~~CONFIDENTIAL~~

DIRECTORY OF COMMUNICATIONS-ELECTRONICS EQUIPMENT

JANAP 161

634=575

PAGES 1-940 are CHANGE 1 VERSION
PAGES 941-END are ORIGINAL VERSION

THE JOINT CHIEFS OF STAFF
JOINT COMMUNICATIONS-ELECTRONICS COMMITTEE
WASHINGTON 25, D. C.
MARCH 1953

THE JOINT CHIEFS OF STAFF

JOINT COMMUNICATIONS-ELECTRONICS COMMITTEE

WASHINGTON 25, D. C.

1 October 1956

LETTER OF PROMULGATION TO:

The Department of the Army
The Department of the Navy
The Department of the Air Force

Subject: Change No. 1 to JANAP 161.

1. Change No. 1 to JANAP 161, DIRECTORY OF COMMUNICATIONS-ELECTRONICS EQUIPMENT is prepared by the Joint Communications-Electronics Committee for Joint Use.

2. Change No. 1 to JANAP 161 is an Unclassified Nonregistered Publication. It shall be transported, stored, and safeguarded in accordance with current Service regulations, until it is entered in the basic publication.

3. Change No. 1 to JANAP 161, is EFFECTIVE UPON RECEIPT. Insert new pages in numerical sequence. Check the list of Effective Pages. Destroy the superseded pages and the remaining pages of this change, as listed in the Letter of Promulgation of this change. No report of destruction is required. An appropriate entry shall be made on the Record of Changes and Corrections page that this change has been entered.

4. The pages removed from JANAP 161 incident to the entry of this change shall be destroyed without report.

5. JANAP 161, 6 March 1953, is regraded from CONFIDENTIAL to UNCLASSIFIED when the following pages have been deleted:

AN/ARC-24	Pages 35, 36
AN/ARC-26	39, 40
AN/PAC-1	585, 586
AN/PAR-1	587, 588
AN/SAC-1	655, 656

These pages shall be safeguarded or destroyed in accordance with current Service regulations.

6. Copies and extracts may be made from this publication as required in the preparation of publications.

7. Comments and recommendations concerning this publication should be addressed to one of the following, as appropriate:

a. Chief Signal Officer, U. S. Army.
b. Chief of Naval Operations (DNC), U. S. Navy.
c. Director of Communications, U. S. Air Force.

FOR THE JOINT COMMUNICATIONS-ELECTRONICS COMMITTEE OF THE JOINT CHIEFS OF STAFF

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CHANGE NO. 1 TO JANAP 161

1. This change contains the following pages:

a. Letter of Promulgation ..... Page III
b. Change Instructions ..... Paragraph 2
c. List of Deleted Pages 3
d. List of Reprinted Insert Pages 4
e. List of New Insert Pages 5
f. General Directions for Changing JANAP 161, 6 March 1953 6
g. Insert pages for JANAP 161 (listed in paragraphs 5 and 6 above) 7

2. Change Instructions

Page	Equipment	Change
4	AN/AIC–2	Instruction Literature: TO AN 16–30AIC 2–3 to **TO 12R2–2AIC2–2**
5	AN/AIC–3	Status: Substitute Standard to **Limited Standard**
6		Instruction Literature: TO–16–30AIC 3–3 to **TO 12R2–2AIC3–2**
7	AN/AIC–8	Status: Substitute Standard to **Limited Standard**
8		Instruction Literature: insert **TO 12R2–2AIC8–2**
		Technical Characteristics: 2 to 15 Interphone Stations to **2 to 5 Interphone Stations**
9	AN/AIC–10	Status: Substitute Standard to **Standard**
		Classification of Equipment: Restricted to **Unclassified**
10		Instruction Literature: insert **TO 12R2–2AIC10–2**
		Classification of Equipment: Restricted to **Unclassified**
15	AN/ARC–1A	Status: Limited Standard to **Standard**
19	AN/ARC–3	Status: Standard to **Limited Standard**
		First paragraph: Delete "on the transmitter and/or"
20		Instruction Literature: TO 16–30ARC–3 to **TO 12R2–2ARC3–2**
23	AN/ARC–8	First paragraph: high power to **medium power**
		Third paragraph: AN/ART–13 to **AN/ART–13A**; 200 to 500 kc to **200 to 600 kc**
		Sixth paragraph: AN/ART–13 to **AN/ART–13A**
24		Instruction Literature: TO 16–30ART13 and 16–30ARR–11 to **TO 12R2–2ART13–2**
		Major Components: AN/ART–13 to **AN/ART–13A**
		Technical Characteristics: 200 to 500 kc to **200 to 600 kc**
33	AN/ARC–21	Status: Substitute Standard to **Alternate Standard**
		Classification of Equipment: Restricted to **Unclassified**
		Fourth paragraph: Antenna Coupler CU–145/ARC–21 to **ERA Antenna Tuner Type 3001–B2**
34		Instruction Literature: insert **TO 12R2–2ARC21–2**
		Classification of Equipment: Restricted to **Unclassified**
41	AN/ARC–27	Status: Standard to **Alternate Standard**
		Classification of Equipment: Restricted to **Unclassified**
42		Instruction Literature: TO AN16–30ARC27–2, –3 to **TO 12R2–2ARC27–2**
		Classification of Equipment: Restricted to **Unclassified**
45	AN/ARC–30	Status: Standard to **Limited Standard**
47	AN/ARC–33	Status: Substitute Standard to **Alternate Standard**
		Classification of Equipment: Restricted to **Unclassified**
48		Instruction Literature: TO 16–30ARC33–2 to **TO 12R2–2ARC33–2**
		Classification of Equipment: Restricted to **Unclassified**
49	AN/ARC–34	Status: Substitute Standard to **Standard**
		Classification of Equipment: Restricted to **Unclassified**
50		Instruction Literature: insert **TO 12R2–2ARC34–2**
		Classification of Equipment: Restricted to **Unclassified**
		Major Components: (first item) 7-9/10 x 10-3/5 x 21½; 45.87 (lbs) to **7 9/16 x 10 1/8 x 20 11/16 46.9 (lbs)**
		(second item) insert: **2 x 10¾ x 21 5/16 3.6 (lbs)**
		(third item) 4-3/10 x 5¾ x 3-9/10 2 (lbs) to **4⅞ x 5¾ x 7-1/10 2.7 (lbs)**
		Physical Characteristics: 8 x 10½ x 21½ to **7 9/16 x 10⅛ x 20 11/16**
		(net weight) 50.56 to **53.2** pounds
		(total volume) 1.1 (cu ft) to **1.24** cu ft

Page	Equipment	Change
51	AN/ARC–36	Status: Standard to **Limited Standard**
52		Instruction Literature: insert **TO 12R2–2ARC3–2**
53	SCR–274	Status: Standard to **Limited Standard**
		Service Type Number: SCR–274 to **SCR–274–N**
54		Instruction Literature: TO 16–40BC–224–2 to **TO 12R2–3SCR274–2**
		Service Type Number: SCR–274 to **SCR–274–N**
55	SCR–522	Sixth paragraph: Delete "SCR–542–A"
		Seventh paragraph: Delete "SCR–542–A; 322 w of 14–v dc."
56		Instruction Literature: TO 16–40SCR522–2 to **TO 12R2–3SCR522–2**
59	ARC Type 12	Replace descriptive text with: **Radio Set ARC Type 12 is a group of radio equipments used in various combinations to form a variety of lf, vhf, and uhf communication and navigation systems. The specific components used depend upon the particular requirements of the individual aircraft installation. This equipment is used for air-to-air and air-to-ground communication.**
		(Delete balance of text on this page.)
60		Instruction Literature: Instruction Book & TO 16–45–121 to **TO 12R2–4–1–2**
62	Collins 18S–4	Instruction Literature: Collins Instruction Manual 18S–4 to **TO 12R2–4–5–2**
67	BC–348	Service Type Number: BC–348 to **BC–348–R**
		Replace descriptive text with: **Radio Receiver BC–348–R is an am (voice and cw) equipment used in air-to-ground and air-to-air radio communication over the frequency range .2 to .5 and 1.5 to 18 mc.**
		(Delete balance of text on this page.)
		Service Type Number: BC–348 to **BC–348–R**
68		Instruction Literature: TO 16–40BC–348 to **TO 12R2–3BC–112**
69	BC–453	Status: Standard to **Limited Standard**
70		Instruction Literature: TO 16–40SCR–274–5 to **TO 12R2–3SCR274–2**
73	AN/ART–13A	Using Service: Navy to **Air Force**
		Delete first three paragraphs
		Fourth paragraph: .2 to 1.5 mc (range) to **200 to 600 kc** range
74		Instruction Literature: insert **TO 12R2–2ART13–2**
		Using Service: Navy to **Air Force**
		Technical Characteristics: 0.2 to 1.5 to **.2 to .6**
87	AN/CRT–3	Top of page; Type Number: AN/CRT–3 to **AN/CRT–3A**
		First paragraph: .5 mc and 8.28 mc to **500 kc and 8364 kc**
		Second paragraph: .5 mc to **500 kc**, 8.28 mc to **8364 kc**; .5 mc to **500 kc.**
88		Instruction Literature: TO AN 16–30CRT3–2 to **TO 12R5–2CRT3–2**
		Top of page; Type number: AN/CRT–3 to **AN/CRT–3A**
		Operational Characteristics; Approximate Range: .5 mc to **500 kc**; 8.28 mc to **8364 kc**
		Technical Characteristics: 8.28 to **8.364** (following Frequency Range in Megacycles; Type of Signal; and Power Output)
101	OA–11/FC	Status: Limited Standard to **Substitute Standard**
103	OA–12/FC	Status: Limited Standard to **Substitute Standard**
107	UN	Status: Standard to **Limited Standard**
109	UP	Status: Standard to **Limited Standard**
119	TT–45/FG, TT–46/FG	Status: Standard to **Substitute Standard (TT–45/FG); Limited Standard (TT–46/FG)**
123	AN/FGC–1B	Status: Limited Standard to **Standard**
151	TG–26	Status: Standard to **Limited Standard**
177	TT–21/FG	Status: Limited Standard to **Standard**
185	SFO–2	Commercial Type Number: Philco to **Technical Materiel Corporation**
		First paragraph: Delete "The Philco"
186		Commercial Type Number: Philco to **Technical Materiel Corporation**
		Physical Characteristics: Philco to **Technical Materiel Corporation**
191	TT–51/FG	Status: Standard to **Limited Standard**
193	TT–53/FG	Status: Standard to **Substitute Standard**
201	LS–124/FI	Status: Limited Standard to **Standard**
225	AN/FRC–6	Status: Standard to **Limited Standard**
247	AN/FRR–3	Status: Standard to **Limited Standard**

Page	Equipment	Change
253	AN/FRR–12	Status: Standard to **Limited Standard**
255	AN/FRR–28	Status: Standard to **Substitute Standard**
281	RBF–3	Status: Standard to **Limited Standard**
285	RBQ–1	Status: Standard to **Substitute Standard**
289	RCO	Status: Substitute Standard to **Limited Standard**
291	RDE, RDE–1	Status: Substitute Standard to **Limited Standard**
295	RDM, RDM–1	Status: Substitute Standard to **Limited Standard**
299	SCR–244	Status: Standard to **Limited Standard**
339	OA–60/FRT	Status: Standard to **Limited Standard**
345	T–83/SR	Status: Standard to **Limited Standard**
349	T–159/FRT	Status: Standard to **Limited Standard**
369	TAB–6, –7	Status: Standard to **Limited Standard**
371	TBA–10	Status: Limited Standard to **Standard**
375	TBK–1, –11	Delete "TBK–1" only—obsolete
377	TBL–11	Status: Standard to **Limited Standard**
381	TBU–1, –3	Status: Substitute Standard to **Standard**
397	TDF	Status: Standard to **Limited Standard**
425	OA–9/FC	Status: Limited Standard to **Substitute Standard**
475	AN/GRC–6	Second paragraph: and an auxiliary receiver, both of which operate to **that operates**
489	AN/GRC–27	Fourth paragraph: ADD: **Use of later versions of the power supply and transmitter components (MD–129A/GR and T–217A/GR respectively) permit operation of this equipment at 95% modulation for periods up to one hour at ambient temperatures of 65° C, and continuously at lower temperatures.**
497	SCR–543	Status: Standard to **Standard (–543–( )); Limited Standard (–A, –B, –C)**
519	R–137/GR	Status: Standard to **Limited Standard**
525	SCR–607	Status: Substitute Standard to **Limited Standard**
559	AN/MRC–22	Status: Standard to **Limited Standard**
565	SCR–399	Status: Standard to **Limited Standard**
591	TT–61/FG	Status: Standard to **Limited Standard**
612	AN–PRC–16	Power Output: 50 mw to **500 mw**
621	MAY	Status: Limited Standard to **Substitute Standard**
631	SCR–609	Service Type Number: SCR–609 to **SCR–609; SCR–610; AN/TRC–20** Status: Add after Limited Standard **(SCR–609, –610); Standard (AN/TRC–20)** ADD: (Fifth paragraph) **Radio Set AN/TRC–20 consists of a later version of the SCR–610 and is used as the radio link between outlaying microphones and centrally located control and recording components of such equipment as Sound Ranging Sets GR–3–C and GR–8. It can also be used to provide fm (voice) radio communication facilities.**
632		SCR–609: SERVICE TYPE NUMBER to **SCR–609; SCR–610; AN/TRC–20**
643	R–206/PR	Status: Substitute Standard to **Limited Standard**
645	RC–261	SERVICE TYPE NUMBER: RC–261 to **RC–261; AN/GRA–11** Status: Standard to **Limited Standard (RC–261); Standard (AN/GRA–11)** First paragraph: ADD: **Radio Set Group AN/GRA–11 is similar to, and interchangeable with, RC–261.**
646		RC–261: SERVICE TYPE NUMBER to **RC–261; AN/GRA–11**
667	SCR–281	Status: Standard to **Limited Standard**
681	R–96/SR	Status: Standard to **Limited Standard**
691	AN/SRT–3	Status: Standard to **Limited Standard**
693	AN/SRT–4	Status: Standard to **Limited Standard**
715	TBL, TBL–2, –3	Delete "TBL and TBL–2" only—obsolete
737	CF–1	Status: Standard to **Limited Standard**
739	CF–2	Status: Standard to **Limited Standard**
741	CF–3	Status: Standard to **Limited Standard**
747	TC–21	Status: Standard to **Limited Standard**
749	TC–23	Status: Standard to **Limited Standard**
769	EE–97	Status: Standard to **Limited Standard**
771	EE–98	Status: Standard to **Limited Standard**
775	TC–3	Status: Standard to **Limited Standard**
777	TC–16	Status: Standard to **Limited Standard**
785	TC–22	Status: Standard to **Limited Standard**

Page	Equipment	Change
787	TG–7	Status: Standard to **Limited Standard**
803	PA–8	Status: Standard to **Limited Standard**
805	PA–5	Status: Substitute Standard to **Limited Standard**
823	AN/TRC–30	Page Heading: AN/TRC–30 to **AN/TRC–type**
		Insert: **COMMERCIAL TYPE NUMBER: Philco Microwave CLR–6**
		Illustration: Change AN/TRC–30 to **CLR–6**
		First Sentence: AN/TRC–30 to **Philco Microwave CLR–6 is an fm**
824		Page Heading: AN/TRC–30 to **AN/TRC–type**
		Insert: **Philco Microwave CLR–6: COMMERCIAL TYPE NUMBER**
		Physical Characteristics: AN/TRC–30 to **Philco Microwave CLR–6**
827	SCR–177	Status: Standard to **Standard (–177–( )); Limited Standard (–177; –A)**
829	SCR–188	Status: Standard to **Standard (–188–( )); Limited Standard (–188)**
851	RC–290	Status: Standard to **Limited Standard**
865	TC–4	Status: Standard to **Limited Standard**
867	TC–10	Status: Substitute Standard to **Limited Standard**
869	TC–12	Status: Standard to **Limited Standard**
875	AN/TTQ–2	Status: Standard to **Limited Standard**
905	AN/URA–6, –7	Status: Standard to **Limited Standard**
911	RBV, RBV–1	Status: Substitute Standard to **Limited Standard**
913	AN/URC–4	Classification of Equipment: Restricted to **Unclassified**
914		Instruction Literature: TO 16–30URC4–2 to **TO 12R2–2URC 4–2**
		Classification of Equipment: Restricted to **Unclassified**
		Power Requirements: 125 v, 520 ma to **1.25 v**, 520 ma
915	MAR	Status: Standard to **Substitute Standard**
925	TCS, TCS–1 through –16	Status: Standard to **Substitute Standard**
931	AN/URR–12	Status: Standard to **Limited Standard**
933	AN/URR–13	Status: Standard to **Limited Standard**
		First paragraph: ADD: **Radio Receiving Set AN/URR–35 ( ) is similar to the AN/URR–13 differing from it in certain design details only.**
935	AN/URR–21	Status: Standard to **Substitute Standard**
937	AN/URR–22	Status: Standard to **Substitute Standard**
939	AN/URR–23( )	Status: Standard to **Limited Standard**
971	RAS, RAS–1 thru –5	Status: Standard to **Limited Standard**
973	RBA, RBA–1, –2, –3, –5, –7	Status: Standard to **Substitute Standard**
975	RBA–6	Status: Standard to **Substitute Standard**
977	RBB, RBB–1 thru –6	Status: Substitute Standard to **Limited Standard**
979	RBC, RBC–1 thru –6	Status: Substitute Standard to **Limited Standard**
987	RBK, RBK–1, –2, –5, –7 thru –11	Status: Substitute Standard to **Limited Standard**
989	RBK–12, –13	Status: Substitute Standard to **Limited Standard**
991	RBK–15	Status: Substitute Standard to **Limited Standard**
993	RBL, RBL–1, –2	Status: Standard to **Limited Standard**
995	RBL–3, RBL–4	Status: Standard to **Limited Standard**
997	RBL–5, –6	Status: Standard to **Limited Standard**
1001	RBS, RBS–1	Status: Substitute Standard to **Limited Standard**
1003	RBS–2	Status: Substitute Standard to **Limited Standard**
1011	RDR	Status: Standard to **Limited Standard**
1013	RDZ	Status: Standard to **Limited Standard**
1021	AN/URT–10	Status: Standard to **Limited Standard**
1051	TDZ	Status: Standard to **Limited Standard**
1073	AN/VRC–2	Status: Standard to **Limited Standard**
1084	AN/VRC–8	Frequency Range in Megacycles: 80 preselected channels to **80 detented channels**
1087	AN/VRC–10	Illustration: AN/VRC–10 to **AN/VRC–15; page 1093**
1093	AN/VRC–15	Illustration: AN/VRC–15 to **AN/VRC–10; refer to page 1087**
1117	SCR–506	Status: Standard to **Limited Standard**
1143	AN/VRR–4	Status: Standard to **Limited Standard**

3. List of Deleted Pages

1, 2	283, 284	665, 666	873, 874	1005, 1006
25, 26	293, 294	669, 670	887, 888	1007, 1008
37, 38	373, 374	689, 690	889, 890	1009, 1010
57, 58	483, 484	705, 706	917, 918	1025, 1026
111, 112	523, 524	717, 718	919, 920	1027, 1028
113, 114	553, 554	723, 724	921, 922	1031, 1032
115, 116	561, 562	725, 726	923, 924	1129, 1130
117, 118	563, 564	727, 728	929, 930	1131, 1132
215, 216	601, 602	751, 752	981, 982	1141, 1142
217, 218	635, 636	779, 780	983, 984	
279, 280	637, 638	833, 834	985, 986	

4. List of Reprinted Insert Pages

List of Effective Pages ..... XI, XII, XIII

Preface ..... XV, XVI

Text ..... 41, 42, 95, 96, 131, 132, 227, 228, 313, 314, 315, 316, 319, 320, 323, 324, 455, 456, 549, 550, 551, 552, 659, 660, 679, 680, 735, 736, 883, 884, 891, 892, 895, 896, 907, 908, 939, 940, 1063, 1064.

Annex (A) ..... A–1 through A–2

Annex (B) ..... B–1 through B–8

Index ..... I–1 through I–20

5. List of New Insert Pages

14a, 14b	254a, 254b	540a, 540b	734a, 734b	886c, 886d
14c, 14d	254c, 254d	552a, 552b	734c, 734d	896a, 896b
52a, 52b	254e, 254f	556a, 556b	734e, 734f	896c, 896d
52c, 52d	258a, 258b	560a, 560b	734g, 734h	910a, 910b
52e, 52f	258c, 258d	560c, 560d	734i, 734j	910c, 910d
62a, 62b	258e, 258f	574a, 574b	734k, 734l	910e, 910f
96a, 96b	258g, 258h	574c, 574d	746a, 746b	912a, 912b
96c, 96d	258i, 258j	574e, 574f	746c, 746d	912c, 912d
130a, 130b	258k, 258l	576a, 576b	746e, 746f	912e, 912f
142a, 142b	258m, 258n	576c, 576d	790a, 790b	914a, 914b
142c, 142d	258o, 258p	576e, 576f	792a, 792b	940a, 940b
142e, 142f	258q, 258r	584a, 584b	794a, 794b	940c, 940d
142g, 142h	264a, 264b	584c, 584d	806a, 806b	940e, 940f
142i, 142j	326a, 326b	598a, 598b	806c, 806d	940g, 940h
188a, 188b	326c, 326d	598c, 598d	806e, 806f	940i, 940j
194a, 194b	326e, 326f	598e, 598f	806g, 806h	952a, 952b
194c, 194d	326g, 326h	618a, 618b	806i, 806j	952c, 952d
200a, 200b	326i, 326j	618c, 618d	806k, 806l	952e, 952f
200c, 200d	338a, 338b	618e, 618f	822a, 822b	952g, 952h
200e, 200f	422a, 422b	648a, 648b	822c, 822d	952i, 952j
220a, 220b	422c, 422d	650a, 650b	822e, 822f	952k, 952l
220c, 220d	422e, 422f	660a, 660b	822g, 822h	1022a, 1022b
222a, 222b	452a, 452b	660c, 660d	826a, 826b	1022c, 1022d
222c, 222d	456a, 456b	664a, 664b	838a, 838b	1022e, 1022f
[illegible], 222f	464a, 464b	664c, 664d	838c, 838d	1054a, 1054b
[illegible], 232b	468a, 468b	664e, 664f	838e, 838f	1062a, 1062b
23[illegible] 234b	468c, 468d	664g, 664h	838g, 838h	1080a, 1080b
2[illegible] 234d	468e, 468f	664i, 664j	838i, 838j	1100a, 1100b
23[illegible] 234f	468g, 468h	664k, 664l	838k, 838l	1106a, 1106b
234g, 234h	482a, 482b	680a, 680b	838m, 838n	1106c, 1106d
234i, 234j	48[illegible] 486b	680c, 680d	846a, 846b	1106e, 1106f
234k, 234l	49[illegible] 496b	688a, 688b	852a, 852b	
234m, 234n	526a, 526b	694a, 694b	876a, 876b	
246a, 246b	538a, 538b	694c, 694d	880a, 880b	
252a, 252b	538c, 538d	732a, 732b	886a, 886b	

6. General Directions for Changing JANAP 161, 6 March 1953

Change JANAP 161, 6 March 1953, as follows:

a. Remove all pages listed in paragraph 3.
b. Insert all revised insert pages listed in paragraph 4.
c. Add all new insert pages listed in paragraph 5.
d. CHECK THE LIST OF EFFECTIVE PAGES; re-number all pages accordingly.
e. Make pen-and-ink corrections listed in paragraph 2.

7. Insert Pages for JANAP 161 (listed in paragraphs 5 and 6).

LIST OF EFFECTIVE PAGES

Subject Matter	Effective Pages	Page Numbers
Title Page	Original	I (Reverse Blank)
Letter of Promulgation	Original	III
Authentication Page	Original	IV
List of Effective Pages	Chg. No. 1	XI, XII, XIII
Record of Changes and Corrections	Original	V–X
Preface	Chg. No. 1	XV, XVI
Text	Original	3–14
	Chg. No. 1	14a–14d
	Original	15–24
	Original	27–34
	Chg. No. 1	41, 42
	Original	43–52
	Chg. No. 1	52a–52f
	Original	53–56
	Original	59–62
	Chg. No. 1	62a, 62b
	Original	63–94
	Chg. No. 1	95, 96
	Chg. No. 1	96a–96d
	Original	97–110
	Original	119–130
	Chg. No. 1	130a, 130b
	Chg. No. 1	131, 132
	Original	133–142
	Chg. No. 1	142a–142j
	Original	143–188
	Chg. No. 1	188a, 188b
	Original	189–194
	Chg. No. 1	194a, 194b
	Original	195–200
	Chg. No. 1	200a–200f
	Original	201–214
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	Chg. No. 1	220a–220d
	Original	221, 222
	Chg. No. 1	222a–222f
	Original	223–226
	Chg. No. 1	227, 228
	Original	229–232
	Chg. No. 1	232a, 232b
	Original	233, 234
	Chg. No. 1	234a–234n
	Original	235–246
	Chg. No. 1	246a, 246b
	Original	247–252
	Chg. No. 1	252a, 252b
	Original	253, 254
	Chg. No. 1	254a–254f
	Original	255–258
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	Chg. No. 1	315, 316
	Original	317, 318
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PREFACE

1. PURPOSE

JANAP 161, Directory of Communications-Electronics Equipment, including Change No. 1 thereto, contains information pertaining to the technical, physical, and operational characteristics of communication equipment used by the Department of Defense. It is intended primarily for the use of signal officers of Army and Marine Corps division and higher headquarters, Navy staff communications officers, and Air Force wing, base, and higher echelons in the planning and coordination of tactical communications in a theater of operations. This JANAP is not intended for use in connection with procurement, storage, and issue.

2. TYPES OF EQUIPMENT

This publication contains information on radio, wire, sound, light, and other equipment used for purposes of communication.

3. STATUS OF EQUIPMENT

Application of status to equipment of the Department of the Navy is not official but is included for purposes of comparison with equipment of other departments. Also included are items of equipment that have not been assigned a formal status but, nevertheless, have been issued and are in current use. The status of equipment described in this publication is as follows:

a. Standard. (1) USA. The most advanced and satisfactory item of equipment or assemblage that has been adopted and is preferred for procurement.

(2) USAF. An item that meets an established need and is considered suitable for Air Force use.

b. Alternate Standard. USAF. An item that may not be so satisfactory as a standard item, but which is a usable alternate for procurement in quantity in place of the standard item when the standard item cannot be procured in quantities to satisfy Air Force needs.

c. Limited Standard. (1) USA. An item or assemblage that is less satisfactory than the standard or substitute standard type but which is acceptable and used as a substitute therefor until the supply is exhausted unless specific exception is made by the General Staff.

(2) USAF. An item in stock that is not so satisfactory as either standard or alternate standard items but which is usable in place thereof. Limited standard items may be used until stocks are exhausted. Limited standard end items will not be procured. Additional parts and components may be procured when necessary to maintain the item in serviceable condition.

d. Substitute Standard. USA. An item of assemblage that is not so satisfactory as a standard type but is a usable substitute therefor, and may be procured to supplement the supply of the standard type.

e. Tentative Standard. USAF. An item that appears promising enough operationally to warrant the risk of initiating production of limited quantities prior to the completion of development, or prior to completion of testing.

f. Obsolete. (1) USA. An item or assemblage that has been declared unsuitable for military use.

(2) USAF. An item that no longer meets Air Force needs.

4. ARRANGEMENT OF CONTENT

a. General. (1) Items of equipment are arranged and identified in accordance with type nomenclature designations of the Joint Communications-Electronic Nomenclature System, or "AN" System, as described in JANAP 196. This system is an alphabetical arrangement of basic indicators, followed by a numerical arrangement of types of equipment for each set or series of basic indicators.

(2) Items of equipment with service, commercial, or other types of nomenclature are arranged under the most appropriate **TYPE** of AN System/indicator nomenclature. Within each set or series of basic AN/TYPE designations, equipments are arranged alpha-numerically. All such AN/TYPE designations follow items of equipment arranged as indicated in subparagraph (1) above.

EXAMPLES:

AN/ARC–33	AN/FRR–3	AN/GRR–3
AN/ARC–34	AN/FRR–4	AN/GRR–5
AN/ARC–36	AN/FRR–7	AN/GRR–7
AN/ARC–type	AN/FRR–type	AN/GRR–type
SCR–274	RAO	BC–312
SCR–522	RBF	R–247/URR
SCR–542	RBP	RCF

b. Models. (1) Basic or first edition. The AN or AN/TYPE designations on each page normally include all models of equipment bearing those basic nomenclature designations. Minor differences in models are covered in the content of each page. Major differences in models may be covered in separate pages.

(2) Change No. 1. The specific type designation printed at the top of each page indicates the item of equipment covered. The use of parentheses ( ) in the type designation at the top of each page indicates coverage of more than one model of the item.

c. Index. To facilitate the location of items of equipment in this publication, a comprehensive index provides a listing of all nomenclature type designations by which items of equipment may be known or identified.

5. DETAILS OF CONTENT

a. Security classification of equipment. The Security Classification of items of equipment conforms to data contained in JANAP 140 of issue current at date of preparation of each page of information.

b. "Can communicate with". Information given under this heading in the basic edition is superseded by that contained in annex (B). Data is based primarily on technical characteristics and operating capabilities of similar or related equipment. The listing of items of equipment does not signify authorization for such use or that items can or ever have been so used.

c. Ranges for radio equipment. Information given under this heading is confined to nominal or average communicating distances for radio equipment. Limiting factors of terrain, weather, altitude, type of antenna, climate, and other similar operating factors vary the range distances indicated.

d. Major components. Data given under this heading include only the principal operating components and are usually confined to no more than six items. Spare equipment, auxiliary or maintenance components, and modification parts or components are not included.

e. Physical characteristics. Data given under this heading include volume, weight, and dimensions of equipment. These characteristics are given as an aid in planning storage, transportation, shipment, and installation of communication equipment.

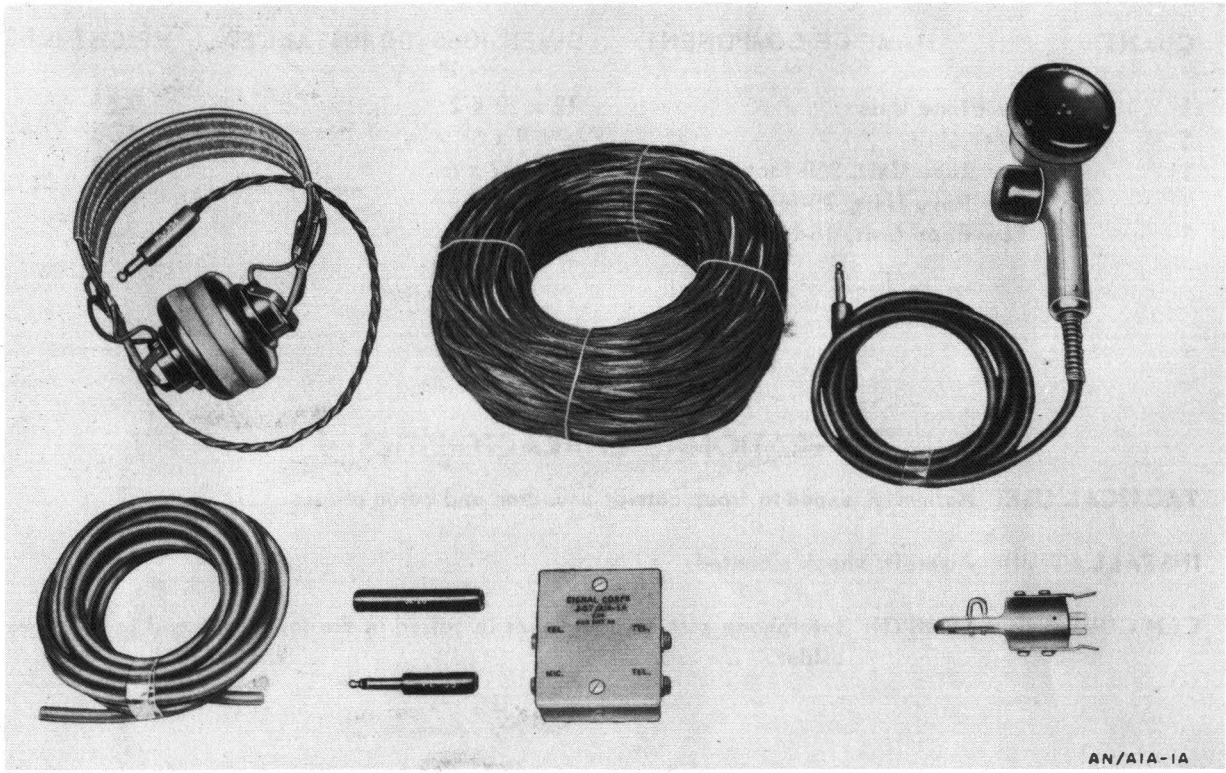
f. Project equipment. This marking applied to certain Air Force equipment indicates that the equipment may be used only under special authorization.

g. Incomplete data. In certain instances, required information could not be determined by the date of publication. In such cases, space has been allowed for the insertion of applicable information as it becomes available to the reader.

6. CURRENCY OF INFORMATION

Information on each page of the publication is current as of the date indicated on each sheet.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 7 Jun 52	**AN/AIA-1A** INTERPHONE EQUIPMENT



Interphone Equipment AN/AIA-1A provides two-way interphone communication between the crew of a tow plane and the crew of a glider by extending interphone facilities already installed in the airplane to the glider. Therefore, it requires no power supply but uses the amplifier in the interphone equipment in the tow plane for an audio power source.

The equipment consists of a tow plane unit, glider unit, and tow rope units (350-foot tow rope kit, 75-foot tow rope kit, or 15-foot tow rope kit, depending on installation requirements).

Wire WT-1/U of the proper length is interwoven at set intervals into a nylon tow rope of predetermined size. Both ends of the wire attached to the tow rope are fitted with Socket Assembly MX-14/AIA. One end is inserted into Plug Assembly MX-15/AIA on the tow plane and the other end into Plug Assembly MX-15/AIA on the glider.

In order to keep maintenance to a minimum and to eliminate failures, strict adherence to proper installation and proper use of tools (included in the 350-foot rope kit) is necessary.

AN/AIA-1A	INSTRUCTION LITERATURE: TO 16-30AIA1-2
	CLASSIFICATION OF EQUIPMENT: Unclassified
	USING SERVICE : Air Force
INTERPHONE EQUIPMENT	DATE OF THIS SHEET : 7 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Tow Plane Unit	12 x 10 x 2	0.61
1	Glider Unit	6 x 8 x 6	2.70
1	Tow Rope Unit, 350-foot	12 x 12 x 6	26.78
1	Tow Rope Unit, 75-foot	6 x 4 x 2	6.11
1	Tow Rope Unit, 15-foot	6 x 4 x 2	2.21

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued to troop carrier squadron and cargo planes.

INSTALLATION: Aircraft, shock mounted.

CAN COMMUNICATE WITH: Interphone station equipment installed in the tow plane and in the towed glider.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Interphone between tow plane and glider.

TYPE CONTROLS: Press-to-talk switch.

POWER REQUIREMENTS: Power is taken from the tow plane interphone to operate one microphone and a maximum of three headsets in the glider.

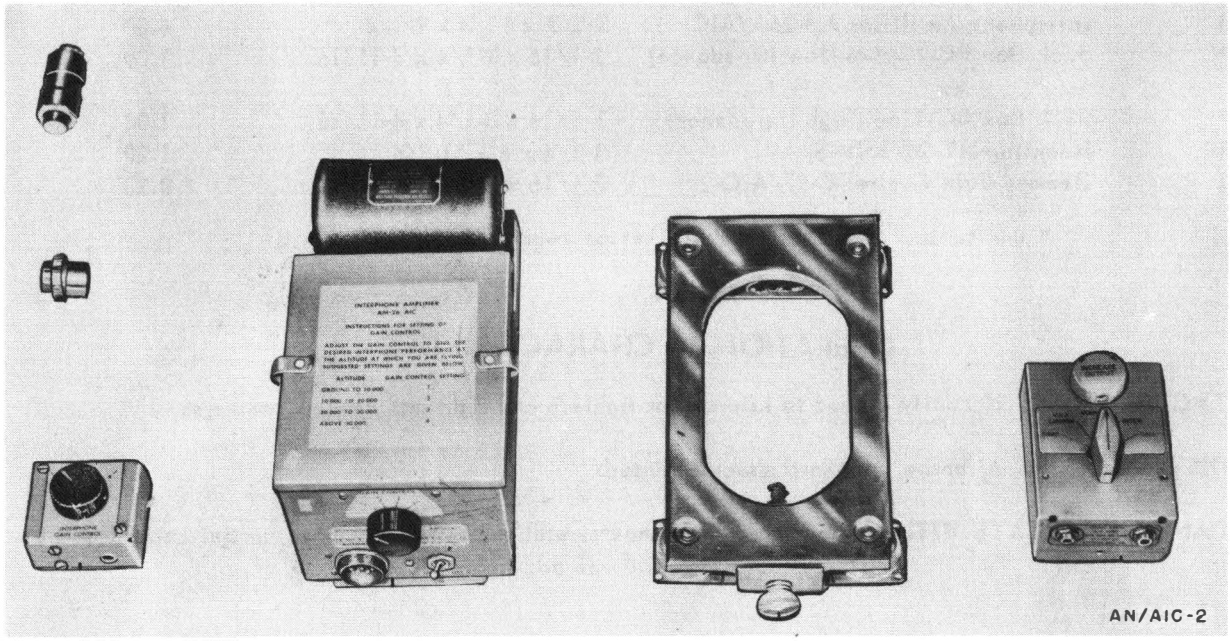
PHYSICAL CHARACTERISTICS

Interphone Equipment AN/AIA-1A weighs 38.41 pounds net, volume 0.9 cu ft. Packed for domestic or export shipment: total weight 51.85 pounds, total volume 1.2 cu ft. Shipped in 1 package.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 12 May 52

AN/AIC-2

INTERPHONE EQUIPMENT



Interphone Equipment AN/AIC-2 provides aircraft with intraplane and interplane communication. Interphone Amplifiers AM-26/AIC (manually operated gain control) and AM-26A/AIC (automatic gain control) provide power output levels adequate for operating a maximum of 15 stations at altitudes up to 40,000 feet.

All stations are provided with control of five circuits as follows: compass, v-h-f liaison, command, interphone, and call.

The stations are placed for convenient operation at stations of the radio operator, the pilot, copilot, observer, and any other members of the crew requiring communication facilities.

There are two types of stations available: Jack Box BC-1366 for high-impedance circuits and Jack Box BC-1366-M for low-impedance circuits.

This equipment is lightweight and requires less than a 50-w input during operation.

AN/AIC-2	INSTRUCTION LITERATURE: TO AN/16-30AIC2-3
	CLASSIFICATION OF EQUIPMENT: Unclassified
	USING SERVICE : Air Force
INTERPHONE EQUIPMENT	DATE OF THIS SHEET : 12 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Interphone Amplifier AM-26A/AIC	5-1/8 x 5-1/4 x 9-3/4	6.80
*	Jack Box BC-1366-M (low impedance)	3-1/16 x 3-1/4 x 4-11/16	1.00
	or		
*	Jack Box BC-1366 (high impedance)	3-1/16 x 3-1/4 x 4-11/16	1.00
1	Mounting MT-28/ARN-5	1-1/4 x 6 x 11-3/4	1.20
1	Remote Gain Control C-97/AIC-2	2-1/16 x 2-1/2 x 2-3/4	0.30

* One to 15, depending on installation requirements.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued to interceptor fighters and light and medium bombers.

INSTALLATION: Airborne, standard shock mounted.

CAN COMMUNICATE WITH: A maximum of 15 master station units which have partial control of three radio sets and one additional receiver.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Operation of 15 stations (maximum) each of which is capable of selecting compass, v-h-f liaison, command, interphone, and call circuits.

TYPE CONTROLS: Each station has a manual volume control and a five-position rotary switch for selection of any circuit from the following: compass, v-h-f liaison, command, interphone, and call. AM-26A/AIC has automatic gain control; AM-26/AIC uses local manual gain control or Remote Gain Control C-97/AIC-2. The system is operated by a push-to-talk control located on the microphones.

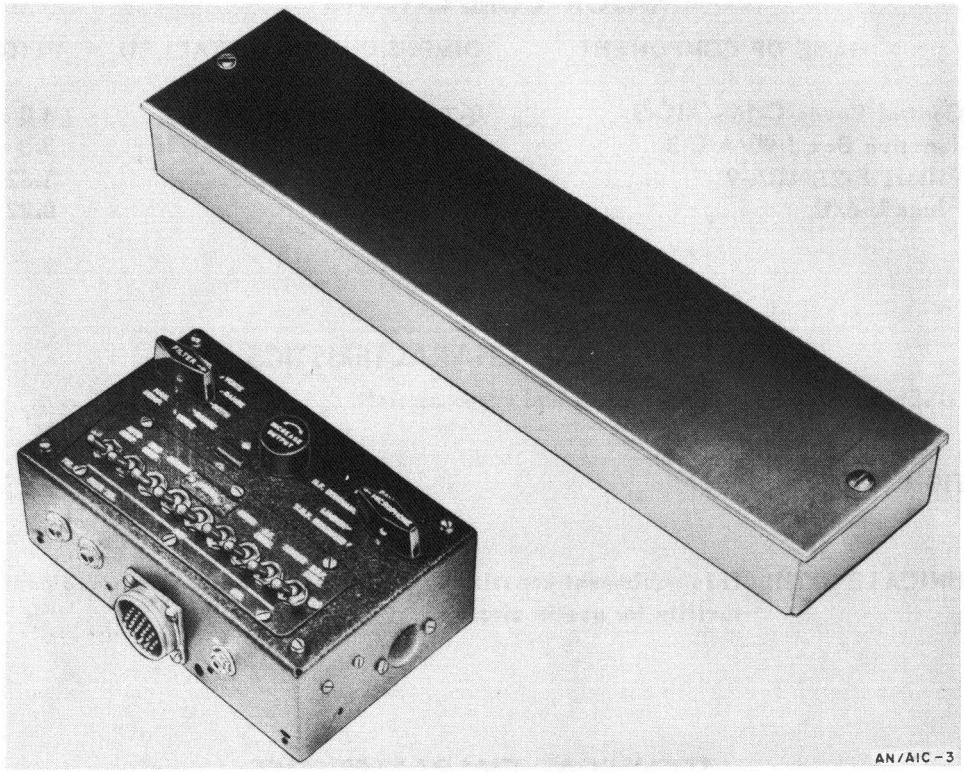
POWER OUTPUT: 4 w into a 250-ohm load with 6% distortion.

POWER REQUIREMENTS: 47.6 w (maximum), 24/28 v, (1.7 amp), dc.

PHYSICAL CHARACTERISTICS

The components of Interphone Equipment AN/AIC-2 are normally installed where needed in the aircraft. For space and weight requirements, see dimensions and weight of major components.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 26 May 52	**AN/AIC-3** INTERPHONE EQUIPMENT



Interphone Equipment AN/AIC-3 is an airborne interplane, intraplane, and air-to-ground intercommunication system normally having two to five interphone stations.

This equipment has five important functions: voice communication between any or all interphone stations; individual selection at each station of the audio output of eight radio receivers (h-f command, v-h-f command, liaison, automatic radio compass, manual radio compass, marker beacon, and any two other special receivers) and of interphone; means of switching the microphone to any one of three transmitters (h-f command, v-h-f command, and liaison transmitters) or to interphone; a "call" facility whereby all positions may be called by voice regardless of the setting of the microphone or facility switches at any of the called stations; and a "filter" facility whereby the output signal of either the automatic radio compass receiver or the manual radio compass receiver may be fed through a radio range filter (at each interphone station) to the operator.

It is designed for aircraft requiring not more than five master stations with all control facilities available at each station.

AN/AIC-3

INTERPHONE EQUIPMENT

INSTRUCTION LITERATURE: TO 16-30AIC3-3
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 26 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2-5	Control Boxes C-166/AIC-3	8-3/4 x 5-3/4 x 3-9/16	4.0 each
1	Junction Box J-90/AIC-3	20-13/32 x 4-57/64 x 2-1/16	3.3 each
2-5	Filters F-21/ARA-9	3-3/4 x 2-3/4 x 2-1/2	1.62 each
2-5	Plugs U-6/U	Not Available	0.22 each

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Installed in light bombers and cargo aircraft.

INSTALLATION: Airborne.

CAN COMMUNICATE WITH: This equipment constitutes a complete communication and control facility for use in aircraft.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Intraplane communication and control of radio equipment.

TYPE CONTROLS: Manual; 3-position switch for voice, range, or both;
5-position switch for v-h-f command, liaison, and h-f command transmitters and interphone and call.

8 individual switches for selecting audio output from various receivers.

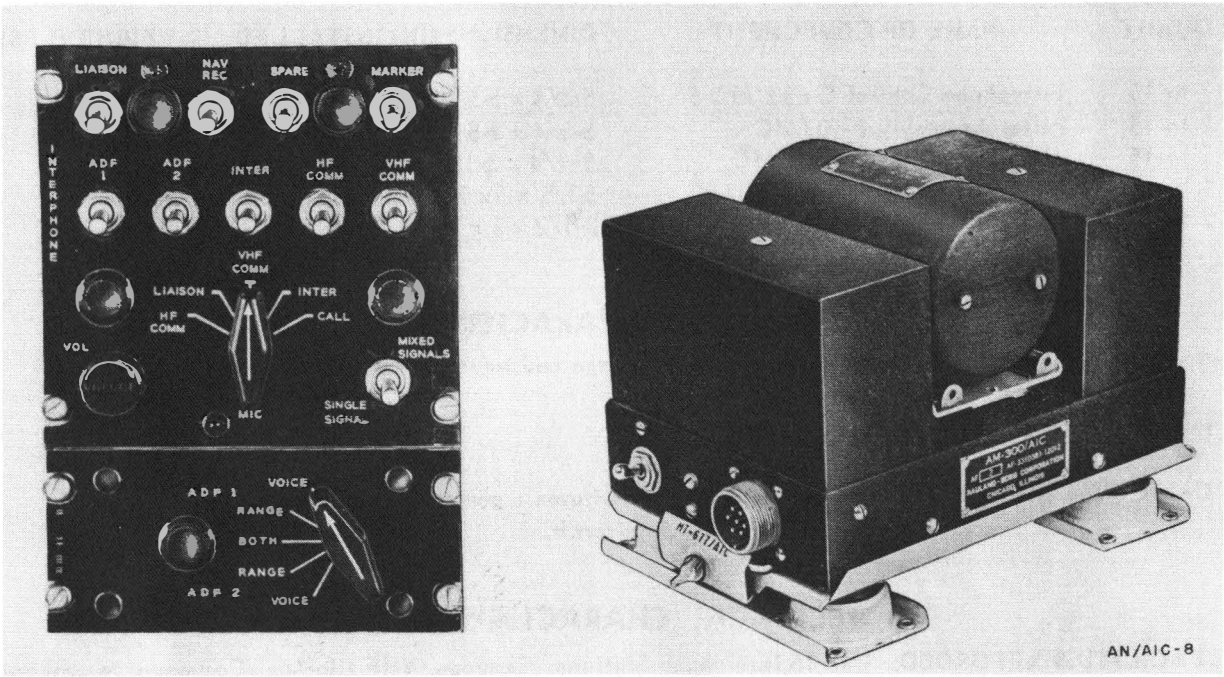
POWER OUTPUT: Approximately 60 mw at 600-ohm impedance (per unit).

POWER REQUIREMENTS: 14 w of 24/28 v,(0.445 amp)dc (per station).

PHYSICAL CHARACTERISTICS

Two to five units are installed where needed in the aircraft. For space and weight requirements see logistical data under major components.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 7 Jun 52	**AN/AIC-8** INTERCOMMUNICATION SET



Intercommunication Set AN/AIC-8 is an airborne interphone for operation in multi-place aircraft requiring 2 to 15 operating positions. It is used for interplane and intraplane communication.

Basically the equipment consists of audio amplifier (including dynamotor), interphone control and filter assembly components.

The interphone control has a 5-position rotary switch for connecting the microphone to hf command, liaison, vhf command, interphone, and call circuits; toggle switches connect any one of the following circuits to the "Single Signal/Mixed Signals" switch: - liaison; navigation receiver; spare; marker; ADF-1; ADF-2; interphone; hf command; vhf command.

The two position "Single Signal/Mixed Signals" switch permits reception of any one of the 9 channels indicated above when placed in the "Single Signal" position; in the "Mixed Signals" position two or more of the channels may be monitored simultaneously by operating the appropriate switches of the 9 listed above.

The filter assembly (when used at toggle switch positions ADF-1 and ADF-2) permits reception of either one or both ADF receivers.

The filter is standard for removing tone when it is desired to use a range channel for voice communication.

AN/AIC-8

INTERCOMMUNICATION SET

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 7 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2 to 15	Interphone Control C-633/AIC-8	5-3/4 x 5-5/8 x 3-1/8	2.32 (each)
2 to 15	Filter Assembly F-90/AIC	5-3/4 x 2-5/8 x 3-1/4	1.44 "
2 to 15	Mixer Amplifier AM-142/AIC	5-1/4 x 3-1/4 x 5-1/4	2.5 "
1	AF Amplifier AM-300/AIC	5-1/8 x 5x 7-1/2	6.0 "
2 to 15	Jack Box J-139A/AIC	3-1/2 x 2 x 1-7/8	0.375 "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Installed on fighter, bomber, cargo and transport aircraft as required.

INSTALLATION: Aircraft shock mounted.

CAN COMMUNICATE WITH: This equipment constitutes a complete communication and control facility for use in aircraft.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: 2 to 15 Interphone Stations, Compass, VHF Liaison, Command, Interphone, Private Interphone, 2 ADF Receivers, Range with or without Voice Filter, Mixed Signals and Call Facilities.

TYPE CONTROLS: Manual.

5-position rotary switch:

hf command	interphone
liaison	call
vhf command	

5-position rotary switch:

ADF-1:	voice	ADF-2: voice
	range	range
	voice and range	voice and range

9 toggle switches for separate or simultaneous operation of:

liaison	ADF-2
vhf nav	interphone
spare	hf command
marker	vhf command.
ADF-1	

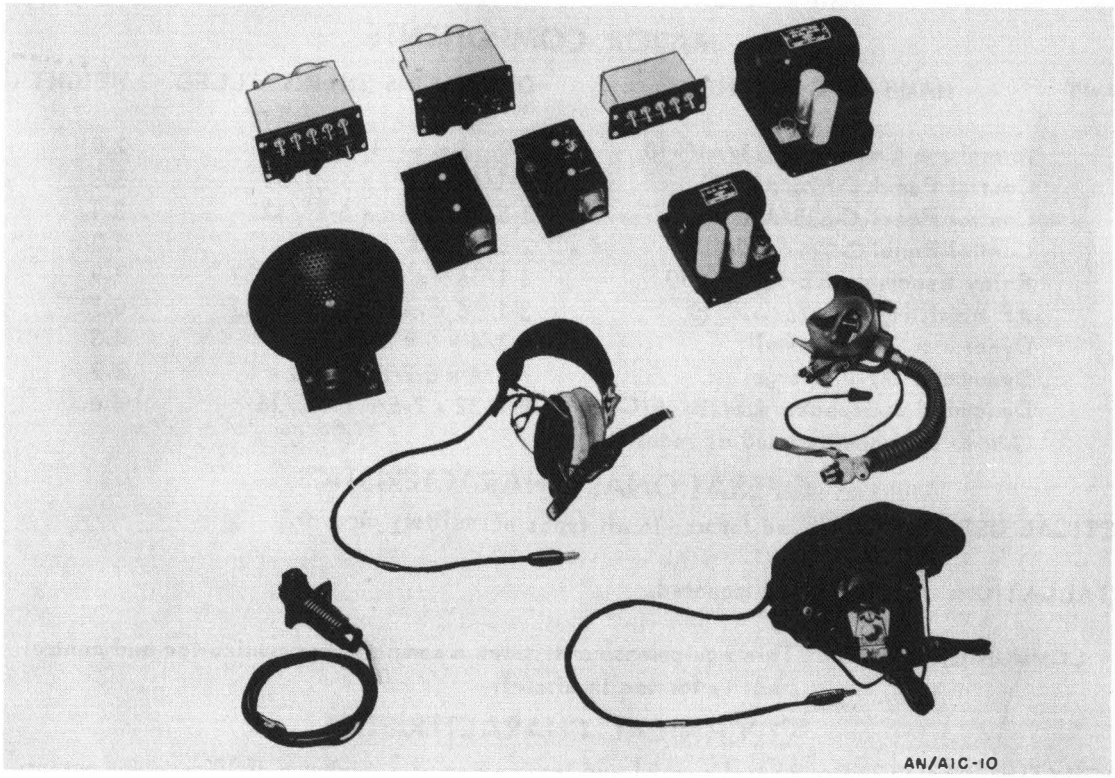
PHYSICAL CHARACTERISTICS

Two to fifteen of each of the station units are used to form the intercommunication system, depending upon the type of installation required. The approximate space requirements and weight of each station unit is indicated above under "Major Components".

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Air Force
DATE OF THIS SHEET: 7 Jun 52

AN/AIC-10

INTERCOMMUNICATION SET



Intercommunication Set AN/AIC-10 is an intercommunication equipment to give increased performance at high altitudes with lower noise pick-up, higher intelligibility and reduced discomfort and inconvenience to the operator.

This set consists of an indeterminate number of items which can be used to meet the tactical requirements of any type aircraft. It consists essentially of five groups of basic components; microphones, the control panels and associated equipment, power supplies, headsets and dynamic loudspeakers with component audio frequency amplifiers.

The functions that may be performed with the AN/AIC-10 will depend on the control panels used. Three types are available; C-823/AIC-10 provides for talking and call, listening with manual volume control and a two position switch for one receiver output, or monitoring as many as 10 receivers; C-825/AIC-10 provides talking, listening, and manual volume control through a six position switch as follows: private interphone, command, liaison, compass, intercommunication, call; (C-824/AIC-10 is the same as C-825/AIC-10 except 5 toggle switches have been added to monitor the output of any one or all of 5 receivers).

All panels have a "Normal/Auxiliary Listen" two-position toggle switch that permits reception from a single receiver; or permits monitoring up to 10 receivers simultaneously when auxiliary Control Panel C-826/AIC-10 is used.

In quiet aircraft, and for stand-by operation, loudspeakers are available. The microphones are noise-cancelling, moving coil type; headphones are also moving coil type designed for minimum discomfort to the wearer.

AN/AIC-10

INTERCOMMUNICATION SET

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Air Force
DATE OF THIS SHEET: 7 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Interphone Control C-823/AIC-10	3-9/16 x 5-7/16 x 4-5/16	2.0
1	Control Panel C-824/AIC-10	3-3/4 x 5-3/4 x 6-21/32	3.3
1	Control Panel C-825/AIC-10	3-3/4 x 5-3/4 x 6-21/32	3.1
1	Control Panel C-826/AIC-10	2-5/8 x 5-3/4 x 4-5/8	1.0
1	Relay Assembly RE-95/AIC-10	3-1/16 x 4-7/16 x 3-19/32	1.9
1	AF Amplifier AM-476/AIC-10	3-1/16 x 4-7/16 x 3-19/32	0.7
1	Dynamotor DY-77 (small)	4-3/4 x 6 x 3-17/32	4.3
1	Dynamotor DY-76 (large)	7-3/4 x 6-7/8 x 5-1/2	8.9
1	Dynamic Loudspeaker LS-184/AIC-10	8-7/32 x 7-5/8 x 4-5/16	4.6
	(Above components used as required)		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: May be issued for use in all types of military aircraft.

INSTALLATION: Aircraft shock mounted.

CAN COMMUNICATE WITH: This equipment constitutes a complete communication and control facility for use in aircraft.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Partial control and intermixing of a maximum of 10 receiver outputs, talking on 6 positions, loudspeaker monitoring and automatic volume compression, automatic gain control and speech clipping.

TYPE CONTROLS: 5-10 toggle switches for audio output of 5-10 receivers.
6-position rotary switch permits talking over the following circuits: private interphone, command, liaison, intercommunication, interphone, and call.
Mixing, or single-receiver, monitoring.
Loudspeaker operation when desired.

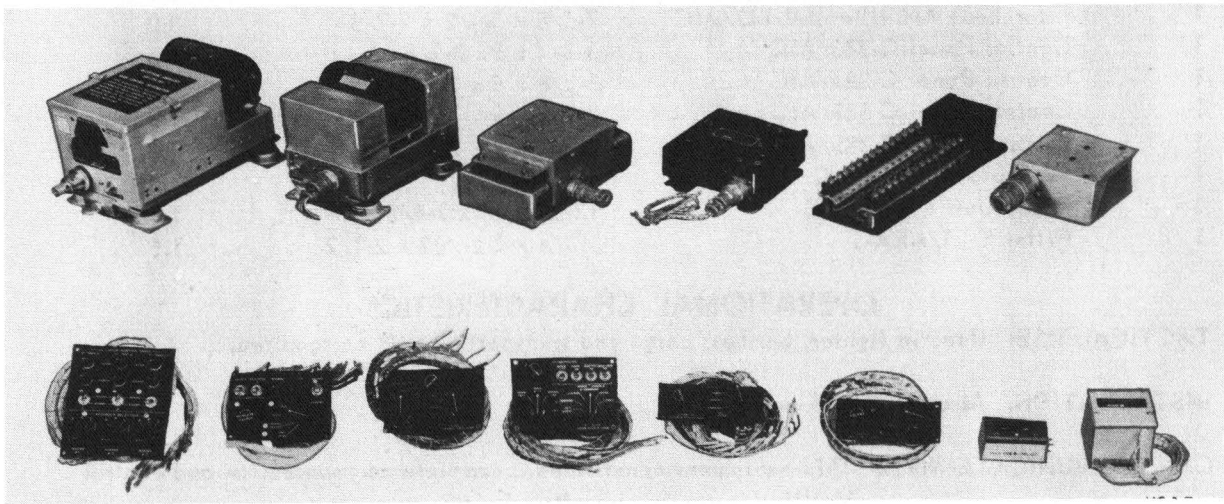
POWER OUTPUT: 200 mw (nominal) per interphone station.

POWER REQUIREMENTS: Per interphone station (nominal): 750 mw, 26.5 v, dc.
Control Panel C-824/AIC-10: 150 mw, 27.6 v, dc.
AF Amplifier AM-476/AIC-10: 150 mw, 27.6 v, dc.
Relay Assembly RE-95/AIC-10: 110 mw, 27.6 v, dc.
Dynamotor DY-77: (1.3 amp)at 27.6 v, dc.
Dynamotor DY-76: (7 amp)at 27.6 v, dc.

PHYSICAL CHARACTERISTICS

The number of principal operating units used are determined by the installation requirements of the Aircraft. Approximate space and weight requirements of each item is listed above under "Major Components."

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 7 Jun 52	AN/AIC-TYPE SERVICE TYPE NUMBER: USAF COMBAT INTERPHONE



USAF Combat Interphone components consist of an assortment of control panels, audio amplifiers, relay units, and related items used to provide interphone communication between the various crew members and/or crew members and radio equipment in multi-place aircraft. The availability of a variety of control panels and amplifiers permit the selection of appropriate components to provide an interphone system which best meets the tactical needs of each individual aircraft and crew station.

The most elaborate combination provides selection of either constant or automatic volume control; control of one to 15 stations (singly or simultaneously); compass; vhf liaison; command; interphone; private interphone; three recorders (maximum); range or voice filter; mixed signals; and call facilities.

Interphone Amplifier AM-26A/AIC is ordinarily used in high altitude aircraft having six or more interphone stations; Interphone Amplifier AM-147/AIC is installed in two- or three-place low-altitude aircraft.

Power requirements are: 24-28 v, dc, the total load will vary with each different installation.

AN/AIC-TYPE	INSTRUCTION LITERATURE: TO 16-55-391 CLASSIFICATION OF EQUIPMENT: Unclassified
USAF :SERVICE TYPE NUMBER	USING SERVICE : Air Force
COMBAT INTERPHONE	DATE OF THIS SHEET: 7 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Interphone Amplifier AM-26A/AIC	10-1/2 x 5-7/8 x 5-1/4	8.0
1	Mixer Amplifier AM-142/AIC	5-1/4 x 6 x 1-3/4	1.9
1	Interphone Amplifier AM-147/AIC	7-5/8 x 5-1/2 x 2-7/8	3.0
1	Control Panel C-383/AIC	3-3/4 x 5 x 3-1/8	1.5
1	Control Panel C-384/AIC	3-3/8 x 5 x 3-1/8	1.25
1	Control Panel C-389/AIC	2-1/4 x 5 x 3-1/8	0.8
1	Control Panel C-385/AIC	2-1/4 x 5 x 2-1/4	0.7
1	Jack Box J-139A/AIC	3-3/8 x 2 x 2	0.3
1	Relay Unit RE-50/AIC	12-3/8 x 4 x 2-1/2	1.9
1	Filter F-21/ARA-9	3-3/4 x 2-27/32 x 2-1/2	1.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in fighter, bomber, cargo and transport aircraft as required.

INSTALLATION: Aircraft, shock-mounted.

CAN COMMUNICATE WITH: This equipment constitutes a complete communication and control facility for use in aircraft.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: 2 to 15 interphone stations, compass, vhf liaison, command, interphone, private interphone, 3 recorders, range with or without voice filter, mixed signals and call facilities.

TYPE CONTROLS: Rotary selector switches, toggle switches and volume controls to select various stations and/or radio equipment with which interphone is connected.

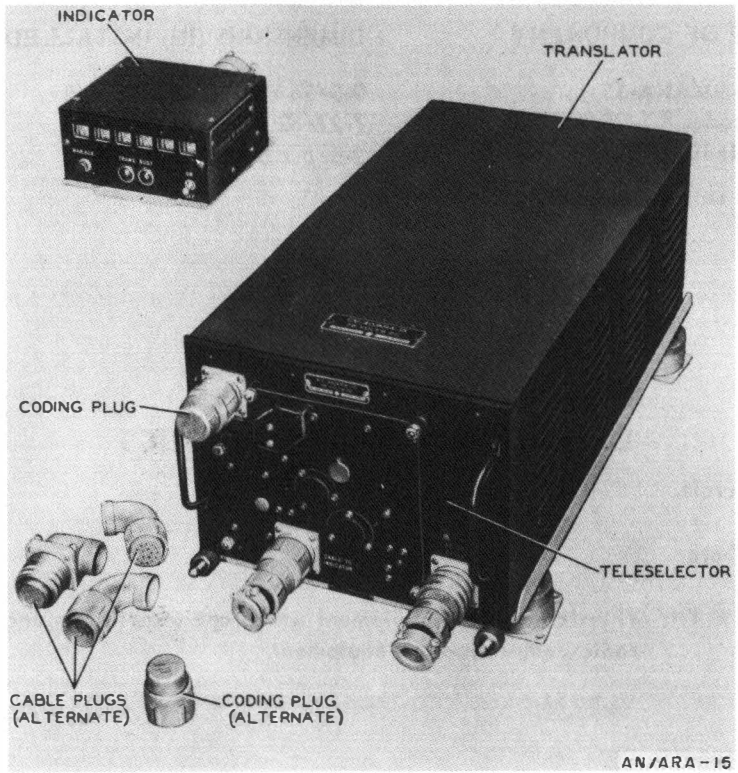
POWER OUTPUT: Amplifiers: 4 w (maximum) to 250-ohm resistive load.

POWER REQUIREMENTS: Total power requirements must be determined from type of installation.
Power drawn by basic components:
Instantaneous starting current 106 w, 24 to 28 v, (1.8 amp) dc.
Interphone Amplifier AM-26A/AIC 27.7 w, 24 to 28 v, (1.8 amp) dc.
Interphone Amplifier AM-147/AIC 19.88 w, 24 to 28 v, (0.75 amp) dc.
Mixer Amplifier AM-142/AIC 17.66 w, 24 to 28 v, (0.13 amp) dc (holding current).

PHYSICAL CHARACTERISTICS

Two to fifteen of each of the station units are used to form the intercommunication system, depending upon the type of installation required. The approximate space requirements and weight of each station unit is indicated above under "Major Components."

STATUS: Standard CLASSIFICATION OF EQUIPMENT: ~~Confidential~~ USING SERVICE: Navy DATE OF THIS SHEET: 29 May 52	**AN/ARA-15** IMPULSE TRANSLATING EQUIPMENT



Impulse Translating Equipment AN/ARA-15 is installed in aircraft to automatically decode and acknowledge a-m signals received from Experimental Impulse Keying Equipment CXJV, (shipborne or shore station equipment). It is used in conjunction with radio communication equipment of the aircraft and of the ship, to translate and visually display a coded message. The visual message consists of six ideograms or symbols. It is designed for use with such equipment as Radio Set AN/ARC-1.

This equipment consists essentially of a selector-decoder, a selector, and an indicator unit.

The selector-decoder converts audio tones into d-c impulses, and the indicator unit converts these d-c impulses to visual messages, and automatically causes transmission of an acknowledgment signal by the aircraft's transmitter to the sending station, indicating either correct or incorrect receipt of the message.

A manual control is provided to enable the operator to answer a request-for-acknowledgment signal from the sending station. The selector-decoder automatically determines whether the received message is intended for the particular equipment; each sending and receiving station has individual code numbers.

AN/ARA-15

IMPULSE TRANSLATING EQUIPMENT

INSTRUCTION LITERATURE: CO-NavAer 16-30ARA15-507
CLASSIFICATION OF EQUIPMENT: Confidential
USING SERVICE : Navy
DATE OF THIS SHEET : 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Selector CV-40/ARA-15	9-5/16 x 11-7/16 x 25-3/8	23.2
*1	Selector Decoder KY-26/ARA-15	7-27/32 x 10-1/4 x 8-5/16	11.3
1	Indicator Unit ID-215/ARA-15	2-5/8 x 5-3/32 x 6-1/32	2.77

*Mounted in selector chassis.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft.

INSTALLATION: Airborne.

CAN COMMUNICATE WITH: This is auxiliary equipment which operates in conjunction with primary radio communication equipment.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: AF (coded).

TYPE COMMUNICATION CIRCUITS: Composite.

CONTROLS: Manual acknowledgment-of-signal control; ON-OFF switch.

POWER REQUIREMENTS: 318 w, 26.5 v, dc.

PHYSICAL CHARACTERISTICS

Impulse Translating Equipment AN/ARA-15 measures 9-5/16 x 16-11/16 x 25-3/8 inches.

AN/ARA–25

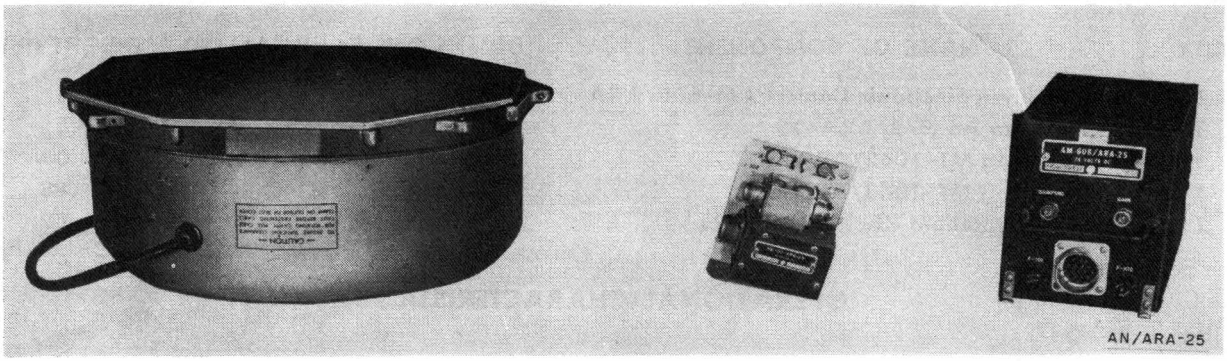
DIRECTION FINDER GROUP

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF

DATE OF THIS SHEET: 6 June 1956



Direction Finder Group AN/ARA–25 is used for indicating relative bearing of, and for homing on, radio signal sources. The signals may be amplitude-modulated or unmodulated. The equipment extracts the information from signals received by such radio sets as AN/ARC–27. The relative bearing of the signal source is indicated on Indicator ID–90A/ARN–6 or Course Indicator ID–250/ARN.

This equipment consists of three major operating units: electronic control amplifier, antenna, and solenoid relay.

AN/ARA–25

DIRECTION FINDER GROUP

INSTRUCTION LITERATURE: 12R1–2ARA25–2

USING SERVICE: USAF

DATE OF THIS SHEET: 6 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Amplifier, Electronic Control AM–608/ARA–25	5 7/8 x 4 7/8 x 12 17/32	5.4
1	Antenna AS–578/ARA–25	6 x 16 x 14 1/2	17.5
1	Mounting MT–1042/ARA–25	4 5/16 x 4 3/8 x 3/16	.09
1	Mounting MT–1043/ARA–25	2 5/64 x 5 3/4 x 11 3/16	.88
1	Relay, Solenoid RE–120/ARA–25	5 15/16 x 6 1/2 x 1 3/4	.82

OPERATIONAL CHARACTERISTICS

TACTICAL USE: In fighters, bombers, and cargo aircraft.

INSTALLATION: Airborne.

APPROXIMATE RANGE: Line of sight.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 225 to 400.

TYPE MODULATION: Am (A1, A3).

TYPE OF SIGNAL: Cw, voice.

POWER REQUIREMENTS: 26.5 v, 6 va, 380 to 420 cy, 1 ph ac (syn-gen rotor); 225 v, .03 amp dc (p); 28 v dc (sol rel, .2 amp; ADF rel, .3 amp; fil, .35 amp; ant. drive mot, 2 amp).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

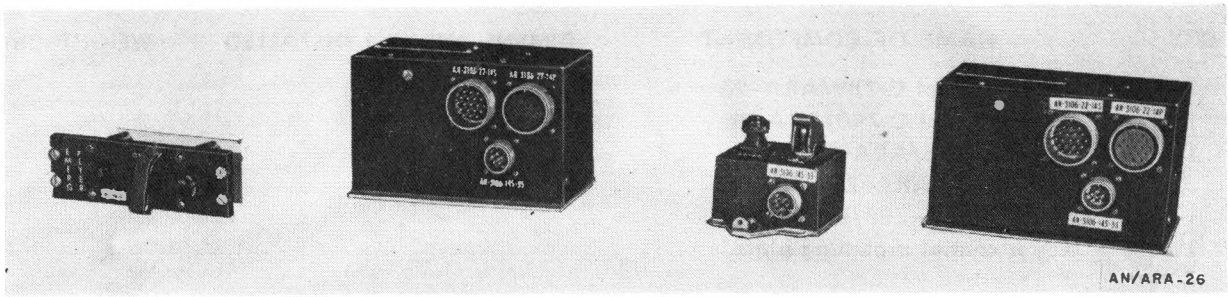
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF

DATE OF THIS SHEET: 6 June 1956

AN/ARA–26

CONTROL-KEYER GROUP



Control-Keyer Group AN/ARA–26 provides automatic keying of airborne radio transmitter equipment to transmit distress signals, during an extreme emergency, to the aircraft.

The control panel, mounted in the pilot's instrument board, and the keyer control, mounted in the radio operator's section of the plane, are used to tune the keyer "on or off" and also to provide an indicator light for checking the power to the keyer group.

The keyer component is a motor-driven device for automatically keying the distress signals and for channeling the transmitter. A time delay, which can be preset for any interval from 5 to 30 seconds, allows time for transmitter warmup and channeling.

AN/ARA-26

CONTROL-KEYER GROUP

INSTRUCTION LITERATURE: 12R5-2ARA26-2

USING SERVICE: USAF

DATE OF THIS SHEET: 6 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Keyer Control C-789/ARA-26		
1	Control Panel C-790/ARA-26		
1	Keyer KY-65/ARA-26 or KY-65A/ARA-26		
1	Mounting MT-797/U		
1	Keyer control mounting plate		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in bombers, air-sea rescue, trainer, and cargo aircraft.

INSTALLATION: Airborne.

TECHNICAL CHARACTERISTICS

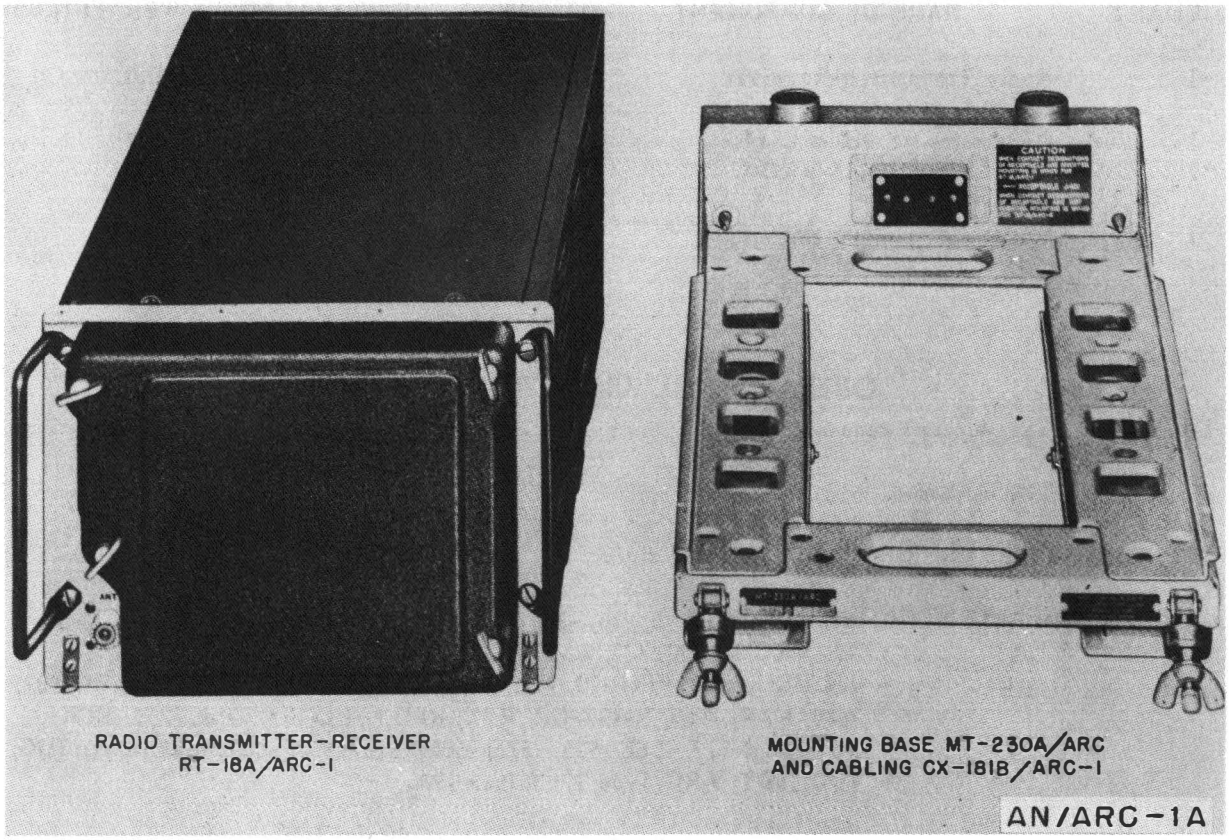
FREQUENCY RANGE IN MEGACYCLES: Operates on distress freq.

POWER REQUIREMENTS: 26.5 v, .7 amp dc.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/ARC-1A** RADIO SET



Radio Set AN/ARC-1A is a general purpose low power v-h-f, a-m (voice) transceiver for radiotelephone communication between aircraft, and from aircraft to ground stations. Remote selection of any one of ten preset crystal-controlled channels is possible. The receiver permits monitoring on the guard channel while operating on a main communication channel.

The equipment is designed to use a quarter-wave base-fed rod or mast-type antenna, which should be installed as nearly as possible along the centerline of the plane.

AN/ARC-1A

RADIO SET

INSTRUCTION LITERATURE: AN 16-30ARC1-7
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter-Receiver RT-18A/ARC-1	24-3/4 x 10-7/8 x 9-1/32	40.0
1	Dynamotor DY-9B/ARC-1	5-1/4 x 3-1/2 x 9-3/16	5.7
*1	Control Unit C-115/ARC-1	2-1/4 x 6 x 6-1/2	1.0
	or C-45/ARC-1	8-3/8 x 3-3/8 x 2-5/8	0.2
1	Mounting Base MT-230/ARC	24 x 10-19/32 x 3-7/8	4.13

*Not supplied.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft communications.

INSTALLATION: Airborne.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-16, -20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -12, -21; AN/URT-7, -10; AN/VRC-1; BC-639, -640; MAR; MBS; R-137/GR; RBK; RBQ; RC-103, -256, -257; RCK; RCO; SCR-522, -542, -573, -575, -607, -616, -624, -641, -643, -644; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 - 156.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

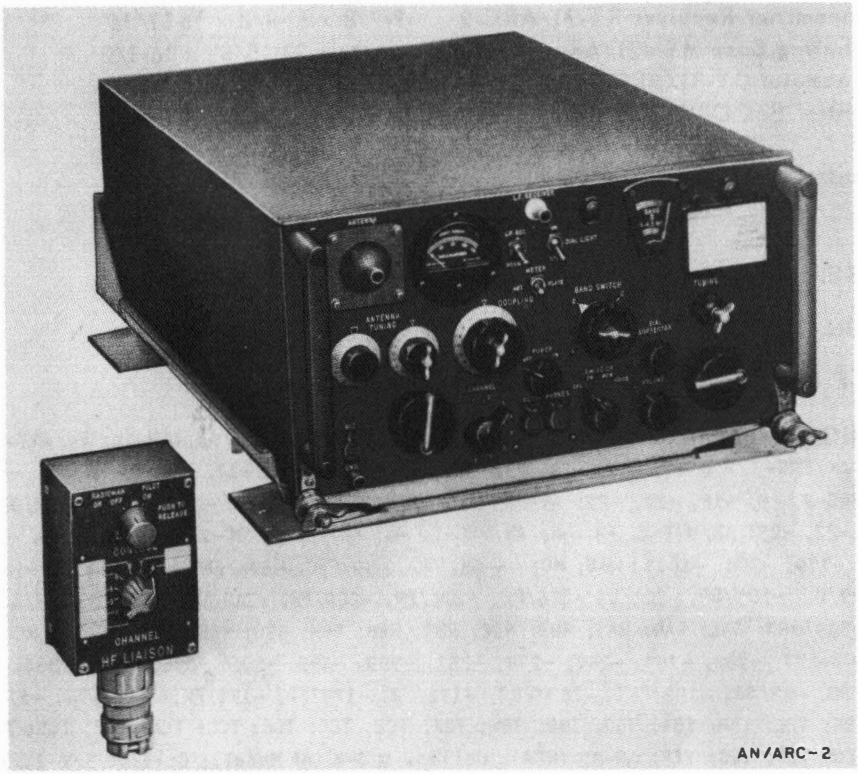
POWER OUTPUT: Transmitter: 8 w.
Receiver: 400 mw into 300 or 4000 ohm output (dual output).

POWER REQUIREMENTS: 504 w, 24-29 v,d c.

PHYSICAL CHARACTERISTICS

Radio Set AN/ARC-1A measures 24-3/4 x 10-7/8 x 9-1/32 inches.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/ARC-2** RADIO SET



Radio Set AN/ARC-2 is a general purpose medium power, m-f and h-f, am (voice, cw, and mcw) transceiver designed for installation in all types of Naval aircraft. Provides manual selection by pilot or radio operator of eight preset master-oscillator controlled channels or remote control of the autotune system of channel selection.

The equipment will operate satisfactorily up to an altitude of 40,000 feet above sea level.

AN/ARC-2

RADIO SET

INSTRUCTION LITERATURE: AN 16-30ARC2-3
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter-Receiver RT-91/ARC-2	7-7/8 x 21-1/8 x 15 11/16	69.5
1	Mounting Base MT-421/AR	5-3/16 x 23-15/32 x 16-1/2	6.0
1	Dynamotor DY-31/ARC-2	4-1/16 x 9-3/32 x 4-1/16	9.5
2	Control Box C-243/ARC-2	5-15/16 x 3-1/2 x 3-1/4	2.0
	C-244A/ARC-2	8-1/8 x 3-5/8 x 3-1/4	1.3
1	Control Panel C-245A/ARC-2	7-23/32 x 6 x 2-1/4	1.3

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Naval aircraft.

INSTALLATION: Airborne.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -608/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 9.05.

Band A: 2.1 - 2.9
Band B: 3.1 - 4.4
Band C: 4.1 - 5.9
Band D: 6.1 - 8.9.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, mcw.

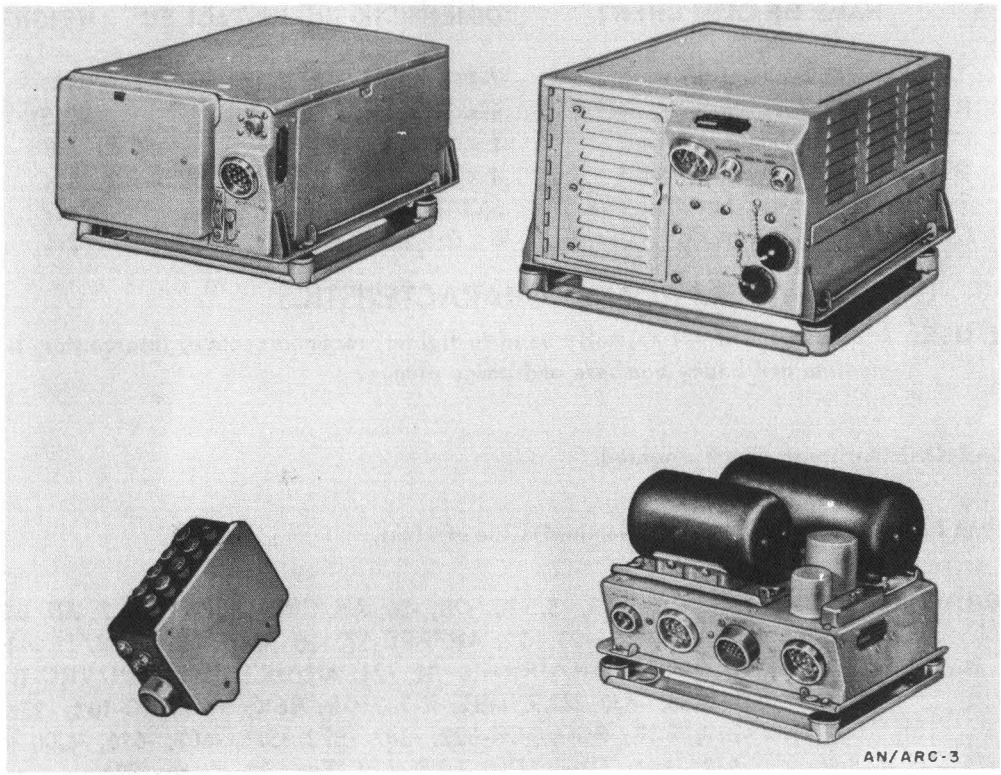
POWER OUTPUT: Transmitter: 17-30 w.
Receiver: 500 mw into 300 ohm output.

POWER REQUIREMENTS: 530 w, 26.5 v dc. (Must withstand surge of 60 amp for 0.5 sec).

PHYSICAL CHARACTERISTICS

Radio Set AN/ARC-2 measures 9-1/8 x 23-15/32 x 16-1/2 inches, net weight 90 pounds.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force, Army, Navy DATE OF THIS SHEET: 28 Apr 52	**AN/ARC-3** RADIO SET



Radio Set AN/ARC-3 is an airborne command v-h-f communication system for air-to-air and air-to-ground communication. It operates on any eight preset crystal-controlled channels in the 100 to 156 mc range, by push buttons located on the transmitter and/or on the remote Control Box C-118/ARC-3.

The crystals are capable of operating under conditions of high humidity and temperature.

The transmitter has an output impedance of 52 ohms matching low impedance transmission lines such as RG-8/U.

It is normally operated with Antenna Mast AN-104-B.

Power is supplied by aircraft batteries at 28 volts.

AN/ARC-3

RADIO SET

INSTRUCTION LITERATURE: TO 16-30ARC-3
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force, Army, Navy
DATE OF THIS SHEET: 28 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	T-67/ARC-3 Transmitter	7-1/2 x 12-1/8 x 15-1/4	21.0
1	R-77/ARC-3 Receiver	6 x 11 x 14-5/16	20.5
1	DY-22/ARC-3 Dynamotor Unit	4 x 3-7/16 x 7-3/16	4.8
1	DY-21/ARC-3 Dynamotor Unit	4 x 3-7/16 x 7-1/2	8.4
1	J-68/ARC-3 Power Junction Box	5-3/16 x 8-3/8 x 10-11/32	6.7
1	C-118/ARC-3 Control Box	6 x 2-5/8 x 6-7/8	2.1

OPERATIONAL CHARACTERISTICS

TACTICAL USE: A command vhf set normally used in fighter, reconnaissance, interceptor, light, medium and heavy bombers and cargo planes.

INSTALLATION: Airborne, shock mounted.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-16, -20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -12, -21; AN/URT-7, -10; AN/VRC-1; BC-639, -640; MAR; MBS; R-137/GR; RBK; RBQ; RC-103, -256, -257; RCK; RCO; SCR-522, -542, -573, -575, -607, -616, -624, -641, -643, -644; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 - 156 on any 8 preset crystal-controlled channels.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone.

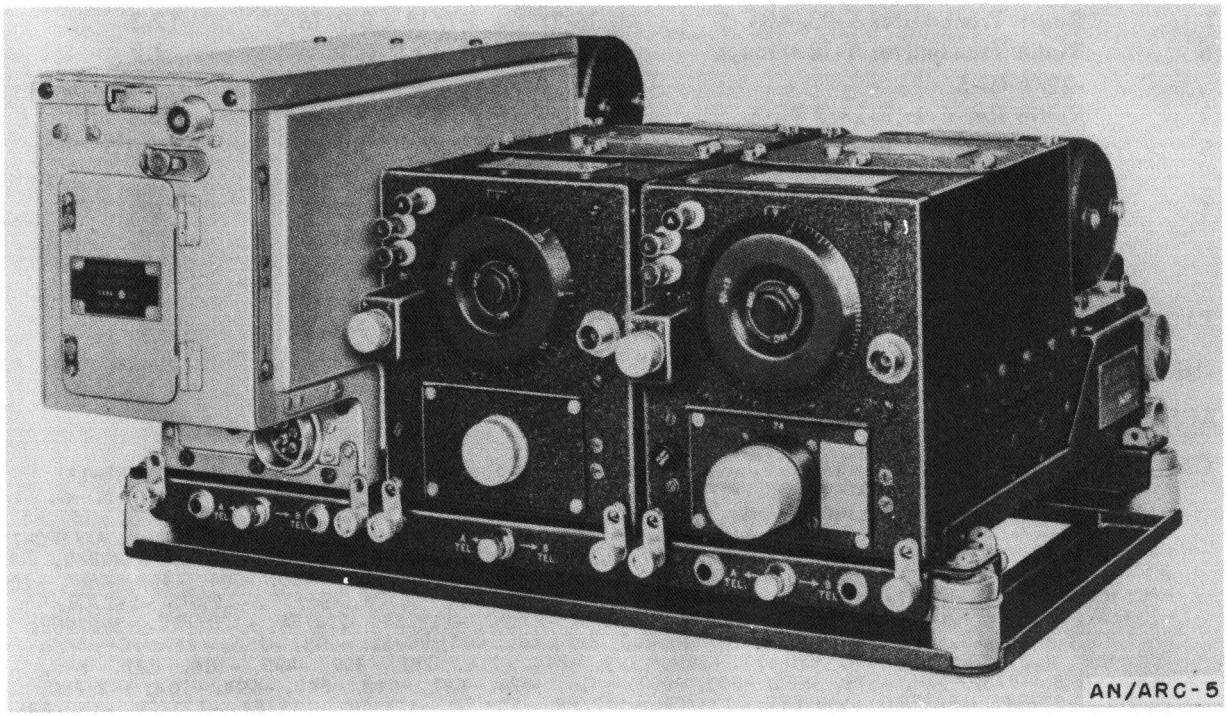
POWER OUTPUT: Transmitter: 8 w.
Receiver: 600 mw into 50 or 600 ohm load impedance.

POWER REQUIREMENTS: Starting; 3324 w, 28 - 32 v, (118 amp) dc.
Continuous operation; 385 w, (13.75 amp) dc.

PHYSICAL CHARACTERISTICS

Radio Set AN/ARC-3 measures 7-1/2 x 25-1/2 x 15-1/4 inches (approximate), net weight 68.1 pounds, volume 2 cu ft (approximate). Packed for domestic or export shipment: total weight 96 pounds, total volume 5 cu ft. Shipped in 1 package.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 23 May 52	**AN/ARC-5** RADIO EQUIPMENT



Radio Equipment AN/ARC-5 is a multichannel l-f, m-f, h-f and v-h-f, am (cw, mcw, voice) transmitting and receiving equipment assemblage for installation in aircraft for general air-to-ground communication, and for reception of instrument landing and navigational signals. It is a multiple-unit equipment, the number of transmitters and receivers employed (limit of five receivers and eight transmitters) depend upon the type of installation.

The l-f, m-f, and h-f transmitters and receivers cover their respective frequency ranges by means of five independent units, any one of which may be operated individually or all simultaneously. Five additional transmitters with lower frequency coverage may be used for special purposes. For v-h-f coverage one transmitter and receiver is used in radiotelephone applications.

Frequency control is by crystal-oscillator; the l-f, m-f, and h-f units are of the single frequency type, while the v-h-f transmitter and receiver employs four preset channels. The l-f, m-f, and h-f equipment may be remotely controlled if desired, however, the v-h-f equipment is designed specifically for operation by remote control.

AN/ARC-5

RADIO EQUIPMENT

INSTRUCTION LITERATURE: NavAer 08-50-95, AN 08-10-195
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 23 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter T-23/ARC-5	15-3/16 x 5-7/16 x 8-9/16	12.3
*5	Radio Transmitter T-18 through -22/ARC-5	12-3/4 x 5-1/4 x 7-1/16	9.0
1	Radio Receiver R-28/ARC-5	8-5/8 x 6 x 17-7/8	13.6
*5	Radio Receiver R-23 through -27/ARC-5	11-1/2 x 4-13/16 x 5-5/8	6.0
1	Modulator MD-7/ARC-5	7-11/16 x 10-3/16 x 8-7/8	9.1

* Quantity dependent upon type installation.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft.

INSTALLATION: Airborne.

APPROXIMATE RANGE (IN MILES): Short.

CAN COMMUNICATE WITH: AN/ARC-1, -2, -3, -5, -8, -9, -18, -21, -25, -26, -28, -36; AN/ARR-15; AN/ART-13; AN/CRC-2; AN/CRT-3, -5; AN/FRC-7, -10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -26, -30; AN/GRR-2, -3, -5; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -17, -19, -20; AN/SRC-3; AN/SRR-3, -9, -11, -12, -13; AN/SRT-1, -3, -4; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -21, -22, -23; AN/URT-2, -3, -4, -7, -10; AN/VRC-1, -4; AN/VRR-2; BC-191, 312, -329, -339, -342, -348, -365, -401, -447, -610, -639, -640, -779, -787, -794, -797, -1004; MAW; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -137/GR, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBK; RBM; RBO; RBP; RBQ; RBS; RC-52, -103, -256, -257; RCF; RCG; RCH; RCK; RCO; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -522, -536, -542, -543, -573, -574, -575, -585, -593, -607, -616, -624, -641, -643, -644, -694, -704; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCO; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDG; TDH; TDK; TDN; TDO; TDQ; TDT; TEB; TEC; TEF; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmitting: 2.1 - 9.1 and 100 - 156 in the ranges below:

2.1 - 3.0	4.0 - 5.3	7.0 - 9.1
3.0 - 4.0	5.3 - 7.0	100 - 156

Receiving: 0.19 - 9.1 and 100 - 156 in the ranges below:

0.19 - 0.55	1.5 - 3.0	6.0 - 9.1
0.52 - 1.5	3.0 - 6.0	100 - 156.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw, cw.

POWER OUTPUT:

100 to 156 mc:	6 w on voice.
2.1 to 3.0 mc:	16 w on cw; 7 w on mcw; 5 w on voice.
3 to 4 mc:	24 w on cw; 11 w on mcw; 6 w on voice.
4 to 5.3 mc:	31 w on cw; 16 w on mcw; 10 w on vcice.
5.3 to 7 mc:	36 w on cw; 18 w on mcw; 11 w on voice.
7 to 9.1 mc:	39 w on cw; 20 w on mcw; 13 w on voice.

POWER REQUIREMENTS: 24-28 v, d-c aircraft supply.

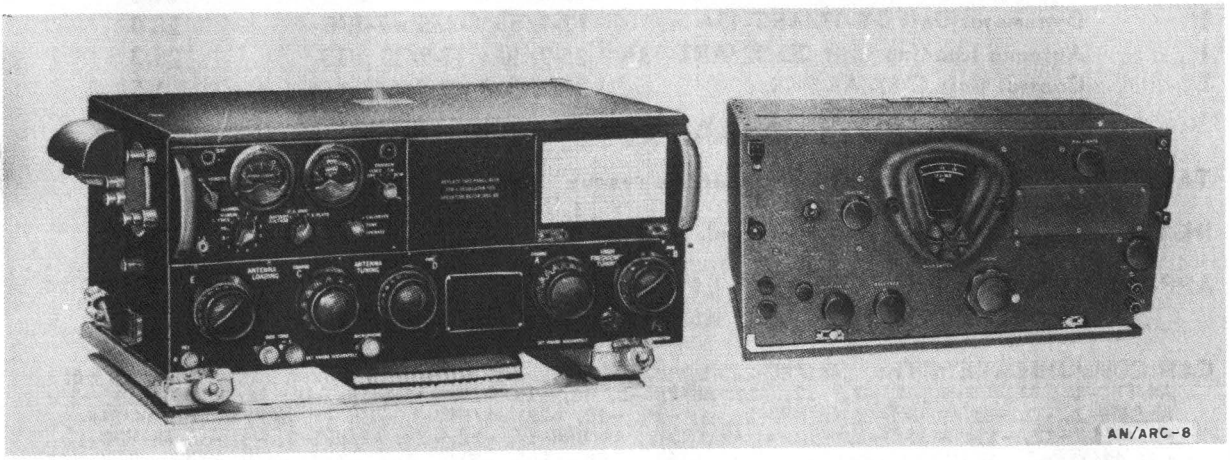
PHYSICAL CHARACTERISTICS

Information on Radio Equipment AN/ARC-5 not available.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 7 Jun 52

AN/ARC-8

RADIO SET



Radio Set AN/ARC-8 is an airborne high power, long range, a-m, h-f, transmitting and receiving set designed for two-way air-to-ground and air-to-air communication. The transmitter and receiver will operate on voice, tone or telegraph signals. (These components are illustrated above.)

This set consists of a radio transmitting set, a control unit, a radio receiving set, and interconnecting cables.

Radio Transmitting Set AN/ART-13 covers two frequency ranges; 200 to 500 kc and 2 to 18 mc. The power output varies from 4 w at 200 kc to 90 w at 13.5 mc.

It operates on 11 preset channels which can be crystal calibrated but not crystal-controlled.

Radio Receiving Set AN/ARR-11 consists of a Radio Receiver BC-348-Q (or-R) shock mounting and necessary plugs, and interconnecting cables. It is designed for continuous tuning over the 200 to 500 kc and 1.5 to 18.0 mc ranges. The receiver can be locally tuned only.

Radio Transmitting Set AN/ART-13 may be remotely controlled by means of Control Unit C-87/ART-13 which utilizes the Collins Auto-tune System of automatic remote control.

Antenna requirements vary with the frequency on which the equipment is operating. Normally a fore-and-aft inverted L or T type antenna is used for h-f operation; for l-f a trailing wire and Antenna Loading Unit CU-32/ART-13A are used.

AN/ARC-8

RADIO SET

INSTRUCTION LITERATURE: TO 16-30ART-13 & 16-30ARR-11
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET : 7 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitting Set AN/ART-13	23-5/8 x 13-5/8 x 10-3/4	103.6
1	Radio Receiving Set AN/ARR-11	18 x 10-1/2 x 9-1/2	41.8
1	Dynamotor Unit DY-17/ART-13A	13-1/5 x 8-4/5 x 7-1/5	28.0
1	Antenna Loading Unit CU-32/ART-13A	25-7/10 x 13-9/10 x 13	28.3
1	Control Unit C-87/ART-13	3-3/5 x 8 x 3-1/5	1.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in all bombers, air sea rescue, trainer and cargo aircraft.

INSTALLATION: Airborne, shock-mounted.

APPROXIMATE RANGE (IN MILES): Lf short,
Hf medium to long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ARR-15; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28; AN/FRT-5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/SRT-1, -3, -4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -329, -339, -342, -348, -365, -401, -447, -453, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -90/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBL; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDF; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmitter: 11 preset channels, 200 - 500 kc and 2 - 18 mc.
Receiver: Continuous tuning, 6 bands, 0.2 - 0.5 and 1.5 - 18 mc.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone cw.

POWER OUTPUT: Varies with frequency.

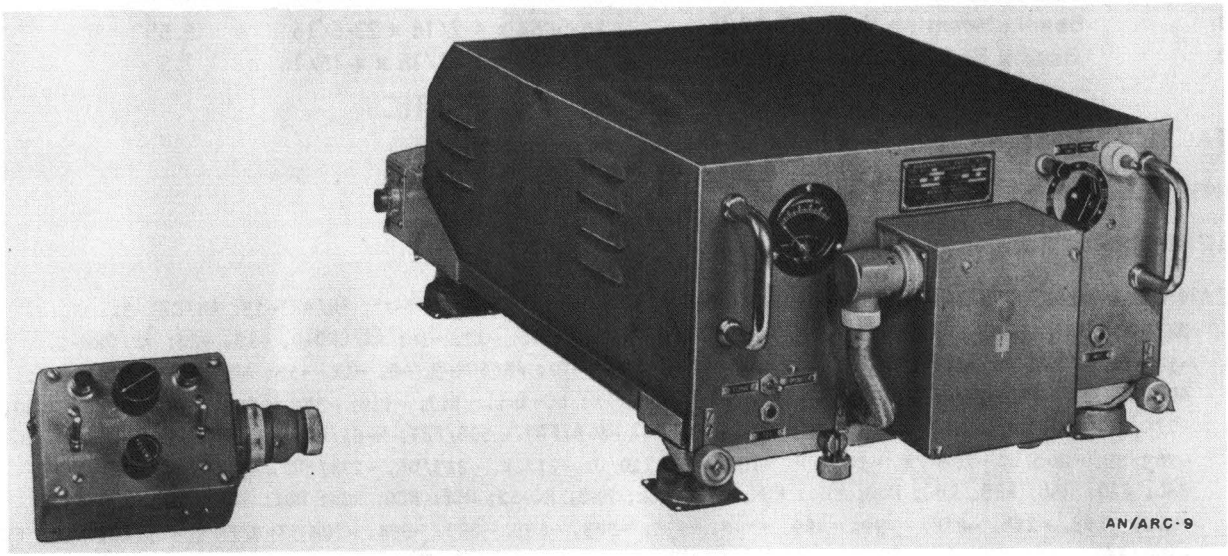
Transmitter:	200 kc 4.0 w	600 kc 18.0 w	5.5 mc to
	300 kc 7.5 w	2.0 mc 30.0 w	13.5 mc 90 w
	400 kc 11.0 w	3.0 mc 60.0 w	15.5 mc 75 w
	500 kc 14.0 w	4.0 mc 80.0 w	18.1 mc 65 w
Receiver:	3 w (maximum) into 300 or 4000 ohm resistive load.		

POWER REQUIREMENTS: Input 28 v at(37 amp) dc, 1036 w.

PHYSICAL CHARACTERISTICS

Radio Set AN/ARC-8 measures 84-1/5 x 13-9/10 x 10-3/4 inches, net weight 203.2 pounds. Packed for either domestic or export shipment: total weight 243.8 pounds, total volume 3.64 cu ft. Shipped in 4 packages.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 26 May 52	**AN/ARC-9** RADIO SET



Radio Set AN/ARC-9 is an airborne liaison two-way radio set for long range air-to-air and air-to-ground communication. Equipment operates on amplitude modulated signals only. Ten crystal controlled channels are available as follows: 3105.0, 4220.0, 4495.0, 4575.0, 4917.5 (or 4465.0), 5588.0, 5662.0, 6210.0, 6440.0 and 6500.0 kc.

The radio frequency power output from the transmitter is 50 w at 100% modulation. Two independent audio channels are available from the receiver, each supplying 300 miliwatts to a 500 ohm resistive load. Interphone facilities are provided between pilots when transmitter switch is in "stand-by" position. An antenna matching system is included which will couple the equipment to any type of commonly used aircraft antenna, which will operate on the frequencies covered by this set.

Radio Set AN/ARC-9X is identical to AN/ARC-9 except that the AN/ARC-9X Model is supplied with a dynamotor which will operate on either 12.5 or 25 v, dc; the AN/ARC-9 operates from 25 v, dc, 20 amp, 500 w; AN/ARC-9X, 25 v, dc, 20 amp, 500 w; 12.5 v, dc, 40 amp, 500 w.

AN/ARC-9

RADIO SET

INSTRUCTION LITERATURE: TO-16-30ARC-9-3
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET: 26 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	(12 or 24 volt) Bendix Communication Unit RTA-1B	15-11/16 x 7-11/16 x 22-13/16	68.5
1	Bendix Mounting Base MT-68-E	16-5/64 x 4-9/16 x 23-5/16	5.55
1	Bendix Remote Control Unit MS-44	3-15/16 x 2-13/16 x 4-15/16	1.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally used in cargo and transport aircraft.

INSTALLATION: Aircraft, shock-mounted.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCO; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 10 channels, crystal-controlled as follows: 3.105, 4.22, 4.495, 4.575, 4.9175 (or 4.465), 5.588, 5.662, 6.21, 6.44 and 6.5.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

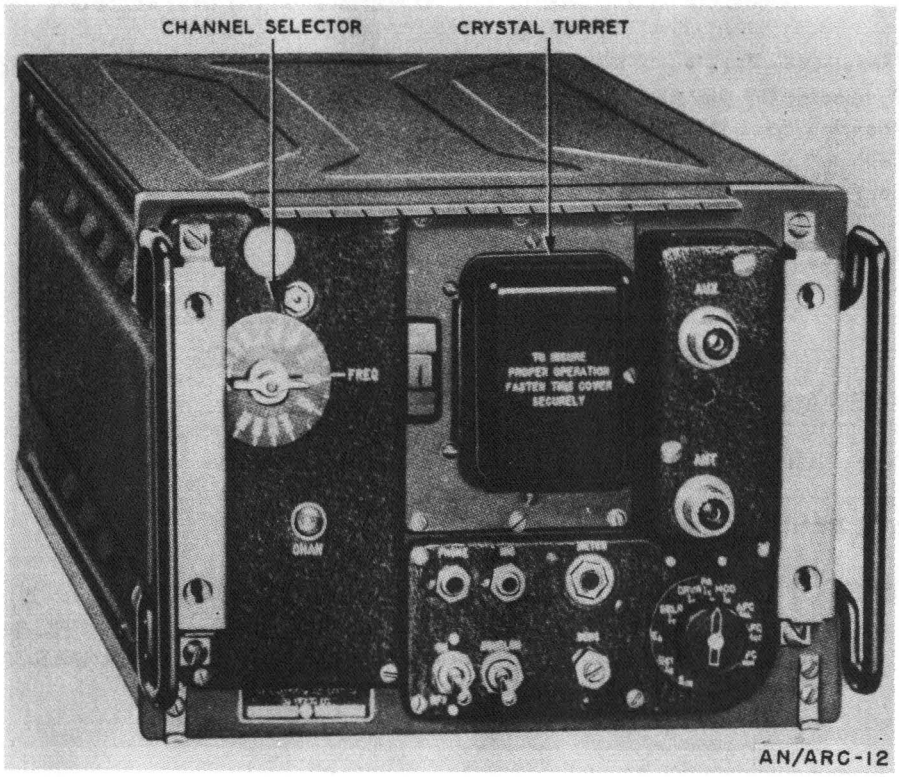
POWER OUTPUT: Transmitter: 50 w at 100% modulation.
Receiver: 300 mw into 500 ohm load (two channels available).

POWER REQUIREMENTS: 500 w, 24-28 v,(20 amp)dc (maximum).
AN/ARC-9; 500 w, 25 v,(20 amp) dc.
AN/ARC-9X; 500 w, 12.5v,(40 amp) dc.

PHYSICAL CHARACTERISTICS

Radio Set AN/ARC-9, -9X measures 19-5/8 x 7-11/16 x 23-5/16 inches, net weight 83.608 pounds, volume 2.1 cu ft. Packed for either domestic or export shipment: total weight 105 pounds, total volume 2.55 cu ft. Shipped in 1 package.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: ~~Restricted~~ USING SERVICE: Navy DATE OF THIS SHEET: 29 May 52	**AN/ARC-12** RADIO SET



Radio Set AN/ARC-12 provides am (voice) facilities for communication between aircraft, or between aircraft, and ground installations.

This set has 10 preset crystal-controlled channels, one of which is a guard channel, with provision for monitoring the guard frequency while operating over one of the communication channels.

It is also a component of Radio Set AN/ARC-30, an airborne communications relay system, which consists essentially of two AN/ARC-12's receiving on one frequency and transmitting on a different frequency.

This equipment is functionally similar to the AN/ARC-1, except for the frequency range covered.

AN/ARC-12

RADIO SET

INSTRUCTION LITERATURE: AN16-30ARC12-3
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE : Navy
DATE OF THIS SHEET: 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter-Receiver RT-58/ARC-12	9-1/32 x 10-7/8 x 24-1/2	45.3
1	Dynamotor DY-9B/ARC-1	3-1/2 x 5-1/4 x 9-3/16	5.7
1	Mounting Base MT-230A/ARC-12	Not Available	4.1
1	Cabling CX-181B/ARC-1	" "	1.8
1	Control Unit C-115/ARC-1 or C-45/ARC-1	" "	1.0
1	Mounting Plate MT-4/ARR-2	" "	0.1

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft.

INSTALLATION: Airborne.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/ARC-12, -19, -27, -30, -33, -34; AN/GRC-16, -27, -29, -30, -32; AN/GRR-7; AN/GRT-3; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-32; AN/URC-4; AN/URR-9, -12, -13; AN/URT-10; MAR; MAY; R-278/GR; RDR; RDZ; SCR-616; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 225 - 350, 9 preset main frequencies and 1 guard frequency.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 6 w.
Receiver: 500 mw.

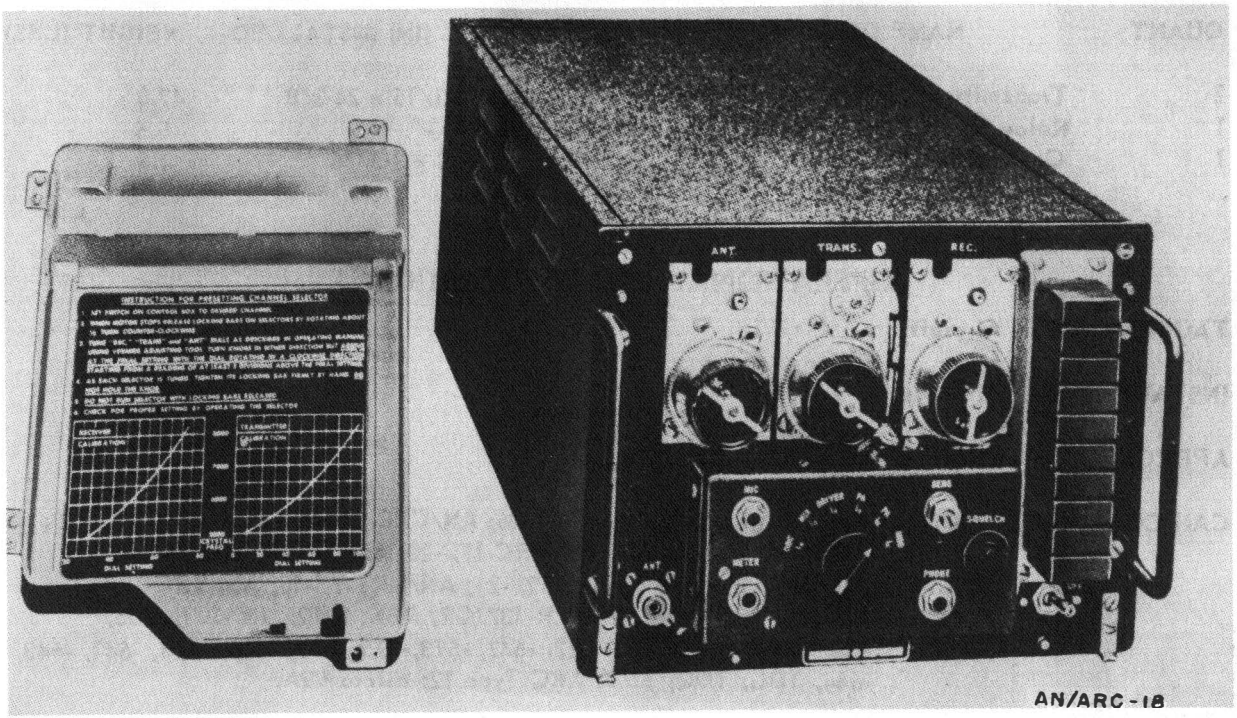
POWER REQUIREMENTS: 24 v, dc(45 amp)intermittent*,(20.5 amp) continuous.

* The result of channel selection and non-continuous transmission.

PHYSICAL CHARACTERISTICS

Radio Set AN/ARC-12 measures 9-1/32 x 10-7/8 x 24-1/2 inches, net weight 58.8 pounds.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Restricted USING SERVICE: Navy DATE OF THIS SHEET: 2 Jun 52	**AN/ARC-18** RADIO SET



Radio Set AN/ARC-18 is an airborne v-h-f, automatic relay station equipment for extending the range of am (voice) radio communication between a shore station, or ship, and other aircraft. A transmitted signal from a ship or shore station is received by one transceiver, and applied through a relay unit, to the second transceiver for relaying to the aircraft with which contact is desired.

This equipment consists essentially of two Radio Sets AN/ARC-1 interconnected by a relay unit. Each transceiver provides ten preset crystal-controlled channels, one of which is used as a guard channel.

The signal received on one frequency by either of the two transceivers is transmitted on a second frequency by the opposite transceiver; a certain minimum separation between receiving and transmitting frequencies is necessary to prevent interference, and permits the operator to monitor both sides of the conversation.

This equipment is very similar in makeup and operation to the AN/ARC-28. The primary difference is that the AN/ARC-28 allows individual transceiver operation.

AN/ARC-18

RADIO SET

INSTRUCTION LITERATURE: AN 16-30ARC18-4
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE : Navy
DATE OF THIS SHEET : 2 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Transmitter-Receiver RT-18/ARC-1	9-1/32 x 11-1/16 x 24-3/8	47.0
1	Relay Unit RE-15/ARC-18	Not Available	5.5
1	Control Unit C-156/ARC-18	6-3/4 x 5-5/8 x 3-5/16	1.9

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft.

INSTALLATION: Airborne.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-16, -20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -12, -21; AN/URT-7, -10; AN/VRC-1; BC-639, -640; MAR; MBS; R-137/GR; RBK; RBQ; RC-103, -256, -257; RCK; RCO; SCR-522, -542, -573,-575, -607, -616, -624, -641, -643, -644; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 - 156, 9 main channels and 1 guard channel.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

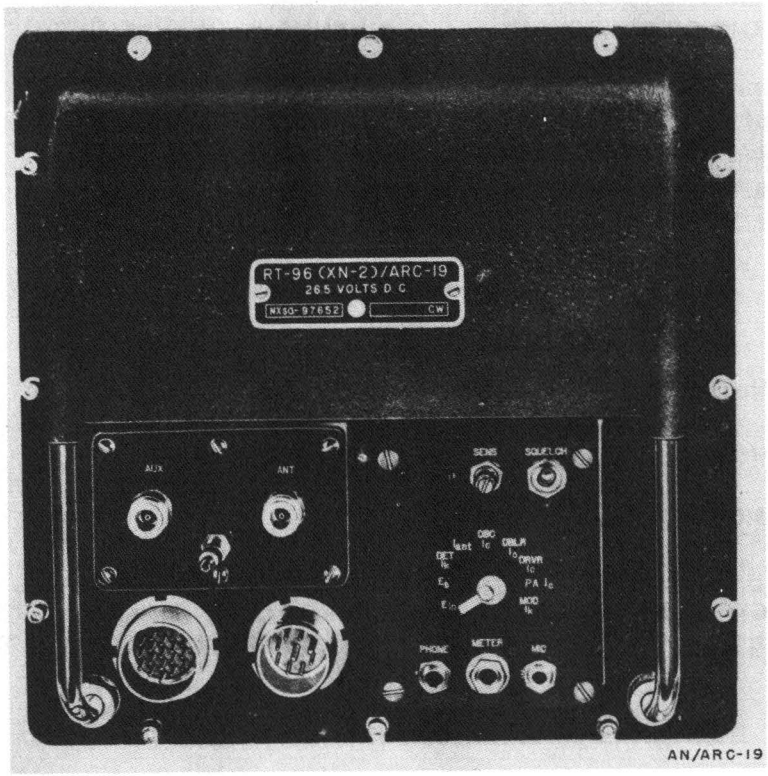
POWER OUTPUT: Transmitter: 8 w.
Receiver: Dual output, 400 mw into each 300 ohm load.

POWER REQUIREMENTS: 504 w, 28 v dc.

PHYSICAL CHARACTERISTICS

Information on Radio Set AN/ARC-18 not available.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Restricted USING SERVICE: Navy DATE OF THIS SHEET: 29 May 52	**AN/ARC-19** RADIO SET



Radio Set AN/ARC-19 is an airborne am (voice, mcw) radio transmitter-receiver for v-h-f and u-h-f communications between aircraft, or between aircraft and ground stations. It is intended for radio-telephone use, tone operation being used only in emergencies.

This radio set is designed for remote control operation. The control unit facilitates automatic selection of any one of nine preset crystal-controlled main channels, and a guard channel; manual adjustment of the nine channels provides possible selection of 875 frequencies and a guard frequency.

The receiver circuit includes a separate r-f unit which permits monitoring on the guard channel while operating on a main channel.

An antenna of the broad-band non-directional type is used, and the change from receiving to transmitting is accomplished by push button control.

AN/ARC-19

RADIO SET

INSTRUCTION LITERATURE: AN 16-30ARC19-7
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE : Navy
DATE OF THIS SHEET : 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter-Receiver RT-96/ARC-19	13-5/8 x 11-5/8 x 26-1/8	92.5
1	Radio Set Control C-590/ARC-19	6-3/4 x 5-3/4 x 6-5/8	5.1
1	Dynamotor, DY-62/ARC-19	4-9/16 x 3-5/8 x 7-13/16	6.5
1	Mounting MT-716/ARC-19	Not Available	2.1

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft.

INSTALLATION: Airborne.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/ARC-12, -19, -27, -30, -33, -34; AN/GRC-16, -27, -29, -30, -32; AN/GRR-7; AN/GRT-3; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-32; AN/URC-4; AN/URR-9, -12, -13; AN/URT-10; MAR; MAY; R-278/GR; RDR; RDZ; SCR-616; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 225 - 400.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, (mcw in emergency).

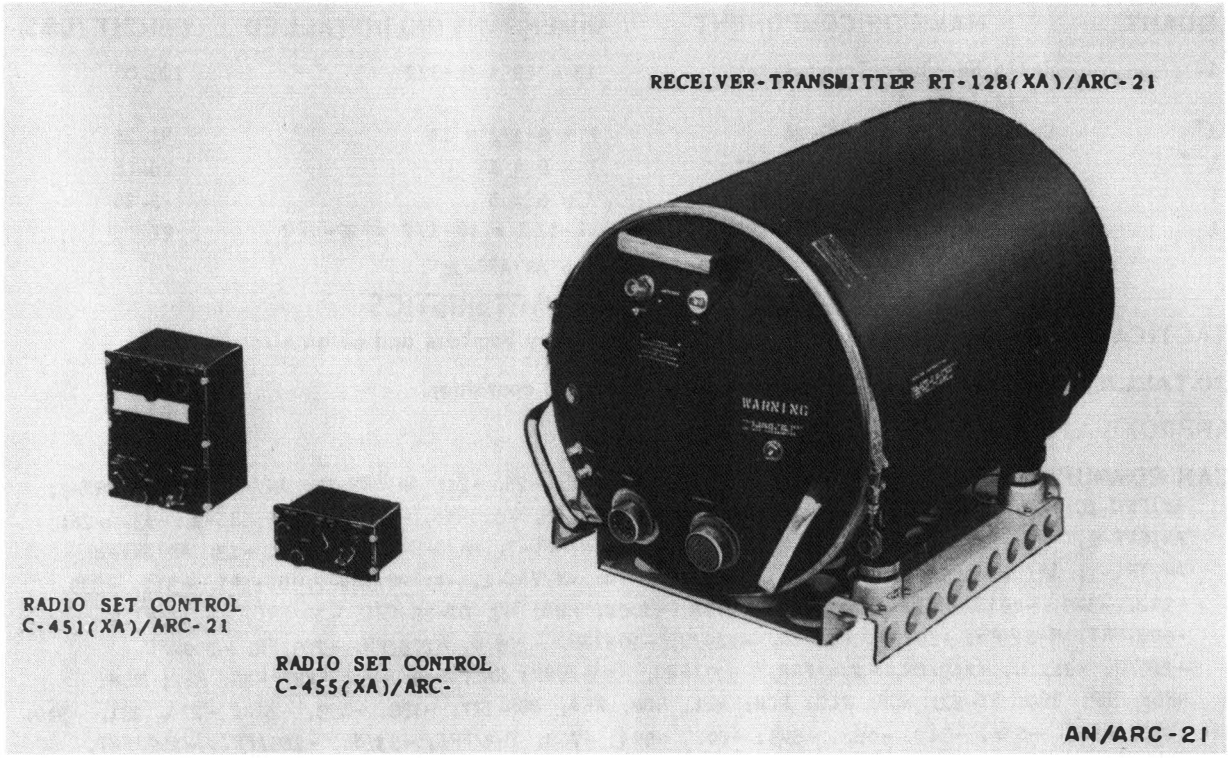
POWER OUTPUT: Transmitter: 9 w.
Receiver: 100 mw into a 300 ohm load.

POWER REQUIREMENTS: 344 w, 26.5 v d-c aircraft supply.

PHYSICAL CHARACTERISTICS

Radio Set AN/ARC-19 measures 16-3/8 x 11-5/8 x 26-1/8 inches.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Restricted USING SERVICE: Air Force DATE OF THIS SHEET: 7 Jun 52	**AN/ARC-21** RADIO SET



Radio Set AN/ARC-21 and AN/ARC-21X are normally used in aircraft for air-to-ground and air-to-air communication and are designed primarily for long range aircraft communication at high altitudes. The transmitter and receiver are in a pressurized container to insure full power output at altitudes up to 50,000 feet.

This equipment operates on any 20 preset channels spaced 500 kc apart in the frequency range 2 to 24 mc.

The transmitter normally operates on cw or voice; when operated with Radio Teletypewriter TT-30/AGA-1 (and ancillary equipment) frequency shift keying is provided.

When operated with Antenna Coupler CU-145/ARC-21, it will load into a fixed wire or flush-mounted aircraft antenna.

Remote control is provided by means of Radio Set Control C-451/ARC-21.

Power supplies are available for operation from 115 v, ac at 380-1000 cyc or 27.5 v, dc.

These sets are substantially the same except that AN/ARC-21X has a 115-v, ac, 380-1,000 cyc Power Supply PP-298/ARC-21 instead of dc Dynamotor Assembly DY-50/ARC-21 used by the AN/ARC-21.

AN/ARC-21

RADIO SET

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE : Air Force
DATE OF THIS SHEET : 7 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver-Transmitter RT-128/ARC-21	18 x 18 x 26-1/2	128.00
1*	Dynamotor DY-50/ARC-21	7 x 8-1/2 x 14	31.25
1**	Power Supply PP-298/ARC-21	7 x 9 x 14	25.75
1	Radio Set Control C-451/ARC-21	7 x 6 x 5	5.25
1	Power Supply PP-297/ARC-21	17-1/2 x 10-1/2 x 20-1/2	27.75

* Supplied with AN/ARC-21. ** Supplied with AN/ARC-21X.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued to light, medium, heavy bombers and cargo aircraft.

INSTALLATION: Aircraft, shock mounted in pressurized container.

APPROXIMATE RANGE (IN MILES): (Nominal) Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -608/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, 281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, —180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 44,000 channels spaced 0.5 mc apart in the frequency range 2 - 24.
Crystal control is provided for any one of 20 preset channels.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, voice and frequency shift keying.

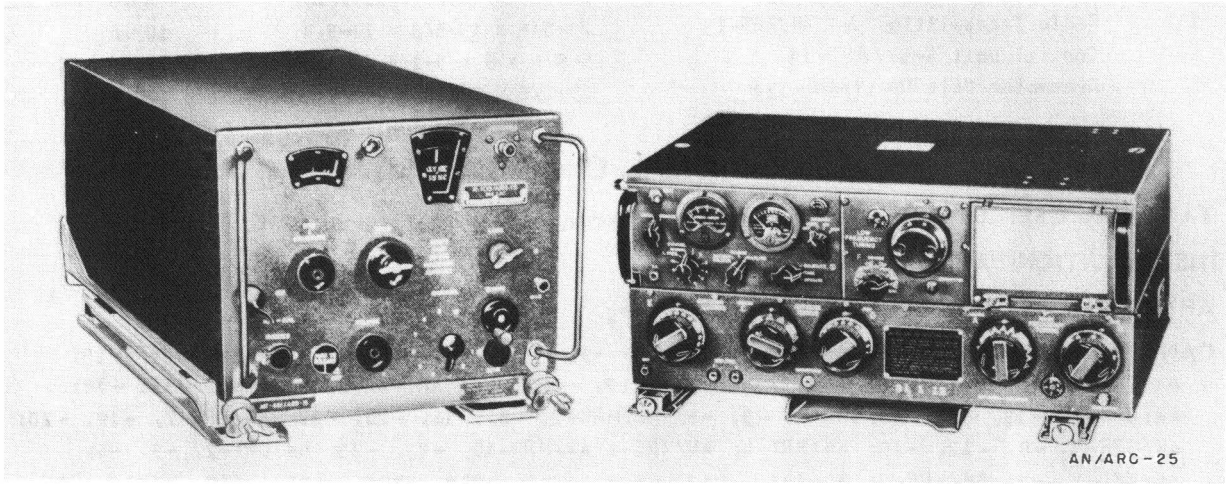
POWER OUTPUT: Transmitter: 100 w (Nominal).
Receiver: 900 mw into 200 ohm impedance.

POWER REQUIREMENTS: DY-50/ARC-21: 1050 w, 27.5 v, (60 amp) dc.
PP-298/ARC-21: 1650 w, 115 v, 380-1000 cyc, 1 phase, ac.
PP-297/ARC-21: 1680 w, 115 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Set AN/ARC 21 measures 56 x 52 x 26-1/2 inches, net weight 218 pounds, volume 6.2 cu ft. Packed for either domestic or export shipment: total weight 250.7 pounds, total volume 6.8 cu ft. Shipped in 4 packages.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 7 Jun 52	**AN/ARC-25** RADIO SET



Radio Set AN/ARC-25 is a liaison, airborne, two-way high power, long range, a-m, h-f radio transmitting and receiving equipment for air-to-ground and air-to-air communication. The transmitter and receiver will operate on voice, tone or cw signals.

This set consists of one radio transmitting set (AN/ART-13), a control unit, one radio receiving set (AN/ARR-15), a mounting base, and interconnecting cables.

Radio Transmitting Set AN/ART-13 normally covers the frequency range 2 to 18 mc, however, a l-f unit is available (on special order) to cover the 200 to 500 kc ranges.

It operates on 10 preset channels which can be crystal calibrated but not crystal-controlled.

Radio Set AN/ARR-15 is essentially a superheterodyne receiving equipment having a crystal-calibrated oscillator operating on any one of 10 preset channels in the 1.5 mc range. It can be operated locally, or from a remote position using Radio Set Control C-733/ARR-15 (not supplied).

Radio Set AN/ARC-25 has an antenna matching network which permits operation with a wide variety of antennas. Normally fore and aft, inverted L-or T-type antennas are used, however, a trailing wire is excellent if available.

AN/ARC-25

RADIO SET

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET : 7 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1 *	Radio Receiver R-105-A/ARR-15	Not Available	Not Available
1 *	Dynamotor DY-34/ARR-15	" "	" "
1 *	Mounting Base MT-461/ARR-15	10-7/8 x 9-3/8 x 21-9/16	43.0
1	Radio Transmitting Set AN/ART-13	23-5/8 x 13-5/8 x 10-3/4	103.6
1	Control Unit C-87/ART-13	3-3/5 x 8 x 3-1/5	1.5
1	Dynamotor Unit DY-17/ART-13A	13-1/5 x 8-4/5 x 7-1/5	28.0

* One Unit

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in all bombers, air sea rescue, trainer and cargo aircraft.

INSTALLATION: Aircraft, shock mounted.

APPROXIMATE RANGE (IN MILES): Medium-long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1 AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -608/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmitter: 10 preset channels 2 - 18 (crystal calibrated).
Receiver: 10 preset channels 1.5 - 18.5.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone, cw.

POWER OUTPUT: Transmitter: 30 w at 2 mc to 65w at 18 mc.
Receiver: 500 mw (maximum).

POWER REQUIREMENTS: 1,150 w, 28.5 v,(40.3 amp) dc .

PHYSICAL CHARACTERISTICS

Radio Set AN/ARC-25 measures 51-1/3 x 13-5/8 x 21-9/16 inches, net weight 176.1 pounds, volume 3.26 cu ft. Packed for either domestic or export shipment: total weight 229 pounds, total volume 3.56 cu ft. Shipped in 3 packages.

STATUS: Std

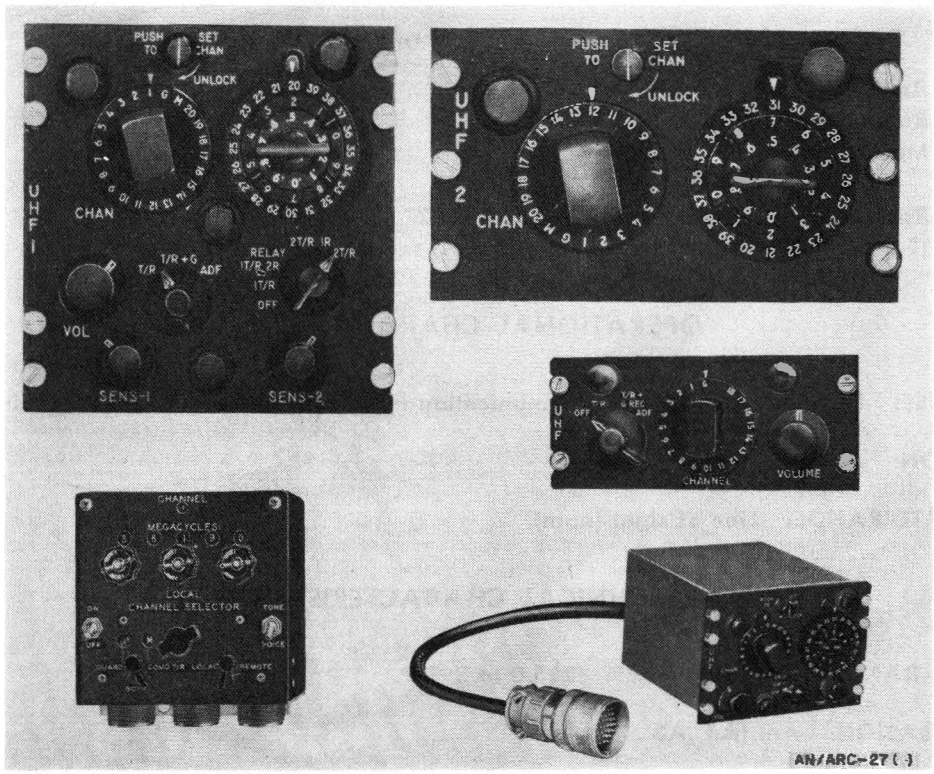
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 8 June 1956

AN/ARC–27( )

RADIO SET



Radio Set AN/ARC–27( ) is an airborne, two-way, uhf command radio equipment for voice or tone signals. It is used in navigation and voice communication for air-to-air, air-to-ship, and ground-to-air communication in all types of fighters, bombers, and cargo aircraft. The AN/ARC–27 must be operated in conjunction with Radio Set Control C–626/ARC–27 (master unit) plus, if desired, any one of several remote control units.

This equipment operates on any one of 18 preset, crystal-controlled frequencies of 1,750 available channels, spaced 100 kc apart. It consists of a triple-conversion, superheterodyne receiver with three crystal oscillators, and a double-conversion superheterodyne auxiliary guard channel receiver; both working into a common audio output circuit. The triple-conversion receiver operates with Direction Finder Group AN/ARA–25 for navigation purposes, as well as for voice communication. Any aircraft antenna with a 52-ohm coaxial transmission line, such as Radio Frequency Cable RG–8/U or RG–58/U, may be used.

The AN/ARC–27 is similar to Radio Set AN/ARC–55 except that the latter has no external blower and it is smaller, lighter, and is not pressurized. Radio Set AN/ARC–27A is identical with the AN/ARC–27 except that the former does not use the same master control unit. Radio Set Control C–1015/ARC–27A, C–1024/ARC–27A, C–1025/ARC–27A, C–1703/ARC–27A, C–1704/ARC–27A, or C–1705/ARC–27A is used with the A model.

AN/ARC–27( )

RADIO SET

INSTRUCTION LITERATURE: AN 16–30ARC27–2, –3

USING SERVICE: USN

DATE OF THIS SHEET: 8 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Radio Set Control C–626/ARC–27	6⅜ x 9⁹⁄₁₆ x 5½	9
1	Radio Set Control C–628/ARC–27	3⅝ x 2⅝ x 5¾	1
1	Mounting MT–822/ARC–27 or MT–822A/ARC–27	11⅛ x 2⅜ x 19¾	4
1	Radio Receiver-Transmitter RT–178/ARC–27	11¼ x 12⅜ x 27⅞	70.5

(For a complete list of major components, see instruction literature.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Navigation and voice communication in fighters, bombers, and cargo aircraft.

INSTALLATION: Airborne.

APPROXIMATE RANGE: Line of sight (nom).

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 225.0 to 399.9.

TYPE MODULATION: Am (A1, A3).

TYPE OF SIGNAL: Voice or tone.

POWER OUTPUT: 2 w (rcvr); 9 w (xmtr).

POWER REQUIREMENTS: 700 w, 24 to 28 v, 25 amp (max) dc.

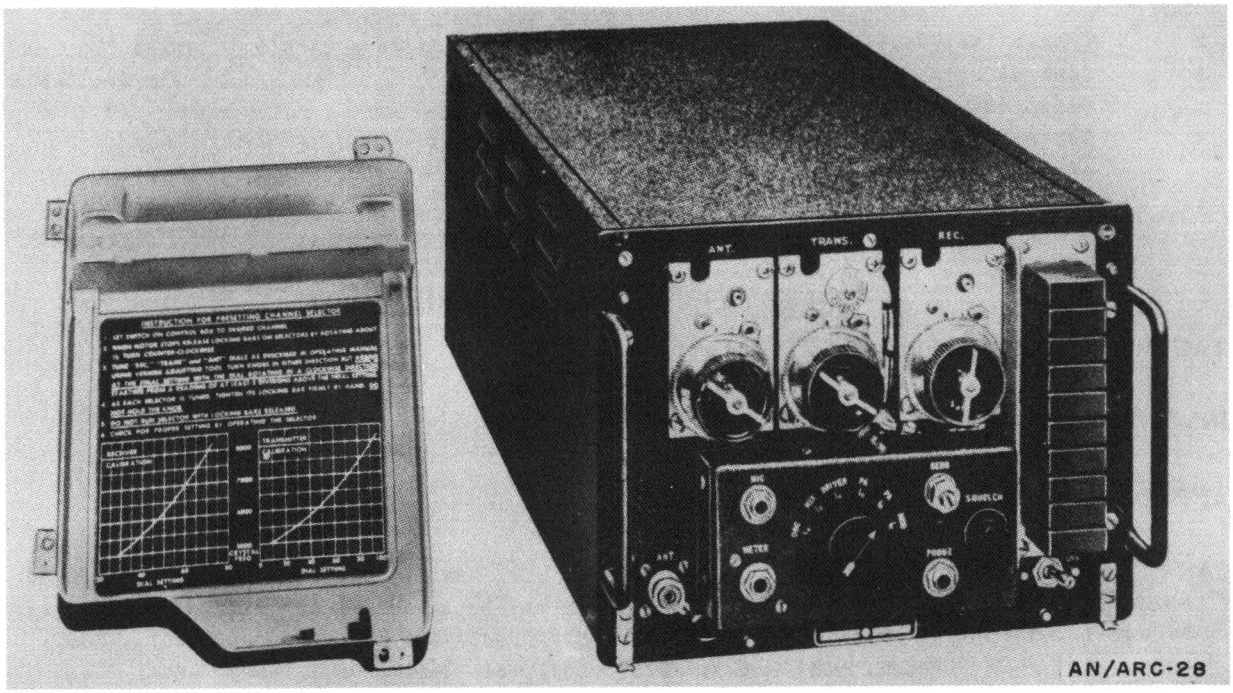
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	11¼ x 12⅜ x 27⅝	81.8	1.15		
DOMESTIC PACK:		87.1	2.72		
EXPORT PACK:		87.1	2.72		

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 2 Jun 52

AN/ARC-28

RADIO SET



Radio Set AN/ARC-28 is an airborne v-h-f automatic relay station equipment for extending the range of a-m (voice) radio communication between a shore station, or ship, and other aircraft. A transmitted signal from a ship or shore station is received by one transceiver, and applied through a relay unit to the second transceiver for relaying to the aircraft with which contact is desired.

This equipment consists essentially of two Radio Sets AN/ARC-1 interconnected by a relay unit. Each transceiver provides 10 preset crystal-controlled channels, one of which is used as a guard - channel. The signal received on one frequency by either of the two transceivers is transmitted on a second frequency by the opposite transceiver; a certain minimum separation between receiving and transmitting frequencies is necessary to prevent interference, and allows the operator to monitor both sides of the conversation.

Remote controls are employed to permit individual transceiver operation as well as the control of the automatic relay system.

AN/ARC-28

RADIO SET

INSTRUCTION LITERATURE: AN 16-30ARC28-3
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE : Navy
DATE OF THIS SHEET : 2 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Transmitter-Receiver RT-18/ARC-1	9-1/32 x 11-11/16 x 24-3/8	47.0
2	Control Unit C-45/ARC-1 or C-115/ARC-1	Not Available "	Not Available "
1	Control Unit C-333/ARC-28 or C-390/ARC-28	4-1/4 x 4-1/4 x 2-15/16 6 x 2-1/4 x 5-1/8	0.7 0.9
1	Relay Unit RE-51/ARC-28	10-1/2 x 6-5/16 x 7-1/8	5.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft.

INSTALLATION: Airborne.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-16, -20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -12, -21; AN/URT-7, -10; AN/VRC-1; BC-639, -640; MAR; MBS; R-137/GR; RBK; RBQ; RC-103, -256, -257; RCK; RCO; SCR-522, -542, -573, -575, -607, -616, -624, -641, -643, -644; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 - 156 mc, 9 main channels and 1 guard channel.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

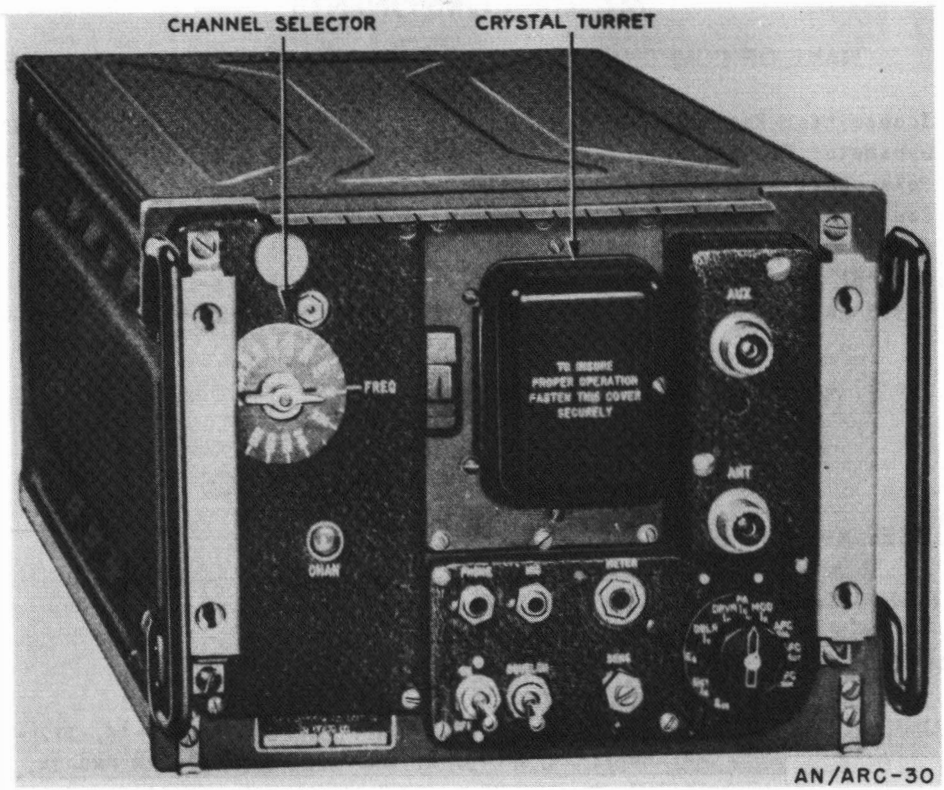
POWER OUTPUT: Transmitter: 8 w.
Receiver: Dual output, 400 mw into each 300 ohm load.

POWER REQUIREMENTS: 504 w, 28 v d-c.

PHYSICAL CHARACTERISTICS

Information on Radio Set AN/ARC-28 not available.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Restricted USING SERVICE: Navy DATE OF THIS SHEET: 29 May 52	AN/ARC-30 RADIO SET



Radio Set AN/ARC-30 is an airborne v-h-f and u-h-f automatic relay station equipment for extending the range of a-m (voice) radio communication between a ship or shore station and a second aircraft in flight. The transmitted signal from a ship or shore station is received by one transceiver, and applied through a relay unit to the second transceiver for relaying to the aircraft with which contact is desired.

The equipment consists basically of two Radio Sets AN/ARC-12 interconnected by a relay unit. Each transceiver employs 10 preset crystal-controlled channels, one of which is a guard channel.

The signal received on one frequency by either of the two transceivers is transmitted on a second frequency by the opposite transceiver, and a certain minimum separation between receiving and transmitting frequencies is necessary to prevent interference. The operator or pilot can monitor both sides of the conversation.

Remote controls are employed to permit individual transceiver operation as well as control of the automatic relay system.

AN/ARC-30

RADIO SET

INSTRUCTION LITERATURE: AN 16-30A RC30-3
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE : Navy
DATE OF THIS SHEET : 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Transmitter-Receiver RT-58/ARC-12	9-1/32 x 10-7/8 x 24-1/2	45.3
2	Dynamotor DY-9B/ARC-1 *	3-1/2 x 5-1/4 x 9-3/16	5.7
1	Relay Unit RE-63/ARC-30	10-1/2 x 6-5/16 x 7-1/8	5.5
2	Control Unit C-45/ARC-1 or C-115/ARC-1	Not Available "	Not Available "
1	Control Unit C-333/ARC-28 or C-390A/ARC-28	4-1/4 x 4-1/4 x 2-15/16 6 x 2-1/4 x 4-1/8	0.7 0.9

* Installed within transmitter-receiver

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft.

INSTALLATION: Airborne.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-12, -19, -27, -30, -33, -34; AN/GRC-16,-27, -29, -30, -32; AN/GRR-7; AN/GRT-3; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-32; AN/URC-4; AN/URR-9, -12, -13; AN/URT-10; MAR; MAY; R-278/GR; RDR; RDZ; SCR-616; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 225 - 350 in 9 main channels and 1 guard channel.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

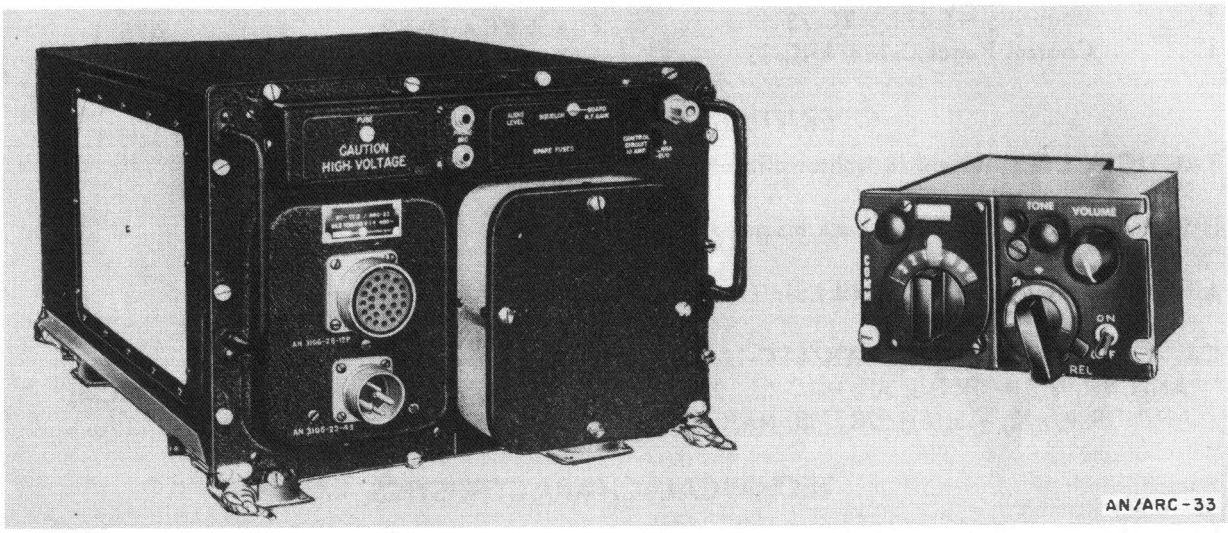
POWER OUTPUT: Transmitter: 6 w.
Receiver: 500 mw into a 300 ohm resistive load.

POWER REQUIREMENTS: 363 w, 26.5 v dc.

PHYSICAL CHARACTERISTICS

Information on Radio Set AN/ARC-30 not available.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Restricted USING SERVICE: Air Force DATE OF THIS SHEET: 9 Jun 52	**AN/ARC-33** RADIO SET



Radio Set AN/ARC-33 is an airborne command set, combination receiver-transmitter unit for two-way air-to-air and air-to-ground communication in the u-h-f range. It is designed for aircraft use at altitudes as high as 50,000 feet, and is normally operated with remote Control Panel C-784/ARC-33 which automatically increases the gain of the modulator speech amplifier with increasing altitudes.

Both the transmitter and receiver in Radio Set AN/ARC-33 operate on any one of 20 preset crystal-controlled channels (of 1,750 available channels) spaced 100 kc apart in the u-h-f range 225.0 to 399.9 mc. One guard channel in the 238 to 248 mc range can, also, be simultaneously monitored while equipment is in normal operation.

It can use u-h-f type antennas such as are already installed in aircraft, e.g.; the flush-tail cap-type arrays having 52-ohm coaxial transmission lines, RG-8/U, and similar systems.

The AN/ARC-33 is interchangeable with the AN/ARC-27 communication wise and the physical characteristics are similar.

AN/ARC-33

RADIO SET

INSTRUCTION LITERATURE: TO 16-30 ARC-33-2
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE : Air Force
DATE OF THIS SHEET : 9 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver-Transmitter RT-173/ARC-33	15-3/16 x 10-3/8 x 21-1/2	83.36
1	Mounting MT-611/ARC-33	21 x 2-3/8 x 14-3/4	2.75
1	Control Panel C-784/ARC-33	5-3/4 x 3-3/8 x 7-5/8	3.43

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Issued to fighter aircraft only.

INSTALLATION: Aircraft, shock mounted.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-12, -19, -27, -30, -33, -34; AN/GRC-16, -27, -29, -30, -32; AN/GRR-7; AN/GRT-3; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-32; AN/URC-4; AN/URR-9, -12, -13; AN/URT-10; MAR; MAY; R-278/GR; RDR; RDZ; SCR-616; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1,750 channels (spaced 100 kc apart) in the frequency range 225.0 to 399.9.
Designed to operate on any 20 preset crystal controlled channels, and one guard channel, in the range 238 to 248.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone.

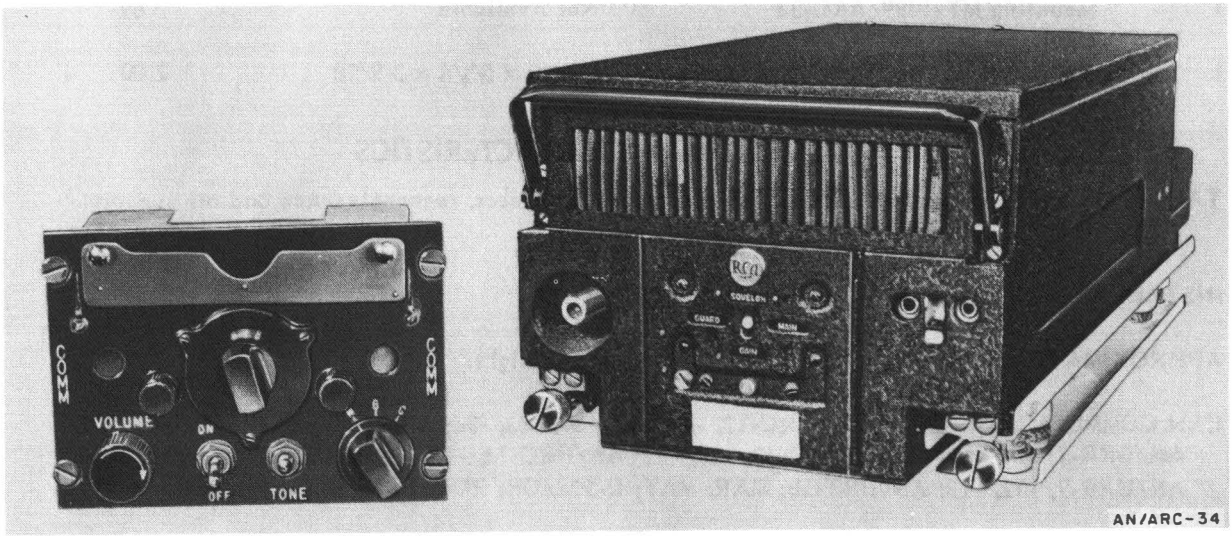
POWER OUTPUT: Transmitter: 10 w (Nominal).
Receiver: 500 mw into a 600 ohm resistive load.

POWER REQUIREMENTS: 27.5 v, dc, at the following power levels:
Receiver operation: 350 w,(12.5 amp).
Transmitter operation: 434 w,(15.5 amp).
Peak operation: 602 w,(20.5 amp).

PHYSICAL CHARACTERISTICS

Radio Set AN/ARC-33 measures 26-3/4 x 10-3/8 x 21-1/2 inches, net weight 107.5 pounds, volume 2.25 cu ft. Packed for either domestic or export shipment: total weight 120 pounds, total volume 3 cu ft. Shipped in 2 packages.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: ~~Restricted~~ USING SERVICE: Air Force DATE OF THIS SHEET: 26 May 52	**AN/ARC-34** RADIO SET



Radio Set AN/ARC-34 is a miniaturized version of Radio Set AN/ARC-33. It is an airborne, combination transmitter-receiver unit for two-way, air-to-air, and air-to-ground communication in the u-h-f range 225.0 to 399.9 mc.

The transmitter and receiver both operate on any one of 20 preset, crystal-controlled channels (of a total of 1,750) which are spaced 100 kc in the u-h-f band. One guard channel can also be monitored simultaneously with normal operation of the equipment.

The equipment is designed to operate with antennas already installed in aircraft which operate with 52-ohm coaxial cable, such as RG-8/U.

AN/ARC-34

RADIO SET

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Air Force
DATE OF THIS SHEET: 26 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver-Transmitter RT-263/ARC-34	7-9/10 x 10-3/5 x 21-1/2	45.87
1	Mounting MT-1099/ARC-34 (Included in Rec-Trans.)	Not Available	2.69
1	Radio Set Control C-1057/ARC-34	4-3/10 x 5-3/4 x 3-9/10	2.00

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally used in fighter interceptor, bomber, reconnaissance and air support aircraft.

INSTALLATION: Airborne, shock mounted.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-12, -19, -27, -30, -33, -34; AN/GRC-16, -27, -29, -30, -32; AN/GRR-7; AN/GRT-3; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-32; AN/URC-4; AN/URR-9, -12, -13; AN/URT-10; MAR; MAY; R-278/GR; RDR; RDZ; SCR-616; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: A total of 1,750 channels, spaced 100 kc apart, in the frequency range 225.0 to 399.9 mc are available. It is designed to operate on any 20 preset crystal-controlled channels.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice or tone.

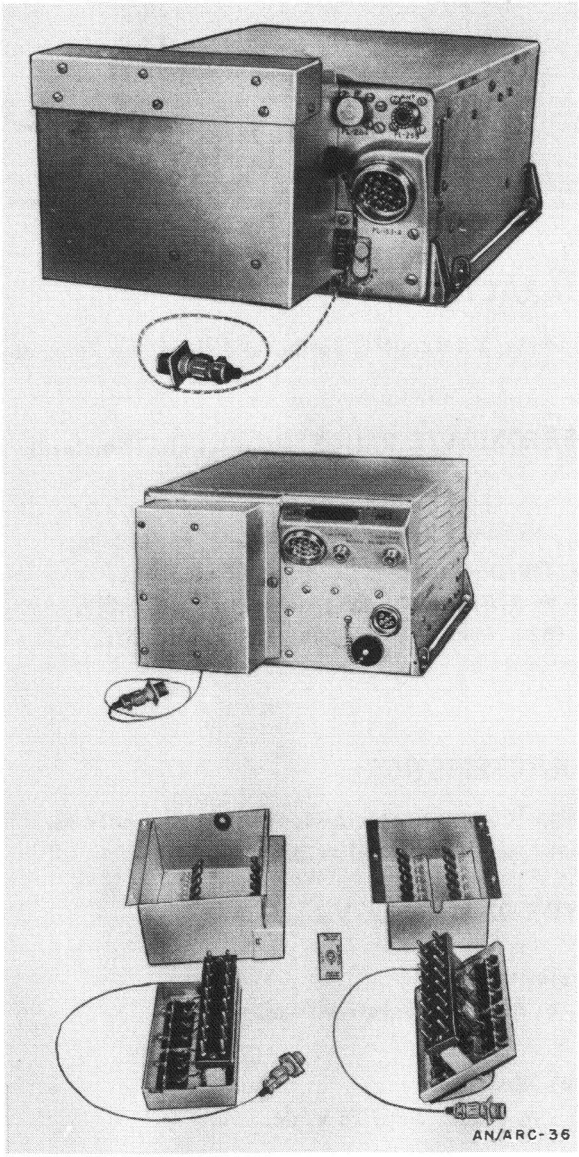
POWER OUTPUT: Transmitter: 10 w.
Receiver: 750 mw into 200 ohm impedance.

POWER REQUIREMENTS: 400 w, 27.5 v,(15 amp) dc.

PHYSICAL CHARACTERISTICS

Radio Set AN/ARC-34 measures 8 x 10-1/2 x 21-1/2 inches, net weight 50.56 pounds, volume 1.05 cu ft. Packed for either domestic or export shipment: total weight 55 pounds, total volume 1.1 cu ft. Shipped in 1 package.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 7 Jun 52	**AN/ARC-36** RADIO SET



Radio Set AN/ARC-36 is an airborne v-h-f command, two-way, radiotelephone set, for air-to-air and air-to-ground communication. This set is similar to Radio Set AN/ARC-3 except for Modification Kit MX-1131/ARC used to provide 16 channels for the AN/ARC-36 as compared to 8 channels for the AN/ARC-3. Set consists of a radio transmitter, radio receiver, two dynamotors, control box, antenna, and interconnecting cables.

The transmitter and receiver each operate on 16 independent crystal-controlled, preset channels in the v-h-f range 100 to 156 mc. Thirty-two crystals are required for operation of both transmitter and receiver on these 16 channels. Channel selection may be made locally by push buttons on the equipment, or remotely by push buttons on remote Control Box C-118/ARC-3. Crystals are capable of operating under conditions of high humidity and temperature.

The transmitter has an output impedance of 52 ohms matching low-impedance transmission lines such as RG-8/U. It normally operates with Antenna Mast AN-104-B. Radio Receiver R-428-A/ARC-36 has an external i-f receptacle which permits injection of a 12-mc signal from a guard channel converter (not supplied), when desired.

AN/ARC-36

RADIO SET

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET : 7 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter T-312-A/ARC-36 (w/mtg)	7-1/2 x 12-1/8 x 16-1/4	22.0
1	Radio Receiver R-428-A/ARC-36 (w/mtg)	6-5/8 x 11 x 17-1/8	23.0
1	Dynamotor Unit DY-22/ARC-3	4 x 3-7/16 x 7-3/16	4.8
1	Dynamotor Unit DY-21/ARC-3	4 x 3-7/16 x 7-1/2	8.4
1	Power Junction Box J-68/ARC-3	5-3/16 x 8-7/16 x 10-11/32	6.7
1	Control Box C-118/ARC-3	6 x 2-5/8 x 6-7/8	2.1
1	Antenna Mast AN-104-B	31 long	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally used in fighter, reconnaissance, interceptor, cargo, and light, medium, and heavy bombers.

INSTALLATION: Airborne, shock mounted.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-16, -20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -12, -21; AN/URT-7, -10; AN/VRC-1; BC-639, -640; MAR; MBS; R-137/GR; RBK; RBQ; RC-103, -256, -257; RCK; RCO; SCR-522, -542, -573, -575, -607, -616, -624, -641, -643, -644; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 - 156 mc, 16 preset, crystal-controlled channels for the transmitter and 16 for the receiver; equipment requires a total of 32 crystals.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone.

POWER OUTPUT: Transmitter: 8 w into a 50 ohm resistive load.
Receiver: 600 mw into 50 ohm, or 600 ohm resistive load.

POWER REQUIREMENTS: Starting: 3,324 w, (118 amp) 28 v, dc.
Continuous operation: 385 w, (13.75 amp) 28 v, dc.

PHYSICAL CHARACTERISTICS

Radio Set AN/ARC-36 measures 32-5/16 x 12-1/8 x 17-1/8 inches, net weight 68.1 pounds, volume 3 cu ft. Packed for either domestic or export shipment: total weight 96 pounds, total volume 3.5 cu ft. Shipped in 4 packages.

AN/ARC–44

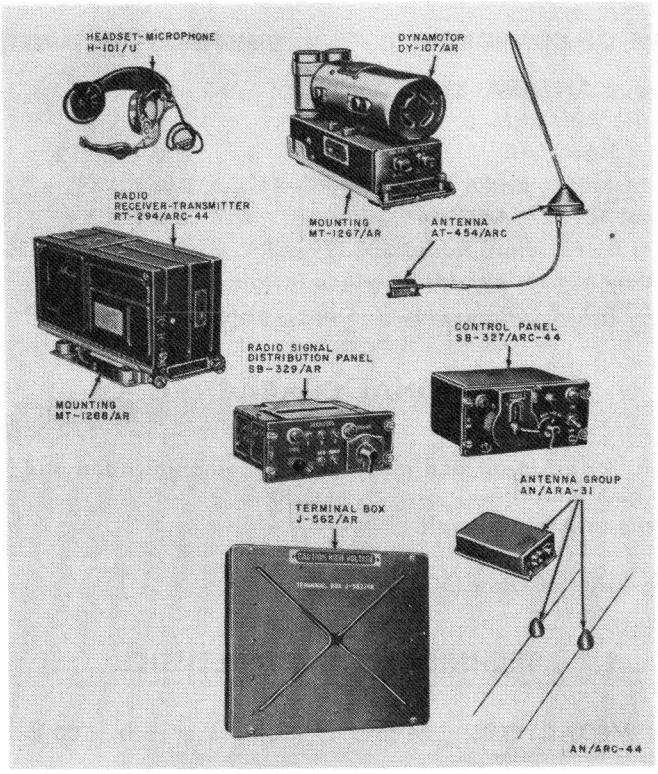
RADIO SET

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 5 June 1956



Radio Set AN/ARC–44 is a compact fm, radio equipment that operates in the vhf range and can be used for communication, retransmission, and homing in Army aircraft.

It consists essentially of a receiver-transmitter that is operated from remote-control panel equipment, and a radio distribution panel that enables the selection and operation of as many as six receivers (singly or in combination), three transmitters, or the aircraft interphone channel.

This equipment is capable of functioning as an airborne radio relay station between two stations that cannot communicate with each other because of distance. In such applications, an additional transmitter is required and different receive and transmit channels are used.

AN/ARC-44

RADIO SET

INSTRUCTION LITERATURE: TM 11-517

USING SERVICE: USA

DATE OF THIS SHEET: 5 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Antenna Group AN/ARA-31		3.38
1	Test Set, Radio AN/ARM-8	6 x 9 x 9 5/32	8.69
1	Terminal Box J-562/AR	2 x 11 x 12	4.25
1	Receiver-Transmitter, Radio RT-294/ARC-44	7 1/4 x 13 7/8 x 5 1/8	14
	Panel, Control SB-327/ARC-44[a]	3 x 6 x 5 3/4	2.19
	Panel, Signal Distribution, Radio SB-329/AR[a]	2 5/8 x 5 5/16 x 5 3/4	1.63

([a]Quantity depends on aircraft in which installed.)
(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: In flight for air-to-air and air-to-ground communication and homing.

INSTALLATION: Airborne in Army aircraft.

APPROXIMATE RANGE: Line of sight (50 mi, nom).

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 24 to 51.9 (280 preset chan, 100 kc apart).

TYPE MODULATION: Fm (F1, F2, F3).

TYPE OF SIGNAL: Voice; keyed fm (modulated or unmodulated), keyed cw for homing.

POWER OUTPUT: 50 mw (rcvr); 8 w (xmtr).

POWER REQUIREMENTS: Dynamotor DY-107/AR: 27 v, 4.75 amp dc.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	(Components distributed in aircraft.)	48.50			
DOMESTIC PACK:					
EXPORT PACK:		92.75	5.2		9

AN/ARC-49

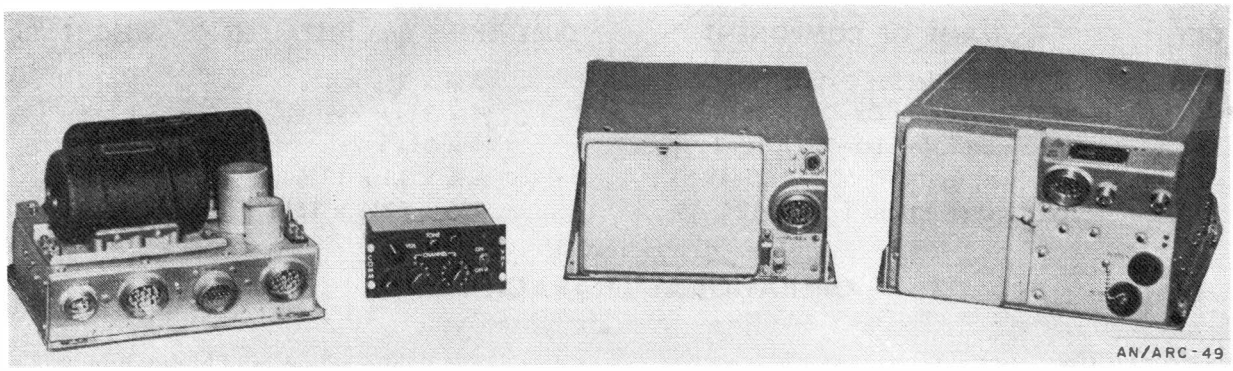
RADIO SE

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF

DATE OF THIS SHEET: 14 June 1956



Radio Set AN/ARC–49 is an airborne command, two-way, vhf radiotelephone set for air-to-air and air-to-ground communication. It is similar to Radio Sets AN/ARC–3 and AN/ARC–36; the major differences being that the AN/ARC–3 has 8, the AN/ARC–36 has 16, and the AN/ARC–49 has 48 channels.

This equipment consists of a radio transmitter, a radio receiver, two dynamotors, a control box, and an antenna.

The transmitter has an output impedance of 52 ohms matching low-impedance transmission lines, such as Radio Frequency Cable RG–8/U. It normally operates with Antenna Mast AN–104–B.

Remote operation of the equipment on any frequency channel is accomplished by selecting the desired channel at the control box or control panel.

AN/ARC–49

RADIO SET

INSTRUCTION LITERATURE: 12R2–2ARC–2

USING SERVICE: USAF

DATE OF THIS SHEET: 14 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Control, Radio Set C–1400/ARC–49	5¾ x 2⅝ x 4⅝	2.1
1	Dynamotor Unit DY–21/ARC–3	4 x 3 7/16 x 7½	8.4
1	Dynamotor Unit DY–22/ARC–3	4 x 3 7/16 x 7 3/16	4.8
1	Receiver, Radio R–608/ARC–49	6⅝ x 11 x 17⅛	23
1	Transmitter, Radio T–452/ARC–49	7½ x 12⅛ x 15¼	22

OPERATIONAL CHARACTERISTICS

TACTICAL USE: In fighter, reconnaissance, interceptor, cargo, and light medium, and heavy bombers.

INSTALLATION: Airborne.

APPROXIMATE RANGE: Line of sight (nom).

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 to 156 (48 preset, xtal-cont chan for xmtr and rcvr).

TYPE MODULATION: Am (A2, A3).

TYPE OF SIGNAL: Voice, tone.

POWER OUTPUT: 600 mw into 50- or 600-ohm resistive load (rcvr); 8 w into a 50-ohm resistive load (xmtr).

POWER REQUIREMENTS: 385 w, 28 v, 13.75 amp dc (continuous operation); 3,324 w, 28 v, 118 amp dc (starting).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		96	3.5		
DOMESTIC PACK:					4
EXPORT PACK:					

STATUS: Std

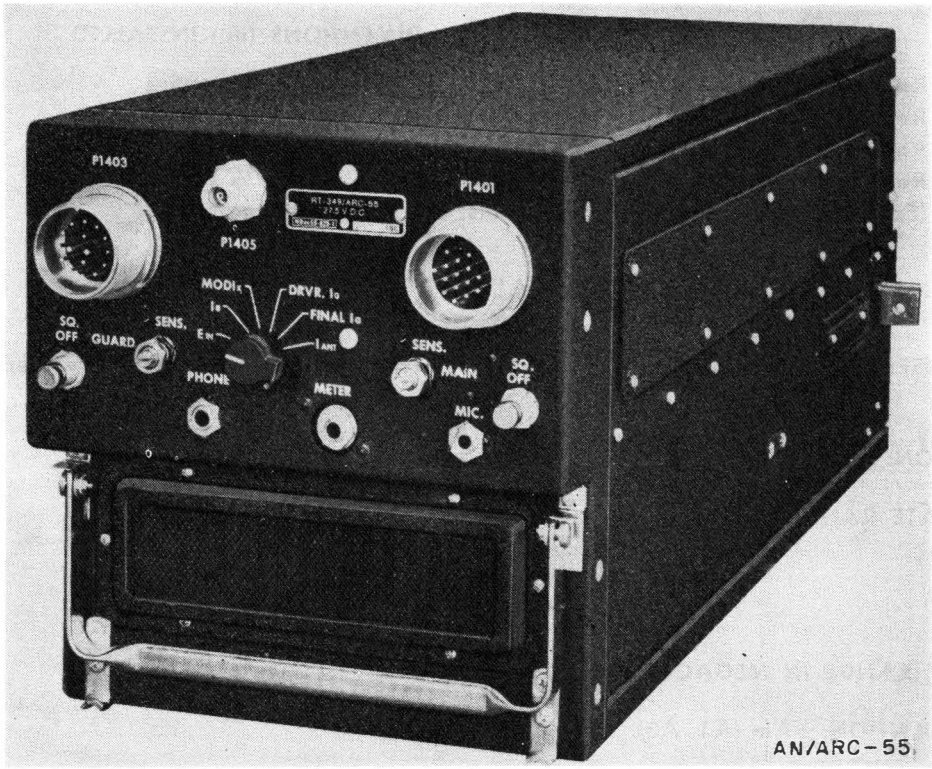
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 8 June 1956

AN/ARC–55

RADIO SET



Radio Set AN/ARC–55 is an airborne, two-way, point-to-point equipment used for air-to-air, air-to-ship, and ground-to-air communication in all types of fighters, bombers, helicopters, and cargo aircraft.

This equipment operates on any one of 18 preset, crystal-controlled frequencies of 1,750 available channels. It consists of a triple-conversion superheterodyne receiver with three crystal oscillators and a double-conversion superheterodyne auxiliary guard channel, both working into a common audio output circuit.

This equipment is similar to Radio Set AN/ARC–27 except that the former has no external blower and it is smaller, lighter, and not pressurized. The case and mounting rack are different.

AN/ARC-55

RADIO SET

INSTRUCTION LITERATURE: AN 16-30ARC27-2, -502

USING SERVICE: USA, USN

DATE OF THIS SHEET: 8 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Radio Set Control C-626/ARC-27	6 3/8 x 9 9/16 x 5 1/2	9
1	Radio Set Control C-628/ARC-27	3 5/8 x 2 5/8 x 5 3/4	1
1	Radio Set Control C-1827/ARC-55	5 3/4 x 3 x 2 1/4	1.7
1	Receiver-Transmitter, Radio RT-349/ARC-55	11 x 9 5/8 x 25 1/16	57.5

(For complete list of major components, see instruction literature.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Point-to-point communication in aircraft, fighters, bombers, helicopters, and cargo aircraft.

INSTALLATION: Airborne.

APPROXIMATE RANGE: Short.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 225 to 399.9.

TYPE MODULATION: Am (A1, A3).

TYPE OF SIGNAL: Voice or tone.

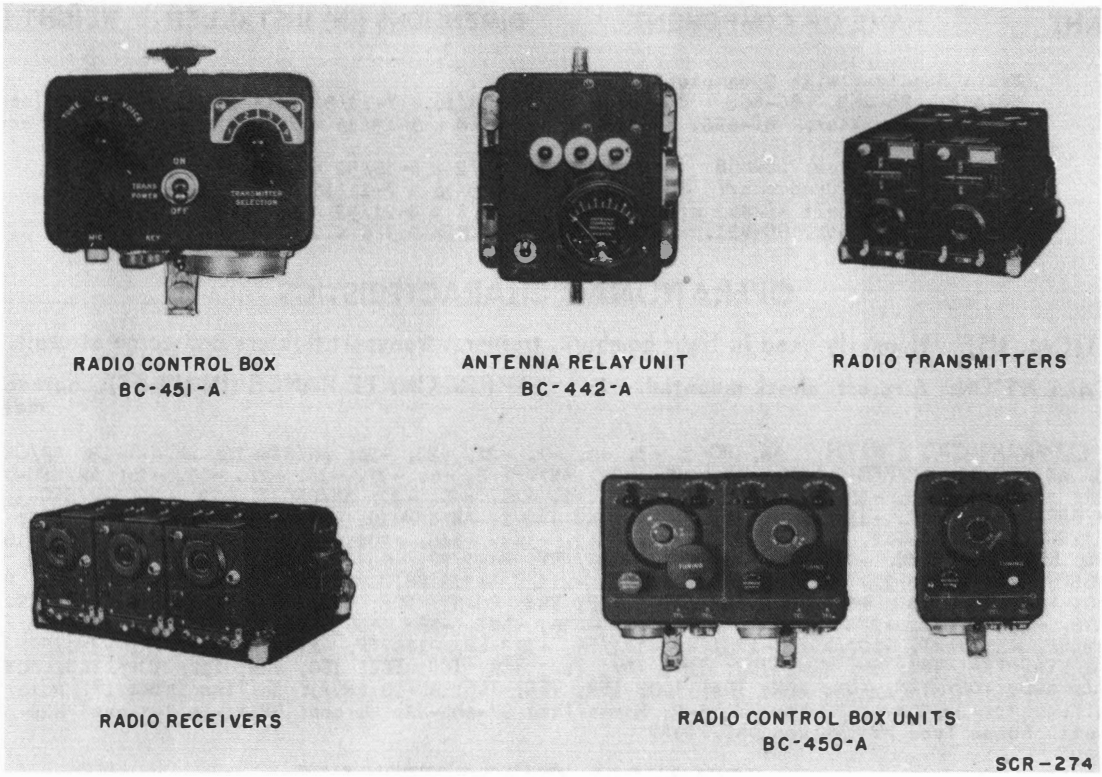
POWER OUTPUT: 2 w (rcvr); 9 w (xmtr).

POWER REQUIREMENTS: 700 w, 24 to 28 v, 25 amp (max) dc.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	11 1/8 x 11 1/16 x 25 1/16	57.5			
DOMESTIC PACK:		61	1.6		
EXPORT PACK:					

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force, Navy DATE OF THIS SHEET: 7 Jun 52	**AN/ARC-TYPE** SERVICE TYPE NUMBER: SCR-274 RADIO SET



Radio Set SCR-274 is an airborne air-to-air and air-to-ground, two-way h-f radio communication equipment. All transmitters and receivers have continuous tuning. Each transmitter is provided with a crystal for calibration of the oscillator on one frequency. The transmitters cover the range 3.0 to 9.1 mc; receivers cover 0.19 to 1.5 mc and 3.0 to 9.1 mc. All transmitters and receivers operate on voice, tone, or cw.

This radio set consists of a maximum of four transmitters, four receivers with dynamotors, and four modulators with dynamotors. Minimum installation requirements are: one transmitter, one receiver (dynamotor included), one modulator (dynamotor included for modulator and transmitter) plus necessary cables, and related items.

Transmitters and receivers may be locally tuned or flexible tuning cables are available for remote operation up to six or eight feet away.

Transmitters and receivers are designed to operate into a fore-and-aft, inverted L, or normal T-type antenna. A variable loading coil is provided in each transmitter to feed antennas of various lengths.

AN/ARC-TYPE

SCR-274 :SERVICE TYPE NUMBER

RADIO SET

INSTRUCTION LITERATURE: TO 16-40BC-224-2
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force, Navy
DATE OF THIS SHEET : 7 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
4	Radio Receiver with Dynamotor: BC-454 BC-453, BC-455, BC-946	6-11/16 x 7-11/32 x 13-1/8	11.2 (each)
4	Radio Transmitter: BC-696, BC-457, BC-458, BC-459	7-1/4 x 9-13/16 x 15-1/32	10.5 (each)
1	Radio Control Box: BC-450	9-1/2 x 5-15/32 x 2-15/16	2.7
1	Modulator Unit/Dynamotor: BC-456	10-3/16 x 7-11/16 x 8-7/8	18.0
1	Antenna Relay Unit BC-442 w/MTG	5-5/8 x 4-21/32 x 6-9/16	2.2
1	Radio Control Box, BC-451, w/MTG FT-228	4-1/8 x 4-3/8 x 2-3/4	0.9

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally used in light bombers, trainers, transport fighters and cargo aircraft.

INSTALLATION: Aircraft, shock mounted.

APPROXIMATE RANGE (IN MILES): Short to medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3, -5, AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/FRT-5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRR-3, -8, -12, -13; AN/SRT-1, -3, -4; AN/TRQ-1, AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -312, -329, -339, -342, -348, -365, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-59/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBK; TBL; TBM; TBN; TBO; TBW; TBX; TCB; TCC; TCE; TCG; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES:

Transmitting		Receiving	
BC-696:	3 - 4	BC-454:	3 - 6
BC-457:	4 - 5.3	BC-455:	6 - 9.1
BC-458:	5.3 - 7.0	BC-453:	0.19 - 0.55
BC-459:	7.0 - 9.1	BC-946:	0.52 - 1.5.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone, cw.

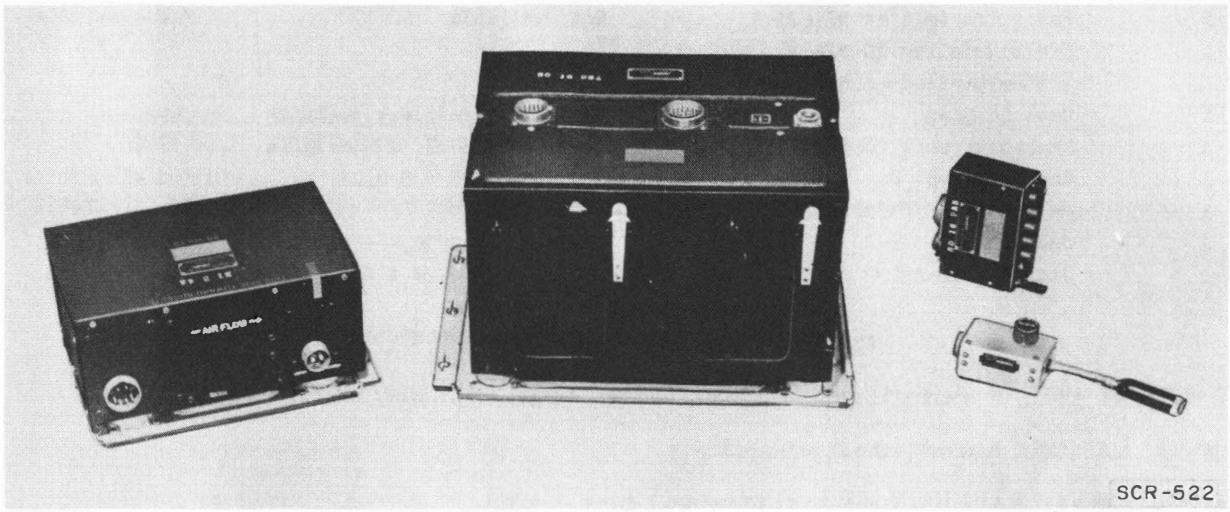
POWER OUTPUT: Per Transmitter: 40 w (maximum)
Per Receiver: 10 mw (Nominal) into 4,000 ohm resistive load.

POWER REQUIREMENTS:
Standby: (Per transmitter) 35 w, 24 - 28 v, (1.25 amp) dc;
Transmitting: (Per transmitter) 126 w, 24 - 28 v, (4.5 amp), dc;
Receiving: (Per receiver) 44.8 w, 24 - 28 v, (1.6 amp) dc.

PHYSICAL CHARACTERISTICS

Radio Set SCR-274 measures 10-3/16 x 15-1/32 x 56-1/4 inches, net weight 110.4 pounds, volume 3.4 cu ft. Packed for either domestic or export shipment: total weight 135.7 pounds, total volume 4.6 cu ft. Shipped in 3 packages both domestic and export.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force, Navy DATE OF THIS SHEET: 7 Jun 52	**AN/ARC-TYPE** SERVICE TYPE NUMBER: SCR-522 RADIO SET



Radio Set SCR-522 is a two-way radiotelephone, v-h-f, airborne command set. Normally it is airborne for air-to-ground and air-to-air communication, but components of this equipment may be ground-operated for ground-to-air, or point-to-point communication. It is designed for remote operation only, using Radio Control Box BC-602-B.

This radio set consists of a radio transmitter, radio receiver (housed together in a case), a dynamotor unit antenna, remote control unit, jack boxes, and interconnecting cables.

The transmitter and receiver each use four separate crystals (total eight crystals) to provide four preset operating channels for each unit in the v-h-f band.

An antenna change-over relay is incorporated in the set which permits use of one Antenna Mast AN-104 for both transmitting and receiving.

The transmitter provides 9 w output on either voice or tone modulation; the receiver provides 10 mw output into a 300- or 4,000-ohm resistive load.

Radio Sets SCR-522-A, SCR-624-B, and SCR-542-A are identical in purpose and all similar units are mechanically interchangeable; the major differences are in the power supply requirements and method of installation.

Required power sources are: SCR-522-A; 336 w of 28-v, dc, SCR-624-B; 325 w of 100-130/200-260-v, ac, SCR-542-A; 322 w of 14-v dc.

AN/ARC-TYPE	INSTRUCTION LITERATURE: TO 16-40SCR-522-2
SCR-522 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO SET	USING SERVICE: Air Force, Navy
	DATE OF THIS SHEET: 7 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-625-A	Not Available	Not Available
1	Radio Receiver BC-624-A	" "	" "
	BC-624-A and -625-A mounted in:		
1	Case CS-30-A	16-5/32 x 12-9/16 x 10-11/16	49.0
1	Dynamotor Unit PE-94-A	12-25/32 x 8-27/32 x 6-15/64	37.0
1	Radio Control Box BC-602-B	2-1/2 x 7-5/9 x 5-9/16	2.41
1	Antenna Mast AM-104-A	Not Available	Not Available
1	Jack Box BC-629-B	2-29/64 x 4-1/16 x 1-61/64	0.6
1	Jack Box BC-631-B	1-1/64 x 2-49/64 x 1-19/64	0.6

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued to fighter, bomber, cargo, and trainer aircraft.

INSTALLATION: Aircraft, shock mounted.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -29, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-16, -20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -12, -21; AN/URT-7, -10; AN/VRC-1; BC-639, -640; MAR; MBS; R-137/GR; RBK; RBQ; RC-103, -256, -257; RCK; RCO; SCR-522, -542, -573, -575, -607, -616, -624, -641, -643, -644; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 - 156.
Receiver: 4 preset crystal-controlled channels.
Transmitter: 4 preset crystal-controlled channels.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice or tone.

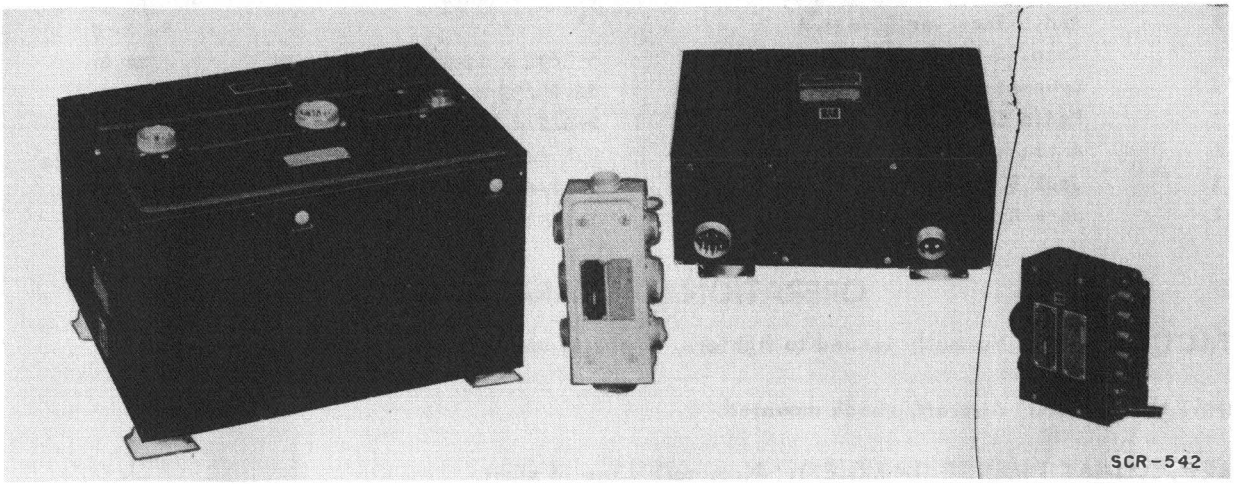
POWER OUTPUT: Transmitter: 9 w.
Receiver: 10 mw into 300 or 4,000 ohm resistive load.

POWER REQUIREMENTS: 336 w, 28 v, (12 amp) dc.

PHYSICAL CHARACTERISTICS

Radio Set SCR-522 measures 30 x 15 x 21 inches, net weight 89.61 pounds, volume 3.8 cu ft.
Packed for either domestic or export shipment: total weight 118.26 pounds, total volume 4.07 cu ft.
Shipped in 2 packages both domestic and export.

STATUS: Standard	AN/ARC-TYPE
CLASSIFICATION OF EQUIPMENT: Unclassified	SERVICE TYPE NUMBER: SCR-542
USING SERVICE: Air Force	RADIO SET
DATE OF THIS SHEET: 7 Jun 52	



Radio Set SCR-542 is a two-way radiotelephone, v-h-f airborne receiver-transmitter for air-to-air and air-to-ground communication. However, it may be ground-operated for point-to-point and ground-to-air communication by adding Antenna AN-94, or equivalent. It is designed for remote operation only, with Radio Control Box BC-602.

This radio set consists of a radio transmitter and radio receiver housed together in a case.

The necessary power unit, antenna, remote control unit, jack boxes, and interconnecting cables are also supplied.

The transmitter and receiver each use four separate crystals (total eight crystals) to provide four preset operating channels for each unit in the v-h-f band.

An antenna change-over relay is incorporated in the set which permits using one antenna for both transmitting and receiving.

The transmitter provides 9 w output on either voice or tone modulation; the receiver provides 10 mw output into a 300- or 4,000-ohm resistive load.

Radio Sets SCR-542-A, SCR-522-A and SCR-624-B, are all identical in purpose and all similar units are mechanically interchangeable; the major differences are in the power supply requirements and method of installation.

Required power sources are: SCR-542-A; 322 w of 14-v dc. SCR-522-A; 336 w of 28-v dc. SCR-624-B; 325 w of 100-130/200-260-v, ac.

AN/ARC-TYPE

SCR-542 :SERVICE TYPE NUMBER

RADIO SET

INSTRUCTION LITERATURE: TO 16-40SCR-522-2
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET : 7 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-625-A	Not Available	Not Available
1	Radio Receiver BC-624-A	" "	" "
1	Case CS-80-A	6-5/32 x 12-9/16 x 10-11/16	49.0
1	Dynamotor Unit PE-98-A	12-25/32 x 9-27/32 x 6-15/64	37.0
1	Radio Control Box BC-602-B	2-1/2 x 7-5/8 x 5-9/16	2.41
1	Antenna Mast AN-104-A	Not Available	Not Available
1	Jack Box BC-629-B	2-29/64 x 4-1/16 x 1-61/64	0.6
1	Jack Box BC-631-B	1-1/64 x 2-49/64 x 1-19/64	0.6

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued to fighters, bombers, and trainers.

INSTALLATION: Aircraft, shock mounted.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-16, -20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -12, -21; AN/URT-7, -10, AN/VRC-1; BC-639, -640; MAR; MBS; R-137/GR; RBK; RBQ; RC-103, -256, -257; RCK; RCO; SCR-522, -542, -573, -575, -607, -616, -624, -641, -643, -644; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 - 156.
Receiver: 4 preset crystal-controlled channels.
Transmitter: 4 preset crystal-controlled channels.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice or tone.

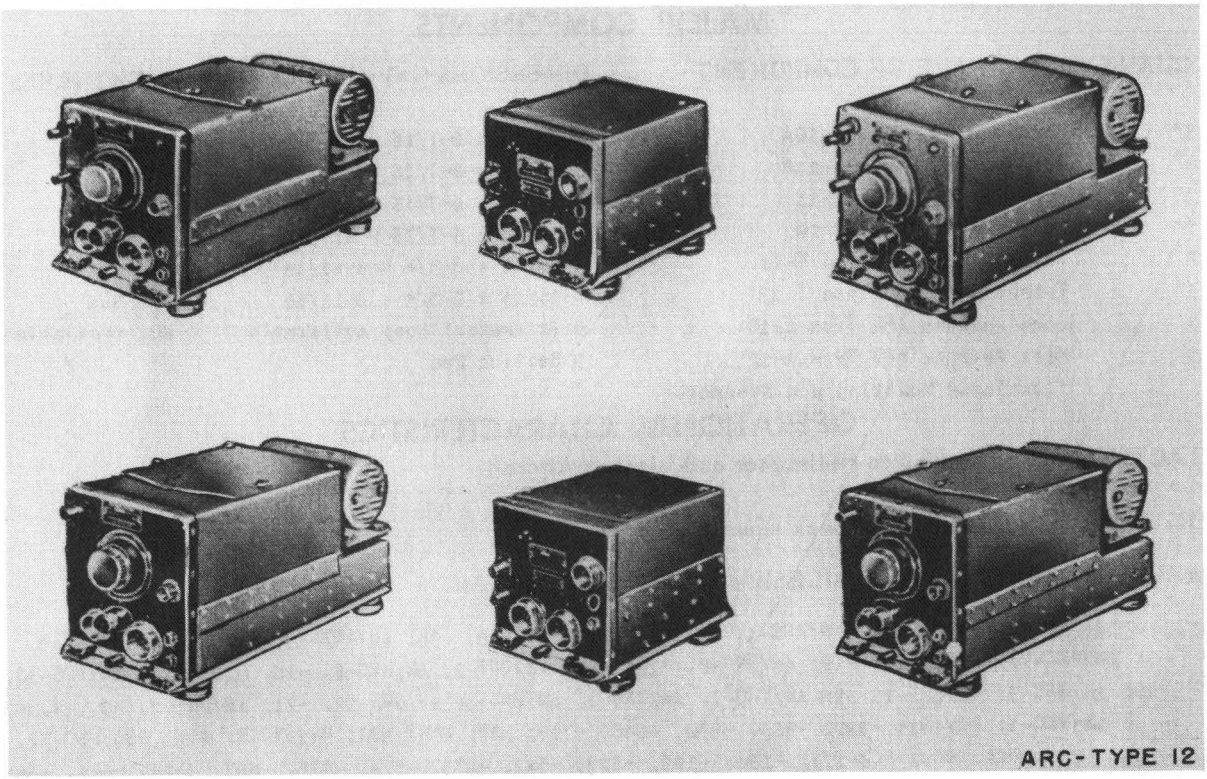
POWER OUTPUT: Transmitter: 9 w.
Receiver: 10 mw into 300 or 4,000 ohm resistive load.

POWER REQUIREMENTS: 322 w, 14 v (23 amp) dc.

PHYSICAL CHARACTERISTICS

Radio Set SCR-542 measures 30 x 15 x 21 inches, net weight 89.61 pounds, volume 3.8 cu ft.
Packed for either domestic or export shipment: total weight 118.26 pounds, total volume 4.07 cu ft.
Shipped in 2 packages both domestic and export.

STATUS: Commercial CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 10 Jun 52	**AN/ARC-TYPE** COMMERCIAL TYPE NUMBER: ARC TYPE 12 RADIO SET



Radio Set ARC Type 12 is a group of radio equipments used in various combinations to form a variety of communication and/or navigation systems for use in aircraft flying at speeds normally not exceeding 200 miles per hour. All transmitters are am, crystal-controlled on preset frequencies in the v-h-f band. Receivers are manually tuned, continuous coverage superheterodyne. This equipment is used for air-to-air and air-to-ground communication.

MODEL: H-13 B HELICOPTER INSTALLATION 28 v, dc.

Transmitters: 2 ARC Type T-11A; 122.1, 122.3, 122.5, 122.7 and 126.18 mc.
Receiver: ARC Type R-11A; 0.19 to 0.55 mc.
Antenna: ARC Type A-12.

MODEL: L-15 AIRCRAFT INSTALLATION (28 v, dc), same as H-13B except the following have been added:

Receiver R-15; 108 to 135 mc.
Loop Antenna ARC Type L-10, (manually rotated).

MODEL: L-17-A-B-C AIRCRAFT INSTALLATION (14 v, dc), same as H-13B and L-15 except the following have been added:

Receiver: ARC Type R-10-A (520 to 1,500 kc).

MODEL: L-19A AIRCRAFT INSTALLATION (28 v, dc).

Transmitter: 1 ARC Type T-11A, 121.5, 121.7, 121.9, 122.1, 122.5 mc.
1 ARC Type T-13, 126.18 mc.
Receiver: ARC Type R-19, 118 to 148 mc.

AN/ARC-TYPE

ARC TYPE 12 :COMMERCIAL TYPE NUMBER
RADIO SET

INSTRUCTION LITERATURE: Inst. Book & TO 16-45-121
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET : 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1*	Receiver ARC Type R-10A	4-15/16 x 6-7/16 x 11-3/8	8.8
1*	Receiver ARC Type R-11A	4-15/16 x 6-7/16 x 11-3/8	8.8
1*	Receiver ARC Type R-15	4-15/16 x 6-7/16 x 11-3/8	8.8
1*	Receiver ARC Type R-19	4-15/16 x 6-7/16 x 11-3/8	8.8
2	Transmitter ARC Type T-11	4-15/16 x 5-3/4 x 6-11/16	3.4
1	Transmitter ARC Type T-13	4-15/16 x 5-3/4 x 6-11/16	3.4
1	Loop Antenna ARC Type L-10	9 (diameter) Loop Antistatic	Not available
1	Mast Antenna ARC Type A-12	3 Section Rod	" "

*(Includes Mounting and Dynamotor)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Issued to Helicopter and Liaison Aircraft.

INSTALLATION: Airborne, shock mounted.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -8, -18, -28, -36; AN/ART-13; AN/CRC-2; AN/CRT-3, -5; AN/FRC-7; AN/FRT-10, -19; AN/GRC-9, -26, -30; AN/GRT-2; AN/MRC-6, -16, -20, -22; AN/PRC-17, -20; AN/SRC-3; AN/SRT-1, -3; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-12, -21; AN/URT-2, -3, -4, -7, -10; AN/VRC-1; BC-191, -329, -365, -639, -640, -787; MAR; MAW; MBS; R-137/GR; RBK; RBQ; RC-52, -256, -257; RCK; RCO; SCR-177, -188, -193, -522, -542, -573, -574, -575, -607, -624, -641, -643, -644; T-5/FRC, -159/FRT, -171/FR; TAB; TAJ; TAQ; TBL; TBN; TBU; TBW; TCB; TCE; TCG; TCS; TCY; TCZ; TDD; TDE; TDG; TDK; TDQ; TDT: ARC Type 12; Marconi TH-41-B; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES:
Transmission: Six crystal-controlled channels from 116 - 132.
Reception: Continuously tuneable: 0.19 - 0.55, 0.52 - 1.5, and 108 - 135.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone.

POWER OUTPUT: Transmitters: ARC Type T-11 - 1.2 w
ARC Type T-13 - 1.2 w
Receivers: ARC Type R-15 - 400 mw into 300 ohm line
ARC Type R-10 - 800 mw into 300 ohm line
ARC Type R-11A - 800 mw into 300 ohm line.

POWER REQUIREMENTS: 100 w, (3.6 amp) 28 v, dc, smallest installation
210 w, (7.5 amp) 28 v, dc, largest installation.

PHYSICAL CHARACTERISTICS

Information on Radio Set ARC Type 12 can be determined from components for specific aircraft.

STATUS: Commercial CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 19 May 52	**AN/ARC-TYPE** COMMERCIAL TYPE NO: COLLINS 18S-4 (AF MODEL) RADIO SET



Radio Set Collins 18S-4 (AF Model) is a modified, commercial aircraft transmitter-receiver for air-to-air, and air-to-ground, a-m (voice or cw) communication. It is normally used for long range communication in aircraft operating at altitudes under 31,000 feet and consists of a transmitter-receiver with self-contained dynamotor, an antenna matching network, and a remote control unit.

This equipment operates on 20 crystal-controlled frequencies in 10 tuned channels, each of which can be used for two frequencies (which differ by not more than 1% in the frequency range 2 to 18.15 mc). Nominal power output is 100 w up to 31,000 feet altitude.

The antenna matching network is designed to match the 52-ohm coaxial Radio Frequency Cable RG-8/U, which is used to connect the transmitter-receiver to antennas of 45 feet or more in length.

Frequency selection, as well as audio input and output, may be remotely controlled by an autotune system consisting of the remote control unit and interconnecting cables.

Requires 1,000-w (maximum) of 24-v, dc.

AN/ARC-TYPE

COLLINS 18S-4 (AF MODEL) :COMMERCIAL TYPE NO.
RADIO SET

INSTRUCTION LITERATURE: Collins Instruction Manual 18S-4
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET: 19 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Set 18S-4 (AF Model) with mounting	24-1/2 x 9-1/2 x 16-3/8	59.0
1	Antenna Matching Network 180L-2 with mounting	10-3/8 x 5-7/8 x 9	13.0
1	Remote Control Unit 314S-6	5-3/4 x 2-5/8 x 6	3.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in cargo and transport aircraft for MATS. It may also be substituted for Radio Set AN/ARC-21 in Liaison Aircraft.

INSTALLATION: Airborne, shock mounted.

APPROXIMATE RANGE (IN MILES): (Nominal) Medium, long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -608/FRT; R-62/PR, -80/PR, R-96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR, RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR, TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-8; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 18.5 mc, up to 20 frequencies, 10 preset crystal-controlled channels each of which can be used for two frequencies differing by not more than 1%.

TYPE MODULATION: Am. **TYPE OF SIGNAL:** Voice, cw.

POWER OUTPUT: Transmitter: 100 w nominal
Receiver: 100 mw into a 500 ohm line.

POWER REQUIREMENTS: Standby: 192 w (8 amp) 24 v, dc.
Transmitting: 912 w nominal, (38 amp) 24 v, dc.

PHYSICAL CHARACTERISTICS

Radio Set COLLINS 18S-4 (AF Model) measures 16-3/8 x 15 x 24-1/2 inches, net weight 75.5 pounds, volume 3.5 cu ft. Packed for domestic shipment: total weight 83 pounds, total volume 4 cu ft. Shipped in 3 packages.

STATUS: Coml

CLASSIFICATION OF EQUIPMENT: Unclassified

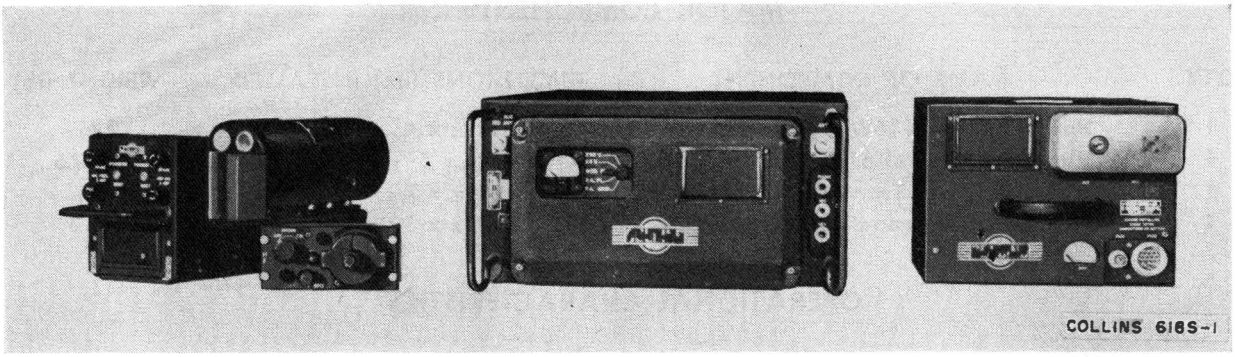
PREPARING SERVICE: USAF

DATE OF THIS SHEET: 6 June 1956

AN/ARC-TYPE

COMMERCIAL TYPE NUMBER: COLLINS 618S-1 (AF MODEL)

RADIO SET



Radio Set Collins AF model 618S-1 provides am (voice or cw) transmitting and receiving facilities between aircraft and ground stations, or between aircraft. This equipment is inclosed in a single case and is mounted on a single main chassis. It permits the selection of 144 crystal-controlled frequencies by means of a common crystal for transmitting and receiving on any one channel.

This set is normally used with an automatic antenna tuner, providing automatic tuning of open, fixed wire antennas between 25 and 100 feet in length.

The class of service and frequency desired are selected by means of a radio set control; tuning and matching are entirely automatic.

AN/ARC–TYPE

INSTRUCTION LITERATURE: 12R2–4–6–2

USING SERVICE: USAF

DATE OF THIS SHEET: 6 June 1956

COLLINS 618S–1 (AF MODEL): COMMERCIAL TYPE NUMBER

RADIO SET

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Power Supply 416W–1	$18\frac{1}{16} \times 4\frac{7}{8} \times 6\frac{3}{4}$	22
1	Radio Set Control 614C–2	$4\frac{9}{16} \times 5\frac{3}{4} \times 2\frac{19}{32}$	1.75
1	Radio Receiver Transmitter 618S–1	$23\frac{7}{16} \times 7\frac{25}{32}$	55
1	Automatic Antenna Tuner 1806–3	$13\frac{3}{8} \times 10\frac{5}{16} \times 2\frac{19}{32}$	18.3

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in cargo and transport aircraft for MATS.

INSTALLATION: Airborne.

APPROXIMATE RANGE: Medium, long (nom).

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 to 25 in four bands:

Band 1: 2 to 3.75
Band 2: 3.75 to 7.25
Band 3: 7.25 to 14.25
Band 4: 14.25 to 25

TYPE MODULATION: Am (A1, A3).

TYPE OF SIGNAL: Cw, voice.

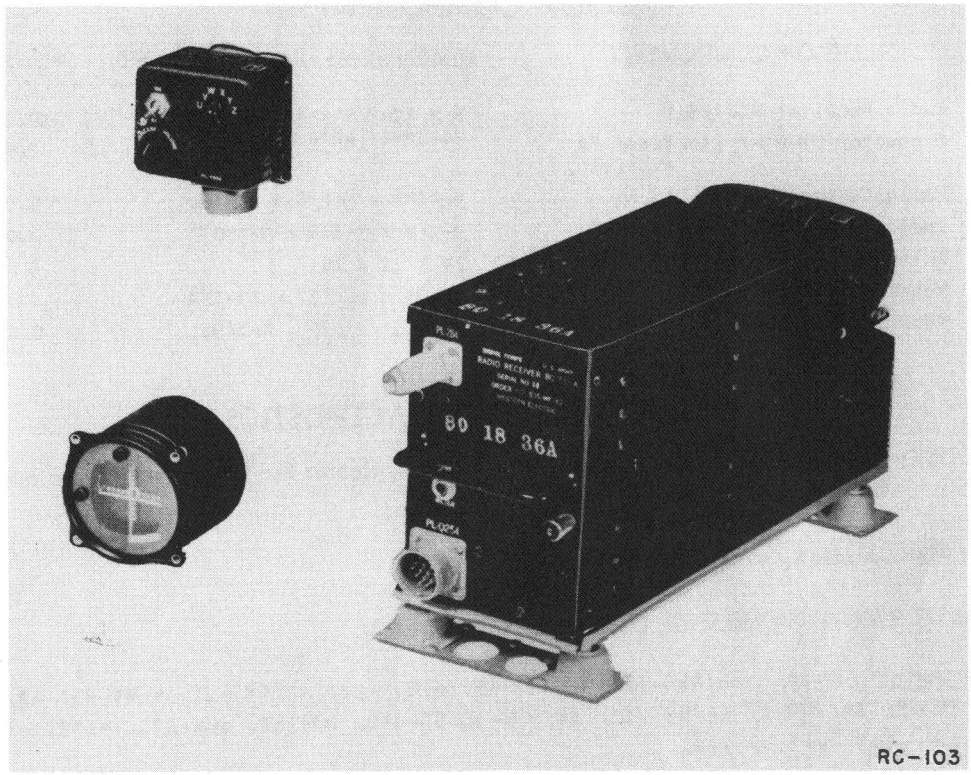
POWER OUTPUT: 300 mw into 300-ohm load (rcvr); 100 w (xmtr).

POWER REQUIREMENTS: 770 w, 27.5 v, 28 amp dc.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 7 Jun 52	**AN/ARN-TYPE** SERVICE TYPE NUMBER: RC-103 RADIO RECEIVING EQUIPMENT



Radio Receiving Equipment RC-103 consists of an airborne receiver with six preset crystal-controlled channels, used for receiving signals transmitted by Army Air Force Instrument Approach System (formerly known as Instrument Landing System SCS-51). It is normally operated by means of a radio control box which provides ON/OFF, volume control, and frequency selection.

Receiver output is usually used to indicate lateral guidance by the vertical pointer of Indicator I-101; however, audio output (at 300 and 4,000 ohm) for voice or tone signals is also provided.

It is used in conjunction with associated (but not supplied) airborne equipment AN/ARN-5, which indicates vertical guidance for aircraft landing operations, in emergency, or under conditions of poor visibility.

Antenna Equipments AN-100 or AN-100-A should be used only for Radio Receiving Equipment RC-103-D; Antenna System AS-27/ARN-5 is used when Radio Receiving Equipment RC-103-D and AN/ARN-5 are used for both horizontal and vertical guidance.

Except for the power requirements Radio Receiving Equipment RC-103-D is interchangeable with RC-103-AZ, RC-103-D requires 72 w of 28-v dc and uses Dynamotor DM-53-A; RC-103-AZ requires 4.5 amp of 14-v, dc, and uses DM-53-AZ. Replacing one dynamotor with the other automatically sets up all the required power connections for the proper functioning of either the RC-103-D or RC-103-AZ.

AN/ARN-TYPE

RC-103 :SERVICE TYPE NUMBER

RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: TO AN-16-40RC-103-2
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET : 7 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver BC-733-D	5 x 13-3/8 x 7-3/32	19.2
1	Dynamotor DM-53-A (Included in receiver)	Not Available	2.9
1	Radio Control Box BC-732-A	3-9/32 x 3-1/4 x 2-5/8	0.56
1 or 2	Indicators I-101-C or I-101-D	3-1/4 x 3-1/4 x 3-3/9	2.06 (each)
1	Antenna Equipment AN-100 or AN-100-A	24 x 12 x 10	4.0
1	Mounting FT-293-A	5-7/8 x 1-7/32 x 13-1/4	1.75
1	Mounting FT-292-A	3-1/16 x 1/16 x 4-1/32	0.07

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued to fighters, interceptors, fighter bombers, medium and heavy bombers, and cargo planes.

INSTALLATION: Aircraft, shock mounted.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -8, -28, -36; AN/CRC-2; AN/GRC-9; AN/MRC-20, -22; AN/TRC-7; AN/TRQ-1; AN/URT-10; AN/VRC-1; BC-640; RC-257; SCR-522, -542, -573, -575, -624, -643; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 6 preset crystal-controlled channels: 108.5, 108.7, 109.1, 109.5, 109.9, and 110.3.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice or tone.

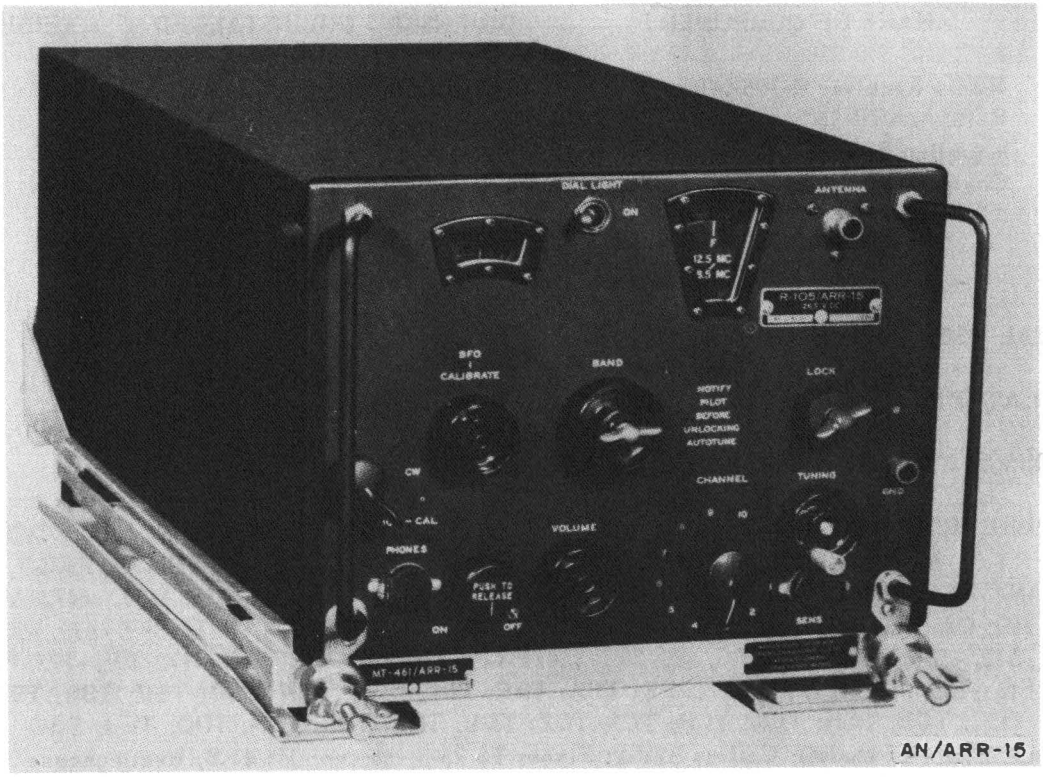
POWER OUTPUT: Audio: 500 mw into a 300 or 4,000 ohm resistive load
Visual: Indicator I-101-C or I-101-D.

POWER REQUIREMENTS: RC-103-D; 72 w, 28 v (2.6 amp) dc (from Dynamotor DM-53-A)
RC-103-AZ;(4.5 amp) 14 v, dc (from Dynamotor DM-53-AZ).

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RC-103 measures 24 x 12 x 19 inches, net weight 29.54 pounds, volume 2.09 cu ft. Packed for either domestic or export shipment: total weight 38.40 pounds, total volume 2.31 cu ft. Shipped in 3 packages both domestic and export.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 May 52	**AN/ARR-15** RADIO SET



Radio Sets AN/ARR-15 and -15A are general purpose, a-m (voice, cw, and mcw) receivers which provide reliable, preset, multichannel, pilot- or radio-operator-controlled, h-f reception.

This equipment may be controlled from the receiver panel or from a remote position.

An autotune system permits the selecting of any one of 10 channels and may be adjusted to select any 10 frequencies within the range 1.5 to 18.5 mc.

The AN/ARR-15 and -15A are functionally similar. The AN/ARR-15A incorporates an improved autotune unit and minor component changes. The AN/ARR-15 is essentially the Collins Model 51H-1. The AN/ARR-15A is the Collins Model 51H-4.

AN/ARR-15

RADIO SET

INSTRUCTION LITERATURE: AN 16-30ARR15-3
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver R-105/ARR-15 or R-105A/ARR-15	7-7/8 x 10-3/8 x 21-9/16	39.5
1	Mounting Base MT-461/ARR-15	3-15/16 x 10-7/8 x 23-27/32	3.3
1	Control Box C-428/ARR-15	Not available	1.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft.

INSTALLATION: Airborne.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.5 - 18.5 on any of the 10 preset channels.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

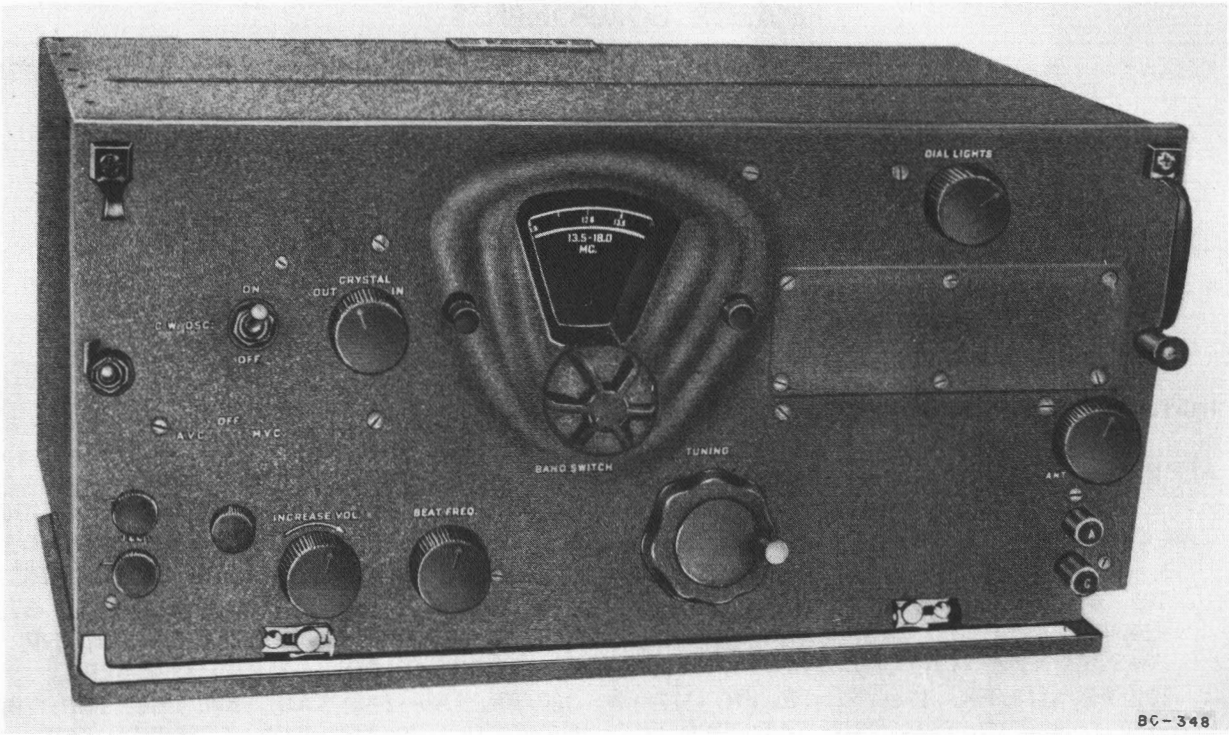
POWER OUTPUT: 500-mw audio output.

POWER REQUIREMENTS: 95 w, 26.5 v($\pm$ 10%)dc.

PHYSICAL CHARACTERISTICS

Radio Set AN/ARR-15 or -15A measures 9-3/8 x 10-7/8 x 23-27/32 inches, net weight 44.3 pounds.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 19 May 52	AN/ ARR-TYPE SERVICE TYPE NUMBER: BC-348 RADIO RECEIVER



Radio Receiver BC-348 is an a-m (voice and cw) equipment used in air-to-ground and air-to-air radio communication over the frequency range 0.2 to 0.5 and 1.5 to 18 mc.

It is continuously tunable and its frequency range is covered in 6 bands which can be selected by a rotary switch located on the equipment's front panel.

The intermediate frequency of this receiver is 915 kc. It has an adjustable beat-frequency oscillator, crystal band-pass filter, and either a manual or automatic volume control.

The antenna is coupled to the receiver through a variable capacitor, permitting use of single wire antennas of various lengths.

Audio power output is 3 w (maximum) into either a 300- or 4,000-ohm load to match high- or low-impedance headphones.

This receiver is powered by a built-in 28-v d-c dynamotor.

When necessary to operate from 14-v d-c power sources, the electrically equivalent Radio Receivers BC-224-F and BC-224-K may be used.

AN/ARR-TYPE	INSTRUCTION LITERATURE: TO 16-40BC-348
BC-348 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVER	USING SERVICE : Air Force
	DATE OF THIS SHEET : 19 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in light, medium, and heavy bombers and in air-sea rescue, trainer, and cargo aircraft.

INSTALLATION: Airborne, shock mounted.

APPROXIMATE RANGE (IN MILES): Short to medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ART-13; AN/CRT-3, -5; AN/FRT-5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRT-1, -3, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -329, -339, -365, -401, -447, -610; MBS; MQ; OA-60/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99 A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.2 - 0.5and 1.5 - 18.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, mcw.

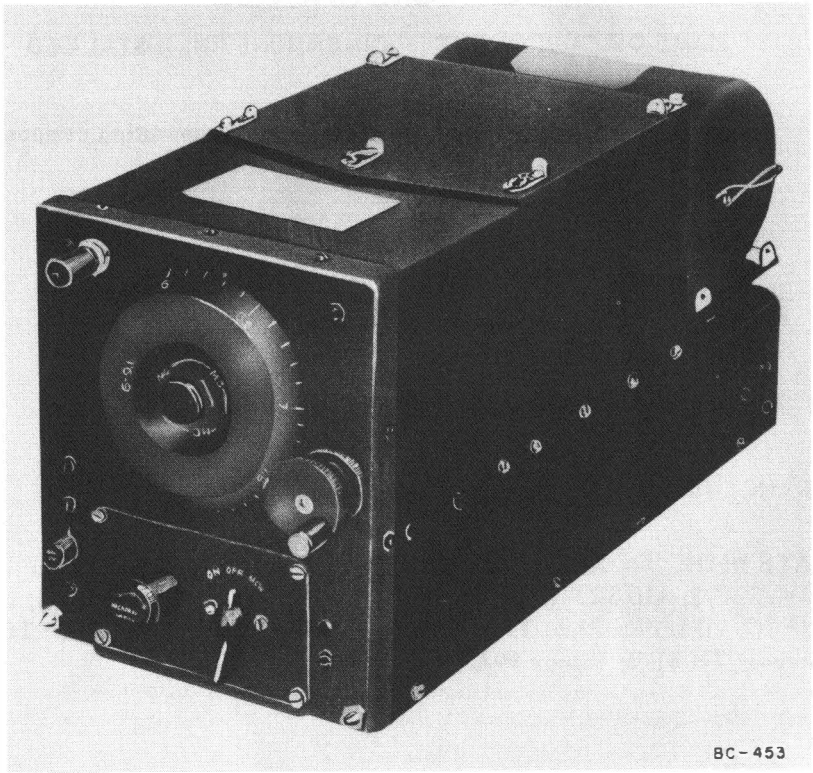
POWER OUTPUT: 3 w (maximum) into either 300 - or 4,000-ohm impedance load.

POWER REQUIREMENTS: BC-348: 56 w, 28 v (2 amp) dc.
BC-224: 56 w, 14 v (4 amp) dc.

PHYSICAL CHARACTERISTICS

Radio Receiver BC-348 measures 18 x 10-1/2 x 9-1/2 inches, net weight 35.5 pounds, volume 1.1 cu ft. Packed for domestic or export shipment: total weight 45 pounds, total volume 1.25 cu ft. Shipped in 1 package.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 10 Jun 52	**AN/ARR-TYPE** SERVICE TYPE NUMBER: BC-453 RADIO RECEIVER



Radio Receiver BC-453 is an airborne a-m and c-w receiver for continuous coverage of the l-f band (short to medium). It is used for ground-to-air and air-to-air reception. There are two models of this receiver (BC-453-A and BC-453-B); the only difference between the two models is that the BC-453-B has a tapped audio output transformer for 8,000-ohm and 600-ohm output impedances and the BC-453-A has only an 8,000-ohm output.

The intermediate frequency is 85 kc.

The recommended type of antenna for this receiver is a long fore-and-aft inverted L or T type aircraft antenna.

The receiver may be either locally or remotely controlled.

It is equipped with a dynamotor power supply operating from 44.8 w, 28 v dc. Radio Receiver BC-453-A is normally part of Radio Set SCR-274-N.

AN/ARR-TYPE	INSTRUCTION LITERATURE: TO 16-40SCR-274-5
BC-453 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVER	USING SERVICE : Air Force
	DATE OF THIS SHEET : 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally used in light bomber and trainer aircraft.

INSTALLATION: Aircraft, shock mounted.

APPROXIMATE RANGE (IN MILES): (Nominal) short to medium.

CAN COMMUNICATE WITH: AN/ARC-8; AN/ART-13; AN/CRT-3, -5; AN/FRT-10, -19; AN/GRT-2; AN/MRC-20; AN/SRC-3; AN/SRT-1, -3; AN/TRQ-1; AN/URT-2, -3, -4; BC-191, -329, -365; SCR-177; T-5/FRC, -171/FR; TAB; TAJ; TAQ; TBL; TBN; TBU; TBW; TCE; TCY; TCZ; TDD; TDE; TDK; Marconi TH-41-B; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.19 - 0.55.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Tone, cw, voice.

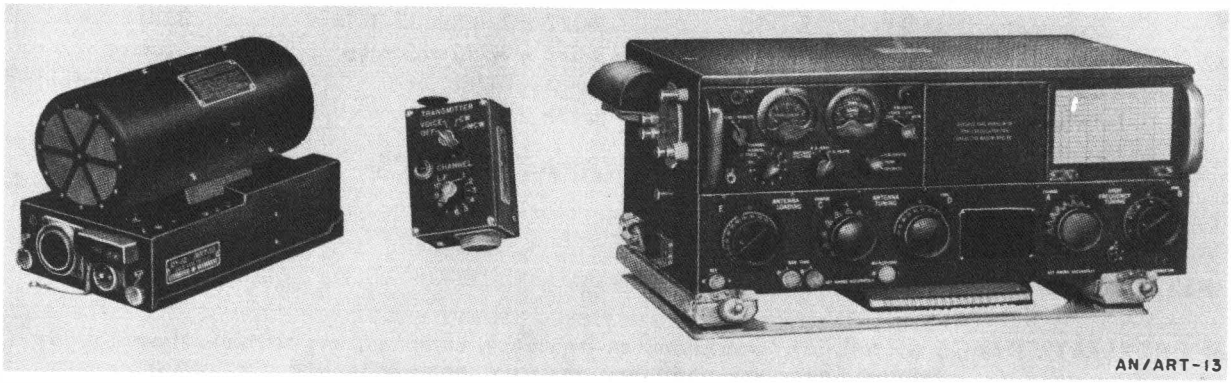
POWER OUTPUT: 10 mw (nominal).

POWER REQUIREMENTS: 44.8 w, 24/28 v, (1.6 amp) dc.

PHYSICAL CHARACTERISTICS

Radio Receiver BC-453 measures 6-11/16 x 7-11/32 x 13-1/8 inches, net weight 11.2 pounds, volume 0.35 cu ft. Packed for domestic or export shipment: total weight 13 pounds, total volume 0.4 cu ft. Shipped in 1 package.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/ART-13** RADIO TRANSMITTING SET



AN/ART-13

Radio Transmitting Set AN/ART-13 is a compact, lightweight, radio transmitter for air-ground communication in aircraft. An autotune system permits rapid selection of 10 preset channels within the h-f range and either c-w, m-c-w, or voice-modulated operation. These operating methods are selected through a local remote switch by radio operator or pilot.

The danger of allowing antenna radiated power to cover a longer range than is necessary has been eliminated by the use of a pressure operated relay.

This equipment includes a set of connectors and adapters but not the necessary interconnecting wires and cables.

Microphones, a table-type key, throttle switch, headphones, and the antenna system are not supplied.

This set does not include the l-f oscillator (which extends the range of the transmitter from 0.2 to 1.5 mc). Space for mounting this additional equipment is provided within the transmitter.

Either a trailing long wire antenna or a fixed antenna with the shunt capacitor can be used. A transmitter-to-receiver antenna transfer relay switch is included.

Sidetone monitoring is provided and frequency calibration is accomplished by the use of the CFI unit. This equipment formerly designated Aircraft Radio Transmitting Equipment ATC.

AN/ART-13

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: AN-08-30ART13-5
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter T-47/ART-13	11-11/32 x 15-15/32 x 23-9/16	67.0
1	Mounting Base MT-284/ART-13	2-1/2 x15-15/32 x 20-33/64	1.88
1	Dynamotor Unit DY-12/ART-13	8-1/2 x 7-1/8 x 12-3/16	30.0
1	Control Unit C-87/ART-13	3-1/4 x 3-1/2 x 6-3/16	1.4
1	Antenna Switching Unit SA-22/ART-13	Not Available	Not Available
1	Antenna Shunt Capacitor CU-24/ART-13	3-7/8 x 4-1/8 x 5	1.68

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft.

INSTALLATION: Airborne.

APPROXIMATE RANGE (IN MILES): Dependent on frequency, antennas, and altitude. Nominal power reduced automatically to 50% at altitude of 25,000 ft.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -314, -342, -344, -348, -453, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBL; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDF; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -614, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 - 18 (10 h-f channels only).
Use of a l-f oscillator provides an additional channel in the frequency band, 0.2 - 1.5.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: 31 - 90 w on the h-f range.
5 - 80 w on the optional l-f range.

POWER REQUIREMENTS: 770 - 896 w, 28 v dc.

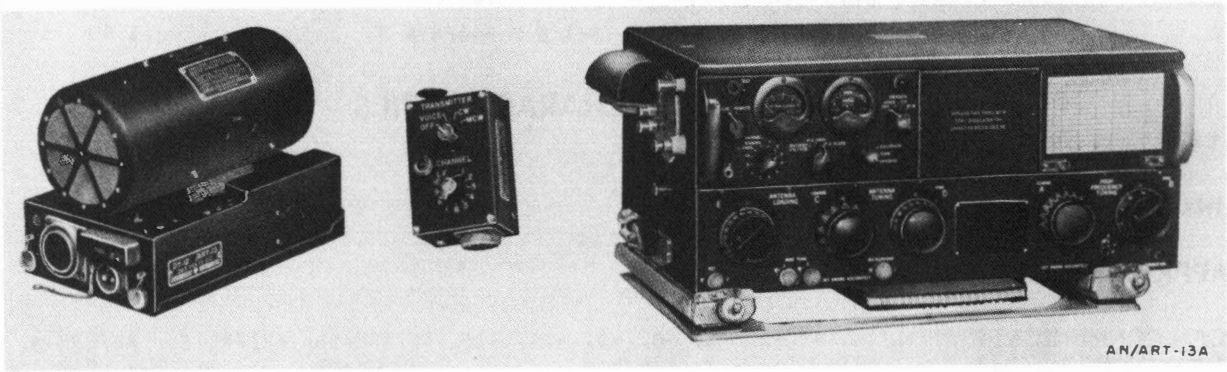
PHYSICAL CHARACTERISTICS

Information on Radio Transmitting Set AN/ART-13 not available.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/ART-13A

RADIO TRANSMITTING SET



Radio Transmitting Set AN/ART-13A is designed for use in aircraft and air-ground communication. It employs an autotune system which permits rapid selection of any one of 11 channels, and choice of type of emission.

The autotune system can be controlled either by the radio operator or by the pilot.

A pressure operated relay, automatically reduces the power output by 50% whenever the aircraft reaches an altitude of 25,000 feet.

This equipment is essentially similar to Radio Transmitting Set AN/ART-13 and Aircraft Radio Transmitting Equipment ATC, but is lighter in weight and provides l-f channel operation in the 0.2 to 1.5 mc range.

AN/ART-13A

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter T-47A/ART-13	11-11/32 x 15-15/32 x 23-9/16	67.0
1	Oscillator O-17/ART-13A	Not Available	Not Available
1	Dynamotor Unit DY-17/ART-13A	8-13/16 x 7-3/16 x 11-15/16	28.0
1	Control Unit C-87/ART-13	3-1/4 x 3-1/2 x 6-3/16	1.4
1	Antenna Loading Unit CU-32/ART-13A	Not Available	Not Available
1	Antenna Shunt Capacitor CU-24/ART-13	3-7/8 x 4-1/8 x 5	1.68

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft.

INSTALLATION: Airborne.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -314, -342, -344, -348, -453, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS: RBA; RBB; RBC; RBG; RBH; RBL; RBM; RBO: RBP; RBS; RCF; RCG; RCH; RDE; RDF; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -614, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: L-f range (one channel) 0.2 - 1.5.
H-f range (ten channels) 2.0 - 18.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: 5 - 80 w on the l-f range.
31 - 90 w on the h-f range.

POWER REQUIREMENTS: 770 - 896 w, 28 v dc.

PHYSICAL CHARACTERISTICS

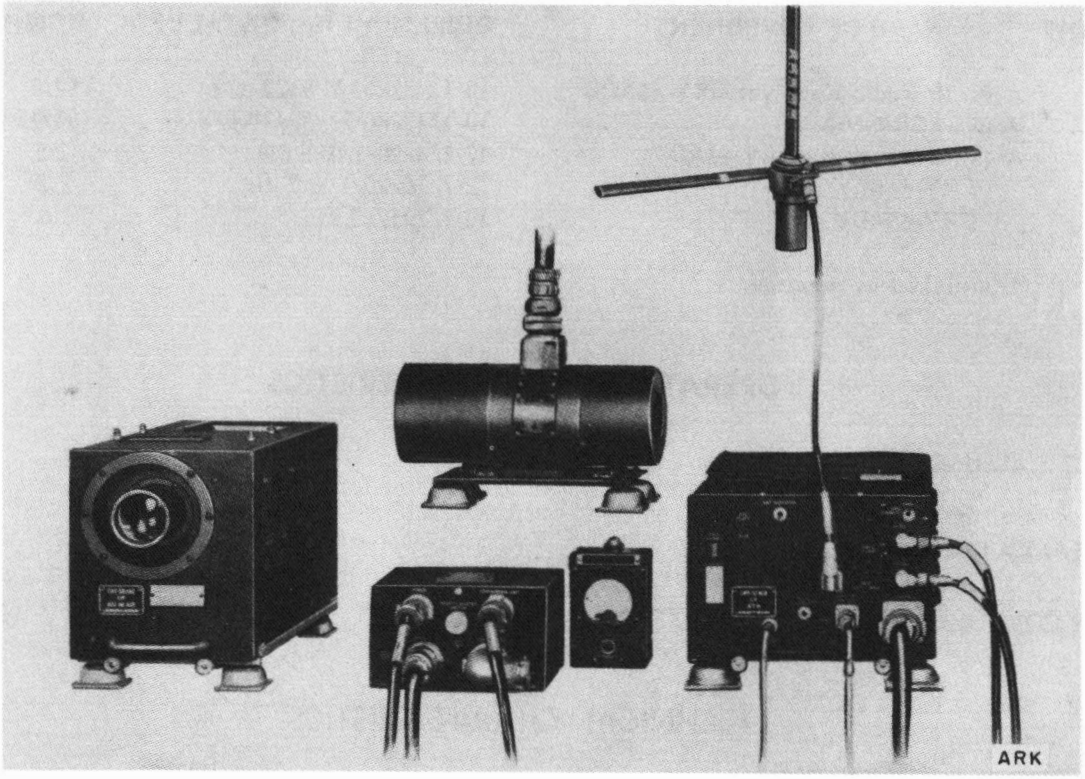
Information on Radio Transmitting Set AN/ART-13A not available.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/AXR-TYPE

SERVICE TYPE NUMBER: ARK

AIRCRAFT RADIO RECEIVING EQUIPMENT



The ARK Aircraft Radio Receiving Equipment is a uhf receiver for use in and by aircraft in conjunction with ATK Aircraft Radio Transmitting Equipment to comprise a complete system used for plane-to-plane radio television reception. Scenes visible from an aircraft using the ATK may be reproduced in another aircraft using the ARK, at a distance of about 10 miles.

The equipment can operate on any one of 10 frequency channels, and up to 10 separate sets of equipments may be operated simultaneously within the same general area. The equipment will operate under severe conditions of vibration, temperature, humidity, and altitude.
Either the cylindrical or elliptical type antenna is supplied for frequency channels 1 to 5; elliptical type only for channels 6 to 10.

AN/AXR-TYPE

ARK :SERVICE TYPE NUMBER

AIRCRAFT RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: AN 16-45-69, 08-5S-79
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Aircraft Radio Receiver CRV-46ACD	10-13/32x17-7/8x22-3/8	57.0
*1	Monitor CRV-60ABK	10-17/32x8-21/32x19-5/8	31.25
1	Antenna Assembly CRV-66ADT	12-1/4x20-1/2x5 dia	2.5
	CRV-66AFW or	12-7/16x20-1/2x2 dia	1.8
	CRV-66ADU	10-1/2x17x2 dia	1.6

*Furnished as required.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft.

INSTALLATION: Airborne.

CAN COMMUNICATE WITH: ATK

TECHNICAL CHARACTERISTICS

FREQUENCY: 264 - 372 mc, in 10 channels.

SCREEN SIZE: 7 in. crt.

ASPECT RATIO: 4:3.

FRAMES PER SECOND: 40.

LINES: 350 scanning lines.

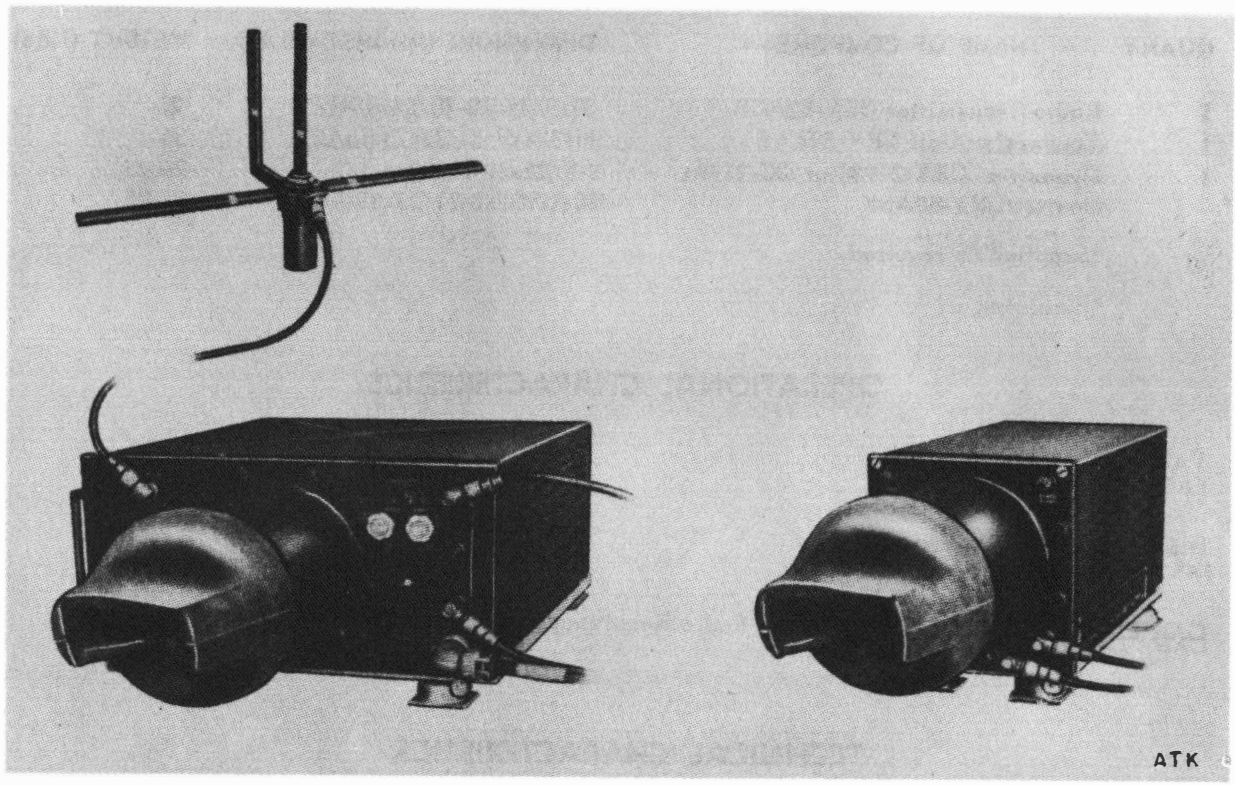
SYNCHRONIZING SIGNALS: Pulses.

POWER REQUIREMENTS: Receiver with monitor; 400 w, 27-31 v dc.

PHYSICAL CHARACTERISTICS

Aircraft Radio Receiving Equipment ARK measures 10-13/32 x 26-17/32 x 22-3/8 inches, net weight 88-1/4 pounds, volume 3.58 cu ft.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/AXT-TYPE** SERVICE TYPE NUMBER: ATK AIRCRAFT RADIO TRANSMITTING EQUIPMENT



The ATK Aircraft Radio Transmitting Equipment is a uhf transmitter for use in and by aircraft, in conjunction with ARK Aircraft Radio Receiving Equipment, to comprise a complete system used for plane-to-plane radio television transmission. Scenes visible from an aircraft using the ATK may be reproduced in another aircraft using the ARK, at a distance of about 10 miles.

The equipment can operate on any one of 10 frequency channels, and up to 10 separate sets of equipments may be operated simultaneously within the same general area. The equipment will operate under severe conditions of vibration, temperature, humidity, and altitude. The power output of the transmitter is 19 w.

Either cylindrical or elliptical type antenna is supplied for channels 1 through 5; elliptical type only for channels 6 through 10.

Antennas used are as follows: CRV-66AED, -66AEE, -66AEF, -66AEG, -66AEH, -66AFX, -66AFY, -66AFZ, -66AGA, -66AGB, -66AEJ, -66AEK, -66AEL, -66AEM, or -66AEN.

AN/AXT-TYPE	INSTRUCTION LITERATURE: AN 16-45-69, 08-5S-79
ATK :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
AIRCRAFT RADIO TRANSMITTING EQUIPMENT	USING SERVICE: Navy
	DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CRV-52ACB	31-9/32x12-13/64x18-1/32	26
1	Conversion Unit CRV-59AAE	11-3/4x9-13/32x23-15/32	36
1	Dynamotor CEK-21981 or CC-21981	9-9/32x13-13/32x6-1/2	26.25
* 1	Monitor CRV-60ABK	10-17/32x8-21/32x19-5/8	31.25

*Supplied as required.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft.

INSTALLATION: Airborne.

CAN COMMUNICATE WITH: Aircraft Radio Receiving Equipment ARK.

TECHNICAL CHARACTERISTICS

FREQUENCY: 264 - 372 mc, in 10 channels.

SCREEN SIZE: 7 in. crt (monitor unit).

ASPECT RATIO: 4:3.

FRAMES PER SECOND: 40.

LINES/INTERLACE: 350 scanning lines.

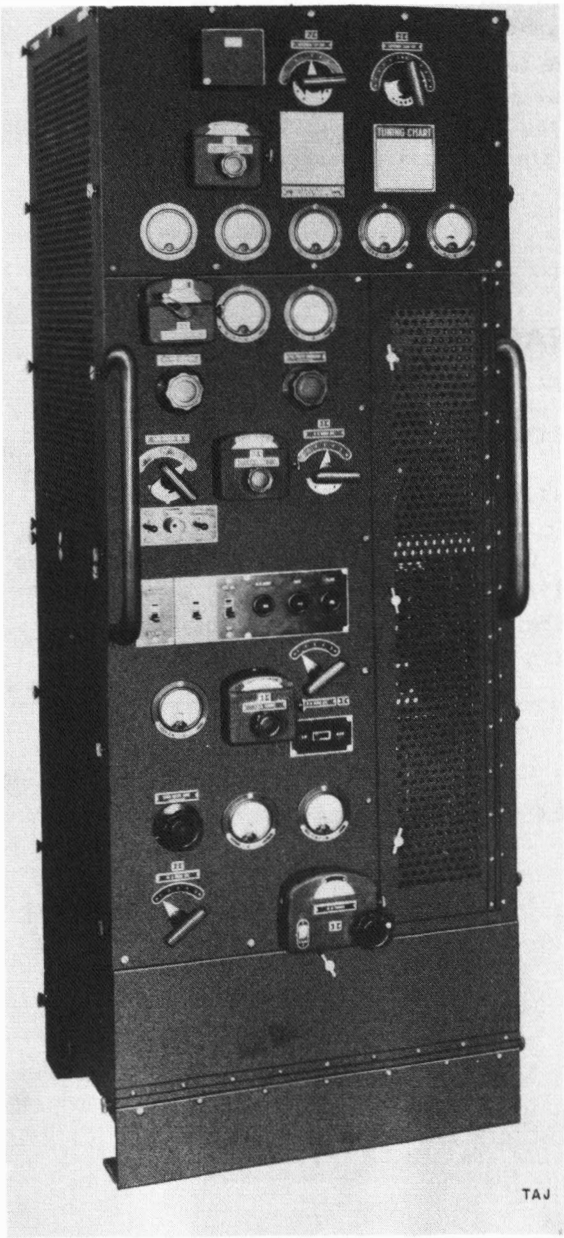
SYNCHRONIZING SIGNALS: Pulses.

POWER REQUIREMENTS: Transmitter with monitor; 850 w, 27-31 v dc.

PHYSICAL CHARACTERISTICS

Aircraft Radio Transmitting Equipment ATK weighs 130.25 pounds net.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 May 52	**AN/BRT-TYPE** SERVICE TYPE NUMBER: TAJ 500 WATT TRANSMITTING EQUIPMENT



500 Watt Transmitting Equipment TAJ is a general service, m-f, medium power a-m (cw, mcw) radiotelegraph transmitter for use on submarines. The transmitter may be operated locally, or remotely over a standard four- or six-wire control system, and employs crystal oscillator frequency control.

Motor generators and starters are available which permit operation of the equipment from either 115-v, or 230-v, d-c power source.

AN/BRT-TYPE

TAJ :SERVICE TYPE NUMBER

500 WATT TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: Not Available

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Navy

DATE OF THIS SHEET : 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter Unit CAY-3334A	46 x 26-1/8 x 17	425
1	Motor-Generator *CAY-3689 or **CAY-3690	20-5/16 x 36 x 18 20-5/16 x 36 x 18	1,200 1,200
1	Filter Unit CAY-3335A	27-7/8 x 14 x 12-1/8	100
1	Starter *CAY-3415, or **CAY-3416 *115-v dc. **230-v dc.	25-3/8 x 21-1/8 x 13-11/16	135

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Submarines.

INSTALLATION: Submarine.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/FRR-4, -28; AN/GRR-2, -3; AN/MRC-5, -8, -20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-4; BC-314, -344, -348, -453, -779, -1004; MBS; OA-58/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBG; RBH; RBL; RBM; RBO; RCF; RCG; RCH; RDF; RDM; SCR-177, -244, -274, -614; AR-88 (RCA); ARC Type 12; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.195- 0.60.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw.

POWER OUTPUT: 300 w.

POWER REQUIREMENTS: 3 kw, 115/230 v, dc.

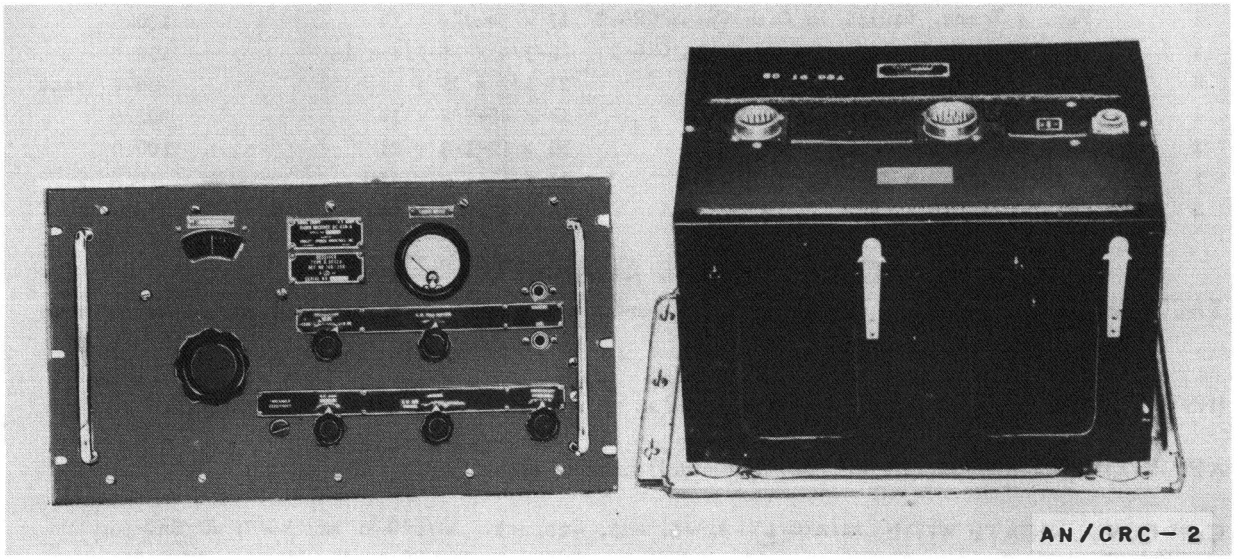
PHYSICAL CHARACTERISTICS

500 Watt Transmitting Equipment TAJ measures 46 x 26-1/8 x 17 inches.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 10 Jun 52

AN/CRC-2

RADIO SET



Radio Set AN/CRC-2 is used as a v-h-f, air-to-ground, advanced air base traffic control system. The set is designed and packaged for air transportation for use in combat areas, where it can be easily set up and knocked down, repackaged, and transported to a new location, by air or motor vehicle.

Radio Set AN/CRC-2 consists essentially of the following major items: 6 Radio Receivers BC-639-A (illustrated above), Radio Receiver BC-624-A, Radio Transmitter BC-625-A (illustrated above), Frequency Meter BC-638-A, 4 Power Units PE-214-A, 8 Antenna Equipments RC-81-A, 4 Antenna Masts AB-7/CRC-2, and accessory items.

The following facilities are provided by Radio Set AN/CRC-2 two-way ground-to-air radio communication on four preset, crystal-controlled channels in the v-h-f band for air base traffic control, continuous monitoring of six radio channels, two spare receiving channels, presetting of the receivers to the desired channels.

AN/CRC-2

RADIO SET

INSTRUCTION LITERATURE: TO 16-30CRC-2
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET : 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
3	Receiving Equip. in Case CY-32/CRC-2	15-1/2 x 39-1/2 x 22-5/16	181.0 (each)
1	Monitoring Equip. in Case CY-33/CRC-2	15 x 22-1/2 x 21-23/32	101.5
1	Rec. & Trans. Equip. in Case CY-34/CRC-2	17 x 34-1/4 x 14	130.3
1	Power Supply Equip. in Case CY-55/CRC-2	20-3/4 x 15-3/4 x 15	102.0
4	Power Unit PE-214-A with Case	23-1/2 x 16 x 20	86.0 (each
1	Cable Equip. in Case CY-165/CRC-2	19 x 45-3/4 x 19	302.0
1	Ant. Equip. in Case CY-_5/CRC-2	31 x 12-1/4 x 21	100.0
1	Misc. Equip. in Case CY-36/CRC-2	21 x 12-1/4 x 21	18.5
4	Mast AB-7/CRC-2 in 2 Chests	16 x 9 x 25 & 135 x 9 x 9	315.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally used in advanced combat areas at newly captured air strips for air base traffic control.

INSTALLATION: Ground-fixed (shockmounted in cases designed for air transportation).

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-16, -20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -12, -21; AN/URT-7, -10; AN/VRC-1; BC-639, -640; MAR; MBS; R-137/GR; RBK; RBQ; RC-103, -256, -257; RCK; RCO; SCR-522, -542, -573, -575, -607, -616, -624, -641, -643, -644; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 - 156.

6 Receivers BC-639-A: 100 - 156 continuous tuning.
1 Receiver BC-624-A: 4 preset crystal-controlled channels from 100 - 156.
1 Transmitter BC-625-A: 4 preset crystal-controlled channels from 100 - 156.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

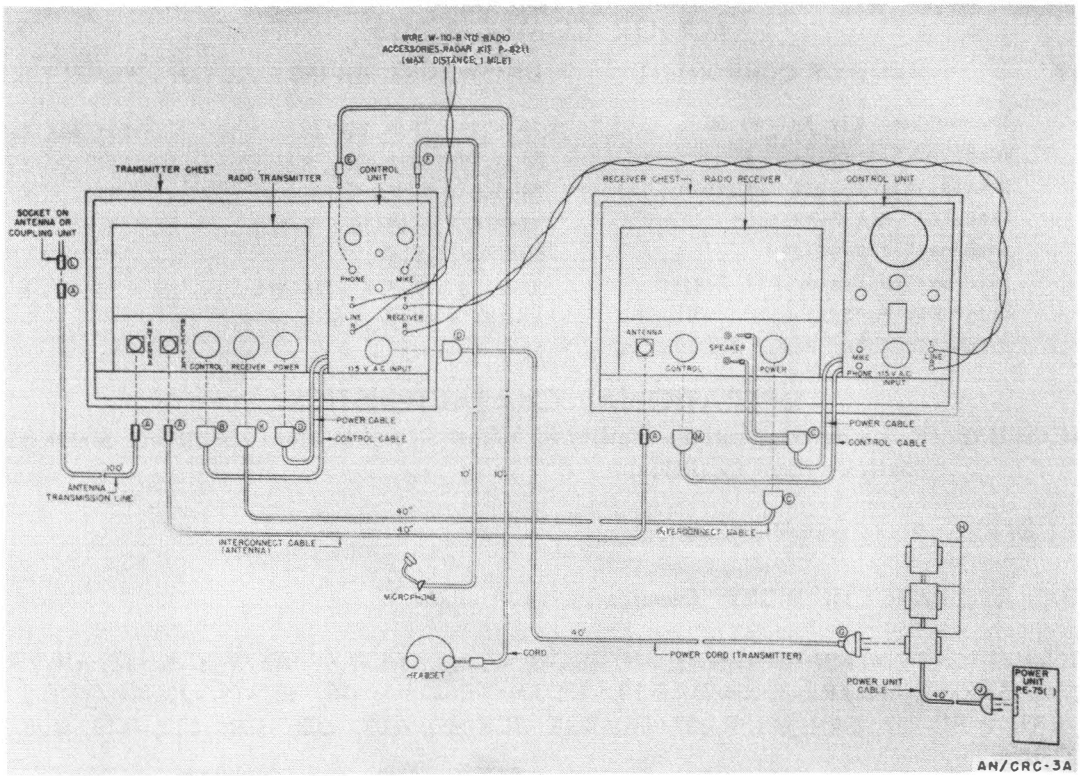
POWER OUTPUT: 6-9 w (Nominal).

POWER REQUIREMENTS: 600 w, 110 v, 50/60 cyc, 1 phase, ac. Power is normally furnished by two Power Units PE-214-A. Four power units are supplied; two are spares.

PHYSICAL CHARACTERISTICS

Radio Set AN/CRC-2 measures 172.5 x 40 x 23 inches, net weight 3,878 pounds, volume 164.34 cu ft. Packed for domestic or export shipment: total weight 4,268 pounds, total volume 182 cu ft, 4.55 ship tons. Shipped in 21 packages.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 10 Jun 52	**AN/CRC-3A** RADIO SET



Radio Set AN/CRC-3A consists of a commercial type, Galvin Mfg. Co., Transmitter PA- 8244 (Motorola Transmitter Kit FMT-50 BD) and radio receiver, Galvin Mfg. Co., PA-8245 (Receiver Kit FSKR-15BD) plus control units, antenna components and accessory items as are required for two-way operation with other similar installations. It can be used for point-to-point communication from a fixed ground or mobile installation.

Several of these sets are normally used to form a single channel communications net in an Aircraft Warning System.

Necessary cables and connectors for local or remote operation over telephone lines up to a distance of two miles are included.

The receiver is a double conversion, crystal-controlled, superheterodyne, employing 4.3 mc and 455 kc for conversion. The transmitter is crystal-controlled on any one of 61 channels in the v-h-f frequency range 30 to 40 mc and capable of fm, voice transmission.

The squelch circuit of the receiver actuates a relay to turn the transmitter ON and OFF after it has been placed in "stand-by" operation. This mode of operation is used when transmitter and receiver are employed as an automatic relay station. The receiver will detect an incoming signal on one frequency and automatically place the transmitter on the air re-transmitting the original signal on another frequency.

AN/CRC-3A

RADIO SET

INSTRUCTION LITERATURE: TO 16-30CRC3-2 Book 241 A
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET : 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter Kit FMT-50 BD	24 x 16-1/2 x 14-7/8	Not Available
1	Receiver Kit FSKR-15 BD	24 x 16-1/2 x 14-7/8	" "
1	Crystal Kit P-8214 P-8214-A	18-5/8 x 5-3/4 x 12-1/4	" "
1	Tank Coil Kit P-8215	12-3/8 x 5-13/16 x 9-7/8	" "
1	Antenna Kit P-8212-B	Not Available	" "
1	Information Center Kit P-8210	37-1/16 x 7-3/4 x 15-3/4	" "
1	Radar Kit P-8211	17-1/2 x 8-29/32 x 10-5/8	" "
1	Automatic Relay Power Kit P-8213	22 x 23 x 13	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Radio communications facility for point-to-point between operations center and auxiliary radar facilities.

INSTALLATION: Fixed ground or mobile.

APPROXIMATE RANGE (IN MILES: (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-7, -8; AN/MRC-5, -16; AN/PRC-9, -10; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -3, -10, -15, -18, -22; AN/VRQ-2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-300, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 61 crystal-controlled, preset channels in the frequency range 30 - 40.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 50 w.
Receiver: 500 mw into 600 ohm line.

POWER REQUIREMENTS: Transmitter: 290 w maximum, 105 - 125 v, 60 cyc, 1 phase, ac.
Receiver: 75 w maximum, 105 - 125 v, 60 cyc, 1 phase, ac.

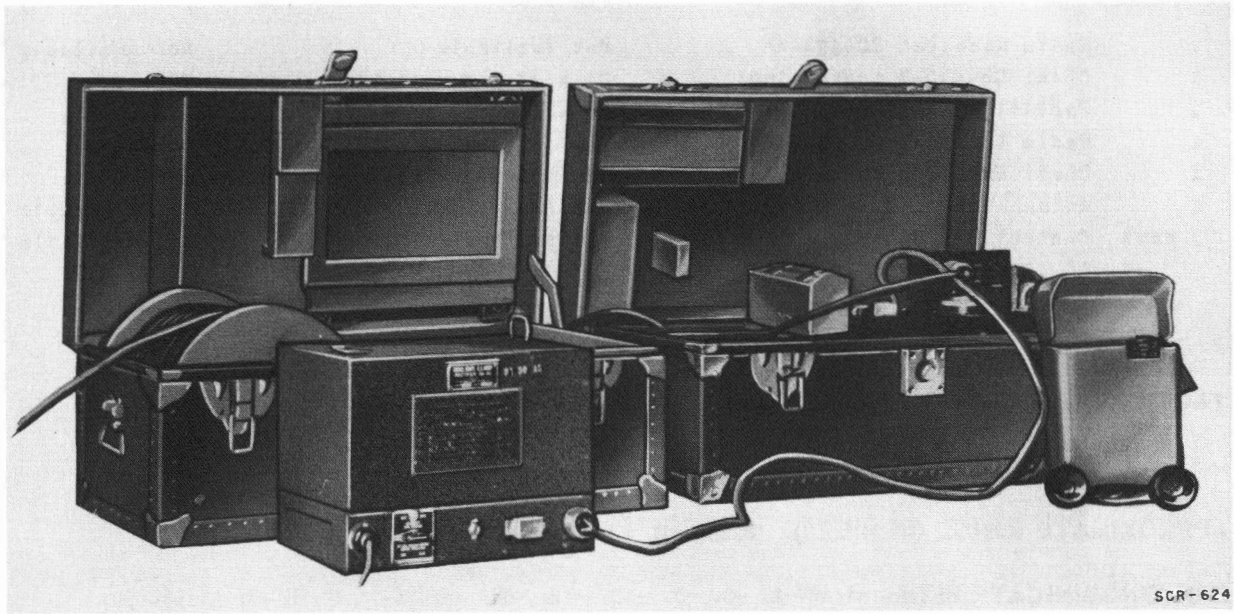
PHYSICAL CHARACTERISTICS

Radio Set AN/CRC-3A measures 24 x 52 x 15 inches, net weight 331 pounds, volume 18.5 cu ft. Packed for domestic or export shipment: total weight 400 pounds, total volume 20 cu ft, 0.5 ship ton. Shipped in 2 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force, Navy
DATE OF THIS SHEET: 26 May 52

AN/CRC-TYPE

SERVICE TYPE NUMBER: SCR-624 RADIO SET



Radio Set SCR-624 is a complete radio ground station consisting of a transmitter and receiver designed for two-way, v-h-f communication. It is especially constructed for transportation by air. Radio Control Box BC-602-B may be used at the transmitter or from a remote position up to 500 feet away for channel selection, as well as send-receive communications; it may also be used up to two miles for send-receive control only.

This radio set consists of Radio Transmitter BC-625-A and Radio Receiver BC-624-A housed together in one case.

A separate power unit, antenna, remote control unit, jack boxes, and interconnecting cables are also supplied.

The transmitter and receiver each use four separate crystals (total 8 crystals) to provide 4 preset operating channels.

An antenna change-over relay is incorporated in the set, which permits using one Antenna AN-94-A, -B, or -C, mounted on Antenna Mast MA-7-A for both transmitting and receiving.

The transmitter provides 6-8 w output on either voice or tone modulation; the receiver output is 10 mw into a 300 ohm or 4,000 ohm resistive load.

Requires 325-w, 100-130/200-260-v ac.

Radio Sets SCR-624-B, SCR-542-A and SCR-522-A, are all identical operationally, and all similar units are mechanically interchangeable; the major differences are in the power supply requirements and method of installation.

AN/CRC-TYPE	INSTRUCTION LITERATURE: TO 16-40SCR624-2
SCR-624 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO SET	USING SERVICE : Air Force, Navy
	DATE OF THIS SHEET : 26 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver BC-624-AM	Not Available	Not Available
1	Cheat CH-172-B containing:	34 x 16-3/4 x 15-3/4	205
1	Rectifier RA-62-B	16 x 11-5/32 x 10-5/8	75
1	Radio Transmitter BC-625-AM	16-5/32 x 12-9/16 x 10-11/16	49
1	Cheat CH-173-B containing:	34 x 16-3/4 x 15-3/4	205
1	Antenna AN-94-B	Not Available	Not Available
1 each	Control Box BC-1312, BC-1313, BC-1314	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Issued as project material in accordance with AFR 100-17.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-16, -20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -12, -21; AN/URT-7, -10; AN/VRC-1; BC-639, -640; MAR; MBS; R-137/GR; RBK; RBQ; RC-103, -256, -257; RCK; RCO; SCR-522, -542, -573, -575, -607, -616, -624, -641, -643, -644; TDQ; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 - 156.
Receiver: 4 preset crystal-controlled channels.
Transmitter: 4 preset crystal-controlled channels.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 6-8 w (Nominal).

POWER REQUIREMENTS: 325 w, 100-130/200-260 v, 50/60 cyc, 1 phase, ac.

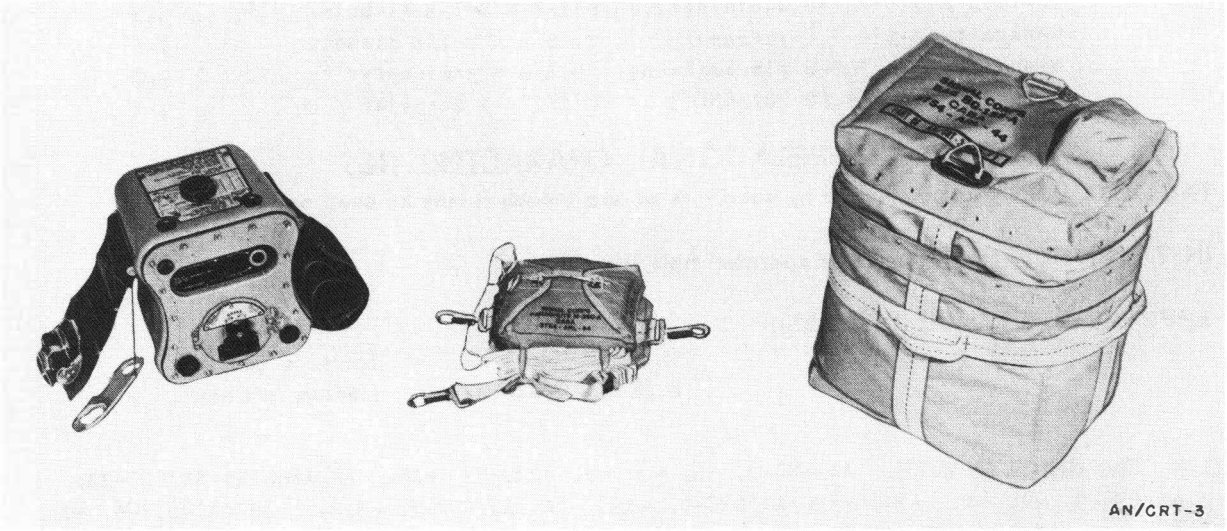
PHYSICAL CHARACTERISTICS

Radio Set SCR-624 measures 72 x 84 x 84 inches, net weight 669 pounds, volume 50 cu ft. Packed for either domestic or export shipment: total weight 773 pounds, total volume 62 cu ft. Shipped in 5packages both domestic and export.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force, Navy
DATE OF THIS SHEET: 7 Jun 52

AN/CRT-3

RADIO SET



Radio Set AN/CRT-3 is a small, rugged, hand powered emergency radio transmitter, designed for use from raft or life boat by survivors, for sea rescue work. The equipment is air transportable and dropped by parachute. It operates at 0.5 mc and 8.28 mc for ground-to-air and point-to-point communication.

This set is capable of three types of signaling: hand keyed signal light; automatic transmission of SOS on 0.5 mc tone modulated, and SOS on 8.28 mc unmodulated, automatically shifting from one frequency to the other every 40 to 50 seconds; and hand-keyed, tone-modulated transmission on 0.5 mc.

One kite and two balloons are supplied to support a single long wire antenna.

All power for operation of the equipment is supplied by a hand cranked generator.

AN/CRT-3

RADIO SET

INSTRUCTION LITERATURE: TO AN 16-30CRT3-2
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force, Navy
DATE OF THIS SHEET: 7 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter T-74/CRT-3	10-1/2 x 10 x 9	16.0
1	Kite M-357-A	19 x 4 diameter	0.8
2	Balloon M-278-A (in container)	5-1/8 x 4-1/4 diameter	1.3
2	Generator M-315-B (hydrogen)	11-5/8 x 4-1/4 diameter	3.3
1	Signal Lamp M-308-B (in container)	3-1/8 x 3 diameter	0.3
2	Antenna Assembly AS-207/CRT-3	2-1/2 x 3 diameter	0.7

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally used by survivors at sea though it may be used on land.

INSTALLATION: Man-carried or operated from life raft.

APPROXIMATE RANGE (IN MILES):

	Day	Night
0.5 mc:	Short	Short to Medium
8.28 mc:	Medium	Medium to Long

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; BC-312, -314, -342, -344, -348, -453, -779, -794, -1004; MBS; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209FR, -210/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBL; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDF; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -704; TBO; TCH; TCS; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Fixed frequencies 0.5 and 8.28.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw on 0.5 mc with 1,000-cyc tone; cw only on 8.28 mc.

POWER OUTPUT: Approximately 2-1/2 w on 0.5 mc and approximately 2 w on 8.28 mc.

POWER REQUIREMENTS: Hand operated generator, crank speed should be 80 to 100 rpm. Output 28 v (.175 amp) and 300 v (.04 amp) dc.

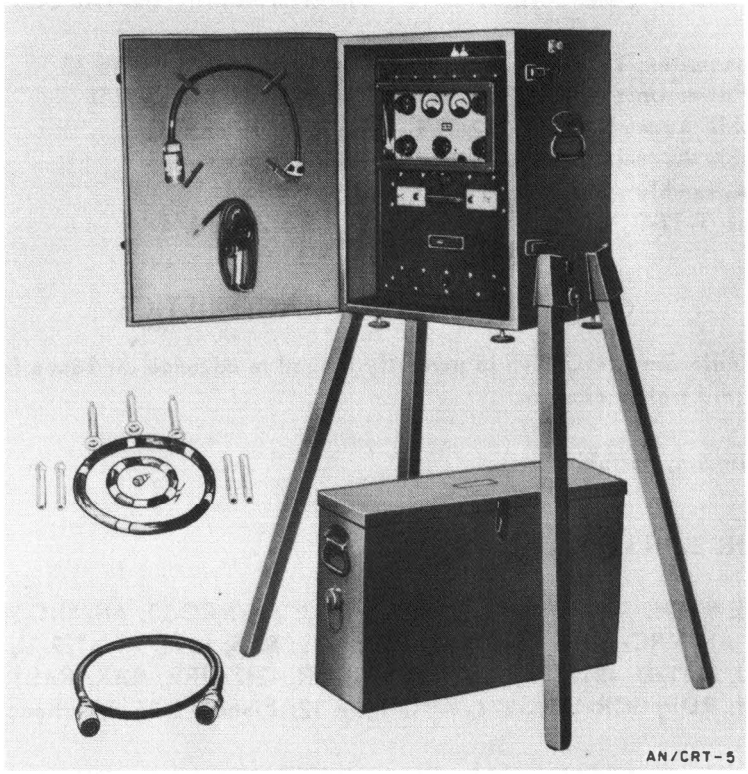
PHYSICAL CHARACTERISTICS

Radio Set AN/CRT-3 measures 10-1/2 x 10 x 9 inches, net weight 40 pounds, volume 1.1 cu ft. Packed for either domestic or export shipment: total weight 40 pounds, total volume 1.1 cu ft. Shipped in 1 package.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 28 Apr 52

AN/CRT-5

RADIO SET



Radio Set AN/CRT-5 is a portable, 10-w, short-range, a-m (voice) radio transmitting equipment used in airfield traffic control applications or as a stand-by or supplementary transmitter for ground-to-air and point-to-point communication.

Because of the low frequency operation of this equipment a long antenna (Antenna Assembly AS-326/CRT-5, 350 to 450 ft) at least 20 ft off the ground should be used where practicable.

Normally uses 110-v, single-phase ac. Can use 12 v dc in emergencies by utilizing Vibrator Power Unit PP-203/CRT-5, which contains a 12-v Battery BB-46 or BB-50.

AN/CRT-5

RADIO SET

INSTRUCTION LITERATURE: T.O. 16-30CRT5-4
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET : 28 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter T-151/CRT-5	12-7/16 x 18-3/8 x 23-5/32	140.0
1	Vibrator Power Unit PP-203/CRT-5	24-1/4 x 7-3/8 x 15-9/16	54.0
1	Power Cable Assembly CX-1172/U	1-3/4 diameter x 72	Not Available
1	Power Cable Assembly CX-1173/U	1-3/4 diameter x 24	.5
1	Antenna Assembly AS-326/CRT-5	Not Available	7.0
1	Microphone T-17-D	69 x 2-3/4 x 2-1/4	1.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Radio Set AN/CRT-5 is normally issued to advance air bases for emergency air field traffic control.

INSTALLATION: Ground, portable.

APPROXIMATE RANGE (IN MILES): 10 - 15.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/GRR-3; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/VRC-4; BC-344, -348, -453, -779; MBS; R-96/SR, -129/U, -203/SR, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR; RAK; RAL; RAS; RBA; RBH; RBL; RBM; RCH; RDF; SCR-177, -274; ARC Type 12; Fisher TS 25-3; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.2 - 0.4 continuous tuning.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 10 w.

POWER REQUIREMENTS: 350 w, 110/125 v, 50/60 cyc 1 phase, ac, or (144 w full load), 12 v (12 amp) dc supplied by Vibrator Power Unit PP-203/CRT-5.

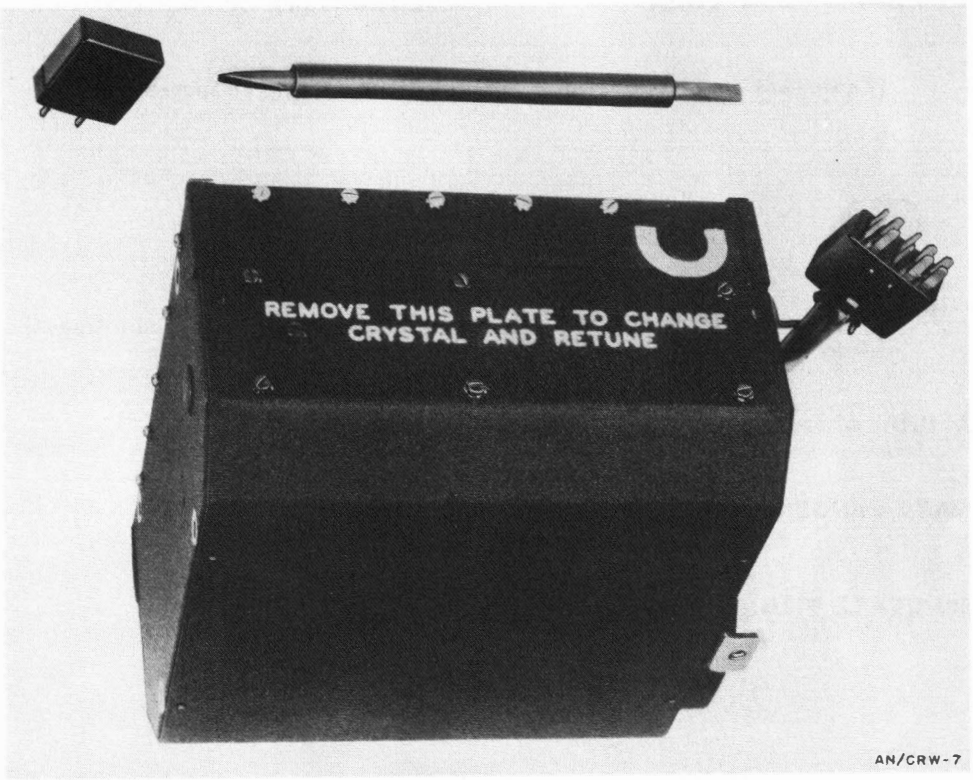
PHYSICAL CHARACTERISTICS

Radio Set AN/CRT-5 measures 19 x 13 x 53 inches, net weight 250 pounds, volume 10 cu ft, Packed for domestic or export shipment: total weight 340 pounds, total volume 17.51 cu ft. Shipped in 1 package.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 19 May 52

AN/CRW-7

RADIO RECEIVING SET



Radio Receiving Set AN/CRW-7 is a compact, battery-operated, superheterodyne receiving unit of a remote control radio system. Crystals are available to preset the receiver to any one of 47 channels in the frequency range 65.94 to 92.85 mc. Once a channel is selected various relays may be operated by audio signals on the following frequencies 475, 755, 1,900, and 3,000 cps. When audio signals are received on these channels relays are operated affording a means of controlling other equipment.

This radio control system is normally operated by signals transmitted from Radio Transmitting Equipment RC-186. However, any other transmitting equipment may be used which is capable of audio tone modulation in the same frequency range.

This receiver normally uses the Razon type antenna, however, the Azon antenna may also be used.

AN/CRW-7	INSTRUCTION LITERATURE: TO 16-30CRW7-11, 13 CLASSIFICATION OF EQUIPMENT: Unclassified
	USING SERVICE : Air Force
RADIO RECEIVING SET	DATE OF THIS SHEET : 19 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component).

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Remote control applications by receiving and transforming radio frequency energy into mechanical energy.

INSTALLATION: Airborne or ground.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: MBF; TBS; TBY.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Any one of 47 crystal-controlled preset channels in the v-h-f range 65.94 - 92.85.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Tone.

POWER REQUIREMENTS: 60 w (maximum) 19 - 23 v,(3 amp) dc.

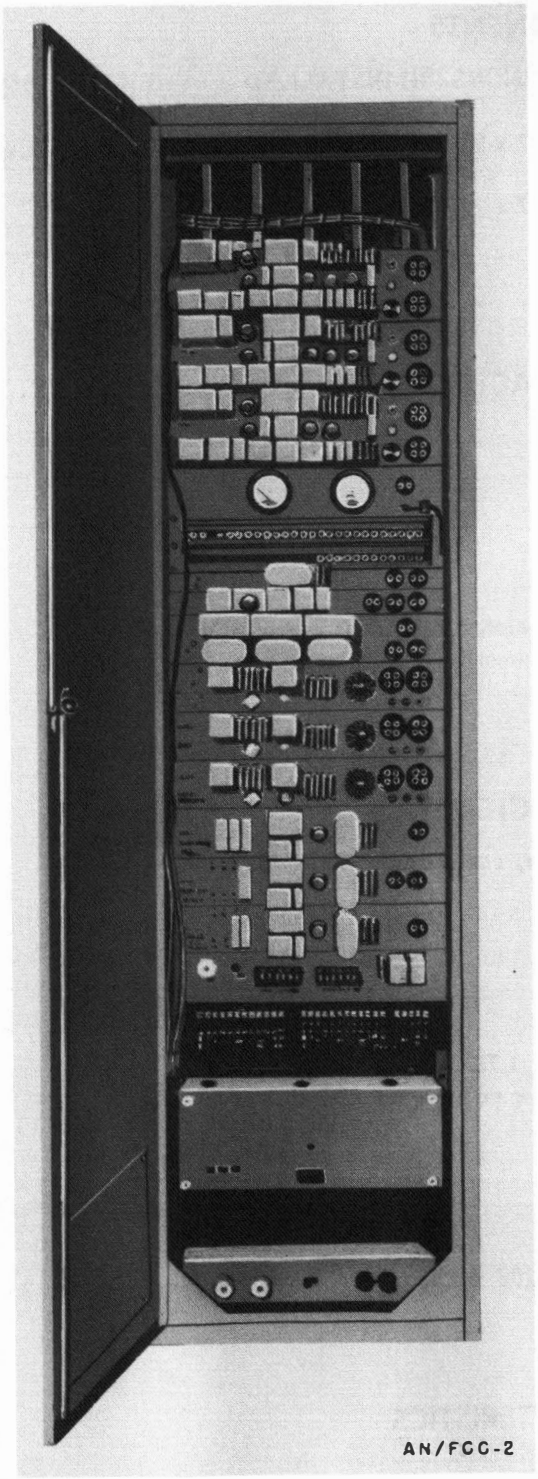
PHYSICAL CHARACTERISTICS

Radio Receiving Set AN/CRW-7 measures 8 x 8-1/2 x 4-1/2 inches, net weight 15 pounds, volume 0.18 cu ft. Packed for either domestic or export shipment: total weight 18 pounds, total volume 0.2 cu ft. Shipped in 1 package.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 30 Jun 52

AN/FCC-2

CARRIER TERMINAL SET



Carrier Terminal Set AN/FCC-2 is a six-channel, voice-frequency d-c telegraph, and teletypewriter terminal equipment which can be used in long distance communication over landlines or radio channels which serve army and higher headquarters.

This equipment consists essentially of a commercial (Western Electric Co 42B1) carrier telegraph equipment and includes four cabinets of panel-mounted apparatus. Each cabinet accommodates apparatus for three channels; two sending cabinets (one of which is shown here) and two receiving cabinets comprising a complete six-channel terminal. It operates on an equivalent four-wire basis and can be used in conjunction with teletypewriter equipment, a remotely keyed radio transmitter, Boehme detector and recorder units, and IBM receiver apparatus.

It operates on 115/230 v, 50/60 cyc, ac.

AN/FCC-2

CARRIER TERMINAL SET

INSTRUCTION LITERATURE: None
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 30 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Sending Terminal Cabinets WECO No X-61848A and X-61848B	84 x 17 x 22-1/4 (each)	Not Available
2	Receiving Terminal Cabinets WECO No X-61848C and X-61848D	84 x 17 x 22-1/4 (each)	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army and higher headquarters.

INSTALLATION Ground, fixed station.

MAXIMUM SYSTEM LENGTH: Extended.

CAN COMMUNICATE WITH: Repeater, terminal, and associated equipment operating in the same facility, or composing the system.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Open wire, cable, radio channels.

FACILITIES AFFORDED: 6-channel, 2-way operation.

FREQUENCY: Channel-spacing: 340 cps apart.
Midchannel-freq: 425, 765, 1,105, 1,445, 1,785, 2,125 cps.
Tone freq 1,785 cps (for Boehme and similar equipment).

TYPE OF MODULATION: Am.

POWER REQUIREMENTS: 180 to 200 w of 103 – 126, or 203 – 253 v, 50/60 cyc, ac.

PHYSICAL CHARACTERISTICS

Carrier Terminal Set AN/FCC-2 measures 84 x 17 x 90 inches.

STATUS: Std

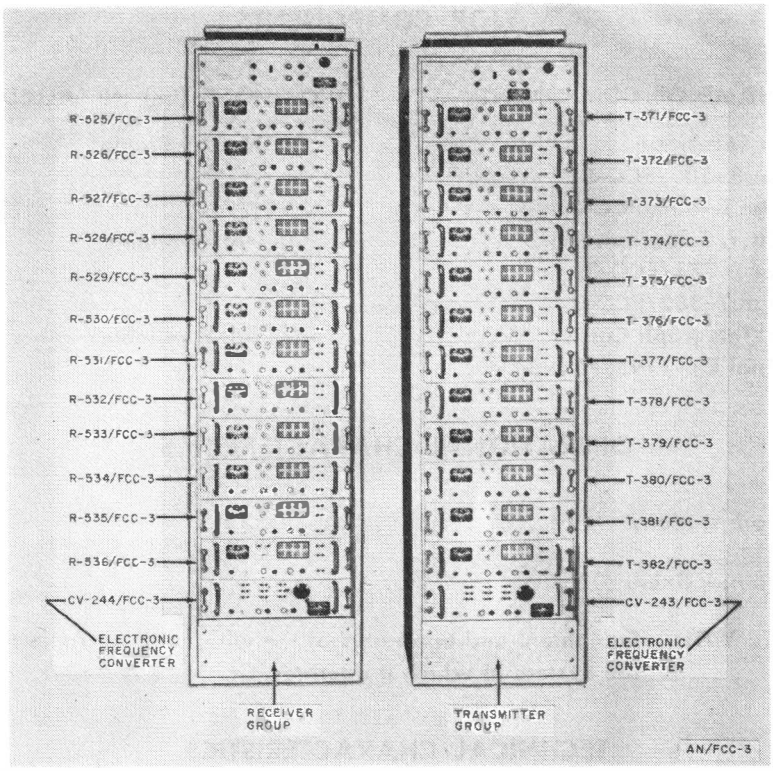
CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: USN

DATE OF THIS SHEET: 9 June 1952

AN/FCC–3

CARRIER TELEGRAPH TERMINAL



Carrier Telegraph Terminal AN/FCC–3 is a shore-based system providing one-way multichannel telegraph or teletypewriter communications over wire lines or radio link. It combines eight low-speed channels (40 dot cps) and four high-speed channels (100 dot cps) into one v-f carrier signal.

The equipment accepts neutral, polar, or tone input signals and furnishes neutral or polar signal outputs. It consists of two cabinets, one containing the transmitting equipment and the other containing the receiving equipment.

Any two receivers may be operated in frequency diversity to improve the quality of the transmission.

The AN/FCC–3 can be used for remote controlled keying of c-w or voice radio transmitting equipment. Line current for the polar or neutral loops can be supplied either externally or by the equipment.

AN/FCC-3

CARRIER TELEGRAPH TERMINAL

INSTRUCTION LITERATURE: Not available

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: USN

DATE OF THIS SHEET: 9 June 1952

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
12	Receiver Telegraph Carrier R-525/FCC-3 through R-536/FCC-3	Not Available	Not Available
12	Transmitter, Telegraph Carrier T-371/FCC-3 through T-382/FCC-3	Not Available	Not Available
2	Cabinet, Telegraph Carrier Terminal CY-1195/FCC-3	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground; fixed.

CAN COMMUNICATE WITH: Equipment and apparatus of the wire, cable, or radio facilities composing the system in which it operates.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Radio link or two-wire line.

FACILITIES AFFORDED: Eight 40 dot cps and four 100 dot cps channels suitable for polar or neutral telegraph or teletypewriter operation.

FREQUENCY: 300 to 3,500 cps.

TYPE OF MODULATION: Frequency shift.

POWER REQUIREMENTS: 115/230 v, 50/60 cyc, 1 phase.

PHYSICAL CHARACTERISTICS

Carrier Telegraph Terminal AN/FCC-3 measures 93 3/16 x 44 3/4 x 24 inches.

STATUS: Std

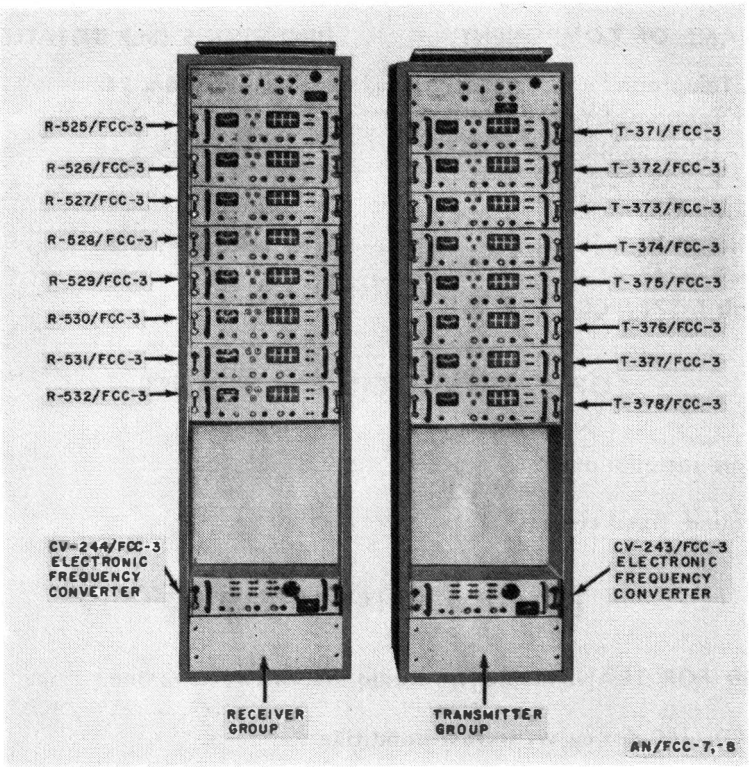
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

AN/FCC-7, -8

TERMINAL, TELEGRAPH CARRIER



Telegraph Carrier Terminal AN/FCC-7 or AN/FCC-8 is a transmitting and receiving terminal for eight channels of voice-frequency carrier telegraph that can be operated over radio or wire facilities.

The AN/FCC-7 consists of the first eight channels of Telegraph Carrier Terminal AN/FCC-3 and two electronic frequency converters, housed in two floor-mounted cabinets. The AN/FCC-8 is identical with the AN/FCC-7, less the two electronic frequency converters.

AN/FCC-7, -8

TERMINAL, TELEGRAPH CARRIER

INSTRUCTION LITERATURE: NAVSHIPS 91901

USING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
2	Cabinet, Telegraph Carrier Terminal CY-1195/FCC-3	93 x 24 x 24	
1 ea	Receiver, Telegraph, Carrier R-525/FCC-3 through R-532/FCC-3	5¼ x 19 x 16	
1 ea	Transmitter, Telegraph Carrier T-371/FCC-3 through T-378/FCC-3	5¼ x 19 x 16	

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore installations.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Radio link or two-wire line.

FACILITIES AFFORDED: 40 dot cy w/narrow-band filters.

FREQUENCY: 425 to 1,615 cy.

TYPE MODULATION: Fm (F1).

TYPE RINGING:

POWER REQUIREMENTS: 1,125 w (xmtr gr), 1,645 w (rcvr gr), 115/230 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		1,820	62	1.6	
DOMESTIC PACK:		2,975	95	2.4	3
EXPORT PACK:					

STATUS: L/Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 8 June 1956

AN/FCC-9

TERMINAL, TELEPHONE

NO PHOTOGRAPH AVAILABLE

Telephone Terminal AN/FCC–9 is a four-channel carrier terminal equipment used at shore fixed stations.

This equipment is functionally similar to Telephone Terminal AN/TCC–3 except for absence of ringing facilities; they are not, however, physically interchangeable.

In addition to the four carrier channels, there is one order-wire channel (two-way). Each channel includes a voice-frequency ringing circuit. The circuit operates with 20-, 50- or 60-cycle ringing signal of 25 volts or more from the two-wire switchboard loop and transmits a 1,600-cycle tone over its channel at a level of +2 to —3 dbm. Attenuators are provided on each channel, and test oscillators and meters for operating and trouble locating purposes are included.

AN/FCC–9

TERMINAL, TELEPHONE

INSTRUCTION LITERATURE: NAVSHIPS 92338

USING SERVICE: USN

DATE OF THIS SHEET: 8 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Handset H–61/U		
1	Terminal, Telephone TA–292/FCC–9	19 x 14 x 5¼	

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore communication terminal.

INSTALLATION: Shore, fixed station.

MAXIMUM SYSTEM LENGTH:

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Any four-wire line or equiv four-wire facility.

FACILITIES AFFORDED: Four carrier chan, one order-wire chan.

FREQUENCY: 300 to 20,000 cy (xmtg and rcvg).

TYPE OF MODULATION: Am (A3).

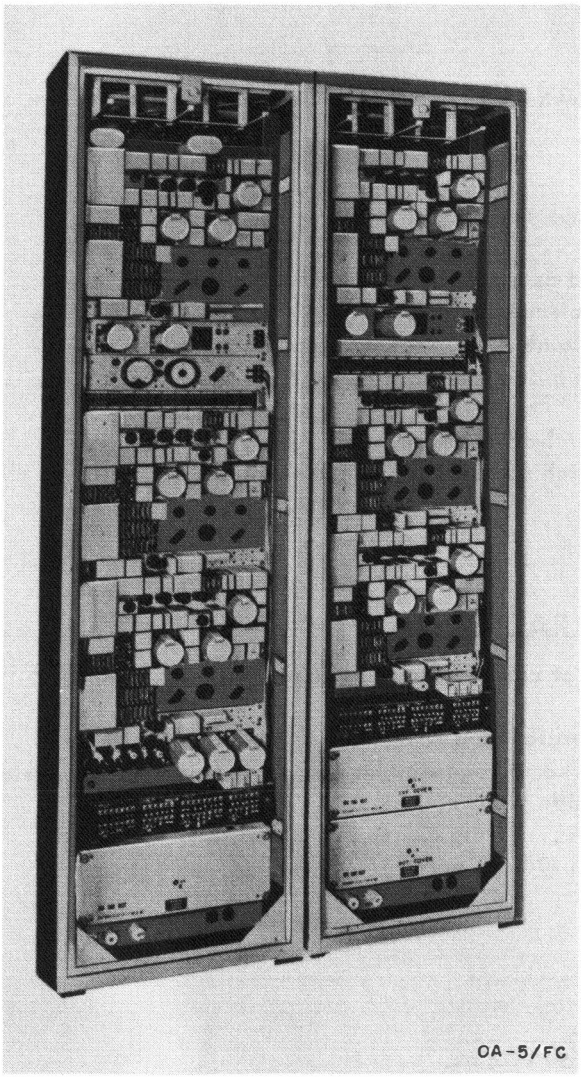
TYPE RINGING: Voice freq.

POWER REQUIREMENTS: 35 w, 115/230 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 13 Feb 52	**AN/FCC-TYPE** AN/COMP TYPE NUMBER: OA-5/FC CARRIER TERMINAL



OA-5/FC

Carrier Terminal OA-5/FC is a six-channel carrier terminal equipment used to provide a maximum of 12 two-way, telegraph circuits on a four-wire basis, over type C or type H carrier facilities serving army and higher headquarters.

This equipment consists of two bays of apparatus contained in individual steel floor type cabinets. Each bay provides three channel terminations.

This terminal equipment is designed to be used in conjunction with Carrier Terminal OA-4/FC to provide 12 carrier channels over a single telephone channel.

It may be used separately, or with Carrier Terminal OA-4/FC, and can be operated in channel two of a three-channel carrier telephone system which is derived through carrier Terminal OA-11/FC, or OA-12/FC; or on the v-f channel, or the carrier channel, of Carrier Terminal OA-13/FC.

This terminal requires v-f ringing and operates from a 700-w source of 115 or 230-v ac.

AN/FCC-TYPE	INSTRUCTION LITERATURE: TM 11-2024, and -2029
OA-5/FC :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
CARRIER TERMINAL	USING SERVICE : Army
	DATE OF THIS SHEET : 13 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Cabinet No. 3, Channels 7, 8, 9	84 x 22-1/4 x 17	600
1	Cabinet No. 4, Channels 10, 11, 12	84 x 22-1/4 x 17	600

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army or higher headquarters.

INSTALLATION: In fixed plant telephone and telegraph terminals.

MAXIMUM SYSTEM LENGTH: Type H (normally used as single-section systems); 145 miles over 104 copper-steel wire circuits at 6-db net loss. Type C, 1,000 miles or more, circuits of 6-db net loss. Repeater spacings on 104 copper-steel wire of about 155 miles or more.

CAN COMMUNICATE WITH: Repeater, terminal, central-office and related station equipment and subsidiary apparatus which operates in the same connecting facility in fixed plant systems.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Wire of cable having a maximum loss of -30 dbm.

FACILITIES AFFORDED: Six-channel, two-way operation on a 4-wire basis; separate sending and receiving paths using the same frequency for each direction of transmission; with monitoring of local side of all channels.

FREQUENCY: 1,445 to 2,295 cps; 6 channels spaced 170 cps apart.

TYPE OF MODULATION: Am.

TYPE RINGING: Vf.

POWER REQUIREMENTS: 700 w of 115 / 230 v, 50/60 cyc, ac.

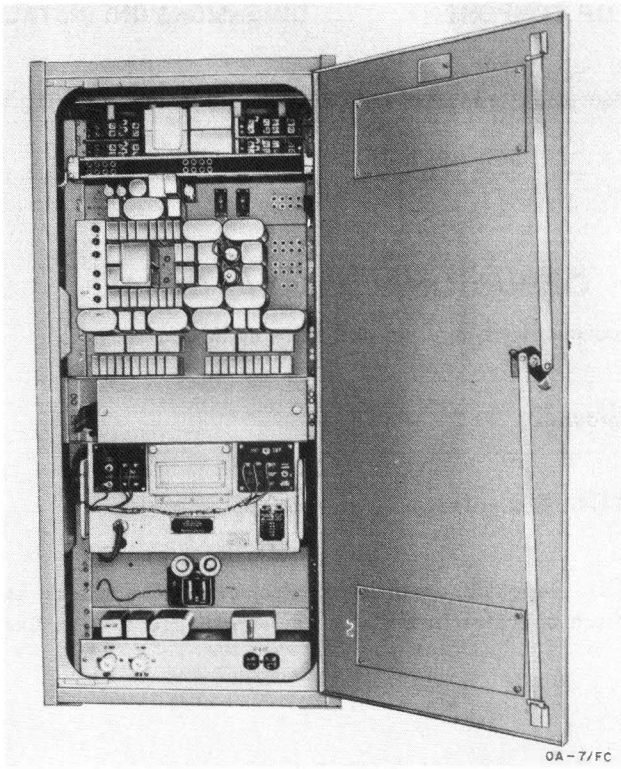
PHYSICAL CHARACTERISTICS

Carrier Terminal OA-5/FC weighs 1,200 pounds net, volume 36.7 cu ft. Packed for export shipment: total weight 1,520 pounds, total volume 66 cu ft, 1.65 ship tons. Shipped in 3 packages.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 15 Feb 52

AN/FCC-TYPE

AN/COMP TYPE NUMBER: OA-7/FC
TELEPHONE REPEATER



Telephone Repeater OA-7/FC is a v-f telephone equipment used to extend the operating range of 2- or 4-wire telephone systems operating over open wire or cable and serving army or equivalent headquarters.

This equipment consists of two composite sets, monitoring and power apparatus, a balancing network, and v-f ringing equipment of 500 - 1,000 cyc.

It is contained in a floor-type steel cabinet and provides for v-f telegraph on a 4-wire basis, and a bridging circuit to enable talking with other repeaters, or to the circuit terminals.

It can be used as a terminal or an intermediate repeater and is powered by 115-v ac.

AN/FCC-TYPE	INSTRUCTION LITERATURE: TM 11-2028
OA-7/FC :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELEPHONE REPEATER	USING SERVICE : Army
	DATE OF THIS SHEET : 15 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army, communication zone and zone of interior.

INSTALLATION: Fixed ground.

MAXIMUM SYSTEM LENGTH: 500 miles.

CAN COMMUNICATE WITH: Repeater, terminal, central office and related station equipment and subsidiary apparatus which operates in the same connecting facility in fixed plant systems.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: 2-wire, or 4-wire lines.

FACILITIES AFFORDED: 2- and 4-wire phantom circuit; 2- and 4-wire physical circuit.

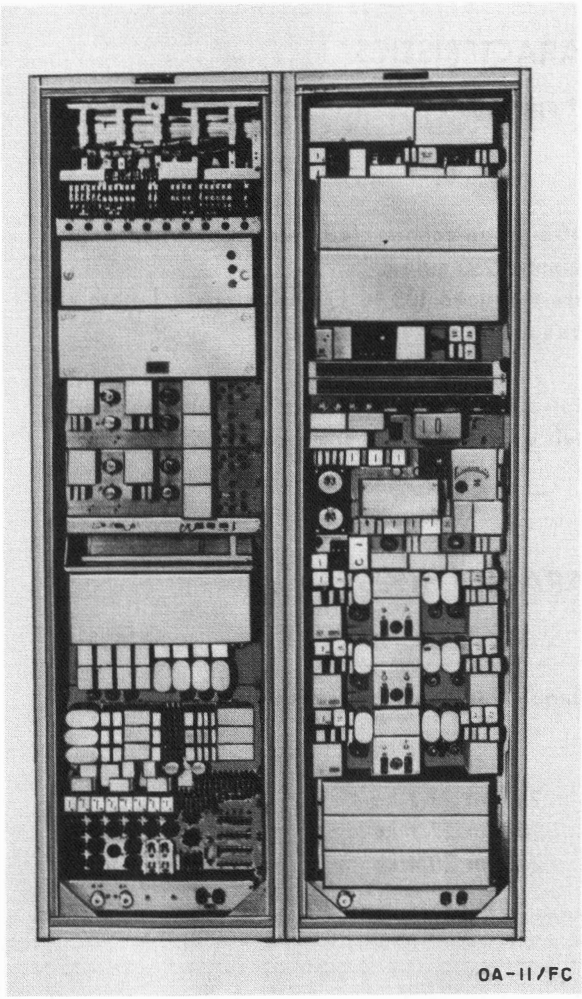
FREQUENCY: 200 to 2,500 cyc.

POWER REQUIREMENTS: 115 v, 50/60 cyc, ac.

PHYSICAL CHARACTERISTICS

Telephone Repeater OA-7/FC measures 49 x 22-1/2 x 17 inches, net weight 300 pounds, volume 10.7 cu ft. Packed for export shipment: total weight 440 pounds, total volume 25 cu ft, 0.6 ship ton.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 29 Feb 52	**AN/FCC-TYPE** AN/COMP TYPE NUMBER: OA-11/FC CARRIER TERMINAL



OA-11/FC

Carrier Terminal OA-11/FC is a wire communication terminal equipment used in conjunction with Carrier Terminal OA-12/FC to provide a means of superimposing three additional two-way telephone circuits on an existing open wire facility operated in the communications zone of a theater of operations.

This equipment consists of panel-mounted apparatus, inclosed in two steel floor type cabinets, comprising a self contained operating unit, which includes power supply equipment. This terminal is arbitrarily designated EAST the other OA-12/FC WEST.

To increase the operating range of a system using this equipment Carrier Repeater OA-9/FC is used.

Composite sets may be used to furnish two ground-return telegraph circuits and any channel of the system may be used for v-f telegraph communication.

It operates on 105 / 250-v ac.

AN/FCC-TYPE	INSTRUCTION LITERATURE: TM 11-2023
OA-11/FC :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
CARRIER TERMINAL	USING SERVICE : Army
	DATE OF THIS SHEET : 29 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Line and Power Bay	22-1/4 x 17 x 84	600
1	Terminal Bay	22-1/4 x 17 x 84	600

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Communications zone of a theater of operations.

INSTALLATION: Fixed station.

MAXIMUM SYSTEM LENGTH: Without repeaters: on 104-gauge copper-clad steel-approximate 175 miles; on copper-approximate 250 miles.
With intermediate repeaters spaced 100 to 175 miles apart, length can be extended several thousand miles.

CAN COMMUNICATE WITH: Repeater, terminal, central-office and related station equipment and subsidiary apparatus which operates in the same connecting facility in fixed plant systems.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Wire.

FACILITIES AFFORDED: Two-wire, 3 circuits (6 channels for 2-way transmission).

FREQUENCY:

	Sending	Receiving
Channel 1:	12.9 kc	24.4 or 21.4 kc
2:	9.4 kc	20.7 or 17.7 kc
3:	6.3 kc	28.4 or 25.4 kc

TYPE OF MODULATION: Am.

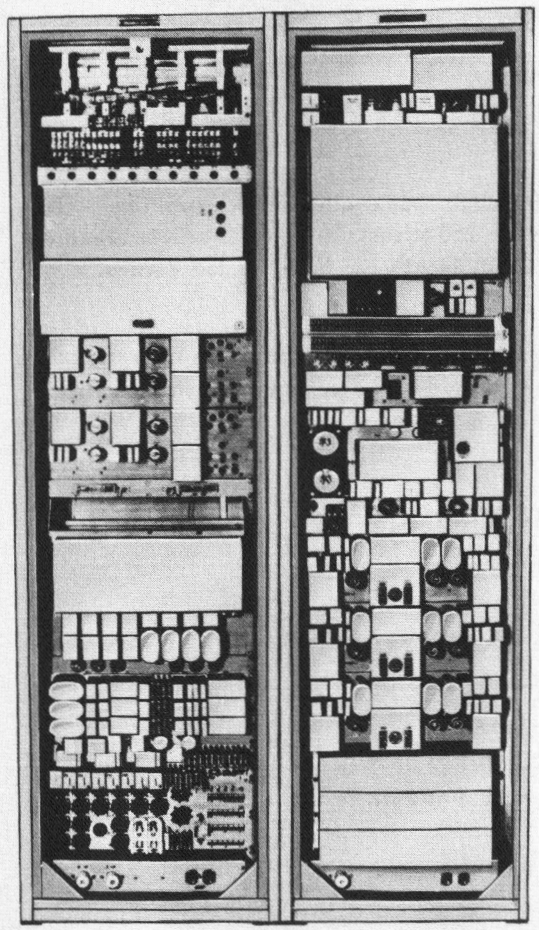
TYPE RINGING: 1,000 cyc.

POWER REQUIREMENTS: Approximate 250 w from a 105 - 125 v, 50/60 cyc source.

PHYSICAL CHARACTERISTICS

Carrier Terminal OA-11/FC weighs 1,200 pounds net, volume 36.8 cu ft. Packed for export shipment: total weight 1,680 pounds, total volume 75 cu ft, 1.9 ship tons. Shipped in 3 packages.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 29 Feb 52	**AN/FCC-TYPE** AN/COMP TYPE NUMBER: OA-12/FC CARRIER TERMINAL



OA-12/FC

Carrier Terminal OA-12/FC is a wire communication terminal equipment used in conjunction with Carrier Terminal OA-11/FC to form a means for superimposing three additional two-way telephone circuits to an existing open wire facility in the communications zone of a theater of operations.

This equipment consists of panel-mounted apparatus mounted in a pair of floor mounted steel cabinets, the pair constituting a self contained operating unit including power supply equipment.

This terminal is arbitrarily designated WEST, the other, composed of Carrier Terminal OA-11/FC is designated EAST.

Carrier Repeater OA-9/FC may be used in the system when necessary to increase the operating range, and composite sets may be used to furnish two ground-return telegraph circuits.

Any channel of the system can be used for v-f carrier telegraph communication.

Operates from 105 to 125-v ac.

AN/FCC-TYPE	INSTRUCTION LITERATURE: TM 11-2023
	CLASSIFICATION OF EQUIPMENT: Unclassified
OA-12/FC :AN/COMP TYPE NUMBER	USING SERVICE : Army
CARRIER TERMINAL	DATE OF THIS SHEET: 29 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Line and Power Bay	22-1/4 x 17 x 84	600
1	Terminal Bay	22-1/4 x 17 x 84	600

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Communications zone of a theater of operations.

INSTALLATION: Fixed station.

MAXIMUM SYSTEM LENGTH: Without repeaters: On 104-gauge copper-clad steel-approximate 175 miles; on copper-approximate 250 miles. With intermediate repeaters spaced 100 to 175 miles apart, length can be extended several thousand miles.

CAN COMMUNICATE WITH: Repeater, terminal, central-office and related station equipment and subsidiary apparatus which operates in the same connecting facility in fixed plant systems.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Wire.

FACILITIES AFFORDED: Two-wire, 3 circuits (6 channels for 2-way transmission).

FREQUENCY:	Sending	Receiving
Channel 1:	12.9 kc	24.4 or 21.4 kc
Channel 2:	9.4 kc	20.7 or 17.7 kc
Channel 3:	6.3 kc	28.4 or 25.4 kc.

TYPE OF MODULATION: Am.

TYPE RINGING: 1,000 cyc.

POWER REQUIREMENTS: Approximate 250 w from a 105 - 125 v, 50/60 cyc source.

PHYSICAL CHARACTERISTICS

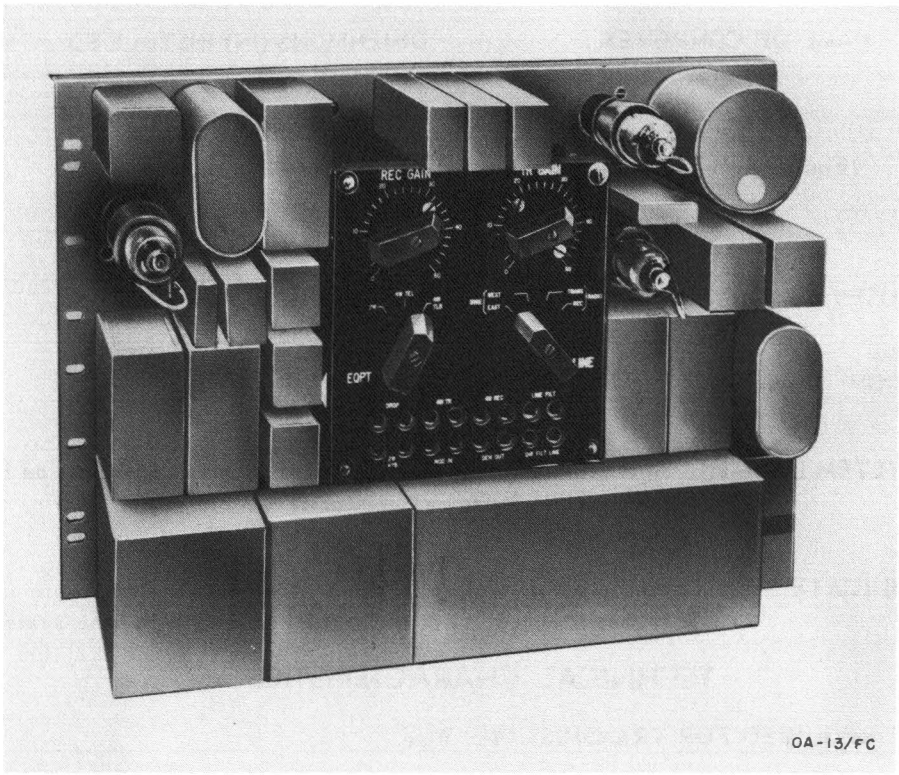
Carrier Terminal OA-12/FC weighs 1,200 pounds net, volume 36.8 cu ft. Packed for export shipment: total weight 1,680 pounds, total volume 75 cu ft, 1.9 ship tons. Shipped in 3 packages.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 29 Feb 52

AN/FCC-TYPE

AN/COMP TYPE NUMBER: OA-13/FC

CARRIER TERMINAL



Carrier Terminal OA-13/FC is type H carrier terminal equipment designed to be used with Carrier Repeater OA-10/FC and Carrier Filter F-36/FC to provide a means of superposing one additional telephone channel on an existing open-wire, v-f circuit, or two additional telephone channels on a circuit involving radio facilities. It is used in the communications zone of a theater of operations as fixed station equipment.

This equipment consists essentially of panel-mounted apparatus which can be installed on a standard relay rack. It converts v-f signals to carrier frequencies for transmission, and carrier frequencies to voice frequencies for reception, with amplification in both directions.

The carrier channel can be used for a v-f telegraph system, within certain limitations. V-f ringing equipment is not included.

Operates on 105-125 v ac.

AN/FCC- TYPE	INSTRUCTION LITERATURE: TM 11-2025
	CLASSIFICATION OF EQUIPMENT: Unclassified
OA-13/FC :AN/COMP TYPE NUMBER	USING SERVICE : Army
CARRIER TERMINAL	DATE OF THIS SHEET : 29 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Communications zone of a theater of operations.

INSTALLATION: Ground.

MAXIMUM SYSTEM LENGTH: Approximately 100 to 1,000 miles or more, depending on line facility, permissible loss, and number of repeaters.

CAN COMMUNICATE WITH: Fixed plant or tactical repeater, terminal, central office or carrier equipment operating in the facility or composing the system.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Wire.

FACILITIES AFFORDED: Provides for superposing one additional telephone channel on an existing open-wire v-f circuit.

	East		West	
FREQUENCY:	Sending	Receiving	Sending	Receiving
	7.4 - 10.15 kc	4.15 - 6.9 kc	4.15 - 6.9 kc	7.4 - 10.15 kc

TYPE OF MODULATION: Am.

TYPE RINGING: 1,000 cps.

POWER REQUIREMENTS: 20 w, 105-125 v, 50/60 cyc, ac.

PHYSICAL CHARACTERISTICS

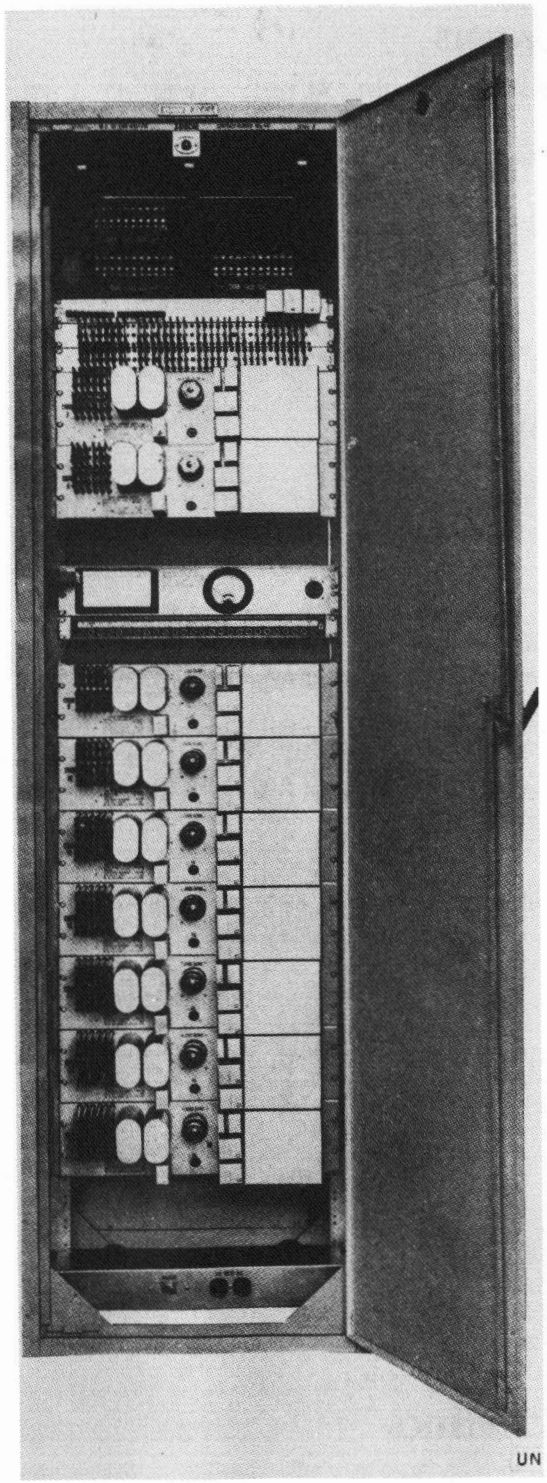
Carrier Terminal OA-13/FC weighs 50 pounds net, volume 1.25 cu ft. Packed for export shipment: total weight 125 pounds, total volume 6 cu ft. Shipped in 1 package both domestic and export.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 May 52

AN/FCC-TYPE

SERVICE TYPE NUMBER: UN

CARRIER CONTROL SYSTEM



Carrier Control System UN is a multi-channel carrier communications equipment capable of furnishing a variety of narrow and wide band a-f telegraph channels as well as voice channels, simultaneously, over one radio carrier circuit or a two- or four-wire line.

This system consists of a number of panel units, which may be ordered as required, to provide different combinations of telegraph and telephone terminal facilities.

When the v-f telegraph equipment and the telephone carrier equipment are used together, operation is possible on three voice-telephone channels.

One or more of these may be used for three wide band or 12 narrow band v-f telegraph carriers.

The narrow band channels are capable of keying speeds up to 100 wpm; the wide band channels can be keyed at speeds up to 300 wpm.

AN/FCC-TYPE	INSTRUCTION LITERATURE: NavShips 95591; 900.201; 900.840
UN :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
CARRIER CONTROL SYSTEM	USING SERVICE: Navy
	DATE OF THIS SHEET: 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Four Wire Terminating and Signaling Bay CW-50250	84 x 26-1/4 x 17	Not Available
1	Power Supply Cabinet includes Rectifier Power Unit CW-20140 through -20142	84 x 26-1/4 x 17	" "

(Other components will vary with the number of narrow and wide telegraph and voice channels required.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

CAN COMMUNICATE WITH: Terminal, repeater, and modifying equipment operating in the connecting facility or composing the primary communicating system.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Radio or wire line capable of 200 to 10,300 cps operation.

FACILITIES AFFORDED: Without telephone terminal equipment: 12 narrow or 3 wide band telegraph channels, or single voice channel. With telephone terminal, 3 voice channels.

FREQUENCY: 300 to 10,150 cps.

TYPE OF MODULATION: Am.

TYPE RINGING: 1,000/20 cps.

POWER REQUIREMENTS: 105-125 v. Wattage dependent on components used. The carrier equipment will operate from a 50/60 cyc power source, except that ringing will be satisfactory only with a 60 cyc power source.

PHYSICAL CHARACTERISTICS

Information on Carrier Control System UN not available.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Restricted USING SERVICE: Navy DATE OF THIS SHEET: 2 Jun 52	**AN/FCC-TYPE** SERVICE TYPE NUMBER: UP TWO-TONE CARRIER CONTROL SYSTEM



Two-Tone Carrier Control System UP provides for six two-way telegraph circuits over one radio-telephone circuit. Four one-way regenerative repeaters are provided to improve the quality of transmission by restoring distorted teletypewriter signals to almost perfect form and timing. This equipment is designed primarily for use with single side band radio transmission.

In order to obtain better transmission in teletypewriter operation where there is selective fading of the radio signals, two tones are usually transmitted for each mark and two for each space, thus forming a frequency-diversity circuit.

A telegraph adapter unit is furnished which provides proper coupling and equalization of the wire line connecting the radio receiver to the telegraph terminal equipment.

Visual and aural indications of signal deterioration are provided by a monitoring bay.

AN/FCC-TYPE

UP :SERVICE TYPE NUMBER

TWO-TONE CARRIER CONTROL SYSTEM

INSTRUCTION LITERATURE: WE Co. IB No. X-75058
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE : Navy
DATE OF THIS SHEET : 2 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1 ea	Power Supply Bay CW-20ADS, -20ADT	84 x 26-1/4 x 17	700
1 ea	Carrier Supply Bay CW-35ABW, -35ABX	84 x 22-1/4 x 17	490
1 ea	Channel Terminal Bay CW-50AFW, -50AFX, -50AFY	84 x 22-1/4 x 17	460
1	Common Bay CW-50AFV	84 x 22-1/4 x 17	515
1	Adapter Unit, Telegraph CW-49AAA	84 x 22-1/4 x 17	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

MAXIMUM SYSTEM LENGTH: Between carrier equipment and radio receiver or transmitter:
128-mil copper open wire, 200 miles.
19 gauge loaded cable, 20 miles.
19 gauge nonloaded cable, 12 miles.

CAN COMMUNICATE WITH: Terminal, repeater, and related apparatus operating in the connecting facility or composing the system.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Radio communications circuit and wire line or radio link circuits between radio equipment and terminal equipment. All circuits must be capable of operation up to 4,900 cps.

FACILITIES AFFORDED: Six two-way telegraph or teletypewriter circuits and four one-way regenerative repeaters.

FREQUENCY: 425 to 2,465 cps and 425 to 4,930 cps when frequency diversity is used.

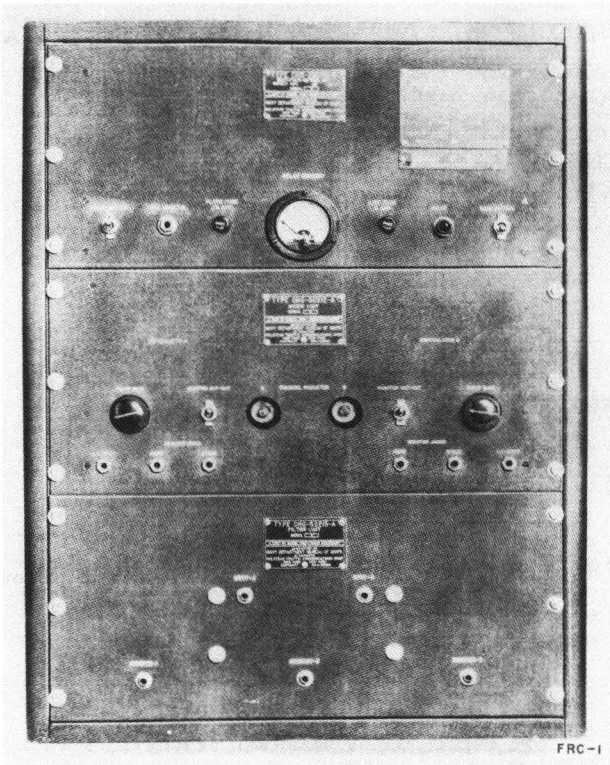
TYPE OF MODULATION: Am, two-tone and two-tone frequency diversity.

POWER REQUIREMENTS: 3 kw, 105 - 125 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Two-Tone Carrier Control System UP measures 84 x 301-1/4 x 17 inches.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 14 May 52	**AN/FGA-TYPE** SERVICE TYPE NUMBER: FRC-1 FREQUENCY SHIFT RECEIVER EQUIPMENT



Frequency Shift Receiver Equipment FRC-1 is used to demodulate frequency-shift-keyed radioteletype signals by converting a-f signals to polar-keyed teletypewriter impulses. It functions at audio frequencies and therefore may be used with any stable communication receiver equipped with a beat-frequency oscillator.

Three radio receivers can be connected to this equipment, but the stronger of only two receiver outputs is automatically selected, and fed to the associated teletypewriter equipment.

It is designed to be used in conjunction with such equipment as Diversity Radio Receiving Equipment RBP and Teletype Corp Model 15 Page Printers, or equivalent teletypewriter equipment.

If a reperforator is used, a Teletype Corp Model 132B1 Synchronizer Set or equal is usually required.

AN/FGA-TYPE	INSTRUCTION LITERATURE: NavShips 900,718 CLASSIFICATION OF EQUIPMENT: Unclassified
FRC-1 :SERVICE TYPE NUMBER	USING SERVICE : Navy
FREQUENCY SHIFT RECEIVER EQUIPMENT	DATE OF THIS SHEET : 14 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Mixer Unit CHG-50212A)		
1	Rectifier-Keying Unit CHG-20345A)	28 x 21-1/2 x 15	150
1	Filter Panel CHG-53215A)		
1	Cabinet CAZJ-10420)		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

CAN COMMUNICATE WITH: This is signal-modifying equipment used in conjunction with primary communication apparatus.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.6 – 3.6 (input from receivers).

TYPE MODULATION: Am.

TYPE OF SIGNAL: Receives voice.
Delivers icw.

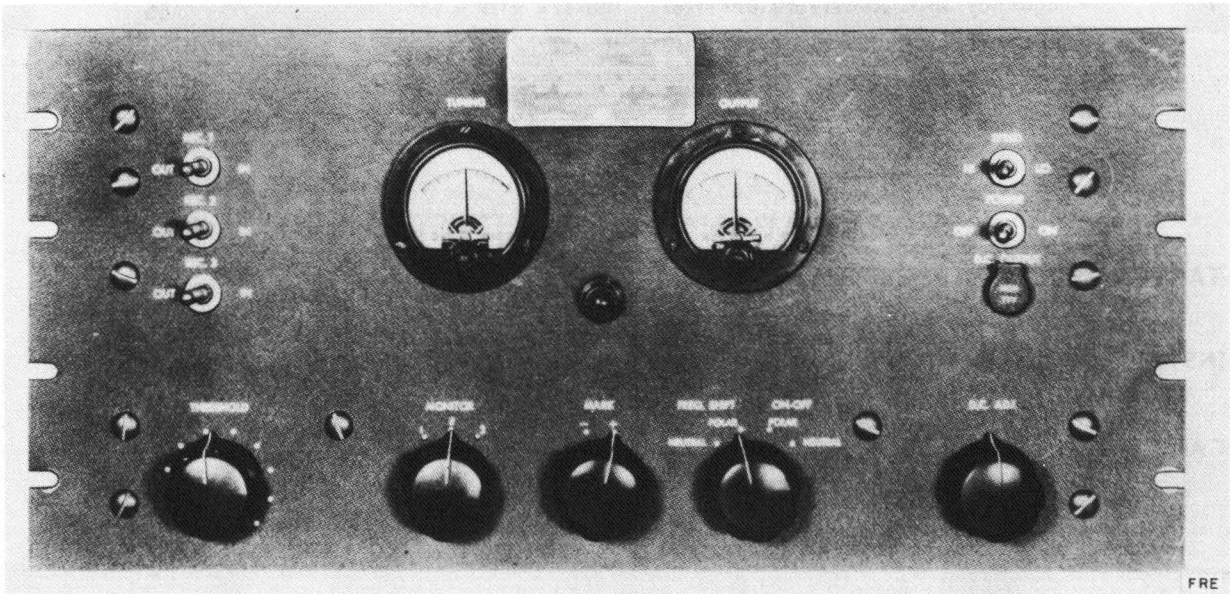
POWER OUTPUT: 15 ma.

POWER REQUIREMENTS: 110 v, 60 cyc, 1 phase ac.

PHYSICAL CHARACTERISTICS

Frequency Shift Receiver Equipment FRC-1 measures 28 x 21-1/2 x 15 inches, net weight 150 pounds.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 8 Apr 52	**AN/FGA-TYPE** SERVICE TYPE NUMBER: FRE FREQUENCY SHIFT RECEIVER CONVERTER EQUIPMENT



Frequency Shift Receiver Converter Equipment FRE is designed to adapt Navy Model Diversity Radio Receiving Equipment RDM for reception of frequency-shift-keyed signals. It is used with associated equipment to provide ship-to-shore and point-to-point radiotelegraph or radioteletype reception.

This equipment combines the output of one, two, or all three radio receiver components of the RDM equipment into a single signal for neutral or polar operation of telegraph or teletypewriter equipment. It accepts any frequency-shift-keyed signal having a mark-to-space frequency shift of 200 to 850 cps.

The first i-f stage of each of the three channels is coupled to the i-f circuit of its associated radio receiver.

It may be operated from 100 to 165 or 190 to 260-v a-c power sources.

AN/FGA-TYPE	INSTRUCTION LITERATURE: NavShips 95100
FRE :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
FREQUENCY SHIFT RECEIVER CONVERTER EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 8 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Frequency Shift Receiver Converter CRV-35104	8-1/4 x 19 x 16	55

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in shore receiver stations.

INSTALLATION: Ground, fixed. Mounts in cabinet rack of associated receiving equipment.

CAN COMMUNICATE WITH: This is signal-modifying equipment used in conjunction with primary communication apparatus.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.455

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Frequency-shift keying.

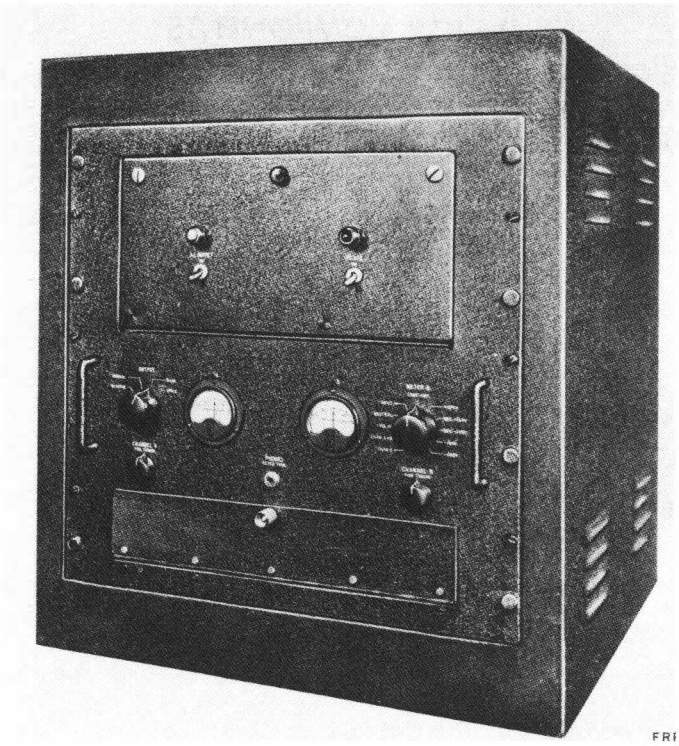
POWER OUTPUT: 60 ma dc for neutral of 25 ma dc for polar telegraph or teletypewriter operation into load impedance of 130 to 1,800 ohms.

POWER REQUIREMENTS: 175 w, 110 – 165 / 190 – 260 v, 50/60 cyc, 1 phase ac.

PHYSICAL CHARACTERISTICS

Frequency Shift Receiver Converter Equipment FRE measures 8-1/4 x 19 x 16 inches, net weight 55 pounds, volume 1.45 cu ft.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/FGA-TYPE** SERVICE TYPE NUMBER: FRF FREQUENCY SHIFT RECEIVER CONVERTER EQUIPMENT



Frequency Shift Receiver Converter Equipment FRF is a dual channel i-f type equipment for translating frequency-shift radio telegraph characters into d-c signals. The signals so produced are used in the direct operation of a teletypewriter on neutral or polar signals; or indirect operation of a teletypewriter by keyed tone. Eight preset tone oscillator frequencies, 170 cps apart (in the range from 595 to 1785 cps) are provided. An external tone frequency can be connected and keyed by incoming telegraph signals.

The converter is located at the receiving station of a long distance radio system.

For demodulating frequency shift telegraph signals for teletypewriter operation.

The equipment is used with Diversity Radio Receiving Equipment RDM, and Radio Receiving Equipment RBB or RBC series, or any other receivers having i-f frequencies between 400 and 470 kc.

Features include a drift compensator, automatic mark signal in the output when the carrier shuts off, and a Narrow-Wide bandwidth switch for rejecting noise frequencies and interference from nearby transmitting stations.

The converter may be mounted in the cabinet of an associated receiver, or in a separate cabinet for table mounting.

AN/FGA-TYPE

FRF :SERVICE TYPE NUMBER

FREQUENCY SHIFT RECEIVER CONVERTER EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,208
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Frequency Shift Converter CW-35118	19-7/32 x 21-1/16 x 19	Not Available
1	Tone Oscillator Unit CW-35117	8-9/16 x 12-5/16 x 15-1/2	" "
1	Rectifier Power Unit CW-20457	9-3/32 x 15-9/16 x 9-5/16	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

CAN COMMUNICATE WITH: This is signal-modifying equipment used in conjunction with primary communication apparatus.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.40 - 0.47.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Frequency shift.

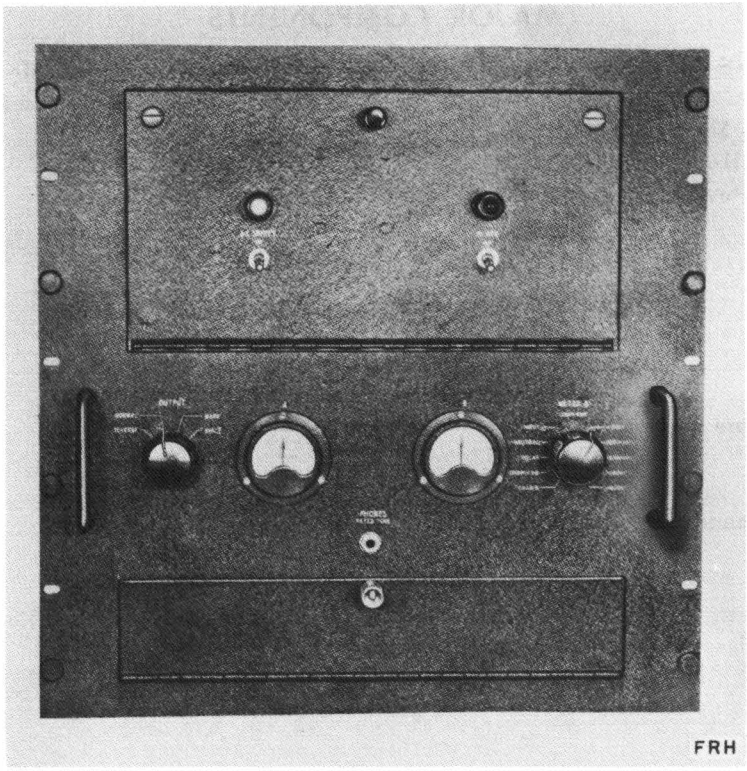
POWER OUTPUT: 25 ma d-c polar output; 60 ma neutral d-c output; and 12 mw, +11 dbm tone output.

POWER REQUIREMENTS: 175 w, 105-125 v, 50/60 cyc, 1 phase.

PHYSICAL CHARACTERISTICS

Frequency Shift Receiver Converter Equipment FRF measures 24-1/2 x 21-1/2 x 17-3/4 inches, net weight 245 pounds. Packed for domestic shipment: total weight 450 pounds, total volume 12.5 cu ft.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/FGA-TYPE** SERVICE TYPE NUMBER: FRH FREQUENCY SHIFT RECEIVER CONVERTER EQUIPMENT



FRH

Frequency Shift Receiver Converter Equipment FRH is a dual-channel, i-f type equipment for translating frequency-shift radio telegraph characters into d-c signals. The signals so produced are used in the direct operation of a teletypewriter on neutral, or polar signals; or the indirect operation of a teletypewriter by keyed tone. Eight preset, tone-oscillator frequencies (in the range from 595 to 1,785 cps) are provided. An external tone frequency can be connected in the tone oscillator unit and keyed by incoming telegraph signals.

This equipment is used with Diversity Receiving Equipments RBP or RCP. A modification kit is supplied to provide connection of the 50 kc output from the i-f stages of the diversity receivers.

Additional components are included for installing an automatic gain control circuit.

Features include a drift compensator, automatic mark-signal in the output in the absence of a carrier, and a NARROW-WIDE bandwidth switch for rejecting noise frequencies, and interference from nearby transmitting stations.

The equipment may be mounted in a standard relay cabinet.

AN/FGA-TYPE

FRH :SERVICE TYPE NUMBER

FREQUENCY SHIFT RECEIVER CONVERTER EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,358
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Frequency Shift Converter CW-35119	19-7/32 x 21-1/16 x 19	125.0
1	Tone Oscillator Unit CW-35117	8-9/16 x 12-5/16 x 15-1/2	Not Available
1	Rectifier Power Unit CW-20457	9-3/32 x 15-9/16 x 9-5/16	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

CAN COMMUNICATE WITH: This is signal-modifying equipment used in conjunction with primary communication apparatus.

TECHNICAL CHARACTERISTICS

FREQUENCY: 50 kc.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Frequency shift.

POWER OUTPUT: 25 ma d-c polar output; 60 ma, neutral d-c output; and 12 ma tone output.

POWER REQUIREMENTS: 175 w, 105-125 v, 50/60 cyc, 1 phase.

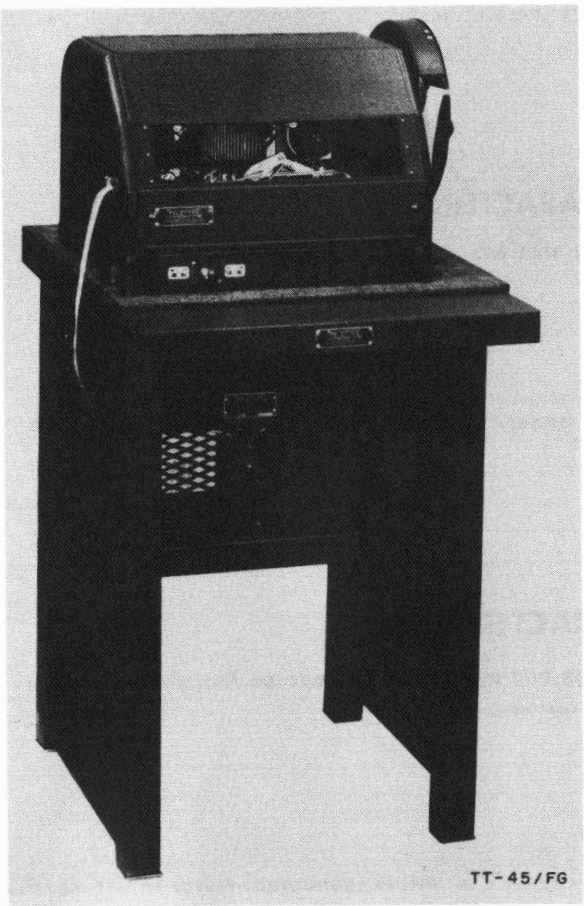
PHYSICAL CHARACTERISTICS

Information on Frequency Shift Receiver Converter Equipment FRH is not available.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 8 May 52

AN/FGA-TYPE

AN/COMP TYPE NUMBER: TT-45/FG, TT-46/FG
REPERFORATOR



TT-45/FG

Reperforators TT-45/FG and TT-46/FG are automatic, receiving only teletypewriter units which produce perforated tape, with typing, of messages received. It is used in tape-relay, and similar teletypewriter communication applications.

These equipments consist essentially of commercial (Teletype Corp. Model 14), receiving only, typing reperforators.

They include a table to support the reperforator unit.

TT-45/FG is identical with the TT-46/FG, except that the latter has a governed-series motor.

AN/FGA-TYPE	INSTRUCTION LITERATURE: NavShips 91241
TT-45/FG, TT-46/FG :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
REPERFORATOR	USING SERVICE : Navy
	DATE OF THIS SHEET: 8 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Typing Reperforator FPRC23H246	11-1/2 x 15-3/4 x 13	Not Available
1	Rectifier REC29	Not Available	" "
1	Relay RY30	" "	" "
1	Base FB46/15	" "	" "
1	Table XRT200AA	26-1/8 x 18 x 21-5/16	" "
1	Electrical Assembly 105014	Not Available	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Teletype receiving and distributing stations.

INSTALLATION: Ground, fixed or transportable.

CAN COMMUNICATE WITH: Five unit code teletype transmitting equipment, geared for 368 opm.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Prints incoming messages and perforates the tape so that the messages can be relayed to other stations.

OPERATING SPEED: 368 opm.

MOTOR CHARACTERISTICS: Synchronous motor in TT-45/FG, series (governed) motor in TT-46/FG.

POWER REQUIREMENTS: 115 v, 60 cyc, 1 phase, ac.

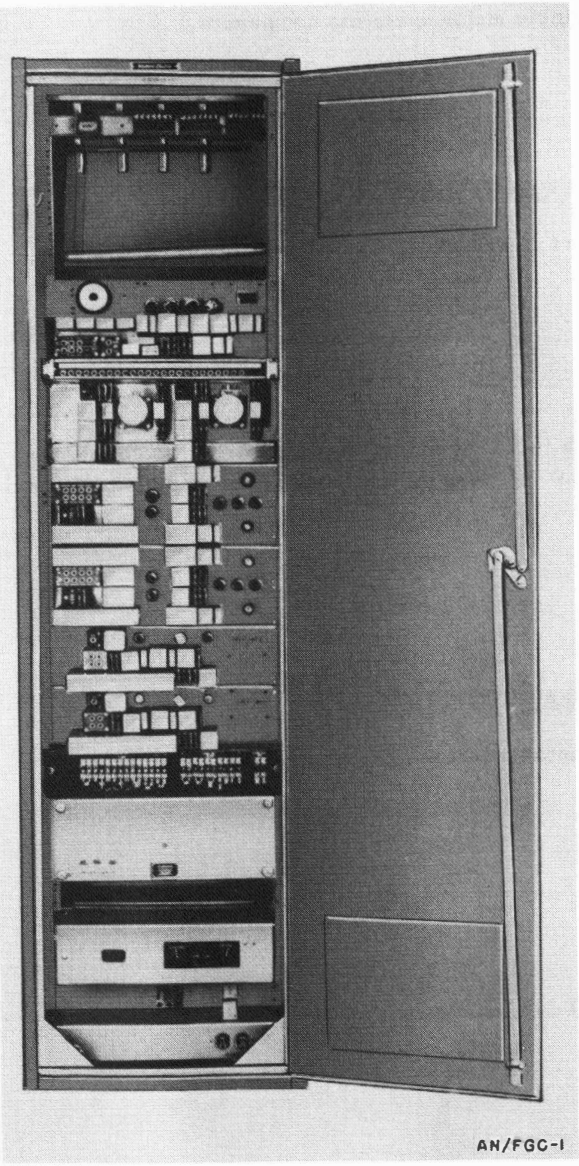
PHYSICAL CHARACTERISTICS

Information on Reperforators TT-45/FG and TT-46/FG not available.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 11 Jan 52

AN/FGC-1

RADIOTELETYPE TERMINAL EQUIPMENT



AN/FGC-1

Radioteletype Terminal Equipment AN/FGC-1 is an assemblage of control apparatus designed to be used in conjunction with radio receiving, carrier, switching, teletypewriter, and related equipment to provide space-diversity reception of frequency-shift radioteletype signals on a two-channel basis, at corps and higher headquarters.

This equipment consists essentially of control and transmission apparatus contained in a floor-type steel cabinet. It does not include radio transmitting or receiving components but provides facilities for disabling of receivers during operation of transmitters on the same frequency.

It also permits receiving and transmitting components of a terminal facility to operate independently when operating on different frequencies, thus providing effective two-channel or full-duplex operation.

This equipment can be operated in conjunction with Diversity Receiving Equipment AN/FRR-3, or suitable commercial types of receivers.

Operates on 115/230-v ac.

AN/FGC-1

RADIOTELETYPE TERMINAL EQUIPMENT

INSTRUCTION LITERATURE: TM 11-356
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 11 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Corps, army, and higher headquarters in communications zone of a theater of operations.

INSTALLATION: Ground, fixed station.

CAN COMMUNICATE WITH: Used in conjunction with radio receiving, carrier, switching, teletypewriter and related station and terminal equipment to provide two-channel radioteletype service.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 – 26 (characteristic of associated radio equipment).

TYPE MODULATION: Am, frequency shift keying.

TYPE OF SIGNAL: F-s teletypewriter.

POWER REQUIREMENTS: 140 w, 115/230 v, 50/60 cyc, ac.

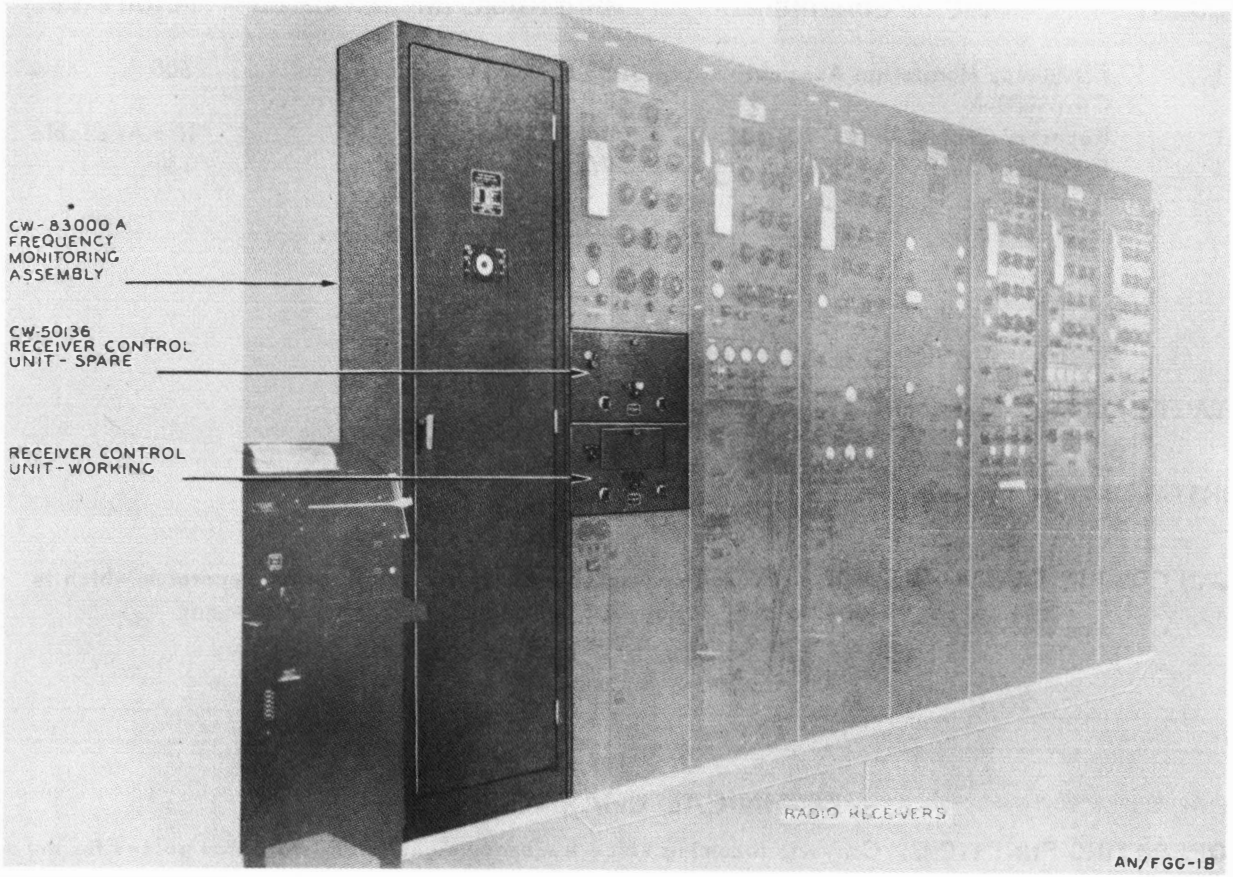
PHYSICAL CHARACTERISTICS

Radioteletype Terminal Equipment AN/FGC-1 weighs 425 pounds net, volume 14 cu ft. Packed for domestic shipment: total weight 425 pounds, total volume 14 cu ft. Packed for export shipment: total weight 680 pounds, total volume 35 cu ft, 0.75 ship ton. Shipped in 1 package both domestic and export.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 8 May 52

AN/FGC-1B

RADIOTELETYPE TERMINAL EQUIPMENT



Radioteletype Terminal Equipment AN/FGC-1B provides facilities for long distance transmission and diversity reception of radioteletype signals.

This equipment is used in conjunction with Diversity Radio Receiving Equipment RBP (series) or a similar unit and with Radio Transmitting Equipment TBA (series) or TBC (series).

AN/FGC-1B

RADIOTELETYPE TERMINAL EQUIPMENT

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 8 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Frequency Monitoring Assembly CW-83000-A	83 x 22 x 17	600
1	Receiver Control Unit CW-50136	10-15/32 x 10-1/8 x 19	Not Available
1	Frequency Shift Keyer Equipment FSA	16 x 19 x 18	130

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore, advanced bases communications stations.

INSTALLATION: Ground.

CAN COMMUNICATE WITH: This equipment consists of signal frequency control apparatus which is used in conjunction with primary communication equipment.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Converts incoming voice-frequency signals into start-stop pulses for the operation of teletypewriter equipment and converts outgoing teletypewriter pulses to voice-frequency signals for radio transmission.

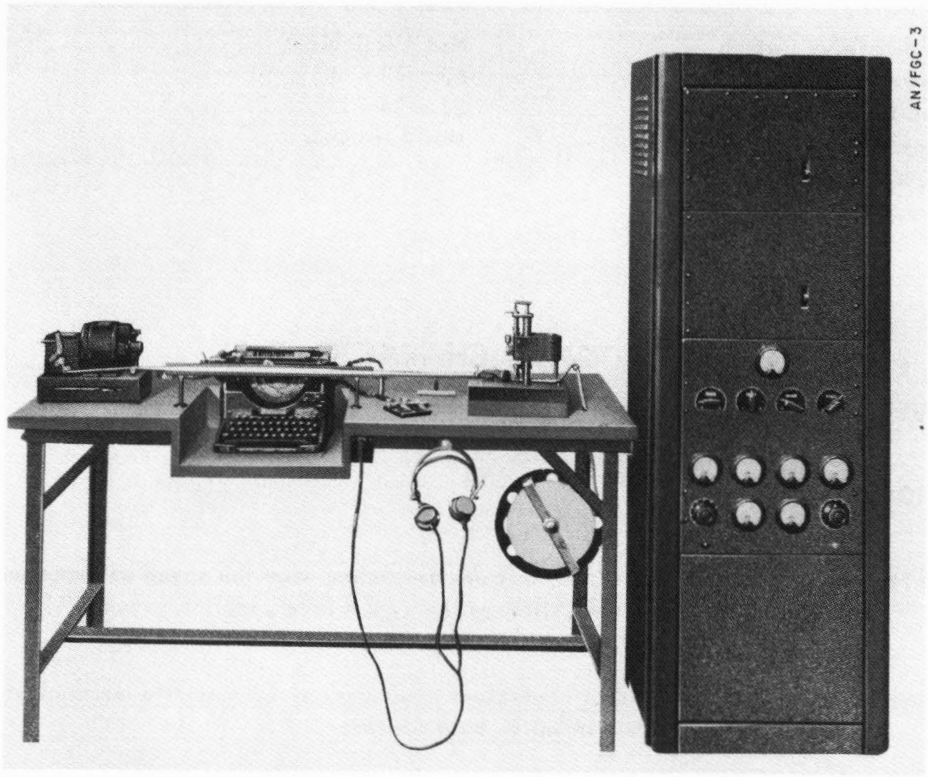
OPERATING SPEED: Teletypewriter station equipment normally associated with this radioteletype terminal is usually designed to operate at 60 wpm but may be modified for 75- or 100-wpm operation.

POWER REQUIREMENTS: 115 v($\pm$10%)50/60, 1 phase,ac.

PHYSICAL CHARACTERISTICS

Information on Radioteletype Terminal Equipment AN/FGC-1B not available.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 28 Dec 51	**AN/FGC-3** OCEAN CABLE TERMINAL SET



Ocean Cable Terminal Set AN/FGC-3 is a complete, fixed, shore ground terminal for transmitting and receiving signals over a submarine cable serving army and higher headquarters.

This equipment consists of a signal-shaping amplifier, operating table, direct writer (inked-tape), and associated keying and recording equipment.

It is used for manually keyed code signals and, with auxiliary equipment, for teletypewriter communication.

AN/FGC-3

OCEAN CABLE TERMINAL SET

INSTRUCTION LITERATURE: TM 11-2213
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 28 Dec 51

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Send-receive switch	Not Available	Not Available
1	Operating Table 175-A	60 x 32 x 30	" "
1	Amplifier Unit 560-A	27 x 24 x 72	" "
1	Tape Reel 2-B	Not Available	" "
1	Tape Puller 4-A	" "	" "
1	Direct Writer 4-A	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army level and higher headquarters.

INSTALLATION: Fixed station.

APPROXIMATE RANGE (IN MILES): 2,000 or more depending upon the speed of signaling and the legibility of the signal received.

CAN COMMUNICATE WITH: Identical or equivalent equipment at the opposite terminal of the facility or system in which both operate.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Morse code, teletypewriter, direct writer, or similar.

TYPE COMMUNICATION CIRCUITS: D-c telegraph in simplex operation.

CONTROLS: Transmitting: manual key, automatic key, and teletypewriter.
Receiving: direct writer, teletypewriter, headphones, inked-tape.

POWER REQUIREMENTS: 325 w, 115 v, 50/60 cyc ac.

PHYSICAL CHARACTERISTICS

Information on Ocean Cable Terminal Set AN/FGC-3 not available.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 18 Feb 52	**AN/FGC-4** TELETYPEWRITER SET



Teletypewriter Set AN/FGC-4 is a type-bar, tape sending and receiving teletypewriter station equipment. It produces typed tape which is not perforated and which is used for communication and monitoring purposes in facilities serving army and higher headquarters.

This equipment consists of a commercial teletypewriter (Teletype Corp Model 14) having a standard communication keyboard and type pallets. It produces typewritten tape rather than typewritten page copy of messages transmitted or received. It can be operated in circuits serving conventional page-printing teletypewriter equipment and has provision for installation of a line relay unit. It can be operated on a half-duplex or full-duplex basis. This equipment includes a keyboard-transmitter unit and a typing unit which are installed upon a model 14 operating table.

AN/FGC-4

TELETYPEWRITER SET

INSTRUCTION LITERATURE: None
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 18 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Typing Unit Teletype FT23D275	Not Available	Not Available
1	Base Teletype FK61MG1	" "	" "
1	Cover Teletype C55	" "	" "
1	Copy Holder Teletype 74833	" "	" "
1	Table Teletype XRT82	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army, communications zone, zone of interior.

INSTALLATION: Fixed plant.

CAN COMMUNICATE WITH: Terminal, repeater, or station apparatus over wire, cable, carrier, or radioteletype standard communication facilities composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: LTRS shift, FIGS shift, BELL on FIG'S "S", BLANK BELL-AND-BREAK mechanism, END-OF-LINE mechanism, STOP on FIG "H" tape-out BELL, and LINE TEST KEY.

OPERATING SPEED: 368.1 opm 60 wpm.

MOTOR CHARACTERISTICS: Series-governed, 110 v, 60 cyc ac, with resistor assembly for operation on 110-v d-c circuit.

POWER REQUIREMENTS: Approximately 110 w on 110 v, 60 cyc ac.

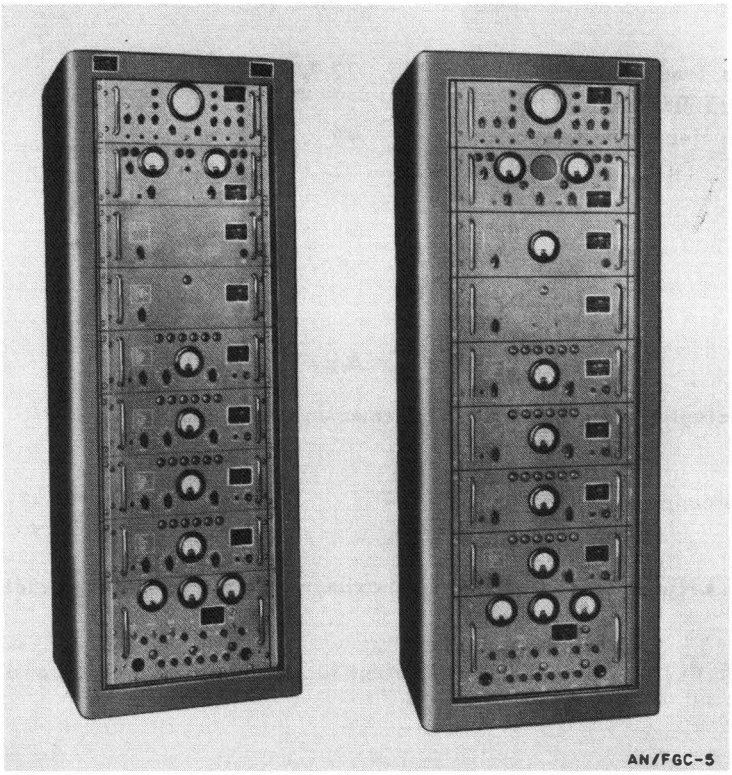
PHYSICAL CHARACTERISTICS

Information on Teletypewriter Set AN/FGC-4 not available.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 8 May 52

AN/FGC-5

TELEGRAPH TERMINAL SET



Telegraph Terminal Set AN/FGC-5 provides two-, three-, or four-channel multiplex teletypewriter operation on a single voice channel on the basis of a time division system.

All components except the power supply are of the tilt-up drawer type; the power supply slides out horizontally on rails.

The equipment, as supplied, is for 60-wpm operation but may be modified by a wiring change to 75 wpm.

The number of channels in which the AN/FGC-5 can be operated depends upon the circuit characteristics. Narrow bands or circuits with excessive distortion may limit operation to three, or even two, multiplex channels.

AN/FGC-5

TELEGRAPH TERMINAL SET

INSTRUCTION LITERATURE: NavShips 91265
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET: 8 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Telegraph Transmitting Group OA-150/FGC-5	72-7/8 x 27 x 24-3/16	720
1	Telegraph Receiving Group OA-151/FGC-5	72-7/8 x 27 x 24-3/16	732

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Telegraph and teletypewriter communication stations.

INSTALLATION: Ground.

MAXIMUM SYSTEM LENGTH: Limited only by maximum range of associated radio equipment.

CAN COMMUNICATE WITH: Identical or equivalent facilities at the distant, or opposite, terminal.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Radio or wire.

FACILITIES AFFORDED: Two, three, or four start-stop channels on a single voice-frequency channel.

POWER REQUIREMENTS: 1,380 w, 115/230-v, 50/60 cyc, 1 phase.

PHYSICAL CHARACTERISTICS

Telegraph Terminal Set AN/FGC-5 measures 72-7/8 x 54 x 24 inches, net weight 1,452 pounds, volume 57 cu ft, 1.4 ship tons. Packed for domestic shipment: total weight 2,622 pounds, total volume 178.8 cu ft, 4.6 ship tons. Shipped in 6 packages.

STATUS: S/Std

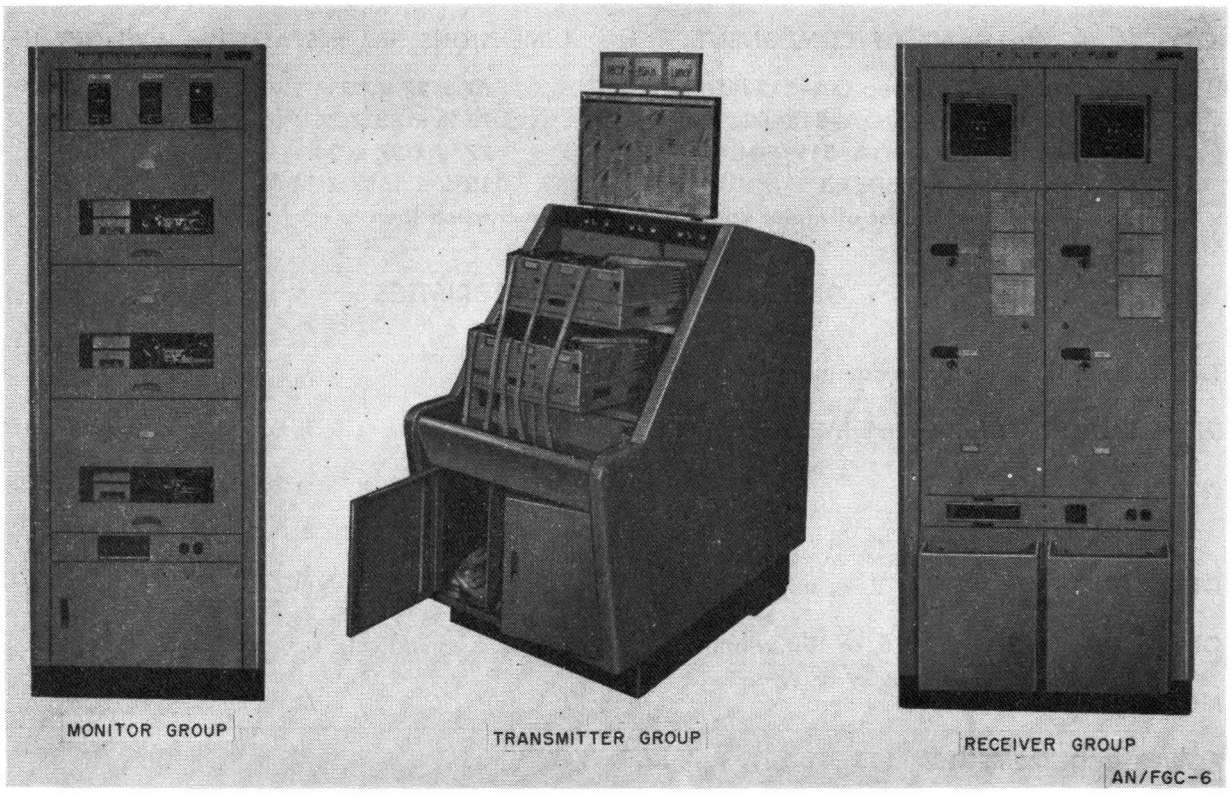
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 8 June 1956

AN/FGC–6

TELETYPEWRITER SET



Teletypewriter Set AN/FGC–6 is used at fixed relay stations ashore to receive, transmit, and monitor telegraph messages. A typical station installation may consist of several sets.

This equipment is composed essentially of three major groups: receiver, transmitter, and monitor. The receiver group receives automatic telegraph signals at 60, 75, or 100 words per minute from three incoming lines. The transmitter group transmits from perforated tape to three outgoing signal lines at the same rate that it receives. The monitor group receives messages in the same manner as the receiver and records on tape for storage.

/FGC–6

TELETYPEWRITER SET

INSTRUCTION LITERATURE: NAVSHIPS 91899(A)

USING SERVICE: USN

DATE OF THIS SHEET: 8 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Transmitter Group OA–517/FGC–6	67 x 27 x 43	528
1	Receiver Group OA–518/FGC–6	77⅜ x 33 x 24	749
1	Monitor Group OA–519/FGC–6	77⅜ x 27 x 24	619
1	Maintenance parts kit	18¾ x 16¼ x 11	30

(For complete list of major components, see instruction literature.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Telegraph communications at shore stations.

INSTALLATION: Ground, fixed.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Rcvg and xmtg auto tlg sig at 60, 75, or 100 wpm on 7.42 unit code.

OPERATING SPEED: 60, 75, or 100 wpm.

MOTOR CHARACTERISTICS: Syn.

POWER REQUIREMENTS: 115 v, 60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		1,926	137.3	3.4	
DOMESTIC PACK:		3,020	212.2	5.3	12
EXPORT PACK:					

STATUS: Std

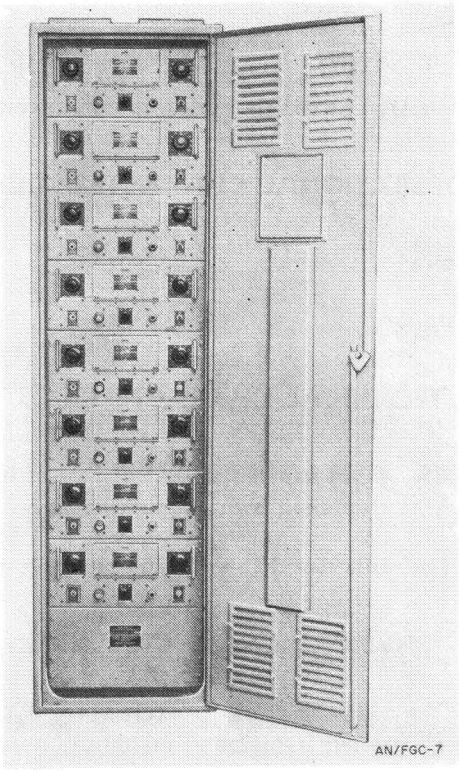
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

AN/FGC–7( )

TELETYPEWRITER REPEATER SET



Teletypewriter Repeater Set AN/FGC–7( ) is an electronic regenerative-type repeater used on long-line teletypewriter wire circuits.

The AN/FGC–7, AN/FGC–7A, and AN/FGC–7B are similar mechanically except for the location of the blank panels. Operationally, all are similar except for operating voltages and location of control switches. Circuitwise, there are differences due to arrangement, design, and value of component parts.

The control panel of each of these sets includes facilities for adjusting them to operate with teletypewriter equipment operating at speeds of 60, 75, or 100 wpm.

AN/FGC–7( )

TELETYPEWRITER REPEATER SET

INSTRUCTION LITERATURE:
NAVSHIPS 91247; 91689; 92609

USING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore installations.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

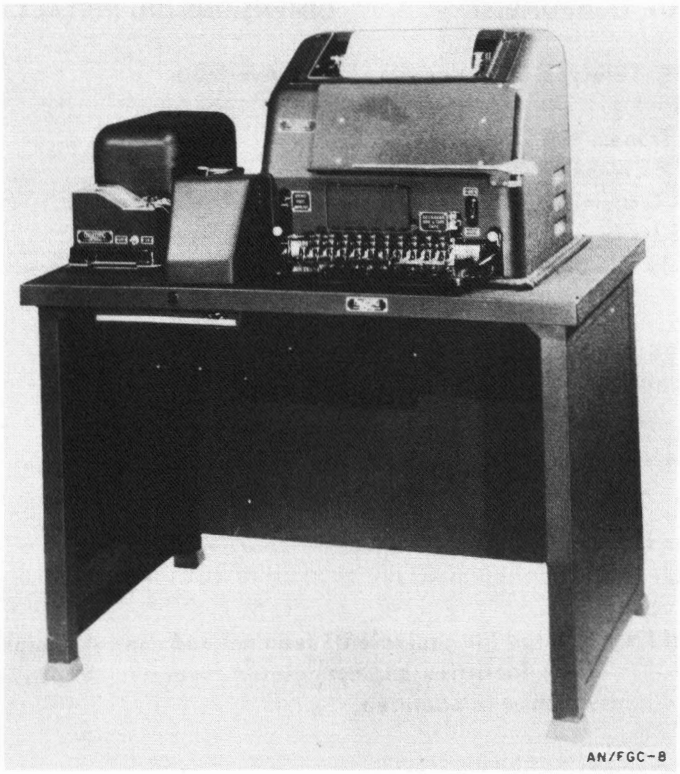
NUMBER AND TYPE OF FACILITIES: Eight sep rep units, capable of handling eight simplexed, or four duplexed chan, simultaneously.

POWER REQUIREMENTS: 85 w (ea rep), 105/125 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
AN/FGC–7	87 x 22 x 28	575			
AN/FGC–7A, –7B	87½ x 22⅜ x 24				
DOMESTIC PACK:		1,075	83.9	2.1	1
EXPORT PACK:					

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 Jun 52	**AN/FGC-8** TELETYPEWRITER SET



Teletypewriter Set AN/FGC-8 is general purpose equipment used for the transmission of teletypewriter messages from keyboard or tape and the reception of incoming messages in printed page form. The typing unit and keyboard have standard English characters.

This equipment provides for direct interchange of typewritten telegraph messages, perforation of tape for subsequent transmission, and automatic transmission of printing-telegraph messages under control of perforated tape.

The perforator transmitter keyboard, used in direct sending, may also be operated independently (whether or not receiving an incoming message) as a high speed perforator in the preparation of tape for subsequent transmission.

AN/FGC-8

TELETYPEWRITER SET

INSTRUCTION LITERATURE: Teletype Corp Bulletin 4,D1-1
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Typing Unit, Teletype Corp Model BP119/210	Not Available	Not Available
1	Perforator Transmitter, Teletype Corp Model PEX25JX	" "	" "
1	Distributor-Transmitter, Teletype-writer TT-52/FG	" "	" "
1	Power Supply PP-315/GGA-1	15 x 25-1/2 x 9-3/4	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

CAN COMMUNICATE WITH: Related (or equivalent) terminal and control equipment over wire or radio facilities and associated apparatus composing the system in which it is operated.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Standard keyboard operation, friction feed, automatic transmission over line circuits using perforated tape.

OPERATING SPEED: 72 English characters per line, 368 opm.

MOTOR CHARACTERISTICS: 2,102 rpm, 115 v a-c series-governed.

POWER REQUIREMENTS: 420 w, 115 v, 50/60 cyc, 1 phase ac.

PHYSICAL CHARACTERISTICS

Teletypewriter Set AN/FGC-8 measures 42 x 36 x 23-1/2 inches, net weight 286 pounds, volume 20.6 cu ft, 0.5 ship ton. Packed for domestic shipment: total weight 447 pounds.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 8 May 52

AN/FGC-9

TELETYPEWRITER SET



Teletypewriter Set AN/FGC-9 is used far ship-to-ship and ship-to-shore radioteletype communication. Provides either direct keyboard or tape transmission.

This is a commercial (Teletype Corp Model 19) page printer set adapted for shipboard use.

Resilient shock mounts are provided between the mounting table and the printer and on the transmitter-distributor to reduce vibration. The table is bolted to the deck.

AN/FGC-9

TELETYPEWRITER SET

INSTRUCTION LITERATURE: NavShips 91239
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 8 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter-Distributor TT-57/FG	Not Available	Not Available
1	Power Supply PP-315/GGA-1	15 x 9-3/4 x 25-1/2	" "
1	Typing Unit BP119/210	Not Available	" "
1	Motor Unit MU-4	" "	" "
1	Perforator Transmitter PEX25JX	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Teletypewriter communication stations.

INSTALLATION: Shipborne, ground.

CAN COMMUNICATE WITH: Related (or equivalent) terminal and control equipment over wire or radio facilities and associated apparatus composing the system in which it is operated.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Page printing of incoming messages, keyboard or perforated tape transmission of outgoing messages.

OPERATING SPEED: 368 opm, approximately 60 wpm.

MOTOR CHARACTERISTICS: Synchronous, capacitor start, motor.

POWER REQUIREMENTS: 110 - 115v, 60 cyc ($\pm$ 0.5)1 phase, ac.

PHYSICAL CHARACTERISTICS

Teletypewriter Set AN/FGC-9 measures 41-5/8 x 36 x 23-1/2 inches.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 23 May 52

AN/FGC-10

TELETYPEWRITER SET



AN/FGC-10

Teletypewriter Set AN/FGC-10 is used for the transmission and reception of teletypewriter messages over wire or radio communication circuits.

It is similar to commercial send-receive teletypewriter equipment (Teletype Corp Model 15).

This equipment is identical to Teletypewriter TT-5/FG, except that the latter has a series-governed motor which must be used when the equipment is connected to sources of unregulated power.

AN/FGC-10

TELETYPEWRITER SET

INSTRUCTION LITERATURE: NavShips 91240
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 23 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Typing Unit BP128/247	Not Available	Not Available
1	Keyboard BK22LD	" "	" "
1	Base BB-44	" "	" "
1	Motor Unit MU-4	" "	" "
1	Power Supply PP-424/U (REC29)	" "	" "
1	Table XRT200AA	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Teletypewriter communication stations.

INSTALLATION: Ground.

CAN COMMUNICATE WITH: Related (or equivalent) terminal and control equipment over wire or radio facilities and associated apparatus composing the system in which it is operated.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Page printing of incoming messages, keyboard transmission of outgoing messages.

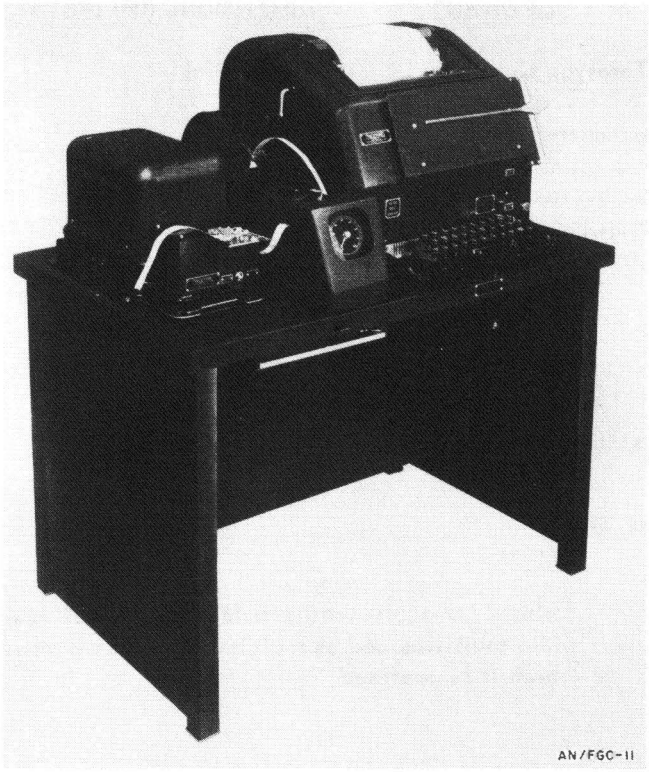
OPERATING SPEED: 368 opm, approximately 60 wpm.

POWER REQUIREMENTS: 115 v, 60 cyc, 1 phase regulated ac.

PHYSICAL CHARACTERISTICS

Information on Teletypewriter Set AN/FGC-10 not available.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 13 Jun 52	**AN/FGC-11** TELETYPEWRITER SET



Teletypewriter Set AN/FGC-11 is a general purpose teletypewriter used for the transmission of messages from keyboard or tape and the reception of incoming messages in printed page form. The typing unit and keyboard have standard English characters.

This equipment provides for direct interchange of typewritten telegraph messages, perforation of tape for subsequent transmission, and automatic transmission of printing-telegraph messages under control of perforated tape.

The perforator transmitter keyboard, used in direct sending, may also be operated independently (whether or not an incoming message is being received) as a high speed perforator in the preparation of tape for subsequent transmission.

AN/FGC-11

TELETYPEWRITER SET

INSTRUCTION LITERATURE: Teletype Corp Bulletin 4,D1-1
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 13 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Typing Unit Teletype Corp Model BP22/247	Not Available	Not Available
1	Perforator Transmitter, Teletype Corp Model PEX25LE	" "	" "
1	Motor Unit PU-109/GG	" "	" "
1	Transmitter-Distributor, Teletype Corp Model XD76FR	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

CAN COMMUNICATE WITH: Related (or equivalent) terminal and control equipment over wire or radio facilities and associated apparatus composing the system in which it is operated.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Standard keyboard operation, friction feed, transmission and reception over line circuits in perforated tape.

OPERATING SPEED: 72 English characters per line, 368 opm, 7.42 unit code.

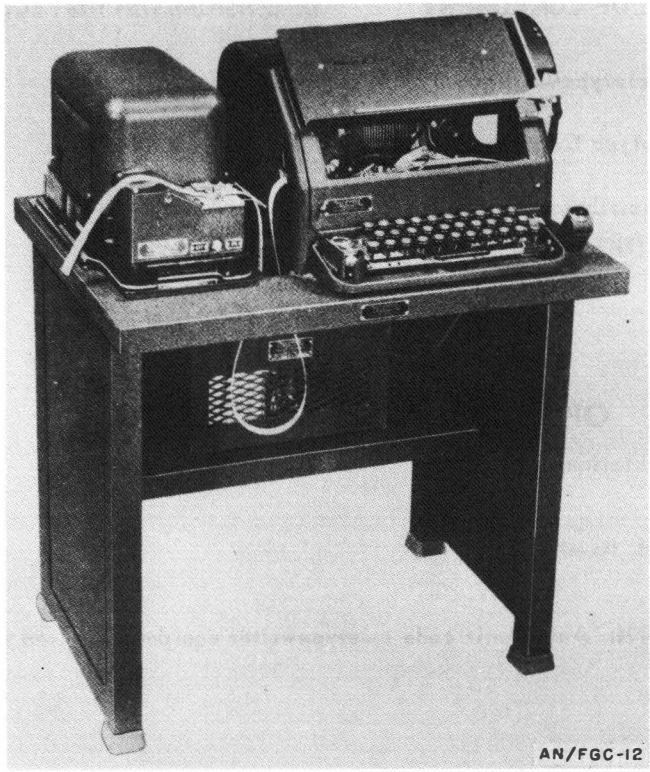
MOTOR CHARACTERISTICS: 115 v, 60 cyc, 1 phase series-governed.

POWER REQUIREMENTS: 420 w, 115 v, 60 cyc, 1 phase ac.

PHYSICAL CHARACTERISTICS

Teletypewriter Set AN/FGC-11 measures 41-5/8 x 36 x 23-1/2 inches, net weight 286 pounds. Packed for domestic shipment: total weight 447 pounds.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 Jun 52	**AN/FGC-12** TELETYPEWRITER SET



Teletypewriter Set AN/FGC-12 is fixed-plant or shore-based teletypewriter station equipment which can be used for communication with two or more stations and in teletypewriter relay, monitoring, and torn-tape switching applications. It has a standard communication keyboard and type pallets with English characters. This equipment transmits directly to the line from the manually operated keyboard, with or without simultaneous production of typed and perforated paper tape. Reception also is in the form of typed and perforated tape, automatically produced by the typing unit. Such tape can be fed to the transmitter-distributor for automatic transmission to the line.

It has a holding magnet, a polar-neutral switch, an end-of-line indicator, and a line circuit radio noise filter.

AN/FGC-12

TELETYPEWRITER SET

INSTRUCTION LITERATURE: Teletype Corp Bulletin 11,D4-1
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 9 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Typing Unit Teletype Corp Model FPR23H246	Not Available	Not Available
1	Keyboard Teletype Corp Model FK110LD 15	" "	" "
1	Transmitter-Distributor TT-57/FG	" "	" "
1	Rectifier Teletype Corp Model REC-10	8 x 11-7/8 x 6-3/4	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

CAN COMMUNICATE WITH: Any 5 unit code teletypewriter equipment geared for 368 opm.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Keyboard operation and automatic transmission to line circuits from perforated tape.

OPERATING SPEED: 368 opm, 7.42 unit code.

MOTOR CHARACTERISTICS: Synchronous motors 1,800 rpm, 115 v, 60 cyc, 1 phase.

POWER REQUIREMENTS: 230 w, 115 v, 60 cyc, 1 phase.

PHYSICAL CHARACTERISTICS

Teletypewriter Set AN/FGC-12 measures 36-3/4 x 27 x 21-5/16 inches, net weight 164 pounds, volume 12.3 cu ft. Packed for domestic shipment: total weight 242 pounds.

STATUS: Std

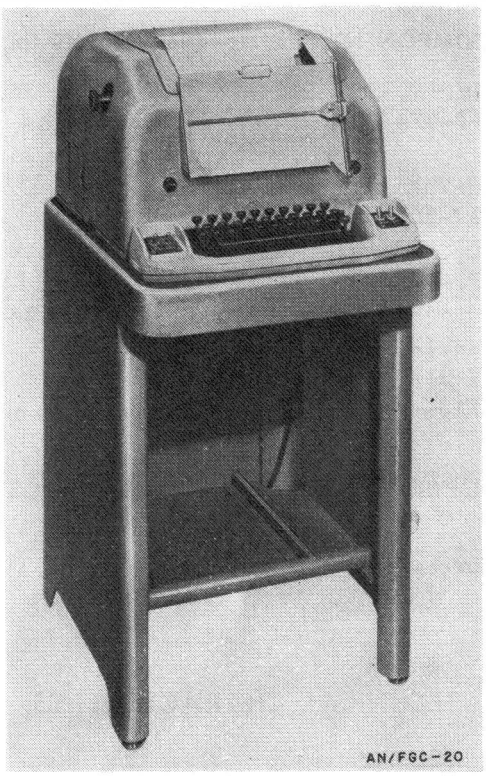
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

AN/FGC–20( ), –21( )

TELETYPEWRITER SET



Teletypewriter Sets AN/FGC–20( ) and AN/FGC–21( ) are page-printing equipments used for the transmission, monitoring, and reception of messages in fixed communication centers and weather stations, respectively.

These sets are mechanically and electrically similar, and each consists essentially of a teletypewriter, a table, and a power supply.

The AN/FGC–20 and AN/FGC–21 are equipped with ac synchronous motors; the AN/FGC–20X and AN/FGC–21X, with ac or dc series-governed motors.

AN/FGC–20( ), –21( )

TELETYPEWRITER SET

INSTRUCTION LITERATURE: TM 11–2230

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 11 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	For AN/FGC–20( ):		
1	Power Supply PP–978/FG	9 x 4 x 4	7
1	Teletypewriter TT–98/FG (–20X) or TT–100/FG (–20)	20⅝ x 24 x 13½	54
	For AN/FGC–21( ):		
1	Power Supply PP–978/FG	9 x 4 x 4	7
1	Teletypewriter TT–97/FG (–21X) or TT–99/FG (–21)	20⅝ x 24 x 13½	54

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant; direct wire or radioteletype.

INSTALLATION: Fixed station.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: CAR. RET., LINE FEED, FIGS, LTRS keys; motor stop, signal bell, space.

OPERATING SPEED: 368.1, 404, 600 opm (approx 60, 66, 100 wpm, respectively).

MOTOR CHARACTERISTICS: Syn (–20, –21); series-governed (–20X, –21X).

POWER REQUIREMENTS: 105 to 125 v, 60 cy, 1 ph ac; 105 to 125 v dc (series-governed motors only).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	21 x 24 x 40½	86.9	20.7	.52	
DOMESTIC PACK:		115	11		2
EXPORT PACK:		125	18		2

STATUS:

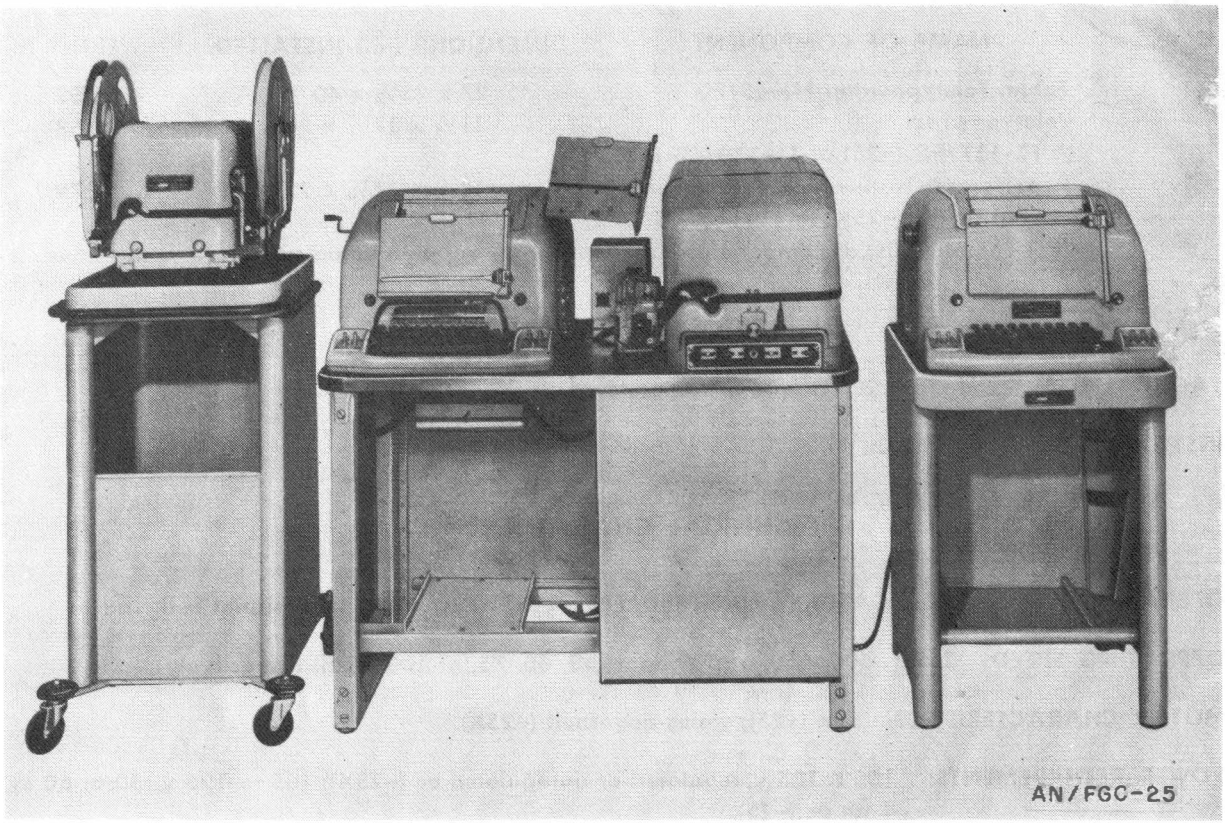
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

AN/FGC–25( )

TELETYPEWRITER SET



Teletypewriter Set AN/FGC–25( ), a typical installation of which is shown above, is a fixed-station equipment used for transmitting, receiving, or monitoring at higher headquarters.

This equipment includes a teleprinter, a perforator having a transmitter distributor, power, and accessory components. A patch panel provides for the selection of a variety of operating circuit arrangements.

This equipment may be operated on a half- or full-duplex basis. It can produce printed page copy and/or perforated-and-printed tape of messages transmitted or received, or it can transmit from such tape.

The AN/FGC–25 has a synchronous motor; the AN/FGC–25X, a series-governed motor.

AN/FGC-25( )

TELETYPEWRITER SET

INSTRUCTION LITERATURE: TM 11-2246

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 11 June 1956

MAJOR COMPONENTS

Q	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Table, Teletypewriter FN-65/FG	27 x 23½ x 40	52
1	Teletypewriter TT-117/FG (-25) or TT-119/FG (-25X)	11¼ x 17⅛ x 20⁹⁄₁₆	58
1	Reperforator-Transmitter, Teletypewriter TT-178/FG (-25X) or TT-179/FG (-25)	13³⁄₃₂ x 17⅛ x 22³⁄₁₆	79

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant; direct wire or radioteletype.

INSTALLATION: Fixed station.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: CAR. RET, LINE FEED, FIGS, LTRS keys; motor stop, signal bell, space.

OPERATING SPEED: 368.1, 404, 460, or 600 opm (60, 66, 75, or 100 wpm, respectively).

MOTOR CHARACTERISTICS: Syn (-25); series-governed (-25X).

POWER REQUIREMENTS: 105 to125 v, regulated or unregulated ac (-25X); 105 to 125 v, 50 or 60 cy, 1 ph ac (-25).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	40³⁄₃₂ x 23½ x 40	201	19.9		
DOMESTIC PACK:		290	25.4	.64	3
EXPORT PACK:		320	37.8	.95	3

STATUS:

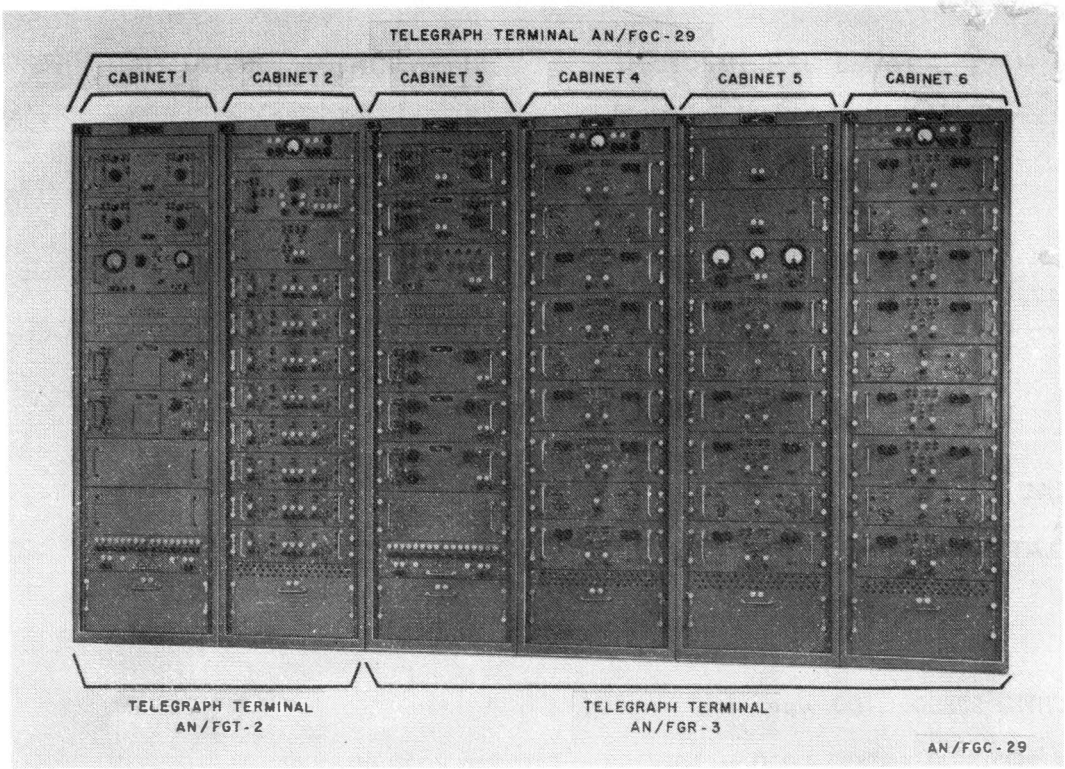
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

AN/FGC–29

TERMINAL, TELEGRAPH



Telegraph Terminal AN/FGC–29 is the terminal equipment for a 16-channel carrier telegraph system that provides communication over long-range, twin-channel, single-sideband radio circuits operating in the high-frequency range.

Two Telegraph Terminals AN/FGC–29 are used with hf radio link equipment to establish duplex telegraph communication between points that may be separated by great distances.

The carrier telegraph channels of this equipment are capable of teletypewriter operation at a maximum speed of 100 wpm. The channels are spaced 170 cycles apart, from 425 to 2,795 cycles. Frequency-shift carrier signals with a marking signal 42.5 cycles above and a spacing signal 42.5 cycles below the center frequency of each channel are used.

To overcome the effects of radio fading, facilities are provided for both two-channel and four-channel diversity combining, using frequency diversity, or space diversity, or both. Multiplexing equipment is provided to derive two voice-frequency circuits from each of the radio channels.

The radio bandwidth, from 200 to 6,000 cycles, is divided into two transmission circuits, each with a bandwidth from 375 to 3,025 cycles. Four each voice-frequency circuits, derived from the twin-channel radio, are used to transmit the carrier telegraph signals, or to provide telephone or facsimile service. Equalizer and amplifier equipment are also provided to permit operation of the terminal over line facilities to remote radio stations.

AN/FGC–29

TERMINAL, TELEGRAPH

INSTRUCTION LITERATURE: TM 11–2245

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 25 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Cabinet 1 } Terminal, Telegraph	75 x 22½ x 24	662
1	Cabinet 2 } AN/FGT–2 (transmitting group)	75 x 22½ x 24	809
1	Cabinet 3 } Terminal, Telegraph	75 x 22½ x 24	749
1	Cabinet 4 } AN/FGR–3	75 x 22½ x 24	869
1	Cabinet 5 } (receiving group)	75 x 22½ x 24	900
1	Cabinet 6 }	75 x 22½ x 24	874

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

OPERATING SPEED: 100 wpm.

POWER REQUIREMENTS: 4,000 w, 107/122 or 210/250 v, 50/60 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	75 x 22½ x 24 (ea cab.)	4,925	141	3.53	
DOMESTIC PACK:					
EXPORT PACK:		8,344	665	18.8	7

STATUS: Std

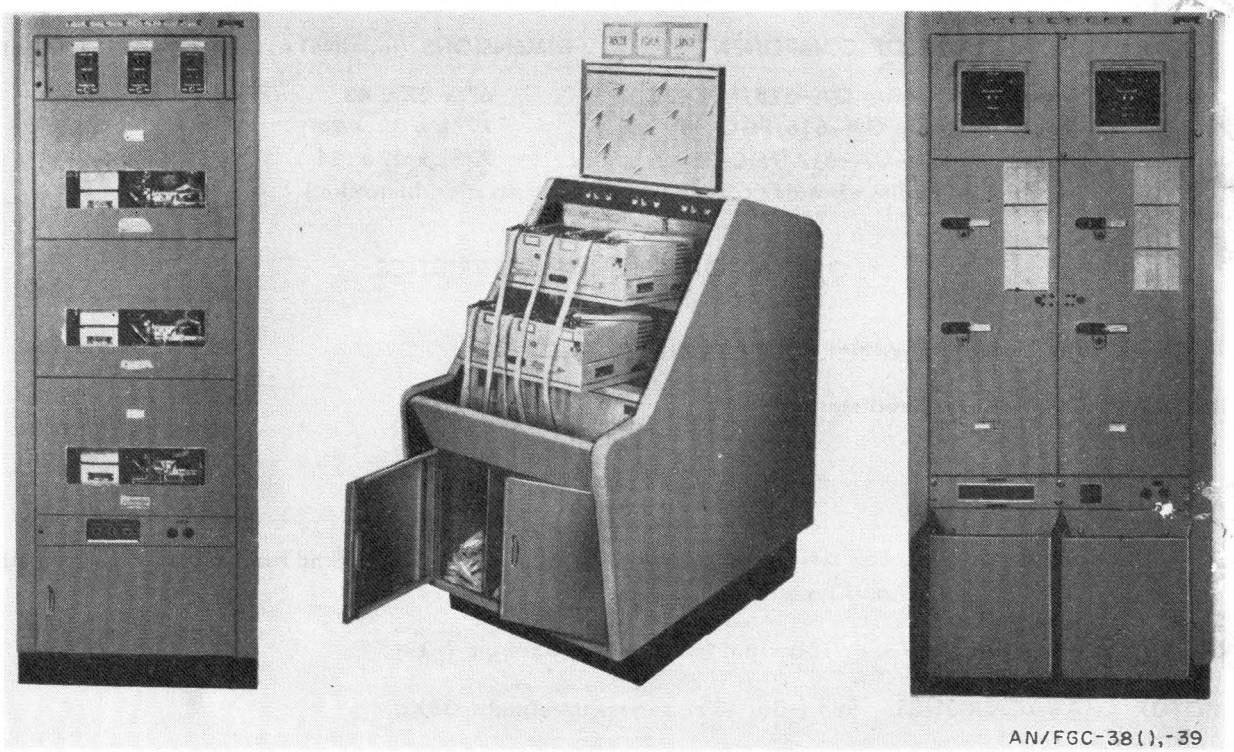
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 8 June 1956

AN/FGC–38( ), –39

TELETYPEWRITER SET



Teletypewriter Set AN/FGC–38( ) or AN/FGC–39 is used at relay stations ashore to receive, transmit, and monitor telegraph messages.

This equipment consists of three groups: transmitter, receiver, and monitor.

The AN/FGC–38 uses the 7.42 unit code and synchronous motors for all units; the AN/FGC–38X, the 7.42 unit code and series-governed motors; and the AN/FGC–39, the 7.00 unit code and synchronous motors.

AN/FGC-38( ), -39

TELETYPEWRITER SET

INSTRUCTION LITERATURE: NAVSHIPS 92378

USING SERVICE: USA, USN, USAF

DATE OF THIS SHEET: 8 June 1956

MAJOR COMPONENTS

	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Transmitter Group OA-615/FGC-38	67 x 27 x 43	284
1	Receiver Group OA-616/FGC-38	77⅜ x 33 x 24	505
1	Monitor Group OA-617/FGC-38	77⅜ x 27 x 24	420

(For complete list of major components, see instruction literature.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore telegraph communication.

INSTALLATION: Shore, fixed station.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: The AN/FGC-38 and -38X receive auto tlg sig and transmit from perforated and typed tape.

OPERATING SPEED: 60, 75, or 100 wpm (-38, -38X); 65 wpm (-39).

MOTOR CHARACTERISTICS: Syn (-38, -39); series-governed (-38X).

POWER REQUIREMENTS: 115v ±10%, 60 cy ±.5 cy, 1 ph ac (syn motor); 115v ±10%, 50/70 cy, 1 ph ac (series-governed motor).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	77⅜ x 33 x 24	750	47.34	1.2	
DOMESTIC PACK:					
EXPORT PACK:		3,020	212	5.3	12

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF

DATE OF THIS SHEET: 12 June 1956

AN/FGC—TYPE

COMMERCIAL TYPE NUMBER: M–28

TELETYPEWRITER

NO PHOTOGRAPH AVAILABLE

Teletypewriter M–28 is a manual fixed station, page-printing equipment that is used to exchange typewritten page messages between two or more stations over radio or wire telegraph facilities.

This equipment consists essentially of a teletypewriter-printer and keyboard and associated compone that can be adjusted to operating speeds of 368 opm (60 wpm), 460 opm (75 wpm), and 600 opm (wpm) as desired.

It is wired at the factory for operation on .06-ampere signal-line current, but by making a wire change in the electrical service unit and by readjusting the selector armature spring, it may be adapted for operation on .02-ampere signal-line current.

AN/FGC–TYPE

INSTRUCTION LITERATURE:

USING SERVICE: USAF

DATE OF THIS SHEET: 12 June 1956

M–28: COMMERCIAL TYPE NUMBER

TELETYPEWRITER

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Cabinet (floor) LAC200AA114	40½ x 20½ x 18¼	81
1	Power Distribution Panel LESUS/110	8⅛ x 4⅝ x 15	5
1	Keyboard LK3RN101	4¾ x 15½ x 17½	11
1	AC Motor (synchronous) LMU3	5¾ x 8½ x 4	9
1	Automatic Typer LP3RN/AC100	9¾ x 10½ x 15½	19

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Page printing of incoming messages and manual keyboard typing for transmission of outgoing messages.

OPERATING SPEED: 368 opm (60 wpm) (460 opm (75 wpm) or 600 opm (100 wpm) by substitution of gear sets).

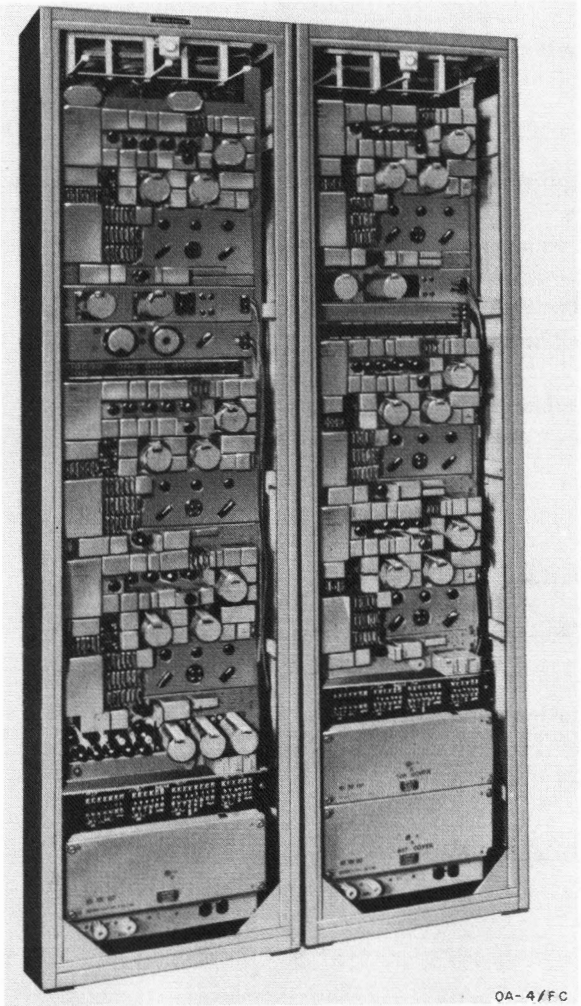
MOTOR CHARACTERISTICS: Syn (cap. start).

POWER REQUIREMENTS: 65 w, 115 v ±10%, 60 cy ±.75%, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	40½ x 20½ x 18¼	130	12.55		
DOMESTIC PACK:		315	24.09	.6	
EXPORT PACK:					

STATUS: Limited Standard	AN/FGC-TYPE
CLASSIFICATION OF EQUIPMENT: Unclassified	AN/COMP TYPE NUMBER: OA-4/FC
USING SERVICE: Army	CARRIER TERMINAL
DATE OF THIS SHEET: 29 Dec 51	



OA-4/FC

Carrier Terminal OA-4/FC is a six-channel carrier equipment which operates on a four-wire basis, to provide 12 two-way telegraph circuits over type C or type H carrier facilities, and is used in long distance teletypewriter communication applications at fixed plant installations at army and higher headquarters.

This equipment consists of two cabinet-inclosed units or bays. Each bay provides three-channel terminations (numbered one through six). It is intended to be used with Carrier Terminal OA-5/FC to provide 12 channels of telegraph communication over a single normal telephone channel.

Used separately, or with Carrier Terminal OA-5/FC, it can be operated over channel two of a three-channel carrier telephone system derived through Carrier Terminal OA-11/FC or OA-12/FC, or on the voice-frequency, or the carrier channel of Carrier Terminal OA-13/FC.

Requires 700-w of 115 / 230-v 50/60 cyc, ac.

AN/FGC-TYPE	INSTRUCTION LITERATURE: TM 11-2024; TM 11-2029
OA-4/FC :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
CARRIER TERMINAL	USING SERVICE : Army
	DATE OF THIS SHEET : 29 Dec 51

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Cabinet No. 1, Channels 1, 2, 3	84 x 22-1/4 x 17	600
1	Cabinet No. 2, Channels 4, 5, 6	84 x 22-1/4 x 17	600

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army or higher headquarters.

INSTALLATION: In fixed plant telephone and telegraph terminals.

MAXIMUM SYSTEM LENGTH: Type H (normally used as single-section systems); 145 miles over 104 copper-steel wire circuits at 6-db net loss. Type C, 1,000 miles or more, circuits of 6-db net loss. Repeater spacings on 104 copper-steel wire of about 155 miles or more.

CAN COMMUNICATE WITH: Repeater, terminal, central office and related station equipment and subsidiary apparatus which operates in the same connecting facility in fixed plant systems.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Wire or cable having a maximum loss of -30 dbm.

FACILITIES AFFORDED: Six-channel, two-way operation on a 4-wire basis; separate sending and receiving paths using the same frequency for each direction of transmission; with monitoring of local side of all channels.

FREQUENCY: 425 - 1,275 cps; 6 channels spaced 170 cps apart.

TYPE OF MODULATION: Am.

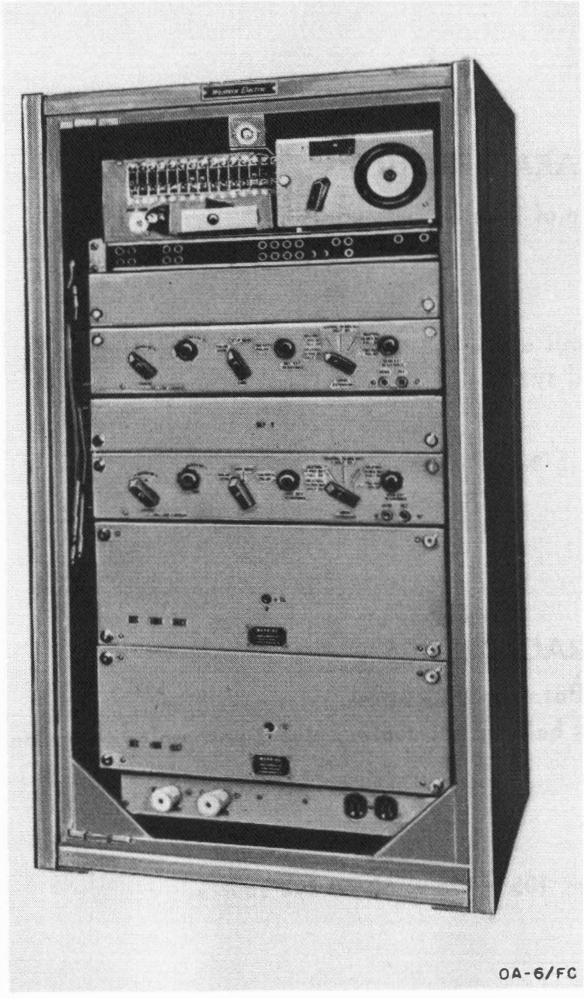
TYPE RINGING: Vf.

POWER REQUIREMENTS: 700 w of 115 / 230 v, 50/60 cyc, ac.

PHYSICAL CHARACTERISTICS

Carrier Terminal OA-4/FC measures 84 x 44-1/2 x 17 inches, net weight 1,200 pounds, volume 36.7 cu ft, 0.917 ship ton.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 18 Feb 52	**AN/FGC-TYPE** AN/COMP TYPE NUMBER: OA-6/FC TELEGRAPH REPEATER



OA-6/FC

Telegraph Repeater OA-6/FC is a packaged, d-c repeater equipment, used to extend the operating range of telegraph systems used for teletypewriter communication over composited open wire, or simplexed open wire or cable facilities serving army and higher levels.

This equipment consists of two complete commercial (Western Electric X-61824) d-c telegraph repeaters and associated rectifiers, and may be adapted to various modes of transmission on both line and local sides, and has provision for connection of a monitoring printer.

It may be used as an intermediate, or a terminal repeater, and is used in conjunction with Regenerative Repeater OA-3/FC, Carrier Terminal OA-4/FC, and Carrier Terminal OA-5/FC in long distance telegraph systems.

Requires 420-w of 105 to 125-v ac.

AN/FGC-TYPE	INSTRUCTION LITERATURE: TM 11-2034
	CLASSIFICATION OF EQUIPMENT: Unclassified
OA-6/FC :AN/COMP TYPE NUMBER	USING SERVICE : Army
TELEGRAPH REPEATER	DATE OF THIS SHEET : 18 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army, communication zone and zone of interior.

INSTALLATION: Fixed station.

CAN COMMUNICATE WITH: Repeater, terminal, central office and related equipment operating in fixed plant facilities and systems.

TECHNICAL CHARACTERISTICS

NUMBER AND TYPE OF FACILITIES: Line side: Polarential or 2-path polar operation.
Local extension (loop or drop) side: Neutral half for full-duplex, plus 2-path polar operation.
Jack for monitoring printer.

POWER REQUIREMENTS: Normal consumption 420 w, 105 ~ 125 v, 50/60 cyc source.

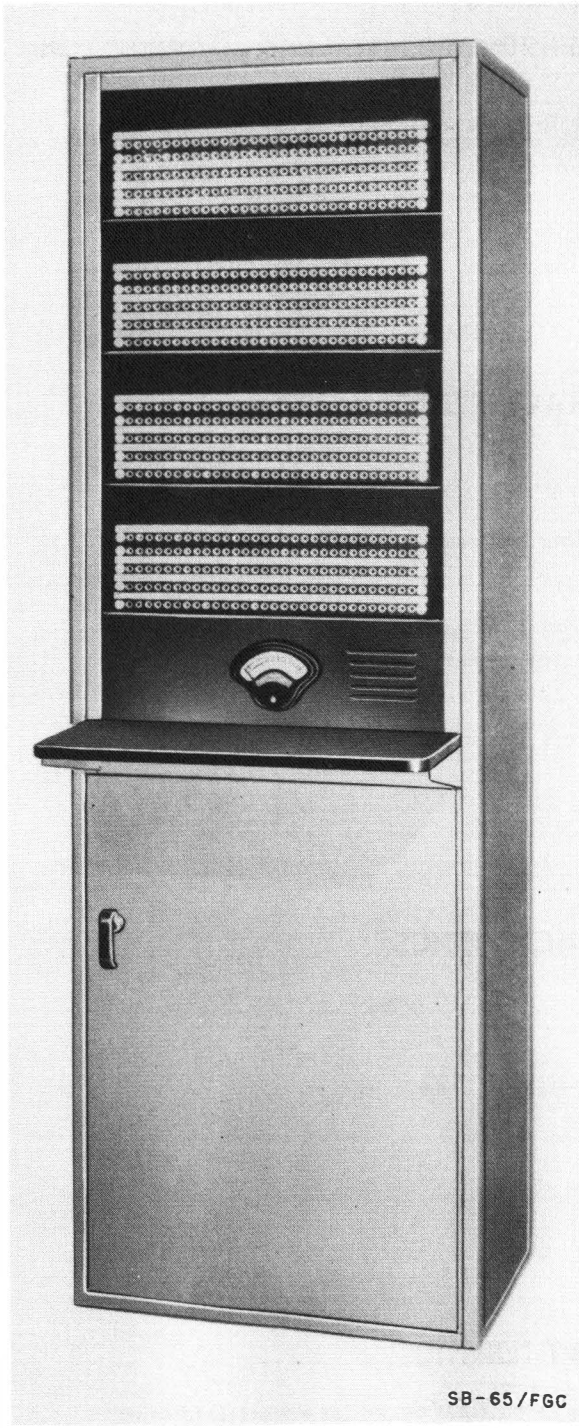
PHYSICAL CHARACTERISTICS

Telegraph Repeater OA-6/FC weighs 400 pounds net, volume 11 cu ft. Packed for export shipment: total weight 550 pounds, total volume 23 cu ft, 0.6 ship ton. Shipped in 1 package.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 25 Jan 52

AN/FGC-TYPE

AN/COMP TYPE NUMBER: SB-65/FGC
SWITCHBOARD



SB-65/FGC

Switchboard SB-65/FGC is a cord-and-jack patching switchboard used for interconnecting loops, extensions, and teletypewriter lines and station equipment, in large communications centers in the communications zone of a theater of operations.

This equipment consists of an upright, desk type, floor mounted switchboard contained in a wooden cabinet. The basic unit of this switchboard is a set of four jacks (two looping jacks and two set jacks) each set having a miscellaneous jack located below each such basic unit. It is equipped with a panel mounted milliammeter for making simple line tests, and can accommodate a telephone set, a telegraph key, and sounder for testing and control purposes.

AN/FGC-TYPE

SB-65/FGC :AN/COMP TYPE NUMBER
SWITCHBOARD

INSTRUCTION LITERATURE: TM 11-2227
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 25 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed in communications zone.

INSTALLATION: Permanent or semipermanent fixed plant equipment.

CAN COMMUNICATE WITH: Used for interconnecting loops, extensions, and teletypewriter lines, and station equipment at large communications centers.

TECHNICAL CHARACTERISTICS

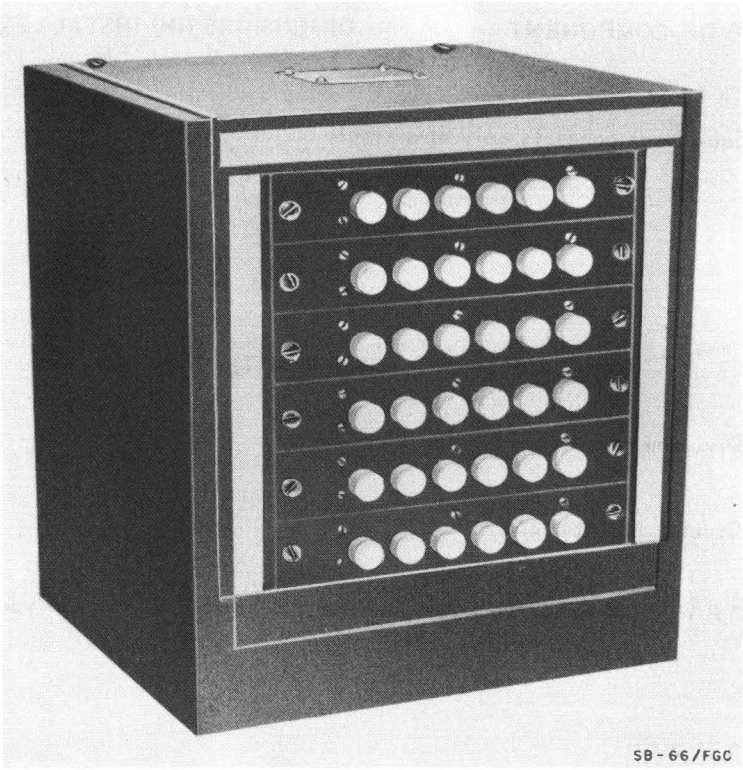
NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS: Number of Line Circuits: 120.

PHYSICAL CHARACTERISTICS

Switchboard SB-65/FGC weighs 510 pounds net, volume 24 cu ft. Packed for export shipment: total weight 1,090 pounds, total volume 40 cu ft, 1 ship ton. Shipped in 1 package.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 29 Dec 51	AN/FGC- TYPE AN/COMP TYPE NUMBER: SB-66/FGC SWITCHBOARD



Switchboard SB-66/FGC is a PBX-type switchboard for interconnecting up to 6 teletypewriters in a small network, with provision for grouping or conference circuits. It is designed for small fixed station applications.

This equipment consists of a single cordless, manual switchboard unit with a maximum capacity of ~~six~~ teletypewriter lines. All 6 lines may be used simultaneously.

Two Switchboard SB-66/FGC may be connected together to serve 12 teletypewriters, but only 6 lines may be in use at any one time.

No provision is made for signaling the operator, since this equipment usually is used in circuits requiring switching on a prescheduled basis.

AN/FGC-TYPE

SB-66/FGC :AN/COMP TYPE NUMBER	INSTRUCTION LITERATURE: TM 11-2083
SWITCHBOARD	CLASSIFICATION OF EQUIPMENT: Unclassified
	USING SERVICE : Army
	DATE OF THIS SHEET: 29 Dec 51

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters .

INSTALLATION: Ground or shipboard.

CAN COMMUNICATE WITH: Provides teletypewriter PBX facilities for teletypewriter equipment of a small network.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

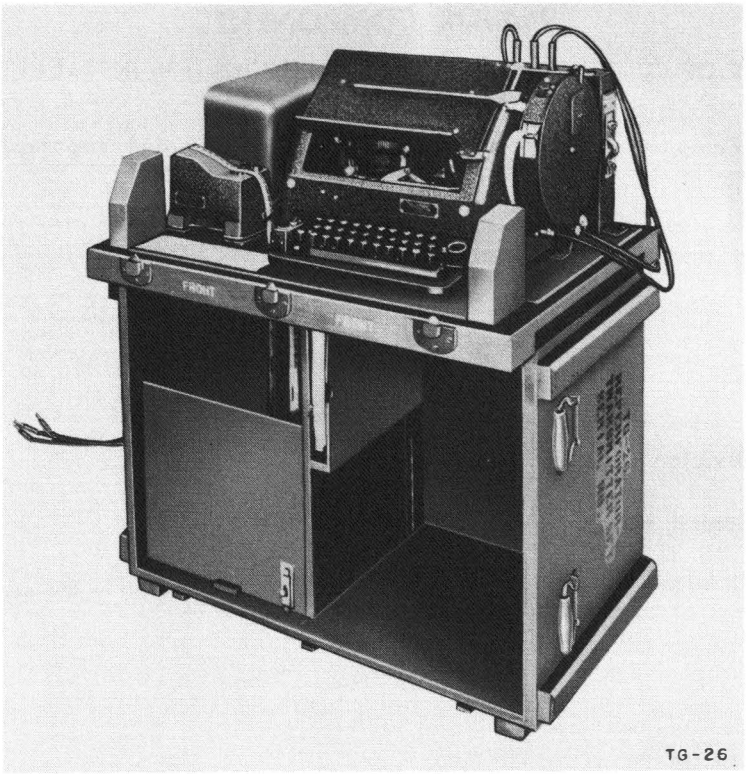
NUMBER AND TYPE OF CIRCUITS:

Number of line circuits: 6.

PHYSICAL CHARACTERISTICS

Switchboard SB-66/FGC measures 7-3/4x9x7 inches, volume 0.28 cu ft. Packed for domestic or export shipment: total weight 40 pounds, total volume 1.4 cu ft. Shipped in 1 package.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 13 Feb 52	**AN/FGC-TYPE** SERVICE TYPE NUMBER: TG-26 REPERFORATOR-TRANSMITTER



Reperforator-Transmitter TG-26 is a portable, field, teletypewriter tape relay station equipment used for the automatic (or manual) transmission, and reception of messages in the form of perforated and typed paper tape, in field wire, cable, or open wire systems serving division and higher headquarters.

This equipment consists of a typing reperforator having a perforator-transmitter and keyboard, plus a transmitter-distributor. It includes carrying cases which can be set up to form an operating desk or table.

Messages are received by the reperforator component, automatically, in the form of typed and perforated tape. Sending is performed either by operation of the keyboard (with or without simultaneous production of perforated and typed tape) or by feeding perforated tape to the transmitter-distributor for automatic transmission to the line.

It has a standard communication keyboard and type pallets.

This set can be used for simultaneous transmission and reception, automatic monitoring, automatic transmission, automatic and manual transmission simultaneously, and other modes of operation as may be required.

It is the major operating component of Reperforator-Teletypewriter Set TC-16, and requires 225 w of 115-v ac or dc.

AN/FGC-TYPE	INSTRUCTION LITERATURE: TM 11-2201
	CLASSIFICATION OF EQUIPMENT: Unclassified
TG-26 :SERVICE TYPE NUMBER	USING SERVICE : Army
REPERFORATOR-TRANSMITTER	DATE OF THIS SHEET: 13 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (I N) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division or higher headquarters.

INSTALLATION: Ground, transportable.

CAN COMMUNICATE WITH: Terminal and repeater equipment operating in the same system.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Line-break, Carriage-return, Line-feed, Space-repeat, Bell on Figs S, Ltrs and Figs Shift.

OPERATING SPEED: 368.1 opm - 60 wpm: 404 opm - 66 wpm.

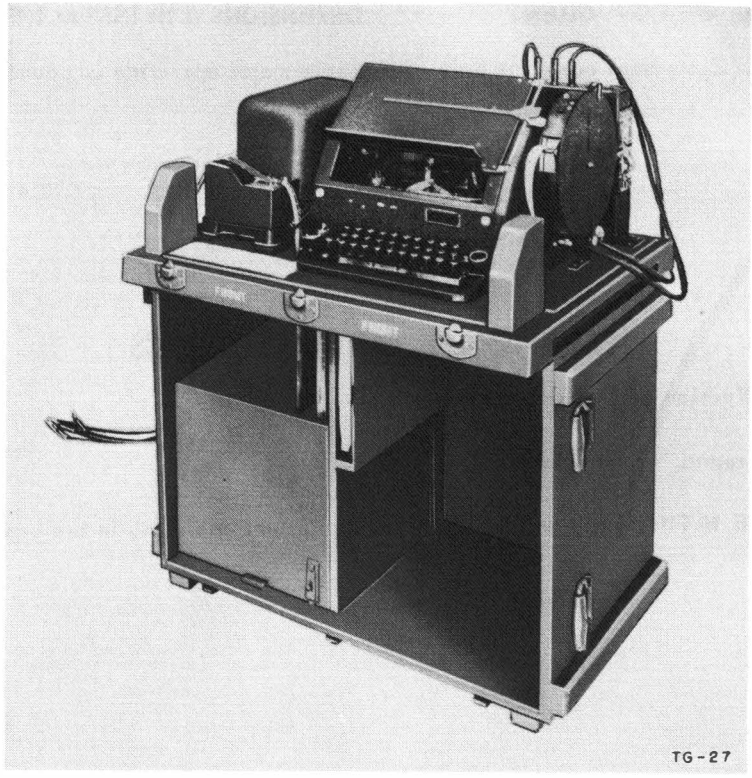
MOTOR CHARACTERISTICS: Governed-series.

POWER REQUIREMENTS: 225 w on 115 v, 50/60 cyc, ac; or 115 v dc.

PHYSICAL CHARACTERISTICS

Reperforator-Transmitter TG-26 measures 19 x 33 x 38 inches, net weight 225 pounds.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 18 Feb 52	**AN/FGC-TYPE** SERVICE TYPE NUMBER: TG-27 REPERFORATOR-TRANSMITTER



Reperforator-Transmitter TG-27 is a transportable standard weather communication teletypewriter station equipment used for sending and receiving weather data by means of perforated paper tape, and can be operated as a tape relay station. It is used at division and higher headquarters.

This equipment consists of a transmitter-distributor and a typing reperforator which has a weather communication keyboard and type pallets, transported in a carrying case which is used as the operating table.

This reperforator-transmitter is the major component of Reperforator Teletypewriter TC-17.

It operates from 115-v ac or dc.

AN/FGC-TYPE	INSTRUCTION LITERATURE: TM 11-2201
TG-27 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
REPERFORATOR-TRANSMITTER	USING SERVICE : Army
	DATE OF THIS SHEET : 18 Feb 52

MAJOR COMPONENTS

QUANT NAME OF COMPONENT DIMENSIONS (I N) INSTALLED WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division or higher headquarters.

INSTALLATION: Ground, transportable.

CAN COMMUNICATE WITH: Terminal and repeater equipment operating in the same system.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Line-break, Carriage-return, Line-feed, Space-repeat, Bell on Figs S, Ltrs and Figs Shift.

OPERATING SPEED: 368.1 opm - 60 wpm: 404 opm - 66 wpm.

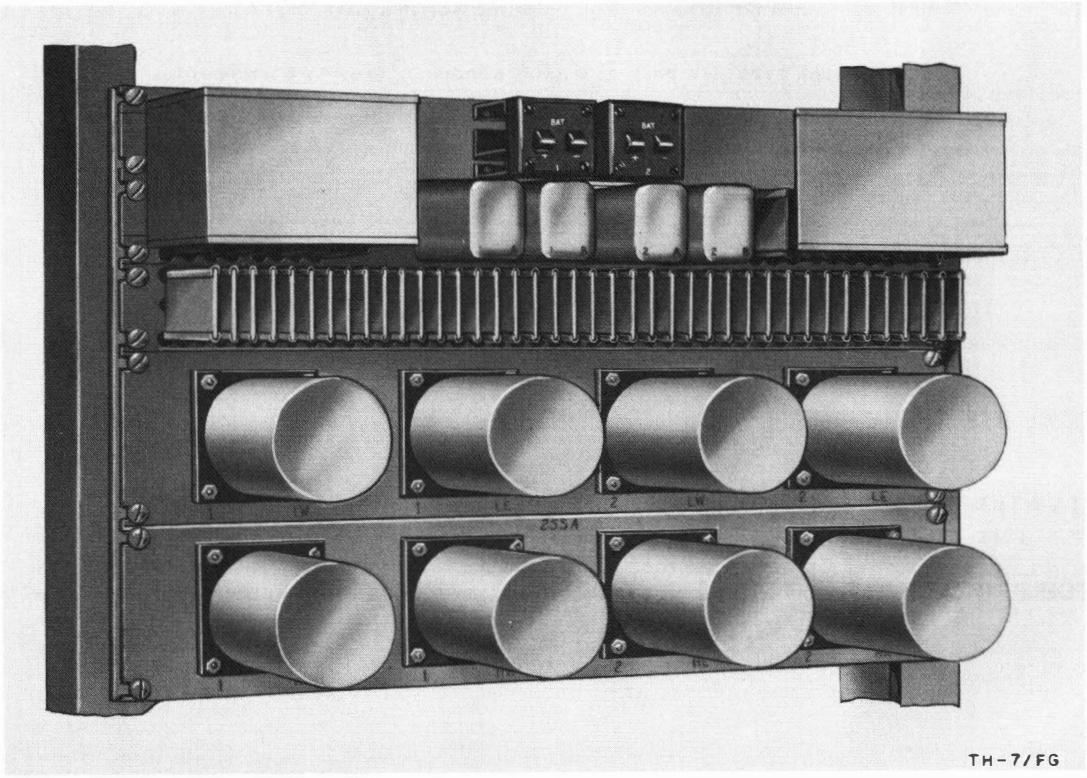
MOTOR CHARACTERISTICS: Governed-series.

POWER REQUIREMENTS: 225 w, 115 v, 50/60 cyc, ac; or 115 v, dc.

PHYSICAL CHARACTERISTICS

Reperforator-Transmitter TG-27 measures 19 x 33 x 38 inches, net weight 225 pounds.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 15 Feb 52	**AN/FGC-TYPE** AN/COMP TYPE NUMBER: TH-7/FG TELEGRAPH REPEATER



Telegraph Repeater TH-7/FG is a single-line, reversible one-way, telegraph repeater equipment which uses open-and-close telegraph signals, and is designed to be used in fixed-plant applications.

This equipment consists essentially of a commercial (Bell Telephone 10E1) single line repeater and is composed of two repeater assemblies mounted on a standard 19-inch panel.

It is used to interconnect two subscriber loop circuits, two line repeater loop circuits, or a subscriber loop and a line repeater loop circuit.

Has battery keys for control of 130-v dc which the equipment requires.

AN/FGC-TYPE	INSTRUCTION LITERATURE: None
TH-7/FG :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELEGRAPH REPEATER	USING SERVICE : Army, Navy
	DATE OF THIS SHEET : 15 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Fixed station.

CAN COMMUNICATE WITH: Terminal and repeater equipment operating in the same system.

TECHNICAL CHARACTERISTICS

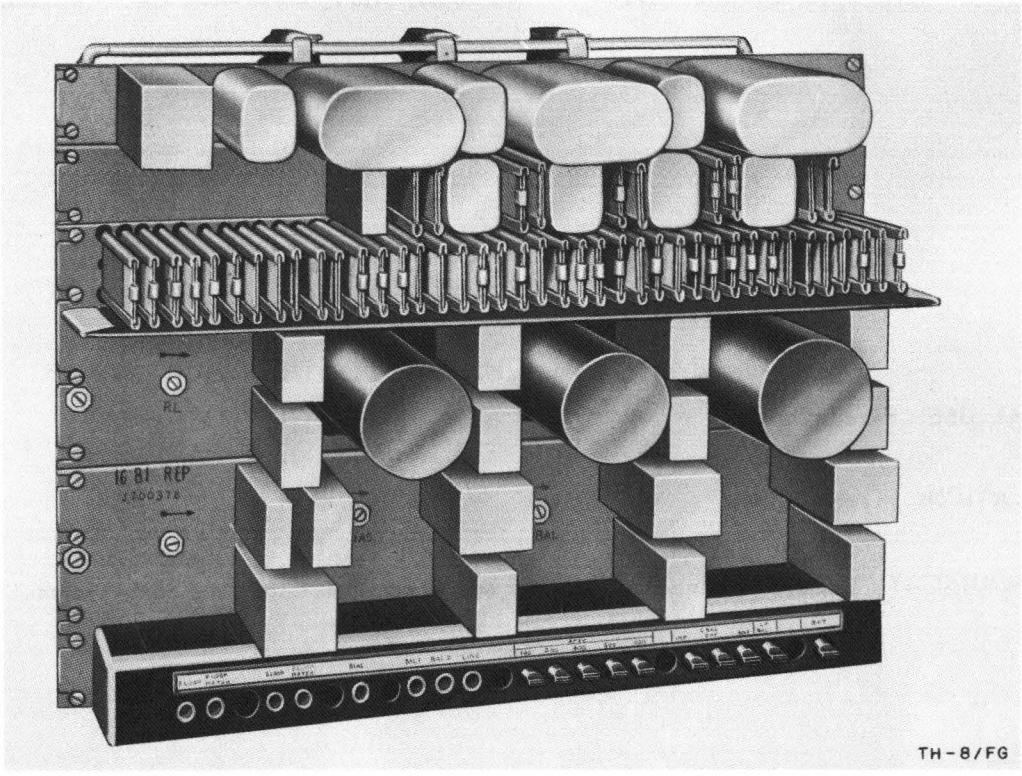
NUMBER AND TYPE OF FACILITIES: Interconnects two loop circuits, two line repeater loops, or a loop circuit and a line repeater loop.

POWER REQUIREMENTS: A 130-v d-c source.

PHYSICAL CHARACTERISTICS

Information on Telegraph Repeater TH-7/FG not available.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 18 Feb 52	AN/FGC-TYPE AN/COMP TYPE NUMBER: TH-8/FG TELEGRAPH REPEATER



Telegraph Repeater TH-8/FG is a repeater equipment designed to be used in single-wire ground-return facilities in fixed-plant applications.

This equipment consists essentially of a commercial (Bell Telephone 16B1 Terminal Repeater) which is mounted on a standard 19-inch panel.

It operates as the polar-sending, or polar-receiving, terminal of a polarential system or as the terminal of a differential-duplex system (with line normal or reversed, and battery normal or reversed).

Requires 130 v of dc.

AN/FGC-TYPE

TH-8/FG :AN/COMP TYPE NUMBER
TELEGRAPH REPEATER

INSTRUCTION LITERATURE: None
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 18 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Fixed station.

CAN COMMUNICATE WITH: Terminal and repeater equipment operating in the same system.

TECHNICAL CHARACTERISTICS

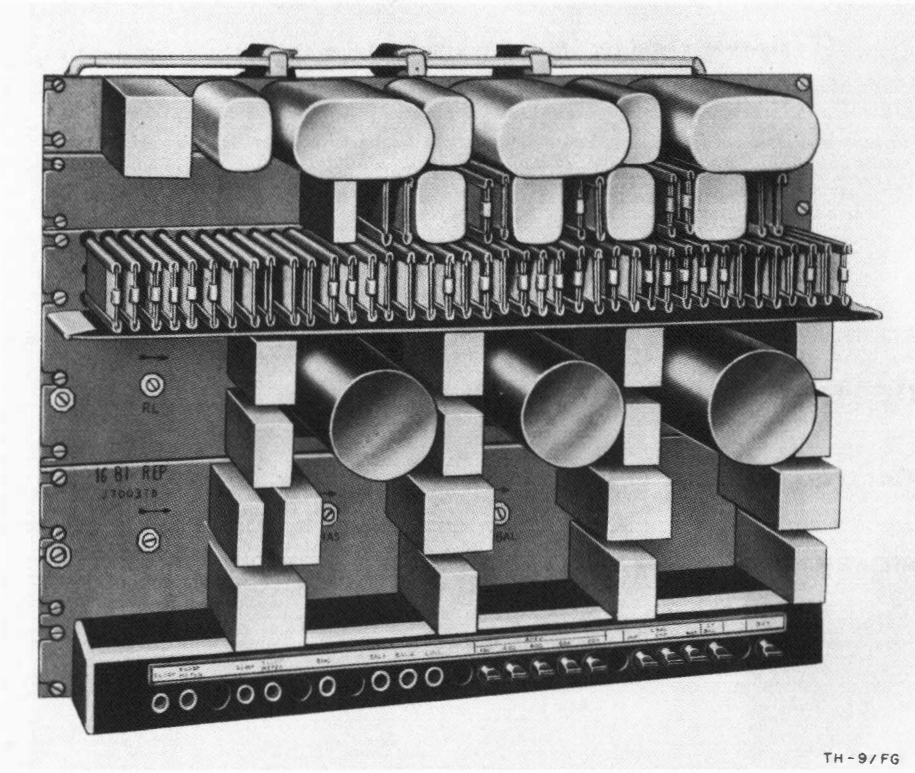
NUMBER AND TYPE OF FACILITIES: Designed for polar sending or receiving or differential duplex systems over a single wire with ground return.

POWER REQUIREMENTS: A 130-v, d-c source.

PHYSICAL CHARACTERISTICS

Information on Telegraph Repeater TH-8/FG not available.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 18 Feb 52	AN/FGC-TYPE AN/COMP TYPE NUMBER: TH-9/FG TELEGRAPH REPEATER



Telegraph Repeater TH-9/FG is a repeater equipment designed to be used in full-metallic facilities in fixed-plant applications.

This equipment consists essentially of a commercial (Bell Telephone 16B1 Terminal Repeater) modified for full metallic operation, and is mounted on a standard 19-inch panel.

It operates as the polar sending, or polar receiving, terminal of a polarential system, or as the terminal of a differential duplex system (with line normal or reversed, and battery normal or reversed).

Requires 130 v of dc.

AN/FGC-TYPE	INSTRUCTION LITERATURE: None
TH-9/FG :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELEGRAPH REPEATER	USING SERVICE : Army, Navy
	DATE OF THIS SHEET : 18 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Fixed station.

CAN COMMUNICATE WITH: Terminal and repeater equipment operating in the same system.

TECHNICAL CHARACTERISTICS

NUMBER AND TYPE OF FACILITIES: Designed for polar sending or receiving or differential duplex systems over two wires.

POWER REQUIREMENTS: A 130-v, d-c source.

PHYSICAL CHARACTERISTICS

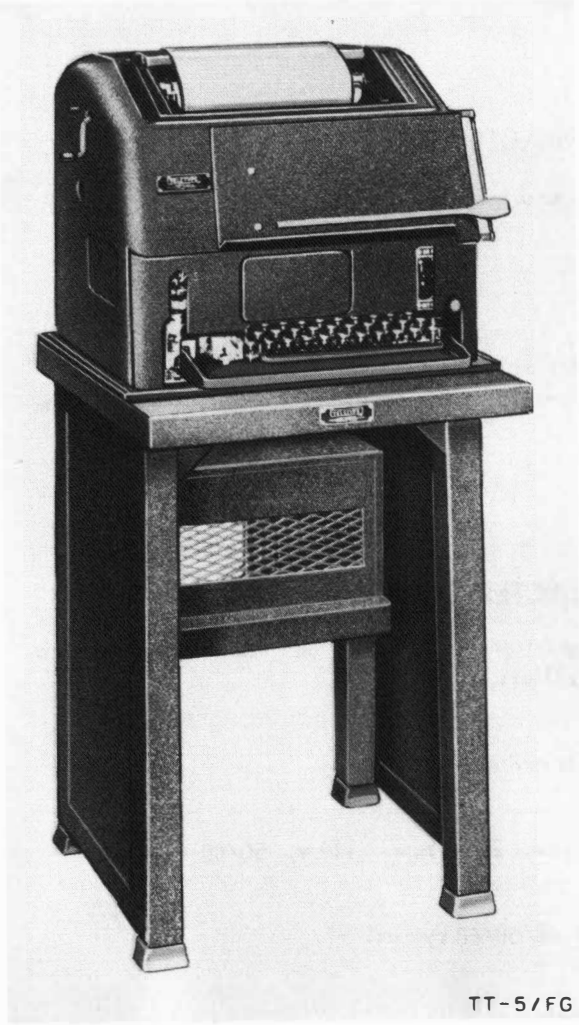
Telegraph Repeater TH-9/FG measures 14 x 19 x 8 inches.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 17 Feb 52

AN/FGC-TYPE

AN/COMP TYPE NUMBER: TT-5/FG

TELETYPEWRITER



TT-5/FG

Teletypewriter TT-5/FG is a standard communication, page-printing sending and receiving teletypewriter station equipment, used in permanent and semipermanent installations at corps and higher headquarters.

This equipment consists essentially of commercial (Teletype Corp Model 15) teletypewriter and includes the operating table and base, a rectifier and related equipment. The unit can be operated on a half-duplex or receive-only basis and adapted to receive either neutral or polar signals. It sends and receives on a single loop, but can be used by means of additional equipment for double-loop operation and for transmitting polar or polarential signals.

AN/FGC-TYPE

TT-5/FG :AN/COMP TYPE NUMBER
TELETYPEWRITER

INSTRUCTION LITERATURE: TM 11-2215
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 17 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Teletypewriter Printer (Model 15)	18 x 21 x 15-1/2	112
1	Table (XRT115)	21-5/16 x 18 x 26-1/2	39
1	Rectifier Power Unit (REC 29)	12-9/16 x 9-1/4 x 8-3/16	46

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Corps, army, communications zone, and zone of interior.

INSTALLATION: Fixed station.

CAN COMMUNICATE WITH: Terminal, repeater, or station apparatus over wire, cable, carrier, or radioteletype standard communication facilities composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Remote control motor stop on upper case "H" and standard communications keyboard and type pallets.

OPERATING SPEED: 368.1 opm and 404 opm; 60 wpm and 66 wpm.

MOTOR CHARACTERISTICS: A-c series-governed motor; 2,100 rpm. 110 v, 50/60 cyc ac.

POWER REQUIREMENTS: 95-125 v or 190-250 v, 25/40/50/60 cyc ac.

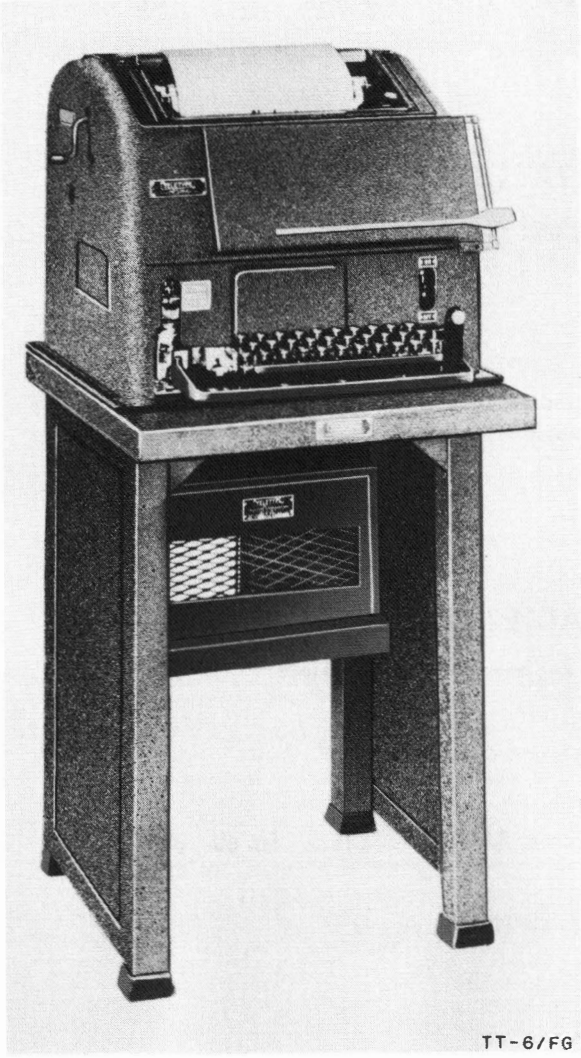
PHYSICAL CHARACTERISTICS

Teletypewriter TT-5/FG measures 21-5/16 x 18 x 42-1/8 inches, net weight 200 pounds, volume 9.35 cu ft. Packed for domestic shipment: total weight 255 pounds, total volume 25 cu ft, 0.63 ship ton. Packed for export shipment: total weight 746 pounds, total volume 64.7 cu ft, 1.6 ship tons. Shipped in 4 packages both domestic and export.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 17 Feb 52

AN/FGC-TYPE

AN/COMP TYPE NUMBER: TT-6/FG
TELETYPEWRITER



TT-6/FG

Teletypewriter TT-6/FG is a standard weather communication, page-printing sending and receiving teletypewriter station equipment used in permanent and semipermanent installations at corps and higher headquarters.

This equipment consists essentially of a commercial (Teletype Corp Model 15) teletypewriter and includes the operating table and base, a rectifier and related equipment. The unit can be operated on a half-duplex or receive-only basis and adapted to receive either neutral or polar signals. It sends and receives on a single loop, but can be used by means of additional equipment for double-loop operation and for transmitting polar or polarential signals.

AN/FGC-TYPE

TT-6/FG :AN/COMP TYPE NUMBER
TELETYPEWRITER

INSTRUCTION LITERATURE: TM 11-2215
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army, Navy
DATE OF THIS SHEET : 17 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Teletypewriter Printer (Model 15)	18 x 21 x 15 1/2 approx	112
1	Table (XRT115)	21-5/16 x 18 x 26-1/2	39
1	Rectifier Power Unit (REC 29)	12-9/16 x 9-1/2 x 8-3/16	46

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Corps, army, communications zone, and zone of interior.

INSTALLATION: Fixed station.

CAN COMMUNICATE WITH: Terminal, switching, repeater, or station apparatus of the weather communication facility composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Weather communications keyboard and type pallets.

OPERATING SPEED: 368.1 opm and 404 opm; 60 wpm and 66 wpm.

MOTOR CHARACTERISTICS: A-c series-governed motor; 2,100 rpm. 110 v, 50/60 cyc ac.

POWER REQUIREMENTS: 95-125 v or 190-250 v, 25/40/50/60 cyc ac.

PHYSICAL CHARACTERISTICS

Teletypewriter TT-6/FG measures 21-5/16 x 18 x 42/1/8 inches, net weight 200 pounds, volume 9.35 cu ft. Packed for domestic shipment; total weight 255 pounds, total volume 25 cu ft, 0.75 ship ton. Packed for export shipment: total weight 746 pounds, total volume 64.7 cu ft, 1.6 ship tons. Shipped in 4 packages both domestic and export.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 17 Feb 52	**AN/FGC-TYPE** AN/COMP TYPE NUMBER: TT-7/FG TELETYPEWRITER



Teletypewriter TT-7/FG is a standard communication, page-printing, tape-perforating and transmitting, fixed station sending and receiving teletypewriter station equipment used in a communications zone of a theater of operations or in the zone of interior.

This equipment consists essentially of a commercial (Teletype Corp Model 19) teletypewriter and includes the operating table and base, a transmitter-distributor, rectifier, and associated components.

Can be used for neutral half-duplex or full-duplex operation with or without simultaneous production of (or automatic transmission from) perforated paper tape. It can be arranged, by the addition of supplementary components, to operate in polar or polarential facilities, and can be used as a tape relay station.

Can be operated from 95-125 v or 190-250 v, 25/40/50/60 cyc ac through the rectifier component which can be adjusted, by means of voltage tape, to deliver the required step-down voltages needed by the operating units of this equipment.

AN/FGC-TYPE	INSTRUCTION LITERATURE: TM 11-2216
TT-7/FG :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELETYPEWRITER	USING SERVICE : Army, Navy
	DATE OF THIS SHEET: 17 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Typing Unit		29
1	Perforator-transmitter		24
1	Distributor-Transmitter, Teletypewriter TT-52/FG	36 x 24 x 42	30
1	Rectifier (REC 30)		106
1	Table		112

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Communications zone of a theater of operations or zone of interior.

INSTALLATION: Fixed station

CAN COMMUNICATE WITH: Terminal, repeater, or station apparatus over wire, cable, carrier, or radioteletype standard communication facilities composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Keyboard operation, standard communication. Tape perforation. Remote control motor stop mechanism.

OPERATING SPEED: 368.1 opm and 404 opm; 60 wpm and 66 wpm.

MOTOR CHARACTERISTICS: A-c series-governed motor; 110 v, 50 to 60 cyc ac.

POWER REQUIREMENTS: 95-125 v or 190-250 v, 25/60 cyc ac.
Where required, step-down voltage can be obtained from power supply for motor operation.

PHYSICAL CHARACTERISTICS

Teletypewriter TT-7/FG weighs 810 pounds net, volume 59 cu ft, 1.5 ship tons.
Packed for export shipment: total weight 1,352 pounds, total volume 97.4 cu ft, 2.4 ship tons.
Shipped in 7 packages.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 17 Feb 52	**AN/FGC-TYPE** AN/COMP TYPE NUMBER: TT-8/FG TELETYPEWRITER



Teletypewriter TT-8/FG (the weather communication version of Teletypewriter TT-7/FG) is a page-printing, tape-perforating and automatic tape-transmitting, sending and receiving teletypewriter station equipment used for weather data communication at fixed plant installations in the communications zone of a theater of operations and in the zone of interior.

This equipment consists essentially of a teletypewriter equipped with a perforator-transmitter and weather keyboard and type pallets, plus a transmitter-distributor, a rectifier, an operating table, and accessories.

Operates on a half-duplex or full-duplex basis, with automatic tape transmission to an independent line. A line selector switch is provided and the equipment can function as a teletypewriter relay station. Wiring includes an integral testing circuit and connection terminals for a reperforator.

Can be operated on 95-125 v or 190-250 v, 25/60 cyc ac by means of the rectifier component.

AN/FGC-TYPE	INSTRUCTION LITERATURE: TM 11-2216
TT-8/FG :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELETYPEWRITER	USING SERVICE : Army, Navy
	DATE OF THIS SHEET: 17 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Typing unit		29
1	Perforator-transmitter		24
1	Distributor-Transmitter Teletype-writer TT-52/FG	36 x 24 x 42	30
1	Rectifier (REC 30)		106
1	Table		112

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Communications zone or zone of interior.

INSTALLATION: Fixed station.

CAN COMMUNICATE WITH: Terminal, switching, repeater, or station apparatus of the weather communication facility composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Keyboard operation, weather arrangement, tape perforation.

OPERATING SPEED: 368.1 opm and 404 opm; 60 wpm and 66 wpm.

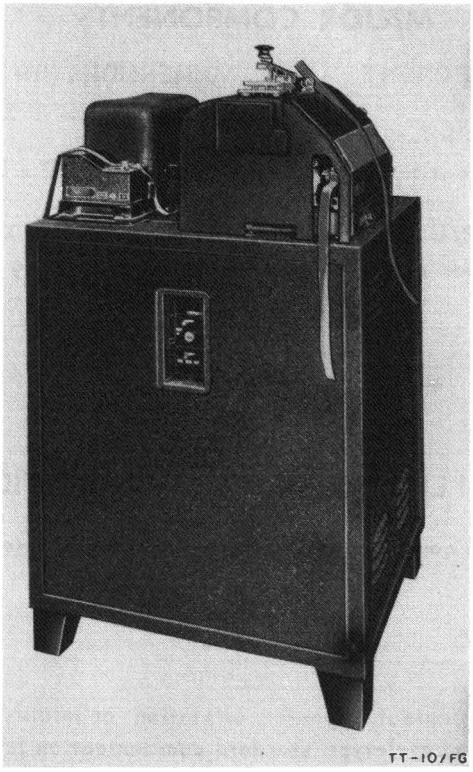
MOTOR CHARACTERISTICS: A-c series governed motor; 110 v, 50/60 cyc ac.

POWER REQUIREMENTS: A 95-125 or 190-250 v, 25/60 cyc source. Where required, step-down voltage can be obtained from power supply for motor operation.

PHYSICAL CHARACTERISTICS

Teletypewriter TT-8/FG weighs 810 pounds net, volume 59 cu ft, 1.5 ship tons. Packed for export shipment: total weight 1,353 pounds, total volume 97.4 cu ft, 2.4 ship tons. Shipped in 7 packages.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 18 Feb 52	**AN/FGC-TYPE** AN/COMP TYPE NUMBER: TT-10/FG TELETYPEWRITER



Teletypewriter TT-10/FG is an automatic sending and receiving teletypewriter station equipment used for receiving, recording, and retransmitting teletypewriter communications, by means of perforated paper tape, at corps and higher headquarters.

This equipment consists essentially of a reperforator-teletypewriter and a transmitter-distributor, an operating table and base, a power supply, and accessories. It is used in conjunction with carrier or radio terminal equipment and enables torn-tape switching or teletypewriter tape relay service.

A synchronizing circuit is provided for the adjustment or improvement of incoming radio signals.

AN/FGC-TYPE	INSTRUCTION LITERATURE: TM 11-2210
	CLASSIFICATION OF EQUIPMENT: Unclassified
TT-10/FG :AN/COMP TYPE NUMBER	USING SERVICE : Army
TELETYPEWRITER	DATE OF THIS SHEET : 18 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Teletypewriter Table FN-49/FG	26 x 22 x 34	215
1	Reperforator Teletypewriter TT-53/FG	16-3/4 x 13-1/2 x 11-1/2	63
1	Power Supply PP-748/U	7-5/8 x 19-3/4 x 9-3/16	78
1	Distributor-Transmitter Teletypewriter TT-52/FG	8-3/8 x 15-1/2 x 9	33

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Corps, army, communications zone, and zone of interior.

INSTALLATION: Fixed station.

CAN COMMUNICATE WITH: Terminal, repeater, or station apparatus over wire, cable, carrier, or radioteletype standard communication facilities composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING SPEED: 368.1 opm.

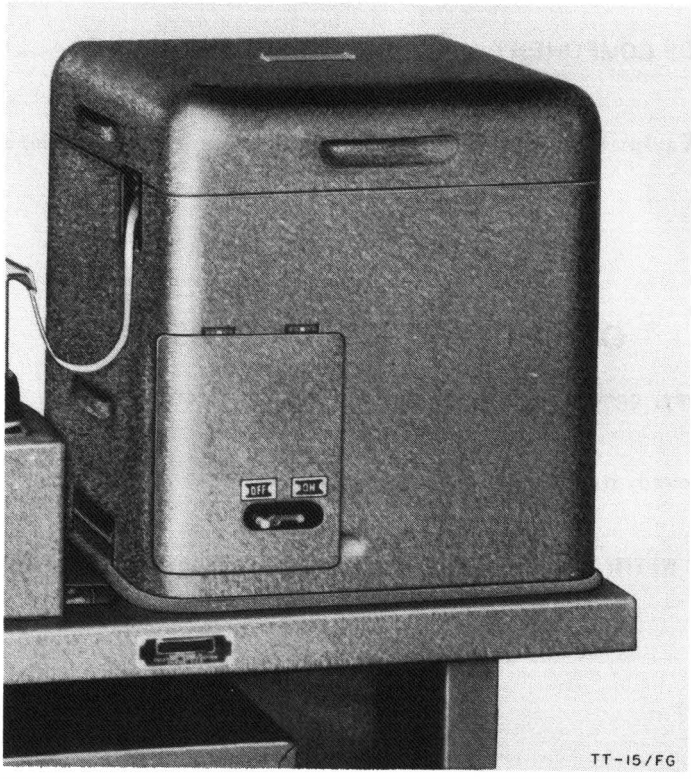
MOTOR CHARACTERISTICS: A-c series-governed motor; 2,100 rpm.

POWER REQUIREMENTS: 180 - 300 w of 105-125 v dc or 95-250 v, 25/60 cyc ac.

PHYSICAL CHARACTERISTICS

Teletypewriter TT-10/FG weighs 400 pounds net. Packed for domestic or export shipment: total weight 652 pounds, total volume 33.75 cu ft, 0.84 ship ton. Shipped in 3 packages.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 18 Feb 52	**AN/FGC-TYPE** AN/COMP TYPE NUMBER: TT-15/FG REPERFORATOR



Reperforator TT-15/FG is an automatic teletypewriter receiving equipment which receives electrical impulses (according to the five-unit, start-stop teletypewriter code) and delivers messages so received in the form of perforated paper tape. It is used at army and higher headquarters.

This equipment consists of a motor-driven mechanism that provides adjustment for distortion in the circuit in which it operates and also includes a low auxiliary table with casters.

It can be used in conjunction with Teletypewriter TT-7/FG and similar equipment to provide an automatic teletypewriter receiving facility, and the perforated tape produced can be used to transmit from standard transmitter-distributor equipment to another line, as in tape relay applications.

It is powered by conventional 110 v ac.

AN/FGC-TYPE	INSTRUCTION LITERATURE: TM 11-2223
TT-15/FG : AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
REPERFORATOR	USING SERVICE : Army, Navy
	DATE OF THIS SHEET : 18 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army, communications zone, and zone of interior.

INSTALLATION: Ground, fixed.

CAN COMMUNICATE WITH: Terminal, repeater, or station apparatus over wire, cable, carrier, or radioteletype standard communication facilities composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Automatic reception from line circuits in perforated tape without typing.

OPERATING SPEED: 368.1 opm and 404 opm; 60 wpm and 66 wpm.

MOTOR CHARACTERISTICS: Series-governed motor; 110 v, 50/60 cyc ac.

POWER REQUIREMENTS: 110 v, 50/60 cyc ac

PHYSICAL CHARACTERISTICS

Reperforator TT-15/FG weighs 134 pounds net, volume 2 cu ft. Packed for export shipment: total weight 180 pounds, total volume 7 cu ft.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 18 Feb 52	**AN/FGC-TYPE** AN/COMP TYPE NUMBER: TT-16/FG REPERFORATOR



Reperforator TT-16/FG is an automatic teletypewriter receiving equipment designed to operate in standard teletypewriter communication facilities serving army and higher headquarters.

This equipment consists essentially of a single unit having standard communication type pallets, perforating, control, and related mechanisms inclosed in a steel unit housing installed on a low table.

It can be used for automatic receiving or for monitoring and produces typed and perforated tape of messages received which can be used to transmit automatically from transmitter-distributor equipment. This reperforator can be used in conjunction with automatic transmitting equipment in torn-tape switching, relay, and similar applications.

It operates from 110 v ac.

AN/FGC- TYPE	INSTRUCTION LITERATURE: TM 11-2223
TT-16/FG : AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
REPERFORATOR	USING SERVICE : Army, Navy
	DATE OF THIS SHEET : 18 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army, communications zone, and zone of interior.

INSTALLATION: Fixed plant or semipermanent.

CAN COMMUNICATE WITH: Terminal, repeater, or station apparatus over wire, cable, carrier, or radioteletype standard communication facilities composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Automatic reception from line circuits in perforated tape with typewritten characters.

OPERATING SPEED: 368.1 opm and 404 opm; 60 wpm and 66 wpm.

MOTOR CHARACTERISTICS: Series-governed motor; 110-v, 50/60 cyc ac.

POWER REQUIREMENTS: 110 v, 50/60 cyc ac.

PHYSICAL CHARACTERISTICS

Reperforator TT-16/FG weighs 62.5 pounds net, volume 2.2 cu ft. Packed for export shipment: total weight 150 pounds, total volume 9.8 cu ft.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 18 Feb 52	**AN/FGC-TYPE** AN/COMP TYPE NUMBER: TT-17/FG REPERFORATOR



Reperforator TT-17/FG is an automatic teletypewriter receiving equipment designed to operate in weather data teletypewriter facilities serving army and higher headquarters.

This equipment consists essentially of a single unit that has its weather data communication type pallets and perforating, control, and related mechanisms inclosed in a steel unit housing installed on a low table.

It can be used for automatic receiving or for monitoring and produces typed and perforated tape of messages received which can be used to transmit automatically from transmitter-distributor equipment. This teletypewriter can be used in conjunction with automatic transmitting equipment in torn-tape switching, relay, and similar applications.

It operates from 110 v ac.

AN/FGC-TYPE	INSTRUCTION LITERATURE: TM 11-2223
	CLASSIFICATION OF EQUIPMENT: Unclassified
TT-17/FG :AN/COMP TYPE NUMBER	USING SERVICE : Army, Navy
REPERFORATOR	DATE OF THIS SHEET: 18 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army, communications zone, and zone of interior.

INSTALLATION: Ground, fixed.

CAN COMMUNICATE WITH: Terminal, switching, repeater, or station apparatus of the weather communication facility composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Automatic reception from line circuits in perforated tape with typewritten characters.

OPERATING SPEED: 368.1 opm and 404 opm; 60 wpm and 66 wpm.

MOTOR CHARACTERISTICS: Series-governed motor.

POWER REQUIREMENTS: 110 v, 50/60 cyc ac.

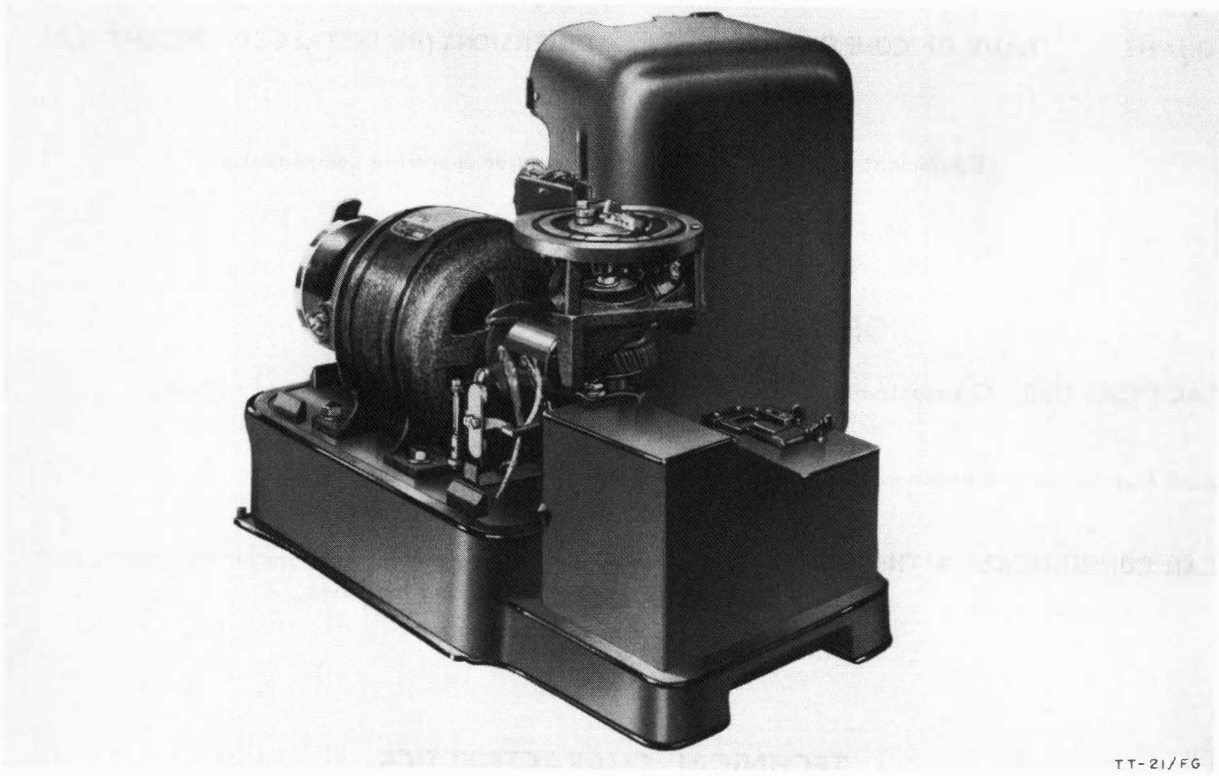
PHYSICAL CHARACTERISTICS

Reperforator TT-17/FG weighs 62.5 pounds net, volume 2.2 cu ft. Packed for export shipment: total weight 150 pounds, total volume 9.8 cu ft.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 12 Feb 52

AN/FGC-TYPE

AN/COMP TYPE NUMBER: TT-21/FG
TRANSMITTER-DISTRIBUTOR



TT-21/FG

Transmitter-Distributor TT-21/FG is an automatic teletypewriter transmitting equipment. It is used where necessary to insure privacy of teletypewriter communication in large communications centers in the communications zone of a theater of operations or in the zone of interior.

This equipment is a single-channel, motor-driven unit consisting of tape-sensing, tape-feeding, and transmitting mechanisms and a motor inclosed within a metal housing. Includes a special start magnet, power and line cords, and end-of-line stop mechanism.

Operates from 115 v, 25/60 cyc ac.

AN/FGC-TYPE	INSTRUCTION LITERATURE: TM 11-2222
TT-21/FG :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TRANSMITTER-DISTRIBUTOR	USING SERVICE : Army, Navy
	DATE OF THIS SHEET : 12 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Communications zone of theater of operations or in the zone of interior.

INSTALLATION: Permanent or semipermanent fixed plant installations.

CAN COMMUNICATE WITH: Terminal or station apparatus in a privacy teletypewriter system, over specially provided secure connecting facilities.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Transmits five-unit, start-stop teletypewriter code impulses from a perforated tape through electromechanical operation.

OPERATING SPEED: 368.1 opm.

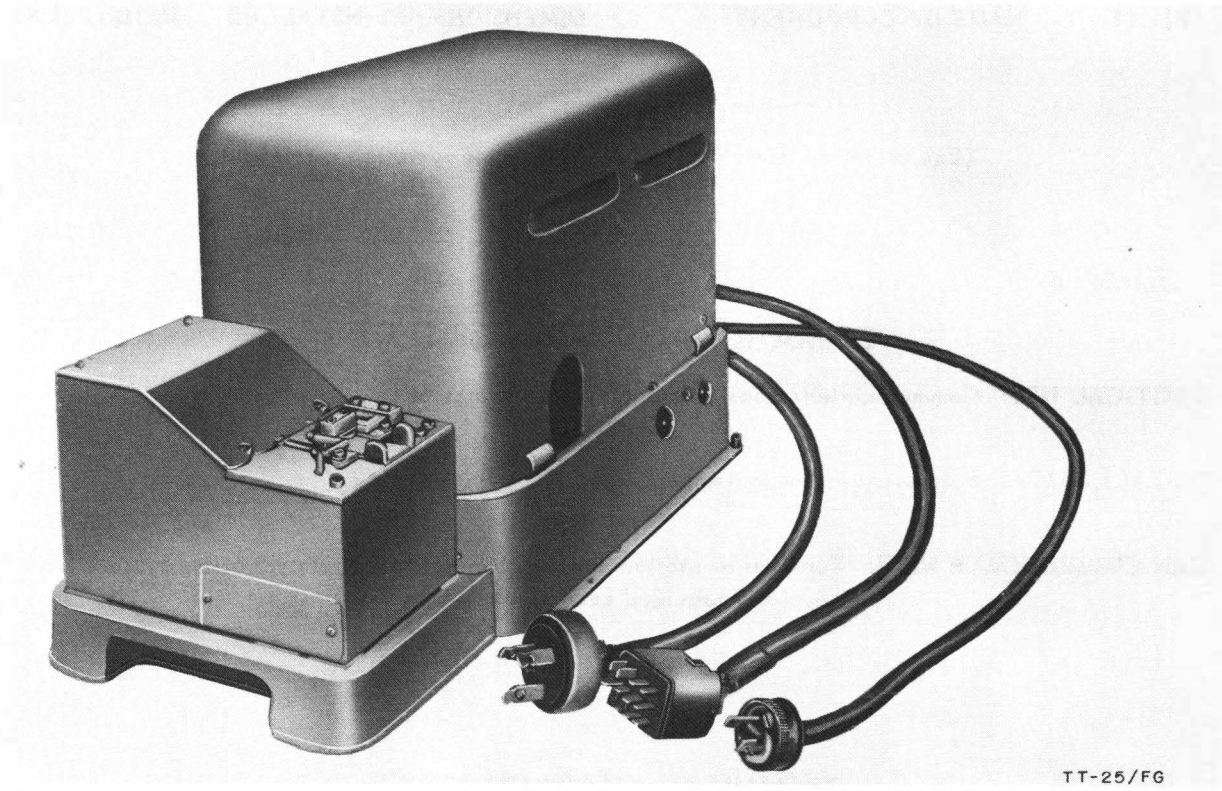
MOTOR CHARACTERISTICS: A-c series-governed motor; tuning fork 87.6 vps; 2,100 rpm.

POWER REQUIREMENTS: 115 v, 25/60 cyc ac.

PHYSICAL CHARACTERISTICS

Transmitter-Distributor TT-21/FG measures 15-1/2 x 8-3/4 x 9 inches, net weight 35 pounds, volume 1.5 cu ft. Packed for domestic shipment: total weight 70 pounds, total volume 5 cu ft. Packed for export shipment: total weight 107 pounds, total volume 5.2 cu ft.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 12 Feb 52	**AN/FGC-TYPE** AN/COMP TYPE NUMBER: TT-25/FG TRANSMITTER-DISTRIBUTOR



Transmitter-Distributor TT-25/FG is an automatic teletypewriter transmitting equipment which sends from perforated paper tape. It is used where necessary to insure privacy of teletypewriter communication at large communications centers in the communications zone of a theater of operations or in the zone of interior.

This equipment is a single-channel, motor-driven unit consisting of tape-sensing, tape-feeding, and signal impulse transmitting mechanisms and a motor inclosed within a metal housing. Includes a special start magnet, power and line cords, and end-of-line stop mechanism.

It is operated from 115 v ac.

AN/FGC-TYPE	INSTRUCTION LITERATURE: TM 11-2222
	CLASSIFICATION OF EQUIPMENT: Unclassified
TT-25/FG : AN/COMP TYPE NUMBER	USING SERVICE : Army
TRANSMITTER-DISTRIBUTOR	DATE OF THIS SHEET: 12 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Communications zone of theater of operations or in zone of interior.

INSTALLATION: Permanent or semipermanent fixed plant installations.

CAN COMMUNICATE WITH: Terminal or station apparatus in a privacy teletypewriter system, over specially provided secure connecting facilities.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Transmits five-unit, start-stop teletypewriter code impulses from perforated tape through electromechanical operation.

OPERATING SPEED: 368.1 opm.

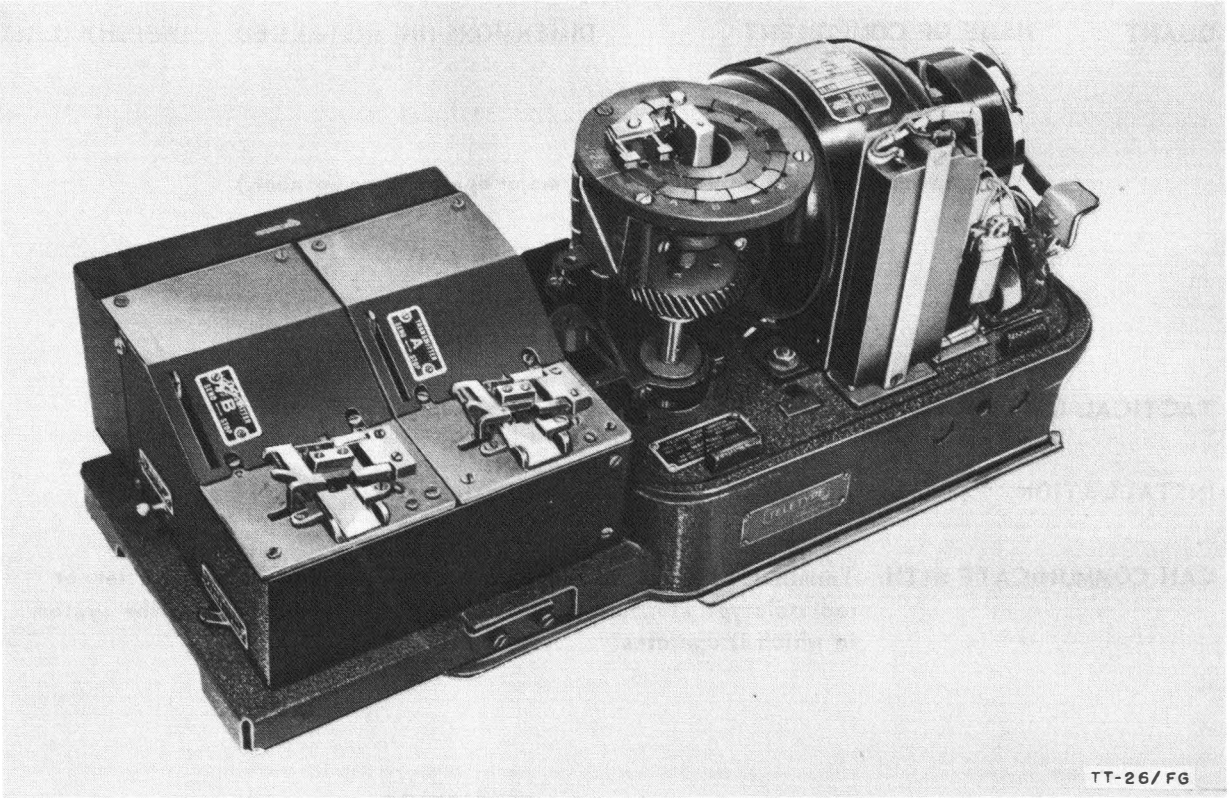
MOTOR CHARACTERISTICS: A-c series-governed motor; tuning fork 87.6 vps; 2,100 rpm.

POWER REQUIREMENTS: 115 v, 25/60 cyc ac.

PHYSICAL CHARACTERISTICS

Transmitter-Distributor TT-25/FG measures 15-1/2 x 8-3/4 x 9 inches, net weight 35 pounds, volume 1.5 cu ft. Packed for domestic or export shipment: total weight 70 pounds, total volume 5 cu ft.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 18 Feb 52	**AN/FGC-TYPE** AN/COMP TYPE NUMBER: TT-26/FG TRANSMITTER-DISTRIBUTOR



Transmitter-Distributor TT-26/FG is an automatic teletypewriter transmitting equipment which sends electrical impulses (according to the five-unit, start-stop teletypewriter code) to two lines, simultaneously from previously perforated paper tape. It is used in the communications zone of a theater of operations or in the zone of interior.

This equipment consists essentially of a motor-driven unit and electrical pulsing contacts and related controls.

It can be used in torn-tape switching applications and teletypewriter tape relay operation.

It operates on 105/125 v, 50/60 cyc, ac.

AN/FGC-TYPE	INSTRUCTION LITERATURE: TM 11-2222
TT-26/FG :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TRANSMITTER-DISTRIBUTOR	USING SERVICE: Army
	DATE OF THIS SHEET: 18 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Communications zone of a theater of operations or the zone of interior.

INSTALLATION: Permanent or semipermanent fixed plant installations.

CAN COMMUNICATE WITH: Terminal, repeater, or station apparatus over wire, cable, carrier, or radioteletype standard communication facilities composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Transmits five-unit, start-stop teletypewriter code impulses from perforated tape.

OPERATING SPEED: 368.1 opm and 404 opm; 60 wpm and 66 wpm.

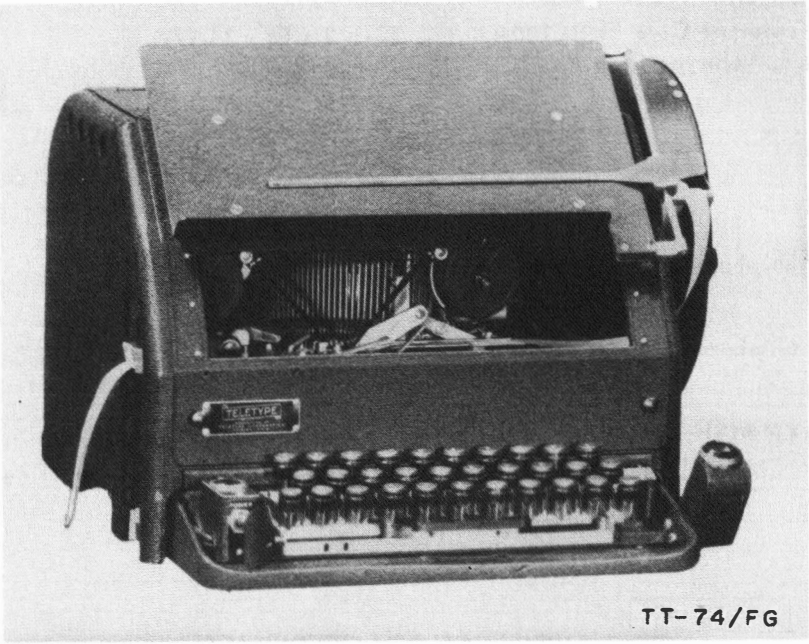
MOTOR CHARACTERISTICS: Series-governed motor; 105/125 v, 50/60 cyc ac.

POWER REQUIREMENTS: 105/125 v, 50/60 cyc ac.

PHYSICAL CHARACTERISTICS

Transmitter-Distributor TT-26/FG weighs 35 pounds net, volume 0.83 cu ft. Packed for both domestic or export shipment: total weight 70 pounds, total volume 5 cu ft.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 May 52	**AN/FGC-TYPE** AN/COMP TYPE NUMBER: TT-74/FG TELETYPEWRITER REPERFORATOR



Teletypewriter Reperforator TT-74/FG is sending and receiving teletypewriter station equipment which produces typed and perforated paper tape of messages received from the line and which can transmit to the line from tape so produced. It can be used in tape-relay and torn-tape switching applications and for monitoring where a permanent record of messages is needed.

It consists essentially of a commercial (Teletype Corp Model 14) send-receive typing reperforator and is designed for table or shelf mounting.

AN/FGC-TYPE

TT-74/FG :AN/COMP TYPE NUMBER

TELETYPEWRITER REPERFORATOR

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Typing Reperforator Teletype Corp FPR23GB246	Not Available	Not Available
1	Cover, Teletype Corp FPRC200AA	10-1/2 x 14 x 16-1/2	" "
1	Keyboard, Teletype Corp FK110LD 15	Not Available	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne or ground.

CAN COMMUNICATE WITH: Identical or equivalent, terminal, repeater, and transmitting and receiving teletypewriter equipment operating in the connecting facility or system.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Receives teletypewriter messages and simultaneously prints and perforates a tape for retransmitting the message when desired. On outgoing messages, it transmits a neutral or polar signal on the line and simultaneously prints and perforates a tape for station record or duplicate transmission.

OPERATING SPEED: 368 opm, approximately 60 wpm.

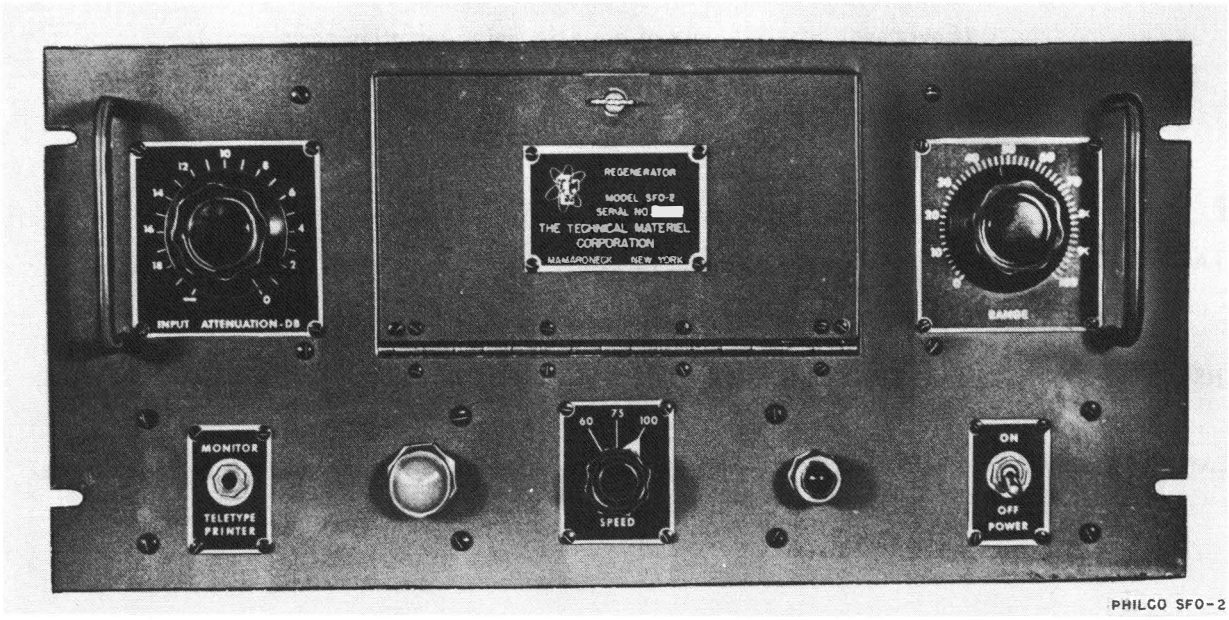
MOTOR CHARACTERISTICS: Series-governed.

POWER REQUIREMENTS: 110 - 115 v, 50/60 cyc, 1 phase ac.

PHYSICAL CHARACTERISTICS

Teletypewriter Reperforator TT-74/FG measures 10-1/2 x 14 x 16-1/2 inches.

STATUS: Commercial CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 11 Jun 52	**AN/FGC-TYPE** COMMERCIAL TYPE NUMBER: PHILCO MODEL SFO-2 REGENERATOR



PHILCO SFO-2

The Philco Model SFO-2 Regenerator (Technical Materiel Corporation) is a device used for the correction of mark-space distortion of teletypewriter signals on either wire or radio communication facilities.

This regenerator equipment accepts signals in either audio (ON/OFF) form or in d-c form (polar or neutral), at 60, 75, or 100 wpm. The acceptable input distortion may be as much as 45%; the output distortion is less than 5%.

Regeneration of the signals is accomplished by electronic means. Sampling pulses are generated in the unit to synchronize with the center of each pulse. When the sampling pulse coincides with a mark, the pulse operates a relay circuit to produce a regenerated mark at the output; when the sampling pulse coincides with a space, a space pulse of proper duration is produced at the output.

Power requirements are 85 w of 110/220 v, 50/60 cyc ac.

AN/FGC-TYPE	INSTRUCTION LITERATURE: Not Available
PHILCO MODEL SFO-2 :COMMERCIAL TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
REGENERATOR	USING SERVICE : Air Force
	DATE OF THIS SHEET : 11 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Long distance, radio link or landline. Project material issued in accordance with AFR-100-17.

INSTALLATION: Ground, fixed, rack mounted.

CAN COMMUNICATE WITH: This equipment is used in conjunction with related primary communication apparatus.

TECHNICAL CHARACTERISTICS

TYPE COMMUNICATION CIRCUITS: Input Keying: (tone 500 to 3,600 cps) -20 db to 0 db into 600-ohm line; 30 ma polar or 60 ma neutral dc (d-c positive or negative to ground). Output: Mercury relay contacts closed on mark during operation or during any steady input state into 600-ohm line.

CONTROLS: 60, 75, or 100 wpm teletypewriter signal selector; input attenuator OFF/ON; monitor plug-in jack; signal selector panel; range adjuster.

POWER REQUIREMENTS: 85-w, 110/220 v, 50/60-cyc ac.

PHYSICAL CHARACTERISTICS

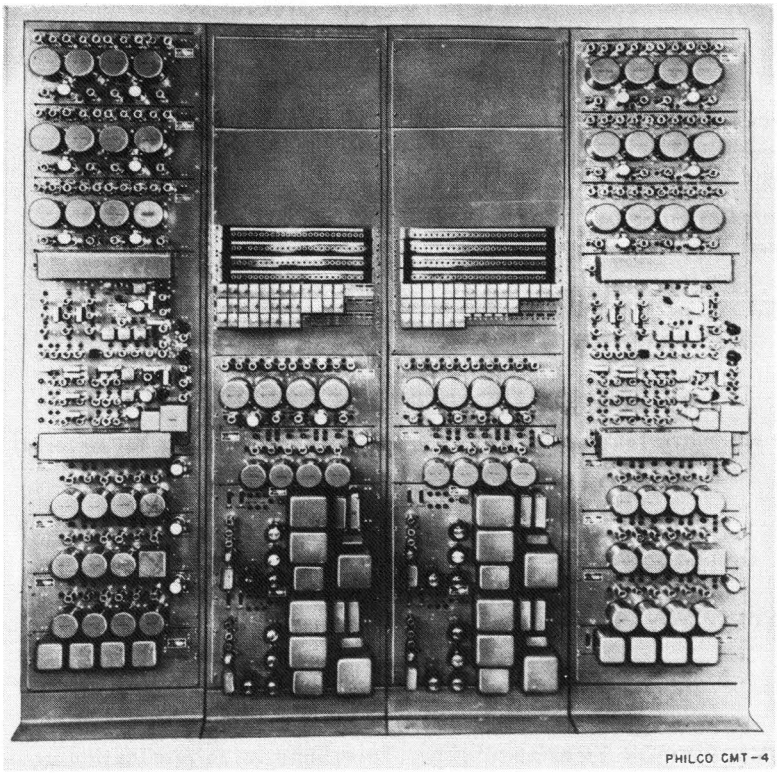
Philco Model SFO-2 Regenerator measures 19 x 8-3/4 x 10 inches, net weight 55 pounds, volume 0.98 cu ft. Packed for domestic or export shipment: total weight 85 pounds, total volume 1 cu ft. Shipped in 1 package.

STATUS: Commercial
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 7 Jun 52

AN/FGC-TYPE

COMMERCIAL TYPE NUMBER: PHILCO TYPE CMT-4

VOICE CARRIER EQUIPMENT



Voice Carrier Equipment Philco Type CMT-4 is a 4- to 24-channel, multiplex pulse, a-m terminal facility which normally operates with AN/TRC-30 to form a microwave radio relay terminal station. This equipment is built on a four-channel basis and any combination of these units may be made to provide additional circuits up to a maximum of 24 channels.

For teletypewriter operation, any channel can be subdivided into 12 teletypewriter channels by using Philco CMT-2 teletypewriter equipment, or equal.

Normal output is on a four-wire basis; therefore, for voice operation, additional voice terminating equipment, (Philco VTE or equal) is required for party line, dial, or ring-down two-wire systems.

Each of the available 24 channels is from 50 to 3,300 cps but wide-band channels of 50 to 6,600 cps are also available.

This equipment is capable of handling telephone, telemetering, facsimile, and teletypewriter communications by adding auxiliary equipment.

Audio inputs are 600 ohms, balanced, at a normal level of -13 db. Facilities are available for insertion and drop-out of channels at relay stations.

Power requirements for a 24-channel duplex system are 1 kw of 117-v, 60-cyc, 1 phase ac.

AN/FGC-TYPE

PHILCO TYPE CMT-4 :COMMERCIAL TYPE NUMBER
VOICE CARRIER EQUIPMENT

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET : 7 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter common band amplifier	19 x 15-3/4 x 15	Not Available
1	Receiver	19 x 15-5/8 x 15	" "
1 to 6	Demodulator units	19 x 8-3/4 x 15	" "
1 to 6	Modulator units	19 x 7 x 15	" "
2	Filament supplies	19 x 3-3/8 x 15	" "
4	Power supplies	19 x 12-1/4 x 15	" "
6	Jack fields and 2 attenuator fields	Not Available	" "
1 to 5	Racks (with equipment)	20-3/8 x 84-3/8 x 15	320 (each)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued on any organizational level as project material in accordance with AFR 100-17.

INSTALLATION: Ground fixed.

CAN COMMUNICATE WITH: This is an auxiliary equipment used in conjunction with primary communication apparatus.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Telephone voice termination equipment, microwave radio relay equipment, teletypewriter carrier equipment, facsimile equipment, cable and wire.

FACILITIES AFFORDED: Four wire telephone circuits, 4 to 24 channels (narrow band, voice) 60 to 3,300 cps; or any two narrow band voice channels can be combined to form 1 wide band 50 to 6,600 kc channel.

FREQUENCY: Normal channel 50 to 3,300 cps. Wide band channels 50 to 6,600 cps.

TYPE OF MODULATION: Pulse amplitude modulation.

TYPE RINGING: 20 cyc (normally supplied by ancillary voice termination equipment).

POWER REQUIREMENTS: 24-channel, full duplex operation: 1 kw, 117-v ($\pm$ 5%) 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Voice Carrier Equipment Philco Type CMT-4 measures 102 x 84-3/8 x 15 inches, net weight 1,600 pounds, volume 74.77 cu ft. Packed for either domestic or export shipment: total weight 1,840 pounds, total volume 80 cu ft, 2 ship tons. Shipped in 5 packages.

(Logistical data is for 24-channel duplex termination.)

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

AN/FGQ-1

TELETYPEWRITER REPEATER-MIXER



Teletypewriter Repeater-Mixer AN/FGQ-1 is used with other teletypewriter equipment, shown above, to provide a secrecy system in which plain text messages may be automatically enciphered before transmission to a distant station. Incoming messages received in cipher are automatically deciphered and appear on the recording teletypewriter in plain text.

These teletypewriter station arrangements are adaptable for on-line and off-line operations. The former operation applies to the direct connection of this equipment to the transmission path to the distant station; the latter, to local enciphering and deciphering of messages received and sent by other apparatus to the distant station.

AN/FGQ–1

TELETYPEWRITER REPEATER-MIXER

INSTRUCTION LITERATURE: TM 11–2209

USING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Teletypewriter Repeater-Mixer AN/FGQ–1	30½ x 26 x 22	160

OPERATIONAL CHARACTERISTICS

TACTICAL USE: In communication centers at higher headquarters.

INSTALLATION: Fixed station.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: CIPHER-LOCAL TEST-TEXT, BREAK-BREAK RELEASE, STA TEST keys.

OPERATING SPEED: 60 wpm or 368 opm.

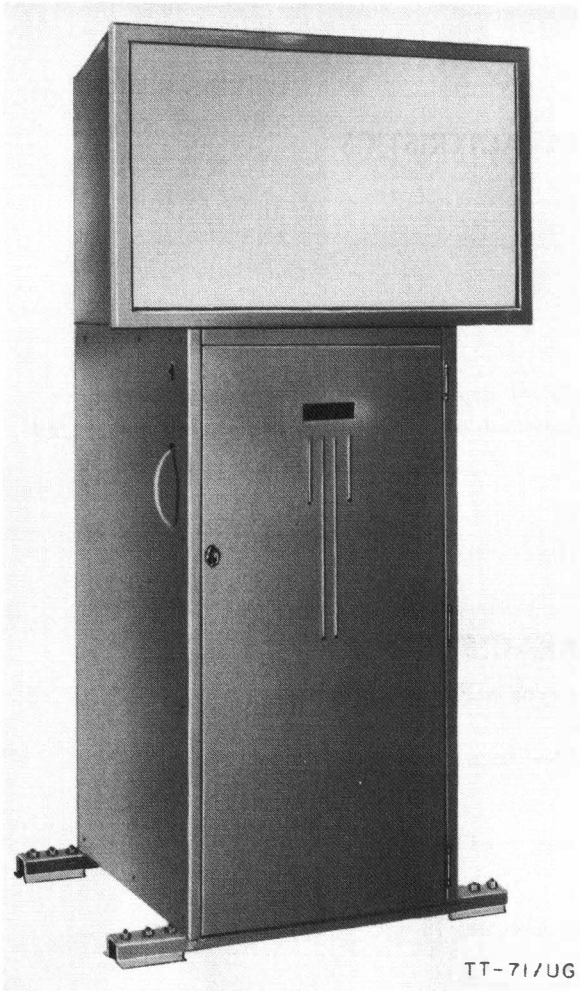
MOTOR CHARACTERISTICS: 95, 105, 115, 125, 190, 210, 230, or 250 v; 25, 40, 50, or 60 cy ac (ac series or univ); 95 to 125 v, 60 cy ac (ac syn); 105 to 125 v dc (univ).

POWER REQUIREMENTS: 300 to 315 w, 115/125 or 230 v, 50/60 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	30½ x 26 x 22	160	10.1		
DOMESTIC PACK:					
EXPORT PACK:		408	20.9	.52	2

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 18 Feb 52	**AN/FGQ-TYPE** AN/COMP TYPE NUMBER: TT-71/UG TELETYPEWRITER PRINTER-PROJECTOR



TT-71/UG

Teletypewriter Printer-Projector TT-71/UG is fixed station receiving-only equipment. It projects its received messages upon a translucent screen and is used for conference communication, group orientation and instruction, and similar applications. It is used at higher headquarters.

This equipment consists of a single unit which contains two receiving units and the optical projection system and illumination source. One of the receiving units is a commercial (Teletype Corp Model 14, or equal) page-printing teletypewriter. This unit is supported within the cabinet by the projector frame which also holds the optical assembly. The other receiving unit is a commercial (Teletype Corp Model 14, or equal) type-bar tape printer. The page-printer unit produces typewritten messages, in successive lines, upon a transparent web, from which the message is projected upon a screen, approximately, 3 feet wide by 2 feet high. The tape-printer unit typewrites the message upon a continuous strip of paper tape which may be used for reference purposes.

Operates on about 1-kw of 110-v ac.

AN/FGQ-TYPE

TT-71/UG :AN/COMP TYPE NUMBER
TELETYPEWRITER PRINTER-PROJECTOR

INSTRUCTION LITERATURE: TM 11-2228
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 18 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army and higher headquarters.

INSTALLATION: Fixed plant.

CAN COMMUNICATE WITH: Terminal, repeater, or station apparatus over wire, cable, carrier, or radioteletype standard communication facilities composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Standard communications type pallet arrangement.
Five-unit start-stop code.
Optical system, using 500-w lamp.

OPERATING SPEED: 368.1 opm, 45 English characters per line.

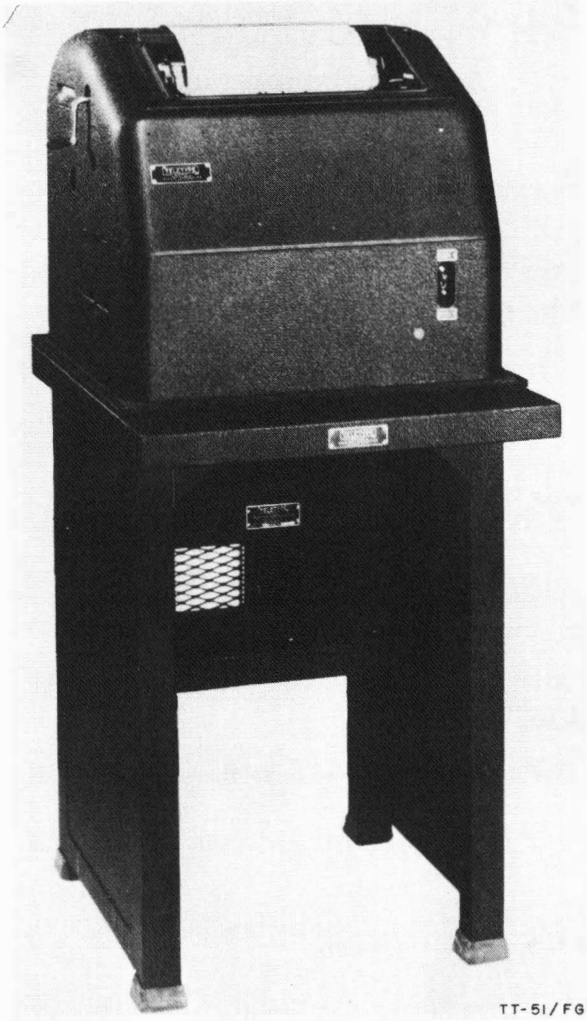
MOTOR CHARACTERISTICS: Synchronous; 110 v, 60 cyc, ac; 10-amp start - 2-amp run.

POWER REQUIREMENTS: 110 v, 60 cyc, ac; approximately 1 kw.

PHYSICAL CHARACTERISTICS

Teletypewriter Printer-Projector TT-71/UG measures 81 x 33 x 37 inches.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 10 Jun 52	**AN/FGR-TYPE** AN/COMP TYPE NUMBER: TT-51/FG TELETYPEWRITER



TT-51/FG

Teletypewriter TT-51/FG is a general purpose, receiving only, page printing teletypewriter equipment used in wire or radio communication circuits at shore stations. The typing unit has standard English characters.

It consists essentially of a commercial (Teletype Corp Model 15) page printing teletypewriter, and associated component.

The equipment has a governed-series motor, and can be operated from any 50/60-cyc, 1-phase, a-c power source.

AN/FGR-TYPE

TT-51/FG :AN/COMP TYPE NUMBER
TELETYPEWRITER

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Typing Unit, Teletype Corp Model, BP119/210	Not Available	Not Available
1	Base, Teletype Corp Model, BB50	" "	" "
1	Power Unit, Teletype Corp Model, REC29	" "	" "
1	Table, Teletype Corp Model, XRT115	" "	" "
1	Motor, Teletype Corp Model, MU27	" "	" "
1	Relay, Teletype Corp Model, RY30	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore station.

INSTALLATION: Ground, fixed.

CAN COMMUNICATE WITH: Five unit code teletypewriter transmitting equipment operating at 368 opm.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Automatic reception from line circuits in printed page form.

OPERATING SPEED: 368 opm; 72 English characters per line.

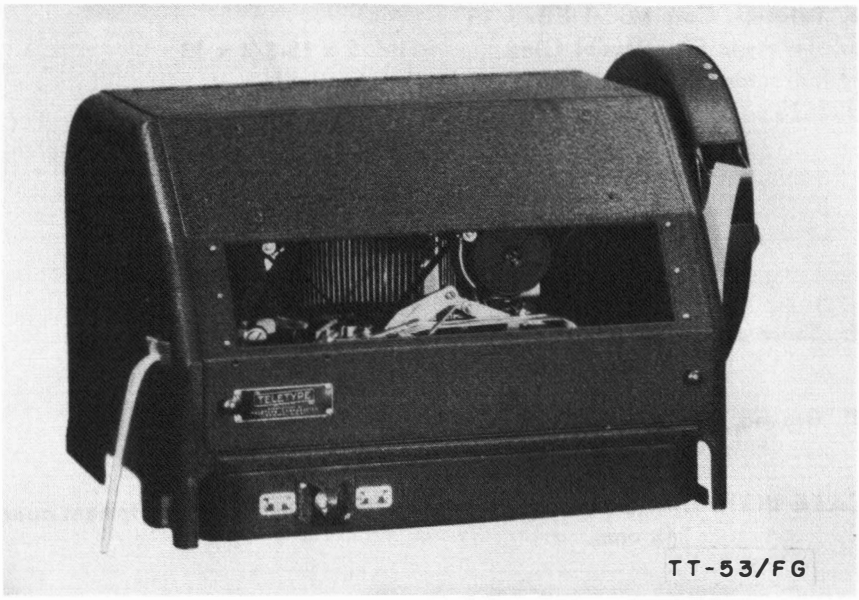
MOTOR CHARACTERISTICS: Governed-series, 2,102 rpm, 115-v, a-c motor.

POWER REQUIREMENTS: 240 w, 115 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Teletypewriter TT-51/FG measures 38-3/4 x 24 x 24 inches, net weight 215 pounds.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 12 Jun 52	**AN/FGR-TYPE** AN/COMP TYPE NUMBER: TT-53/FG REPERFORATOR



Reperforator TT-53/FG is an automatic tape-perforating and typing teletypewriter receiving equipment used for production of message tapes which may be distributed later by a transmitter-distributor to line circuits or to local page printers. It prints English characters.

It consists essentially of a commercial (Teletype Corp Model 14) reperforator (receive only) and may be operated from any 115-v, 50/60-cyc, 1 phase power source.

Printed characters simplify tape handling by eliminating the necessity of reading code perforations.

AN/FGR-TYPE

TT-53/FG :AN/COMP TYPE NUMBER
REPERFORATOR

INSTRUCTION LITERATURE: TM 11-2223
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 12 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Reperforator, Teletype Corp Model FPR21GB226	Not Available	Not Available
1	Base, Teletype Corp Model FB43/15	" "	" "
1	Cover, Teletype Corp Model C166	11-1/2 x 15-3/4 x 13	" "
1	Speed Indicator, Teletype Corp No. 103628	Not Available	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

CAN COMMUNICATE WITH: Any 5 unit code teletypewriter transmitting equipment operating at 368 opm.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Communications characters; 5 unit code; automatic reception from line circuits in perforated tape, with typing.

OPERATING SPEED: 368 opm.

MOTOR CHARACTERISTICS: Series-governed motor, 2,102 rpm.

POWER REQUIREMENTS: 115 v, 50/60 cyc, 1 phase.

PHYSICAL CHARACTERISTICS

Reperforator TT-53/FG measures 11-1/2 x 15-3/4 x 13 inches.

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 28 June 1956

AN/FGR–TYPE

TT–92/FG

REPERFORATOR, TELETYPEWRITER



Teletypewriter Reperforator TT–92/FG is a general-purpose receiving-only typing reperforator that automatically types and perforates messages on 11/16-inch paper tape.

This equipment is used as fixed plant equipment in message and signal centers.

AN/FGR-TYPE

TT-92/FG

REPERFORATOR, TELETYPEWRITER

INSTRUCTION LITERATURE: Teletype Manual 96MA

USING SERVICE: USN

DATE OF THIS SHEET: 28 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore installations.

INSTALLATION: Shore stations.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Communication characters (7.42 unit code).

OPERATING SPEED: 368 opm.

MOTOR CHARACTERISTICS: Syn (1,800 rpm).

POWER REQUIREMENTS: 160 w, 115 v, 60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	7½ x 11½ x 12	67.5			
DOMESTIC PACK:		180.0	13		1
EXPORT PACK:					

STATUS:

CLASSIFICATION OF EQUIPMENT: Unclassified

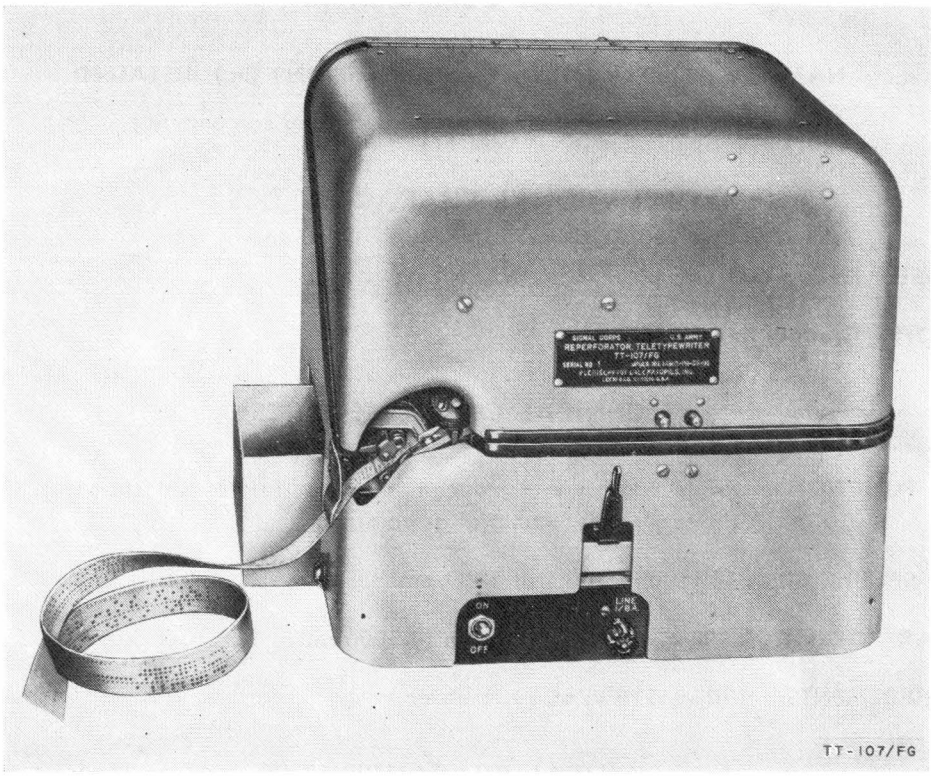
PREPARING SERVICE: USA

DATE OF THIS SHEET: 29 June 1956

AN/FG[illegible]-TYPE

TT-107/FG

REPERFORATOR, TELETYPEWRITER



Teletypewriter Reperforator TT-107/FG is a fixed station, receiving only, lightweight typing reperforator used to automatically receive messages directly from the line, or to monitor copy produced by other teletypewriters. It may be operated by either polar or neutral signals.

This equipment consists of a printing reperforator, spare parts, and accessories.

It prints English characters and perforates standard start-stop five-unit code groups at the rate of 60 or 100 wpm; the speed depends on the motor drive gear set used.

AN/FGR–TYPE

INSTRUCTION LITERATURE: TM 11–2226

USING SERVICE: USA

DATE OF THIS SHEET: 29 June 1956

TT–107/FG

REPERFORATOR, TELETYPEWRITER

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Prints English and std comm sig; perforates std start-stop five-unit code groups; receives neutral or polar sig.

OPERATING SPEED: 60 or 100 wpm; 386.1 or 600 opm.

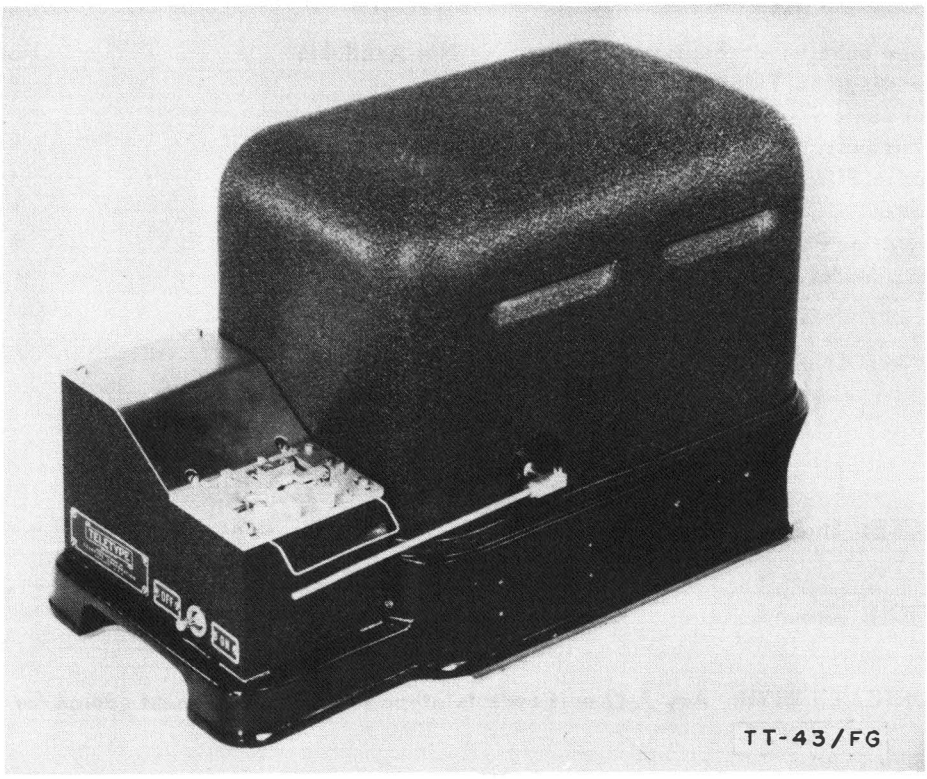
MOTOR CHARACTERISTICS: Syn, cap.-start-and-run (3,600 rpm).

POWER REQUIREMENTS: 120 w, 115 v, 60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	12 5/16 x 12 5/8 x 12 1/4	37	1.5		
DOMESTIC PACK:		68	4.1		
EXPORT PACK:		75	5.4		1

STATUS: Standard	AN/FGT-TYPE
CLASSIFICATION OF EQUIPMENT: Unclassified	AN /COMP TYPE NUMBER: TT-43/FG
USING SERVICE: Navy	TRANSMITTER-DISTRIBUTOR
DATE OF THIS SHEET: 8 May 52	



Transmitter-Distributor TT-43/FG is a tape-transmitting equipment used for automatic transmission, tape relay, or torn-tape switching in teletypewriter communication applications.

It is a single channel unit using chad or chadless tape 11/16 inches wide. It consists essentially of a commercial (Teletype Corp Model XD208AA/AJ) unit and is normally used with Teletypewriter TT-42/FG.

AN/FGT-TYPE

TT-43/FG :AN/COMP TYPE NUMBER
TRANSMITTER-DISTRIBUTOR

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 8 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Tape Sensing Mechanism	Not Available	Not Available
1	Feeding and Transmitting Mechanism	" "	" "
1	Distributor Motor and Base	" "	" "
1	Radio Filter	" "	" "
1	Cover	" "	" "
1	Mounting Plate Teletype Corp Model 115932BA	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

CAN COMMUNICATE WITH: Any 7.42 unit code teletype receiving equipment geared for 460 OPM.

TECHNICAL CHARACTERISTICS

OPERATING SPEED: 460 OPM, approximately 75 wpm.

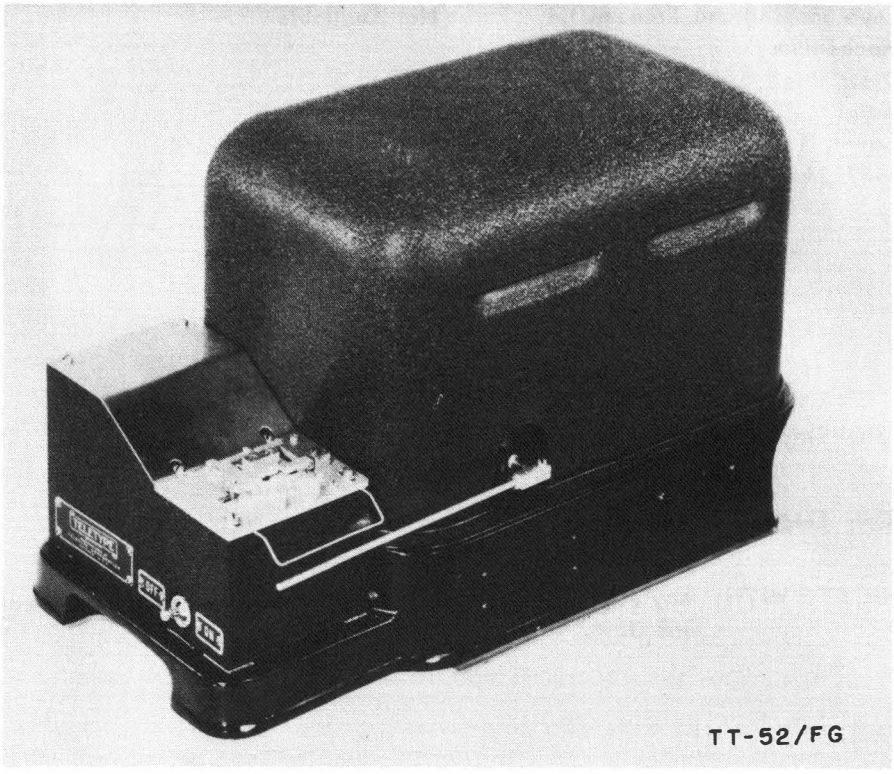
MOTOR CHARACTERISTICS: Synchronous motor, 1,800 rpm.

POWER REQUIREMENTS: 115v, 60 ($\pm$ 0.5) cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Information on Transmitter-Distributor TT-43/FG not available.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 8 May 52	AN/FGT-TYPE AN/COMP TYPE NUMBER: TT-52/FG DISTRIBUTOR-TRANSMITTER, TELETYPEWRITER



Distributor-Transmitter, Teletypewriter TT-52/FG is used for the automatic transmission of teletypewriter messages from perforated tape.

It is a general purpose transmitter-distributor designed for table or shelf mounting.

It is part of Teletypewriter Set AN/TGC-3 but may be used separately.

AN/FGT-TYPE

TT-52/FG :AN/COMP TYPE NUMBER
DISTRIBUTOR-TRANSMITTER, TELETYPEWRITER

INSTRUCTION LITERATURE: Teletype Bulletin No. 1109
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 8 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	(WEIGHT (LBS)
1	Tape Sensing and Transmitter Mechanism	Not Available	Not Available
1	Distributor	" "	" "
1	Motor	" "	" "
1	Cover, Teletype Corp Model 114713AA	9-1/2 x 16-1/4 x 8-3/4	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

CAN COMMUNICATE WITH: Any 7.42 unit code teletypewriter receiving equipment geared for 368 OPM.

TECHNICAL CHARACTERISTICS

OPERATING SPEED: 368 opm, approximately 60 wpm.

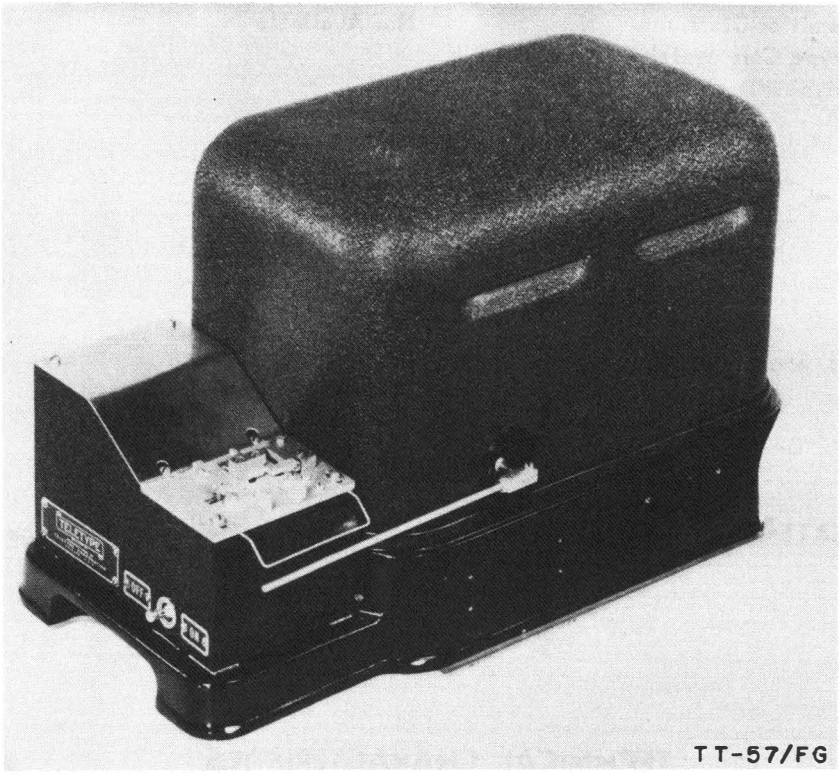
MOTOR CHARACTERISTICS: Series-governed motor.

POWER REQUIREMENTS: 65 w, 110-115 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Information on Distributor-Transmitter, Teletypewriter TT-52/FG not available.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 Jun 52	**AN/FGT-TYPE** AN/COMP TYPE NUMBER: TT-57/FG TRANSMITTER-DISTRIBUTOR



TT-57/FG

Transmitter-Distributor TT-57/FG is communication equipment used for the automatic transmission of teletypewriter messages from perforated tape. It translates code combinations into electrical impulses and transmits the impulses to one or more receiving stations.

This equipment is a single channel unit and uses chad or chadless tape. It consists of a sensing mechanism, feeding and transmitting mechanism, distributor motor, and radio filters mounted on a teletypewriter table.

AN/FGT-TYPE	INSTRUCTION LITERATURE: Teletype Corp Bulletin No. 144
TT-57/FG :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TRANSMITTER-DISTRIBUTOR	USING SERVICE : Navy
	DATE OF THIS SHEET: 9 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter-Distributor Teletype Corp Model XD200AA/AJ	Not Available	Not Available
1	Teletypewriter Table FN-31/FG	" "	40

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

CAN COMMUNICATE WITH: Any 7.42 unit code teletypewriter receiving equipment geared for 368 opm.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: 7.42 unit code; automatic transmission to line circuits from perforated tape.

OPERATING SPEED: 368 opm.

MOTOR CHARACTERISTICS: Synchronous motor, 1,800 rpm.

POWER REQUIREMENTS: 115 v, 60 cyc, 1 phase.

PHYSICAL CHARACTERISTICS

Information on Transmitter-Distributor TT-57/FG not available.

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

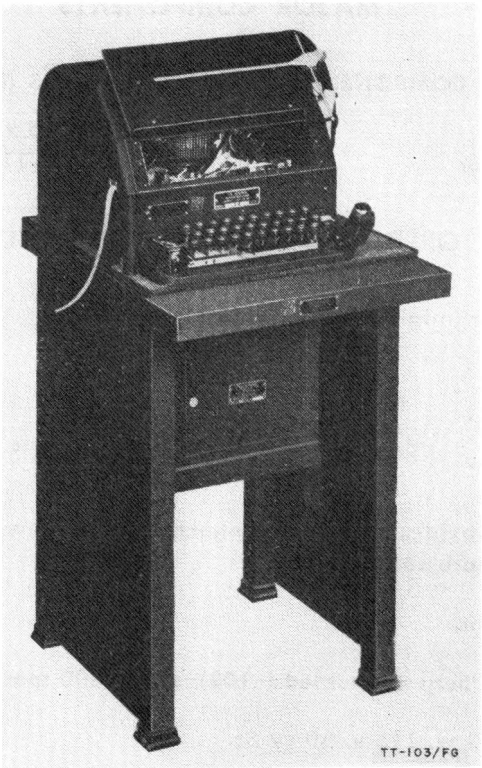
PREPARING SERVICE: USN

DATE OF THIS SHEET: 28 June 1956

AN/FGT—TYPE

TT–102/FG, TT–103/FG

REPERFORATOR-TRANSMITTER, TELETYPEWRITER



Teletypewriter Reperforator-Transmitters TT–102/FG and TT–103/FG are general-purpose send-receive typing reperforator sets. Transmission is accomplished through direct keyboard operation and messages are received on 1 1/16-inch typed and perforated paper tape.

Both equipments are identical except for the type of motors used.

AN/FGT–TYPE

INSTRUCTION LITERATURE: Teletype Manual 96MA

USING SERVICE: USN

DATE OF THIS SHEET: 28 June 1956

TT–102/FG, TT–103/FG

REPERFORATOR-TRANSMITTER, TELETYPEWRITER

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Keyboard	9 x 15 x 16	17
1	Typing reperforator	7½ x 11½ x 12	33

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Signal center (originating and relay).

INSTALLATION: Fixed.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Provides means for interchanging typewritten messages between two or more points.

OPERATING SPEED: 368 opm.

MOTOR CHARACTERISTICS: Series-governed (–102); syn, 1,800 rpm (–103).

POWER REQUIREMENTS: 160 w, 115 v, 60 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		157			
DOMESTIC PACK:		400	29.1	.7	2
EXPORT PACK:					

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

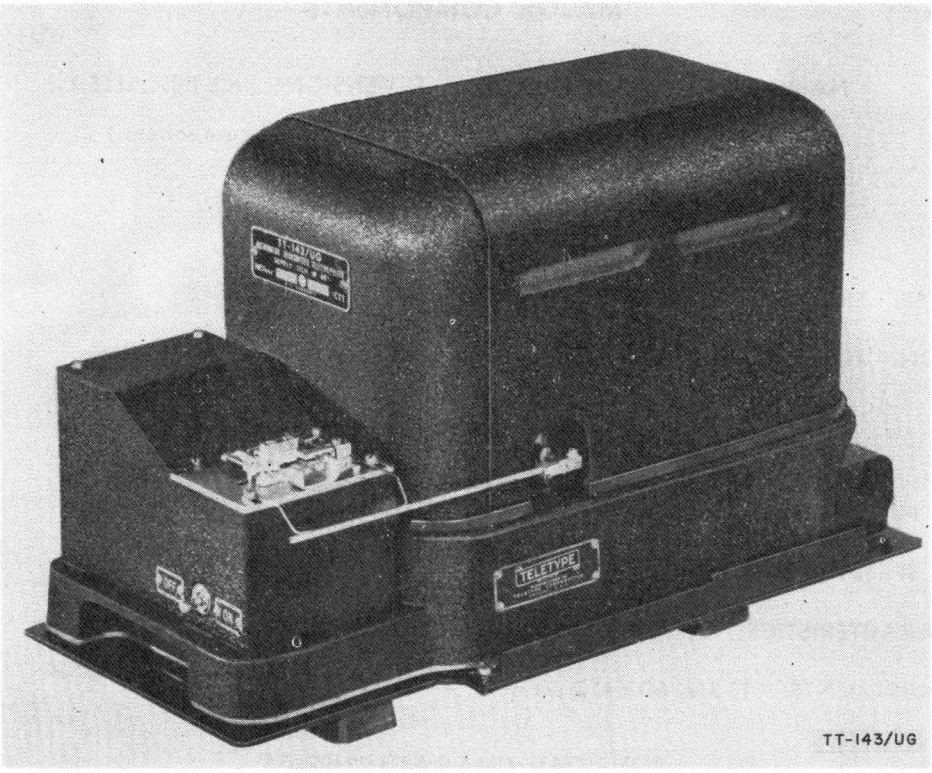
PREPARING SERVICE: USN

DATE OF THIS SHEET: 28 June 1956

AN/FGT-2 TYPE

TT–143/UG

DISTRIBUTOR-TRANSMITTER, TELETYPEWRITER



Teletypewriter Distributor-Transmitter TT–143/UG is a general-purpose teletypewriter equipment that automatically transmits from perforated paper tape.

This equipment is used as a fixed station equipment where large amounts of traffic must be handled quickly.

AN/FGT–TYPE

TT–143/UG

INSTRUCTION LITERATURE: Teletype Manual 103 MA

USING SERVICE: USN

DATE OF THIS SHEET: 28 June 1956

DISTRIBUTOR-TRANSMITTER, TELETYPEWRITER

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore installations.

INSTALLATION: Fixed station.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Automatic tape transmission.

OPERATING SPEED: 390 opm.

MOTOR CHARACTERISTICS: Syn (1,800 rpm).

POWER REQUIREMENTS: 115 v, 60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	7⅞ x 9½ x 15½	33			
DOMESTIC PACK:		110	7.4		1
EXPORT PACK:					

STATUS: L/Std

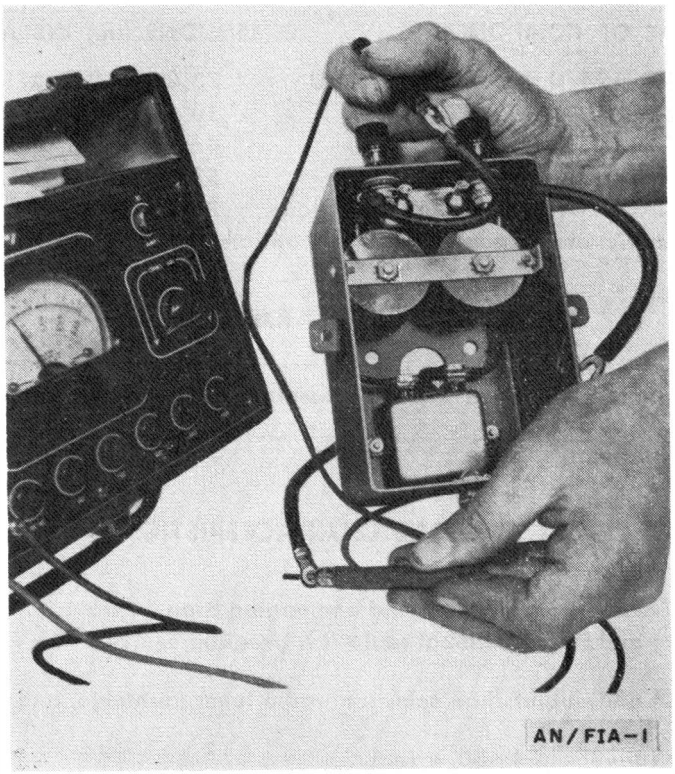
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 5 June 1956

AN/FIA-1

AUDIO DISTRIBUTING CENTRAL



Audio Distributing Central AN/FIA-1 and its associated audio input equipment amplify and distribute program material to pillow, program, and paging speakers in hospitals and similar institutions.

This equipment can originate programs from recordings or transcriptions, and it can pick up and amplify two fm, am, or short-wave broadcast programs simultaneously. Programs piped in from telephone lines or originated by speech input equipment, such as Amplifier AM-129/U, also can be distributed by this system. Four program channels and one paging channel are available. Provisions have been made for the addition of a fifth program channel and two additional radio receiver program sources.

AN/FIA–1

AUDIO DISTRIBUTING CENTRAL

INSTRUCTION LITERATURE: TM 11–2590

USING SERVICE: USA

DATE OF THIS SHEET: 5 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENTS	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1 ea	Amplifier AM–124/U through AM–128/U	73¼ x 16½ x 22½	171 to 293
3	Microphone M–10/FIA–1	10¼ h x 7½ d	9.3
1	Console OA–23/FIA–1, desk section	4 x 15 x 32	30
1	Console OA–23/FIA–1, main section	57⅜ x 30 x 74⅛	439
2	Console OA–23/FIA–1, phonograph section	33½ x 24 x 27	121

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant installations, such as hospitals and similar institutions.

INSTALLATION: Fixed station.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Four program chan and one paging chan w/provisions for a fifth program chan and two additional radio rcvr program sources.

TYPE CONTROLS: Input and output chan selection, radio tuner, turntable, and ampl cab. cont.

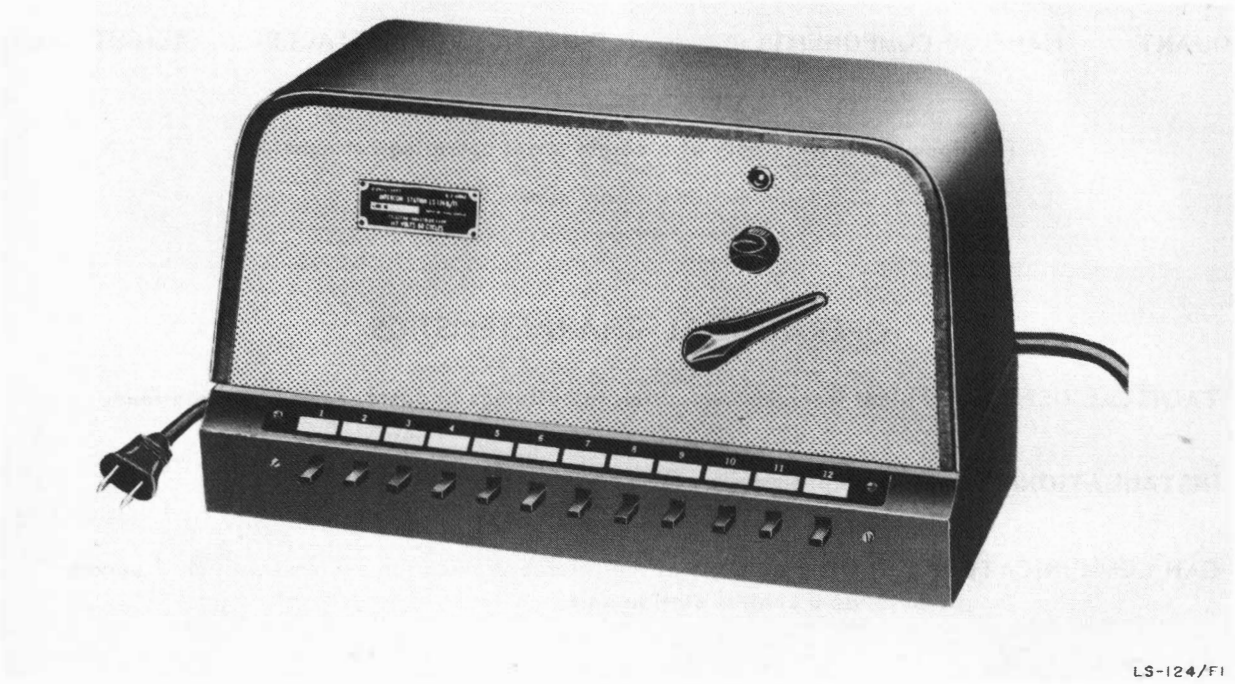
POWER OUTPUT: .5 w (driver ampl); 50 w (pa).

POWER REQUIREMENTS: 60 w (max, driver ampl), 120 w (rcvr), 206 w (max, pa), 3,072 w (max, console), 115 v, 60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	74⅛ x 57⅜ x 63½	1,918.5			
DOMESTIC PACK:		3,051			16
EXPORT PACK:					

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 8 Jan 52	**AN/FIC-TYPE** AN/COMP TYPE NUMBER: LS-124/FI INTERCOMMUNICATING STATION



LS-124/FI

Intercommunicating Station LS-124/FI is a master control station unit of an intercommunication system serving large headquarters buildings, depots, and communications centers at air stations or similar installations.

This equipment consists of a speaker microphone and an audio amplifier assembled as a single unit and is used in conjunction with as many as 12 other local station units on a one-way, talk-back, selected station, or all-talk basis.

Controls include 12 station selector switches, a talk-listen-idle switch which operates the annunciators at outlying station units, a volume control, and a pilot light.

This equipment is usually operated in conjunction with remote speaker microphone station units which cannot signal this master station.

Can operate over a trunk line connecting to another master station; the resulting combination can provide intercommunication and paging facilities.

Operates on 110/125 v ac.

AN/FIC-TYPE	INSTRUCTION LITERATURE: TM 11-2572 and TM 11-2572A
LS-124/FI : AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
INTERCOMMUNICATING STATION	USING SERVICE : Army
	DATE OF THIS SHEET : 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant intercommunication in buildings at posts, camps, and stations.

INSTALLATION: Ground or shipboard.

CAN COMMUNICATE WITH: Other stations of the intercommunication system in which it serves as a control station unit.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Serves 11 remote stations if one or more is a master station or 12 remote stations if all are speaker microphone units.

TYPE CONTROLS: Station selection (push button), volume control switch, talk-listen level switch.

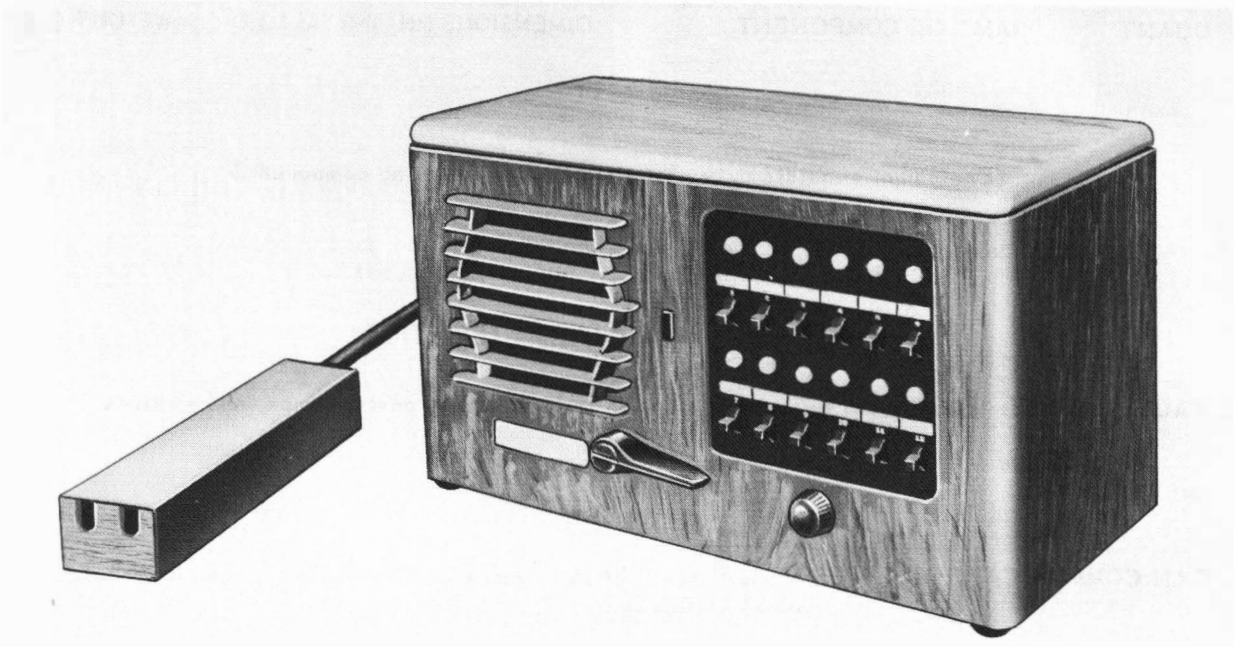
POWER OUTPUT: To line, 2 w; to speaker, 1 w.

POWER REQUIREMENTS: 110-125 v, 50/60 cyc; 25 w when in use, 12 w when idle.

PHYSICAL CHARACTERISTICS

Intercommunicating Station LS-124/FI measures 7-3/8 x 6-7/8 x 13-3/8 inches, net weight 20.5 pounds, volume 0.5 cu ft. Packed for export shipment: total weight 35 pounds, total volume 1.8 cu ft. Shipped in 1 package.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 29 Jan 52	**AN/FIC-TYPE** AN/COMP TYPE NUMBER: LS-125/FI INTERCOMMUNICATING STATION



LS-125/FI

Intercommunicating Station LS-125/FI is a master or control station unit used in an intercommunication system. It is used in headquarters buildings, depots, communications centers, or similar installations.

This equipment consists of a speaker microphone and an audio amplifier assembled as a single unit and is used in conjunction with as many as 12 other local station units on a one-way, talk-back, selected station, or all-talk basis.

Controls include 12 station selector switches, a talk-listen-idle switch which operates the annunciators at outlying station units, and a volume control.

This unit is designed specifically for use with Intercommunicating Station LS-129/FI or LS-130/FI.

Operates from a conventional a-c power source and consumes 15 w when idle.

AN/FIC-TYPE	INSTRUCTION LITERATURE: TM 11-2572
	CLASSIFICATION OF EQUIPMENT: Unclassified
LS-125/FI AN/COMP TYPE NUMBER	USING SERVICE: Army
INTERCOMMUNICATING STATION	DATE OF THIS SHEET: 29 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant intercommunication in buildings at posts, camps, and stations.

INSTALLATION: Fixed.

CAN COMMUNICATE WITH: Other stations of the intercommunication system in which it serves as a control station unit.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Serves 11 remote stations if one or more is a master station or 12 remote stations if all are speaker microphone units.

TYPE CONTROLS: Station selector switches, on-off and volume switch, and idle-listen-talk switch.

POWER OUTPUT: 2-1/2 w.

POWER REQUIREMENTS: 110-125 v, 50/60 cyc; 15 w when idle.

PHYSICAL CHARACTERISTICS

Intercommunicating Station LS-125/FI measures 7-3/8 x 6-7/8 x 13-3/8 inches, net weight 20-1/2 pounds, volume 0.5 cu ft. Packed for export shipment; total weight 70 pounds, total volume 3.3 cu ft. Shipped in 1 package.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 29 Jan 52

AN/FIC-TYPE

AN/COMP TYPE NUMBER: LS-126/FI
INTERCOMMUNICATING STATION



Intercommunicating Station LS-126/FI is a master or control station unit used in an intercommunication system. It is used in headquarters buildings, depots, communications centers, or similar installations.

This equipment consists of a speaker microphone and an audio amplifier assembled as a single unit and is used in conjunction with as many as six other local station units on a one-way, talk-back, selected station, or all-talk basis.

Controls include six station selector switches, a talk-listen-idle switch which operates the annunciators at outlying station units, and a volume control.

This unit is designed specifically for use with Intercommunicating Station LS-129/FI or LS-130/FI.

Operates from a conventional a-c power source and consumes 15 w when idle.

AN/FIC-TYPE	INSTRUCTION LITERATURE: TM 11-2572
	CLASSIFICATION OF EQUIPMENT: Unclassified
LS-126/FI : AN/COMP TYPE NUMBER	USING SERVICE : Army
INTERCOMMUNICATING STATION	DATE OF THIS SHEET: 29 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	(WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant intercommunication in buildings at posts, camps, and stations.

INSTALLATION: Fixed.

CAN COMMUNICATE WITH: Other stations of the intercommunication system in which it serves as a control station unit.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Serves five remote stations if one or more is a master station or six remote stations if all are speaker microphone units.

TYPE CONTROLS: Station selector switches, on-off and volume switch, and idle-listen-talk switch.

POWER OUTPUT: 2-1/2 w.

POWER REQUIREMENTS: 110-125 v ac; 15 w when idle.

PHYSICAL CHARACTERISTICS

Intercommunicating Station LS-126-FI measures 7-3/8 x 6-7/8 x 13-3/8 inches, net weight 20-1/2 pounds, volume 0.5 cu ft. Packed for export shipment: total weight 70 pounds, total volume 3.3 cu ft. Shipped in 1 package.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 31 Jan 52	AN/FIC-TYPE AN/COMP TYPE NUMBER: LS-127/FI INTERCOMMUNICATING STATION



Intercommunicating Station LS-127/FI is the master or control station unit of an intercommunication system and is used in systems serving large headquarters buildings, depots, communications centers, or similar fixed plant installations.

This equipment consists essentially of a self-contained speaker microphone and amplifier having 24 station selector switches, a talk-listen-idle switch, a volume control, and pilot light.

It can be used in conjunction with as many as 24 other station units on a one-way, talk-back, selected station, or all-talk basis.

The unit can be switched to either 50- or 500-ohm impedances, is powered from a conventional a-c power source, and consumes 15 w when idle.

This equipment is designed specifically for use with Intercommunicating Station LS-129/FI or LS-130/FI.

AN/FIC-TYPE	INSTRUCTION LITERATURE: TM 11-2572
	CLASSIFICATION OF EQUIPMENT: Unclassified
LS-127/FI : AN/COMP TYPE NUMBER	USING SERVICE : Army
INTERCOMMUNICATING STATION	DATE OF THIS SHEET : 31 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant intercommunication in buildings at posts, camps and stations.

INSTALLATION: Fixed.

CAN COMMUNICATE WITH: Other stations of the intercommunication system in which it serves as a control station unit.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Serves 23 remote stations if one or more is a master station or 24 remote stations if all are speaker microphone units.

TYPE CONTROLS: Station selector switches, on-off and volume switch, and idle-listen-talk switch.

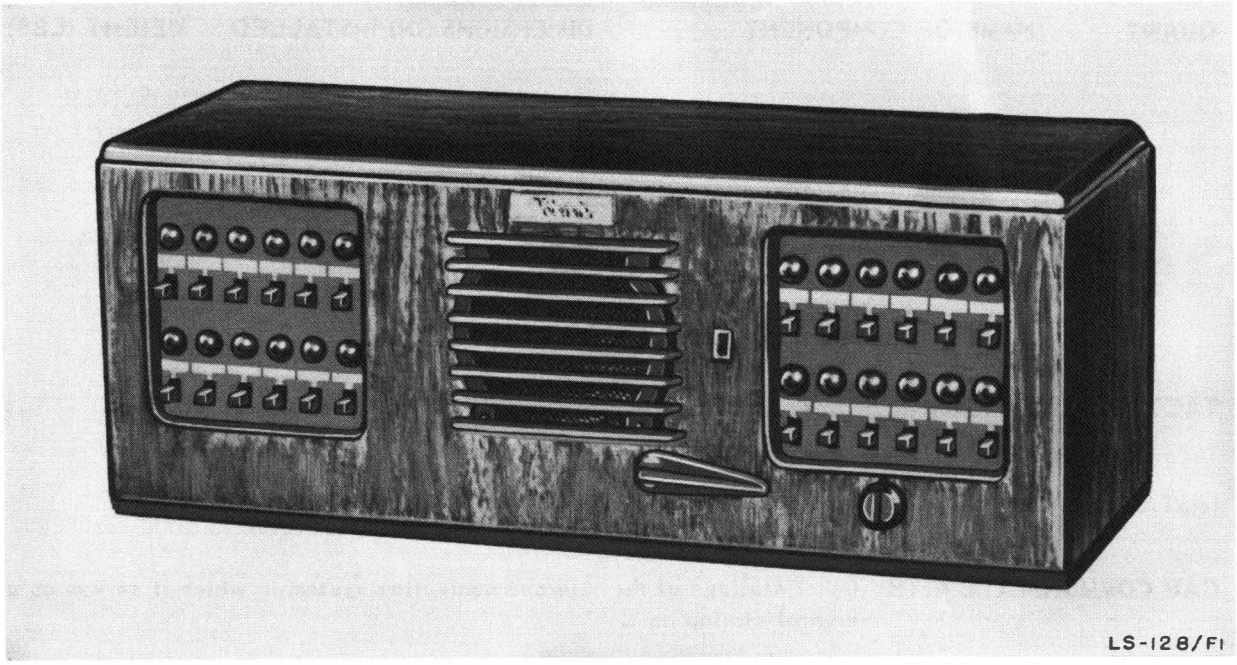
POWER OUTPUT: 2-1/2 w.

POWER REQUIREMENTS: Conventional a-c source; 15 w when idle.

PHYSICAL CHARACTERISTICS

Intercommunicating Station LS-127/FI measures 7-3/8 x 6-7/8 x 19-3/4 inches, net weight 30 pounds, volume 0.75 cu ft. Packed for export shipment: total weight 79.5 pounds, total volume 3.75 cu ft. Shipped in 1 package.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 31 Jan 52	**AN/FIC-TYPE** AN/COMP TYPE NUMBER: LS-128/FI INTERCOMMUNICATING STATION



Intercommunicating Station LS-128/FI is the master or control station unit of an intercommunication system and is used in systems serving large headquarters buildings, depots, communications centers, or similar fixed plant installations.

This equipment consists essentially of a self-contained speaker microphone and amplifier having 24 station selector switches, arranged on two panels, and has signal lamps, a talk-listen-idle switch, a volume control, and pilot light.

It can be used in conjunction with as many as 24 other station units on a one-way, talk-back, selected station, or all-talk basis.

The unit can be switched to either 50- or 500-ohm impedances, is powered from a conventional a-c power source, and consumes 15 w when idle.

This equipment is designed specifically for use with Intercommunicating Station LS-129/FI or LS-130/FI.

AN/FIC-TYPE	INSTRUCTION LITERATURE: TM 11-2572
	CLASSIFICATION OF EQUIPMENT: Unclassified
LS-128/FI :AN/COMP TYPE NUMBER	USING SERVICE : Army
INTERCOMMUNICATING STATION	DATE OF THIS SHEET: 31 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant intercommunication in buildings at posts, camps, and stations.

INSTALLATION: Fixed.

CAN COMMUNICATE WITH: Other stations of the intercommunication system in which it serves as a control station unit.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Serves 23 remote stations if one or more is a master station or 24 remote stations if all are speaker microphone units.

TYPE CONTROLS: Station selector switches, on-off and volume switch, and idle-listen-talk switch.

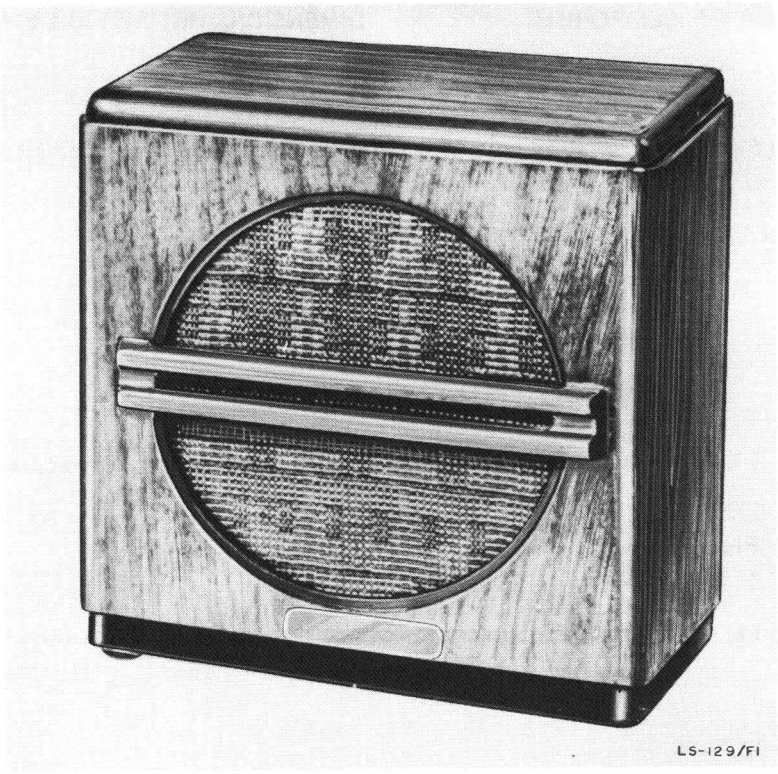
POWER OUTPUT: 2-1/2 w.

POWER REQUIREMENTS: 110–125 v, 50/60 cyc; 15 w when idle.

PHYSICAL CHARACTERISTICS

Intercommunicating Station LS-128/FI measures 7-3/8 x 6-7/8 x 19-3/4 inches, net weight 30 pounds, volume 0.5 cu ft. Packed for export shipment: total weight 79.5 pounds, total volume 3.9 cu ft. Shipped in 1 package.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 22 Jan 52	AN/FIC-TYPE AN/COMP TYPE NUMBER: LS-129/FI INTERCOMMUNICATING STATION



Intercommunicating Station LS-129/FI is a speaker microphone equipment used in an intercommunication system. It is used in headquarters buildings, depots, communications centers, and similar installations.

This equipment consists of a speaker microphone housed in a wooden cabinet. It cannot initiate calls to other speaker microphone units or to the master station unit of a system in which it is used.

In an emergency, it can be used in 500-ohm impedance systems, but with reduced efficiency.

It may be used with Intercommunicating Station LS-125/FI and is powered by the master station unit of the system.

AN/FIC-TYPE	INSTRUCTION LITERATURE: TM 11-2572
	CLASSIFICATION OF EQUIPMENT: Unclassified
LS-129/FI :AN/COMP TYPE NUMBER	USING SERVICE : Army
INTERCOMMUNICATING STATION	DATE OF THIS SHEET : 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant intercommunication in buildings at posts, camps, and stations.

INSTALLATION: Fixed plant.

CAN COMMUNICATE WITH: Master control stations of the system in which it serves as a listening station or talk-back unit.

TECHNICAL CHARACTERISTICS

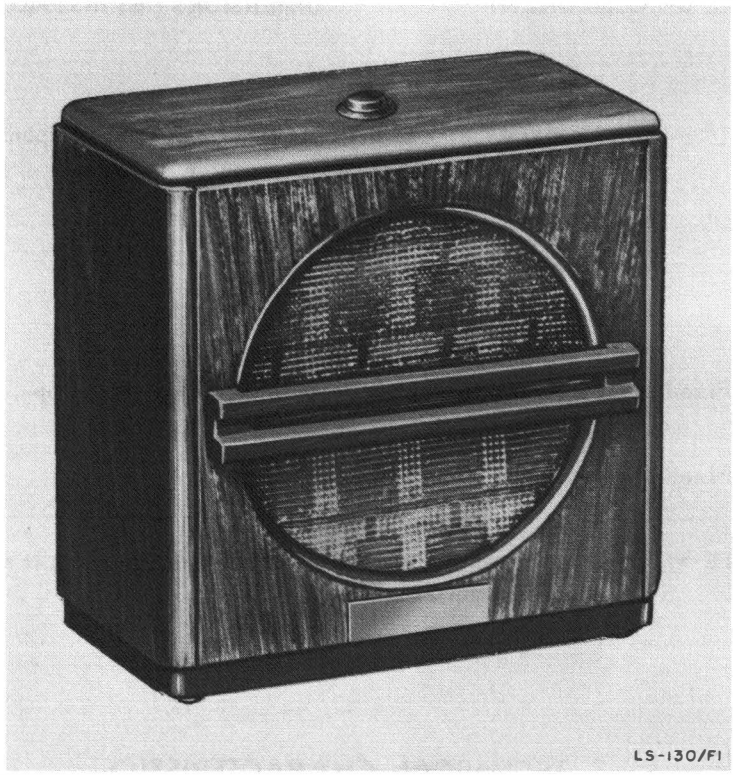
FACILITIES AFFORDED: Local intercommunication station.

POWER OUTPUT: 2 w.

PHYSICAL CHARACTERISTICS

Intercommunicating Station LS-129/FI measures 7-3/8 x 3-3/4 x 7-1/8 inches, net weight 4.25 pounds, volume 0.125 cu ft.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 15 Feb 52	**AN/FIC-TYPE** AN/COMP TYPE NUMBER: LS-130/FI INTERCOMMUNICATING STATION



Intercommunicating Station LS-130/FI is a speaker microphone equipment designed for use as a local station unit in an intercommunication system. It is used in systems serving large headquarters buildings, depots, communications centers, or similar installations at army and higher headquarters.

Consists of a 5-inch speaker microphone housed in a wooden cabinet and is equipped with a push button for signaling annunciator-equipped master station units.

This equipment cannot initiate calls to other speaker microphone units or to master station units not equipped with annunciators.

AN/FIC-TYPE

LS-130/FI : AN/COMP TYPE NUMBER
INTERCOMMUNICATING STATION

INSTRUCTION LITERATURE: TM 11-2572
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 15 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant intercommunication in buildings at posts, camps, and stations.

INSTALLATION: Fixed station.

CAN COMMUNICATE WITH: Master control stations of the system in which it serves as a listening station or talk-back unit.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: No special facilities.

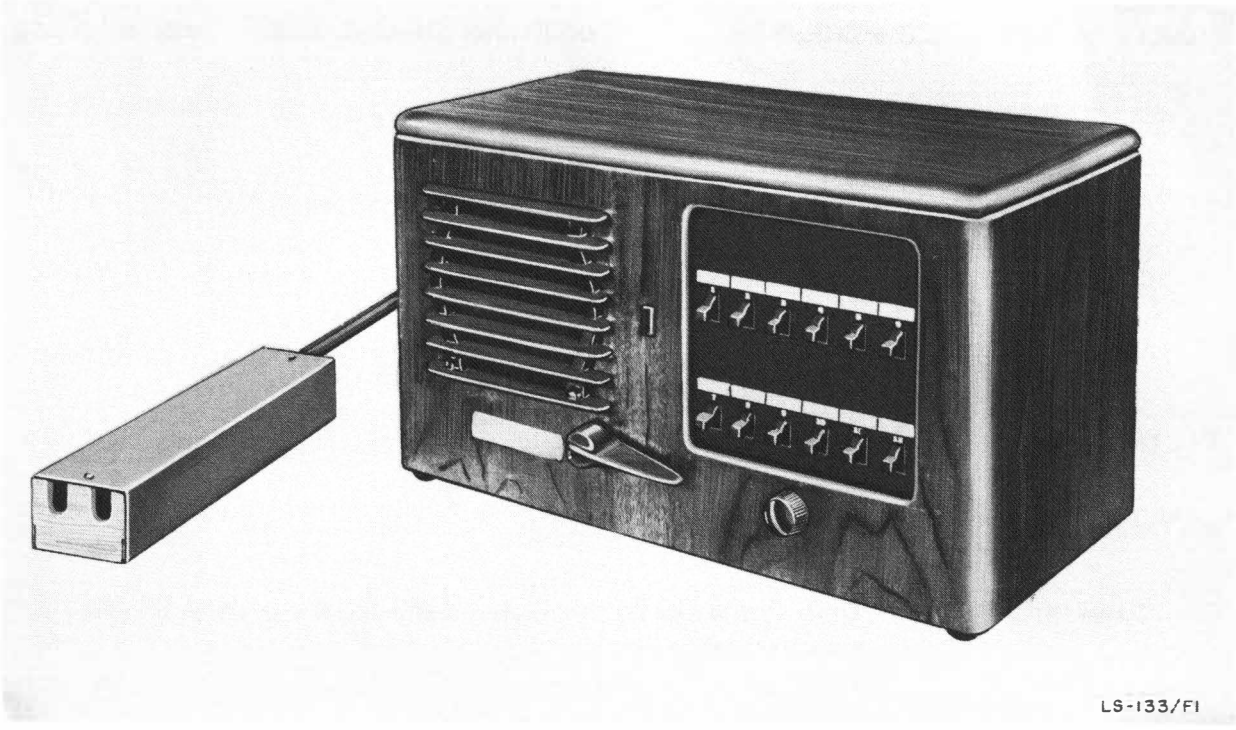
TYPE CONTROLS: Push button for calling master station.

POWER OUTPUT: 2 w.

PHYSICAL CHARACTERISTICS

Intercommunicating Station LS-130/FI measures 7-3/8 x 3-3/4 x 7-1/8 inches, net weight 4.25 pounds, volume 0.125 cu ft. Packed for export shipment: total weight 40 pounds (10 units), total volume 4 cu ft. Shipped in 1 package.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 15 Feb 52	**AN/FIC-TYPE** AN/COMP TYPE NUMBER: LS-133/FI INTERCOMMUNICATING STATION



LS-133/FI

Intercommunicating Station LS-133/FI is a master or control station unit of an intercommunication system. It is used in systems serving large headquarters buildings, depots, communications centers, or similar installations at army and higher headquarters.

This equipment consists of a self-contained speaker microphone and amplifier unit having 12 station selector switches, a press-to-talk switch, and a volume control.

It can be used in conjunction with as many as 12 other local station units on a one-way, talk-back, selected station, or all-talk basis.

This unit can communicate with other master stations and through them with their remote stations.

It can be switched to either 50- or 500-ohm impedances, is powered by a conventional a-c power source, and consumes 15 w when idle.

AN/FIC-TYPE	INSTRUCTION LITERATURE: None
	CLASSIFICATION OF EQUIPMENT: Unclassified
LS-133/FI :AN/COMP TYPE NUMBER	USING SERVICE : Army
INTERCOMMUNICATING STATION	DATE OF THIS SHEET: 15 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant intercommunication in buildings at posts, camps, and stations.

INSTALLATION: Fixed.

CAN COMMUNICATE WITH: Other stations of the intercommunication system in which it serves as a control station unit.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Serves 12 remote stations.

TYPE CONTROLS: Station selector switches, on-off and volume switch, and idle-talk-listen switch.

POWER OUTPUT: 2-1/2 w.

POWER REQUIREMENTS: 110/220 v, 50/60 cyc; 15 w when idle.

PHYSICAL CHARACTERISTICS

Intercommunicating Station LS-133/FI measures 7-3/8 x 6-7/8 x 13-3/8 inches, net weight 20.5 cu ft, volume 0.4 cu ft. Packed for export shipment: total weight 70 pounds, total volume 3.3 cu ft. Shipped in 1 package.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 15 Feb 52	**AN/FIC-TYPE** AN/COMP TYPE NUMBER: LS-134/FI INTERCOMMUNICATING STATION



Intercommunicating Station LS-134/FI is a master or control station unit of an intercommunication system. It is used in systems serving large headquarters buildings, depots, communications centers, or similar installations at army and higher headquarters.

This equipment consists of a self-contained speaker microphone and amplifier unit having 24 station selector switches, on-off switch, volume control, and an idle-talk-listen switch.

It can be used in conjunction with as many as 24 other station units on a one-way, talk-back, selected station, or all-talk basis.

This unit can communicate with other master stations and through them with their remote stations.

It has a special circuit which prevents reception by an outside station without consent of stations conversing, but which allows an outside station to interrupt with a priority message.

Operates on 110-125v and consumes 15 w when idle.

AN/FIC-TYPE	INSTRUCTION LITERATURE: None
	CLASSIFICATION OF EQUIPMENT: Unclassified
LS-134/FI :AN/COMP TYPE NUMBER	USING SERVICE : Army
INTERCOMMUNICATING STATION	DATE OF THIS SHEET: 15 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant intercommunication in buildings at posts, camps, and stations.

INSTALLATION: Fixed.

CAN COMMUNICATE WITH: Other stations of the intercommunication system in which it serves as a control station unit.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Serves 24 remote stations.

TYPE CONTROLS: Station selector switches, on-off and volume switch, and an idle-talk-listen switch.

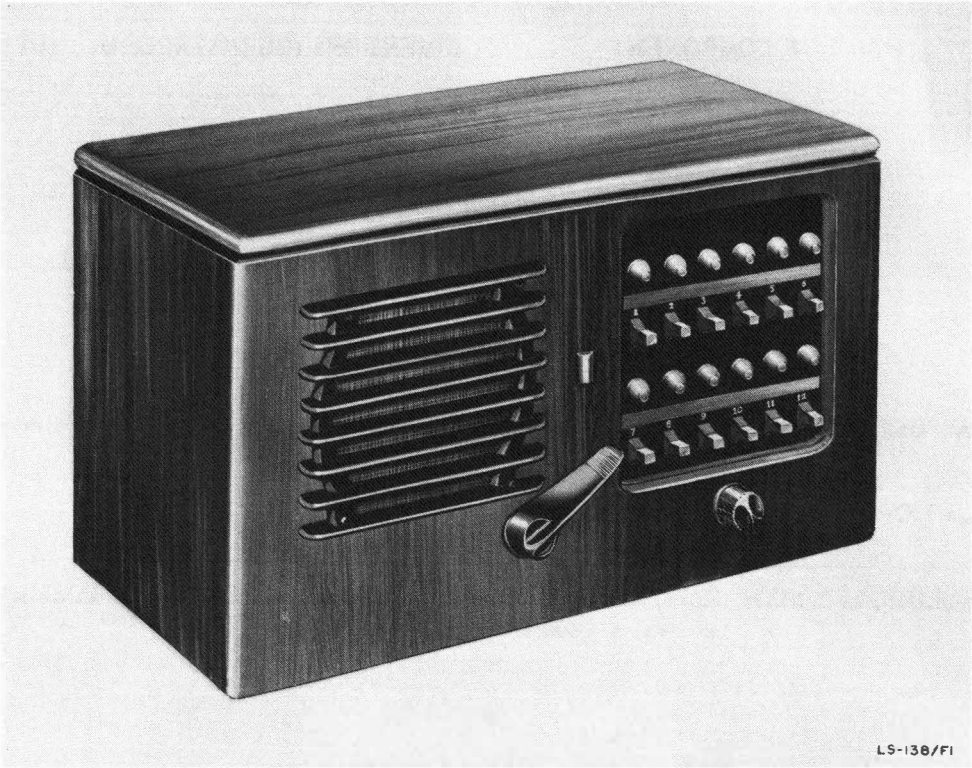
POWER OUTPUT: 2-1/2 w.

POWER REQUIREMENTS: 110-125 v, 50/60 cyc; 15 w when idle.

PHYSICAL CHARACTERISTICS

Intercommunicating Station LS-134/FI measures 7-3/8 x 6-7/8 x 13-3/8 inches, net weight 20.5 pounds, volume 0.4 cu ft. Packed for export shipment: total weight 79.5 pounds, total volume 3.9 cu ft. Shipped in 1 package.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 15 Feb 52	**AN/FIC-TYPE** AN/COMP TYPE NUMBER: LS-138/FI INTERCOMMUNICATING STATION



Intercommunicating Station LS-138/FI is a master or control station unit of an intercommunication system. It is used in systems serving large headquarters buildings, depots, communications centers, or similar installations at army and higher headquarters.

This equipment consists of a self-contained speaker microphone and amplifier unit having 12 station selector switches, a press-to-talk switch, and a volume control.

It is designed to be used in conjunction with as many as 12 other local station units on a one-way, talk-back, selected station, or all-talk basis.

This unit can communicate with other master stations and through them with their remote stations.

Operates on conventional 110/220 v ac and consumes 15 w when idle.

AN/FIC-TYPE	INSTRUCTION LITERATURE: None
LS-138/FI : AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
INTERCOMMUNICATING STATION	USING SERVICE : Army
	DATE OF THIS SHEET : 15 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant intercommunication in buildings at posts, camps, and stations.

INSTALLATION: Fixed.

CAN COMMUNICATE WITH: Other stations of the intercommunication system in which it serves as a control station unit.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Serves 12 remote stations.

TYPE CONTROLS: Station selector switches, on-off and volume switch, and an idle-talk-listen switch.

POWER OUTPUT: 2-1/2 w.

POWER REQUIREMENTS: 110/220 v 50/60 cyc, 15 w when idle.

PHYSICAL CHARACTERISTICS

Intercommunicating Station LS-138/FI measures 7-3/8 x 6-7/8 x 13-3/8 inches, net weight 20.5 pounds, volume 0.4 cu ft. Packed for export shipment: total weight 70 pounds, total volume 3.3 cu ft. Shipped in 1 package.

STATUS: Std

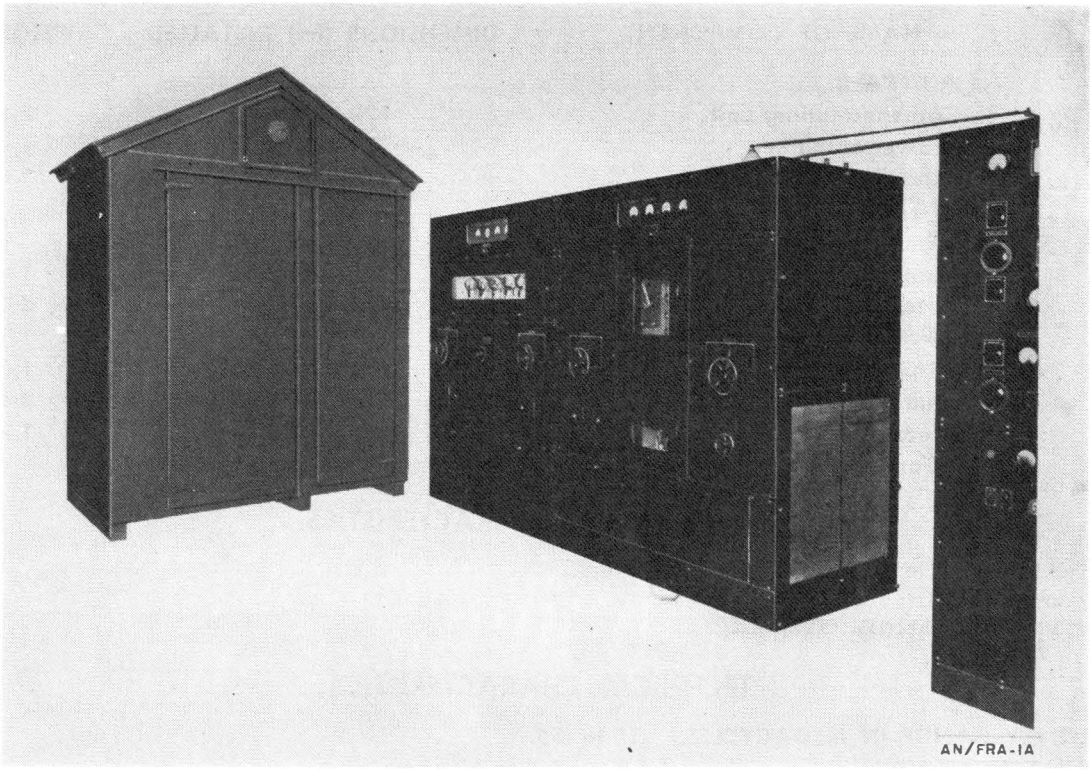
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 5 June 1956

AN/FRA–1( )

AMPLIFIER ASSEMBLY



Amplifier Assembly AN/FRA–1( ) is a low- to medium-frequency, medium-power (class C), rf power-amplifier equipment intended for military fixed station radiotelegraph service. It is operated with such exciters as Radio Transmitter BC–365–( ).

This equipment consists essentially of the power amplifier, its related rectifier, an antenna tuning unit, and associated items.

Models A and B include a prefabricated wooden house that contains the antenna tuning networks. All models are functionally interchangeable but differ in arrangement of controls, control circuitry, and similar design details.

AN/FRA-1( )

AMPLIFIER ASSEMBLY

INSTRUCTION LITERATURE: TM 11-1055, TM 11-5028

USING SERVICE: USA

DATE OF THIS SHEET: 5 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	For AN/FRA-1:		
1	Antenna tuning unit	120 x 97 x 68	2,540
1	Power amplifier	78 x 60 x 36	1,400
1	Rectifier	78 x 60 x 36	1,600
	For AN/FRA-1A:		
1	Amplifier	76 x 60 x 36	900
1	Antenna tuning unit	98 x 84 x 58	1,400
1	Rectifier unit	76 x 60 x 36	2,000
	For AN/FRA-1B:		
1	Amplifier	76 x 60 x 36	1,650
1	Antenna tuning unit	110 x 84 x 62	2,600
1	Rectifier unit	76 x 60 x 36	1,700

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed station radiotelegraph.
INSTALLATION: Ground, fixed station.
APPROXIMATE RANGE: Extended.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .15 to .55.
ANTENNA CHARACTERISTICS: 750 to 3,000 $\mu\mu$f; 6 to 12 ohms.
TYPE MODULATION: Am (A1, A2).
TYPE OF SIGNAL: Cw, on-off, or fsk (200-wpm International Morse Code).
POWER OUTPUT: 6 to 10 kw.
POWER REQUIREMENTS: 22 kva, 200/240 v, 50/60 cy, 3 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	16½ x 5½ x 7 ft (-1)	5,540 (-1)			
	19 x 5 x 7 ft (inside xmtr house, -1A, -1B)	4,300 (-1A)			
	9 x 7 ft (clear area adjacent to ant. down lead, -1A, -1B)	5,950 (-1B)			
DOMESTIC PACK:					
EXPORT PACK:		9,915 (-1)	646.82	16.2	17
		9,488 (-1A)			13
		8,846 (-1B)			10

STATUS: Std

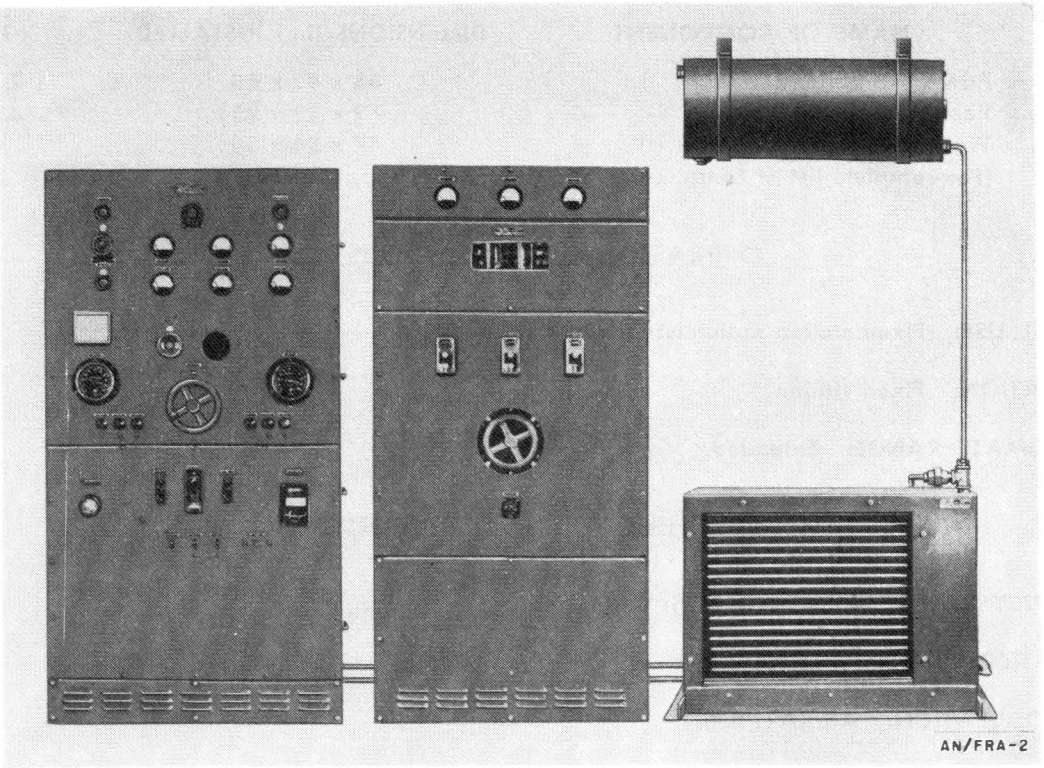
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 5 June 1956

AN/FRA-2

AMPLIFIER GROUP



Amplifier Group AN/FRA-2 is a low- to medium-frequency, medium-power, cw or frequency-shift keying, rf power-amplifying equipment used for fixed station radioteletypewriter communication.

This equipment consists essentially of the power-amplifier unit (a push-pull, class C amplifier), its associated rectifier, and a water-cooling unit.

This power amplifier is operated with Radio Transmitter BC-339-( ) or equal and is available in several models, all of which are functionally interchangeable but different in design details.

AN/FRA–2

AMPLIFIER GROUP

INSTRUCTION LITERATURE: TM 11–801

USING SERVICE: USA

DATE OF THIS SHEET: 5 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Power Amplifier BC–340–( )	83 x 42 x 60	2,370
1	Rectifier RA–22–( )	79 x 39 x 95	3,105
1	Water Cooling Unit RU–2–( )	47 x 54 x 54	850

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed station radioteletypewriter.

INSTALLATION: Fixed station.

APPROXIMATE RANGE: Extended.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4 to 26.5.

EXCITER REQUIREMENTS: 400 w to 1 kw.

TYPE MODULATION: Am (A1, A2).

TYPE OF SIGNAL: Cw or fsk (300-wpm International Morse Code; 425 cy either side of mean carrier freq).

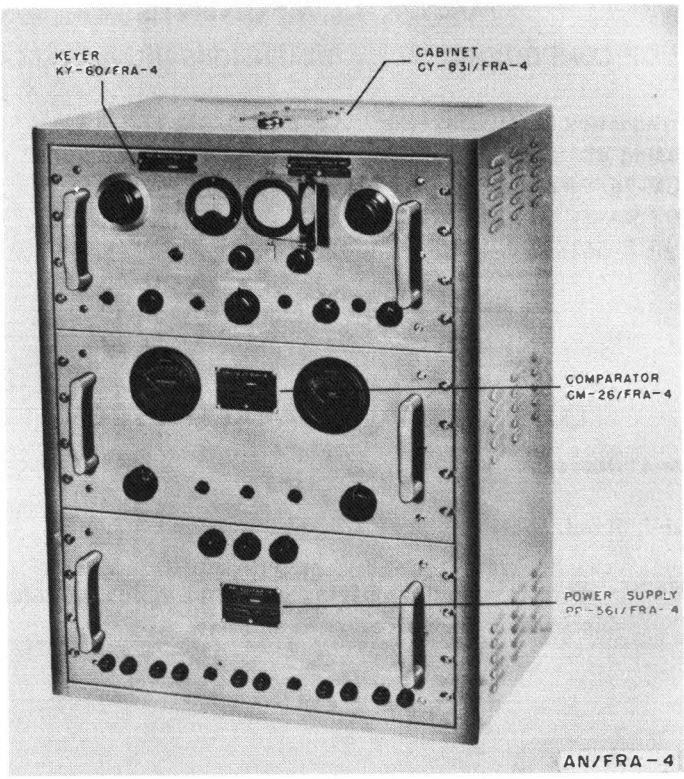
POWER OUTPUT: 10 kw.

POWER REQUIREMENTS: 200 v, 50/60 cy, 3 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		7,357	335.9	8.4	
DOMESTIC PACK:					21
EXPORT PACK:		9,258	653.7	16.3	21

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Confidential USING SERVICE: Navy DATE OF THIS SHEET: 14 May 52	**AN/FRA-4** FREQUENCY SHIFT CONVERTER GROUP



Frequency Shift Converter Group AN/FRA-4 is used to select the strongest of three frequency-shift signals from associated diversity radio receiving equipments, and to convert mark-space type frequency-shifts into polar-relay operation, keyed-tone output, and keyed d-c output; or to convert multiple-shift facsimile-type signals into a-m tone output. These outputs are used to operate teletypewriter perforated tape recorders, remotely located telegraph, or teletypewriter terminal equipment, facsimile recorders, or other similar equipments.

The signals used by the equipment are the 50 kc i-f outputs from three RBP or RCP Diversity Radio Receiving Equipments. It can be used with one- or two-channel diversity receiving system as well as the customary three receiver system.

The frequency of the keyed-tone output is continuously adjustable from 850 to 3,750 cps by a tone frequency key.

An external audio oscillator can be connected to the external tone input jack. A polar relay is provided for keying d-c telegraph loop circuits at keying speeds corresponding to teletypewriter speeds of up to 100 wpm.

The comparator, keyer, and power supply may be removed from the main table-mounted type cabinet, and mounted in any 19-inch relay rack.

AN/FRA-4

FREQUENCY SHIFT CONVERTER GROUP

INSTRUCTION LITERATURE: NavShips 91496
CLASSIFICATION OF EQUIPMENT: Confidential
USING SERVICE : Navy
DATE OF THIS SHEET : 14 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	AN/FRA-4 Frequency Shift Converter Group Consisting of:	28 x 28-3/8 x 17-1/16	159
	Comparator CM-26/FRA-4	8-3/4 x 19 x 15-3/16	Not Available
	Keyer KY-60/FRA-4	8-3/4 x 19 x 15-3/16	" "
	Power Supply PP-561/FRA-4	8-3/4 x 19 x 15-3/16	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

CAN COMMUNICATE WITH: This is signal modifying apparatus which operates in conjunction with primary communication equipment.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .05, .01 bandwith.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Frequency Shift.

POWER OUTPUT: Tone output: 10 v across 600 ohms.
D-c signal: 90 v across 3,000 ohms.
Polar relay: 270 v, dc.

POWER REQUIREMENTS: 227 w, 115 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Frequency Shift Converter Group AN/FRA-4 measures 28 x 28-3/8 x 17-1/16 inches, net weight 245 pounds, volume 10.85 cu ft. Packed for domestic shipment: total weight 372 pounds, total volume 26.5 cu ft, 0.66 ship ton. Shipped in 2 packages.

STATUS: Std

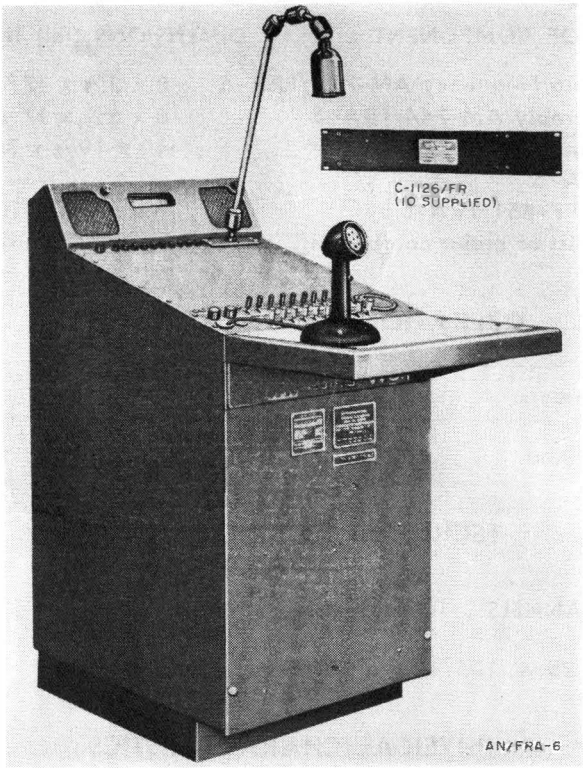
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 8 June 1956

AN/FRA–6

CONTROL-MONITOR GROUP



Control-Monitor Group AN/FRA–6 is an airport remote-control console used for the operation of 1 to 10 transmitters remotely located from the airport control tower. It is also used for selecting and controlling the output of 1 to 10 remotely located receivers.

When required, two of these groups can be connected in multiple to share any or all the remote equipment available.

AN/FRA-6

CONTROL-MONITOR GROUP

INSTRUCTION LITERATURE: NAVSHIPS 91816(A)

USING SERVICE: USN

DATE OF THIS SHEET: 8 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Amplifier, Audio Frequency AM-728/FRA-6	8 x 2 7/8 x 17 7/16	
1	Amplifier Assembly AM-744/FRA-6	8 x 5 3/4 x 17 7/16	
1	Console, Communication Control OA-408/FRA-6	40 x 19 1/2 x 36	
1	Power Supply PP-851/FRA-6	7 1/4 x 8 5/8 x 10 7/8	

(For complete list of major components, see instruction literature.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Airport towers.

INSTALLATION: Ground, fixed.

TECHNICAL CHARACTERISTICS

NO. OF CONTROLLED CHANNELS: 10 ea (max; rcvr, xmtr).

POWER REQUIREMENTS: 25 w, 105/125 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	40 x 19 1/2 x 36	310			
DOMESTIC PACK:		705	39.2	1	4
EXPORT PACK:					

STATUS: Std

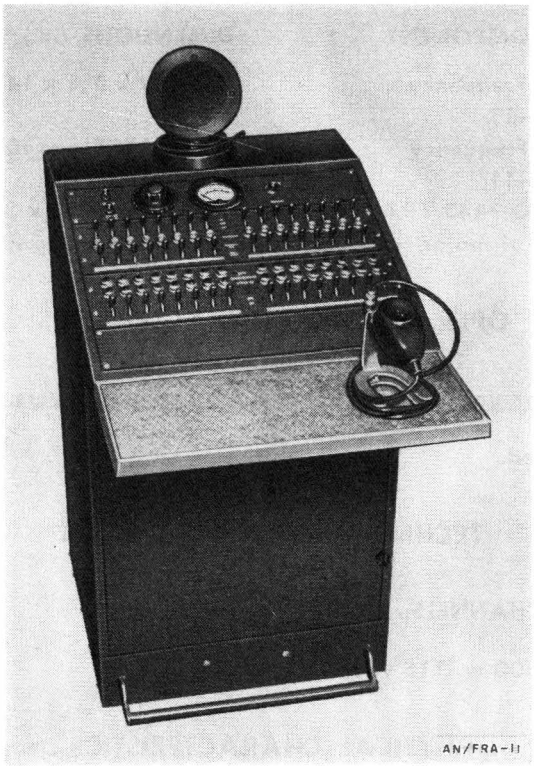
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 8 June 1956

AN/FRA-11

CONTROL-MONITOR GROUP



Control-Monitor Group AN/FRA-11 is an aircraft communication control system that provides unified air-to-ground voice communication.

This equipment provides flexible control of 16 transmit-receive communication channels. The transmitters and receivers may be either locally or remotely located.

AN/FRA-11

CONTROL-MONITOR GROUP

INSTRUCTION LITERATURE: NAVSHIPS 92273

USING SERVICE: USN

DATE OF THIS SHEET: 8 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
4	Amplifier, Audio Frequency AM-1042/FRA-11	19 x 8¾ x 14	
4	Amplifier, Audio Frequency AM-1043/FRA-11	19 x 5¼ x 10½	
3	Control-Indicator C-1443/FRA-11	20 1/16 x 35 x 34⅜	

(For complete list of major components, see instruction literature.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft communication control at airport control towers.

INSTALLATION: Ground, fixed.

TECHNICAL CHARACTERISTICS

NUMBER OF CONTROLLED CHANNELS: 16 ea (rcvr, xmtr).

POWER REQUIREMENTS: 1,600 w, 115 v, 60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:		1,956.2	142.7	3.6	15
EXPORT PACK:					

STATUS: Std

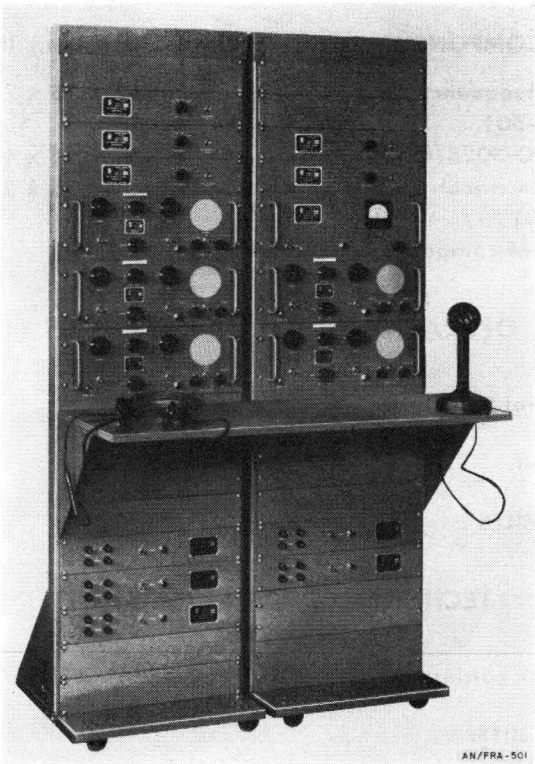
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

AN/FRA–501

RECEIVER CONTROL GROUP



Receiver Control Group AN/FRA–501 is a remote-control equipment used to operate a radio receiver, or another radio device from a central station, over a land line or radio microwave link.

This equipment provides up to 15 vernier and 10 on/off control functions within a standard voice-frequency band of 400 to 3,000 cycles.

It consists essentially of two operating groups: one at the control site and the other at the remote operating site, interconnected by either radio or telephone facilities.

AN/FRA-501

RECEIVER CONTROL GROUP

INSTRUCTION LITERATURE: NAVSHIPS 92600A

USING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Amplifier, Audio Frequency AM-5028/FRA-501	27 x 15 x 24	16
1	Control, Receiver C-5028/FRA-501	27 x 15 x 11	15
1	Filter Assembly, Electrical F-5010/FRA-501	27 x 15 x 24	32

(For complete list of components, see instruction literature.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Remote-control facilities.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Audio tone carrier.

TYPE COMMUNICATION CIRCUITS:

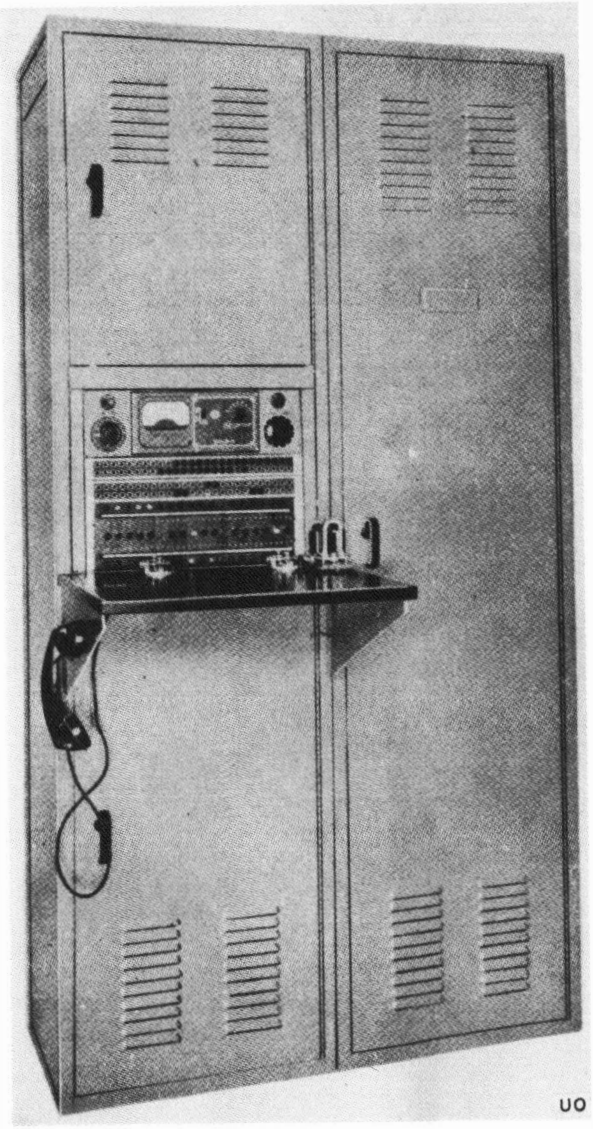
CONTROLS: 15 vernier and 10 on/off.

POWER REQUIREMENTS: 1.2 kw, 110/220 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 May 52	**AN/FRA-TYPE** SERVICE TYPE NUMBER: UO VOICE CONTROL AND SPEECH PRIVACY EQUIPMENT



UO

Voice Control and Speech Privacy Equipment UO is terminal equipment used to connect four-wire radiotelephone transmitter and receiver circuits to normal two-wire telephone plant. It also provides speech scrambling and unscrambling to prevent unauthorized listening-in on radiotelephone circuits.

This equipment includes channel shifter and restorer circuits, which by shifting one voice channel of a single side band, twin-channel, radiotelephone circuit, provides a means of reducing crosstalk between the two channels.

Radio noise is effectively reduced by voice operated, gain-controlled amplifiers, which raise speech waves to all telephone stations to the same volume level, and by a noise reducer which attenuates noise signals during intervals between speech syllables or words.

It is housed in six 19-inch relay cabinets and provides for one-channel operation.

Several of the components will accommodate two- or four-channels and are not required on a one-for-one basis, for multichannel operation.

AN/FRA-TYPE	INSTRUCTION LITERATURE: W E Co. Nos. 1,114 through 1,121, 1,128 CLASSIFICATION OF EQUIPMENT: Unclassified
UO :SERVICE TYPE NUMBER	USING SERVICE : Navy
VOICE CONTROL AND SPEECH PRIVACY EQUIPMENT	DATE OF THIS SHEET : 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
*	Control Terminal CW-23532 (Control Bay)	84 x 22-1/4 x 17	Not Available
*	Control Terminal CW-23534 (Auxiliary Bay)	84 x 22-1/4 x 17	" "
***	Privacy System CW-50293 (Common Bay)	84 x 22-1/4 x 17	" "
*	Privacy System CW-50295 (Channel Bay)	84 x 22-1/4 x 17	" "
**	Channel Shifter Bay CW-50296	84 x 22-1/4 x 17	" "
**	Vogad Bay CW-50299	84 x 22-1/4 x 17	" "

* (1) per channel. ** (1) per twin channel. *** (1) per four channels.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

CAN COMMUNICATE WITH: This is auxiliary signal modifying apparatus used in conjunction with primary communication equipment.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE: 250 - 3,000 cps, or
2,250 - 5,000 cps (channel shifted).

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: +7 to +12 volume units.

POWER REQUIREMENTS: 1,500 w, 105-125 v, 50/60 cyc, 1 phase, ac.

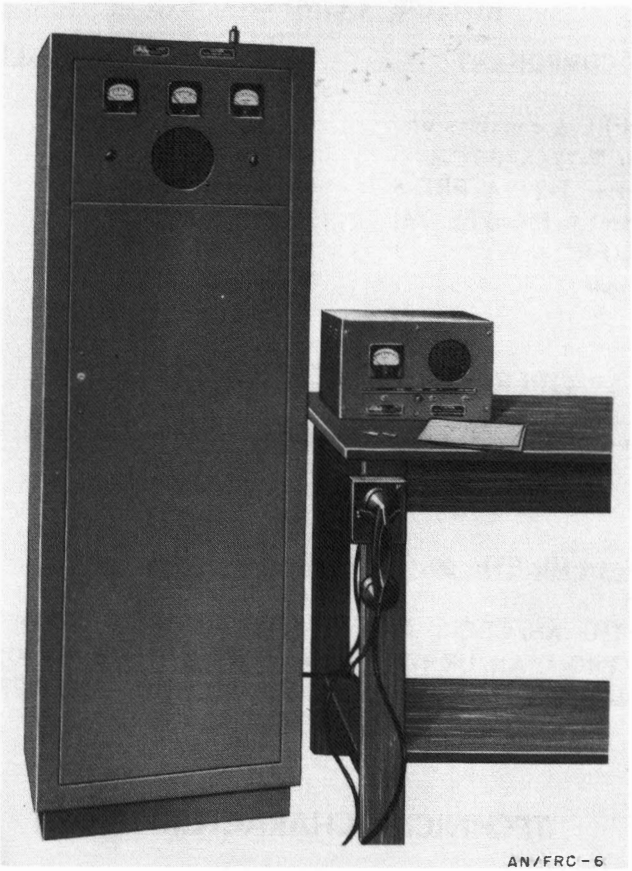
PHYSICAL CHARACTERISTICS

Voice Control and Speech Privacy Equipment UO measures 84 x 133-1/2 x 17 inches.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 20 Jan 52

AN/FRC-6

RADIO SET



Radio Set AN/FRC-6 is a two-way, crystal-controlled, f-m (voice) transmitting and receiving equipment used for communication in the h-f band by military police, security troops, and similar units.

The equipment consists of cabinet-inclosed, rack and panel-mounted equipment and includes a control console, handset, and associated accessories.

This set can be operated by remote control over a field telephone pair from a distance up to 10 miles and can communicate with fixed or vehicular stations, in open country, up to 20 miles away.

Requires approximately 325 w of 115v ac.

AN/FRC-6

RADIO SET

INSTRUCTION LITERATURE: TM 11-5506
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 20 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Rack MT-658A/FRC-6 consists of:	68-1/8 x 22-1/2 x 15	173
	Radio Receiver R-276A/FRC-6	9 x 9 x 18-1/2	21
	Radio Transmitter T-215A/FRC-6	9 x 9 x 18-1/2	38
	Radio Set Control C-560A/FRC-6	5-1/4 x 6 x 18-1/2	8
1	Console C-559A/FRC-6	8-3/4 x 12 x 13	33
1	Handset and hanger	9 x 4-3/8 x 4-1/8	3

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Counter Intelligence Corps detachments at division, army, and theater level.

INSTALLATION: Fixed Ground.

APPROXIMATE RANGE (IN MILES): 20.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-7, -8; AN/MRC-5, -16; AN/PRC-9, -10; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -3, -10, -15, -18, -22; AN/VRQ-2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-300, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 30 - 40.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Fm, voice.

POWER OUTPUT: 50 w.

POWER REQUIREMENTS: 325 w, 115 v, 60 cyc, 1 phase ac.

PHYSICAL CHARACTERISTICS

Radio Set AN/FRC-6 measures 68-1/8 x 22-1/2 x 15 inches, net weight 213 pounds, volume 16.354 cu ft. Packed for domestic shipment: total weight 496 pounds, total volume 40.101 cu ft, 1.10 ship tons. Shipped in 2 packages.

STATUS: Std

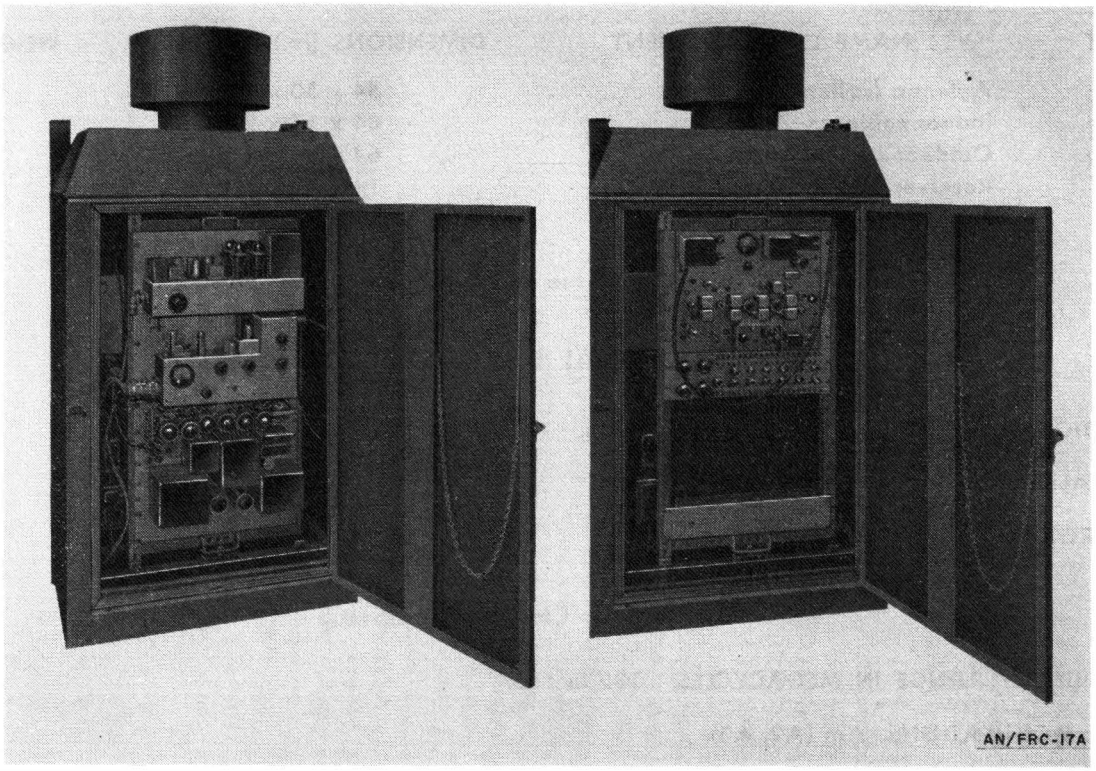
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

AN/FRC–7A, –17A

RADIO SET



Radio Sets AN/FRC–7A and AN/FRC–17A are medium-power, vhf, am (voice and tone) receiving and transmitting equipment used for fixed plant radio relay applications. The AN/FRC–7A serves as an indoor installation; the AN/FRA–17A, as an outdoor installation.

Each set consists essentially of a receiver and transmitter, housed in ventilated steel cabinets, and includes auxiliary items. In radio relay service, this equipment, with appropriate carrier facilities, provides four two-way channels.

AN/FRC–7A, –17A

RADIO SET

INSTRUCTION LITERATURE: TM 11–292

USING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
2	Antenna (collapsed)	54 x 50 x 12	40
2	Indoor cabinet (–7A)	84 x 17 x 26¼	265
2	Outdoor cabinet (–17A)	64½ x 18 x 32	290
1	Receiver	14 x 2½ x 19	20
1	Transmitter	19 7/32 x 8 11/16 x 19	14
1	Transmitter power supply	8¾ x 8¾ x 19	68

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Corps or higher headquarters.

INSTALLATION: Fixed station.

APPROXIMATE RANGE: Line of sight.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 132 to 156.

TYPE MODULATION: Am (A2, A3).

TYPE OF SIGNAL: Voice or tone.

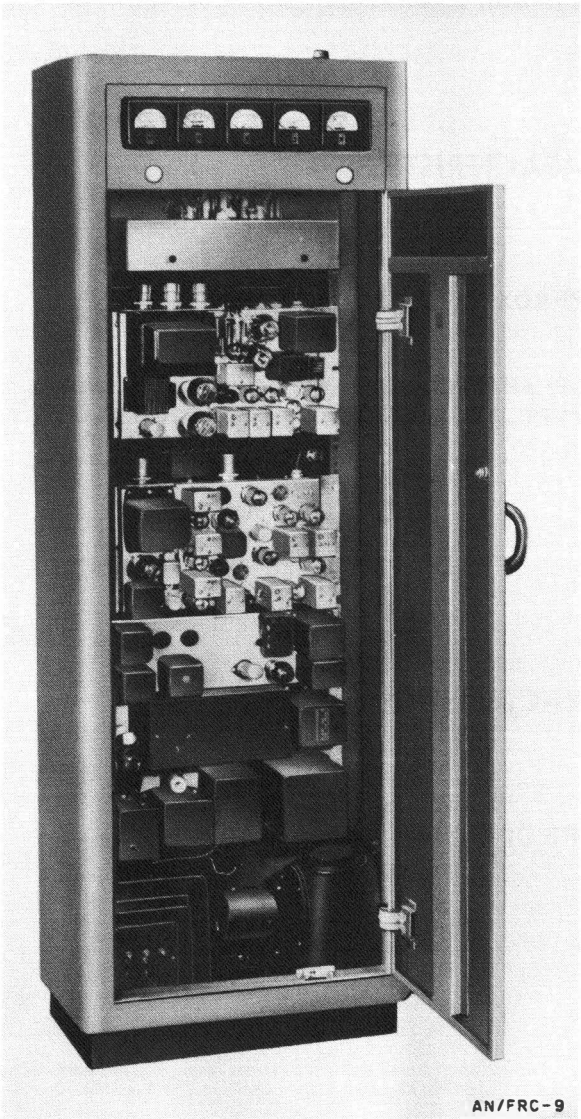
POWER OUTPUT: 25 w.

POWER REQUIREMENTS: 90 w (rcvr), 400 w (xmtr), 105 to 125 v, 60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
AN/FRC–7A	84 x 17 x 26¼ (ea cab.)	419.5	44.5	1.11	
AN/FRC–17A	64½ x 18 x 32 (ea cab.)	444.5	42.4	1.06	
DOMESTIC PACK:					
EXPORT PACK:					
AN/FRC–7A		1,149	134.75	3.4	7
AN/FRC–17A		1,269	140.57	3.5	7

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 8 Jan 52	**AN/FRC-9** RADIO SET



AN/FRC-9

Radio Set AN/FRC-9 is a medium-power, crystal-controlled, f-m (voice), radio transmitting and receiving equipment which operates in the v-h-f band and is used for fixed-station, point-to-point communication for traffic control by guard and security troops, military police units and similar organizations.

This equipment consists of a single-channel transmitter with associated receiver and power supply components inclosed in a floor-type metal cabinet. It has an automatic power overload reset, and includes a motor blower.

A coaxial whip-type or equivalent antenna is used.

AN/FRC-9	INSTRUCTION LITERATURE: None CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE : Army
RADIO SET	DATE OF THIS SHEET : 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed station, primary guard radio.

INSTALLATION: Ground, transportable. APPROXIMATE RANGE (IN MILES): 30.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-7, -8; AN/MRC-5, -16; AN/PRC-9, -10; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -3, -10, -15, -18, -22; AN/VRQ-2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-300, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 30 - 40.

TYPE MODULATION: Fm. TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter - 250 w.

POWER REQUIREMENTS: 1,160 w, 115 v, 60 cyc, ac.

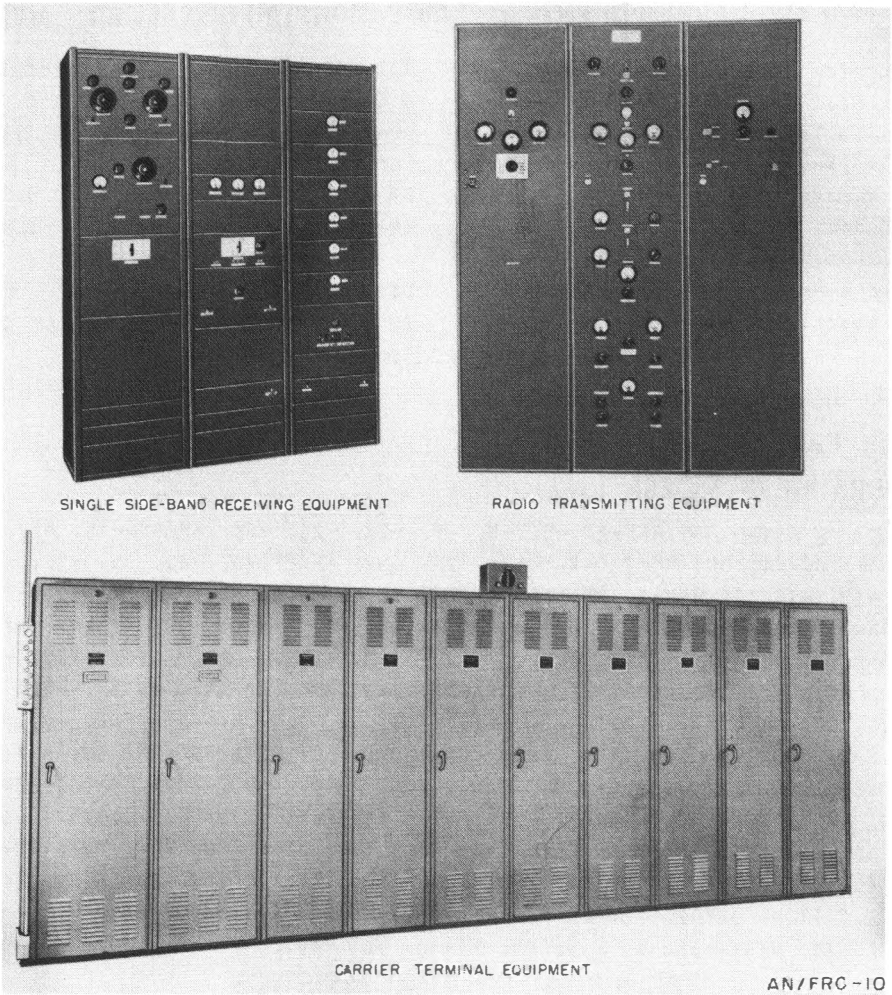
PHYSICAL CHARACTERISTICS

Radio Set AN/FRC-9 measures 22-1/2 x 15 x 68 inches, net weight 350 pounds.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

AN/FRC-10

RADIO SET



Radio Set AN/FRC-10 is a high-power, h-f, long range, a-m (voice, and tone) radioteletype communication equipment used in long distance, fixed plant applications at army, and equivalent headquarters.

This equipment consists of a single sideband radio transmitter, receiving components, and carrier terminal facilities. It provides six full duplex radioteletype channels (plus a v-f order-wire facility) when operated in a system terminated by identical or equivalent equipment. It can be arranged for double modulation diversity operation when required to overcome fading or interference with long distance communication.

This set requires an elaborate rhombic antenna array, and power is provided by 5-kw field power units located at each of the sites of the operating components which are usually displaced a considerable distance from each other.

AN/FRC-10

RADIO SET

INSTRUCTION LITERATURE: TM 11-2132, TM 11-832, TM 11-884
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Carrier Terminal OA-64/FRC-10 and	220-1/4 x 84 x 17	5,260
1	Carrier Terminal OA-63/FRC-10	220-1/4 x 84 x 17	5,260
1	Radio Transmitting Equipment TEF (Navy)	60-3/4 x 89 x 27	2,428
1	Transmitter T-265/FRC-10	84 x 84 x 42-1/2	5,260
f	SS-Band Radio Receiving Equipment REA (Navy)	64-3/4 x 84 x 15-1/4	1,436
1	Radio Receiver R-369/FRC-10	21-1/2 x 84 x 34	550
1	Distortion Measuring Bay	22 x 84 x 17	350

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army and higher headquarters.

INSTALLATION: Fixed ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -9, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; T-4/FRC, -83/SR, -159/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4 - 23.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice and tone.

POWER OUTPUT: 2 to 4 kw.

POWER REQUIREMENTS: Distortion measuring bay: 250 w, 115 v, 50/60 cyc, 1 phase, ac.
Carrier terminal equipment: 3 kw, 115 v, 50/60 cyc, 1 phase, ac.
Receiver R-369/FRC-10: 600 w, 115 v, 50/60 cyc, 1 phase, ac.
Receiver (REA): 500 w, 115 v, 50/60 cyc, 1 phase, ac.
Transmitter T-265/FRC-10: 10 kw, 220 v, 50/60 cyc, 3 phase, ac.
Transmitter (TEF): 5 kw, 220 v, 50/60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Information on Radio Set AN/FRC-10 not available.

STATUS: Std

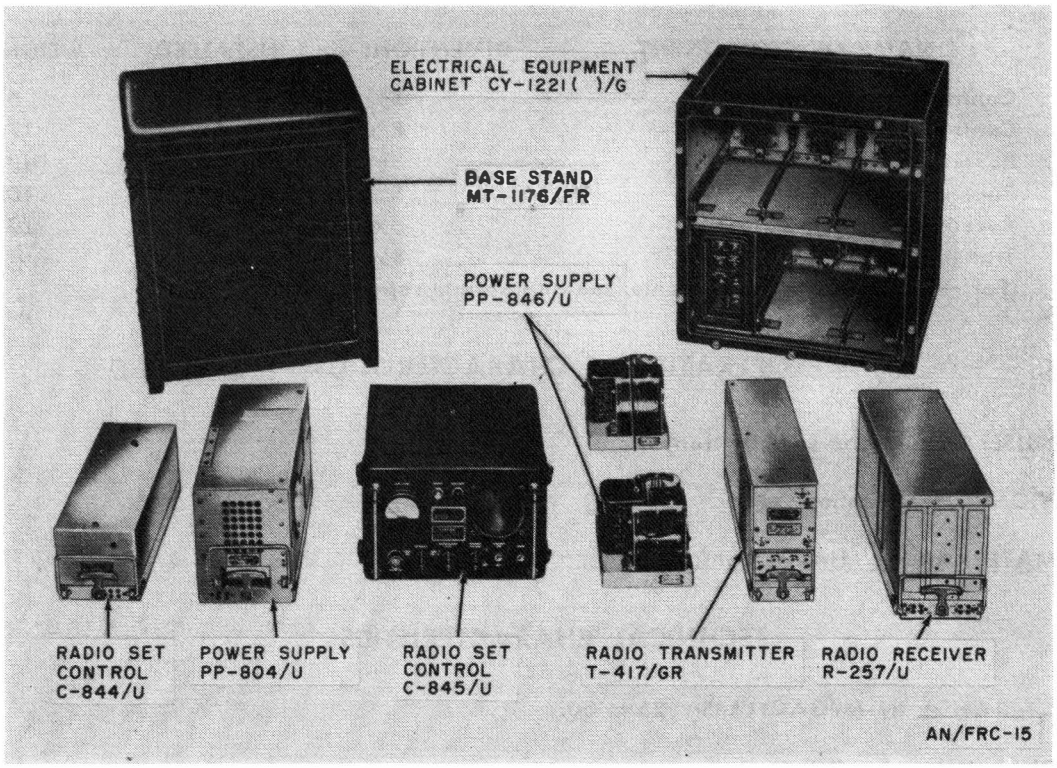
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 5 June 1956

AN/FRC–15

RADIO SET



Radio Set AN/FRC–15 is a vhf, fm, low-powered radio receiving and transmitting equipment used in tactical and nontactical communication applications.

This equipment consists of receiver and transmitter components, local and remote-control units, equipment cabinet and base, related power supplies, and accessories.

It can be operated in simplex, duplex, and retransmission applications. Push-to-talk operation over either of two preset frequencies is provided either locally or at a maximum distance of 10 miles from the transmitter site. Duplex operation requires an additional antenna and can be conducted from the local operating site only. The remote-control unit can be used to transmit tone signals for transmitter adjustment and signaling, to monitor reception, and to intercommunicate between the set and the remote point.

AN/FRC–15

RADIO SET

INSTRUCTION LITERATURE: TM 11–282

USING SERVICE: USA

DATE OF THIS SHEET: 5 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Control, Radio Set C–844/U	8¾ x 14¾ x 5⅞	6.5
1	Control, Radio Set C–845/U	8 7/16 x 13¾ x 13½	17.5
1	Power Supply PP–804/U	8⅝ x 7 x 14½	40
2	Power Supply PP–846/U	5⅛ x 6¼ x 7 1/16	10.5
1	Receiver, Radio R–257/U	8½ x 14½ x 5¾	19
1	Transmitter, Radio T–417/GR	8½ x 14½ x 4½	9

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Guard and security troops.

INSTALLATION: Fixed station.

APPROXIMATE RANGE: Line of sight.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 25 to 50.

TYPE MODULATION: Fm (F3).

TYPE OF SIGNAL: Voice.

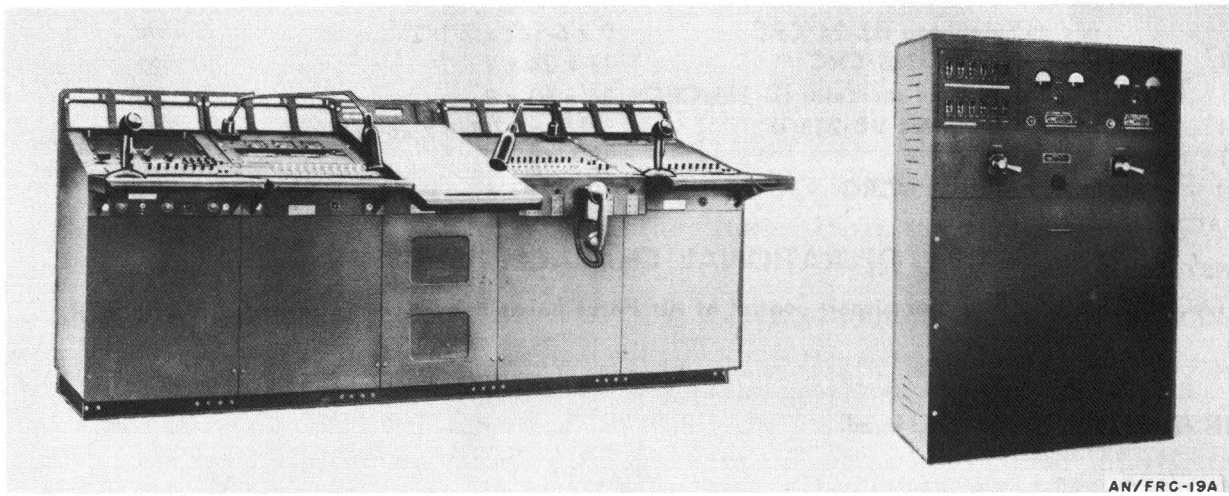
POWER OUTPUT: .5 w (rcvr) 45 w (xmtr).

POWER REQUIREMENTS:
PP–804/U: 230 va, 115/230 v, 50/65 cy ac.
PP–846/U: 46 va, 115/230 v, 50/65 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		291.6	13.5		
DOMESTIC PACK:		384	23.8	.6	4
EXPORT PACK:		477	28.1	.7	3

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force, Navy DATE OF THIS SHEET: 10 Jun 52	**AN/FRC-19A** AIRPORT CONTROL TOWER CONSOLE



Airport Control Tower Console AN/FRC-19A is a ground, fixed station which provides the communication, signaling, and information facilities required for air traffic control at Air Force bases.

This equipment consists essentially of a control tower console, relay, alarm telephone, control unit, field condition indicator, four storage batteries, and a bell.

It provides meteorological information, control of remotely located voice-frequency recorders, local and remote indication of field flight conditions, intercommunication facilities for coordination of flight information, voice modulation and control of remote transmitters, control of output signal level of remote radio receivers, d-c power for microphones and control circuits, crash alarm system, lighting for console and tower, and mounting provisions for Airport Lighting Control Panel Type I, II, or III.

Four Storage Batteries BB-245/U are supplied for emergency operation of 5 to 6 hours of the d-c console components.

AN/FRC-19A

AIRPORT CONTROL TOWER CONSOLE

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force, Navy
DATE OF THIS SHEET : 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Control Tower Console CY-888/CRC	94 x 40 x 36	960
1	Relay RE-82/CRC	4 x 8 x 4	3
1	Alarm-Telephone BZ-24/CRC	9 x 6-1/2 x 7-1/2	9
1	Control Unit C-388/CRC	19 x 24 x 4	22
1	Field Condition Indicator ID-298/CRC	84 x 50 x 9	22
4	Storage Batteries BB-245/U	5-1/2 x 12-3/4 x 26-3/8	312 (each)
1	Bell BZ-26/U	13 x 12 x 5	8
1	Indicator ID-203/CRC	19 x 24 x 4	24

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used for airport control at Air Force bases and issued in accordance with AFR 100-17.

INSTALLATION: Ground, fixed.

CAN COMMUNICATE WITH: This equipment constitutes a complete communication and control facility for use at ground air installations.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Voice or signal light.

TYPE COMMUNICATION CIRCUITS: Radiotelephone, commercial landline telephone, voice recorders, and crash alarm emergency facilities.

CONTROL FACILITIES: 4 telephones, 2 recorders, 12 radio receivers, 8 radio transmitters, 10 crash alarm substations, and various lighting and intercommunication facilities.

POWER REQUIREMENTS: 500 w, 117/234 v, 60 cyc, 1 phase (3-wire) ac, or 500 w, 117 v, 60 cyc, 1 phase (2-wire) ac. In emergencies (5 to 6 hrs): Four 50-v,(60-amp)Storage Battery BB-245/U (nickel cadmium).

PHYSICAL CHARACTERISTICS

Airport Control Tower Console AN/FRC-19A measures 222 x 50 x 36 inches, net weight 2,296 pounds, volume 104.05 cu ft, 2.5 ship tons. Packed for domestic and export shipment: total weight 2,755 pounds, total volume 115 cu ft, 2.9 ship tons. Shipped in 30 packages.

STATUS: L/Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

AN/FRC–23, –26

RADIO-TELEPHONE TERMINAL SET, RADIO REPEATER SET

NO PHOTOGRAPH AVAILABLE

Radio-Telephone Terminal Set AN/FRC–23 and Radio Repeater Set AN/FRC–26 are fixed plant, pm microwave radio transmitting and receiving sets that are the system transmitting and repeater elements, respectively, of a 24-channel, simultaneous two-way, point-to-point communications system.

Radio-Telephone Terminal Set AN/FRC–23 consists essentially of the normal transmitter and receiver components plus a standby or spare transmitter and a diversity receiver that can be used as a spare, and antenna, multiplexing, testing, and associated items.

Radio Repeater Set AN/FRC–26 is composed essentially of the same primary operating components arranged for operation at intermediate points of a system to extend its effective range.

These sets can be adjusted to operate in conjunction with Radio Repeater Set AN/FRC–34 and Radio Set AN/FRC–35, after rearrangement of components and interconnections.

AN/FRC–23, –26

**RADIO-TELEPHONE TERMINAL SET,
RADIO REPEATER SET**

INSTRUCTION LITERATURE: TM 11–222B

USING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE: Extended.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1,700 to 1,850.

TYPE MODULATION: Pulse (P2f, P3f).

TYPE OF SIGNAL: Tone, voice.

POWER OUTPUT: 10 w (xmtr).

POWER REQUIREMENTS: 1,500 w (at rep), 2,400 w (at term.), 117 v ±5%, 50/60 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

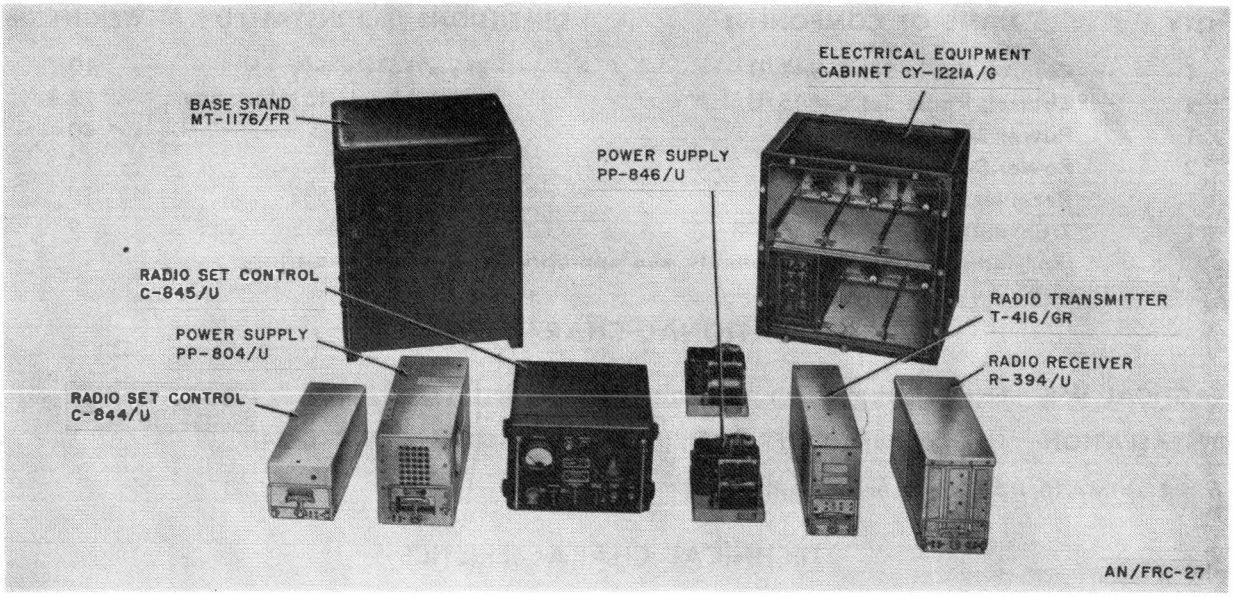
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

AN/FRC–27, TRC–34

RADIO SET



Radio Sets AN/FRC–27 and AN/TRC–34 are vhf, fm, low-powered radio receiving and transmitting equipment used in communication applications in the field.

This equipment consists of receiver and transmitter components, local and remote-control units, equipment cabinet and base, related power supplies, and accessories.

It can be operated in simplex, duplex, and retransmission applications. Push-to-talk operation over either of two preset frequency channels is provided either locally or at a maximum distance of 10 miles from the transmitter site. Duplex operation requires an additional antenna and can be conducted from the local operating site only. The remote-control unit can be used to transmit tone signals for signaling and for transmitter adjustment, to monitor reception, and to intercommunicate between the remote point and the set.

Radio Sets AN/FRC–27 and AN/TRC–34 are identical except that Base Stand MT–1176/FR is supplied only with the former.

AN/FRC-27, TRC-34

RADIO SET

INSTRUCTION LITERATURE: TM 11-226

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 11 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Control, Radio Set C-844/U	8¾ x 14¾ x 5⅞	10
1	Control, Radio Set C-845/U	8⅞₁₆ x 13¾ x 13½	17.5
1	Power Supply PP-804/U	8⅝ x 7 x 14½	40
2	Power Supply PP-846/U	5⅛ x 6¼ x 7₁₁₁₆	10
1	Receiver, Radio R-394/U	8½ x 14½ x 5¾	19
1	Transmitter, Radio T-416/GR	8½ x 14½ x 4½	9

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant; division and higher headquarters.

INSTALLATION: Fixed station (AN/FRC-27); ground, transportable (AN/TRC-34).

APPROXIMATE RANGE: Line of sight.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 152 to 174.

TYPE MODULATION: Fm (F2, F3).

TYPE OF SIGNAL: Voice.

TRANSMITTER POWER OUTPUT: 20 w, 45 w.

POWER REQUIREMENTS:

PP-804/U: 115/230 v, 230 va, 50/60 cy ac.
PP-846/U: 115/230 v, 46 va, 50/60 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
AN/FRC-27	21¼ x 16⅞ x 20½ (cab.)	311.6	13		
AN/TRC-34		237.6	9		
DOMESTIC PACK:					
AN/FRC-27		346	23	.58	5
AN/TRC-34		252	15		4
EXPORT PACK:					
AN/FRC-27		473	27.6	.69	4
AN/TRC-34		343	18.7		3

STATUS:

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

AN/FRC-30

RADIO SET

NO PHOTOGRAPH AVAILABLE

Radio Set AN/FRC-30 is an am, hf, single-sideband, twin-channel radiotelephone equipment used to handle two-way telephone or six two-way radiotelegraph or radioteletype traffic in long-range, point-to-point communication. It can be operated in transoceanic radio communication circuits.

This equipment includes radio transmitting equipment (shown above) that provides operation over 10 pushbutton-selected preset frequency channels, and receiving, carrier terminal, and auxiliary components.

AN/FRC–30

RADIO SET

INSTRUCTION LITERATURE: TM 11–814, TM 11–870, TM 11–2132

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 25 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Carrier Terminal OA–63/FRC–10	91 x 36 x 180	6,780
1	Carrier Terminal OA–64/FRC–10	84 x 28 x 44	1,440
1	Radio Receiver R–369/FRC–10	84 x 22½ x 17	550
1	Transmitter, Radio T–409/FRC–30	48 x 42½ x 84	5,800

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE: Long range.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE:

Carrier Terminals: 425 to 4,845 cy (26 carr freq).
Receiver: 4 to 28 mc.
Transmitter: 4 to 23 mc.

TYPE MODULATION: Am (A3a, A3b, A4, A9, A9c).

TYPE OF SIGNAL: Voice, facsimile, composite.

POWER OUTPUT: 1 kw (dsb); 4 kw (ssb).

POWER REQUIREMENTS:

Carrier Terminals: 3 kw, 115 v, 50/60 cy ac.
Receiver: 500 w, 115 v, 50/60 cy, 1 ph ac.
Transmitter: 10 kva (9 kw), 230 v, 50/60 cy, 3 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	91 x 245 x 84	11,570	383.1	9.6	
DOMESTIC PACK:					
EXPORT PACK:		13,877	668.8	16.7	

STATUS: L/Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

AN/FRC-31

RADIO SET



Radio Set AN/FRC-31 is a general-purpose, vhf, fm (voice or tone) radio receiving and transmitting equipment used for nontactical, fixed plant communication applications in the field by military police, Transportation Corps, and similar operations. It is operated from a console, which can be set up at a maximum distance of 10 miles from the rest of the equipment.

This equipment consists essentially of an antenna used for both transmission and reception, the operating console, and an equipment cabinet that houses the transmitter, receiver, power supply, control unit, and ac panel.

This set has facilities for transmitting and receiving on either of two pairs of crystal-controlled frequencies to enable communication with groups of vehicles, in a typical application, over one pair of frequencies while communication is maintained over the other pair of frequencies with other fixed stations.

AN/FRC-31

RADIO SET

INSTRUCTION LITERATURE: TM 11-234

USING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Antenna AT-427/FRC-31	164 lg x 3 3/16 dia	73
1	Console C-559C/FRC-6	9 x 12 3/4 x 13	30
1	Power Supply PP-966/FRC-31	7 1/4 x 6 1/4 x 19	42
1	Receiver, Radio R-565/FRC-31	5 1/4 x 4 7/8 x 16 1/2	9
1	Transmitter, Radio T-413/FRC-31	5 1/4 x 4 7/8 x 16 1/2	6.5
1	Electrical equipment cabinet	54 5/16 x 18 x 20	128.5

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Nontactical (MP guard security troops, Transportation Corps, etc).

INSTALLATION: Fixed station.

APPROXIMATE RANGE: Line of sight (25 to 50 mi, nom).

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 152 to 174 (rcvr, 2 chan within 180 kc of ea other); 152 to 174 (xmtr, 2 chan within 240 kc of ea other); 162 to 174 (ant.).

TYPE MODULATION: Fm (F3).

TYPE OF SIGNAL: Voice or tone.

TRANSMITTER POWER OUTPUT: 50 w (167 to 174 mc); 60 w (152 to 167 mc).

POWER REQUIREMENTS: Console 50 w; pwr sup 115 w (standby), 480 w (transmit); 117 v; 60 cy; 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	54 5/16 x 18 x 20 (cab.)	305			
DOMESTIC PACK:					
EXPORT PACK:		583	33.2	.83	3

STATUS: Std

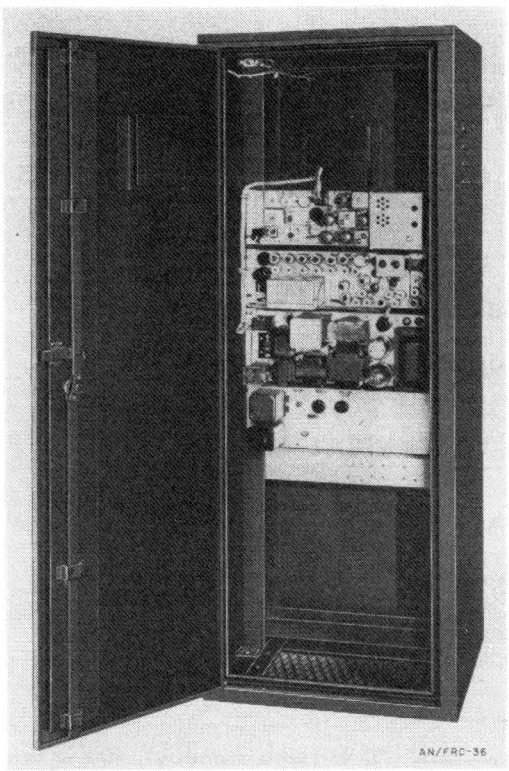
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

AN/FRC-36

RADIO SET



Radio Set AN/FRC–36 is a commercial medium-power, fm (voice), fixed radio receiving and transmitting equipment used for two-way communication by guards and security police in internal security and industrial control operations.

This equipment consists of a remotely controlled, outdoor base station. A weatherproof cabinet houses the transmitter, receiver, power supply, and antenna. Remote-control facilities are furnished by a separate unit, Radio Set Control C–1624/FRC–36.

AN/FRC-36

RADIO SET

INSTRUCTION LITERATURE: NAVSHIPS 92758

USING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Guard and security police operations.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE (IN MILES): 20.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 30 to 42.

TYPE MODULATION: Fm (F3).

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 50 w.

POWER REQUIREMENTS: 40 w (rcvr), 70 w (xmtr standby), 400 w (xmtr), 115 v, 60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	54 5/16 x 20 x 18		11.5		
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: T/Std

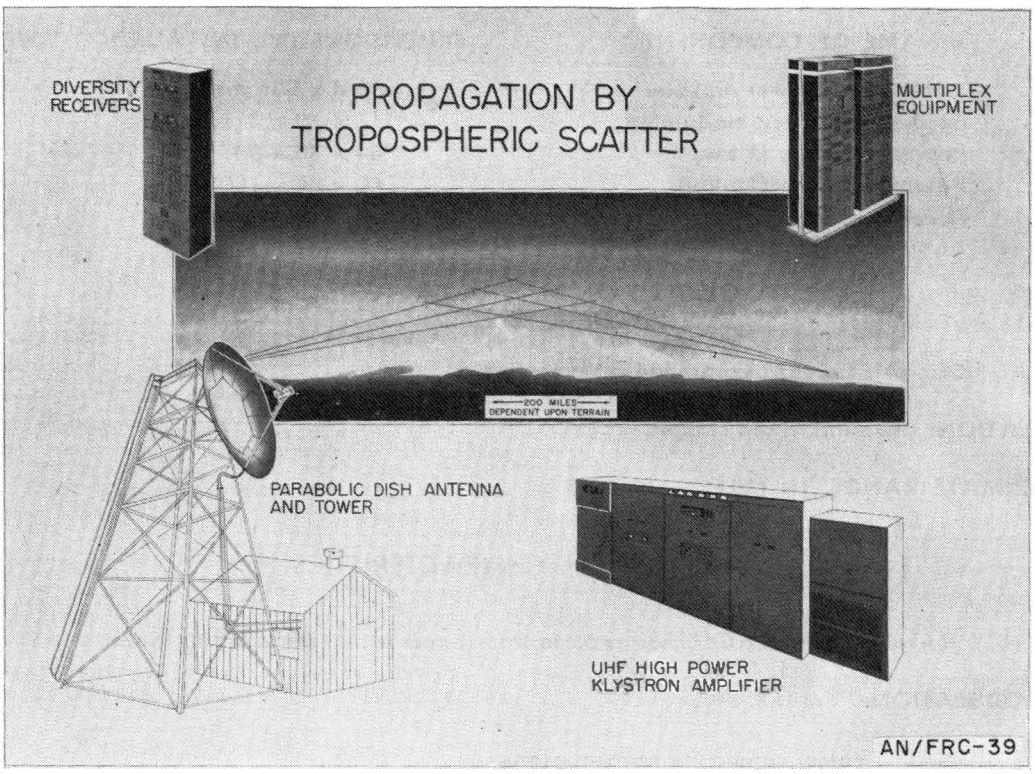
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 4 June 1956

AN/FRC–39

RADIO SET



Radio Set AN/FRC–39 is a multichannel equipment for voice and data signal transmission in point-to-point communication facilities serving filter centers of the Air Defense Command.

The number of operating components of this equipment that is required depends on its intended use as a terminal station (or in pairs as a repeater station) of a radio relay facility.

It normally is operated with such other equipment as Telephone Terminals AN/TCC–3 and AN/TCC–7 or Telegraph Terminal AN/TCC–20.

AN/FRC-39

RADIO SET

INSTRUCTION LITERATURE:

USING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 4 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	Antenna w/power diplexer	96 d x 336 dia	1,800
	Exciter, frequency-modulated	17 x 19 x 31½	225
	Power amplifier (1 kw)	54 x 30 x 84	1,600
	Power amplifier (10 kw)	46 x 84 x 180	8,600
	Receiver	17 x 19 x 33½	200

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Air Defense Command filter centers.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE (IN MILES): 200.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 755 to 985 (band A); 1,700 to 2,400 (band B).

TYPE MODULATION: Fm (F3, F9).

TYPE OF SIGNAL: Voice; composite transmissions.

POWER OUTPUT: 1 or 10 kw (depending on power ampl used).

POWER REQUIREMENTS:

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

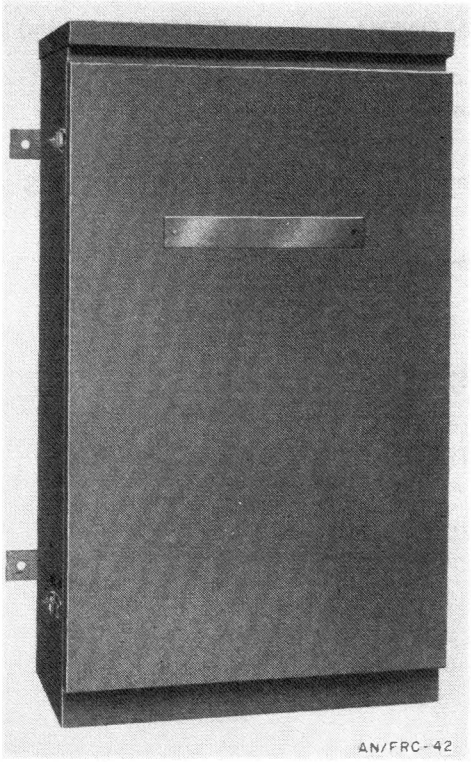
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

AN/FRC–42

RADIO SET



Radio Set AN/FRC–42 is a pole-mounted, fixed station equipment used for two-way voice communication.

The pole-mounted cabinet is provided with straps for mounting it on crossarms between two telephone poles. This cabinet must be installed close to the antenna transmission line and a source of line voltage. Sufficient room should be available to open the cabinet for servicing.

This equipment is a militarized version of a commercial (General Electric Company Model PO–16W) pole-mounted radio set.

AN/FRC-42

RADIO SET

INSTRUCTION LITERATURE: NAVSHIPS 92653

USING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Electrical Equipment Cabinet CY-1907/FRC-42		
1	Radio Receiver Transmitter RT-368/FRC-42		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore station communications.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 30 to 42.

TYPE MODULATION: Fm (F3).

TYPE OF SIGNAL: Voice.

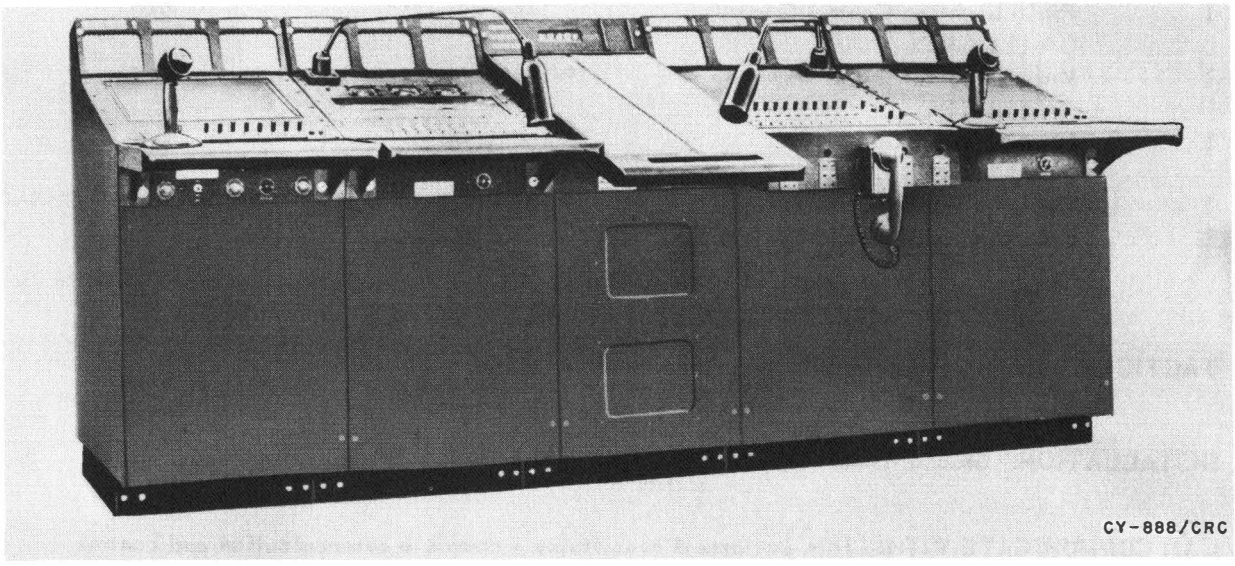
POWER OUTPUT: 75 w.

POWER REQUIREMENTS: 117 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	27 x 12½ x 42				
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 26 May 52	**AN/FRC-TYPE** AN/COMP TYPE NUMBER: CY-888/CRC CONTROL TOWER CONSOLE



CY-888/CRC

Control Tower Console CY-888/CRC is used in air base operation. It normally forms a part of Airport Control Tower Console AN/FRC-19A and replaces Control Tower Console CY-442/CRC. It provides unified control of aircraft traffic operating either under visual CFR (contact flight rules) or under IFR (instrument flight regulations). This console is a centralized control point for all communication functions normally found in a control tower.

This equipment is comprised primarily of two local and one remote operating positions. Provisions are made for transmitter, receiver, field lighting, and recorder control.

Intercommunication, and crash alarm, commercial telephone connection, meteorological data presentation, range monitoring, and flight progress control facilities are also provided.

Two operator control positions are furnished. Each end section contains duplicate radio transmitter control facilities; the center sections are arranged so that either operator can manipulate the controls.

Storage Battery BB-245/U is supplied for emergency operation and permits normal operation of the equipment for 5 to 6 hours.

AN/FRC-TYPE

CY-888/CRC :AN/COMP TYPE NUMBER

CONTROL TOWER CONSOLE

INSTRUCTION LITERATURE: TO 16-35CY442-2
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET : 26 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Field Lighting Control Group OA-116/CRC	19-1/4 x 40 x 36	260
1	Meteorological Indicator Group OA-118/CRC	19-1/4 x 40 x 36	200
1	Flight Data Indicator Group OA-117/CRC	17 x 40 x 36	90
1	Communications Group OA-119/CRC	19-1/4 x 40 x 36	140
1	Control-Monitor Group OA-115/CRC	19-1/4 x 40 x 36	44

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Airport control at Air Force bases.

INSTALLATION: Ground fixed.

CAN COMMUNICATE WITH: This equipment constitutes a complete communication and control facility for use at ground air installations.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Voice or signal light.

TYPE COMMUNICATION CIRCUITS: Radiotelephone, commercial landline telephone, recorders, and crash alarm emergency facilities.

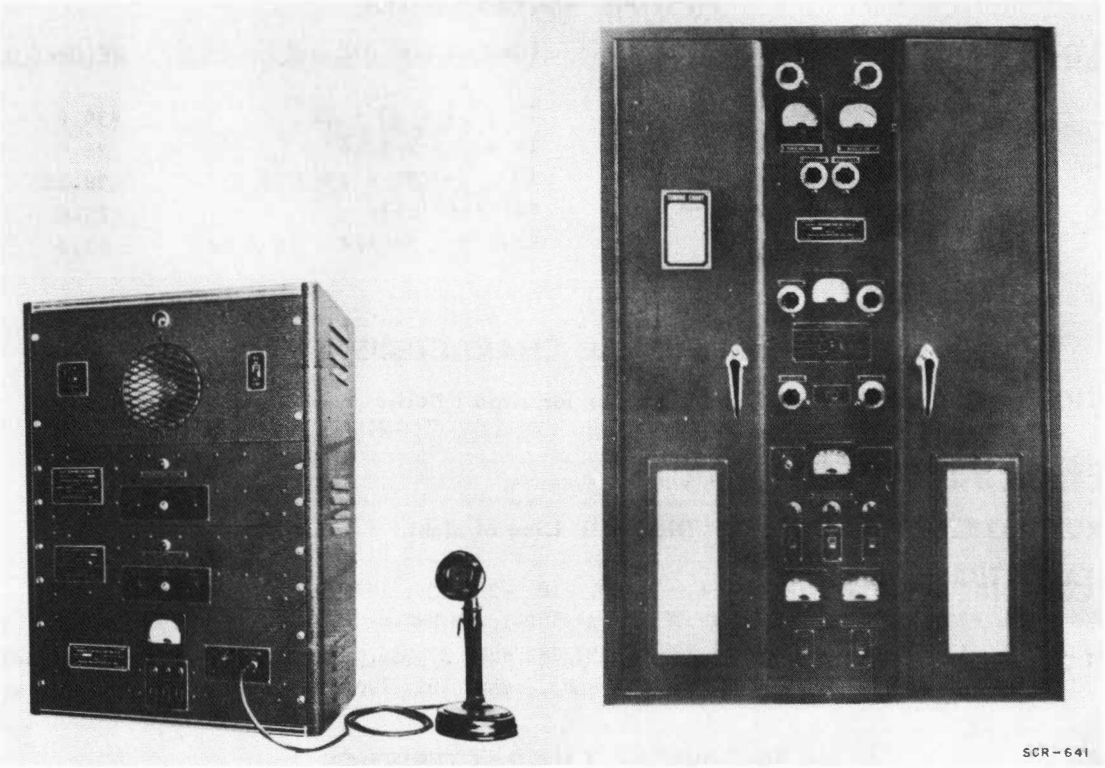
CONTROL FACILITIES: 4 telephones, 2 recorders, 12 radio receivers, 8 radio transmitters, 10 crash alarm substations, and various lighting and intercommunication facilities.

POWER REQUIREMENTS: 500 w, 117-234v, 60 cyc, 1 phase (3-wire) ac
or 500 w, 117 v, 60 cyc, 1 phase (2-wire) ac.
Emergency operation: (5 to 6 hrs): 50 v, (60 amp) dc from Storage Battery BB-245/U (nickel cadmium).

PHYSICAL CHARACTERISTICS

Control Tower Console CY-888/CRC measures 94 x 40 x 36 inches, net weight 960 pounds, volume 88.5 cu ft. Packed for domestic or export shipment: total weight 1,120 pounds, total volume 111.7 cu ft, 2.8 ship tons. Shipped in 24 packages.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 10 Jun 52	AN/FRC-TYPE SERVICE TYPE NUMBER: SCR-641 RADIO SET



Radio Set SCR-641 is normally used for two-way radiotelephone, ground-to-air and point-to-point communication. It is ground, fixed, station equipment operated at advanced air bases for aircraft traffic control.

This radio set consists of two separate units: Transmitter BC-797, complete with power supply and antenna which is designed to operate in the v-h-f range of 116 to 126.25 mc on a single preset, crystal-controlled channel; two receivers, one speaker, and one remote control unit.

Radio Receivers BC-1271 operate on a single preset, crystal-controlled channel in the v-h-f range 116 to 145 mc. The intermediate frequency is 6.125 mc which makes the receiver subject to interference from near-by transmitters operating on 6 mc.

Remote Control Unit RM-31 is normally located at the receiving position for ON/OFF control of the two receivers, and selection of one preset channel from either receiver. It also provides ON/OFF, and push-to-talk, single-channel operation of the transmitter. The transmitter may be operated up to a distance of 2-1/2 miles over 2 pairs of standard telephone lines.

Two Antenna Systems RC-254 are used; one connected to the transmitter, the other to the receivers with 72-ohm coaxial transmission line RG-11/U, or equal.

The power requirements are approximately 935 w of 115-v, ac.

AN/FRC-TYPE

SCR-641 :SERVICE TYPE NUMBER
RADIO SET

INSTRUCTION LITERATURE: TM 11-650
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-797	29-1/16 x 43 x 21	430.0
1	Remote Control Unit RM-31	19 x 7 x 9-3/16	28.0
2	Radio Receiver BC-1271-A	19 x 5-7/32 x 13-3/16	38.25
2	Antenna System RC-254-A	Not Available	175.0
1	Cabinet CH-205-A (includes speaker)	21-5/8 x 28-1/4 x 16-5/16	50.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Issued to advanced air bases for airport traffic control.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -2, -5, -18, -28, -36; AN/CRT-2; AN/FRC-7; AN/GRC-30; AN/MRC-20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10; -12, -21; AN/URT-7, -10; AN/VRC-1; BC-639, -640; MAR; MBS; R-137/GR; RBK; RC-256, -257; RCK; RCO; SCR-522, -542, -573, -574, -575, -607, -616, -624, -641, -643, -644; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES:
Transmitter: 116 - 126.25 crystal-controlled.
Receiver: One preset, crystal-controlled frequency, from 116 - 145 for each receiver.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 45 w (unmodulated carrier).
Receiver: 1 w into a 600 ohm resistive load (Nominal).

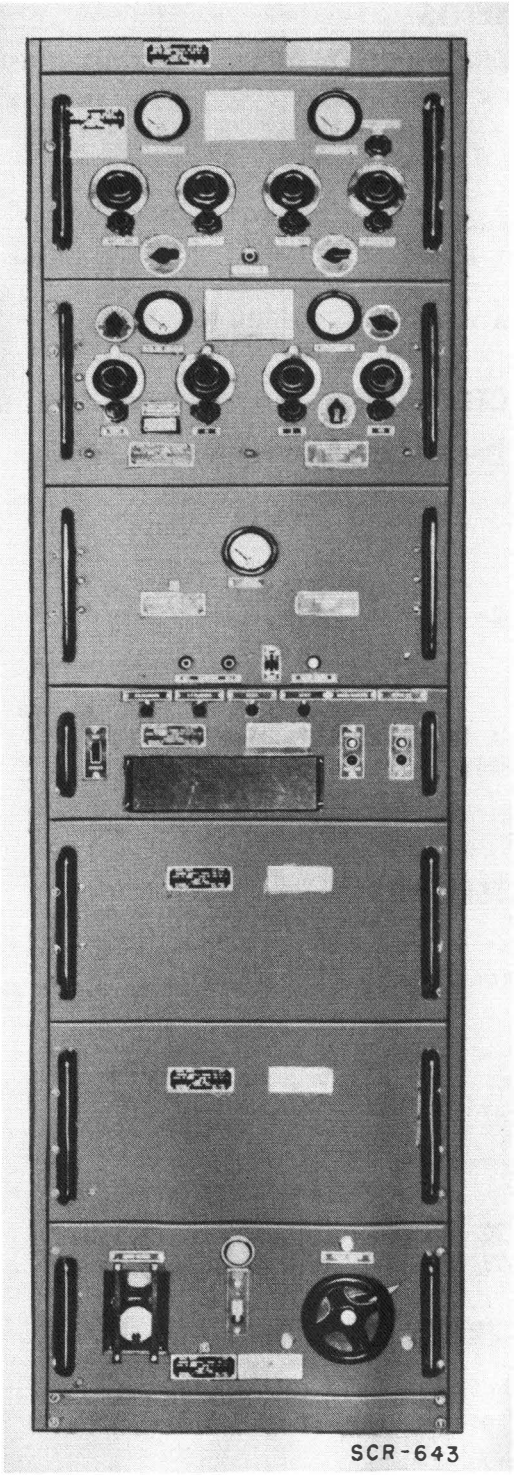
POWER REQUIREMENTS:

BC-797:	750 w
BC-1271 (2 each):	160 w
RM-31:	25 w
Total	935 w of 115 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Set SCR-641 measures 50-11/16 x 43 x 21 inches, net weight 725 pounds, volume 29.75 cu ft, 0.6 ship ton. Packed for domestic or export shipment: total weight 870 pounds, total volume 32.73 cu ft, 0.9 ship ton. Shipped in 5 packages both domestic and export.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 10 Jun 52	**AN/FRC-TYPE** SERVICE TYPE NUMBER: SCR-643 RADIO SET



SCR-643

Radio Set SCR-643 is a complete fixed station, ground, radio transmitting equipment for point-to-point, and ground-to-air operation. Twc Radio Transmitters BC-640 each provide one preset, crystal-controlled voice, or tone-modulated channel, in the v-h-f range 100 to 156 mc. This equipment is normally used to provide two transmitting channels for v-h-f Aircraft Control Net Systems.

This radio set consists of two radio transmitters (one of which is shown here) antenna equipment including masts, monitoring equipment, power unit, and shelter for the power unit.

Transmitters can be operated either locally, or from a remote point, by Control Unit RM-27.

Radio Set SCR-643 is normally operated in conjunction with Radio Set SCR-644, its companion receiving facility, from the operating site of which it may be controlled from distances up to two miles.

Such remote operation permits ON/OFF control, adjustment of audio input level, monitoring of audio input as well as monitoring the r-f output of the transmitter.

The transmitter input matches 72-ohm coaxial cable, such as RG-11/U, for operation of recommended Antenna Equipment RC-81.

Power requirements are supplied by Power Unit PE-99 or an equivalent source of 110 to 120 v, 50/60 cyc, 1 phase, ac.

AN/FRC-TYPE

SCR-643 :SERVICE TYPE NUMBER
RADIO SET

INSTRUCTION LITERATURE: TO 40SCR-643-2
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET: 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Transmitter BC-640-A	21-1/4 x 72-3/8 x 20	5 each
2	Antenna Equipment RC-81-A	28 x 12 x 39	4 "
1	Antenna AM-56-B or Antenna Mast MA-6	43-1/2 x 188 x 25-3/4	4,078
1	Monitoring Equipment RC-80-A	20-1/2 x 72 x 3	134
2	Power Unit PE-99-A (including one and one spare)	28 x 41 x 60	1,140 each
1	Shelter HO-3	49 x 66 x 60	2,000

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Issued on any organizational level as project material in accordance with AFR 100-17.

INSTALLATION: Designed for 19-inch relay rack.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -12, -21; AN/VRC-1; BC-639, -787; MAR; MBS; R-137/GR; RBK; RBO; RC-103, -256; RCK; RCO; SCR-522, -542, -574, -575, -607, -616, -624, -641, -644.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 to 156 simultaneous operation on two crystal-controlled preset channels, (one preset channel for each transmitter).

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice or tone.

POWER OUTPUT: 50 w (Nominal).

POWER REQUIREMENT: 5.5 kva with heaters) 110 - 120 v, 50/60 cyc, 1 phase, ac (supplied
2.5 kva without heaters) by PE-99, or equivalent power source).

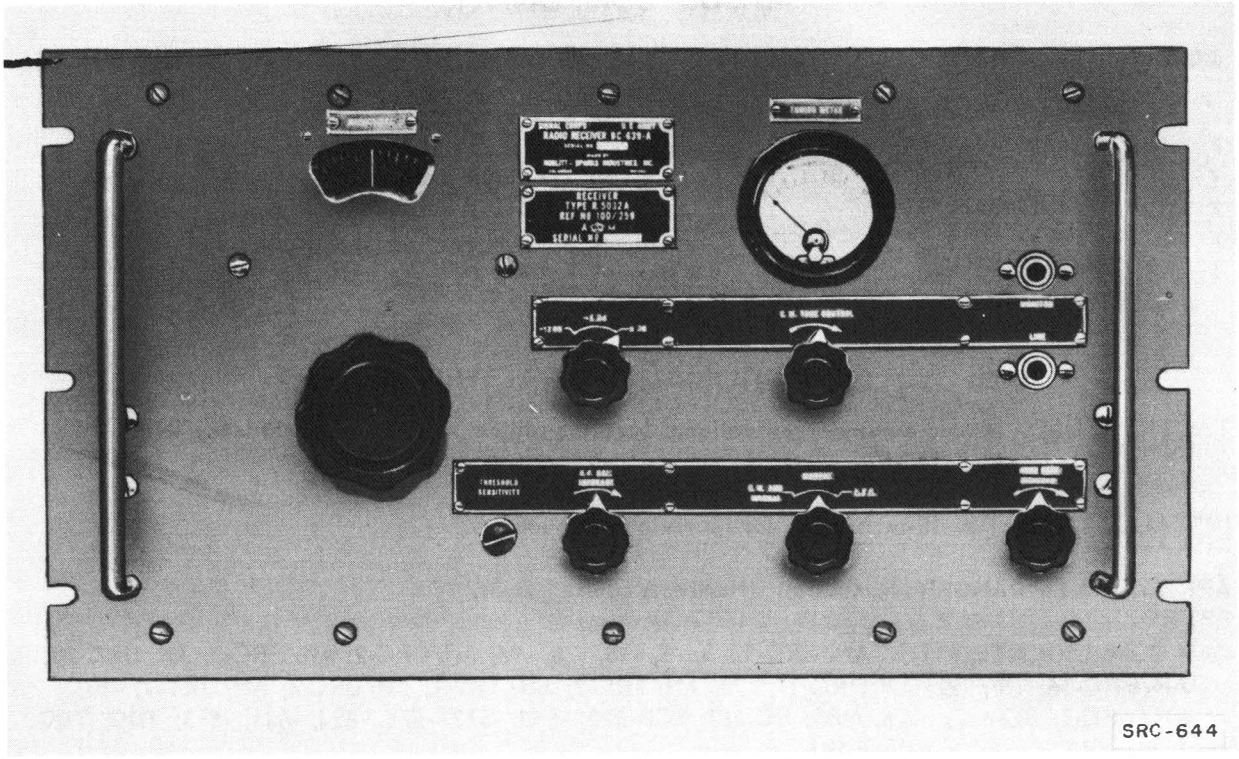
PHYSICAL CHARACTERISTICS

Radio Set SCR-643 measures 120 x 84 x 84 inches, net weight 9,699 pounds, volume 490 cu ft. Packed for domestic or export shipment: total weight 10,000 pounds, total volume 500 cu ft, 12.5 ship tons. Shipped in 16 packages both domestic and export.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 9 Jun 52

AN/FRC-TYPE

SERVICE TYPE NUMBER: SCR-644
RADIO SET



Radio Set SCR-644 is a fixed, ground, v-h-f, a-m and c-w receiving station (one Radio Receiver BC-639 is shown above) providing simultaneous reception on two channels, and remote control operation of its companion transmitter equipment Radio Set SCR-643. It is normally used for ground-to-air and point-to-point communication.

Control and amplifier units allow received signals from aircraft to be passed on by wire to the flight control center.

This radio set is normally operated in conjunction with Radio Set SCR-643 (transmitting) over telephone lines, from distances of 1/4 to 1-1/2 miles. When cw is used, the distance must not exceed 500-feet.

These receivers are manually tuned, and are crystal monitored by means of Frequency Meter BC-638.

The antenna input circuit is designed to match 72-ohm coaxial cable. Recommended antenna is RC-81-C of which two are used. The nominal output impedance is 600 ohms but satisfactory operation can be had on 200 to 20,000 ohm resistive loads.

Power is supplied by Power Unit PE-99, or any equivalent source of 115 to 120 v, 50/60 cyc, 1 phase, ac.

No housing facilities are provided. It may be housed in any available building, preferably in one room.

AN/FRC-TYPE	INSTRUCTION LITERATURE: TO 16-40SCR644-2
SCR-644 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO SET	USING SERVICE : Air Force
	DATE OF THIS SHEET: 9 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Radio Receivers, BC-639-A	19 x 10-15/32 x 13-9/16	38 each
2	Rectifier, RA-42-A	19 x 6-31/32 x 8-23/32	26 "
2	Control Unit, RM-18	19 x 5-7/32 x 8-31/32	15 "
2	Amplifier, BC-686-A	19 x 10-1/2 x 10-15/32	36 "
1	Power Unit, PE-99-A	28 x 41 x 60	1,140
1	Shelter, HO-3	48 x 66 x 60	2,000

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Issued on any organizational level as project material in accordance with AFR 100-17.

INSTALLATION: Two 19-inch racks for receiving components.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-16, -20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URT-7, -10; AN/VRC-1; BC-640; MAW; MBS; RC-257; SCR-522, -542, -573, -575, -624, -641, -643; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 - 156.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, voice, or tone.

POWER OUTPUT: 1 w into a 600 ohm resistive load for each receiver.

POWER REQUIREMENTS: 4.5 kva with heaters) 110-120 v, 50/60 cyc, 1 phase, ac
1.5 kva without heaters) (supplied by Power Unit PE-99 or equivalent power source).

PHYSICAL CHARACTERISTICS

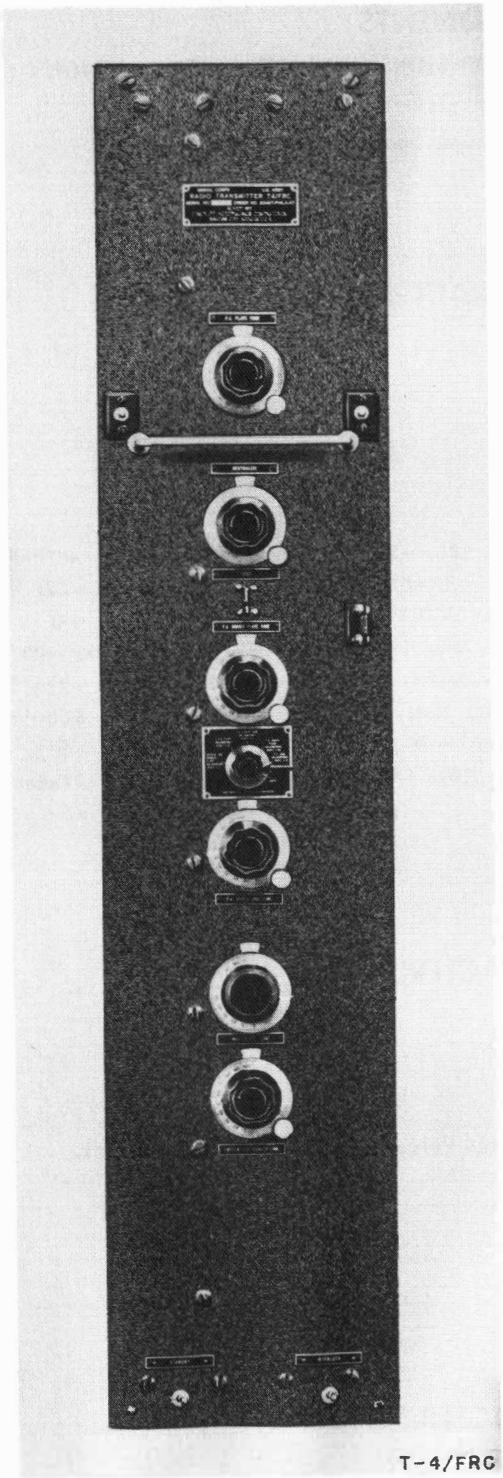
Radio Set SCR-644 measures 144 x 84 x 84 inches, net weight 9,099 pounds, volume 588 cu ft. Packed for either domestic or export shipment: total weight 9,500 pounds, total volume 590 cu ft, 14.75 ship tons. Shipped in 15 packages both domestic and export.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 31 Jan 52

AN/FRC-TYPE

AN/COMP TYPE NUMBER: T-4/FRC

RADIO TRANSMITTER



T-4/FRC

Radio Transmitter T-4/FRC is a crystal-controlled, medium frequency, a-m (voice, cw, mcw, and frequency-shift keying) Transmitting equipment, for point-to-point or ground-to-air communication in the medium frequency band, at air bases and similar fixed plant applications.

This equipment consists of a radio transmitter inclosed in a steel floor-type cabinet which also contains the low-voltage power supply unit. It can be operated from a distant location by means of appropriate remote-control equipment, and is provided with a selector switch for selection of crystal, or master oscillator control, or for radio-teletype communication.

For c-w transmission a power supply unit alone must be added; for voice communication a power supply unit and a modulator are required. It may be used with three other transmitters, a modulator, and suitable power supply equipment to constitute a multichannel station equipment.

Operates into a delta-matched doublet, or a rhombic, or equivalent antenna system, and requires a 400 - 600-ohm transmission line.

Requires 220-v ac.

AN/FRC-TYPE	INSTRUCTION LITERATURE: TM 11-820
T-4/FRC :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTER	USING SERVICE : Army
	DATE OF THIS SHEET: 31 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE (IN (MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA: SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 19S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 - 18.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, frequency shift keying, and voice with additional equipment.

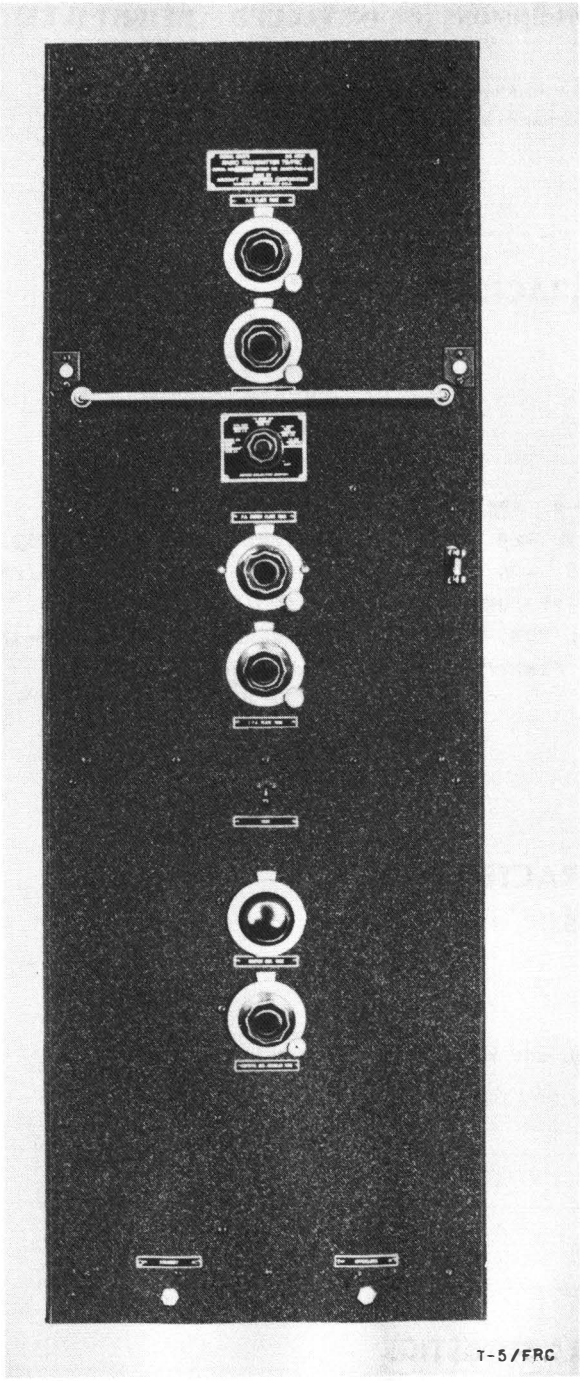
POWER OUTPUT: 400 w.

POWER REQUIREMENTS: 220 v, 50/60 cyc ac.

PHYSICAL CHARACTERISTICS

Radio Transmitter T-4/FRC weighs 330 pounds net.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 30 Jan 52	**AN/FRC-TYPE** AN/COMP TYPE NUMBER: T-5/FRC RADIO TRANSMITTER



T-5/FRC

Radio Transmitter T-5/FRC is a long-range, high-power, medium- and low-frequency, crystal-controlled, transmitting station equipment. Can be used for communication by a-m (voice using additional equipment cw, mcw, or frequency-shift keying) signals at fixed plant installations.

This equipment consists of a single transmitting unit and a tuning house, and it is used principally as the low-frequency r-f unit of a multichannel radio system.

It operates into a 600-ohm transmission line which feeds a vertical radiator, or a beveridge type antenna.

A low-voltage power supply unit is contained within the equipment cabinet and the high-voltage is furnished by an external source. It requires 220-v, a-c power.

AN/FRC-TYPE

T-5/FRC : AN/COMP TYPE NUMBER

RADIO TRANSMITTER

INSTRUCTION LITERATURE: TM 11-820
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 30 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter T-5/FRC	61 x 24 x 18	450
1	Antenna Tuning House	49-1/4 x 38-1/4 x 39-1/8	193

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Fixed station.

APPROXIMATE RANGE (IN MILES): Medium, long.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/FRR-4, -28; AN/GRR-2, -3; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-4; BC-314; -344, -348, -453, -779, -1004; MBS; OA-58/FRC; R-52/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBG; RBH; RBL; RBM; RBO; RCF; RCG; RCH; RDF; RDM; SCR-177, -244, -274, -614; AR-88 (RCA); ARC Type 12; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.15 - 0.55.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, frequency shift keying, and voice with additional equipment.

POWER OUTPUT: 600 w.

POWER REQUIREMENTS: 220 v, 50/60 cyc, ac.

PHYSICAL CHARACTERISTICS

Information on Radio Transmitter T-5/FRC not available.

AN/FRC—TYPE

STATUS: Std

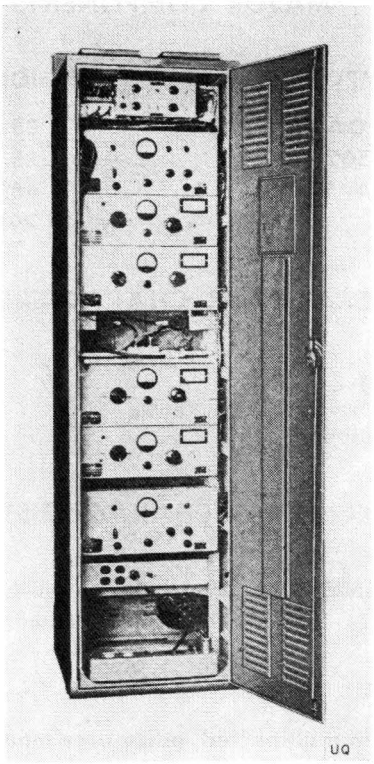
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 28 June 1956

SERVICE TYPE NUMBER: UQ

RADIO RELAY LINK



Radio Relay Link UQ is uhf relay equipment providing either 8- or 23-channel communication over a single radio beam by time multiplexing. Each of the 23 channels is primarily designed for voice communication but also can be used to provide many other types of communication within the limit of its bandwidth.

Using this equipment as a basis, radio relay links can be built up or expanded to meet actual traffic demands. Starting with any desired number of channels, more channels can be added, up to a maximum of 23, by merely inserting two additional plug-in units (one for transmitting and one for receiving) into the existing facilities.

A typical installation consists of rf multiplexing, patch and test, and terminating equipment.

AN/FRC–TYPE

INSTRUCTION LITERATURE: NAVSHIPS 91845

USING SERVICE: USN

DATE OF THIS SHEET: 28 June 1956

UQ: SERVICE TYPE NUMBER

RADIO RELAY LINK

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Radio Terminal Group OA–501/FRC	88 x 24 x 23⅜	596
1	Modulator Group OA–502/FRC	88 x 24 x 23⅜	555
1	Demodulator Group OA–504/FRC	88 x 24 x 23⅜	615
1	Terminal service group	20 x 20 x 110	57

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore installations.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Four-wire to two-wire terminating equip.; rf transmission line for ant. connection.

FREQUENCY: 1,700 to 1,850 mc.

TYPE MODULATION: Time-division multiplexed, pulse-time modulation.

POWER REQUIREMENTS: 115/230 v ac, 50/60 cy, 1 ph ac.

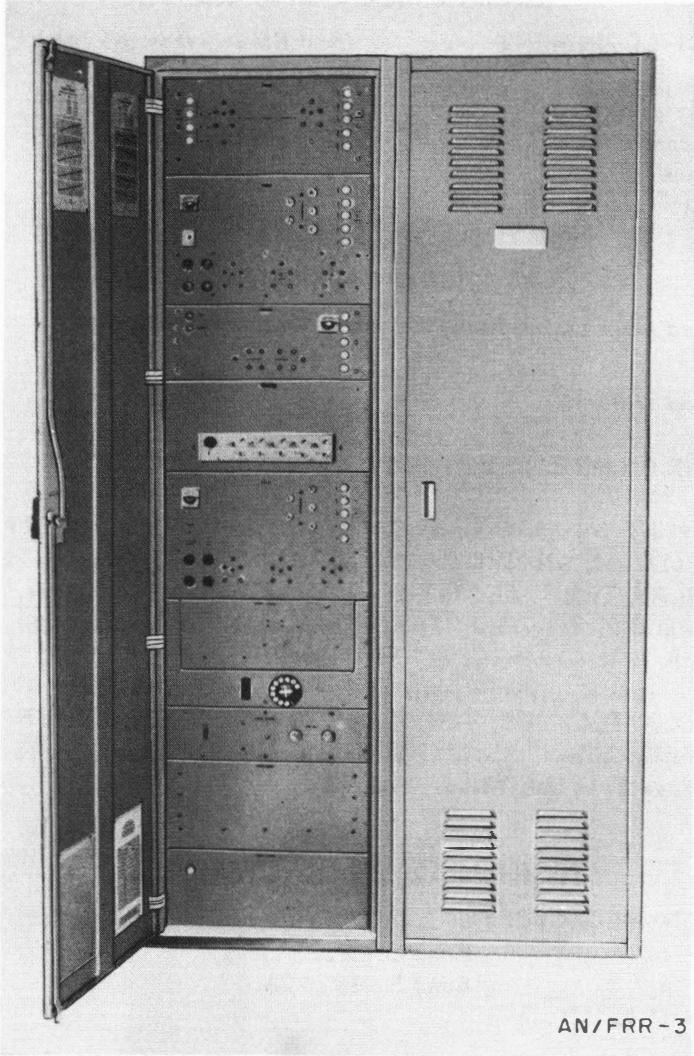
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	88 x 72 x 22⅜	3,200	100	2.5	
DOMESTIC PACK:		11,400	1,100	27.5	32
EXPORT PACK:					

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 2 Jan 52

AN/FRR-3

DIVERSITY RECEIVING EQUIPMENT



Diversity Receiving Equipment AN/FRR-3 is an h-f, a-m (voice and frequency-shift-keying) radio receiving equipment used in long-range, point-to-point communication to overcome the effects of radio fading. It is used as fixed plant equipment at Air Force weather stations and for similar applications.

This equipment consists essentially of two identical superheterodyne radio receivers, which operate from separate antennas, and an h-f oscillator common to both receivers. Its output can be fed to Radioteletype Terminal Equipment AN/FGC-1.

It is equipped with a telephone dial which may be used to turn the equipment on or off and to select any of five preset frequency channels or any combination of four antennas.

AN/FRR-3

DIVERSITY RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: TM 11-872
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 2 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Power supply unit	7-1/2 x 13-5/8 x 18-3/4	61.75
1	Receiver B unit	12-1/4 x 13-3/4 x 18-3/4	46.00
1	Receiver A unit	12-1/4 x 13-3/4 x 18-3/4	46.00
1	Antenna unit	8-3/4 x 13-5/8 x 18-3/4	35.00

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant installation, Air Force weather stations.

INSTALLATION: Fixed station.

APPROXIMATE RANGE (IN MILES): Extended.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.4 - 23.0, in 5 bands.

Band 1: 2.4 – 4.2.
Band 2: 4.2 – 6.9.
Band 3: 6.9 – 11.2.
Band 4: 11.2 – 17.5.
Band 5: 15 – 23.

TYPE MODULATION: Am.

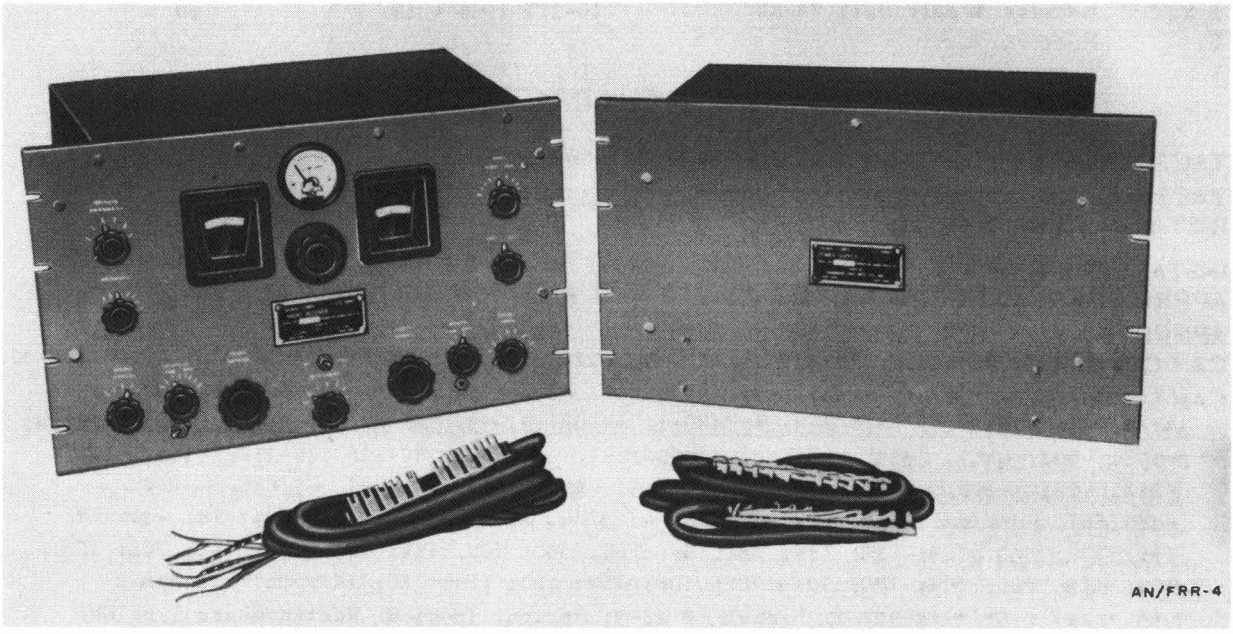
TYPE OF SIGNAL: Voice and frequency shift (radioteletype).

POWER REQUIREMENTS: 100-130 v, 50/60 cyc or 400 w, 200-260 v, 50/60 cyc ac.

PHYSICAL CHARACTERISTICS

Diversity Receiving Equipment AN/FRR-3 measures 85 x 22-1/2 x 17 inches, net weight 366.5 pounds, volume 29.19 cu ft. Packed for domestic shipment: total weight 800 pounds, total volume 53.8 cu ft, 1.35 ship tons. Shipped in 3 packages. Packed for export shipment: total weight 1,146 pounds.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 20 Dec 51	AN/FRR-4 RADIO SET



Radio Set AN/FRR-4 is a medium-frequency, a-m (voice, tone, and cw), long-range receiving equipment used for fixed station or mobile and vehicular installation (with appropriate shock mountings), and for intercept team applications.

This equipment consists of a commercial (Hammarlund Super-Pro) communications receiver which may be cabinet-inclosed or rack and panel mounted, plus a power supply unit.

It can be operated, in emergencies, by battery supply.

AN/FRR-4

RADIO SET

INSTRUCTION LITERATURE: TM 11-866
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 20 Dec 51

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver BC-1004	10-1/2 x 15-3/8 x 19	55
1	Power Supply Unit RA-84	10-1/2 x 10 x 19	60

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant; also used by radio intercept teams.

INSTALLATION: Fixed stations.

APPROXIMATE RANGE (IN MILES): 100.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25, -26; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.54 - 20 in 5 bands.

Band 1: 0.54 — 1.16
Band 2: 1.16 — 2.5
Band 3: 2.5 — 5
Band 4: 5 — 10
Band 5: 10 — 20

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, tone, and voice.

POWER REQUIREMENTS: 180 w, 105 — 125 v, 50/60 cyc, ac.

PHYSICAL CHARACTERISTICS

Radio Set AN/FRR-4 measures 21 x 25-3/8 x 38 inches; net weight 115 pounds, volume 3 cu ft. Packed for domestic shipment: total weight 116 pounds, total volume 4.3 cu ft. Packed for export shipment: total weight 175 pounds, total volume 7.4 cu ft. Shipped in 2 packages both domestic and export.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 9 Jan 52	**AN/FRR-7** RADIO RECEIVING SET



Radio Receiving Set AN/FRR-7 is a crystal-controlled, fixed-frequency, a-m (voice and tone) receiving equipment operating in the medium frequency band. It is used at army and higher headquarters.

Equipment consists of lightweight radio receiver with built-in power supply and loudspeaker. It provides for break-in operation when operated in conjunction with a transmitter using the same or an adjacent frequency.

This set has squelch control for reducing background noise, volume control, and provision for operation of an external loudspeaker. It uses a conventional type antenna system.

AN/FRR-7

RADIO RECEIVING SET

INSTRUCTION LITERATURE: TM 11-883
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 9 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army or higher headquarters.

INSTALLATION: Ground; fixed station.

APPROXIMATE RANGE (IN MILES): Medium to long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/FRT-15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-4; BC-191, -401, -447, -610; MBS; MQ; RC-52; SCR-177, -188, -193, -281, -399, -499, -506, -543; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBK; TBL; TBM; TBO; TBU; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; Collins 18S-4 (AF Model); Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.6 - 2.9.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Tone and voice.

POWER REQUIREMENTS: 40 w, 115 v, 50/60 cyc, ac.

PHYSICAL CHARACTERISTICS

Radio Receiving Set AN/FRR-7 measures 9 x 12 x 15-9/16 inches, net weight 30 pounds, volume 2.15 cu ft. Packed for domestic shipment: total weight 47 pounds, total volume 3.40 cu ft. Shipped in 1 package.

STATUS: Std

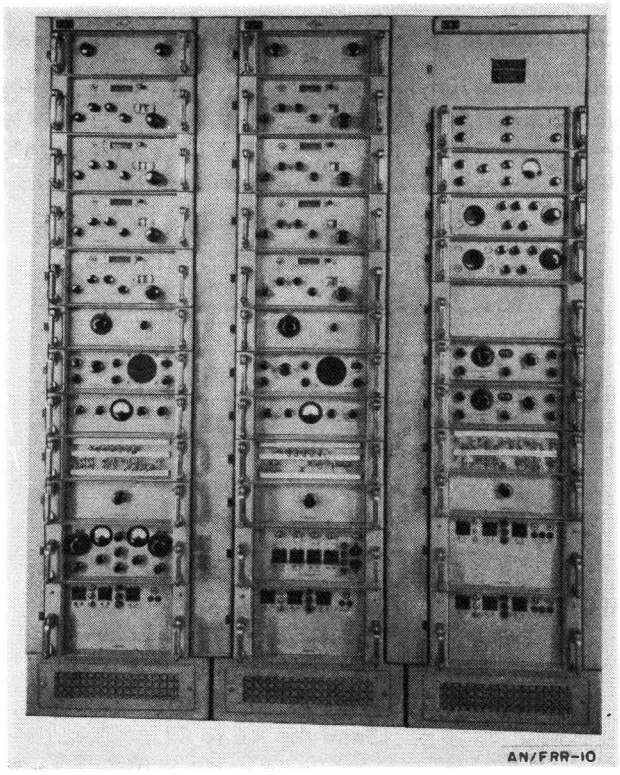
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

AN/FRR–10

RECEIVING SET, RADIO



Radio Receiving Set AN/FRR–10 is a double-conversion, superheterodyne diversity receiver used at shore stations in point-to-point communication.

The complete equipment consists of two receivers and the necessary switching-comparing and filtering facilities required to receive signals in signal- or space-dual-diversity operation, such as double-sideband radiotelephone, single-sideband radiotelephone or radioteletype, and single-sideband suppressed carrier radiotelephone or radioteletype.

Basically, the AN/FRR–10 performs the same function as Radio Receiving Sets AN/FRR–24 and AN/FRR–37 except that it receives single-sideband suppressed carrier signals but not frequency-shift telegraph signals.

AN/FRR–10

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: NAVSHIPS 92144

USING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
2	Amplifier-Converter AM–450B/FRR–24	13½ x 21⅛ x 24⅜	80
2	Amplifier-Converter AM–451B/FRR–24	13½ x 21⅛ x 24⅜	80
2	Amplifier-Converter AM–452B/FRR–24	13½ x 21⅛ x 24⅜	80

(For complete list of components, see instruction literature.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore installations.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE: Long.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 to 32 in four bands:
- Band 1: 2 to 4
- Band 2: 4 to 8
- Band 3: 8 to 16
- Band 4: 16 to 32

TYPE MODULATION: Am (A2, A3, A3a, A3b).

TYPE OF SIGNAL: Radiotelephone and radioteletype.

POWER OUTPUT:

POWER REQUIREMENTS: 1,392 w, 105/115/125 v, 50/60 cy ac.

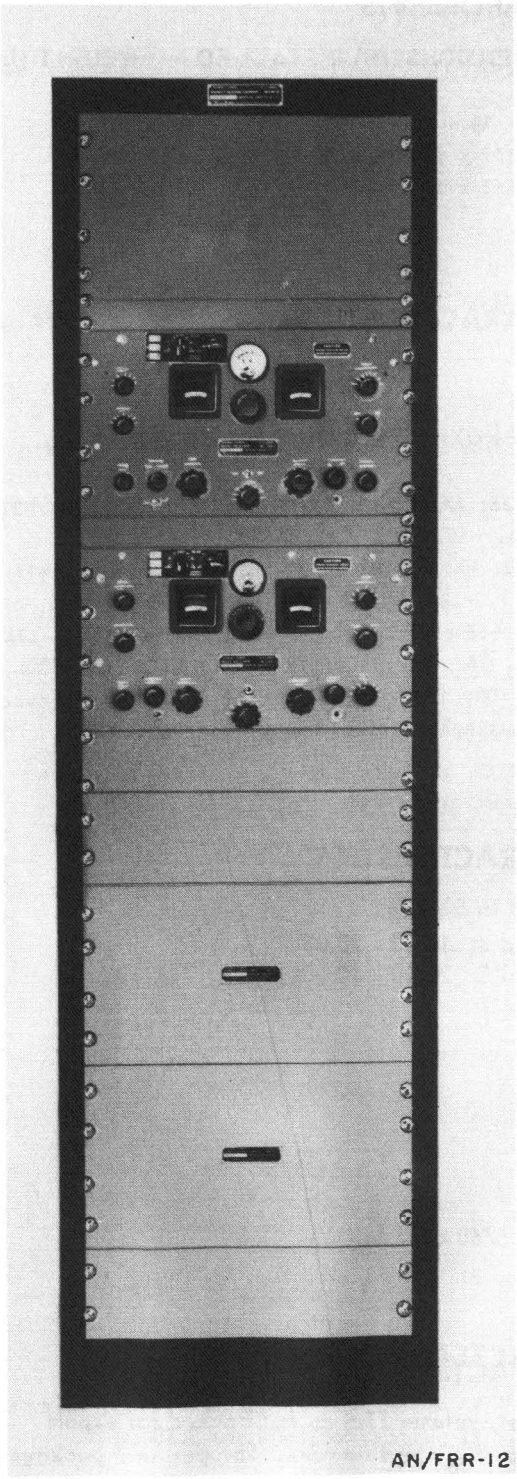
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	81 x 32¾ x 87	1,240			
DOMESTIC PACK:		2,900	200	5	35
EXPORT PACK:					

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

AN/FRR-12

RADIO RECEIVING SET



AN/FRR-12

Radio Receiving Set AN/FRR-12 is a dual-diversity radio receiving station equipment used for the reception of frequency-shift radioteletype and a-m (voice, tone, cw, or mcw) signals in the medium-high- and very-high-frequency bands in point-to-point, and fixed-station applications at division and higher headquarters.

This equipment consists of two rack- and panel-mounted receivers and associated power supply equipment inclosed as a single unit in a steel floor-type cabinet.

Receivers have noise-limiter, bandspread, phasing, volume, beat-frequency oscillator controls, and are crystal-controlled.

AN/FRR-12

RADIO RECEIVING SET

INSTRUCTION LITERATURE: TM 11-896
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Rack MT-660/FRR-12	76 x 19 x 22	230.0
2	Radio Receiver R-270/FRR	10-1/2 x 16-3/4 x 19	60.5
2	Power Supply Unit RA-74-D	10-1/2 x 10-1/4 x 19	60.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, fixed station. APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5 -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.25 - 40.00 in 5 bands.

Band 1: 1.25 - 2.50
Band 2: 2.50 - 5.00
Band 3: 5.00 - 10.00
Band 4: 10.00 - 20.00
Band 5: 20.00 - 40.00.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Am: voice, cw, icw, mcw.
Frequency shift teletypewriter.

POWER REQUIREMENTS: 400 w, 95-130/190-260 v, 25/60 cyc, ac.

PHYSICAL CHARACTERISTICS

Radio Receiving Set AN/FRR-12 weighs 472 pounds net, volume 17.5 cu ft. Packed for export shipment: total weight 934 pounds, total volume 34.7 cu ft, 1.12 ship tons. Shipped in 5 packages.

STATUS: Std

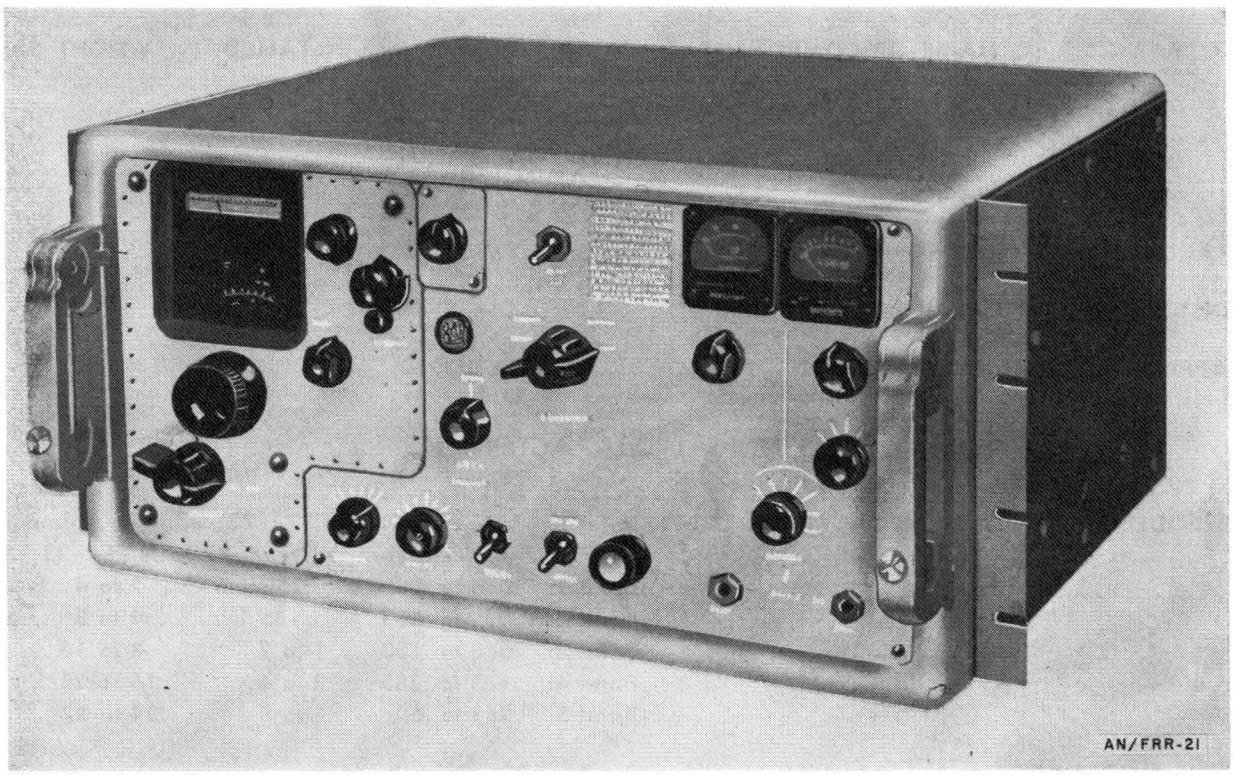
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 8 June 1956

AN/FRR–21, –22, –23

RECEIVING SET, RADIO



Radio Receiving Sets AN/FRR–21, AN/FRR–22, and AN/FRR–23 are used for fixed station operation in the low-, medium-, and high-frequency bands, respectively.

The frequency range of each receiver is divided into five bands with continuous tuning throughout each band.

The AN/FRR–21 has provision for receiving three types of emission (A1, A2, and F1), and the AN/FRR–22 and AN/FRR–23, for receiving four types of emission (A1, A2, A3, and F1).

The AN/FRR–21, AN/FRR–22, and AN/FRR–23 are basically similar to Radio Receiving Sets AN/SRR–11, AN/SRR–12, and AN/SRR–13, respectively.

AN/FRR–21, –22, –23

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: NAVSHIPS 92211

USING SERVICE: USN, USAF

DATE OF THIS SHEET: 8 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	(Equipment consists of a single major operating component.)		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore communication.

INSTALLATION: Ground, based.

APPROXIMATE RANGE: Extended.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .014 to .6 (–21); .25 to 8 (–22); 2 to 32 (–23); ea in five bands:

	AN/FRR–21	*AN/FRR–22*	*AN/FRR–23*
Band 1:	.014 to .03	.25 to .5	2 to 4
Band 2:	.03 to .063	.5 to 1	4 to 8
Band 3:	.063 to .133	1 to 2	8 to 16
Band 4:	.133 to .283	2 to 4	16 to 24
Band 5:	.283 to .6	4 to 8	24 to 32

TYPE MODULATION: Am (A1, A2 (–21, –22, –23); A3 (–22, –23)); fm (F1).

TYPE OF SIGNAL: Cw, voice, fsk.

POWER REQUIREMENTS: 105/115/125 v, 50/60 or 400 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	8¾ x 17½ x 18½	75	1.5		
DOMESTIC PACK:		130	4.9		1
EXPORT PACK:					

STATUS: S/Std

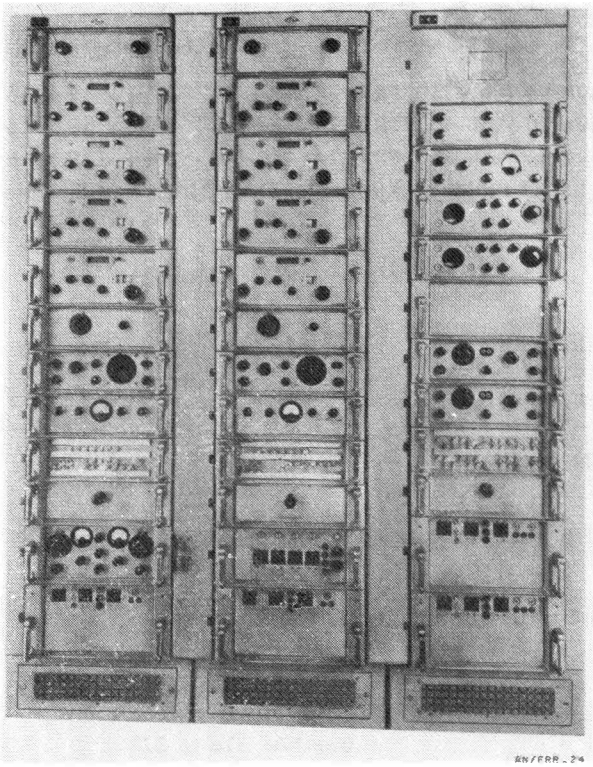
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 8 June 1956

AN/FRR–24

RADIO RECEIVING SET



Radio Receiving Set AN/FRR–24 is a diversity receiver for use at shore stations in point-to-point communication. It can receive signals in single-channel, space- or frequency-dual- or triple-diversity operations, such as double-sideband radiotelephone, on-off keyed radiotelegraph, and frequency-shift-keyed telegraph to operate single-channel teletypewriters at 24.5 dot cycles and/or up to four channel multiplex at 98 dot cycles.

The functions and performance of the AN/FRR–24 are similar to those of Radio Receiving Sets AN/FRR–10 and AN/FRR–37, except that the AN/FRR–24 uses both dual- or triple-diversity operation and cannot receive single-sideband suppressed signals.

The complete equipment is contained in four rack cabinets permanently connected together.

AN/FRR-24

RADIO RECEIVING SET

INSTRUCTION LITERATURE: NAVSHIPS 95180

USING SERVICE: USN

DATE OF THIS SHEET: 8 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
3	Amplifier-Converter AM-450/FRR-24	$6\frac{31}{32} \times 19 \times 16\frac{15}{16}$	58
3	Amplifier-Converter AM-451/FRR-24	$6\frac{31}{32} \times 19 \times 16\frac{15}{16}$	58
3	Amplifier-Converter AM-452/FRR-24	$6\frac{31}{32} \times 19 \times 16\frac{15}{16}$	58

(For complete list of major components, see instruction literature.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore installations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 to 32 in four bands:

Band 1: 2 to 4
Band 2: 4 to 8
Band 3: 8 to 16
Band 4: 16 to 32

TYPE MODULATION: Am (A1, A2, A3); fm (F1, F4).

TYPE OF SIGNAL: Cw, mcw, voice, fsk, facsimile.

POWER OUTPUT: 60 w into 600-ohm load.

POWER REQUIREMENTS: 1.5 kw, 105/115/125 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	84 x 17 x 76	1,400	42	1	
DOMESTIC PACK:		7,000	258	6.5	55
EXPORT PACK:					

STATUS: Std

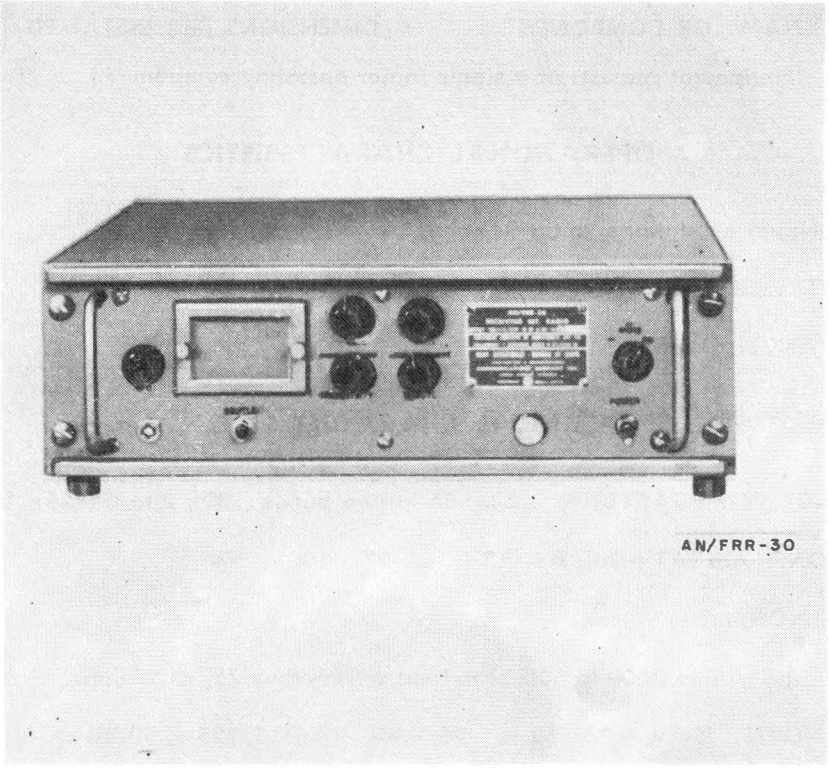
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

AN/FRR–26, –27, –30

RECEIVING SET, RADIO



Radio Receiving Sets AN/FRR–26, AN/FRR–27, and AN/FRR–30 are used in air-traffic control towers at naval air stations. They can also be used at naval shore stations or advanced bases in point-to-point communication applications.

This equipment, capable of continuous operation over a long period of time, can be used for both local and limited remote control operations.

Each set is similar in design and construction, differing only in frequency range.

AN/FRR–26, –27, –30

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: NAVSHIPS 92679

USING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Naval air stations; in traffic control.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE: Medium.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .2 to .56 in two bands (–30); 2 to 8 (–26); 100 to 156 (–27).

TYPE MODULATION: Am (A1 (–30); A2, A3 (–26, –27, –30)).

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: 1.5 w into 200– to 600–ohm load w/less than 7% distortion.

POWER REQUIREMENTS: 54 w (–27), 62 w (–26, –30), 105/115/125 v, 50/60 cy, 1 ph ac.

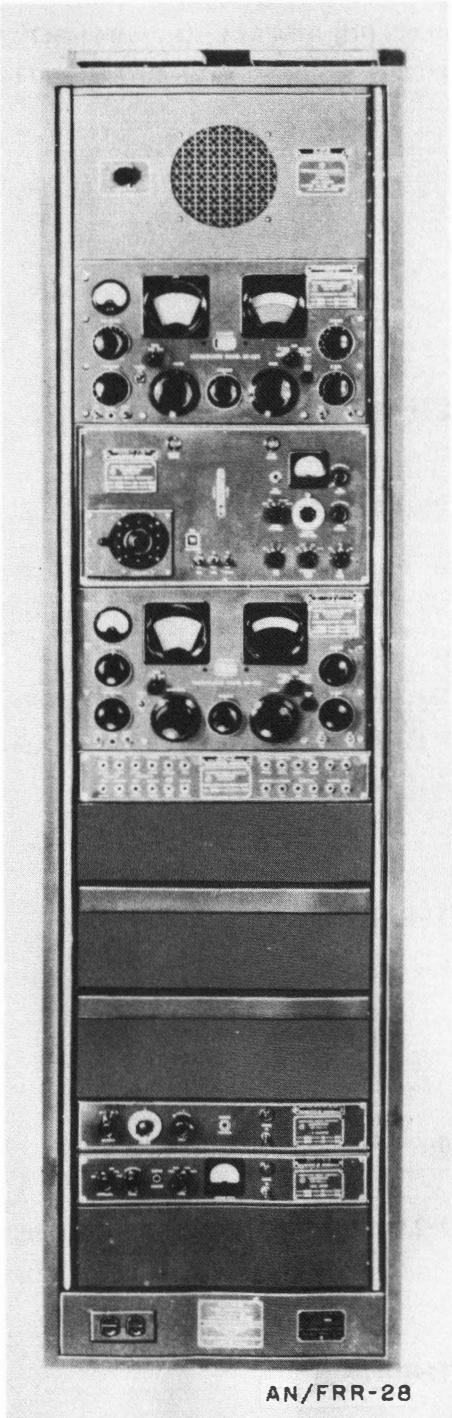
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	6 x 17 x 18¾	36 (–27) 40 (–26, –30)			
DOMESTIC PACK:		84 (–27) 88 (–26, –30)	4.2		1 (–26, –30) 2 (–27)
EXPORT PACK:					

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 Jun 52

AN/FRR-28

RECEIVING SET, RADIO



AN/FRR-28

Receiving Set, Radio AN/FRR-28 is an a-m (cw, mcw, voice, frequency shift keying) receiver for diversity radio reception with a frequency-shift converter-comparator group to provide two-channel space or frequency-diversity reception, of radio signals.

This equipment employs two commercial standard (Hammarlund Model SP-600-MX) receivers modified for diversity operation.

Continuous variable tuning or crystal control is provided.

These receivers feature beat-frequency oscillator, and noise-limiter circuits, and have provision for visual indication of the output.

AN/FRR-28

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Receiver, Radio R-450/FRR-28	Not Available	Not Available
1	Oscillator, Radio Frequency O-165/UR	" "	" "
1	Amplifier-Detector AM-615/UR	" "	" "
1	Keyer KY-79/UR	" "	" "
1	Panel, Patching, Communication SB-224/UR	" "	" "
1	Loudspeaker, Magnetic LS-187/UR	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -365, -401, -447, -610; MBS: MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.54 - 54.0 in 6 bands.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice, frequency shift keying.

POWER REQUIREMENTS: 400 w, 95-105-117-130/190-210-234-260 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Receiving Set, Radio AN/FRR-28 measures 84 x 22-3/8 x 24 inches.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Confidential USING SERVICE: Navy DATE OF THIS SHEET: 9 Jun 52	**AN/FRR-32** RECEIVING SET, RADIO

NO PHOTOGRAPH AVAILABLE

Receiving Set, Radio AN/FRR-32 is a-m (cw, mcw, and voice) receiving equipment for use with a frequency shift converter-comparator group to provide two-channel space or frequency diversity reception of radio signals.

A built-in monitoring unit permits local monitoring and tuning of the two component receivers. Both are controlled by a separate master oscillator to improve stability.

AN/FRR-32

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Confidential
USING SERVICE : Navy
DATE OF THIS SHEET : 9 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Cabinet, containing:	84 x 22 x 24	Not Available
2	Radio Receiver	Not Available	" "
1	Master Oscillator	" "	" "
1	Monitoring Unit	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1; AN/VRT-1; BC-191, -339, -401, -447, -610; MQ; OA-60A/FRT, -608/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399. -499, -506, -536, -543, -585, -694; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model), Collins 32V-2; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 - 32 in 5 bands.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice, frequency shift keying.

POWER REQUIREMENTS: 105 - 125 v, 50/60/400 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Receiving Set, Radio AN/FRR-32 measures 84 x 22 x 24 inches.

STATUS: Std

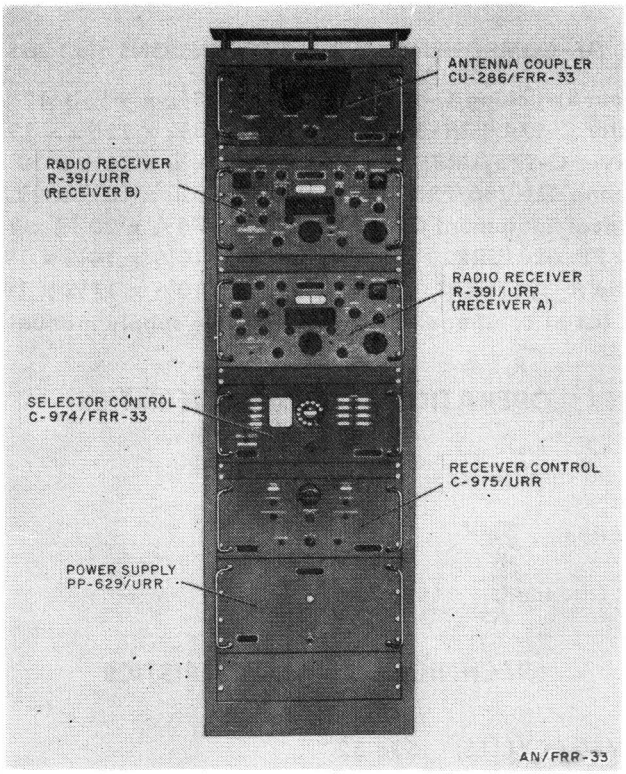
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

AN/FRR–33

RECEIVING SET, RADIO



Radio Receiving Set AN/FRR–33 is a dual-diversity equipment used for minimizing the effects of fading in radioteletype signals. It is operated in conjunction with Radioteletype Terminal Equipment AN/FGC–1 in fixed plant military communication applications at higher headquarters.

This equipment includes two identical radio receivers, an antenna coupler, a selector control, a receiver control, a remote switching control, and a power supply, all of which are rack-mounted in a steel cabinet. A complete diversity antenna system, providing two rhombic antennas for each receiver, is required but not supplied with this equipment.

As many as three AN/FRR–33 systems can be controlled by the remote switching control.

AN/FRR–33

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: TM 11–871

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 11 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Control, Remote Switching C–973/FRR–33	$8\frac{7}{32} \times 9\frac{31}{32} \times 12\frac{51}{64}$	22
1	Control, Selector C–974/FRR–33	$8\frac{3}{4} \times 15\frac{15}{16} \times 19$	45
1	Control, Receiver C–975/URR	$8\frac{3}{4} \times 16\frac{1}{2} \times 19$	48
1	Coupler, Antenna CU–286/FRR–33	$8\frac{3}{4} \times 16\frac{1}{2} \times 19$	36
1	Cabinet, Electrical Equipment CY–1119/U	$78\frac{1}{2} \times 20\frac{13}{16} \times 21\frac{7}{8}$	165
1	Power Supply PP–629/URR	$10\frac{1}{2} \times 14\frac{5}{8} \times 19$	50
2	Receiver, Radio R–391/URR	$10\frac{1}{2} \times 17\frac{1}{4} \times 19$	80

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant applications.

INSTALLATION: Fixed station.

APPROXIMATE RANGE: Extended.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .5 to 32.

TYPE MODULATION: Am (A2, A3).

TYPE OF SIGNAL: Cw, voice, fsk radio tty (850 cy).

POWER OUTPUT:

POWER REQUIREMENTS: 1,475 w, 115/230 v, 48/62 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	$78\frac{1}{2} \times 20\frac{13}{16} \times 21\frac{7}{8}$	446	29.7	.74	
DOMESTIC PACK:					
EXPORT PACK:		1,099	65.6	1.64	9

STATUS: Std

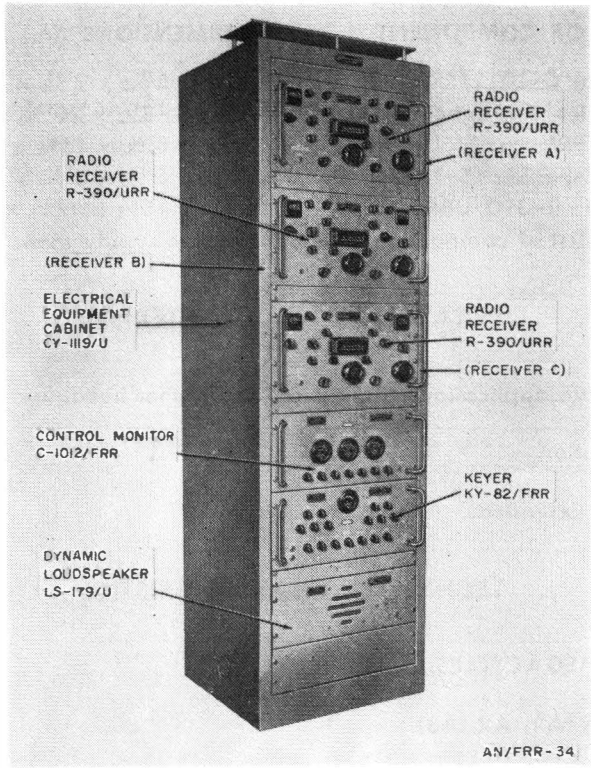
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

AN/FRR-34

RECEIVING SET, RADIO



Radio Receiving Set AN/FRR-34 is a triple-diversity equipment used for the reception of radiotelephone, radiotelegraph, and radioteletype signals.

This equipment consists essentially of three receivers, a control monitor, a keyer, and a loudspeaker, all mounted in an equipment cabinet.

By means of switching circuits in the keyer, the following modes of operation can be selected: each receiver separately; two in dual diversity or three in triple diversity, to minimize fading; or two in dual diversity while the third is operated as a search receiver on other frequencies.

AN/FRR-34

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: TM 11-864

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 19 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Control-Monitor C-1012/FRR	$8\frac{23}{32} \times 9\frac{13}{16} \times 19$	22.5
1	Cabinet, Electrical Equipment CY-1119/U	$78\frac{1}{2} \times 20\frac{13}{16} \times 21\frac{7}{8}$	165
1	Keyer KY-82/FRR	$8\frac{23}{32} \times 15\frac{3}{16} \times 19$	40
1	Dynamic Loudspeaker LS-179/U	$6\frac{31}{32} \times 3\frac{13}{16} \times 19$	6.5
3	Receiver, Radio R-390/URR	$10\frac{1}{2} \times 17\frac{1}{4} \times 19$	80

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant applications at division and higher headquarters.

INSTALLATION: Fixed station.

APPROXIMATE RANGE: Extended.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .5 to 32.

TYPE MODULATION: Am (A1, A2, A3).

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: 5 mw (phones); 10 mw (600-ohm bal line); 500 mw (600-ohm unbal line).

POWER REQUIREMENTS: 980 w, 115/230 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	$78\frac{1}{2} \times 20\frac{13}{16} \times 21\frac{7}{8}$ (cab.)	474	29.4	.74	
DOMESTIC PACK:					
EXPORT PACK:		922	122	3.1	5

STATUS: Std

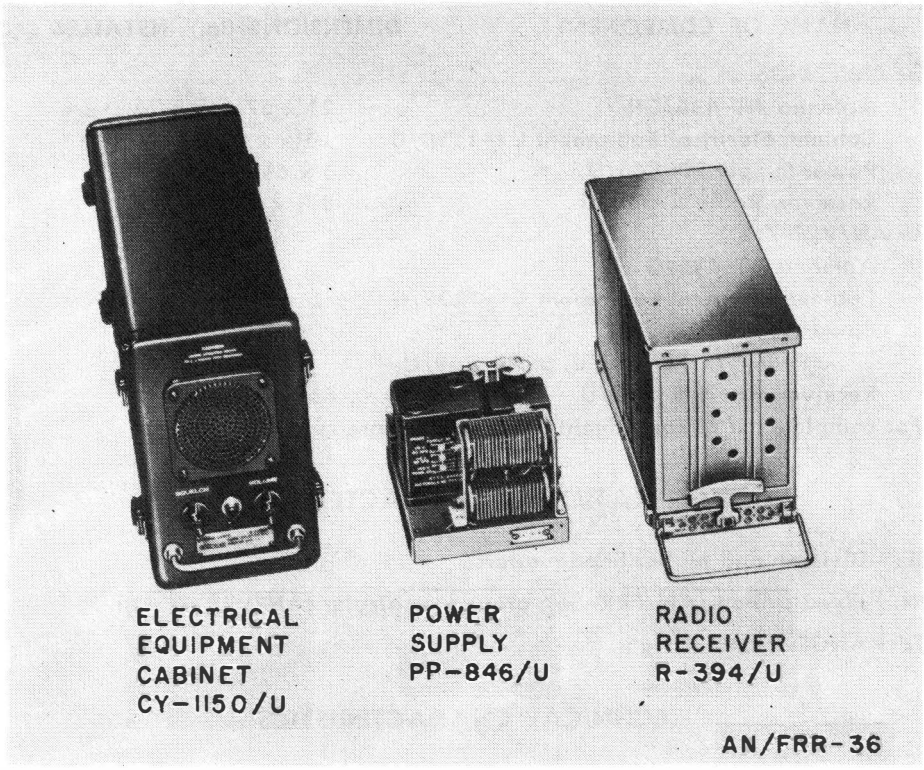
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 14 June 1956

AN/FRR–36, VRR–7( )

RECEIVING SET, RADIO



Radio Receiving Sets AN/FRR–36 and AN/VRR–7( ) are similar uhf (fm-voice) equipments used for monitoring and radio communication applications.

Each of these sets consists essentially of a radio receiver with its power supply, housed in a metal equipment cabinet, and includes appropriate antennas and accessory items.

The AN/FRR–36 is a fixed-station equipment that uses a half-wave folded dipole-type vertical antenna; the AN/VRR–7( ) uses a whip-type array for metal-top vehicles or a bumper-type antenna for smaller vehicles.

The AN/FRR–36 is powered from conventional 115- or 230-volt sources; the AN/VRR–7, –7X, and –7Y are operated in vehicles equipped with 24-, 12-, or 6-volt batteries, respectively.

AN/FRR–36, VRR–7( )

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: TM 11–229

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 14 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	For AN/FRR–36:		
1	Antenna AT–438/GR	21 x 57¼ x 57¼	7.5
1	Cabinet, Electrical Equipment CY–1150/U	10⅝ x 21¼ x 7½	14.5
1	Power Supply PP–846/U	5 x 6¼ x 7 1/16	9.5
1	Receiver, Radio R–394/U	8½ x 14½ x 5¾	17
	For AN/VRR–7( ):		
1	Antenna AT–496/G		
1	Cabinet, Electrical Equipment CY–1223/G		
1	Power Supply PP–867/U, PP–868/U, or PP–869/U		
1	Receiver, Radio R–394/U	8½ x 14½ x 5¾	17

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Fixed station (AN/FRR–36); ground, vehicular (AN/VRR–7( )).

APPROXIMATE RANGE: Line of sight.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 152 to 174.

TYPE MODULATION: Fm (F3).

TYPE OF SIGNAL: Fm.

POWER OUTPUT: .5 w.

POWER REQUIREMENTS:

PP–846/U: 46 va, 115/230 v, 50/65 cy ac.
PP–867/U: 24 v, 1.1 amp dc.
PP–868/U: 12 v, 2 amp dc.
PP–869/U: 6 v, 3.7 amp dc.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET: AN/FRR–36	10⅝ x 21¼ x 7½	51.5	2.3		
DOMESTIC PACK:		127.5	2.9		2
EXPORT PACK:		176	7.25		2

STATUS: Std

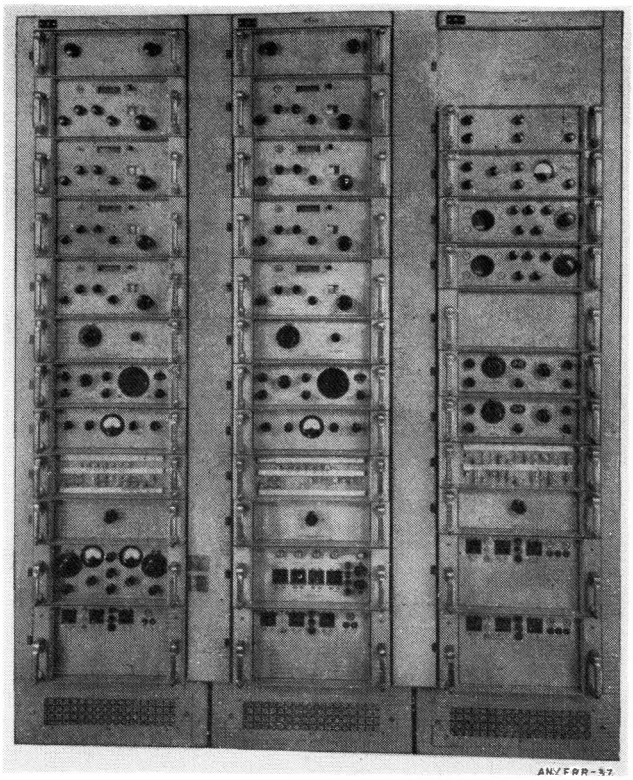
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

AN/FRR–37

RECEIVING SET, RADIO



Radio Receiving Set AN/FRR–37 is a double-conversion superheterodyne-type diversity receiver for use at shore stations. It can receive signals in single-channel, space- or frequency-dual-diversity operation, such as double-sideband radiotelephone, on-off-keyed radiotelegraph, and frequency-shift-keyed telegraph to operate single-channel radioteletype point-to-point communication.

This equipment performs the same function as Radio Receiving Set AN/FRR–24 except that it provides dual-diversity operation only. Auxiliary items necessary to operate the equipment include a 70-ohm antenna system, headphones, power source, and teletypewriter.

AN/FRR-37

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: NAVSHIPS 91896

USING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
2	Amplifier-Converter AM-450A/FRR-24	13½ x 21⅛ x 24⅜	80
2	Amplifier-Converter AM-451A/FRR-24	13½ x 21⅛ x 24⅜	80
2	Amplifier-Converter AM-452A/FRR-24	13½ x 21⅛ x 24⅜	80

(For complete list of major components, see instruction literature.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore installations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 to 32 in four bands:

Band 1: 2 to 4
Band 2: 4 to 8
Band 3: 8 to 16
Band 4: 16 to 32

TYPE MODULATION: Am (A1, A2, A3), fm (F1, F4).

TYPE OF SIGNAL: Radiotelephone, radioteletype.

POWER OUTPUT:

POWER REQUIREMENTS: 1,825 w, 105/115/125 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	67⅛ x 24 x 85	1,249			
DOMESTIC PACK:			212.5	5.3	39
EXPORT PACK:					

AN/FRR–38

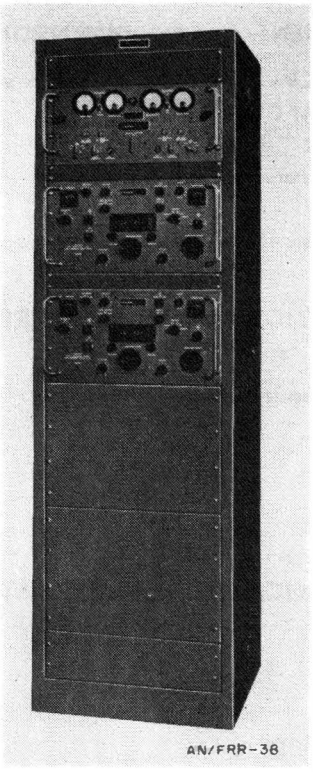
RECEIVING SET, RADIO

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 14 June 1956



Radio Receiving Set AN/FRR–38 is a dual-diversity equipment that receives frequency-shift-keyed, single-channel, or time-division multiplex radioteletype signals. It is used as a radio receiving link in a space-diversity radioteletype communications system.

This equipment consists of two receivers and a frequency-shift converter mounted in an equipment cabinet and includes an installation kit.

AN/FRR–38

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: TM 11–647

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 14 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Converter, Frequency Shift CV–116/URR	8¾ x 17 x 19	65
1	Cabinet, Electrical Equipment CY–1119/U	76 x 20½ x 21 27/32	225
2	Receiver, Radio R–390/URR	10½ x 17¼ x 19	80
1	Installation kit for Radio Receiving Set AN/FRR–38		40

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Fixed station.

APPROXIMATE RANGE: Extended.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .5 to 32.

TYPE MODULATION: Am (A9).

TYPE OF SIGNAL: Cw (A1), mcw (A2), voice (A3), fsk (F1).

POWER OUTPUT: 5 mw (phones); 10 mw (600-ohm bal line); 500 mw (600-ohm unbal line).

POWER REQUIREMENTS: 270 w, 115/230 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	76 x 20½ x 21 27/32 (cab.)	490	25.3	.63	
DOMESTIC PACK:					
EXPORT PACK:		875	64.3	16.1	5

STATUS: Std

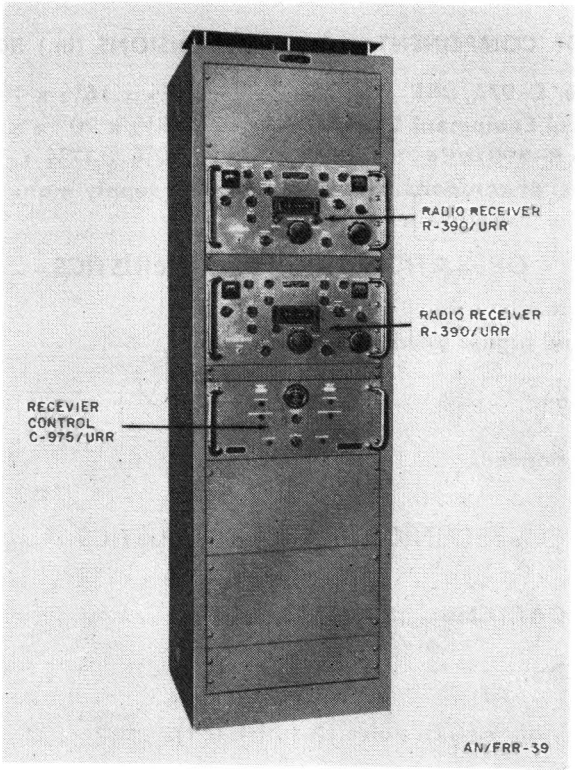
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 14 June 1956

AN/FRR–39

RECEIVING SET, RADIO



Radio Receiving Set AN/FRR–39 is a diversity equipment used at a terminal of a system to receive frequency-shift-keyed, single-channel, or time-division multiplex teletypewriter signals.

It consists of two receivers and a receiver control mounted in an equipment cabinet and includes an installation kit.

This equipment is operated in conjunction with Radioteletype Terminal Equipment AN/FGC–1( ).

AN/URR-39

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: TM 11-648

USING SERVICE: USA

DATE OF THIS SHEET: 14 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Control, Receiver C-975/URR	8¾ x 16½ x 19	48
1	Cabinet, Electrical Equipment CY-1119/U	78½ x 20 13/16 x 21⅞	165
2	Receiver, Radio R-390/URR	10½ x 17¼ x 19	80

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Fixed station.

APPROXIMATE RANGE: Extended.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .5 to 32.

TYPE MODULATION: Am (A9).

TYPE OF SIGNAL: Cw (A1), mcw (A2), voice (A3), fsk (F1).

POWER OUTPUT: 5 mw (phones); 10 mw (60-ohm bal line); 500 mw (600-ohm unbal line).

POWER REQUIREMENTS: 270 w, 115/230 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	78½ x 20 13/16 x 21⅞ (cab.)	373	26.3	.66	
DOMESTIC PACK:					
EXPORT PACK:			53.4	1.34	3

STATUS:

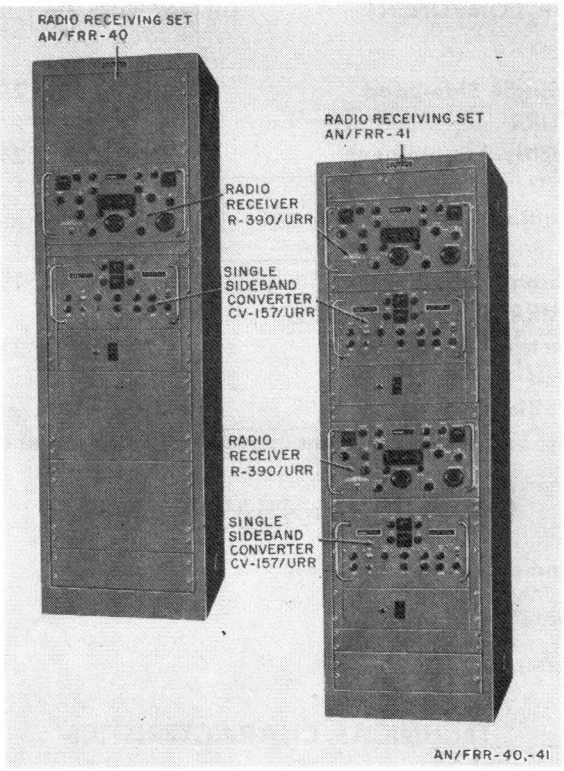
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 14 June 1956

AN/FRR–40, -41

RECEIVING SET, RADIO



Radio Receiving Sets AN/FRR–40 and AN/FRR–41 are used for the reception of single-sideband or twin single-sideband radio signals that carry multiplex teletypewriter, facsimile, and/or voice intelligence.

The AN/FRR–40 consists of one receiver and a single-sideband converter housed in a metal equipment cabinet. The AN/FRR–41, composed of two receivers and two converters housed in a metal equipment cabinet, is used for dual-diversity reception.

Both equipments are used in long-range applications between installations that have a heavy flow of message traffic. The audio output of either of these sets is capable of operating voice-reproducing equipment directly, or of feeding carrier terminal equipment that provides several teletypewriter or facsimile channels.

AN/FRR–40, –41

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: TM 11–649

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 14 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	For AN/FRR–40:		
1	Converter, Single Side-band CV–157/URR	15¾ x 15 x 19	104
1	Cabinet, Electrical Equipment CY–1119/U	76 x 20½ x 21 27/32	225
1	Receiver, Radio R–390/URR	10½ x 17¼ x 19	80
	For AN/FRR–41:		
2	Converter, Single Side-band CV–157/URR	15¾ x 15 x 19	104
1	Cabinet, Electrical Equipment CY–1119/U	76 x 20½ x 21 27/32	225
2	Receiver, Radio R–390/URR	10½ x 17¼ x 19	80

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Fixed station.

APPROXIMATE RANGE: Extended.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .5 to 32.

TYPE MODULATION: Am (A9).

TYPE OF SIGNAL: Am, voice.

POWER REQUIREMENTS: 520 w (–40), 1,040 w (–41), 105/125 or 210/250 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
AN/FRR–40	76 x 20½ x 21 27/32 (ea cab.)	445	24.3	.61	
DOMESTIC PACK:					
AN/FRR–41		646	28.9	.72	
EXPORT PACK:					
AN/FRR–40		642	55.3	1.38	4
AN/FRR–41		909	75.3	1.88	6

STATUS: S/Std

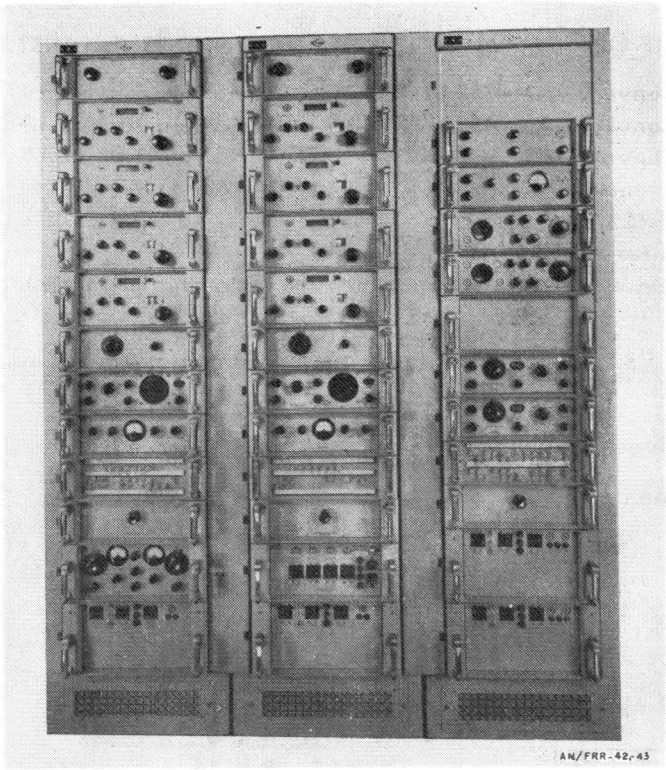
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

AN/FRR–42, –43

RECEIVING SET, RADIO



Radio Receiving Sets AN/FRR–42 and AN/FRR–43 are double-conversion, superheterodyne-type receivers used at shore stations for point-to-point communication.

The AN/FRR–42 includes a single-channel receiver and provides single-channel reception only. The AN/FRR–43 has three radio receivers mounted in a three-rack cabinet and can provide single reception and dual or triple space-diversity or frequency-diversity reception.

Diversity combining facilities and detection are supplied by auxiliary apparatus not part of the AN/FRR–43.

AN/FRR–42, –43

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: NAVSHIPS 91891(A)

USING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Amplifier-Converter AM–452A/FRR–24[a]	$6\frac{31}{32} \times 16\frac{15}{16} \times 19$	58
1	Amplifier-Converter AM–453A/FRR–24[a]	$6\frac{31}{32} \times 16\frac{15}{16} \times 19$	58
1	Amplifier-Converter AM–898/FRR[a]	$6\frac{31}{32} \times 16\frac{15}{16} \times 19$	58
1	Converter, Frequency, Electronic CV–277/FRR[a]	$5\frac{7}{32} \times 16\frac{15}{16} \times 19$	33

[a]Three each for AN/FRR–43.

(For complete list of major components, see instruction literature.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Point-to-point communications.

INSTALLATION: Shipboard.

APPROXIMATE RANGE: Medium to long.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4 to 32 in three bands:
Band 1: 4 to 8
Band 2: 8 to 16
Band 3: 16 to 32

TYPE MODULATION: Am (A2, A3); fm (F1, F4).

TYPE OF SIGNAL: Mcw, voice, fsk, facsimile.

POWER OUTPUT: 15 mw into 600-ohm load (line, phone); 1 w (to loudspeaker).

POWER REQUIREMENTS: 453 w, 105/115/125 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	$23\frac{3}{8} \times 24 \times 85$	874			
DOMESTIC PACK:		1,728	107.25	2.68	18
EXPORT PACK:					

STATUS: Std

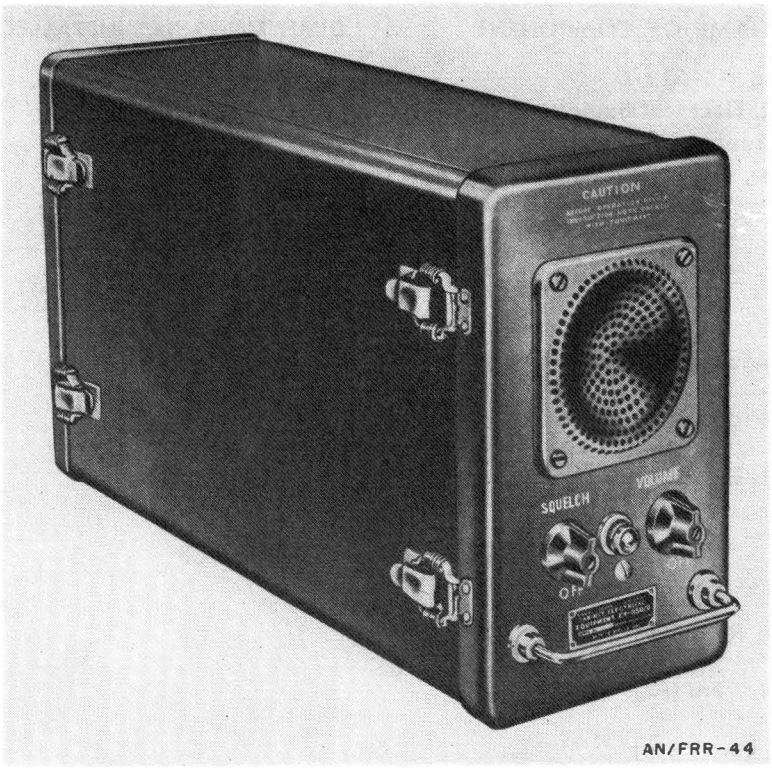
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 14 June 1956

AN/FRR-4

RECEIVING SET, AD



Radio Receiving Set AN/FRR–44 is a vhf (fm-voice) fixed station equipment used primarily for monitoring and radio communication applications.

This equipment consists essentially of a radio receiver and its power supply, housed in an equipment cabinet, and includes antenna and accessory components.

The primary operating component, Radio Receiver R–257/U, is also used as the receiving component of such radio equipments as Radio Sets AN/FRC–15, AN/TRC–22, and AN/VRC–6( ).

AN/FRR–44

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: TM 11–225

USING SERVICE: USA

DATE OF THIS SHEET: 14 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Antenna AS–612/U	11½ x 5¼ x 41	30.0
1	Cabinet, Electrical Equipment CY–1150/U	10⅝ x 21¼ x 7½	14.5
1	Power Supply PP–846/U	5 x 6¼ x 7 1/16	9.5
1	Receiver, Radio R–257/U	8½ x 14½ x 5¾	17.0

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Fixed station.

APPROXIMATE RANGE: Line of sight.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 25 to 50.

TYPE MODULATION: Fm (F3).

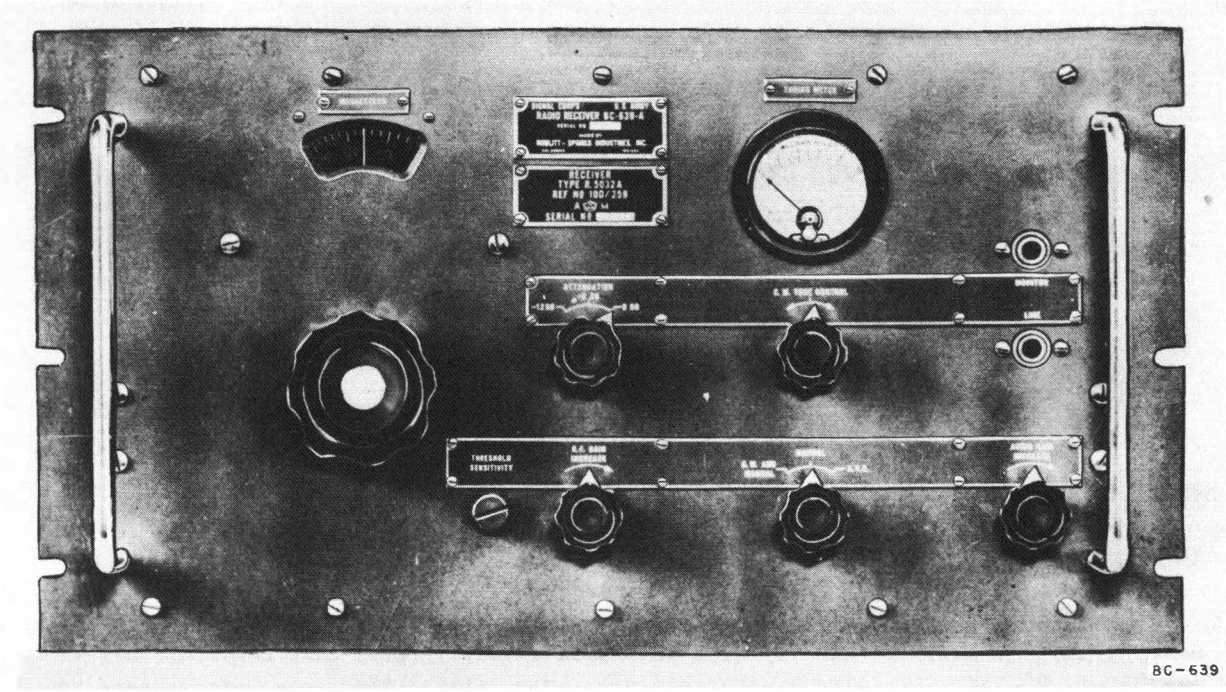
TYPE OF SIGNAL: Fm.

POWER REQUIREMENTS: 115 v, .4 amp, 50/65 cy ac; 230 v, .2 amp, 50/65 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	10⅝ x 21¼ x 7½	71			
DOMESTIC PACK:		113	4.29		2
EXPORT PACK:		140	5.60		2

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force, Navy DATE OF THIS SHEET: 7 Jun 52	AN/FRR-TYPE SERVICE TYPE NUMBER: BC-639 RADIO RECEIVER



Radio Receiver BC-639 is a-m (tone, cw, and icw) receiving equipment used for ground-to-air and point-to-point communication, and in direction finding applications.

Radio Receivers BC-639, BC-639-A, -B and -D are all similar. BC-639, and BC-639-A are operationally identical; BC-639-D is the same as BC-639-B except for a wider audio band width and built-in noise suppression circuit. Noise suppression Modification Kit MC-633 is available for modification of BC-639-A and -B.

The antenna input circuit is designed to match 70-mm coaxial cable. Antenna Equipment RC-81 is recommended (wide band dipole).

Normal output impedance is 600 ohms, but satisfactory operation can be had from 200 to 20,000 ohms.

Power supplies must be requisitioned separately. Rectifier RA-42-A or RA-42-B is used for operation from 90-140/200-250 v, ac; Dynamotor Unit PE-100-A is used for operation from a 6-v, d-c source; and an 80-ampere-hour battery will operate this equipment for approximately 12 hours.

AN/FRR-TYPE	INSTRUCTION LITERATURE: TO 16-40BC639-2, 21, 22
BC-639 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVER	USING SERVICE : Air Force, Navy
	DATE OF THIS SHEET: 7 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver BC-639	19 x 10-15/32 x 13-9/16	38
1*	Rectifier RA-42-A	19 x 6-31/32 x 8-23/32	26
	or		
1*	Rectifier RA-42-B	19 x 6-31/32 x 8-23/32	26
	or		
1*	Dynamotor Unit PE-100A	19 x 10-15/32 x 8-11/16	24

*Required but not supplied with BC-639.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued on any organizational level as project equipment in accordance with AFR 100-17.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-16, -20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URT-7, -10; AN/VRC-1; BC-640; MAW; MBS; RC-257; SCR-522, -542, -573, -575, -624, -641, -643; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 - 156 continuous tuning.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone, cw and icw.

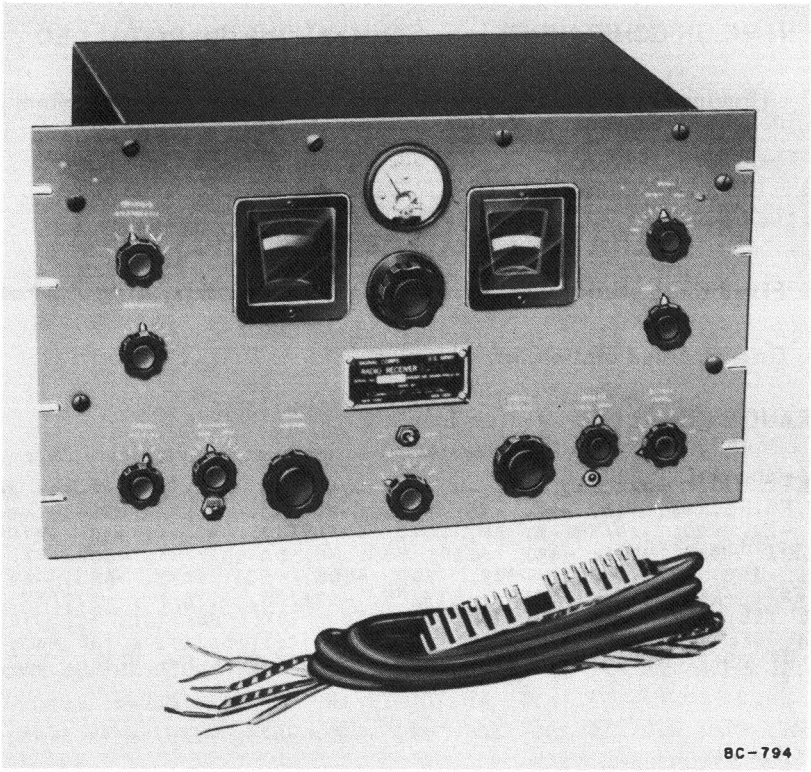
POWER OUTPUT: 1 w into 600 ohm impedance.

POWER REQUIREMENTS: General: Plate Supply 210 v, (60 ma) dc; Filament 6.3 v, (3.5 amp) ac or dc.
From an ac source: Using Rectifier RA-42-A or RA-42-B; 60 w, 90-140/200-250 v, 60 cyc, 1 phase, ac.
From a dc source: Using Dynamotor PE-100-A; 60 w, 6 v, (10 amp) dc.

PHYSICAL CHARACTERISTICS

Radio Receivers BC-639, -639-A, -B, -D measure 19 x 10-15/32 x 13-9/16 inches, net weight 38 pounds, volume 2 cu ft. Packed for either domestic or export shipment: total weight 50 pounds, total volume 2.8 cu ft. Shipped in 1 package both domestic and export.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 11 Jan 52	**AN/FRR-TYPE** SERVICE TYPE NUMBER: BC-794 RADIO RECEIVER



Radio Receiver BC-794 is a general purpose, a-m (voice, tone and cw), receiving equipment which operates in the medium- and high-frequency bands, and is used as fixed station equipment for communication, monitoring, or similar applications at corps and higher levels.

This equipment consists essentially of a commercial (Hammarlund Super-Pro) communications-type radio receiver and includes accessories. It may be installed in a vehicle by means of appropriate shock mounts.

It uses a doublet antenna with balanced transmission line, a straight wire and ground, or equivalent antenna systems.

Can be operated from batteries, or from 95 to 230-v ac through appropriate power-modifying units (Power Supply Units RA-74, RA-84, or RA-94).

AN/FRR-TYPE	INSTRUCTION LITERATURE: TM 11-866
BC-794 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVER	USING SERVICE : Army
	DATE OF THIS SHEET : 11 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed radio stations at corps or higher headquarters, Army Air Force squadrons.

INSTALLATION: Ground, fixed station, or vehicular.

APPROXIMATE RANGE (IN MILES): Medium-long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, 22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -401, -447, -610; MBS; MQ; OA-60A/FRT, -608/FRT; RC-52; SCR-177, -198, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -93/SR, -159/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.25 - 40 in 5 bands.

Band 1: 1.25 - 2.5
Band 2: 2.5 - 5.0
Band 3: 5 - 10
Band 4: 10 - 20
Band 5: 20 - 40.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone, cw.

POWER REQUIREMENTS: 180 w from Power Supply Unit RA-74: 95 - 260 v, 25/60 cyc, ac, RA-84: 105 125 v, 50/60 cyc, ac, RA-94: 115 or 230 v, 50/60 cyc, ac; or one 6-v storage battery, five 45-v B batteries, one 45-v C battery.

PHYSICAL CHARACTERISTICS

Radio Receiver BC-794 measures 24-1/8 x 20-1/2 x 15-1/8 inches. Packed for domestic shipment: total weight 90 pounds, total volume 4.3 cu ft. Shipped in 1 package.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy, Air Force DATE OF THIS SHEET: 11 Jan 52	**AN/FRR-TYPE** SERVICE TYPE NUMBER: BC-1004 RADIO RECEIVER



Radio Receiver BC-1004 is a crystal-controlled, general purpose, a-m (voice, tone, and cw) receiving equipment used in fixed plant or vehicular applications for monitoring, intercept, or communication in the l-f and m-f ranges, at corps and higher headquarters.

This equipment consists essentially of a commercial (Hammarlund Super Pro) communications type receiver which can be removed from its cabinet and mounted on a standard rack panel. For vehicular use, a shock mount is available.

Operates with a conventional straight wire antenna and ground or a doublet type antenna system.

Can be operated on 95-230 v a-c power through use of appropriate Power Supply Units RA-74, -84, and -94 or from a 6-v storage battery and appropriate dry batteries.

AN/FRR-TYPE

BC-1004 : SERVICE TYPE NUMBER

RADIO RECEIVER

INSTRUCTION LITERATURE: TM-866

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army, Navy, Air Force

DATE OF THIS SHEET : 11 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed radio station at corps or higher headquarters.

INSTALLATION: Ground, fixed station or vehicular.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.54 - 1.16, 1.16 - 2.5, 5.0 - 10.0, 10.0 - 20.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, tone.

POWER REQUIREMENTS: 180 w from Power Supply Unit RA-74; 95-260 v, 25/60 cyc
RA-84; 105-125 v, 50/60 cyc
RA-94; 115 or 230 v, 50/60 cyc

or

One 6-v storage battery, five 45-v B batteries, one 45-v C battery.

PHYSICAL CHARACTERISTICS

Radio Receiver BC-1004 measures 24-1/8 x 20-1/2 x 15-1/8 inches. Packed for domestic shipment: total weight 90 pounds, total volume 4.3 cu ft. Shipped in 1 package.

STATUS: T/Std

CLASSIFICATION OF EQUIPMENT: Unclassified

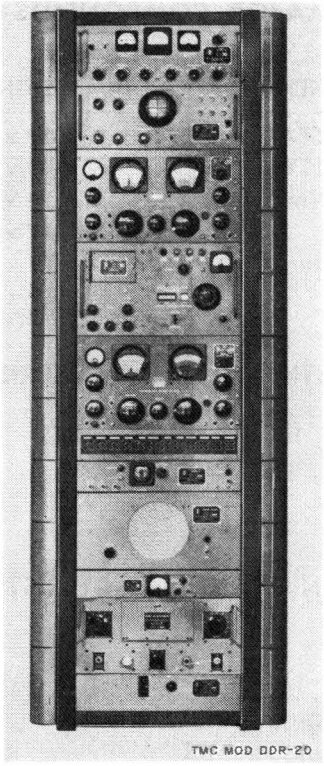
PREPARING SERVICE: USAF

DATE OF THIS SHEET: 12 June 1956

AN/FRR–TYPE

COMMERCIAL TYPE NUMBER: TECHNICAL MATERIEL CORPORATION MODEL DDR–2D

DUAL DIVERSITY RECEIVER



Technical Materiel Corporation Dual Diversity Receiver Model DDR–2D is designed to receive am (cw, mcw, voice) and fsk signals in point-to-point communication applications.

This equipment is a multipurpose, dual-diversity receiving equipment consisting of two receivers with a common oscillator and a diversity-combining unit providing a common output for both receivers.

Both visual and audio monitoring of receiver tuning is provided.

Radio printer reproduction is effected by the frequency-shift converter, which provides electronic neutral keying.

AN/FRR–TYPE

INSTRUCTION LITERATURE: Commercial Instruction Book

USING SERVICE: USAF

DATE OF THIS SHEET: 12 June 1956

TECHNICAL: COMMERCIAL TYPE NUMBER MATERIEL CORPORATION MODEL DDR–2D

DUAL DIVERSITY RECEIVER

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Frequency Shift Converter CFA	19 x 3½ x 16	
1	Diversity Combining Unit DCV	19 x 7 x 14	25.5
1	Diversity Visual Monitor DVM	19 x 7 x 14	30
1	Monitor Speaker LSP	19 x 8¾ x 5	
1	Variable Frequency Oscillator VOX	19 x 10½ x 16	67
2	Receiver 600 DMK	19 x 18½ x 16½	66

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .54 to 54.

TYPE MODULATION: Am (A1, A2, A3); fm (F1).

TYPE OF SIGNAL: Cw, mcw, tone, voice, fsk.

POWER OUTPUT: 2.5 w (audio).

POWER REQUIREMENTS: 800 w, 110/220 v, 50/60 cy ac.

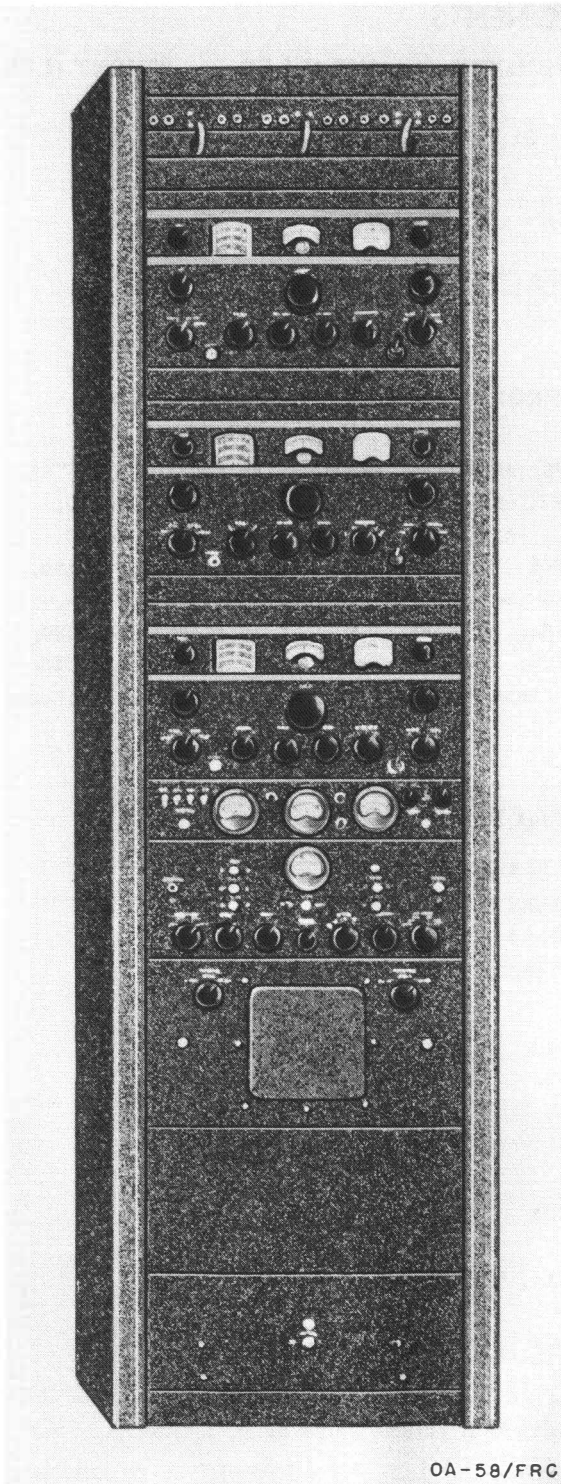
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	86 x 28 x 20	550	42	1.1	
DOMESTIC PACK:					5
EXPORT PACK:		1,350	120	3	5

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 15 Feb 52

AN/FRR-TYPE

AN/COMP TYPE NUMBER: OA-58/FRC
RADIO RECEIVER ASSEMBLY



OA-58/FRC

Radio Receiver Assembly OA-58/FRC is a long-range, medium-and high-frequency, triple-diversity, a-m (voice, cw, and mcw) fixed-station radio receiving equipment, designed to minimize the effects of fading.

This equipment consists of three superheterodyne radio receivers, each with an individual power supply, a tone keyer, a monitoring unit, loudspeaker, and accessories assembled to a standard relay rack, and inclosed in a steel floor-type cabinet.

Each of the receivers can be operated separately from its own doublet or rhombic antenna. The monitoring unit is common to all receivers and operates on its own power supply unit. The loudspeaker can be switched to any one, or all, of the radio receiver outputs.

Operates on 108-126-150 or 230-v ac.

AN/FRR-TYPE

OA-58/FRC :AN/COMP TYPE NUMBER

RADIO RECEIVER ASSEMBLY

INSTRUCTION LITERATURE: TM 11-889A

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET: 15 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
3	Radio Receiver (RCA Model AR-88F)	10-1/2 x 19 x 19 (each)	235.50
1	Cabinet	84 x 21 x 22	275.0
1	Monitoring Unit	3-1/2 x 7-1/2 x 19	10.50
1	Tone Keyer Unit	7 x 11 x 19	26.50
1	Monitoring Unit Power Supply	7 x 7 x 19	17.50
1	Loudspeaker Assembly	10-1/2 x 4-1/2 x 19	26.50

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Fixed ground station. **APPROXIMATE RANGE (IN MILES):** Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -9, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -608/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.54 - 32.0 in 6 bands.

Band 1: 0.54 - 1.6
Band 2: 1.57 - 4.55
Band 3: 4.45 - 12.15
Band 4: 11.9 - 16.6
Band 5: 16.1 - 22.7
Band 6: 22.0 - 32.0

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, voice, and mcw.

POWER OUTPUT: 12 mw, 2.5 w with receiver amplifier.

POWER REQUIREMENTS: 450 w, 108-126-150, or 230 v, 50/60 cyc, ac.

PHYSICAL CHARACTERISTICS

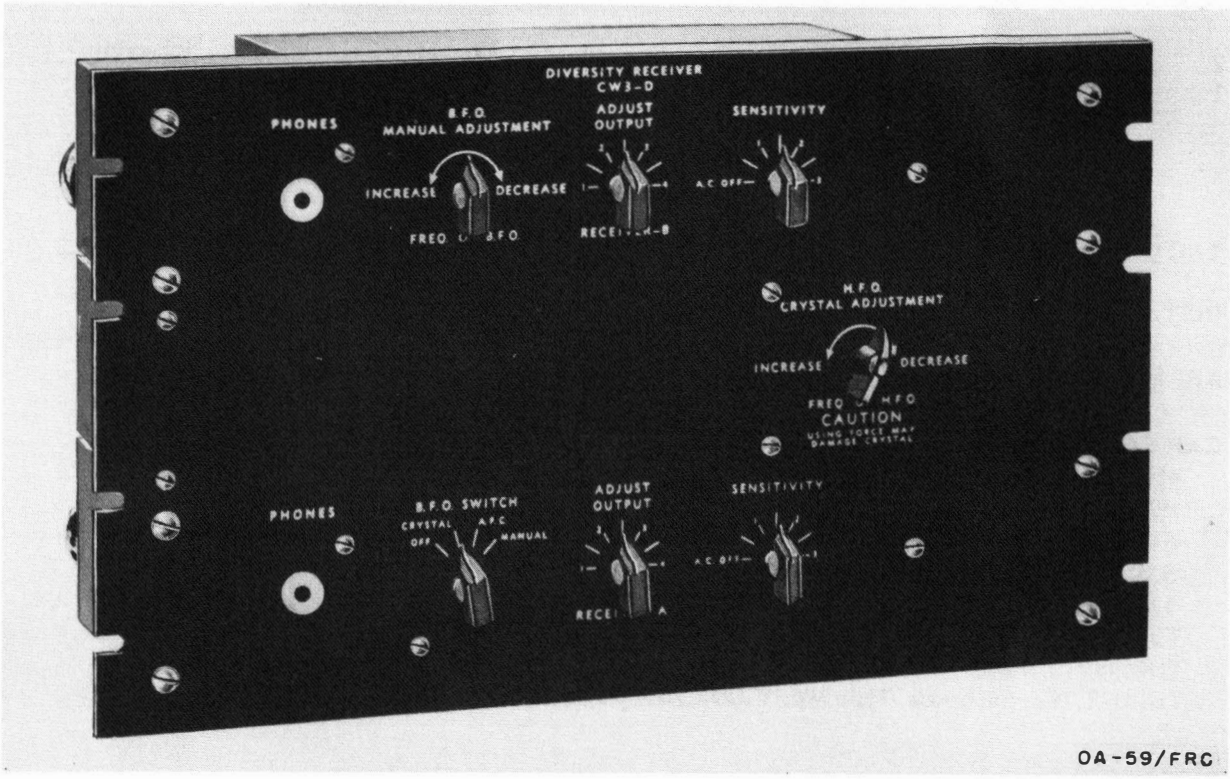
Radio Receiver Assembly OA-58/FRC measures 22 x 84 x 21 inches, net weight 650 pounds. Packed for domestic shipment: total weight 1,122 pounds, total volume 78.74 cu ft, 2 ship tons.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 15 Feb 52

AN/FRR-TYPE

AN/COMP TYPE NUMBER: OA-59/FRC

RADIO RECEIVER ASSEMBLY



OA-59/FRC

Radio Receiver Assembly OA-59/FRC is a crystal-controlled, dual diversity, fixed-frequency, a-m (cw) receiving equipment used for radioteletype and radiotelegraph long-range communication in fixed plant installations.

This equipment consists, essentially, of two commercial type (Wilcox Model CW 3-D) receivers, each with its own power supply, rack-and-panel-mounted in a steel floor type cabinet. It operates in 6 bands, which are selected by means of appropriate plug-in coils furnished with the equipment. Is provided with h-f and beat-frequency oscillators common to both receiver components.

This set uses two rhombic or two other matched-type antenna systems.

AN/FRR-TYPE

OA-59/FRC :AN/COMP TYPE NUMBER
RADIO RECEIVER ASSEMBLY

INSTRUCTION LITERATURE: TM 11-2204
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 15 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Wilcox Model CW3-D Receivers	10-1/2 x 19 x 11-1/2	Not available
1	Metal cabinet	72 x 24 x 17	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -83/SR, -158/FRT, 159/FRT, - 171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK;TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.9 - 24.0, in 6 bands.

Band 1: 1.9 - 3.6.	Band 4: 9.4 - 16.5.
Band 2: 3.4 - 5.9.	Band 5: 16.5 - 20.0.
Band 3: 5.8 - 9.4.	Band 6: 20.0 - 24.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw.

POWER REQUIREMENTS: (1.3 amp) 110 - 115 v, 69 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Receiver Assembly OA-59/FRC packed for export shipment: total weight 528 pounds, total volume 37 cu ft, 0.9 ship ton.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 30 Jan 52	AN/FRR-TYPE AN/COMP TYPE NUMBER: R-208/FR RADIO RECEIVER



R-208/FR

Radio Receiver R-208/FR is a crystal-controlled, a-m (cw only) receiving equipment used for long distance point-to-point or ground-to-air applications at fixed plant installations.

This equipment consists of a single rack-mounted component which may be installed with any combination of eight receivers (one or more of which may be Radio Receiver R-209/FR) on a standard relay rack. It can be preset by selection of appropriate interchangeable coils to operate in frequency channels covered by four sets of plug-in coils for each band.

When installed in combinations of several receivers, each receiver can be controlled independently, either locally or from a remote operating point, through use of Remote Control Console CY-161/FRC.

Sensitivity, frequency selection, beat-frequency oscillator, and noise controls are included. It uses a doublet, rhombic, or other suitable type of antenna system.

Operates on 110 v, 60 cyc ac.

AN/FRR-TYPE

R-208/FR : AN/COMP TYPE NUMBER

RADIO RECEIVER

INSTRUCTION LITERATURE: TM 11-853

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET: 30 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant applications.

INSTALLATION: Ground, permanent.

APPROXIMATE RANGE (IN MILES): Medium to Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/FRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.95 - 16.5, by use of four sets of r-f coils.

Set 1: 1.95 - 3.6. Set 3: 5.6 - 10.0.

Set 2: 3.50 - 6.1. Set 4: 9.4 - 16.5.

TYPE MODULATION: Am.

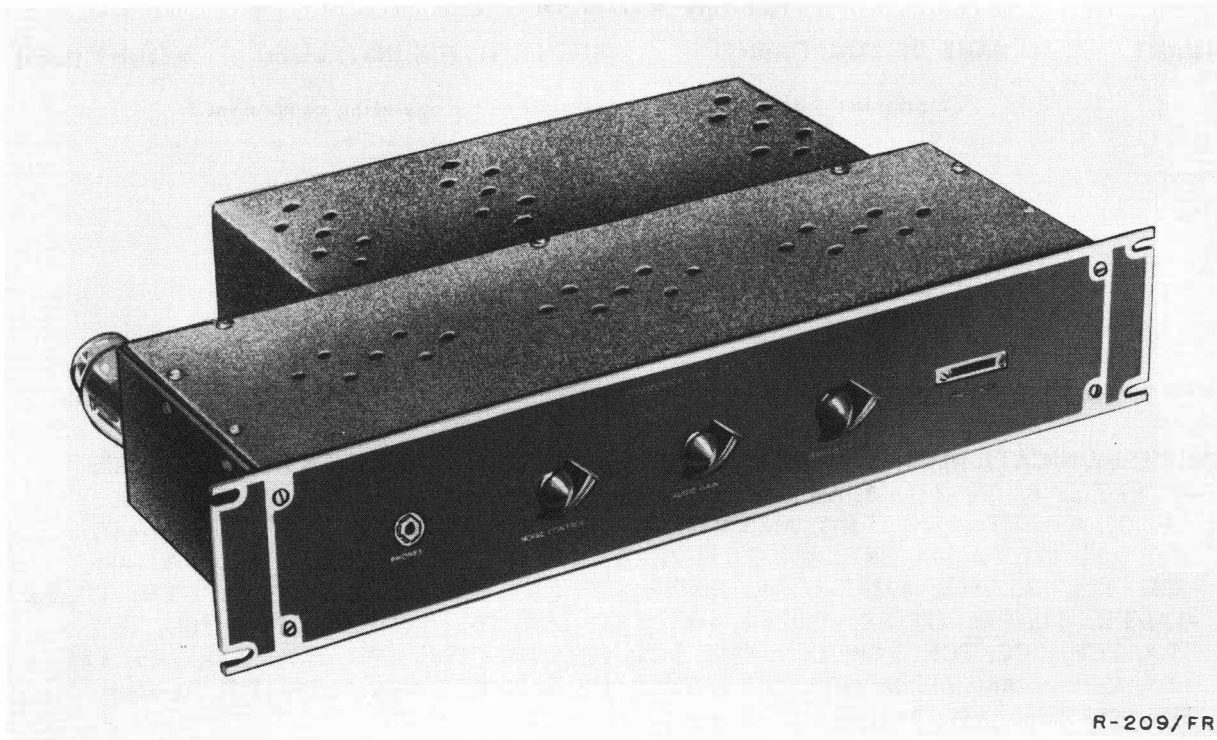
TYPE OF SIGNAL: Cw.

POWER REQUIREMENTS: 70 w, 110 v, 60 cyc ac.

PHYSICAL CHARACTERISTICS

Radio Receiver R-208/FR measures 3-15/32 x 12-1/2 x 19 inches, net weight 20.6 pounds, volume 0.477 cu ft. Packed for domestic shipment: total weight 25 pounds, total volume 0.95 cu ft. Packed for export shipment: total weight 40 pounds, total volume 2.5 cu ft. Shipped in 1 package both domestic and export.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 30 Jan 52	**AN/FRR-TYPE** AN/COMP TYPE NUMBER: R-209/FR RADIO RECEIVER



R-209/FR

Radio Receiver R-209/FR is a crystal-controlled, superheterodyne a-m (voice), m-f and h-f receiving equipment designed for use in point-to-point or ground-to-air communication and similar applications at fixed plant installations.

This equipment consists of a single, panel-mounted radio receiver having three panel controls and designed for assembly to a standard relay rack which can accommodate a total of eight such receivers. It may be preset by means of four sets of interchangeable r-f coils.

Can be mounted with seven other identical receivers, or in any combination of Radio Receivers R-208/FR and R-209/FR, and installed in a single floor type cabinet to form a single operating bay of equipment.

Each receiver so assembled can be individually controlled locally or, by means of Remote Control Console CY-161/FRC, from a remote operating point.

Antenna systems used by this equipment may be of the long wire, doublet, rhombic, or other suitable type.

Is powered by 70 w of 110 v ac.

AN/FRR- TYPE	INSTRUCTION LITERATURE: TM 11-853
R-209/FR :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVER	USING SERVICE : Army
	DATE OF THIS SHEET : 30 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE (IN MILES): Medium to long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model): Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.95 - 16.5, by use of four sets of r-f coils.

Set 1: 1.95 - 3.6.
Set 2: 3.50 - 6.1.
Set 3: 5.6 - 10.0.
Set 4: 9.4 - 16.5.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER REQUIREMENTS: 70 w, 110 v, 60 cyc ac.

PHYSICAL CHARACTERISTICS

Radio Receiver R-209/FR measures 3-15/32 x 12-1/4 x 19 inches, net weight 20 pounds, volume 0.467 cu ft. Packed for domestic shipment: total weight 25 pounds, total volume 0.95 cu ft. Packed for export shipment: total weight 50 pounds, total volume 2.39 cu ft. Shipped in 1 package both domestic and export.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 30 Jan 52	AN/FRR-TYPE AN/COMP TYPE NUMBER: R-274/FRR RADIO RECEIVER



R-274/FRR

Radio Receiver R-274/FRR is a medium-, high-, and very-high-frequency a-m (voice, tone and cw) receiving equipment used for communication and special applications in fixed plant and similar installations.

This equipment consists of a single radio receiver component having a built-in power supply which is mounted on a panel for rack mounting. It requires additional equipment for reproduction of audio signals.

Carrier shift signals can be fed to appropriate teletype terminal equipment or to Dual Diversity Converter CV-31/TRA-7 and similar units. Provision is made for use of the audio end of this radio receiver alone, and for stand-by operation when used in conjunction with radio transmitting equipment.

It operates with a balanced doublet or single-wire antenna.

There are three models of this equipment; R-274/FRR is constructed according to military specification and is interchangeable with R-274A/FRR, (not illustrated), which is a commercial (Hammarlund SP-600-JX-1) communication type receiver; also used as part of Navy Radio Set AN/GRR-8. R-274/FRR is a commercial (Hammarlund SP-600-JX-6) equipment procured by the Navy.

AN/FRR-TYPE

R-274/FRR :AN/COMP TYPE NUMBER

RADIO RECEIVER

INSTRUCTION LITERATURE: TM 11-897

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Navy

DATE OF THIS SHEET: 30 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Mobile and fixed radio security teams, fixed plant.

INSTALLATION: Ground, semipermanent or fixed station.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-2, -4; AN/VRT-1; BC-191, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.54 - 54.0 in 6 bands.

Band 1: 0.54 - 1.27	Band 3: 3.0 - 7.0	Band 5: 13.8 - 29.7
Band 2: 1.27 - 3.0	Band 4: 7.0 - 13.8	Band 6: 29.7 - 54.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw (voice or tone), carrier shift radioteletype.

POWER REQUIREMENTS: 120 w, 95 - 130 and 190 - 260-v, 50/60 cyc, 1 phase, ac.

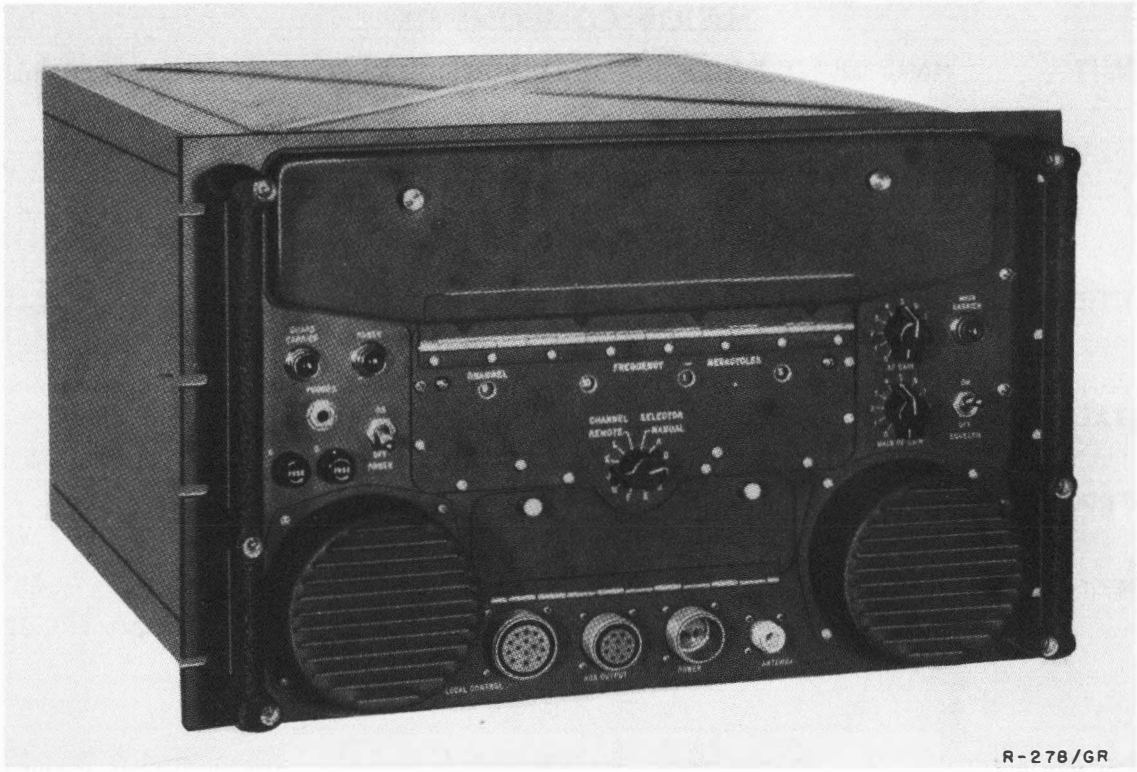
PHYSICAL CHARACTERISTICS

Radio Receiver R-274/FRR measures 10-1/2 x 16-3/4 x 19 inches, net weight 58 pounds, volume 2.04 cu ft. Packed for export shipment: total weight 105 pounds, total volume 4.64 cu ft. Shipped in 1 package.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Air Force
DATE OF THIS SHEET: 19 May 52

AN/FRR-TYPE

AN/COMP TYPE NUMBER: R-278/GR
RADIO RECEIVER



Radio Receiver R-278/GR is a fixed, or mobile, ground-operated, u-h-f, crystal controlled a-m receiver, operating on any one of 10 preset channels (of a total of 1,750 spaced 100 kc apart) in the 225.0 to 399.9 mc range. It also monitors either one of two crystal-controlled preset, "stand-by", guard frequencies in the range 238 to 248 mc.

The moment a signal is impressed on the preset guard frequency, it automatically takes over control of the receiver on that one frequency.

It is used for ground-to-air and point-to-point communication, and with Radio Direction Finder Set AN/CRD-6 can be used for navigation applications.

This receiver can be remotely controlled up to five miles by means of Radio Set Control C-565/GR and Control Indicator C-806/GR.

The antenna input impedance is 52 ohms, which permits using Antennas AS-505/GR, AT-197/GR, and AS-450/GR.

It has an audio output of 3 w at 600 ohm impedance which permits operation of loudspeakers, or feeding into telephone lines.

Operates on 110 or 220-v, ac.

AN/FRR-TYPE	INSTRUCTION LITERATURE: TO 16-35-OA-192-3
R-278/GR :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Restricted
RADIO RECEIVER	USING SERVICE : Air Force
	DATE OF THIS SHEET : 19 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued on any organizational level as project material in accordance with AFR 100-17.

INSTALLATION: Ground operated.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-12, -19, -27, -30, -33, -34; AN/GRC-16, -27, -29, -30, -32; AN/GRT-3; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-32; AN/URC-4; AN/URT-10; MAR; MAY; TDZ; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1,750 channels in the frequency range 225.0 - 399.9 . 10 preset channels: also operates on any guard frequency between 238 and 248 .

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone.

POWER OUTPUT: 3 w (Nominal).

POWER REQUIREMENTS: (Peak power required) 470 w, 115/230 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Receiver R-278/GR measures 19 x 12-1/4 x 20 inches, net weight 115 pounds, volume 4 cu ft. Packed for domestic shipment: total weight 145 pounds, total volume 6 cu ft. Packed for export shipment: total weight 155 pounds, total volume 6 cu ft. Shipped in 1 package both domestic and export.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 30 Jan 52	**AN/FRR- TYPE** AN/COMP TYPE NUMBER: R-320/FRC RADIO RECEIVER



R-320/FRC

Radio Receiver R-320/FRC is an a-m (voice, cw, and mcw) receiving equipment used for general communications such as point-to-point, ground-to-air, and ship-to-shore applications or for diversity reception.

Two types of receivers have been procured under this nomenclature designation. R-320/FRC (illustrated above) is a commercial (RCA Model AR-88-F) receiver having avc, i-f gain, and a diode output circuit. It operates in the frequency range 0.535 to 0.32 mc (in 6 bands) and requires 115/230 v ac. It is used in Radio Receiver Assembly OA-56A/FRC, which uses three such receivers for triple diversity reception.

R-320A/FRC is a commercial (Hammarlund SP-600-J-4) receiver having avc, i-f gain, a diode output circuit, a crystal filter, and a beat-frequency oscillator. It operates in the frequency range 0.54 to 54.0 mc, (in 6 bands) and can be adjusted for operation from 95 to 260 v ac (by seven transformer taps).

AN/FRR-TYPE

R-320/FRC :AN/COMP TYPE NUMBER
RADIO RECEIVER

INSTRUCTION LITERATURE: TM 11-899
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 30 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists of one major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Electronic warfare detachments.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.535 - 32.0, in 6 overlapping bands.

Band 1: 0.535 - 1.60.	Band 4: 11.9 - 16.6.
Band 2: 1.570 - 4.55.	Band 5: 16.1 - 22.7.
Band 3: 4.450 - 12.15	Band 6: 22.0 - 32.0.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: 2.5 w, maximum undistorted.

POWER REQUIREMENTS: 115/230 v, 50/60 cyc ac.

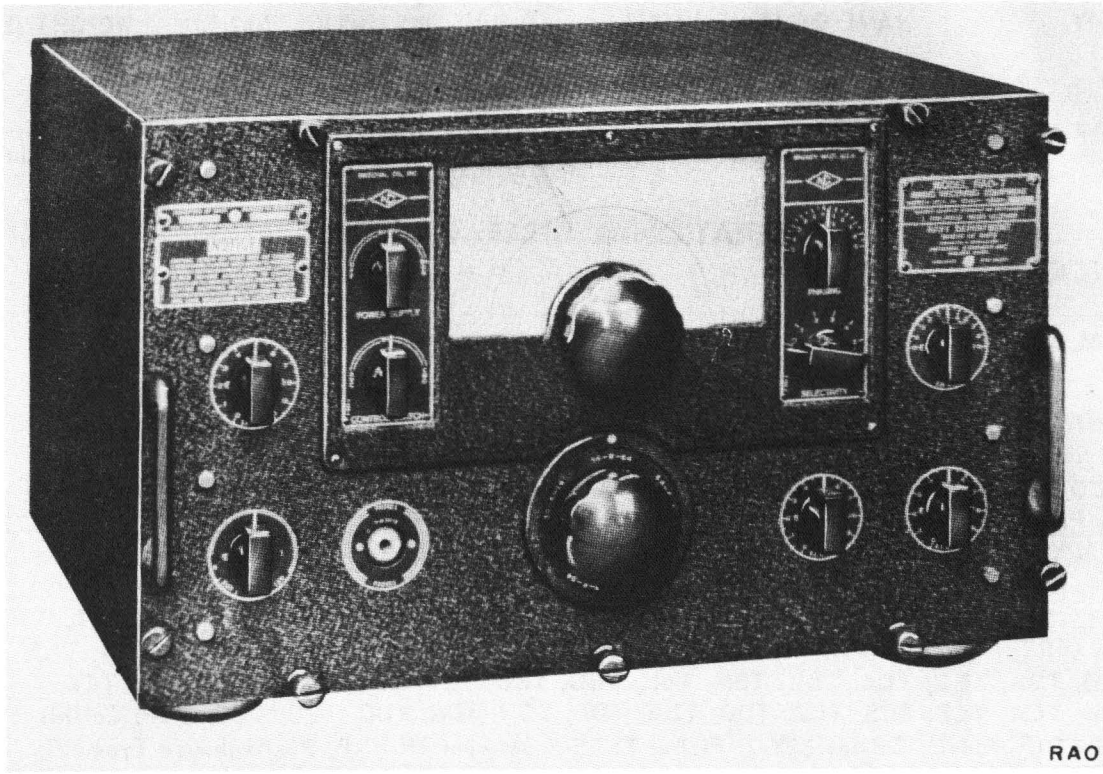
PHYSICAL CHARACTERISTICS

Radio Receiver R-320/FRC weighs 98 pounds net, volume 2.37 cu ft. Packed for export shipment: total weight 200 pounds, total volume 8.93 cu ft. Shipped in 2 packages.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Mar 52

AN/FRR-TYPE

SERVICE TYPE NUMBER: RAO, RAO-1
RADIO RECEIVING EQUIPMENT



RAO

Radio Receiving Equipments RAO and RAO-1 are high-selectivity, general purpose receivers for receiving radiotelegraph or voice signals.

They are similar in design: RAO is designed for rack installation; RAO-1 for table installation.

Both receivers are supplied with loudspeakers and fitted with loudspeaker power output sockets distinct from the headset output sockets.

Electrically, RAO-1 is the same as RAO with the addition of a noise limiter and a second stage of a-f amplification.

A headset and an antenna are required but not supplied.

These receivers may be operated from batteries in an emergency.

AN/FRR-TYPE

RAO, RAO-1 :SERVICE TYPE NUMBER

RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver Unit CNA-46072, -46088	10-7/8 x 17-9/16 x 13-3/8	55
1	Loudspeaker CNA-49092,	7 x 19 x 3-1/2	Not Available
	-49106	9-7/16 x 10-1/4 x 7-7/16	11

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, 499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR, TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.54 - 30.0, in 5 bands.

Band 1: 0.54 - 1.30.
Band 2: 1.3 - 2.8.
Band 3: 2.8 - 6.4.
Band 4: 6.4 - 14.0.
Band 5: 14.0 - 30.0.

TYPE MODULATION: AM.

TYPE OF SIGNAL: Cw, icw, mcw, voice.

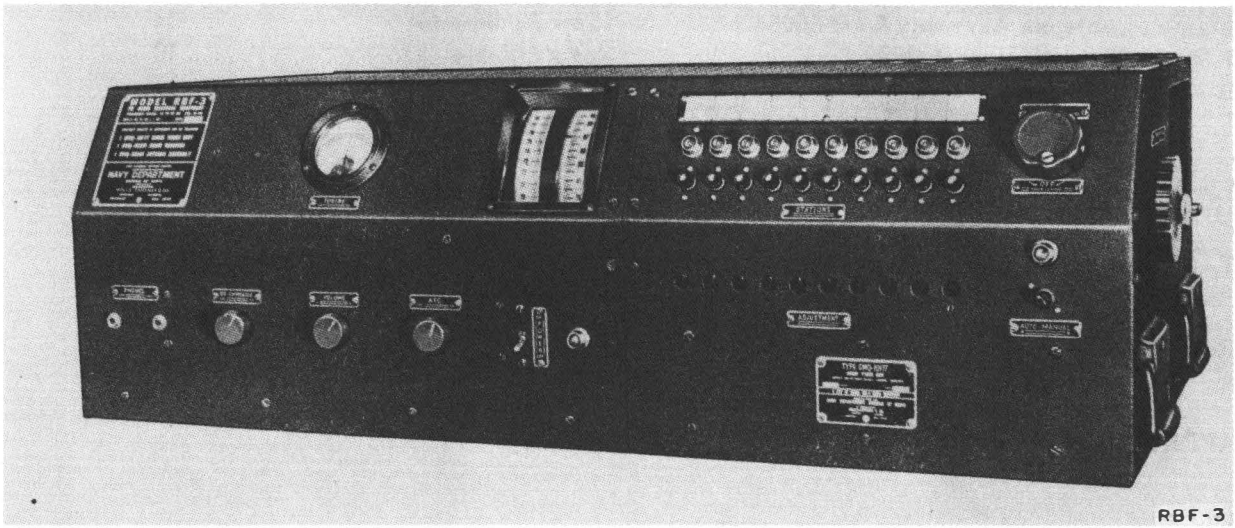
POWER OUTPUT: 12-mw output to headset socket.
2-w output to loudspeaker socket.

POWER REQUIREMENTS: RAO: 50 w, 115 v($\pm$ 10%) 50/62 cyc, 1 phase.
RAO-1: 70 w, 115 v($\pm$ 10%) 50/62 cyc, 1 phase.
Battery operation: 16.8 w, 240 v and 20 w, 6.3 v.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RAO or RAO-1 measures 20-5/16 x 17-9/16 x 13-3/8 inches.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 4 Apr 52	**AN/FRR- TYPE** SERVICE TYPE NUMBER: RBF-3 RADIO RECEIVING EQUIPMENT



Radio Receiving Equipment RBF-3 is an f-m superheterodyne receiver designed for monitoring signals from as many as 10 sono-radio-buoy transmitting equipments. It is used in harbor defense and underwater sound detection applications.

The receiver has a special tuning unit which provides manual tuning, push-button tuning, or (by means of a motor driven tuning and muting device) continuous automatic tuning of one station after another for 5- second periods.

The receiving equipment is complete and ready for installation except for a headset, required but not supplied.

In an emergency, the receiver can be operated from batteries, using manual tuning only.

AN/FRR-TYPE	INSTRUCTION LITERATURE: NavShips 900,225
RBF-3 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 4 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CWQ-46204	12-7/16 x 39-1/8 x 18-3/16	235
1	Radio Tuner Unit CWQ-10177	Not Available	Not Available
1	Antenna Assembly CWQ-66084	152 x 72 diameter	34
1	Ground Plane A-1202	Not Available	10
1	Antenna Coaxial Cable CASSN-70-1	200 feet long	17
1	Constant Voltage Transformer 30B722	Not Available	55

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Shore.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/TRC-1, -3, -4.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 70 - 90.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: 500 mw into 50 - or 5,000-ohm load.

POWER REQUIREMENTS: 215 w, 95-125 v, 50/60 cyc, 1 phase.
Battery operation: 53 w, 8 v; 45 w, 300 v.

PHYSICAL CHARACTERISTICS

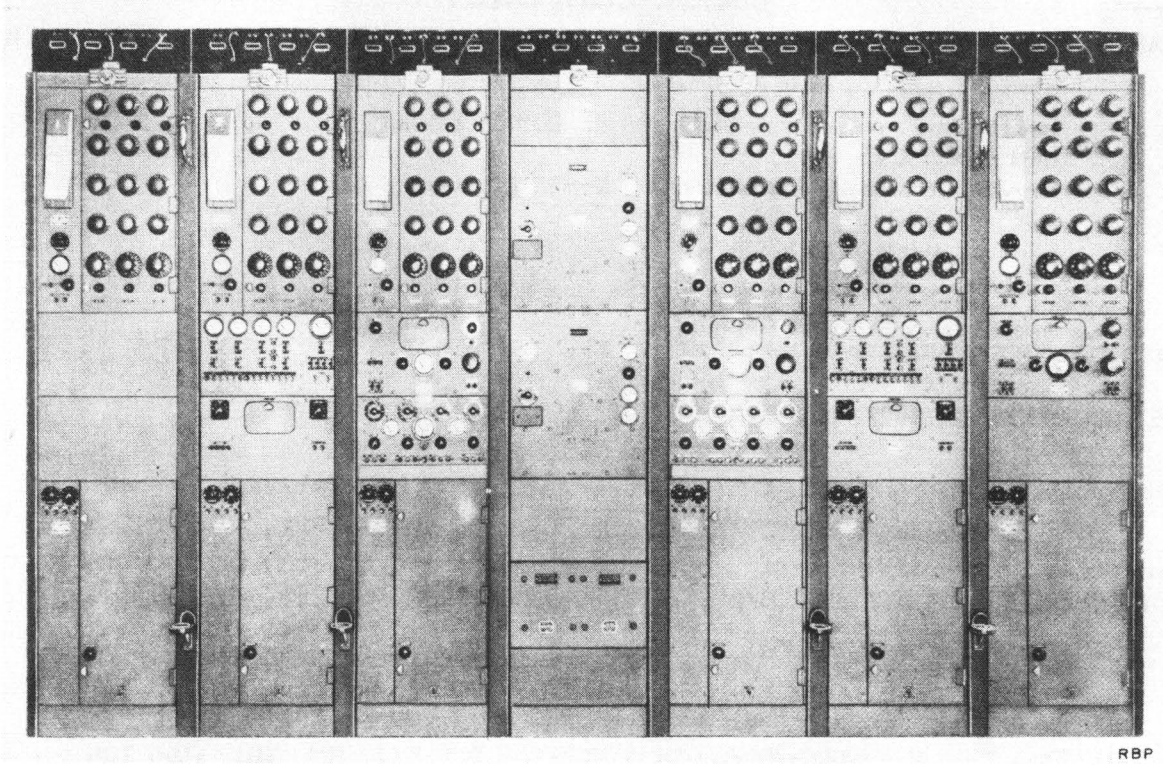
Radio Receiving Equipment RBF-3 measures 12-7/16 x 39-1/8 x 18-3/16 inches, net weight 235 pounds. Packed for domestic shipment: Total weight 880 pounds, total volume 43.49 cu ft, 1.1 ship tons. Shipped in 6 packages.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: See note below*
DATE OF THIS SHEET: 29 May 52

AN/FRR- TYPE

SERVICE TYPE NUMBER: RBP, RBP-1 and -2

DIVERSITY RADIO RECEIVING EQUIPMENT



RBP

Diversity Radio Receiving Equipments RBP, RBP-1, and RBP-2 are shore-based dual diversity a-m (cw, mcw, and voice) units. Six h-f superheterodyne receivers may be used, either as two three-set units, three two-set units, or six individual units, for diversity reception of long range signals. A typical installation places the antennas for the respective receivers 1,000 feet apart.

The space diversity system is used to counteract the fading characteristics of long range signals.

Each of the six identical receivers covers the 3- to 24-mc range in three bands, is designed for extreme stability, excellent selectivity, and very high gain and includes automatic gain control.

Signal control panels are used for switching, combining, and monitoring signals.

Three-tone keyer units are used and keying speeds up to 500 dot cps are possible.

For best results, fishbones, rhombics, open V, or other antennas which afford good directional characteristics should be used.

Seven antenna panels are available.

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* RBP: Navy, Army.
RBP-1, -2: Navy.

AN/FRR-TYPE

RBP, RBP-1 and -2 :SERVICE TYPE NUMBER
DIVERSITY RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,478; 95250
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: See note below*
DATE OF THIS SHEET: 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
6	RF Amplifier Unit CRV-50096	28 x 19 x 8-1/4	83
6	Intermediate Frequency Amplifier Unit CRV-50097	28 x 19 x 9-1/4	85
2	Signal Control Panel CRV-50099, CRV-50120	10-1/2 x 19 x 5-7/8	17
2	AF Amplifier Unit CRV-50098	10-1/2 x 19 x 10-1/4	32
2	Rectifier Power Unit CRV-20136	21 x 19 x 9-5/8	123

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, 19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 3 - 24, in 3 bands.
Band 1: 3 – 6. Band 2: 6 – 12. Band 3: 12 – 24.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: Telephone: 60 mw into 600 ohms.
Telegraph: 6 db above 1.5 to 12.0 mw with attenuator pad out.

POWER REQUIREMENTS: 813 w, 98 – 125 v, 60 cyc, 1 phase ac.

PHYSICAL CHARACTERISTICS

Diversity Radio Receiving Equipment RBP, RBP-1, or RBP-2 measures 88-5/8 x 142-5/16 x 44-5/16 inches.

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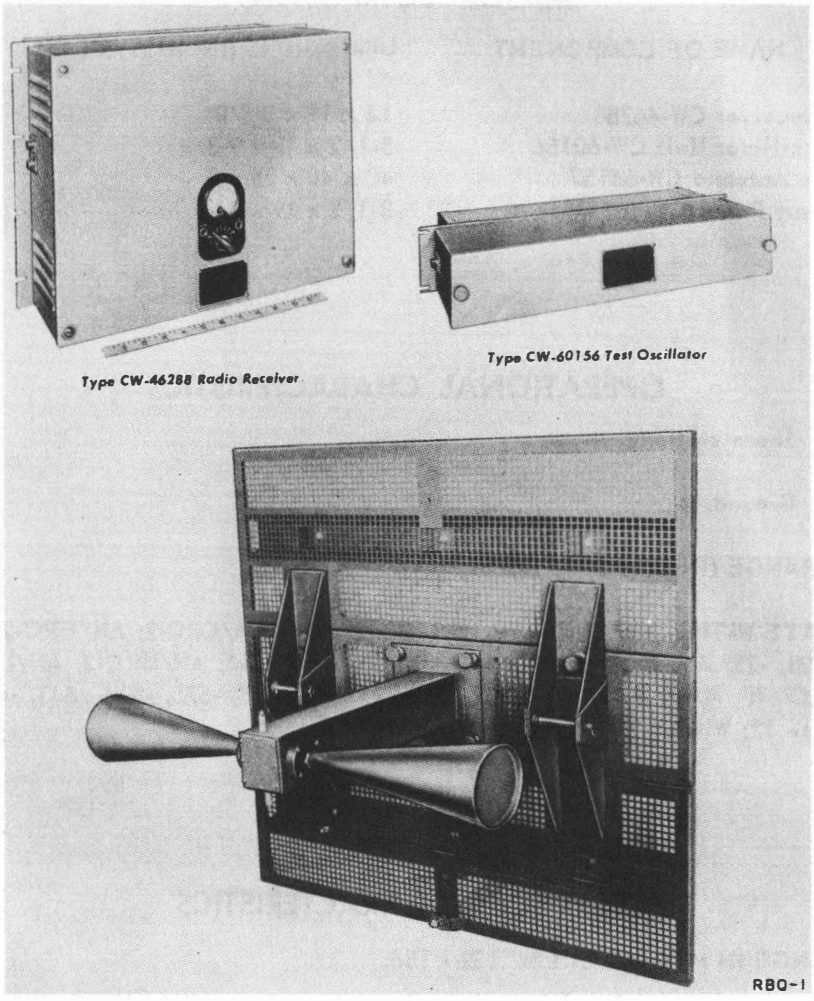
* RBP: Navy, Army.
RBP-1, -2: Navy.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 2 May 52

AN/FRR-TYPE

SERVICE TYPE NUMBER: RBQ-1

HIGH FREQUENCY RADIO RECEIVING EQUIPMENT



Type CW-46288 Radio Receiver

Type CW-60156 Test Oscillator

RBQ-1

High Frequency Radio Receiving Equipment RBQ-1 is used as the radio receiving terminal of a permanent point-to-point v-h-f radio link system. It provides one crystal-controlled channel within the frequency range 132 to 156 mc. Facilities are provided for local or remote control of the equipment.

It is used for reception of one voice channel, two voice-frequency carrier telephone channels, or multichannel v-f carrier telegraph.

Portable antenna, Navy Type CW-66157, is used for semipermanent installations. For permanent high-tower installations either 9-db antenna, Western Electric Co. Type D-150428, or 3-db antenna, Western Electric Co. Type D-150427, is required but not supplied.

Outdoor cabinet, Navy Type CW-10589, is available, which permits installation of the equipment at the base of the antenna tower or pole.

AN/FRR-TYPE

RBQ-1 :SERVICE TYPE NUMBER

HIGH FREQUENCY RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,621
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CW-46288	14 x 19 x 9-5/8	Not Available
1	Test Oscillator Unit CW-60156	3-1/2 x 19 x 9-3/4	" "
1	Portable Antenna CW-66157	40 x 40 x 25	65
1	Spare Part Panel CW-10569	3-1/2 x 19 x 5	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-16, -20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URT-7, -10; AN/VRC-1; BC-640; MAW; MBS; RC-257; SCR-522, -542, -573, -575, -624, -641, -643; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 132 - 156.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

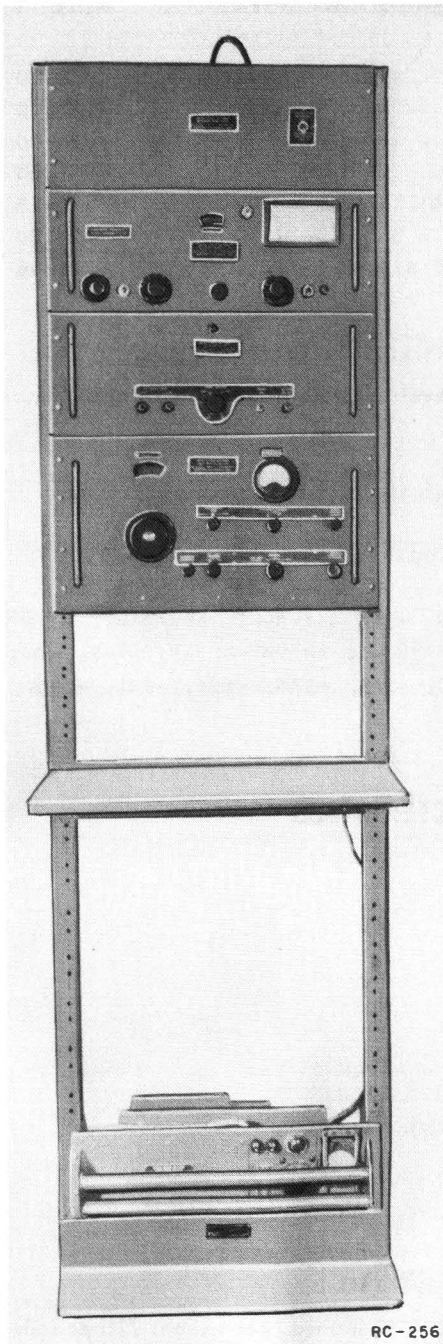
POWER OUTPUT: 30 mw into 600 ohm load.

POWER REQUIREMENTS: 110 w, 110-120 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

High Frequency Radio Receiving Equipment RBQ-1 measures21 x 19 x 9-5/8 inches.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 12 May 52	**AN/FRR-TYPE** SERVICE TYPE NUMBER: RC-256 RADIO RECEIVING EQUIPMENT



RC-256

Radio Receiving Equipment RC-256 is a-m (voice, cw, icw and tone) equipment which operates in the frequency range 100 to 156 mc. It is used with, but not part of, Radio Transmitter RC-257 to form a single-channel radio-link terminal station for point-to-point and air-to-ground communication.

The input impedance matches Radio Frequency Cable RG-11/U coaxial cable for operation with Antenna Equipment RC-81 or RC-81-C.

This receiver provides continuous tuning over its entire frequency range.

A series type noise limiter is built-in for reduction of pulse type interference.

Frequency Meter BC-1420 is supplied for the precise calibration of this equipment.

AN/FRR-TYPE	INSTRUCTION LITERATURE: TO 16-40RC-256-6-3-4-6
RC-256 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVING EQUIPMENT	USING SERVICE : Air Force
	DATE OF THIS SHEET : 12 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver BC-1421	10-15/32 x 19 x 13-9/16	38.00
1	Rectifier RA-147	8-23/32 x 19 x 6-31/32	26.00
1	Frequency Meter BC-1420	7 x 19 x 11-1/2	35.00
1	Switching Panel PN-56	6-31/32 x 19-1/8	7.50
1	Antenna Equipment RC-81-C	Not Available	6.75
1	Fuse Panel PN-15-B	5 x 19 x 5	24.00
1	Frame FM-39	72 x 20 x 3	121.00

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued on any organizational level as project material in accordance with AFR 100-17.

INSTALLATION: Ground, fixed designed for mounting in standard 19-inch relay rack.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-16, -20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URT-7, -10; AN/VRC-1; BC-640; MAW; MBS; RC-257; SCR-522, -542, -573, -575, -624, -641, -643; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 - 156.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, icw and tone.

POWER OUTPUT: 1.2 w into 600 ohm impedance (maximum).

POWER REQUIREMENTS: 100 w, 110-125/220-250 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RC-256 measures 72 x 20 x 13-9/16 inches, net weight 725 pounds, volume 44 cu ft, 1.1 ship tons. Packed for either domestic or export shipment: total weight 948 pounds, total volume 66.53 cu ft, 1.66 ship tons. Shipped in 2 packages.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 2 May 52

AN/FRR-TYPE

SERVICE TYPE NUMBER: RCO

RADIO RECEIVING EQUIPMENT



Radio Receiving Equipment RCO is a general purpose, crystal-controlled, fixed-tunes, single-channel receiver of modulated telegraph signals, and (more frequently) of voice signals, over the aeronautical v-h-f range.

RCO is often used in multichannel installations where two or more receivers provide two or more receiving channels.

It is supplied with a complete antenna assembly which includes the vertical 1/4-wave adjustable rod, ground plane, and 100-foot transmission line, with connectors.

A special four-pin socket is provided for remote controlled operation of the receiver. One pair of pins are used for the speaker, and the other pair for squelch and r-f gain controls.

A headset, or remote control equipment, and a crystal of the appropriate frequency are required but not supplied with the equipment.

AN/FRR-TYPE	INSTRUCTION LITERATURE: NavShips 900,255
RCO :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CCI-46220	5-1/4 x 19 x 14	28
1	Antenna Assembly CKV-66091	Not Available	18

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Naval air bases, airport control towers, or aeronautical ground stations.

INSTALLATION: Ground, rack mounted.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-16, -20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URT-7, -10; AN/VRC-1; BC-640; MAW; MBS; RC-257; SCR-522, -542, -573, -575, -624, -641, -643; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 - 156.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

POWER OUTPUT: 0.5 w into 600 ohms.

POWER REQUIREMENTS: 75 w, 110-120 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RCO measures 5-1/4 x 19 x 14 inches. Packed for export shipment: total weight 140 pounds, total volume 8.5 cu ft. Shipped in 2 packages.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 2 May 52	**AN/FRR-TYPE** SERVICE TYPE NUMBER: RDE, RDE-1 RADIO RECEIVING EQUIPMENT



RDE

Radio Receiving Equipments RDE and RDE-1 are single channel, fixed-tuned, crystal-controlled general purpose, radiotelephone receivers used for airport control operation and aeronautical ground stations.

A squelch circuit is used to block the receiver when no signals are being received.

Provisions are made for remote control of the receiver, and muting or disabling may also be controlled remotely over the transmitter press-to-talk circuit.

Four frequency bands are selected by plug-in coil sets.

Either a high-impedance antenna of 50 uuf or more, or a low-impedance 100- or 400-ohm line may be used.

AN/FRR-TYPE

RDE, RDE-1 :SERVICE TYPE NUMBER

RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 95257
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET: 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CCI-46219	3-1/2 x 19 x 13	31
1	Coil Set CCI-47363	5-1/8 x 1-7/16 x 4-5/16	Not Available
1	Coil Set CCI-47364	5-1/8 x 1-7/16 x 4-5/16	" "
1	Coil Set CCI-47365	5-1/8 x 1-7/16 x 4-5/16	" "
1	Coil Set CCI-47366	5-1/8 x 1-7/16 x 4-5/16	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Airport control towers or aeronautical ground stations.

INSTALLATION: Ground, rack-mounted.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 8.0 in four bands.

Band 1: 2.0 - 2.8
Band 2: 2.8 - 4.0
Band 3: 4.0 - 5.5
Band 4: 5.5 - 8.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 0.5 w into 600 ohm load.

POWER REQUIREMENTS: 60 va, 110-115 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipments RDE, RDE-1 measure 3-1/2 x 19 x 13 inches.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 Apr 52	**AN/FRR-TYPE** SERVICE TYPE NUMBER: RDF RADIO RECEIVING EQUIPMENT



RDF

Radio Receiving Equipment RDF is a general purpose, fixed-tuned, l-f radio receiver for use in airport traffic control towers, aeronautical ground stations, and Civil Aeronautic Authority range monitoring and for receiving weather broadcasts.

This receiver includes provision for remote control operation.

A 500/600-ohm speaker, or set of headphones, is required but not supplied.

AN/FRR-TYPE

RDF :SERVICE TYPE NUMBER
RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 95258
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CCI-46242	3-1/2 x 19 x 11-7/16	14.5
1	Coil Set CCI-47380	Not Available	Not Available
1	Coil Set CCI-47381	" "	" "
1	Coil Set CCI-47382	" "	" "
1	Coil Set CCI-47383	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations, airport control towers, aeronautical ground stations, Civil Aeronautic Authority range monitoring.

INSTALLATION: Ground, fixed, rack-mounted.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/ART-13; AN/CRT-3, 5; AN/FRT-10, -19; AN/GRT-2; AN/MRC-20; AN/SRC-3; AN/SRT-1, -3; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-4; BC-191, -329, -365; MBS; SCR-177; T-5/FRC, -171/FR; TAB; TAJ; TAQ; TBL; TBN; TBU; TBW; TCE; TCY; TCZ; TDD; TDE; TDK; Marconi TH-41-B; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.20 - 0.55. One fixed-tuned channel. Four sets of plug-in coils cover the following bands:

Band 1: 0.20 – 0.25.
Band 2: 0.25 – 0.33.
Band 3: 0.33 – 0.43
Band 4: 0.43 – 0.55.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

POWER OUTPUT: 2 w.

POWER REQUIREMENTS: 45 w, 105-115 v, 50/60 cyc, 1 phase.

PHYSICAL CHARACTERISTICS

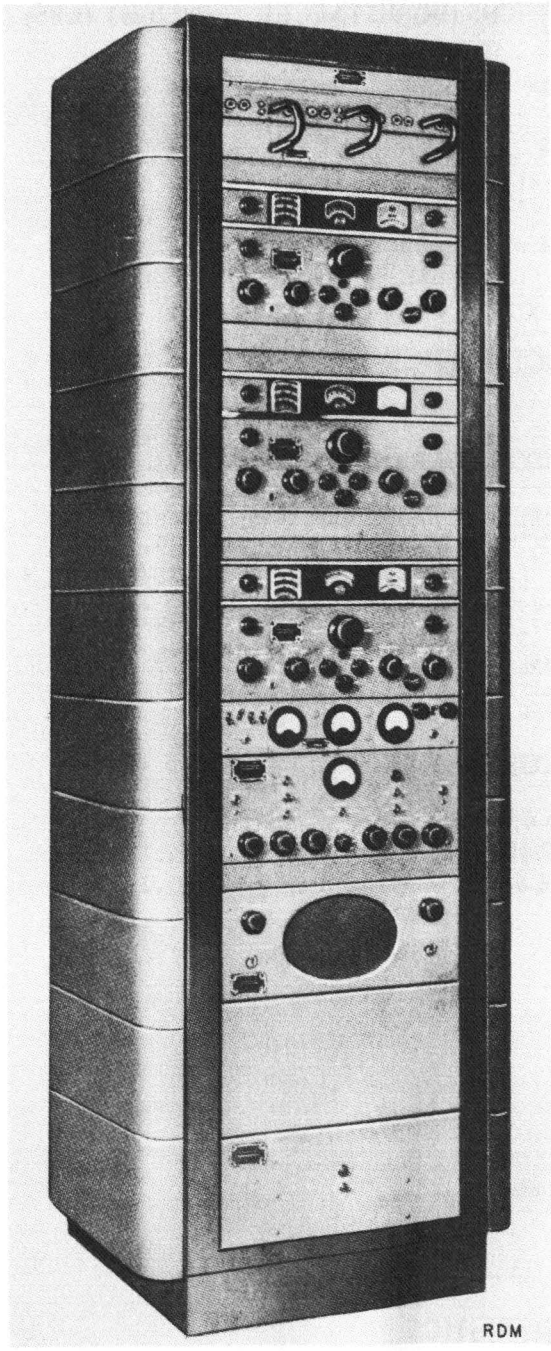
Radio Receiving Equipment RDF measures 3-1/2 x 19 x 11-7/16 inches, net weight 14.5 pounds, volume 4.45 cu ft.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Apr 52

AN/FRR-TYPE

SERVICE TYPE NUMBER: RDM, RDM-1

DIVERSITY RADIO RECEIVING EQUIPMENT


RDM

Diversity Radio Receiving Equipments RDM and RDM-1 are designed for the reception of either continuous wave or modulated carrier signals within the medium- and high-frequency ranges. They automatically select and deliver the strongest of three signals picked up by three space diversity antennas.

This equipment is complete except for the diversity antenna system and a set of high impedance headphones.

All major components are mounted in a rack-type cabinet.

Model RDM is supplied with cabinet, rack, and panel assembly which includes the antenna panel.

The RDM-1 is supplied with a cabinet and an antenna panel, as two separate components.

Complete system flexibility is provided in both models, through the use of three receivers, tone keyer unit, and monitoring unit.

AN/FRR-TYPE

RDM, RDM-1 :SERVICE TYPE NUMBER
DIVERSITY RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 91061, 95261
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
3	Radio Receiver CRV-46256-A, -46256-B	11 x 19 x 19-1/4	98
1	Tone Keyer CALO-35049, -35049-A	7 x 19 x 10-1/2	26
1	Monitoring Unit CALO-23424, -23424-A	Not Available	11
1	Monitoring Unit Power Supply CALO-20289, -20289-A	, x 19 x 6-1/2	18
1	Speaker CALO-49526, -49526-A	8-3/4 x 19 x 4-3/4	12

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground. **APPROXIMATE RANGE (IN MILES):** Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -608/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.535 - 32.0 in 6 bands.

Band 1: 0.535 - 1.6	Band 3: 4.45 - 12.15	Band 5: 16.1 - 22.7
Band 2: 1.57 - 4.55	Band 4: 11.9 - 16.6	Band 6: 22.0 - 32.0 .

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

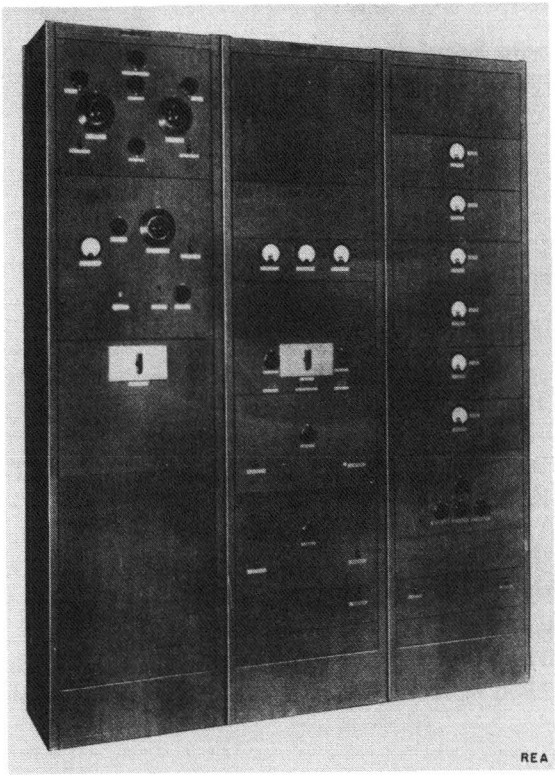
POWER OUTPUT: Tone keyer: 12 mw, 600 ohms.
Receiver: 2.5 w, 600 ohms and 2.5 ohms.

POWER REQUIREMENTS: 450 w, 100-165/190-260 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Diversity Radio Receiving Equipments RDM, RDM-1 measure 84 x 22 x 21 inches, net weight 650 pounds, volume 26.6 cu ft, 0.66 ship ton.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy, Army DATE OF THIS SHEET: 2 May 52	AN/FRR-TYPE SERVICE TYPE NUMBER: REA, REA-1 SINGLE SIDE BAND RADIO RECEIVING EQUIPMENT



Single Side Band Radio Receiving Equipments REA and REA-1 are complete single side band, reduced-carrier, radio receivers of the triple detection type, for either one, or both of two telephone channels arranged as a twin-channel system. They can be used in conjunction with multichannel carrier telegraph receiving equipment.

The REA is identical to the REA-1, except that the REA-1 has an improved first beat oscillator-frequency control unit and an improved tuning control unit.

The equipment is enclosed in three rack-type bays, and is complete, except for a receiving antenna system, a power cable, headsets, and terminal equipment.

AN/FRR-TYPE	INSTRUCTION LITERATURE: NavShips 95354 CLASSIFICATION OF EQUIPMENT: Unclassified
REA, REA-1 :SERVICE TYPE NUMBER	USING SERVICE : Navy, Army
SINGLE SIDE BAND RADIO RECEIVING EQUIPMENT	DATE OF THIS SHEET : 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Single Sideband Radio Receiving Equipment CW-D-99945	65-1/8 x 84 x 18-1/4	1,440

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Long distance radio telephone receiving stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -401, -447, -610; MBS; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBW; TBX; TCB; TCC; TCE; TCH; TCO; TCK; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model): Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4 - 22 in two bands.
Band 1: 4 - 10. Band 2: 10 - 22.

TYPE MODULATION: Am (single or double side band).

TYPE OF SIGNAL: Voice.

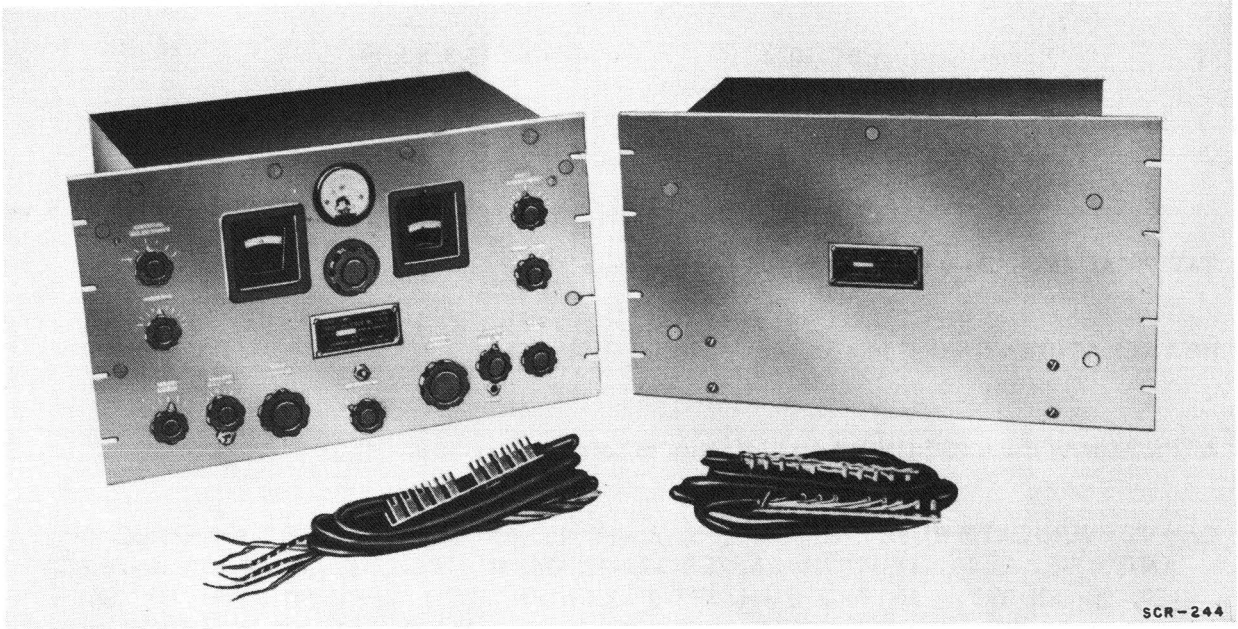
POWER OUTPUT: + 15 volume unit, 600 ohms, each channel.

POWER REQUIREMENTS: 600 w, 115 v ($\pm$ 15%) 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Single Side Band Radio Receiving Equipments REA, REA-1 measure 65-1/8 x 84 x 18-1/4 inches. Packed for domestic shipment: total weight 1,900 pounds.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 30 Jan 52	**AN/FRR-TYPE** SERVICE TYPE NUMBER: SCR-244 RADIO SET



Radio Set SCR-244 is a general purpose, a-m (voice and cw) receiving equipment used for communication, monitoring, or intercept purposes in the m-f and h-f bands in fixed station applications at division and higher headquarters.

This equipment consists essentially of a commercial (Hammerlund Super-Pro) communications type receiver, plus a power supply. It may be operated as table top equipment or installed on a standard relay rack. When cabinet inclosed it may be mounted on appropriate shock mounts and operated in vehicles.

Automatic and manual volume control are provided.

Some models of the receiver have a tuning meter on the front panel.

In later models (SCR-244-D, not illustrated) receiver and power supply components are installed together in a metal cabinet of the same size as the receiver cabinet of earlier models.

Antenna and accessory items are included and the equipment operates from conventional (105 to 125 v) a-c power.

AN/FRR-TYPE	INSTRUCTION LITERATURE: TM 11-866
	CLASSIFICATION OF EQUIPMENT: Unclassified
SCR-244 :SERVICE TYPE NUMBER	USING SERVICE : Army
RADIO SET	DATE OF THIS SHEET: 30 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver BC-1004 (or Receiver, Radio R-483/FRR)	10-1/2 x 15-3/8 x 19	55
1	Power Supply Unit RA-84	10-1/2 x 10 x 19	60
1	Cabinet CH-104	12-1/4 x 16-1/2 x 23	18

OPERATIONAL CHARACTERISTICS

TACTICAL USE: At division or higher headquarters.

INSTALLATION: Ground, transportable, mobile, fixed station.

APPROXIMATE RANGE (IN MILES): Medium to long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.54 - 1.16, 1.16 - 2.5, 2.5 - 5, 5-10, 10 - 20. (SCR-244-D: 0.54 to 54.0, in 6 bands).

TYPE MODULATION: Am.

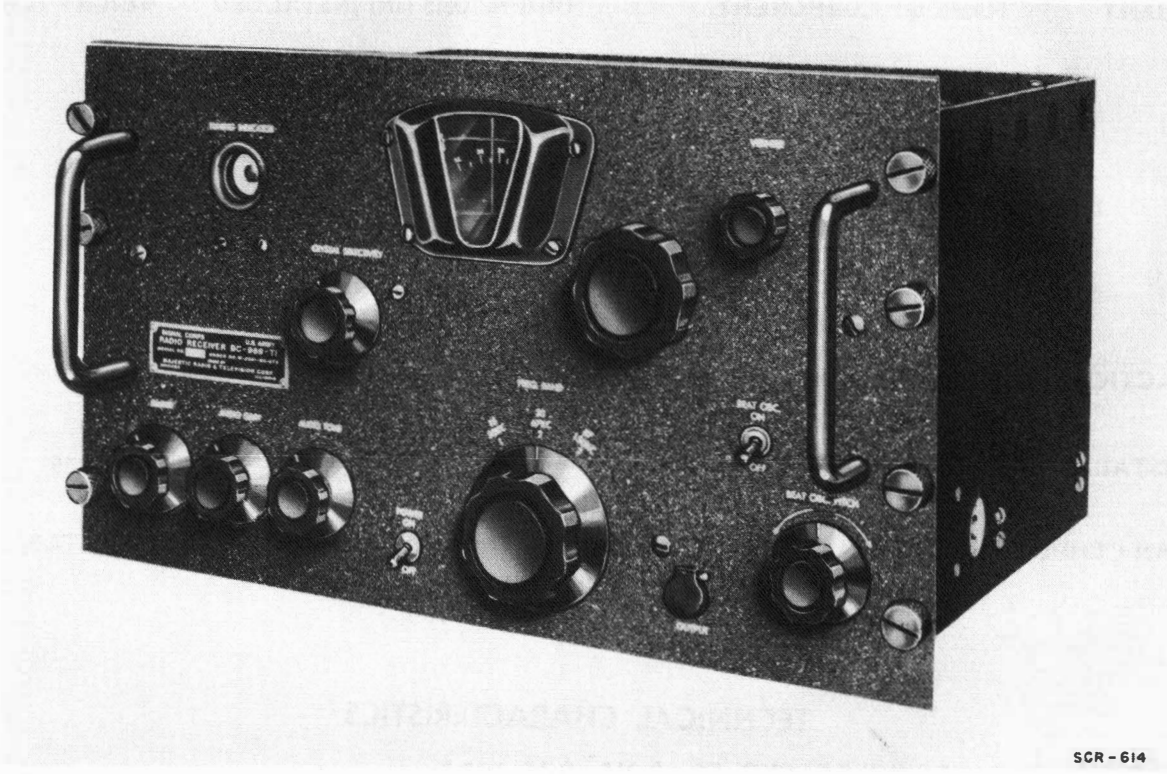
TYPE OF SIGNAL: Voice, tone, cw.

POWER REQUIREMENTS: 105 – 125 v, 50/60 cyc ac. (SCR-244-D; 95 – 260 v in 7 steps).

PHYSICAL CHARACTERISTICS

Radio Set SCR-244 weighs 55 pounds net. Packed for export shipment: total weight 90 pounds, total volume 4.3 cu ft. Shipped in 2 packages.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 31 Jan 52	**AN/FRR-TYPE** SERVICE TYPE NUMBER: SCR-614 RADIO SET



Radio Set SCR-614 is an l-f, multiband a-m (voice, cw, and tone), long-range radio receiving equipment. It is intended for radio direction finding, monitoring, or intercept applications.

This equipment consists of a radio receiver, which can be rack-mounted or installed on a vehicular shock mount, a power supply unit, and associated accessories.

It uses a whip-type antenna in vehicular use and a balanced 100-ohm line antenna in fixed plant installations.

It operates from 115-or 230-v a-c power.

AN/FRR-TYPE	INSTRUCTION LITERATURE: TM 11-873
SCR-614 : SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO SET	USING SERVICE : Army
	DATE OF THIS SHEET : 31 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver BC-969	19 x 10-1/2 x 15-7/8	49.3
1	Case CS-109-A	20-1/8 x 10-1/2 x 13-1/2	18.5
1	Mounting FT-411	21-1/4 x 3-1/2 x 13-1/2	10.2
1	Power Supply Unit RA-61	19 x 4 x 13-7/8	52.1
1	Mounting FT-414	18-1/4 x 3-1/2 x 11-3/4	9.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army Security Agency, headquarters.

INSTALLATION: Ground, fixed station or mobile. **APPROXIMATE RANGE (IN MILES):** Long.

CAN COMMUNICATE WITH: AN/FRT-4, -10, -19; AN/TRQ-1; BC-365; T-5/FRC, -171/FR; TAB; TCG; Marconi TH-41-B; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.015 - 0.15, in 3 bands.
Band 1: 0.015 — 0.030.
Band 2: 0.030 — 0.0675.
Band 3: 0.0675 — 0.15.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, voice, or tone.

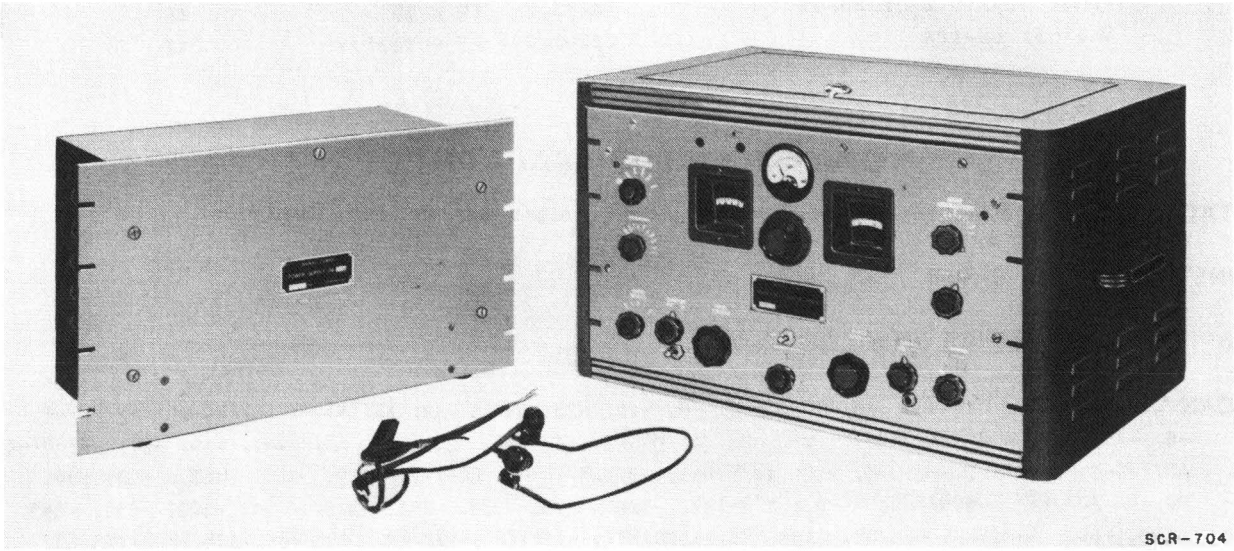
POWER OUTPUT: 2 w.

POWER REQUIREMENTS: 115/230 v, 50/60 cyc, ac.

PHYSICAL CHARACTERISTICS

Radio Set SCR-614 weighs 141.7 pounds net.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 29 Jan 52	**AN/FRR-TYPE** SERVICE TYPE NUMBER: SCR-704 RADIO SET



SCR-704

Radio Set SCR-704 is a long-range, a-m (voice, tone, and cw) receiving equipment which is used far high-frequency intercept, monitoring, and similar applications for fixed plant use by army security agency (ASA).

This equipment consists essentially of a commercial (Hammarlund Super-Pro) communications-type table model receiver and a panel-mounted power supply. The equipment may be installed on a standard relay rack and operates in five frequency bands.

This set can be installed and operated in a vehicle and can be used for communication purposes. The antenna used is a single-wire and ground, or may be a doublet antenna system having a balanced transmission line. It can be used as an audio amplifier if required.

Operates from 115 or 230-v ac or from a 6-v vehicular storage battery and six 45-v dry cells.

AN/FRR-TYPE

SCR-704 :SERVICE TYPE NUMBER

RADIO SET

INSTRUCTION LITERATURE: TM 11-866
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 29 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver BC-794	10-1/2 x 19 x 15-3/8	55
1	Power Supply Unit RA-94	10-1/2 x 19 x 10	60
1	Cabinet CH-104	10-1/2 x 23 x 16-1/2	18

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army security agency headquarters, signal service team, fixed plant.

INSTALLATION: Ground, fixed station, or mobile.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -401, -447, -610; MBS; MQ; OA-60A/FRT, -608/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-8; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.25 - 40.0 in 5 bands.

Band 1: 1.25 - 2.50
Band 2: 2.50 - 5.0
Band 3: 5.0 - 10.0
Band 4: 10.0 - 20.0
Band 5: 20.0 - 40.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, tone, and voice.

POWER REQUIREMENTS: 115 - 230 v, 50/60 cyc, ac, (or, 6-v storage battery, and six 45-v batteries).

PHYSICAL CHARACTERISTICS

Radio Set SCR-704 weighs 146.6 pounds net, volume 5.34 cu ft. Packed for export shipment: total weight 179 pounds, total volume 7.5 cu ft.

STATUS: Commercial
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 28 Apr 52

AN/FRR-TYPE

COMMERCIAL TYPE NUMBER: COLLINS 75A-2
RADIO RECEIVER



COLLINS 75A-2

Radio Receiver Collins 75A-2 is a double conversion, superheterodyne equipment designed for coverage of only the amateur bands in the frequency range of 1.5 to 30.0 mc. It is normally used for fixed ground, point-to-point communication in the Military Amateur Radio Systems (MARS) and has provisions for f-m reception by inserting NBFM adaptor 148C-1, and for check point calibration by inserting Crystal Calibrator Unit BR-1.

The input circuit operates from coaxial transmission lines, (such as RG-8/U (52 ohms) and RG-11/U (73 ohms)).

It has an automatic noise limiter for a-m reception, and a manually operated shunt-type noise limiter for cw.

Visual tuning accuracy to within 1 kc for the amateur bands 1.5 to 21.8 mc; and 2 kc for the 10 and 11 meter amateur bands (26 to 30 mc) is provided.

Provision has been made to connect a blocking voltage to mute the receiver audio when the key of an associated transmitter is closed.

Power requirements are 85 w of 115 v, ac.

AN/FRR-TYPE	INSTRUCTION LITERATURE: Collins 75A-2 Collins Instruction Book CLASSIFICATION OF EQUIPMENT: Unclassified
COLLINS 75A-2 : COMMERCIAL TYPE NUMBER RADIO RECEIVER	USING SERVICE : Air Force DATE OF THIS SHEET: 28 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver 75A-2	21-1/8 x 12-1/2 x 13-1/6	50
1	Speaker	15 x 11-1/8 x 9-1/8	15

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Issued for use in the Military Amateur Radio Systems.

INSTALLATION: Fixed ground for either table or standard 19-inch relay rack mounting.

APPROXIMATE RANGE (IN MILES): (Nominal) Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25, -26; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -401, -447, -610; MBS; MQ; OA-60A/FRT; OA-60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.6 - 32.0 in 6 bands.

Band 1: 1.6 - 2.0	Band 3: 6.4 - 8.0	Band 5: 19.2 - 24.0
Band 2: 3.2 - 4.0	Band 4: 12.8 - 16.0	Band 6: 25.6 - 32.0

TYPE MODULATION: Am and fm.

TYPE OF SIGNAL: Cw, mcw, and phone.

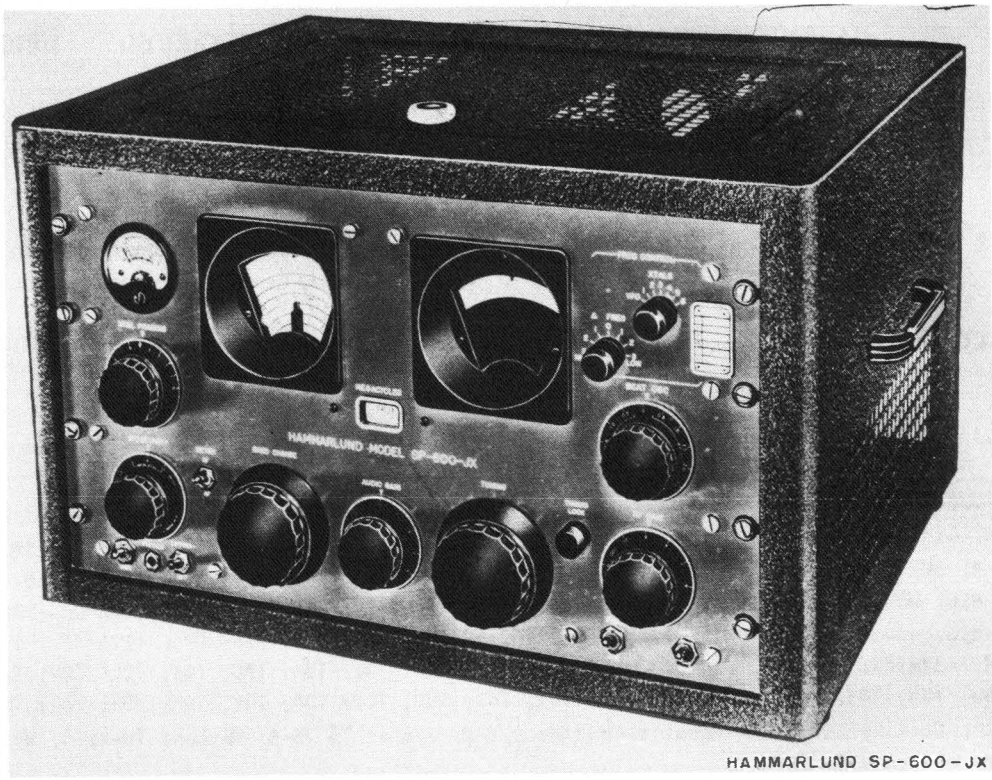
POWER OUTPUT: Audio output; 2.5 w at 500 ohm impedance.

POWER REQUIREMENTS: 85 w, 115 v, 50/60 cyc, ac.

PHYSICAL CHARACTERISTICS

Radio Receiver Collins 75A-2 measures 21-1/8 x 24 x 13-1/6 inches, net weight 65 pounds, volume 2.9 cu ft. Packed for domestic or export shipment: total weight 70 pounds, total volume 3 cu ft. Shipped in 1 package.

STATUS: Commercial CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 26 May 52	**AN/FRR-TYPE** COMMERCIAL TYPE NO: HAMMARLUND SP-600-JX RADIO RECEIVER



HAMMARLUND SP-600-JX

Radio Receiver Hammarlund SP-600-JX is a general purpose, fixed ground, a-m (voice, cw, and mcw) equipment operating signals in part of the m-f and v-h-f bands, and all of the h-f band. It is a single conversion type superheterodyne, from 0.54 to 7.4 mc; a double conversion type from 7.4 to 54.0 mc, and has a high degree of sensitivity and selectivity. The high frequency oscillator is designed for crystal control on any six-preset channels.

The intermediate frequency amplifier provides 455 kc output from a cathode follower to a connection on the rear skirt of the chassis, which may be used for dual diversity reception.

The input impedance of the antenna terminals is designed to match a 100-ohm balanced transmission line. Although the frequency of the oscillator is not crystal-controlled (except on the preset channels listed above) it has good frequency stability and will function for long periods with a minimum of monitoring.

Also has a noise limiter for reduction of pulse type interference. The receiver output is 600 ohms for operation into telephone lines, or a loudspeaker.

AN/FRR-TYPE	INSTRUCTION LITERATURE: Hammarlund Instruction Manual
HAMMARLUND SP-600-JX :COMMERCIAL TYPE NO.	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVER	USING SERVICE : Air Force
	DATE OF THIS SHEET: 26 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Issued on any organizational level as project material in accordance with AFR 100-17.

INSTALLATION: Ground operated for mounting in standard 19-inch relay rack occupying 10-1/2-inch panel space.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.54 - 54 in 6 bands.

Band 1: 0.54 - 1.35	Band 3: 3.45 - 7.4	Band 5: 14.8 - 29.7
Band 2: 1.35 - 3.45	Band 4: 7.40 - 14.8	Band 6: 29.7 - 54.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, mcw, and icw.

POWER OUTPUT: 2.5 w.

POWER REQUIREMENTS: 130 w, 95-130/190-260 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Receiver Hammarlund SP-600-JX measures 21-3/8 x 12-3/4 x 17-1/8 inches, net weight 87.5 pounds, volume 3 cu ft. Packed for domestic or export shipment: total weight 95 pounds, total volume 3.5 cu ft. Shipped in 1 package.

STATUS: Commercial	AN/FRR-TYPE
CLASSIFICATION OF EQUIPMENT: Unclassified	COMMERCIAL TYPE NUMBER: NATIONAL HRO-50
USING SERVICE: Air Force	RADIO RECEIVING EQUIPMENT
DATE OF THIS SHEET: 12 May 52	



NATIONAL HRO-50

Radio Receiving Equipment National HRO-50 is a radio receiver normally used for fixed ground, point-to-point communication in the Military Amateur Radio System. Its frequency range is covered by a series of plug-in coils, which have switches for spreading each one of the amateur bands (3.5 mc through 54 mc) over the entire tuning dial scale. This equipment can receive f-m signals by inserting the National NFM type narrow-band f-m adapter and the National XCU crystal calibrator for 100-kc and 1,000-kc check points.

The input circuit can be operated with a single wire antenna, a balanced transmission line, or a 72-ohm coaxial cable. The actual input impedance is between 300 to 600 ohms, depending on the frequency of the input signal.

There are two stages of r-f amplification (before the converter) to provide high sensitivity. The i-f system uses 12 permeability-tuned circuits in three i-f stages for selectivity. Terminals are provided for external input to the audio system for phone or mike and for silencing the receiver during periods of transmission. For emergency communication, a connector is available for operation from an exteraal 6-v d-c supply.

AN/FRR- TYPE

NATIONAL HRO-50 :COMMERCIAL TYPE NUMBER

RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: National HRO-50 Instruction Book
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET : 12 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver	19-3/4 x 10-1/8 x 16-1/2	75
1	Speaker	13 x 11 x 8	8

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued for use in the Military Amateur Radio System.

INSTALLATION: Fixed-ground, two models: one for table mounting, the other for standard 19-inch rack.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-4, -5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRT-1, -3, -4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -329, -339, -365, -401, -447, -610; MBS; MQ; OA-60/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCG; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.05 - 0.43, 0.48 - 35.0, and 48.0 - 54.0.

TYPE MODULATION: Am (fm with Adaptor NFM-83-50).

TYPE OF SIGNAL: Cw, mcw, voice, tone.

POWER OUTPUT: 10 w.

POWER REQUIREMENTS: 110-120/220-240 v, 50/60 cyc , 1 phase at approximately 115 w. For emergency service, it can be operated from Vibrator Power Supply 650-S whose power requirements are 90 w (at 15 amp) from a 6-v storage battery.

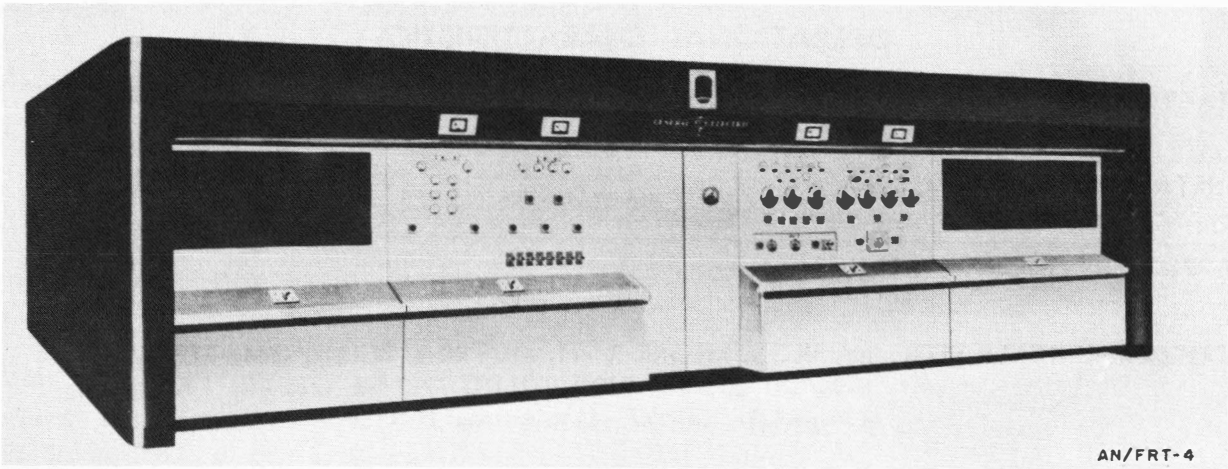
PHYSICAL CHARACTERISTICS

Radio Receiving Equipment National HRO-50 measures 21-1/8 x 19-3/4 x 16-1/2 inches, net weight 83 pounds, volume 2.6 cu ft. Packed for domestic or export shipment: total weight 95 pounds, total volume 3.4 cu ft. Shipped in 2 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy, Air Force
DATE OF THIS SHEET: 15 May 52

AN/FRT-4

RADIO TRANSMITTING SET



AN/FRT-4

Radio Transmitting Set AN/FRT-4 is a high-power, low-frequency a-m/f-m (cw, frequency-shift keying, facsimile) radiotelegraph transmitter for shore-to-ship use.

This equipment has master oscillator frequency control and provides continuous tuning throughout its frequency range. It is designed for operation into a 600-ohm transmission line.

AN/FRT-4

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: NavShips 91169.3
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy, Air Force
DATE OF THIS SHEET: 15 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/SRC-3; AN/SRR-3, -11; AN/TRQ-1; BC-314, -344, -779; MBS; R-96/SR, -203/SR, -210/U, -211/U, -212/SR, -215/SR; RAK; RBA; RBL; RCH; SCR-177, -614; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.050 - 0.150.

TYPE MODULATION: Am, Fm.

TYPE OF SIGNAL: Cw, frequency-shift keying, facsimile.

POWER OUTPUT: 55 kw.

POWER REQUIREMENTS: 230 v, 60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Information on Radio Transmitting Set AN/FRT-4 not available.

STATUS: Std

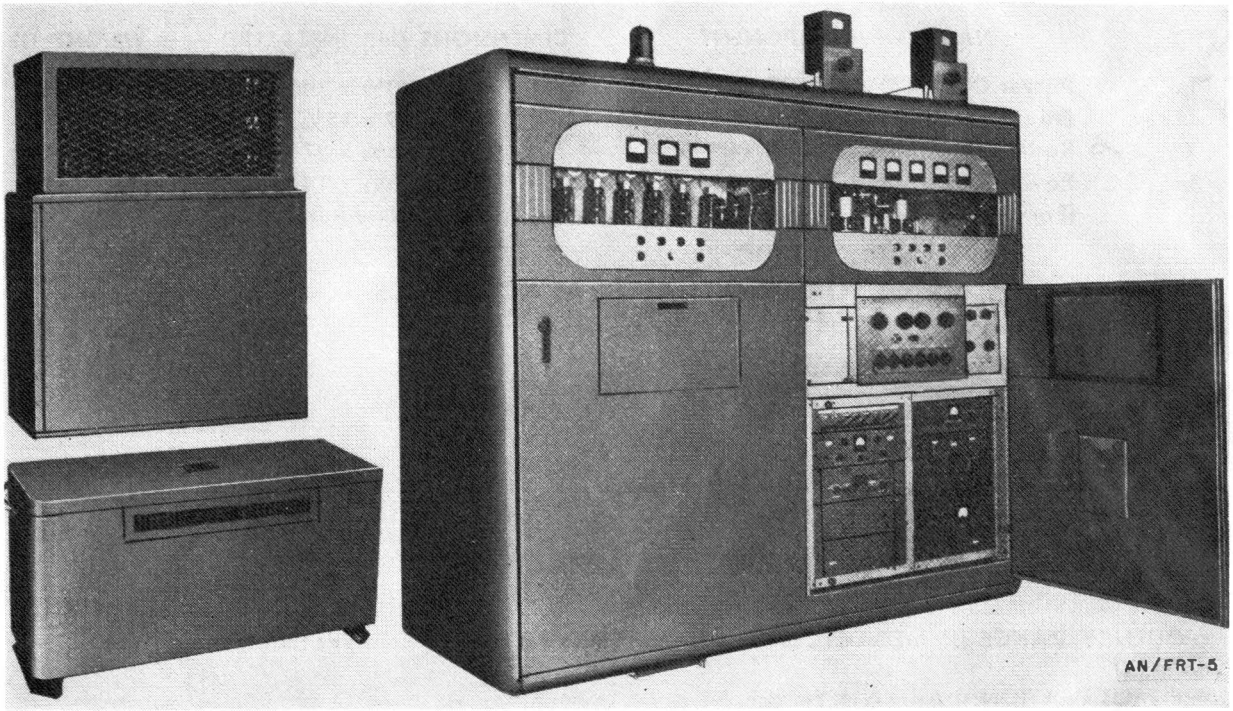
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

AN/FRT–5( )

RADIO TRANSMITTING SET



Radio Transmitting Set AN/FRT–5( ) is a medium-range, medium-power, hf transmitter for on-off radiotelegraph, frequency-shift keying or teletypewriter and facsimile transmission. It is capable of keying speeds up to 400 wpm on either cw or frequency-shift keying in ship-to-shore and point-to-point communication applications.

The AN/FRT–5A or AN/FRT–5B is the same as AN/FRT–5 except provisions are made in Frequency Shift Keyer KY–45A/FRT–5 for facsimile transmission. The A and B models differ only in circuitry design and component parts.

This equipment may be remotely operated and includes automatic shutdown facilities that can be adjusted to operate when the transmitter is not keyed for a predetermined period.

AN/FRT-5( )

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: NAVSHIPS 91183; 91457(A); 91740(A)

USING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Power Control C-587/FRT-5	30¼ x 30¼ x 14¼	298
1	Frequency Shift Keyer KY-45A/FRT-5	10½ x 19 x 15⅛	29
1	Radio Transmitter T-225A/FRT-5	91½ x 46⅝ x 37½	2,108
1	Power Transformer TF-122/U	18½ x 36½ x 14¾	527

(For a complete list of major components, see instruction literature.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore installation.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE: Medium.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4 to 26 (10 preset chan or cont var tuning).

TYPE MODULATION: Am (A1), fm (F1, F4).

TYPE OF SIGNAL: Cw, fsk, facsimile.

POWER OUTPUT: 15 kw.

POWER REQUIREMENTS: 28 kw, 230 v +10%, 60 cy, 1 ph ac; 115 v, 60 cy, 1 ph ac (xtal oven).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT* (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	91½ x 93¼ x 37½	5,104	221.5	5.54	
DOMESTIC PACK:		7,687	434.76	10.87	16
EXPORT PACK:					

STATUS: Std

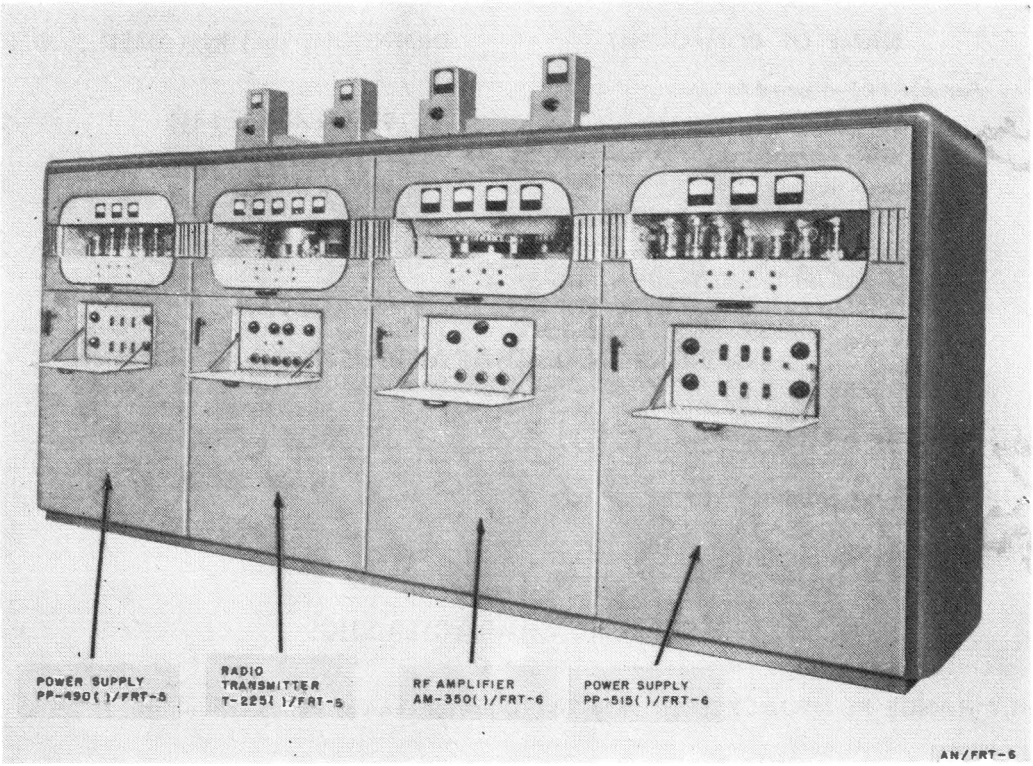
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 9 May 1956

AN/FRT-6( )

RADIO TRANSMITTING SET



Radio Transmitting Set AN/FRT–6( ) is a long-range, hf, high-power transmitter for on-off radiotelegraph, frequency-shift telegraph or teletypewriter, and facsimile transmission. It is capable of keying speeds up to 400 wpm on either cw or frequency-shift emission in point-to-point communication applications.

The AN/FRT–6, AN/FRT–6A, AN/FRT–6B are all functionally interchangeable except for minor parts changes. The AN/FRT–6C is functionally interchangeable with these earlier models except that the single-sideband conversion kit is omitted. It is also capable of operating from a 50/60-cycle power line source, if changes in transformers, relays, and blowers are made. All models are designed for optimum operation into an antenna with an impedance of 600 ohms. They may be operated (without the main rf amplifier section of the equipment) to provide a 15-kw output (instead of the normal 40-kw) for operation to medium distances or in emergencies. The power tubes are forced-air cooled. Power for the blowers is obtained from a 230-volt transmitter power supply.

AN/FRT-6( )

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: NAVSHIPS 91263

USING SERVICE: USN

DATE OF THIS SHEET: 9 May 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	For AN/FRT-6 or -6A:		
1	RF Amplifier AM-350/FRT-6 or AM-350A/FRT-6	91½ x 46⅝ x 54½	2,550
1	Power Supply PP-490/FRT-5 or PP-490A/FRT-5	91½ x 46⅝ x 37½	1,742
1	Radio Transmitter T-225/FRT-5 or T-225A/FRT-5	91½ x 46⅝ x 37½	2,108

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore installations.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE: Long.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4 to 26 (10 preset chan or cont var tuning).

TYPE MODULATION: Am (A1), fm (F1).

TYPE OF SIGNAL: Cw, fsk.

POWER OUTPUT: 40 kw (nor); 15 kw (w/o final rf ampl unit).

POWER REQUIREMENTS: 25.5 kw (low pwr), 86 kw (nor), 207 to 253 v, 60 cy, 3 ph ac; 115 v, 60 cy, 1 ph ac (xtal oven).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	91½ x 186½ x 54½	12,641	513.2	12.8	
DOMESTIC PACK:		17,892	959.8	24	29
EXPORT PACK:					

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Restricted USING SERVICE: Navy DATE OF THIS SHEET: 12 Jun 52	**AN/FRT-10** RADIO TRANSMITTING SET

NO PHOTOGRAPH AVAILABLE

Radio Transmitting Set AN/FRT-10 is l-f, high-power, a-m (cw, frequency-shift keying facsimile) transmitting equipment used for long-range shore-to-ship, point-to-point, or broadcast radiotelegraph or radioteletype transmission.

This equipment consists of transmitter and power supply installations.

The transmitter installation has a dual 250-kw transmitter, antenna system (less towers), operator's console, and monitoring equipment.

Seven Diesel engine generators, power control and distribution panels, oil storage tanks, and fuel transfer pumps comprise the power supply installation.

The equipment is so proportioned that it can be transported by air.

AN/FRT-10

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: Not available

CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE: Navy

DATE OF THIS SHEET: 12 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Radio Transmitter T-281/FRT-10	84 x 48-1/4 x 54	2,300
2	Radio Frequency Amplifier AM-513/FRT-10	84 x 48-1/4 x 54-1/4	Not Available
2	Power Supply PP-657/FRT-10	84 x 48-1/4 x 54	1,800
2	Power Supply PP-658/FRT-10	84 x 48-1/4 x 54	Not Available
1	Console C-856/FRT-10	44-1/16 x 36-9/32 x 65-13/16	" "
2	Radio Frequency Tuner TN-189/FRT-10	84 x 48 x 72-1/4	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-5,-8; AN/GRR-3; AN/MRC-20; AN/SRR-3, -11, -12; AN/TRQ-1; AN/VRC-4; BC-344, -348, -779; MBS; R-96/SR, -203/SR, -206/PR, -210/U, -211/U, -212/SR, -215/SR, -247/URR; RAK; RAS; RBA; RBL; RBM; RCH; RDF; SCR-274; -614; ARC-Type 12; Fisher TS 25-3; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.1 - 0.2.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, frequency-shift keying facsimile.

POWER OUTPUT: 500 kw.

POWER REQUIREMENTS: 825 kw (total power) obtained from three Diesel engine driven generators as follows: 1 - 480 v, 60 cyc, 3 phase.
2 - 4,160 v, 60 cyc, 3 phase.

PHYSICAL CHARACTERISTICS

Information on Radio Transmitting Set AN/FRT-10 not available.

STATUS: Std

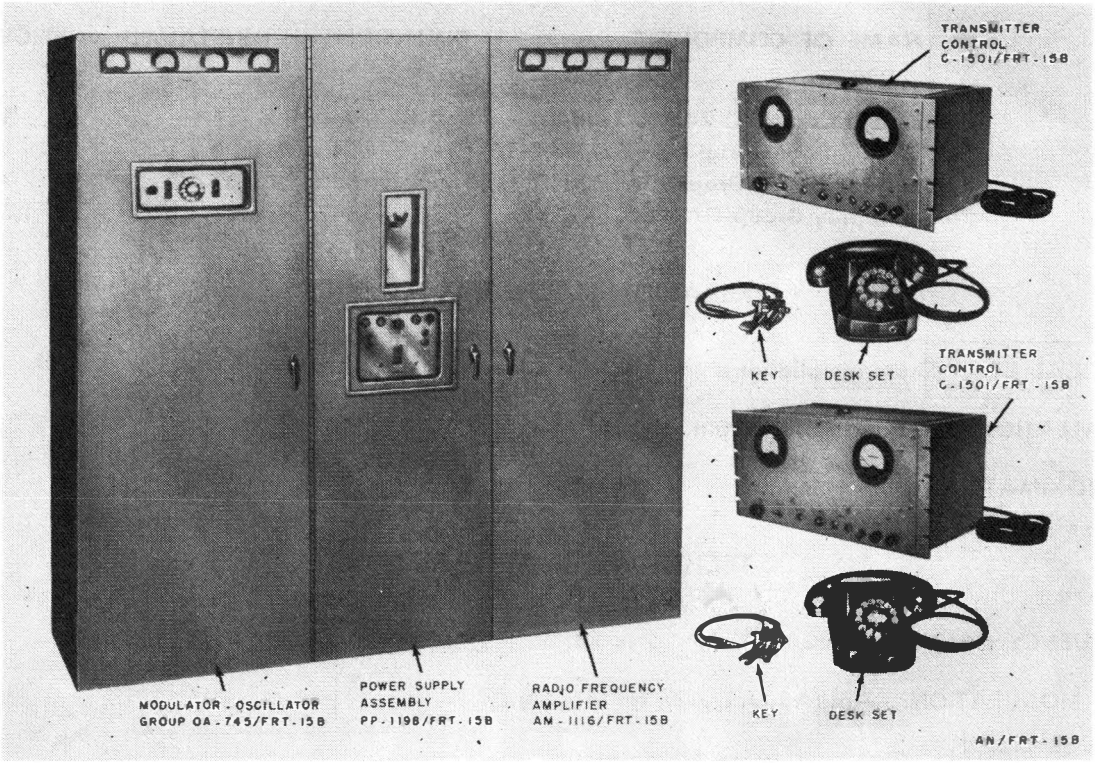
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

AN/FRT–15( )

RADIO TRANSMITTING SET



Radio Transmitting Set AN/FRT–15( ) is a general service equipment intended for naval shore or air stations to provide point-to-point cw, mcw, radioteletype, and facsimile communication, and other services requiring operation on a number of readily selected frequency channels.

This equipment contains, basically, a transmitter group, a radio modulator group, a power supply group, and two transmitter controls.

The AN/FRT–15, AN/FRT–15A, and AN/FRT–15B are generally interchangeable electrically and mechanically, although there are differences between some of their major operating components.

AN/FRT–15( )

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: NAVSHIPS 91690(A)

USING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	For AN/FRT–15:		
2	Transmitter Control C–745/FRT–15	9 x 19 x 11	105
1	Radio Modulator Group OA–204/FRT–15	84 x 29 x 31	830
1	Radio Transmitting Group OA–205/FRT–15	84 x 29 x 31	775
1	Power Supply Group OA–206/FRT–15	84 x 26 x 31	1,350

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore installations.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE: Medium.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 to 30.

TYPE MODULATION: Am (A1, A2, A3), fm (F1, F4).

TYPE OF SIGNAL: Cw, mcw, voice, fsk, facsimile.

POWER OUTPUT: 3,000 w.

POWER REQUIREMENTS: 9,920 w, 220 v, 50/60 cy, 3 ph ac; 110 v, 50/60 cy, 1 ph ac (remote-cont units).

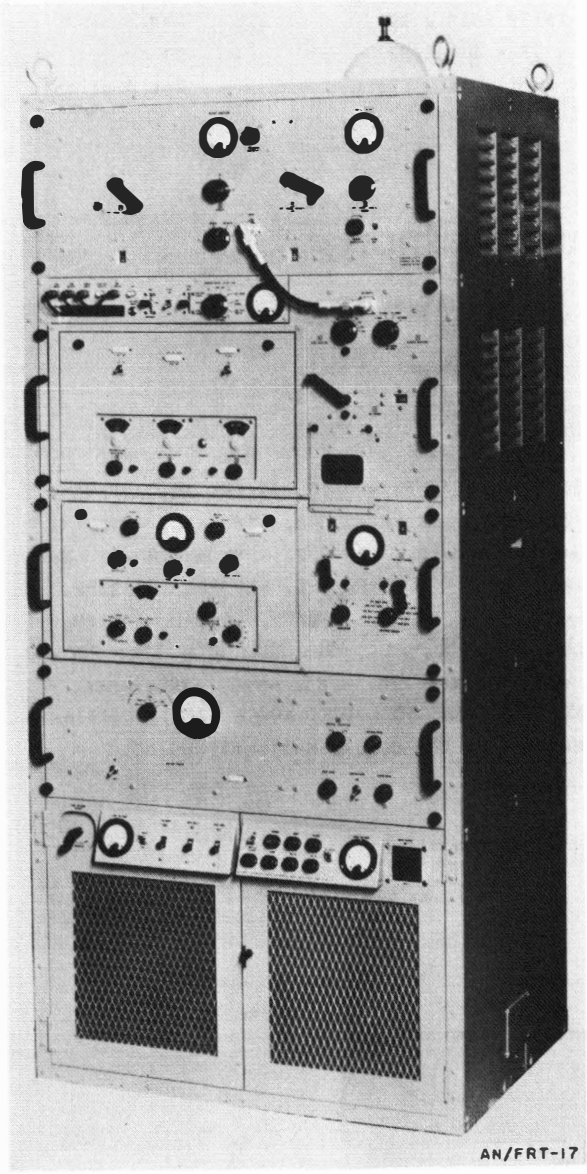
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	84 x 85 x 31	3,060			
DOMESTIC PACK:		7,413	521.33	13	
EXPORT PACK:					

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 12 Jun 52

AN/FRT-17

RADIO TRANSMITTING SET



Radio Transmitting Set AN/FRT-17 is a general purpose, medium-power, am (cw, mcw, voice, frequency shift keying, radioteletype or, facsimile) transmitter, designed for shore-station installation.

This equipment may be operated at either 250, 500, or 1,000 w r-f output.

Frequency control is by means of a master or crystal oscillator.

It is designed as a replacement for radio transmitting Equipment TDO.

AN/FRT-17

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 12 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	RF Unit, Collins Type 507A-1A	Not Available	Not Available
1	RF Oscillator O-91/FRT-5	10-15/32 x 13 x 19	" " "
1	Frequency Shift Keyer KY-45/FRT-5	13 x 19 x 10-15/32	50
1	Modulator, Collins Type 509A-1	Not Available	Not Available
1 each	Power Unit, Collins Type 506A-1, 509A-1	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -29, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -12, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -787, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -137/GR, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBK; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; TBO; TBX; TBY; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 - 30.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice, frequency shift keying, facsimile.

POWER OUTPUT: 250, 500, or 1,000 w.

POWER REQUIREMENTS: 230 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Set AN/FRT-17 measures 84 x 47 x 32 inches.

STATUS: Std

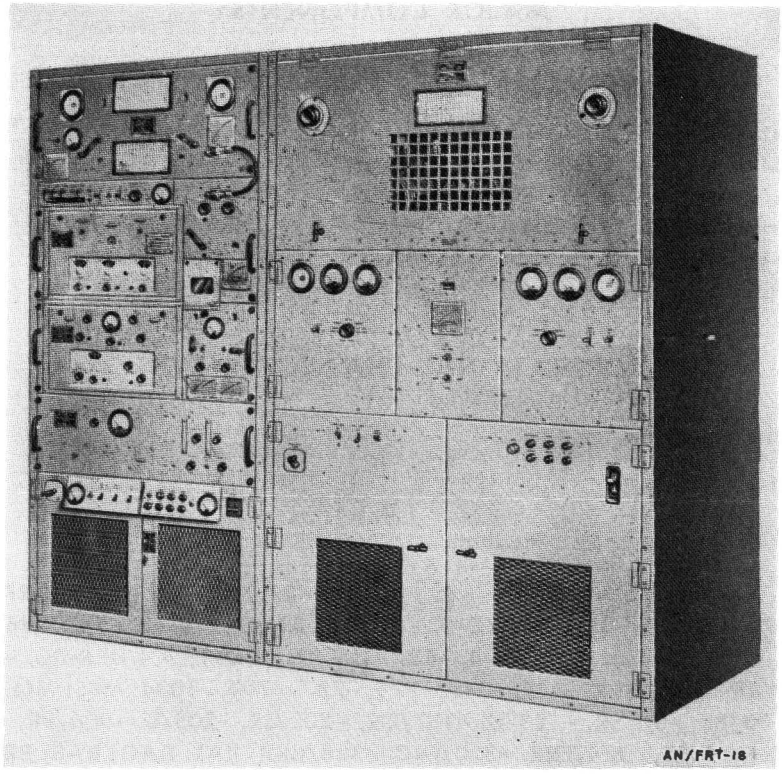
CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: USN

DATE OF THIS SHEET: 12 June 1952

AN/FRT–18

RADIO TRANSMITTING SET



Radio Transmitting Set AN/FRT–18 is a general purpose, medium-power, am (cw, mcw, voice, frequency-shift keying, facsimile) transmitter designed for shore-station installation.

It consists of Radio Transmitting Set AN/FRT–17 plus an rf amplifier bay. Frequency control is by means of a master or crystal oscillator. This equipment replaces Radio Transmitting Equipment TDH.

AN/FRT–18

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: Not Available

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: USN

DATE OF THIS SHEET: 12 June 1952

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lbs)
1	RF Unit, Collins Type 507A–1A	Not Available	Not Available
1	RF Oscillator O–91/FRT–5	$10^{15}/_{32}$ x 13 x 19	Not Available
1	Frequency Shift Keyer KY–45/FRT–5	13 x 19 x $10^{15}/_{32}$	50
1	Modulator, Collins Type 509A–1	Not Available	Not Available
1 each	Power Unit, Collins Type 506A–1, 508A–1	Not Available	Not Available
1	RF Amplifier	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, Fixed.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC–2, –5, –8, –9, –21, –25, –26; AN/ARR–15; AN/FRC–10; AN/FRR–3, –4, –7, –12, –28, –32; AN/GRC–9, –13, –26; AN/GRR–2, –3, –5; AN/MRC–2, –6, –16, –20, –22; AN/PRC–7, –19, –20; AN/SRR–3, –8, –12, –13; AN/TRQ–1; AN/URR–10, –12, –22, –23; AN/VRC–1, –4; AN/VRR–2; BC–312, –342, –348, –779, –787, –794, –1004; MBS; MQ; OA–58/FRC, –59/FRC; R–62/PR, –80/PR, –96/SR, –129/U, –137/GR, –203/SR, –205/U, –206/PR, –208/FR, –209/FR, –210/U, –211/U, –213/SR, –274/FRR, –320/FRC, –388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBK; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR–177, –188, –193, –244, –274, –281, –399, –499, –506, –536, –543, –585, –593, –607, –694, –704; TBO; TBX; TBY; TCH; TCP; TCS; AR–88 (RCA); Collins 18S–4 (AF Model); Collins 75A–2; Fisher TS 25–3; Hammarlund SP–600–JX; National HRO–50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2–30.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice, frequency shift keying, facsimile.

POWER OUTPUT: 3 kw.

POWER REQUIREMENTS: 230 v, 50–60 cyc, 3 phase, ac.

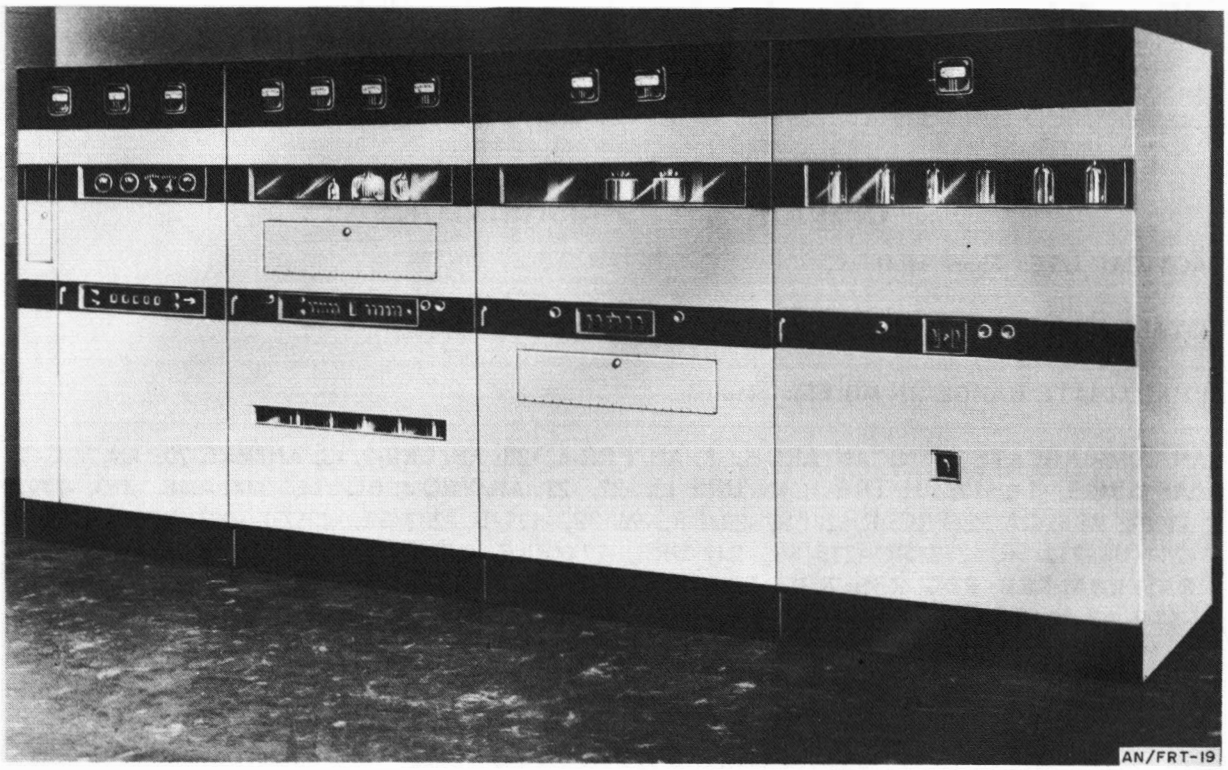
PHYSICAL CHARACTERISTICS

Information on Radio Transmitting Set AN/FRT–18 not available.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 12 Jun 52

AN/FRT-19

RADIO TRANSMITTING SET



Radio Transmitting Set AN/FRT-19 is a single-frequency, medium-power, a-m (cw, mcw, frequency-shift keying, and facsimile) transmitter for shore-based radiotelegraph or radioteletype fixed station applications.

This equipment consists essentially of an exciter bay, amplifier bay, and antenna tuner. Frequency control for the one channel provided is by means of a master or crystal oscillator.

A power output of 15 kw is possible over a frequency range of 0.03 to 0.3 mc.

AN/FRT-19

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: Not available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET: 12 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Nomenclature assignments not made as yet.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/FRR-4, -28; AN/GRR-2, -3; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-4; BC-314, -344, -348, -453, -779, -1004; MBS; OA-58/FRC; R-62/FR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBG; RBH; RBL; RBM; RBO; RCF; RCG; RCH; RDF; RDM; SCR-177, -244, -274, -614; AR-88 (RCA); ARC Type 12; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.03 - 0.60.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, Mcw, frequency-shift keying, facsimile.

POWER OUTPUT: 0.03 to 0.3 mc, 15 kw.
0.3 to 0.6 mc, 3 kw.

POWER REQUIREMENTS: 230 v, 50/60 cyc , 3 phase, ac.

PHYSICAL CHARACTERISTICS

Information on Radio Transmitting Set AN/FRT-19 not available.

STATUS: Std

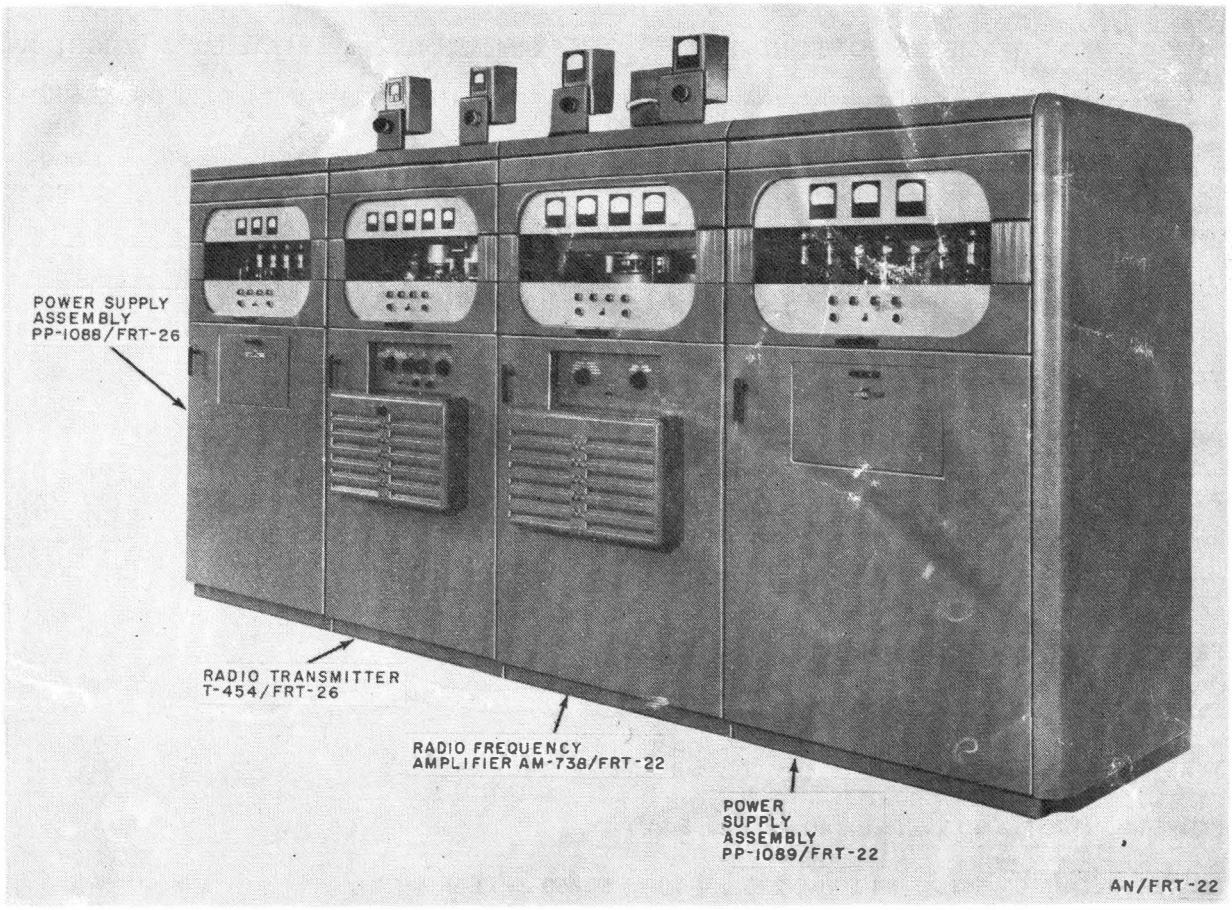
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

AN/FRT–22

TRANSMITTING SET, RADIO



Radio Transmitting Set AN/FRT–22 is a high-power, hf, fixed station radio equipment used for handling cw radiotelegraph, frequency-shift teletypewriter, or facsimile traffic over long distances.

It consists essentially of a transmitter (having two rf oscillators, a frequency-shift keyer, and a power supply), an amplifier, and two power assemblies. Each of these components is housed in a metal cabinet, four of which are bolted together to form a single unit.

This equipment is the primary operating component of Coded Facility –334 (TB SIG 322–334).

AN/FRT-22

TRANSMITTING SET, RADIO

INSTRUCTION LITERATURE: TM 11-847

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 25 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Amplifier, Radio Frequency AM-738/FRT-22	91 7/16 x 43 1/2 x 59 7/16	2,650
1	Power Supply Assembly PP-1088/FRT-26	79 5/16 x 43 1/2 x 37 11/16	1,800
1	Power Supply Assembly PP-1089/FRT-22	79 5/16 x 43 1/2 x 37 11/16	2,000
1	Transmitter Radio T-454/FRT-26	91 7/16 x 43 1/2 x 42 7/16	2,200

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Fixed station.

APPROXIMATE RANGE: Extended.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4 to 26.5.

TYPE MODULATION: Am (A1, A3b); fm (F1).

TYPE OF SIGNAL: Cw, fsk.

POWER OUTPUT: 30 kw (ssb), 40 kw (cw, fsk).

POWER REQUIREMENTS: 84.5 kw, 230 v ±10%, 50/60 cy, 3 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	91 7/16 x 180 1/4 x 59 7/16	12,595	481.4	12.04	
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

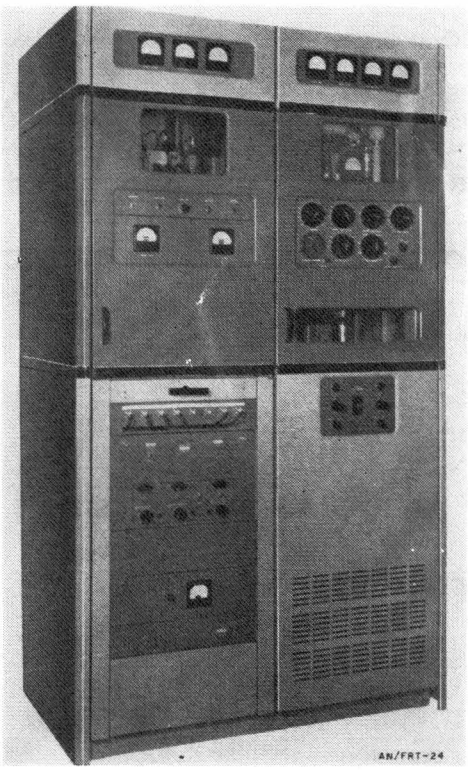
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

AN/FRT–24

TRANSMITTING SET, RADIO



Radio Transmitting Set AN/FRT–24 is used to provide reliable shore-to-ship, ground-to-aircraft, or point-to-point communication under wide variations in climatic conditions.

This equipment includes automatic tuning that selects any one of 10 preset channels for local or remote control. The two remote-control units are each provided with an impedance-matching device that permits feeding into connecting facilities ranging from a 52-ohm unbalanced line to a 600-ohm balanced line without tuning.

AN/FRT–24

TRANSMITTING SET, RADIO

INSTRUCTION LITERATURE: NAVSHIPS 92223(A)

USING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
2	Control, Transmitting Set C–1362/FRT–24	10⅞ x 11 x 21⅛	50
1	Power Supply PP–454/FRT–5	8¾ x 15⅛ x 19	88
1	Transmitter, Radio T–440/FRT–24	31¾ x 46⅞ x 83	1,500
2	Telephone Set TA–267/U	5⅛ x 5½ x 7½	4

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore installations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE: Medium.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 to 30 in eight bands:

Band 1: 2 to 3
Band 2: 3 to 4
Band 3: 4 to 6
Band 4: 6 to 8
Band 5: 8 to 12
Band 6: 12 to 16
Band 7: 16 to 24
Band 8: 24 to 30

TYPE MODULATION: Am (A1, A3).

TYPE OF SIGNAL: Cw, voice.

POWER OUTPUT: 1,000 w (A1 or A3) into 600-ohm load.

POWER REQUIREMENTS: 4.5 kw, 208/230 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	31¾ x 46⅞ x 83	1,500			
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

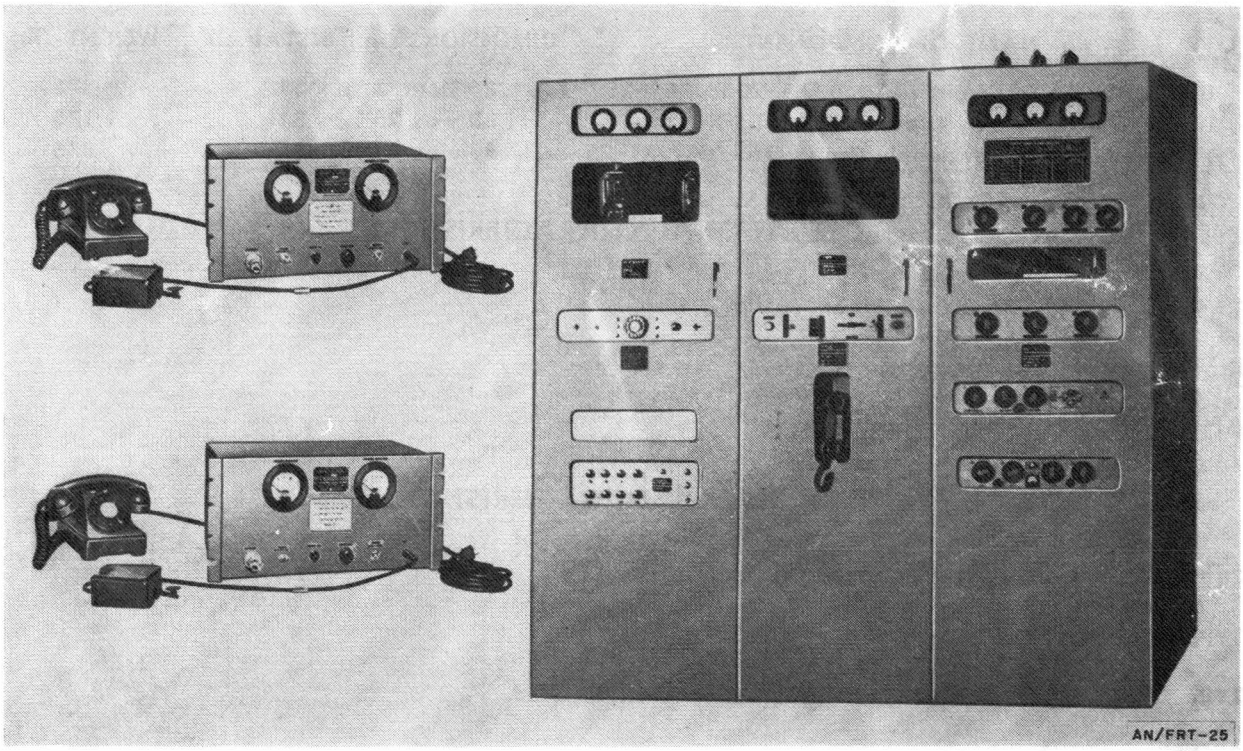
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

AN/FRT–25

TRANSMITTING SET, RADIO



Radio Transmitting Set AN/FRT–25 is used at naval shore installations to provide transmission facilities for point-to-point and ground-to-air communication applications.

This equipment is capable of continuous high-power operation on cw, frequency-shift keying, or photo-transmission.

It will operate in any one channel of 10 crystal-controlled frequencies or on 1 master-oscillator-controlled frequency.

AN/FRT-25

TRANSMITTING SET, RADIO

INSTRUCTION LITERATURE: NAVSHIPS 92431

USING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Radio Transmitter Group OA-205B/FRT-25	$86\frac{15}{16} \times 28\frac{15}{16} \times 31$	875
1	Power Supply Group OA-206B/FRT-25	$83\frac{15}{16} \times 25\frac{15}{16} \times 31$	1,175
1	Keyer-Power Supply Group OA-708/FRT-25	$83\frac{15}{16} \times 28\frac{15}{16} \times 31$	875

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore installation.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE: Medium.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 to 30.

TYPE MODULATION: Am (A1), fm (F1, F4).

TYPE OF SIGNAL: Cw, fsk, fsk w/ph modulation, facsimile.

POWER OUTPUT: 3 kw (max).

POWER REQUIREMENTS: 220 v, 50/60 cy, 3 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC:					
EXPORT PACK:					

STATUS:

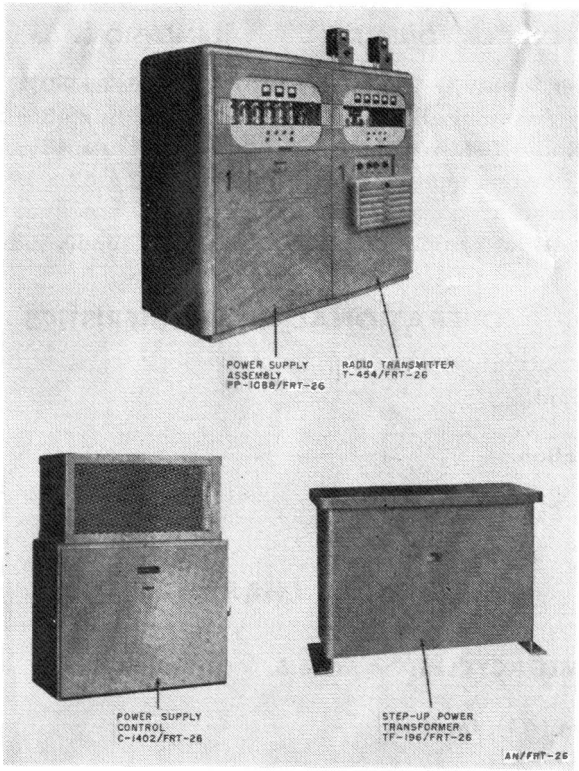
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

AN/FRT–26

TRANSMITTING SET, RADIO



Radio Transmitting Set AN/FRT–26 is a medium-power, hf fixed station radio equipment used for handling cw radiotelegraph, radioteletype, or facsimile traffic over long distances.

It consists essentially of a transmitter and its power supply (housed in two metal cabinets bolted together to form a single unit), a high-voltage power transformer, and a power control. The transmitter cabinet also contains two rf oscillators, a frequency-shift keyer, and a power supply.

This equipment is the primary operating component of Coded Facility –333 (TB SIG 322–333).

AN/FRT-26

TRANSMITTING SET, RADIO

INSTRUCTION LITERATURE: TM 11-846

USING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Control, Power Supply C-1402/FRT-26	38¼ x 30¼ x 14¾	298
1	Power Supply Assembly PP-1088/FRT-26	79⁵⁄₁₆ x 43½ x 37¹¹⁄₁₆	1,800
1	Transmitter, Radio T-454/FRT-26	91⁹⁄₁₆ x 43½ x 42⁷⁄₁₆	2,200
1	Transformer, Power, Step-up TF-196/FRT-26	32 x 42 x 19⅛	605

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Fixed station.

APPROXIMATE RANGE: Extended.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4 to 26.5.

TYPE MODULATION: Am (A1), fm (F1).

TYPE OF SIGNAL: Cw, fsk.

POWER OUTPUT: 15 kw.

POWER REQUIREMENTS: 27.5 kw, 230 v ±10%, 50/60 cy, 3 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	91⁹⁄₁₆ x 93¼ x 42⁷⁄₁₆	5,070	197	4.9	
DOMESTIC PACK:					
EXPORT PACK:					

AN/FRT–27

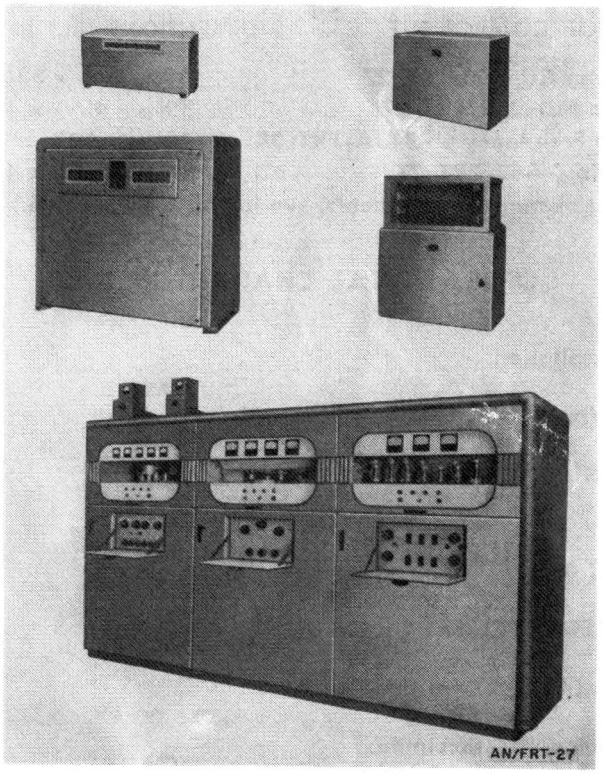
TRANSMITTING SET, RADIO

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956



Radio Transmitting Set AN/FRT–27 is used for shore-based, point-to-point radiotelegraph, radiotelephone, radioteletype, or facsimile communication applications.

With some modification in the power-amplifier circuit, this equipment will operate as a medium-power rf amplifier for a single-sideband transmitter.

AN/FRT-27

TRANSMITTING SET, RADIO

INSTRUCTION LITERATURE: NAVSHIPS 92501(A)

USING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Coupler, Modulator CU-396/FRT-27	38⅛ x 41 x 33⅛	1,800
1	Modulator, Radio MD-232/FRT-27	79⅝ x 43½ x 41¾	1,805
1	Oscillator, Radio Frequency O-243A/FRT-24	10 15/32 x 18 3/16 x 16 13/16	15
1	Transmitter, Radio T-463/FRT-27	91 9/16 x 43½ x 41¾	1,943

(For complete list of major components, see instruction literature.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore installation.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4 to 26.

TYPE MODULATION: Am (A1, A3), fm (F1, F4).

TYPE OF SIGNAL: Cw, voice, fsk, facsimile.

POWER OUTPUT: 10 kw (A3); 15 kw (A1, F1, F4).

POWER REQUIREMENTS: 230 v, 50/60 cy, 3 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	91 9/16 x 43½ x 41¾	8,508	325	8.1	
DOMESTIC PACK:		13,000	774	19.4	21
EXPORT PACK:					

STATUS: See note below *	**AN/FRT-TYPE**
CLASSIFICATION OF EQUIPMENT: Unclassified	SERVICE TYPE NUMBER: BC-329
USING SERVICE: Air Force	RADIO TRANSMITTER
DATE OF THIS SHEET: 10 Jun 52	



Radio Transmitter BC-329 is a fixed, ground, a-m radio transmitter for short-range airport control by voice communication in the l-f (200 to 410 kc) range.

It is crystal controlled, but has a master oscillator for emergency operation at frequency range 0.19 to 0.4 mc.

The 500-ohm impedance audio input circuit is designed for a low impedance microphone or telephone line.

The antenna output is designed for operation into a long wire antenna such as the antenna kit (Signal Corps Stock No. 2A2530-GP-1) used with but not part of Tower AB-127/FR.

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* Radio Transmitters BC-329-A, -B, -C, -D, -E, -F, -G, -H, -J, -L, -M are Limited Standard; BC-329-N is Substitute Standard, but all models are interchangeable.

AN/FRT-TYPE	INSTRUCTION LITERATURE: TO 16-30GRT-2-3
BC-329 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTER	USING SERVICE : Air Force
	DATE OF THIS SHEET : 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally utilized at advanced air bases for emergency airport traffic control.

INSTALLATION: Ground, self-contained for table or floor mounting.

APPROXIMATE RANGE (IN MILES): (Nominal) short.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/GRR-3; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/VRC-4; BC-344, -348, -453, -779; MBS; R-96/SR, -129/U, -203/SR, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR; RAK; RAL; RAS; RBA; RBH; RBL; RBM; RCH; RDF; SCR-177, -274, -614; ARC Type 12; Fisher TS 25-3; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.2 - 0.41, preset, single channel.

TYPE MODULATION: Am:

TYPE OF SIGNAL: Voice.

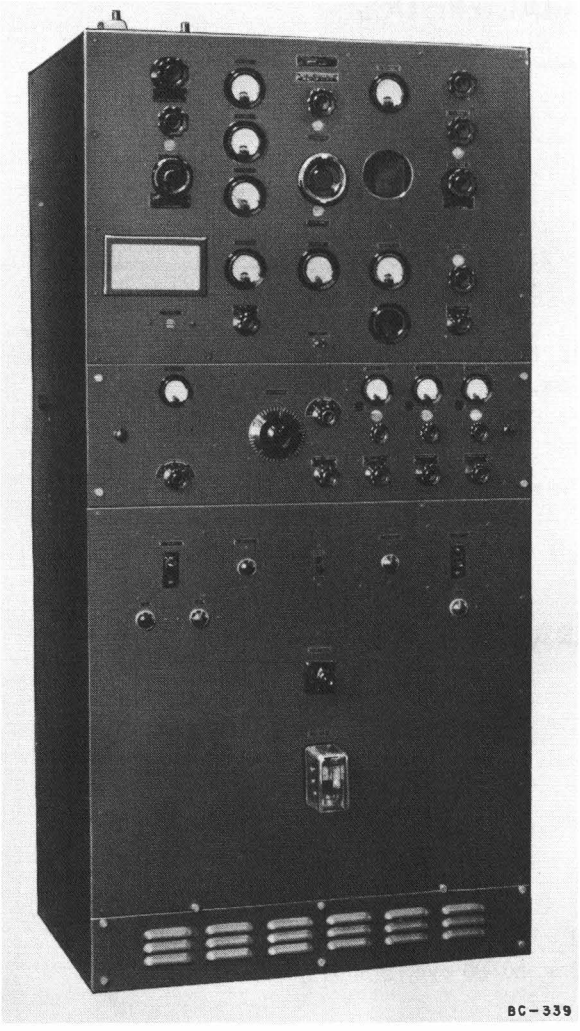
POWER OUTPUT: 25 w.

POWER REQUIREMENTS: 560 w, 105-125 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitter BC-329 measures 30-1/2 x 24-1/2 x 20 inches, net weight 240 pounds, volume 6.9 cu ft. Packed for domestic or export shipment: total weight 264 pounds, total volume 7.4 cu ft. Shipped in 1 package.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 8 Jan 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: BC-339 RADIO TRANSMITTER



BC-339

Radio Transmitter BC-339 is a high-frequency, medium power, radiotelegraph transmitting equipment used for fixed plant long range, high-speed communication.

This equipment consists of a floor type steel cabinet containing the operating components and related apparatus.

It can be operated independently, or as a driver for Power Amplifier BC-340 with Rectifier RA-22 and Water Cooling Unit RU-2 to form a 10-kw radiotelegraph or radioteletype facility.

It has provision for remote starting, stopping and keying the transmitter over a telephone pair from distances up to six miles away, and can be operated under such conditions at speeds of 300 wpm.

It is usually operated with a rhombic doublet, or similar array, and operates on 220-v ac.

AN/FRT-TYPE

BC-339 :SERVICE TYPE NUMBER

RADIO TRANSMITTER

INSTRUCTION LITERATURE: TM 11-836

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Navy

DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Theater commands, army security agency.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -29, -32; AN/GRC-3, -4, -9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -22; AN/PRC-7, -9, -19, -20; AN/SRR-3, -9, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -5, -9, -13, -16, -20; AN/VRQ-1; BC-312, -342, -348, -779, -794, -1004; MBS; OA-58/FRC, -59/FRC; R-62/PR, -90/PR, -96/SR, -129/U, -203/SR, -205/SR, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 19S-4 (AF Model); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4.0 - 26.5.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, frequency shift keying.

POWER OUTPUT: 1 kw.

POWER REQUIREMENTS: BC-339-A, -B, -C, -F: 220 v, 60 cyc, 3 phase, ac.
BC-339-E, -G, -H, -J, -K, -L, -M : 220 v, 50/60 cyc, 3 phase, ac.
Key up: 1,610 w, (7 amp) per line.
Key down: 4,300 w, (13 amp) per line.

PHYSICAL CHARACTERISTICS

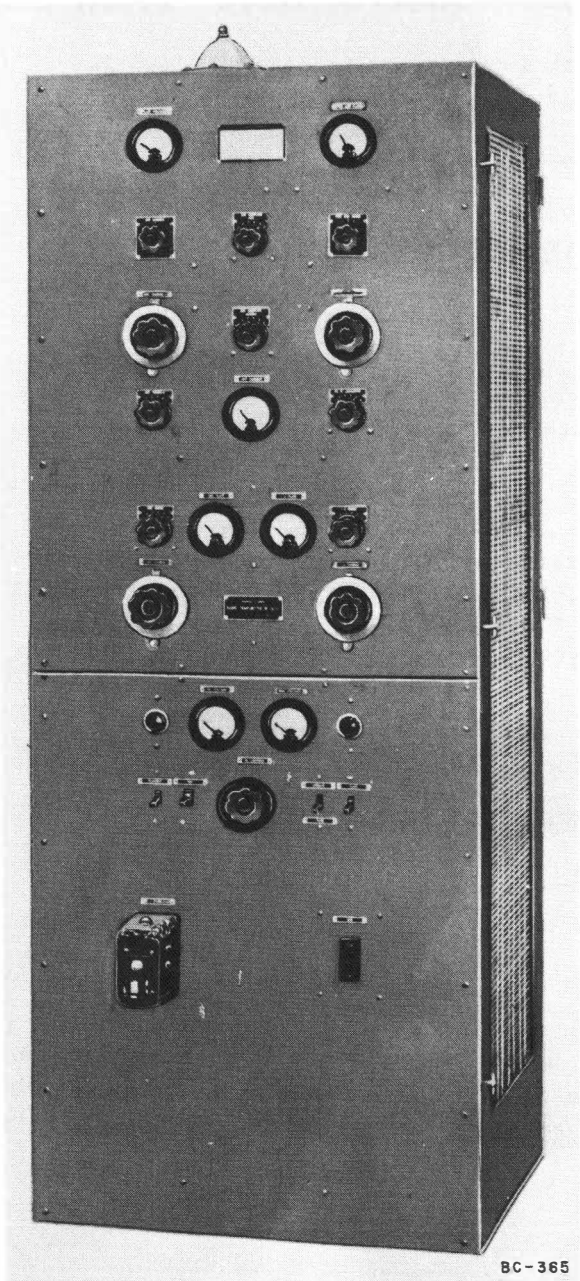
Radio Transmitter BC-339 measures 81-5/8 x 33-3/8 x 37-1/8 inches, net weight 1,560 pounds, volume 58.5 cu ft, 1.47 ship tons. Packed for domestic shipment: total weight 2,350 pounds, total volume 115 cu ft. Shipped in 6 packages. Packed for export shipment: total weight 2,350 pounds, total volume 115 cu ft, 3.91 ship tons.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 11 Jan 52

AN/FRT-TYPE

SERVICE TYPE NUMBER: BC-365

RADIO TRANSMITTER



BC-365

Radio Transmitter BC-365 is a medium-power, l-f and m-f, radiotelegraph transmitting equipment used at fixed plant installations for long range communication.

This equipment consists of a single floor-type cabinet containing the operating components and control units. The frequency-keyer control is mounted on the front panel, and two separate keyer tubes provide for both a-m and frequency-shift keying.

Its remote control component permits operation of the transmitter over a telephone pair from a point up to 6 miles away.

Requires about 2,000-w, 110/220-v ac.

AN/FRT-TYPE

BC-365 :SERVICE TYPE NUMBER

RADIO TRANSMITTER

INSTRUCTION LITERATURE: TM 11-828

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Navy

DATE OF THIS SHEET: 11 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-365	28 x 26 x 76	810.00
1	Remote Control Unit RM-10	19 x 1-15/16 x 1-3/4	2.25

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/FRR-4, -28; AN/GRR-2, -3; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-4; BC-314, -344, -348, -453, -779, -1004; MBS; OA-59/FRC; R-52/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBG; RBH; RBL; RBM; RBO; RCF; RCG; RCH; RDF; RDM; SCR-177, -244, -274, -614; AR-88 (RCA); ARC Type 12; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.15 - 0.55.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, frequency-shift keying.

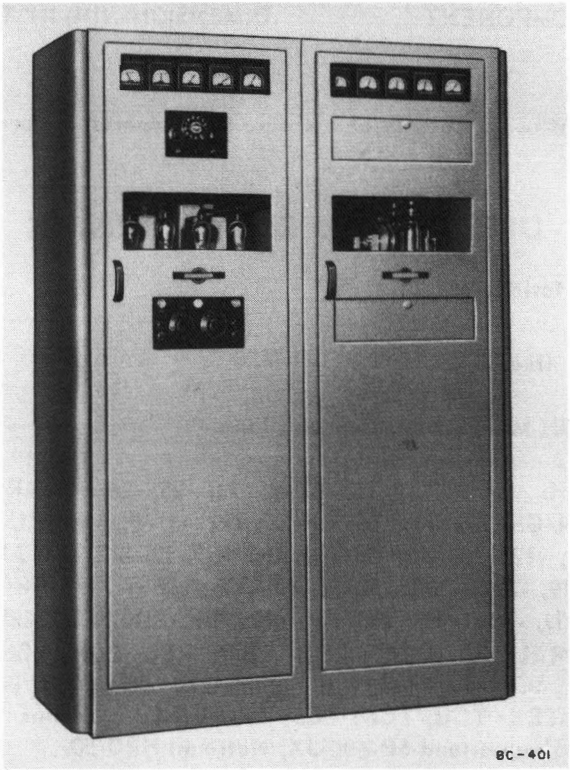
POWER OUTPUT: 350 w.

POWER REQUIREMENTS: 1,800 w, 110 / 220 v, 50/60 cyc, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitter BC-365 weighs 871 pounds net, volume 35 cu ft, 0.88 ship ton. Packed for export shipment: total weight 925 pounds, total volume 46 cu ft.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 8 Jan 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: BC-401 RADIO TRANSMITTER



Radio Transmitter BC-401 is a crystal-controlled, a-m (voice and cw), m-f and h-f radio transmitting equipment which is used for medium- and long-range, high-power communication at permanent installations.

This equipment consists of a steel floor-type cabinet inclosing operating units and components. It operates in 10 preset crystal-controlled channels, has provision for full remote control operation, and uses a double-cage type of antenna.

A rectifier and modulation unit and a remote control unit are used with but are not issued as part of this equipment.

Operates on 220 v ac.

AN/FRT-TYPE	INSTRUCTION LITERATURE: None
BC-401 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTER	USING SERVICE : Army
	DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed station.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Medium and long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, voice.

POWER OUTPUT: 400 w.

POWER REQUIREMENTS: 220 v, 60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

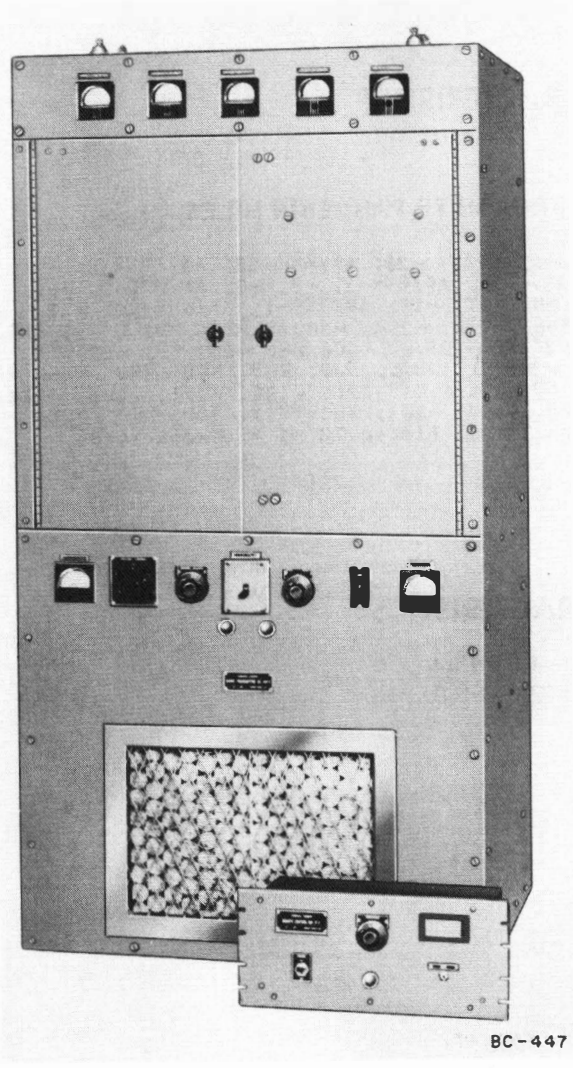
Radio Transmitter BC-401 measures 78 x 48 x 24 inches, net weight 1,640 pounds, volume 52 cu ft, 1.3 ship tons.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

AN/FRT-TYPE

SERVICE TYPE NUMBER: BC-447

RADIO TRANSMITTER



BC-447

Radio Transmitter BC-447 is a medium-power, long range, radiotelegraph transmitting equipment which operates in the medium-and high-frequency bands at fixed plant installations.

This equipment consists of a cabinet-inclosed radio transmitter and associated remote control unit, and provides two crystal-controlled channels.

It can be operated from a remote point over a telephone pair, and uses any suitable antenna with a balanced 600-ohm transmission line.

Requires about 1,200-w of 115- or 230-v, ac.

AN/FRT-TYPE

BC-447 :SERVICE TYPE NUMBER

RADIO TRANSMITTER

INSTRUCTION LITERATURE: TM 11-827

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-447	72 x 35 x 27-3/16	871
1	Remote Control Unit RM-17	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed station.

INSTALLATION: Ground, fixed. **APPROXIMATE RANGE (IN MILES):** Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Channel 1: 4.0 - 13.4.
Channel 2: 2.0 - 8.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw.

POWER OUTPUT: 300 w.

POWER REQUIREMENTS: 1,200 w, 115 / 230 v, 50/60 cyc, ac.

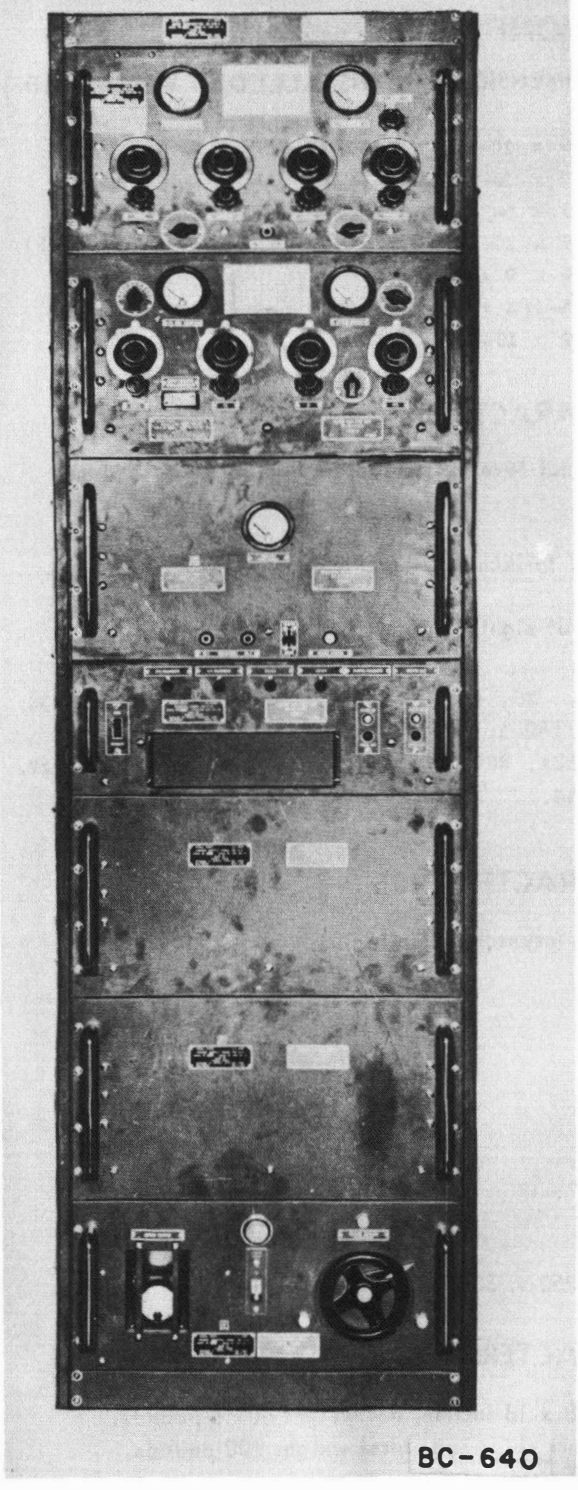
PHYSICAL CHARACTERISTICS

Radio Transmitter BC-447 weighs 871 pounds net, volume 42 cu ft, 1.05 ship tons. Packed for export shipment: total weight 1,247 pounds, total volume 92 cu ft, 2.30 ship tons. Shipped in 1 package.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 19 May 52

AN/FRT-TYPE

SERVICE TYPE NUMBER: BC-640
RADIO TRANSMITTER



Radio Transmitter BC-640 is a 50-w crystal-controlled, a-m (voice or tone) v-h-f transmitter. Plug-in crystals are used to permit operation on any frequency in the 100 to 156 m-c range. It is normally operated from a fixed ground, or mobile location, for point-to-point or ground-to-air communication, and can be operated locally, or from a remote point up to eight miles away. The addition of repeater equipment extends the range of remote operation.

The output of the transmitter matches 72-ohm coaxial transmission lines, such as Radio Frequency Cable RG-11/U.

Recommended antennas are Antenna Equipment RC-81 and Antenna AN-188.

This radio transmitter and its associated Radio Receiver BC-639 form a single channel, radio link, terminal station, or a part of an aircraft control-net system.

Radio Transmitter BC-640, -A, -B, are interchangeable, operationally, with BC-640-D.

AN/FRT-TYPE	INSTRUCTION LITERATURE: TO 16-40BC640-2
BC-640 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTER	USING SERVICE : Air Force
	DATE OF THIS SHEET : 19 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Amplifier Panel PN-9-C	19 x 10-1/2 x 16-1/4	41.5
1	Oscillator Panel PN-9-C	19 x 10-1/2 x 16-1/4	39.0
1	Control Panel PN-11-B	19 x 6-31/32 x 9-5/8	27.0
2	Power Supply Panel PN-12-B	19 x 10-1/2 x 14-1/2	84.0 (each)
1	Power Control Panel PN-13-C	19 x 9 x 9-3/4	40.0
1	Cabinet CS-88-A	21-1/4 x 72-3/8 x 18	210.0
1	Modulator Panel PN-10-C	19 x 10-1/2 x 15	48.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued on any organizational level as project equipment in accordance with AFR 100-17.

INSTALLATION: Ground fixed, designed for standard 19-inch relay rack mounting.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -12, -21; AN/VRC-1; BC-639, -797; MAR; MBS; R-137/GR; RBK; RBQ; RC-103, -256; RCK; RCO; SCR-522, -542, -574, -575, -607, -616, -624, -641, -644.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 - 156 (crystal-controlled).

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw.

POWER OUTPUT: 50 w.

POWER REQUIREMENTS: 860 watts of 110-125/220-250-v, 50/60-cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitter BC-640-D measures 21-1/4 x 72-3/8 x 18 inches, net weight 601.5 pounds, volume 18.4 cu ft. Packed for either domestic or export shipment: total weight 900 pounds, total volume 55.33 cu ft, 1.38 ship tons. Shipped in 1 package.

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 22 June 1956

AN/FRT–TYPE

KY–7/FRT

TONE KEYING UNIT

NO PHOTOGRAPH AVAILABLE

Tone Keying Unit KY–7/FRT provides a keyed negative output voltage and adapts any type of keyed radio transmitting equipment to tone-keying operations.

A 1,000-cycle keying tone is fed over a 500-ohm line into the input transformer, which has a center tap for simplex control.

This equipment contains a polarized keying relay, controlled by the keyed tone input, that can be used to key an associated radio transmitter.

AN/FRT–TYPE

INSTRUCTION LITERATURE: TM 11–2669

USING SERVICE: USA

DATE OF THIS SHEET: 22 June 1956

KY–7/FRT

TONE KEYING UNIT

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	(Equipment consists of a single major operating component.)		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Tone keyed neg output voltage.

INPUT IMPEDANCE: 500 ohms.

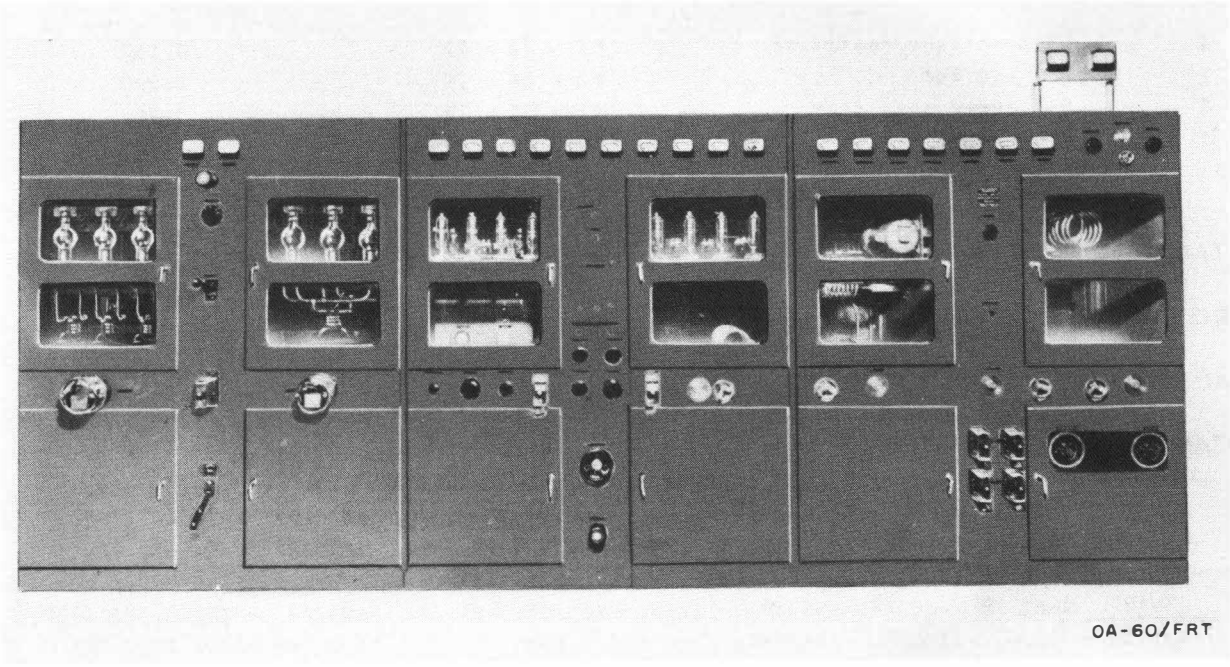
KEYED OUTPUT VOLTAGE: 0 to 115 v.

POWER REQUIREMENTS: 115/230 v, 60 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	8¾ x 9 13/16 x 19	28.3	1		
DOMESTIC PACK:					
EXPORT PACK:		67	2.7		1

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 15 Feb 52	**AN/FRT-TYPE** AN/COMP TYPE NUMBER: OA-60/FRT RADIO TRANSMITTER ASSEMBLY



OA-60/FRT

Radio Transmitter Assembly OA-60/FRT is a high-power, a-m (cw), single side band, high-frequency radio transmitting equipment used for point-to-point long range communication applications at large fixed stations.

This equipment consists of an assembly of operating units and components rack and panel mounted in floor-type cabinets, and includes high-voltage rectifier, r-f exciter, r-f power amplifier sections, and water cooling, crystal-control, and related accessory and auxiliary items.

It can be used with a single-side band transmitter as a linear amplifier, controlled by six different crystals, and provides a single preset operating channel.

It is used for high-speed cw, and for radioteletype communication and can be controlled locally, or from a remote operating site, by appropriate remote control equipment.

Uses a 600-ohm transmission line operating into a rhombic antenna array, has a power output of about 40 kw and operates from a 100-kw source of 230-v, 3 phase, ac.

AN/FRT-TYPE	INSTRUCTION LITERATURE: TM 11-835
OA-60/FRT :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTER ASSEMBLY	USING SERVICE : Army
	DATE OF THIS SHEET : 15 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	High-voltage rectifier	82 x 56 x 72	4,860
1	R-f exciter	82 x 56 x 72	3,090
1	R-f power amplifier	82 x 56 x 72	3,290
1	Water-cooling Unit	66 x 66 x 60	1,093

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH:

AN/ARC-2, -5, -8, -9, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-3, -4, -9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -22; AN/PRC-7, -8, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -5, -8, -13, -16, -20; AN/VRQ-1; BC-312, -342, -348, -779, -794, -1004; MBS; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/SR, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

OA-60B/FRT. In addition to communicating with all of the above sets, will also communicate with: AN/ARC-21; RBB; SCR-543.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: OA-60A/FRT: 5.3 - 21.
OA-60B/FRT: 4 - 21.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, or single side band.

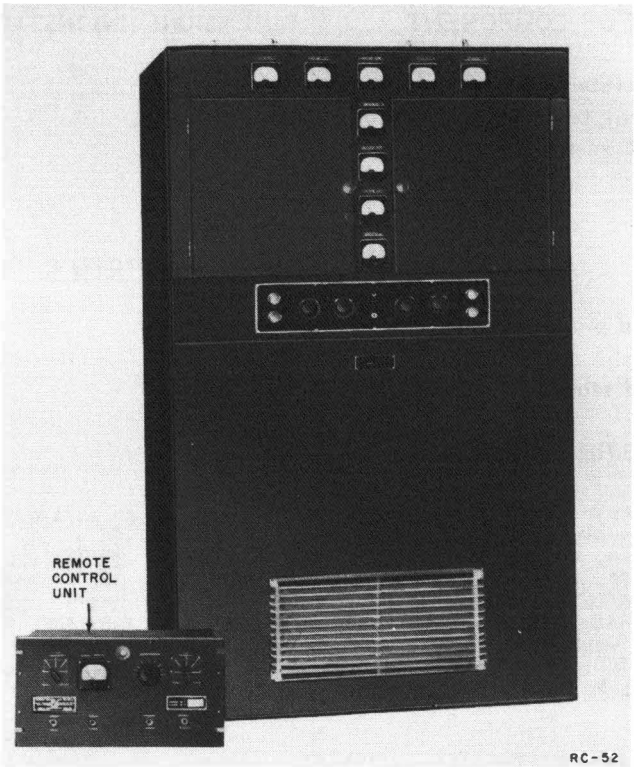
POWER OUTPUT: 40,000 w.

POWER REQUIREMENTS: 100 kw, 240 v, 3 phase, ac or, Power Unit PE-220.

PHYSICAL CHARACTERISTICS

Radio Transmitter Assembly OA-60/FRT measures 216 x 56 x 84 inches.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 30 Jan 52	AN/FRT-TYPE SERVICE TYPE NUMBER: RC-52 RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment RC-52 is a medium power, medium range, medium-and high-frequency fixed plant radio transmitting station equipment used for point-to-point communication, air-warning and similar applications by means of a-m (voice, cw, or mcw) signals.

This equipment consists of a single cabinet-inclosed unit and a remote control equipment plus microphone and accessory items. It covers its frequency range (1.5 to 7 mc) in four bands and operates in two preselected channels.

Provision is made for selection of specific types of emission from the remote operating or control point, and for automatic starting and stopping the equipment by remote control.

A rhombic or doublet antenna is used, and power is derived from a source of 115-v or 230-v, ac.

AN/FRT-TYPE

RC-52 :SERVICE TYPE NUMBER

RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: None

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET: 30 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-452	29 x 24 x 72	Not Available
1	Remote Control Unit RM-22	Not Available	" "
1	Microphone T-27-B	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Fixed station.

APPROXIMATE RANGE (IN MILES): 200.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -9, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -9, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; BC-312, -314, -342, -344, -349, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -90/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -595, -593, -694, -704; TBO; TBX; TCH; TCO; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.5 - 7.0 in 4 bands.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, and mcw.

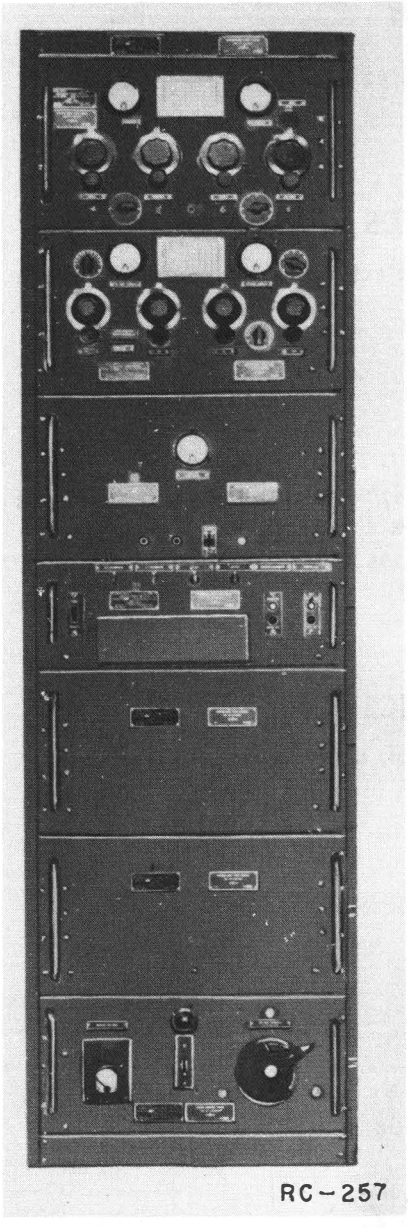
POWER OUTPUT: 300 w.

POWER REQUIREMENTS: 115/230 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment RC-52 weighs 1,250 pounds net. Packed for export shipment: total weight 1,750 pounds, total volume 50 cu ft, 1.3 ship tons.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 26 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: RC-257 RADIO TRANSMITTING EQUIPMENT



RC-257

Radio Transmitting Equipment RC-257 includes all components necessary to set up a complete radio transmitting station, except for an external source of a-c power. It is used for ground-to-air and point-to-point a-m operation in the v-h-f range, usually in conjunction with Radio Receiving Equipment RC-256 to provide a single-channel, radio-link, terminal station for voice or tone-modulated communication.

This equipment consists primarily of a Radio Transmitter BC-640, Antenna Equipment RC-81, Antenna Mast MA-6, Junction Box JB-132, and necessary connecting cables, relay rack, and microphone.

It may be operated locally, or, under average conditions, from remote positions up to eight miles away.

Radio Transmitting Equipment RC-257-A is similar to Radio Transmitting Equipment RC-257-C except that RC-257-A uses Radio Transmitter BC-640-A and Antenna Equipment RC-81-A.

Power requirements are: 1,200 w of 115/220-v, single-phase, 50/60 cyc, ac.

AN/FRT-TYPE	INSTRUCTION LITERATURE: TO 16-1A-10 & 16-40BC640-2
RC-257 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTING EQUIPMENT	USING SERVICE : Air Force
	DATE OF THIS SHEET: 26 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-640-D	21-1/4 x 72 x 20	601
1	Mast MA-6	90 feet erected	883
1	Junction Box JB-132	12-3/16 x 17-13/32 x 7-11/16	16
1	Antenna Equipment RC-81-C	(Not Available)	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued on any organizational level as project material in accordance with AFR 100-17.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -19, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -12, -21; AN/VRC-1; BC-639, -787; MAR; MBS; R-137/GR; RBK; RBQ; RC-103, -256; RCK; RCO; SCR-522, -542, -574, -575, -607, -616, -624, -641, -644.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 - 156 single channel, crystal-controlled (crystals not furnished).

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice or tone.

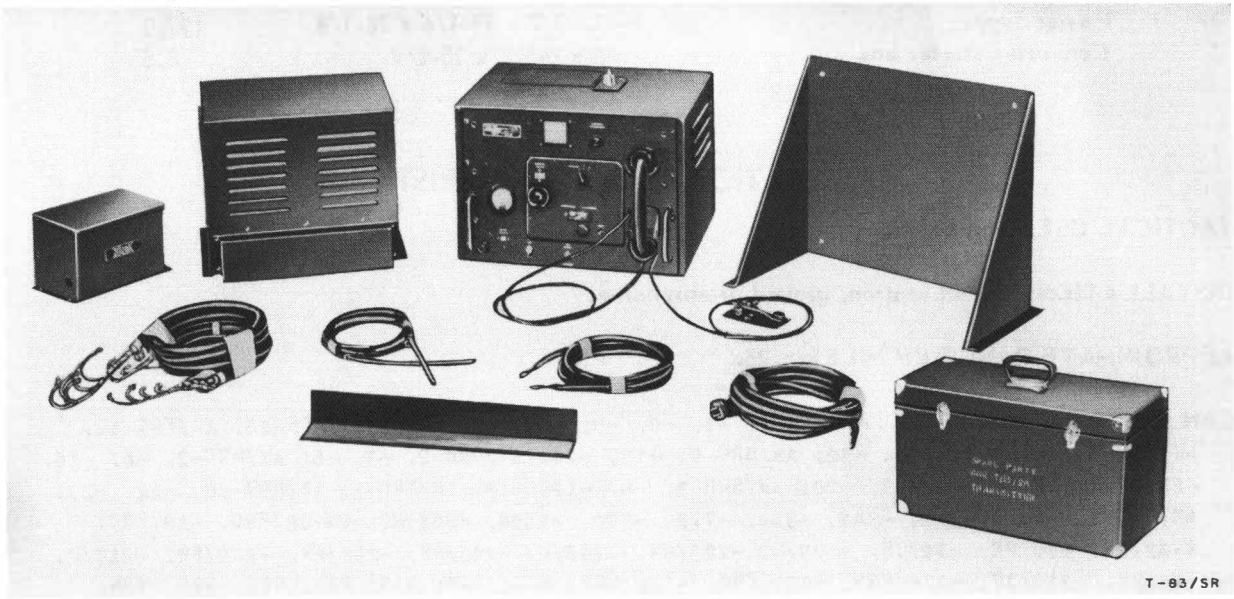
POWER OUTPUT: 50 w (Nominal).

POWER REQUIREMENTS: 1,200 w, 115/220 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment RC-257 measures 24 x 84 x 24 inches, net weight 1,500 pounds, volume 17.5 cu ft. Packed for either domestic or export shipment: total weight 1,700 pounds, total volume 17.5 cu ft, 0.5 ship ton. Shipped in 5 packages both domestic and export.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 30 Jan 52	AN/FRT-TYPE AN/COMP TYPE NUMBER: T-83/SR RADIO TRANSMITTER



Radio Transmitter T-83/SR is a crystal-controlled, short-range, a-m (voice and cw) transmitter equipment used in two-way ship-to-shore communication in the medium- and high-frequency range.

This equipment consists of the radio transmitter component and associated power supply and includes a converter starter box and accessories. It operates in five preset frequency channels selected by a five-position switch and can be controlled from a remote operating location.

It uses a long-wire or whip-type antenna and may be table or shelf-mounted.

It is powered by a source of 115-v ac.

AN/FRT-TYPE

T-83/SR :AN/COMP TYPE NUMBER

RADIO TRANSMITTER

INSTRUCTION LITERATURE: TM 11-837
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 30 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter T-83/SR	13-1/2 x 16 x 21	118.0
1	Power Supply	13-3/8 x 15-1/4 x 18-1/8	127.0
1	Converter starter box	6 x 6-1/8 x 10-1/2	8.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Fixed station, ground or shipborne.

APPROXIMATE RANGE (IN MILES): 25.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; RBX; TCH; TCO; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.7 - 8.7.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw and voice.

POWER OUTPUT: 50 w.

POWER REQUIREMENTS: 460 w, 115 v, 50/60 cyc, ac.

PHYSICAL CHARACTERISTICS

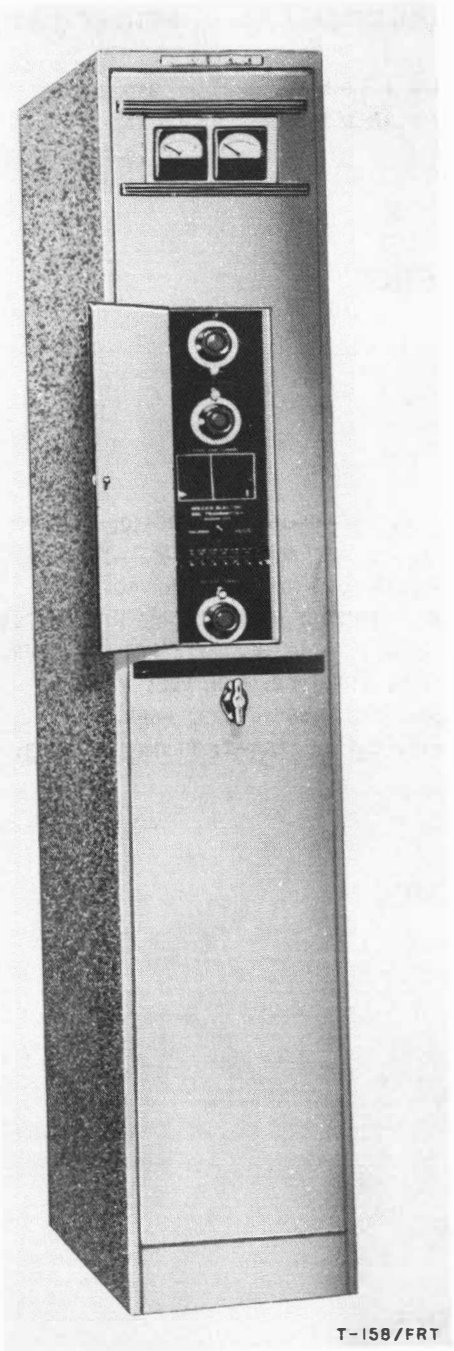
Information on Radio Transmitter T-83/SR not available.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 31 Jan 52

AN/FRT-TYPE

AN/COMP TYPE NUMBER: T-158/FRT

RADIO TRANSMITTER



T-158/FRT

Radio Transmitter T-158/FRT is crystal-controlled, a-m (voice, cw, mcw, and frequency shift keying) medium-power, transmitting equipment. It is used for fixed plant, ground-to-air, and point-to-point long range communication in the medium- and high-frequency range.

This equipment consists of a radio transmitter, exciter unit, and coil set inclosed in a floor-type cabinet and includes a radioteletype modification kit. The rectifier and modulator are not supplied as part of this equipment.

It is usually operated at a distant site by means of remote control equipment, and can use any 600-ohm antenna.

Requires 15 kva of 220-v ac.

AN/FRT-TYPE	INSTRUCTION LITERATURE: TM 11-2671
T-158/FRT :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT:Unclassified
RADIO TRANSMITTER	USING SERVICE : Army
	DATE OF THIS SHEET : 31 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter T-158/FRT	73-3/4 x 26-1/4 x 12-1/4	365
1	Exciter Unit	8-3/4 x 8-1/2 x 17-1/4	27
1	Coil Set	Not Available	6.7
1	Teletype Modification Kit	" "	6.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Fixed station.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -209/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 19S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 - 18.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, frequency shift keying, and voice.

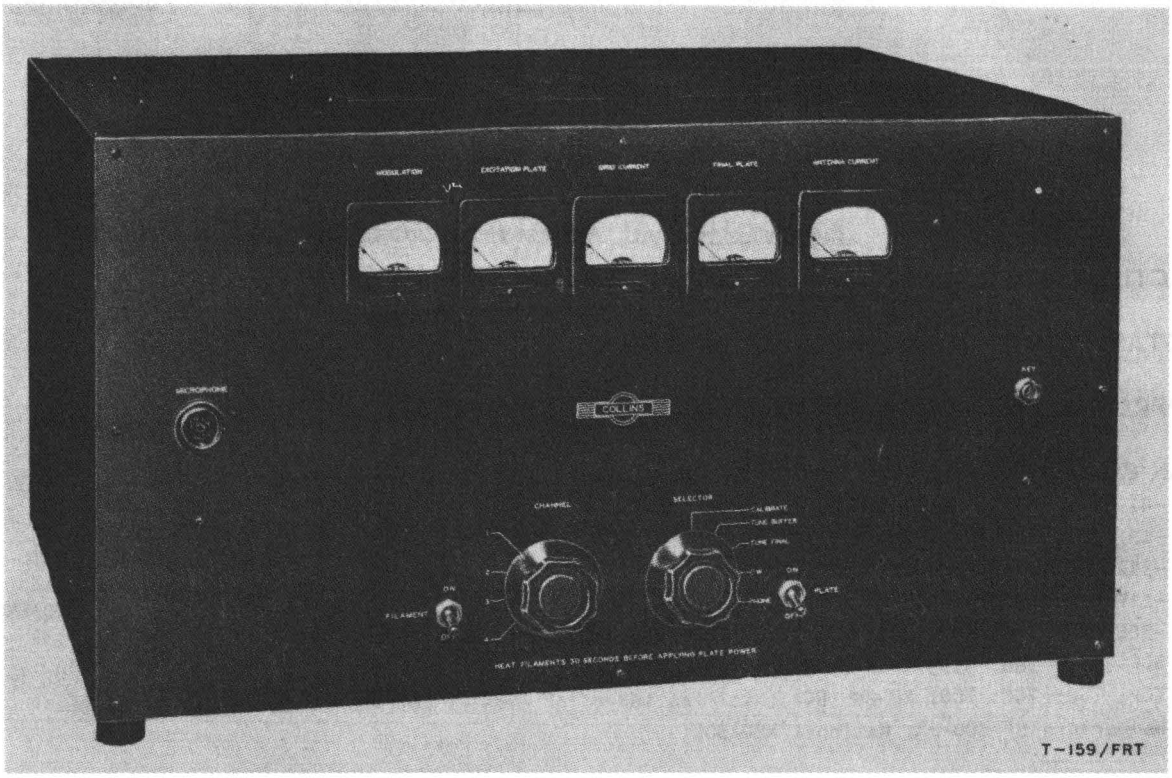
POWER OUTPUT: 2,500 w.

POWER REQUIREMENTS: 15 kva, 220 v, 50/60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitter T-158/FRT packed for domestic shipment: total weight 732 pounds, total volume 51.6 cu ft, 1.25 ship tons.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 1 Jan 52	AN/FRT-TYPE AN/COMP TYPE NUMBER: T-159/FRT RADIO TRANSMITTER



T-159/FRT

Radio Transmitter T-159/FRT is a low-power, a-m (voice and cw) radio transmitting equipment used for point-to-point, homing, and fixed or mobile station use in the medium- and high-frequency bands at corps and equivalent headquarters.

This equipment consists essentially of a commercial (Collins Model 32 RA-7, -8, or -9) table-model transmitter which is completely contained in a steel cabinet. The complete installation includes a microphone and a telegraph key. It operates in four preset channels and may be keyed up to speeds of 60 wpm.

It is designed to work into unbalanced antennas, or transmission lines, having a resistive impedance of 30 to 1,200 ohms and a reactive impedance of up to 300 ohms. It requires about 400 w of 115-v ac.

AN/FRT-TYPE	INSTRUCTION LITERATURE: TO 16-10-116
T-159/FRT : AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTER	USING SERVICE : Army
	DATE OF THIS SHEET : 1 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: General purpose use at corps and equivalent headquarters.

INSTALLATION: Ground, mobile or fixed station.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; BC-312, -314, -342, -344, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.5 - 15.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice and cw.

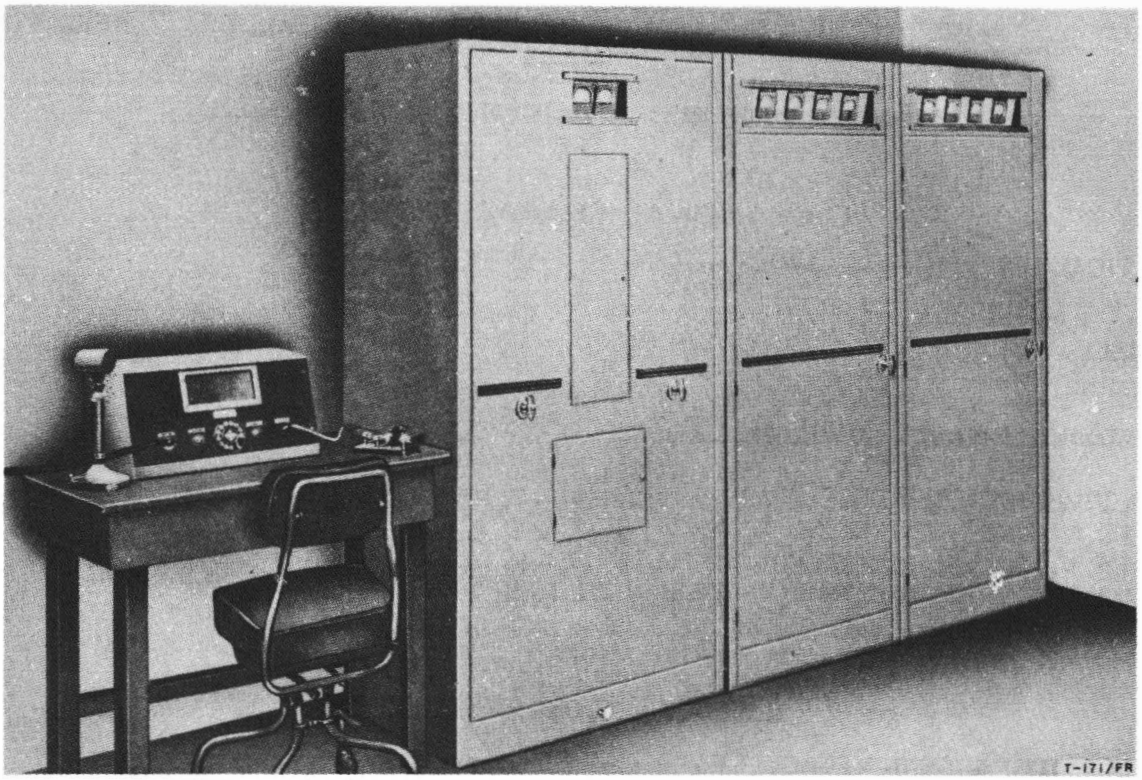
POWER OUTPUT: Voice: 50 w.
Cw: 75 w.

POWER REQUIREMENTS: 390 w (at 0.9 power factor) 115 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitter T-159/FRT measures 12 x 22 x 18, net weight 120 pounds, volume 3 cu ft.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 2 Jan 52	**AN/FRT-TYPE** AN/COMP TYPE NUMBER: T-171/FR RADIO TRANSMITTER



Radio Transmitter T-171/FR is an l-f, high-power, long-range, a-m (voice and cw) radio transmitting equipment which is used for handling large traffic loads in fixed station application or can be used for homing.

This equipment consists essentially of a large floor type unit transmitter which is used in association with control and power components to form a complete radio transmitting station.

It may be operated from a distant point by means of remote control equipment and has provision for automatic keying.

T-171/FR provides voice and cw;T-171A/FR provides cw, remote keying, and voice; T-171B/FR provides frequency-shift keying and voice.

Power is derived from special power rectifier and supply units.

AN/FRT-TYPE	INSTRUCTION LITERATURE: TM 11-802
T-171/FR :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTER	USING SERVICE : Army
	DATE OF THIS SHEET : 2 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant installation.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/GRR-3; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/URR-25; AN/VRC-4; BC-314, -344, -348, -453, -779; MBS; R-62/PR, -96/SR, -129/U, -203/SR, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -388/URR; RAK; RAL; RAS; RBA; RBB; RBH; RBL; RBM; RCH; RDF; SCR-177, -614, -794; ARC Type 12; Fisher TS 25-3; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.125- 0.525.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, voice.

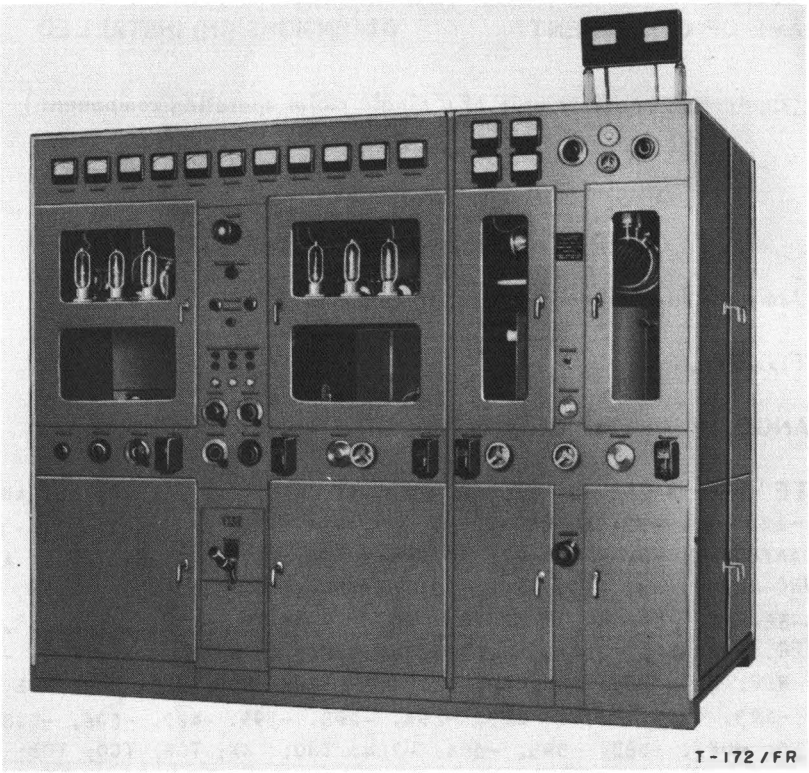
POWER OUTPUT: T-171/FR and T-171A/FR: 2,000 w.
T-171B/FR: 2,400 w.

POWER REQUIREMENTS: 1.0 amp at 4,000 v.
0.125 amp at 2,000 v.
0.1 amp at 500 v.
0.05 amp at 500 v.
1.0 amp at 12 v.

PHYSICAL CHARACTERISTICS

Radio Transmitter T-171/FR measures 72 x 24-3/4 x 36-1/2 inches, net weight 705 to 720 pounds, volume 37.9 cu ft, 0.95 ship ton. Packed for domestic or export shipment: total weight 1,342 pounds, total volume 152.6 cu ft, 4 ship tons. Shipped in 9 packages.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 31 Jan 52	**AN/FRT-TYPE** AN/COMP TYPE NUMBER: T-172/FR RADIO TRANSMITTER



Radio Transmitter T-172/FR is a crystal-controlled, long-range, high-frequency, transmitting equipment used for o-m (cw, and frequency-shift keying) communications in fixed plant applications at army and higher headquarters.

This equipment consists of medium-power radio transmitting equipment, including rectifier, exciter, power amplifier, and related units inclosed in a large floor-type steel cabinet as a single unit. It is capable of c-w transmission at the rate of about 350 wpm, and by means of supplementary equipment, can be used in radioteletype communication.

It operates in six frequency channels which are selected by a six-position selector switch located on the operating panel.

This transmitter uses a rhombic antenna system, having a 500 to 600-ohm two-wire transmission line, and can be operated from a distant operating point by means of appropriate remote control components.

It operates from a source of 220-v ac.

AN/FRT-TYPE	INSTRUCTION LITERATURE: TM 11-821
T-172/FR :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTER	USING SERVICE : Army
	DATE OF THIS SHEET : 31 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army and higher headquarters, fixed plant.

INSTALLATION: Fixed station.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-3, -4, -9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -22; AN/PRC-7, -8, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -5, -8, -13, -16, -20; AN/VRQ-1; BC-312, -342, -348, -779, -794, -1004; MBS; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH;RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4 - 21.

TYPE OF SIGNAL: Cw, and frequency shift keying.

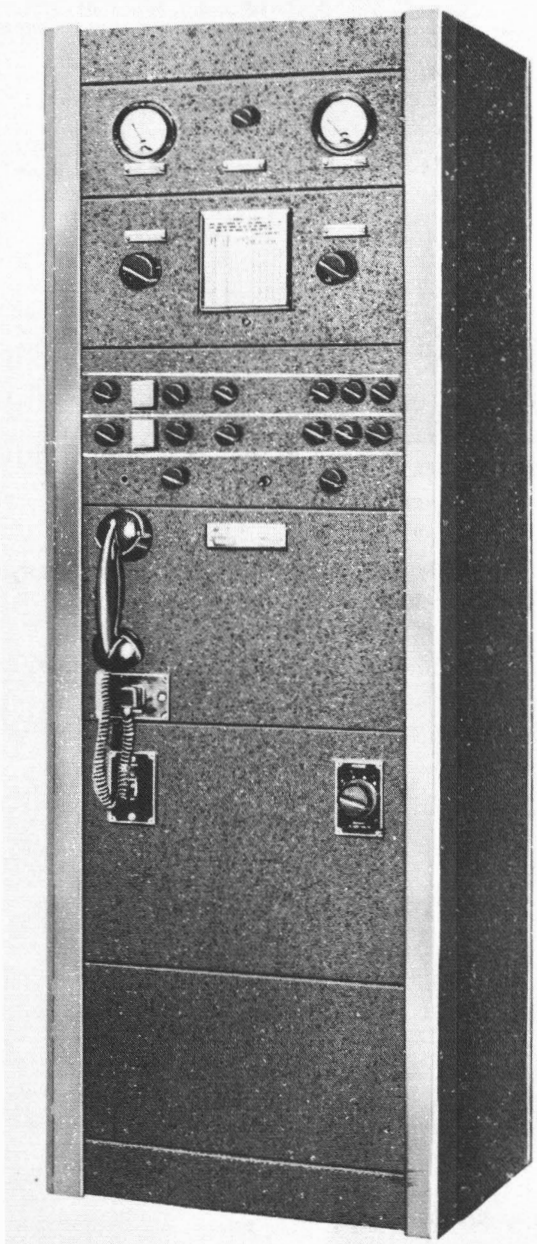
POWER OUTPUT: 15 kw.

POWER REQUIREMENTS: 35 kw, 220 v, 60 cyc, 3 phase, ac; 12 v dc.

PHYSICAL CHARACTERISTICS

Radio Transmitter T-172/FR measures 108 x 84-1/2 x 56-1/4 inches, net weight 6,948 pounds, volume 294.2 cu ft. Packed for export shipment: total weight 11,227 pounds, total volume 885.4 cu ft. 22.1 ship tons.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 31 Jan 52	**AN/FRT-TYPE** AN/COMP TYPE NUMBER: T-174/FR RADIO TRANSMITTER



T-174/FR

Radio Transmitter T-174/FR is a crystal-controlled, medium-power, long range, a-m (voice, cw, and frequency shift keying) four-band, transmitting equipment for fixed plant ground-to-air communication applications in the high frequency range.

This equipment consists of r-f power amplifier, driver, audio amplifier, power and related apparatus rack-and-panel mounted in a floor type steel cabinet.

It has provision for two-tone telegraph, and telephone communication and operates on two-preset frequency channels. It can be operated at a distant location by means of appropriate remote control equipment.

A rhombic antenna, or a doublet type array which is fed by a 70 to 600-ohm balanced transmission line, is used.

Operates from a source of 200 to 250-v ac.

AN/FRT-TYPE

T-174/FR :AN/COMP TYPE NUMBER

RADIO TRANSMITTER

INSTRUCTION LITERATURE: TM 11-818

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET: 31 Jan 52

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter T-174/FR	76 x 27 x 25	550
1	Fan and housing	27 x 21 x 14	64
	Transformers	18 x 12 x 19	192
	Relays	26 x 20 x 26	85
	Power amplifier plate coils	Not Available	Not Available

TACTICAL USE: Fixed plant.

INSTALLATION: Fixed station. **APPROXIMATE RANGE (IN MILES):** Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

FREQUENCY RANGE IN MEGACYCLES: 3 - 13 in 4 bands:

Band 1: 3 - 4.5 Band 3: 6 - 9

Band 2: 4.5 - 6 Band 4: 9 - 13.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, frequency shift keying.

POWER OUTPUT: 350 w.

POWER REQUIREMENTS: 1,800 w, 2,000 va, 200 - 250 v, 50/60 cyc, 1 phase, ac.

Radio Transmitter T-174/FR packed for domestic shipment: total weight 1,700 pounds, total volume 87 cu ft, 2.2 ship tons.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 31 Jan 52

AN/FRT-TYPE

AN/COMP TYPE NUMBER: T-175/FR
RADIO TRANSMITTER



T-175/FR

Radio Transmitter T-175/FR is a medium power, a-m (voice, cw, and frequency shift keying), long range, transmitting equipment which operates in the high frequency band in fixed plant point-to-point, ground-to-air, and similar applications.

This equipment consists of rack-and-panel mounted oscillator, exciter, power amplifier, driver, and related components inclosed in a floor type steel cabinet, and operates in four-frequency channels, two of which can be preset.

It uses a rhombic or doublet type antenna system, fed by a balanced 70- to 600-ohm transmission line.

It requires 200 to 250-v of a-c power.

AN/FRT-TYPE

T-175/FR :AN/COMP TYPE NUMBER

RADIO TRANSMITTER

INSTRUCTION LITERATURE: TM 11-818

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET : 31 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter T-175/FR	76 x 27 x 25	550
1	Fan and housing	27 x 21 x 14	64
	Transformers	15 x 12 x 21	166
	Vacuum Tubes	26 x 20 x 26	64

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Fixed ground station. **APPROXIMATE RANGE (IN MILES):** Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 3 - 13 in 4 bonds.

Band 1: 3 - 4.5
Band 2: 4.5 - 6
Band 3: 6 - 9
Band 4: 9 - 13.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, and frequency shift keying.

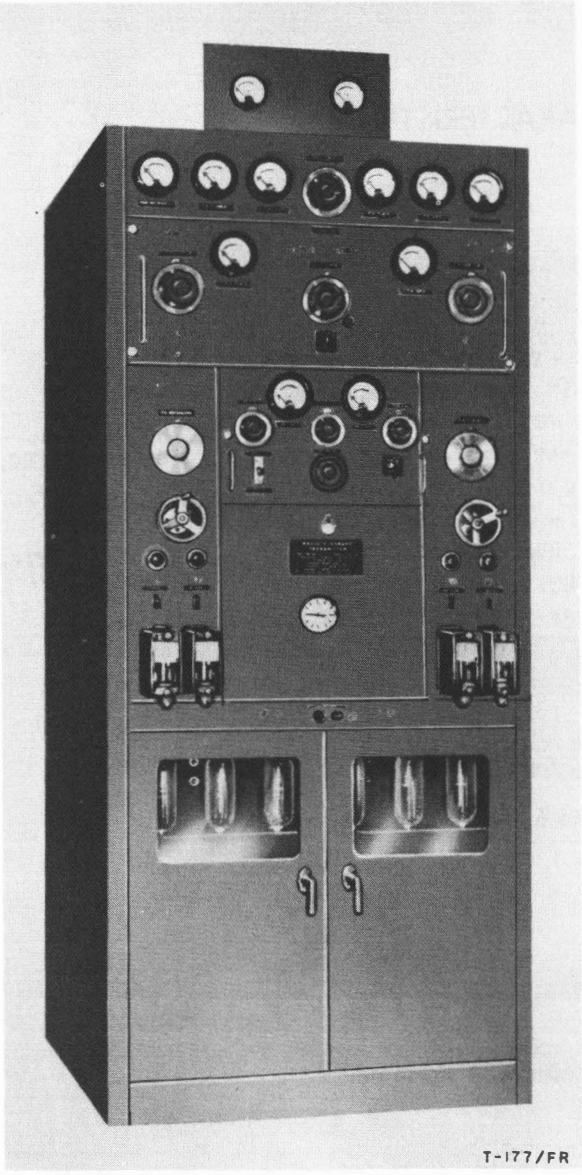
POWER OUTPUT: 350 w.

POWER REQUIREMENTS: 1,400 w, 1,500 va, 200 - 250 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitter T-175/FR packed for domestic shipment: total weight 809 pounds, total volume 43.25 cu ft, 1 ship ton.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 8 Jan 52	**AN/FRT-TYPE** AN/COMP TYPE NUMBER: T-177/FR RADIO TRANSMITTER



T-177/FR

Radio Transmitter T-177/FR is a medium-power, low- and medium-frequency, long-range radio transmitting station equipment. It is used for cw or frequency-shift radioteletype communication over six preset channels at fixed plant installations serving army and equivalent headquarters.

This equipment consists essentially of a commercial (Press Wireless Model PW 918A) radio transmitter and is crystal or master-oscillator controlled. It has provision for electronic keying and for connection of Carrier Terminal OA-5/FC. Internal frequency-shift and remote control provisions are included.

It requires about 12-kva at 220/230-v, 50/60-cyc, ac.

AN/FRT-TYPE	INSTRUCTION LITERATURE: TM 11-834
T-177/FR : AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTER	USING SERVICE : Army
	DATE OF THIS SHEET : 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army and higher headquarters.

INSTALLATION: Fixed plant.

APPROXIMATE RANGE (IN MILES): 1,000 or more.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 23.0 in 6 preselected channels.

TYPE MODULATION: Frequency shift.

TYPE OF SIGNAL: Cw and frequency shift keying.

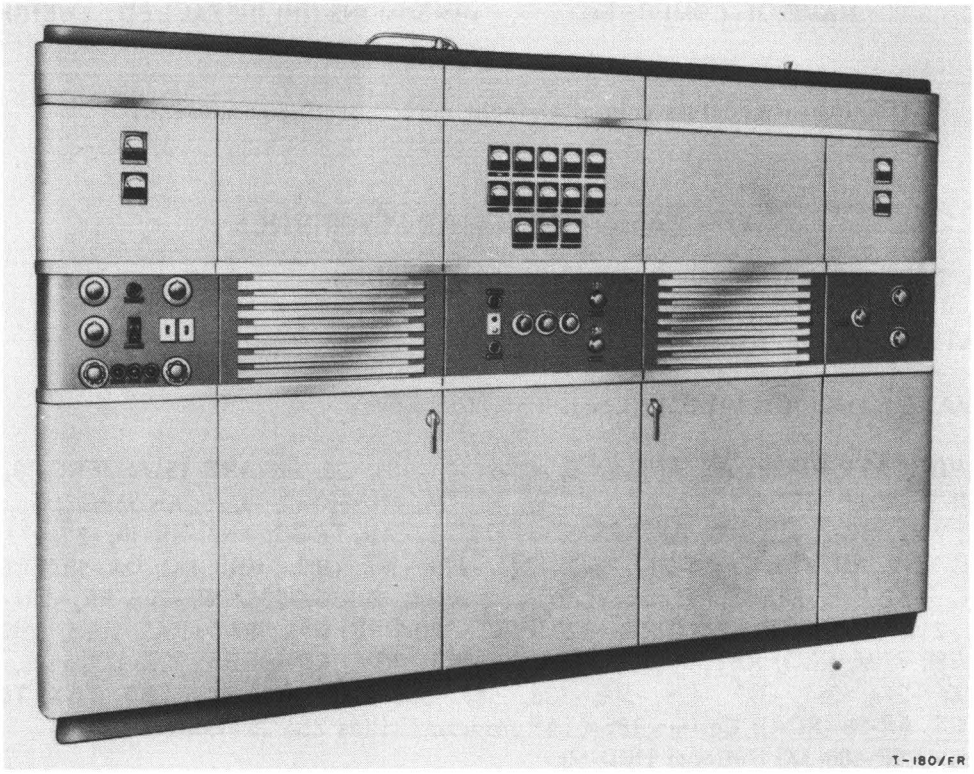
POWER OUTPUT: 2.5-kw.

POWER REQUIREMENTS: 11.8 kva, 220 v-230 v, 50/60 cyc, 3 phase ac.

PHYSICAL CHARACTERISTICS

Radio Transmitter T-177/FR measures 77 x 33 x 36 inches, net weight 1,717 pounds. Packed for domestic shipment: total weight 3,326 pounds, total volume 196.8 cu ft, 1 ship ton. Shipped in 8 packages.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 23 Jan 52	**AN/FRT-TYPE** AN/COMP TYPE NUMBER: T-180/FR RADIO TRANSMITTER



Radio Transmitter T-180/FR is a long-range, high-power, a-m (voice) transmitting equipment used for communication in the m-f and h-f bands in fixed station applications for point-to-point, ground-to-air, and broadcast purposes.

This equipment is a crystal-controlled transmitter which provides high-level, class B modulation and class C final.

It consists essentially of an assemblage of control and operating components inclosed in floor type steel cabinets.

It operates from a 220-v 50/60-cyc a-c source.

AN/FRT-TYPE	INSTRUCTION LITERATURE: None
T-180/FR :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTER	USING SERVICE : Army
	DATE OF THIS SHEET : 23 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Permanent, long range, fixed station applications.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10, AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13, AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA -58/FRC, -59/FRC R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 - 22.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 7.5kw.

POWER REQUIREMENTS: 220 v, 50/60 cyc, 3 phase.

PHYSICAL CHARACTERISTICS

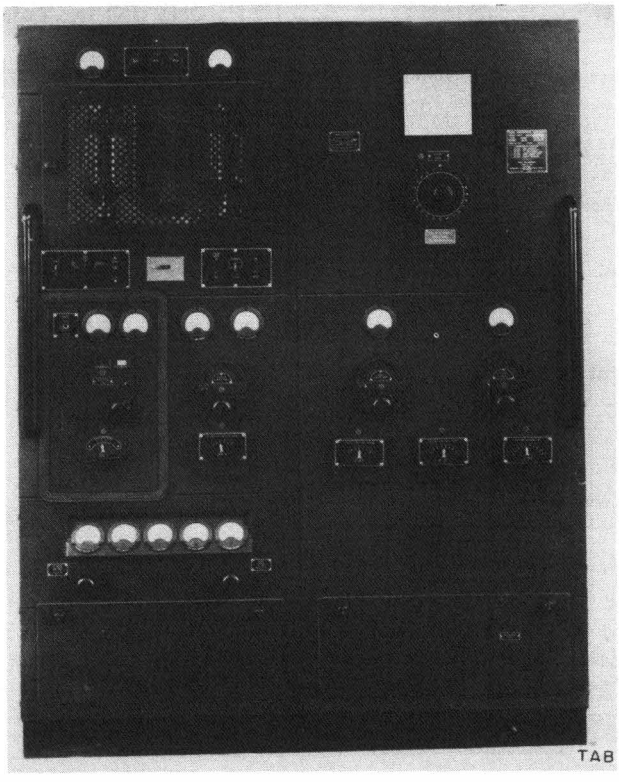
Radio Transmitter T-180/FR measures 122 x 90 x 49 inches.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 2 May 52

AN/FRT-TYPE

SERVICE TYPE NUMBER: TAB, TAB-3

2 KW TRANSMITTING EQUIPMENT



2 KW Transmitting Equipments TAB and TAB-3 are medium-power, fixed station transmitters used to transmit radiotelegraph signals within the l-f and m-f range 0.1 to 0.555 mc.

TAB is intended for operation from either two- or three-phase power; TAB-3 operates from a three-phase power source only.

Both transmitters can be operated either locally or remotely by means of a single pair control line.

The equipment starts when the telegraph key is operated and automatically shuts down 30 seconds after keying is stopped.

Two transmitting antennas can be used to cover the frequency range; they are connected to the equipment by means of the antenna selector switch.

AN/FRT-TYPE

TAB, TAB-3 :SERVICE TYPE NUMBER

2 KW TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: GEI-1776 NavShips 95285
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter Unit CG-4320, CAY-3438-A	76-1/16 x 48-5/32 x 33-3/16	895
1	Generator Transfer Switch CG-4317, -4316, CAY-3452-A	28-1/2 x 30 x 15	125
1	Antenna Selector Switch CG-4319, CAY-3439	16-1/2 x 8 x 3	Not Available
1	Motor Generator Set CG-4313, -4314	80-11/16 x 25-3/4 x 18-1/2	1,580

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/FRR-4, -28; AN/GRR-2, -3; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-4; BC-314, -344, -348, -453, -779, -1004; MBS; OA-58/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBG; RBH; RBL; RBM; RBO; RCF; RCG; RCH; RDF; TDM; SCR-177, -244, -274, -614; AR 88 (RCA); ARC Type 12; Fisher TS 253; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.1 - 0.555 in 6 bands.

Band 1: 0.1 – 0.143
Band 2: 0.143 – 0.19
Band 3: 0.19 – 0.27
Band 4: 0.27 – 0.356
Band 5: 0.356 – 0.45
Band 6: 0.45 – 0.555

TYPE MODULATION: Am.

TYPE OF SIGNAL: TAB: Cw, icw.
TAB-3: Cw, mcw.

POWER OUTPUT: Cw: 2 kw.
Mcw: 1 kw.
Icw: 0.8 kw.

POWER REQUIREMENTS: TAB: 6.3 kw, 220 v, 60 cyc, 2 or 3 phase ac.
TAB-3: 6.3 kw, 220 v, 60 cyc, 3 phase ac.

PHYSICAL CHARACTERISTICS

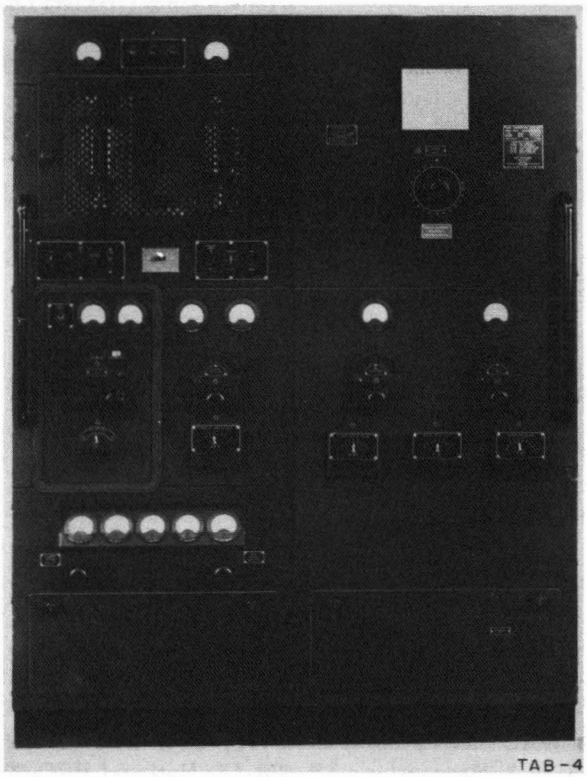
2 KW Transmitting Equipment TAB or TAB-3 measures 76-1/16 x 48-5/32 x 33-3/16 inches.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 2 May 52

AN/FRT-TYPE

SERVICE TYPE NUMBER: TAB-4

2 KW TRANSMITTING EQUIPMENT



2 KW Transmitting Equipment TAB-4 is a medium-power fixed station radiotelegraph transmitter of signals within the l-f and m-f range 0.1 to 0.555 mc.

This transmitter can be operated either locally or from a remote point over a single telephone pair.

It starts when the telegraph key is operated and automatically shuts down 30 seconds after keying is stopped.

Its antenna selector switch permits a quick change from one transmitting antenna to another when two antennas are used to cover the frequency range.

AN/FRT-TYPE	INSTRUCTION LITERATURE: GEI-6092
TAB-4 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
2 KW TRANSMITTING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter Unit CG-4225, -4225-A -4225-B	76 x 58-15/16 x 35-31/32	1,098
1	Motor Generator Set 12A354, 12A355, 12A148	23-5/8 x 73-7/8 x 22-7/8	2,216
1	Automatic Starter CG-4228, -4228-A, -4228-B	27-1/8 x 25-5/8 x 39-3/16	179
1	Generator Fuse and Filter Box CG-4226, -4226-A, -4226-B	22-1/4 x 17-1/2 x 15-5/8	113

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/FRR-4, -28; AN/GRR-2, -3; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-4; BC-314, -344, -348, -453, -779, -1004; MBS; OA-58/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBG; RBH; RBL; RBM; RBO; RCF; RCG; RCH; RDF; TDM; SCR-177, -244, -274, -614; AR 88 (RCA); ARC Type 12; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.1 - 0.555.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw.

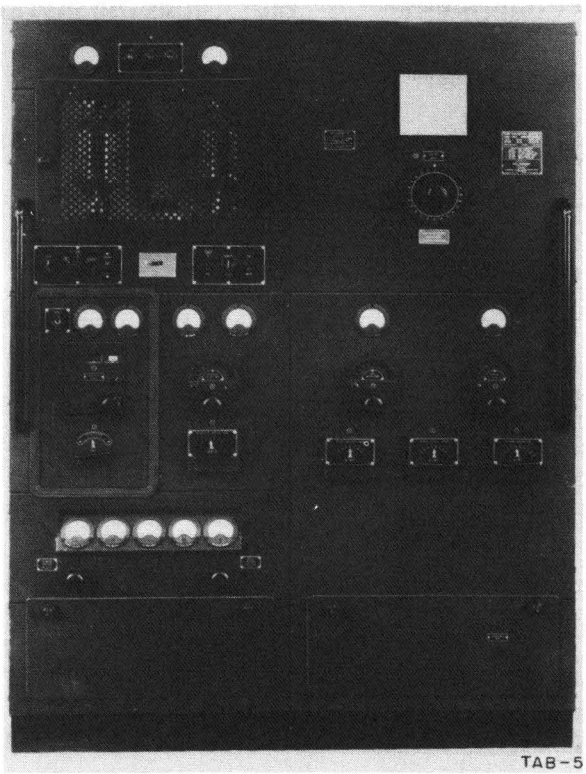
POWER OUTPUT: Cw: 2 kw.
Mcw: 1 kw.

POWER REQUIREMENTS: 7.9 kw, 220 v, 60 cyc, 3 phase or
7.0 kw, 440 v, 25 cyc, 3 phase or
7.75 kw, 120 v dc.

PHYSICAL CHARACTERISTICS

2 KW Transmitting Equipment TAB-4 measures 76 x 58-15/16 x 35-31/32 inches.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 2 May 52	AN/FRT-TYPE SERVICE TYPE NUMBER: TAB-5 2 KW TRANSMITTING EQUIPMENT



TAB-5

2 KW Transmitting Equipment TAB-5 is a medium-power, fixed station transmitter of radiotelegraph signals within the l-f and m-f range 0.1 to 0.555 mc.

Two motor generator sets, two magnetic controllers, and an a-c power transfer panel are supplied to provide operational and stand-by equipment.

The TAB-5 can be operated either locally or from a remote point over a single telephone pair.

It starts when the telegraph key is operated and automatically shuts down 30 seconds after keying is stopped.

Its antenna selector switch makes possible a quick change from one transmitting antenna to another when two antennas are used to cover the frequency range.

AN/FRT-TYPE	INSTRUCTION LITERATURE: NavShips 95287
TAB-5 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
2 KW TRANSMITTING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CAY-52164, -52165	76 x 57-1/2 x 37	1,065
1	Land Line Control Unit CAY-23216, -23217	20-11/16 x 20-7/16 x 10-3/4	54
1	AC Power Transfer Panel CAY-24084, -24084-A	39-13/16 x 20-1/4 x 11	77
2	Motor Generator Set CAY-21503, CC-21507	25-5/16 x 72-1/2 x 22	2,450

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/FRR-4, -28; AN/GRR-2, -3; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-4; BC-314, -344, -348, -453, -779, -1004; MBS; OA-58/FRC; R-62/PR, -80/FR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBG; RBH; RBL; RBM; RBO; RCF; RCG; RCH; RDF; TDM; SCR-177, -244, -274, -614; AR 88 (RCA); ARC Type 12; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.1 - 0.555.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw.

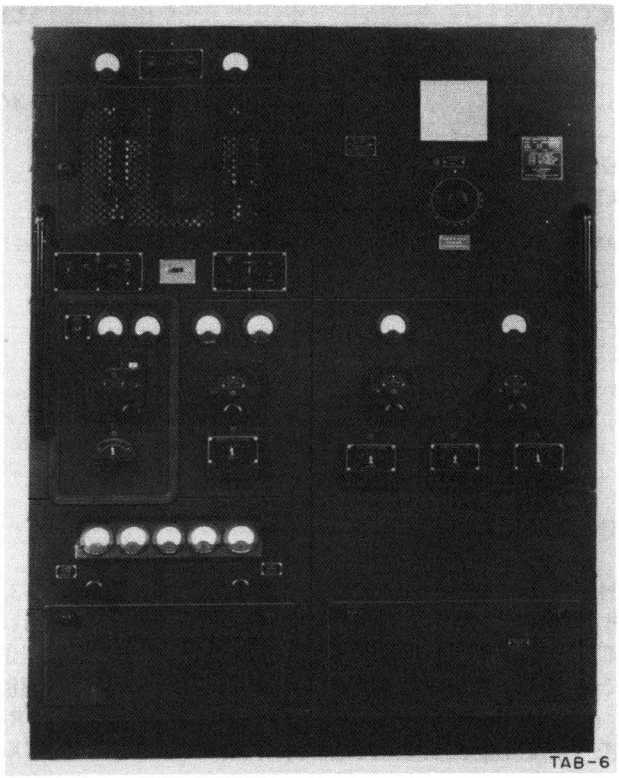
POWER OUTPUT: Cw: 2 kw.
Mcw: 1 kw.

POWER REQUIREMENTS: 7.2 kw, 220 v, 60 cyc, 3 phase or
7.2 kw, 220 v, 25 cyc, 3 phase or
7.2 kw, 440 v, 25 cyc, 3 phase.

PHYSICAL CHARACTERISTICS

2 KW Transmitting Equipment TAB-5 measures 76 x 57-1/2 x 37 inches, net weight 4,020 pounds. Packed for domestic shipment: total weight 5,350 pounds, total volume 223.49 cu ft, 5.6 ship tons. Shipped in 10 packages.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 2 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TAB-6, -7 2 KW TRANSMITTING EQUIPMENT



2 KW Transmitting Equipments TAB-6 and TAB-7 are fixed station, medium-power transmitters designed to transmit radiotelegraph signals within the l-f and m-f range of 0.1 to 0.555 mc.

Both transmitters can be operated either locally or remotely by means of a single pair control line.

They are started by operating the telegraph key and they shut down automatically 30 seconds after keying has stopped. Keying speeds up to 500 wpm are possible.

The antenna selector switch permits a quick change from one antenna to the other when two transmitting antennas are used to cover the frequency range.

TAB-6 has two rectifier power units and an a-c power transfer panel; TAB-7 has only one rectifier power unit.

AN/FRT-TYPE

TAB-6, -7 :SERVICE TYPE NUMBER

2 KW TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,379
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CAY-52273	76 x 57-1/2 x 37	1,133
1	Land Line Control Unit CAY-23216	20-11/16 x 20-7/16 x 10-3/8	81
*1	AC Power Transfer Panel CAY-24084-A	39-13/16 x 20-1/4 x 11	108
**	Rectifier Power Unit CAY-20167	72 x 34 x 24	2, 340 (for 2)
1	Rotary Switch CAY-24145	9-1/4 x 17-1/2 x 20-7/8	23

*Supplied with TAB-6 only. ** Two supplied with TAB-6, one supplied with TAB-7.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/FRR-4, -28; AN/GRR-2, -3; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-4; BC-314, -344, -348, -453, -779, -1004; MBS; OA-58/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBG; RBH; RBL; RBM; RBO; RCF; RCG; RCH; RDF; RDM; SCR-177, -244, -274, -614; AR-88 (RCA); ARC Type 12; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.1 - 0.555.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw.

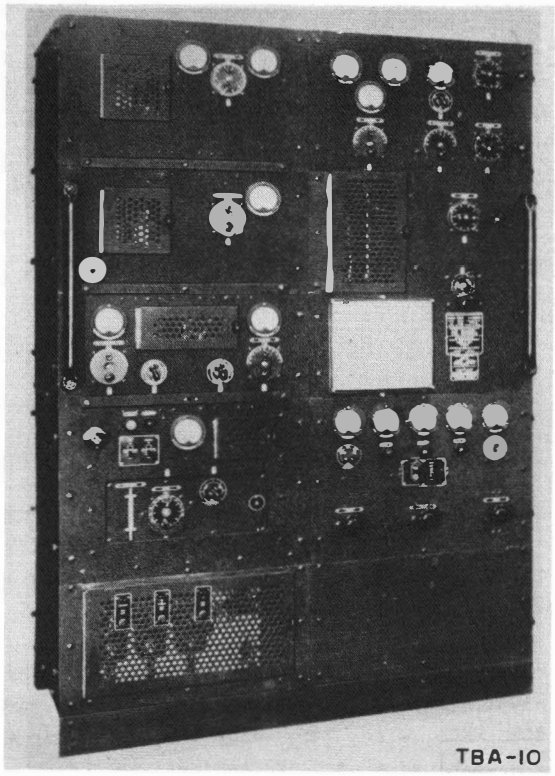
POWER OUTPUT: Cw: 2 kw.
Mcw: 1 kw.

POWER REQUIREMENTS: 7.5 kw, 220 v, 60 cyc, 3 phase.

PHYSICAL CHARACTERISTICS

Information on 2 KW Transmitting Equipment TAB-6 or TAB-7 not available.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 Apr 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TBA-10 RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TBA-10 is a medium power shore-to-ship, h-f radiotelegraph transmitter.

Vacuum tube keying speeds up to 500 wpm, and relay keying at speeds up to 100 wpm are possible.

A land line control unit provides remote transmitter control over a land line.

Frequency control is by means of a continuously variable oscillator.

It is designed for use with a single vertical-wire antenna.

AN/FRT-TYPE

TBA-10 :SERVICE TYPE NUMBER

RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,406
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CG-52282	72 x 49 x 24-7/8	953
2	Motor Generator Set CG-21375-A	17-9/16 x 70-7/16 x 16	815
2	Magnetic Controller CG-21373	22-1/8 x 20-1/4 x 10-1/4	65
1	Power Transfer Switch CG-24092	12-1/4 x 16 x 9-1/4	26
1	Land Line Control Unit CG-23269	42-1/8 x 24 x 15-3/4	165

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-3, -4, -9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -22; AN/PRC-7, -8, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -5, -8, -13, -16, -20; AN/VRQ-1; BC-312, -342, -348, -779, -794, -1004; MBS; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274; -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4.0 - 26.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw.

POWER OUTPUT: 1 kw.

POWER REQUIREMENTS: 4.6 kw, 220 v, 60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TBA-10 measures 72 x 49 x 24-7/8 inches, net weight 3,156 pounds, volume 101.7 cu ft, 2.54 ship tons. Packed for domestic shipment: total weight 5,008 pounds, total volume 158.3 cu ft, 3.95 ship tons. Shipped in 12 packages.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 Jun 52	AN/FRT-TYPE SERVICE TYPE NUMBER: TBC-2 through -5 RADIO TRANSMITTING EQUIPMENT

NO PHOTOGRAPH AVAILABLE

Radio Transmitting Equipments TBC-2 through -5 are fixed, a-m (cw), radiotelegraph transmitters for h-f shore-to-ship communication. Provision is made for three types of keying; relay keying at speeds up to 200 wpm, and facsimile, or vacuum tube keying at speeds up to 1,000 wpm.

Crystal control of twelve preset frequencies is provided, as well as master oscillator control, to permit continuously variable tuning throughout the frequency range.

In addition to the exciter, power amplifier, and rectifier units, each equipment contains a contactor unit for control and voltage regulation of the filament and plate circuits; a main plate transformer for providing plate voltage to the power amplifier tubes, and a water cooling system.

The TBC-3 (25 cyc equipment) has a plate transformer for supplying plate voltage to the 1 kw exciter tubes, and a step-down transformer for reducing 440-v ac to the 230-v ac required for operation of all units (except the exciter, power amplifier, rectifier, and the main plate rectifier, which operate at 440-v ac).

AN/FRT-TYPE

TBC-2 through -5 :SERVICE TYPE NUMBER
RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 95614; 900,853; 900,854
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET: 9 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Exciter Unit CG-52101, -52168, -52168A, -52155, or CG-*52177	93-1/2 x 50 x 36-3/4	1,255
1	Power Amplifier CG-50056, -50111, -50111-A, -50071 or CG-*50074	100-5/16 x 54 x 64	2,490
1	Main Rectifier CG-20077, -20152, -20260, 20115 or CG-20111*	100-5/16 x 74 x 49-1/4	2,635

*Used with 25-cyc source.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed. **APPROXIMATE RANGE (IN MILES):** Extended.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -9, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-3, -4, -9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -22; AN/PRC-7, -8, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -5, -8, -13, -16, -20; AN/VRQ-1; BC-312, -342, -348, -779, -794, -1004; MBS; OA-58/FRC, -59/FRC; R-62/PR, -90/PR, -96/SR, -129/U, -203/SR, -205/SR, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -398/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4.0 - 26.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw.

POWER OUTPUT: 50 kw.

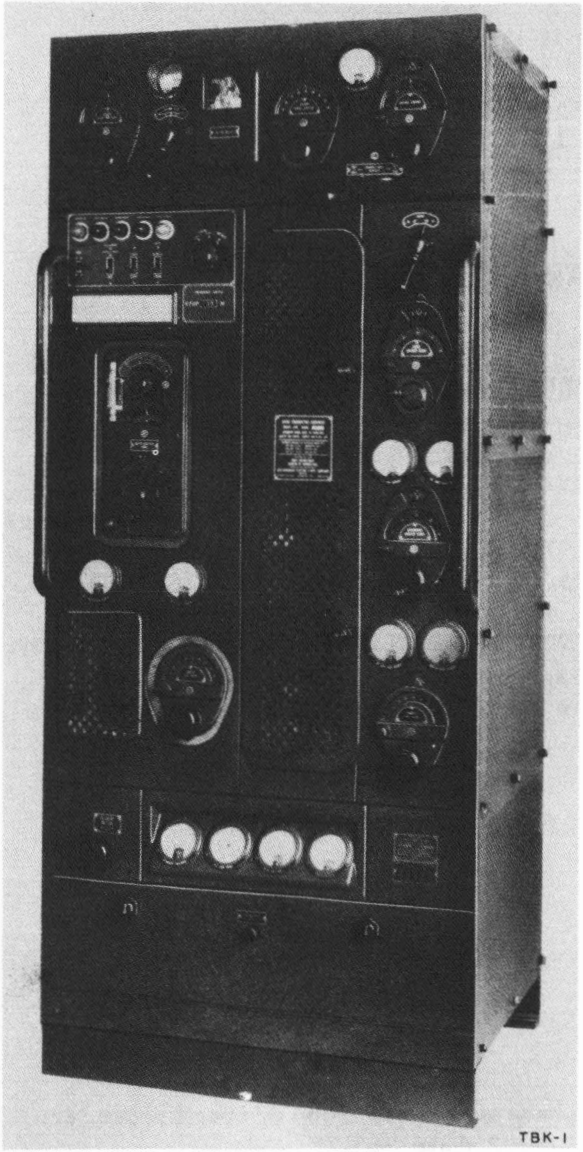
POWER REQUIREMENTS: TBC-2: *108 kw, 230 v, 60 cyc, 3 phase, ac.
TBC-3: *108 kw, 230 v, 60 cyc, 3 phase or 440 v, 25 cyc, 3 phase, ac.
TBC-4 and -5: *108 kw, 230 v, 60 cyc, 3 phase, ac.

*Does not include power required for water cooling system.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipments TBC-2 through -5 net volume 842.3 cu ft, 21 ship tons. Packed for domestic shipment: total weight 45,549 pounds, total volume 2,697 cu ft, 67.4 ship tons. Shipped in 84 packages.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 8 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TBK-1, -11 RADIO TRANSMITTING EQUIPMENT



TBK-1

Radio Transmitting Equipment TBK-1 and -11 are shore-based a-m (cw) radiotelegraph transmitters for h-f communication. TBK-11 is capable of vacuum-tube keying speeds up to 500 wpm, as well as relay keying of 100 wpm or better. Provisions are made in both equipments for variation from full-power to low-power operation of 75 w.

This transmitter uses master oscillator control and is continuously variable over its frequency range.

Remote control is provided over a two-wire landline up to 50 miles. Local operation from the transmitter panel is usually reserved for test purposes.

A power-transfer panel is used at the TBK-11 for manually switching the transmitter input from one motor generator set to the other. The two motor starters used obtain operating power from the transmitter control circuits.

It may be operated on any one of four power sources.

AN/FRT-TYPE

TBK-1, -11 :SERVICE TYPE NUMBER

RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,386

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Navy

DATE OF THIS SHEET: 8 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CAY-52169,* -52170	72 x 32 x 24	810
1	Land Line Control Unit CAY-23217, 23216	20-11/16 x 20-7/16 x 10-3/8	81
2	Motor-Generator Unit CAY-21521,* -21522, -21671	21-3/4 x 78-1/2 x 20-1/2 20-3/8 x 74-21/32 x 20-1/2	1,250 1,100
2	Magnetic Controller Unit* CAY-21610, -21644, -21609, -21512	24-1/4 x 17 x 11-5/8	80

* These components are for TBK-11.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; ROE; ROM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw.

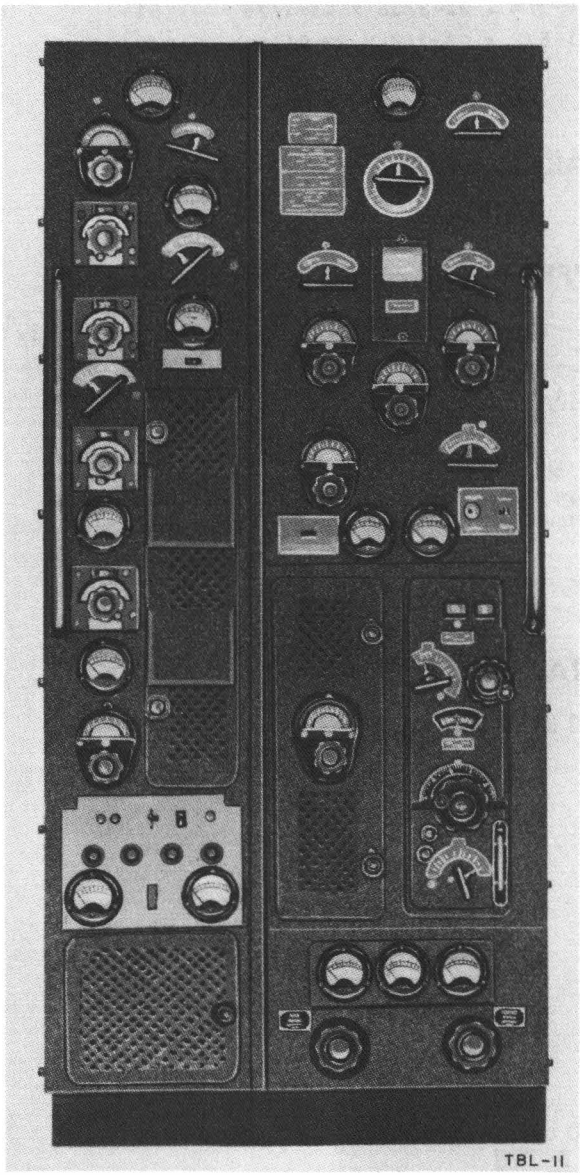
POWER OUTPUT: 2.0 - 18.1 mc: 500 w.
2.0 - 9.05 mc: 75 w.

POWER REQUIREMENTS: 3.96 kw, 220 v, 60 cyc, 3 phase ac; 4.5 kw, 220 v, 60 cyc, 1 phase, ac; or 3.96 kw 220 / 440 v, 25 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TBK-1 and -11 weigh 3,812 pounds net. Packed for domestic shipment: total weight 5,242 pounds, total volume 189.32 cu ft, 4.73 ship tons.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TBL-11 RADIO TRANSMITTING EQUIPMENT



TBL-11

Radio Transmitting Equipment TBL-11 is general purpose, a-m (cw, mcw, voice) medium power m-f/h-f transmitter designed for shore installations where space is at a premium.

This equipment may be operated locally, or from a remote station over a landline up to 50 miles in length.

Keying speeds up to 100 wpm are possible, and when suitable speech input equipment is used, voice transmission is possible throughout the frequency range.

The transmitter incorporates two separate master oscillator controlled r-f circuits to cover the m-f and h-f bands. Only one band is used at a time.

AN/FRT-TYPE	INSTRUCTION LITERATURE: NavShips 900,390-1B
TBL-11 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CAY-52249	72 x 32 x 24-3/8	829
1	Land Line Control Unit CAY-23216	20-3/4 x 21-3/16 x 11-1/16	81
1	Rectifier Power Unit CAY-20195	71-5/8 x 27-1/8 x 23-9/16	819

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground. **APPROXIMATE RANGE (IN MILES):** Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -314, -342, -344, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO: RAS; RBA; RBB; RBC; RBG; RBH; TBL; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDF; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.175 - 0.60 and 2.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw, cw.

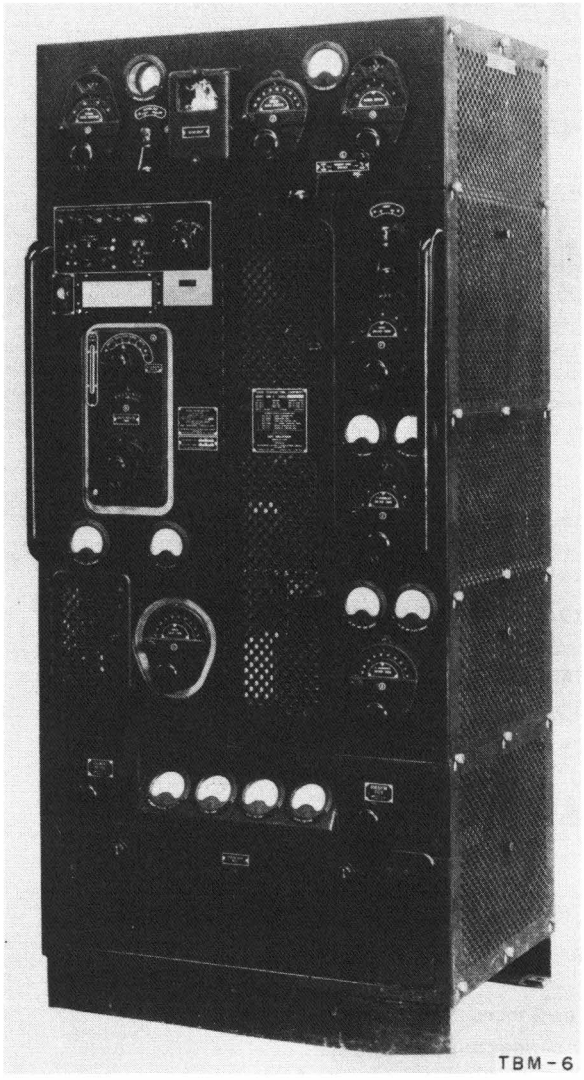
POWER OUTPUT: Cw: 200 w.
Mcw: 100 w.
Voice: 50 w.

POWER REQUIREMENTS: 3.5 kw, 220 / 440 v, 50/60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TBL-11 weighs 1,898 pounds net.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 8 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TBM-6, -10 RADIO TRANSMITTING EQUIPMENT



TBM-6

Radio Transmitting Equipments TBM-6 and TBM-10 are a-m (cw, mcw, and voice) radio transmitters for use at shore stations in h-f communication. Vacuum tube keying speeds up to 500 wpm on cw and relay keying speeds up to 100 wpm on cw and 50 wpm on mcw are possible. Provisions are made for reduction from full- to low-power operation at 75 w for radiotelegraph operation.

These transmitters use master oscillator frequency control and are continuously variable over their frequency range.

They may be controlled from local or remote locations. For c-w and m-c-w operation, remote control is by landline; while "voice" transmission may be remotely controlled by the use of radiophone units or by means of a voice-operated relay located in the modulator.

A power transfer panel is used in TBM-6 for manually switching the transmitter input from one motor generator set to the other. (The two motor starters used obtain operating power from the transmitter control circuits.)

TBM-10 uses a rectifier power unit instead of a motor generator.

The type of components used by either TBM equipment depends upon the power source available.

AN/FRT-TYPE	INSTRUCTION LITERATURE: NavShips 900,386, 900,387
TBM-6, -10 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 8 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CAY-52170, -52169	72 x 32 x 24	825
1	Modulator Unit CAY-50065, -50065A	72 x 18 x 24	380
1	Rectifier Power Unit CAY-20228 (TBM-10 only)	72 x 32 x 24	1,000
1	Land Line Control Unit CAY-23216, -23217	20-11/16 x 20-7/16 x 10-3/8	81
2	Motor Generator Unit CAY-21521, -21522 (TBM-6 only).	21-3/4 x 78-1/2 x 20-1/2	1,250 each

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, 22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

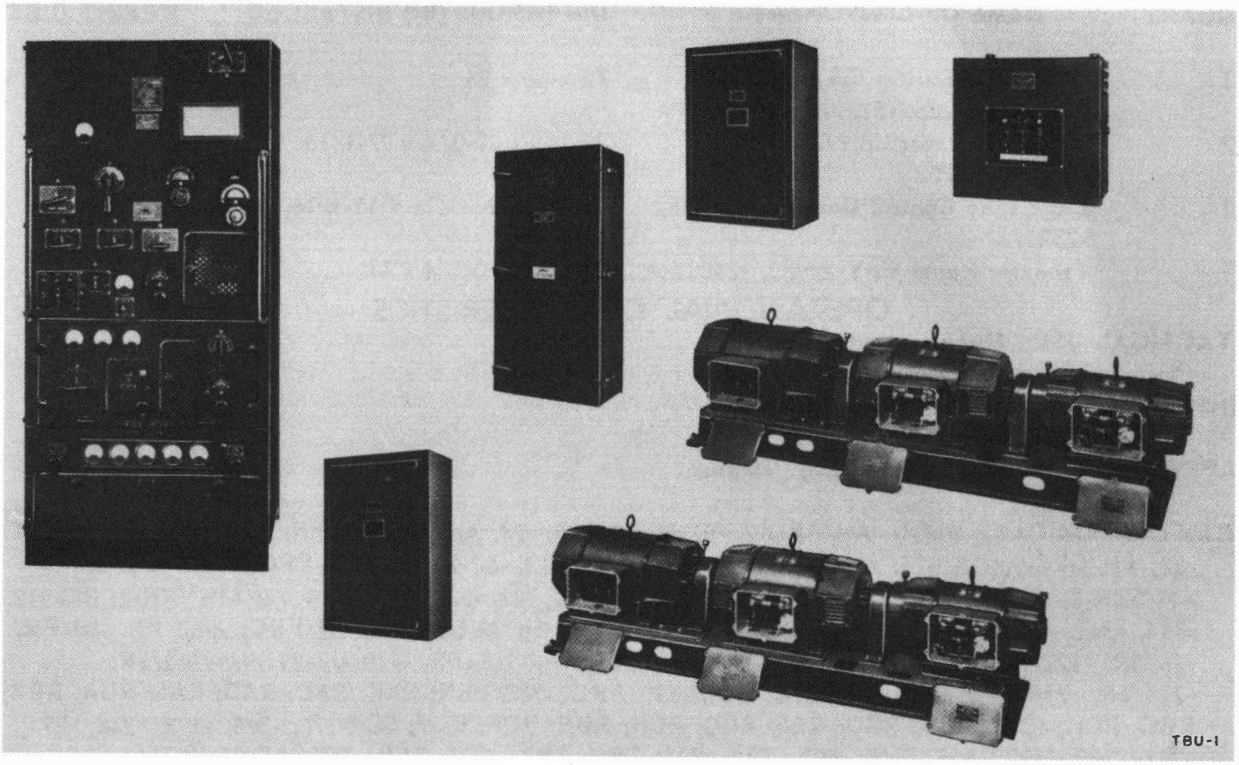
POWER OUTPUT: 2.0 to 18.1 mc: cw, 500 w; voice and mcw, 350 w.
2.0 to 9.05 mc (power amplifier disconnected); cw, 75 w.

POWER REQUIREMENTS: TBM-6: 5.1 kw, 220 v, 25/60 cyc, 3 phase, ac.
TBM-10: 5.2 kw (5.8 kva), 220/440 v, 50/60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TBM-6 or TBM-10 weighs 4,219 pounds net. Packed for domestic shipment: total weight 5,899 pounds, total volume 224 cu ft, 5.6 ship tons.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 2 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TBU-1, -3 RADIO TELEGRAPH TRANSMITTING EQUIPMENT



Radio Telegraph Transmitting Equipments TBU-1 and TBU-3 are medium-power, m-f radiotelegraph transmitters for shore installation. The emitted frequency is continuously variable throughout the frequency range 0.3 to 2.0 mc.

TBU-1 and TBU-3 are similar to TBU and TBU-2 but have been especially adapted for service at shore stations by the addition of duplicate motor generator sets and magnetic controllers and a land-line control unit.

TBU-1 and TBU-3 can be operated locally or from a remote location by means of the landline control unit.

Telegraph keying speeds up to 500 wpm are possible by means of vacuum tube keying and up to 100 wpm by means of relay keying.

AN/FRT-TYPE	INSTRUCTION LITERATURE: NavShips 900,384
TBU-1, -3 :SERVICE TYPE NUMBER:	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TELEGRAPH TRANSMITTING EQUIPMENT	USING SERVICE: Navy
	DATE OF THIS SHEET: 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CAY-52223, -52224, -52225, -52227	72 x 34 x 24	769
2	Motor Generator Unit CAY-21447, -21448, -21703	22-1/8 x 20-3/4 x 77-1/16	1,300
1	Land Line Control Unit CAY-23216, -23217	20-3/4 x 21-3/16 x 11-1/16	81
1	Transfer Panel CAY-24083, -24084-A	39-7/8 x 20-1/4 x 11	108

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25, -26; AN/ARR-15, AN/FRR-4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -20, -22; AN/PRC-7; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -314, -342, -344, -348, -453, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/SR, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBG; RBH; RBL; RBM; RBO; RBS; RCG; RCH; RDE; RDF; RDM; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -543, -593, -614, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.3 - 2.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw.

POWER OUTPUT: Cw: 1 kw.
Mcw: 500 w.

POWER REQUIREMENTS: TBU-1: 220 v, 25/60 cyc , 3 phase.
TBU-3: 220/440 v, 25 cyc, 3 phase.

PHYSICAL CHARACTERISTICS

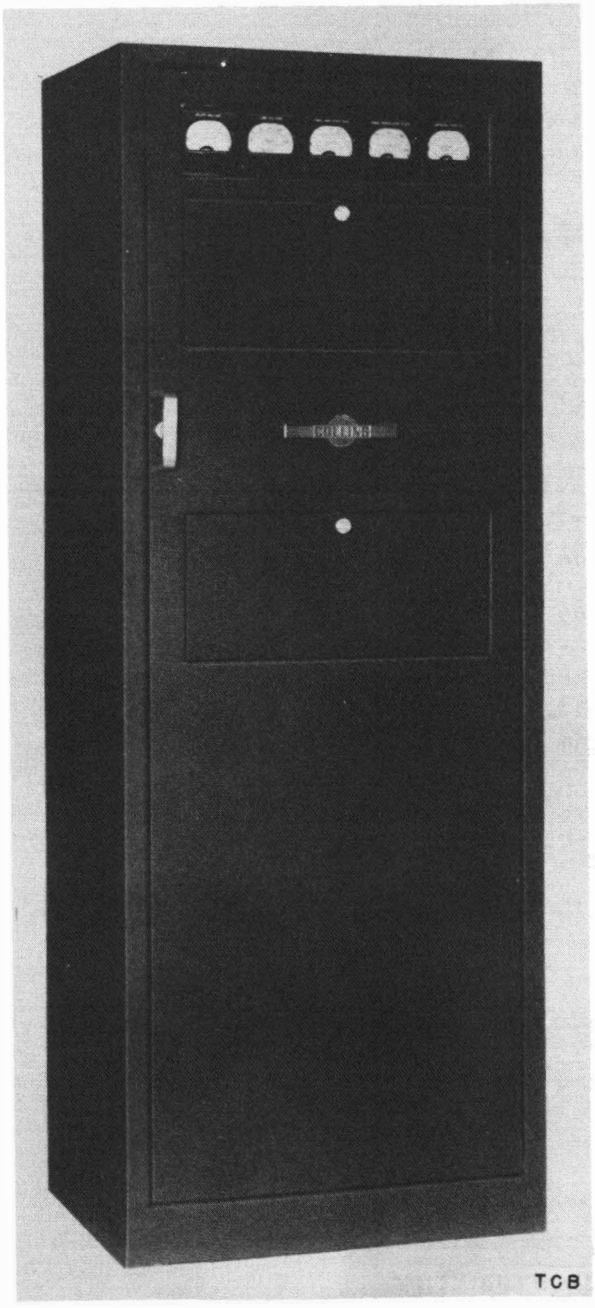
Radio Telegraph Transmitting Equipment TBU-1 or TBU-3 measures 72 x 34 x 24 inches, net weight 3,578 pounds. Packed for domestic shipment: total weight 4,182 pounds, total volume 169.12 cu ft, 4.23 ship tons. Shipped in 9 packages.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/FRT-TYPE

SERVICE TYPE NUMBER: TCB

RADIO TELEPHONE & TELEGRAPH TRANS EQUIP



Radio Telephone and Telegraph Transmitting Equipment TCB is designed for general telegraph or voice transmission (at low power) within the high-frequency range. An autotune system provides rapid automatic selection of ten preset crystal-controlled frequencies from a remote location, or at a local station control unit.

Terminals for connection of a facsimile sender are provided.

The operator's desk set includes a control dial and a handset, and provision is made for telephone intercommunication with the station control unit, also for connection of the handset to the output of a stotion receiver for complete send-receiver operation.

The transmitter cabinet has an antenna input terminal, and an antenna transfer terminal, for automatic transfer of the antenna connection to a station receiver, whenever the transmitter is brought to CARRIER-OFF-STAND-BY OPERATION.

AN/FRT-TYPE	INSTRUCTION LITERATURE: NavShips 95302
TCB :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TELEPHONE & TELEGRAPH TRANS EQUIP	USING SERVICE : Navy
	DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter 16-E1	61-3/4 x 21-1/2 x 16-1/2	502.0
1	Station Control Unit 176L-1	7-3/4 x 9 x 5-1/4	11.0
1	Operators Control Unit 177E-1	8-3/4 x 19 x 10	38.0
1	Operators Desk Set 223F-4	6 x 9 x 7-1/2	5.75

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Short, medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, 4; BC-312, -314, -342, -344, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.5- 12.0. On 10 pretuned crystal-controlled carrier frequencies.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

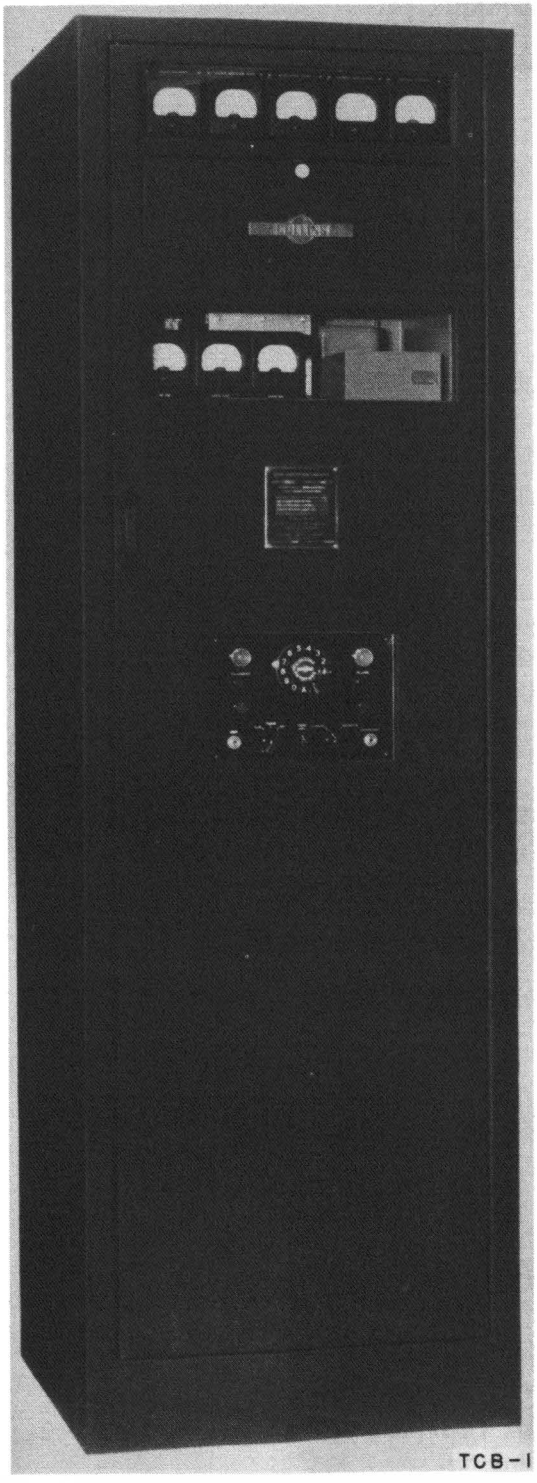
POWER OUTPUT: 150 w.

POWER REQUIREMENTS: 1 kw, 110 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Telephone and Telegraph Transmitting Equipment TCB measures 61-3/4 x 21-1/2 x 16-1/2 inches, net weight 557 pounds.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TCB-1, TCB-2 RADIO TELEPHONE & TELEGRAPH TRANS EQUIP



TCB-1

Radio Telephone and Telegraph Transmitting Equipments TCB-1 and TCB-2 are designed for general telegraph and voice transmission at low power within the high-frequency range. An autotune system provides rapid automatic selection of ten preset crystal-controlled frequencies from a remote location, or at a local station control unit.

TCB-1 and TCB-2 are similar, except that TCB-1 can operate on either 60 cyc or 25 cyc power (by use of alternate major components).

A handset is supplied for the local operating position.

The operator's desk set includes a telephone type dial control, and a telegraph key.

A companion receiver can be connected to the antenna transfer panel to provide complete communication facilities.

Circuits, relay switches, and terminals are incorporated in the operator's control unit which mute the receiver when transmitter carrier is switched on, or permit listening to the receiver when transmitter carrier is switched off.

AN/FRT-TYPE

TCB-1, TCB-2 :SERVICE TYPE NUMBER

RADIO TELEPHONE & TELEGRAPH TRANS EQUIP

INSTRUCTION LITERATURE: NavShips 95303, 95304
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter 16E-5, 16E-6	78 x 24 x 24	952.0
1	Operator's Control Unit 117G-4, 117G-5	10 x 19 x 11-1/4	53.0
1	Desk Set 223G-3, 223G-6	6 x 9 x 7-1/2	5.75
1	Handset 69H-5	Not Available	Not Available
1	Telegraph Key 67A-3	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Short, medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; BC-312, -314, -342, -344, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.5 - 15.0 on 10 pretuned crystal-controlled carrier frequencies.

TYPE MODULATION: Am. **TYPE OF SIGNAL:** Cw, mcw, voice.

POWER OUTPUT: 75 w, into 600 ohm resistive load.

POWER REQUIREMENTS: TCB-1: 900 w, 110 v, 25/60 cyc, 1 phase, ac.
TCB-2: 900 w, 110 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

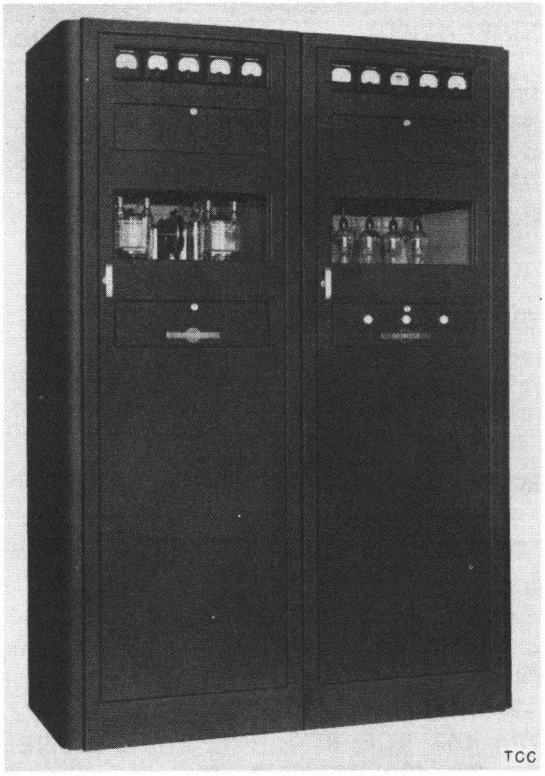
Radio Telephone and Telegraph Transmitting Equipments TCB-1 and TCB-2 measure 78 x 24 x 24 inches, net weight 1,011 pounds, volume 26 cu ft, 0.6 ship ton.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/FRT-TYPE

SERVICE TYPE NUMBER: TCC, TCC-2

RADIO TELEPHONE & TELEGRAPH TRANS EQUIP


TCC

Radio Telephone and Telegraph Transmitting Equipments TCC and TCC-2 are designed to transmit radiotelegraph or radiotelephone signals at medium power in the 2- to 20-mc frequency range point-to-point, ground-to-air, and transoceanic communication. Ten preset, crystal-controlled channels are available and can be selected from a remote position.

TCC and TCC-2 are complete h-f transmitters and include all units necessary for either local or remote control.

By use of the operator's control unit and a four-wire control line, the transmitter can be dial-tuned, started, or stopped and the r-f carrier can be turned on, keyed, or modulated; all operations being controlled from the remote position.

The control units includes an audio input circuit and a muting relay switch which permit operation of a receiver in conjunction with this transmitting equipment.

Telephone intercommunication between the local and remote positions is provided.

AN/FRT-TYPE

TCC, TCC-2 :SERVICE TYPE NUMBER

RADIO TELEPHONE & TELEGRAPH TRANS EQUIP

INSTRUCTION LITERATURE: Not Available

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Navy

DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Autotune RF Bay 1007-6	78 x 24 x 24	990.0
1	Power and Modulator Bay 1006-6	78 x 24 x 24	580.0
1	Station Control Unit 1764-2	11-1/2 x 12-1/4 x 6-3/8	12.0
1	Operator's Control Unit 177E-2	8-3/4 x 19 x 10	38.0
1	Operator's Desk Set 223F-4	6 x 9 x 7-1/2	5.75
1	Telegraph Key, Cord and Plug 274N-7	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Extended.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 - 20.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

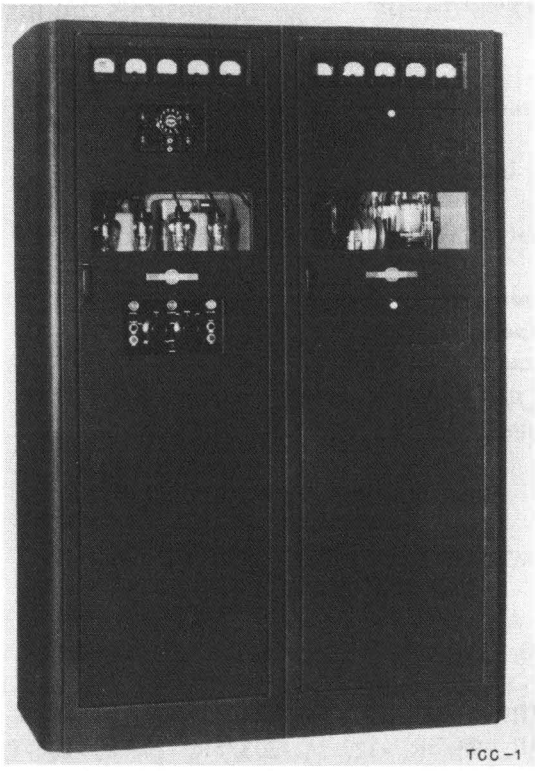
POWER OUTPUT: Cw: 1 kw.
Mcw: 600 w.

POWER REQUIREMENTS: Transmitter: 4.50 w, 220 v, 50/60 cyc, 3 phase, ac.
Operator's and station control units: 110 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Telephone and Telegraph Transmitting Equipment TCC or TCC-2 measures 78 x 48 x 24 inches, net weight 1,626 pounds, volume 52 cu ft, 1.3 ship tons.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TCC-1, TCC-3 RADIO TELEPHONE & TELEGRAPH TRANS EQUIP



Radio Telephone and Telegraph Transmitting Equipments TCC-1 and TCC-3 are used to transmit radiotelegraph or radiotelephone signals at medium power in the 2.0 to 18.1 m-c frequency range for point-to-point, ground-to-air, and transoceanic communication. Ten preset, crystal-controlled frequencies are available and can be selected by a remote control.

By use of the operator's control unit and a four-wire control line, the transmitter can be dial-tuned, started, or stopped and the r-f carrier turned on or off, keyed, or modulated; all operations being controlled from the remote operating position.

The control unit includes an audio input circuit and a muting relay switch used when a receiver is operated jointly with this transmitter. This unit also includes intercommunication connections for a telephone line linking local and remote positions.

This transmitter, when operated from a 25-cyc, 3-phase power source, uses Collins Radio Frequency Changer 231N500 and other slightly different major components.

AN/FRT-TYPE

TCC-1, TCC-3 :SERVICE TYPE NUMBER

RADIO TELEPHONE & TELEGRAPH TRANS EQUIP

INSTRUCTION LITERATURE: NavShips 95306, 95308
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Autotune RF Bay, 1014-1, -2, -5	78 x 24 x 24	600
1	Power and Modulator Bay, 1021-1, -2, -5	78 x 24 x 24	1,000
1	Operator's Control Unit 177G-1, -3, -5	10-1/2 x 19 x 10	53
1	Operator's Desk Set 223G-1, 223G-3	5-1/2 x 51/8 x 7-1/2	5.75
1	Frequency Converter 231N500 (supplied only for operation from 25-cyc power source)	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Extended.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

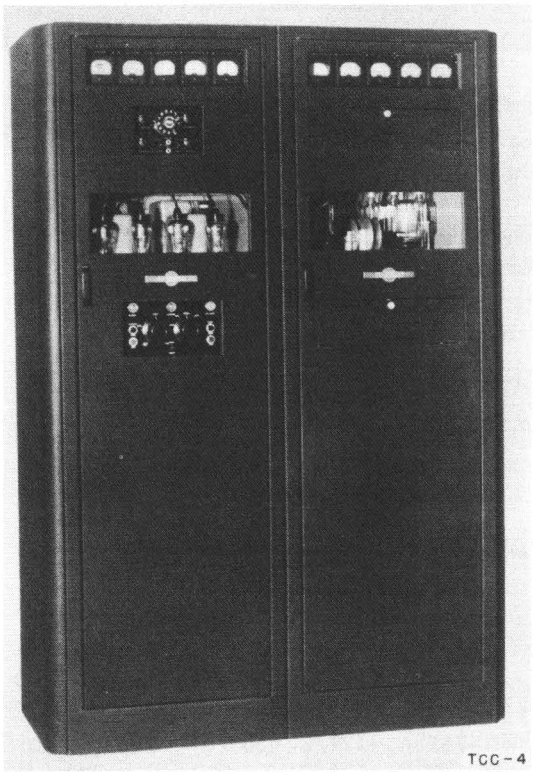
POWER OUTPUT: Cw: 1 kw.
Mcw: 600 w.

POWER REQUIREMENTS: Transmitter: 4.50 kw, 220 v, 25/60 cyc, 3 phase, ac.
Operator's control unit, TCC-1: 105-125 v, 25/50/60 cyc, 1 phase, ac.
Operator's control unit, TCC-3: 105-125 v, 25 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Telephone and Telegraph Transmitting Equipment TCC-1 or TCC-3 measures 78 x 48 x 24 inches, net weight 1,659 pounds, volume 52 cu ft, 1.3 ship tons.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TCC-4 RADIO TELEPHONE & TELEGRAPH TRANS EQUIP



Radio Telephone and Telegraph Transmitting Equipment TCC-4 transmits radiotelegraph and radiotelephone signals at medium power in the 2.0- to 18.1-mc frequency range for point-to-point, ground-to-air, and transoceanic communication. Ten preset, crystal-controlled transmitting frequencies are available and can be selected from a remote position.

This equipment is a complete h-f transmitting station which includes all units necessary for either local or remote control.

With a four-wire control line, the control unit can be used to dial-tune, start, and stop the transmitter, to key the carrier on or off, and to relay tone or voice modulating signals.

Circuits are provided for a telephone line linking local and remote operating positions.

When operating the transmitter from a 25-cyc, 3-phase power source, a frequency converter is used. In all cases, the remote control unit operates on 25-cyc ac.

AN/FRT-TYPE

TCC-4 :SERVICE TYPE NUMBER
RADIO TELEPHONE & TELEGRAPH TRANS EQUIP

INSTRUCTION LITERATURE: NavShips 900,214
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter COL-52297	78 x 48 x 24	1,600.0
1	Station Handset and Cord 69H-5	Not Available	Not Available
1	Remote Control Unit COL-23360	10-1/2 x 19 x 10	53.0
1	Operator's Desk Set 223G-3	5-1/2 x 5-1/8 x 7-1/2	5.75
1	Telegraph Key Cord and Plug 67A-3	Not Available	Not Available
1	Frequency Converter 231N500	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore radio stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Extended.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13, AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

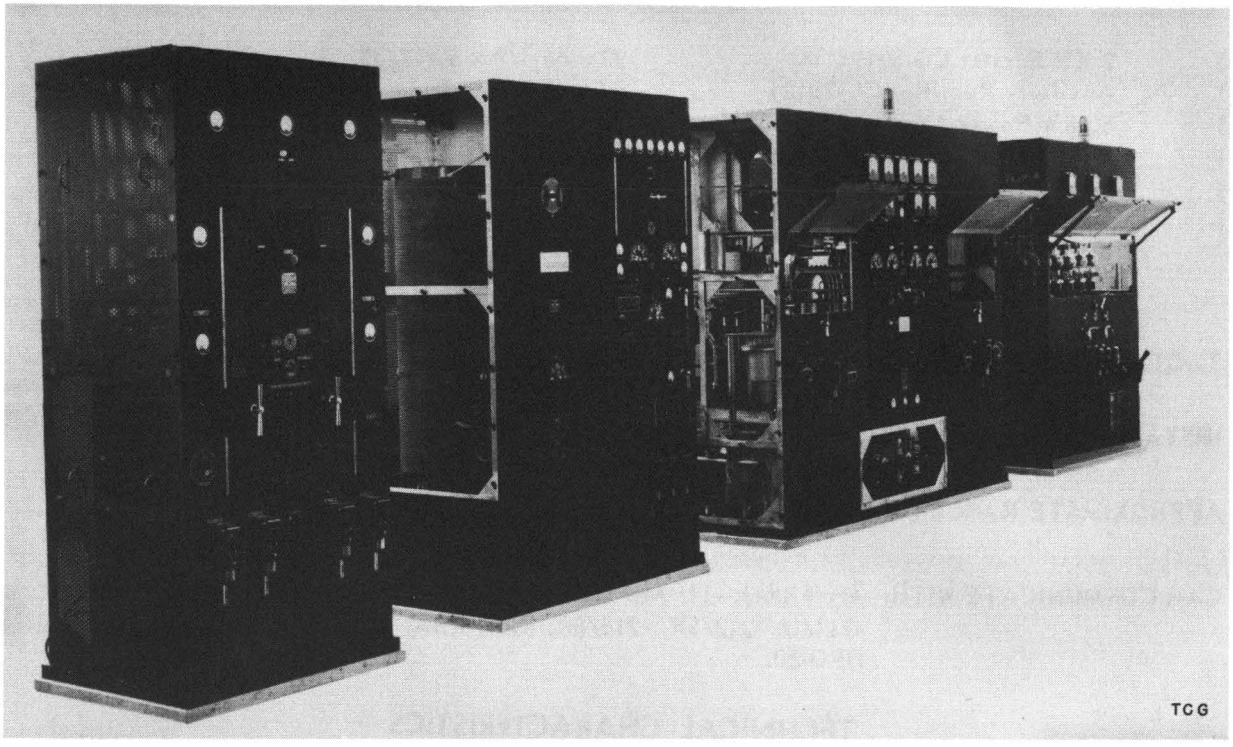
POWER OUTPUT: Cw: 1 kw.
Mcw: 600 w.

POWER REQUIREMENTS: Transmitter: 4.50 kw, 220 v, 25/60 cyc, 3 phase, ac.
Operator's control unit: 105-125 v, 25 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Telephone and Telegraph Transmitting Equipment TCC-4 measures 78 x 48 x 24 inches, net weight 1,700 pounds, volume 52 cu ft, 1.3 ship tons.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 8 Apr 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TCG RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TCG is designed for high-power, low-frequency shore-to-ship radiotelegraph service.

This equipment has a continuously variable, temperature-controlled master oscillator which can operate over the range of 0.05 to 0.15 mc. Requires an antenna having a resistance of 2 to 7 ohms and a capacitance of 2,500 to 4,000 mmf. Provision is made to operate the exciter unit directly into the antenna system. The r-f amplifier uses water-cooled tubes.

The transmitter can be keyed at speeds up to 500 words per minute and can convert facsimile audio signals (within a frequency range of 2,000 to 10,000 cps) to c-w signals.

AN/FRT-TYPE	INSTRUCTION LITERATURE: NavShips 95311 CLASSIFICATION OF EQUIPMENT: Unclassified
TCG :SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO TRANSMITTING EQUIPMENT	DATE OF THIS SHEET : 8 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	2 KW Exciter CG-52194	92 x 66-1/8 x 50-17/32	1350
1	Auxiliary Rectifier CG-20121	92 x 45 x 38-5/8	1397
1	50 KW Power Amplifier CG-50081	100-5/16 x 120-7/8 x 143-7/16	6275
1	Main Rectifier Unit CG-20111	100-5/16 x 74-7/8 x 49-1/4	2635
1	Power Transformer CG-30458-A	44-1/2 x 65-5/8 x 100-3/8	5000
1	Contactor Unit CG-29092	65-3/8 x 46 x 44	1790

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore transmitting station.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/SRR-3, -11; AN/TRQ-1; BC-344, -779; R-96/SR, -203/SR, -210/U, -211/U, -212/SR, -215/SR; RAK; RBA; RBL; RCH; SCR-614; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.050 - 0.150, in 6 bands.

Band 1: 0.050 – 0.062
Band 2: 0.062 – 0.073
Band 3: 0.073 – 0.087
Band 4: 0.087 – 0.105
Band 5: 0.105 – 0.124
Band 6: 0.124 – 0.150.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw.

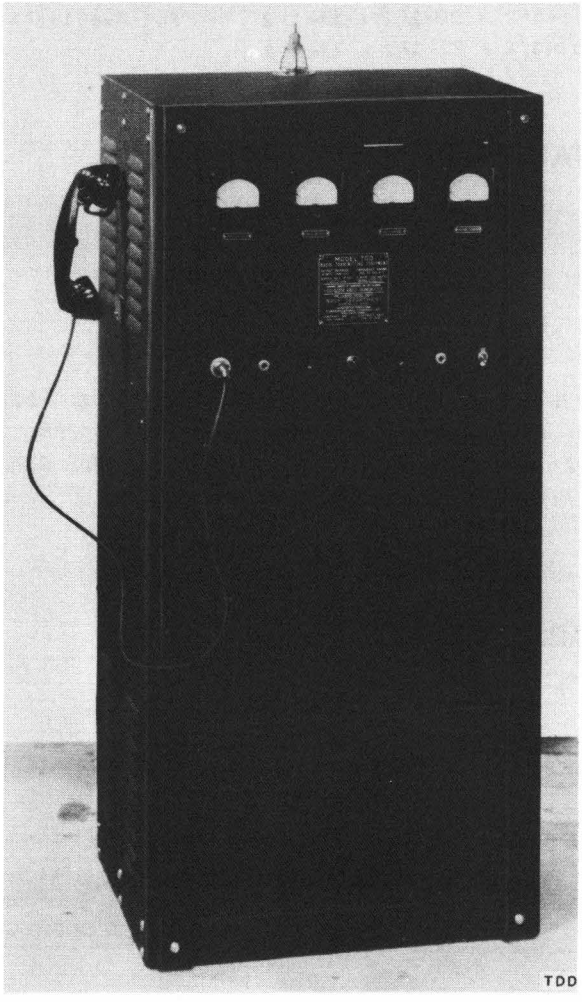
POWER OUTPUT: 50 kw, 2 kw without r-f amplifier.

POWER REQUIREMENTS: 100 kw, 230 v, 60 cyc, 3 phase. Operation without r-f amplifier: 12 kw, 230 v, 60 cyc, 3 phase.

PHYSICAL CHARACTERISTICS

Information on Radio Transmitting Equipment TCG not available.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 14 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TDD, TDD-1 through -4 RADIO TELEPHONE TRANSMITTING EQUIPMENT



TDD

Radio Telephone Transmitting Equipments TDD and TDD-1 through -4 are single-frequency, low-power, a-m (voice) transmitters for use in airport traffic control towers.

This equipment has one preset crystal-controlled channel and the antenna load coil incorporates a variometer adjustment for fine tuning. Taps on the stator permit course adjustment, thus providing a wide choice of antenna types.

Provisions are made for connection of a remote telephone or microphone, and a muting relay is utilized to prevent feedback or objectionable interference when a receiver is used in conjunction with this transmitter.

AN/FRT-TYPE

TDD, TDD-1 through -4 : SERVICE TYPE NUMBER
RADIO TELEPHONE TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,271
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 14 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CCI-52258, or anyone of the following:	52 x 25-1/2 x 18	190
	CCI-52258-A	52 x 25-1/2 x 18	190
	CBST-52258-B	51-1/2 x 22-1/2 x 17-1/2	Not Available
	CCI-52258-C	51-1/2 x 22-1/2 x 17-1/2	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Airport control towers.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/GRR-3; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/VRC-4; BC-344, -348, -453, -779; MBS; R-96/SR, -129/U, -203/SR, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR; RAK; RAL; RAS; RBA; RBH; RBL; RBM; RCH; RDF; SCR-177, -274, -614; ARC Type 12; Fisher TS 25-3; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.20 - 0.55.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 15 w.

POWER REQUIREMENTS: 330 w, 115 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

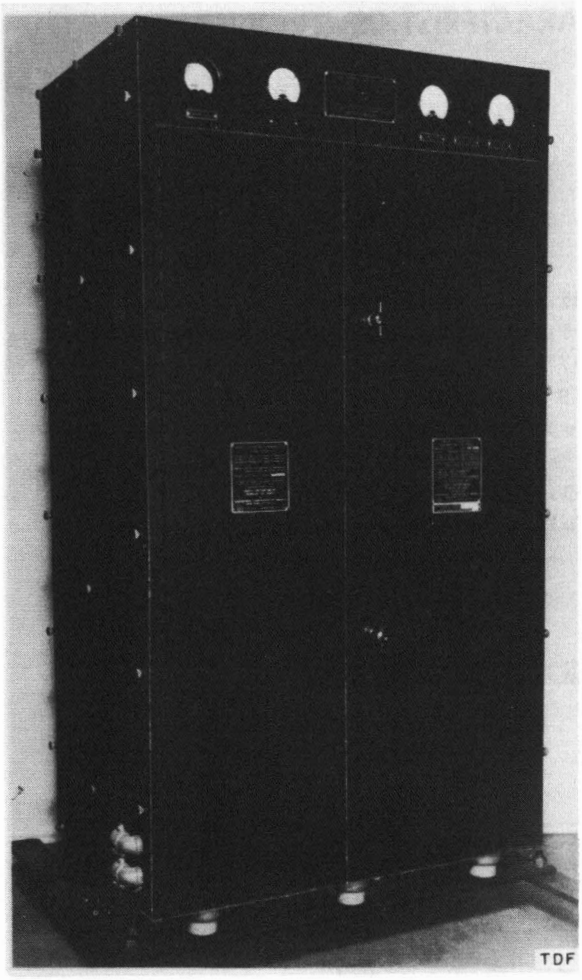
Radio Telephone Transmitting Equipment TDD or TDD-1 through -4 measures 52 x 25-1/2 x 18 inches. Packed for domestic shipment: total weight 475 pounds.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/FRT-TYPE

SERVICE TYPE NUMBER: TDF

RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TDF is a medium-power, general purpose, m-f/h-f, radiotelephone equipment used specifically for remote control operation, permitting shore station installations to communicate with ships, or other shore stations. Six preset crystal-controlled channels can be selected by either of the two remote control units.

Relay keying speeds up to 40 wpm are possible.

A horizontal, or sloping type, single-wire antenna, 50 to 65 feet long, is suitable for this equipment.

A low resistance ground system is essential.

AN/FRT-TYPE	INSTRUCTION LITERATURE: NavShips 95329
TDF :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CRM-52261	61-1/4 x 34 x 20	690
2	Remote Control Unit CRM-23288	9-1/4 x 14 x 9-1/4	16

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Medium, long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, 16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 9.4.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, mcw.

POWER OUTPUT: 125 w.

POWER REQUIREMENTS: 1,030 w, 105-125 v /210-250 v, 50/60 cyc, 1 phase, ac.

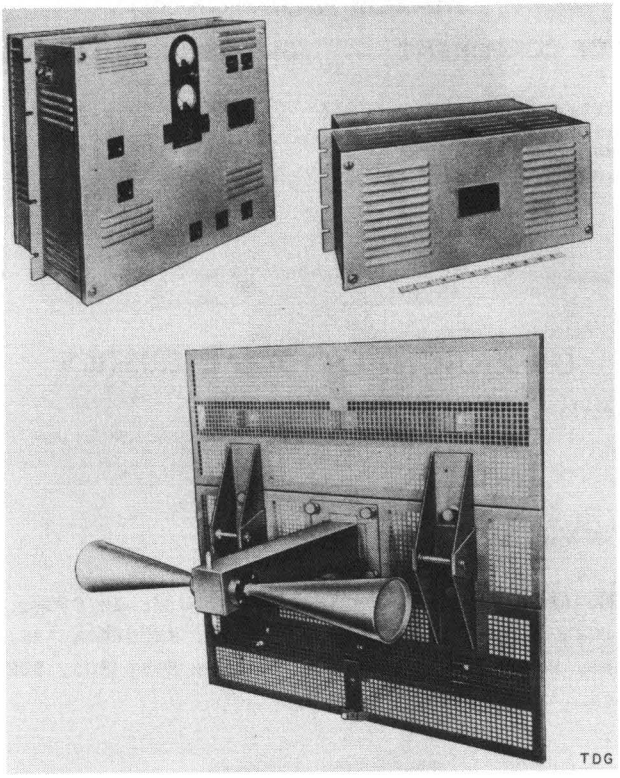
PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TDF measures 61-1/4 x 34 x 20 inches, net weight 1,135 pounds. Packed for domestic shipment: total weight 1,660 pounds, total volume 74 cu ft, 1.85 ship tons.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 2 May 52

AN/FRT-TYPE

SERVICE TYPE NUMBER: TDG, TDG-1
HF RADIO TELEPHONE TRANS EQUIP



High Frequency Radio Telephone Transmitting Equipments TDG and TDG-1 are radio transmitting terminals of permanent point-to-point, v-h-f, radio link systems. They provide one crystal-controlled channel within the frequency range, 132 to 156 mc. Facilities are provided for remote control of the equipment.

These units are used for voice, or multichannel telegraph, transmission using voice frequencies; or combinations of voice and telegraph derived from suitable carrier terminal equipment.

Portable Antenna, Navy Type, CW-66157, is used for semipermanent installations.

For permanent high tower installations either the 9-db antenna, Western Electric Co. Type D-150428, or the 3-db antenna, Western Electric Co. Type D-140427 is required, but not supplied.

Outdoor Cabinet, Navy Type CW-10589, (which permits installation of the equipment at the base of the antenna tower or pole) is available.

AN/FRT-TYPE	INSTRUCTION LITERATURE: NavShips 900,620; 95330
TDG, TDG-1 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
HF RADIO TELEPHONE TRANS EQUIP	USING SERVICE : Navy
	DATE OF THIS SHEET : 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CW-52255, -52366	15-3/4 x 19 x 10	43
1	Spare Part Panel CW-10568	3-1/2 x 19 x 5	3
1	Rectifier Power Unit CW-20143	8-3/4 x 19 x 11-1/4	75
1	Portable Antenna CW-66157	40 x 40 x 20	65

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -29, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-12, -21; AN/VRC-1; BC-639, -797; MAR; MBS; R-137/GR; RBK; RBQ; RC-256; RCK; RCO; SCR-522, -542, -574, -575, -607, -616, -624, -644.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 132 - 156.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

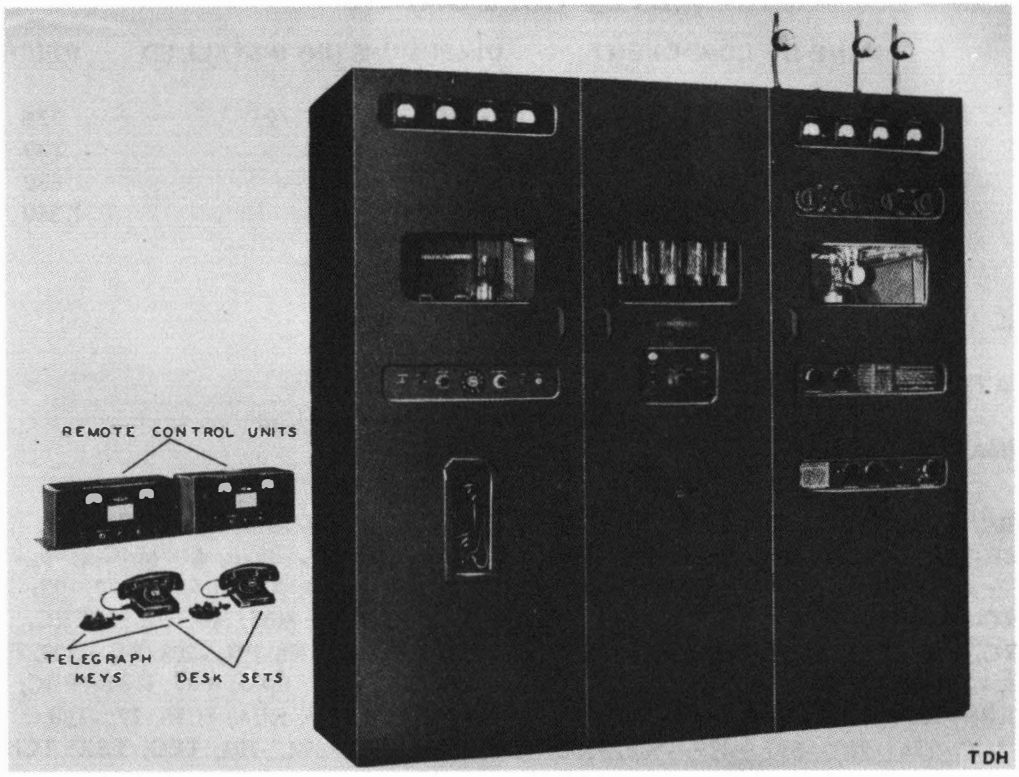
POWER OUTPUT: 12 w.

POWER REQUIREMENTS: 390 w, 115 v, (± 10%) 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

High Frequency Radio Telephone Transmitting Equipments TDG, TDG-1 measure 28 x 19 x 11-1/4 inches.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TDH, TDH-2, -3, -4 RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipments TDH and TDH-2 through -4 are designed for general purpose, high-power, h-f point-to-point communication, aeronautical ground station use, and other services requiring operation on a number of readily selected frequencies. An autotune system is used for automatic selection of any one of 11 preset master oscillator controlled channels. Selection is made locally or at one of the remote control stations, either of which provides for complete control of the transmitter. Manual tuning over the entire frequency range is possible.

The remote control units are located at any distance where the total line loss does not exceed 25 db and may be mounted in standard relay racks.

Vacuum tube keying speeds up to 200 wpm on cw and 60 wpm on mcw are obtainable.

The equipment is designed for use with an unbalanced antenna or transmission line of 70-600-ohm impedance.

AN/FRT-TYPE

TDH, TDH-2, -3, -4 :SERVICE TYPE NUMBER
RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 95331, 95332, 900,904, 900,798
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter COL-52291,	95-5/8 x 31 x 28-1/2	775
	-52343	84 x 31 x 28-1/2	749
1	Modulator COL-50129	84 x 31 x 28-1/2	830
1	Rectifier Power Unit COL-20196	84 x 31 x 25	1,350

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations and aeronautical ground stations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10; -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794; -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP: RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, mcw.

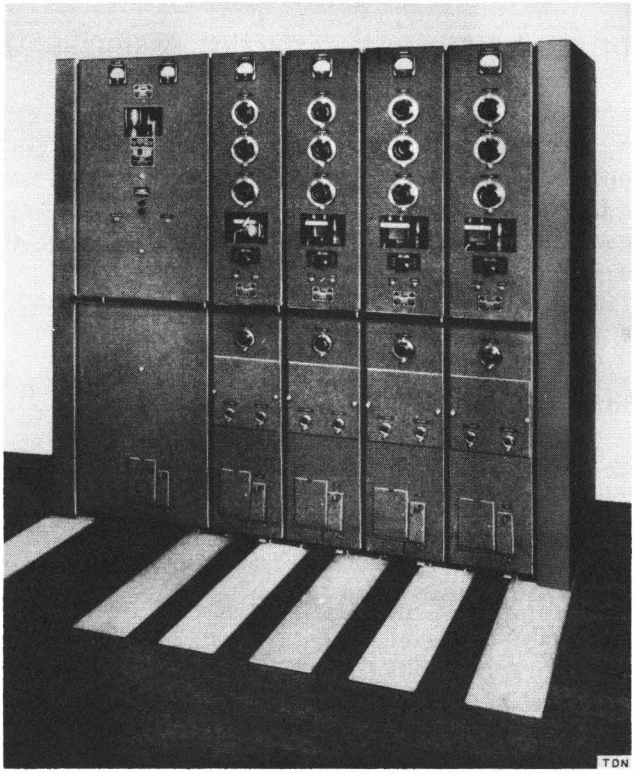
POWER OUTPUT: 2 to 12 mc, 3,000 w.
12 to 18.1 mc, 2,500 w.

POWER REQUIREMENTS: Transmitter: 9.92 kw, 230 v, 50/60 cyc, 3 phase.
Remote control unit: 52 w, 115 v, 50/60 cyc, 1 phase.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TDH or TDH-2 through -4 measures 95-5/8 x 82-1/16 x 31 inches, net weight 3,325 pounds. Packed for domestic shipment: total weight 5,716 pounds.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 23 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TDN, TDN-4 RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipments TDN and TDN-4 are single-frequency, a-m (cw and voice) radio transmitters for use at aircraft ground stations or for general shore station communication.

These transmitters use separate r-f units for different channels, making possible not only simultaneous operation on several frequencies but also rapid frequency change without using complicated r-f switching.

Each r-f unit is a complete telegraph transmitter, lacking only the power supply to operate independently. Each r-f unit operates with a separate antenna.

The audio amplifier unit is a complete a-f equipment which provides voice transmission throughout the frequency range of the transmitting equipment.

TDN has crystal oscillator control on six preset channels; TDN-4 has master oscillator control and has been modified to facilitate connection of external frequency-shift keying apparatus.

Remote control of both equipments is usually satisfactory at distances up to 1/2 mile, and provision is made for the connection of telegraph keys.

AN/FRT-TYPE

TDN, TDN-4 :SERVICE TYPE NUMBER
RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 23 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Radio Transmitter CFT-52349	72 x 11-1/4 x 34	Not Available
2	Radio Transmitter CFT-52350	72 x 11-1/4 x 34	" "
1	Radio Transmitter CFT-52351	72 x 11-1/4 x 34	" "
1	Local Control Unit CFT-23357	7 x 18-3/4 x 3-1/4	" "
1	Rectifier Power Unit CFT-20208	71-3/4 x 22-1/8 x 34-1/4	" "
1	Audio Amplifier Unit, Fed. Tel. Type 123-A	Not Available	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft ground stations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 - 20, in 3 bands.
Band 1: 2.0 — 5.16 Band 2: 5.16 — 13.3 Band 3: 13.3 — 20.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, voice.

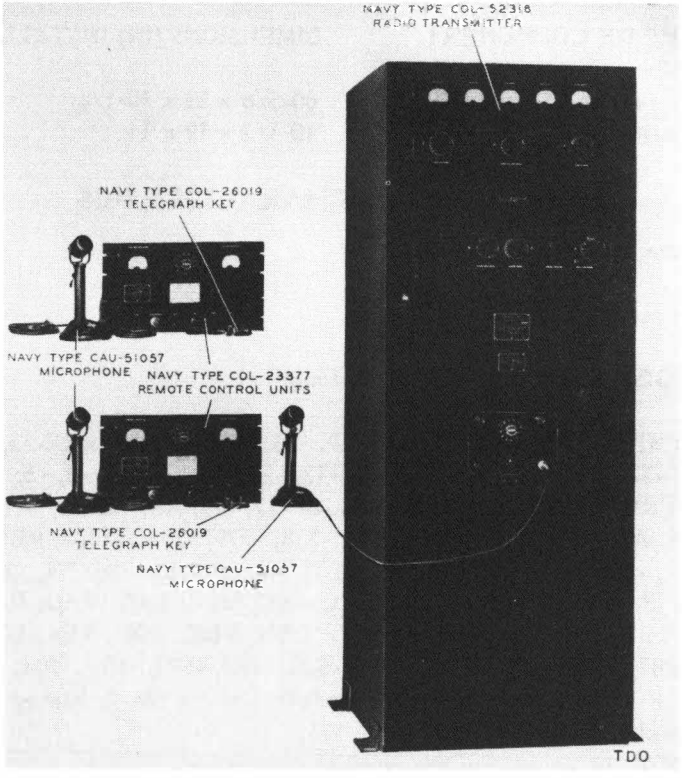
POWER OUTPUT: 3 kw.

POWER REQUIREMENTS: 20 kw, 220 v, 50/60 cyc, 3 phase (4 r-f units operating).

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TDN or TDN-4 measures 72 x 66-7/8 x 34-1/4 inches.

STATUS: Limited Standard	AN/FRT-TYPE
CLASSIFICATION OF EQUIPMENT: Unclassified	SERVICE TYPE NUMBER: TDO
USING SERVICE: Navy	RADIO TRANSMITTING EQUIPMENT
DATE OF THIS SHEET: 9 May 52	



Radio Transmitting Equipment TDO is used for medium-power, m-f and h-f point-to-point communication. It uses an autotune system for instantaneous selection of any one of 11 preset channels. Channel selection is made by means of a telephone dial on the transmitter panel, or at the remote control unit.

The remote control units may be used for complete control of the equipment at any distance where the total line loss does not exceed 25 db.

An electronic carrier control is provided which permits keying speeds up to several hundred wpm for c-w operation and 60 wpm for m-c-w operation.

A master oscillator is used for frequency control.

The equipment is designed to operate into an unbalanced 70 to 600 ohm antenna or line.

AN/FRT-TYPE

TDO :SERVICE TYPE NUMBER
RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 95336
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter COL-52318	80-5/8 x 28 x 30-1/4	1,140
2	Remote Control Unit COL-23377	10-1/2 x 19 x 11	30

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Medium to long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, mcw.

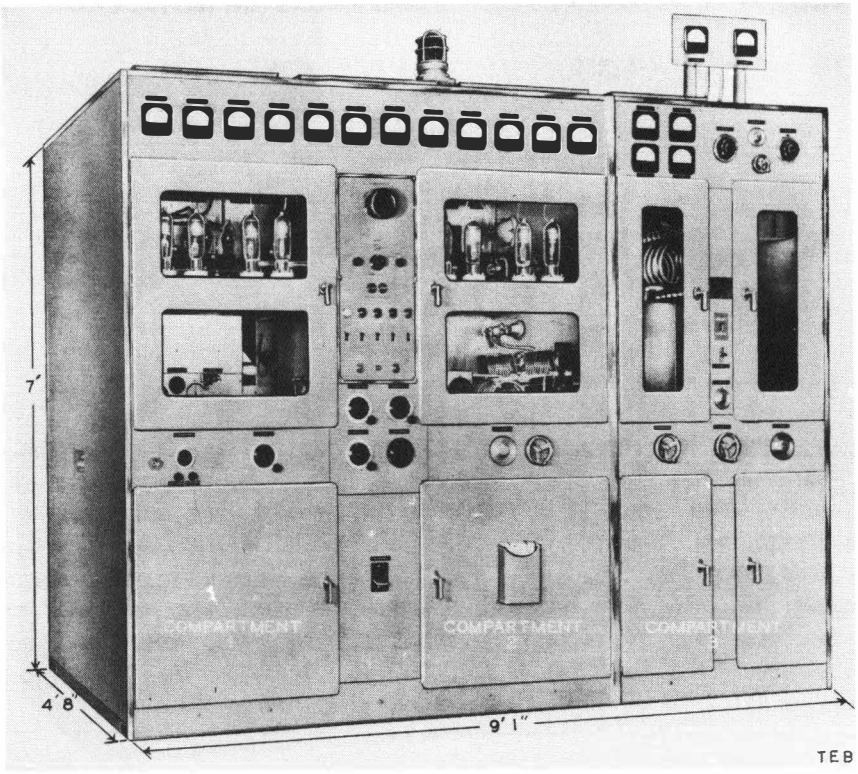
POWER OUTPUT: Voice, mcw: 250 w.
Cw: 400 w.

POWER REQUIREMENTS: Transmitter: 1570 w, 115-230 v, 50/60 cyc, 1 phase, ac.
Remote control unit: 25 w, 115 v, 50/60 cyc 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TDO measures 80-5/8 x 28 x 30-1/4 inches, net weight 1,365 pounds. Packed for domestic shipment: total weight 2,362 pounds, total volume 102.6 cu ft, 2.5 ship tons. Shipped in 12 packages.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TEB RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TEB is used for general purpose, high-power, h-f, radiotelegraph, or frequency-shift operation in shore-to-ship, and point-to-point communication. Vacuum-tube keying speeds up to 400 wpm are possible, and provision is made for the connection of an external frequency shift keyer.

Six preset crystal-controlled channels are available, and provision is made for connection of an external master oscillator.

An automatic control circuit will shut down the entire equipment, except blowers and oscillator oven, if the transmitter is not keyed for a predetermined period (adjustable from two to 30 minutes).

This equipment is designed to work into a balanced two-wire transmission line of 550 to 650 ohm impedance and zero reactance.

AN/FRT-TYPE	INSTRUCTION LITERATURE: NavShips 900,352(A)
TEB :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CYV-52353	84 x 109 x 56	9,000

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-3, -4, -9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -22; AN/PRC-7, -8, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -5, -8, -13, -16, -20; AN/VRQ-1; BC-312, -342, -348, -779, -794, -1004; MBS; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4 - 21.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, frequency shift (when external keyer is used).

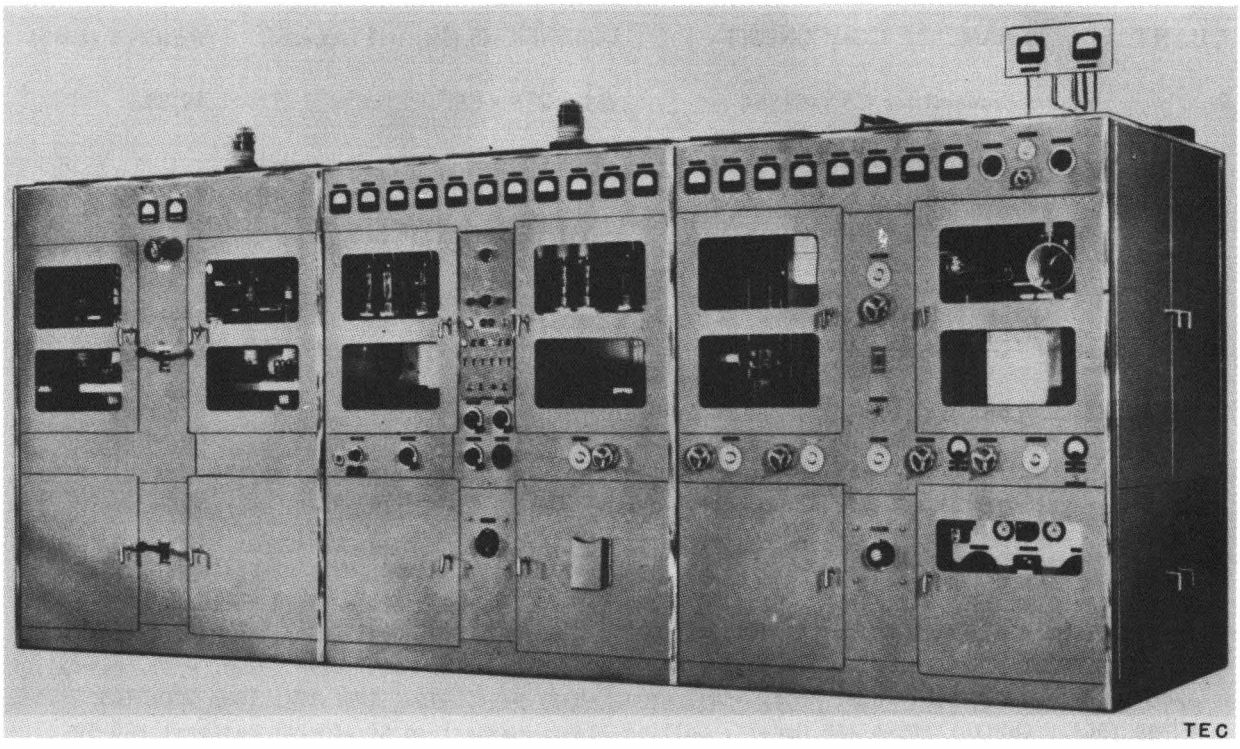
POWER OUTPUT: 15 kw.

POWER REQUIREMENTS: 35 kw, 230 v, 60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TEB measures 84 x 109 x 56 inches, net weight 11,302 pounds, volume 510 cu ft. Packed for domestic shipment: total weight 15,563 pounds, total volume 833 cu ft. Shipped in 20 packages.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TEC RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TEC is used for high-power, general purpose, h-f radiotelegraph, or frequency-shift operation in shore-to-ship and point-to-point communication. Vacuum-tube keying speeds up to 400 wpm are obtainable, and provision is made for frequency shift keying through connection of an external frequency shift keyer.

It may be used in conjunction with a single-sideband transmitter, the output of which is fed into the power amplifier stage of TEC.

Six preset crystal-controlled channels are available, and provision is made for connection of an external master oscillator.

This transmitter works into a balanced two-wire transmission line of 550 to 650 ohm impedance, with zero reactance.

It has an automatic control feature which will shut down the equipment if it is not keyed for a predetermined period, which is adjustable from two to 30 minutes.

The control circuit provides overload protection for driver, and power amplifier stages both.

AN/FRT-TYPE	INSTRUCTION LITERATURE: NavShips 900,212X
TEC :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CYV-52354	84 x 216 x 56	19,584

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Short to medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-3, -4, -9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -22; AN/PRC-7, -8, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -5, -8, -13, -16, -20; AN/VRQ-1; BC-312, -342, -348, -779, -794, -1004; MBS; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; R8B; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4 - 21.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, frequency shift (when external keyer shifter is used).

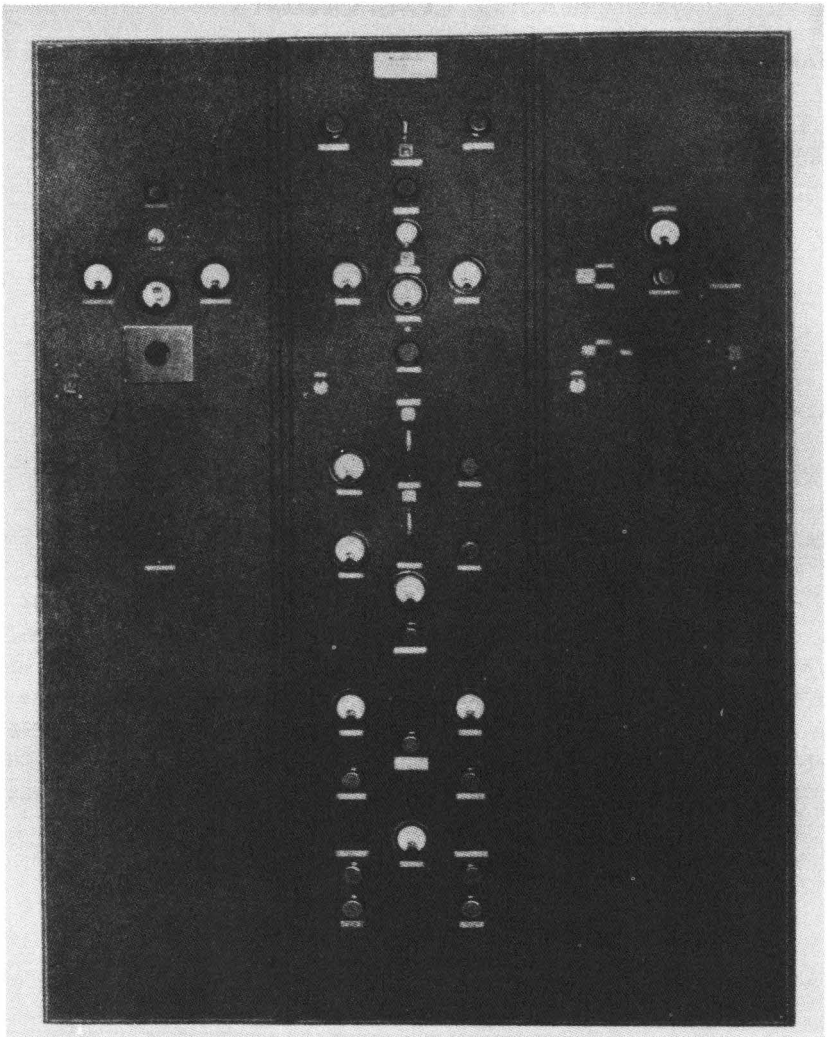
POWER OUTPUT: Normal operation: 40 kw.
Without power amplifier: 2 kw.

POWER REQUIREMENTS: 95 kw, 230 v, 60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TEC measures 84 x 216 x 56 inches, net weight 23,992 pounds. Packed for domestic shipment: total weight 36,119 pounds, total volume 2,258 cu ft. Shipped in 52 packages.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TEF RADIO TRANSMITTING EQUIPMENT



TEF

Radio Transmitting Equipment TEF is a medium-power, h-f, short wave, long distance, multichannel, radiotelephone equipment for use in transoceanic communication. It provides two telephone channels in a twin-channel single-sideband system, and (alternatively) one conventional double-sideband channel. The change from single to double sideband, or selection of six preset crystal-controlled frequencies, may be made at the equipment, or from a remote control panel.

This transmitter is used with a balanced open wire line of 400-800 ohms, or a balanced concentric line of 200 ohms.

It has a monitor circuit which is used to measure the degree of distortion at the output.

AN/FRT-TYPE	INSTRUCTION LITERATURE: NavShips 95356
TEF :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter Western Electric Co D-156000	89 x 60-3/4 x 27	2,400

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Transoceanic.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-3, -4, -9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -22; AN/PRC-7, -8, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -5, -8, -13, -16, -20; AN/VRQ-1; BC-312, -342, -348, -779, -794, -1004; MBS; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4.5- 22.9.
(4 - 20 by modification).

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw, cw.

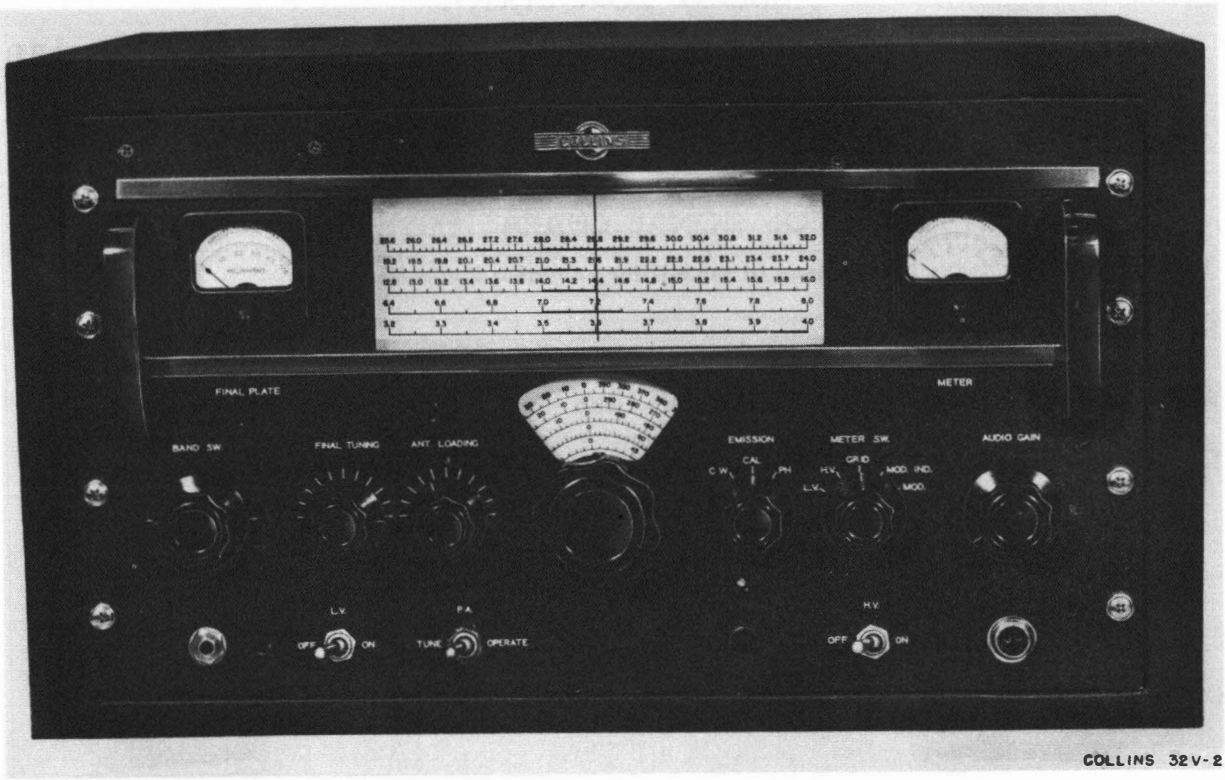
POWER OUTPUT: 500 w.

POWER REQUIREMENTS: 5 kw, 220-235 v, 50/60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TEF measures 89 x 60-3/4 x 27 inches, net weight 2,400 pounds.

STATUS: Commercial CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 7 Jun 52	AN/FRT-TYPE COMMERCIAL TYPE NUMBER: COLLINS 32V-2 RADIO TRANSMITTER



COLLINS 32V-2

Radio Transmitter Collins 32V-2 is a small, compact unit, with built-in power supply, speech amplifier, and modulator. It is capable of c-w and voice operations on all amateur bands between 3.5 and 29.7 mc by bandswitching, and by continuous tuning through its accurate permeability-tuned oscillator.

This equipment is normally used in the military Amateur Radio System (MARS) for point-to-point communication.

The output network of this transmitter will operate satisfactorily with antenna transmission line impedances of 26 to 200 ohms.

The modulator output has provisions for supplying 60 w of audio to an external 500 ohm resistive load (when it is not required for modulation of the transmitter).

Terminals are provided to turn the transmitter ON/OFF from a remote point.

It has provisions for push to talk, break-in keying when used with its companion Radio Receiver Collins 75A-2, and automatic antenna change-over relay control.

Requires 500 w of 115-v, ac.

AN/FRT-TYPE	INSTRUCTION LITERATURE: Collins Instruction Manual
COLLINS 32V-2 : COMMERCIAL TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTER	USING SERVICE : Air Force
	DATE OF THIS SHEET : 7 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Issued to stations of the Military Amateur Radio System.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Medium to long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-3, -4, -9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -22; AN/PRC-7, -8, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -5, -8, -13, -16, -20; AN/VRQ-1; BC-312, -342, -348, -779, -794, -1004; MBS; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCQ; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 3.2 - 32.0 in 5 bands.

Band 1: 3.2 - 4.0
Band 2: 6.4 - 8.0
Band 3: 12.8 - 16.0
Band 4: 19.2 - 24.0
Band 5: 25.6 - 32.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice or cw.

POWER OUTPUT: Voice: 90 w
Cw: 113 w.

POWER REQUIREMENTS: 500 w (maximum), 115 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

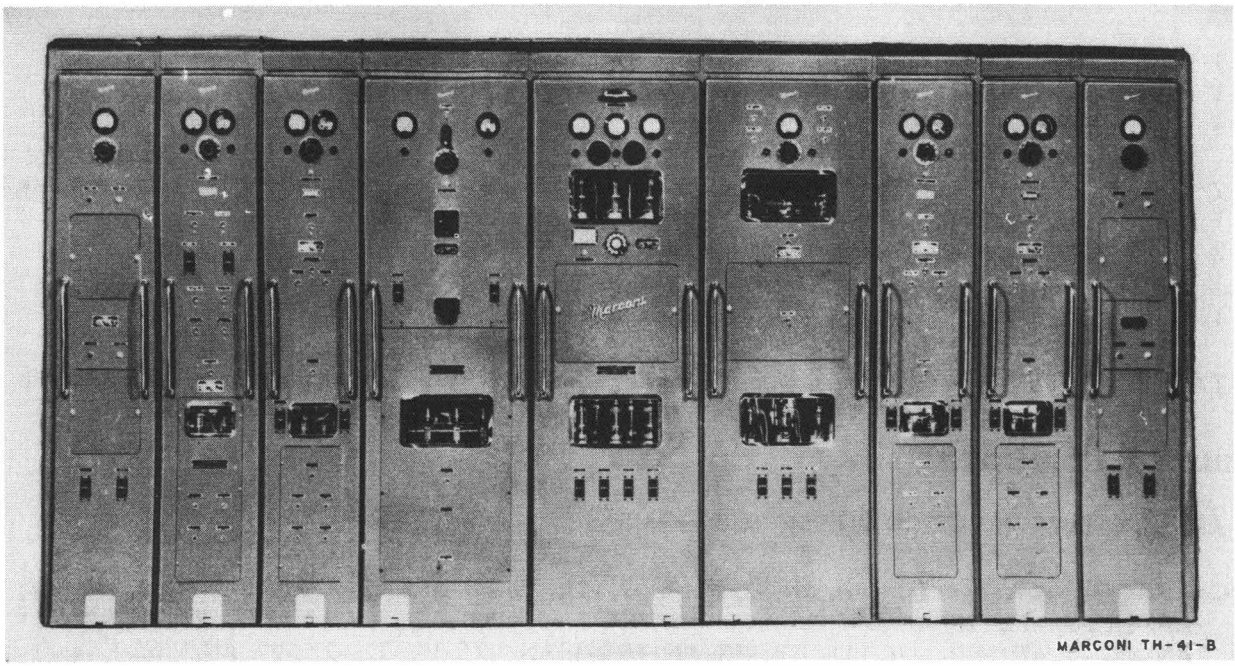
Radio Set Collins 32V-2 measures 21-1/8 x 12-1/4 x 13-13/16 inches, net weight 110 pounds, volume 3.57 cu ft. Packed for domestic and export shipment: total weight 128 pounds, total volume 4 cu ft. Shipped in one package both domestic and export.

STATUS: Commercial
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 11 Jun 52

AN/FRT- TYPE

COMMERCIAL TYPE NUMBER: MARCONI TH-41-B

RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment Marconi TH-41-B, is a high-power, c-w, frequency-shift keying, and a-m radio transmitter for ground fixed station use in long distance point-to-point communication.

This equipment consists of nine large cabinets containing the following: rectifier power supply, modulator, l-f/r-f unit, four h-f/r-f units, two r-f exciter units,and one separate remote control unit. Each r-f unit can be operated on up to 10 preset channels (either crystal or master oscillator frequency controlled), except the l-f unit which uses master oscillator frequency control only.

Three transmitting units cen be operated simultaneously on either c-w or frequency-shift keying; when voice is used, only two units may be operated at a time (one unit modulated and the other on c-w or frequency-shift keying).

Complete remote control of all functions is provided by Master Remote Control Unit 141-398 from distances up to 5 miles over four pairs of standard telephone lines.

The transmitter r-f units are designed to operate into a 600-ohm balanced or unbalanced transmission line; however, an L type matching section is included in the h-f units to provide an impedance matching range of 70 to 2,500 ohms. The l-f unit uses a T type matching section for 72-ohm coaxial Radio Frequency Cable RG-34/U, or equivalent.

Power requirements are: 40.5 kva, 208/220 v, 3 phase, 60 cyc, ac.

AN/FRT-TYPE

MARCONI TH-41-B :COMMERCIAL TYPE NUMBER
RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: Marconi Instruction Book
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET: 11 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	148-000 Rectifier Unit	24-1/2 x 81-1/16 x 37-1/2	2,780
1	148-002 Modulator Unit	24-1/2 x 81-1/16 x 37-1/2	1,320
5	148-006A,B,C,D, and 112973 Radio Transmitter	14-1/2 x 81-1/16 x 37-1/2	440 each
2	148-008 Dual Exciter Unit	14-1/2 x 81-1/16 x 37-1/2	Not Available
1	141-398 Master Remote Control Unit	19 x 8-3/4 x 10	" "
2	141-581 Auxiliary Remote Control Unit	19 x 5-1/4 x 3-1/8	" "
1	117-807 Remote Speech Amplifier Unit	19 x 5-1/4 x 12-9/16	" "
1	129-837 R.F. Tuner	Not Available	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued on any organizational level as project material in accordance with AFR 100-17.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Medium to long (depending on frequency).

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ARR-15; AN/FRR-3, -4, -7, -12, -28; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -10, -19, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRQ-1; AN/URR-10, -12, -22, -23; AN/VRC-1, -4, -22; AN/VRR-2; BC-312, -314, -342, -344, -348, -453, -779, -787, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/SR, -96/SR, -129/U, -137/GR, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBK; RBL; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDF; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -614, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.08 - 0.2, single channel master oscillator frequency control. 2 - 28, 10 preset channels per unit. Either master oscillator or crystal control may be used.

TYPE OF SIGNAL: Cw, frequency-shift keying telegraphy, voice.

POWER OUTPUT: 5,000 w.

POWER REQUIREMENTS: 40 kva (approx) 40,000 w, 208/220 v, 3 phase, 60 cyc ac. 250 w, 115 v, 1 phase, 60 cyc ac, when master oscillator oven heaters are used. 150 w, 115/220 v, 1 phase, 60 cyc ac, when remote control equipment is used.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment Marconi TH-41-B measures 126 x 81-1/16 x 37-1/2 inches, net weight 10,000 pounds, volume 135.7 cu ft. Packed for domestic or export shipment: total weight 11,000 pounds, total volume 150 cu ft, 3.75 ship tons. Shipped in 15 packages.

STATUS: Commercial CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 28 Apr 52	**AN/FRT-TYPE** COMMERCIAL TYPE NO: WESTINGHOUSE TYPE MW RADIO TRANSMITTER



Radio Transmitter Westinghouse Type MW is a fixed station a-m (voice, cw, mcw), tone, OFF-ON or frequency-shift-keying, teletypewriter equipment. A normal installation consists of one rectifier unit, one modulator unit, plus various radio frequency units to provide for the requirements of the installation.

All r-f units require external excitation of 2 w in the range 2.0 to 4.5 mc from a 70-ohm impedance coaxial cable. Provides for connecting up to six r-f and/or modulator units to a single rectifier unit at a time; only four such units can be operated simultaneously from one rectifier unit.

The modulator unit provides effective voice transmission with 20-db adjustable volume compression, bypassed at will, and a peak limiter which prevents overmodulation on either the positive of the negative peaks of the modulation envelope.

Remote control facilities are available for keying, voice, and power ON-OFF control.

The r-f output circuit is designed for operation into a 700-ohm balanced transmission line, and contains harmonic suppression equipment. Normally a doublet (Antenna Kit MX-741/FR), or a rhombic (Antenna Kit MX-742/FR) array are used.

Power input required is approximately 24 kw of 210 to 250 v, ac.

AN/FRT-TYPE	INSTRUCTION LITERATURE: Instruction Book CF-1624
WESTINGHOUSE TYPE MW : COMMERCIAL TYPE NO.	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTER	USING SERVICE: Air Force
	DATE OF THIS SHEET: 28 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Rectifier Unit Style 1474264 Cabinet	24-1/4 x 76 x 24	650
1	R-F Unit Style 1474265 Cabinet	12-1/4 x 76 x 24	350
1	Modulator Unit Style 1474266 Cabinet	12-1/4 x 76 x 24	340
1	Power Supply Style 1353091	19 x 14 x 9-1/4	57
1	Crystal Oscillator Style 1353089	8-1/4 x 5 x 6-5/16	3
1	Plate Transformer T-112	31 x 22 x 47-1/2	1,100

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Issued as project material in accordance with AFR 100-17.

INSTALLATION: Fixed, ground.

APPROXIMATE RANGE (IN MILES): Medium to long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -12, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -787, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -137/GR, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBK; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; TBO; TBX; TBY; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: For six coil ranges 2 - 30 in 6 bands.

Band 1: 2 - 3.46	Band 3: 6.0 - 10.4	Band 5: 18 - 24
Band 2: 3.46 - 6.0	Band 4: 10.4 - 18.	Band 6: 24 - 30.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, tone, OFF-ON, and frequency shift keying teletype.

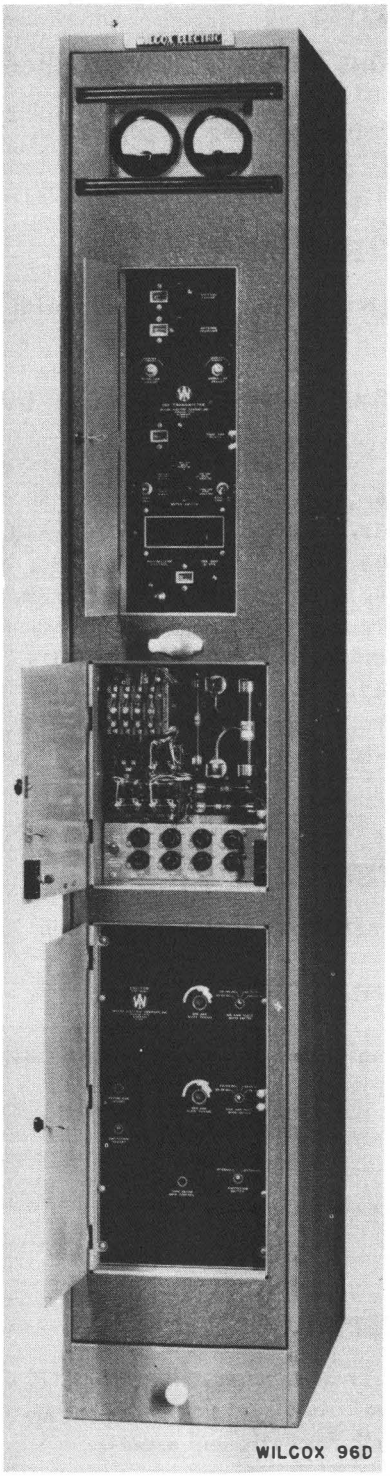
POWER OUTPUT: Am: 2.5 kw, at all frequencies up to 24 mc; from 24 - 30 mc output is slightly less.
Cw: 3 kw.

POWER REQUIREMENTS: 24 kw, 210-250 v, 50/60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitter Westinghouse Type MW measures 79 x 76 x 24 inches, net weight 2,500 pounds, volume 63 cu ft. Packed for domestic shipment: total weight 2,700 pounds, total volume 67 cu ft. Packed for export shipment: total weight 3,000 pounds, total volume 70 cu ft. Shipped in 5 packages both domestic and export.

STATUS: Commercial CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 19 May 52	**AN/FRT-TYPE** COMMERCIAL TYPE NUMBER: WILCOX 96D RADIO TRANSMITTER



Radio Transmitter Wilcox Model 96D is a 2.5 kw equipment intended primarily for ground-to-air, and long distance point-to-point a-m, radiotelephone and radioteletype communication in the frequency range 2 to 26 mc. Power supply or modulator are not included. Normally used with Modulator MD-69/FRT (Wilcox 50 H Modulator) and Rectifier Power Unit PP-219/FRT (Wilcox 36D Rectifier) which are separately supplied.

This equipment is designed for simultaneous radioteletype and voice, or tone operation when an external frequency-shift exciter is used, and the transmitter has been properly adjusted for this type of operation.

Remote control up to nine miles is possible by means of Remote Control Console CY-161/FRC.

The output impedance is 500 to 600 ohm for either balanced or unbalanced antenna transmission lines. It is normally used with a doublet (Antenna Kit MX-741/FR) or a rhombic, transmitting (Antenna Kit MX-742/FR).

This transmitter is a commercial model similar to Radio Transmitter T-158C/FRT and has tone keying facilities and an extended frequency range; features not included in the T-158/FRT.

AN/FRT-TYPE	INSTRUCTION LITERATURE: Wilcox Instruction Manual CLASSIFICATION OF EQUIPMENT: Unclassified
WILCOX 96D :COMMERCIAL TYPE NUMBER	USING SERVICE : Air Force
RADIO TRANSMITTER	DATE OF THIS SHEET : 19 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Issued on any organizational level as project material in accordance with AFR 100-17.

INSTALLATION: Ground, fixed. **APPROXIMATE RANGE (IN MILES):** Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 - 26 single channel preset crystal-controlled.

TYPE MODULATION: Am (when used with external modulator).

TYPE OF SIGNAL: Cw, voice, icw and frequency shift keying teletypewriter (when used with external equipment).

POWER OUTPUT: 2.5 kw.

POWER REQUIREMENTS: Rectifier Power Unit PP-219/FRT (Wilcox 36D Rectifier).

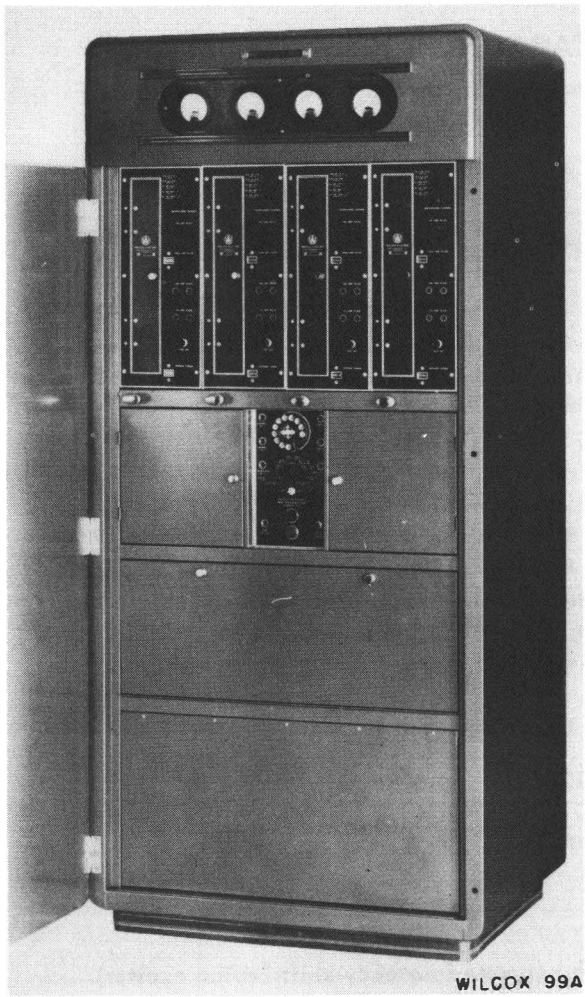
PHYSICAL CHARACTERISTICS

Radio Transmitter Wilcox 96D measures 12-5/16 x 73-1/2 x 27-3/4 inches, net weight 320 pounds, volume 15 cu ft. Packed for either domestic or export shipment: total weight 1,225 pounds, total volume 125.7 cu ft, 3.14 ship tons. Shipped in 3 packages both domestic and export.

STATUS: Commercial
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 26 May 52

AN/FRT-TYPE

COMMERCIAL TYPE NUMBER: WILCOX 99A
RADIO TRANSMITTER


WILCOX 99A

Radio Transmitter Wilcox Model 99A is a (nominal) 400 w, a-m, (mcw or cw) crystal-controlled equipment with a system of plug-in r-f units permitting operation in the frequency ranges 0.125 to 0.525 mc; 2 to 20 mc; and 108 to 132 mc. Simultaneous voice, radioteletype or tone may be transmitted in the 2- to 20-mc range when frequency-shift-keying Exciter Unit 0-5/FRT, or equal is used. Remote keying is accomplished with a 1,000-cyc tone (or remote d-c keying). Remote channel selection is possible by using a 60-cyc dialing pulse.

The transmitter proper houses a maximum of four r-f units, power supplies, two independent modulators, and necessary channel-selection equipment.

For radiotelephone operation Amplifier BC-730 and ancillary equipment is used for volume limiting of the audio-input signal.

An adjustable antenna-matching network permits feeding balanced transmission lines of from 20 to 600 ohm impedance.

The two separate modulators and the system of plug-in r-f units permit simultaneous operation of two channels on either frequency shift keying or voice, or any combination of these.

This transmitter has a power-reduction feature which enables operation at either 400 w or 40 w output. At present only h-f, radio frequency units are being procured by the Air Force.

Power requirements are 4,780 w of 220-v, ac, (for normal operation at 400 w output).

AN/FRT-TYPE

WILCOX 99A : COMMERCIAL TYPE NUMBER
RADIO TRANSMITTER

INSTRUCTION LITERATURE: Mfr. Instruction Manual
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET: 26 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter 99A	32-3/4 x 72 x 27-7/16	1,450
1 to 4	*RF Units (each)	21 x 17-3/4 x 7	54
1	Coil Cabinet	40 x 40 x 7	225

* 1 to 4 RF Units may be installed at one time.
Any two may be operated simultaneously.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Issued on any organizational level as project material in accordance with ARF 100-17.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): LF - medium; HF - long; VHF - line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -2, -3, -5, -8, -9, -18, -21, -25, -28, -36; AN/ARR-15; AN/CRC-2; AN/FRC-10; AN/FRR-3, -4, -7, -12, -23; AN/GRC-9, -13, -26, -30; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -17, -19, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -21, -22, -23, -25; AN/VRC-1, -4; AN/VRR-2; BC-312, -314, -342, -344, -348, -453, -639, -779, -794, -1004; MAW; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320.FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBL; RBM; RBO; RBP; RBQ; RBS; RC-103; RC-256; RCF; RCG; RCH; RCK; RCO; RDE; RDF; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -522, -536, -542, -543, -574, -575, -585, -593, -614, -624, -641, -644, -694, -704, -794; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX: National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES:

LF	0.125	-	0.525
HF	2.0	-	20.0
VHF	108.0	-	132.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw or radioteletype (with separate frequency-shift-keying exciter).

POWER OUTPUT: 400 w (nominal), or 40 w (depending upon position of power selector switch).

POWER REQUIREMENTS: 4,780 w, 200 - 230 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitter Wilcox 99A measures 72 x 72-3/4 x 28 inches, net weight 1,450 pounds, volume 37.5 cu ft. Packed for either domestic or export shipment: total weight 2,504 pounds, total volume 116.5 cu ft, 2.9 ship tons. Shipped in 11 packages both domestic and export.

STATUS: Std

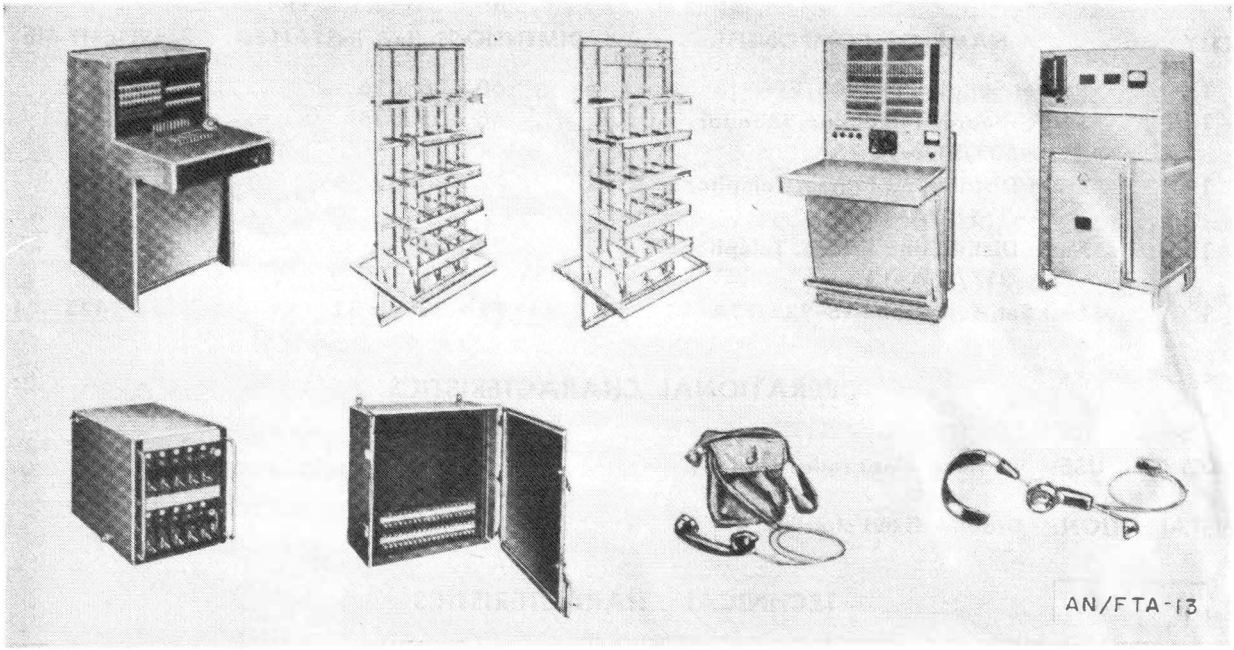
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF

DATE OF THIS SHEET: 4 June 1956

AN/FTA–13

TELEPHONE CENTRAL OFFICE GROUP, MANUAL



Manual Telephone Central Office Group AN/FTA–13 is a tactical fixed station equipment designed to furnish communication facilities for radar stations and related radar networks. It provides for selective intercommunication among operating personnel at the radar station, and for communication by telephone line or by control of a radio link, with radio shelters and information centers, other radar stations, or other outside points, including aircraft in flight.

This equipment provides protected terminations for 300 outside wire lines that may be used for telephone or radio circuit connections. Through cross-connections in the distributing frames, these lines may be selectively connected to one or more suitable components in the group.

Included in the system are 10 trunk circuits for connections to other switchboards and 20 switching relays for making connections to any of 20 radio circuits.

A primary power source of 115-volt, 60-cycle, ac power is required to charge the batteries and to provide ringing power. This equipment is designed to operate on 24-volt dc battery voltage.

AN/FTA–13

TELEPHONE CENTRAL OFFICE GROUP, MANUAL

INSTRUCTION LITERATURE: 31W1–2FTA13-Series

USING SERVICE: USAF

DATE OF THIS SHEET: 4 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Power Supply PP–1408/FTA–13	60 x 30 x 26	249
1	Switchboard, Telephone, Manual SB–503/FTA–13	46 x 25 x 35	315
1	Main Distributing Frame, Telephone TA–315/FTA–13	72 x 30¼ x 30½	260
1	Main Distributing Frame, Telephone TA–317/FTA–13	72 x 30¼ x 30½	260
1	Test Set, Telephone TS–925/FTA–13	72 x 33½ x 32	425

OPERATIONAL CHARACTERISTICS

TACTICAL USE: At fixed plant radar stations.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

Manually Operated Equipment:

Number of Cord Circuits: 10
Number of Line Circuits: 30
Number of Trunk Circuits: 10

PERCENT TRUNKING:

POWER REQUIREMENTS: 690 w, 115 v, 6 amp, 60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

AN/FTC-9

TELEPHONE CENTRAL OFFICE SET

NO PHOTOGRAPH AVAILABLE

Telephone Central Office Set AN/FTC-9 is fixed plant, unattended, single-party, bridged ringing, 48-volt, common battery-type private automatic (dial) equipment that provides the necessary switching facilities required for a 50-line dial telephone system. It is used in larger structures and limited areas to provide connections for local intercommunication only. It is capable of expansion to accommodate up to 100 lines.

This equipment consists essentially of commercial (Automatic Electric Company Type 50 PAX) dial switching equipment and includes installation materials, batteries, and battery-charging accessories.

It is mounted in a double-sided frame, inclosed in a steel cabinet with hinged collapsible doors.

N/FTC-9

TELEPHONE CENTRAL OFFICE SET

INSTRUCTION LITERATURE: TM 11-2100; TM 11-2105; TB SIG 322-102

USING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Steel cabinet with equipment	72 x 24 x 84⅛	Floor loading requirements: 125 psf

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: Unattended.

AUTOMATIC EQUIPMENT:

NUMBER OF LINE CIRCUITS: 50 (ult 100).

POWER REQUIREMENTS: 115 v, 6 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET					
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

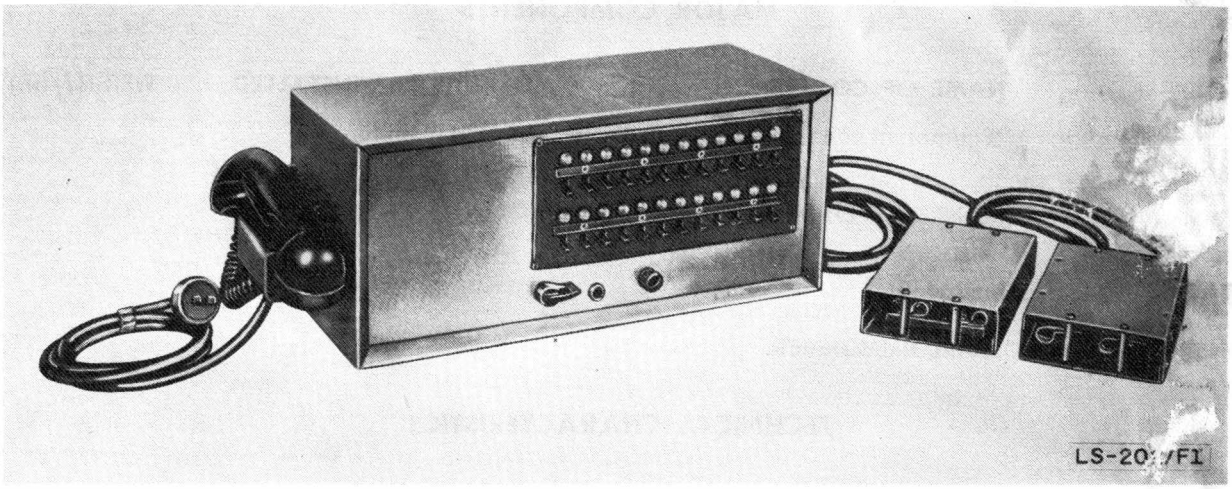
PREPARING SERVICE: USA

DATE OF THIS SHEET: 28 June 1956

AN/FTC–TYPE

LS–200/FI, LS–201/FI, LS–202/FI

INTERCOMMUNICATION STATION



Intercommunication Stations LS–200/FI, LS–201/FI, and LS–202/FI (illustrated above) are used for voice communication over wire lines between offices of a large headquarters. These sets are arranged to provide privacy of communication (by means of speaker-microphone or handset) between stations when all master stations in the system are equipped with this feature. Annunciators are used as a means of signaling between points.

These equipments are similar in construction and operation but differ in size, internal wiring, and station capacity. The LS–200/FI controls six stations. The LS–201/FI is similar to Intercommunicating Station LS–125B/FI; each can handle 12 master or remote stations. The LS–202/FI is similar to Intercommunicating Station LS–127B/FI; each can be used to control a maximum of 24 stations.

AN/FTC–TYPE

LS–200/FI, LS–201/FI, LS–202/FI

INTERCOMMUNICATION STATION

INSTRUCTION LITERATURE: TM 11–5089

USING SERVICE: USA

DATE OF THIS SHEET: 28 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT, (lb)
	(Equipment consists of a single major operating component.)		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: The LS–200/FI controls 6 stations; the LS–201/FI, 12 stations; and the LS–202/FI, 24 stations.

TYPE CONTROLS: Station selector; talk-listen; volume control; on-off; handsets.

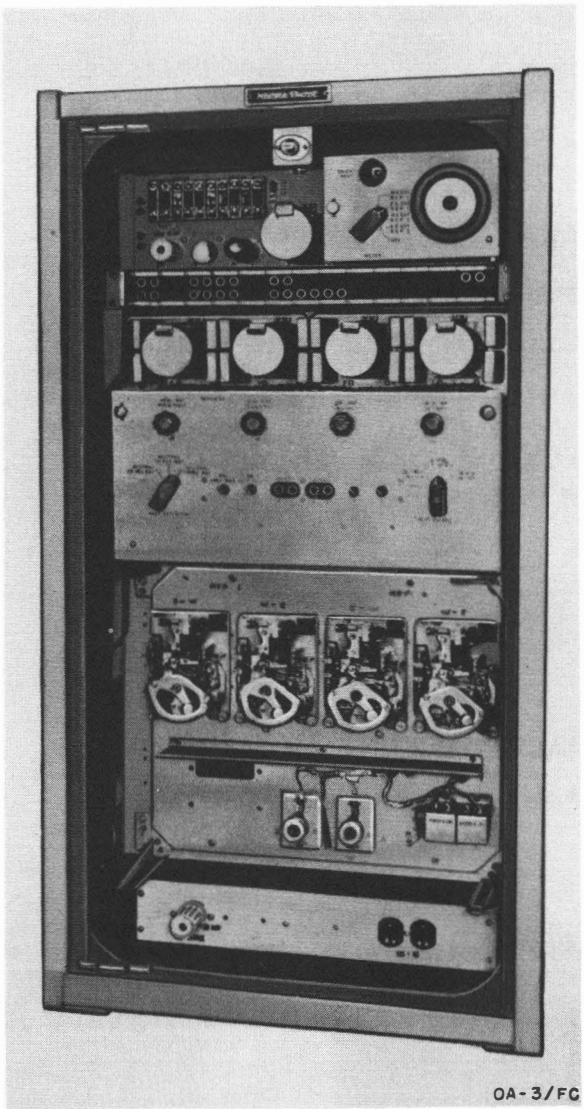
POWER OUTPUT: 2 w.

POWER REQUIREMENTS: 30 w, 105 to 125 v, 60 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
LS–200/FI	13¾ x 7⅛ x 7½				
LS–201/FI	13¾ x 7⅛ x 7½				
LS–202/FI	21¾ x 7½ x 8½				
DOMESTIC PACK:					
LS–200/FI		22	1.6		1
LS–201/FI		24	1.6		1
LS–202/FI		28	1.9		1
EXPORT PACK:					
LS–200/FI		27	2.0		1
LS–201/FI		29	2.0		1
LS–202/FI		33	2.3		1

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 18 Feb 52	**AN/FTC-TYPE** AN/COMP TYPE NUMBER: OA-3/FC REGENERATIVE REPEATER



OA-3/FC

Regenerative Repeater OA-3/FC is an intermediate d-c, neutral only, repeater equipment used at points between two Telegraph Repeaters OA-6/FC in facilities serving army and higher headquarters.

This equipment consists of two panel-mounted d-c telegraph regenerative repeaters housed in a single floor-type cabinet. It re-forms, re-times, and re-transmits teletypewriter signals and enables operation in tandem of several line sections thus effectively increasing the over-all length (or operating distance) of a telegraph line circuit.

When operated in conjunction with carrier equipment it is used only with the d-c portion of the circuit.

Operates from 115 to 130-v oc.

AN/FTC-TYPE	INSTRUCTION LITERATURE: TM 11-2032
	CLASSIFICATION OF EQUIPMENT: Unclassified
OA-3/FC :AN/COMP TYPE NUMBER	USING SERVICE : Army
REGENERATIVE REPEATER	DATE OF THIS SHEET: 18 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army, communications zone and zone of interior.

INSTALLATION: Fixed plant.

CAN COMMUNICATE WITH: Repeater, terminal, carrier, central office and station equipment and apparatus operating in the same facility.

TECHNICAL CHARACTERISTICS

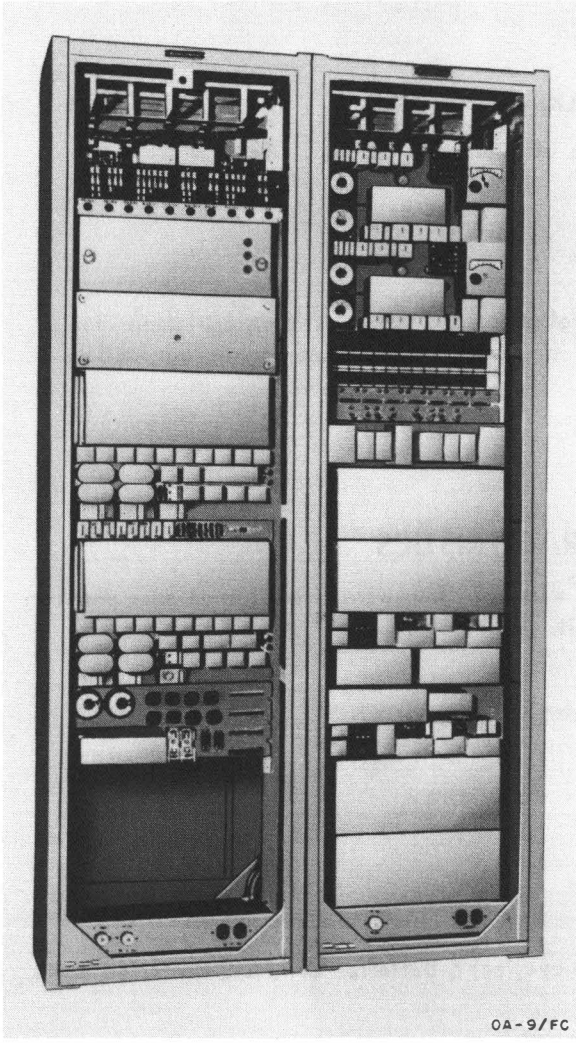
NUMBER AND TYPE OF FACILITIES: Neutral half-duplex, neutral full-duplex, and neutral three-way.

POWER REQUIREMENTS: 150 w, 115 v, 50/60 cyc, 180 va ac, 130 v dc.

PHYSICAL CHARACTERISTICS

Regenerative Repeater OA-3/FC weighs 315 pounds net, volume 10 cu ft. Packed for export shipment: total weight 510 pounds, total volume 23.8 cu ft, 0.6 ship ton.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 18 Feb 52	**AN/FTC-TYPE** AN/COMP TYPE NUMBER: OA-9/FC CARRIER REPEATER



OA-9/FC

Carrier Repeater OA-9/FC is a fixed plant wire communication equipment used to superimpose three additional telephone channels on an existing physical open wire (or side-circuit) v-f telephone circuit. It is used at army and equivalent headquarters.

This equipment consists of apparatus mounted on standard rack panels in two, floor type steel cabinets which are installed side by side.

It is installed in carrier terminals and can be used in systems to extend the operating range.

Operates on 105 - 125-v, 50/60 cyc, ac, or from batteries.

AN/FTC-TYPE	INSTRUCTION LITERATURE: TM 11-2023
OA-9/FC :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
CARRIER REPEATER	USING SERVICE : Army
	DATE OF THIS SHEET: 18 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Carrier repeater bay	22-1/4 x 17 x 84	1,080
1	Repeater line and power bay	22-1/4 x 17 x 84	1,080

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army, communication zone and zone of interior.

INSTALLATION: Fixed ground.

CAN COMMUNICATE WITH: Repeater, terminal, central-office and related station equipment and subsidiary apparatus which operates in the same connecting facility in fixed plant systems.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Open wire pair, four-wire circuit, open wire phantom circuit.

FACILITIES AFFORDED: Four v-f circuits, v-f telegraph system circuit.

FREQUENCY: 6 to 29 kc.

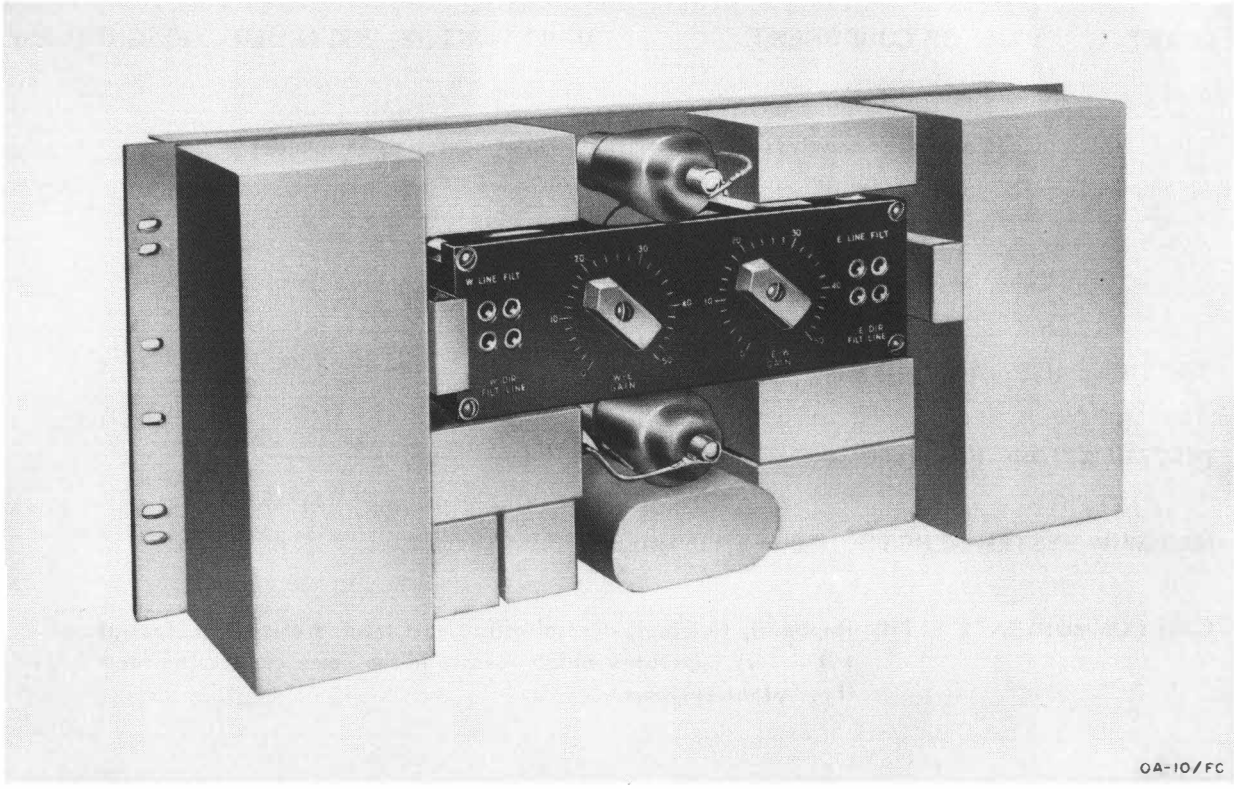
TYPE OF MODULATION: Am.

POWER REQUIREMENTS: 200 w, 105 - 125 v, 50/60 cyc, ac; 6 Batteries BA-34, 2 Batteries BA-8, and 10 Batteries BA-27.

PHYSICAL CHARACTERISTICS

Carrier Repeater OA-9/FC weighs 1,080 pounds net, volume 42 cu ft. Packed for domestic shipment: total weight 1,570 pounds, total volume 75 cu ft, 1.9 ship tons. Shipped in 3 packages.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 15 Feb 52	**AN/FTC-TYPE** AN/COMP TYPE NUMBER: OA-10/FC CARRIER REPEATER



Carrier Repeater OA-10/FC is a single-channel, type H telephone and telegraph carrier-repeater equipment used to extend the range, in both directions, of transmission in a system operated in conjunction with Carrier Terminal OA-13/FC, or equivalent terminal apparatus. It is used at fixed station installations at army and higher headquarters.

This equipment consists of two amplifiers, two sets of line and filter jacks, and associated telephone apparatus mounted on a single rack panel which can be mounted in Cabinet CY-413/FC or CY-414/FC. It can be used in conjunction with radio relay and related terminal equipment in a system and can be installed at intermediate points of a section or facility.

It operates on 105-125 v ac.

AN/FTC-TYPE

OA-10/FC :AN/COMP TYPE NUMBER
CARRIER REPEATER

INSTRUCTION LITERATURE: TM 11-2025
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 15 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army and higher headquarters.

INSTALLATION: Fixed station.

MAXIMUM SYSTEM LENGTH: 150 to 1,135 miles.

CAN COMMUNICATE WITH: Repeater, terminal, central office, and related station equipment and subsidiary apparatus which operate in the same connecting facility in fixed plant systems.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Two-wire.

FACILITIES AFFORDED: Composited or simplexed circuits.

FREQUENCY: 4 to 10 kc.

POWER REQUIREMENTS: 105 — 125 v, 50/60 cyc ac, 15 w.

PHYSICAL CHARACTERISTICS

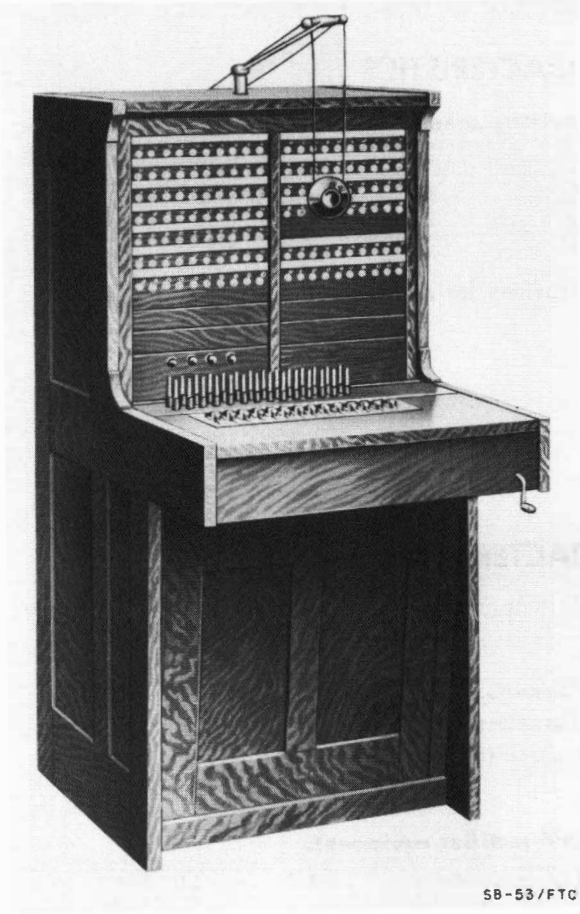
Carrier Repeater OA-10/FC weighs 35 pounds net, volume 0.49 cu ft. Packed for export shipment: total weight 70 pounds, total volume 4.5 cu ft, 0.11 ship ton.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 7 Feb 52

AN/FTC-TYPE

AN/COMP TYPE NUMBER: SB-53/FTC

TELEPHONE SWITCHBOARD



SB-53/FTC

Telephone Switchboard SB-53/FTC is a single-position, manual, cord type, universal switchboard used for switching local common battery and magneto lines, and for connecting other switchboards. It is used in fixed plant applications.

This equipment consists of a desk type switchboard which uses a separate ringing generator (not furnished with this equipment) and is provided with a built-in magneto ringing generator for emergency use.

Fifteen simultaneous talking connections can be operated through this switchboard.

Operates on a 24-v storage battery and 24-v power source when used as a branch exchange, or a small main exchange, and is interchangeable with the Stromberg-Carlson universal type 106, or the Kellogg 100-line universal switchboard.

AN/FTC-TYPE	INSTRUCTION LITERATURE: TM 11-2087
	CLASSIFICATION OF EQUIPMENT: Unclassified
SB-53/FTC :AN/COMP TYPE NUMBER	USING SERVICE : Army
TELEPHONE SWITCHBOARD	DATE OF THIS SHEET: 7 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in fixed plant and in communications zone.

INSTALLATION: Ground, fixed station.

CAN COMMUNICATE WITH: Used in fixed plant applications for switching, local common battery, and magneto lines.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

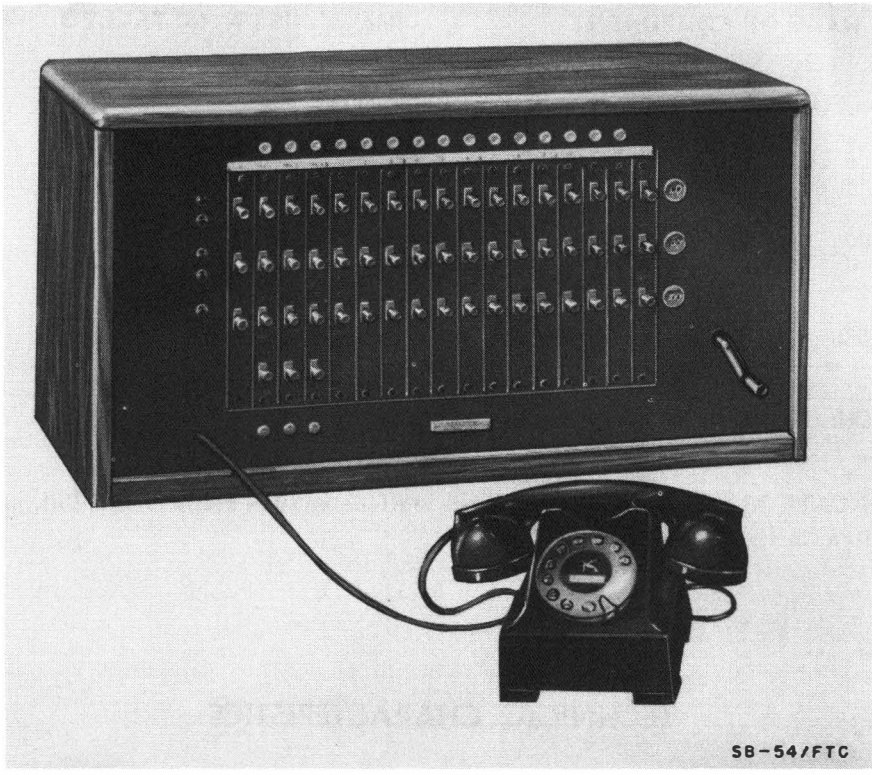
NUMBER AND TYPE OF CIRCUITS: Number of Cord Circuits: 15
Number of Line Circuits: 100
Number of Trunk Circuits: 10.

POWER REQUIREMENTS: 24 v, from storage battery and rectifier equipment.

PHYSICAL CHARACTERISTICS

Telephone Switchboard SB-53/FTC measures 59 x 24 x 38-3/8 inches, net weight 550 pounds, volume 31.5 cu ft, 0.6 ship ton. Packed for export shipment: total volume 66 cu ft, 1.55 ship tons. Shipped in 1 package both domestic and export.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 7 Feb 52	**AN/FTC- TYPE** AN/COMP TYPE NUMBER: SB-54/FTC TELEPHONE SWITCHBOARD



Switchboard SB-54/FTC is a cordless, manual, single-position, common-battery telephone switchboard used for establishing connections between a small number of local stations, or between such stations and a dial, or manual, central office. It is used in fixed-station applications in the communications zone of a theater of operations.

This equipment consists essentially of a commercial (Kellogg 1007-cc, special, or equal) telephone switchboard of the desk-mounted or turret type, in which interconnections are made by means of a key in each line or circuit. The maximum capacity for interconnection of lines is five telephone circuits or trunks.

It is designed for 48 v d-c ringing from central office and has additional keys for night service. Includes provision for alternate magneto ringing. Requires an operator's desk set which is not furnished with this equipment.

AN/FTC - TYPE	INSTRUCTION LITERATURE: None
SB-54/FTC : AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELEPHONE SWITCHBOARD	USING SERVICE : Army
	DATE OF THIS SHEET : 7 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in communications zone fixed stations.

INSTALLATION: Ground; fixed plant.

CAN COMMUNICATE WITH: Used between local stations or such stations and dial, or manual, central office, in fixed station applications.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1

NUMBER AND TYPE OF CIRCUITS:

Number of connecting circuits: 5.
Number of line circuits: 12.
Number of trunk circuits: 5.

POWER REQUIREMENTS: Battery (operates on a common battery basis).

PHYSICAL CHARACTERISTICS

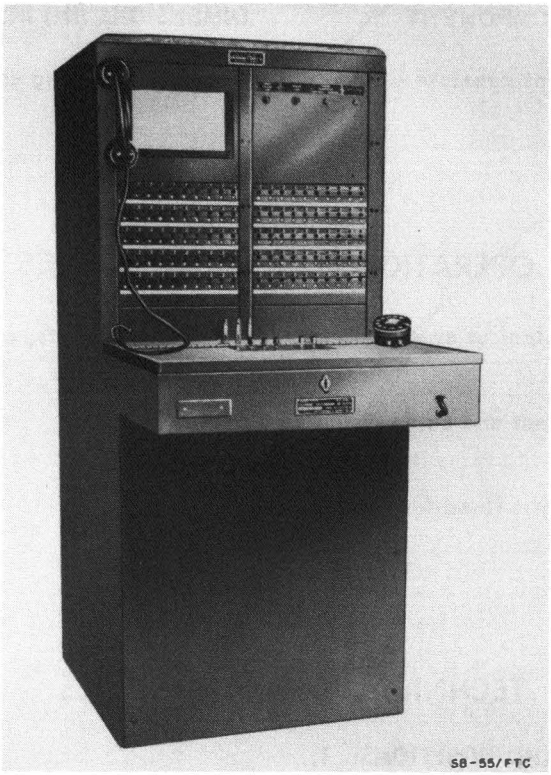
Telephone Switchboard SB-54/FTC weighs 110 pounds net, volume 24 cu ft. Packed for export shipment: total weight 200 pounds, total volume 40 cu ft. Shipped in 1 package both domestic and export.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 25 Jan 52

AN/FTC-TYPE

AN/COMP TYPE NUMBER: SB-55/FTC

TELEPHONE SWITCHBOARD



Telephone Switchboard SB-55/FTC is a manual, single-position, two-panel, switchboard used for fire-reporting and similar applications at posts, camps, and stations.

This equipment consists of a single floor-type desk unit having a 100-line capacity, three cord circuits, and two trunks operated by two 3-position keys. The trunks may be manual- or dial-operated.

It includes a handset for the operator and requires 48 v of battery and 20-cyc ringing current.

Switchboards SB-55/FTC and SB-55A/FTC are interchangeable but differ in line circuit, and are otherwise similar.

AN/FTC-TYPE	INSTRUCTION LITERATURE: TM 11-2084
SB-55/FTC :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELEPHONE SWITCHBOARD	USING SERVICE : Army
	DATE OF THIS SHEET : 25 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant at army and higher headquarters; posts, camps, and stations.

INSTALLATION: Permanent and semipermanent comcenters.

CAN COMMUNICATE WITH: Used for fire reporting systems.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

Number of cord circuits: 3.
Number of line circuits: 100.
Number of trunk circuits. 2.

POWER REQUIREMENTS: 48 v.

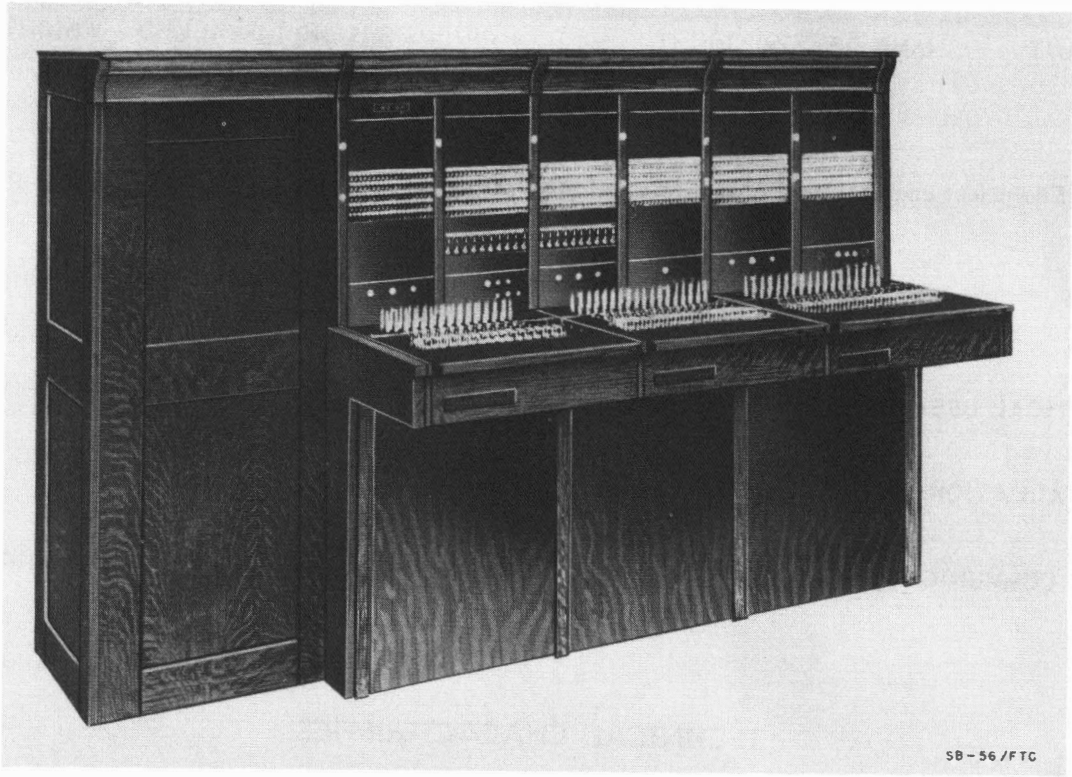
PHYSICAL CHARACTERISTICS

Telephone Switchboard SB-55/FTC measures 38-1/4x24x57-1/4 inches, net weight 400 pounds, volume 30 cu ft. Packed for export shipment: total weight 600 pounds, total volume 40 cu ft, 2 ship tons. Shipped in 1 package both domestic and export.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 7 Feb 52

AN/FTC-TYPE

AN/COMP TYPE NUMBER: SB-56/FTC
SWITCHBOARD



Switchboard SB-56/FTC is a three-position, multiple, common-battery, manual telephone switchboard with a maximum capacity of 800 lines and is used in the communications zone of a theater of operations.

This equipment consists of large commercial (Kellogg #6-800) central office type switchboard, each position of which has 2 jack panel sections. Each position has 15 universal cord circuits, dial circuit, and an operator's circuit. The switchboard is wired and equipped for 20 magneto trunks, and 20 two-way trunks to automatic exchanges, lamp supervision, and miscellaneous circuits.

A relay rack is mounted at the rear of the switchboard, and the main distributing frame, and operator's telephone equipment is not supplied as part of this equipment.

Battery supply of 24 v and ringing current source are furnished separately.

AN/FTC-TYPE	INSTRUCTION LITERATURE: None
SB-56/FTC :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
SWITCHBOARD	USING SERVICE : Army
	DATE OF THIS SHEET: 7 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in communications zone.

INSTALLATION: Fixed plant. Permanent installation.

CAN COMMUNICATE WITH: Provides three-position, multiple common-battery, manual facilities in fixed plant central office switchboard.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 3 expandable. MAXIMUM: As required.

MINIMUM: 3.

NUMBER AND TYPE OF CIRCUITS:

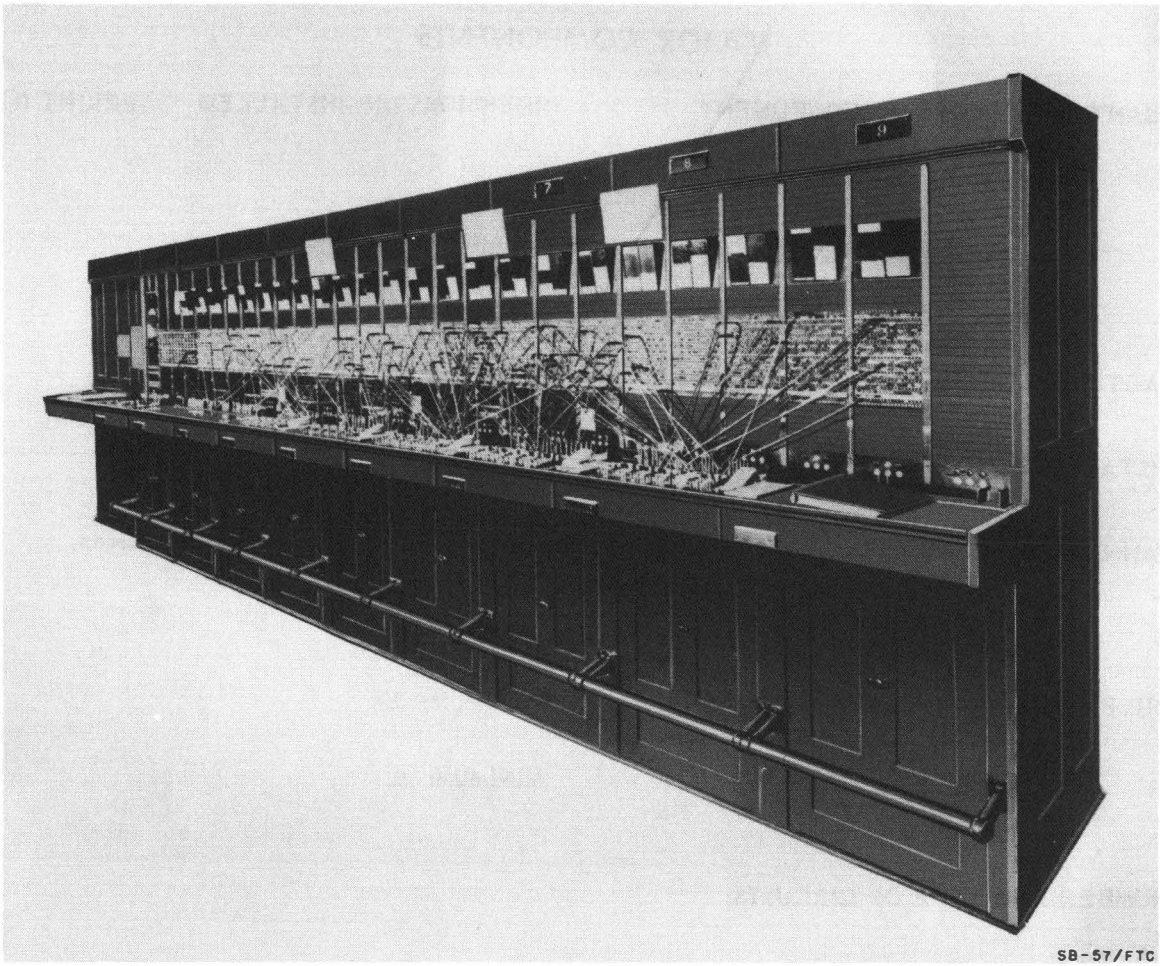
Number of cord circuits: 45 (3 dial).
Number of line circuits: 800.
Number of trunk circuits: 40.

POWER REQUIREMENTS: Kellogg #6-800.

PHYSICAL CHARACTERISTICS

Switchboard SB-56/FTC packed for export shipment: total weight 7,500 pounds, total volume 480 cu ft, 12 ship tons.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 7 Feb 52	**AN/FTC-TYPE** AN/COMP TYPE NUMBER: SB-57/FTC SWITCHBOARD



SB-57/FTC

Switchboard SB-57/FTC is a large, manual, multiple, common battery switchboard used for local service, with trunking facilities to other offices in permanent installations.

This equipment consists of commercial (Kellogg #2800; Stromberg Carlson #18, or Western Electric Company #11) telephone central office switchboard equipment. This equipment has apparatus for common battery line, common battery and dial trunk, night alarm, and related circuits, and has provision for re-ring signals.

Requires 24 v of battery, and 20-cyc ringing power.

AN/FTC-TYPE	
SB-57/FTC	:AN/COMP TYPE NUMBER
SWITCHBOARD	

INSTRUCTION LITERATURE: None
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 7 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Large fixed plant installations, in multioffice areas.

INSTALLATION: Ground; fixed station.

CAN COMMUNICATE WITH: Used for local service, with trunking facilities to other offices, in fixed plant installations.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: MAXIMUM: 20.

MINIMUM: 5.

NUMBER AND TYPE OF CIRCUITS:

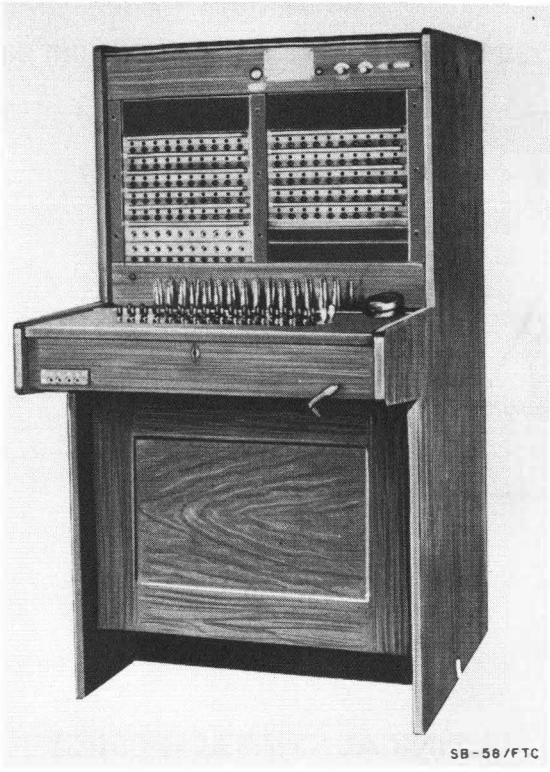
Number of cord circuits:	17 per position.
Number of line circuits:	Maximum capacity 2800 lines, multiplied on a 7-panel basis.
Outgoing trunks:	40.
Manual or dial trunks:	20.
Magneto trunks:	20.
Information trunks:	10.
Interposition trunks:	10.

POWER REQUIREMENTS: 24-v battery and 20-cyc ringing power.

PHYSICAL CHARACTERISTICS

Switchboard SB-57/FTC weighs 6,000 pounds net. Packed for export shipment: total weight 7,800 pounds, total volume 430 cu ft, 10.75 ship tons.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 7 Feb 52	**AN/FTC-TYPE** AN/COMP TYPE NUMBER: SB-58/FTC SWITCHBOARD



Switchboard SB-58/FTC is a single-position, nonmultiple, telephone switching equipment for interconnection and communication between common-battery and magneto lines, and operation to manual or dial central offices in the communications zone of a theater of operations.

This equipment consists essentially of a commercial (Western Electric Co No. G1) floor-type unit having two jack-panels, and is equipped for 80 common-battery and 20 local-battery magneto station lines. It also has 15 universal cord circuits, and 10 trunks, a dial and cord for operation with automatic central offices, line and supervisory lamps for local lines. Has provision for one-lamp signaling on trunks.

Includes an operator's telephone set and has a hand generator for emergency ringing. Does not include battery supply or 20-cyc ringing equipment.

Operates from 24-v battery (common-battery lines).

AN/FTC-TYPE

SB-58/FTC : AN/COMP TYPE NUMBER
SWITCHBOARD

INSTRUCTION LITERATURE: None
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 7 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in communications zone.

INSTALLATION: Fixed station applications.

CAN COMMUNICATE WITH: Used between common-battery and magneto lines, and in operation to manual or dial central offices.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

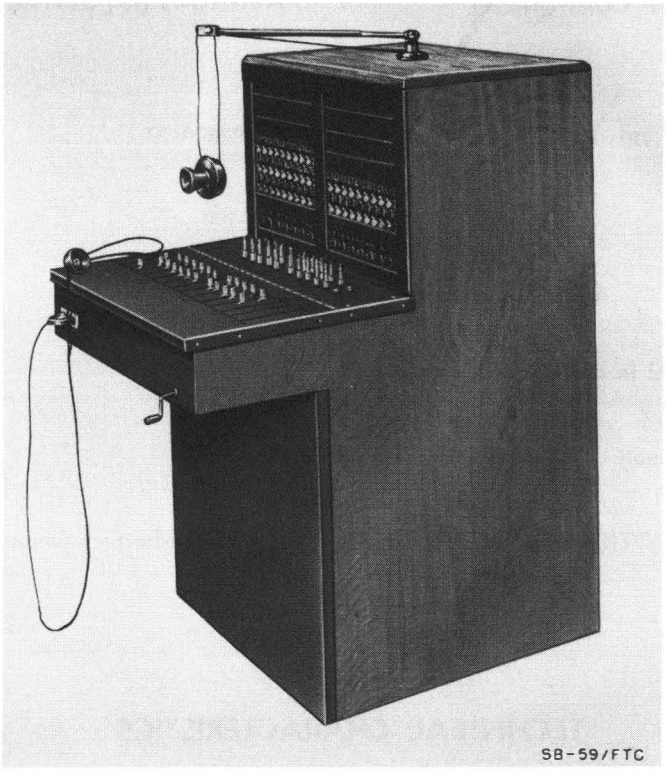
Number of cord circuits: 15; 1 dial.
Number of line circuits: 100.
Number of trunk circuits: 10.

POWER REQUIREMENTS: 24 v dc.

PHYSICAL CHARACTERISTICS

Switchboard SB-58/FTC weighs 487 pounds net, volume 24 cu ft. Packed for export shipment: total weight 700 pounds, total volume 40 cu ft, 1 ship ton. Shipped in 1 package.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 7 Feb 52	**AN/FTC-TYPE** AN/COMP TYPE NUMBER: SB-59/FTC SWITCHBOARD



Switchboard SB-59/FTC is a manual, single position, common-battery, telephone switchboard used for trunking to other common-battery, manual or dial central offices and is not intended for "through" switching applications. It is used in systems serving the communications zone of a theater of operations.

This equipment consists essentially of a commercial (Kellogg K100) telephone switchboard. It is a floor-mounted desk-type unit wired for a dial circuit, but does not include a dial. It is equipped with 100 line circuits, 15 cord circuits, and 10 trunks, includes an operator's telephone set and a hand generator for emergency ringing.

Operates from 24-v battery.

AN/FTC-TYPE	INSTRUCTION LITERATURE: None
	CLASSIFICATION OF EQUIPMENT: Unclassified
SB-59/FTC :AN/COMP TYPE NUMBER	USING SERVICE : Army
SWITCHBOARD	DATE OF THIS SHEET: 7 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in communications zone.

INSTALLATION: Permanent or semipermanent installations

CAN COMMUNICATE WITH: Used for trunking to other common-battery (manual or dial) central offices.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

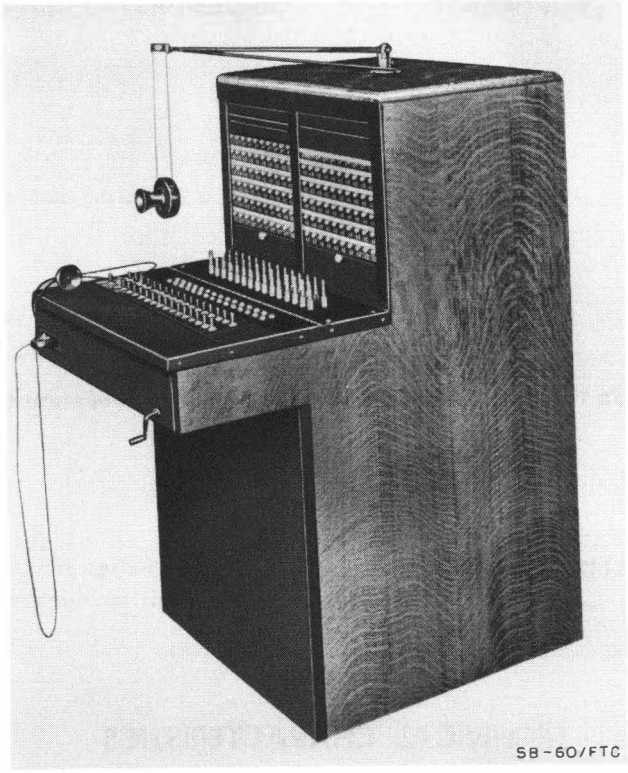
Number of cord circuits: 15.
Number of line circuits: 100.
Number of trunk circuits: 10.

POWER REQUIREMENTS: 24 v dc.

PHYSICAL CHARACTERISTICS

Switchboard SB-59/FTC weighs 390 pounds net, volume 24 cu ft. Packed for export shipment: total weight 581 pounds, total volume 35 cu ft. Shipped in 1 package.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 7 Feb 52	**AN/FTC-TYPE** AN/COMP TYPE NUMBER: SB-60/FTC SWITCHBOARD



Switchboard SB-60/FTC is a single-position, nonmultiple, manual, magneto telephone switchboard used in situations where line resistance, leakage, or other unfavorable plant conditions prohibit satisfactory common battery operation in the communications zone of a theater of operations.

This equipment is a floor-mounted, desk-type unit having combination drops (not shown in the illustration) and jacks arranged on 2 jack panels, and providing for 100 magneto lines, and 15 cords furnished and equipped for double drop supervision. There is also a 5-bar hand generator wired to a key for switching to power generator. An operator's telephone is included.

Local battery supply is furnished separately.

AN/FTC-TYPE	INSTRUCTION LITERATURE: None
SB-60/FTC :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
SWITCHBOARD	USING SERVICE : Army
	DATE OF THIS SHEET: 7 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in the communications zone of a theater of operations.

INSTALLATION: Fixed plant.

CAN COMMUNICATE WITH: Used for magneto operation of facilities where line resistance, leakage, or other unfavorable conditions prohibit common battery operation.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1

NUMBER AND TYPE OF CIRCUITS:

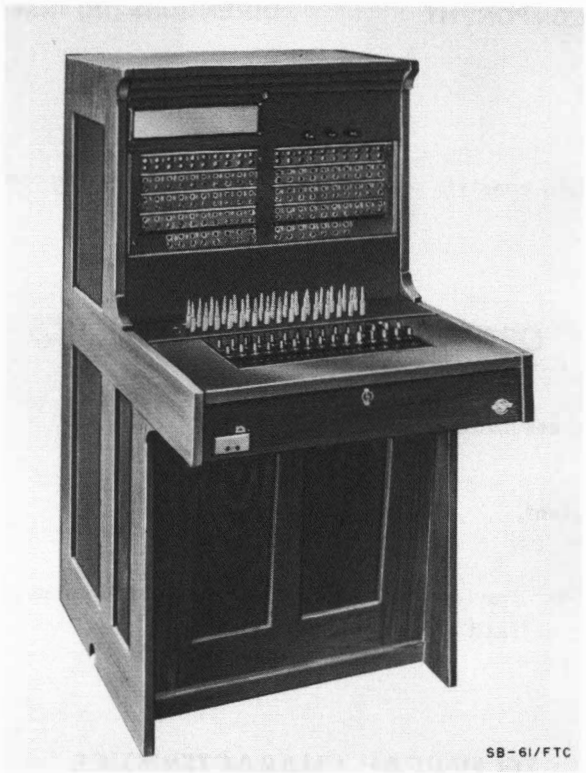
Number of cord circuits: 15.
Number of line circuits: 100.
Number of trunk circuits: 0.

POWER REQUIREMENTS: 3 v dc from dry cells.

PHYSICAL CHARACTERISTICS

Switchboard SB-60/FTC weighs 390 pounds net, volume 24 cu ft. Packed for export shipment: total weight 575 pounds, total volume 40 cu ft, 1 ship ton. Shipped in 1 package.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 7 Feb 52	**AN/FTC-TYPE** AN/COMP TYPE NUMBER: SB-61/FTC SWITCHBOARD



Switchboard SB-61/FTC is a single-position, nonmultiple, common-battery telephone switchboard having switchboard circuits for manual or dial operation to connecting central offices in the communications zone of a theater of operations.

This equipment consists of a floor-type commercial (Western Electric Co No. 550 SC) switchboard having 2 jack-panels and is wired for 80 common-battery lines, 15 cord circuits, and 15 trunks. It has lamp signaling and supervision. A hand generator is furnished for emergency ringing. It is equipped with a dial which is not shown in the illustration. Includes an operator's telephone set.

Battery supply 24 v dc and ringing current must be furnished separately.

AN/FTC-TYPE	INSTRUCTION LITERATURE: None
	CLASSIFICATION OF EQUIPMENT: Unclassified
SB-61/FTC (AN/COMP TYPE NUMBER)	USING SERVICE : Army
SWITCHBOARD	DATE OF THIS SHEET : 7 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in communications zone.

INSTALLATION: Fixed plant.

CAN COMMUNICATE WITH: Provides manual or dial operation to connecting central offices in fixed plant systems.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

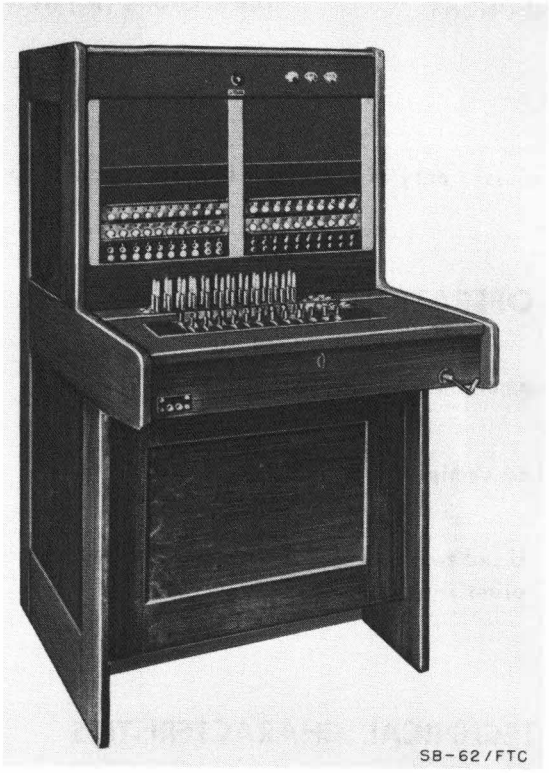
Number of cord circuits: 15.
Number of line circuits: 80.
Number of trunk circuits: 15.

POWER REQUIREMENTS: 24 v dc

PHYSICAL CHARACTERISTICS

Switchboard SB-61/FTC weighs 500 pounds net, volume 24 cu ft. Packed for export shipment: total weight 700 pounds, total volume 40 cu ft, 1 ship ton. Shipped in 1 package.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 7 Feb 52	AN/FTC-TYPE AN/COMP TYPE NUMBER: SB-62/FTC SWITCHBOARD



Switchboard SB-62/FTC is a common-battery, nonmultiple, manual, telephone switchboard having circuits for dial (not shown in this illustration) or manual operation to connecting central offices and is used in fixed plant applications in the communications zone of a theater of operations.

This equipment consists essentially of a commercial (Western Electric Co No. 551A) telephone switchboard and is a floor-mounted desk-type unit. It is a single-position equipment with 2 panels and is wired for 40 common-battery lines, 10 cord circuits, and 10 trunks. It has lamp signaling and supervision, a hand generator for emergency signaling, an operator's telephone set, and includes 20 line-circuits equipped with relays for use on circuits of high line-resistance characteristics.

Does not include battery supply or ringing equipment and operates on 24-v battery.

AN/FTC-TYPE	INSTRUCTION LITERATURE: None
	CLASSIFICATION OF EQUIPMENT: Unclassified
SB-62/FTC :AN/COMP TYPE NUMBER	USING SERVICE : Army
SWITCHBOARD	DATE OF THIS SHEET : 7 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	(WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in communications zone.

INSTALLATION: Permanent or semipermanent communications centers.

CAN COMMUNICATE WITH: Used to provide dial or manual operation to central offices in fixed plant installations.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

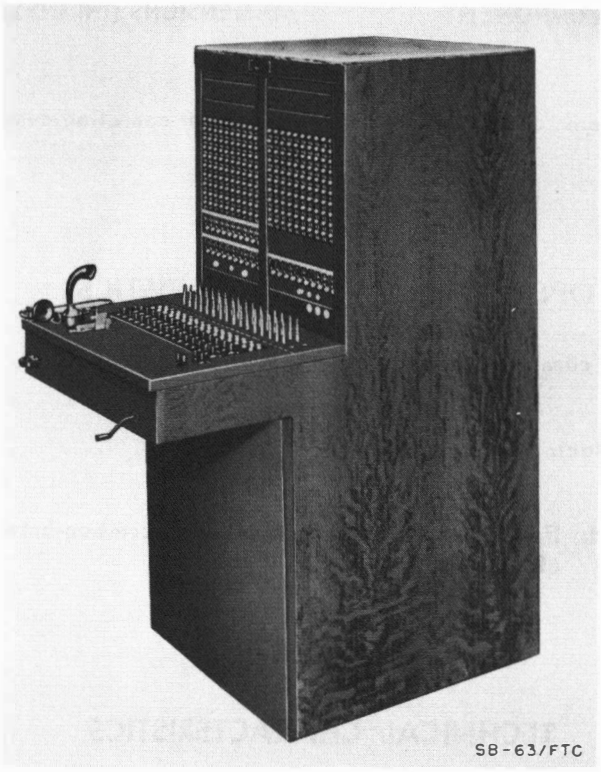
Number of cord circuits: 10.
Number of line circuits: 40.
Number of trunk circuits: 10.

POWER REQUIREMENTS: 24 v dc.

PHYSICAL CHARACTERISTICS

Switchboard SB-62/FTC weighs 500 pounds net, volume 24 cu ft. Packed for export shipment: total weight 700 pounds, total volume 40 cu ft, 1 ship ton. Shipped in 1 package.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 7 Feb 52	**AN/FTC-TYPE** AN/COMP TYPE NUMBER: SB-63/FTC SWITCHBOARD



Switchboard SB-63/FTC is a single-position, manual, common-battery telephone switchboard used in the communications zone of a theater of operations.

This equipment consists essentially of a commercial (Kellogg Jr. Masterbuilt) telephone switchboard of the floor-mounted, desk-type having 2 jack-panels and equipped for 40 common-battery, 40-universal, 20 magneto (with lamp signaling) lines, and wired for 20 (equipped for 10) dial trunks. It has 15 universal cord circuits, a hand generator for emergency ringing and an operator's telephone set.

Uses 24-v battery, but ringing current and battery must be furnished separately.

AN/FTC-TYPE	INSTRUCTION LITERATURE: None
SB-63/FTC : AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
SWITCHBOARD	USING SERVICE : Army
	DATE OF THIS SHEET: 7 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in communications zone.

INSTALLATION: Fixed plant.

CAN COMMUNICATE WITH: Provides single-position, manual, common-battery facilities in fixed plant installations.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

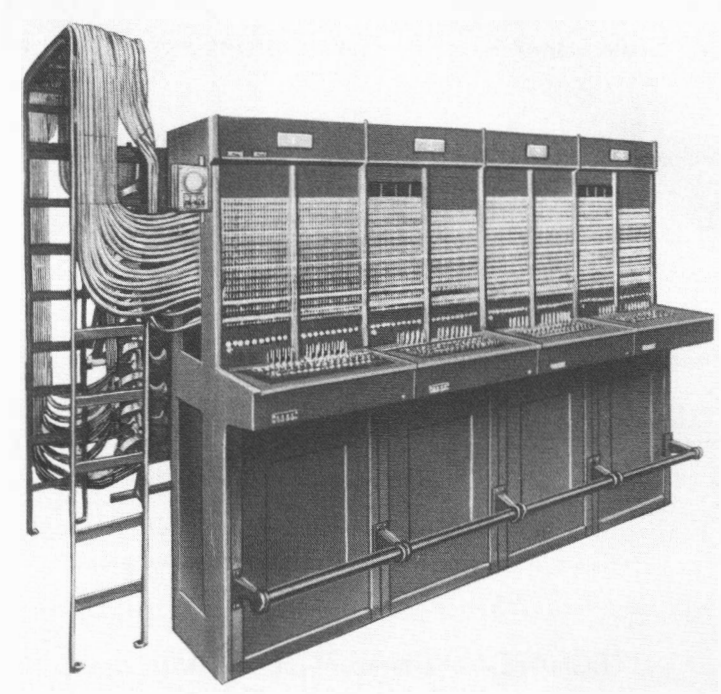
Number of cord circuits: 15.
Number of line circuits: 40 common battery; 40 universal, 20 magneto.
Number of trunk circuits: 10.

POWER REQUIREMENTS: 24 v dc.

PHYSICAL CHARACTERISTICS

Switchboard SB-63/FTC weighs 500 pounds net, volume 24 cu ft. Packed for export shipment: total weight 700 pounds, total volume 40 cu ft, 1 ship ton. Shipped in 1 package.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 7 Feb 52	**AN/FTC-TYPE** AN/COMP TYPE NUMBER: SB-64/FTC SWITCHBOARD



SB-64/FTC

Switchboard SB-64/FTC is a medium-size central-office type, multiposition, manual, 640-line (maximum capacity) switchboard equipment used in fixed plant applications.

This equipment consists essentially of a commercial (Western Electric Co No. 12 640-line) exchange switchboard which is a 4-position equipment constructed sectionally and having 2 jack panels per position, each position constituting a self-contained unit. It may be equipped with a total of 640 common battery and/or magneto lines with lamp signaling multiplied on a 2 -panel basis, and 120 2-way ring-down trunks; 15 universal cord circuits are wired per position (the normal equipment for each position is 13 cords) with lamp supervisory equipment on cord circuits.

It also is equipped with dial and dial cord, and ringing current is supplied by a separate power unit. It uses a main distributing frame supplied separately which is connected to this switchboard by cabling.

Operates on 48-v battery.

AN/FTC-TYPE	INSTRUCTION LITERATURE: None
SB-64/FTC : AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
SWITCHBOARD	USING SERVICE : Army
	DATE OF THIS SHEET : 7 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Permanent fixed plant applications.

INSTALLATION: Ground; fixed station.

CAN COMMUNICATE WITH: Provides multiposition manual central office facilities in fixed plant installations or in systems serving fixed plan.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 3 (expandable).

MAXIMUM: As required.

MINIMUM: 3.

NUMBER AND TYPE OF CIRCUITS: (Per position.)

Number of cord circuits: 15.
Number of line circuits: 640.
Number of trunk circuits: 120.

POWER REQUIREMENTS: 48 v dc.

PHYSICAL CHARACTERISTICS

Switchboard SB-64/FTC weighs 3,360 pounds net, volume 112 cu ft. Packed for export shipment: total weight 7,500 pounds, total volume 480 cu ft. 12 ship tons.

STATUS:

CLASSIFICATION OF EQUIPMENT: Unclassified

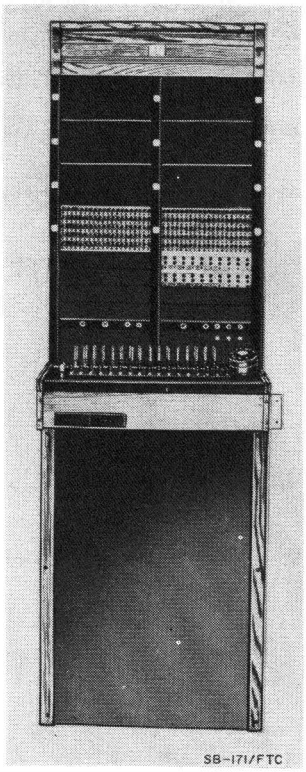
PREPARING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

AN/FTC–TYPE

SB–171/FTC

MANUAL TELEPHONE SWITCHBOARD SECTION



Manual Telephone Switchboard Section SB–171/FTC is the basic unit of local manual central office switching facilities that are capable of handling 1,200 to 1,600 lines.

This equipment consists essentially of one commercial (Kellogg No. 1600) switchboard section equipped with 15 universal cord circuits.

The 1,200-line office (Coded Facility –152, TB SIG 322–152) includes 16 operating positions or sections and two end positions composed of the SB–171/FTC. The 1,600-line office (Coded Facility –156, TB SIG 322–156) has 22 such operating positions and two end positions.

AN/FTC–TYPE

INSTRUCTION LITERATURE: TM 11–2061

USING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

SB–171/FTC

MANUAL TELEPHONE SWITCHBOARD SECTION

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Manual Telephone Switchboard Section SB–171/FTC	22⅝ x 37 1/16 x 72⅞	
	(For complete list of components, see appropriate supply manuals.)		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Fixed station.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: Dependent on size of central office in which instl.

NUMBER AND TYPE OF CIRCUITS:

Manually Operated Equipment:

Number of Cord Circuits: 15

Number of Line Circuits: } As reqd by instl

Number of Trunk Circuits: }

PERCENT TRUNKING:

POWER REQUIREMENTS:

PHYSICAL CHARACTERISTICS

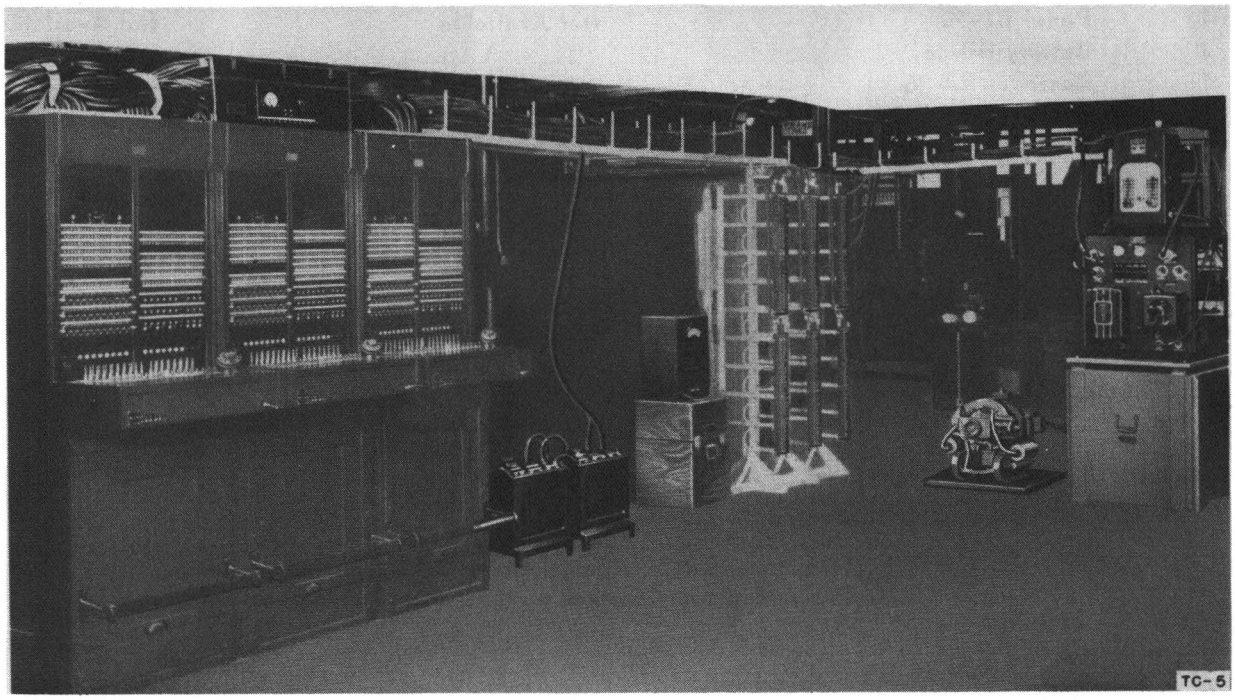
	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:		2,797	145.8	3.6	11

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 18 Feb 52

AN/FTC-TYPE

SERVICE TYPE NUMBER: TC-5

AUXILIARY TELEPHONE CENTRAL EQUIPMENT



Auxiliary Telephone Central Equipment TC-5 is a group of installation components used to enable movement of Telephone Central Office Set TC-2 or TC-10 with a minimum of interruption of service at army or equivalent headquarters.

This equipment consists essentially of a power unit, cable racks, and related items which are installed at the new location preliminary to movement of the telephone exchange, as in a "leap-frogging" operation. Switchboards, main frame, and wire chief's test cabinet are then obtained separately and added to these installed components to complete the move.

AN/FTC-TYPE

TC-5 :SERVICE TYPE NUMBER

AUXILIARY TELEPHONE CENTRAL EQUIPMENT

INSTRUCTION LITERATURE: None

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET: 18 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Panel BD-90	Not Available	Not Available
4	Battery BB-46	" "	" "
1	Rectifier RA-36	" "	" "
1	Power Unit PE-75	" "	" "
1	Cabinet BE-75	" "	" "
1	Cabinet BE-72	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army headquarters or equivalent.

INSTALLATION: Transportable.

CAN COMMUNICATE WITH: Telephone central office, repeater, and switching equipment and related station apparatus composing the system in which it is operated.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Voice.

TYPE COMMUNICATION CIRCUITS: Telephone.

CONTROLS: Panel BD-90, Cabinet BE-75, and Cabinet BE-72.

POWER REQUIREMENTS: 2.5 kva, 115 v, 60 cyc ac (Power Unit PE-75)
0.0 _ 65 v (Rectifier RA-36)
40 _ 56 v (storage battery)

PHYSICAL CHARACTERISTICS

Auxiliary Telephone Central Equipment TC-5 weighs 1,601 pounds net. Packed for export shipment: total weight 2,531 pounds, total volume 149 cu ft, 3.7 ship tons.

STATUS: S/Std (–44A, –44V); Std (–44C)

CLASSIFICATION OF EQUIPMENT: Unclassified

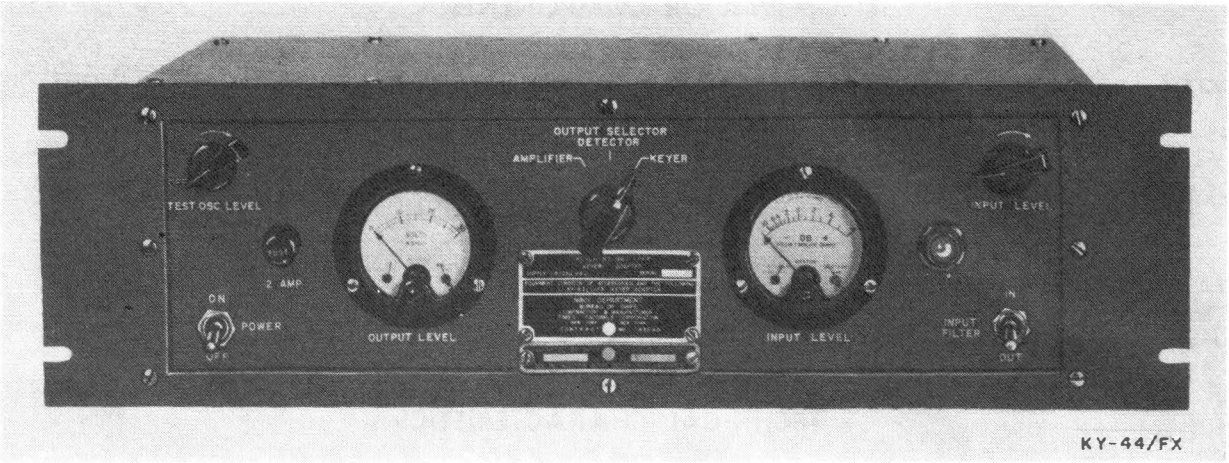
PREPARING SERVICE: USN

DATE OF THIS SHEET: 10 May 1956

AN/FXA–TYPE

KY–44( )/FX

KEYER ADAPTER



Keyer Adapter KY–44( )/FX is a frequency-shift adapter used to convert am, af facsimile signals into keying signals for frequency-shift exciter units in radio transmitter equipments.

This equipment is a self-contained unit and may be table-mounted or installed in a standard relay rack.

For alignment purposes, an internal test oscillator provides an unmodulated 1,800-cycle signal to check the unit for proper operation, and to determine the output levels required from the unit in its function as an amplifier, detector, or keyer when no incoming signal is available.

The KY–44A/FX, KY–44B/FX, and KY–44C/FX have essentially the same appearance, electrical rating, and performance. The major differences are changes in internal parts and cabinet design.

AN/FXA–TYPE

KY–44( )/FX

KEYER ADAPTER

INSTRUCTION LITERATURE: NAVSHIPS 91627

USING SERVICE: USN

DATE OF THIS SHEET: 10 May 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore installations.

INSTALLATION: Shipborne or ashore.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE: 0 to 800 cy (modulation); 100 to 7,000 cy (carrier, –44A, –44B); 1,500 to 7,000 cy (carrier, –44C).

TYPE MODULATION: Am (A4).

TYPE OF SIGNAL: Facsimile.

OUTPUT LEVEL: 20 v ±5% across 600 ohms.

POWER REQUIREMENTS: 40 w, 115/230 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	$6\frac{11}{32} \times 14\frac{59}{64} \times 18\frac{15}{16}$	26.5			
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 28 June 1956

AN/GCA–TYPE

TA–182/U

CONVERTER, TELEGRAPH-TELEPHONE SIGNAL

NO PHOTOGRAPH AVAILABLE

Telegraph-Telephone Signal Converter TA–182/U provides a means of signaling in circuits that will not pass 20-cycle ringing signals because of line or equipment characteristics.

In telegraph circuits, it converts 20-cycle ringing signals to 1,225 cycles for transmission, and reverses this operation upon reception. In telephone circuits, it converts 20-cycle ringing signals to 1,600 cycles for transmission, and reverses this operation upon reception.

AN/GCA–TYPE

INSTRUCTION LITERATURE: TM 11–2137

USING SERVICE: USA

DATE OF THIS SHEET: 28 June 1956

TA–182/U

CONVERTER, TELEGRAPH-TELEPHONE SIGNAL

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	(Equipment consists of a single major operating component.)		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, transportable.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Ringing.

FREQUENCY: 20/1,225 cy (tlg); 20/1,600 cy (tel).

TYPE COMMUNICATION CIRCUITS: Tlg and tel ringing.

CONTROLS: 2W–4W selector; TP–TG selector; HI–LO SENSITIVITY selector.

POWER REQUIREMENTS: 40 w, 115 v ±10%, 50/60 cy, 1 ph ac.

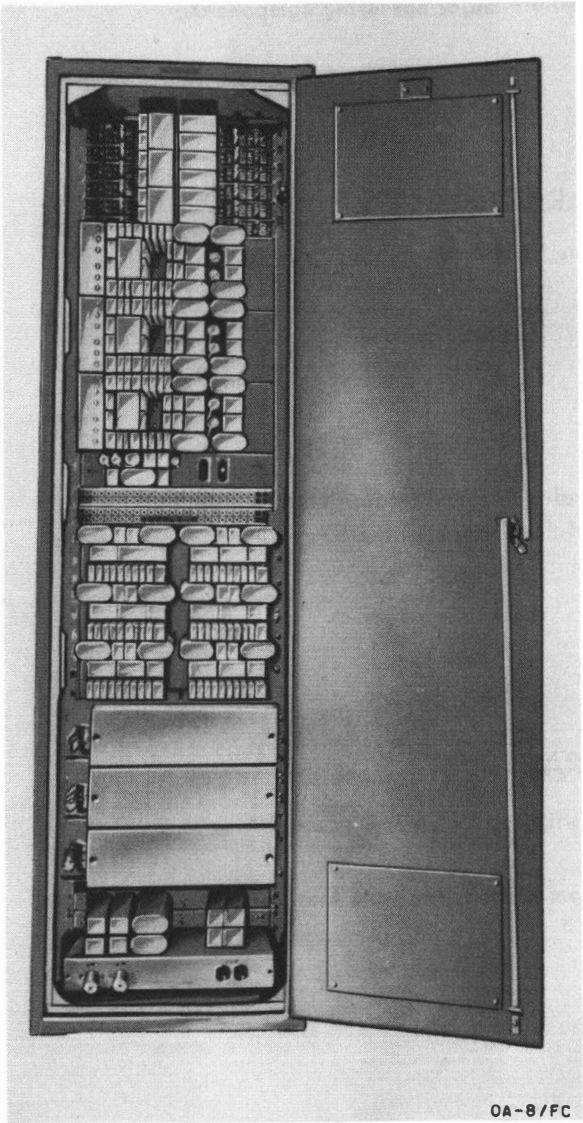
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	11 x 7½ x 10½	15	.50		
DOMESTIC PACK:		19	.78		1
EXPORT PACK:		24	1.02		

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 17 Feb 52

AN/GCC-TYPE

AN/COMP TYPE NUMBER: OA-8/FC
TELEPHONE REPEATER



OA-8/FC

Telephone Repeater OA-8/FC is a v-f equipment used to extend the range of communication of two- or four-wire v-f telephone systems on open wire or cable facilities. It is used as an intermediate or terminal repeater in long distance communication facilities serving army and equivalent headquarters.

This equipment consists of three v-f telephone amplifiers mounted in a single cabinet, and includes composite sets, adjustable equalizers for two- or four-wire circuits, and adjustable network for two-wire balancing. Each of the amplifiers has its own power supply, and bridging circuits to permit talking to other repeaters or to circuit terminals.

It has provision for monitoring, 2- or 4-wire termination, signaling, level indicating, and includes overload and safety devices.

It operates on 115-v ac.

AN/GCC-TYPE	INSTRUCTION LITERATURE: TM 11-2028
OA-8/FC :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELEPHONE REPEATER	USING SERVICE : Army
	DATE OF THIS SHEET: 17 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army, communications zone and zone of interior.

INSTALLATION: Fixed plant.

MAXIMUM SYSTEM LENGTH: 500 miles.

CAN COMMUNICATE WITH: Repeater, terminal, central-office and related station equipment and subsidiary apparatus, which operates in the same connecting facility, in fixed plant systems.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Two-wire, or four-wire lines.

FACILITIES AFFORDED: Two- and four-wire phantom circuit, two- and four-wire physical circuit.

FREQUENCY: 200 to 2,500 cps.

POWER REQUIREMENTS: 115 v, 50/60 cyc ac.

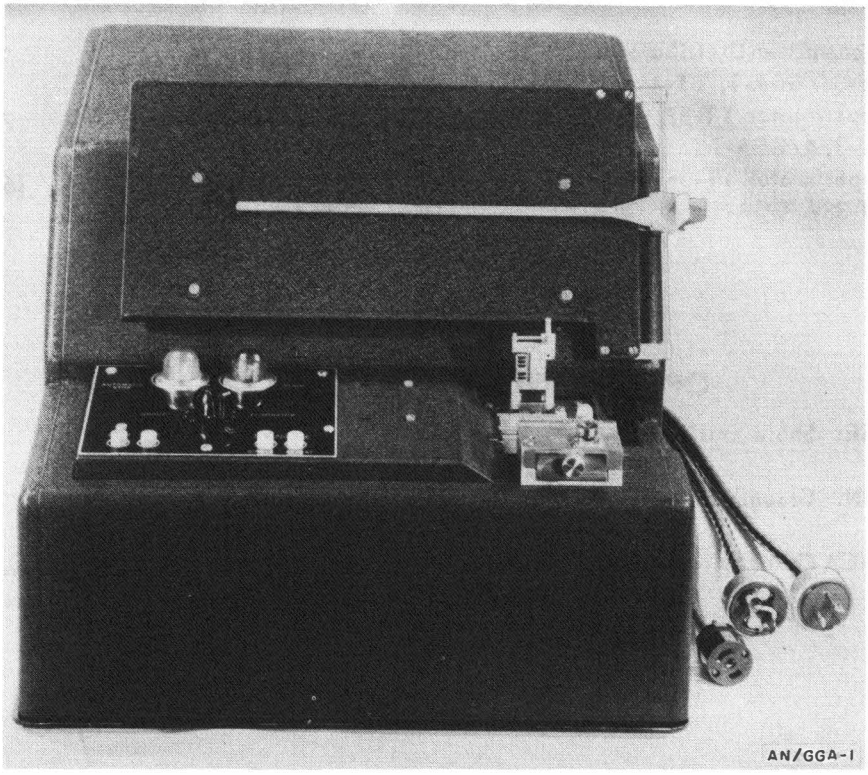
PHYSICAL CHARACTERISTICS

Telephone Repeater OA-8/FC measures 84 x 22-1/2 x 17 inches, net weight 650 pounds, volume 18.3 cu ft. Packed for export shipment: total weight 975 pounds, total volume 35.5 cu ft, 0.9 ship ton.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 Jun 52

AN/GGA-1

TELETYPEWRITER GROUP



Teletypewriter Groups AN/GGA-1 and AN/GGA-1A are general purpose, send-receive teletypewriter systems for use with related communication equipment at shore stations.

This group consists of a transmitter-distributor, two send-receive typing reperforators (one with keyboard), a receive-only teletypewriter, and a power supply mounted on a teletypewriter table.

The table has two tape bins and a storage drawer.

It can be operated from either 110 to 120 v or 190 to 250 v, ac.

Power for the synchronous motors is furnished by the power supply component.

AN/GGA-1

TELETYPEWRITER GROUP

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter-Distributor TT-36/GGA-1, TT-36A/GGA-1	13-1/4 x 16-1/4 x 20-3/4	78
1	Reperforator TT-37/GGA-1, TT-37A/GGA-1	11-1/2 x 16-1/2 x 17-1/2	77
1	Reperforator TT-38/GGA-1, TT-38A/GGA-1	39-1/8 x 21-1/2 x 18	167

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

CAN COMMUNICATE WITH: Related (or equivalent) terminal and control equipment over wire or radio facilities and associated apparatus composing the system in which it is operated.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Receives messages in printed page form or on tape. Automatically transmits to line circuits from perforated tape. Keyboard operation.

OPERATING SPEED: 72 English characters per line, 460 opm.

MOTOR CHARACTERISTICS: Synchronous, 115v, 60 cyc, ac motors.

POWER REQUIREMENTS: 1,400 va, 110 — 120 v or 190 — 250 v, 60 cyc, 1 phase, ac.

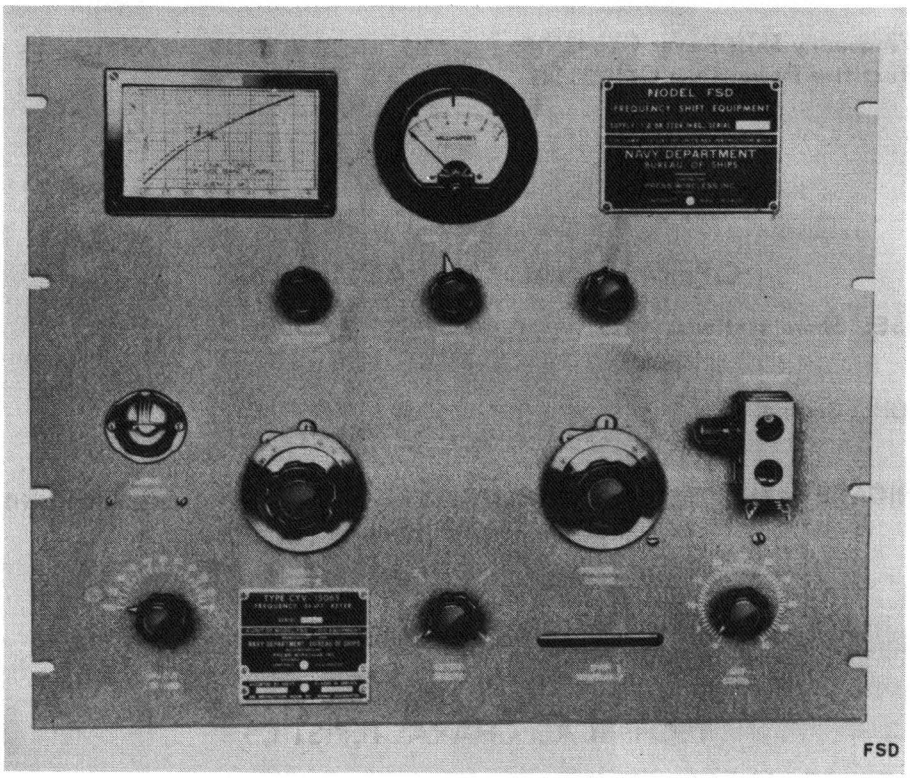
PHYSICAL CHARACTERISTICS

Teletypewriter Group AN/GGA-1 or AN/GGA-1A measures 68-1/2 x 60-3/4 x 25 inches.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 23 May 52

AN/GGA-TYPE

SERVICE TYPE NUMBER: FSD
FREQUENCY SHIFT KEYER EQUIPMENT



Frequency Shift Keyer Equipment FSD is used to replace the exciter of a c-w transmitter with a source of r-f excitation that can be shifted in frequency a small value (higher and lower) to produce telegraph or facsimile signals corresponding to the signals at the keyer input. This frequency-shift method minimizes selective fading, interference, and static disturbances, thereby assuring high fidelity of transmission.

It is used at long distance transmitting stations to improve transmission.

Four preset crystal-controlled oscillator frequencies are provided.

AN/GGA-TYPE	INSTRUCTION LITERATURE: Not Available
FSD :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
FREQUENCY SHIFT KEYER EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 23 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Frequency Shift Keyer CYV-35065	15-3/4 x 19 x 12-1/2	65
1	Rectifier Power Unit CYV-20349	8-3/4 x 19 x 12	30

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

CAN COMMUNICATE WITH: This is signal-modifying equipment used in conjunction with primary communication apparatus.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 - 5.

TYPE MODULATION: Fm.

TYPE OF SIGNALS: Frequency-shift keying.

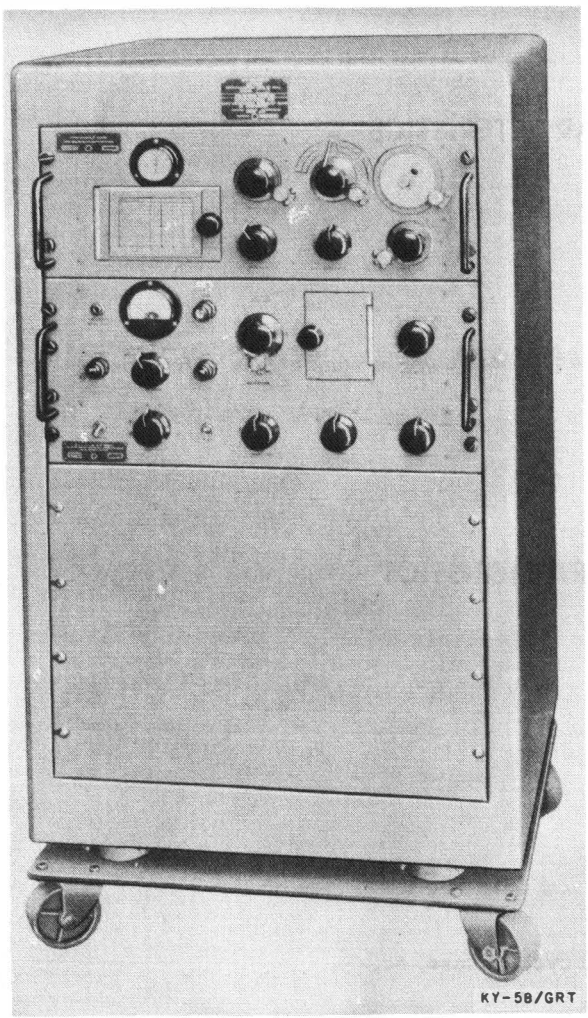
POWER OUTPUT: 1.5 w.

POWER REQUIREMENTS: 110 / 260 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Frequency Shift Keyer Equipment FSD measures 24-1/2 x 19 x 12-1/2 inches.

STATUS: Standard	AN/GGA-TYPE
CLASSIFICATION OF EQUIPMENT: Unclassified	AN/COMP TYPE NUMBER: KY-58/GRT
USING SERVICE: Navy, Air Force	KEYER
DATE OF THIS SHEET: 15 May 52	


KY-58/GRT

Keyer KY-58/GRT is used at long distance transmitting station to improve transmission. It replaces the exciter of a c-w transmitter, with a source of excitation that can be shifted in frequency (a small value higher and lower) to produce telegraph or facsimile signals corresponding to those delivered to the keyer input. This frequency-shift method is used to minimize selective fading, interference, and static disturbances.

This Keyer can be connected to an external master oscillator (such as that of the associated transmitter) and provides three crystal-controlled channels.

AN/GGA-TYPE

KY-58/GRT :AN/COMP TYPE NUMBER

KEYER

INSTRUCTION LITERATURE: NavShips 91,543
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy, Air Force
DATE OF THIS SHEET : 15 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

CAN COMMUNICATE WITH: This is signal-modifying equipment used in conjunction with primary communication apparatus.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.0 - 6.7.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Frequency shift keying facsimile.

POWER OUTPUT: 6 w into 75 ohm load.

POWER REQUIREMENTS: 470 w, 115 / 230 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Keyer KY-58/GRT measures 41-7/16 x 22-1/8 x 29-9/16 inches, net weight 322 pounds. Packed for domestic shipment: total weight 469 pounds, total volume 20.89 cu ft. Shipped in 2 packages.

STATUS: Std

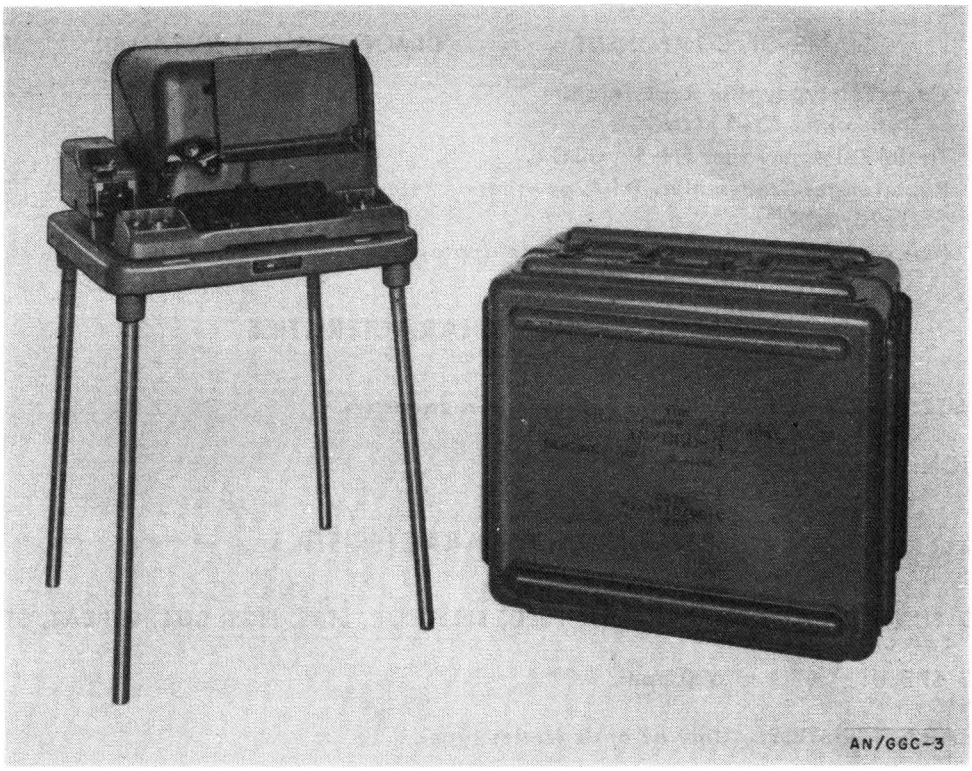
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

AN/GGC-3

TELETYPEWRITER SET



Teletypewriter Set AN/GGC-3 is a lightweight, portable sending and receiving equipment used at division and higher headquarters.

This equipment consists essentially of a typing reperforator unit with a keyboard transmitter and a tape transmitter; and includes a teletypewriter table. It derives line-operating current from an associated teletypewriter switchboard, Telegraph Terminal TH-5/TG, or other external source, and can be arranged to operate on either neutral or polar signals on a half- or full-duplex basis.

This set provides facilities for sending from either a keyboard or a tape transmitter; received signals are printed and perforated on tape. It operates over dc wire lines, carrier, or radio channels through suitable line terminating equipment, and is equipped with a universal series-governed motor, enabling operation from either ac or dc sources.

AN/GGC–3

TELETYPEWRITER SET

INSTRUCTION LITERATURE: TM 11–2225

USING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Case, Teletypewriter Reperforator-Transmitter CY–1110/GGC	25 x 22 x 16	30
1	Table, Teletypewriter FN–52/GGC	21 x 18 x 28	15
1	Reperforator-Transmitter, Teletypewriter TT–76/GGC	21 x 18 x 12	45

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant; division and higher headquarters.

INSTALLATION: Portable or fixed station.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: CAR. RET., LINE FEED, SELECTOR, LTRS, FIGS, BELL, REPEAT, START-STOP.

OPERATING SPEED: 368.1 or 600 opm.

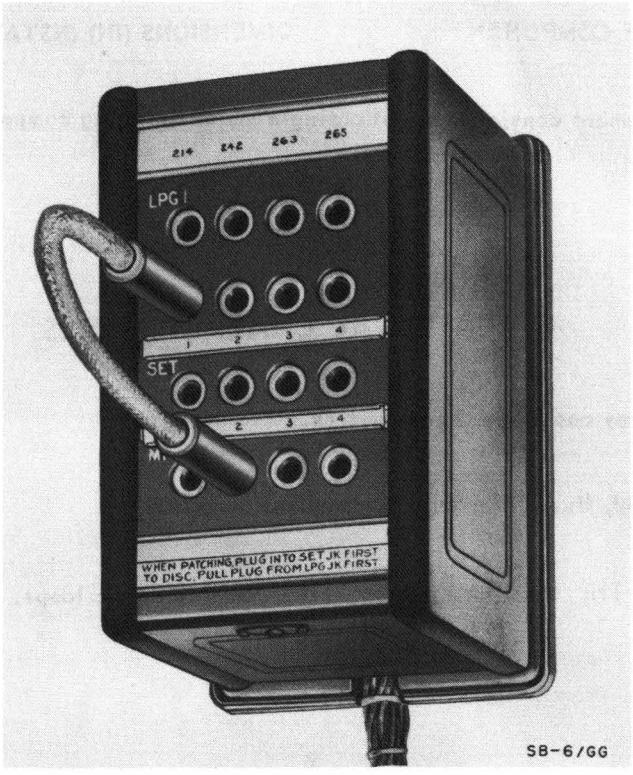
MOTOR CHARACTERISTICS: Univ ac or dc (series type).

POWER REQUIREMENTS: 150 w, 115/230 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	21 x 18 x 28	97	13.85		
DOMESTIC PACK:		106	6.75		1
EXPORT PACK:		208	18.36		1

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 31 Jan 52	**AN/GGC-TYPE** AN/COMP TYPE NUMBER: SB-6/GG TELEGRAPH SWITCHBOARD



Telegraph Switchboard SB-6/GG is a transportable, jack-patching manual switchboard used for interconnecting local lines dc , loops, extensions, and teletypewriter sets . It is used at army headquarters in fixed plant applications.

The equip ment consists of 16 panel mounted jacks in a steel cabinet, and serves four line circuits. For each line circuit, there are two loop-jacks and a set jack for connection of a teletypewriter or other equipment and a miscellaneous jack for connection of auxiliary equipment, or spare teletypewriter sets.

The equipment is used to switch circuits and to make tests of associated line facilities.

AN/GGC- TYPE	INSTRUCTION LITERATURE: TM 11-2035
SB-6/GG :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELEGRAPH SWITCHBOARD	USING SERVICE : Army
	DATE OF THIS SHEET : 31 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: At army and higher headquarters.

INSTALLATION: Ground, fixed for mobile communications centers.

CAN COMMUNICATE WITH: Used for interconnecting local lines d-c loops, extensions, and teletypewriter station equipment.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

Number of line circuits: 4.

PHYSICAL CHARACTERISTICS

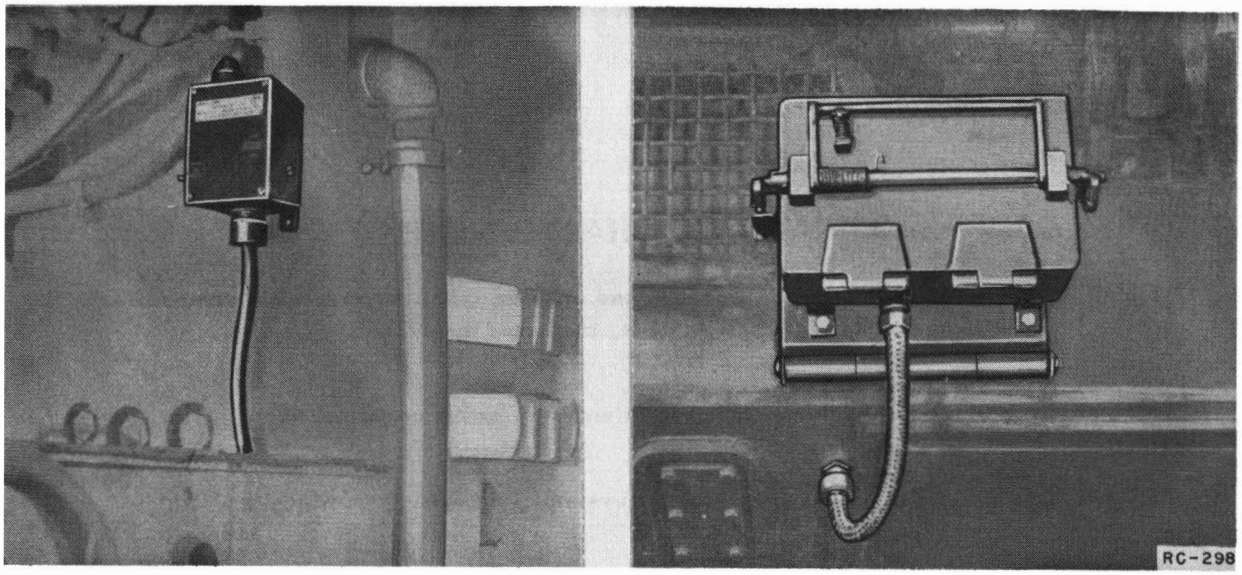
Telegraph Switchboard SB-6/GG measures 7-5/16x4-3/4x4-5/8 inches, net weight 4 pounds, volume 0.5 cu ft.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 30 Jan 52

AN/GIC-TYPE

SERVICE TYPE NUMBER: RC-298

INTERPHONE EXTENSION KIT



Interphone Extension Kit RC-298 is an assemblage of components which can be added to the existing interphone equipment of inclosed vehicles to provide an interphone station located outside the vehicle. It is used in conjunction with interphone systems designed for use in armored vehicles.

This equipment consists of an external interphone box, an internal interphone switchbox, and related components. The only adjustment provided is for control of volume. Internal and external interphone stations have call signal lamps to indicate to using personnel that contact with the station outside the vehicle is desired.

AN/GIC-TYPE

RC-298 :SERVICE TYPE NUMBER

INTERPHONE EXTENSION KIT

INSTRUCTION LITERATURE: TM 11-703

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET : 30 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	External Interphone Box BC-1362	Not Available	Not Available
1	Switchbox BC-1361	" "	" "
1	Toggle Switch ST52R	" "	" "
1	Cordage CO-213 (hardware and necessary mounting)	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Armored vehicles of infantry, and armored units. Companies of armored, infantry, and airborne divisions; corps and army level.

INSTALLATION: Ground; vehicular. External interphone station connected to vehicular system.

CAN COMMUNICATE WITH: Internal interphone system of the vehicle to which applied.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Voice; telephone.

TYPE COMMUNICATION CIRCUITS: Two-way; press-to-talk.

CONTROLS: Volume only (on external interphone station).

POWER REQUIREMENTS: Vehicular storage battery derived through vehicular interphone system with which connected.

PHYSICAL CHARACTERISTICS

Interphone Extension Kit RC-298 packed for export shipment: total volume 3.75 cu ft. Shipped in 1 package.

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

AN/GRA-6

CONTROL GROUP

NO PHOTOGRAPH AVAILABLE

Control Group AN/GRA-6 is a remote-control equipment used to operate one or two radio sets, either locally or from remote locations, and is used with radio communication equipment at battalion and regimental command levels.

This equipment consists of a remote-control unit, a local-control unit, and accessory components.

It enables push-to-talk control of radio equipment selected from either the local or remote point, and provides telephone facilities, including ringing or call lamp signaling, between operators up to distances of 2 miles over a conventional telephone pair.

AN/GRA-6

CONTROL GROUP

INSTRUCTION LITERATURE: TM 11-5038

USING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Remote Control C-433/GRC	3½ x 7 3/32 x 8¼	7.0
1	Local Control C-434/GRC	3½ x 10⅛ x 8 5/16	10.5
1	Bag CW-189/GR	11 x 7¾ x 10⅝	2.1
1	Handset H-33/PT	2 3/64 x 3 x 7⅞	1.1

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Battalion and higher headquarters.

INSTALLATION: Fixed station.

APPROXIMATE RANGE (IN MILES): 2.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Voice.

TYPE COMMUNICATION CIRCUITS: Duplex tel comm; push-to-talk; pwr cont.

CONTROLS: LOCAL, REMOTE, LINE, CALL LIGHT, AUDIO, SELECTOR.

POWER REQUIREMENTS: 3 v dc (ea mike, two Batteries BA-30); 45 v dc (remote cont, Battery BA-414/U).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		20.85	.94		
DO IC PACK					
EXPO. T PACK:		61	3.32		1

STATUS:

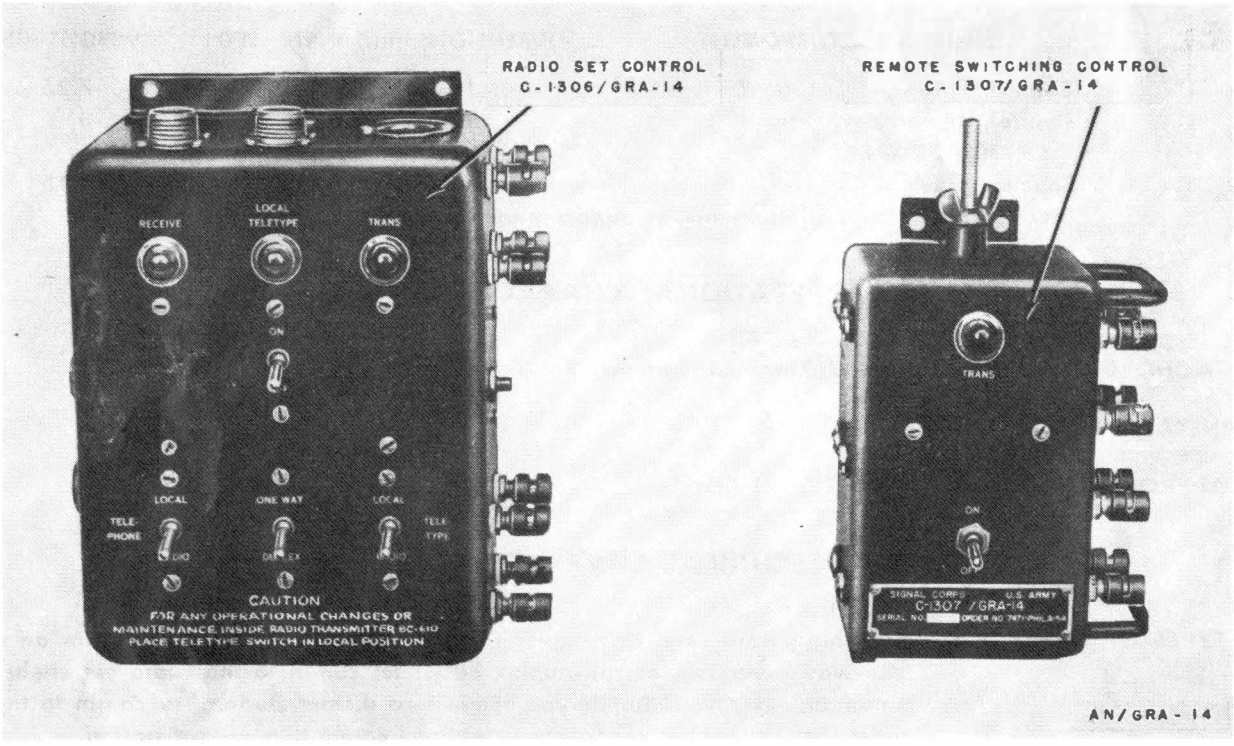
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 26 June 1956

AN/GRA–14

RADIO SET CONTROL GROUP



Radio Set Control Group AN/GRA–14 is used with Radio Set AN/GRC–26A, AN/GRC–26B, or AN/GRC–26C to provide remote control of the radio set over distances up to 1 mile. It enables control of the following functions of the radio set: switching from send to receive; radio-telephone or radioteletype communication on a one-way or full-duplex basis.

This radio set control group consists of a local-control unit, a remote-control unit, and six cables for connecting the local-control unit to the radio set. The local-control unit is mounted in the radio-set shelter and connected to the radio set and the local telephone. The remote-control unit is located at the remote site and is connected to the remote teletypewriter or telephone, and to a 115-volt ac power source.

The teletypewriters and the perforator transmitter may be moved from the radio-set shelter and located at the remote site. However, for full use of the radio set with the control group, two additional teletypewriters, a perforator transmitter or reperforator-transmitter teletypewriter, and a 115-volt ac power source are required.

AN/GRA-14

RADIO SET CONTROL GROUP

INSTRUCTION LITERATURE: TM 11-264A, C4

USING SERVICE: USA

DATE OF THIS SHEET: 26 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Control, Radio Set C-1306/GRA-14	12 x 4¾ x 8½	7.25
1	Control, Remote Switching C-1307/GRA-14	9½ x 4 x 5⅜	3
6	Special cable		2.15

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE (IN MILES): 1 (max).

TECHNICAL CHARACTERISTICS

TYPES OF OPERATION: Switching from send to receive; radiotel and/or radio-teletype comm on a one-way reversible or full-duplex basis; tel comm to the radio set shelter simultaneously w/radioteletype comm to a distant station; tty comm to the radio set shelter simultaneously w/radiotel comm to a distant station.

CONTROLS:

Local Control Unit: ON-OFF, TELEPHONE LOCAL-RADIO; ONE-WAY DUPLEX; LOCAL-RADIO TELETYPE.

Remote Control Unit: ON-OFF transmit-receive.

POWER REQUIREMENTS: 115 v ac (remote-cont unit); 115 v dc (local-cont unit).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		12.75	.28		
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: T/Std

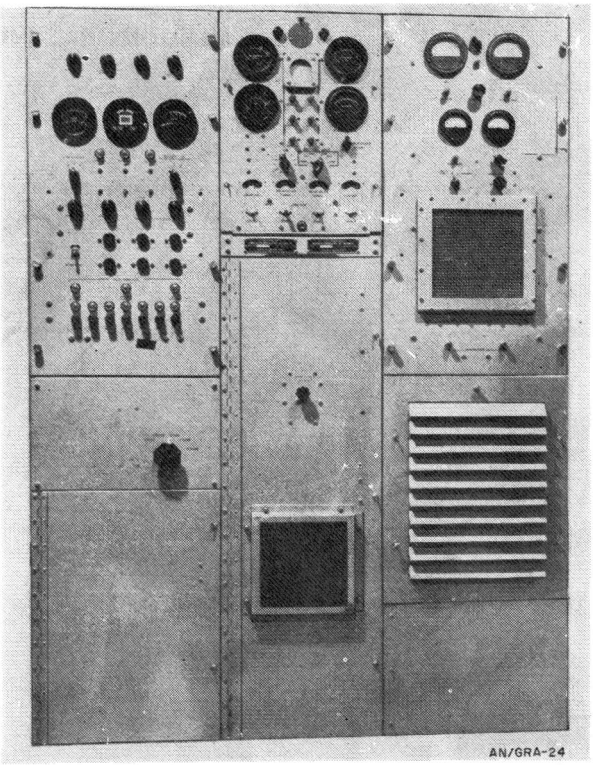
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF

DATE OF THIS SHEET: 4 June 1956

AN/GRA-24

AMPLIFIER-MODULATOR GROUP



Amplifier-Modulator Group AN/GRA-24 is a uhf, rf power amplifier designed to increase the useful operating range of radio communication with aircraft. It requires an exciter input of 80 watts obtained from either Radio Set AN/GRC-27 or Radio Transmitting Set AN/GRT-3.

This equipment is used where high-power ground-to-air communication is required; higher power reduces the susceptibility to enemy jamming and provides more effective line-of-sight coverage.

It is intended for single-channel, ground-to-air am transmission of voice or digital data. It may be switched easily to either a directional or omnidirectional antenna by means of a switch on the control unit.

Antennas AS-450/GR, AS-505/GR, and AT-197/GR, not supplied, may be used with this equipment.

AN/GRA-24

AMPLIFIER-MODULATOR GROUP

INSTRUCTION LITERATURE:

USING SERVICE: USAF

DATE OF THIS SHEET: 4 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Amplifier-modulator group	48 x 36 x 60	1,825
1	Control unit	19 x 20 x 8¾	50

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Ground-to-air communication.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE: Line of sight.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 225 to 400.

TYPE MODULATION: Am (A2, A3, A9); fm (F1, F9; by modification of drivers).

TYPE OF SIGNAL: Tone, voice composite transmissions.

POWER OUTPUT: 1,000 w (min).

POWER REQUIREMENTS: 9 kva, 208 v ±10 v, 50/60 cy, .9 pf, 4-wire, 3 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	48 x 36 x 60	1,875	62	1.6	
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 29 June 1956

AN/GRA–TYPE

CY–751/GR

CONSOLE

NO PHOTOGRAPH AVAILABLE

Console CY–751/GR is a high-fidelity, audio amplifier and control system used in broadcasting am and fm radio programs.

This equipment consists of a power supply and a console. It provides facilities for mixing and amplifying the outputs of four microphones in one or two studios, a control-room microphone, an announce-booth microphone, two transcription turntables, and two of six remote lines.

The amplified output signals of the console are transmitted to a radio transmitter to modulate the broadcast carrier.

This console may also be used for auditioning, monitoring, talk-back from the control room to the studios or remote points, studio cuing, and remote cuing. In conjunction with an external recorder and a recording amplifier, it can be used for recording broadcast programs or auditions.

AN/GRA–TYPE

CY–751/GR

CONSOLE

INSTRUCTION LITERATURE: TM 11–2647

USING SERVICE: USA

DATE OF THIS SHEET: 29 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Console	10½ x 17 x 39	135
1	Power supply	15 x 8 x 15	60

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Audio (30 to 15,000 cy).

CONTROLS: A-P (6 Audition-Program selector switches); REMOTE-LOCAL ANNOUNCE; REG.-EMG. LINE OUT; OVERRIDE-OFF-RECORD; PROGRAM-REMOTE PH MON; MIXER 5 INPUT (9 pushbutton selectors for connecting turn tables and any one of six remote lines to console); MIXER 6 INPUT (same as MIXER 5 INPUT); REMOTE CUE (8 pushbutton selector for remote line and remote talk-back); MONITOR INPUT (9 pushbutton selector for monitoring signals); TUBE CHECK (selects console tube stages to be checked on front panel volume meter); MONITOR (volume control for monitor amplifier); MASTER (volume control for program amplifier); VU CONTROL (zero adjust for volume-unit meter).

POWER REQUIREMENTS: 225 w, 100 to 130 v, 50/60 cy ac.

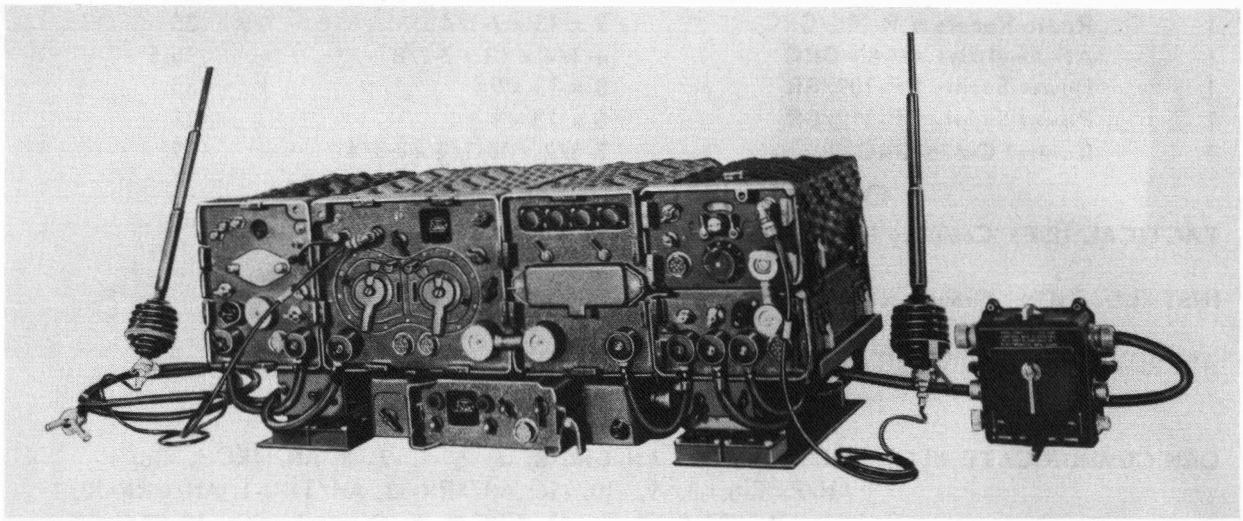
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		195	5.07		
DOMESTIC PACK:					
EXPORT PACK:		385	22.6	.6	2

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 5 Jan 52

AN/GRC-3

RADIO SET



Radio Set AN/GRC-3 is a short-range, f-m (voice), two-way communication equipment having provision for retransmission, duplex, and remote control operation. It is one of the integrated series of radio equipment and is used by units organic to an armored division.

It consists of a medium-power radio receiver-transmitter component, designated as set 1, and an auxiliary radio receiver, both of which operate in the frequency range assigned to armored units. In addition, it includes a separate low-power, short-range receiver-transmitter, designated as set 2, which operates in a frequency band common to armored, artillery, and infantry units. Vehicular interphone amplifier and control units for selecting desired modes of operation and service are included.

Operates in a vehicle from the 12- or 24-v vehicular storage battery. A hand generator and associated components (Modification Kit MX-898/GR) provide for operation in semipermanent locations.

AN/GRC-3

RADIO SET

INSTRUCTION LITERATURE: TM 11-284
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 5 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT		DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-66/GRC		9 x 13 x 11-1/4	35
1	Receiver-Transmitter RT-70/GRC		4-3/4 x 13 x 7-1/8	25
1	Radio Receiver R-108/GRC		9 x 13 x 7-1/4	35
1	AF Amplifier AM-65/GRC		4-1/4 x 13 x 7-7/8	15.5
1	Power Supply PP-109/GR	or	8 x 13 x 9	35
1	Power Supply PP-112/GR		8 x 13 x 9	35
1	Control C-435/GRC		3-1/2 x 10-1/2 x 8-3/4	12

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company level and higher (armored division and corps).

INSTALLATION: Ground, vehicular.

APPROXIMATE RANGE (IN MILES): Set 1: stationary 15, moving 10.
Set 2: 2,000 yards.

CAN COMMUNICATE WITH: AN/FRT-5, -6; AN/GRC-3, -4, -5, -6, -7, -8; AN/MRC-5, -16; AN/PRC-6, -8, -9, -10, -16; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/URT-2, -3, -4; AN/VRC-3, -5, -7, -8, -9, -10, -13, -14, -15, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; BC-787; R-137/GR; RBK; SCR-293, -294, -298, -300, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -808.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Receiver-Transmitter RT-66/GRC (set 1) 20.0 – 27.9.
Receiver-Transmitter RT-70/GRC (set 2) 47.0 – 58.4.
Radio Receiver R-108/GRC (auxiliary receiver) 20.0 – 27.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice and 1,600-cyc f-m signals.

POWER OUTPUT:

	Transmitting		Receiving		
	Low	High	Phone	Speaker	Retransmission
Set 1:	1 to 2 w	9 to 16 w	50 mw	1 w	30 mw
Set 2:	.5 w			75 mw	
Aux Rec:			50 mw	1 w	30 mw

POWER REQUIREMENTS: 110 to 280 w (depending upon mode of operation) from 12- or 24-v vehicular storage battery.

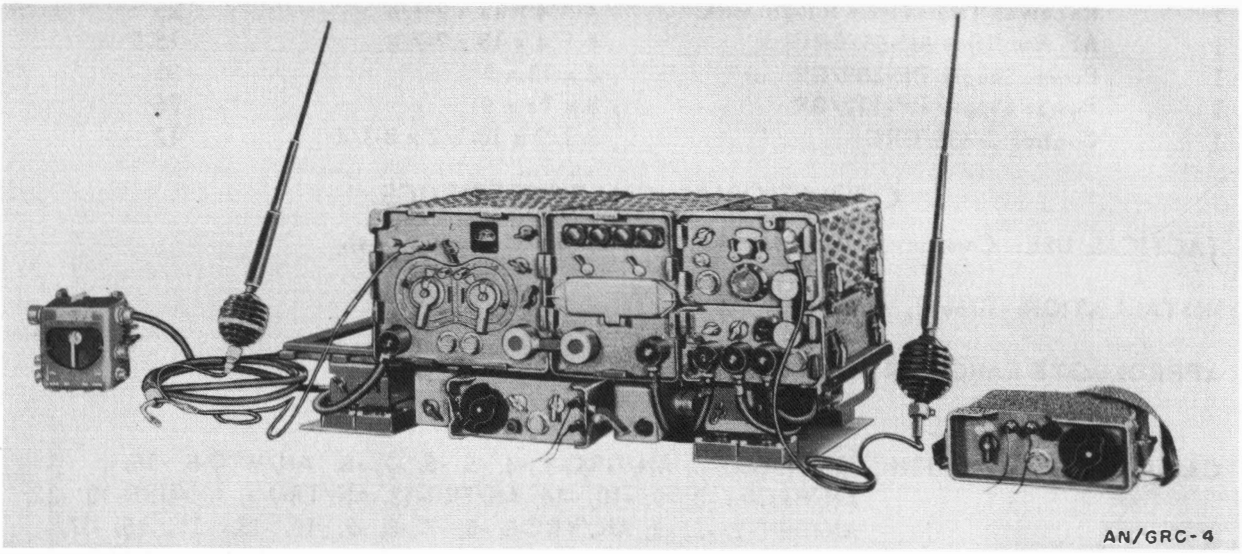
PHYSICAL CHARACTERISTICS

Radio Set AN/GRC-3 packed for export shipment: total weight 441 pounds, total volume 10.48 cu ft. Shipped in 4 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 8 Jan 52

AN/GRC-4

RADIO SET



Radio Set AN/GRC-4 is a short-range, f-m (voice), two-way communication equipment having provision for retransmission, duplex, and remote control operation. It is one of the integrated series of radio equipment and is used by units organic to an armored division.

It consists of a medium-power radio receiver-transmitter component, designated as set 1, which operates in the frequency range assigned to armored units, and a low-power receiver-transmitter, designated as set 2, which operates in a frequency band common to armored, artillery, and infantry units. Vehicular interphone amplifier and control units for selecting desired modes of operation and service are included.

Operates in a vehicle from the 12- or 24-v vehicular storage battery. A hand generator and associated components (Modification Kit MX-898/GR) provide for operation in semipermanent ground applications.

AN/GRC-4

RADIO SET

INSTRUCTION LITERATURE: TM 11-284
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-66/GRC	9 x 13 x 11-1/4	35
1	Receiver-Transmitter RT-70/GRC	4-3/4 x 13 x 7-1/8	25
1	AF Amplifier AM-65/GRC	4-1/4 x 13 x 7-7/8	15.5
1	Power Supply PP-109/GR or	8 x 13 x 9	35
1	Power Supply PP-112/GR	8 x 13 x 9	35
1	Control C-435/GRC	3-1/2 x 10-1/2 x 8-3/4	12

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company level and higher (armored division and corps).

INSTALLATION: Ground, vehicular.

APPROXIMATE RANGE (IN MILES): Set 1-- stationary 15, moving 10.
Set 2-- 2,000 yards.

CAN COMMUNICATE WITH: AN/FRT-5, -6; AN/GRC-3, -4, -5, -6, -7, -8; AN/MRC-5, -16; AN/PRC-6, -8, -9, -10, -16; AN/SRR-13, AN/TRQ-1; AN/URR-10, -12; AN/URT-2, -3, -4; AN/VRC-3, -5, -7, -8, -9, -10, -13, -14, .15, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; BC-787; R-137/GR; RBK; SCR-293, -294, -298, -300, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -808.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Receiver-Transmitter RT-66/GRC (set 1) -20.0 — 27.9.
Receiver-Transmitter RT-70/GRC (set 2) -47.0 — 58.4.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice and 1,600-cyc f-m signals.

POWER OUTPUT:

	Transmitting		Receiving		
	Low	High	Phone	Speaker	Retransmission
Set 1:	1 to 2 w	9 to 16 w	50 mw	1 w	30 mw
Set 2:	.5 w			75 mw	

POWER REQUIREMENTS: 110 to 280 w (depending upon mode of operation) from 12- or 24-v vehicular storage battery.

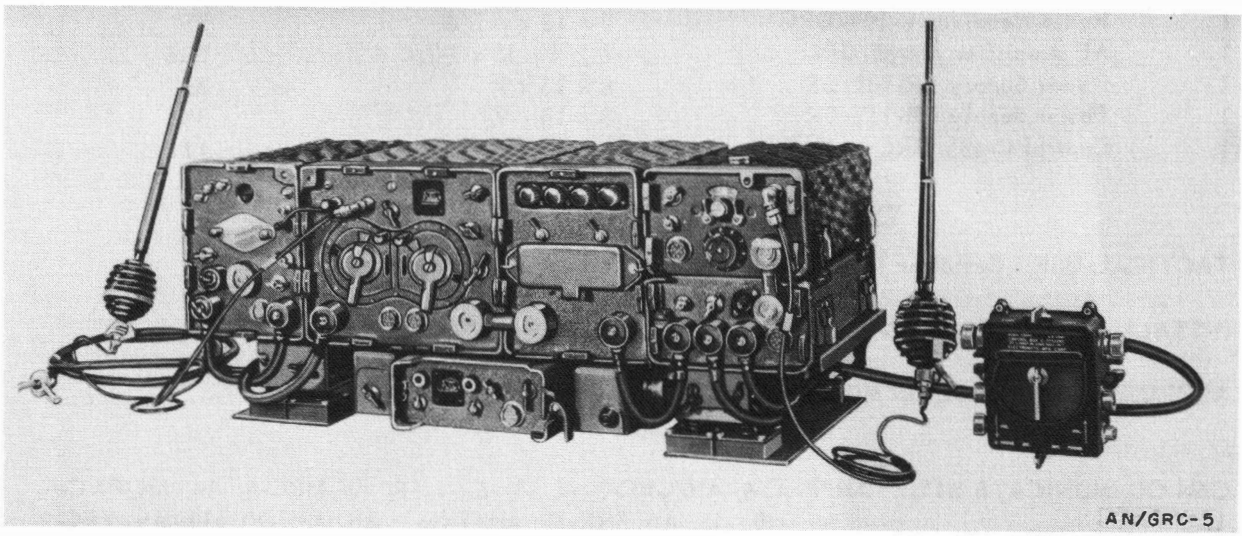
PHYSICAL CHARACTERISTICS

Radio Set AN/GRC-4 packed for export shipment: total weight 441 pounds, total volume 10.48 cu ft. Shipped in 4 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 9 Jan 52

AN/GRC-5

RADIO SET



Radio Set AN/GRC-5 is a short-range, f-m (voice), two-way communication equipment having provision for retransmission, duplex, and remote control operation. It is one of the integrated series of radio equipment used by field artillery units.

This equipment consists of a medium-power radio receiver-transmitter (set 1) operating on frequencies assigned to field artillery and a low-power receiver-transmitter (set 2) operating on frequencies common to artillery, armored, and infantry units for communication and liaison among all three types of organizations. It includes an auxiliary receiver, a vehicular interphone amplifying equipment, and control units for selecting desired modes of operation and service.

Operates in a vehicle from the 12- or 24-v vehicular storage battery. A hand generator and associated components (Modification Kit MX-898/GR) provide for semipermanent field operation of set 1 or set 2 removed from the vehicle.

AN/GRC-5

RADIO SET

INSTRUCTION LITERATURE: TM 11-284
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 9 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT		DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-67/GRC		9 x 13 x 11-1/4	35
1	Receiver-Transmitter RT-70/GRC		4-3/4 x 13 x 7-1/8	25
1	Radio Receiver R-109/GRC		9 x 13 x 7-1/4	35
1	AF Amplifier AM-65/GRC		4-1/4 x 13 x 7-7/8	15.5
1	Power Supply PP-109/GR	or	8 x 13 x 9	35
1	Power Supply PP-112/GR		8 x 13 x 9	35
1	Control C-435/GRC		3-1/2 x 10-1/2 x 8-3/4	12

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Battalion level and higher (armored division and corps).

INSTALLATION: Ground, vehicular.

APPROXIMATE RANGE (IN MILES): Set 1--stationary 15, moving 10.
Set 2-- 2,000 yards.

CAN COMMUNICATE WITH: AN/FRC-6; AN/GRC-3, -4, -5, -6, -7, -8; AN/MRC-5, -16; AN/PRC-6, -8, -9, -10, -16; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -3, -5, -7, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-293, -294, -298, -300, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Receiver-Transmitter RT-67/GRC (set 1)-- 27.0 — 38.9.
Receiver-Transmitter RT-70/GRC (set 2)-- 47.0 — 58.4
Radio Receiver R-109/GRC (auxiliary)--27.0 — 38.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice and 1,600-cyc f-m signals.

POWER OUTPUT:

	Transmitting		Receiving		
	Low	High	Phone	Speaker	Retransmission
Set 1:	1 to 2 w	9 to 16 w	50 mw	1 w	30 mw
Set 2:	.5 w			75 mw	
Aux Rec:			50 mw	1 w	30 mw

POWER REQUIREMENTS: 110 to 280 w (depending upon mode of operation) from 12- or 24-v vehicular storage battery.

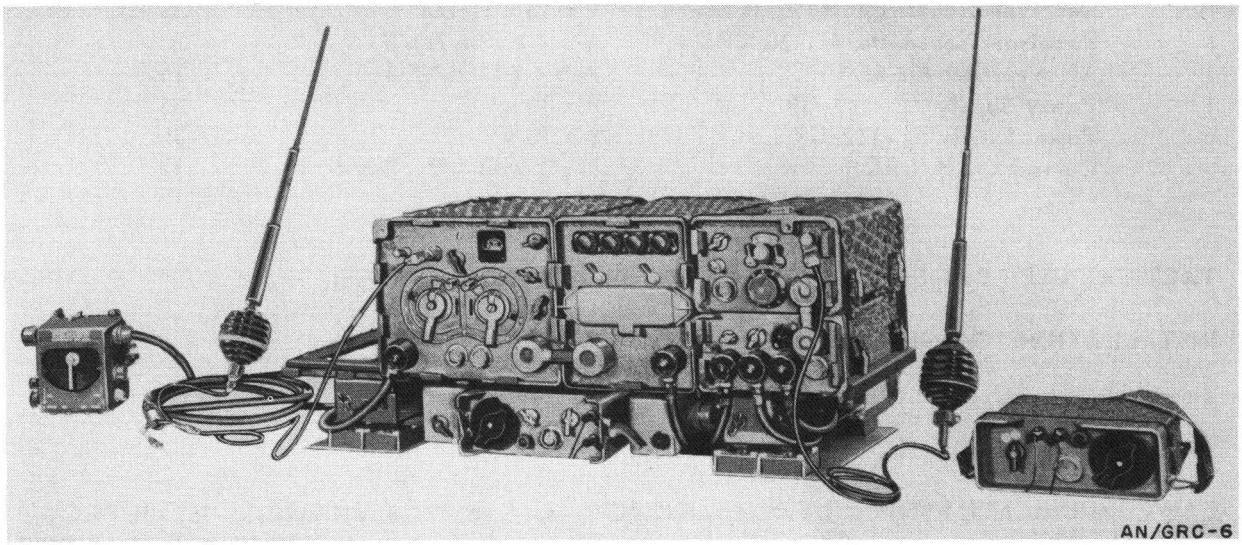
PHYSICAL CHARACTERISTICS

Radio Set AN/GRC-5 packed for export shipment: total weight 441 pounds, total volume 10.48 cu ft. Shipped in 4 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 8 Jan 52

AN/GRC-6

RADIO SET



Radio Set AN/GRC-6 is a vehicular, short-range, f-m (voice), two-way radio communication equipment having provision for retransmission, duplex, and remote control operation. It is one of the integrated series of radio equipment and is used by battalion and higher level artillery units.

This equipment consists of a medium-power receiver-transmitter, designated as set 1, and an auxiliary receiver, both of which operate in the frequency range assigned to an artillery unit. In addition, it includes a separate low-power, short-range, receiver-transmitter, designated as set 2, which operates in the frequency band common to armored, artillery, and infantry units. Vehicular interphone amplifier and control units for selecting desired modes of operation and service are included.

Operates in a vehicle from the 12- or 24-v vehicular storage battery. A hand generator and associated components (Modification Kit MX-898/GR) provide for operation in semipermanent locations.

AN/GRC-6

RADIO SET

INSTRUCTION LITERATURE: TM 11-284
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-67/GRC	9 x 13 x 11-1/4	35
1	Receiver-Transmitter RT-70/GRC	4-3/4 x 13 x 7-1/8	25
1	AF Amplifier AM-65/GRC	4-1/4 x 13 x 7-7/8	15.5
1	Power Supply PP -109/GR or	8 x 13 x 9	35
1	Power Supply PP-112/GR	8 x 13 x 9	35
1	Control C-435/GRC	3-1/2 x 10-1/2 x 8-3/4	12

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Battalion level and higher (armored division and corps).

INSTALLATION: Ground, vehicular

APPROXIMATE RANGE (IN MILES): Set 1-- stationary 15, moving 10.
Set 2-- 2,000 yards.

CAN COMMUNICATE WITH: AN/FRC-6; AN/GRC-3, -4, -5, -6, -7, -8; AN/MRC-5, -16; AN/PRC-6, -8, -9, -10, -16; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -3, -5, -7, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-293; -294, -298, -300, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Receiver-Transmitter RT-67/GRC (set 1)-- 27.0 — 38.9.
Receiver-Transmitter RT-70/GRC (set 2)-- 47.0 — 58.4.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice and 1,600-cyc f-m signals.

POWER OUTPUT:

	Transmitting		Receiving		
	Low	High	Phone	Speaker	Retransmission
Set 1:	1 to 2 w	9 to 16 w	50 mw	1 w	30 mw
Set 2:	.5 w			75 mw	

POWER REQUIREMENTS: 110 to 280 w (depending upon mode of operation) from 12- or 24-v vehicular storage battery.

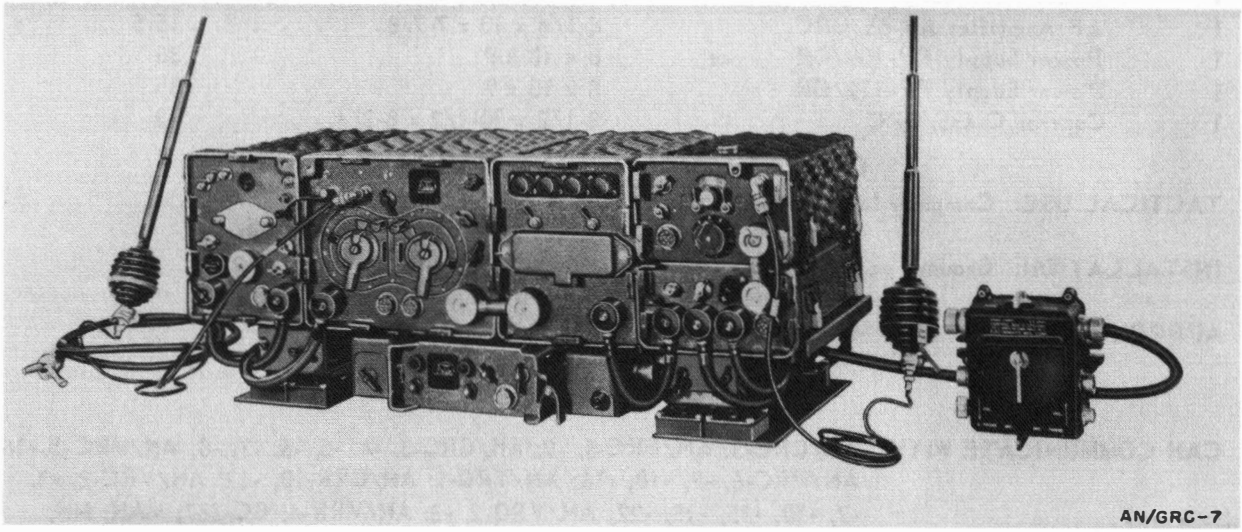
PHYSICAL CHARACTERISTICS

Radio Set AN/GRC-6 packed for export shipment: total weight 441 pounds, total volume 10.48 cu ft. Shipped in 4 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 5 Jan 52

AN/GRC-7

RADIO SET



Radio Set AN/GRC-7 is a short-range, f-m (voice), two-way communication equipment having provision for retransmission, duplex, and remote control operation. It is one of the integrated series of radio equipment and is used by infantry units.

It consists of a medium-power radio receiver-transmitter component, designated as set 1, and an auxiliary radio receiver, both of which operate in the frequency range assigned to armored units. In addition, it includes a separate low-power, short-range receiver-transmitter, designated as set 2, which operates in a frequency band common to armored, artillery, and infantry units. Vehicular interphone amplifier and control units for selecting desired modes of operation and service are included.

Operates in a vehicle from the 12- or 24-v vehicular storage battery. A hand generator and associated components (Modification Kit MX-898/GR) provide for operation in semipermanent locations.

AN/GRC-7

RADIO SET

INSTRUCTION LITERATURE: TM 11-284
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army, Navy
DATE OF THIS SHEET: 5 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT		DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-68/GRC		9 x 13 x 11-1/4	35
1	Receiver-Transmitter RT-70/GRC		4-3/4 x 13 x 7-1/8	25
1	Radio Receiver R-110/GRC		9 x 13 x 7-1/4	35
1	AF Amplifier AM-65/GRC		4-1/4 x 13 x 7-7/8	15.5
1	Power Supply PP-109/GR	or	8 x 13 x 9	35
1	Power Supply PP-112/GR		8 x 13 x 9	35
1	Control C-435/GRC		3-1/2 x 10-1/2 x 8-3/4	12

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company level, organic units of infantry division.

INSTALLATION: Ground, vehicular.

APPROXIMATE RANGE (IN MILES): Set 1-- stationary 15, moving 10.
Set 2-- 2,000 yards.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-3, -4, -5, -6, -7, -8; AN/MRC-5,-16; AN/PRC-6, -9, -10, -16; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -3, -7, -10, -15, -18, -22; AN/VRQ-2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-300, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Receiver-Transmitter RT-68/GRC (set 1) -38.0 — 54.9.
Receiver-Transmitter RT-70/GRC (set 2) -47.0 — 58.4.
Radio Receiver R-110/GRC (auxiliary receiver) - 38.0 — 54.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice and 1,600-cyc f-m signals.

POWER OUTPUT:

	Transmitting			Receiving	
	Low	High	Phone	Speaker	Retransmission
Set 1:	1 to 2 w	9 to 16 w	50 mw	1 w	30 mw
Set 2:	.5 w			75 mw	
Aux Rec:			50 mw	1 w	30 mw

POWER REQUIREMENTS: 110 to 280 w (depending upon mode of operation) from 12- or 24-v vehicular storage battery.

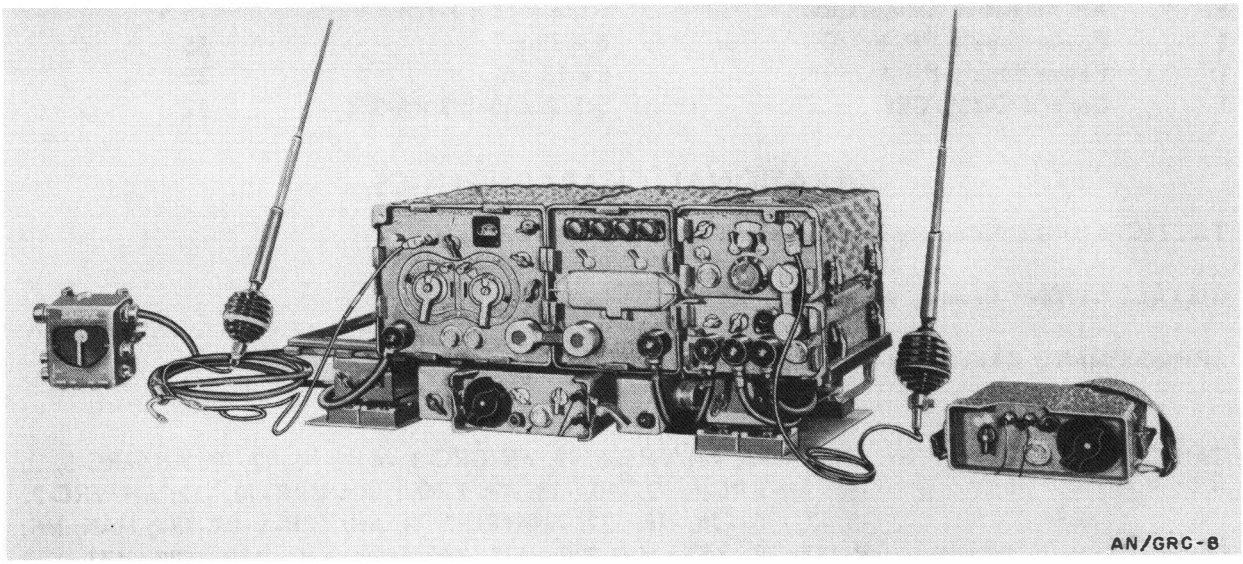
PHYSICAL CHARACTERISTICS

Radio Set AN/GRC-7 packed for export shipment: total weight 441 pounds, total volume 10.48 cu ft. Shipped in 4 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 9 Jan 52

AN/GRC-8

RADIO SET



Radio Set AN/GRC-8 is a short-range, f-m (voice), two-way communication equipment having provision for retransmission, duplex, and remote control operation. It is one of the integrated series of radio equipment used by units organic to an infantry division.

This equipment consists of a medium-power radio receiver-transmitter component, designated as set 1, operating in the frequency range assigned to infantry units, and a low-power receiver-transmitter, designated as set 2, which operates in a frequency band common to armored, artillery, and infantry units. It includes vehicular interphone amplifying equipment and control units for selecting desired modes of operation.

Operates in a vehicle from the 12- or 24-v vehicular storage battery. A hand generator and associated components (Modification Kit MX-898/GR) provide for operation in semipermanent ground applications.

AN/GRC-8

RADIO SET

INSTRUCTION LITERATURE: TM 11-284
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army, Navy
DATE OF THIS SHEET : 9 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT		DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-68/GRC		9 x 13 x 11-1/4	35
1	Receiver-Transmitter RT-70/GRC		4-3/4 x 13 x 7-1/8	25
1	AF Amplifier AM-65/GRC		4-1/4 x 13 x 7-7/8	15.5
1	Power Supply PP-109/GR	or	8 x 13 x 9	35
1	Power Supply PP-112/GR		8 x 13 x 9	35
1	Control C-435/GRC		3-1/2 x 10-1/2 x 8-3/4	12

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company level, organic units of infantry division.

INSTALLATION: Ground, vehicular.

APPROXIMATE RANGE (IN MILES): Set 1 - stationary 15, moving 10.
Set 2 - 2,000 yards.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-3, -4, -5, -6, -7, -8; AN/MRC-5, -16; AN/PRC-6, -9, -10, -16; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -3, -7, -10, -15, -18, -22; AN/VRQ-2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-300, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Receiver-Transmitter RT-68/GRC (set 1) - 38.0 — 54.9.
Receiver-Transmitter RT-70/GRC (set 2) - 47.0 — 58.4.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice and 1,600-cyc f-m signals.

POWER OUTPUT	Transmitting			Receiving	
	Low	High	Phone	Speaker	Retransmission
Set 1:	1 to 2 w	9 to 16 w	50 mw	1 w	30 mw
Set 2:	.5 w			75 w	

POWER REQUIREMENTS: 110 to 280 w (depending upon mode of operation) from 12- or 24-v vehicular storage battery.

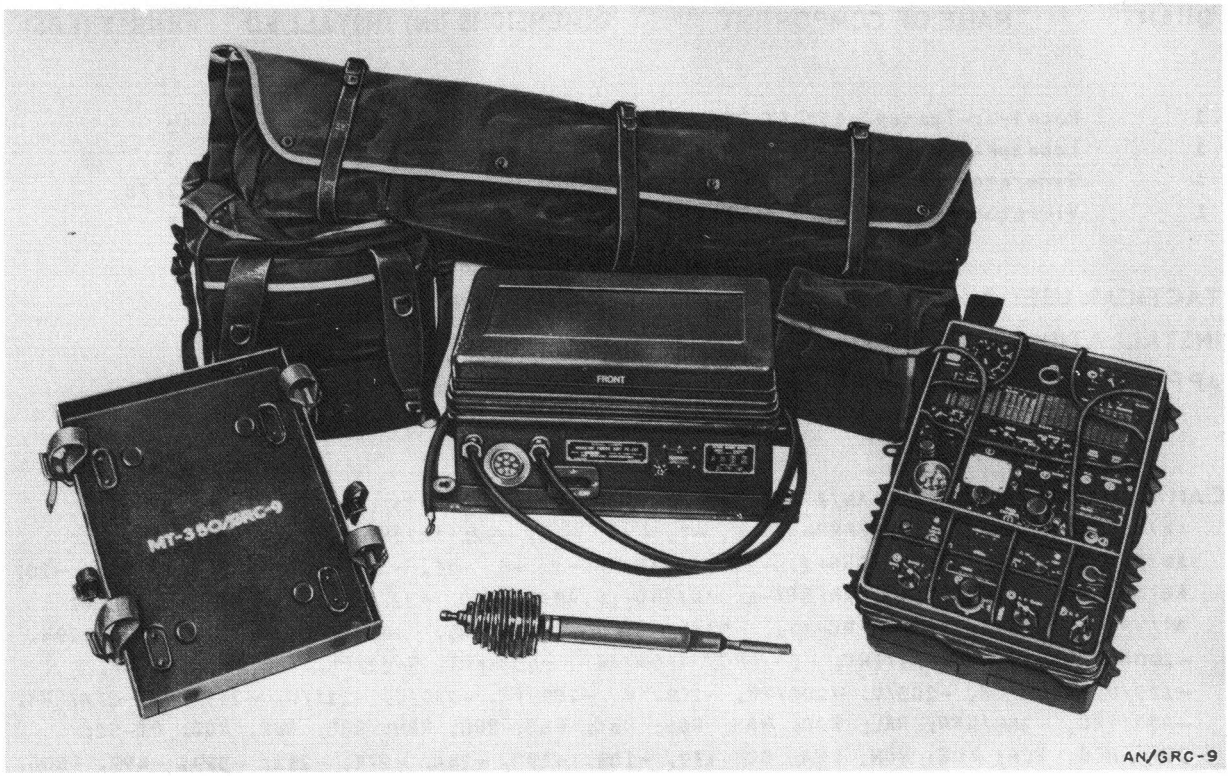
PHYSICAL CHARACTERISTICS

Radio Set AN/GRC-8 packed for export shipment: total weight 441 pounds, total volume 10.48 cu ft. Shipped in 4 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 8 Jan 52

AN/GRC-9

RADIO SET



Radio Set AN/GRC-9 is a light-weight portable or vehicular, 3-band, a-m (voice, tone, cw, and mcw) equipment used by infantry and armored units for communication in the v-h-f band.

This equipment consists of a receiver-transmitter (which can be either crystal- or master-oscillator controlled), a power supply, and related accessories. Uses a vehicular whip-type or long-wire antenna, one or two sets of headphones, or a loudspeaker connected at either of the headphone jacks.

Power is derived from a storage battery through the vibrator power unit or from a hand Generator GN-58.

During stand-by, the receiver uses Battery BA-48, which can be used in conjunction with the hand generator when the transmitter is being operated.

AN/GRC-9

RADIO SET

INSTRUCTION LITERATURE: TM 11-263
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-77/GRC-9	16 x 13 x 8	32
1	Loudspeaker LS-7	7 x 4-3/4 x 3	3
1	Generator GN-58	10-1/2 x 7-1/2 x 8	22.75
1	Vibrator Power Supply PE-237	20 x 10-1/2 x 10-3/4	74

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Infantry, armored, and armored-cavalry motorized elements.

INSTALLATION: Ground, field and vehicular.

APPROXIMATE RANGE (IN MILES):

	Stationary	Moving
Voice	15	10
Cw	30	20
Mcw	20	10

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -93/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 12 in three bands.
Band 1: 6.6 - 12 Band 2: 3.6 - 6.6 Band 3: 2.0 - 3.6.

TYPE MODULATION: Am. **TYPE OF SIGNAL:** Voice, cw, or mcw.

POWER OUTPUT: Transmitter: w/PE-237 - High, phones 7.0 w, cw 15 w. Low, phones 1.0 w, cw 5 w.
w/GN-58 - High, phones 3.6 w, cw 10 w. Low, phones 1.2 w, cw 5 w.

POWER REQUIREMENTS: Vibrator Power Supply PE-237 and 6-, 12-, or 24-v vehicular storage battery or Generator GN-58 or Power Unit PE-162. Battery BA-48 (stand-by operation receiver only).

PHYSICAL CHARACTERISTICS

Radio Set AN/GRC-9 packed for export shipment: total weight 359 pounds, total volume 15.9 cu ft. Shipped in 3 packages.

STATUS: Std

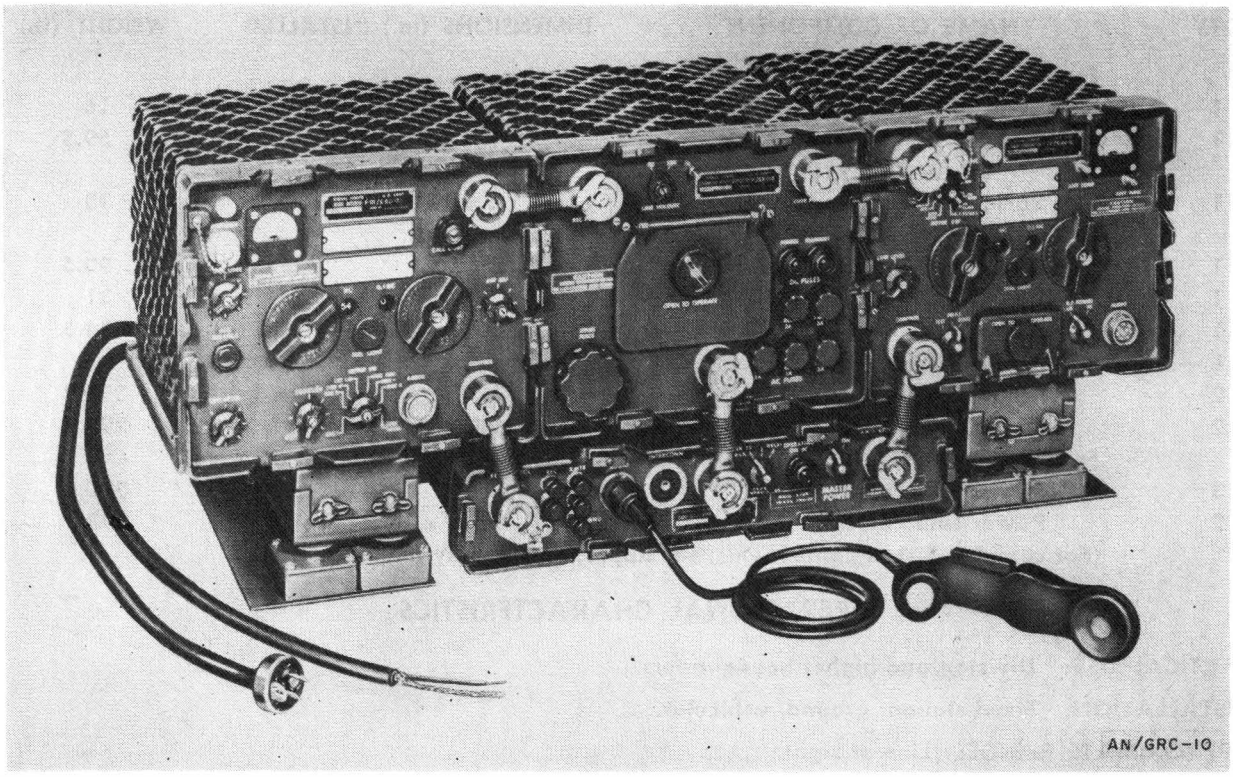
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 14 June 1956

AN/GRC–10, –39, –40

RADIO SET, RADIO TERMINAL SET, RADIO REPEATER SET



Radio Set AN/GRC–10 is a vhf, fm receiving and transmitting equipment that may be used in single-channel push-to-talk communication applications, as a terminal station of a single-channel radio relay system, as a major component of a multichannel radio terminal set, or as part of a radio relay (repeater) set of a multichannel system.

It consists essentially of an antenna system, a receiver, a transmitter, a power supply, a radio-set control, and an equipment rack.

Radio Terminal Set AN/GRC–39 consists essentially of one Radio Set AN/GRC–10, one spare, and two power units. When it is operated in conjunction with Telephone Terminal AN/TCC–3 and associated equipment, it can provide duplex facilities for four voice channels or combinations of voice, telegraph, and facsimile circuits.

Radio Repeater Set AN/GRC–40, consisting essentially of two Radio Sets AN/GRC–10, a spare, and two power units, is used as a multichannel (5) radio relay set.

AN/GRC–10, –39, –40

RADIO SET, RADIO TERMINAL SET, RADIO REPEATER SET

INSTRUCTION LITERATURE: TM 11–614

USING SERVICE: USA

DATE OF THIS SHEET: 14 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	For AN/GRC–10:		
1	Control, Radio Set C–632/GRC–10	4 x 13 x 18	18
1	Dynamotor-Power Supply DY–94/GRC–10	9¼ x 13 x 11¼	59.5
1	Rack, Electrical Equipment MT–700/GRC–10	5 x 12½ x 33⅝	33
1	Antenna Group OA–249/GRC–10		90.5
1	Receiver, Radio R–125/GRC–10	9¼ x 13 x 11¼	31
1	Transmitter, Radio T–235/GRC–10	9¼ x 13 x 11¼	34.5
	For AN/GRC–39:		
2	Radio Set AN/GRC–10		390.8
2	Power Unit PE–75	24½ x 19 x 36	298
	For AN/GRC–40:		
3	Radio Set AN/GRC–10		390.8
2	Power Unit PE-75	24½ x 19 x 36	298

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Fixed station; ground, vehicular.

APPROXIMATE RANGE: Line of sight.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 54 to 70.9 (170 chan spaced .1 mc apart).

TYPE MODULATION: Fm (F3).

TYPE OF SIGNAL: Voice; multichan tel, tlg, or facsimile; or various combinations of these.

TRANSMITTER POWER OUTPUT: 10 w, 40 w.

POWER REQUIREMENTS: (ea DY–94/GRC–10) 292 w, 115/230 v, 50/65 cy ac; 326 w, 26 v dc.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET: AN/GRC–10		390.8			
AN/GRC–39		1,406.1			
AN/GRC–40		1,791.4			
DOMESTIC PACK:					
EXPORT PACK: AN/GRC–10		609.3	33	.83	4

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/GRC-13

RADIO SET



Radio Set AN/GRC-13 is a general purpose low-power m-f, h-f, a-m (voice and cw) radio communication equipment. It is a complete transportable radio station, and is used in amphibious or field operations. Ten preset crystal-controlled channels are provided, and a remote control unit may be used at distances up to one mile. The remote operator cannot control operation of the radio set, but he can transmit or receive by code or voice, or communicate with the local operator.

The basic equipment employs a hand generator for power in transmission, and the hand generator or self-contained batteries for reception. The generator is suitable where transportation facilities are limited to man or pack carry.

The AN/GRC-13 may be installed in a vehicle by use of Installation Kit MX-1012/U, operated from 12- or 24-v d-c or 115-v a-c power sources by use of Power Supply Kit MX-1011/U, or operated with a gasoline driven power unit by use of Engine-Generator Kit MX-1010/U.

AN/GRC-13

RADIO SET

INSTRUCTION LITERATURE: NavShips 91235
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE : Navy
DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver-Transmitter RT-136/GRC-13	8-1/2 x 17-11/32 x 16-1/8	Not Available
1	Hand Generator G-28A/U	10 x 8-7/8 x 7-1/4	" "
1	Remote Control C-477/GRC-13	5-5/16 x 7-7/16 x 7-3/32	" "
1	Crystal Unit Container NT-10527-A with Crystal Unit CR-18/U	2 x 10-1/2 x 5-1/2	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Field, shore stations, or advanced bases.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE (IN MILES): Short.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -398/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -190/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 12.0 in 4 bands.

Band 1: 2.0 - 3.13
Band 2: 3.13 - 4.9
Band 3: 4.9 - 7.665
Band 4: 7.665 - 12.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw.

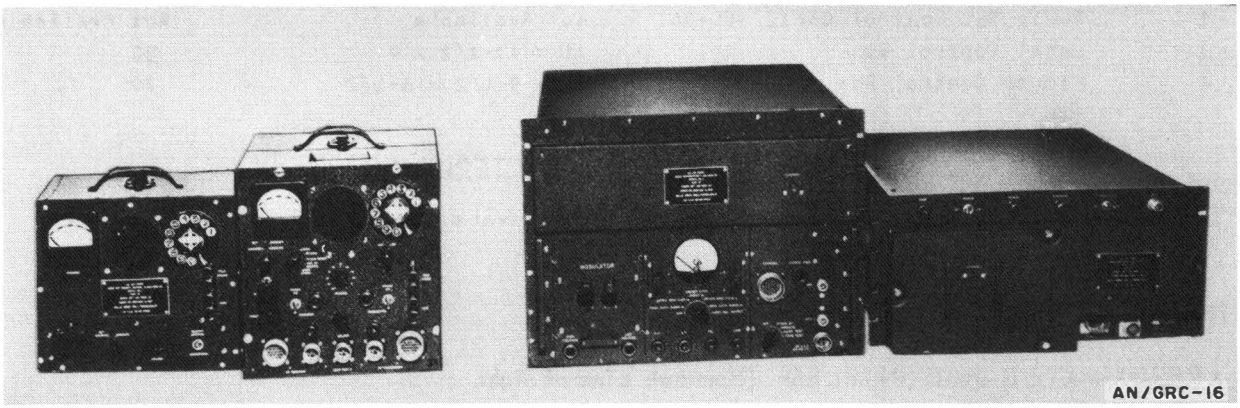
POWER OUTPUT: Transmitter: Voice, 4.5 w; cw, 12 w.
Receiver: 25 mw.

POWER REQUIREMENTS: Transmitter: Powered by Hand Generator G-28A/U.
Receiver: 3.15 w, 90 v dc; and 1.125 w, 1.5 v dc.
(Operates from Battery BA-48 or Hand Generator G-28A/U)
Remote Control Unit: 6 Batteries BA-30.

PHYSICAL CHARACTERISTICS

Radio Set AN/GRC-13 measures 8-1/2 x 17-11/32 x 16-1/8 inches, net weight 257 pounds, volume 9 cu ft. Packed for domestic shipment: total weight 485 pounds, total volume 36 pounds.

STATUS: Experimental CLASSIFICATION OF EQUIPMENT: Restricted USING SERVICE: Air Force DATE OF THIS SHEET: 10 Jun 52	**AN/GRC-16** RADIO SET



Radio Set AN/GRC-16 is a fixed or mobile, u-h-f, ground-to-air, or point-to-point, tactical radio equipment. 1,750 channels, 10 of which can be preset (but only one utilized at a time) are available in the frequency range band 225.0 to 399.9 mc.

This equipment consists of a radio transmitter, radio receiver and a radio set control. Both local and remote control, up to a distance of one mile, using Radio Set Control C-612/GRC-16, are available.

The operator at the local control unit can maintain full control of the set and, also allocate full control to the remote position. Press-to-talk, monitoring and channel selection facilities are available at both local and remote control points.

Indicator lights are provided to show the radio channel in operation at both local and remote positions.

Intercommunication and visual signaling facilities are provided at both the local and remote control positions.

For tactical field use, a loudspeaker is normally used. The loudspeaker is muted automatically during headset operation. Equipment is shock mounted and transportable in weather-proof carrying cases.

Recommended antenna (not supplied) is Antenna AT-197/GR, 52 ohm nominal impedance.

AN/GRC-16

RADIO SET

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE : Air Force
DATE OF THIS SHEET: 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter T-231/GRC-16	19 x 17-1/2 x 19	200
1	Radio Receiver R-317/GRC-16	19 x 8-1/2 x 21-1/2	80
1	Radio Set Control C-612/GRC-16	Not Available	Not Available
1	Local Control Box	11 x 11-1/2 x 9	30
1	Remote Control Box	11 x 9-1/2 x 6-1/2	20

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued on any organizational level as project equipment in accordance with AFR 100-17.

INSTALLATION: Ground, tactical.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-12, -19, -27, -30, -33, -34; AN/GRC-16, -27, -29, -30, -32; AN/GRR-7; AN/GRT-3; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-32; AN/URC-4; AN/URR-9, -12, -13; AN/URT-10; MAR; MAY; R-278/GR; RDR; RDZ; SCR-616; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: A total of 1,750 channels, 10 preset, spaced 100 kc apart, in the frequency range 225.0 to 399.9 mc are available, only one utilized at a time.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone.

POWER OUTPUT: Transmitter: 25 w.
Receiver: 3 w into 600 ohm resistive load.

POWER REQUIREMENTS: 2,500 w, 115 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Set AN/GRC-16 measures 19 x 21-1/2 x 46-1/2 inches, net weight 330 pounds, volume 4.5 cu ft. Shipped for domestic or export shipment: total weight 409 pounds, total volume 5.4 cu ft. Shipped in 4 packages.

STATUS: Std

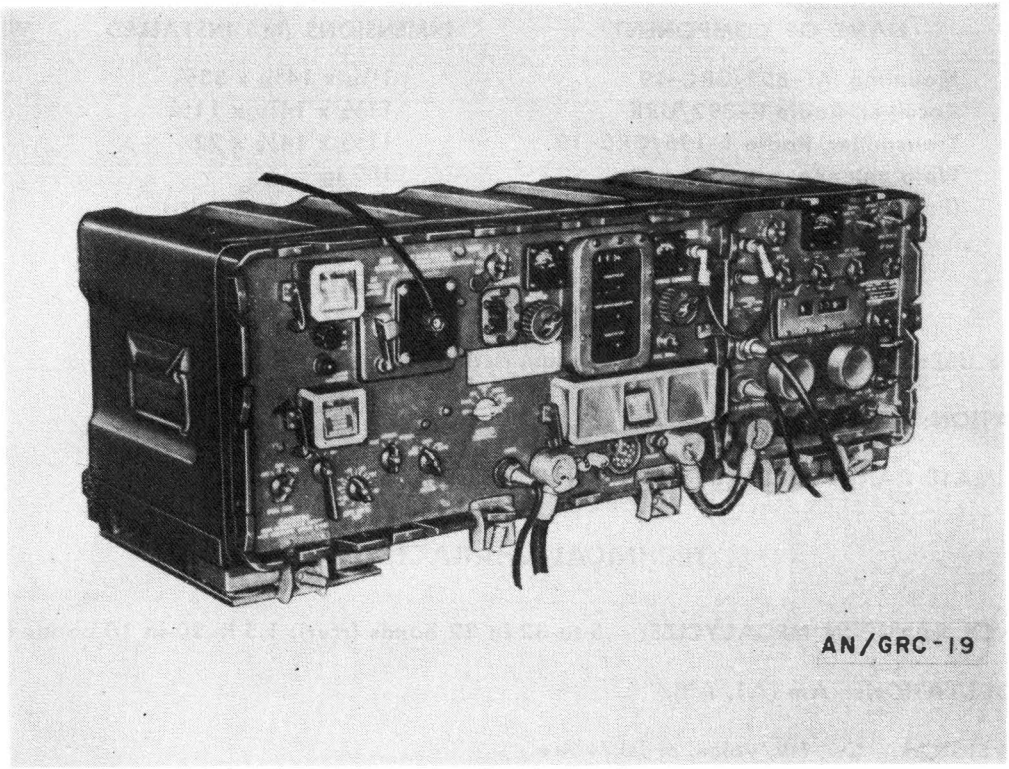
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

AN/GRC–19

RADIO SET



Radio Set AN/GRC–19 is a medium-power, mobile or portable, hf fixed station equipment used for transmitting and receiving voice, radiotelegraph, and, in conjunction with suitable associated equipment, for radioteletype communication. Its transmitter may be remotely controlled at a maximum distance of 75 feet from the operating site by means of an appropriate control unit.

This equipment consists essentially of a transmitter, receiver, and whip antenna but requires an installation unit suited to the vehicle in which it is used for mobile operation. Both a 28-volt power source and a half-wave, center-fed Hertz array (Antenna Group AN/GRA–12) are required for fixed station operation.

This radio set has provision for simultaneous voice and radioteletype service, and it can operate on a simplex or duplex basis or in radio relay applications.

AN/GRC–19

RADIO SET

INSTRUCTION LITERATURE: TM 11–274

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 25 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Mounting MT–851/GRC–19	1 11/16 x 14 9/32 x 33 7/8	45
1	Receiver, Radio R–392/URR	11 1/2 x 14 3/16 x 11 1/4	52.3
1	Transmitter, Radio T–195/GRC–19	11 1/2 x 14 1/8 x 22	125
1	Whip antenna	180 lg	

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Regimental and higher headquarters.

INSTALLATION: Mobile; fixed-portable.

APPROXIMATE RANGE (IN MILES): 50 (voice); 75 (cw); 150 to 1,500 (sky wave).

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .5 to 32 in 32 bands (rcvr); 1.5 to 20 in 10 bands (xmtr).

TYPE MODULATION: Am (A1, A3).

TYPE OF SIGNAL: Cw, fsk, voice, or fsk/voice.

POWER OUTPUT: 200 mw (rcvr to 600-ohm headset); 100 w (xmtr).

POWER REQUIREMENTS: 28.5 v dc.

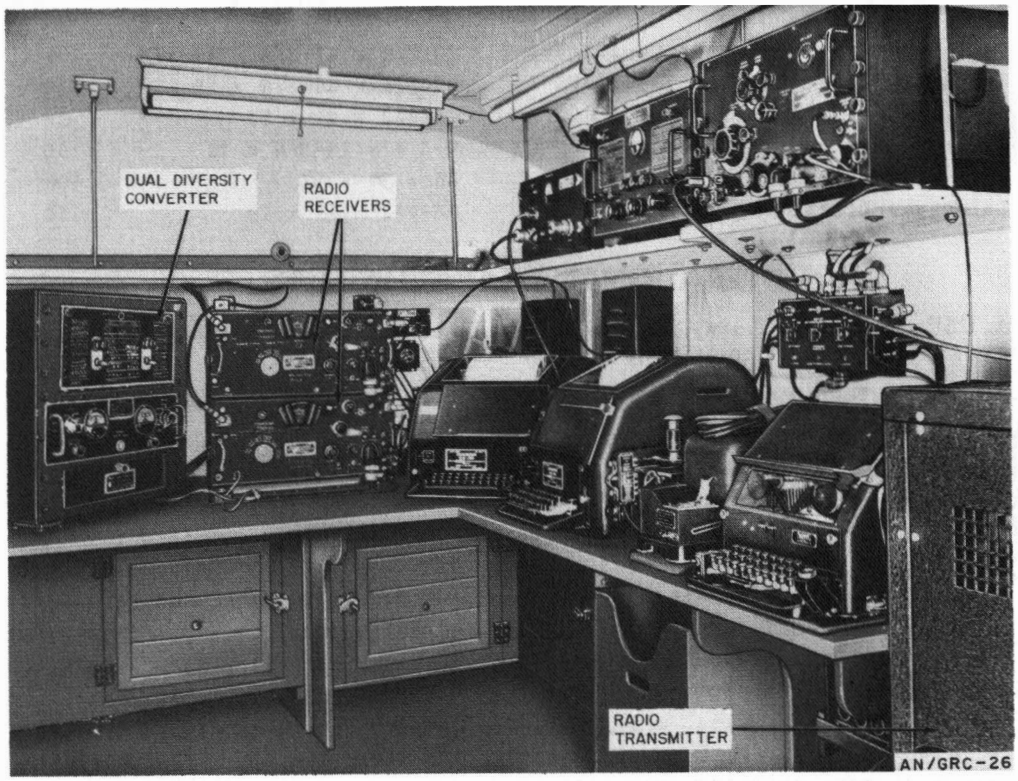
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	13 1/2 x 14 1/4 x 33 7/8	253.5			
DOMESTIC PACK:					
EXPORT PACK:		351	31.7	.79	4

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 9 Jan 52

AN/GRC-26

RADIO SET



Radio Set AN/GRC-26 is a mobile, medium-power, long range, a-m (voice, tone, cw, or frequency-shift-keying teletypewriter) transmitting and receiving equipment used for point-to-point and ground-to-air communication at division and higher headquarters.

This equipment consists of radio, teletypewriter, and associated items installed in a field-type shelter mounted on a 2-1/2-ton, 6 x 6, cargo truck, with a 1-ton trailer on which a portable, field power unit is installed. Whip-type and doublet antenna components are included.

This set usually is used for radioteletype operation on a full-duplex basis and uses dual-diversity reception. It can be operated on a half-duplex basis and includes a voice channel which is used as an "order wire". The equipment normally is operated at the halt but can provide voice or c-w communication while in motion. The voice channel can be used as a voice-patching facility, simultaneously with radioteletype operation in emergencies or when otherwise required.

The entire equipment can be transported by a C-82 type aircraft.

AN/GRC-26

RADIO SET

INSTRUCTION LITERATURE: TM 11-264
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 9 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Dual Diversity Converter CV-31B/TRA-7	20-7/8 x 17-5/6 x 19-1/4	200
1	Frequency Shift Exciter O-39B/TRA-7	12-5/8 x 16-3/8 x 19	110
1	Perforator-Transmitter TT-56/MGC	13-1/2 x 21 x 25	85
2	Radio Receiver R-336/GRC-26	9-1/4 x 10-3/4 x 18	65
1	Radio Transmitter T-213/GRC-26	45 x 30 x 31	400
2	Teletypewriter TT-55/MGC	15-1/2 x 18 x 18	60

OPERATIONAL CHARACTERISTICS

TACTICAL USE: At division, army, and corps level, used in radio and message center operations company, signal battalion, corps (corps level). Used by special teams.

INSTALLATION: Ground, mobile **APPROXIMATE RANGE (IN MILES):** (Nominal) 100.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-12, -13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, .22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -R-96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC; -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Receiver: Band A: 1.5 - 3.0, Band B: 3.0 - 5.0, Band C: 5.0 - 8.0, Band D: 8.0 - 11.0, Band E: 11.0 - 14.0, Band F: 14.0 - 18.0. Transmitter: 2.0 - 18.0.

TYPE MODULATION: Am and frequency shift keying.

TYPE OF SIGNAL: Voice, tone, cw, and frequency shift keying.

POWER OUTPUT: Voice - 300 w; cw - 400 w; frequency shift keying - 400 w.

POWER REQUIREMENTS: Transmitter: 2,000 w, Exciter: 185 w, Receiver: 80 w, Converter: 175 w, 115 v, 60 cyc, ac.

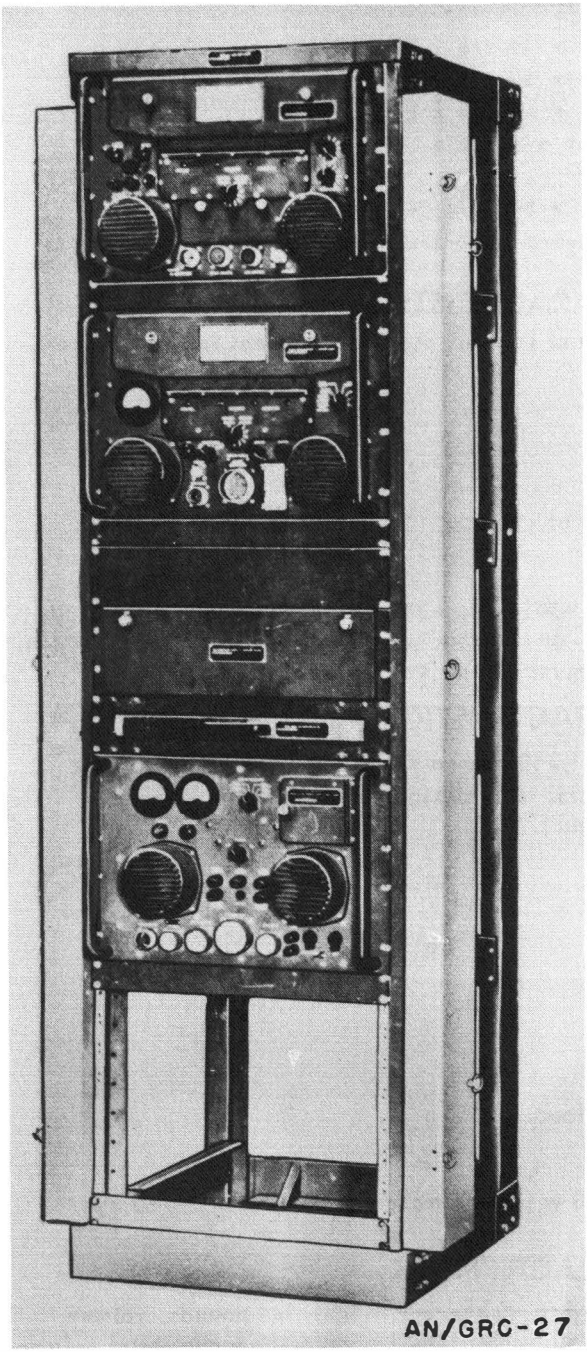
PHYSICAL CHARACTERISTICS

Radio Set AN/GRC-26 weighs 8,881.6 pounds net, volume 586.5 cu ft, 14.66 ship tons. Packed for domestic shipment: total weight, 11,950 pounds, total volume 926 cu ft, 23.15 ship tons. Packed for export shipment: total weight 15,400 pounds, total volume 1,150 cu ft, 28.75 ship tons. Shipped in 2 packages both domestic and export.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Air Force
DATE OF THIS SHEET: 10 Jun 52

AN/GRC-27

RADIO SET


AN/GRC-27

Radio Set AN/GRC-27 is the basic family of communication units for two-way, fixed station, ground, u-h-f, a-m (voice or mcw) air base traffic control, or point-to-point, communication. It is comprised of an indefinite quantity of each of the following: radio transmitter, modulator-power supply, radio receiver, distribution panel components, and 19-inch relay racks, antennas, and the necessary interconnecting cables.

This equipment is designed to operate in any 10 preset crystal-controlled channels (of a total of 1,750 channels) spaced 100 kc apart in the 225.0 to 399.9 mc range.

Radio Receiver R-278/GR also monitors either one of two crystal-controlled, preset, stand-by, guard channels from 238 to 248 mc.

Modulator-Power Supply MD-129/GR supplies power for Radio Transmitter T-217/GR in cycles of one minute ON and five minutes OFF.

Equipment can be requisitioned as required on an individual project, or installation basis.

Requires 2,310 w, 115 to 230-v, 60-cyc, ac for a typical installation of one transmitter, one modulator, one receiver plus ancillary items.

AN/GRC-27

RADIO SET

INSTRUCTION LITERATURE: TO 16-30GRC27-1 & 16-35A104
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Air Force
DATE OF THIS SHEET: 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
*	Radio Transmitter T-217/GR	19 x 12-1/4 x 20	130.0
*	Radio Receiver R-278/GR	19 x 12-1/4 x 20	115.0
*	Modulator-Power Supply MD-129/GR	19 x 12-1/4 x 20	140.0
*	Antenna AT-197/GR	Not available	7.0
*	Antenna AS-505/GR	" "	50.5
*	Distribution Panel J-390/GR	19 x 5-1/4 x 3-1/4	5.5
*	Rack MT-686/GR	22-5/8 x 72-1/2 x 21-3/8	96.0

* Issued as required

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued on any organizational level as project equipment in accordance with AFR 100-17.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-12, -19, -27, -30, -33, -34; AN/GRC-16, -27, -29, -30, -32; AN/GRR-7; AN/GRT-3; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-32; AN/URC-4; AN/URR-9, -12, -13; AN/URT-10; MAR; MAY; R-278/GR; RDR; RDZ; SCR-616; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: A total of 1,750 channels, spaced 100 kc apart, in the frequency range 225.0 to 399.9 mc are available. It is designed to operate on 10 preset channels and one guard channel (238 to 248 mc).

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw.

POWER OUTPUT: Transmitter: 100 w (Nominal).
Receiver: 3 w into 600 ohm load.

POWER REQUIREMENTS: Minimum installation 2,310 w (approximate) 115/230 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Set AN/GRC-27 measures 22-5/8 x 72-1/2 x 21-3/8 inches, net weight 544 pounds, volume 20.1 cu ft, 1 ship ton. Packed for domestic or export shipment: total weight 600 pounds, total volume 24 cu ft, 1.2 ship tons. Shipped in 7 packages.

(Minimum installation requirements; one transmitter, one receiver, one modulator, and ancillary items.)

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Restricted USING SERVICE: Air Force, Navy DATE OF THIS SHEET: 10 Jun 52	**AN/GRC-29** RADIO SET



Radio Set AN/GRC-29 is a two-way, u-h-f, (am, voice or tone) communication equipment for advanced Air Base Traffic Control ground-to-air or point-to-point communication. It is an adaptation of the AN/GRC-27, for amphibious use; having water tight container, and an adaptable mobile power unit.

This equipment consists of a radio transmitter, modulator-power supply, radio receiver, radio set controls, two antennas, power units, and related items.

It operates in the frequency range 225.0 to 399.9 mc, and Radio Receiver R-278/GR (illustrated above) also monitors either one of two crystal-controlled, preset, stand-by guard channels from 238 to 248 mc.

Modulator Power Supply MD-129/GR supplies power for Radio Transmitter T-217/GR in cycles of one minute ON and five minutes OFF.

This set can be operated from a distance up to 10 miles away by means of Radio Set Control C-566/GR, over two telephone pairs.

The antenna system uses low impedance 52-ohm transmission lines and has switching facilities for selecting directional, or omni-directional, broadband operation.

Power requirements (2.5 kw) are supplied by Power Unit 5JB, or an equivalent power source.

AN/GRC-29

RADIO SET

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE : Air Force, Navy
DATE OF THIS SHEET : 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter T-217/GR	19 x 12-1/4 x 22-5/8	150.0
1	Modulator Power Supply MD-129/GR	19 x 12-1/4 x 22-5/8	180.0
1	Radio Receiver R-278/GR	19 x 12-1/4 x 22-5/8	145.0
1	Radio Set Control C-565/GR	19 x 12-1/4 x 11-1/2	85.0
1	Radio Set Control C-566/GR	19 x 8-3/4 x 11-1/2	45.0
1	Antenna AS-450/GR	23 x 17 x 29	65.0
1	Antenna AT-197/GR	19 x 26 x 19	7.5
1	Antenna Mast AB-159/GR	50 to 90 feet long	650.0
1	Power Unit Type 5JB	73 x 39 x 27	1,400.0
8	Cases CY-722/GR and CY-724/GR to CY-73/MRQ-2 inclusive	23 x 17 x 29	70.0 each

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued to advanced air bases for air field traffic control and for airways communication.

INSTALLATION: Ground, semi-fixed.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-12, -19, -27, -30, -33, -34; AN/GRC-16, -27, -29, -30, -32; AN/GRR-7; AN/GRT-3; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-32; AN/URC-4; AN/URR-9, -12, -13; AN/URT-10; MAR; MAY; R-278/GR; RDR; RDZ; SCR-616; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1,750 channels, spaced 100 kc apart, in the frequency range 225.0 - 399.9.
Operates on 10 preset channels.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 100 w.
Receiver: 3 w into 600 ohm resistive load.

POWER REQUIREMENTS: 2.5 kw, 115 or 230 v, 50/60 cyc, 1 phase, ac. (Supplied by Power Unit Type 5JB.)

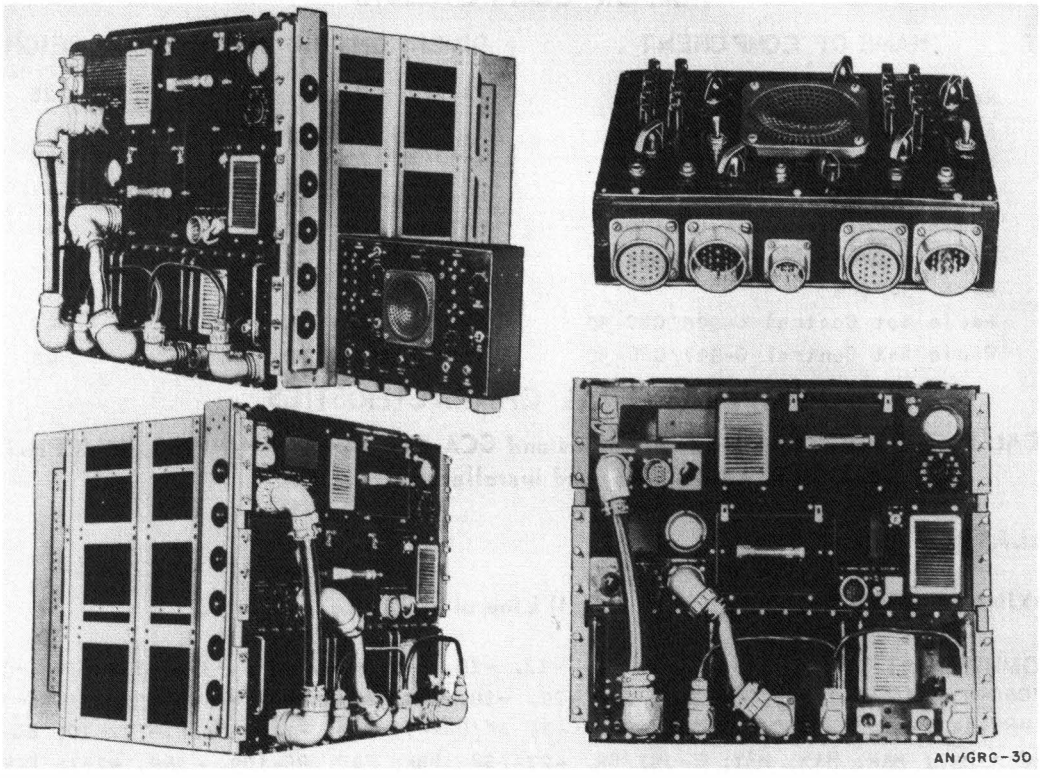
PHYSICAL CHARACTERISTICS

Radio Set AN/GRC-29 measures 39 x 29 x 233 inches, net weight 3,042 pounds, volume 73.3 cu ft. Packed for domestic or export shipment: total weight 3,954 pounds, total volume 87.9 cu ft, 2.1 ship tons. Shipped in 21 packages.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Air Force
DATE OF THIS SHEET: 19 May 52

AN/GRC-30

RADIO SET



Radio Set AN/GRC-30 is a ground-operated, two-way, dual-channel, v-h-f/u-h-f, voice-modulated, receiver-transmitter. It is normally used to provide communication between ground controlled approach (GCA) equipment and aircraft.

Two radio receiver-transmitter units and one monitor radio receiver R-420/GRC-30 provide 2,552 operating channels in the 100- to 180-mc, and 225.0 to 399.9-mc ranges

Operates on 20 crystal-controlled, preset channels; 10 channels in each receiver-transmitter unit, without resetting the units.

Radio Receiver RT-420/GRC-30 monitors one channel in both the v-h-f and u-h-f bands, and has provision for a 1,600-ohm balanced output for direction finding and navigation applications.

Disk-cone, Antenna Group OA-291/GRC-30 is normally used with this equipment, which can be remotely controlled up to 5 miles, over standard telephone lines.

It is normally used with Radar Sets AN/FPN-16, AN/CPN-4, AN/CPN-18, and Radio Set AN/MPN-1, and other GCA radar equipment.

AN/GRC-30

RADIO SET

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Air Force
DATE OF THIS SHEET: 19 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver-Transmitter RT-226/GRC-30	24-1/2 x 6-3/4 x 21	125
1	Radio Receiver-Transmitter RT-227/GRC-30	24-1/2 x 6-3/4 x 21	145
1	Radio Receiver R-420/GRC-30	7-7/8 x 7-3/4 x 21	45
1	Antenna Group OA-291/GRC-30 each 50 ohm	30 x 38-1/2 x 7-1/2	22
1	Radio Set Control C-896/GRC-30	12 x 7-3/4 x 21	45
1	Radio Set Control C-897/GRC-30	12 x 7-3/4 x 21	45

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued to air fields and GCA sets such as AN/MPN-1, AN/CPN-18, AN/CPN-4, AN/FPN-16, and installed.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -12, -18, -19, -27, -28, -30, -33, -34, -36; AN/CRC-2; AN/FRC-7; AN/GRC-16, -27, -29, -30, -32; AN/GRR-7; AN/GRT-3; AN/MRC-12; AN/PRC-14, -17; AN/TRC-7, -32; AN/URC-4; AN/URR-9, -13, -21; AN/URT-7, -10; BC-639, -640, -787; MAR; MAW; MAY; R-137/GR, -278/GR; RBK; RBQ; RC-103, -256, -257; RCK; RCO; RDR; RDZ; SCR-522, -542, -573, -574, -575, -607, -616, -624, -641, -643, -644; TDG; TDQ; TDT; TDZ; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES:

Radio Receiver-Transmitter RT-226/GRC-30: 10 channels in 100 - 180.
Radio Receiver-Transmitter RT-227/GRC-30: 10 channels in 225.0 - 399.9.
Radio Receiver R-420/GRC-30: 2 channels in each range; 100 - 160 and 225.0 - 399.9.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice or tone.

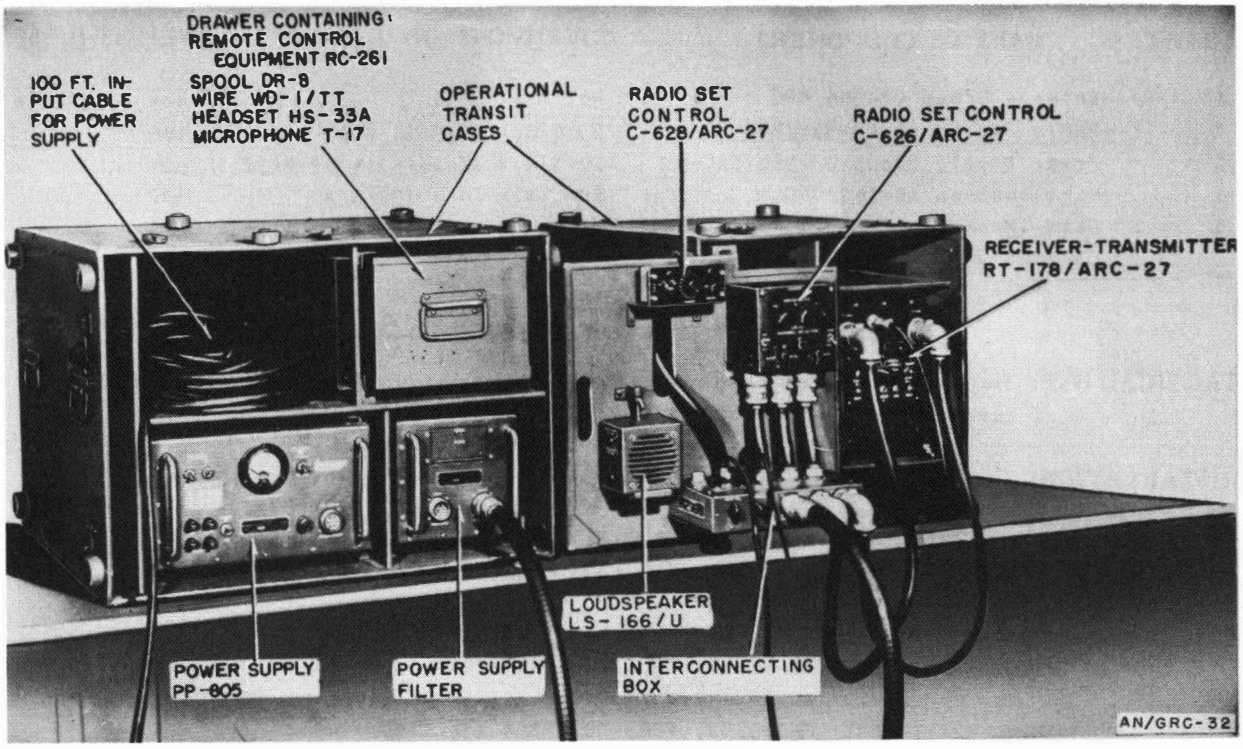
POWER OUTPUT: Transmitters: 12 w (each).
Receivers: 1.2 w (each).

POWER REQUIREMENTS: 3,100 w, 115 to 230 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Set AN/GRC-30 measures 24-1/2 x 30 x 21 inches, net weight 589 pounds, volume 8.9 cu ft. Packed for either domestic or export shipment: total weight 650 pounds, total volume 10 cu ft.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Restricted USING SERVICE: Air Force DATE OF THIS SHEET: 19 May 52	**AN/GRC-32** RADIO SET



Radio Set AN/GRC-32 is a ground-operated, two-way, u-h-f, a-m, receiver-transmitter, normally used for ground-to-air communication. It can be used wherever a low-power u-h-f communication system is needed for tactical control of aircraft at moderate ranges. The set can also form the ground radio terminal of air-ground radio circuits for flight safety, as well as short range tactical control of aircraft.

The transmitter and receiver both operate on any one of 18 preset, crystal-controlled channels (of a total of 1,750) which are spaced 100 kc apart.

Remote control facilities are provided by means of Remote Control Equipment RC-261 which provides remote operation of, and voice communication over, voice-operated radio sets on a preset frequency, (with a preset adjustment of the volume control) for distances up to 1/2 mile from the radio set.

This radio set consists of components of Radio Set AN/ARC-27, modified to operate from 115/230-v, 60-cyc, single phase, ac, in lieu of 26.5 v, dc, used in aircraft.

Radio Set AN/GRC-32 is housed in operational, transit cases to permit easy transportation.

AN/GRC-32

RADIO SET

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE : Air Force
DATE OF THIS SHEET: 19 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Antenna Group OA-306/GRC	Not Available	Not Available
1	Radio Set Group OA-384/GRC	23-5/8 x 22-3/16 x 30-1/4	156
1	Power Supply Group OA-385/GRC-32	29-3/4 x 25-15/32 x 32-9/32	327
1	Mast Antenna AB-282/GRC	10-1/4 x 10 x 133-1/4	170
1	Case (Mast Erection Equip.) CY-1186/GRC	21-27/32 x 14-1/2 x 26-9/16	160

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued for air-ground communications at advanced air bases or forward areas.

INSTALLATION: Ground, temporary installations in tents, covered vehicles, portable shelter or permanent buildings.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-12, -19, -27, -30, -33, -34; AN/GRC-16, -27, -29, -30, -32; AN/GRR-7; AN/GRT-3; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-32; AN/URC-4; AN/URR-9, -12, -13; AN/URT-10; MAR; MAY; R-278/GR; RDR; RDZ; SCR-616; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: A total of 1,750 channels, spaced 100 kc apart, in the frequency range 225.0 - 399.9 mc are available. It is designed to operate on any 18 preset crystal-controlled channels.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice or tone.

POWER OUTPUT: 10 w (Nominal).

POWER REQUIREMENTS: 1,000 w, 115/230 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Set AN/GRC-32 measures 39-7/8 x 15 x 21-3/4 inches, net weight 813 pounds, volume 7.6 cu ft. Packed for either domestic or export shipment: total weight 894 pounds, total volume 8 cu ft.

STATUS: Std

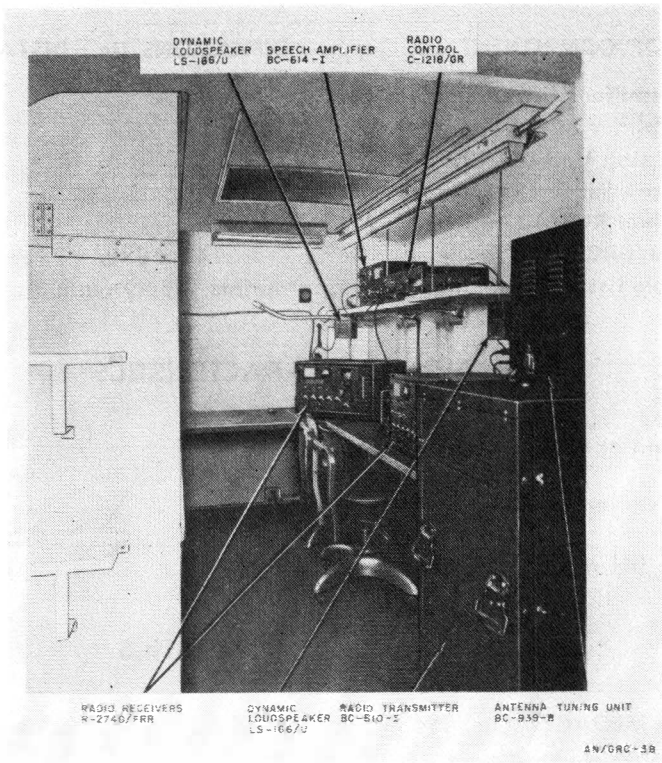
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 3 July 1956

AN/GRC–38

RADIO SET



Radio Set AN/GRC–38 is a mobile or fixed transmitting and receiving station used for ground-to-ground and ground-to-air communication applications.

It consists of a transmitter, two receivers, a speech amplifier, an antenna tuning unit, and a radio set control. All operating components are housed in a shelter, which is transportable in a 2½-ton, 6 by 6 cargo truck.

This equipment requires a 115-volt ac commercial power source for fixed station operation, but includes a trailer-mounted generator for mobile use.

AN/GRC–38

RADIO SET

INSTRUCTION LITERATURE: TM 11–281B

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 3 July 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Radio Transmitter BC–610–I		
1	Speech Amplifier BC–614–I		
1	Antenna Tuning Unit BC–939–B		
1	Control, Radio Set C–1218/GR		
2	Radio Receiver R–274D/FRR		
1	Shelter S–69/GRC	142 x 83½ x 79½	

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Fixed station; mobile.

APPROXIMATE RANGE (IN MILES): 1,000.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .54 to 54 in six bands (rcvr); 2 to 18 (xmtr).

TYPE MODULATION: Am (A1, A3).

TYPE OF SIGNAL: Cw, voice.

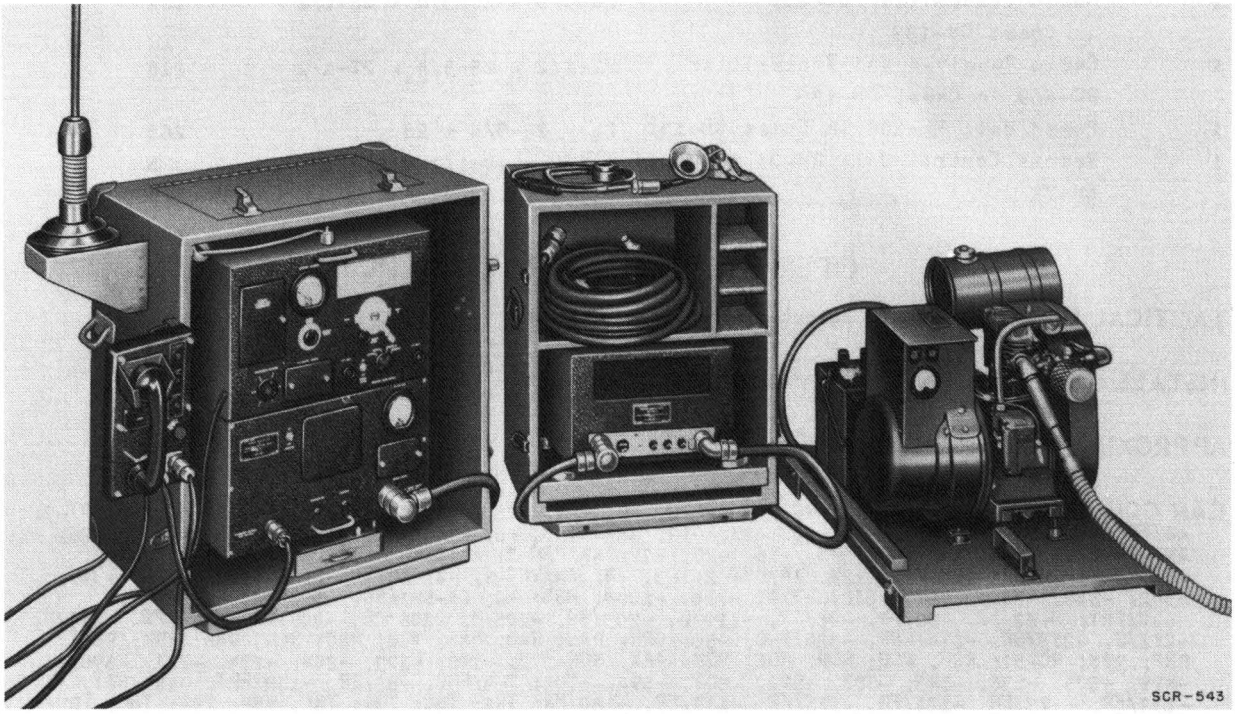
TRANSMITTER POWER OUTPUT: 300 w (voice); 400 w (cw).

POWER REQUIREMENTS: 5.4 kw, 115 v, 60 cy, 1 ph ac (coml); 10 kw, 120/240 v, 60 cy, 1 ph ac (PE–95–G).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	142 x 83½ x 79½ (shelter)				
DOMESTIC PACK:					
EXPORT PACK:		12,365	1,130.75	28.3	2

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 31 Jan 52	AN/GRC-TYPE SERVICE TYPE NUMBER: SCR-543 RADIO SET



Radio Set SCR-543 is a medium range, medium- and high-frequency, a-m (voice), radiotelephone equipment for mobile or fixed station use by antiaircraft artillery units.

This equipment consists of a radio receiver and transmitter component, power supply, and associated accessories, and may be installed and operated in a light truck or from a permanent location as a field radiotelephone station. Can be operated with a whip-type, or straight-wire antenna.

This equipment may be operated from a remote point by use of Remote Control Unit RM-21.

AN/GRC-TYPE	INSTRUCTION LITERATURE: TM 11-625
SCR-543 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO SET	USING SERVICE : Army, Navy
	DATE OF THIS SHEET: 31 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-699 in Chest CH-133	20-3/8 x 29-3/4 x 28-1/2	182
1	Radio Receiver and Transmitter BC-669 in Chest CH-133	22-1/2 x 28-3/4 x 27-1/2	216
1	Power Unit PE-108 in Chest CH-131	24 x 23-3/4 x 28	265
1	Remote Control Unit RM-21 in Chest CH-73	4-1/2 x 10-1/2 x 16-1/2	5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Antiaircraft detachment, special teams.

INSTALLATION: Mobile or fixed station.

APPROXIMATE RANGE (IN MILES): 15 to 30.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCO; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 960, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.68 - 4.45.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice and cw.

POWER OUTPUT: 45 w.

POWER REQUIREMENTS: Power Unit PE-108, or storage battery.

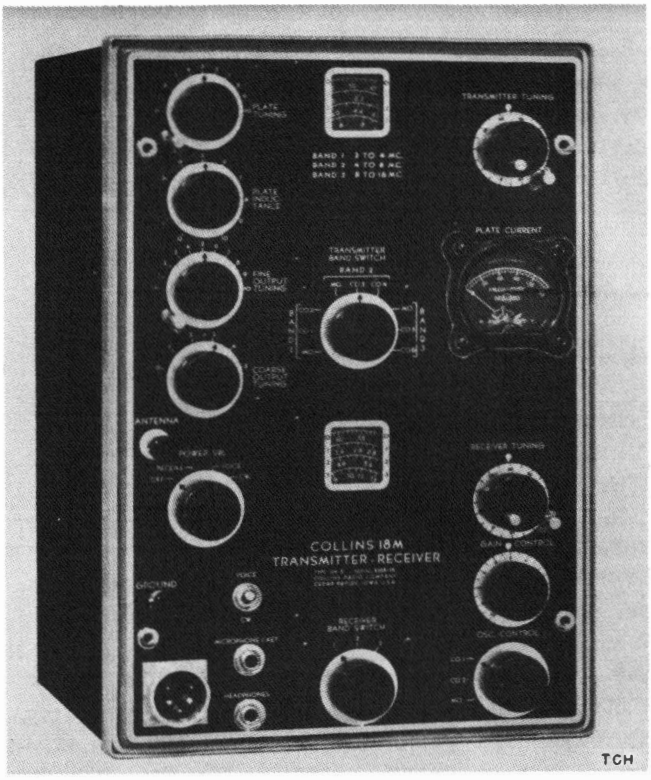
PHYSICAL CHARACTERISTICS

Radio Set SCR-543 packed for domestic or export shipment: total weight 1,253 pounds, total volume 54 cu ft, 1.4 ship tons.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 23 May 52

AN/GRC-TYPE

SERVICE TYPE NUMBER: TCH
TRANSMITTER AND RECEIVER EQUIPMENT



Transmitter and Receiver Equipment TCH is a-m (cw, voice) h-f, field and vehicular radiotelephone and radiotelegraph set. The transmitter may be keyed at speeds up to 30 wpm on cw.

This equipment covers its frequency range in three bands, using a master oscillator for continuously variable frequency operation over the entire range; crystal control on any two preset frequencies in the three bands. Crystal operation over the 8 to 16 mc band is not generally satisfactory.

The transmitter will operate into a wide range of antenna lengths. In temporary field installations various counterpoise arrangements are possible; an 8 to 10 foot rod (with suitable loading coil) is recommended for vehicular installation.

Collins Type 415E-3 Power Unit operates from a 12-v storage battery.

AN/GRC-TYPE

TCH :SERVICE TYPE NUMBER

TRANSMITTER AND RECEIVER EQUIPMENT

INSTRUCTION LITERATURE: Not Available

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Navy

DATE OF THIS SHEET: 23 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter-Receiver Unit Collins Type 18M-5	14-1/4 x 9-5/8 x 9-3/4	25.5
1	Power Unit Collins Type 413B-1	9-1/2 x 22-1/4 x 12	95.0
1	Power Unit Collins Type 415E-3	6-3/8 x 6-5/8 x 3-1/2	8.5
1	Power Unit Collins Type 416T-1	6-1/4 x 6-1/2 x 7-1/2	18.0
1	Power Unit Collins Type 416T-2	6-1/4 x 6-1/2 x 7-1/2	18.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Field units or vehicles.

INSTALLATION: Ground, vehicular.

APPROXIMATE RANGE (IN MILES): Short.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR. -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 - 16 in 3 bands.
Band 1: 2 - 4 Band 2: 4 - 8 Band 3: 8 - 16.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw.

POWER OUTPUT: Transmitter: Cw, 15 w; voice, 5 w.
Receiver: 200 mw maximum into 500 ohm load.

POWER REQUIREMENTS: 102 w, 12 v, dc; or 160 w, 24 v, dc; or 150 w, 32 v, dc; or 115 v, dc or ac.

PHYSICAL CHARACTERISTICS

Information on TCH Transmitter and Receiver Equipment not available.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 20 Dec 51	**AN/GRR-2** RADIO SET



Radio Set AN/GRR-2 is a crystal-controlled, medium-weight radio receiver for the reception of a-m (voice) and cw signals in the m-f, h-f, and v-h-f bands. It con be used in permanent or semipermanent stations.

This equipment is essentially a commercial (Hallicrafters SX-28) table-model receiver which may be either cabinet or rack and panel mounted. It has a phonograph jack and three output impedances for headphones and an external 500-ohm or 5,000-ohm permanent magnet speaker. Can be operated in a conventional inverted L or doublet antenna system.

It has a built-in power supply, and it operates from ac with provision for emergency use of either battery or power pack.

AN/GRR-2

RADIO SET

INSTRUCTION LITERATURE: TM 11-874
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army, Navy
DATE OF THIS SHEET : 20 Dec 51

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant; also used by special teams, such as D/F intercept team.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE (IN MILES): Medium to long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5. -6, -15, -17, -18, -19, AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.55 - 42 in six bands.

Band 1: 0.55 - 1.6	Band 3: 3.0 - 5.8	Band 5: 11.0 - 21.0
Band 2: 1.60 - 3.0	Band 4: 5.8 - 11.0	Band 6: 21.0 - 42.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone, keyed cw.

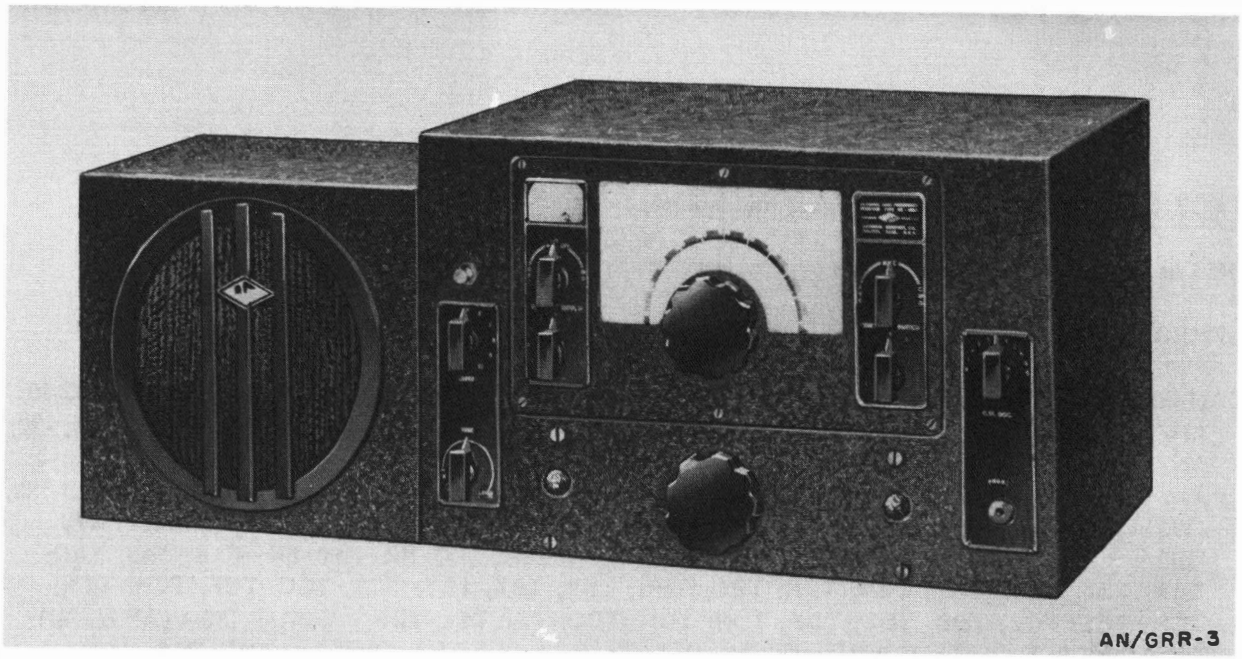
POWER OUTPUT: 8 w undistorted.

POWER REQUIREMENTS: 138 w, 117 v, 60 cyc, ac
or
6 v, 4.8 amp heater supply
and 270 v, 150 ma high voltage.
Dc power consumption is 108 w,

PHYSICAL CHARACTERISTICS

Radio Set AN/GRR-2 measures 16-1/2 x 20-3/4 x 10-3/4 inches, net weight 78 pounds, volume 2.1 cu ft. Packed for domestic shipment: total weight 135 pounds, total volume 5.5 cu ft. Shipped in 1 package.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 8 Jan 52	**AN/GRR-3** RADIO SET



Radio Set AN/GRR-3 is a transportable, a-m (voice, cw, and mcw) receiving equipment which operates in the l-f and m-f bands for air-ground, ground, and weather data communication at division and higher headquarters in fixed station applications.

This equipment consists essentially of a commercial (National NC-100 ASC) communications type receiver and associated 8-inch inclosed loudspeaker. It has a built-in power supply.

This set can be used with conventional inverted L or T type antennas or with a doublet antenna system.

AN/GRR-3

RADIO SET

INSTRUCTION LITERATURE: None
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	National Receiver NC-100 ASC	12 x 19 x 15	65
1	8" PM Loudspeaker in cabinet	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Fixed or mobile.

APPROXIMATE RANGE (IN MILES): Medium to long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-5, -6, -10, -15, -17, -18, -19, AN/GRC-9, -13, -26; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRT-3, -4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -329, -339, -365, -401, -447, -610; MBS; MQ; OA-60/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR; -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.2 - 0.4 and 1.3 - 30.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, mcw.

POWER REQUIREMENTS: 110 v, 60 cyc.

PHYSICAL CHARACTERISTICS

Radio Set AN/GRR-3 measures 12 x 19 x 15 inches, net weight 65 pounds, volume 1.8 cu ft.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 20 Dec 51	**AN/GRR-5** RADIO SET



Radio Set AN/GRR-5 is a low-power, a-m (voice, cw, and mcw) radio receiving equipment which operates over four frequency bands in the m-f and h-f ranges. It is a general purpose set used in infantry divisions and is intended to replace Radio Set SCR-593.

This equipment consists essentially of a superheterodyne radio receiver having an integral loudspeaker and a shock mount. It is provided with a protective canvas carrying case.

Three types of antennas (whip-type, doublet, and straight wire) and an integral power supply are included. Operates from 110-v a-c power or from 6-, 12-, or 24-v storage batteries. Can be operated for 48 hours on Battery BA-48, which can be mounted on top of the equipment.

AN/GRR-5

RADIO SET

INSTRUCTION LITERATURE: None
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 20 Dec 51

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver R-174/URR	Not Available	Not Available
1	Power Supply PP-308/URR	" "	" "
1	Case CY-615/URR	" "	" "
1	Rack MT-678/FMQ-2	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Signal company in infantry division antiaircraft artillery gun batteries, field artillery replacement for SCR-593 on T/O&E's and T/A's.

INSTALLATION: Vehicle or semifixed.

APPROXIMATE RANGE (IN MILES): Short to medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.5 - 18.0, in 4 bands.

Band 1: 1.5 – 2.7.
Band 2: 2.7 – 5.0.
Band 3: 5.0 – 9.5.
Band 4: 9.5 – 18.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: 20 - 90 mw.

POWER REQUIREMENTS: Dry battery
350 to 450 ma at 1.4 v and
20 to 27 ma at 90 v.

Using Power Supply PP-308/URR
5.0 amp at 6 v dc or
2.5 amp at 12 v dc or
1.75 amp at 24 v dc or
0.5 amp at 110 v ac.

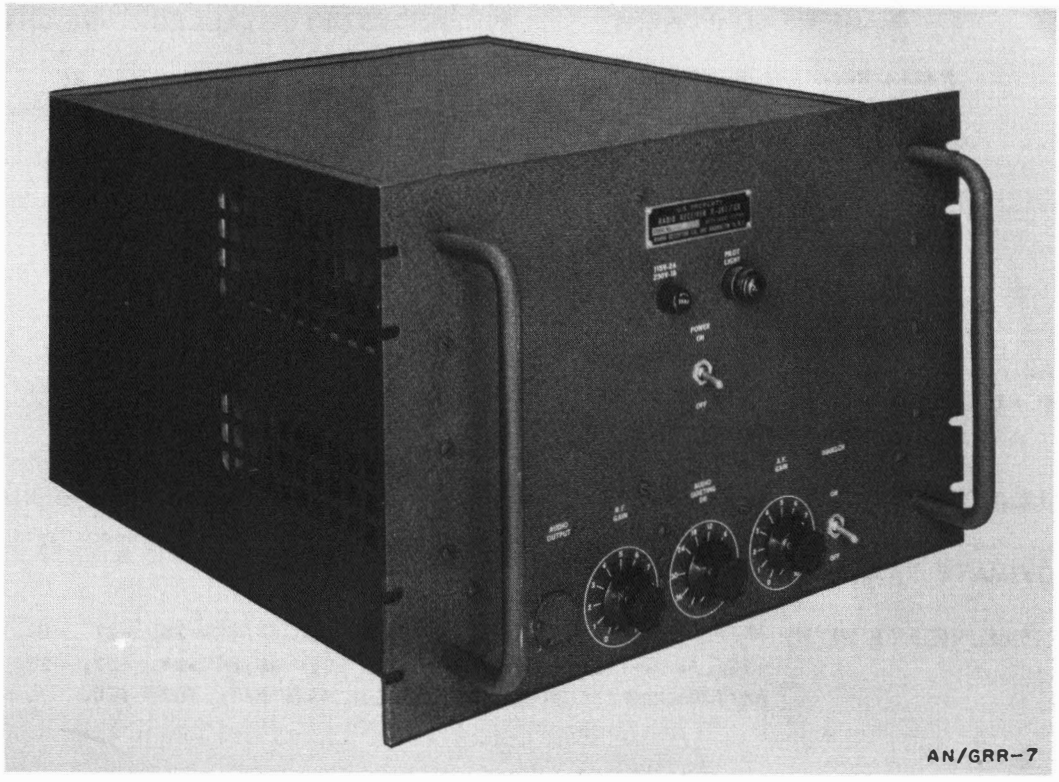
PHYSICAL CHARACTERISTICS

Information on Radio Set AN/GRR-5 not available.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Air Force
DATE OF THIS SHEET: 12 May 52

AN/GRR-7

RADIO RECEIVING SET



Radio Receiving Set AN/GRR-7 may be used for reception of a-m (voice or tone) signals in the u-h-f range 225 to 399.9 mc for general ground operation for air-to-ground and point-to-point communication. It is used primarily for control tower, and airway station operation, and has sufficient output to operate a loudspeaker.

This receiver is a crystal-controlled, single-channel, double conversion superheterodyne, having individual channels spaced 100 kc apart throughout the tuning range.

The second intermediate frequency is 6 mc and this equipment is thus subject to interference from h-f radio transmitters operating on or near this frequency.

The r-f input circuit is designed to operate from the following antennas: AT-197/GR; AS-505/GR; AS-450/GR. Normally used with, but not part of, Radio Transmitter Set AN/GRT-3.

AN/GRR-7

RADIO RECEIVING SET

INSTRUCTION LITERATURE: TO AN 16-30GRR-7-1 13 Feb. 52
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Air Force
DATE OF THIS SHEET: 12 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver R-361/GR	19 x 12-1/4 x 19	50
1*	Relay Rack	Standard 19"	Not Available
1*	Terminal Panel	Not Available	" "
1*	Desk Shelf MX-1058/U	" "	" "
1*	Interconnecting cables	" "	" "

* Required but not supplied.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued on any organizational level as project material in accordance with AFR 100-17.

INSTALLATION: Designed for mounting in standard 19" relay rack for fixed ground installation.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-12, -19, -27, -30, -33, -34; AN/GRC-16, -27, -29, -30, -32; AN/GRT-3; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-32; AN/URC-4; AN/URT-10; MAR; MAY; TDZ; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Crystal controlled for operation on channels spaced 100 kc apart in the u-h-f band 225 _ 399.9 mc.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice or tone.

POWER OUTPUT: 1 w into 600 ohm load.

POWER REQUIREMENTS: 200 w, 115/230 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Receiving Set AN/GRR-7 measures 19 x 12-1/4 x 19 inches, net weight 50 pounds, volume 2.1 cu ft. Packed for either domestic or export shipment: total weight 62 pounds, total volume 2.5 cu ft. Shipped in 1 package.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 8 Jan 52	**AN/GRR-TYPE** SERVICE TYPE NUMBER: BC-312 RADIO RECEIVER



Radio Receiver BC-312 is an m-f and h-f, a-m (voice, tone, and cw) general utility radio receiving equipment which is widely used as part of such radio sets as AN/GRC-26 and SCR-399. It can be used in mobile, vehicular, fixed plant, or airborne radio communication applications.

This equipment consists of a single primary operating component. It can be used with a loudspeaker or headphones.

Most models operate from a 12/14-v vehicular storage battery; BC-312-HX and BC-312-NX require 24/28-v.

AN/GRR-TYPE	INSTRUCTION LITERATURE: TM 11-850
BC-312 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVER	USING SERVICE : Army
	DATE OF THIS SHEET : 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company level.

INSTALLATION: Ground, vehicular or fixed.

APPROXIMATE RANGE (IN MILES): Medium to long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.5- 18.0 (over-all).

Band A: 1.5 – 3.0	Band D: 8.0 – 11.0
Band B: 3.0 – 5.0	Band E: 11.0 – 14.0
Band C: 5.0 – 8.0	Band F: 14.0 – 18.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, tone, voice.

POWER REQUIREMENTS: Radio Receiver BC-312 (most models): 12/14 v dc (storage battery).
Radio Receivers BC-312-HX and BC-312-NX: 24/28 v dc (storage battery).

PHYSICAL CHARACTERISTICS

Radio Receiver BC-312 measures 10 x 9-1/16 x 18-1/16 inches, net weight 58 pounds, volume 1 cu ft. Packed for domestic shipment: total weight 120 pounds, total volume 4.7 cu ft. Shipped in 1 package.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 8 Jan 52	**AN/GRR-TYPE** SERVICE TYPE NUMBER: BC-314 RADIO RECEIVER



Radio Receiver BC-314 is a lightweight, portable, battery-operated, a-m radio receiving equipment used for voice, c-w, and tone signal communication in the l-f and m-f bands. It is a general purpose equipment which can be used in fixed station, mobile, or vehicular applications.

This equipment consists of a single cabinet-inclosed superheterodyne radio receiver, which is the battery-operated version of Radio Receiver BC-344, and is used as a component of such equipment as Radio Set SCR-177-B.

Uses a conventional straight wire or a vehicular whip-type antenna.

AN/GRR-TYPE	INSTRUCTION LITERATURE: TM 11-850
BC-314 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVER	USING SERVICE : Army
	DATE OF THIS SHEET : 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: European Theater, special teams.

INSTALLATION: Ground, vehicular or fixed.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-8; AN/ART-13; AN/CRT-3, -5; AN/FRT-4, -10, -19; AN/GRT-2; AN/MRC-6, -16, -20, -22; AN/SRC-3; AN/SRT-1, -3; AN/TRQ-1; AN/URT-2, -3, -4; BC-191, -329, -365; MBS; RC-52; SCR-177, -188, -193; T-5/FRC, -159/FRT; -171/FR; TAB, TAJ; TAQ; TBL; TBN; TBU; TCB; TCE; TCG; TCS; TCY; TCZ; TDD; TDE; TDK; Marconi TH-41-B; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.15- 1.5 (over-all).

Band A: 0.15 _ 0.26
Band B: 0.26 _ 0.45
Band C: 0.45 _ 0.82
Band D: 0.82 _ 1.50.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, tone, voice.

POWER REQUIREMENTS: 12- to 14-v storage battery.

PHYSICAL CHARACTERISTICS

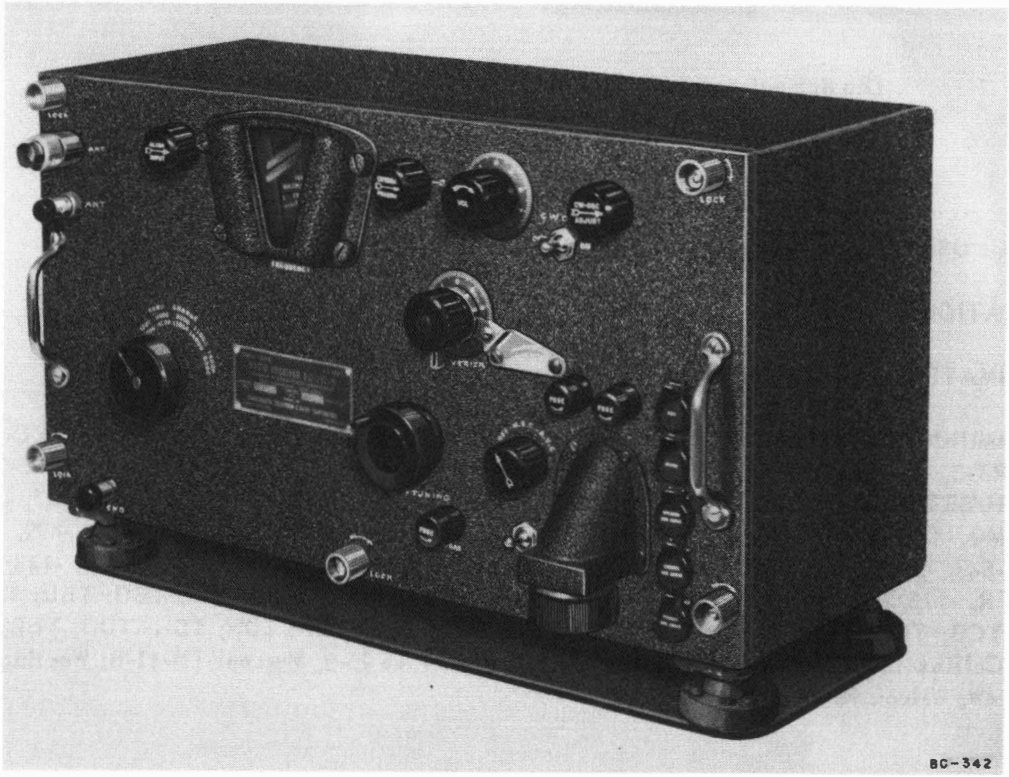
Radio Receiver BC-314 measures 10 x 9-1/16 x 18-1/16 inches, net weight 58 pounds, volume 1.0 cu ft. Packed for domestic shipment: total weight 120 pounds, total volume 4.7 cu ft. Shipped in 1 package.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 8 Jan 52

AN/GRR-TYPE

SERVICE TYPE NUMBER: BC-342

RADIO RECEIVER



Radio Receiver BC-342 is a lightweight, a-m (voice, tone, and cw) receiving equipment which operates in the m-f and h-f bands and is the a-c operated equivalent of Radio Receiver BC-312. It is designed for general purpose ground, mobile, or fixed station use at division or higher headquarters.

This equipment is a highly sensitive and selective self-contained radio receiver inclosed in a metal cabinet. It is used as a component of Radio Set SCR-399 and similar equipment.

It uses a whip type or straight wire antenna and operates from a conventional a-c power source.

AN/GRR-TYPE	INSTRUCTION LITERATURE: TM 11-850
BC-342 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVER	USING SERVICE: Army, Navy
	DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Corps, division, and company levels; USAF squadron and groups.

INSTALLATION: Ground, mobile or fixed.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.5 - 18.0 (over-all).

Band A: 1.5 – 3.0	Band D: 8.0 – 11.0
Band B: 3.0 – 5.0	Band E: 11.0 – 14.0
Band C: 5.0 – 8.0	Band F: 14.0 – 18.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, tone, voice.

POWER REQUIREMENTS: 75 w, 115 v, 50/60 cyc ac.

PHYSICAL CHARACTERISTICS

Radio Receiver BC-342 measures 10 x 9-1/16 x 18-1/16 inches, net weight 61.5 pounds, volume 1 cu ft. Packed for domestic shipment: total weight 120 pounds, total volume 4.7 cu ft. Shipped in 1 package.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 8 Jan 52	AN/GRR-TYPE SERVICE TYPE NUMBER: BC-344 RADIO RECEIVER



Radio Receiver BC-344 is a lightweight, portable, a-c operated, a-m radio receiving equipment used for voice, c-w, and tone signal communication in the low-and medium-frequency bands. It is a general purpose equipment which is widely used in fixed plant applications at higher headquarters and for special purposes.

This equipment consists of a single, cabinet-inclosed radio receiver which is the a-c version of battery-operated Radio Receiver BC-314. It is used as a component of such equipment as Radio Set AN/MRQ-2 and Radio Control Central AN/TRQ-1.

Can be operated with straight wire or rhombic types of antennas, doublet antenna systems, and antennas of special design as may be required.

AN/GRR-TYPE	INSTRUCTION LITERATURE: TM 11-850
BC-344 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVER	USING SERVICE : Army
	DATE OF THIS SHEET : 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Corps, company level, special teams, Army Security Agency.

INSTALLATION: Ground, mobile or fixed.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-8; AN/ART-2, -13; AN/CRT-3, -5; AN/FRT-4, -10, -19; AN/MRC-6, -16, -20, -22; AN/SRC-3; AN/SRT-1, -3; AN/TRQ-1; AN/URT-2, -3, -4; BC-191, -329, -365; MBS; RC-52; SCR-177, -188, -193; T-5/FRC, -159/FR, -171/FR; TAB; TAJ; TAQ; TBL; TBN; TBU; TBW; TCB; TCE; TCG; TCS; TCY; TCZ; TDD; TDE; TDK; Marconi TH-41-B; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.15 - 1.5 (over-all).

Band A: 0.15 – 0.26
Band B: 0.26 – 0.45
Band C: 0.45 – 0.82
Band D: 0.82 – 1.50.

TYPE MODULATION: Am.

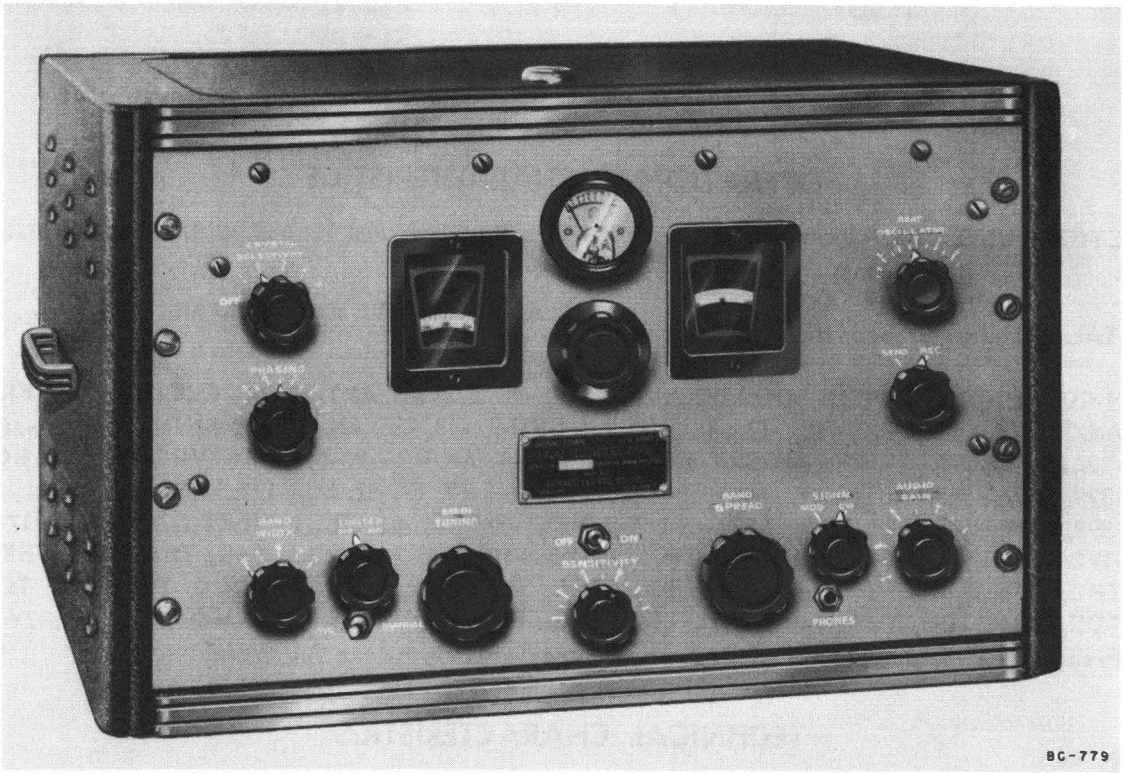
TYPE OF SIGNAL: Cw, tone, voice.

POWER REQUIREMENTS: 75 w, 115 v, 50/60 cyc ac.

PHYSICAL CHARACTERISTICS

Radio Receiver BC-344 measures 10 x 9-1/16 x 18-1/16 inches, net weight 61.5 pounds, volume 1.0 cu ft. Packed for domestic shipment: total weight 120 pounds, total volume 4.7 cu ft. Shipped in 1 package.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 8 Jan 52	AN/GRR-TYPE SERVICE TYPE NUMBER: BC-779 RADIO RECEIVER



Radio Receiver BC-779 is a long-range, m-f and h-f, a-m (voice, tone, and cw) equipment which operates in five frequency bands. Used at division and higher headquarters for fixed station, monitoring, and similar communication applications.

This equipment consists of a table model commercial type (Hammerlund Super-Pro) communication receiver which can be operated in its metal cabinet or mounted on a standard relay rack. Can be provided with shock mounts for use in a vehicle.

Operates on a single long wire or doublet antenna system and uses an external power supply unit. Can also be operated from storage and dry batteries.

AN/GRR-TYPE	INSTRUCTION LITERATURE: TM 11-866
BC-779 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVER	USING SERVICE: Army, Navy
	DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Special teams of 2d Signal Service Battalion, and 1st and 9th Detachment Fixed Stations.

INSTALLATION: Ground, fixed station or vehicular. APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-4, -5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-3, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4, -8; BC-191, -329, -339, -365, -401, -447, -610; MBS; MQ; OA-60/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCG; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: From 0.1 - 0.4 and from 2.5 - 20.0, in 5 bands.

Band 1: 0.1 – 0.2
Band 2: 0.2 – 0.4
Band 3: 2.5 – 5.0
Band 4: 5.0 – 10.0
Band 5: 10.0 – 20.0.

TYPE MODULATION: Am.

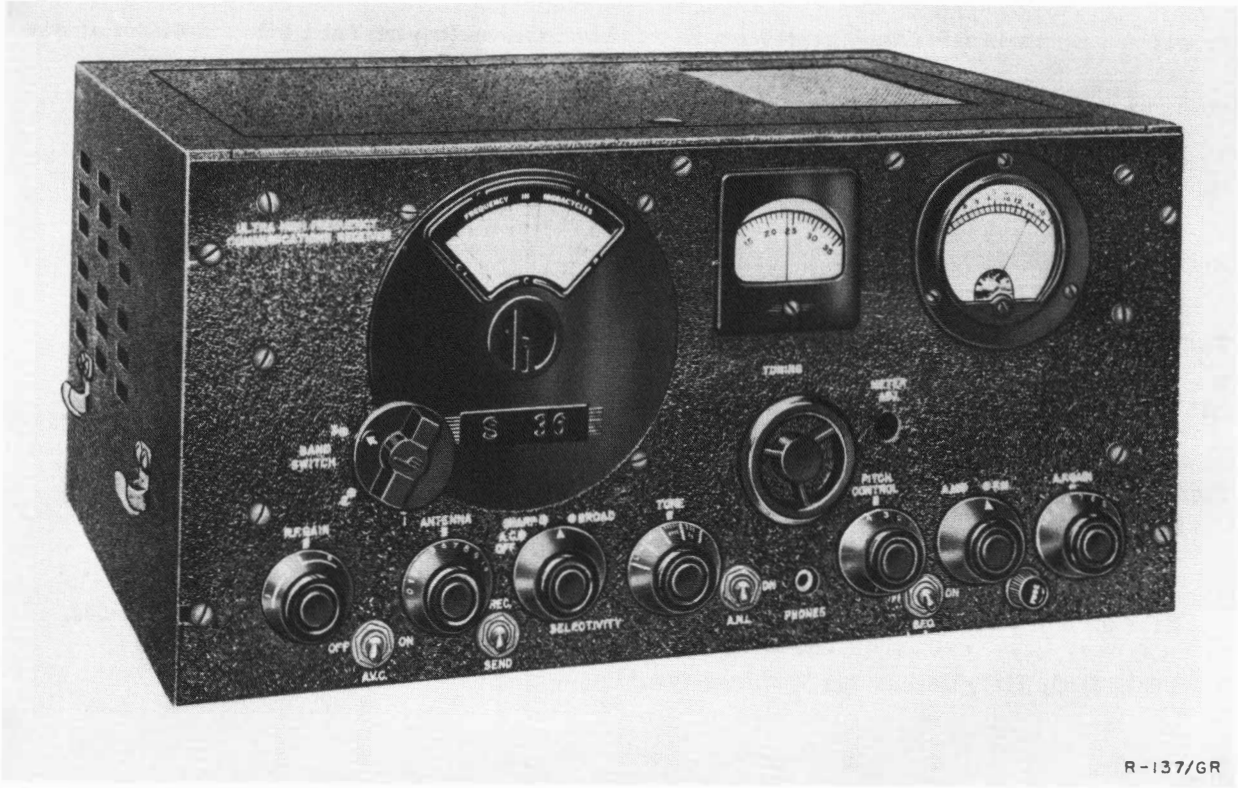
TYPE OF SIGNAL: Cw, tone voice.

POWER REQUIREMENTS: Power Supply Unit RA-74, -84, or -94 (a-c power) or one 6-v storage battery, five 45-v B batteries, and one 45-v C battery.

PHYSICAL CHARACTERISTICS

Radio Receiver BC-779 measures 10-1/2 x 15-3/8 x 19 inches, net weight 55 pounds, volume 1.8 cu ft. Packed for domestic shipment: total weight 57 pounds, total volume 2.6 cu ft. Packed for export shipment: total weight 90 pounds, total volume 4.3 cu ft. Shipped in 1 package both domestic and export.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 22 Jan 52	**AN/GRR-TYPE** AN/COMP TYPE NUMBER: R-137/GR RADIO RECEIVER



R-137/GR

Radio Receiver R-137/GR is a transportable, a-m (voice, cw) and f-m (voice) receiving equipment used for intercept, monitoring, ground-to-air, and air warning applications in the h-f and v-h-f bands.

This equipment consists essentially of a commercial (Hallicrafter S-36) communications type receiver that is inclosed in a table model cabinet and which requires an external loudspeaker. It is provided with a jack for a headset and an output terminal for loudspeaker operation. It also has manual and automatic volume control and a beat-frequency oscillator.

This set can be operated on 115/230 v ac or from a 6-v battery plus 270 v (at 145 ma) of B battery.

May be used as a component of Radio Control Central AN/TRQ-1.

AN/GRR-TYPE	INSTRUCTION LITERATURE: None
	CLASSIFICATION OF EQUIPMENT: Unclassified
R-137/GR : AN/COMP TYPE NUMBER	USING SERVICE : Army
RADIO RECEIVER	DATE OF THIS SHEET: 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Intercept and air warning. APPROXIMATE RANGE (IN MILES): Long.

INSTALLATION: Ground, mobile or fixed station.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2, -3; AN/FRC-6, -7, -9; AN/GRC-3, -4, -5, -6, -7, -8, -30; AN/MRC-5, -16; -22; AN/PRC-6, -8, -9, -10, -16, -17, -20; AN/TRC-1, -3, -4, -7, -8, -11, -12; AN/TRQ-1; AN/URC-4; AN/URT-7, -10, AN/VRC-1, -2, -3, -5, -7, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRT-1; BC-640; MAN; MAW; MBF; MBS; MN; RC-257; SCR-177, -293, -298, -300, -508, -509, -510, -522, -528, -542, -573, -575, -608, -609, -610, -619, -624, -628, -641, -643, -808, -828; TBS; TBY; TDG; TDQ; TDT; Collins 32v-2; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27.8 - 143.0 in three bands.

TYPE MODULATION: Am, fm.

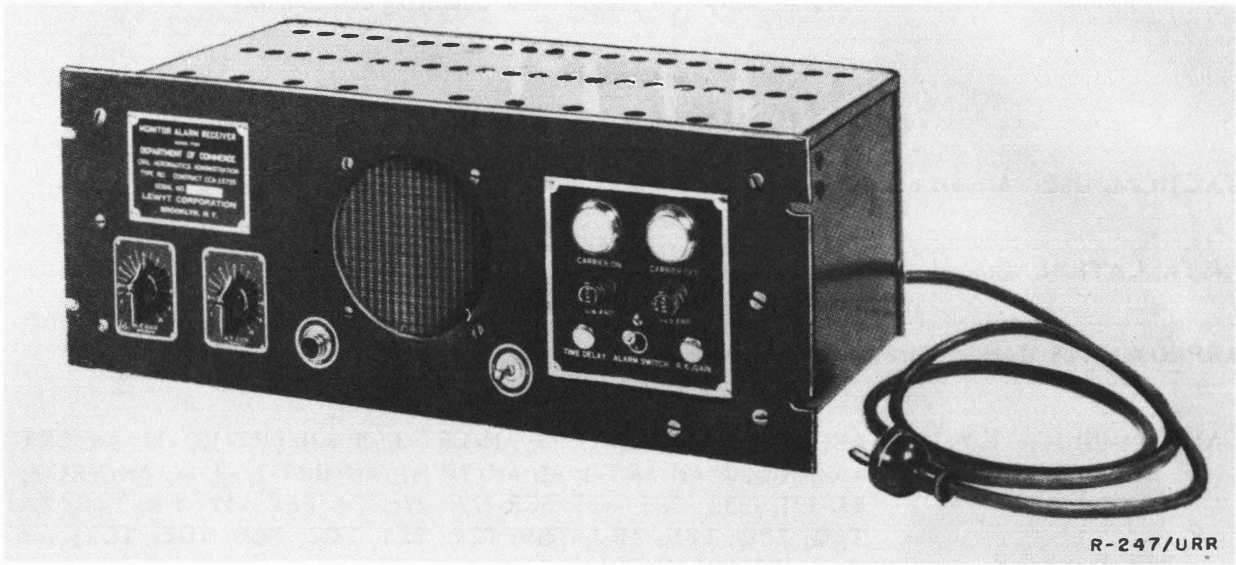
TYPE OF SIGNAL: Voice, cw.

POWER REQUIREMENTS: 115/230 v, 50/60 cyc ac or A battery, 6 v at (4.5 amp) and B battery, 270 v at 145 ma.

PHYSICAL CHARACTERISTICS

Radio Receiver R-137/GR measures 19 x 9 x 14 inches, net weight 66 pounds, volume 1.5 cu ft.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 Apr 52	AN/GRR-TYPE AN/COMP TYPE NUMBER: R-247/URR RADIO RECEIVER



R-247/URR

Radio Receiver R-247/URR is a rack-mounted, a-c operated, fixed-tuned, radio range, tuned-radio-frequency receiver designed for the monitoring of compass locator station transmitters. An alarm buzzer and signal lamps operate whenever the received signal drops below a predetermined level.

This equipment provides instantaneous or time delay alarm operation. The time delay circuit delays operation of the alarm system for 10 to 15 seconds to prevent undesired operation of the alarm, caused by the absence of a signal during normal short-time transmission interruptions.

Has three r-f stages individually adjustable from the back of the receiver but does not provide automatic volume control.

Can use a single vertical wire antenna.

AN/GRR-TYPE	INSTRUCTION LITERATURE: NavShips 91084
R-247/URR :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVER	USING SERVICE : Navy
	DATE OF THIS SHEET : 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Airport control or aeronautical ground stations.

INSTALLATION: Ground, rack-mounted.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/ART-13; AN/CRT-3, -5; AN/FRT-10, -19; AN/GRT-2; AN/MRC-20; AN/SRT-1, -3; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-4; BC-191, -329, -365; MBS; SCR-177, -274; T-5/FRC, -171/FR; TAB; TAJ; TAQ; TBL; TBN; TBU; TBW; TCE; TCY; TCZ; TDD; TDE; TDK; Marconi TH-41-B; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.2 - 0.55.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw.

POWER OUTPUT: Built-in loudspeaker: 0.5 w. Auxiliary output terminals: 0.2 w.

POWER REQUIREMENTS: 48 w, 115 v, 60 cyc, 1 phase.

PHYSICAL CHARACTERISTICS

Radio Receiver R-247/URR measures 6-31/32 x 19 x 10 inches. Packed for domestic shipment: total weight 40 pounds.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/GRR-TYPE** SERVICE TYPE NUMBER: RCF, RCF-1 RADIO RECEIVING EQUIPMENT



RCF

Radio Receiving Equipments RCF and RCF-1 are highly selective and sensitive general purpose, receivers of telegraph or telephone signals within the medium- and high-frequency ranges.

RCF and RCF-1 include reradiation suppressors which make their use safe in combat areas .

RCF includes the vibrator power unit and loudspeaker, and is identical to Radio Set AN/GRR-2.

It is normally intended for table installation, but is provided with a 19-inch front panel which is suitable for relay rack mounting.

A phone-output jack is provided, but the headset is not supplied. A phono-input jack accommodates the audio amplifier for sound reproduction. Controls include a send-receiver switch, and a special socket for receiver disabling purposes.

The receiver poser supply includes an octal socket for use when dc instead of the usual ac is used.

A receiving antenna is required but not supplied.

AN/GRR-TYPE

RCF, RCF-1 :SERVICE TYPE NUMBER
RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 95284
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CHL-46202	10 x 20-1/2 x 14-3/4	75
*1	Vibrator Power Unit CMA-20164	5-3/8 x 8-1/2 x 6-9/16	Not Available
*1	Loudspeaker CJS-49172	10-7/8 x 16 x 11	" "
1	Reradiation Suppressor CN-50174-A	4-17/32 x 5-1/2 x 2	" "

*Supplied with RCF only.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Advanced bases, shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBY; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.550 - 43.0 mc in 6 bands.

Band 1: 0.550 - 1.620
Band 2: 1.5 - 3.1
Band 3: 2.9 - 5.9
Band 4: 5.75 - 11.5
Band 5: 10.3 - 21.5
Band 6: 20.4 - 43.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice.

POWER OUTPUT: 8 w, into 500 or 5,000 ohm load.

POWER REQUIREMENTS: RCF: 207 w, 117 v, 60 cyc, 1 phase, ac; or 199 w, 6.3 v, dc.
RCF-1: 207 w, 115/230 v, 25/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipments RCF, RCF-1 measure 15-3/8 x 20-1/2 x 14-3/4 inches. Packed for domestic shipment: total weight 213 pounds, total volume 9.1 cu ft.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 3 Jan 52	**AN/GRR-TYPE** SERVICE TYPE NUMBER: SCR-607 RADIO SET



Radio Set SCR-607 is a 3-band, voice and c-w a-m and f-m, medium- and high-frequency, general purpose radio receiving equipment for fixed station or mobile use in intercept, monitoring, or communication applications.

It consists of a commercial type (Hallicrafter S-36) table model communication receiver which can also be mounted on a standard relay rack. It is designed to operate with a special dipole array (Antenna Equipment RC-154) and can be controlled at "stand-by" from a remote location by means of auxiliary equipment.

This equipment is operated from 115/230 v ac or from a 6-v vehicular storage battery plus 270 volts of B battery supply. A shock mount is provided for use when this set is installed and operated in a vehicle.

AN/GRR-TYPE	INSTRUCTION LITERATURE: TM 11-867
	CLASSIFICATION OF EQUIPMENT: Unclassified
SCR-607 : SERVICE TYPE NUMBER	USING SERVICE : Army
RADIO SET	DATE OF THIS SHEET : 3 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver BC-787	9-5/16 x 21-1/4 x 14-1/2	78
1	Mounting FT-377	4-7/8 x 21-1/4 x 14-1/2	12
1	Antenna Equipment RC-154	Not Available	200

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army Security Agency headquarters, Army Security Agency mobile teams.

INSTALLATION: Fixed station or mobile.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2, -3; AN/FRC-6, -7, -9; AN/GRC-3, -4, -5, -6, -7, -8, -30; AN/MRC-5, -16, -22; AN/PRC-6, -8, -9, -10, -16, -17, -20; AN/TRC-1, -3, -4, -7, -8, -11, -12; AN/TRQ-1; AN/URC-4; AN/URT-7, -10; AN/VRC-1, -2, -3, -5, -7, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRT-1; BC-640; MAN; MAW; MBF; MBS; MN; RC-257; SCR-177, -293, -298, -300, -508, -509, -510, -522, -528, -542, -573, -575, -608, -609, -610, -619, -624, -628, -641, -643, -808, -828; TBS; TBY; TDG; TDQ; TDT; Collins 32V-2; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27.8 - 143, in 3 bands.
Band 1: 27.8 – 47.0.
Band 2: 46 – 82.
Band 3: 82 – 143.

TYPE MODULATION: Am, fm.

TYPE OF SIGNAL: Voice, cw.

POWER OUTPUT: 3 w.

POWER REQUIREMENTS: 110 w, 115/230 v, 50/60 cyc ac or A battery, 6 v at(4.5 amp) B battery, 270 v at 145 ma.

PHYSICAL CHARACTERISTICS

Information on Radio Set SCR-607 not available.

STATUS:

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 15 June 1956

AN/GRT–1

RADIO SET

NO PHOTOGRAPH AVAILABLE

Radio Set AN/GRT–1 is a portable broadcasting station consisting of a broadcast transmitter, power supply, pressure-cooling unit, control console mixer, and a phonograph turntable. It is packed in five armored trunks that serve as carrying cases.

Antenna supports, as well as suitable control room and studio facilities, are required.

AN/GRT-1

RADIO SET

INSTRUCTION LITERATURE:

USING SERVICE: USA

DATE OF THIS SHEET: 15 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Pressure Cooling and Voltage Selector Unit Type B2	11⅞ x 9 x 17⅞	54.3
1	Transmitter Power Supply Type PB-50	10½ x 12½ x 16	89.3
1	Radio Broadcast Transmitter TWT PB-50A	11¼ x 18¾ x 17⅞	49.5
1	Phonograph Turntable Type T2, two-speed	6¾ x 20¼ x 18	20
1	Control Console Mixer Type 2C4	11 x 18 x 9⅜	35

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Psychological warfare services.

INSTALLATION: Ground, portable.

APPROXIMATE RANGE: Short.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.1 to 1.5.

TYPE MODULATION: Am (A3).

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 50 w.

POWER REQUIREMENTS: 285 w, 90/240 v, 50/60 cy ac.

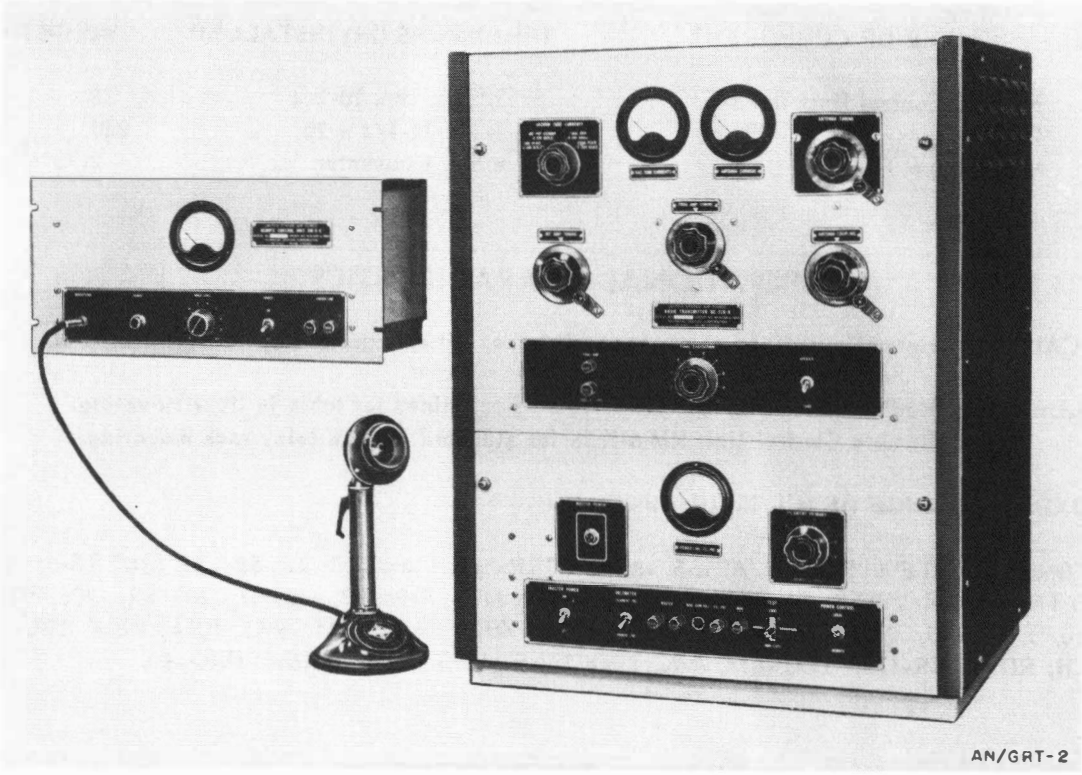
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 28 Apr 52

AN/GRT-2

RADIO TRANSMITTING SET



Radio Transmitting Set AN/GRT-2 is a fixed, ground a-m (voice) transmitter for short-range, airport traffic control communication in the l-f and m-f range. Can be operated from a distance of 5 miles by Remote Control Unit RM-6.

The frequency is crystal-controlled (with a master oscillator for emergency operation).

Nominal power output is 25 w. The 500-ohm impedance audio input circuit is designed for a low-impedance microphone or telephone line.

The antenna output is designed for operation into a long wire antenna.

Input power required is 105/125 v ac, 50/60 cyc , single-phase, at 560 w for transmitter; requires an added 28-w input for remote control operation.

AN/GRT-2

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: TO 16-30GRT2-2, TO 16-30GRT2-3
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 28 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Remote Control Unit RM-6-K	8-23/32 x 19 x 10-1/4	36
1	Radio Transmitter BC-329-N	30-1/2 x 24-1/4 x 20	240
1	Microphone T-27-P	11 x 5-1/4 diameter	2.75

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally utilized at advance air bases for emergency airport traffic control.

INSTALLATION: Radio Transmitter BC-329-N is self-contained for table in floor mounting. Remote Control Unit RM-6-K is for standard 19-inch relay rack mounting.

APPROXIMATE RANGE (IN MILES): (Nominal) short.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/GRR-3; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/VRC-4; BC-344, -348, -453, -779; MBS; R-96/SR, -129/U, -203/SR, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR; RAK; RAL; RAS; RBA; RBH; RBL; RBM; RCH; RDF; SCR-177, -274, -614; ARC Type 12; Fisher TS25.3; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.2 - 0.41.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 25 w.

POWER REQUIREMENTS: 560 w, 105-125 v, 1 phase, 50/60 cyc ac. An additional 28 w is required for remote control.

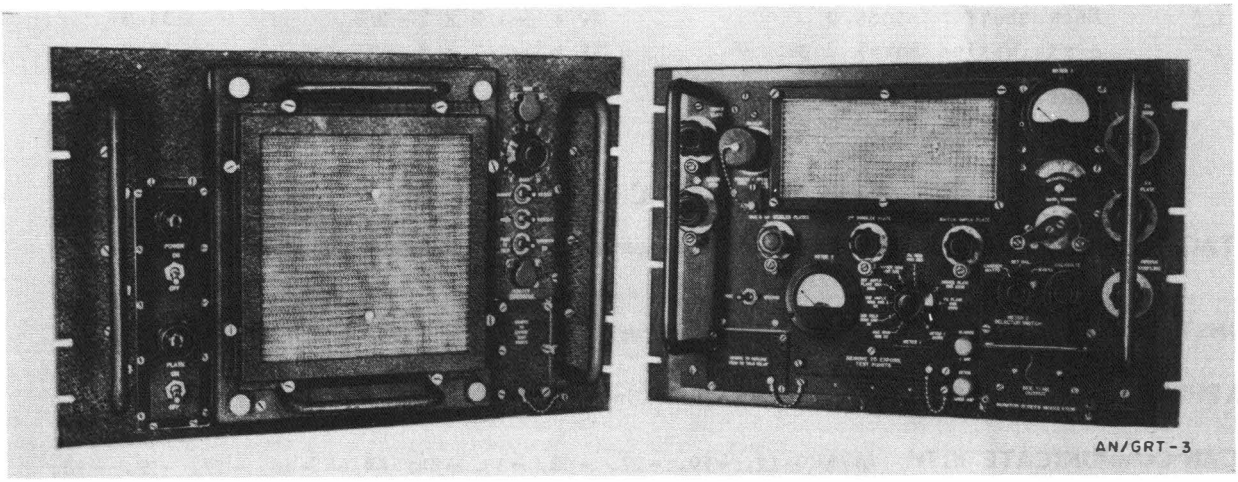
PHYSICAL CHARACTERISTICS

Radio Transmitting Set AN/GRT-2 measures 20 x 25 x 31 inches, net weight 279 pounds, volume 24 cu ft. Packed for domestic or export shipment: total weight 512 pounds, total volume 25.6 cu ft (approximate). Shipped in 2 packages.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Air Force
DATE OF THIS SHEET: 9 Jun 52

AN/GRT-3

RADIO TRANSMITTING SET



Radio Transmitting Set AN/GRT-3 is a ground-fixed station u-h-f voice transmitter for single-channel, ground-to-air, and point-to-point radio communication. It is normally used with Radio Receiving Set AN/GRR-7 to form a two-way communications facility.

This set consists of a radio transmitter and modulator-power supply plus interconnecting cables. A relay rack, desk shelf and distribution panel are used with this equipment but are not supplied.

Operates on preset, crystal-controlled channels in the u-h-f band 225 to 400 mc.

The transmitter output circuit is designed to match a 52-ohm coaxial low-impedance transmission line RG-8/U or equivalent.

Recommended antennas are: Antenna AT-197/GR, Antenna AS-505/GR and Antenna AS-450/GR. On control tower frequencies Antenna AT-197/GR is used. On airway frequencies Antenna AS-505/GR is recommended. No remote control facilities are provided.

AN/GRT-3

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE : Air Force
DATE OF THIS SHEET : 9 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter T-282/GR	19 x 12-1/4 x 21	175.0
1	Modulator-Power Supply MD-141/GR	10 x 12-1/4 x 21	200.0
1 *	Rack MT-686/GR	22-5/8 x 72-1/2 x 21-3/8	96.0
1 *	Desk Shelf MX-1058/U	19 x 3-1/2 x 20-3/8	11.3
1 *	Distribution Panel J-390/GR	19 x 5-1/2 x 3	15.0

* Required but not supplied.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued on any organizational level as project equipment in accordance with AFR 100-17.

INSTALLATION: Ground, fixed (Standard relay rack).

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight .

CAN COMMUNICATE WITH: AN/ARC-12, -19, -27, -30, -33, -34; AN/GRC-16, -27, -29, -30, -32; AN/GRR-7; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-32; AN/URC-4; AN/URR-9, -12, -13; MAR; MAY; R-278/GR; RDR; RDZ; SCR-616.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: (Uhf) 225 - 400, single channel, preset, crystal-controlled.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 100 w (Nominal).

POWER REQUIREMENTS: 750 w of 105 _ 125 or 210 _ 250 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Set AN/GRT-3 measures 22-5/8 x 72-1/2 x 21-3/8 inches, net weight 500 pounds, volume 20.40 cu ft. Packed for either domestic or export shipment: total weight 600 pounds, total volume 22.44 cu ft, 0.51 ship ton. Shipped in 4 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 8 Jan 52

AN/GRT-TYPE

SERVICE TYPE NUMBER: BC-191
RADIO TRANSMITTER



Radio Transmitter BC-191 is a general utility, medium-range, low-frequency, a-m (voice and cw) radio transmitting equipment which is widely used as part of Radio Sets SCR-177, SCR-188, SCR-193, and AN/VRC-1 and similar equipment. It can be used on the ground, in vehicles, and in aircraft and is used for ground-to-ground or ground-to-air communication.

This equipment consists of a radio transmitter, and appropriate tuning units for the frequency channels in which it is desired to operate it, a dynamotor and related accessories. Normally, when issued as part of a complete radio set, this equipment is provided with tuning units for the frequencies in which the radio set is to be operated.

May be operated from a storage battery, through the dynamotor component, or from a portable field power unit such as Power Units PE-75 and PE-49 and similar equipment.

AN/GRT-TYPE

BC-191 :SERVICE TYPE NUMBER
RADIO TRANSMITTER

INSTRUCTION LITERATURE: TM 11-4017
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Antenna Tuning Unit BC-306	17-3/4 x 9-1/2 x 9-1/8	9.75
1	Dynamotor Unit BD-77	10-29/32 x 11-1/16 x 7-1/2	38.7
1	Radio Control Box BC-309	3-9/16 x 3 1/2 x 2-7/32	0.418
8	Transmitter Tuning Units .	7-5/8 x 16-3/4 x 8-3/4 (each)	11.437

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in training artillery units.

INSTALLATION: Aircraft, ground, vehicle.

APPROXIMATE RANGE (IN MILES): 100.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -314, -342, -344, -348, -453, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/UR, -209/UR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -288/URR, -320/FRC; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBL; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDF; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -614, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.2 - 0.8 and 1.5 - 12.5.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone, and cw.

POWER OUTPUT: 40 - 75 w.

POWER REQUIREMENTS: 12-v storage battery, gasoline engine generator for supplying 12 v and high voltage, or 110/220 v ac.

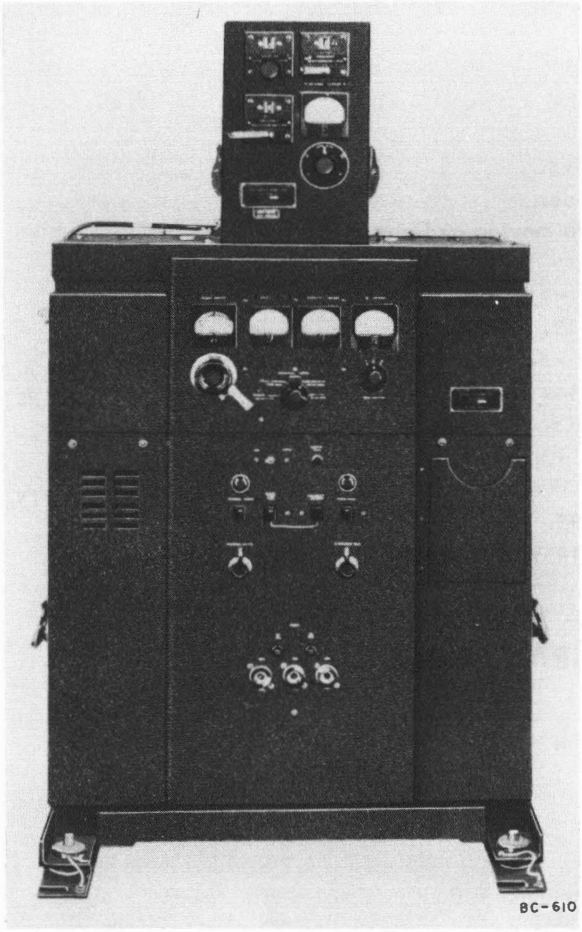
PHYSICAL CHARACTERISTICS

Radio Transmitter BC-191 measures 22 x 21-21/32 x 9-5/16 inches, net weight 52 pounds.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 8 Jan 52

AN/GRT-TYPE

SERVICE TYPE NUMBER: BC-610
RADIO TRANSMITTER


BC-610

Radio Transmitter BC-610 is the widely used radio transmitting component of such equipments as Radio Sets SCR-399, SCR-499, and similar radio sets. It is a crystal-controlled or master oscillator a-m (voice or cw), medium- and high-frequency, radiotelephone and radiotelegraph equipment used in intermediate and long distance communication at division and higher headquarters.

This equipment consists essentially of a single, cabinet-inclosed, compact unit which is fitted with shock mountings. It is designed for use in mobile applications, which can operate on the move, using whip-type antenna systems. It can also be used as a fixed station transmitter, used with rhombic, doublet, tower-supported or other more elaborate arrays.

As mobile equipment it is powered by a trailer-drawn power unit; as fixed station equipment it is operated on conventional power sources.

It requires 1,700 to 2,000 w of 115 v 50/60 cyc, ac.

AN/GRT-TYPE

BC-610 :SERVICE TYPE NUMBER

RADIO TRANSMITTER

INSTRUCTION LITERATURE: TM 11-281, TM 11-4057
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army, Navy
DATE OF THIS SHEET : 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Overseas theaters.

INSTALLATION: Ground: mobile or fixed station.

APPROXIMATE RANGE (IN MILES): Voice: 100 miles.
C-w : 250 miles.
(Ranges for both moving and stationary.)

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -9, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 - 18.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw and voice.

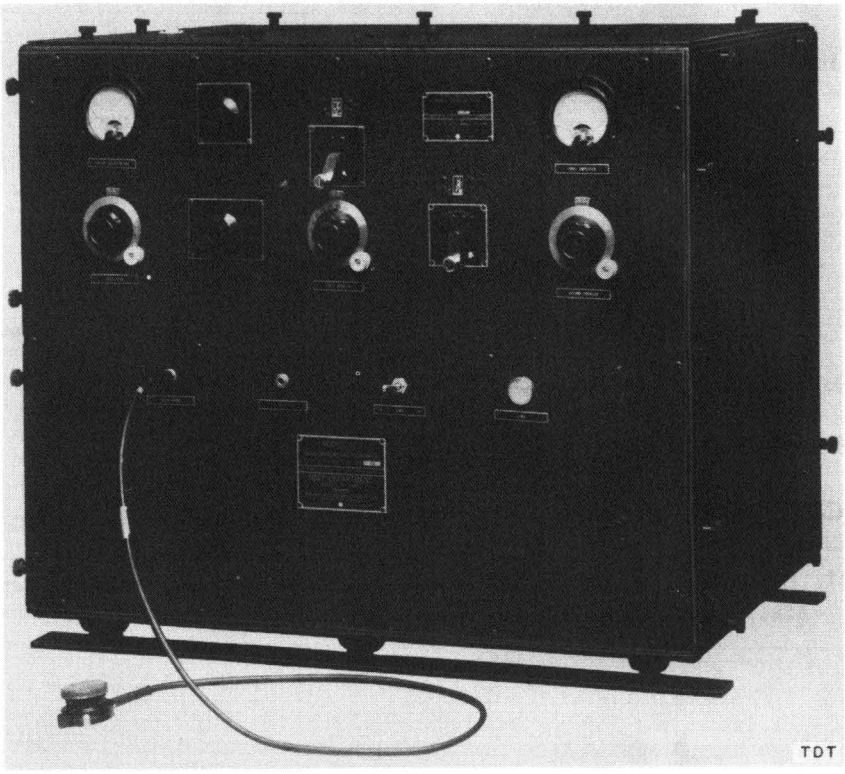
POWER OUTPUT: Cw: 400 w.
Voice: 300 w.
Above 8 mc output is somewhat less.

POWER REQUIREMENTS: 1,700 to 2,000 w, 115 v, 50/60 cyc, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitter BC-610 measures 32-5/8 x 21-3/8 x 39-7/8 inches, net weight 497 pounds, volume 16.8 cu ft. Packed for domestic shipment: total weight 755 pounds, total volume 35.1 cu ft, 0.88 ship ton.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/GRT-TYPE** SERVICE TYPE NUMBER: TDT RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TDT is a single-channel, general purpose, semiportable, v-h-f equipment designed for air-traffic control, and point-to-point use.

A crystal oscillator provides frequency control.

A quarter-wave vertical antenna, adjustable for various frequency ranges, is supplied. Relay keying speeds of 40 wpm are possible.

The equipment has shock mounts for table, or bench mounting.

AN/GRT-TYPE	INSTRUCTION LITERATURE: NavShips 95337
TDT :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CKV-52322	26-3/4 x 31-1/2 x 26-1/2	400.0
1	Antenna Assembly CKV-66091	28-3/8 x 49-1/2 x 49-1/2	16.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations, airport control towers, or aeranautical ground stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-12, -21; AN/VRC-1; BC-639, -787, MAR; MBS; R-137/GR; RBK; RBQ; RC-256; RCK; RCO; SCR-522, -542, -574, -575, -607, -616, -624, -641, -644.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 115 - 156.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw.

POWER OUTPUT: 35 w.

POWER REQUIREMENTS: 750 w, 110 - 120 v, 50/60 cyc, 1 phase, ac.

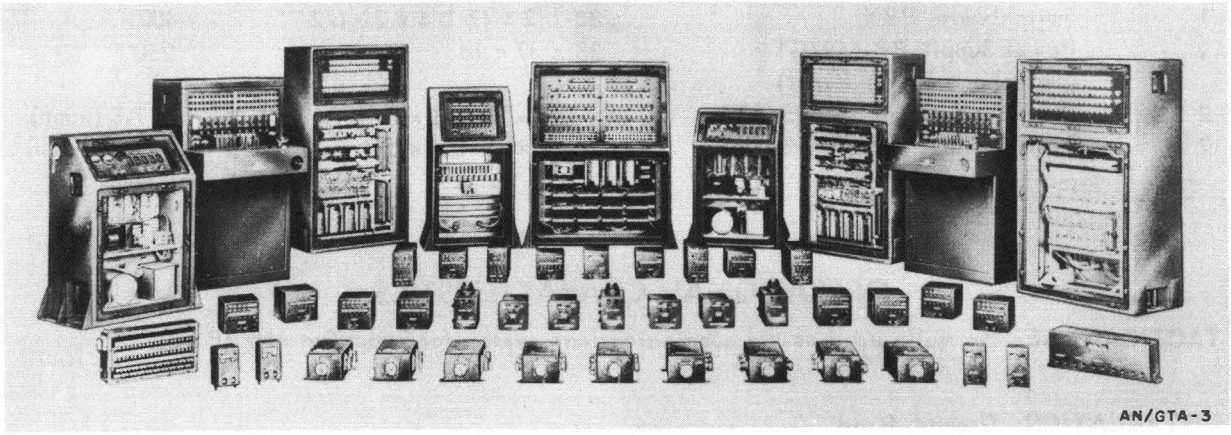
PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TDT measures 26-3/4 x 31-1/2 x 26-1/2 inches, net weight 451.5 pounds. Packed for domestic shipment: total weight 640 pounds, total volume 33 cu ft, 0.83 ship ton. Shipped in 3 packages.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 10 Jun 52

AN/GTA-3

TELEPHONE CENTRAL GROUP



Telephone Central Group AN/GTA-3 is a complete telephone communication system used with, but not part of, Radar Set AN/FPS-3. It provides telephone communication between radar set operating personnel and outside points, which include aircraft in flight, radio communication with 12 v-h-f and three h-f transmitters and receivers, and wire telephone communication through four trunk lines to commercial telephone systems, with provisions for either magneto ringing or dial calling.

Although this equipment is operated independently of Radar Set AN/FPS-3, except for the supply of 120 v, 60 cyc ac for charging the batteries and providing ringing power, a correct telephone installation cannot be made previous to the installation of the radar set.

The input supply from the radar power distribution cabinet is 24 v dc to the main frame and relay rack and the ringing supply is 80 v, 20 cyc ac.

Maximum d-c drain from the telephone power unit is 10 amp. Two Storage Batteries BB-53 are used, supplying 45 amp at 12 v dc for 20 hours at a discharge rate of 2.25 amp.

AN/GTA-3

TELEPHONE CENTRAL GROUP

INSTRUCTION LITERATURE: TO 16-30FPS-23
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Telephone Switchboard SB-116/GT (Chief Controller's Telephone Unit)	27 x 48-1/2 x 18	240
1	Telephone Switchboard SB-115/GT	24-1/2 x 42-3/4 x 18	200
1	Switchboard, PBX	35-1/2 x 47-1/4 x 22-1/2	400
1	Power Supply PP-559/GT (Telephone Power Panel)	28 x 37 x 18	250
2	Distribution Panel SB-95/GT	9-7/8 x 18-1/8 x 5	17.5 (each)
2	Distribution Panel SB-136/GT	9-7/8 x 18-1/8 x 5	17.5 (each)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally used as the communications system for Radar Set AN/FPS-3.

INSTALLATION: Ground, fixed.

CAN COMMUNICATE WITH: Aircraft in flight; and ground telephone stations.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Voice.

TYPE COMMUNICATION CIRCUITS: Standard line telephone circuits.

CONTROLS: Manually operated switches, plugs, and microphones.

POWER REQUIREMENTS: 1,200 w (10 amp) 120 v, 60 cyc, 1 phase ac .
2 storage batteries (ea) 24 v, (45 amp 20 hr) .

PHYSICAL CHARACTERISTICS

Telephone Central Group AN/GTA-3 weighs 3,820 pounds net, volume 602.177 cu ft. Packed for domestic or export shipment: total weight 7,636 pounds, total volume 602.177 cu ft, 15.05 ship tons. Shipped in 38 packages.

STATUS: A/Std

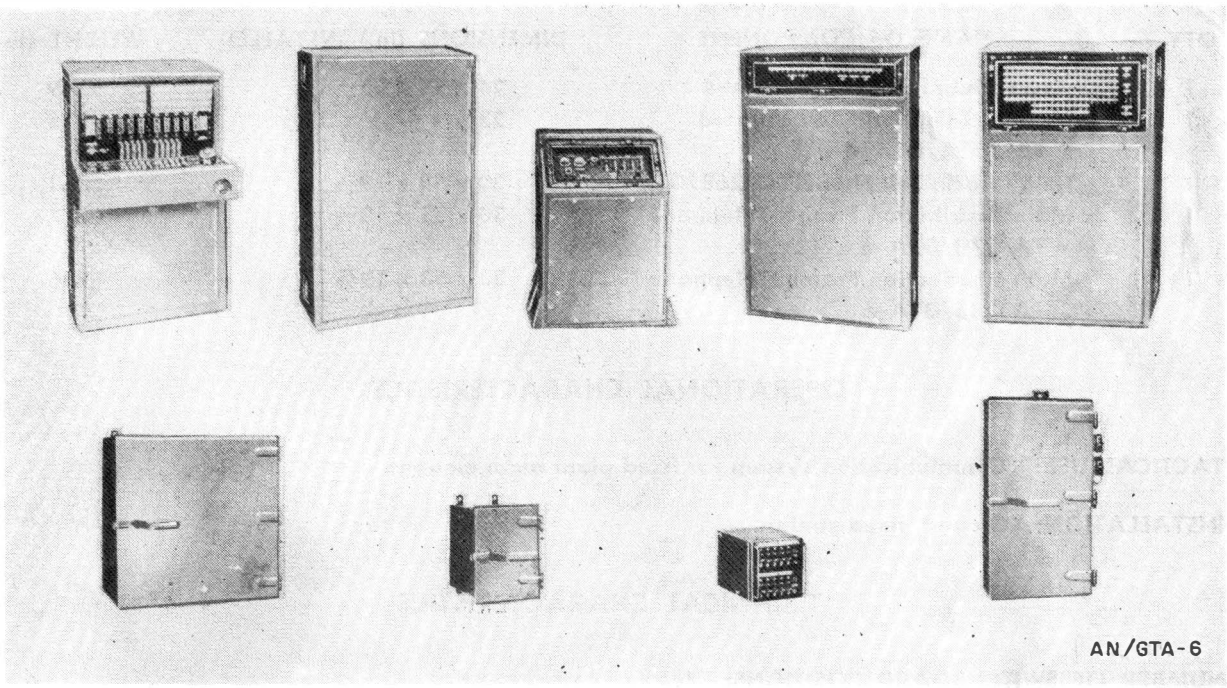
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF

DATE OF THIS SHEET: 4 June 1956

AN/GTA-6

TELEPHONE CENTRAL OFFICE GROUP, MANUAL



Manual Telephone Central Office Group AN/GTA-6 is tactical fixed station equipment that furnishes communication facilities for radar stations and their related radar networks.

This system can be adapted to many uses, depending on the tactical situation. It is manufactured without cross-connections in the main frames, thus providing the flexibility needed to adapt it to the radar set being used and to the requirements of the local situation.

Communication with other stations in the radar network, civilian trunk lines, and aircraft in flight is limited by the number of outside lines and channels provided by the telephone communication system. This equipment provides 160 outside wire lines, including 20 radio channels; each requiring the use of three outside wire lines.

AN/GTA–6

TELEPHONE CENTRAL OFFICE GROUP, MANUAL

INSTRUCTION LITERATURE: 31W1–2GTA6–Series

USING SERVICE: USAF

DATE OF THIS SHEET: 4 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Power Supply PP–706B/GTA–4	24 x 18 x 37	249
1	Manual Telephone Switchboard SB–202A/GTA–4	23⅝ x 47½ x 31½	315
1	Relay Rack, Telephone TA–268/GTA–6	30 x 53 x 19⅜	361
1	Main Distribution Frame, Telephone TA–270/GTA–6	30 x 53 x 19⅜	277
1	Main Distribution Frame, Telephone TA–285/GTA–6	30 x 53 x 19⅜	236

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Communication system for fixed plant radar stations.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

Manually Operated Equipment:

Number of cord circuits: 10
Number of line circuits: 40
Number of trunk circuits: 10

PERCENT TRUNKING:

POWER REQUIREMENTS: 250 w, 115 v, 60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

AN/GTA–TYPE

TA–126/GT

REPEATER, TELEPHONE

NO PHOTOGRAPH AVAILABLE

Telephone Repeater TA–126/GT is a portable, single-channel, terminal-type equipment that provides stable, low-loss, short-haul telephone circuits in point-to-point, loop, and local trunk circuits. It is used in field wire systems to improve transmission under all weather conditions.

This equipment uses 20-cycle or voice-frequency signaling. It may be used with field telephones, field switchboards, telephone and telegraph apparatus, multichannel telegraph terminals, and data transmission equipment. It consists of a single component with a self-contained power supply. It has two-wire and four-wire input and output terminals.

Power Unit PE–214–B or commercial 115-volt, 60-cycle ac power may be used.

AN/GTA–TYPE

TA–126/GT

REPEATER, TELEPHONE

INSTRUCTION LITERATURE: TM 11–2135

USING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	(Equipment consists of a single major operating component.)		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Field wire systems.

INSTALLATION: Ground, transportable.

MAXIMUM SYSTEM LENGTH: 5 to 30 mi.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Two-wire or four-wire field tel lines.

FACILITIES AFFORDED: Two-wire and four-wire lines.

FREQUENCY: 200 to 6,500 cy.

TYPE OF MODULATION: Am (A3).

TYPE RINGING: 20 cy.

POWER REQUIREMENTS: 115 v ±10%, 1 amp, 50 to 60 cy ac; 22 to 30 v, 4 amp dc or 24-v vehicular-type battery.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	11⅝ x 15⅞ x 16½	65	2.5		
DOMESTIC PACK:		75	3.13		1
EXPORT PACK:					

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 11 Jun 52

AN/GTC-TYPE

SERVICE TYPE NUMBER: TP-14

TELEPHONE REPEATER



Telephone Repeater TP-14 is a portable, field, 22-type repeater equipment used to extend the range of two-wire (open wire or field cable) facilities which serve division or equivalent headquarters.

This equipment consists of a completely self-contained unit including the amplifier, filters, equalizers, line-balancing networks, and related items. It is a panel-mounted apparatus contained in a protective box or case. Can be removed from its housing for rack-and-panel mounted applications for fixed station use.

Two of these repeaters may be used in tandem to extend circuits where mixed facilities, such as open wire and field cable, are used, and can be installed at terminal or intermediate points of a system.

It operates from 110/130 or 220/250 v ac, from a 12-v storage battery, or from suitable dry batteries.

AN/GTC-TYPE	INSTRUCTION LITERATURE: TM 11-2007, TM 11-4412.
TP-14 : SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELEPHONE REPEATER	USING SERVICE : Army
	DATE OF THIS SHEET: 11 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground; fixed or portable.

CAN COMMUNICATE WITH: Repeater, terminal, central office and related apparatus operating in the connecting facility or system.

TECHNICAL CHARACTERISTICS

NUMBER AND TYPE OF FACILITIES: Four-wire.
Two-wire to four-wire.

POWER REQUIREMENTS: 110-130 v, 50/60 cyc ac,(11 w) or
220-250 v, 50/60 cyc ac,(11 w) or
12-v storage battery,(800-ma drain) or
dry cells 135 v dc,(20-ma drain) and
12 v dc, 150-ma drain.

PHYSICAL CHARACTERISTICS

Telephone Repeater TP-14 measures 17-1/2 x 11 x 8 inches.

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 20 June 1956

AN/GTT–TYPE

OA–145/GT

TONE WARNING GENERATOR GROUP

NO PHOTOGRAPH AVAILABLE

Tone Warning Generator Group OA–145/GT is used on a telephone line to indicate audibly when a telephone conversation is being recorded.

This equipment consists of a tone-warning generator, a tone-warning generator control, cables, and accessories.

Three special purpose cable assemblies are supplied so that the generator group can be connected to any suitable recorder.

The warning signal is applied to the line at intervals of 15 seconds.

AN/GTT–TYPE

INSTRUCTION LITERATURE: TM 11–2088

USING SERVICE: USA

DATE OF THIS SHEET: 20 June 1956

OA–145/GT

TONE WARNING GENERATOR GROUP

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Tone Warning Generator Control C–638/GT	$3\frac{15}{16} \times 4 \times 4\frac{1}{2}$	.5
1	Tone Warning Generator O–93/GT	$9\frac{3}{4} \times 6\frac{5}{8} \times 4\frac{11}{32}$	1.5

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: 1,400 cy tone (.2 sec duration, at intervals of 15 sec).

POWER REQUIREMENTS: 115 v, 50/60 cy ac.

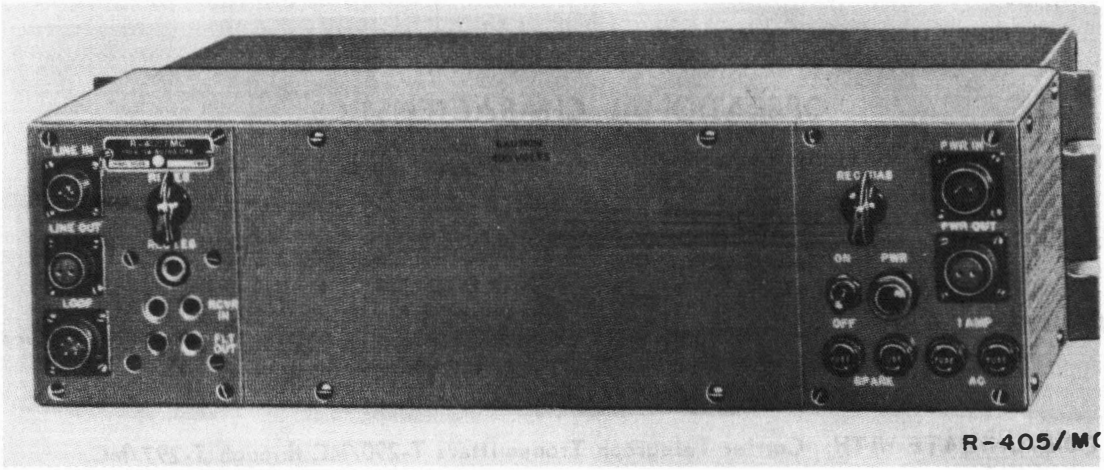
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	$9\frac{3}{4} \times 12 \times 5$	9	2		
DOMESTIC PACK:					
EXPORT PACK:		35	2		1

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Mar 52

AN/MCR-TYPE

AN/COMP TYPE NUMBER: R-405/MC through R-412/MC
CARRIER TELEGRAPH RECEIVER



Carrier Telegraph Receivers R-405/MC through R-412/MC are used to form an eight-channel carrier-telegraph terminal at which a received f-m carrier signal is translated (by each of these eight carrier receiver components) into d-c, on-off-type telegraph signals to operate from one to eight teletypewriters (or similar signal recording devices).

These eight carrier-telegraph receivers are identical except for the characteristic center audio frequency of each.

Interconnections are made by means of short cables.

These eight operating units are installed in a relay rack console which is located in the signal path between radio receiver and teletypewriter (or other recording device).

Each unit has its own built-in power supply.

AN/MCR-TYPE

R-405/MC through R-412/MC :AN/COMP TYPE NUMBER
CARRIER TELEGRAPH RECEIVER

INSTRUCTION LITERATURE: NavShips 91541
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET: 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
8	Carrier Telegraph Receiver R-405/MC through R-412/MC	5-1/4 x 19 x 14-1/2	27.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations, mobile.

INSTALLATION: Ground, mobile.

MAXIMUM SYSTEM LENGTH: Subject to input signal strength. The receiver is sensitive between -40 dbm and +10 dbm, from a 600-ohm source.

CAN COMMUNICATE WITH: Carrier Telegraph Transmitters T-290/MC through T-297/MC.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: One wire, cable, or radio, v-f circuit.

FACILITIES AFFORDED: Eight receiving channels, 170 cps apart between 850 and 2210 cps.

FREQUENCY:

(R-405/MC) 935 cps	(R-409/MC) 1615 cps
(R-406/MC) 1105 cps	(R-410/MC) 1785 cps
(R-407/MC) 1275 cps	(R-411/MC) 1955 cps
(R-408/MC) 1445 cps	(R-412/MC) 2125 cps

TYPE OF MODULATION: Fm.

POWER REQUIREMENTS: 280 w, 105/115/125v, 50/60 cyc, 1 phase.

PHYSICAL CHARACTERISTICS

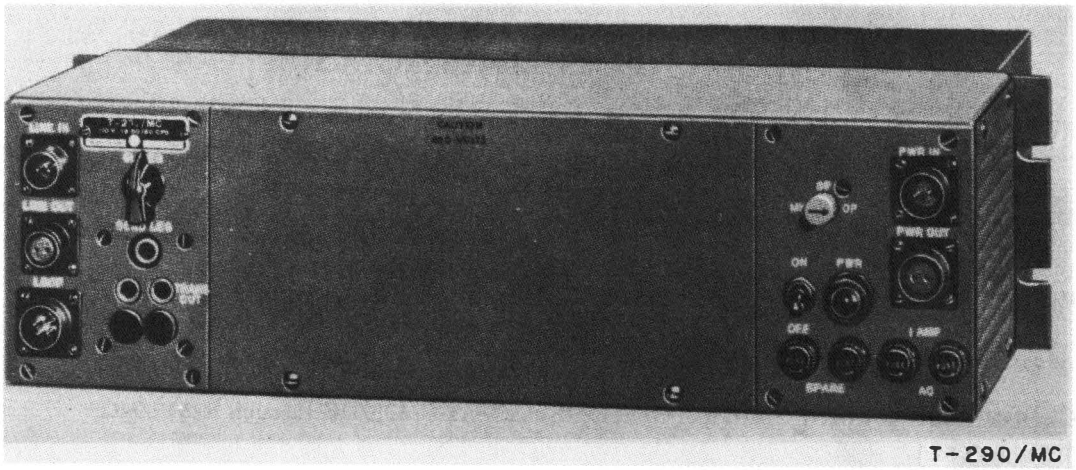
Carrier Telegraph Receiver R-405/MC(through R-412/MC)measures 42 x 19 x 14-1/2 inches, net weight 216 pounds, volume 6 cu ft. Packed for domestic shipment: total weight 252 pounds, total volume 14.48 cu ft. Shipped in 8 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Mar 52

AN/MCT-TYPE

AN/COMP TYPE NUMBER: T-290/MC through T-297/MC

CARRIER TELEGRAPH TRANSMITTER



T-290/MC

Carrier Telegraph Transmitters T-290/MC through T-297/MC are used to form an eight-channel carrier telegraph transmitting terminal, whereby mark and space signals from up to eight keyboard sending printers are translated into f-m audio signals which can be relayed to carrier receivers by wire, cable, or radio circuits.

The eight carrier telegraph transmitters are identical except for the characteristic center audio frequency to which each individual transmitter is adapted. Each unit is usually controlled by a keyboard sending printer, but hand keying or any other telegraph keying system may be used. The eight units are usually installed in a relay rack console. Each unit has its own built-in power supply and connections are made from unit to unit with short cables.

AN/MCT-TYPE

T-290/MC through T-297/MC :AN/COMP TYPE NUMBER
CARRIER TELEGRAPH TRANSMITTER

INSTRUCTION LITERATURE: NavShips 91541
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET: 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
8	Carrier Telegraph Transmitter T-290/MC through T-297/MC	5-1/4 x 19 x 14-1/2	24.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations; mobile.

INSTALLATION: Ground, mobile.

MAXIMUM SYSTEM LENGTH: Subject to load impedance and transmission line losses. Transmitter output between -20 dbm and +6 dbm into 600-ohm load.

CAN COMMUNICAT E WITH: Carrier Telegraph Receivers R-405/MC through R-412/MC.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: One wire, cable, or radio v-f circuit.

FACILITIES AFFORDED: Eight transmitting channels, 170 cps apart between 850 and 2,210 cps.

FREQUENCY:

935 cps (T-290/MC)
1,105 cps (T-291/MC)
1,275cps (T-292/MC)
1,445 cps (T-293/MC)
1,615 cps (T-294/MC)
1,785 cps (T-295/MC)
1,955 cps (T-296/MC)
2,125 cps (T-297/MC)

TYPE OF MODULATION: Fm.

POWER REQUIREMENTS: 232 w, 105/115/125 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Carrier Telegraph Transmitters T-290/MC through T-297/MC measure 42 x 19 x 14-1/2 inches, net weight 196 pounds, volume 6 cu ft. Packed for domestic shipment: total weight 232 pounds, total volume 14.48 cu ft. Shipped in 8 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 18 Feb 52

AN/MGC-TYPE

AN/COMP TYPE NUMBER: TT-55/MGC
TELETYPEWRITER



Teletypewriter TT-55/MGC is a field, page-printing, teletypewriter equipment designed for installation in field-type shelters or vans for mobile station use at regiment or higher headquarters in standard communication applications.

This equipment consists essentially of a modified commercial (Teletype Corp Model 15) teletypewriter station equipment, without the cases illustrated above. It has a standard communications keyboard and type pallets and includes a base, motor unit, keyboard transmitter and typing unit, and related accessories. It can be operated in one-way but not in full-duplex applications.

Can be operated on 115 v dc or 115 v, 25 cyc or 50/60 cyc, ac.

AN/MGC-TYPE	INSTRUCTION LITERATURE: TM 11-352
TT-55/MGC :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELETYPEWRITER	USING SERVICE : Army
	DATE OF THIS SHEET: 18 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Regiment or higher headquarters.

INSTALLATION: Ground, mobile.

CAN COMMUNICATE WITH: Terminal, repeater, or station apparatus over wire, cable, carrier, or radioteletype standard communication facilities composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Standard keyboard, 72 characters per line, break-in key, remote motor stop, bell, shift and unshift, space-repeat, carriage return, line feed.

OPERATING SPEED: 368.1 opm; 60 wpm.

MOTOR CHARACTERISTICS: Series-governed motor; 115 v dc or 25 or 50/60 cyc ac, 87.6 vps, tuning fork frequency, 1,800 rpm.

POWER REQUIREMENTS: 110 w on 115 v dc, 140 va on 115 v, 25 cyc ac, or 115 v, 50/60 cyc ac.

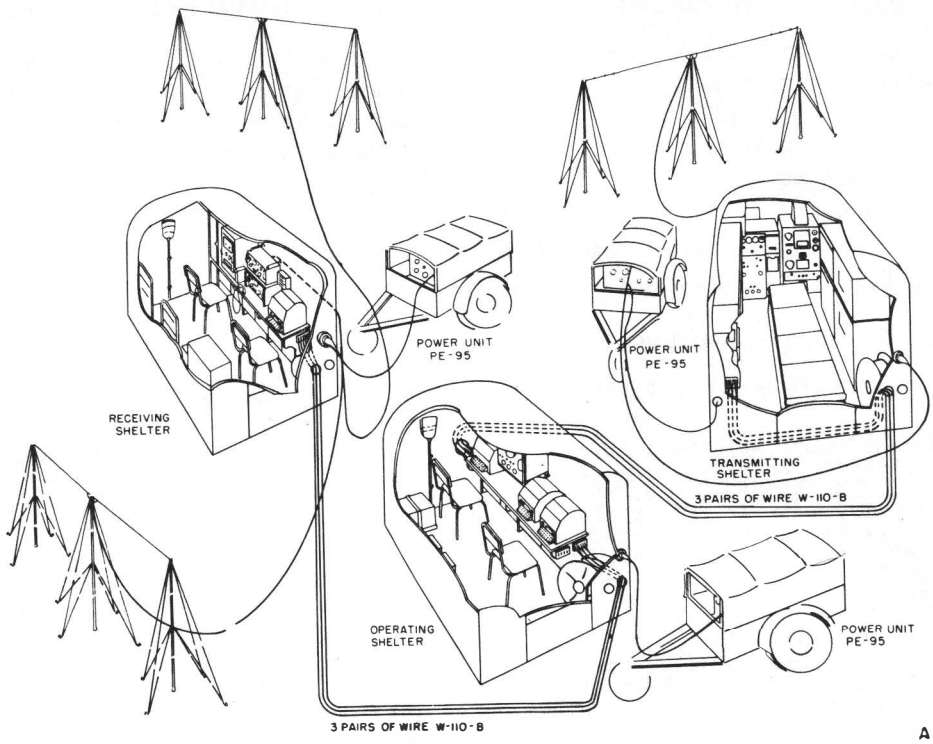
PHYSICAL CHARACTERISTICS

Teletypewriter TT-55/MGC packed for export shipment: total weight 557 pounds, total volume 42 cu ft, 1.1 ship tons. Shipped in 3 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 20 Dec 51

AN/MRC-2

RADIO SET



AN/MRC-2

Radio Set AN/MRC-2 is a 2-kw mobile radioteletype station designed to provide either net or long distance operation, with provision for 200/300 w a-m (voice) communication. It is used at field headquarters of large units for long range communication and for handling a heavy volume of traffic.

This equipment is installed and operated in three Shelters HO-17, each carried on a 2-1/2-ton, 6 x 6 cargo truck. Each truck has a 5-kw trailer-drawn power unit. One shelter houses the transmitting equipment (a modified Radio Set SCR-399), another carries the receiving equipment, and the third carries the teletypewriter equipment. An additional truck may be provided to transport the transmitting antenna masts and accessories.

The transmitter operates into one coaxially-fed doublet antenna. The receiver operates with two coaxially-fed doublet antennas spaced three wavelengths apart for diversity reception.

In an emergency it is possible to transmit cw at 2-kw, and cw or voice at 300 w.

AN/MRC-2

RADIO SET

INSTRUCTION LITERATURE: TM 11-624
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 20 Dec 51

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Shelter HO-17, Transmitting	158 x 90-1/2 x 77	8,800
1	Shelter HO-17, Receiving	158 x 90-1/2 x 77	7,200
1	Shelter HO-17, Operating	158 x 90-1/2 x 77	7,200
3	Power Unit PE-95	76-1/2 x 108 x 76-1/2	4,965
1	Power Unit PE-75	56 x 44 x 39	491
1	Antenna Gear	21 x 46 x 20	280

OPERATIONAL CHARACTERISTICS

TACTICAL USE: For division, army, and corps levels.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE (IN MILES): 1,000 or more, dependent on frequency.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9. -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2; 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmitter: 2 - 18.
Receiver: 1.5 - 18 in 6 bands.

Band A: 1.5 - 3.0	Band C: 5.0 - 8.0	Band E: 11.0 - 14.0
Band B: 3.0 - 5.0	Band D: 8.0 - 11.0	Band F: 14.0 - 18.0.

TYPE MODULATION: Transmitter: Frequency shift; am in emergency (for voice).
Receiver: Am.

TYPE OF SIGNAL: Transmitter: Frequency shift teletypewriter signals; emergency use: cw.
Receiver alone: cw, tone, and voice.
Receiver and converter: Frequency shift teletypewriter signals, dual space diversity reception.

POWER OUTPUT: 2 kw.

POWER REQUIREMENTS: (3) Power Unit PE-95.
Transmitter: 6.5 kw; 115 v, 60 cyc.
Receiver: 115 v, 60 cyc.
Control Unit: 170 w; 115 v, 50 - 60 cyc.

PHYSICAL CHARACTERISTICS

Radio Set AN/MRC-2 packed for export shipment: total weight 39,416 pounds, total volume 3,057 cu ft; ship tons 76.4. Shipped in 9 packages.

STATUS: Obs (–5); L/Std (–5A); S/Std (–5B); Std (–5C)

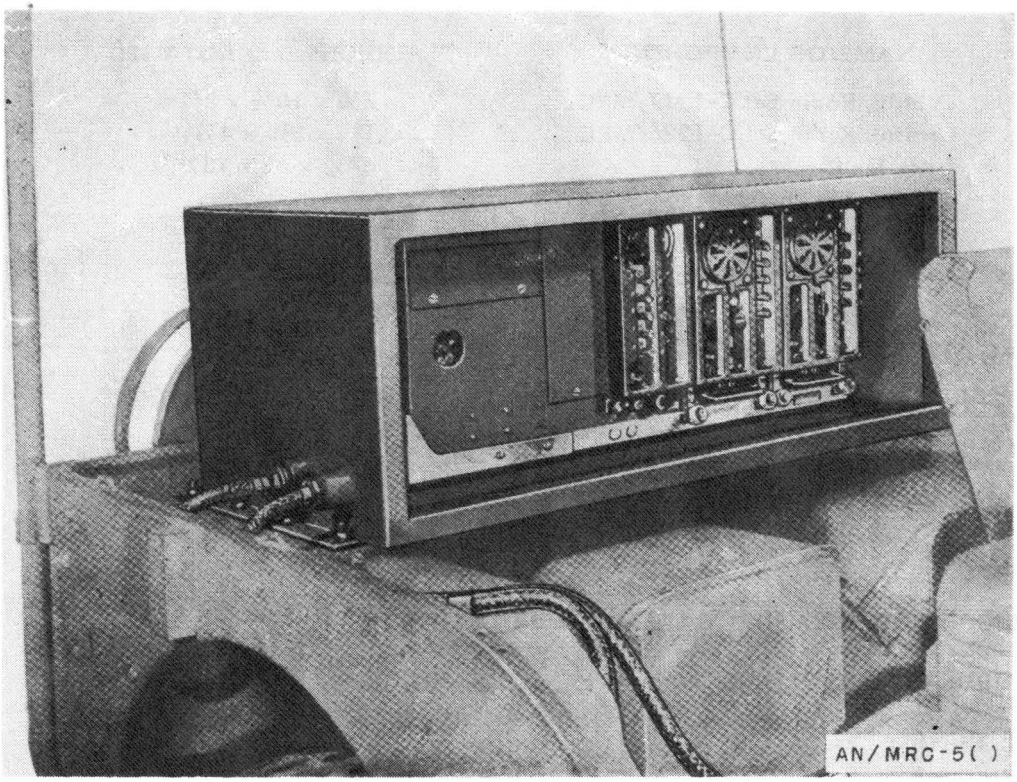
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

AN/MRC–5( )

RADIO SET



Radio Set AN/MRC–5( ) is a mobile, field, fm (voice) equipment used in internal security applications. It is mounted on a ¼-ton truck (jeep) and consists primarily of a radio set and a remote control unit. Under certain conditions, this equipment can be immediately operated after being submerged.

The AN/MRC–5, AN/MRC–5A, AN/MRC–5B, and AN/MRC–5C are functionally similar, although components and type numbers vary. The AN/MRC–5 and AN/MRC–5C use Radio Set SCR–608; the A and B models use Radio Transmitter-Receiver Assembly OA–25A/MRC–5. The AN/MRC–5B includes an additional power generator, which operates from the engine of the vehicle and two additional storage batteries. The AN/MRC–5C uses Dynamotor DM–36 for receiving and Dynamotor DM–37 for transmitting.

AN/MRC-5( )

RADIO SET

INSTRUCTION LITERATURE: NAVSHIPS 91811

USING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Control, Radio Set C-1217/MRC	7 1/4 x 10 5/8 x 8 3/4	
1	Control, Radio Set C-1226/MRC	1 9/16 x 3 3/16 x 4 7/8	
1	Truck M-38	67 1/4 x 62 x 132 15/16	
1	Radio Set SCR-608		181

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore and field operations.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE (IN MILES): 5 to 15.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27 to 38.9.

TYPE MODULATION: Fm (F3).

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 20 w (-5C); 35 w (-5, -5A, -5B).

POWER REQUIREMENTS: 24 v, 16 amp dc (from electrical sys of veh in which instl).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	69 x 60 x 134 1/4	500			
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Obs (–6); L/Std (–6A); S/Std (–6B); Std (–6C)

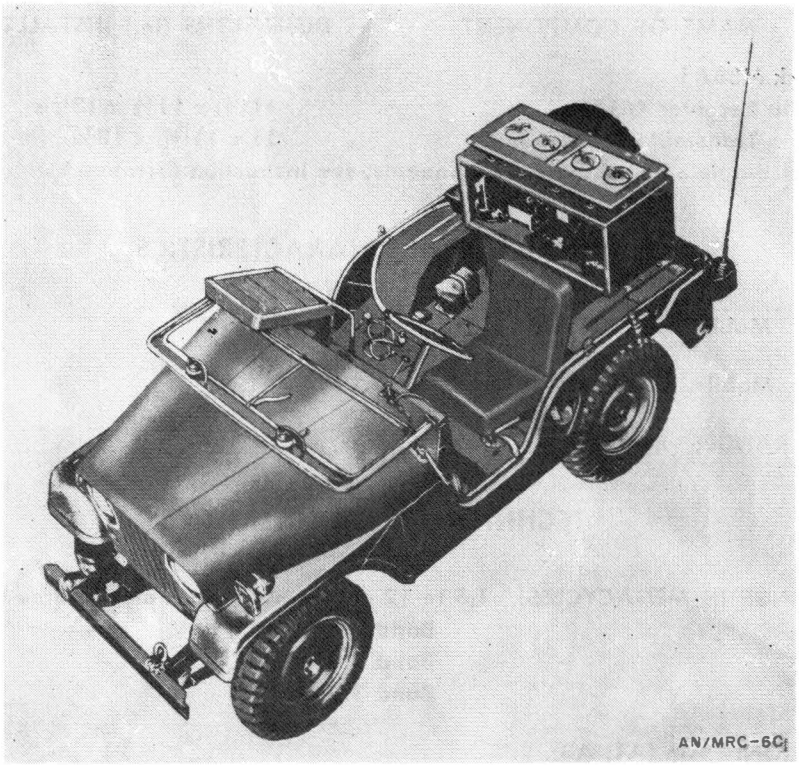
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 9 May 1956

AN/MRC–6( )

RADIO SET



Radio Set AN/MRC–6( ) is a complete, vehicular radio station for short-range point-to-point communication in ground-to-ground tactical field use.

This equipment is so designed and constructed that operation is possible after submersion during deep-water fording or landing operations. Models A, B, and C are functionally similar. The AN/MRC–6B, in addition to the vehicle electrical source, includes two additional storage batteries.

AN/MRC-6( )

RADIO SET

INSTRUCTION LITERATURE: NAVSHIPS 91811

USING SERVICE: USN

DATE OF THIS SHEET: 9 May 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Truck M38A1		2,665
1	Radio Receiver 46159-A	$11\frac{11}{16} \times 11\frac{7}{8} \times 13\frac{13}{16}$	38.1
1	Radio Transmitter 52245-A	$11 \times 11\frac{13}{16} \times 13\frac{3}{4}$	48

(For complete list of major components, see instruction literature.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Mobile shore facilities.

INSTALLATION: Mobile.

APPROXIMATE RANGE: Medium.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.5 to 12 continuously variable, in three bands:

Band 1: 1.5 to 3
Band 2: 3 to 6
Band 3: 6 to 12

TYPE MODULATION: Am (A1, A3).

TYPE OF SIGNAL: Cw or voice.

POWER OUTPUT: 25 w (cw); 10 w (voice).

POWER REQUIREMENTS: 24 v dc (obtained from veh electrical sys).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	The equipment is shipped uncrated and fully equipped.				
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

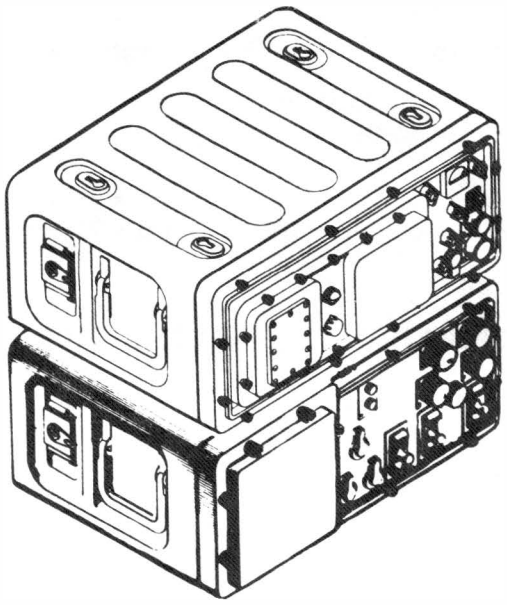
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 28 June 1956

AN/MRC–13( )

RADIO SET



AN/MRC-13( )

Radio Set AN/MRC–13( ) is a general service, mobile, medium-range, am (mcw and voice) equipment used for uhf communication with aircraft, ships, and mobile field units.

This equipment consists essentially of VHF Radio Transmitting and Receiving Equipment MAR, which is mounted in a truck. It is similar to Radio Set AN/MRC–12( ) except that the latter includes a standby receiver (Portable Radio Receiving Equipment RDR).

The AN/MRC–13 and AN/MRC–13A operate from 13-volt, self-contained batteries; and the AN/MRC–13B, from a 24-volt vehicular battery.

AN/MRC-13( )

RADIO SET

INSTRUCTION LITERATURE:

USING SERVICE: USN

DATE OF THIS SHEET: 28 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Truck M38A1(-13B), V-35/U(-13A), or Reconnaissance Car 10182-D(-13) containing:		
	1 Transmitter-Receiver 43067	9½ x 21¼ x 16¼	45
	1 Modulator-Dynamotor Unit 50248	9½ x 21¼ x 16¼	45
	1 Installation kit		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Mobile field units.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE: Short.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 225 to 390 (10 preset freq).

TYPE MODULATION: Am (A2, A3).

TYPE OF SIGNAL: Mcw, voice.

POWER OUTPUT: 8 w.

POWER REQUIREMENTS: 430 w, 115/230 v, 50/60 cy, 1 ph ac; 430 w, 13 to 24/115/230 v dc.

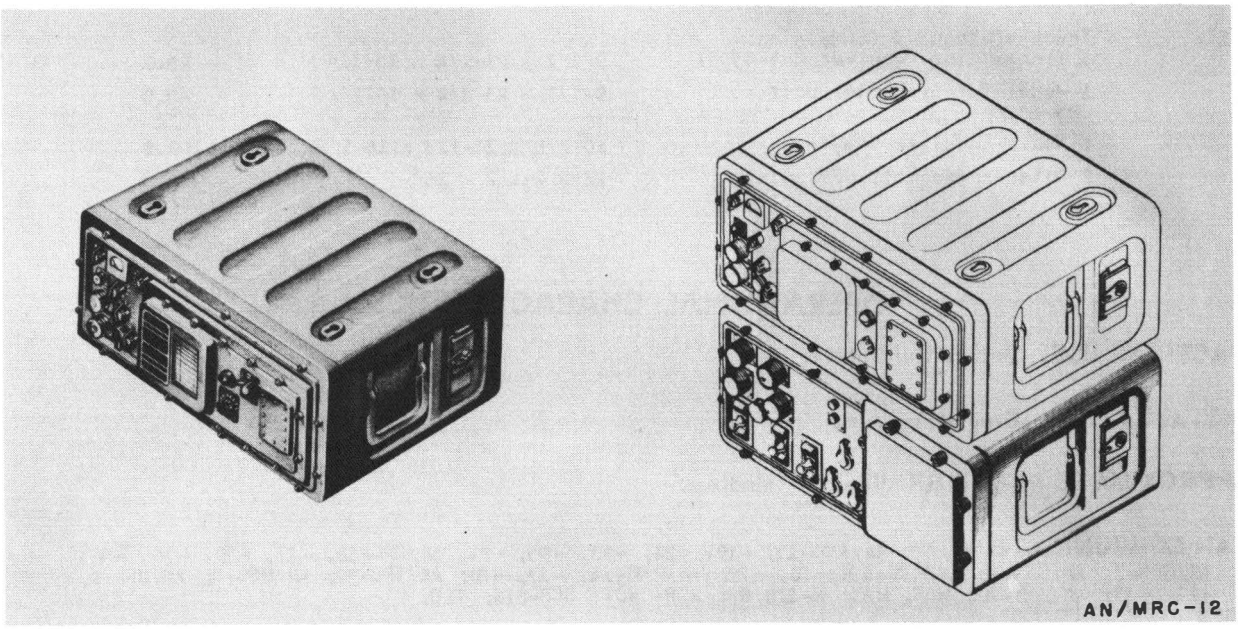
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 9 Jun 52

AN/MRC-12

RADIO SET



Radio Set AN/MRC-12 is a general service, mobile, medium-range a-m (mcw, voice) equipment for u-h-f communications with aircraft, ships, and field units.

This set consists of Truck 10182D (1/4 ton), UHF Radio Transmitting and Receiving Equipment MAR (less a-c/d-c power supply), Portable Radio Receiving Equipment RDR (less power supply), Installation Kit MX-802/MRC and two antennas.

Automatic rapid selection of any one of 10 preset crystal-controlled channels is possible in either the RDR or MAR equipments.

The receiver circuits include automatic volume control, a noise-peak limiter for blocking interference, and a silencer circuit for operation during no-signal periods.

AN/MRC-12

RADIO SET

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 9 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Truck NT-10132-D Containing:		
	1 Transmitter-Receiver CRV-43067	9-1/2 x 21-1/4 x 16-1/4	45.0
	1 Modulator-Dynamotor Unit CRV-50248	9-1/2 x 21-1/4 x 16-1/4	45.0
	1 Radio Receiver CRV-46293	10-7/8 x 21-1/4 x 16-1/4	100.0
	2 Antenna Assembly CRV-66147	22 x 2-1/2 x 25	3.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Mobile field units.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-12, -19, -27, -30, -33, -34; AN/GRC-16, -27, -29, -30, -32; AN/GRR-7; AN/GRT-3; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-32; AN/URC-4; AN/URR-9, -12, -13; AN/URT-10; MAR; MAY; R-278/GR; RDR; RDZ; SCR-616; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 225 - 390.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

POWER OUTPUT: Transmitter: 8 w.
Receivers: 1 w into 600 ohm load.

POWER REQUIREMENTS: 12 v dc from 2 batteries BB-221/U.

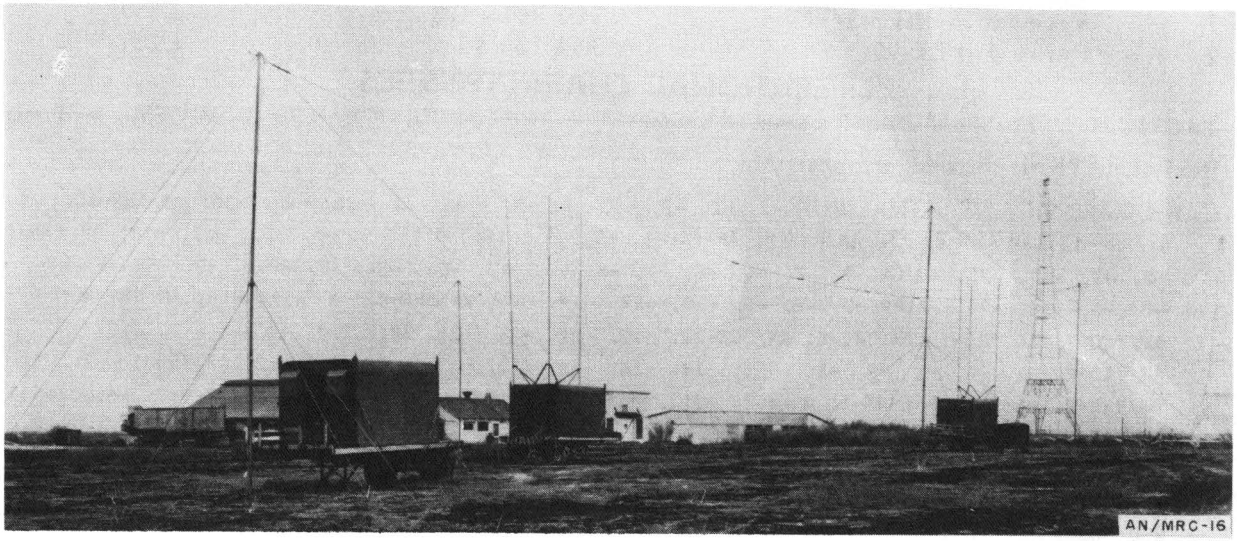
PHYSICAL CHARACTERISTICS

Information on Radio Set AN/MRC-12 not available.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 14 May 52

AN/MRC-16

RADIO SET



Radio Set AN/MRC-16 is a mobile, m-f, h-f, and v-h-f receiving and transmitting equipment used as a ground radio command center in two-way communication with aircraft or with other ground radio stations. It has provision for a-m (voice, mcw, and cw) operation in general air warning, fighter air defense applications and in general air-to-ground and short-range ground-to-ground communication. An f-m radio set is included for communication with tactical ground elements.

This equipment consists of a receiver shelter, a transmitter shelter, a power shelter, 10 remote control stations, two trailer-drawn power units, and associated components and accessories. The transmitter shelter contains the following Radio Transmitting Equipments: two TCK's, one TBM, two TCS's, and three TDQ's.

The receiver shelter contains five Radio Receiving Equipments RAO and RCK and one Radio Set SCR-608.

In the power shelter are Power Unit PE-85-M, for supplying power to the transmitting shelter, and a motor generator for supplying power to Radio Transmitting Equipment TBM, which alone draws 5,000 w.

The receiver shelter is powered by one of the trailer-drawn Power Units PE-95, and the other serves as an auxiliary power supply for the transmitter shelter.

The remote control stations, which are not designed to be operated more than 1/2 mile distant from the main station equipment, consist essentially of a telephone set and a hand telegraph key, which are connected to any of the radio transmitting or receiving components by means of an adapter.

AN/MRC-16

RADIO SET

INSTRUCTION LITERATURE: NavShips 91607
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 14 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Shelter S-1/FM	98 x 100 x 173	9,700
1	Shelter S-2/MRN-3	98 x 100 x 173	9,950
1	Receiver Shelter S-3/TPS-1	98 x 100 x 173	8,150
2	Power Unit PE-95	75 x 74 x 95	4,200

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore aircraft command centers. APPROXIMATE RANGE (IN MILES): Medium.

INSTALLATION: Ground, transportable.

CAN COMMUNICATE WITH: AN/ARC-1, -2, -3, -5, -8, -9, -18, -21, -25, -28, -36; AN/ARR-15; AN/ART-13; AN/CRC-2, -3; AN/CRT-3; AN/FRC-6, -7, -9, -10; AN/FRT-5, -6, -15, -17, -18; AN/FRR-3, -4, -7, -12, -28; AN/GRC-3, -4, -5, -6, -7, -8, -9, -13, -26, -30; AN/GRR-2, -3, -5; AN/MRC-2, -5, -6, -16, -22; AN/PRC-7, -8, -9, -10, -17, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-40; AN/TRC-7; AN/TRQ-1; AN/URC-4: AN/URR-10, -12, -22, -23, -28; AN/URT-2, -3, -4, -7, -10; AN/VRC-1, -2, -5, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRR-2, -3, -4; AN/VRT-1; BC-191, -312, -314, -339, -342, -344, -348, -401, -447, -610, -639, -640, -779, -787, -794, -1004; MAN; MAW; MBF; MBS; MN; MQ; OA-58/FRC, -59/FRC, -60/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -137/GR, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/U, -274/FR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBK; RBM; RBO; RBP; RBQ; RBS; RCF; RCG; RCH; RCO; RDA; RDE; RDM; RC-52, -103, -256, -257; SCR-177, -188, -193, -244, -274, -281, -293, -294, -298, -399, -499, -506, -508, -509, -510, -522, -528, -536, -542, -543, -573, -574, -575, -585, -593, -607, -608, -609, -610, -616, -619, -624, -628, -641, -643, -644, -678, -694, -704, -808, -828; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FRT, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO: TBS; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDG; TDH; TDN; TDO; TDQ; TDT; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmitting: 1.5 - 18.0, 27.0 - 38.9 (fm), and 115 - 156.
Receiving: 0.54 -30, 27.0 - 38.9 (fm), and 115 - 156.

TYPE MODULATION: Am, Fm.

TYPE OF SIGNAL: Am: Voice, mcw, cw.
Fm: Voice.

POWER OUTPUT:

Transmitters

TCK: 400 w on cw, 100 w on voice.
TBM: 500 w on cw, 350 w on mcw and voice.
TDQ: 45 w on cw, 25 w on mcw and voice.
TCS: 40 w on cw, 20 w on voice.
SCR-608: 20 w.

Receivers

RAO: 0.3 w into 600 ohms.
RCK: 15 mw into 600 ohms.
TCS: 6 mw.
SCR-608: 2 w to loudspeaker, 200 mw to headset.

POWER REQUIREMENTS:
Transmitting: 13.6 kw, 220 v, 50/60 cyc, 3 phase. (Including TBM, which draws 5 kw.)
Receiving: (5kw, 220 v, 50/60 cyc, 1 phase.

PHYSICAL CHARACTERISTICS

Radio Set AN/MRC-16 weighs 36,200 pounds net, volume 3,550 cu ft, 88.6 ship tons. Packed for domestic shipment: total weight 36,200 pounds, total volume 3,550 cu ft, 88.6 ship tons.

STATUS: Std

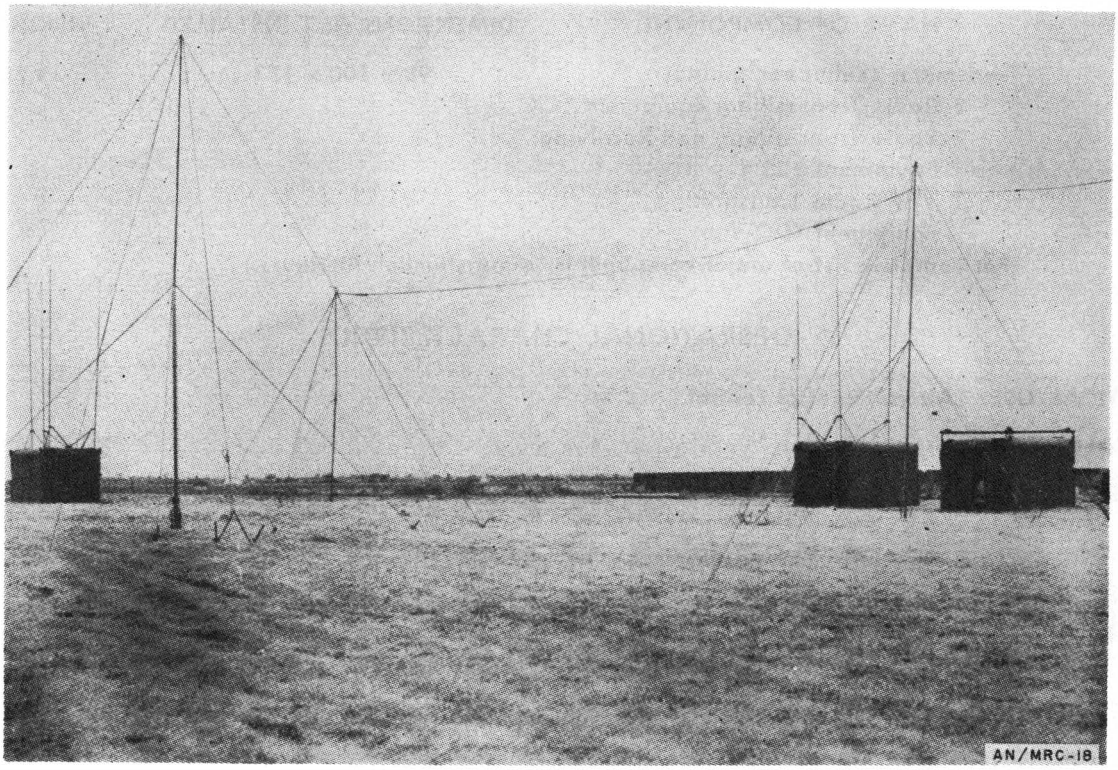
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

AN/MRC–18

RADIO SET



Radio Set AN/MRC–18 is used for communication between aircraft in flight and ground command centers, and can also be used in ground, point-to-point communication applications.

This equipment has a receiver shelter, a transmitter shelter, a power shelter, 3 power trailers, and 10 remote-control stations. A remote station consists of a telephone set and a hand telegraph key, but remote operation is limited to ½ mile from the equipment.

AN/MRC–18

RADIO SET

INSTRUCTION LITERATURE: NAVSHIPS 91487

USING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Transmitter shelter containing: 3 Radio Transmitting Equipment TCK 2 Radio Transmitting and Receiving Equipment TCS 2 VHF Radio Transmitting Equipment TDQ	98 x 100 x 173	9,700

(For complete list of major components, see instruction literature.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft control central.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE: Medium.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .54 to 30 (rcvg); 1.5 to 18 (xmtg); 27 to 38.9, 115 to 156 (xmtg and rcvg).

TYPE MODULATION: Am (A1, A2, A3); fm (F3).

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT:

SCR–608: 20 w
TCK: 100 w (A3); 400 w (A1)
TCS: 20 w (A3); 40 w (A1)
TDQ: 25 w (A2, A3); 45 w (A1)

POWER REQUIREMENTS:

PE–85M: 10 kw, 220 v, 60 cy, 3 ph ac (for xmtr shelter).
PE–95: 5 kw, 220 v, 60 cy, 1 ph ac (for rcvr shelter).

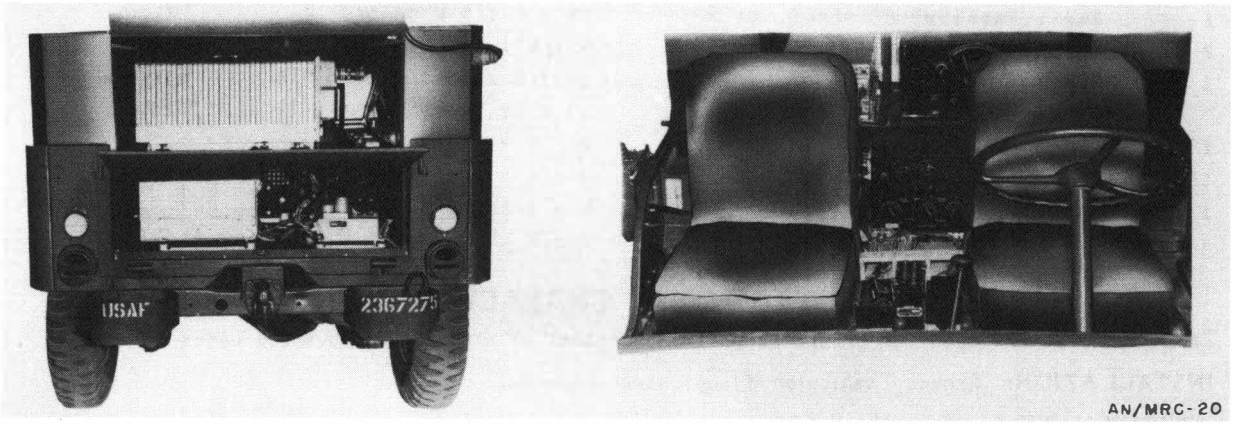
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:		32,000	3,245	81	6
EXPORT PACK:					

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Air Force
DATE OF THIS SHEET: 10 Jun 52

AN/MRC-20

RADIO SET



AN/MRC-20

Radio Set AN/MRC-20 is a ground, mobile, two-way voice and tone-modulated communication equipment which operates over one of 11 preset (auto-tuned) channels in the 200 to 500 kc, and 2 to 18 mc range.

It provides eight crystal-controlled, preset channels in the 100 to 156 mc range, and any one of 18 preset, crystal-controlled frequency channels (from 1,750 available) spaced 100 kc apart in the 225 to 399.9 mc range.

All equipment, including power supply and antennas, is normally mounted in a 1/4-ton command reconnaissance vehicle (jeep). Facilities are provided for remote operation up to 1/2-mile.

Equipment consists of two radio transmitters, two radio receivers, and a radio receiver-transmitter plus associated accessory components.

Three antennas supplied are h-f antenna, 18 foot whip-type, u-h-f Antenna AT-208/URC-5 with mast, and a v-h-f antenna and mast.

Power is supplied by Power Unit PE-246. Power required is 1,700 w of 28.5 v dc. For emergency use, a 28-v, 35-amp hour storage battery will operate the equipment for approximately 30 minutes under normal conditions.

AN/MRC-20

RADIO SET

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Air Force
DATE OF THIS SHEET: 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter T-47A/ART-13	23-1/2 x 11-1/2 x 14-1/2	103.6
1	Radio Receiver-Transmitter RT-178/ARC-27	12-3/8 x 11-1/4 x 27-7/8	71.0
1	Radio Transmitter T-67/ARC-3	12-1/4 x 7-1/2 x 15	17.5
1	Radio Receiver R-77/ARC-3	11 x 6 x 15-1/2	17.0
1	Radio Receiver BC-348-Q, or R	18 x 9-1/2 x 10-1/2	41.0
2	Remote Control RC-261	4-1/4 x 4-1/4 x 8-1/2	21.0
1	Power Unit PE-246	16-7/8 x 20-1/2 x 24-3/8	113.0
3	Antenna Groups (HF, VHF, UHF)	30 x 18 (Approx.)	25.0
1	Radio Set Control C-626/ARC-27	6-3/8 x 9-9/16 x 5-1/4	11.2
1	Radio Set Control C-628/ARC-27	3-1/4 x 8-1/2 x 3	1.3
1	Control Unit C-87/ART-13	8 x 3-1/2 x 3-3/8	2.1
1	Control Box C-118/ARC-3	2-5/8 x 6 x 6-7/8	2.1

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used for ground support and control of aircraft at advanced bases.

INSTALLATION: Ground, vehicular (jeep) shock-mounted.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -2, -3, -5, -9, -9, -12, -18, -19, -21, -25, -27, -28, -30, -33, -34, -36; AN/ARR-15; AN/ART-13; AN/CRC-2; AN/CRT-3, -5; AN/FRC-7, -10; AN/FRR-3, -4, -7, -12, -29; AN/FRT-5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -16, -26, -27, -29, -30, -32; AN/GRR-2, -3, -5, -7; AN/GRT-2, -3; AN/MRC-2, -6, -12, -16, -20, -22; AN/PRC-7, -14, -17, -19, -20; AN/SRC-3; AN/SRR-3, -9, -11, -12, -13; AN/SRT-1, -3, -4; AN/TRC-7, -32; AN/TRQ-1; AN/URC-4; AN/URR-9, -10, -13, -21, -22, -23; AN/URT-2, -3, -4, -7, -10; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -329, -339, -342, -348, -365, -401, -447, -453, -610, -639, -640-D, -779, -787, -794, -1004; MAR; MAW; MAY; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -608/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -137/GR, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -278/GR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBK; RBL; RBM; RBO; RBP; RBQ; RBS; RC-52, -103-D, -256-C, -257-C; RCF; RCG; RCH; RCK; RCO; RDE; RDF; RDM; RDR; RDZ; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -522, -536, -542, -543, -573-A, -574-A, -575, -585, -593, -607, -616, -624, -641, -643-A, -644, -694, -704; T-4/FRC, -5/FRC, -93/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -190/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCO; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDG; TDH; TDK; TDN; TDO; TDQ; TDT; TDZ; TEB; TEC; TED; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmission: 0.2 - 0.5, 2 - 18, 100 - 156, 225 - 299.9.
Reception: 0.2 - 0.5, 1.5 - 18, 100 - 156, 225 - 299.

TYPE MODULATION: Am. **TYPE OF SIGNAL:** Voice, tone (in the h-f and l-f ranges cw may be used).

POWER OUTPUT: Transmitters: 10 w (Nominal). Receivers: 0.5 to 3 w (nominal).

POWER REQUIREMENTS: 28 v, dc, at (60 amp) 1.7 kw using Power Unit PE-246 (supplied). 28.5 v, dc, (35 amp hour) battery, (supplied) will operate set 1/2 hour for emergency use.

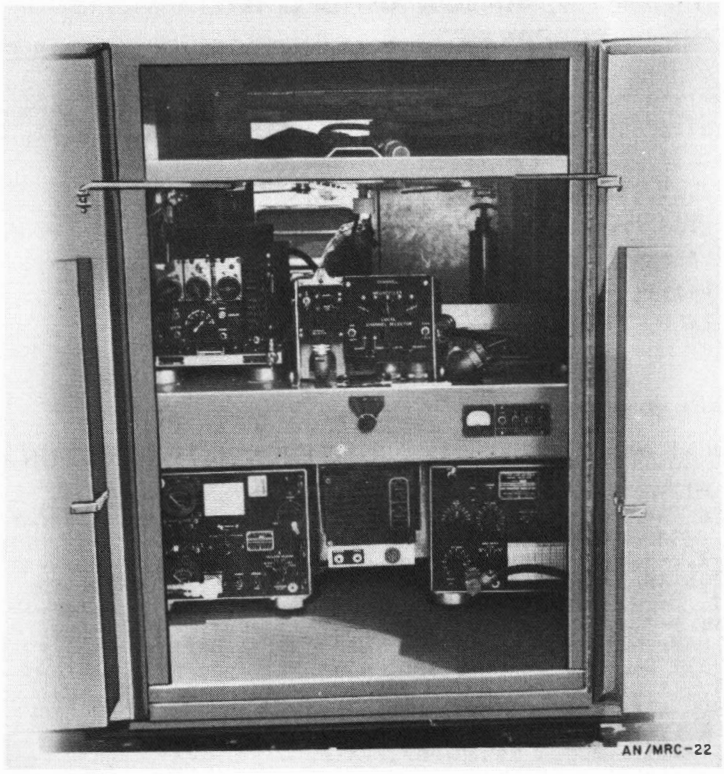
PHYSICAL CHARACTERISTICS

Radio Set AN/MRC-20 measures 45-3/4 x 50-1/2 x 28", net weight 415.8 pounds, volume 10.4 cu ft. Packed for domestic or export shipment: total weight 498 pounds, total volume 11.5 cu ft. Shipped in 8 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 9 Jun 52

AN/MRC-22

RADIO SET



Radio Set AN/MRC-22 is a mobile multichannel a-m (cw, mcw, voice) two-way communication equipment for u-h-f/v-h-f ground-to-air or point-to-point communication.

This equipment consists of three transceivers, a motor generator assembly, and a gasoline-driven motor generator installed in a two wheel trailer; composing a complete, self-powered, radio communication station which can be quickly moved to any ground location.

This set provides four preset crystal-controlled channels in the 1.5 to 12 mc range, 10 preset crystal-controlled channels in the 100 to 156 mc range, and 18 preset crystal-controlled channels in the 225 to 400 mc range.

Manual adjustment of the 18 u-h-f channels makes possible the use of 1,751 frequency channels.

Remote control up to 25 feet is possible.

AN/MRC-22

RADIO SET

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE : Navy
DATE OF THIS SHEET: 9 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter-Receiver RT-18/ARC-1	9-1/32 x 10-19/32 x 24-3/16	47
1	Radio Receiver-Transmitter RT-178/ARC-27	12-3/8 x 11-1/4 x 27-7/8	72
1	Radio Transmitting and Receiving Equipment TCS including Motor Generator Assembly, COL-21826	11-1/2 x 23 x 17-1/2	143
1	Gasoline Engine Generator, Homelite 24D28-23	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Mobile command stations.

INSTALLATION: Ground, mobile. **APPROXIMATE RANGE (IN MILES):** Short.

CAN COMMUNICATE WITH: AN/ARC-1, -2, -3, -5, -8, -9, -12, -18, -19, -21, -25. -26, -27, -30, -33, -34, -36; AN/ARR-15; AN/ART-13; AN/CRC-2; AN/CRT-3; AN/FRC-7, -10; AN/FRR-3, -4, -7, -12, -29, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -16, -26, -27, -29, -30, -32; AN/GRR-2, -3, -5, -7; AN/GRT-3; AN/MRC-2, -6, -12, -16, -20, -22; AN/PRC-7, -14, -17, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRC-7, -32; AN/TRQ-1; AN/URC-4; AN/URR-9, -10, -12, -13, -21, -22, -23; AN/URT-2, -3, -4, -7, -10; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -314, -339, -342, -344, -348, -401, -447, -610, -639, -640, -779, -794, -1004; MAR; MAW; MAY; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -137/GR, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -278/GR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBK; RBM; RBO; RBP; RBQ; RBS; RC-52, -103, -256, -257; RCF; RCG; RCH; RCK; RCO; RDE; RDM; RDR; RDZ; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -522, -536, -542, -543, -573, -574, -575, -585, -593, -607, -616, -624, -641, -643, -644, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCO; TCP; TCS; TCZ; TDE; TDF; TDG; TDH; TDN; TDO; TDQ; TDT; TEB; TEC; TED; TEF; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: TCS: 1.5- 12.0.
AN/ARC-1: 100 - 156.
AN/ARC-27: 225 - 400.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: Cw: 25 w.
Mcw, voice: 10 w.

POWER REQUIREMENTS: Incorporates its own gasoline engine generator and motor-generator assembly.

PHYSICAL CHARACTERISTICS

Radio Set AN/MRC-22 packed for domestic shipment: total weight 1,630 pounds, total volume 295 cu ft, 70.3 ship tons.

STATUS: Std

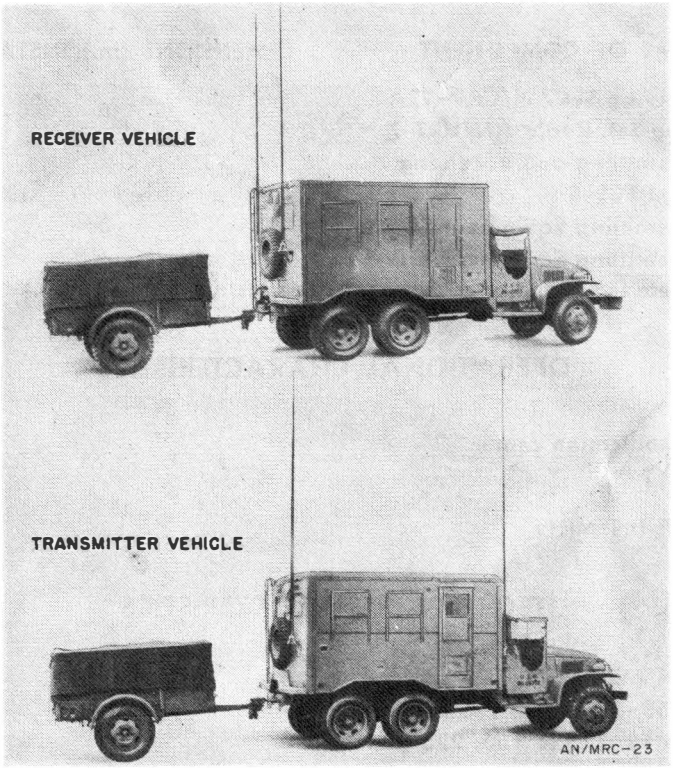
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 9 May 1956

AN/MRC–23

RADIO SET



Radio Set AN/MRC–23 is a self-contained mobile radio communication center capable of operation in ground-to-air tactical radio nets.

This equipment includes a transmitter truck and receiver truck. Each truck derives its primary power from an associated trailer-mounted gasoline engine generator (Power Unit PE–95–G). The receiver truck has two antenna masts; the transmitter truck, one. Antennas, cables, ground rack, and mast and guy assemblies are stored in the trucks during transit.

AN/MRC–23

RADIO SET

INSTRUCTION LITERATURE: NAVSHIPS 91962

USING SERVICE: USN

DATE OF THIS SHEET: 9 May 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Radio Receiving Set AN/URR–13A		
1	Transmitting Set, Radio AN/URT–7		
1	Radio Transmitting and Receiving Equipment TCS–8		
1	Radio Transmitting Equipment TDE–1		
1	Radio Transmitting Equipment TED–1		

(For complete list of major components, see instruction literature.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Communication center.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES:

Receiving: .08 to .56; 1.9 to 24; 115 to 156; 225 to 400

Transmitting: 1.5 to 18; 115 to 156; 225 to 400

TYPE MODULATION: Am (A1, A2, A3).

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT:

AN/URT–7: 45 w (A2, A3)

TCS–8: 20 w (A3); 40 w (A1)

TDE–1: 30 w (A3); 35 w (A2); 125 w (A1)

TED–1: 15 w (A2)

POWER REQUIREMENTS:

PE–95–G: 12.5 w (output), 115 v, 60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: T/Std

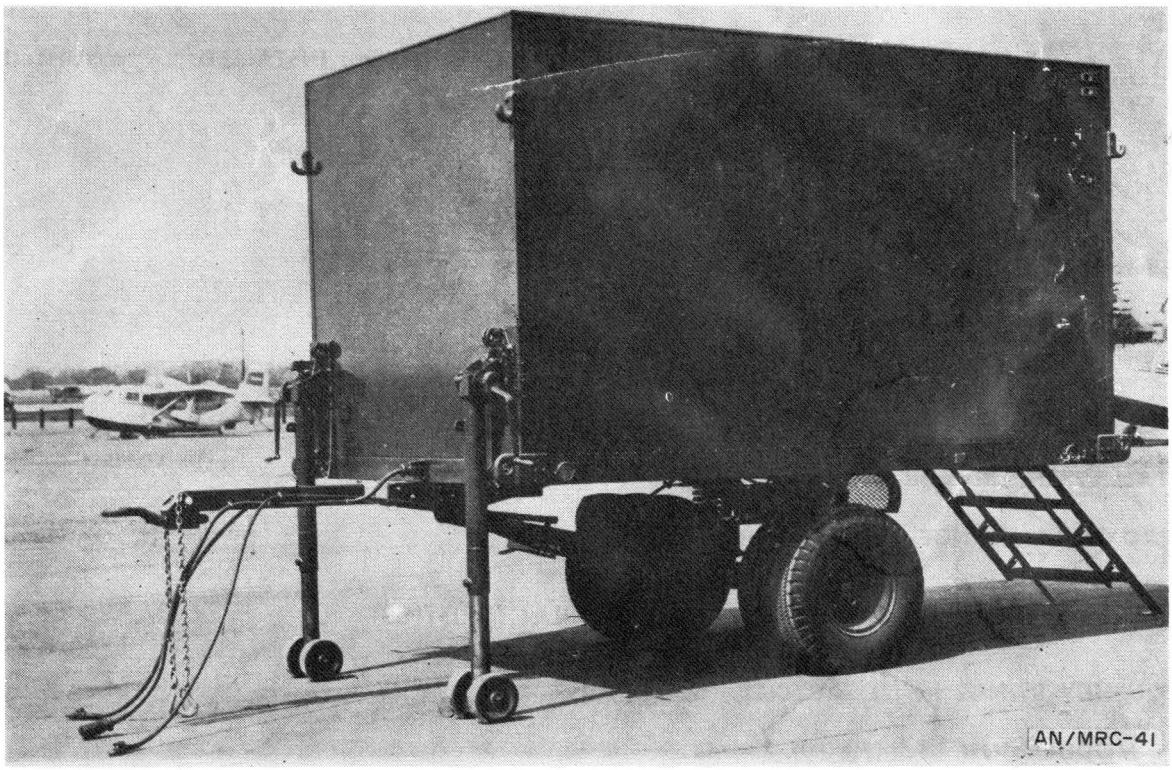
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

AN/MRC–41

RADIO SET



Radio Set AN/MRC–41 is a highly mobile, air-transportable, radio relay set capable of independent operation, or with other mobile or permanent comcenter facilities to provide ground-to-ground, point-to-point communication.

This equipment is used either as a relay or terminal station in cw, voice, and diversity radioteletype communication and is normally operated with Teletypewriter Central Office AN/MGC–2, Radio Receiving Set AN/MRR–5, and Radio Transmitting Set AN/MRT–6 (Project *Four Wheels*).

All operating components are installed in and operated from Van Trailer V–83/M.

Power is supplied by Trailer Mounted Diesel Engine Generator Set Type MB–5 (not supplied as part of this set).

AN/MRC-41

RADIO SET

INSTRUCTION LITERATURE:

USING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Terminal, Telephone AN/TCC-3		
1	Radio Relay Set AN/TRC-12B		
8	Converter, Signal TA-182/U		
4	Converter, vf carrier		
4	Keyer, vf carrier		
4 sets	Network (2 ea ±120 cy)		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Operated by AACS at such commands as TAC, SAC, or ADC.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE: Line of sight.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 230 to 250.

TYPE MODULATION: Fm (F3, F9).

TYPE OF SIGNAL: Cw, voice, fsk.

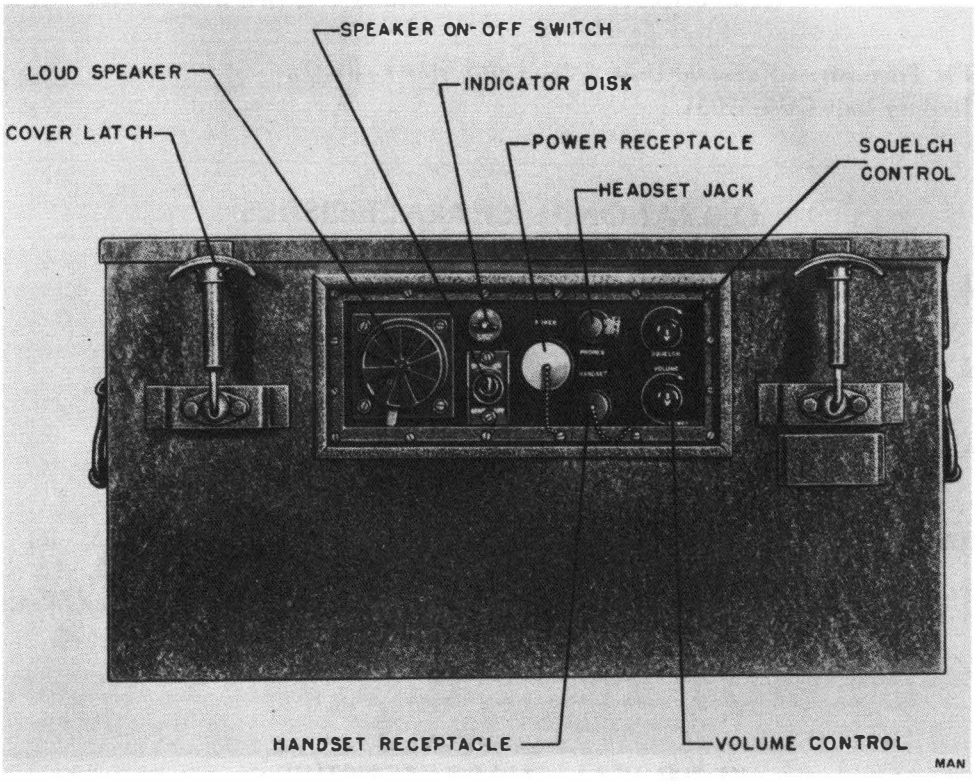
POWER OUTPUT: .5 w (rcvr); 5 w (xmtr, w/o ampl).

POWER REQUIREMENTS: 20 to 30 kw, 120/240 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	150 x 96 x 138		1,150	28.75	
DOMESTIC PACK:			1,150	28.75	1
EXPORT PACK:		8,000	1,150	28.75	1

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/MRC-TYPE** SERVICE TYPE NUMBER: MAN PORTABLE FM RADIO TRANS & REC EQUIP



Portable FM Radio Transmitting and Receiving Equipment MAN is a single-frequency, medium-power, v-h-f (voice), general purpose radio set designed primarily for mobile use.

Crystal oscillator frequency control is employed in both the transmitter and receiver. The equipment, supplied complete, is alined with proper crystals for operation on 36.5 mc. Crystals for operating on 10 other frequencies within the 30- to 40-mc range are provided.

AN/MRC-TYPE	INSTRUCTION LITERATURE: NavShips 95124
MAN :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
PORTABLE FM RADIO TRANS & REC EQUIP	USING SERVICE : Navy
	DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	FM Transmitter-Receiver Unit CGG-43057	Not Available	Not Available
1	Battery Unit CGG-19051	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Military police.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE (IN MILES): 10

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-7, -8; AN/MRC-5, -16; AN/PRC-9, -10; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -3, -10, -15, -18, -22; AN/VRQ-2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-300, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 30 — 40.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 15 to 20 w.

POWER REQUIREMENTS: 6-v storage battery, 3 to 4 hours continuous service.

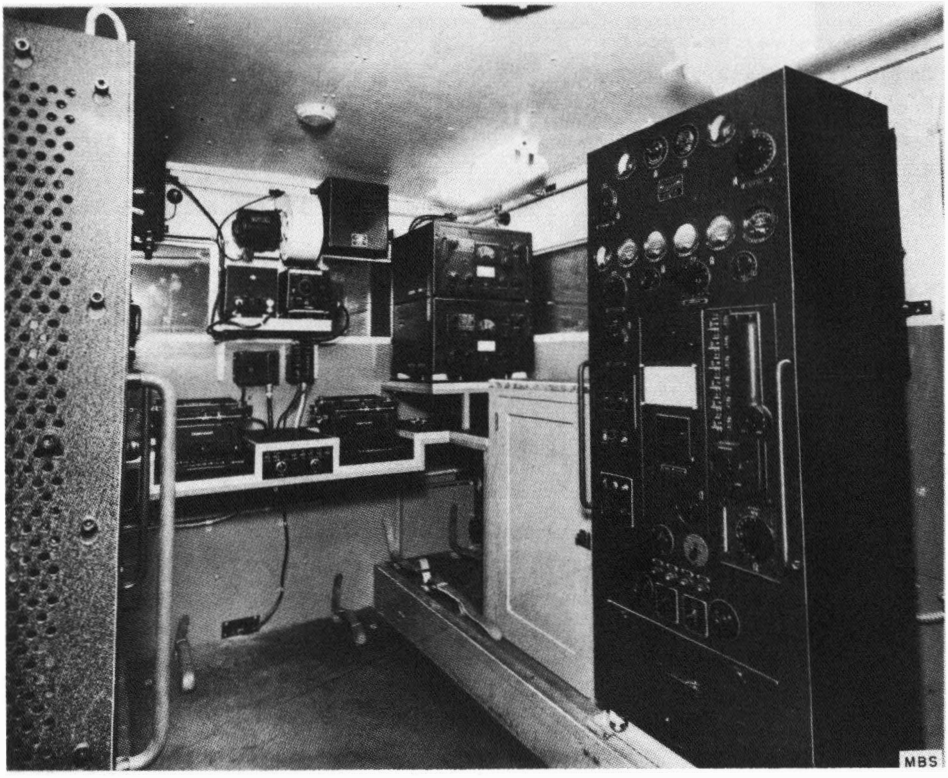
PHYSICAL CHARACTERISTICS

Information on Portable FM Radio Transmitting and Receiving Equipment MAN not available.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 23 May 52

AN/MRC-TYPE

SERVICE TYPE NUMBER: MBS
MOBILE RADIO TRANS & REC EQUIP



Mobile Radio Transmitting and Receiving Equipment MBS is a-m (cw, mcw, voice) equipment, operating as an air command center on shore for m-f, h-f, and v-h-f two-way communication with aircraft. It is used for fighter air defense, and general air-to-ground communications.

A 2-1/2 ton truck contains one Radio Transmitting and Receiving Equipment TCS (series), one Radio Transmitting Equipment TCK-4, three Radio Receiving Equipments RCH, Radio Receiver BC-639, and Radio Transmitter BC-640.

A trailer houses a gasoline-engine-driven generator set (PE-99, or equal).

Provision is made for remote control of the equipment.

AN/MRC-TYPE

MBS :SERVICE TYPE NUMBER

MOBILE RADIO TRANS & REC EQUIP

INSTRUCTION LITERATURE: Not Available

CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE : Navy

DATE OF THIS SHEET: 23 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver BC-639-A	19 x 10-15/32 x 13-9/16	38.0
1	Radio Transmitter BC-640-B	72-3/8 x 21-1/4 x 20	601.5
1	Radio Transmitter COL-52245	11-11/16 x 13-3/4 x 11-13/16	41.75
1	Radio Transmitter CG-52299	52-5/16 x 25 x 18-1/4	290.0
3	Radio Receiver CZC-46209	13-7/8 x 21 x 20-13/16	106.0
1	Radio Receiver COL-46159	11-11/16 x 13-3/4 x 11-13/16	36.75

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore-based air command stations.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-1, -2, -3, -5, -8, -9, -18, -21, -25, -36; AN/ARR-15; AN/ART-13; AN/CRC-2; AN/CRT-3, -5; AN/FRC-7, -10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-4, -5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -26, -30; AN/GRR-2, -3, -5; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -17, -19, -20; AN/SRC-3; AN/SRR-3, -8, -12, -13; AN/SRT-1, -3, -4; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -12, -21, -22, -23; AN/URT, -2, -3, -4, -7, -10; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -329, -339, -342, -348, -365, -401, -447, -610, -639, -640, -779, -794, -1004; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; MAR; MBS; MQ; R-62/PR, -80/PR, -96/SR, -129/U, -137/GR, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC: RBG; RBH; RBK; RBM; RBO; RBP; RBQ; RBS; RC-52, -103, -256, -257; RCF; RCG; RCH; RCK; RCO; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -522, -536, -542, -543, -573, -574, -575, -585, -593, -607, , -616, -624, -641, -643, -644, -694, -704; T-4/FRC, -5/FRC, -83/SR, -159/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -190/FR; TAB; TAJ; TAQ; TBA; TBC; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCG; TCH; TCK; TCO; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDG; TDH; TDK; TDN; TDO; TDQ; TDT; TEB; TEC; TEF; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmitting: 1.5 - 18.1 and 100 - 156.
Receiving: 0.08 - 0.56 and 1.9 - 24.0, and 100 - 156.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, mcw.

POWER OUTPUT: Transmitters:
TCS: 40 w on cw, 20 w on voice.
TCK-4: 400 w, on cw, 100 w on voice.
BC-640: 50 w.

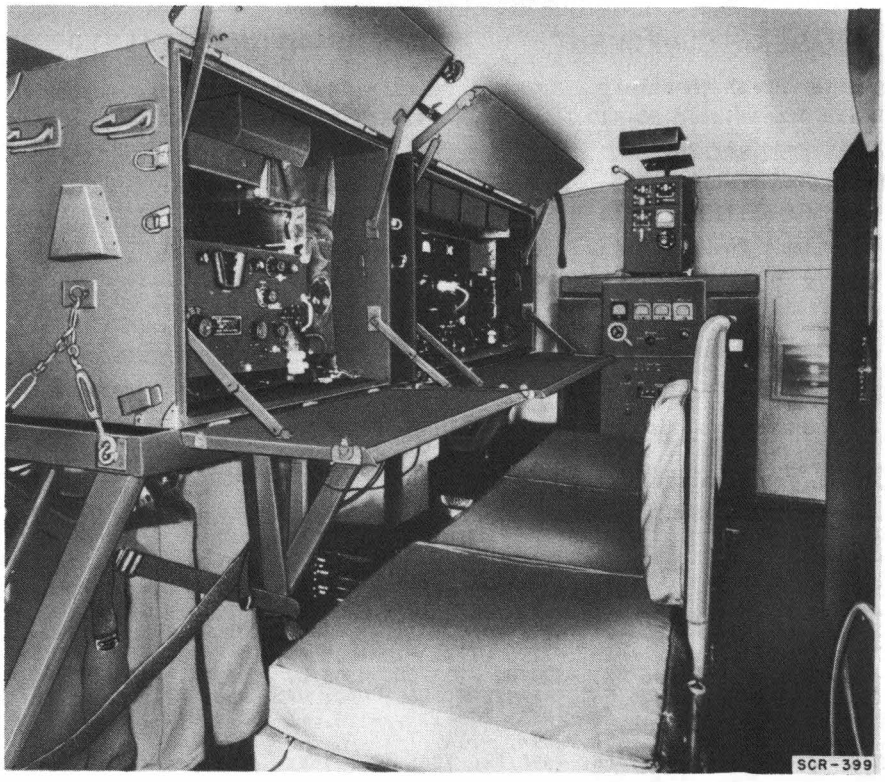
Receivers:
RCH: 100 mw for 600 ohm, or 20,000 ohm headset
2 w for 600 ohm loudspeaker
BC-639-A; 1 mw into 600 ohms
TCS: 2.5 w maximum.

POWER REQUIREMENTS: Self-contained, 100 — 120 v, 60 cyc, 1 phase and 3 phase, ac.

PHYSICAL CHARACTERISTICS

Information on Mobile Radio Transmitting and Receiving Equipment MBS not available.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 22 Jan 52	AN/MRC-TYPE SERVICE TYPE NUMBER: SCR-399 RADIO SET



Radio Set SCR-399 is a field, mobile, transmitting and receiving station used for a-m (voice, tone, or cw) communication, to medium or long distances, in the medium- and high-frequency ranges, at division and equivalent headquarters.

This equipment consists of transmitting, receiving, control, and related components installed within a field Shelter HO-17, which is carried on a 2-1/2-ton 6 x 6 cargo truck, and can operate on the move or at the halt.

It includes remote-control components by means of which the equipment can be operated from locations up to two miles away, over a telephone pair, in conjunction with Telephone EE-8.

It can be used in the 1-mc range by means of Frequency Conversion Kit MC-509, and uses a vehicular whip-type antenna system. At the halt, when the operating range must be extended, it can be used in conjunction with more elaborate arrays, such as doublet systems.

A trailer-drawn, 5 kw power unit is included to provide power for this set.

Radio Set SCR-499 is the air-transportable version of this equipment.

AN/MRC-TYPE	INSTRUCTION LITERATURE: TM 11-281
	CLASSIFICATION OF EQUIPMENT: Unclassified
SCR-399 :SERVICE TYPE NUMBER	USING SERVICE : Army, Navy
RADIO SET	DATE OF THIS SHEET : 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Shelter HO-17 (Mobile)	159 x 92 x 80	7,255.0
1	Radio Transmitter BC-610	32-5/8 x 21-3/8 x 39-7/8	452.0
1	Radio Receiver BC-342	10 x 9-1/16 x 19-1/16	61.5
1	Radio Receiver BC-312	10 x 9-1/16 x 18-1/16	58.0
1	Speech Amplifier BC-614	16 x 9-1/4 x 11	Not Available
1	Power Unit PE-95	75-1/2 x 28-1/2 x 38-1/2	1,545.0
1	Antenna Tuning Unit BC-939	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Engineer battalion, antiaircraft battalion, army security agency, signal operation company, signal operation battalion, signal-air, ground training company.

INSTALLATION: Ground, vehicular, operates on the move or at the halt.

APPROXIMATE RANGE (IN MILES): 100 to 250.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -90/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -93/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmitting: 2 - 18 (in 3 bands)
Receiving: 1.5 - 18 (in 6 bands).

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone, or cw.

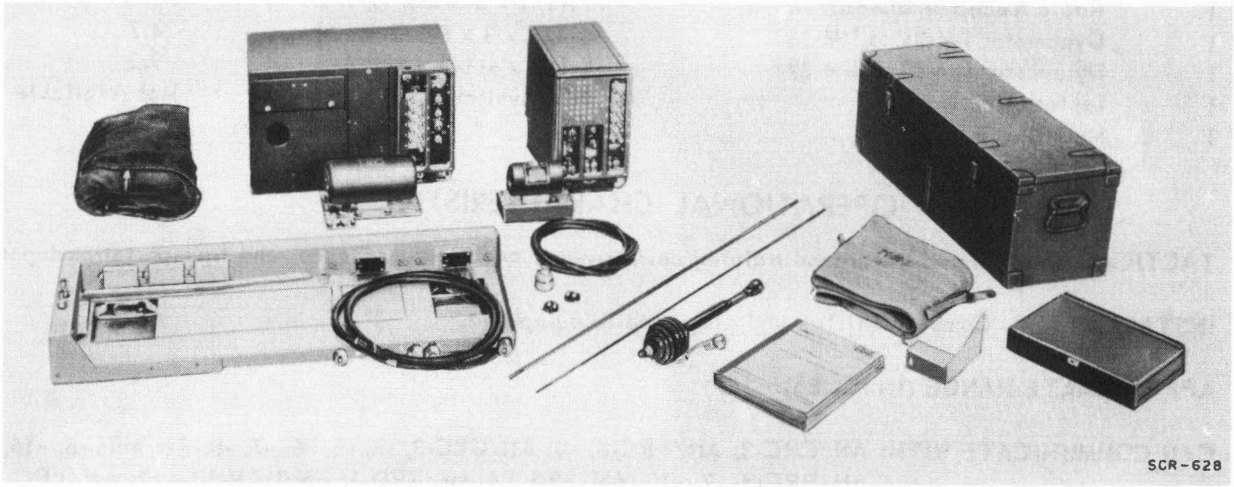
POWER OUTPUT: Cw: 400 w
Voice: 300 w.

POWER REQUIREMENTS: 2,500 w, 115 v, 60 cyc, ac (supplied by PE-95 or equivalent source) and 12-v storage battery.

PHYSICAL CHARACTERISTICS

Radio Set SCR-399 weighs 6,595 pounds net. Packed for export shipment: total weight 10,025 pounds, total volume 895 cu ft, 22.4 ship tons. Shipped in 2 packages both domestic and export.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army Navy DATE OF THIS SHEET: 29 Jan 52	**AN/MRC-TYPE** SERVICE TYPE NUMBER: SCR-628 RADIO SET



Radio Set SCR-628 is a crystal-controlled, vehicular, short-range, low-power radiotelephone equipment used for f-m (voice) communication in the frequency range assigned field artillery units.

This equipment consists essentially of one receiver and one transmitter, appropriate dynamotors, antenna components, and accessories.

The transmitter and the receiver provide 120 channel frequencies, 10 of which may be preset, in each case. Each of these components are equipped with 10 push buttons for selecting frequency channels. There are thus provided 10 transmitting and 10 receiving channels.

The SCR-628 provides for operation of the interphone equipment of the vehicle in which it is installed.

Operates from 12- or 24-v vehicular storage batteries through selection of appropriate dynamotors.

AN/MRC-TYPE

SCR-628 :SERVICE TYPE NUMBER
RADIO SET

INSTRUCTION LITERATURE: TM 11-620
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 29 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-684-BM	11-1/2 x 10-1/4 x 18	67
1	Radio Receiver BC-683-BM	11-1/2 x 6-3/4 x 12-1/2	35
1	Dynamotor DM-34 or DM-36	4-1/2 x 3 x 6-1/2	4.7
1	Dynamotor DM-35 or DM-37	5-1/2 x 4-1/2 x 8-1/4	9.2
1	Installation Unit	Not Available	Not Available
1	Mounting FT-284	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Signal air-ground training company and engineer, ordnance, and transportation depots.

INSTALLATION: Combat vehicles and other mobile equipment.

APPROXIMATE RANGE (IN MILES): 15.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-3, -4, -5, -6, -7, -8; AN/MRC-5, -16; AN/PRC-8, -9, -10; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -5, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-293, -294, -298, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27.0 — 38.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

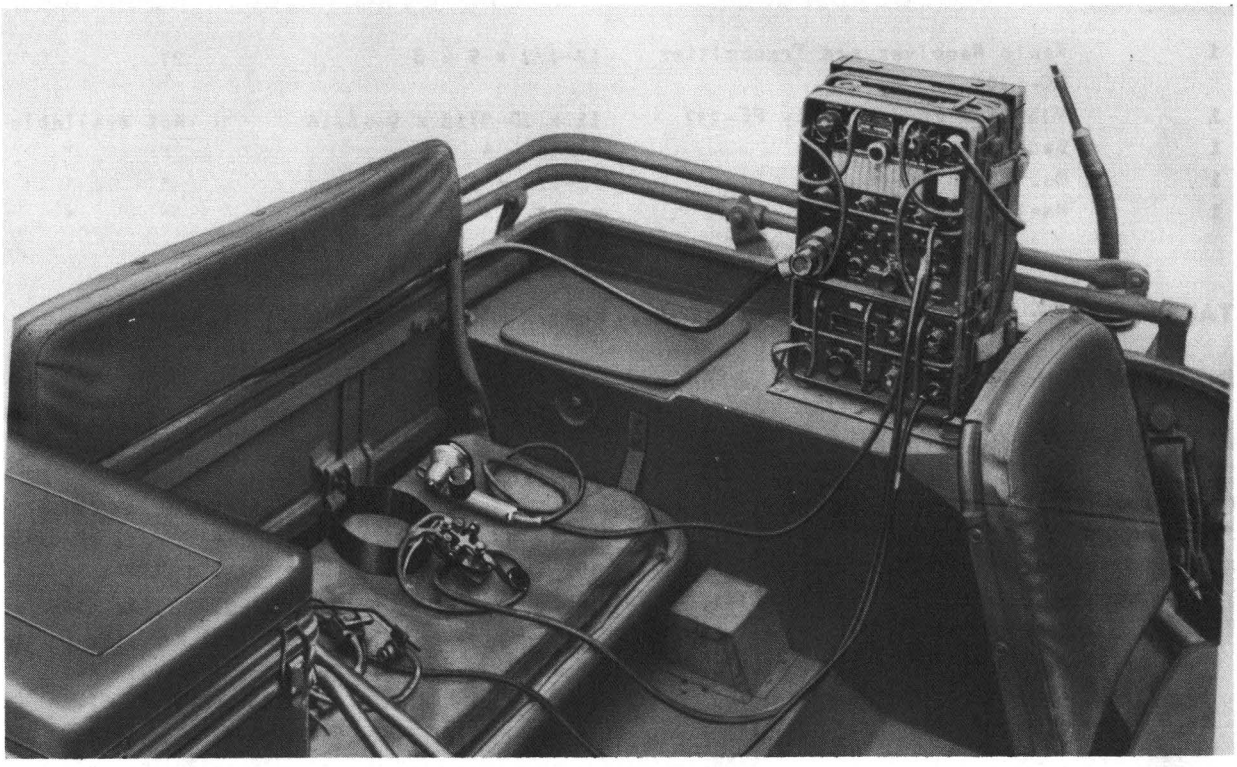
POWER OUTPUT: 20 w.

POWER REQUIREMENTS: 12 v at(20 amp)or 24 v at(12 amp)dc.
Transmitter: 12-v vehicular battery through Dynamotor DM-35,
24-v vehicular battery through Dynamotor DM-37.
Receiver: 12-v vehicular battery through Dynamotor DM-34,
24-v vehicular battery through Dynamotor DM-36.

PHYSICAL CHARACTERISTICS

Radio Set SCR-628 weighs 349.5 pounds net, volume 14.5 cu ft. Packed for domestic shipment: total weight 595 pounds, total volume 29.5 cu ft, 0.75 ship ton. Packed for export shipment: total weight 660 pounds, total volume 31.5 cu ft, 0.75 ship ton.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 29 Jan 52	AN/MRC-TYPE SERVICE TYPE NUMBER: SCR-694 RADIO SET



Radio Set SCR-694 is a lightweight, portable, crystal-controlled, medium-frequency, a-m (voice, tone, and cw) equipment used for front-line communication, and as a command set which can be installed on the ground, or in vehicles, at company, battery, and equivalent levels.

This equipment consists of a radio transmitter-receiver, power supply, hand operated generator, and related accessories. The water tight case and waterproof metal cover permit floating this set ashore as in amphibious operations.

It uses a whip-type or half-wave horizontal antenna and has a 3-position frequency-band switch. It can be powered by a 6, 12, or 24-v storage battery, or by its hand generator component.

AN/MRC-TYPE	INSTRUCTION LITERATURE: TM 11-230-C
SCR-694 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO SET	USING SERVICE : Army, Navy
	DATE OF THIS SHEET : 29 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver and Transmitter BC-1306	14-1/2 x 9 x 5	27
1	Vibrator Power Supply PE-237	11 x 20-3/16 x 9-15/16	Not Available
1	Generator GN-58	8 x 6 x 6	" "
1	Mast Base MP-65	16-1/2 x 3	" "
1	Mast Bracket MP-50	8 x 5 x 5	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Engineer company, field artillery battery, military police Special 11-500 Teams.

INSTALLATION: Ground, portable or vehicular.

APPROXIMATE RANGE (IN MILES): 30.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; OA-58/FRC, -59/FRC, -60A/FRT, -608/FRT; R-62/PR, -80/PR, -96/SR; -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D; 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 3.8 - 6.5.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw and voice.

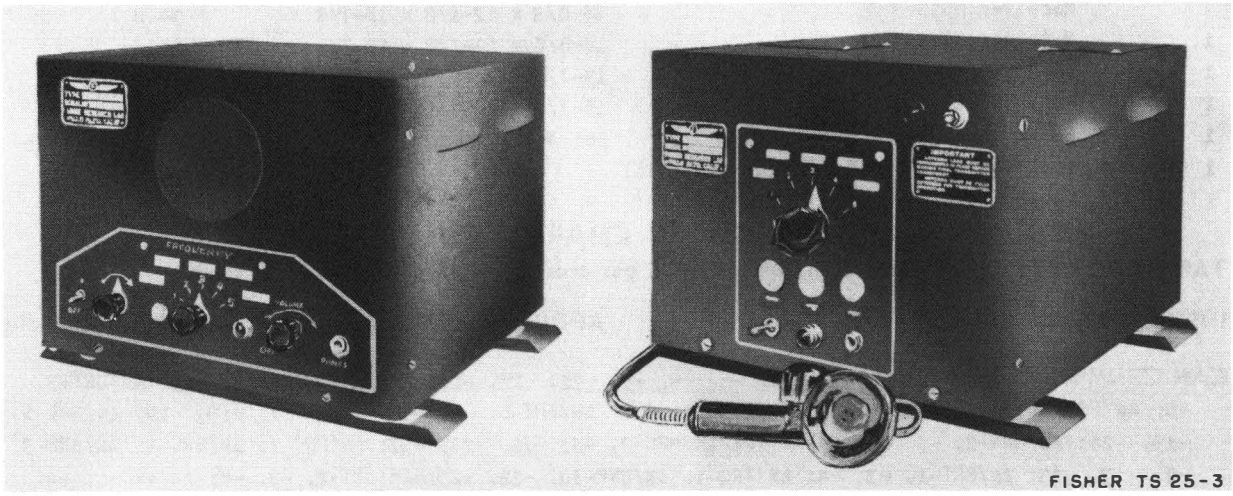
POWER OUTPUT: 8.5, 14, and 17 w.

POWER REQUIREMENTS: 6/12/24-v storage battery, (or Generator GN-58).

PHYSICAL CHARACTERISTICS

Radio Set SCR-694 weighs 191.5 pounds net, volume 3 cu ft. Packed for domestic shipment: total weight 250 pounds, total volume 7.5 cu ft.

STATUS: Commercial CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 10 Jun 52	**AN/MRC-TYPE** COMMERCIAL TYPE NUMBER: FISHER TS25-3 RADIO SET



FISHER TS 25-3

Radio Set Fisher TS25-3 is composed of Radio Transmitter TS25-3, Radio Receivers RS25-3 and RS25-4, power supplies and other ancillary items to make up a complete two-way radio communication set. This equipment is designed for a-m vehicular or mobile operation, for point-to-point and ground-to-air communication. It is to be replaced by Radio Set AN/VRC-19.

Both radio receivers operate in four crystal-controlled channels in the 0.2 to 0.8 m-c range, and in one variable frequency band (channel 5). Channel 5 in Radio Receiver RS25-3 covers the 3.0 to 4.5 m-c band; channel 5 in Radio Receiver RS25-4 covers the range 0.19 to 0.51 mc.

The radio transmitter also operates in four crystal-controlled channels (0.02 to 0.08 mc) plus the variable frequency channel 5 (3.0 to 4.5 mc).

Power Units Fisher PS25-3 (6-v dc), PS25-3 (12-v dc), and PS25-3 (110-v ac) supply all the power requirements of the transmitter component plus one, but not both, receiver components. Receiver power unit Fisher PRDC-6 may be used to operate either one of the receiver components from a standard 6-v storage battery.

This equipment can be normally operated into a whip-type antenna 15 to 35 feet long such as Antenna Assembly AS-170/VRC-4. Antenna Coil L35-6, located in the transmitter, is tapped so that it can be adjusted for a satisfactory antenna impedance match.

Power requirements are 252 w, from either a 6- or 12-v storage battery, or 110 v, 60 cyc, 1 phase, ac.

AN/MRC-TYPE

FISHER TS25-3 :COMMERCIAL TYPE NUMBER
RADIO SET

INSTRUCTION LITERATURE: TM 11-829 & TO 16-55-248
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET : 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter TS25-3	16-5/8 x 12-1/2 x 15-7/8	39.0
1	Receiver RS25-3	16-5/8 x 12-1/8 x 15-7/8	34.5
1	Receiver RS25-4	16-5/8 x 12-1/8 x 15-7/8	34.5
1	Power Unit PS25-3 6 v, dc	13-7/8 x 9-13/16 x 10-5/8	32.0
1	Power Unit PS25-3 12 v, dc	13-7/8 x 9-13/16 x 10-5/8	30.0
1	Power Unit PS25-3 110 v, ac	Not Available	Not Available
1	Receiver Power Unit PRDC-6 (6 v, dc)	" "	" "
1	Antenna Assembly AS-170/VRC-4	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Issued on a basis of one each per crash vehicle and/or ambulance, per Air Base.

INSTALLATION: Ground mobile, vehicular. **APPROXIMATE RANGE (IN MILES):** Short to medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7; AN/SRC-3; AN/SRR-3, -8, -12, -13; AN/SRT-1, -3, -4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -314, -329, -339, -342, -344, -348, -365, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, OA-59/FRC; OA-60A/FRT; OA-60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -704; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBX; TC8; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES:
Transmitter TS25-3: 2 - 8 crystal-controlled; 3 - 4.5, variable frequency oscillator.
Receiver RS25-3: 2 - 8, crystal-controlled; 3 - 4.5, continuous tuning.
Receiver RS25-4: 2 - 8, crystal-controlled; 0.19 - 0.51, continuous tuning.

TYPE MODULATION: Am. **TYPE OF SIGNAL:** Voice, cw, tone.

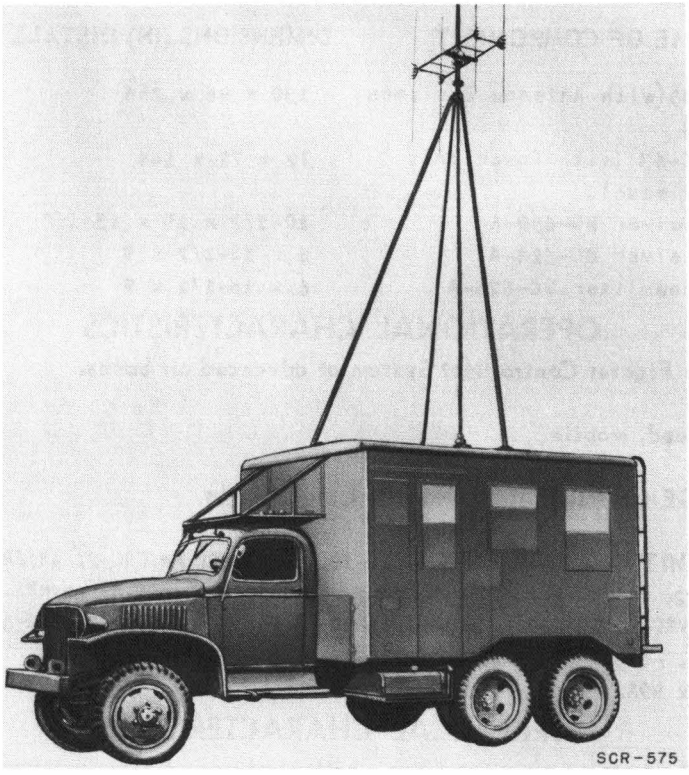
POWER OUTPUT: Transmitter 25 w (maximum).

POWER REQUIREMENTS: 252 w, (42 amp) 6 v, dc;
252 w, (21 amp) 12 v, dc;
252 w, 110 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Set Fisher TS25-3 measures 64 x 47 x 15-7/8 inches, net weight 180.75 pounds, volume 30 cu ft, 0.75 ship ton. Packed for domestic or export shipment: total weight 195 pounds, total volume 33 cu ft, 0.82 ship ton. Shipped in 5 packages both domestic and export.

STATUS: Standard	AN/MRN-TYPE
CLASSIFICATION OF EQUIPMENT: Unclassified	
USING SERVICE: Air Force	SERVICE TYPE NUMBER: SCR-575
DATE OF THIS SHEET: 26 May 52	RADIO SET



Radio Set SCR-575 is a complete v-h-f, ground, mobile direction finding, and two-way radio communication set for a-m (voice, cw, and icw) operation in the frequency range of 100 to 156 mc. It is normally used in v-h-f Fighter Control Net Systems for ground-to-air and point-to-point communication.

This radio set operates on four crystal-controlled, preset, push-button selected channels for reception or transmission. In addition to the BC-624 receiver component (part of Radio Set SCR-522-A) there are two Radio Receivers BC-639 which are manually tuned and provide for direction finding as well as for regular communication. One receiver is normally used for stand-by operation.

Antenna Equipment RC-153 is a large manually rotatable, azimuth-calibrated equipment used for communication, ond for direction finding by either visual, or aural-null methods. This is mounted on Truck K-53 which carries all the equipment necessary for operation of the radio set (except the power unit which is trailer-drawn).

Relay Unit BC-687 is used for remote control operation over telephone lines.

The power unit normally supplies 4,080 w for all apparatus including heating of the operating compartment in Truck K-53.

For limited emergency operation of the radio equipment only, batteries are available.

AN/MRN-TYPE

SCR-575 :SERVICE TYPE NUMBER
RADIO SET

INSTRUCTION LITERATURE: TM 11-227
TO 16-40SCR575-3
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET: 26 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Truck K-53(with Antenna Equipment RC-153-A)	130 x 96 x 256	13,385.0
1	Trailer K-63 (with Power Unit PE-99, or equal)	72 x 72 x 144	2,860.0
2	Radio Receiver BC-639-A	10-1/2 x 19 x 13-1/2	36.0 each
1	Radio Receiver BC-624-A	6 x 15-1/2 x 9	14.5
1	Radio Transmitter BC-625-A	6 x 15-1/2 x 9	16.25

OPERATIONAL CHARACTERISTICS

TACTICAL USE: In a Fighter Control Net System at advanced air bases.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-16, -20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -12, -21; AN/URT-7, -10; AN/VRC-1; BC-639, -640; MAR; MBS; R-137/GR; RBK; RBQ; RC-103, -256, -257; RCK; RCO; SCR-522, -542, -573, -574, -575, -607, -616, -624, -641, -643, -644; TDQ; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 - 156.
Transmitter: BC-624-A, 4 preset crystal-controlled channels (Part of SCR-522-A).
BC-625-A, 4 preset crystal-controlled channels (Part of SCR-522-A).
2 BC-639-A continuous tuning.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Transmitter: Voice.
Receiver: Voice, tone, cw.

POWER OUTPUT: Transmitter: 6 w.
Receiver: Maximum 1 w into 600 ohm impedance.

POWER REQUIREMENTS: 4,080 w with heaters) 110 v, 60 cyc, 3 phase, ac (from PE-99) or
1,080 w without heaters) 110-120 v, 50/60 cyc, 1 phase, ac (from commercial source).
Emergency Use: Four 12-v plus two 6-v storage batteries (two 12 v plus one 6 v in use, two 12 v plus one 6 v in reserve).

PHYSICAL CHARACTERISTICS

Radio Set SCR-575 installed in truck weighs 16,312 pounds net, volume 2,272 cu ft, 56.8 ship tons. Packed for either domestic or export shipment: total weight 16,312 pounds, total volume 2,272 cu ft, 56.8 ship tons. Shipped in 1 package both domestic and export.

STATUS: S/Std

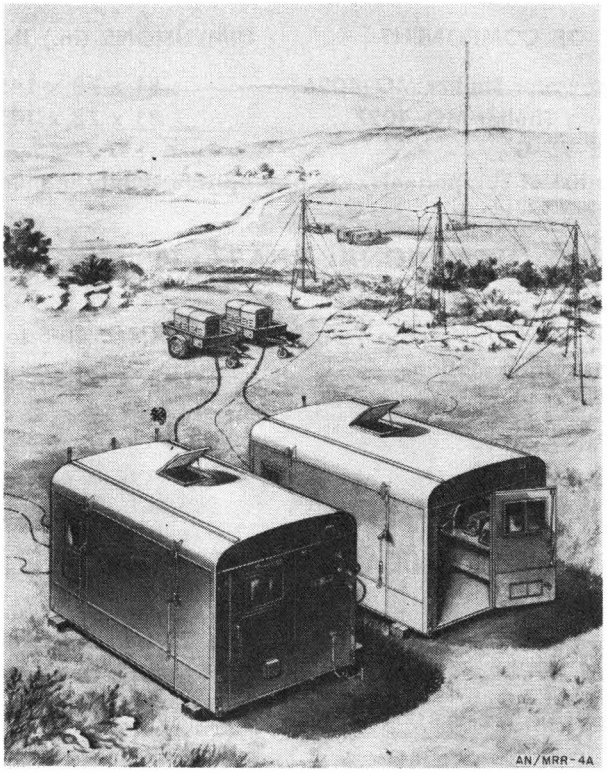
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 21 June 1956

AN/MRR–4( )

RADIO RECEIVING SET



Radio Receiving Set AN/MRR–4( ) is a transportable, voice, cw, and radioteletype receiving station for (1) aural monitoring, (2) magnetic tape recording of broadcasts, either picked up by radio receivers or transmitted over landline, (3) receiving programs of remote origin for direct rebroadcast, (4) receiving programs, or other information by radioteletype circuits, and (5) sending and receiving information by a landline teletypewriter system.

This equipment, consisting of a radio receiving and a radioteletype shelter, normally functions as the receiving terminus for Radio Transmitting Set AN/MRT–5. It includes pushbutton and patch-board facilities that enable rapid connection of system components to the AN/MRT–5 or similar radio stations. The shelters, which house all of the operating components except the power units, include panoramic indicators, a teletypewriter, a perforator transmitter, radio receivers, magnetic tape recorders, telephones, and accessories.

The two shelters are powered by trailer-drawn, 10-kw power units and are readily transported by standard 6 x 6 trucks.

The AN/MRR–4 and AN/MRR–4A are functionally identical and all components are interchangeable.

AN/MRR-4( )

RADIO RECEIVING SET

INSTRUCTION LITERATURE: TM 11-646

USING SERVICE: USA

DATE OF THIS SHEET: 21 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Radio Teletypewriter Shelter MO-4026	81 x 78 x 145	4,863
1	Radio Receiving Shelter MO-4027	81 x 78 x 145	4,215
2	Power Unit PE-95-G		

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally used with Radio Transmitting Set AN/MRT-5 to form a complete receiving and transmitting station.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE: Extended.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .1 to .4, 1.35 to 29.4 in six bands (Hammarlund rcvr Mod SP-600-JLX); .54 to 54 in six bands (R-274A/FRR).

TYPE MODULATION: Am (A1, A2, A3).

TYPE OF SIGNAL: Cw, tone, voice, radioteletype.

POWER OUTPUT:

POWER REQUIREMENTS: 130 w, 115 v, 60 cy ac (except for int bat.-operated tel sys).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	81 x 78 x 145 (ea shelter)	8,898			
DOMESTIC PACK:					
EXPORT PACK:		8,898			

STATUS: T/Std

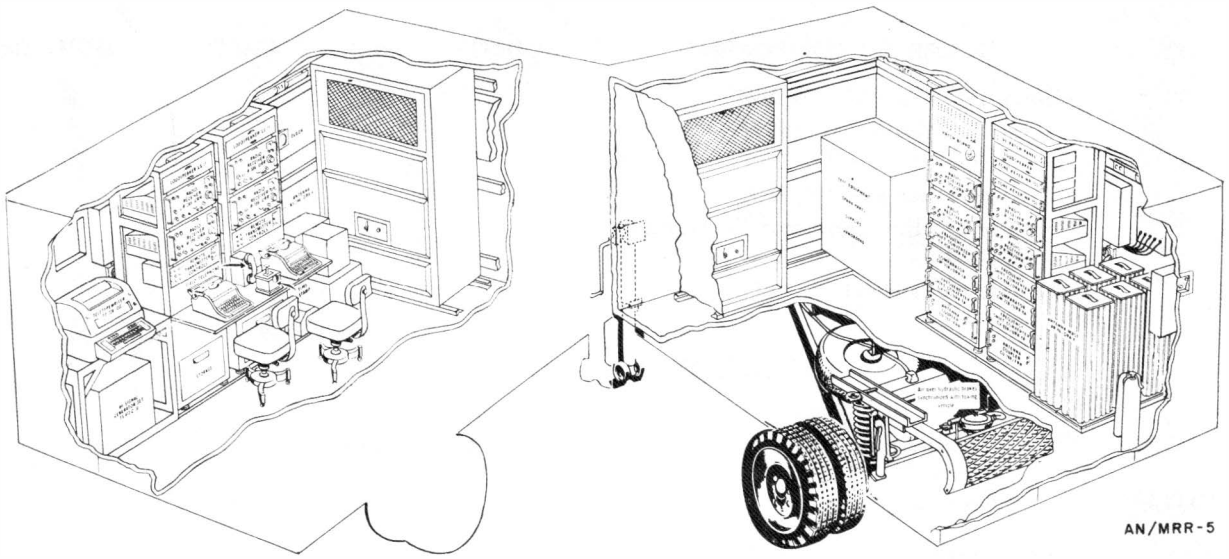
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

AN/MRR–5

RECEIVING SET, RADIO



Radio Receiving Set AN/MRR–5 is a highly mobile, air-transportable equipment capable of operating with other mobile or permanent, comcenters as a portion of a cw, voice, and diversity radioteletype, point-to-point, and ground-to-air communication system.

It is equipped with remote controls for operating Radio Transmitting Set AN/MRT–6, and is capable of operating with Radio Beacon AN/URN–5, Radio Transmitting Set AN/URT–7, and Radio Transmitting Equipment TED–2. It normally is used with Teletypewriter Central Office AN/MGC–2, Radio Set AN/MRC–41, and Radio Transmitting Set AN/MRT–6 (Project *Four wheels*).

All operating components are installed in and operated from Van Trailer V–83/M.

Power is supplied by Trailer-Mounted Diesel Engine Generator Set Type MB–5 (not supplied as part of this set).

AN/MRR–5

RECEIVING SET, RADIO

INSTRUCTION LITERATURE:

USING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
3	Antenna Group AN/GRA–4		
2	Antenna Coupler CU–168/FRR		
8	Radio Receiver R–388/URR		
1	Teletypewriter TT–70A/UG		
2	Frequency Shift Converter-Comparator NR–174		
2	Remote transmitter controls		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Operated by AACS at such commands as TAC, SAC, or ADC.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .5 to 30.5 (continuous coverage in 30 tuning steps).

TYPE MODULATION: Am (A1, A2, A3); fm (F1).

TYPE OF SIGNAL: Cw, tone, voice, fsk.

POWER OUTPUT: 1.5 w (4 or 600 ohms).

POWER REQUIREMENTS: 20 to 30 kw, 120/240 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	150 x 96 x 138		1,150	28.75	
DOMESTIC PACK:			1,150	28.75	1
EXPORT PACK:		8,000	1,150	28.75	1

STATUS: T/Std

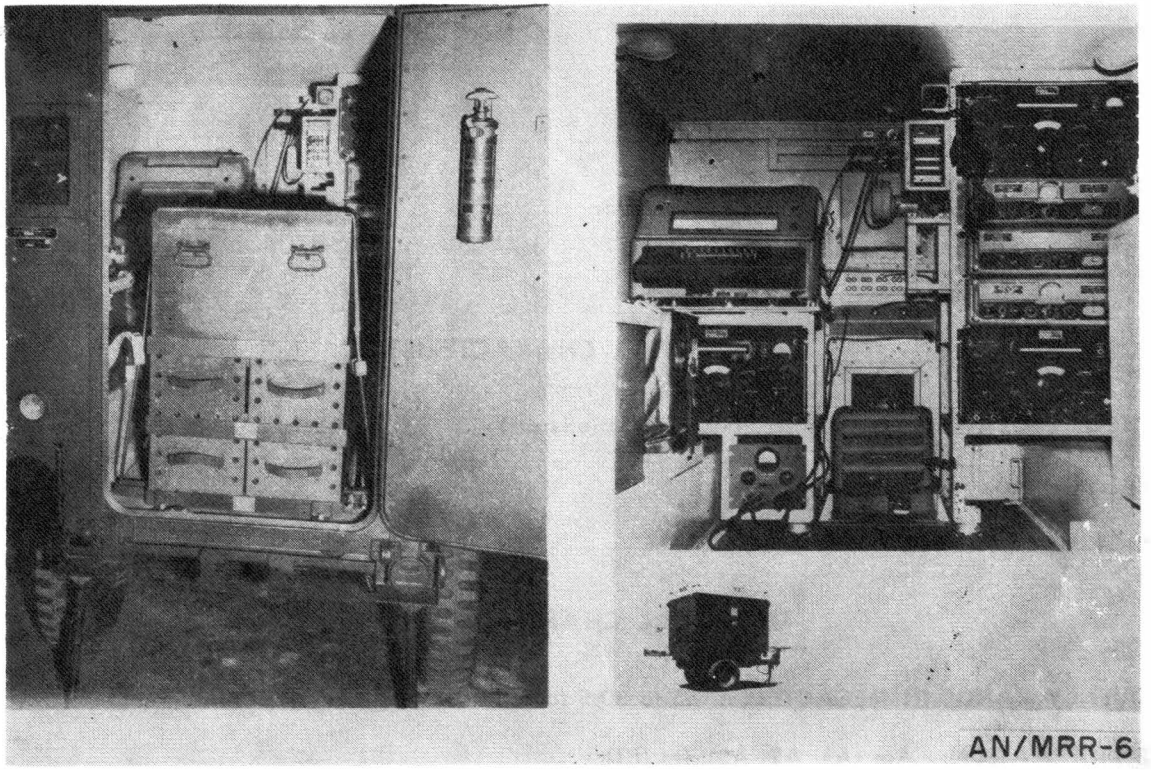
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

AN/MRR–6

RECEIVING SET, RADIO



Radio Receiving Set AN/MRR–6 is a highly mobile, air-transportable set used for reception and printing of radioteletype signals transmitted by the frequency-shift method, as well as voice and cw signals. It is used in short duration (up to 3 months) emergency support of AACS air operations.

This equipment includes remote controls for operation of Radio Transmitting Set AN/MRT–7 and can receive radioteletype signals through Frequency Shift Converter-Comparator, Northern Radio Type 174 operating with Teletypewriter TT–70/UG.

It is usually operated with Air Traffic Control Set AN/MRN–15, Radio Transmitting Set AN/MRT–7, and Facsimile Set AN/MXR–1 (when part of Project *Two Wheels*).

All operating components are installed in and operated from a trailer van.

Power is supplied by Trailer Mounted Diesel Engine Generator Set MB–6 (not supplied as part of this set).

AN/MRR-6

RECEIVING SET, RADIO

INSTRUCTION LITERATURE:

USING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
4	Mast AB-86/GRA-4		
3	Radio Receiver R-388/URR		
1	Rectifier Power Unit RA-133		
1	Teletypewriter TT-70/UG		
1	Frequency Shift Converter-Comparator NR-174		
1	Shelter w/trailer mounting chassis		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Emergency use for AACS operations at TAC, SAC, or ADC.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE: Long range.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .5 to 30.5 (continuous coverage in 30 tuning steps).

TYPE MODULATION: Am (A1, A2, A3); fm (F1).

TYPE OF SIGNAL: Cw, tone, voice, fsk.

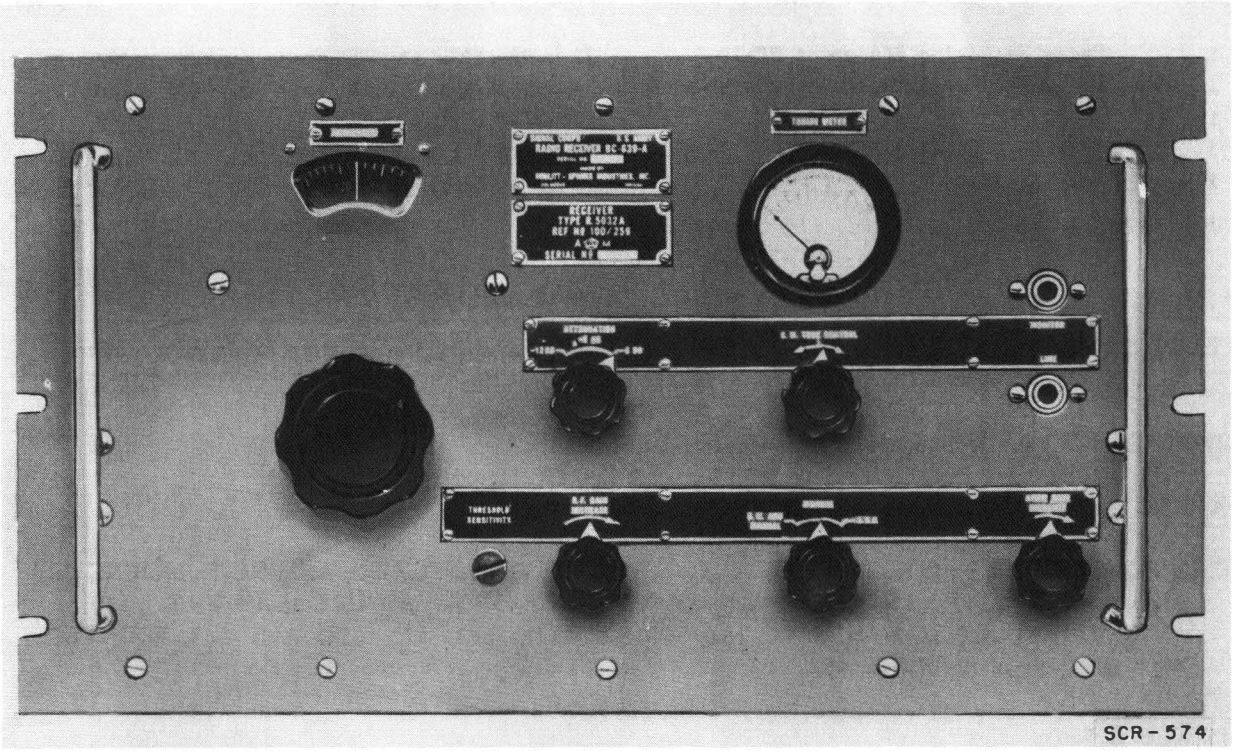
POWER OUTPUT: 1.5 w, 600 ohms.

POWER REQUIREMENTS: 5 kw, 240 v, 50/63 cy, 3-wire, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	120 x 80 x 82	3,000 (approx)	341.6	8.54	
DOMESTIC PACK:			341.6	8.54	1
EXPORT PACK:		3,200 (approx)	341.6	8.54	1

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force, Navy DATE OF THIS SHEET: 7 Jun 52	AN/MRR-TYPE SERVICE TYPE NUMBER: SCR-574 RADIO SET



Radio Set SCR-574 is a mobile, v-h-f (voice or tone) radio receiving equipment for ground-to-air and point-to-point communication built into Truck K-53 and Truck K-69.

Two Radio Receivers BC-639, (illustrated above) provide dual reception on any frequency from 100 to 156 mc.

This equipment can be used with Radio Set SCR-573 to comprise a two-way v-h-f, Fighter Control Net System.

The Antenna system consists of Antenna AN-86, Antenna Equipment RC-81, and associated 72-ohm coaxial cable.

It operates on power furnished by Power Unit PE-99, or from a 115v 50/60-cyc source of commercial ac. Requires 4.5 kva with electric heaters in operation, 1.4 kva without these heaters.

AN/MRR-TYPE	INSTRUCTION LITERATURE: TM-11-227 TO 16-40SCR574-2
SCR-574 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO SET	USING SERVICE : Air Force, Navy
	DATE OF THIS SHEET : 7 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiving Equipment RC-72-A	72 x 20-1/2 x 13-1/4	302
1	Radio Receiving Equipment RC-155-A	72 x 20-1/4 x 13-1/4	258
1	Truck K-53	130 x 96 x 256	13,385
1	Trailer K-63 with PE-99-A	72 x 72 x 114	2,860
1	Antenna AN-86	25 cu ft (Packaged)	743

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued on any organizational level as project material in accordance with AFR 100-17.

INSTALLATION: Ground, mobile, vehicular.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36: AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-16, -20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URT-7, -10; AN/VRC-1; BC-640; MAW; MBS; RC-257; SCR-522, -542, -573, -575, -624, -641, -643; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 - 156 (continuously tuneable).

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone or cw.

POWER OUTPUT: 3 w (maximum) into 600 ohm impedance, however, satisfactory output can be had at any impedance between 200 and 20,000 ohm.

POWER REQUIREMENTS: 4.5 kva with heaters) 100 v, 50/60 cyc, 3 phase, ac,
1.5 kva without heaters) (from PE-99).

PHYSICAL CHARACTERISTICS

Radio Set SCR-574-A, installed in truck weighs 17,548 pounds net, volume 2,275 cu ft, 8.75 ship tons. Packed for either domestic or export shipment: total weight 17,548 pounds, total volume 2,275 cu ft, 8.75 ship tons. Shipped in 2 packages both domestic and export.

STATUS: S/Std

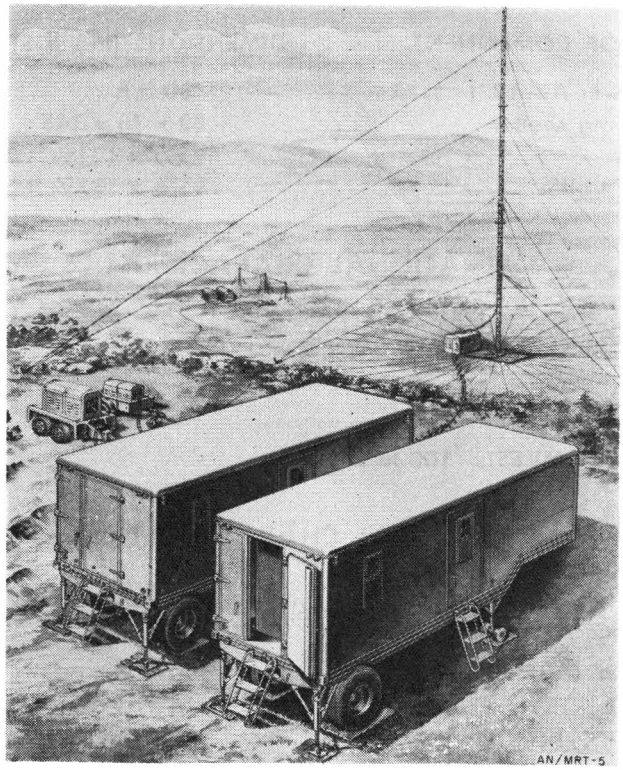
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 21 June 1956

AN/MRT–5( )

RADIO TRANSMITTING SET



Radio Transmitting Set AN/MRT–5( ) is a transportable radio station that provides complete radio transmission facilities in the standard am broadcast band. This equipment, when used with Radio Receiving Set AN/MRR–4( ), is a complete radio station for dissemination of information for entertainment and psychological warfare services.

All operating components, with the exception of the two power units and the antennas, are housed in the transmitting trailer, the studio trailer, and the antenna tuning shelter. The transmitting trailer supplies facilities for generating, amplifying, and transmitting the rf carrier; and the studio trailer, for all local programming. The antenna tuning shelter provides for tuning the antenna and feeding the modulated rf to the mast antenna or the balloon-carried antenna. Provisions are made for transmitting programs originated at a remote point.

Main power for the transmitting trailer and the antenna tuning shelter is furnished by Power Unit PE–85–M; and for the studio trailer, by Power Unit PE–95–G.

The AN/MRT–5 and AN/MRT–5A differ somewhat; a variable-frequency oscillator and Radio Receiver R–388/URR are added to the transmitting trailer of the A model.

AN/MRT-5( )

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: TM 11-643

USING SERVICE: USA

DATE OF THIS SHEET: 21 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Antenna Tower AB-127( )/FR	180 ft h	
1	Antenna tuning shelter	82 x 78 x 145	
1	Studio trailer	95½ x 131¾ x 318	
1	Transmitting trailer	95½ x 131¾ x 318	

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Psychological warfare services.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE (IN MILES): 100 to 250.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .54 to 1.6.

TYPE MODULATION: Am (A3).

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 5 kw.

POWER REQUIREMENTS: 30 w, 115 v, 60 cy ac (R-274/FRR); 85 w, 115/230 v, 45/70 cy ac (R-388/URR); 15.5 kw, 230 v, 60 cy, 3 ph ac (xmtr).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: T/Std

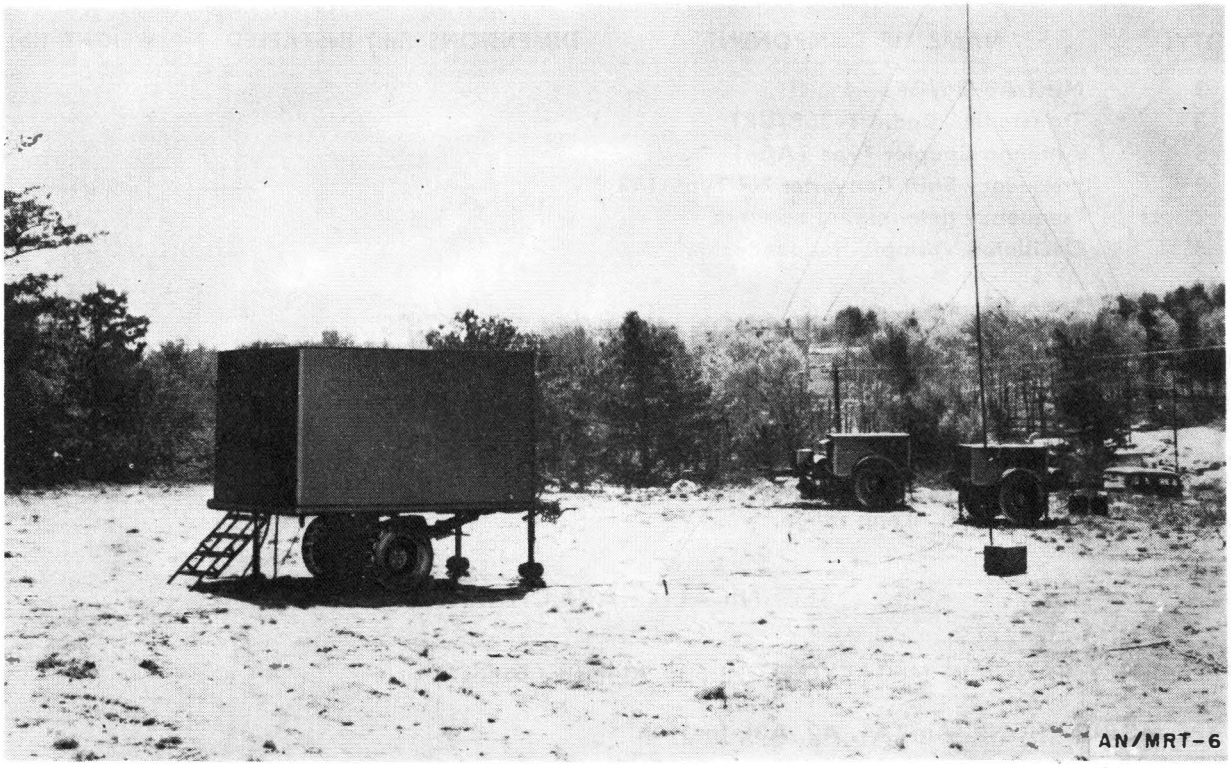
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 11 June 1956

AN/MRT–6

TRANSMITTING SET, RADIO



Radio Transmitting Set AN/MRT–6 is a mobile, air-transportable, long-range, hf equipment capable of operating in conjunction with other mobile or permanent comcenters in a portion of a cw, voice, and diversity radioteletype, point-to-point, worldwide communication system.

Various components of this equipment may be remotely controlled by Radio Receiving Set AN/MRR–5.

It is normally operated with Teletypewriter Central Office AN/MGC–2, Radio Set AN/MRC–41, and Radio Receiving Set AN/MRR–5 (as part of Project *Four Wheels*) and is installed in and operated from Van Trailer V–83/M.

Power is supplied by Trailer Mounted Diesel Engine Generator Set Type MB-5 (not supplied as part of this set).

AN/MRT-6

TRANSMITTING SET, RADIO

INSTRUCTION LITERATURE:

USING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 11 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
3	Mast AB-86/GRA-4		
3	Transmitter, Radio T-368/URT		
3	Antenna Coupler Type TAC-1		
2	Frequency Shift Converter NR Type 152		
2 sets	Frequency determining network		
3	Oscillator, variable-frequency		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Operated by AACS at such commands as TAC, SAC, or ADC.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE: Long range.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.5 to 20 in five bands.

TYPE MODULATION: Am (A1, A2, A3); fm (F1).

TYPE OF SIGNAL: Cw, tone, voice, fsk.

POWER OUTPUT: 375 w (voice); 475 w (cw).

POWER REQUIREMENTS: 20 to 30 kw, 120/240 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	150 x 96 x 138		1,150	28.75	
DOMESTIC PACK:			1,150	28.75	1
EXPORT PACK:		8,000 (approx)	1,150	28.75	1

STATUS: T/Std

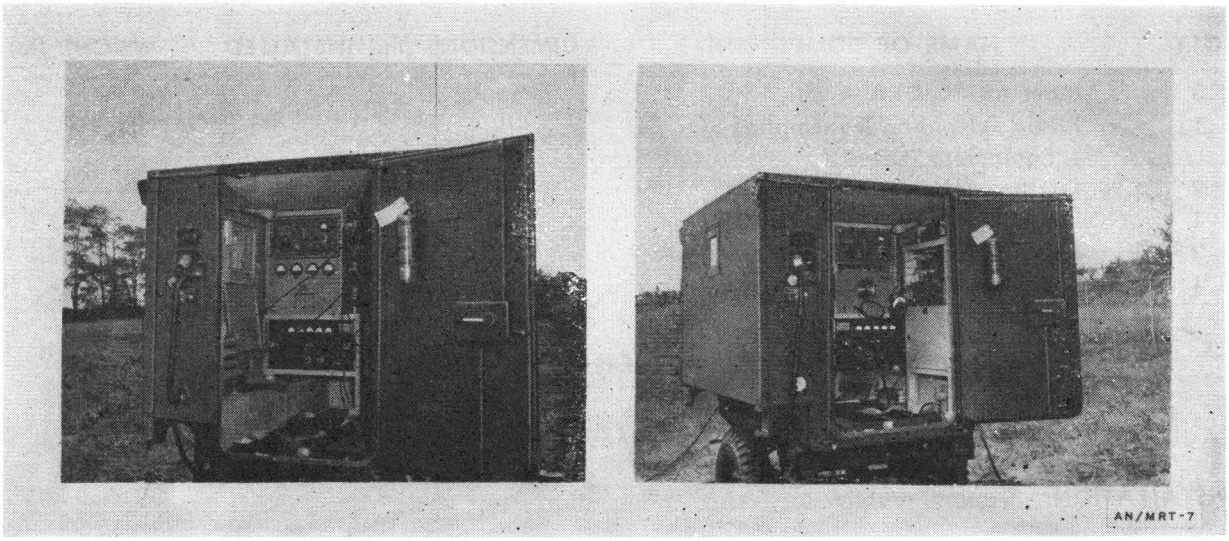
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

AN/MRT-7

TRANSMITTING SET, RADIO



Radio Transmitting Set AN/MRT-7 is air-transportable, mobile, hf equipment used to transmit voice, frequency-shift telegraph, and lf beacon signals. It is suitable for worldwide communication use and in short-duration (3 months) emergency support applications of AACS operations.

This equipment can be operated by remote control from Radio Receiving Set AN/MRR-6. It is used with Air Traffic Control Set AN/MRN-15, Radio Receiving Set AN/MRR-6, and Facsimile Set AN/MXR-1 when part of Project *Two Wheels*.

All operating components are installed in and operated from a trailer van. Power for operation is derived from Trailer-Mounted Diesel Engine Generator Type MB-6 (not a component of this equipment).

AN/MRT-7

TRANSMITTING SET, RADIO

INSTRUCTION LITERATURE:

USING SERVICE: USAF (RAOC)

DATE OF THIS SHEET: 12 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
3	Mast AB-86/GRA-4		
1	Radio Telephone Transmitting Equipment TDD-4		
2	Oscillator, Model PMO		
1	Frequency Shift Keyer, Model XFK		
2	Radio Transmitter, CR Model 32-BA-9		
1	Shelter w/trailer mounting chassis		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Emergency use for AACS operations at TAC, SAC, or ADC.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE: Long range.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .2 to .4; 1.5 to 15.

TYPE MODULATION: Am (A1, A2, A3); fm (F1).

TYPE OF SIGNAL: Cw, tone, voice, fsk.

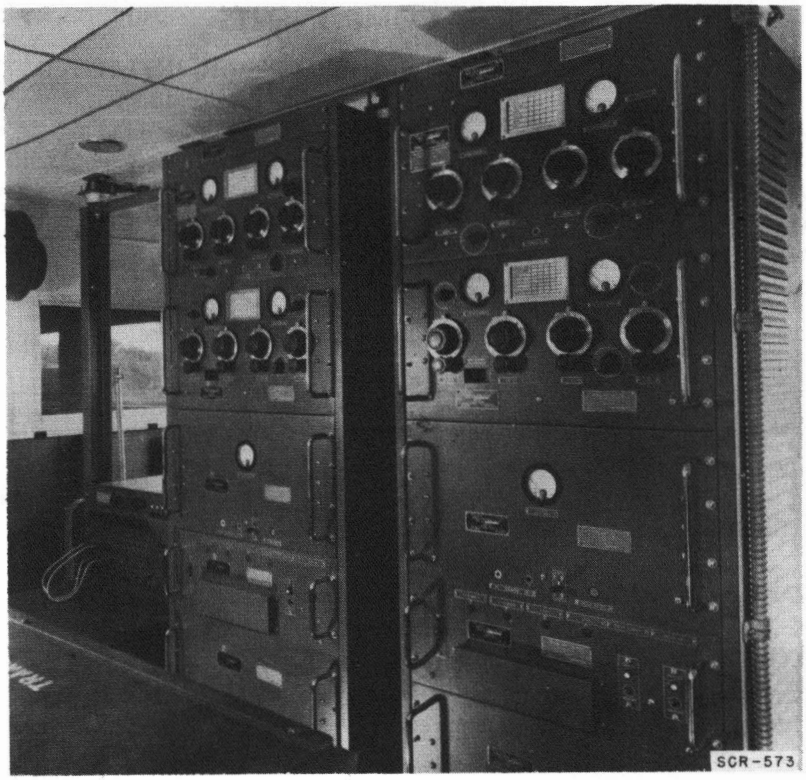
POWER OUTPUT: 15 w (A2, A3); 50 w (A2, A3); 75 w (A1, F1).

POWER REQUIREMENTS: 5 kw, 240 v, 50/63 cy, 3-wire, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	120 x 80 x 82	3,000 (approx)	341.6	8.54	
DOMESTIC PACK:			341.6	8.54	1
EXPORT PACK:		3,200 (approx)	341.6	8.54	1

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force, Navy DATE OF THIS SHEET: 9 Jun 52	**AN/MRT-TYPE** SERVICE TYPE NUMBER: SCR-573 RADIO SET



Radio Set SCR-573 is a-m or tone-modulated, v-h-f, transmitting equipment for ground-to-air, and point-to-point communication. It is normally operated as mobile equipment from Truck K-53, and Trailer K-63, both of which are supplied. Radio Set SCR-573-A (transmitting station) when used with Radio Set SCR-574-A (receiving station) comprises a two-way, v-h-f Fighter Control Net System.

Two BC-640 transmitters, each operating on one preset, crystal-controlled frequency, provide dual channel transmission.

Equipment can be controlled locally, or by remote control over standard telephone lines from a distance of 60 to 120 miles. The distance between transmitters and receivers should be at least 1/4 mile and not more than two miles, because the transmitters can block out receivers operating in adjacent channels.

Recommended antenna system consists of Antenna AN-86 (76 feet), two Antenna Equipments RC-81, and associated coaxial cable.

Power is normally furnished by Power Unit PE-99 (part of Radio Set SCR-573), or an equivalent source.

Power requirements are 5.5 kva of 110-v, 50/60-cyc, single phase ac (with electric heaters), 2.2 kva (without the electric heaters).

AN/MRT-TYPE

SCR-573 :SERVICE TYPE NUMBER
RADIO SET

INSTRUCTION LITERATURE: TO AN-40SCR573-2
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force, Navy
DATE OF THIS SHEET : 9 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Truck K-53	130 x 96 x 256	13,385
1	Trailer K-63 (with PE-99)	72 x 72 x 144	2,860
2	Radio Tranamitter BC-640	72 x 21 x 20	515
1	Control Unit RM-27	11-3/8 x 19 x 10-1/2	29
1	Antenna AN-86-A	25 cu ft	743
2	Antenna Equipment RC-81-A	12 x 28 x 38	4

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued on any organizational level as project material in accordance with AFR 100-17.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -12, -21; AN/VRC-1; BC-639, -787; MAR; MBS; R-137/GR; RBK; RBO; RC-103, -256; RCK; RCO; SCR-522, -542, -574, -575, -607, -616, -624, -641, -644.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 150 - 156.
2 preset crystal-controlled frequencies (one for each transmitter) providing simultaneous transmission on 2 channels.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice or tone.

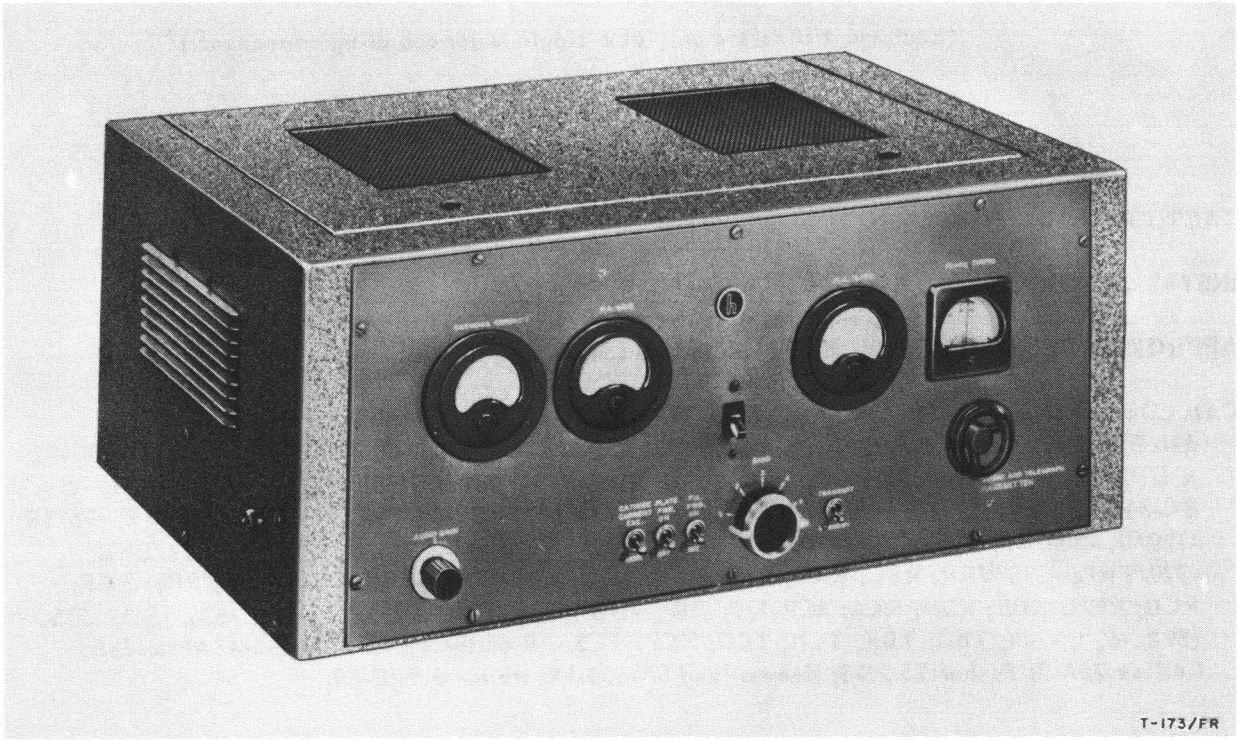
POWER OUTPUT: 50 w, per transmitter.

POWER REQUIREMENTS: 2.5 kva, 110 v, 50/60 cyc, 1 phase, ac, or
7.5 kva, 120 v, 50/60 cyc, 3 phase, ac (from PE-99).

PHYSICAL CHARACTERISTICS

Radio Set SCR-573-A, installed in truck net weight 17,760 pounds, volume 2,275 cu ft, 8.75 ship tons. Packed for either domestic or export shipment: total weight 17,760 pounds, total volume 2,275 cu ft, 8.75 ship tons. Shipped in 2 packages both domestic and export.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 31 Jan 52	**AN/MRT-TYPE** AN/COMP TYPE NUMBER: T-173/FR RADIO TRANSMITTER



Radio Transmitter T-173/FR is a medium power, high-frequency, a-m (voice and cw), transmitting equipment used in point-to-point, long distance communication in fixed plant applications.

This equipment consists essentially of a commercial (Hallicrafter HT 9) table-model transmitter, a microphone, telegraph hand key, and antenna components. It includes a set of crystals by means of which five channels can be preset; there is an individual crystal for each channel. Band switching is accomplished by means of interchangeable plug-in coils and the band switch on the front panel.

This transmitter can be operated with conventional antenna systems.

Operates on 105-125-v ac only.

AN/MRT-TYPE	INSTRUCTION LITERATURE: None
T-173/FR :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTER	USING SERVICE : Army
	DATE OF THIS SHEET : 31 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed ground, or mobile.

APPROXIMATE RANGE (IN MILES): Medium and long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.7 - 30.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw.

POWER OUTPUT: 100 w cw.
75 w PHONE.

POWER REQUIREMENTS: 500 va, 105 - 125 v, 50/60 cyc, ac.

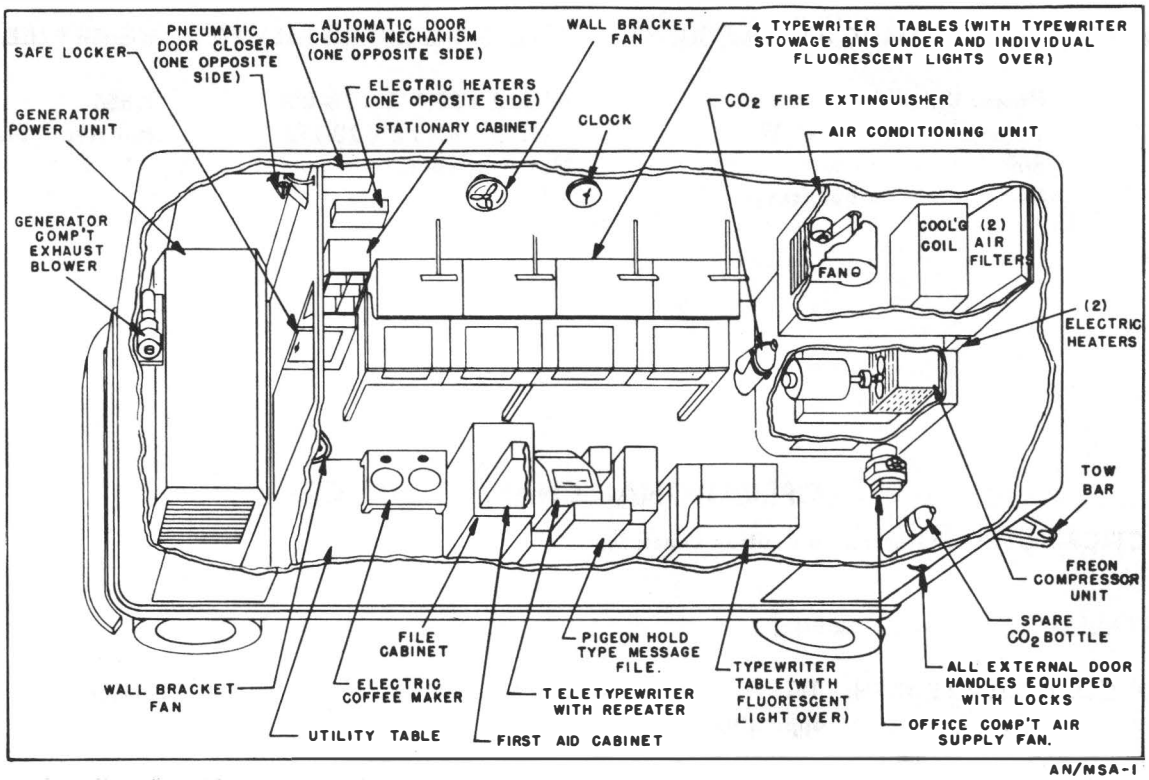
PHYSICAL CHARACTERISTICS

Radio Transmitter T-173/FR measures 29-1/8 x 12-1/2 x 20-1/2 inches, net weight 120 pounds.
Packed for domestic shipment: total weight 125 pounds.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/MSA-1

COMMUNICATIONS CENTRAL OFFICE GROUP



AN/MSA-1

Communications Central Office Group AN/MSA-1 is a fully equipped trailer type van which provides a mobile office that may be towed on land or transported by ship or rail. Its principal function is to provide working facilities for personnel on continuous duty in the coding and decoding of communications.

This equipment consists essentially of a van with built-in wooden furniture, fixed light and heating equipment, air conditioning, power generator systems, and office and communication equipment. Terminals are installed for two teletypewriter and six telephone circuits.

It is equipped with a CO-2 fire protection system.

The electrical power system is designed to furnish an independent source of power for the air conditioning system and for lighting and miscellaneous office use. Wiring is provided for receiving power from an external source or furnishing power to an external load.

AN/MSA-1

COMMUNICATIONS CENTRAL OFFICE GROUP

INSTRUCTION LITERATURE: NavShips 91498
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Power Unit PE-95-G	67-1/2 x 38-1/2 x 28-1/4	1,556
1	Teletypewriter Model 19	34-3/8 x 41-5/8 x 23-1/2	Not Available
1	Safe Locker No. 6	Not Available	" "
2	Communication handset	" "	" "
5	Typewriter	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore communication controls.

INSTALLATION: Ground, mobile.

CAN COMMUNICATE WITH: This is a shelter used to house primary and related communication apparatus.

TECHNICAL CHARACTERISTICS

POWER REQUIREMENTS: 10 kw, 120 v, 60 cyc, 1 or 3 phase ac (supplied by Power Unit PE-95-G when external power source is not available).

PHYSICAL CHARACTERISTICS

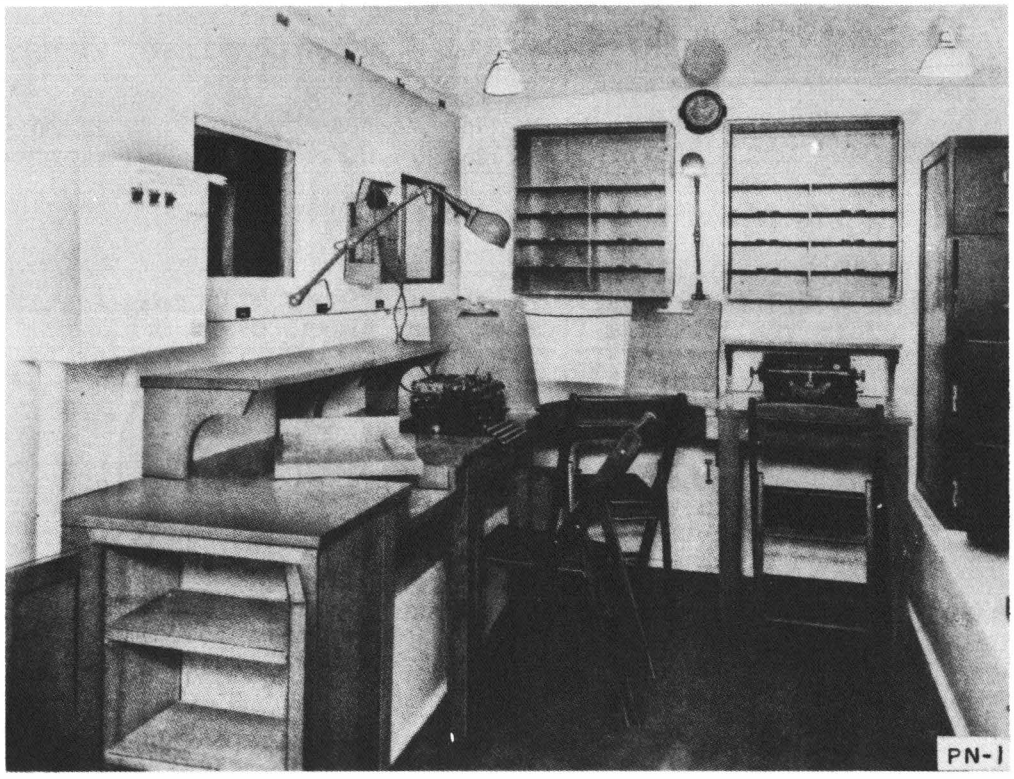
Communications Central Office Group AN/MSA-1 measures 245 x 95 x 129 inches, net weight 17,000 pounds, volume 1,500 cu ft, 38 ship tons.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 9 Jun 52

AN/MSQ-TYPE

SERVICE TYPE NUMBER: PN-1 and -2

MOBILE CODING VAN



Mobile Coding Vans PN-1 and -2 are mobile operating shelters used at advanced-base cryptographic, radio receiving, or teletypewriter stations. These vans contain required office furniture, plus telewriter equipment. Provision is made for the installation of desired radio equipment.

In addition to general office equipment these vans are equipped with the following:

PN-1: 5 teletypewriters, 2 Telephones EE-8, 6 coding boards, 2 telephone line terminals, and 1 Power Unit PE-95.

PN-2: 3 Model 15 and 3 Model 19 teletypewriters, 2 Model 14 Typing Reperforators, 2 Telephones EE-8, 3 Teletype Panels TT-23/SG, and 2 Power Units PE-95.

The power units provided are sufficient to operate two Mobile Radio Transmitting and Receiving Equipments MBB (series) as well as the equipment normally installed to these vans.

AN/MSQ-TYPE	INSTRUCTION LITERATURE: NavShips 900,099
PN-1 and -2 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Restricted
MOBILE CODING VAN	USING SERVICE: Navy
	DATE OF THIS SHEET: 9 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Trailer K-35G* or	116 x 96 x 309	10,800***
1	Trailer K-32**	124-1/2 x 108 x 318	14,500***

*PN-1.
**PN-2.
***Trailer loaded.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Advanced bases.

INSTALLATION: Ground, mobile.

CAN COMMUNICATE WITH: These are shelters used to house primary and related communication apparatus.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Af, voice and start-stop d-c (teletypewriter).

TYPE COMMUNICATION CIRCUITS: Teletypewriter, telephone.

POWER REQUIREMENTS: 10 kw, 115 v, 60 cyc, 1 phase. (Normally supplied by the PE-95 Power Units).

PHYSICAL CHARACTERISTICS

Mobile Coding Van PN-2 measures 124-1/2 x 108 x 318 inches, net weight 14,500 pounds, volume 2,428 cu ft, 60.7 ship tons. (See list of Major Components above).

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 26 June 1956

AN/MTC–TYPE

SB–100/MTC

CONTROL SWITCHBOARD

NO PHOTOGRAPH AVAILABLE

Control Switchboard SB–100/MTC is semiautomatic equipment used for quickly grouping field telephones of a network for alerts, conferences, and instructions. It is usually mounted atop the administrative switchboard.

This equipment, consisting of the switchboard component and a handset, has no means for ringing and signaling.

AN/MTC–TYPE

INSTRUCTION LITERATURE: TM 11–2133

USING SERVICE: USA

DATE OF THIS SHEET: 26 June 1956

SB–100/MTC

CONTROL SWITCHBOARD

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Handset TS–9	9 x 3 x 3	1.75

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

Manually Operated Equipment:

Number of line circuits: 14.

POWER REQUIREMENTS: 3 v dc; 24 v, .5 amp dc.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	8 x 17 x 9 3/16	20	.72		
DOMESTIC PACK:					
EXPORT PACK:		57	3.20		1

STATUS: Std

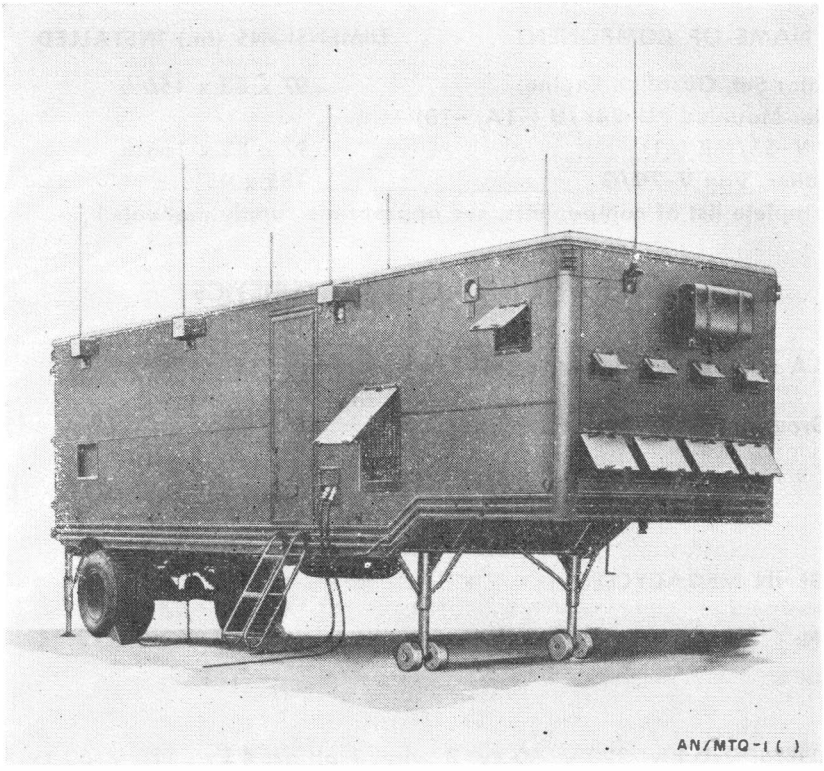
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 15 June 1956

AN/MTQ–1( )

OPERATIONS CENTER



Operations Center AN/MTQ–1( ) is a mobile operations center used as the tactical or battle headquarters of an antiaircraft defense command to collect, evaluate, and disseminate intelligence, and to direct firing when necessary.

This equipment, consisting of three trailers (an equipment trailer and two power trailers), is not designed to operate on the move.

The equipment van contains telephone, teletypewriter, radar repeater, and radio equipment, display boards, air conditioning equipment, and accessory items. Communication equipment is not supplied but facilities for mounting such equipment are provided.

The AN/MTQ–1, AN/MTQ–1A, and AN/MTQ–1B are functionally identical. Each operations center normally requires 220-volt, three-wire, single-phase ac power, but can be operated on 110 volts if the air conditioning equipment is not connected. Power is normally supplied by a trailer-mounted Power Unit PE–95–( ) but commercial power may be substituted, if available.

AN/MTQ-1( )

OPERATIONS CENTER

INSTRUCTION LITERATURE: TM 11-5550

USING SERVICE: USA

DATE OF THIS SHEET: 15 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
2	Generator Set, Gasoline Engine, Trailer-Mounted PU-248/U (-1A, -1B)	97 x 83 x 156½	4,500
2	Trailer V-55/MR (-1)	97 x 83 x 165½	4,500
1	Semitrailer, Van V-79/G	135 x 95½ x 363	10,500

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: AA defense (tac or battle hq).

INSTALLATION: Ground, mobile.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES:

TYPE MODULATION:

TYPE OF SIGNAL:

POWER REQUIREMENTS: 10 kw, 220 v, 60 cy, 3 wire, 1 ph ac; 4 kw, 110 v, 60 cy, 2 wire, 1 ph ac (w/o air conditioning equip.).

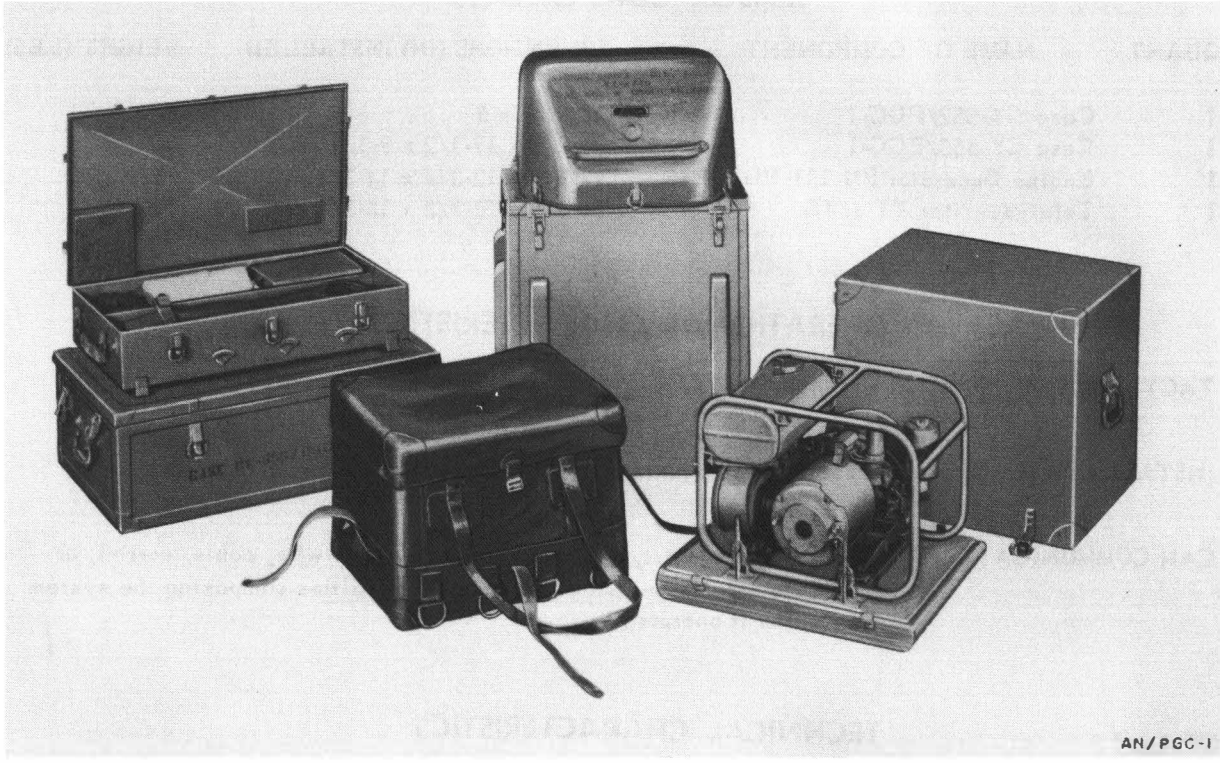
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 17 Jan 52

AN/PGC-1

TELETYPEWRITER SET



Teletypewriter Set AN/PGC-1 is a portable, field teletypewriter station for use at division and higher headquarters.

The equipment consists of a lightweight teletypewriter, a gasoline engine-driven electrical generator, carrying cases, and accessories. The cases are used to mount the equipment during operation in the field. The entire equipment can be transported on QM packboards.

This set is designed to operate in neutral circuits but can be adapted to receive and transmit polar signals. It is usually connected to the remote teletypewriter through a d-c telegraph line, tactical carrier facilities, or a radio channel. Can be arranged for half-duplex, full-duplex, or sending or receiving only operation. Two or more of these sets can be interconnected for operation with each other without using intermediate line modifying equipment.

This teletypewriter is powered by its power unit component or from a conventional power source and operates on 105/125 v dc or 50/60 cyc ac.

AN/PGC-1	INSTRUCTION LITERATURE: TM 11-2235
	CLASSIFICATION OF EQUIPMENT: Unclassified
	USING SERVICE : Army
TELETYPEWRITER SET	DATE OF THIS SHEET : 17 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Case CY-552/PGC-1	27 x 16 x 6	24
1	Case CY-553/PGC-1	30-1/2 x 19-1/2 x 9-1/2	30
1	Engine-Generator PU-181/PGC-1	17-1/2 x 12-3/4 x 14-3/4	95
1	Teletypewriter TT-4/TG	24-3/8 x 20-7/8 x 16-3/8	94-1/2

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher units.

INSTALLATION: Ground, airborne, or shipborne.

CAN COMMUNICATE WITH: Terminal, repeater, or station apparatus over wire, cable, carrier, or radioteletype standard communication facilities composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Keyboard operation, remote motor stop, break-in facilities.

OPERATING SPEED: 368.1 opm (60 wpm), gears furnished for 600 opm (100 wpm). 72 characters per line (no weather keyboard available).

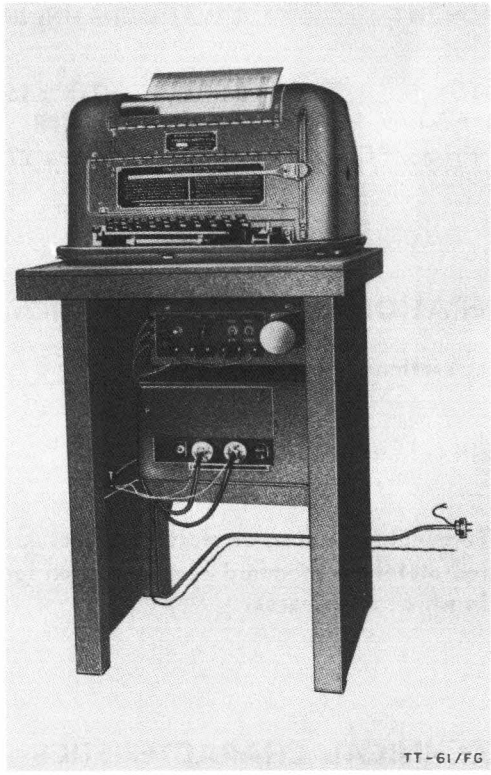
MOTOR CHARACTERISTICS: Universal (ac or dc) series type, tuning fork speed adjusting frequency--180 vps, 3,600 rpm.

POWER REQUIREMENTS: The teletypewriter motor requires approximately 150 w from a 105-125-v dc or 50/60 cyc source. Power obtained from the power unit supplied or from conventional commercial source. Complete system requires a 115-v d-c source for line current.

PHYSICAL CHARACTERISTICS

Teletypewriter Set AN/PGC-1 weighs 135 pounds net. Packed for domestic shipment: total weight 243 pounds, total volume 11.45 cu ft. Packed for export shipment: total weight 285 pounds, total volume 19.5 cu ft. Shipped in 3 packages both domestic and export.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 12 Feb 52	**AN/PGC-TYPE** AN/COMP TYPE NUMBER: TT-61/FG TELETYPEWRITER



Teletypewriter TT-61/FG is a transportable, page-printing, standard communication, sending and receiving teletypewriter station equipment used at permanent or semipermanent camps, posts, and stations.

This equipment consists essentially of tactical Teletypewriter TT-4/TG adapted to fixed plant applications. It includes an operating table which contains an adapter unit and a power supply.

It is primarily intended for neutral sending and neutral or polar receiving and can operate on a 60-ma d-c line or a 20-ma d-c v-f facility.

Can be operated on 95/125 v or 190/250 v ac supplied by the power supply component.

AN/PGC-TYPE	INSTRUCTION LITERATURE: TM 11-2236
TT-61/FG :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELETYPEWRITER	USING SERVICE: Army
	DATE OF THIS SHEET: 12 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Teletypewriter TT-4/TG	24-3/8 x 20-7/8 x 16-3/8	94.50
1	Power Supply PP-604/FG	12 x 8-7/8 x 7-1/8	29.25
1	Teletypewriter Table FN-45/FG	18-5/8 x 21-1/4 x 27	24.75

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Posts, camps, stations, depots.

INSTALLATION: Fixed or semifixed station.

CAN COMMUNICATE WITH: Terminal, repeater, or station apparatus over wire, cable, carrier, or radioteletype standard communication facilities composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Remote motor stop, break-in key, bell, carriage return, line feed, space-repeat.

OPERATING SPEED: 368.1 opm convertible to 404 opm or 600 opm.

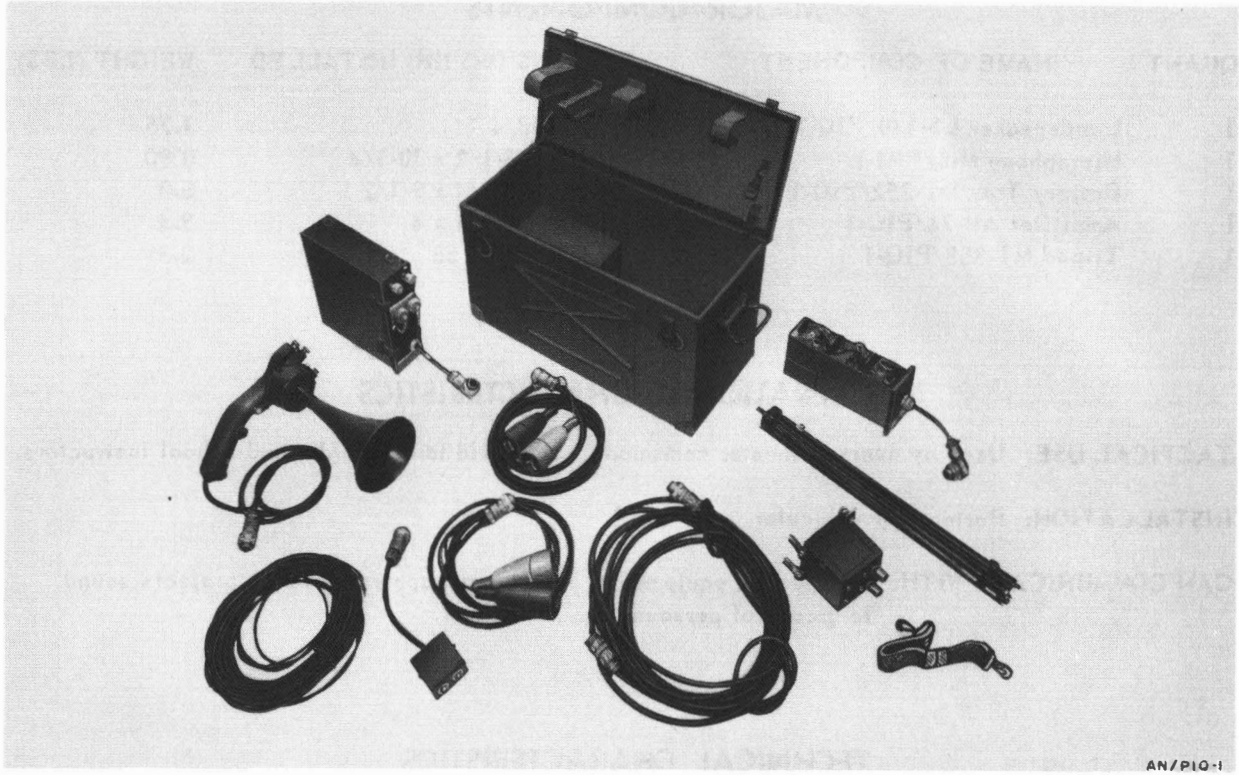
MOTOR CHARACTERISTICS: Universal, series-governed motor; 3,600 rpm. 150 w, 115 v, 50 to 60 cyc, one phase, ac or 150 w, 115 v dc.

POWER REQUIREMENTS: For Power Supply PP-604/FG, 95-125 v or 190-250 v ac, 25 to 60 cyc, single phase, maximum demand 45 w with no a-c load.

PHYSICAL CHARACTERISTICS

Teletypewriter TT-61/FG weighs 99.5 pounds net, volume 11.03 cu ft. Packed for domestic or export shipment: total weight 260 pounds, total volume 23.7 cu ft. Shipped in 3 packages.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Air Force DATE OF THIS SHEET: 8 Jan 52	**AN/PIQ-1** PUBLIC ADDRESS SET



Public Address Set AN/PIQ-1 is a portable (man-carried), low-power, short-range, voice amplifying and projecting equipment used by tactical or training units to control or brief groups of personnel within 200 yards.

This equipment consists of an amplifier contained in a carrying case which holds the batteries, loudspeaker and microphone assembly, tripod, and accessories. It can be arranged for operation with the loudspeaker mounted on a handle supporting a lip microphone or it may be mounted on a tripod for stationary use. By means of auxiliary equipment this set can be modified to allow the operator's hand to remain free while using the equipment.

This set can be installed and operated in a vehicle and connected to a larger loudspeaker and can also be operated by a d-c power supply.

Earlier models are designed to hold three rechargeable wet cells in the battery tray; later models can accommodate either wet or dry cells.

AN/PIQ-1

PUBLIC ADDRESS SET

INSTRUCTION LITERATURE: TM 11-2566
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army, Air Force
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Loudspeaker LS-110/PIQ-1	5 x 10-3/4	1.75
1	Microphone M-8/PIQ-1	3-1/8 x 3-1/2 x 10-1/4	0.90
1	Battery Tray MT-352/PIQ-1	4-3/8 x 3-1/4 x 9-1/2	5.0
1	Amplifier AM-74/PIQ-1	2-1/4 x 8-1/4 x 4	3.4
1	Tripod MT-353/PIQ-1	1-5/8 x 18 x 58	2.25

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used by oversea theater commands, army field force boards, and school instructors.

INSTALLATION: Portable or vehicular.

CAN COMMUNICATE WITH: No specific equipment. Sound-in-air apparatus which projects sound to groups of personnel.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Single-channel public address, voices.

TYPE CONTROLS: Volume, push-to-talk switch.

POWER OUTPUT: 1-1/2 w.

POWER REQUIREMENTS: Three Batteries BB-206/U (storage)

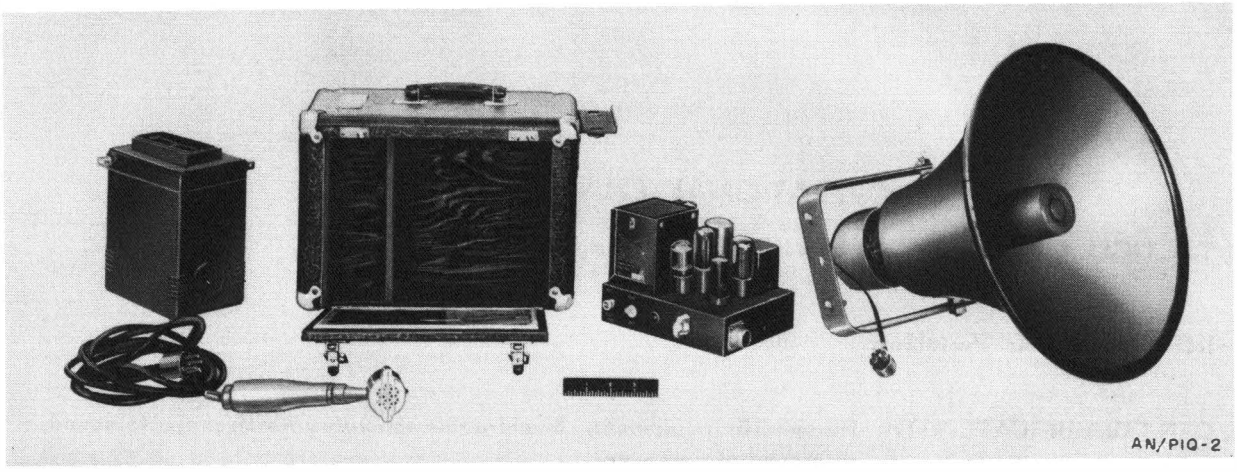
or

Three Batteries BA-56 and four Batteries BA-41
(in emergency, BA-30 may be substituted for BA-41).

PHYSICAL CHARACTERISTICS

Public Address Set AN/PIQ-1 packed for domestic or export shipment: total weight 70 pounds, total volume 2.58 cu ft. Shipped in 1 package both domestic and export.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 8 Jan 52	**AN/PIQ-2** PUBLIC ADDRESS SET



Public Address Set AN/PIQ-2 is a portable, medium-power, general purpose sound amplifying and projecting equipment used for beach control purposes during amphibious operations, for control of groups of personnel, and similar tactical applications.

This equipment consists of an audio amplifier, a coaxial type loudspeaker, a hand microphone, and associated accessories.

Operating range is approximately 300 to 400 yards.

It is designed for use primarily where 110 v a-c power is not available. It includes a 6-v storage battery in a specially designed container as a power source.

AN/PIQ-2

PUBLIC ADDRESS SET

INSTRUCTION LITERATURE: None
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Information not available).

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Amphibious operations, controlling crowds, etc.

INSTALLATION: Portable.

CAN COMMUNICATE WITH: No specific equipment. Sound-in-air apparatus which projects sound to groups of personnel.

TECHNICAL CHARACTERISTICS

TYPE CONTROLS: On-off switch and volume control.

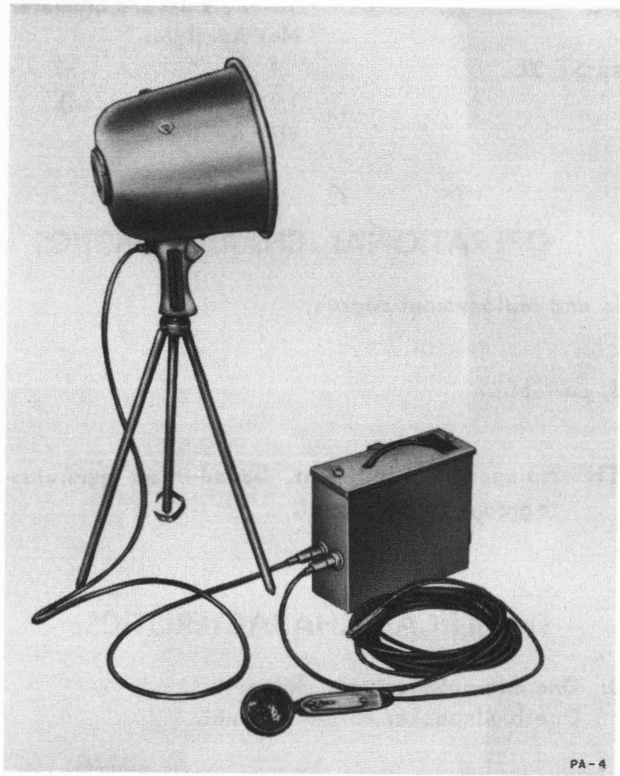
POWER OUTPUT: 10 - 14 w.

POWER REQUIREMENTS: 6 v dc.

PHYSICAL CHARACTERISTICS

Public Address Set AN/PIQ-2 measures 13-1/4 x 10-1/8 x 7-7/8 inches, net weight 39.5 pounds. Packed for domestic shipment: total weight 50 pounds. Packed for export shipment: total weight 87 pounds.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 30 Jan 52	**AN/PIQ-TYPE** SERVICE TYPE NUMBER: PA-4 PUBLIC ADDRESS EQUIPMENT



Public Address Equipment PA-4 is a portable, field, sound amplifying and projecting equipment used for briefing, training, and morale purposes at schools, posts, camps, and stations or for traffic control and similar applications.

This equipment consists essentially of an audio amplifier, loudspeaker unit and microphone combined, a tripod, and accessories. It can be installed and operated on the ground, in a vehicle, or worn by the operator by means of a harness provided, while the amplifier component is hand-carried.

Uses four flashlight-type A Batteries BA-30 and two B Batteries BA-51.

AN/PIQ-TYPE	INSTRUCTION LITERATURE: TM 11-435
PA-4 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
PUBLIC ADDRESS EQUIPMENT	USING SERVICE : Army
	DATE OF THIS SHEET: 30 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Amplifier BC-641	8-7/8 x 8-1/4 x 3-3/16	7.0
1	Loudspeaker LS-6	14-1/2 x 10-5/8 diameter	6.0
1	Microphone T-36	Not Available	0.5
1	Shoulder Harness ST-39	" "	0.75
1	Tripod M-230	15 (53-1/2 extended)	1.75
1	Case CS-91	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Schools and replacement depots.

INSTALLATION: Ground, portable.

CAN COMMUNICATE WITH: No specific equipment. Sound-in-air apparatus which projects sound to groups of personnel.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: One microphone input channel.
One loudspeaker output channel.

TYPE CONTROLS: Loudspeaker LS-6: hold-to-talk trigger switch.
Microphone T-36 : press-to-talk thumb switch.
Amplifier BC-641: volume control.

POWER OUTPUT: 2 w (normal).

POWER REQUIREMENTS: A batteries: four Batteries BA-30 or equal, plus eight spares.
B batteries: two Batteries BA-51 or equal, plus two spares.
(Batteries not included with PA-4.)

PHYSICAL CHARACTERISTICS

Public Address Equipment PA-4 packed for export shipment: total weight 38.5 pounds, total volume 2.5 cu ft. Shipped in 1 package.

STATUS: Std

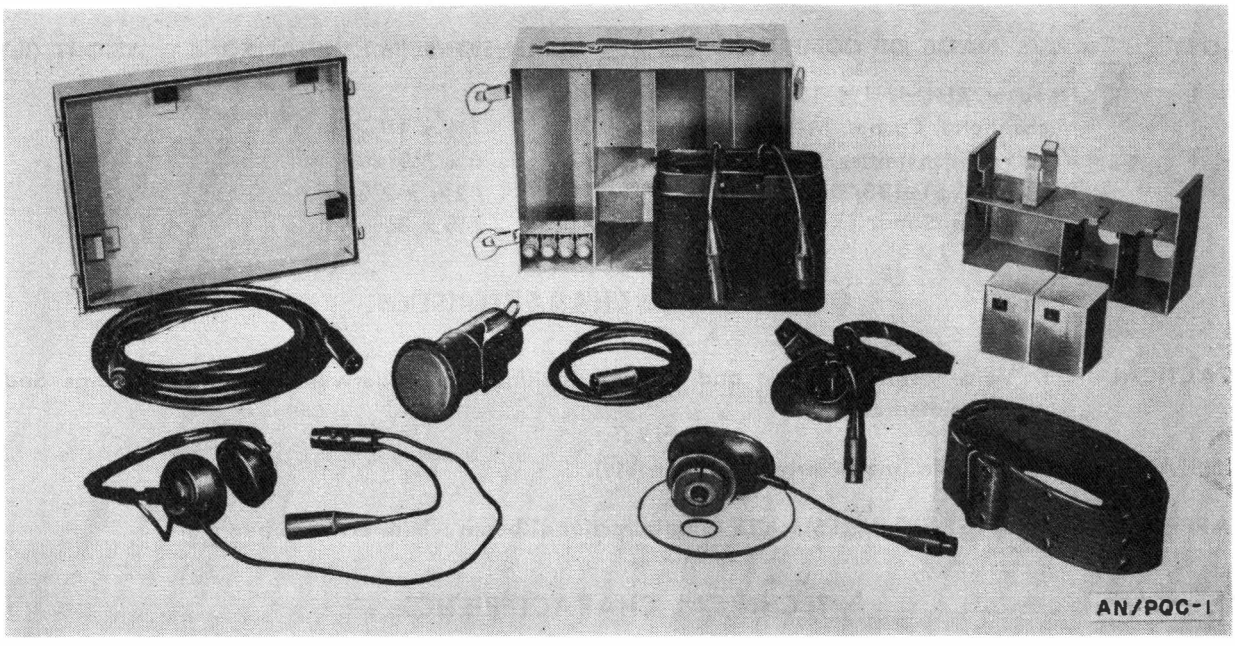
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

AN/PQC–1

UNDERWATER SOUND COMMUNICATION SET



Underwater Sound Communication Set AN/PQC–1 is used by underwater demolition teams for underwater voice communication and vectoring through the water.

It provides for coordination of the various elements of underwater demolition teams during amphibious operations and assists swimmers and associated craft to reach their objectives and to return.

This equipment is a submersible, battery-operated, single-sideband, suppressed-carrier transceiver that includes a sonar receiver-transmitter, transducer, headset, microphone, and batteries.

AN/PQC-1

UNDERWATER SOUND COMMUNICATION SET

INSTRUCTION LITERATURE:

USING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Headset, Electrical H-120/PQC-1		
1	Microphone, Carbon M-64/PQC-1	1½ x 1 11/16 dia	
1	Receiver-Transmitter, Sonar RT-352/PQC-1	6 x 7½ x 3	
1	Belt, Pistol ST-133/U	42½ x 2¼ w	
1	Transducer, Sonar TR-119/PQC-1	7½ x 3½ dia	

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Voice communication and homing facilities for underwater demolition teams and associated craft.

INSTALLATION: Portable (man-carried, submersible).

APPROXIMATE RANGE (IN MILES): .25 (omnidirectional beam); 1 (directional beam).

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE: 8.0875 kc (voice carrier); 9 kc (homing tone).

TYPE MODULATION: Am (ssb suppressed carrier).

TYPE OF SIGNAL: Voice, tone.

POWER OUTPUT: .6 w (to transducer).

POWER REQUIREMENTS: 1.25 v dc (mercury cell A battery); 135 v dc (B battery w/-7.5-v C battery tap).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		10.1 (unsubmerged)			
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

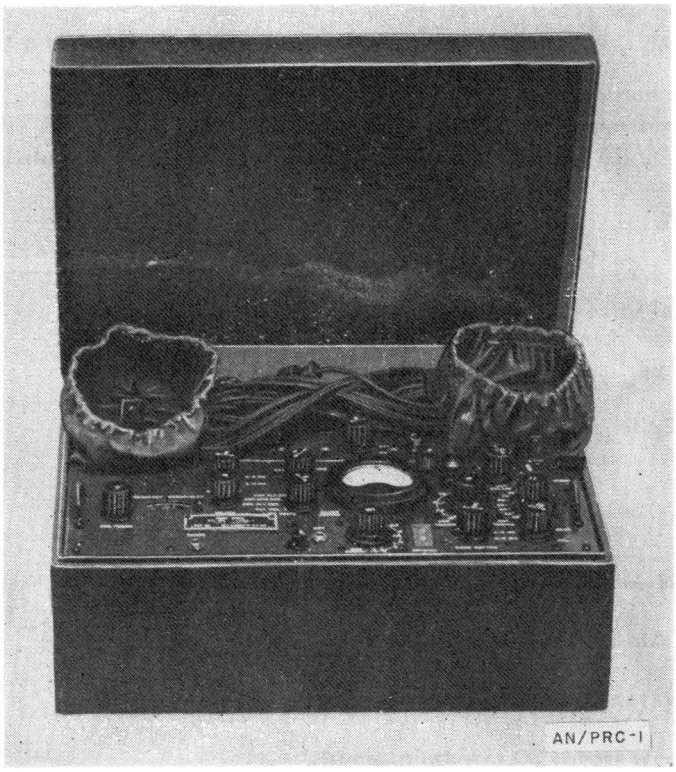
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

AN/PRC-1

RADIO SET



Radio Set AN/PRC-1 is a complete portable radio receiving and transmitting equipment.

It consists essentially of a receiver-transmitter and a rectifier power unit, both contained in one housing.

This equipment receives cw, voice, or tone-modulated signals; it transmits only cw signals.

AN/PRC–1

RADIO SET

INSTRUCTION LITERATURE: TM 11–638

USING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Rectifier Power Unit PP–36/PRC–1		
1	Receiver-Transmitter RT–30/PRC–1	18 x 5½ x 12	

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Special forces organization.

INSTALLATION: Portable.

APPROXIMATE RANGE (IN MILES): 50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 to 12 in two bands.

TYPE MODULATION: Am (A1, A2, A3).

TYPE OF SIGNAL: Cw, tone, voice.

POWER OUTPUT: 25 mw (rcvr); 30 mw (min, xmtr).

POWER REQUIREMENTS:

PP–36/PRC–1: 125 w (rcvr), 210 w (xmtr), 115/150/200/220/250 v, 50/60 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	19 x 6½ x 16	35			
DOMESTIC PACK:					
EXPORT PACK:		76			1

AN/PRC–5

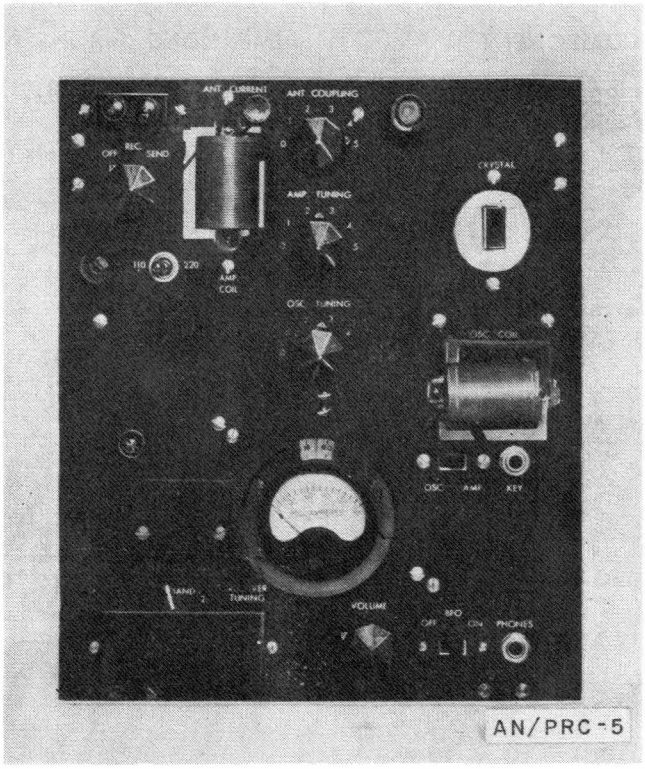
RADIO SET

STATUS: S/Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956



Radio Set AN/PRC–5 is a portable cw receiving and transmitting equipment, mounted in a luggage-type carrying case, used for shortwave communication over medium distances.

It consists of a transceiver composed of a radiotelegraph receiver and transmitter unit with power supply and includes a telegraph key, headset, and auxiliary items.

AN/PRC–5

RADIO SET

INSTRUCTION LITERATURE: TM 11–265

USING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Case, portable luggage-type	12¼ x 10¾ x 8½	
1	Radio receiver and transmitter	11 x 10 x 4⅛	15

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Special forces organizations.

INSTALLATION: Portable.

APPROXIMATE RANGE (IN MILES): 100.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4 to 16 in four bands (xmtr); 4.5 to 16 in two bands (rcvr).

TYPE MODULATION: Am (A1).

TYPE OF SIGNAL: Cw.

TRANSMITTER POWER OUTPUT: 10 w, 16 w.

POWER REQUIREMENTS: 110/220 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	12¼ x 10¾ x 5½ (encased)	25			
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 8 Jan 52

AN/PRC-6

RADIO SET



Radio Set AN/PRC-6 is the f-m version of the "handie-talkie" Radio Set SCR-536 and operates in a single, fixed-frequency channel selected by use of the appropriate crystal. This is low-power, short-range equipment which operates in the v-h-f range for line-of-sight communication by forward elements of armored, infantry, and artillery units.

This equipment consists of a light, self-contained receiver-transmitter having a built-in microphone and earphone, and provision for a loop antenna which is used for homing applications. Includes provision for connecting a conventional handset.

The normal antenna is a built-in spring-steel ribbon which extends from or retracts into the housing.

Operates from Battery BA-270/U (which is not supplied as part of this set) and includes the necessary crystal unit for the frequency in which the equipment is to operate.

AN/PRC-6

RADIO SET

INSTRUCTION LITERATURE: TM 11-296, TM 11-4069
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army, Navy
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter, Radio RT-196/PRC-6	14-3/4 x 4-3/4 x 4-1/4	3.5
1	Crystal Unit CR-23/U	11/32 x 23/32 x 1-1/32	.031
1	Handset H-33C/PT	1-1/2 x 8-3/8 x 3-1/4	.875

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company and battery level, armored, airborne, and infantry divisions.

INSTALLATION: Portable.

APPROXIMATE RANGE (IN MILES): 1.

CAN COMMUNICATE WITH: AN/GRC-3, -4, -5, -6, -7, -8; AN/PRC-6, -10, -16; AN/URR-10, -12; AN/VRC-3, -7, -10, -22; AN/VRQ-3; BC-787; MN; R-137/GR; RBK; SCR-300, -607.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 47.0 - 55.4 (43 channels).

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 0.25 w.

POWER REQUIREMENTS: Battery BA-270/U

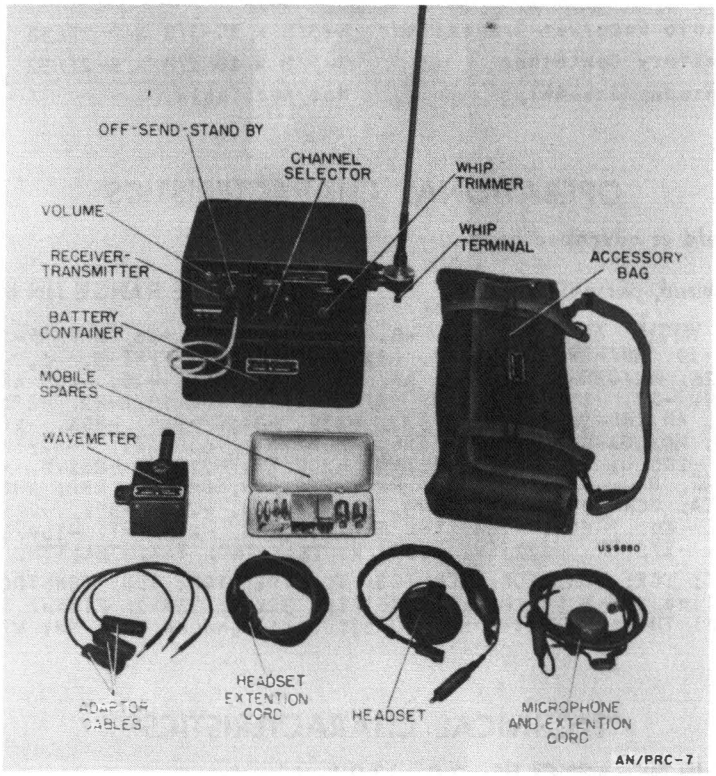
Transmitter: 1.5 w (1 amp) 1.5 v.
0.63 w (14 ma) 45 v.
2.52 w (28 ma) 90 v.

Receiver: 440 ma, 1.5 v.
13 ma, 45 v.

PHYSICAL CHARACTERISTICS

Radio Set AN/PRC-6 weighs 6.5 pounds net, volume 0.2 cu ft. Packed for domestic shipment: total weight 6 pounds (without battery), total volume 0.5 cu ft. Packed for export shipment: total weight 7 pounds, total volume 0.7 cu ft. Shipped in 1 package both domestic and export.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: ~~Restricted~~ USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/PRC-7** RADIO SET



Radio Set AN/PRC-7 is a portable, low-power, general purpose m-f/h-f transmitter-receiver which provides radiotelephone communication for amphibious or field operations.

It has interchangeable plug-in intermediate frequency stages, and five preset crystal-controlled channels.

Button controlled relays are used for instantaneous switching from reception to transmission.

A 10-foot, 10-inch whip-type antenna is supplied which mounts directly on the equipment housing.

AN/PRC-7

RADIO SET

INSTRUCTION LITERATURE: NavShips 91389
CLASSIFICATION OF EQUIPMENT: ~~Restricted~~
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver-Transmitter	4-3/8 x 10-1/8 x 9-27/32	9
1	Battery Container	4-3/8 x 10-1/8 x 9-27/32	3
1	Antenna Assembly	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Field or advanced bases.

INSTALLATION: Ground, portable. **APPROXIMATE RANGE (IN MILES):** 1 mile.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -608/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2; 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D; 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 12.0 in 4 bands.

Band 1: 2.0 - 3.12
Band 2: 3.12 - 4.9
Band 3: 4.9 - 7.61
Band 4: 7.61 - 12.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 0.8 w.
Receiver: 75 mw (max) to headset.

POWER REQUIREMENTS: 10 w for 12 hours of continuous operation (at a ratio equivalent to 1/3 of the time transmitting to 2/3 of the time receiving). Supplied by: 6 Batteries BA-53, 1 Battery BA-54, and 2 Batteries BA-35.

PHYSICAL CHARACTERISTICS

Radio Set AN/PRC-7 measures 8-3/4 x 10-1/8 x 9-27/32 inches, net weight 24 pounds, volume 5.7 cu ft.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 9 Jan 52

AN/PRC-8

RADIO SET



Radio Set AN/PRC-8 is a portable (man-carried), low-power, f-m (voice), radio transmitting and receiving equipment used for v-h-f, short-range, point-to-point, or radio relay communication by company and battery level units operating in the frequency range assigned to armored divisions. It can also be installed in aircraft.

This equipment consists essentially of a radio transmitter-receiver equipped with a carrying harness, antenna components and related accessories.

It can be operated by remote control and adapted for homing use by the addition of appropriate auxiliary components. The set can also be operated in a vehicle.

Two of these sets can be operated back-to-back as an unattended radio relay station.

Power is supplied by one Battery BA-279/U, which is not supplied with the set.

AN/PRC-8

RADIO SET

INSTRUCTION LITERATURE: TM 11-612
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 9 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver-Transmitter RT-174/PRC-8	9.5 x 3 x 10.5	9
1	Case CY-744/PRC	9.5 x 3 x 9.5	1.5
1	Antenna AT-271/PRC	113 x 0.75 (diameter)	0.33
1	Antenna AT-272/PRC	36.5 x 0.875 (diameter)	0.5
1	Handset H-33B/PT	3.5 x 3.5 x 8	0.875

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company and battery level, airborne, infantry, and armored divisions.

INSTALLATION: Portable, vehicular, aircraft.

APPROXIMATE RANGE (IN MILES): 5.

CAN COMMUNICATE WITH: AN/FRT-5, -6; AN/GRC-3, -4, -5, -6; AN/MRC-3, -16; AN/PRC-8, -9; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/URT-2, -3, -4; AN/VRC-5, -8, -9, -13, -14, -16, -17, -20, -21; AN/VRQ-1, -2; BC-787, R-137/GR; RBK; SCR-293, -294, -298, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 20.0 - 27.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter, 1.2 w.

POWER REQUIREMENTS: Battery BA-279/U (not supplied).

PHYSICAL CHARACTERISTICS

Radio Set AN/PRC-8 weighs 26 pounds net, volume 1.075 cu ft. Packed for domestic shipment: total weight 30 pounds, total volume 3.33 cu ft. Packed for export shipment: total weight 40 pounds, total volume 4.85 cu ft. Shipped in 1 package both domestic and export.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 8 Jan 52

AN/PRC-9

RADIO SET



Radio Set AN/PRC-9 is a portable (man-carried), low-power, f-m (voice), radio transmitting and receiving equipment used for v-h-f, short-range, point-to-point, or radio relay communication by company and battery level units operating in the frequency range assigned to artillery units. It can also be installed and operated in aircraft.

This equipment consists essentially of a radio receiver-transmitter equipped with a carrying harness, antenna components, and related accessories.

It can be operated by remote control and adapted for homing use by the addition of appropriate auxiliary components. The set can also be operated in a vehicle.

Two of these sets can be operated back-to-back as an unattended radio relay station.

Power is supplied by one Battery BA-279/U, which is not supplied with the set.

AN/PRC-9

RADIO SET

INSTRUCTION LITERATURE: TM 11-612
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver-Transmitter RT-175/PRC-9	9.5 x 3 x 10.5	9
1	Case CY-744/PRC	9.5 x 3 x 9.5	1.5
1	Antenna AT-271/PRC	113 x 0.75 (diameter)	0.33
1	Antenna AT-272/PRC	36.5 x 0.875 (diameter)	0.5
1	Handset H-33B/PT	3.5 x 3.5 x 8	0.875

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Infantry and airborne divisions, company and battery level.

INSTALLATION: Portable, vehicular, aircraft.

APPROXIMATE RANGE (IN MILES): 5.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-3, -4, -5, -6, -7, -8; AN/MRC-5, -16; AN/PRC-8, -9, -10; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -5, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-293, -294, -298, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27.0 – 38.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter, 1.0 w.

POWER REQUIREMENTS: Battery BA-279/U (not supplied).

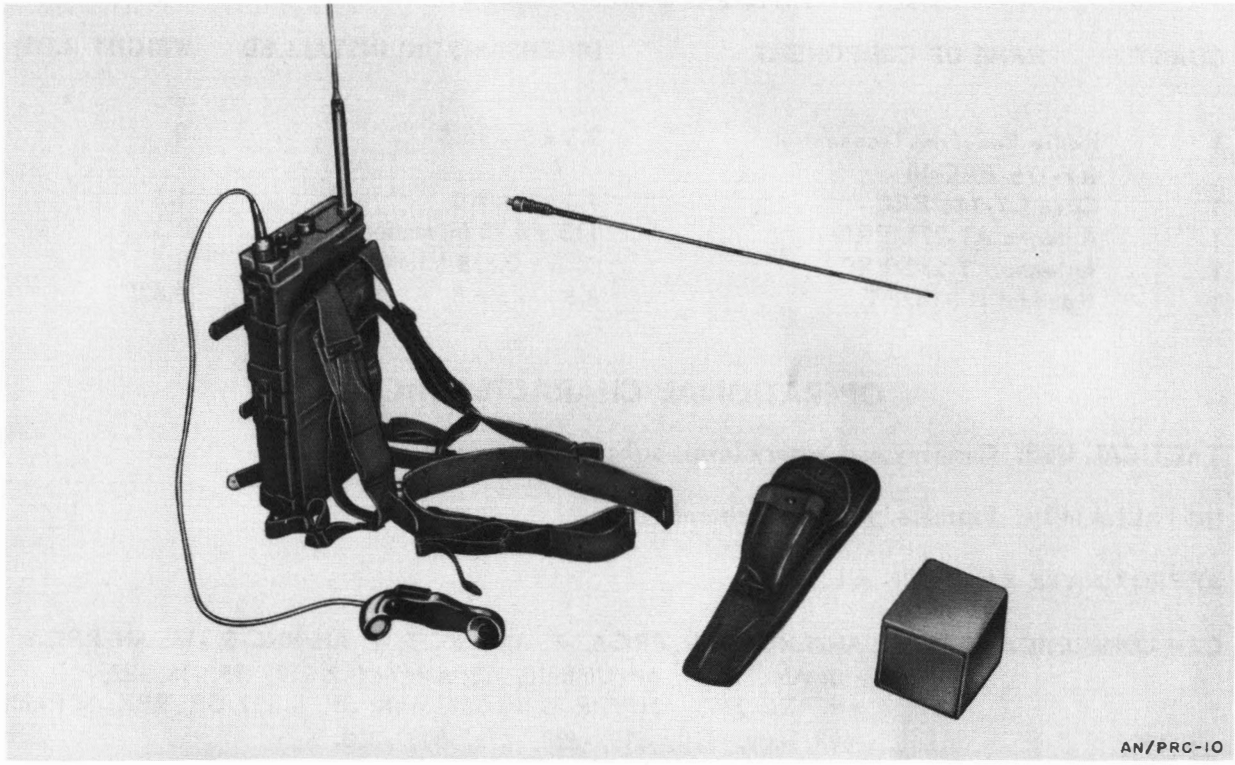
PHYSICAL CHARACTERISTICS

Radio Set AN/PRC-9 weighs 26 pounds net, volume 1.075 cu ft. Packed for domestic shipment: total weight 30 pounds, total volume 3.33 cu ft. Packed for export shipment: total weight 40 pounds, total volume 4.85 cu ft. Shipped in 1 package both domestic and export.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 8 Jan 52

AN/PRC-10

RADIO SET



Radio Set AN/PRC-10 is a portable (man-carried), low-power, f-m (voice), radio transmitting and receiving equipment used for v-h-f, short-range, point-to-point, or radio relay communication by company and battery level units operating in the frequency range assigned to infantry divisions. It can also be installed and operated in aircraft.

This equipment consists essentially of a radio receiver-transmitter equipped with a carrying harness, antenna components, and related accessories.

It can be operated by remote control and adapted for homing use by the addition of appropriate auxiliary components. The set can also be operated in a vehicle.

Two of these sets can be operated back-to-back as an unattended radio relay station.

Power is supplied by one Battery BA-279/U, which is not supplied with the set.

AN/PRC-10

RADIO SET

INSTRUCTION LITERATURE: TM 11-612
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army, Navy
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver-Transmitter RT-176/PRC-10	9.5 x 3 x 10.5	9
1	Case CY-744/PRC	9.5 x 3 x 9.5	1.5
1	Antenna AT-271/PRC	113 x 0.75 (diameter)	0.33
1	Antenna AT-272/PRC	36.5 x 0.875 (diameter)	0.5
1	Handset H-33B/PT	3.5 x 3.5 x 8	0.875

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company and battery level, airborne and armored divisions.

INSTALLATION: Portable, vehicular, aircraft.

APPROXIMATE RANGE (IN MILES): 5.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-7, -8; AN/MRC-5, -16; AN/PRC-9, -10; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -10, -15, -18, -22; AN/VRQ-2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 38.0 - 54.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter, 0.9 w.

POWER REQUIREMENTS: Battery BA-279/U (not supplied).

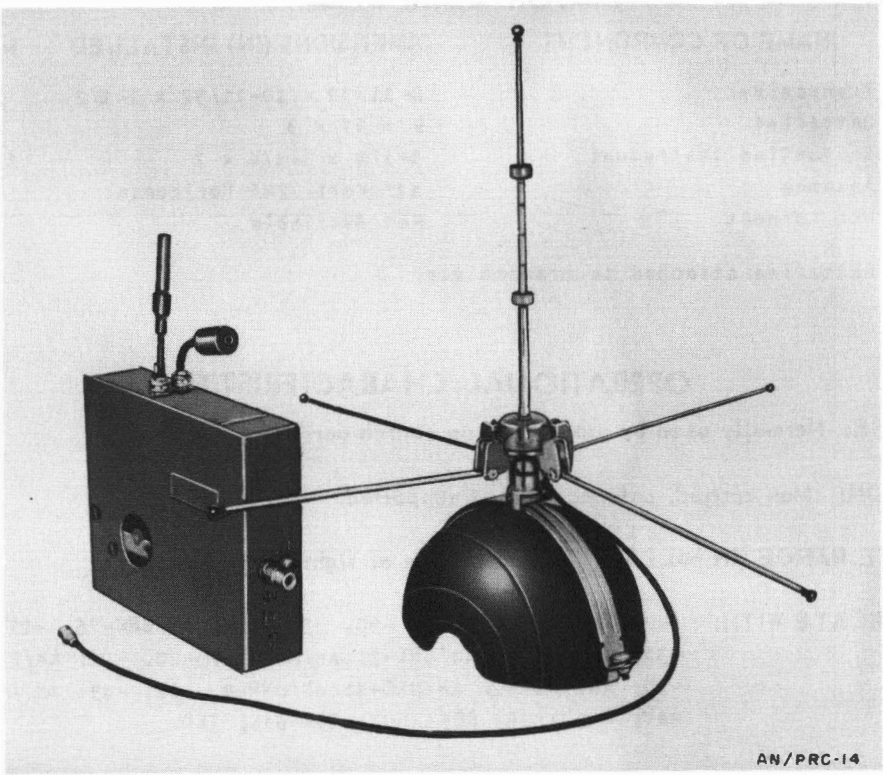
PHYSICAL CHARACTERISTICS

Radio Set AN/PRC-10 weighs 26 pounds net, volume 1.075 cu ft. Packed for domestic shipment: total weight 30 pounds, total volume 3.33 cu ft. Packed for export shipment: total weight 40 pounds, total volume 4.85 cu ft. Shipped in 1 package both domestic and export.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Air Force, Navy
DATE OF THIS SHEET: 12 May 52

AN/PRC-14

RADIO SET



Radio Set AN/PRC-14 is a portable, a-m and c-w transceiver for point-to-point and ground-to-air communication in the u-h-f range 225 to 400 mc. This equipment is designed to be man-carried and can be operated, while in motion.

A specially designed helmet supports a ground plane antenna.

All batteries, cables and the transceiver are strapped to the operator in such a way as not to impede his normal movements.

Radio Set AN/PRC-14 uses crystal control for transmission on any four preset channels (of 1,751) spaced 100 kc apart.

Equipment has special provisions for push-to-talk operation over field wire, up to a distance of one mile.

AN/PRC-14

RADIO SET

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: ~~Restricted~~ Confidential
USING SERVICE : Air Force, Navy
DATE OF THIS SHEET: 12 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transceiver	8-11/32 x 10-11/32 x 2-1/2	12.50
*	Batteries	9 x 11 x 3	15.00
	Indicating Instrument	1-1/4 x 1-1/4 x 2	125.00
	Antenna	12" Vert. 24" Horizontal	.37
	Web Harness	Not Available	.62

* Batteries attached to transceiver

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally used by ground rescue search parties.

INSTALLATION: Man carried, antenna, helmet supported.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-12, -19, -27, -30, -33, -34; AN/GRC-16, -27, -29, -30, -32; AN/GRR-7; AN/GRT-3; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-32; AN/URC-4; AN/URR-9, -12, -13; AN/URT-10; MAR; MAY; R-278/GR; RDR; RDZ; SCR-616; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 225 - 400 mc, 1,751 channels, 4 preset crystal-controlled channels.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 1 w.

POWER REQUIREMENTS: 135 v, dc, 45 v, dc and 6.3 v, dc.
Normally supplied from special battery pack.

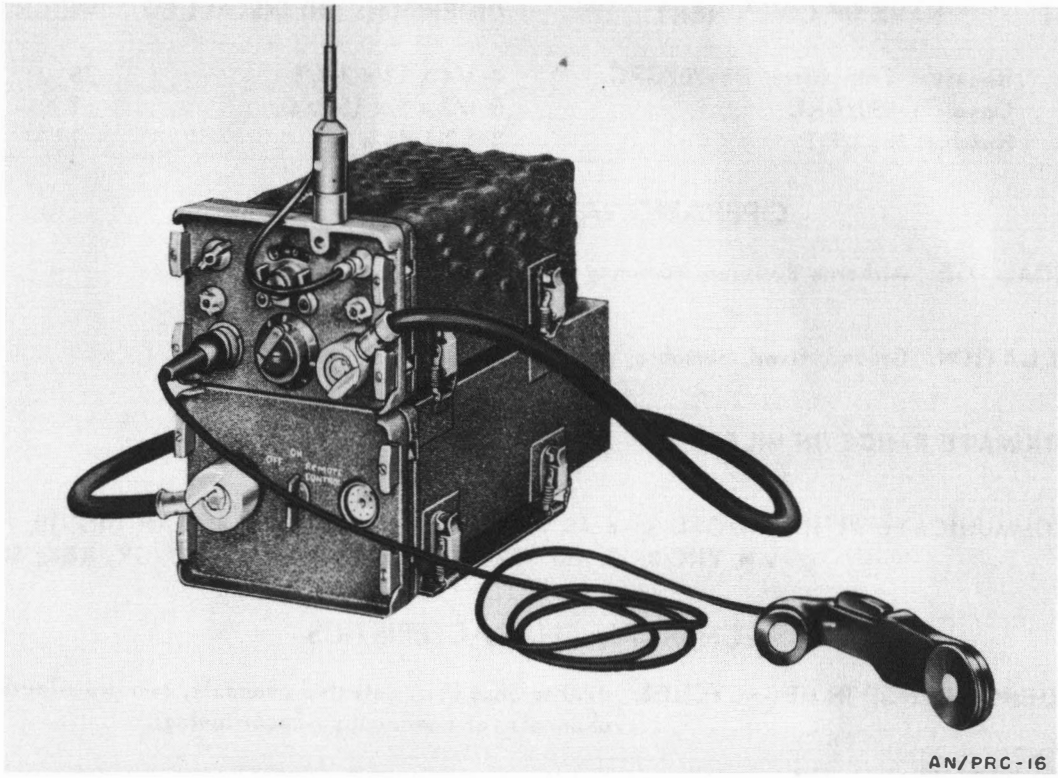
PHYSICAL CHARACTERISTICS

Radio Set AN/PRC-14 weighs 28.74 pounds net.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

AN/PRC-16

RADIO SET



Radio Set AN/PRC-16 is a portable, lightweight, low-power, short-range, battery-operated, f-m (voice) equipment for two-way ground-to-ground or ground-to-air communication in the v-h-f range.

This set consists of the separate, short-range, low-power receiver-transmitter component designated as set 2 when used as part of radio sets of the integrated series such as Radio Sets AN/GRC-3 through AN/GRC-8. Antenna system, battery box, handset, and accessories are included.

This equipment can be operated from a remote point over a telephone pair up to a distance of about 2 miles by means of Control Group AN/GRA-6.

AN/PRC-16

RADIO SET

INSTRUCTION LITERATURE: TM 11-288
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-70/GRC	4-3/4 x 13 x 7-7/8	25
1	Case CY-590/GRC	5-1/2 x 8 x 15-3/4	7
1	Handset H-33/PT	3 x 2-1/16 x 3	2

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Airborne division, company level.

INSTALLATION: Ground, fixed, portable, pack, airborne.

APPROXIMATE RANGE (IN MILES): 1.

CAN COMMUNICATE WITH: AN/GRC-3, -4, -5, -6, -7, -8; AN/PRC-6, -10, -16; AN/URR-10, -12; AN/VRC-3, -7, -10, -22; AN/VRQ-3; BC-787; R-137/GR; RBK; SCR-607.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 47.0 to 58.4 (115 detented channels, two preselected channels, or continuous manual tuning).

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter (rf), 50 mw (approximately).
Receiver (af), 75 mw (approximately).

POWER REQUIREMENTS: Five 1.5-v Batteries BA-403/U, one 90-v Battery BA-419/U.

Power drain: 90 v at 80 ma - plates and screens.
6.3 v at 360 ma - filaments.
6.3 v at 160 ma - transmit relay.

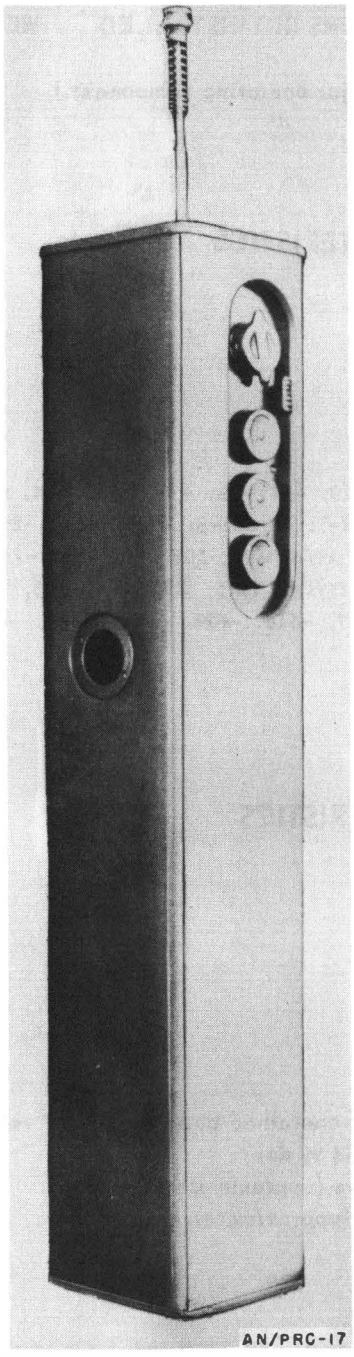
PHYSICAL CHARACTERISTICS

Radio Set AN/PRC-16 measures 10-1/4 x 8 x 15-3/4 inches, net weight 45.85 pounds, volume 0.97 cut ft. Shipped in 1 package both domestic and export.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 23 Jun 52

AN/PRC-17

RADIO SET


AN/PRC-17

Radio Set AN/PRC-17 is a hand-held, a-m (mcw and voice), emergency search and rescue transmitter-receiver for u-h-f/v-h-f communication between life-rafts and ships, or searching aircraft.

All components of this set are contained in a light-weight, watertight, metal case.

The transmitter operates on either of two crystal-controlled channels.

The receiver is of the superregenerative type and operates at either of the two frequencies selected for the transmitter.

The equipment may transmit an audio tone which can be keyed at a slow rate, these signals have a slightly greater range than the voice signals.

The range over salt water to aircraft at 2,000-feet altitude is approximately, 15 miles, or 30 miles at an altitude of 5,000 feet or more. The range over land is approximately, half the range over salt water.

AN/PRC-17	INSTRUCTION LITERATURE: Manuscript AN/PRC-1 (XN)
	CLASSIFICATION OF EQUIPMENT: ~~Restricted~~
	USING SERVICE : Navy
RADIO SET	DATE OF THIS SHEET : 23 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Life rafts afloat, surface craft or land.

INSTALLATION: Life rafts, ground portable.

APPROXIMATE RANGE (IN MILES): Short to medium.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -12, -18, -19, -27, -29, -30, -33, -34, -36; AN/CRC-2; AN/FRC-7; AN/GRC-16, -27, -29, -30, -32; AN/GRR-7; AN/GRT-3; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-7, -32; AN/TRQ-1; AN/URC-4; AN/URR-9, -10, -12, -13, -21; AN/URT-7, -10; AN/VRC-1; BC-639, -640; MAR; MAY; MBS; R-137/GR, -279/GR; RBK; RBQ; RC-103, -256, -257; RCK; RCO; RDR; RDZ; SCR-522, -542, -573, -574, -575, -607, -616, -624, -641, -643, -644; TDG; TDQ; TDT; TDZ; TED; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 121.5 - 243.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

POWER OUTPUT: 50 mw.

POWER REQUIREMENTS: 1.575 w; 5.4 - 105 v, dc (from self-contained batteries) "B" voltage 135 v, dc. "A" voltage 1.1 - 1.34 v, dc.
Battery life: Transmitting 20 hours (approximate).
Receiving 15 hours (approximate).

PHYSICAL CHARACTERISTICS

Radio Set AN/PRC-17 measures 14-3/4 x 2-5/8 x 2-7/8 inches.

STATUS: Development CLASSIFICATION OF EQUIPMENT: Restricted USING SERVICE: Air Force DATE OF THIS SHEET: 12 May 52	**AN/PRC-19** RADIO SET

NO PHOTOGRAPH AVAILABLE

Radio Set AN/PRC-19 provides voice communication for survivors, with aircraft in flight, advanced bases, mobile radio vehicles and ground-search parties. Equipment is used by ground-search parties (scouting) of any field service engaged in search for missing, or wrecked, aircraft, or in any other emergency which requires a lightweight, portable, emergency transceiver.

This equipment can be hand-carried, or stowed in aircraft for parachuting to survivors, para-rescue teams, or other ground-rescue parties. It is used where the nature of the terrain (such as mountains, jungle, and heavy snow) prevents the carrying of excess weight, and where the mission requires separation of the various members of the ground-search parties, or other groups.

Radio Set AN/PRC-19 is used in conjunction with h-f, v-h-f, u-h-f pack Radio Set AN/PRC-20, Portable Radio Direction Finder Set AN/PRD-4, and direction finding Radio Set SCR-291.

This set can be operated from batteries, a battery-vibrator combination, or a hand generator.

AN/PRC-19

RADIO SET

INSTRUCTION LITERATURE: Information from RADC
CLASSIFICATION OF EQUIPMENT: ~~Restricted~~
USING SERVICE: Air Force
DATE OF THIS SHEET: 12 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transceiver	14 x 3 x 3	8
1 each	Batteries	The batteries and antenna	
1	Antenna	are carried with the transceiver	
1	Web Harness	case and are included in the weight and size.	

OPERATIONAL CHARACTERISTICS

TACTICAL USE: For use by ground-rescue search parties.

INSTALLATION: Equipment is carried with or dropped to para-rescue teams or ground-rescue parties.

APPROXIMATE RANGE (IN MILES): Short.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -13; AN/SRT-4; AN/TRC-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; MBS; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -209/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -398/URR; RAL; RAO; RAS; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -190/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBW; TCB; TCC; TCE; TCH; TCK; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, -75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Total frequency range capability: 8.2 - 8.4.
Normal operating frequency: 8.364.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 1 w.
Receiver: Sufficient to operate ear phones with a signal input of better than 5 microvolts.

POWER REQUIREMENTS: Total Wattage: 9.14.
Voltage: 1.25 v, dc, 6.3 v, dc, and 135 v, dc.
Battery Life: Approximately 8 hours.

PHYSICAL CHARACTERISTICS

Radio Set AN/PRC-19 measures 3 x 3 x 14 inches, net weight 8 pounds, volume .073 cu ft. Packed for either domestic or export shipment: total weight 10 pounds, total volume 0.1 cu ft. Shipped in 1 package.

STATUS: Not Assigned CLASSIFICATION OF EQUIPMENT: Restricted USING SERVICE: Air Force DATE OF THIS SHEET: 12 May 52	**AN/PRC-20** RADIO SET

NO PHOTOGRAPH AVAILABLE

Radio Set AN/PRC-20 provides voice communication for survivors, with aircraft in flight, advanced bases, mobile radio vehicles, and other ground-search parties. This equipment is used by ground-search parties (scouting) of any field service engaged in search for missing or wrecked aircraft, or for other emergencies which require a lightweight portable emergency transceiver.

It can be hand-carried, or stowed in aircraft, for parachuting to survivors, para-rescue teams, or ground-rescue parties.

Used, primarily, in regions of mountainous terrain, jungle, or where heavy snow, would prevent carrying heavy equipment, and where the mission requires separation of the members of ground-search parties, or other groups.

This radio set is used in conjunction with Radio Set AN/PRC-19, portable radio Direction Finder Set AN/PRD-4, and direction finding Radio Set SCR-291.

The set can be operated from batteries, a battery-vibrator combination or a hand generator.

AN/PRC-20

RADIO SET

INSTRUCTION LITERATURE: (None Available) RADC
CLASSIFICATION OF EQUIPMENT: ~~Restricted~~ CONFIDENTIAL
USING SERVICE : Air Force
DATE OF THIS SHEET: 12 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transceiver	8 x 10 x 2-3/4	8
1 *	Batteries	8 x 10 x 2-3/4	14
1	Hand Generator	6 x 6 x 6	14
1	Submersion Bag for Transceiver	8-1/2 x 10-1/2 x 3-1/4	2
1	Submersion Bag for Batteries	8-1/2 x 10-1/2 x 3-1/4	2
1	Submersion Bag for Receiver	6-1/2 x 6-1/2 x 6-1/2	2

* Batteries in one pack.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally used by ground-rescue search parties.

INSTALLATION: Man-carried.

APPROXIMATE RANGE (IN MILES):
8.364 mc - 25.
121.5 mc - Line of sight.
243 mc - Line of sight.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -25, -26; AN/ARR-15; AN/ART-13; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/FRT-5, -6, -15, -17, -19; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; MBS; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR. -320/FRC, -388/URR; RAL; RAO; RAS; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBW; TCB; TCC; TCE; TCH; TCK; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 8.364
121.5
243.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice and tone on 8.364 mc.
Voice only on 121.5mc and 243 mc.

POWER OUTPUT: Transmitter: 2 w at 8.364 mc.
1 w at 121.5 mc and 243 mc.
Receiver: 1-1/2 w minimum.

POWER REQUIREMENTS: Total Wattage: 53
Voltages: 1.25 v, 6.3 v and 135 v.
Battery Life: Approximately 8 hours.

PHYSICAL CHARACTERISTICS

Radio Set AN/PRC-20 measures 8 x 10 x 2-3/4 inches (w/o batteries), net weight 22 pounds, volume 0.125 cu ft (w/o batteries).

STATUS: L/Std

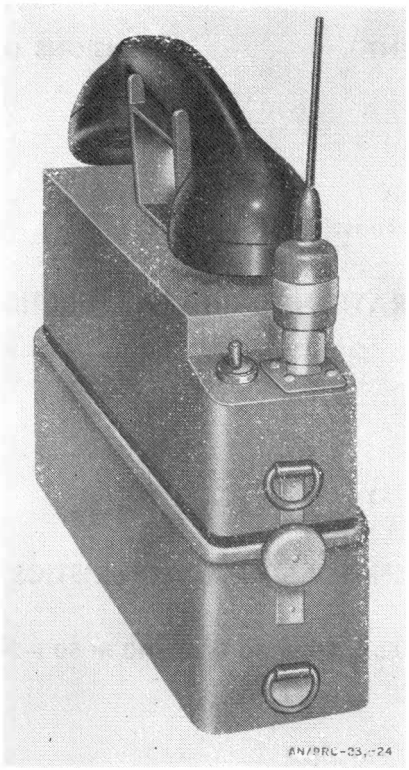
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

AN/PRC–23, –24

RADIO SET



Radio Set AN/PRC–23 (Motorola Model FHTR–1BLL) and Radio Set AN/PRC–24 (Motorola Model FHTR–1BH) are self-contained, short-range, single-frequency, low-power, battery-operated, fm (voice) transmitting and receiving equipment capable of providing two-way communication up to 1.5 miles over average terrain.

Both sets are pretuned to the selected frequency within their respective ranges. Realignment of the individual stages of the transmitter and receiver is required to change the operating frequency of either one.

Operating power is provided in each set by six 1½-volt Batteries BA–30 and three 67½-volt Batteries BA–51. The batteries provide 6 to 8 hours of continuous operation before replacement is required.

AN/PRC–23, –24

RADIO SET

INSTRUCTION LITERATURE: Commercial Instruction Book

USING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Antenna		
1	Handset		
1	Housing		
1	Power supply chassis		
1	Transmitter-receiver chassis		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Special.

INSTALLATION: Ground, portable.

APPROXIMATE RANGE (IN MILES): 1.5.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 25 to 30 (–23); 40 to 50 (–24).

TYPE MODULATION: Fm (F2, F3).

TYPE OF SIGNAL: Mcw, voice.

POWER OUTPUT: 500 mw.

POWER REQUIREMENTS: 1.3 v, 490 ma dc; 1.3 v, 750 ma dc; 1.23 w (standby) 60 v, 10 ma dc; 5.8 w (transmit), 120 v, 40 ma dc.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	12⅝ x 3⅛ x 10 (ea set)	9.8	.2		
DOMESTIC PACK:					
EXPORT PACK:					

AN/PRC–29

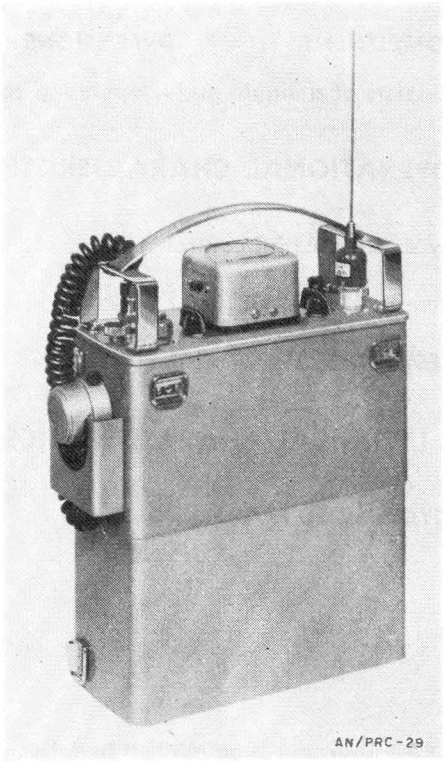
RADIO SET

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956



Radio Set AN/PRC–29 is a portable (man-carried), low-power, fm (voice) radio receiving and transmitting equipment used for short-range, point-to-point communication over average terrain. It is used by guards and security police for communication during internal security and industrial control operations.

This equipment consists essentially of a commercial (Motorola Model X–11–1A) radio receiver-transmitter equipped with a carrying harness, antenna, and related accessories.

AN/PRC-29

RADIO SET

INSTRUCTION LITERATURE: NAVSHIPS 92759

USING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Internal security and industrial control.

INSTALLATION: Portable (man-carried).

APPROXIMATE RANGE (IN MILES): 1 to 2.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 30 to 42.

TYPE MODULATION: Fm (F3).

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 750 mw.

POWER REQUIREMENTS: Three 45-v (Burgess-type M30) B batteries or equiv (p); two 1.5-v std 4F-size batteries (fil).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	15⅛ x 12⅛ x 5	23.7	.5		
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

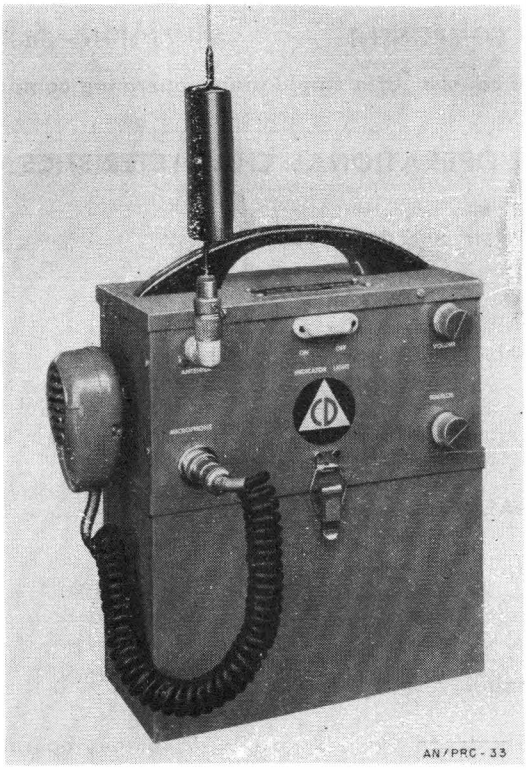
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

AN/PRC–33

RADIO SET



Radio Set AN/PRC–33 is a lightweight, short-range, vhf, fm (voice) receiving and transmitting equipment used for two-way communication applications in the field.

This equipment consists essentially of a militarized version of hand-carried commercial (Industrial Radio Corporation, Type PS–40, Model HC) radio equipment and is normally resistant to dust and rain. A weatherproof canvas case is used to protect the equipment under extreme weather conditions, and carrying straps are provided so that it can be carried on the back of the operator.

AN/PRC-33

RADIO SET

INSTRUCTION LITERATURE: NAVSHIPS 92651

USING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Man-carried field and patrol applications.

INSTALLATION: Portable.

APPROXIMATE RANGE (IN MILES): 2 (nor); 10 (max).

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 30 to 42.

TYPE MODULATION: Fm (F3).

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 750 mw (min).

POWER REQUIREMENTS: 1.5 v dc (fil); 45 v dc; 135 v dc (battery operated).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Standard	AN/PRC-TYPE
CLASSIFICATION OF EQUIPMENT: Unclassified	SERVICE TYPE NUMBER: MAW
USING SERVICE: Navy	PORTABLE VHF RADIO TRANS & REC EQUIP
DATE OF THIS SHEET: 9 May 52	



Portable VHF Radio Transmitting and Receiving Equipment MAW is a low-power, v-h-f, pack type communication set used in ground-to-air liaison, ship, or shore based emergency communication. The entire equipment, including accessories, is contained in a portable submersion-proof case. It is capable of voice and mcw transmission and reception on any one of 10 preset crystal-controlled channels.

This equipment is powered by two 2-v storage batteries and a vibrator-type power pack.

The batteries are of the dry-charged type, and 24 ounces of 1.265 specific gravity sulphuric acid is required.

Battery charging can be accomplished by connection to a 6-v storage battery or other source of low voltage d-c power.

AN/PRC-TYPE

MAW :SERVICE TYPE NUMBER

PORTABLE VHF RADIO TRANS & REC EQUIP

INSTRUCTION LITERATURE: NavShips 900,734
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter- Receiver CHW-43069	17-15/16 x 14-1/2 x 5-3/8	42.0
2	Antenna Assembly CHW-66150	19 x 1-1/2 x 1-1/2	0.73
1	Shipping Chest CHW-10543	12-3/4 x 25 x 16-1/2	35.56

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Ground, portable.

APPROXIMATE RANGE (IN MILES): 10.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -23, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -12, -21; AN/URT-7, -10; AN/VRC-1; BC-639, -640; MAR; MAW; MBS; R-137/GR; RBK; RBQ; RC-256, -257; RCK; RCO; SCR-522, -542, -573, -574, -575, -607, -616, -624, -641, -643, -644; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 115- 156.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw.

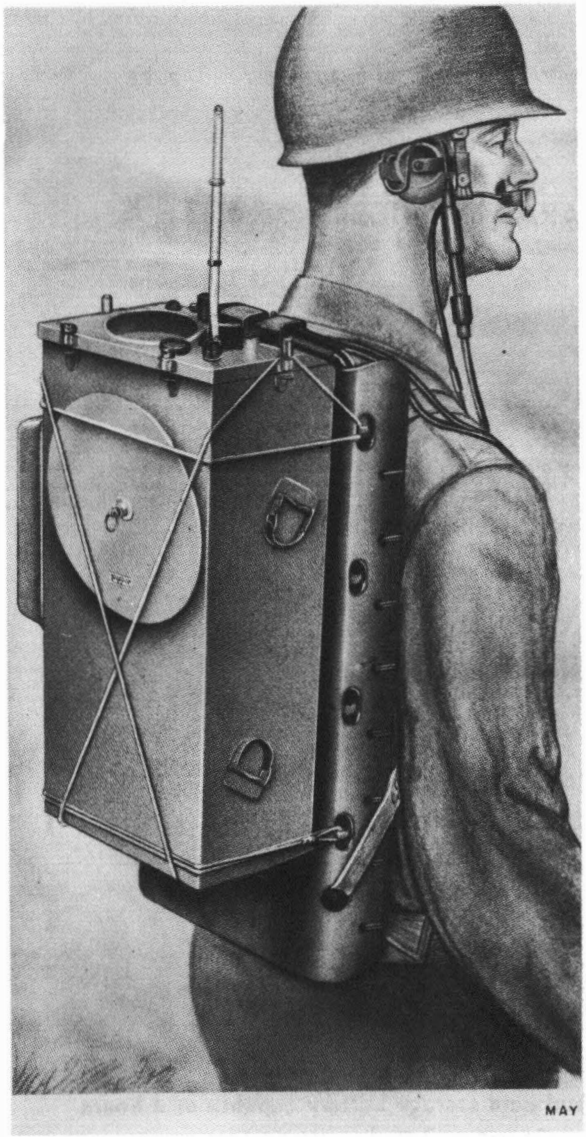
POWER OUTPUT: Transmitter: 0.7 w.
Receiver: 0.025 w into 600 ohm load.

POWER REQUIREMENTS: 45.2 w, 4 v, dc.

PHYSICAL CHARACTERISTICS

Portable VHF Radio Transmitting and Receiving Equipment MAW measures 17-15/16 x 14-1/2 x 5-3/8 inches, net weight 91 pounds, volume 3.21 cu ft. Packed for domestic shipment: total weight 137 pounds, total volume 6.54 cu ft.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 23 May 52	**AN/PRC-TYPE** SERVICE TYPE NUMBER: MAY PORTABLE RADIO TRANS & REC EQUIPMENT



Portable Radio Transmitting and Receiving Equipment MAY is a general service, a-m (voice, mcw) low-power v-h-f/u-h-f transmitter-receiver designed for packboard operation in the field.

Four preset crystal-controlled channels are provided for the transmitter-receiver. It is designed for use with a collapsible broad-band antenna of the ground plane type, but will operate with a collapsible whip type array.

AN/PRC-TYPE

MAY :SERVICE TYPE NUMBER

PORTABLE RADIO TRANS & REC EQUIPMENT

INSTRUCTION LITERATURE: NavShips 91392
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 23 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter-Receiver CRP-43071 (with Headset and Microphone)	23-13/16 x 13-1/8 x 10	44.0
2	Antenna AS-408/U	20-9/16 x 2-5/16 x 2-5/16	2.75

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Field, amphibious.

INSTALLATION: Ground, portable.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-12, -19, -27, -30, -33, -34; AN/GRC-16, -27, -29, -30, -32; AN/GRR-7; AN/GRT-3; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-32; AN/URC-4; AN/URR-9, -12, -13; AN/URT-10; MAR; MAY; R-278/GR; RDR; RDZ; SCR-616; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 225 - 390.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

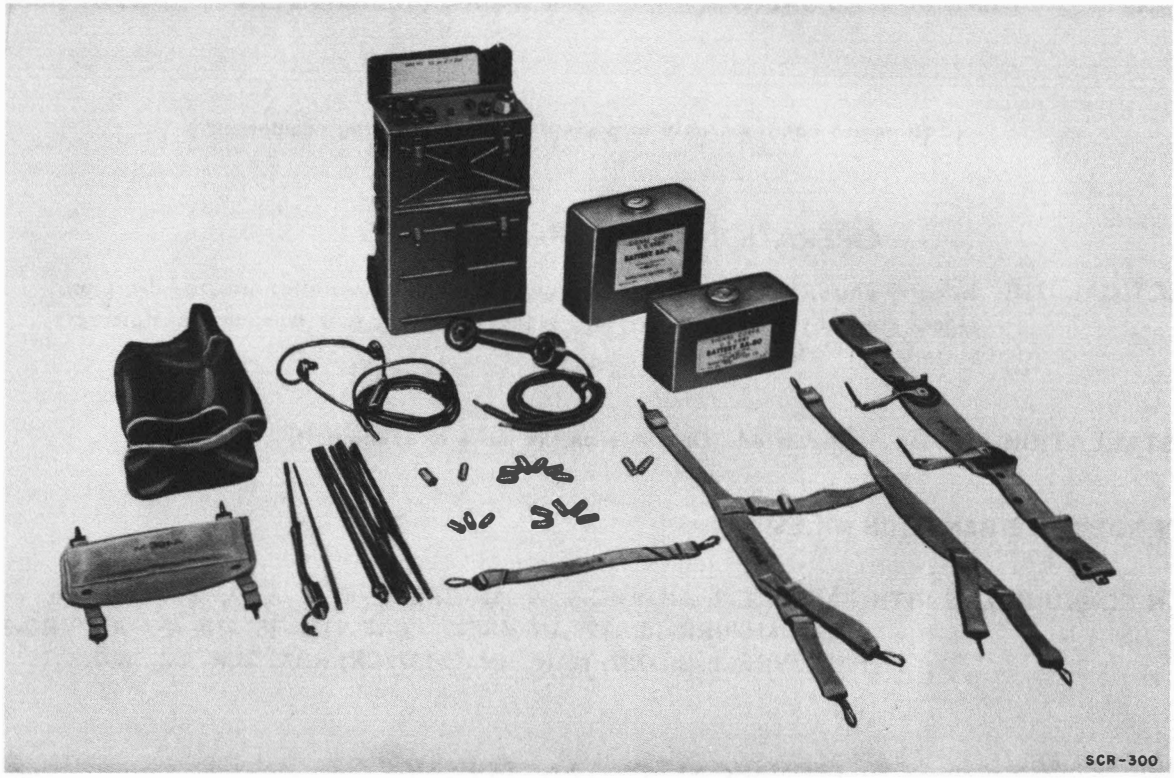
POWER OUTPUT: Transmitter: 1 w into 50 ohm load.
Receiver: 25 mw into 300 ohm load.

POWER REQUIREMENTS: Self-contained, 6 v, d-c lead acid storage battery capable of 4 hours continuous operation at a duty cyc of 3 to 1.

PHYSICAL CHARACTERISTICS

Information on Portable Radio Transmitting and Receiving Equipment MAY not available.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 30 Jan 52	**AN/PRC-TYPE** SERVICE TYPE NUMBER: SCR-300 RADIO SET



Radio Set SCR-300 is a portable, short-range, low-power, f-m (voice) transmitting and receiving equipment used for communication by foot troops at company and higher combat levels.

This equipment consists of a transmitter-receiver contained in a metal housing, the lower portion of which is the battery compartment, and includes a flexible, whip-type antenna. It may be operated on the ground or while being carried by the operator or a "bearer" and may be installed in aircraft or vehicles. A handset with a press-to-talk switch is included but the equipment can be operated by means of headphones and microphone.

The vehicular version of this equipment is Radio Set AN/VRC-3.

AN/PRC-TYPE	INSTRUCTION LITERATURE: TM 11-242
SCR-300 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO SET	USING SERVICE : Army, Navy
	DATE OF THIS SHEET : 30 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Infantry units, company, battalion, and higher headquarters; armored division, signal company; airborne division, signal company; tank company, antiaircraft battery.

INSTALLATION: Ground, man-carried. Operates on the move or at the halt.

APPROXIMATE RANGE (IN MILES): 3.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-3, -4, -5, -6, -7, -8; AN/PRC-6, -10, -16; AN/URR-10, -12; AN/VRC-2, -3, -7, -10, -15, -18, -22; AN/VRQ-3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-300, -607.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 40 - 48, in 40 channels.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice only.

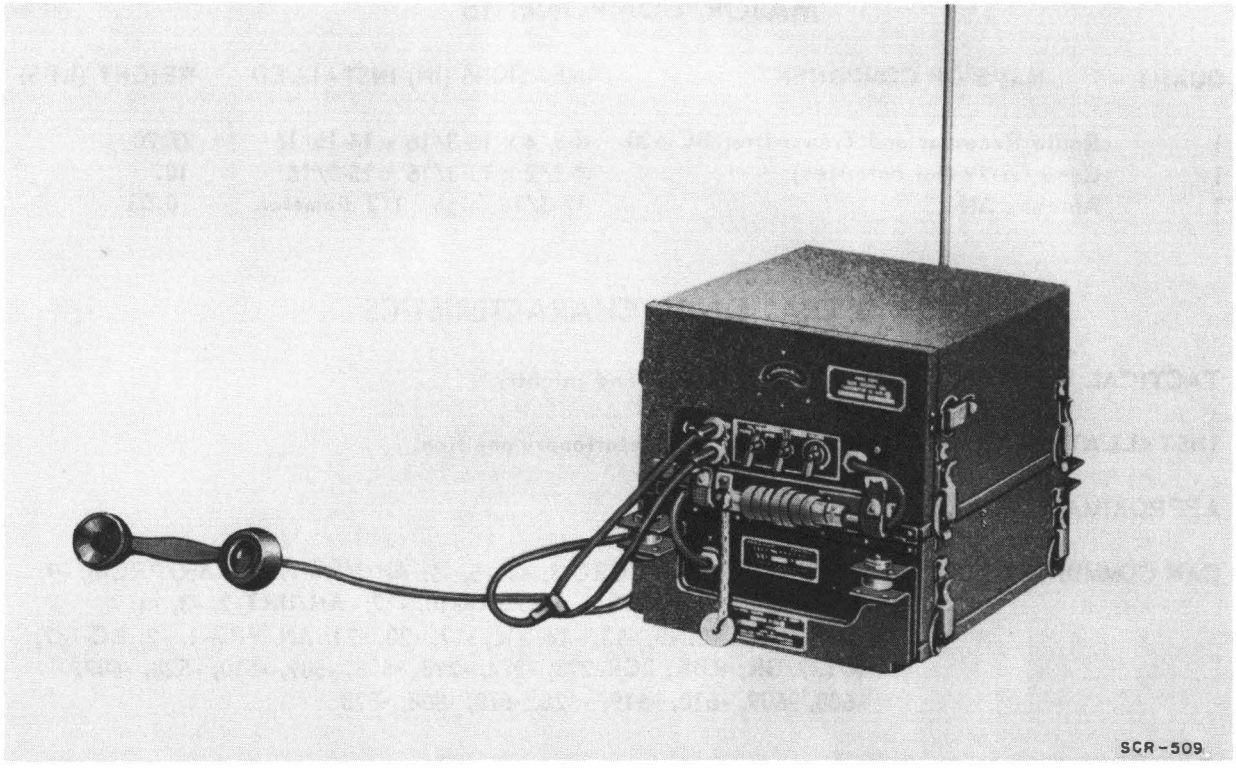
POWER OUTPUT: Transmitter, 0.3 w. Receiver, 2.0 mw.

POWER REQUIREMENTS: Battery BA-80 or Battery Case CS-139.

PHYSICAL CHARACTERISTICS

Radio Set SCR-300 weighs 23.25 pounds net. Packed for domestic shipment: total weight 26.5 pounds, total volume 2 cu ft. Packed for export shipment: total weight 44.5 pounds, total volume 3 cu ft. Shipped in 1 package both domestic and export.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 22 Jan 52	AN/PRC-TYPE SERVICE TYPE NUMBER: SCR-509 RADIO SET



Radio Set SCR-509 is a portable, short-range, low-power, f-m (voice only), radio receiving and transmitting equipment used by armored, field artillery, and infantry units. The set is designed for operation on the ground but can be installed in a vehicle.

This equipment consists of a receiver-transmitter, a metal case containing the batteries, an antenna, and related accessories. The receiver-transmitter is mounted on the battery case by means of trunk-type clasps. It provides 80-crystal-controlled channels spaced 100 kc apart, two of which can be preset.

It can be operated from a remote point over a telephone pair by means of standard remote control apparatus.

Can be operated from the storage battery when installed in a vehicle by substituting Power Supply Unit PE-120 for Case CS-79. When so arranged the SCR-509 is identical with Radio Set SCR-510.

AN/PRC-TYPE	INSTRUCTION LITERATURE: TM 11-605
SCR-509 : SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO SET	USING SERVICE : Army, Navy
	DATE OF THIS SHEET : 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver and Transmitter BC-620	6-3/4 x 13-3/16 x 14-15/16	27.20
1	Case CS-79 (for batteries)	4-1/2 x 13-3/16 x 15-9/16	10.
1	Antenna AN-45	17-3/16 high 1/2 diameter	0.63

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Armored units, field artillery, and infantry.

INSTALLATION: Portable pack; operates from stationary position.

APPROXIMATE RANGE (IN MILES): 5

CAN COMMUNICATE WITH: AN/FRT-5, -6; AN/GRC-3, -4, -5, -6; AN/MRC-3, -16; AN/PRC-8, -9; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/URT-2, -3, -4; AN/VRC-5, -8, -9, -13, -14, -16, -17, -20, -21; AN/VRQ-1, -2; BC-787; R-137/GR; RBK; SCR-293, -294, -298, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES : 20.0 - 27.9.

TYPE MODULATION : Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 1.8 w.

POWER REQUIREMENTS: Battery BA-39, Battery BA-40, and Battery BA-41.

PHYSICAL CHARACTERISTICS

Radio Set SCR-509 packed for export shipment: total weight 210 pounds, total volume 9 cu ft. Shipped in 3 packages both domestic and export.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 22 Jan 52

AN/PRC-TYPE

SERVICE TYPE NUMBER: SCR-536
RADIO SET



Radio Set SCR-536 is a highly portable, hand-held, short range, transmitting and receiving equipment for a-m (voice) communication by foot-troops in forward areas.

This equipment consists of a crystal-controlled transmitter-receiver contained in a metal housing which also contains the batteries to which the earphone and microphone are assembled. The set is turned on or off by extending or retracting the telescoping antenna which is built into the set. A press-to-talk switch is mounted on the side of the housing.

This set operates on a single preset frequency of 50 available frequency channels any one of which can be preselected.

AN/PRC-TYPE	INSTRUCTION LITERATURE: TM 11-235
SCR-536 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO SET	USING SERVICE: Army, Navy
	DATE OF THIS SHEET: 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Lower echelons, schools.

INSTALLATION: Hand carried.

APPROXIMATE RANGE (IN MILES): Normally about 1.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -9, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCO; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 3.5 - 6.0 (any one of 50 channels).

TYPE MODULATION: Am.

TYPE OF SIGNAL: Transmitter: Voice.
Receiver: Voice and tone.

POWER OUTPUT: 0.02 w.

POWER REQUIREMENTS: 1 Battery BA-37, 1.5 v.
1 Battery BA-38, 103.5 v.

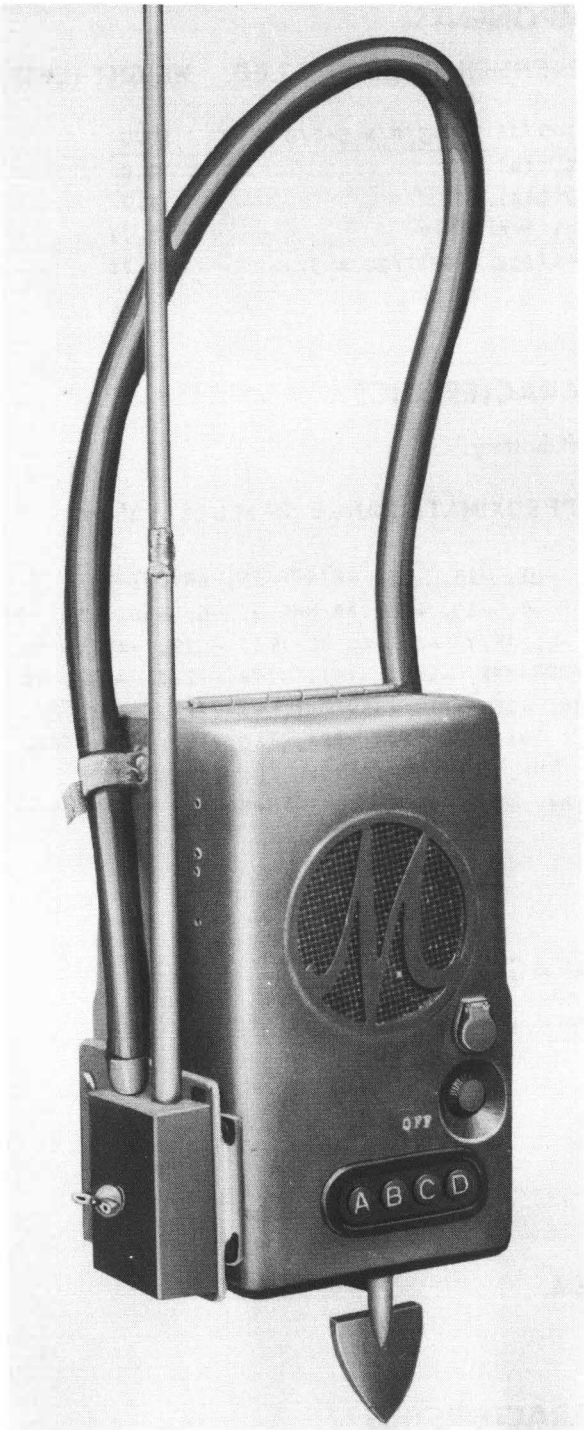
PHYSICAL CHARACTERISTICS

Radio Set SCR-536 packed for export shipment: total weight 17 pounds, total volume 0.6 cu ft. Shipped in 1 package.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 10 Jan 52

AN/PRC-TYPE

SERVICE TYPE NUMBER: SCR-593
RADIO SET



SCR - 593

Radio Set SCR-593 is a portable light weight, a-m (voice), radio receiving equipment used for air-warning, patrols, and similar applications.

This equipment consists of a push-button controlled receiver having a rechargeable two-volt battery, which operates on four-preselected channels. In portable applications, the telescoping antenna and associated lead-in form a harness by which the set can be carried slung from the shoulder.

In vehicular applications, a shock mounting is provided.

AN/PRC-TYPE

SCR-593 :SERVICE TYPE NUMBER

RADIO SET

INSTRUCTION LITERATURE: TM 11-859

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET : 10 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT		DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver BC-728-A		11-9/16 x 8-3/8 x 5-5/8	15.0
1	Antenna AN-75-A	(extended)	84 (lg)	4.0
		(collapsed)	12 (lg)	4.0
1	Mounting FT-339-A and Accessories		Not Available	5.77
1	Battery BB-54-A		5-17/32 x 3-27/32 x 3	4.75

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Field artillery battalion, antiaircraft battery.

INSTALLATION: Ground or vehicular. **APPROXIMATE RANGE (IN MILES):** Short.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -401, -447, -610; MBS; MQ; OA-60A/FRT, -608/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 - 6 mc, four push button channels.

TY FE MODULATION: Am.

TYP E OF SIGNAL: Voice.

POWER REQUIREMENTS: 2-v storage Battery BB-54-A.

PHYSICAL CHARACTERISTICS

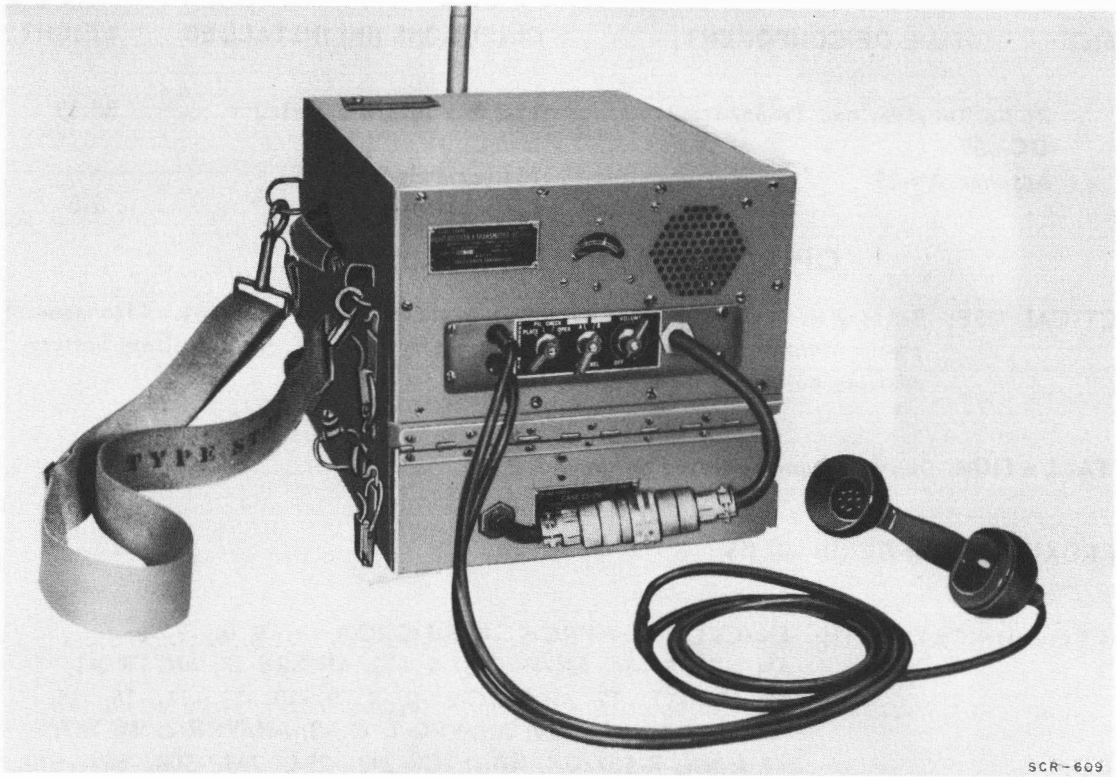
Radio Set SCR-593 packed for domestic shipment: total weight 63 pounds, total volume 3 cu ft.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 22 Jan 52

AN/PRC-TYPE

SERVICE TYPE NUMBER: SCR-609

RADIO SET



Radio Set SCR-609 is a transportable, low-power, short-range, f-m (voice), transmitting and receiving equipment used by field artillery units.

This equipment consists essentially of a receiver-transmitter component which derives its power from a set of dry batteries contained within a case to which it is attached by means of trunk-type clasps. Antenna, handset, and related accessories are included.

Provides 80 f-m channels spaced 100 kc apart, two of which can be preset in the field. This set can be operated by means of standard remote control equipment.

Radio Set SCR-609 can be operated in a vehicle by means of a power supply unit which derives its power from the storage battery of the vehicle in which the equipment is installed. When so arranged the equipment is identical with Radio Set SCR-610.

AN/PRC-TYPE

SCR-609 :SERVICE TYPE NUMBER
RADIO SET

INSTRUCTION LITERATURE: TM 11-615
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army, Navy
DATE OF THIS SHEET: 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver and Transmitter BC-659	11-7/8 x 16-3/8 x 21-1/2	35.13
1	Antenna AN-29	154 (extended) 15-1/2 (collapsed)	2.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Battery fire control from observation posts or liaison airplanes. Also general communication between vehicles. Engineer company, field artillery battery, military police company.

INSTALLATION: Installed and operated on ground.

APPROXIMATE RANGE (IN MILES): 5.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-3, -4, -5, -6, -7, -8; AN/MRC-5, -16; AN/PRC-8, -9, -10; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -5, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-293, -294, -298, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27.0 - 38.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

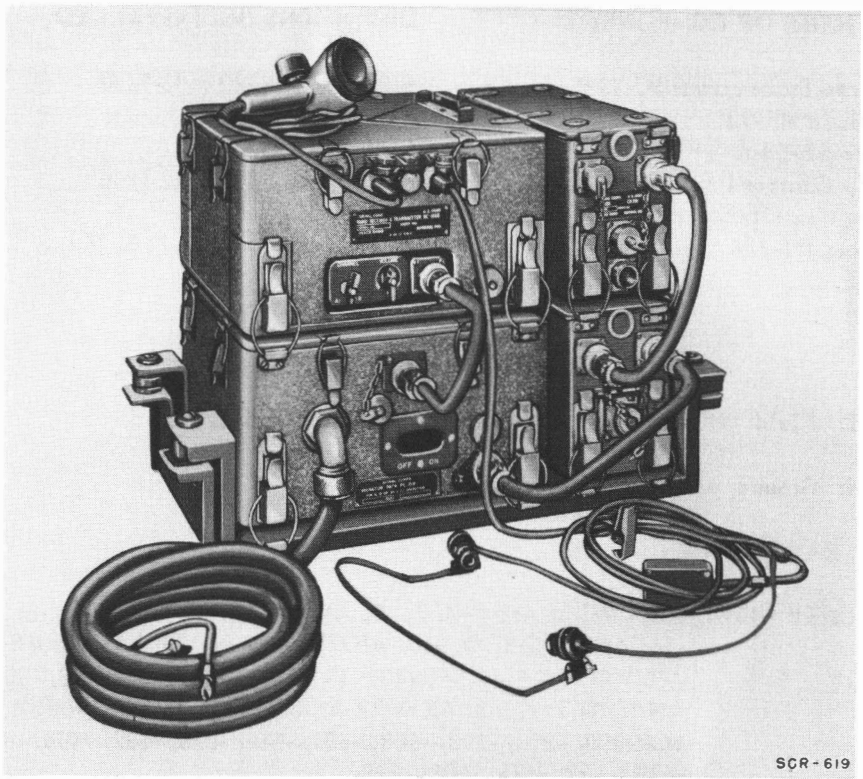
POWER OUTPUT: 1.3 w.

POWER REQUIREMENTS: Receiving: Battery BA-40; A, 1.5 v and B, 90 v.
Transmitting: Batteries BA-39 and BA-40; A, 7.5 v and B, 150 v.
Internal bias Battery BA-41 is also required.

PHYSICAL CHARACTERISTICS

Radio Set SCR-609 packed for domestic shipment: total weight 137.5 pounds, total volume 7.4 cu ft.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 30 Jan 52	AN/PRC-TYPE SERVICE TYPE NUMBER: SCR-619 RADIO SET



Radio Set SCR-619 is a pack and vehicular, short-range, f-m (voice) radiotelephone equipment used for communication in the v-h-f- band by field artillery units in battery fire control applications.

This equipment consists of a receiver-transmitter which is crystal-controlled and operates in 120 frequency channels spaced 100 kc apart, two of which are preset. A battery box, dynamotor, and charger are included.

This set uses a whip-type antenna and can be removed from the vehicle in which it is installed for operation from the ground.

It is powered by the vehicular storage battery or by dry batteries contained in the battery box.

AN/PRC-TYPE

SCR-619 :SERVICE TYPE NUMBER
RADIO SET

INSTRUCTION LITERATURE: TM 11-619
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 30 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter BC-1335	6-21/32 x 12-1/2 x 13-9/32	22.75
1	Mast Base MP-74	Not Available	Not Available
9	Battery BB-54-A	5-7/16 x 3-31/32 x 3	4.3
1	Battery Charger PE-219	6-11/32 x 12-1/8 x 12-5/16	25.0
1	Battery Box CY-740/PRC	Not Available	Not Available
1	Mounting FT-506	10-3/16 x 4-11/16 x 21-3/16	12.25

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Field artillery units and armored and infantry divisions.

INSTALLATION: Ground, portable or vehicular.

APPROXIMATE RANGE (IN MILES): 5.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-3, -4, -5, -6, -7, -8; AN/MRC-5, -16; AN/PRC-8, -9, -10; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -5, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-293, -294, -298, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27.0 - 38.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

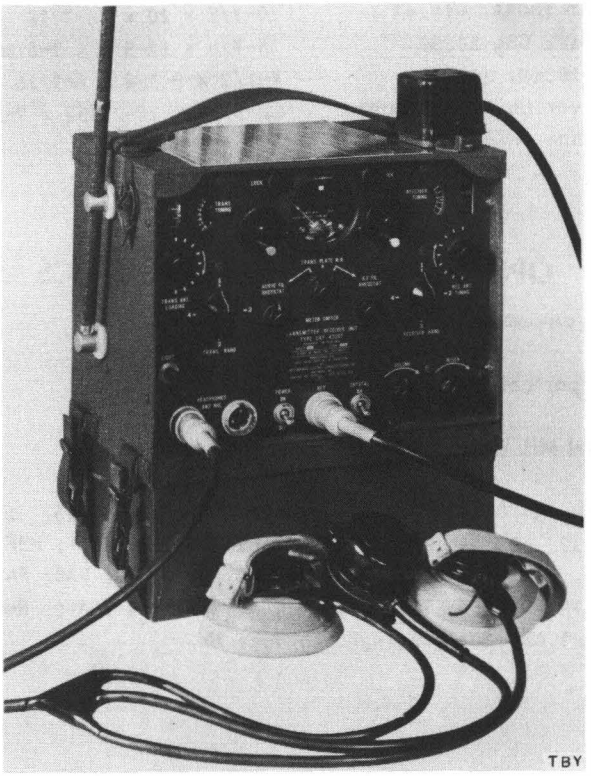
POWER OUTPUT: 1.5 w.

POWER REQUIREMENTS: 6 v,(6 amp)or 12 v,(3.5 amp) power supply or dry batteries; or 24 v w/Dynamotor DY-44/U.

PHYSICAL CHARACTERISTICS

Radio Set SCR-619 weighs 189.43 pounds net. Packed for domestic shipment: total weight 366 pounds, total volume 16.1 cu ft.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/PRC-TYPE** SERVICE TYPE NUMBER: TBY, TBY-1, -2 ULTRA PORTABLE TRANS & REC EQUIP



Ultra Portable Transmitting and Receiving Equipments TBY, TBY-1 and -2 are field, v-h-f radio communication sets designed for transportation as knapsack loads and may be operated while being carried on the operator's back.

The equipments are complete and self-contained, and specially designed for field use. They may be stowed and carried in shipping chests or pack transported.

Continuous tuning throughout the frequency range and crystal calibration of frequency are provided for both transmission and reception.

AN/PRC-TYPE

TBY, TBY-1, -2 :SERVICE TYPE NUMBER

ULTRA PORTABLE TRANS & REC EQUIP

INSTRUCTION LITERATURE: NavShips 95299
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Shipping Chest CAY-10038, -10142	10-7/8 x 20 x 16-7/16	20.6
1	Canvas Carrying Case CSS-10039	15-7/8 x 12-3/8 x 7-5/8	3.5
1	Battery Pack CGD-19018, 19018-A	4-1/2 x 9-3/8 x 6-9/16	13.0
1	Transmitter-Receiver Unit CAY-43007	12-3/32 x 10-23/32 x 7-1/4	23.0
1	Flagelliform Antenna CWA-66025	108 x 3/8 dia	0.7

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Field or advanced bases.

INSTALLATION: Ground, portable.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/CRW-7; AN/FRR-12, -28, -32; AN/FRT-15, -17, -18; AN/GRR-2, -3; AN/SRR-13; AN/URR-10, -12, -23; AN/URT-10; AN/VRT-1; BC-787, -794; MBF; OA-58/FRC; R-62/PR, -80/PR, -137/GR, -205/U, -211/U, -274/FRR, -320/FRC, -388/URR; RAO; RAS; RBG; RBK; RCF; RCG; RDM; SCR-607, -704; T-173/FR; TBS; TBY; AR-88 (RCA); Collins 75A-2; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 28 - 80.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

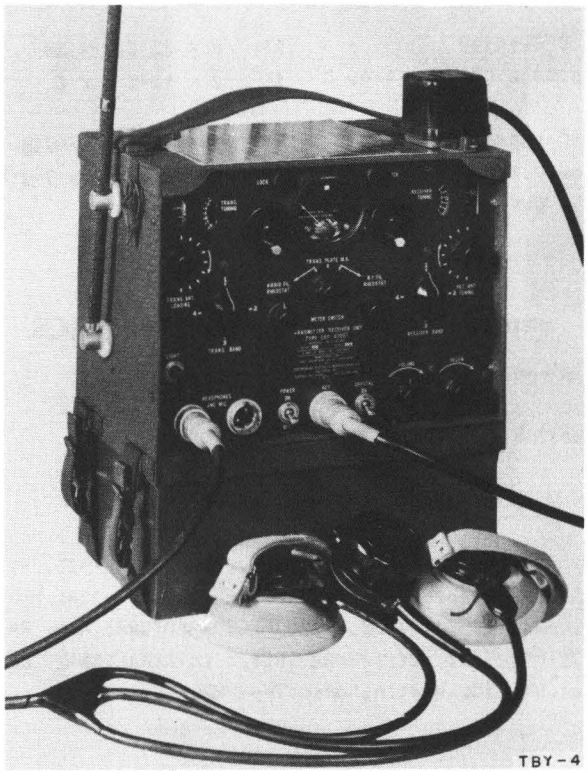
POWER OUTPUT: Receiver: 1 mw into 600 ohm load.
Transmitter: 0.5 w.

POWER REQUIREMENTS: 8.72 w (from Battery Pack Navy Type CGD-19018, -19018-A).
Normal battery life is 30 hours with a 50:50 transmit-receive duty cycle.

PHYSICAL CHARACTERISTICS

Ultra Portable Transmitting and Receiving Equipments TBY, TBY-1, -2 measure 157/8 x 12-3/8 x 7-5/8 inches, net weight 82 pounds, volume 2.1 cu ft.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/PRC-TYPE** SERVICE TYPE NUMBER: TBY-4, -6, -7, -8 ULTRA PORTABLE TRANS & REC EQUIP



TBY-4

Ultra Portable Transmitting and Receiving Equipments TBY-4, -6, -7, and -8 are field, v-h-f radio communication sets designed for transportation as knapsack loads, and may be operated while being carried on the operator's back.

The equipments are complete and self-contained, and specially designed for field use. They may be stowed and carried in shipping chests or pack transported.

Continuous tuning through the frequency range and crystal calibration of frequency are provided for both transmission and reception.

AN/PRC-TYPE

TBY-4, -6, -7, -8 :SERVICE TYPE NUMBER

ULTRA PORTABLE TRANS & REC EQUIP

INSTRUCTION LITERATURE: NavShips 95596
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Shipping Chest CFG-10197	11-7/8 x 22-5/8 x 18	22.5
1	Canvas Carrying Case CSS-10039-A, -10039-B	16-1/2 x 12-1/2 x 8	3.5
1	Battery Pack CNC-19018-B	4-1/2 x 9-3/8 x 6-9/16	13.0
1	Transmitter-Receiver Unit CRI-43044	12-3/32 x 11-7/8 x 7-1/4	33.4
1	Antenna Assembly CWN-66087, -66087-S	108 x 3/8 dia	0.7

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Field or advanced bases.

INSTALLATION: Ground, portable.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/CRW-7; AN/FRR-12, -28, -32; AN/FRT-15, -17, -18; AN/GRR-2, -3 AN/SRR-13; AN/URR-10, -12, -23; AN/URT-10; AN/VRT-1; BC-787, -794; MBF; OA-58/FRC; R-62/PR, -80/PR, -137/GR, -205/U, -211/U, -274/FRR, -320/FRC, -388/URR; RAO; RAS; RBG; RBK; RCF; RCG; RDM; SCR-607, -704; T-173/FR; TBS; TBY; AR-88 (RCA); Collins 75A-2; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 28 - 80.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

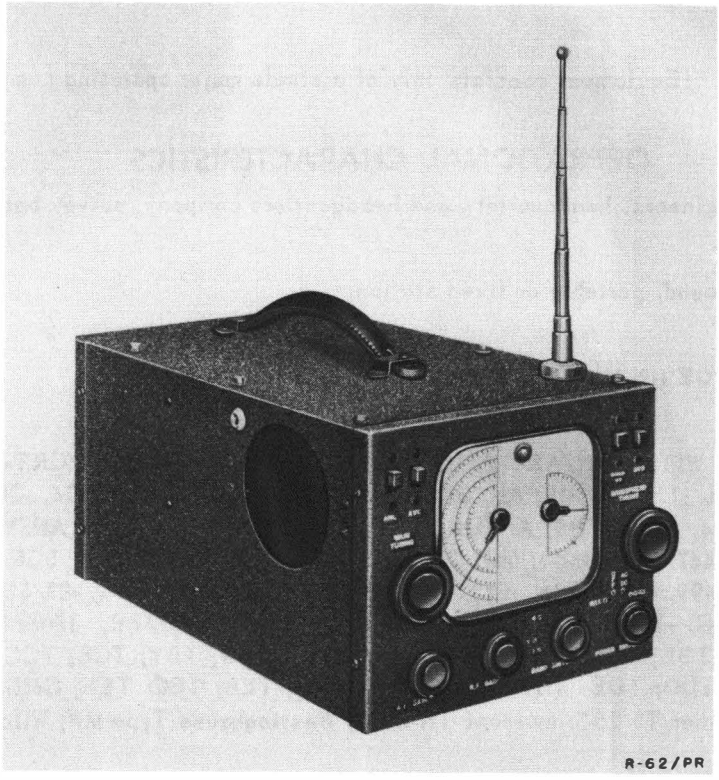
POWER OUTPUT: Receiver: 1 mw into 600 ohms.
Transmitter: Voice: 0.75 w; mcw: 0.5 w.

POWER REQUIREMENTS: 8.72 w (from Battery Pack Navy Type CNC-19018-B).
Normal battery life is 30 hours with a 50:50 transmit-receive duty cycle.

PHYSICAL CHARACTERISTICS

Ultra Portable Transmitting and Receiving Equipments TBY-4, -6, -7, -8 measure 16-1/2 x 12-1/2 x 8 inches, net weight 90 pounds, volume 2.75 cu ft.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 22 Jan 52	AN/PRR-TYPE AN/COMP TYPE NUMBER: R-62/PR RADIO RECEIVER



Radio Receiver R-62/PR is a hand-carried, a-m (voice, tone, and cw) radio receiving equipment used for intercept, monitoring, and similar applications in the m-f and h-f bands.

This equipment consists of a radio receiver in a steel cabinet having a carrying handle, a telescoping antenna, and a built-in loudspeaker. It has provision for connection of a headset and straight wire antenna and ground. This set has automatic or manual volume controls, automatic noise level adjustment, stand-by and beat-frequency oscillator switches, a-f and r-f gain controls, and band-spread tuning.

Operates from 115 v ac or dc or from dry batteries.

AN/PRR-TYPE

R-62/PR : AN/COMP TYPE NUMBER

RADIO RECEIVER

INSTRUCTION LITERATURE: TM 11-876

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army

DATE OF THIS SHEET: 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Engineers, headquarters and headquarters company, survey battalion.

INSTALLATION: Ground, portable or fixed station.

APPROXIMATE RANGE (IN MILES): Short.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.5 - 30.5, in 4 bands.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, voice, tone,

POWER REQUIREMENTS: 40 w, 115 v ac or dc
or
One 6-v A battery and two 45-v B batteries.

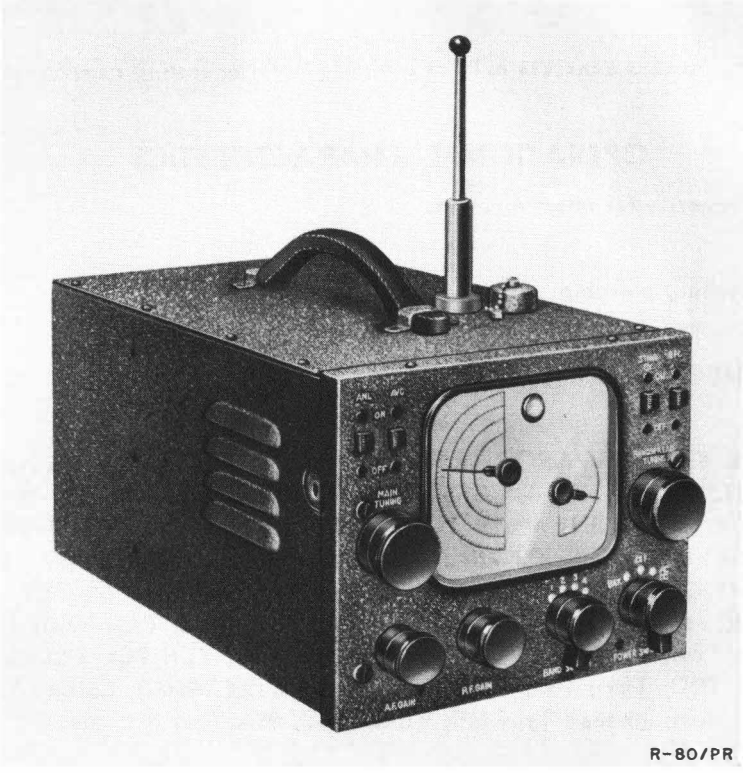
PHYSICAL CHARACTERISTICS

Radio Receiver R-62/PR measures 7 x 8-1/2 x 13-1/4 inches, net weight 18 pounds, volume 0.4 cu ft. Packed for domestic shipment: total weight 31.5 pounds, total volume 1.25 cu ft. Packed for export shipment: total weight 58 pounds, total volume 2.2 cu ft. Shipped in 1 package both domestic and export.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 22 Jan 52

AN/PRR-TYPE

AN/COMP TYPE NUMBER: R-80/PR
RADIO RECEIVER



R-80/PR

Radio Receiver R-80/PR is a general purpose, hand-carried radio receiving equipment which receives a-m (voice, tone, and cw) signals in the m-f and h-f bands. It is used for communication, intercept, monitoring, and similar applications, or for morale purposes, at tactical or fixed stations.

This equipment consists of a radio receiver in a steel cabinet having a carrying handle, a telescoping antenna, and a built-in loudspeaker. It has automatic and manual volume controls, automatic noise level adjustment, a-f and r-f gain controls, stand-by and beat-frequency oscillator switches, and band-spread tuning. Has provision for use of headphones and connection to a long wire antenna and ground.

Operates from batteries or from 115 v ac or dc.

AN/PRR-TYPE	INSTRUCTION LITERATURE: TM 11-876
R-80/PR : AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVER	USING SERVICE : Army
	DATE OF THIS SHEET: 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Primarily for entertainment.

INSTALLATION: Ground, portable or fixed station.

APPROXIMATE RANGE (IN MILES): Short.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.55 - 30.5, in 4 bands.

TYPE MODULATION: Am.

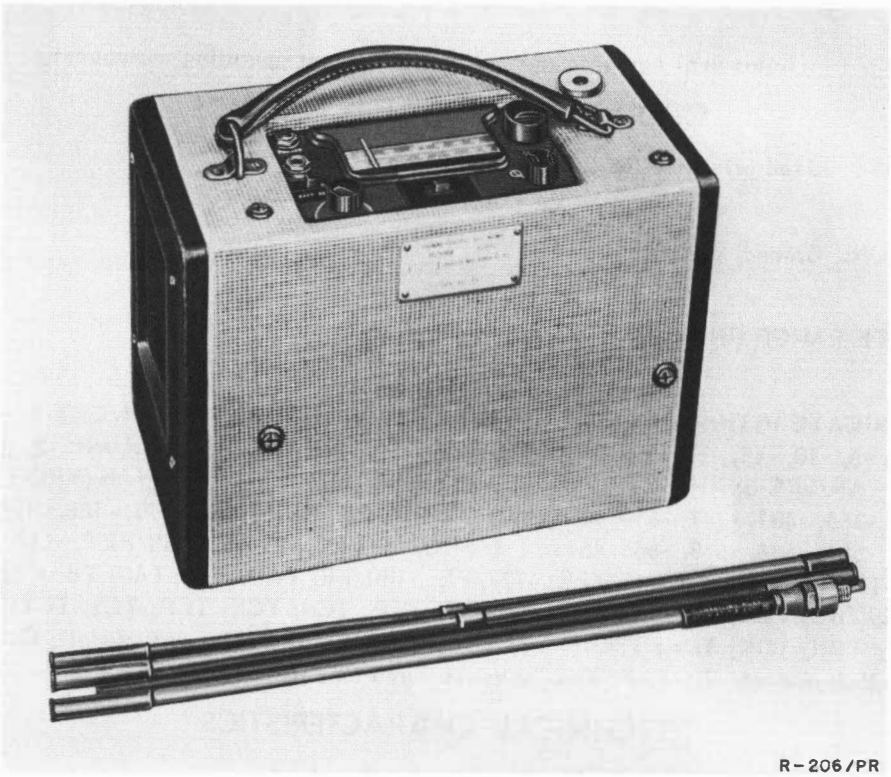
TYPE OF SIGNAL: Cw, voice, tone.

POWER REQUIREMENTS: 50 w, 110/117 v ac or dc
or
One 6-v A battery and two 45-v B batteries.

PHYSICAL CHARACTERISTICS

Radio Receiver R-80/PR measures 9 x 9 x 15 inches, net weight 28 pounds, volume 0.7 cu ft. Packed for domestic shipment: total weight 31.5 pounds, total volume 1.25 cu ft. Packed for export shipment: total weight 58 pounds, total volume 2.2 cu ft. Shipped in 1 package both domestic and export.

STATUS: Substitute Standard	**AN/PRR-TYPE**
CLASSIFICATION OF EQUIPMENT: Unclassified	AN/COMP TYPE NUMBER: R-206/PR
USING SERVICE: Army	RADIO RECEIVER
DATE OF THIS SHEET: 22 Jan 52	



R-206/PR

Radio Receiver R-206/PR is a highly portable, three-band, special purpose, a-m (voice and tone) receiving equipment which is used in the low-, medium-, and high-frequency bands for checking range courses and for similar applications.

This equipment consists of a small compact radio receiver contained in a suitcase-type housing. It has a built-in speaker and an output jack for connection of a headset. It has a loop antenna used in frequency bands 1 and 2 (0.195 - 0.41 and 0.54 - 1.56 mc); the whip-type antenna is used on all three bands.

This set operates on 115 v dc or 50/60 cyc ac or from a 7-1/2-v A battery and two 45-v B batteries.

AN/PRR-TYPE	INSTRUCTION LITERATURE: TM 11-5011
R-206/PR : AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVER	USING SERVICE: Army
	DATE OF THIS SHEET: 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used primarily for checking range courses.

INSTALLATION: Ground, portable.

APPROXIMATE RANGE (IN MILES): Short and medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7; AN/SRC-3; AN/SRT-1, -3, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -329, -339, -365, -401, -447, -610; MBS; MQ; OA-60/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 253; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Band 1: 0.195 - 0.41.
Band 2: 0.54 - 1.56.
Band 3: 2.20 - 6.20.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone.

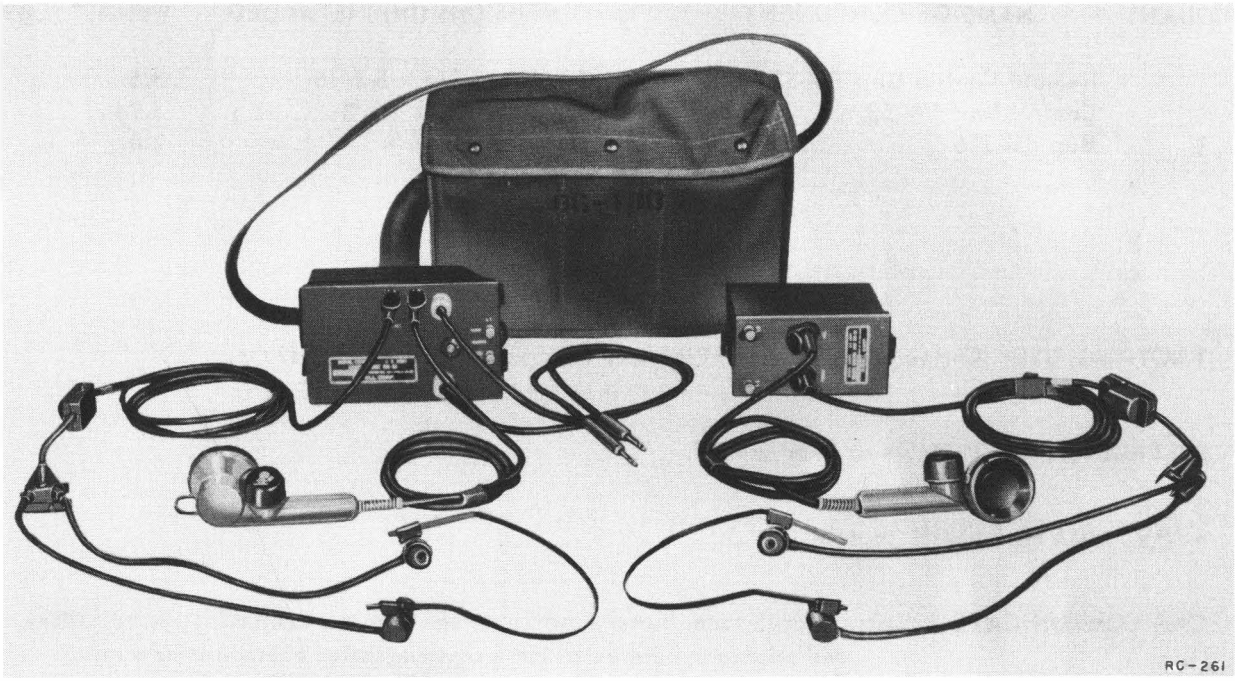
POWER OUTPUT: 50 mw on battery operation; 0.5 w on a-c or d-c operation.

POWER REQUIREMENTS: 115 v, 50/60 cyc ac or
40 w, 115 v dc or
1 A battery - 7-1/2 v and
2 B batteries - 45 v.

PHYSICAL CHARACTERISTICS

Radio Receiver R-206/PR measures 8-1/2 x 6-1/2 x 12 inches, net weight 10.5 pounds, volume 0.375 cu ft. Packed for domestic shipment: total weight 21.5 pounds, total volume 2.25 cu ft. Shipped in 1 package.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 31 Jan 52	**AN/PRW-TYPE** SERVICE TYPE NUMBER: RC-261 REMOTE CONTROL EQUIPMENT



Remote Control Equipment RC-261 is an assemblage of items enabling the erection of a local battery telephone facility between a remote operating position and the actual site of a radio equipment. It is used in conjunction with radio equipment used at company and battery level units which are organic to infantry, armored, and airborne divisions.

This equipment consists essentially of a control station designed to be operated at the remote point, a control box used at the radio set, and accessories. The remote control unit is connected to the control box at the radio set by a field telephone pair.

By means of this equipment the radio set can be operated from the remote point, transmission from the remote point can be monitored at the radio set, or operation at the radio set can be monitored at the remote point. In addition, the two terminal units of the system can be used as an intercommunication facility between the two locations.

The equipment is powered by dry batteries and by the hand generator unit which is integral in the remote control unit.

AN/PRW-TYPE

RC-261 :SERVICE TYPE NUMBER
REMOTE CONTROL EQUIPMENT

INSTRUCTION LITERATURE: TM 11-2632
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 31 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Remote Control Unit RM-52	7-1/16 x 3-1/4 x 5-3/16	3.5
1	Control Unit RM-53	8-1/2 x 4-3/8 x 4-3/8	4.94
1	Bag BG-186	15-1/2 x 5x 9-5/8	2.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company and battery of infantry armored and airborne divisions.

INSTALLATION: Portable or fixed ground.

APPROXIMATE RANGE (in miles): 0.5.

CAN COMMUNICATE WITH: Through local battery switching and repeater equipment central office, and related apparatus to radio communication equipment at a remote point.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Cw and voice.

TYPE COMMUNICATION CIRCUITS: Local battery telephone.

CONTROLS: A switch marked RADIO, REMOTE, INTERPHONE; impedance switch marked HIGH-LOW; and press-to-talk switch.

POWER REQUIREMENTS: 3 v dc (two Batteries BA-30); 6 v dc (four Batteries BA-30).

PHYSICAL CHARACTERISTICS

Remote Control Equipment RC-261 measures 22-1/2 x 20-1/4 x 15 inches, net weight 71.19 pounds.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 31 Jan 52	**AN/PRW-TYPE** SERVICE TYPE NUMBER: RC-289 REMOTE CONTROL EQUIPMENT



RC-289

Remote Control Equipment RC-289 is an assemblage of items enabling the erection of a local battery telephone facility between a remote operating position and the actual site of the radio equipment. It is used in conjunction with radio equipment organic to company level units.

This equipment consists essentially of a modified steel-cased Telephone EE-8, a telegraph key, and a standard field Telephone EE-8. The connecting facility is usually a conventional field telephone pair. Telephone EE-8 is located at the remote station; the remote control unit is installed at the radio set.

The modes of operation available are local battery telephone communication between remote point and radio operator, control of radio equipment from the remote Telephone EE-8, voice circuit monitoring by the radio operator at the radio equipment, and operation of the radio set (voice or cw) with monitoring at either the remote station or the radio set.

It is powered by dry batteries and uses the hand generator integral in the remote control unit or in a Telephone EE-8 for ringing.

AN/PRW-TYPE

RC-289 :SERVICE TYPE NUMBER

REMOTE CONTROL EQUIPMENT

INSTRUCTION LITERATURE: TM 11-2667

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army

DATE OF THIS SHEET: 31 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Control Unit RM-39	9-5/16 x 6-5/8 x 5	12.9
1	Case CS-76-J	9-7/8 x 8-5/8 x 6-3/4	2.0
1	Cord CD-1254	60 (long)	.5
1	Cord CD-1255	72 (long)	.25
1	Cord CD-1256	32 (long)	.3
1	Key J-47	Not Available	.3
1	Telephone EE-8	" "	12.9

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company and battery of infantry, armored and airborne divisions.

INSTALLATION: Fixed or portable.

CAN COMMUNICATE WITH: Telephone switching, repeater, terminal, and station apparatus between a remote operating point and the operating site of radio communication equipment.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Cw and voice.

TYPE COMMUNICATION CIRCUITS: Local battery telephone.

CONTROLS: Four-position switch marked TELEPHONE, THROUGH, RADIO, CW: Crank GC-9; and toggle switch marked ANTI-HOWL.

POWER REQUIREMENTS: 4-1/2 v dc (Battery BA-27); 15 v dc (two Batteries BA-34); 1.5 v dc (Battery BA-30).

PHYSICAL CHARACTERISTICS

Remote Control Equipment RC-289 measures 20 x 14 x 13-3/4 inches. Packed for export shipment: total weight 70 pounds, total volume 2.2 cu ft. Shipped in 1 package.

STATUS: Std

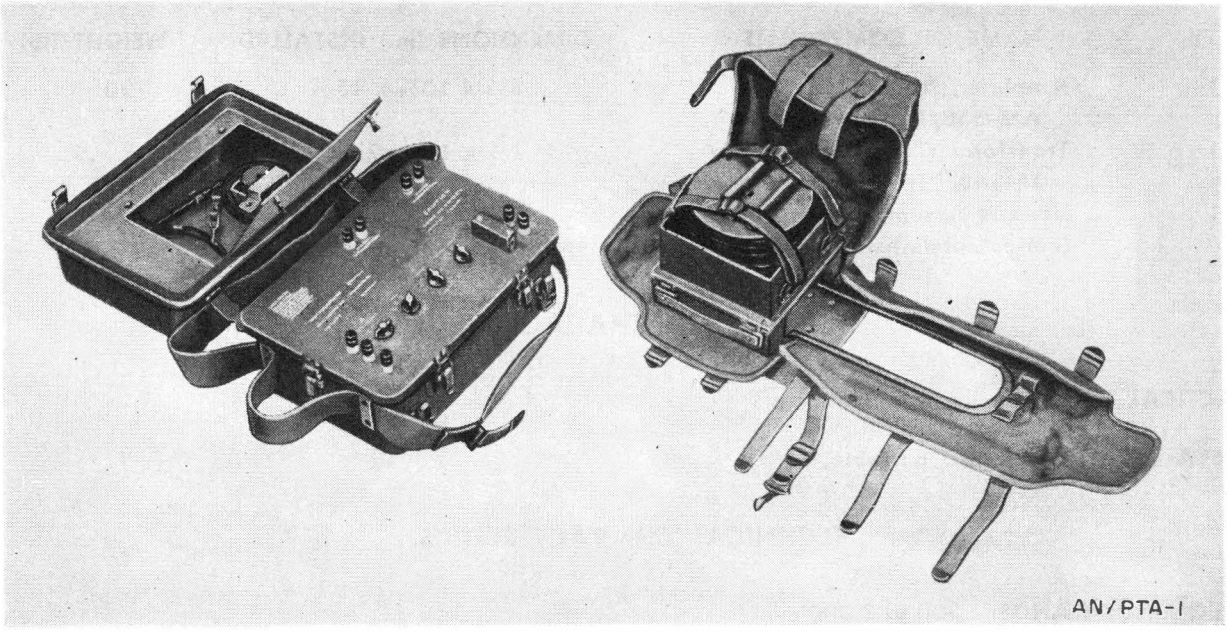
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 18 June 1956

AN/PTA–1

MONITOR, AUDIO FREQUENCY



Audio Frequency Monitor AN/PTA–1 is a battery-operated wiretapping device used to intercept communication signals transmitted over telephone wire circuits.

This equipment consists of an af amplifier, an af transformer, a headset assembly, and a wire reel with wire, ground rods, and other accessories.

The intercepted signal can be recorded, but recording equipment is not supplied as part of this assemblage.

It is packed in two units for convenience of transportation and can be easily carried by one man.

AN/PTA-1

MONITOR, AUDIO FREQUENCY

INSTRUCTION LITERATURE: TM 11-2099

USING SERVICE: USA

DATE OF THIS SHEET: 18 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Amplifier, Audio Frequency AM-558/PTA-1	8¾ x 10⅝ x 15⅜	20
1	Transformer, Audio Frequency TF-148/PTA-1	1⅝ x 1⅞ x 2 15/16	.5
1	Headset Assembly 49507		.875

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Special organizations.

INSTALLATION: Ground, portable.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE: 200 to 8,000 cy.

TYPE MODULATION:

TYPE OF SIGNAL:

POWER OUTPUT:

POWER REQUIREMENTS: 6 v, 50 ma dc (fil); 90 v, 5 ma dc (p).

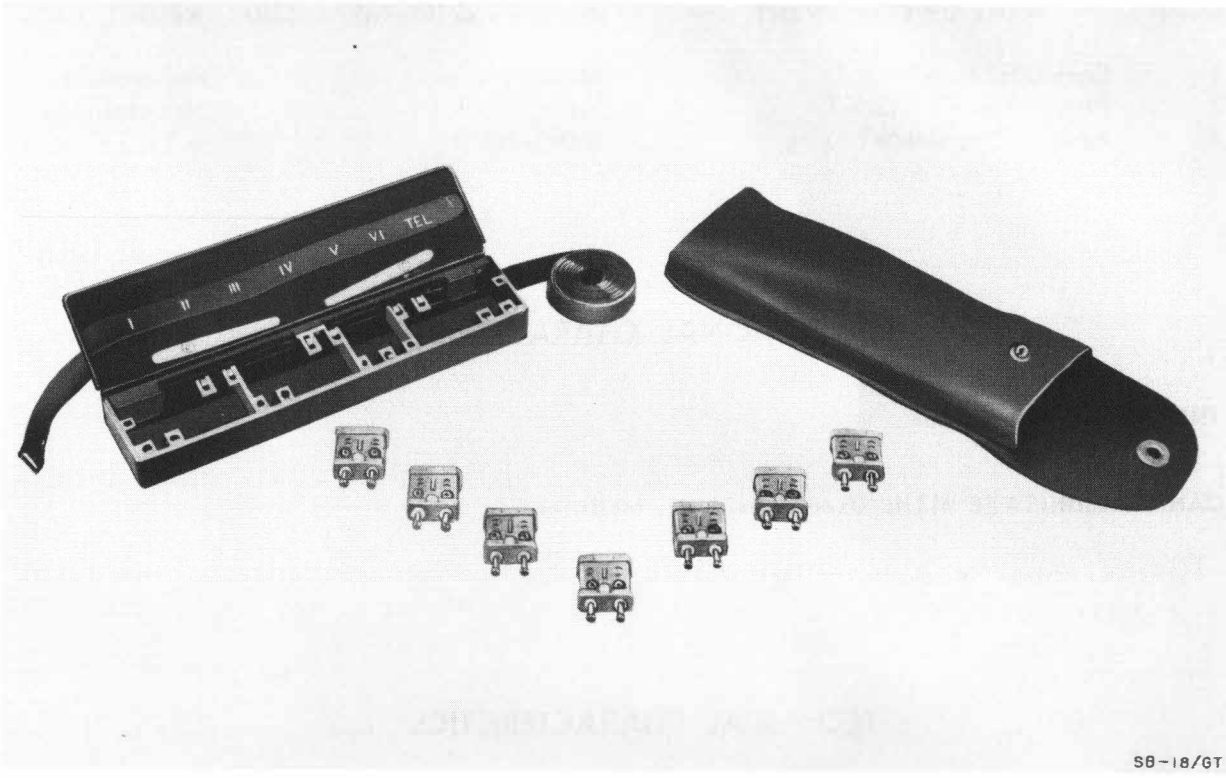
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO PACKAGES
NET:		32	1.5		
DOMESTIC PACK:					
EXPORT PACK:		82	6.1		1

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 17 Jan 52

AN/PTC-TYPE

AN/COMP TYPE NUMBER: SB-18/GT
EMERGENCY SWITCHBOARD



Emergency Switchboard SB-18/GT is a small, compact, lightweight, manual switching equipment used in field wire facilities serving infantry units.

This equipment can be used as an emergency substitute for a 6-line magneto telephone switchboard; and consists of a small case containing Adapter Plug U-4/GT, and is fitted with a carrying strap; switching is performed by interconnecting the adapter plugs. These plugs have small neon bulbs which serve as signal lamps when energized by ringing current.

The operator's telephone is a field Telephone EE-8 which supplies ringing power.

AN/PTC-TYPE	INSTRUCTION LITERATURE: None
SB-18/GT :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
EMERGENCY SWITCHBOARD	USING SERVICE : Army
	DATE OF THIS SHEET : 17 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Case CY-229/GT	12x4x1-1/2	Not available
1	Plug Holder MT-313/GT	12x3x1-1/4	Not available
7	Adapter Plug U-4/GT	2x1-1/2x5/8	0.1

OPERATIONAL CHARACTERISTICS

INSTALLATION: Ground.

CAN COMMUNICATE WITH: Used in field wire facilities.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

Number of line circuits: 6

POWER REQUIREMENTS: None; ringing power supplied by accessory Telephone EE-8.

PHYSICAL CHARACTERISTICS

Emergency Switchboard SB-18/GT measures 12x3x1-1/4 inches, net weight 2.25 pounds, volume 0.025 cu ft. Packed for export shipment: total weight 5 pounds, total volume 0.2 cu ft. Shipped in 1 package both domestic and export shipment.

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

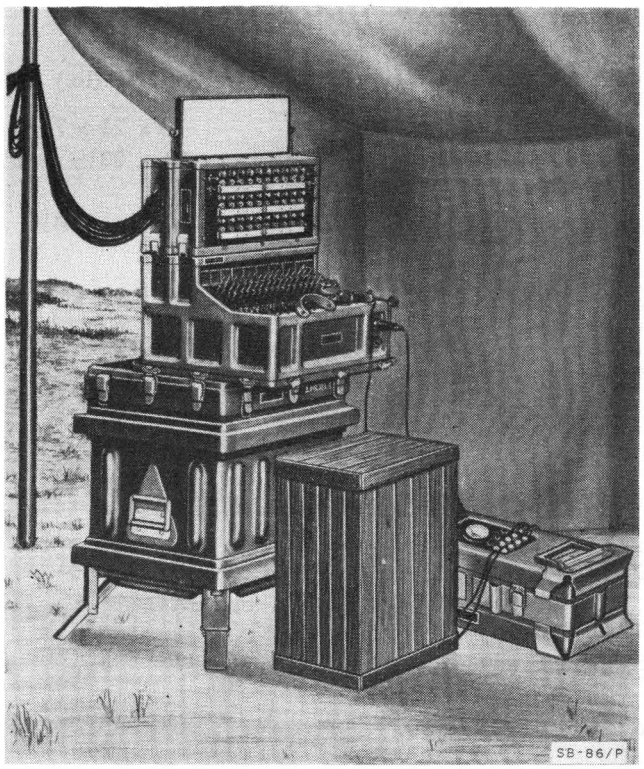
PREPARING SERVICE: USA

DATE OF THIS SHEET: 27 June 1956

AN/PTC–TYPE

SB–86/P

SWITCHBOARD, TELEPHONE, MANUAL



Manual Telephone Switchboard SB–86/P is a portable, field-type unit used for connecting local battery telephone and voice-frequency teletypewriter lines in many types of wire communication systems.

This equipment consists of a switchboard signal assembly, manual telephone switchboard section, power supply, and headset-handset. It is capable of handling 15 calls at one time. Provision is made for automatic and manual ringing, common-battery and magneto signaling, and conference calls. It is mounted for operation on its outer cover assembly. An additional jack field is required to handle more than 30 lines.

It is normally operated from 10 Batteries BA–200/U and 4 Batteries BA–30 or from a 24-volt storage battery for semipermanent locations. One Battery BA–2 (22½ volts) can be used in emergencies.

Telegraph Terminal TH–5/TG and a teletypewriter are required to complete calls if the voice-frequency teletypewriter circuits are set up for telegraph-only service.

AN/PTC–TYPE

INSTRUCTION LITERATURE: TM 11–2134

USING SERVICE: USA

DATE OF THIS SHEET: 27 June 1956

SB–86/P

SWITCHBOARD, TELEPHONE, MANUAL

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Power Supply PP-990/G	10 x 21 x 7⅛	29
1	Switchboard Section, Telephone, Manual SB–248/P	21 x 23½ x 18½	65
1	Switchboard Signal Assembly TA–207/P	10 x 4 x 14½	6

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Regimental and higher headquarters.

INSTALLATION: Ground, transportable.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

Manually Operated Equipment:

Number of Cord Circuits: 16.
Number of Line Circuits: 30 to 60.
Number of Trunk Circuits: 2.

RINGING: 20 cy (auto from vibrator or man. from hand gen).

POWER REQUIREMENTS:

Common Battery Signaling: 20 to 26.5 v dc from five BA–200/U.
Magneto Signaling: 15 to 26.5 v dc from five BA–200/U.
Night Alarm and Panel Lamps: 3 v dc from two BA–30.
Operator's Telephone: 3 v dc from two BA–30.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	50 x 21½ x 23	181	13.5		
DOMESTIC PACK:		235	14.37		1
EXPORT PACK:		300	19.95		1

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 27 Jan 52

AN/PVC-TYPE

SERVICE TYPE NUMBER: EE-84

SIGNAL LAMP EQUIPMENT



Signal Lamp Equipment is a portable, visual-signaling device which is used for communication by means of flashes of white or redlight which are keyed in accordance with the dots and dashes of telegraphic codes. It is used in line-of-sight communication, airport traffic control, and similar applications in forward areas of infantry divisions, by military police and security troops, and similar units.

This equipment consists essentially of a prefocussed lamp in a cylindrical housing, a tripod, and associated battery box. It has a sighting telescope having illuminated crossed-hairs used in setting up and aiming the device, and a compass and azimuthal scale for orientation.

It is powered by flashlight-type batteries.

AN/PVC-TYPE	INSTRUCTION LITERATURE: TM 11-391
EE-84 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
SIGNAL LAMP EQUIPMENT	USING SERVICE : Army
	DATE OF THIS SHEET : 27 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Signal Lamp M-132	10 x 5-1/2 (diameter)	5.5
1	Tripod (Ordnance type G for aiming circle type M1916)	34 x 4 (diameter when folded)	7.4
	Cords, accessories, boxes and bags	Not Available	24.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Infantry divisions in forward areas, airport traffic control, military police, security troops and similar units.

INSTALLATION: Ground, transportable, operates in fixed position.

APPROXIMATE RANGE (IN MILES): 2.5 miles in bright sunlight (maximum). Many times this range at night. Line of sight.

CAN COMMUNICATE WITH: Observer stations at remote terminal, or intermediate relay points, of a line-of-sight system.

TECHNICAL CHARACTERISTICS

NUMBER AND TYPE OF CHANNELS: 1, keyed, or interrupted light flashes.

COMMUNICATION SPEED: 8 wpm.

TYPE LIGHT SOURCE: Incandescent lamp, prefocussed, paraboloidal reflector.

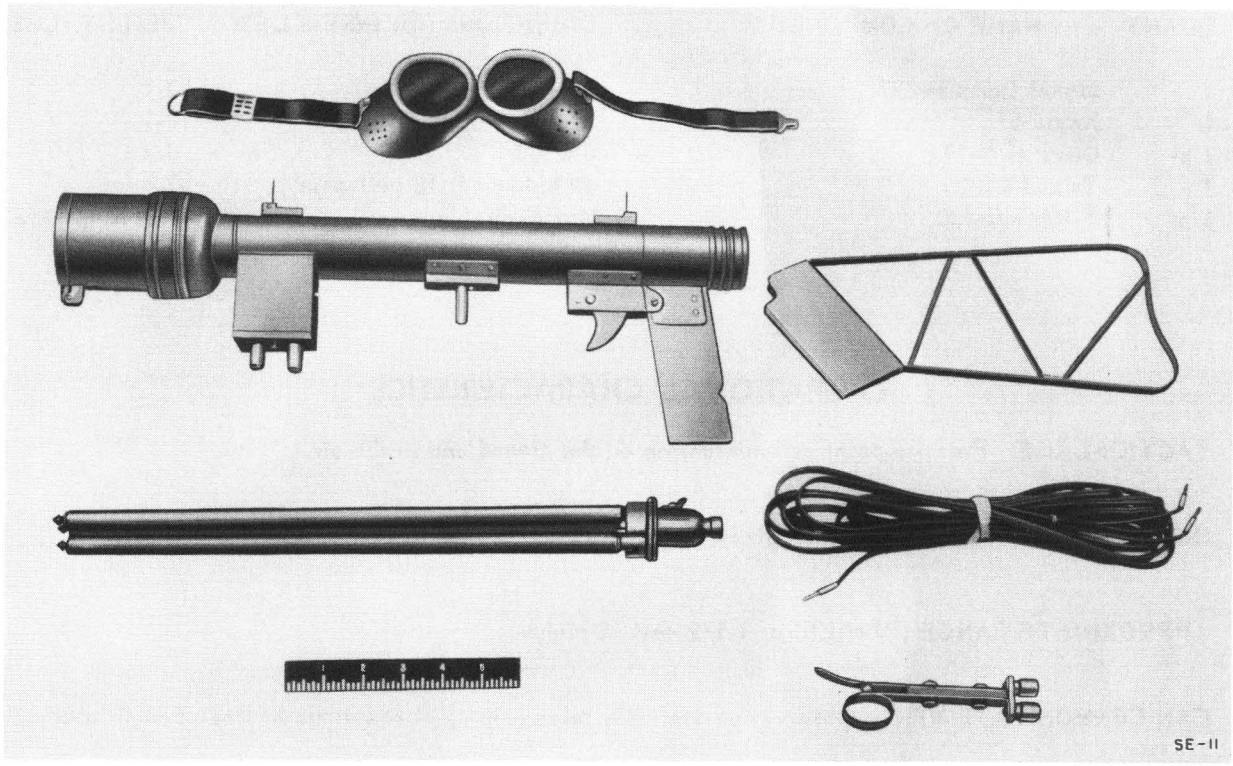
SPECIAL FEATURES: May use filters to modify light to red or other color. Includes red filter goggles for reading red light signals.

POWER REQUIREMENTS: 8 Batteries BA-30 plus 8 spares.

PHYSICAL CHARACTERISTICS

Signal Lamp Equipment EE-84 measures 60 x 60 x 60 inches, net weight 37.1 pounds, volume 1.2 cu ft. Packed for export shipment: total weight 70 pounds, total volume 6 cu ft. Shipped in 2 packages.

STATUS: Standard	AN/PVC-TYPE
CLASSIFICATION OF EQUIPMENT: Unclassified	SERVICE TYPE NUMBER: SE-11
USING SERVICE: Army	SIGNAL LAMP EQUIPMENT
DATE OF THIS SHEET: 23 Jan 52	



Signal Lamp Equipment SE-11 is a light-signaling device by means of which communication can be conducted by flashes of red or white light keyed according to the dots and dashes of Morse or other codes. It is used in traffic control and forward area line-of-sight communication applications.

This equipment consists of a signal lamp having a pistol grip and trigger-type on-off switch. A gunstock type of mounting is provided for operating the equipment from the shoulder and a tripod is included for use when the signal lamp is installed on the ground in relatively permanent applications. The tripod has a swivel head assembly and the equipment can be operated by remote control.

The signal lamp is equipped with sights similar to those of a rifle and can be permanently trained upon a given target.

The equipment is battery powered and can be operated at speeds of about 10 words per minute.

AN/PVC-TYPE	INSTRUCTION LITERATURE: TM 11-392
SE-11 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
SIGNAL LAMP EQUIPMENT	USING SERVICE : Army
	DATE OF THIS SHEET: 23 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Signal Lamp M-227	18-1/2 x 6 x 1-3/4	2.1
1	Key J-51	1-11/16 x 5-9/16 x 1/2	0.1
1 pr	Goggles M-172	8 x 2-3/4	0.3
1	Tripod LG-21	42 extended, 18 collapsed	1.4
1 pr	Filter MC-430	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Point-to-point communication on the ground and in the air.

INSTALLATION: Ground, portable; fixed station.

APPROXIMATE RANGE (IN MILES): 1-1/2 day. 5 night.

CAN COMMUNICATE WITH: Observation stations, relay points, or observers at line-of-sight distances.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Red or white light flashes.

TYPE COMMUNICATI ON CIRCUITS: Half-duplex; line of sight.

CONTROLS: Self-contained trigger and a hand key.

POWER REQUIREMENTS: 7.5 v from five Batteries BA-30 in series.

PHYSICAL CHARACTERISTICS

Signal Lamp Equipment SE-11 measures 50 x 50 x 50 inches, net weight 8.5 pounds, 0.1 cu ft.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: ~~Restricted~~
USING SERVICE: Navy
DATE OF THIS SHEET: 23 May 52

AN/SAR-1

INFRARED RECEIVING SET



AN/SAR-1

Infrared Receiving Set AN/SAR-1 is a shipboard receiver of invisible light signals for use at night in converting invisible infrared radiation to visible light by a photoelectric tube known as an image tube.

The receiver consists of a lens and mirror system, an image tube, an eyepiece lens assembly and certain electrical components. It may be either hand-held or mounted; and may be powered by batteries or ship's power.

AN/SAR-1

INFRARED RECEIVING SET

INSTRUCTION LITERATURE: NAVSHIPS 250-222-19
CLASSIFICATION OF EQUIPMENT: ~~Restricted~~
USING SERVICE: Navy
DATE OF THIS SHEET: 23 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Navy Type C-3 Nancy Receiver	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/SAC-1.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.8 – 1.5 microns.

TYPE OF SIGNAL: Visual.

POWER REQUIREMENTS: Self-contained flashlight batteries; or 115 v dc/ac.

PHYSICAL CHARACTERISTICS

Infrared Receiving Set AN/SAR-1 measures 8-13/16 x 8-1/2 x 14 inches.

STATUS: Std

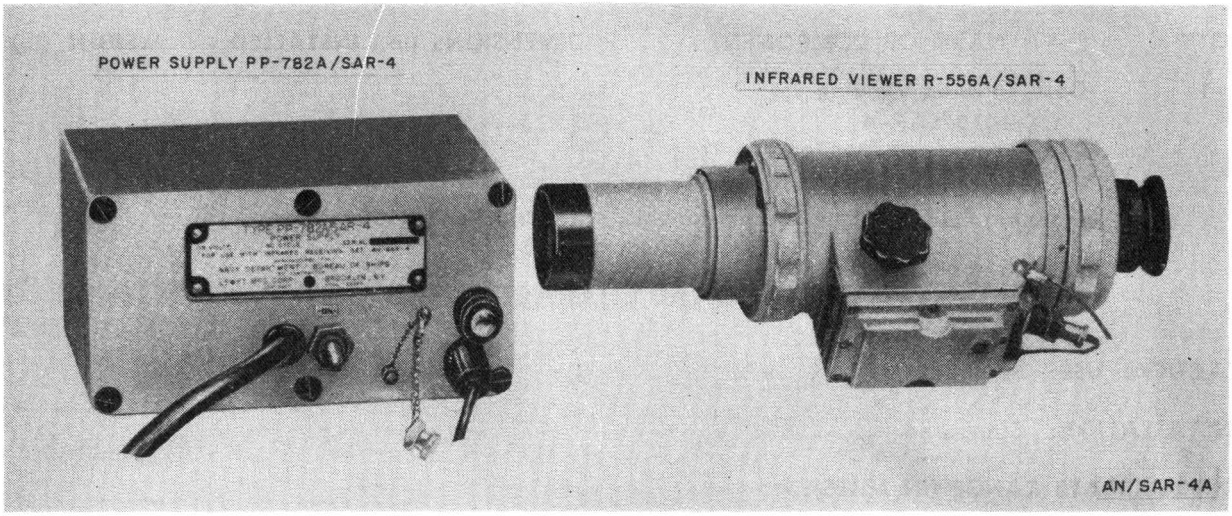
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 9 May 1956

AN/SAR–4( )

VIEWING SET, INFRARED



Infrared Viewing Set AN/SAR–4( ) is a shipboard viewer of invisible light signals used at night to receive and convert invisible infrared radiation to visible light (by means of a photoelectric image tube) in shipboard communications.

This equipment is used as the receiving unit in the infrared blinker systems with such transmitters as the AN/SAT–2 or the 12-inch signaling searchlight with infrared filters. It is also used with the infrared filtered searchlight to observe objects in total darkness.

The AN/SAR–4, AN/SAR–4A, AN/SAR–4B, and the AN/SAR–4X are functionally interchangeable.

AN/SAR-4( )

VIEWING SET, INFRARED

INSTRUCTION LITERATURE: NAVSHIPS 91911A

USING SERVICE: USN

DATE OF THIS SHEET: 9 May 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Case, Infrared Viewing Set CY-1410/SAR-4		
1	Power Supply PP-782/SAR-4		
1	Viewer, Infrared R-556A/SAR-4		

(For complete list of major components, see instruction literature.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE: .8 to 1.5 microns.

TYPE MODULATION:

TYPE OF SIGNAL: Visual.

POWER OUTPUT:

POWER REQUIREMENTS: 115 v ac; 6 or 115 v dc.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

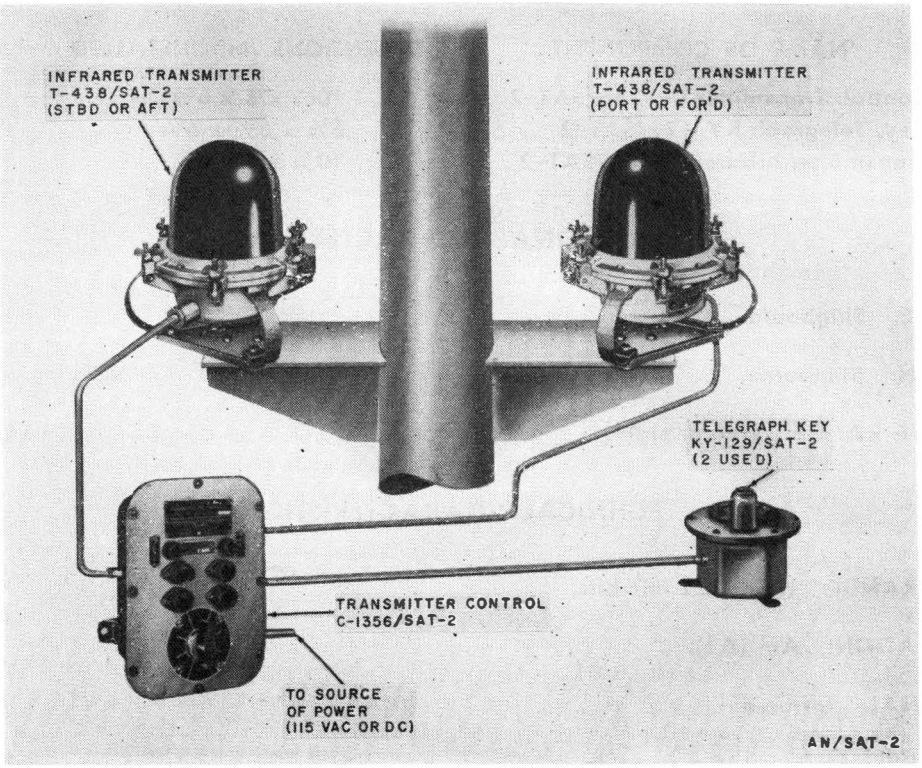
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 26 June 1956

AN/SAT–2

TRANSMITTING SET, INFRARED



Infrared Transmitting Set AN/SAT–2 provides a secure means of signaling at night aboard ship under darkened conditions by means of signals that cannot be detected beyond 400 yards by the unaided eye.

This equipment is functionally and operationally equivalent to Beacon System US/X–3A NAN but has simpler controls and provides greater flexibility of installation.

AN/SAT–2

TRANSMITTING SET, INFRARED

INSTRUCTION LITERATURE: NAVSHIPS 92169

USING SERVICE: USN

DATE OF THIS SHEET: 26 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Control, Transmitter C–1356/SAT–2	10¾ x 8 x 6⅜	10.25
2	Key, Telegraph KY–129/SAT–2	5⅞ x 6¾ x 6¾	6
2	Transmitter, Infrared T–438/SAT–2	10¾ x 8 x 6⅜	18.75

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE: Line of sight.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE: .75 to 1.2 microns.

TYPE MODULATION: Am (A1).

TYPE OF SIGNAL: Infrared.

POWER REQUIREMENTS: 115 v ac or dc.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	13¼ x 12½ x 12½	43.5			
DOMESTIC PACK:		83.75	6.26		1
EXPORT PACK:					

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

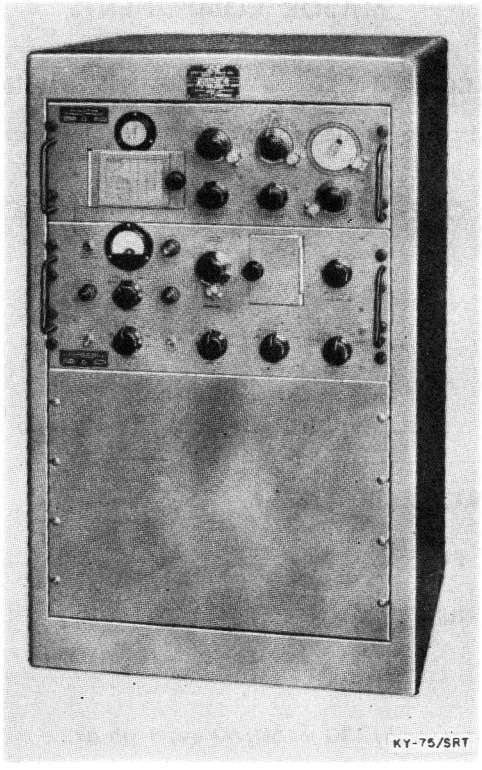
PREPARING SERVICE: USN

DATE OF THIS SHEET: 11 May 1956

AN/SGA—TYPE

KY–75/SRT

KEYER



Keyer KY–75/SRT is used in long-distance radiotelegraph systems to improve transmission by utilizing a two-frequency method: one *mark* signal and one space signal.

The two-frequency method, or frequency-shift operation, provides a better signal-to-noise ratio resulting in better signal reception.

This equipment is similar to Keyer KY–58/GRT except for type of mounting.

AN/SGA–TYPE

KY–75/SRT

KEYER

INSTRUCTION LITERATURE: NAVSHIPS 91543

USING SERVICE: USN

DATE OF THIS SHEET: 11 May 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1 to 6.7.

TYPE MODULATION: Fm (F1, F4).

TYPE OF SIGNAL: Fsk, facsimile.

POWER OUTPUT: 6 w.

POWER REQUIREMENTS: 470 w, 115/230 v, 50/60 cy, 1 ph ac.

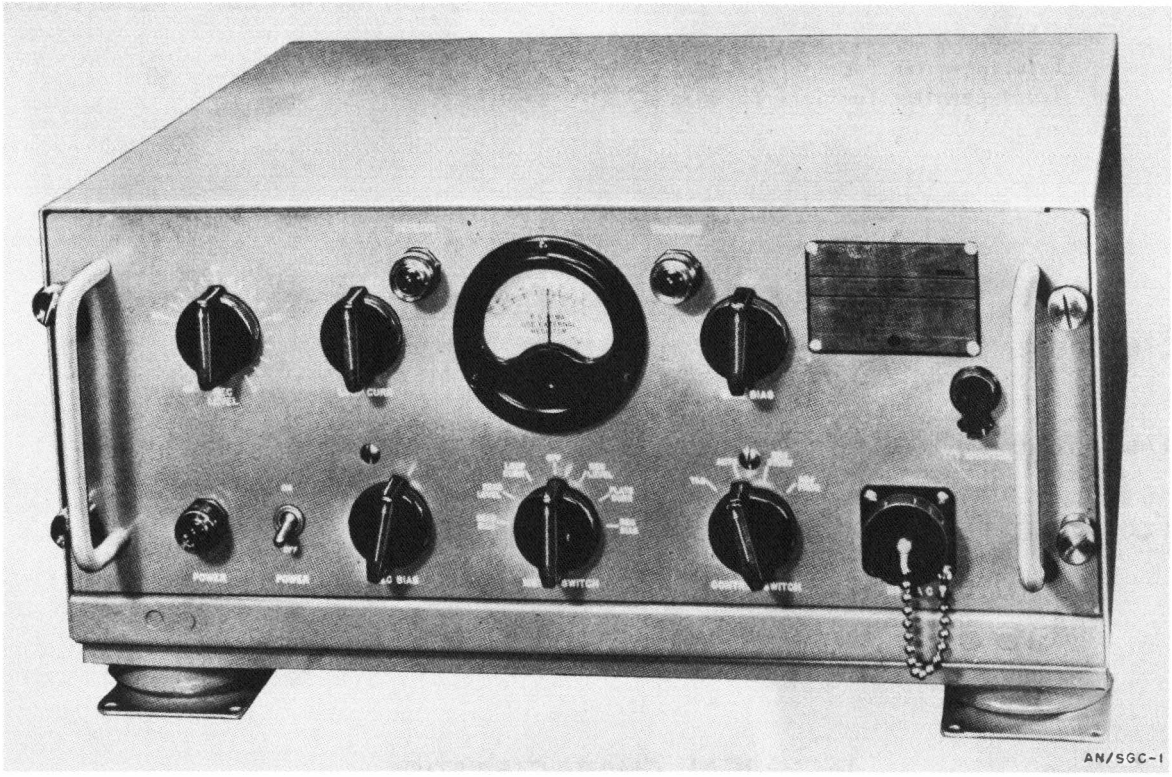
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	24½ x 22⅛ x 26⁹⁄₁₆	220			
DOMESTIC PACK:		346	13.5		1
EXPORT PACK:					

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/SGC-1

RADIO TELETYPE TERMINAL SET



Radio Teletype Terminal Sets AN/SGC-1 and 1A are used for the transmission and reception of teletypewriter messages, over radio channels between stations similarly equipped.

At the voice-operated transmitter, these terminal sets convert the current pulses from the teletype - writer to audio tones which modulate the radio transmitter.

At the receiver, the transmitted signals are demodulated to facilitate operation of the associated teletypewriter station equipment.

AN/SGC-1

RADIO TELETYPE TERMINAL SET

INSTRUCTION LITERATURE: NavShips 91503, 91152
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Teletypewriter Terminal TT-40/SGC-1	9-11/16 x 19-1/4 x 17-9/16	50
or	Teletypewriter Terminal TT-40A/SGC-1		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

CAN COMMUNICATE WITH: This is signal modifying equipment used in conjunction with primary communication apparatus.

TECHNICAL CHARACTERISTICS

FREQUENCY: 0.5 kc and 0.7 kc.

TYPE OF SIGNAL: Cw.

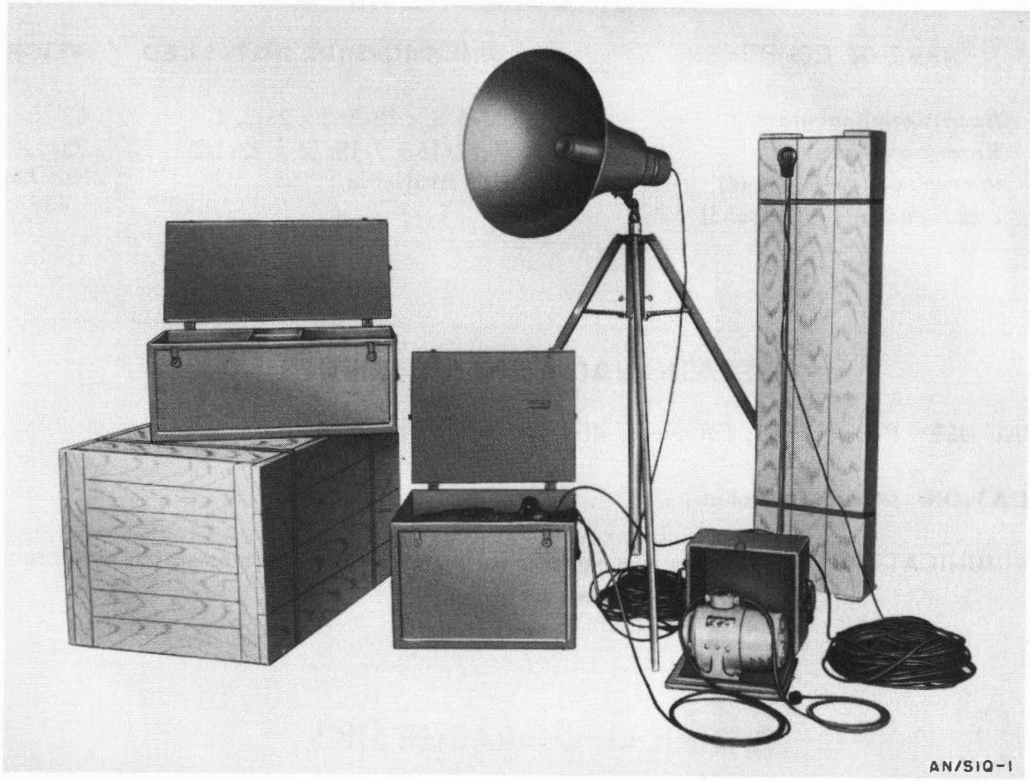
POWER OUTPUT: +10 db.

POWER REQUIREMENTS: 86 w, 115 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Teletype Terminal Set AN/SGC-1(and 1A)measures 9-11/16 x 19-1/4 x 17-9/16 inches.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 8 Jan 52	**AN/SIQ-1** PUBLIC ADDRESS SET



Public Address Set AN/SIQ-1 is a medium-power, sound amplifying and projecting equipment used for briefing, training, or morale purposes. It is designed primarily for shipboard use. It can also be used in indoor or outdoor auditoriums as required.

This equipment consists essentially of a combined two-speed phonograph turntable and audio amplifier, microphones, speakers, and related accessories. It is so arranged that the entire equipment can be packed into seven carrying cases each of which can be carried by two men.

Sound signals, whether speech or music, are picked up by means of the microphones or by means of the 33-1/3 or 78-rpm disk recording equipment, but there is no provision for input from wire communication or radio receiving equipment.

It operates on 115 v ac or, by means of the rotary converter component, on 115 v dc.

AN/SIQ-1

PUBLIC ADDRESS SET

INSTRUCTION LITERATURE: TM 11-2577
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Amplifier-phonograph	17-1/4 x 18-3/4 x 23-3/4	83
1	Rotary converter	7-13/16 x 7-13/16 x 13-1/2	73
2	Microphone (with stand)	Not Available	Not Available
4	Loudspeaker (with stand)	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Post, camps, PW areas, division or higher headquarters.

INSTALLATION: Ground, portable.

CAN COMMUNICATE WITH: No specific equipment. Sound-in-air apparatus which projects sound to groups of personnel.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Two loudspeaker output channels, for 1 or 2 or for 3 or 4 speakers. One microphone, or amplifier-record-player, input. 10-, 12-, or 16-inch recordings at 33-1/2 or 78 rpm.

TYPE CONTROLS: Amplifier: volume, auxiliary volume, on-off, microphone-phono selector. Phono: on-off, Microphone: press-to-talk switch.

POWER OUTPUT: 50 w.

POWER REQUIREMENTS: 250 w, 115 v, 60 cyc, single-phase ac. or 250 w, 115 v dc through converter.

PHYSICAL CHARACTERISTICS

Public Address Set AN/SIQ-1 packed for domestic shipment: total weight 536 pounds, total volume 59.3 cu ft, 1.49 ship tons. Shipped in 7 packages.

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 26 June 1956

AN/SRA–TYPE

KY–83( )/S

KEYER



Keyer KY–83( )/S adapts communication radio transmitters and receivers to remote-control operation of magnetic minesweeping equipment. This equipment makes it possible to transmit and receive the timing pulses used in this type of operation, by utilizing available radio communication equipment without interrupting the normal function of such units.

The KY–83/S and KY–83A/S are functionally identical; the A model is more compact and lighter than the basic model. They are operated with Auxiliary Controllers Mark VI and VII, and combinations of radio receivers and transmitters, for detonating magnetic mines.

AN/SRA–TYPE

KY–83( )/S

KEYER

INSTRUCTION LITERATURE: NAVSHIPS 91764, 91822(B)

USING SERVICE: USN

DATE OF THIS SHEET: 26 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL:

Audio Oscillator: 500 cy.
Stability: ±10 cy (under ±10% variation in 115 v dc).
Ambient Temperature: −28° C to +65° C.
Output Level: 0 to 2 v (adjustable).
Audio output: 300 mw.

POWER REQUIREMENTS: 65 w, 115 v ±10% dc.

PHYSICAL CHARACTERISTICS

		DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	KY–83/S	16 x 20 x 32	120			
	KY–83A/S	10 x 13¾ x 21¼	50			

DOMESTIC PACK:

EXPORT PACK:

STATUS: L/Std (–315); Std (–315A)

CLASSIFICATION OF EQUIPMENT: Unclassified

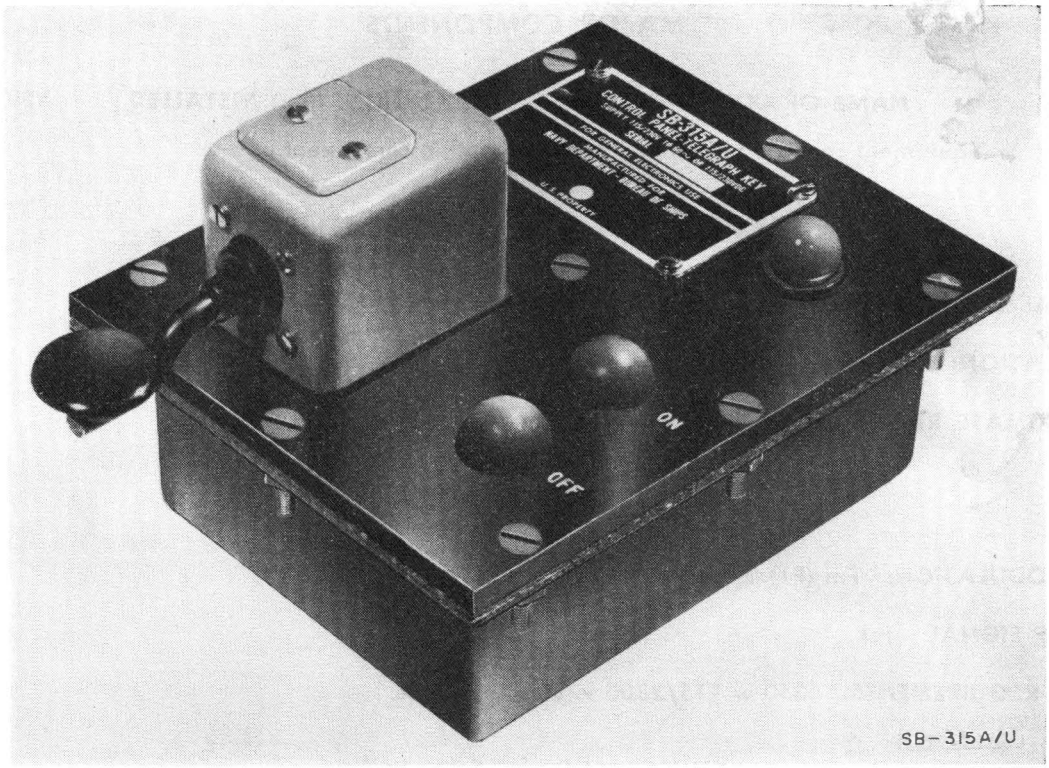
PREPARING SERVICE: USN

DATE OF THIS SHEET: 11 May 1956

AN/SRA–TYPE

SB–315( )/U

CONTROL PANEL-TELEGRAPH KEY



Control Panel-Telegraph Key SB–315( )/U is used for general electronic control applications aboard ship to accomplish the following operations from a remote location: turning power on or off for an associated radio transmitter, providing a visual indication when the transmitter is on, and permitting keying of the radio transmitter.

This equipment replaces 6-Wire-Telegraph Remote Control Panel 23146. The main improvements are miniature stop-start switches, a new waterproof telegraph key, and general waterproof construction of the panel.

The SB–315/U and SB–315A/U are electrically and mechanically interchangeable; however, the latter is protected to withstand 100 hours of salt spray.

AN/SRA–TYPE

INSTRUCTION LITERATURE: NAVSHIPS 92038

USING SERVICE: USN

DATE OF THIS SHEET: 11 May 1956

SB–315( )/U

CONTROL PANEL-TELEGRAPH KEY

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

TYPE MODULATION: Fm (F1).

TYPE OF SIGNAL: Fsk.

POWER REQUIREMENTS: .250 w 115/2300 v, 60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	4 7/16 x 5 1/2 x 8 3/8	2			
DOMESTIC PACK:		3.5	.25		1
EXPORT PACK:					

STATUS: Std

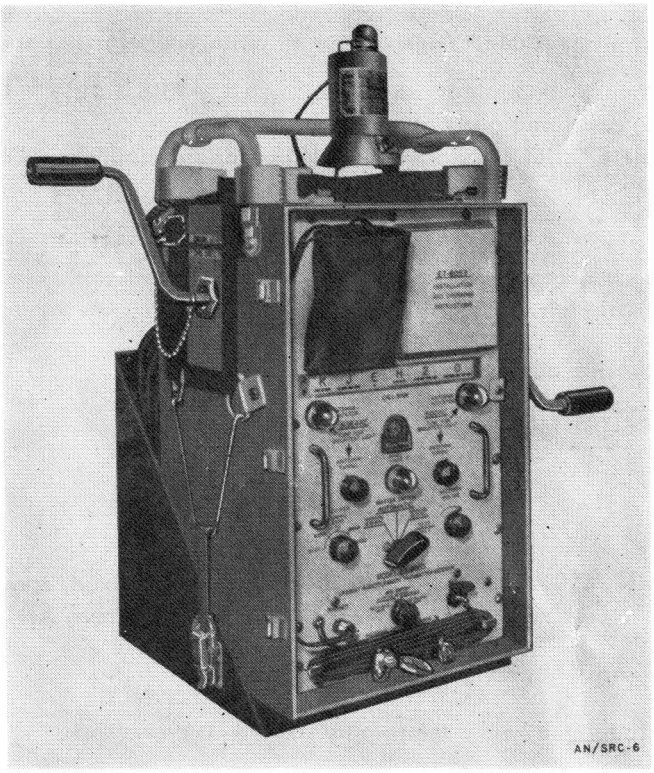
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

AN/SRC–6( )

RADIO SET



Radio Set AN/SRC–6 (Radiomarine Model ET–8053) and Radio Set AN/SRC–6A (Mackay Type 401–A) are portable radiotelegraph transmitters and receivers, powered by a built-in hand-driven generator, for emergency use in lifeboats or other survival craft.

This equipment consists of a transmitter and receiver with a built-in hand generator and an antenna system.

Automatic or manual keying is provided to transmit twelve 4-second dashes with 1-second pauses followed by three distress signals on 500 kc, and three distress signals followed by a 30-second dash for direction finding on 8,364 kc.

Two-way communication can be accomplished by manual keying only.

The AN/SRC–6 and AN/SRC–6A are generally interchangeable as to purpose and use.

AN/SRC–6( )

RADIO SET

INSTRUCTION LITERATURE: NAVSHIPS 92207; Commercial Instruction Book

USING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Watertight case containing transmitter, receiver, and hand generator	20½ x 12½ x 14 7/16	58.5

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Survival craft.

INSTALLATION: Shipborne; portable.

APPROXIMATE RANGE (IN MILES): 25 to 100.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .5 or 8.364 (xmtr); .5 (fixed, rcvr); 8.25 to 8.75 (rcvr, AN/SRC–6); 8.266 to 8.745 (rcvr, AN/SRC–6A).

TYPE MODULATION: Am (A1: rcvr; A2: rcvr, xmtr).

TYPE OF SIGNAL: Modulated keyed telegraphy (rcvr, xmtr); cw (rcvr).

POWER OUTPUT:

AN/SRC–6: 2 w on .5 mc, 5 w on 8.364 mc.

AN/SRC–6A: 1.7 w (min) on .5 mc; 4 w (min) on 8.364 mc.

POWER REQUIREMENTS: Built-in hand generator.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	20½ x 12½ x 14 7/16	58.5	2.15		
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

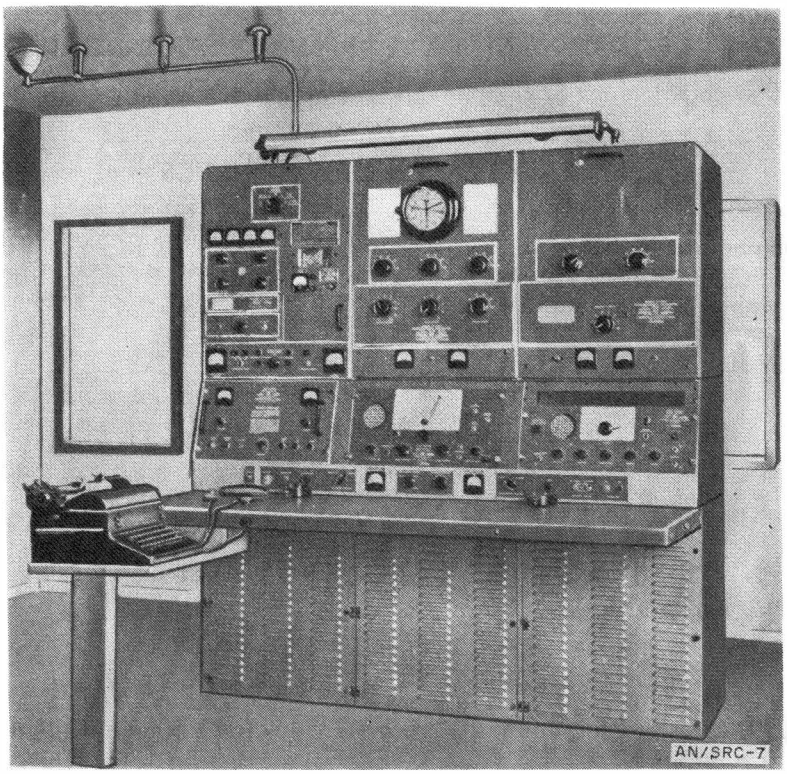
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 26 June 1956

AN/SRC-7

RADIO SET



Radio Set AN/SRC-7 (Radiomarine Model 5U) is a self-contained radiotelegraph communication set providing medium- and high-frequency emergency communication facilities.

This equipment consists of two medium-frequency transmitters (one main and one emergency), an hf transmitter, an hf receiver, one receiver that can receive in both the low- and medium-frequency bands, an auto alarm, an auto alarm keyer, control panels, power components, antennas, and accessories.

The main medium-frequency transmitter and the hf transmitter are cystal-controlled. The emergency transmitter is master-oscillator controlled. The emergency transmitter is operated from a 12-volt storage battery (through a battery charger from the ship's line under normal conditions). The low- and medium-frequency receiver operates from a 12-volt storage battery and a 90-volt B battery, under emergency conditions; normally it is operated from the ship's line as does the rest of the equipment.

This equipment can be operated on ships that have either ac or dc power or a combination of the two.

AN/SRC-7

RADIO SET

INSTRUCTION LITERATURE: Commercial Instruction Book

USING SERVICE: USA

DATE OF THIS SHEET: 26 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne; fixed stations.

APPROXIMATE RANGE: Extended.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .015 to .65 (low- and medium-freq rcvr); .085 to .55, 1.9 to 25 (hf rcvr); .35 to .515 (main and emer xmtr); 2 to 24 (hf xmtr).

TYPE MODULATION: Am (A1, A2).

TYPE OF SIGNAL: Cw, mcw.

POWER OUTPUT: 40 w (mcw, emer xmtr); 200 w (cw), 250 w (mcw) (main medium-freq xmtr); 300 w (cw, hf xmtr).

POWER REQUIREMENTS: 115 v, 17.4 amp, 60 cy, 1 ph ac (Code A); 115 v, 11.3 amp dc (Code A); 115 v, 22 amp, 60 cy, 1 ph ac (Code B); 115 v, 32 amp dc (Code C); 230 v, 22 amp dc (Code D). For operation from 220 or 440 ac, a step-down transformer is used; dc is supplied by a rotary converter.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

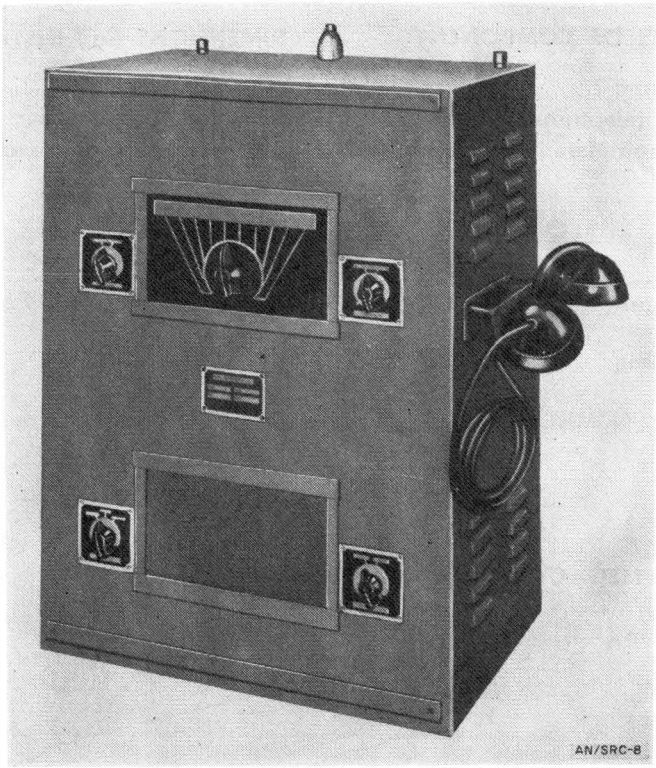
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 26 June 1956

AN/SRC–8( )

RADIO SET



Radio Set AN/SRC–8( ) (Ray Jefferson, Inc. Model 914 Radio Telephone) provides medium-frequency, two-way, ship-to-shore, and ship-to-ship radiotelephone service for ships in coastwise waters.

This equipment consists of a transmitter, a receiver, an antenna, accessories, and power components.

The AN/SRC–8 and the AN/SRC–8X operate from a 115-volt dc and ac power source, respectively; the AN/SRC–8XX, AN/SRC–8Y, and AN/SRC–8Z operate respectively from 12-volt, 32-volt, and 24-volt batteries.

AN/SRC-8( )

RADIO SET

INSTRUCTION LITERATURE: Commercial Instruction Book

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 26 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Antenna		
1	Radiotelephone unit		
	(For complete list of components, see appropriate supply manuals.)		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 to 3 (10 xtal-cont chan).

TYPE MODULATION: Am (A3).

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 65 w.

POWER REQUIREMENTS: 115 v, 60 cy ac (-8X); 12 v dc (-8XX); 24 v dc (-8Z); 32 v dc (-8Y); 115 v dc (-8).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:					

STATUS:

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 26 June 1956

AN/SRC–9

RADIO SET

NO PHOTOGRAPH AVAILABLE

Radio Set AN/SRC–9 (Mackay Type 402–A) is a nonportable, rugged, compact, lifeboat radiotelegraph transmitter-receiver designed for communication between survival craft and rescue vessels in the international distress frequency band and in the long-range frequency band of 8,346 kc. The transmitter design assures effective use by personnel not trained in radio communication.

This equipment provides manual keying for sending distress signals, communication, and automatic keying that transmits sequences of the International Auto Alarm Signal and SOS signals on 500 kc, followed on 8,364 kc by more SOS signals and by a long dash for direction-determining receivers.

All power required for operation of the equipment can be provided by a 12-volt dc storage battery.

AN/SRC-9

RADIO SET

INSTRUCTION LITERATURE: NAVSHIPS 92364

USING SERVICE: USA, USN

DATE OF THIS SHEET: 26 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Survival craft.

INSTALLATION: Shipborne; fixed stations.

APPROXIMATE RANGE (IN MILES): 50 to 200.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES:

Receiver: .492 to .508 (fixed tuned); 8.1 to 8.9 (tunable).

Transmitter: .5, 8.364 (fixed tuned, xtal cont).

TYPE MODULATION: Am (A1, A2).

TYPE OF SIGNAL: Cw, mcw.

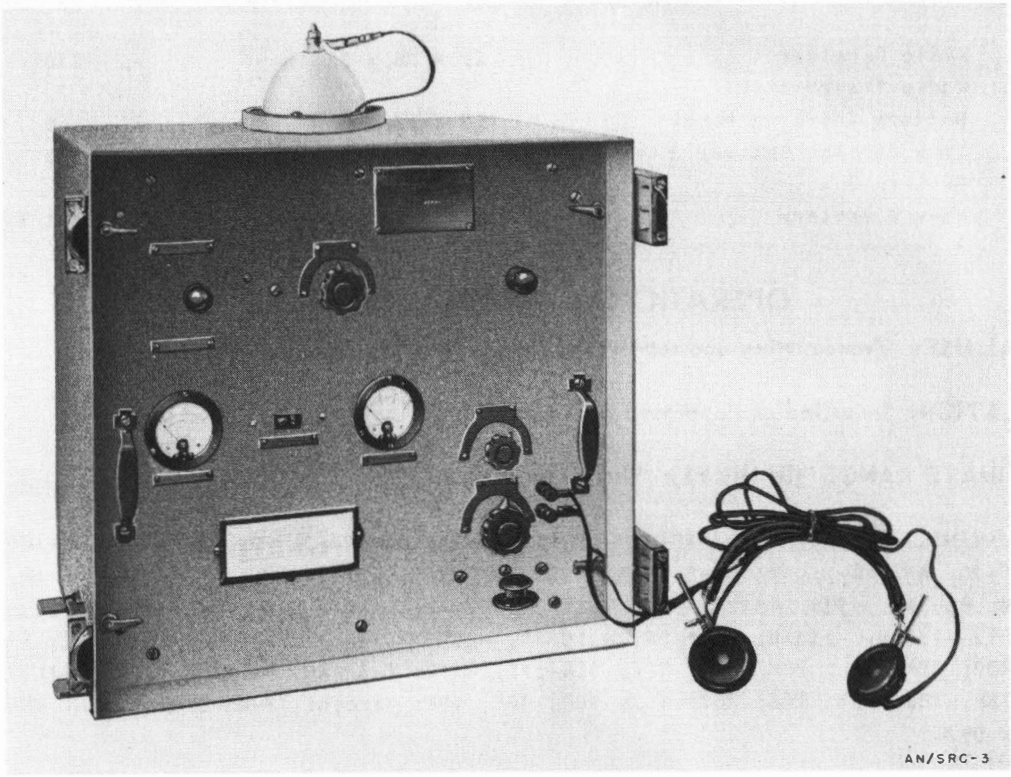
POWER OUTPUT: 30 w (min) into 10 ohms and 100 $\mu\mu$f (500 kc); 40 w (min) into 40 ohms (8,364 kc).

POWER REQUIREMENTS: 12 v, 32 amp dc.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	22 x 21 x 15	92	4.01		
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 15 Feb 52	**AN/SRC-3** RADIO SET



Radio Set AN/SRC-3 is a crystal-controlled, fixed frequency, transmitting and receiving equipment which operates in the distress-frequency range for a-m (cw) communication from lifeboats.

This equipment consists of a single unit containing transmitting and receiving components and includes a charging panel, batteries, and headphones.

It can be used for distress (SOS) signaling or for emergency cw communication by means of the telegraph hand key on the front panel. It uses a conventional long-wire type of antenna.

Power is furnished by 1 storage battery and a 45-v dry cell.

AN/SRC-3

RADIO SET

INSTRUCTION LITERATURE: None
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army, Navy
DATE OF THIS SHEET: 15 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver)	21 x 18 x 22	110
1	Radio Transmitter)		
1	Battery Charging Panel	12 x 12 x 8	9
2	12-v Storage Battery & Battery Box	19-3/4 x 33-3/8 x 12	330
1	45-v B Battery	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Transmitting and receiving signals from lifeboat.

INSTALLATION: Installed and operated in lifeboat.

APPROXIMATE RANGE (IN MILES): Short and medium.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/ART-13; AN/CRT-3, -5; AN/FRT-19; AN/GRT-2; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/SRT-1, -3; AN/TRQ-1; AN/URR-23; AN/URT-2, -3, -4; BC-191, -314, -329, -344, -348, -365, -453; MBS; R-62/PR, -129/U, -203/SR, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -388/URR; RAK; RAL; RAS; RBA; RBB; RBH; RBL; RBM; RCH; RDF; SCR-177, -274; T-5/FRC, -171/FR; TAB; TAJ; TAQ; TBL; TBN; TBU; TBW; TCE; TCY; TCZ; TDD; TDE; TDK; Marconi TH-41-B; National HRO-50; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmitter: 0.5.
Receiver : 0.35 - 0.55.

TYPE MODULATION: Am.

TYPE OF SIGNAL: lcw and cw.

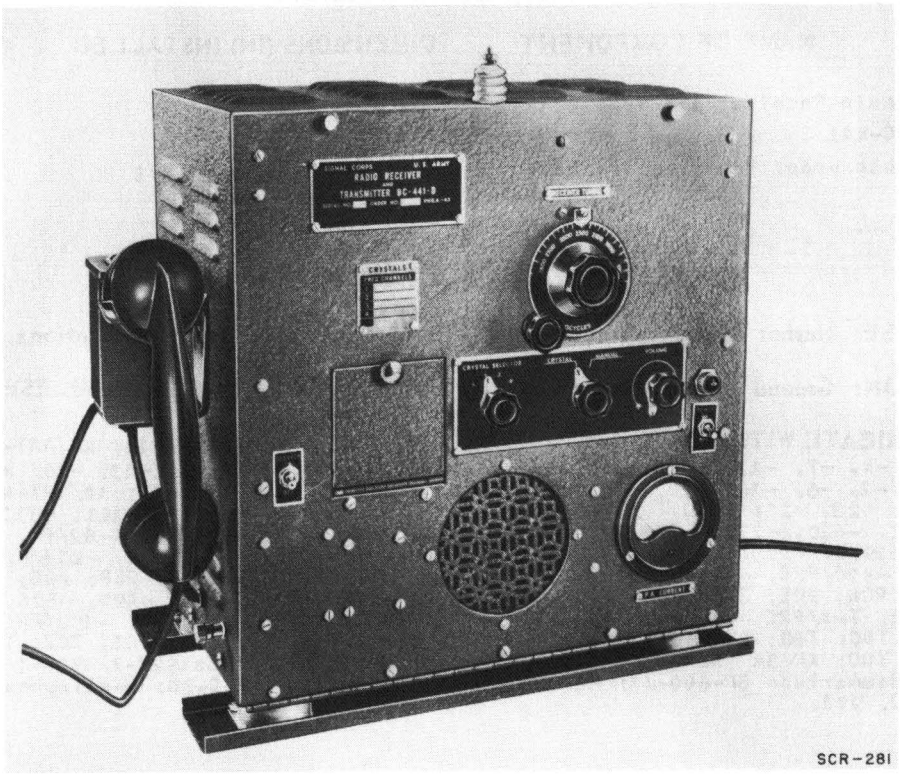
POWER OUTPUT: 50 w.

POWER REQUIREMENTS: 2 each 12-v storage batteries and one 45-v B battery.

PHYSICAL CHARACTERISTICS

Information on Radio Set AN/SRC-3 not available.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 30 Jan 52	**AN/SRC-TYPE** SERVICE TYPE NUMBER: SCR-281 RADIO SET



Radio Set SCR-281 is a medium-power, crystal-controlled a-m (voice) transmitting and receiving equipment used for ship-to-ship, ship-to-shore, and shore station communication is coastwise and harbor-control applications.

This equipment consists of a radio transmitter and a radio receiver assembled within a single metal cabinet which may be installed on the floor or deck, or on a shelf of platform. It has a shock mounting and a handset, and the receiver section includes an integral loudspeaker.

It can be operated in four-channel preselected by means of appropriate plug-in crystals and includes provision for control of transmitter-receiver change-over by means of the press-to-talk switch of the handset.

It can use a conventional long-wire antenna or equivalent system but can be operated by means of a whip-type array 35 feet in length.

Operates from 115-v ac.

AN/SRC-TYPE

SCR-281 :SERVICE TYPE NUMBER
RADIO SET

INSTRUCTION LITERATURE: TM 11-244
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 30 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver and Transmitter BC-441	16 x 10 x 16	102
2	Shockproof Mounting Brackets	1-1/2 x 2-1/2 x 17-7/8	4

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Harbor control, shore-to-ship, ship-to-shore, and similar applications.

INSTALLATION: Ground or shipboard, fixed. **APPROXIMATE RANGE (IN MILES):** 10 - 25.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBG; RBH; RBM; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; SCR-177, -188, -193. -244, -281, -399, -499, -506, -543, -593, -607, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -173/FR, -177/FR, -180/FR; TBK; TBL; TBM; TBN; TBO; TBU;TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCO; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.7 - 2.75.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice only.

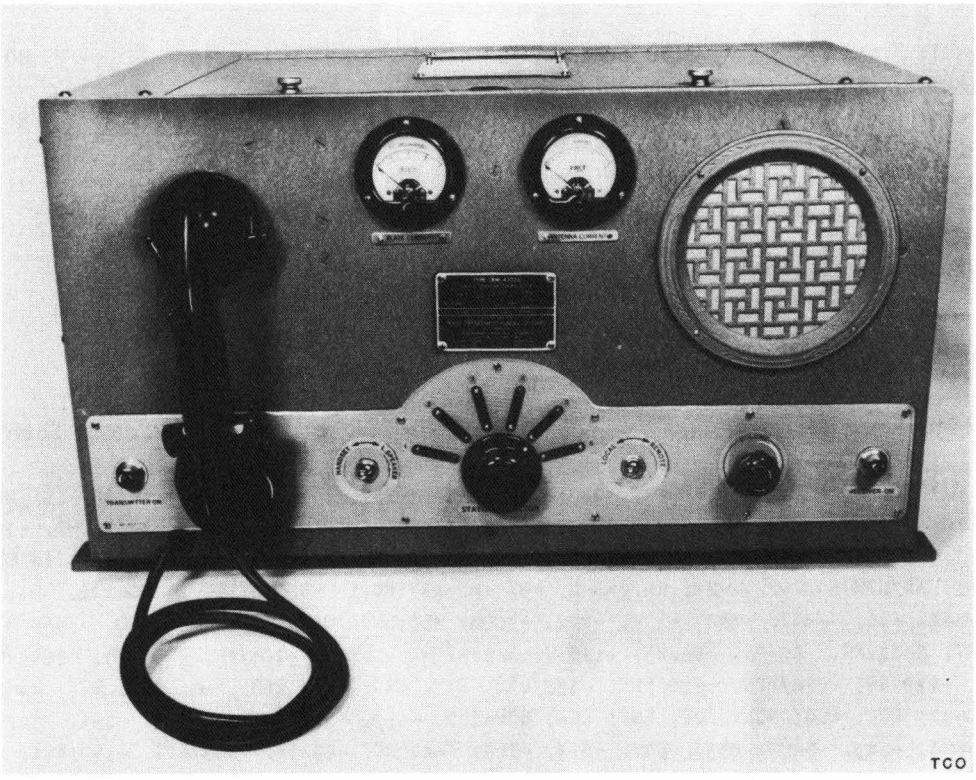
POWER OUTPUT: 25 w.

POWER REQUIREMENTS: Transmitter: 230 w)
Receiver : 107 w) of 115 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Set SCR-281 weighs 102 pounds net, volume 1.5 cu ft. Packed for export shipment: total weight 143 pounds, total volume 6 cu ft.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 May 52	**AN/SRC-TYPE** SERVICE TYPE NUMBER: TCO, TCO-1 through -4 RADIO TELEPHONE TRANS & REC EQUIP



TCO

Radio Telephone Transmitting and Receiving Equipments TCO, and TCO-1 through -4 are m-f, a-m (voice) medium-power radiotelephone equipments for ship-to-ship and ship-to-shore communication. A selective ringer may be added to enable a local coastal harbor station to ring a bell aboard ship on which set is installed.

Provision is made for remote operation of the transmitter-receiver after the set has been turned on, and the desired frequency selected.

Six preset crystal-controlled channels are available.

This equipment is designed to be used with either a "T", "L", or vertical rod antenna. The "T" or "L" types should be from 25 to 35 feet long.

AN/SRC-TYPE

TCO, TCO-1 through -4 :SERVICE TYPE NUMBER
RADIO TELEPHONE TRANS & REC EQUIP

INSTRUCTION LITERATURE: NavShips 95314; 95315
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter-Receiver CRM-43008, -43026, -43026-A, -43026-B	13-3/16 x 24 x 18-3/16	80
1	Power Unit CRM-21563* -21564** -21565***, -20120****,-21554*****	12-7/8 x 22 x 5	44
1	Remote Control Unit CRM-23229, -23229-A	10-3/8 x 13-5/8 x 5-3/8	11

*12-v, dc operation. **32 v, dc operation.
***115-v, dc. ****230-v, dc operation.
*****115-v, 60 cyc, 1 phase, ac.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne. APPROXIMATE RANGE (IN MILES): Short to medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -608/FRT; R-62/PR, -80/PR, -96/SR, -129/U, R-203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK;TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCO; TCP;TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88(RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: TCO, TCO-1: 2.0 - 3.0
TCO-2, -3 and -4: 2.0 - 3.5.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 25 w.
Receiver: 50 mw to loudspeaker.

POWER REQUIREMENTS: 345/384 w, 12/32/115/220 v, dc; or 345 w, 115 v, 60 cyc, 1 phase, ac.

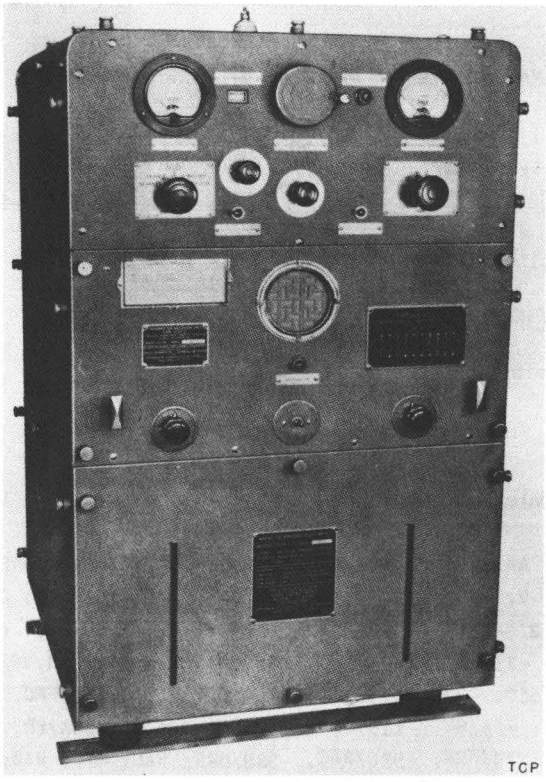
PHYSICAL CHARACTERISTICS

Information on Radio Telephone Transmitting and Receiving EquipmentsTCO, TCO-1 through -4 not available.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 2 May 52

AN/SRC-TYPE

SERVICE TYPE NUMBER: TCP, TCP-1, -2
RADIO TELEPHONE TRANS & REC EQUIP



TCP

Radio Telephone Transmitting and Receiving Equipments TCP, TCP-1 and -2 are compact, medium power, m-f, transmitter-receivers for shipboard use in ship-to-ship or ship-to-shore radiotelephone communication.

A selective ringer may be used with this equipment to enable a shore station to signal the operator by ringing a bell aboard the ship.

Ten preset crystal-controlled transmitting and receiving channels are provided.

A single vertical-wire antenna 25 to 35 feet in length is used.

Transmitter-receiver components are available for operation from 32- or 115-v, d-c power sources.

AN/SRC-TYPE

TCP, TCP-1, -2 :SERVICE TYPE NUMBER

RADIO TELEPHONE TRANS & REC EQUIP

INSTRUCTION LITERATURE: NavShips 95316, 95317
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET: 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter-Receiver Unit CRM-43009*, 43009-A*, 43010**, 43010-A**	37 x 20-1/8 x 22	310
1	Remote Control Unit CRM-23230	10-1/4 x 13-5/8 x 5-3/8	11
1	Line Filter Unit CRM-53076*, 53077**,	10 x 6-1/2 x 6	6
	53085*, 53086**	10-9/16 x 9-3/8 x 3-5/8	9

* 32 v, d-c power source
**115, v d-c " "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard stations.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, 26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -608/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 3.0.

TYPE MODULATION: Am. **TYPE OF SIGNAL:** Voice.

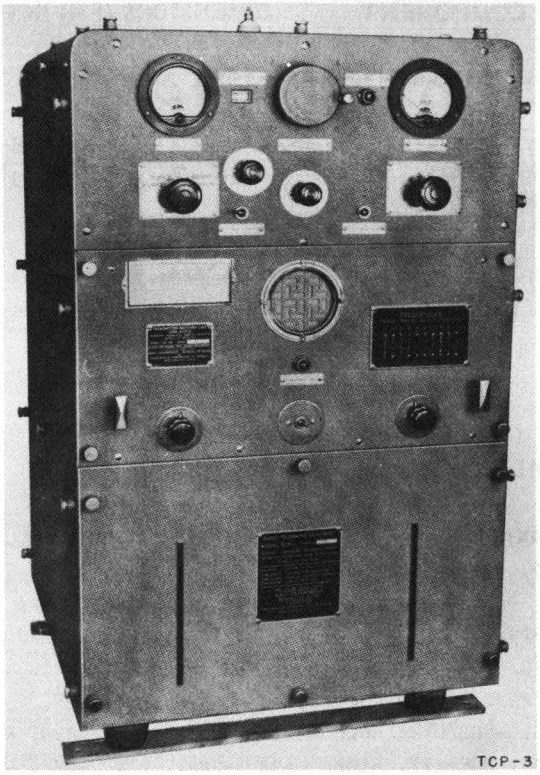
POWER OUTPUT: Transmitter: 75 w. Receiver: 1 w.

POWER REQUIREMENTS: 832 w, 32 v, dc; or 920 w, 115 v, dc.

PHYSICAL CHARACTERISTICS

Radio Telephone Transmitting and Receiving Equipments TCP, TCP-1, -2 measure 37 x 20-1/8 x 22 inches.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 2 May 52	AN/SRC-TYPE SERVICE TYPE NUMBER: TCP-3 RADIO TELEPHONE TRANS & REC EQUIPMENT



Radio Telephone Transmitting and Receiving Equipment TCP-3 is a compact, medium-power m-f transmitter-receiver for shipboard use in ship-to-ship, and ship-to-shore radiotelephone communication.

A selective ringer may be used with this equipment to enable a shore station to signal the operator by ringing a bell aboard the ship.

Ten preset crystal-controlled transmitting and receiving channels are provided.

A single vertical-wire antenna 25 to 35 feet in length should be used.

TCP-3 is available for operation from 32, 115, or 230-v dc; or 115-v, 50/60 cyc, ac.

AN/SRC-TYPE

TCP-3 :SERVICE TYPE NUMBER

RADIO TELEPHONE TRANS & REC EQUIPMENT

INSTRUCTION LITERATURE: NavShips 95318
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (I N) INSTALLED	WEIGHT (LBS)
1	Transmitter-Receiver Unit CRM-43010-A* 43009-A**, 43061***, 43062****	37 x 20-1/8 x 22	310
1	Remote Control Unit CRM-23230	10-1/4 x 13-5/8 x 5-3/8	11
1	Line Filter Unit CRM-53086*, CRM-53085** or 53192***	10-9/16 x 9-3/8 x 3-5/8	9

* 115-v dc. ** 32-v dc.
*** 230-v dc. ****115-v, 50/60 cyc, 1 phase, ac.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -608/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 3.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 75 w.
Receiver: 1 w.

POWER REQUIREMENTS: 830 w, 32 v, dc; or
920 w, 115 - 230 v, dc; or
690 w, 115 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Telephone Transmitting and Receiving Equipment TCP-3 measures 37 x 20-1/8 x 22 inches.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 8 Jan 52	**AN/SRR-3** RADIO RECEIVING SET



Radio Receiving Set AN/SRR-3 is a medium-range, a-m (voice, cw, and mcw) receiving equipment for radiotelephone and radiotelegraph communication in the l-f, m-f, and h-f ranges and is used on shipboard and at fixed shore stations.

This equipment consists essentially of a radio receiver, power supply components, a loudspeaker, and accessories. It is contained in a table model steel cabinet equipped with a shock mount.

It can be removed from its cabinet for rack and panel installation.

This set uses a single long wire or balanced feed line antenna system and is a-c operated.

AN/SRR-3

RADIO RECEIVING SET

INSTRUCTION LITERATURE: None
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver Model SLR-F	21 x 20-13/16 x 13-7/8	106
1	Inverter Model 262	8 x 10-7/16 x 8-11/16	28
1	Speaker (PM) Model SPM-8	10-1/2 x 5 x 9-3/16	6.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: European Theater of Command, fixed stations, shipboard.

INSTALLATION: Fixed station, shipboard, or shore fixed station.

APPROXIMATE RANGE (IN MILES): Medium to long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-4, -5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRT-1, -3, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -329, -339, -365, -401, -447, -610; MBS; MQ; OA-60/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCG; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES:

Band 1: 0.08 — 0.22.
Band 2: 0.21 — 0.56.
Band 3: 1.90 — 5.10.
Band 4: 4.5 — 12.0.
Band 5: 8.8 — 24.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, mcw.

POWER REQUIREMENTS: 85 w, 115 v, 60 cyc ac (0.75 amp).

PHYSICAL CHARACTERISTICS

Radio Receiving Set AN/SRR-3 weighs 140.5 pounds net.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 23 May 52	**AN/SRR-8** RADIO RECEIVING SET

NO PHOTOGRAPH AVAILABLE

Radio Receiving Set AN/SRR-8 is an h-f, general service a-m (cw, mcw, and voice) receiver for shipboard use. It replaces Radio Receiving Equipment RBS.

This equipment is ruggedly constructed for use under adverse conditions.

AN/SRR-8

RADIO RECEIVING SET

INSTRUCTION LITERATURE: BuShips Spec. CS-1114
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 23 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver R-303/SRR-8	11 x 14-1/2 x 17	43
1	Power Supply PP-445/SRR-8	12 x 16 x 10-3/4	56

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 20.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw, cw.

POWER REQUIREMENTS: 115 v, 50/60 cyc, 1 phase.

PHYSICAL CHARACTERISTICS

Radio Receiving Set AN/SRR-8 measures 23 x 16 x 17 inches.

STATUS: L/Std

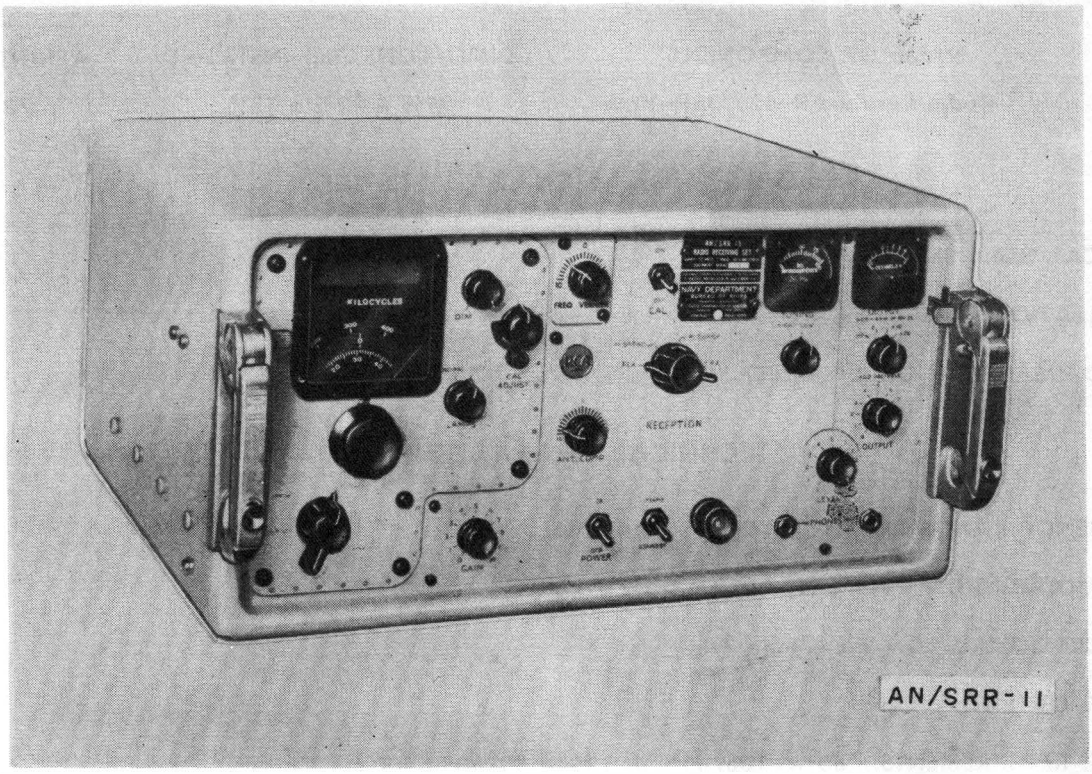
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 9 May 1956

AN/SRR–11

RADIO RECEIVING SET



Radio Receiving Set AN/SRR–11 is a low-frequency, am (cw, mcw, tone) and fm (fsk), double-superheterodyne radio receiver for communication aboard ship.

This equipment differs from Radio Receiving Sets AN/SRR–12 and AN/SRR–13 only in frequency range and types of reception.

It is basically similar to Radio Receiving Sets AN/FRR–18, AN/FRR–21, and AN/MRR–1 except for physical construction and method of mounting. In an emergency, the AN/FRR–21, AN/MRR–1, or AN/SRR–11 may be used as substitute equipment for each other.

AN/SRR-11

RADIO RECEIVING SET

INSTRUCTION LITERATURE: NAVSHIPS 91875(A)

USING SERVICE: USN

DATE OF THIS SHEET: 9 May 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Radio Receiver R-439/SRR-11	29½ x 22⅜ x 13½	73

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .014 to .6.

TYPE MODULATION: Am (A1, A2); fm (F1).

TYPE OF SIGNAL: Cw, mcw, tone (fsk).

POWER OUTPUT:

POWER REQUIREMENTS: 85 w, 105, 115, or 125 v, 50/60 or 400 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	29½ x 22⅜ x 13½	73			
DOMESTIC PACK:		122	4.9		2
EXPORT PACK:					

STATUS: L/Std

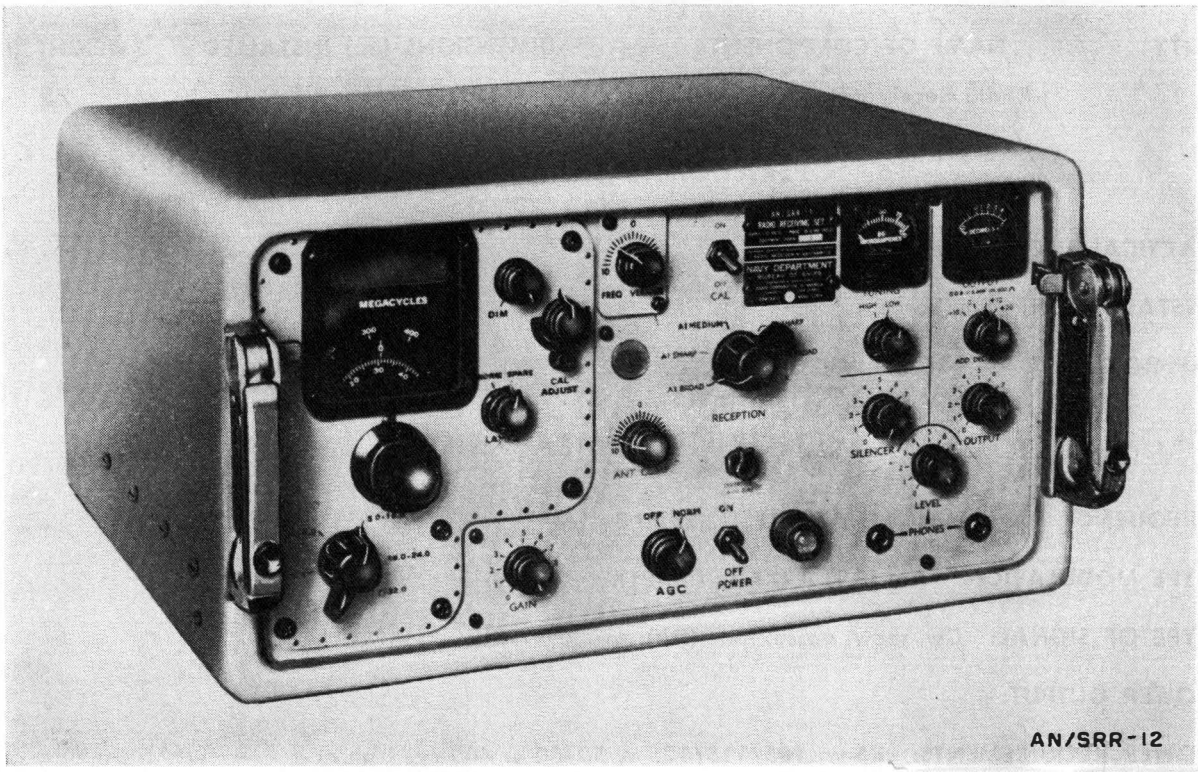
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 9 May 1956

AN/SRR–12

RADIO RECEIVING SET



Radio Receiving Set AN/SRR–12 is a medium-frequency, am (cw, tone, voice) and fm (fsk), double-superheterodyne radio receiver for communication aboard ship.

This equipment differs from Radio Receiving Set AN/SRR–11 in frequency range and types of reception. It is identical with Radio Receiving Set AN/SRR–13 except for frequency range.

The AN/SRR–12 is basically similar to Radio Receiving Sets AN/FRR–22 and AN/MRR–2 except for physical construction and methods of mounting.

AN/SRR-12

RADIO RECEIVING SET

INSTRUCTION LITERATURE: NAVSHIPS 91875(A)

USING SERVICE: USN

DATE OF THIS SHEET: 9 May 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Radio Receiver R-440/SRR-12	18 7/16 x 17 1/4 x 8 23/32	75

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .25 to 8.

TYPE MODULATION: Am (A1, A2, A3); fm (F1).

TYPE OF SIGNAL: Cw, mcw, voice, tone (fsk).

POWER OUTPUT:

POWER REQUIREMENTS: 85 w, 105/115/125 v, 50/60 or 400 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	18 7/16 x 17 1/4 x 8 23/32	75			
DOMESTIC PACK:		152	8.2		2
EXPORT PACK:					

STATUS: L/Std

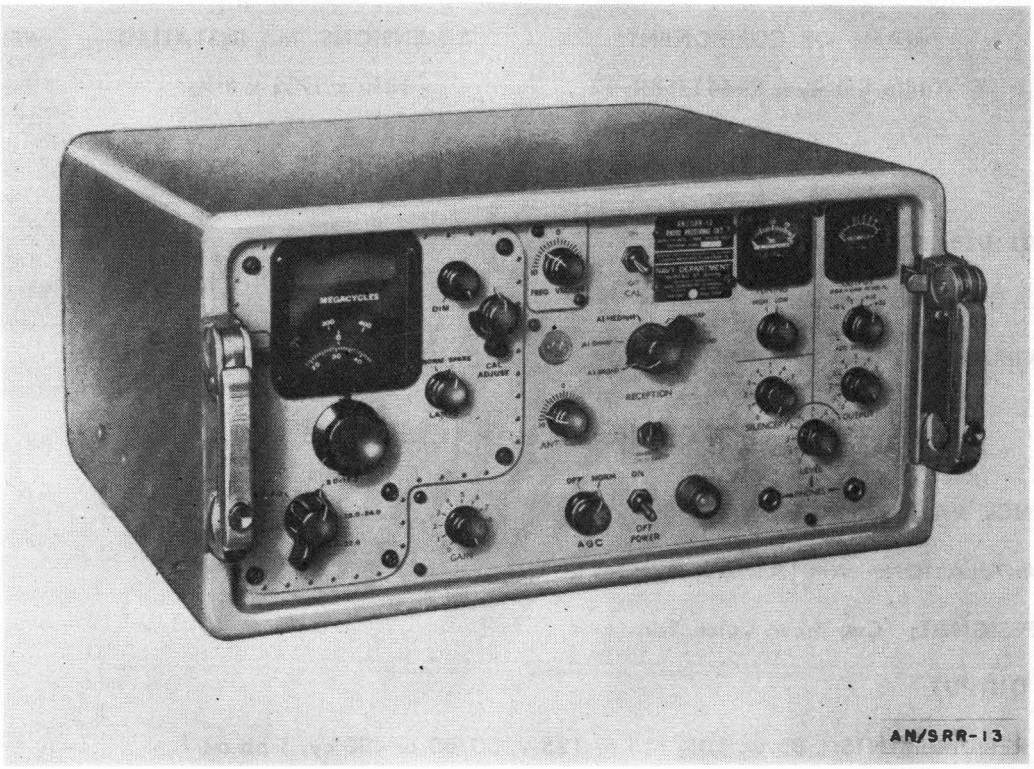
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 10 May 1956

AN/SRR–13

RADIO RECEIVING SET



Radio Receiving Set AN/SRR–13 is a high-frequency, double-superheterodyne radio receiver for shipboard reception of am (cw, voice) and fm (fsk) communication aboard ship.

This equipment differs from Radio Receiving Set AN/SRR–11 in frequency range and type of reception. It is identical with Radio Receiving Set AN/SRR–12 except for frequency range.

The AN/SRR–13 is basically similar to Radio Receiving Sets AN/FRR–19, AN/FRR–23, and AN/MRR–3 except for physical construction and methods of mounting. In an emergency, Radio Receiving Set AN/FRR–23, AN/MRR–3, or AN/SRR–13 may be used as substitute equipment for each other.

AN/SRR-13

RADIO RECEIVING SET

INSTRUCTION LITERATURE: NAVSHIPS 91875(A)

USING SERVICE: USN

DATE OF THIS SHEET: 10 May 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Radio Receiver R-441/SRR-13	18 7/16 x 17 1/4 x 8 23/32	73

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 to 32.

TYPE MODULATION: Am (A1, A2, A3); fm (F1).

TYPE OF SIGNAL: Cw, mcw, voice, fsk.

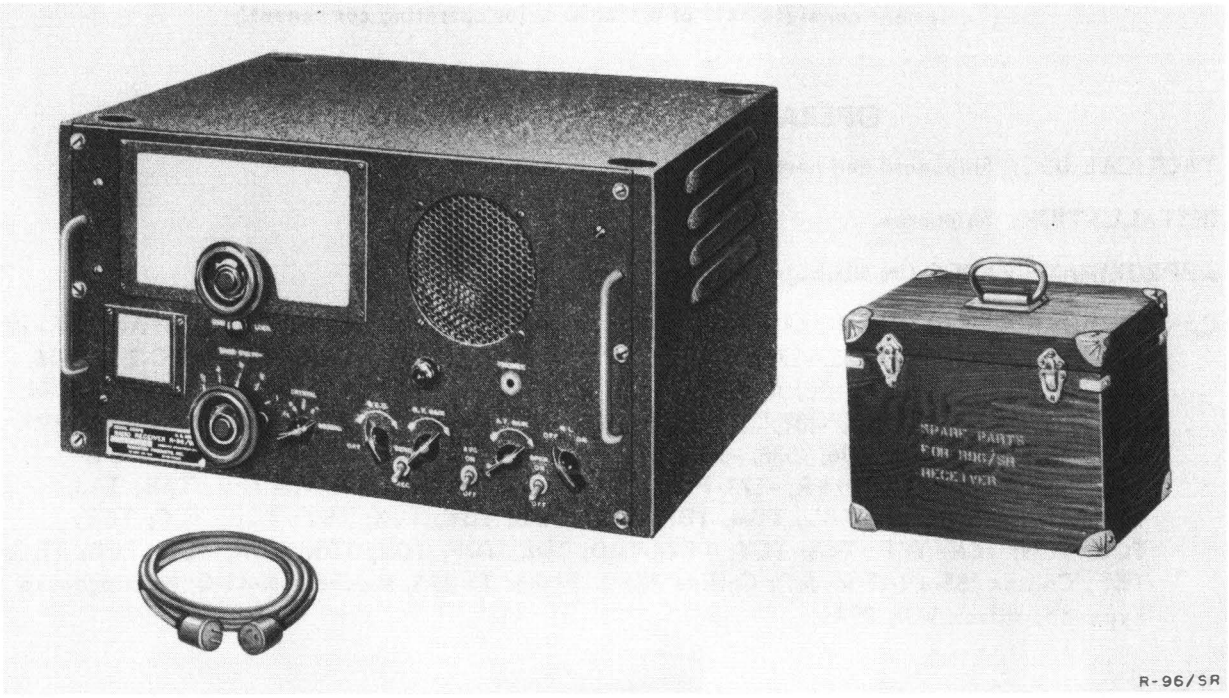
POWER OUTPUT:

POWER REQUIREMENTS: 85 w, 105/115 or 125 v, 50/60 or 400 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	18 7/16 x 17 1/4 x 8 23/32	73			
DOMESTIC PACK:		136	5		2
EXPORT PACK:					

STATUS: Standard	**AN/SRR- TYPE**
CLASSIFICATION OF EQUIPMENT: Unclassified	AN/COMP TYPE NUMBER: R-96/SR
USING SERVICE: Army	RADIO RECEIVER
DATE OF THIS SHEET: 22 Jan 52	



R-96/SR

Radio Receiver R-96/SR is a five-channel, a-m (voice, cw, icw, and mcw) receiving equipment which is used in the low-, medium-, and high-frequency bands in radio operation aboard ship. It may be installed on harbor patrol or seagoing craft.

This equipment consists of a crystal-controlled receiver which is designed to operate in conjunction with Radio Transmitter T-83/SR, to which it may be connected by cables. It has change-over relays in the transmitter to control sending and receiving. These relays are operated by means of the press-to-talk switch in the handset.

Uses a conventional ship's antenna or other suitable array. Operates on 115 v ac or dc.

AN/SRR-TYPE	INSTRUCTION LITERATURE: TM 11-878
	CLASSIFICATION OF EQUIPMENT: Unclassified
R-96/SR :AN/COMP TYPE NUMBER	USING SERVICE : Army
RADIO RECEIVER	DATE OF THIS SHEET: 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard and ports.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-4, -5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-1, -3, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -329, -339, -365, -401, -447, -610; MBS; MQ; OA-60/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCG; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32v-2; Fisher TS 253; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES:

Band 1: 0.135 — 0.26.
Band 2: 0.255 — 0.51.
Band 3: 1.48 — 3.03.
Band 4: 2.97 — 6.06.
Band 5: 5.94 — 12.12.

TYPE MODULATION: AM.

TYPE OF SIGNAL: Voice, cw, icw, mcw.

POWER REQUIREMENTS: 115 v, 50/60 cyc ac. or
115 v dc (0.4 amp) drain.

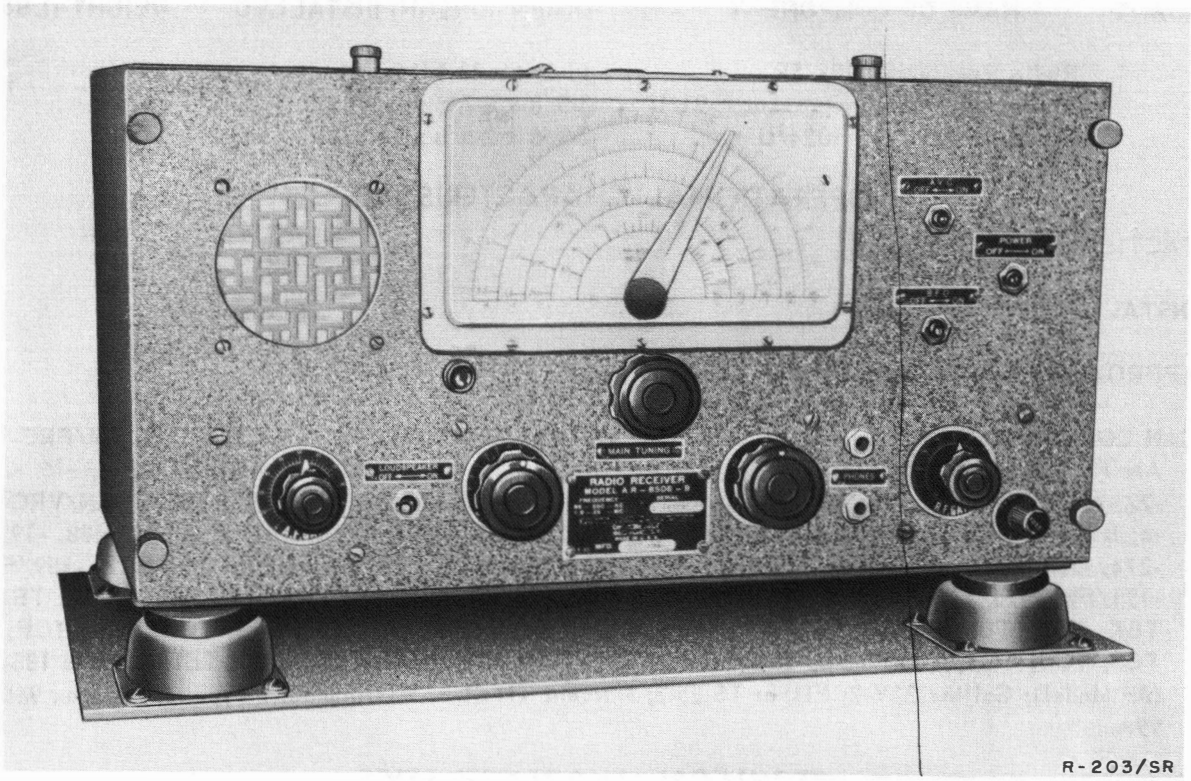
PHYSICAL CHARACTERISTICS

Radio Receiver R-96/SR measures 10 x 20-7/8 x 17-1/2 inches, net weight 87.5 pounds, volume 3 cu ft. Packed for domestic shipment: total weight 160.5 pounds, total volume 7.69 cu ft. Shipped in 1 package.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 22 Jan 52

AN/SRR-TYPE

AN/COMP TYPE NUMBER: R-203/SR
RADIO RECEIVER



Radio Receiver R-203/SR is a table model receiving equipment for a-m (voice and cw) signals in the low-, medium-, and high-frequency bands used in shipborne and similar applications.

This equipment consists essentially of a commercial (RMCA model AR8506-A) marine receiver which is contained in a metal cabinet but which can be removed from the case and installed on a standard relay rack. It has a built-in loudspeaker and includes a headset and accessories.

It can be operated on a ship's antenna or other suitable array.

Operates from 115-v a-c or d-c sources, from 230-v a-c sources, or, by means of the fixed resistor unit included, from 230 v dc.

AN/SRR-TYPE

R-203/SR :AN/COMP TYPE NUMBER
RADIO RECEIVER

INSTRUCTION LITERATURE: TM 11-875
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver R-203/SR	11-3/4 x 13-1/16 x 21	65
1	Electrical Noise Suppressor F-91/U	3-5/8 x 6-7/8 x 7-1/4	6
1	Fixed Resistor MX-1024/U	2-7/8 x 2-5/8 x 11-3/8	1.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Medium-long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-4, -5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -10, -20; AN/SRC-3; AN/SRT-1, -3, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -329, -339, -365, -401, -447, -610; MBS; MQ; OA-60/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCG; TCH; TCK; TCP; TCS; TCU; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES:

Band 1: 0.085 — 0.22.
Band 2: 0.21 — 0.55.
Band 3: 1.9 — 5.4.
Band 4: 5.2 — 12.0.
Band 5: 11.5 — 25.0.

TYPE MODULATION: Am.

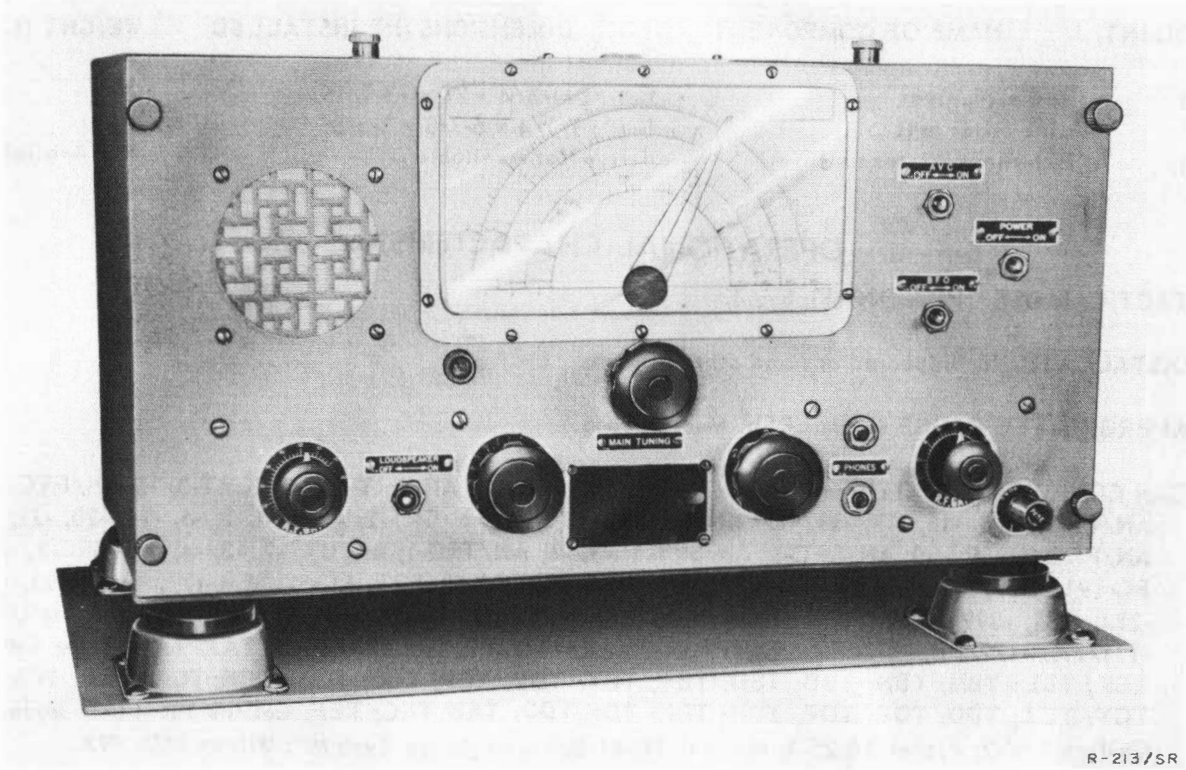
TYPE OF SIGNAL: Voice, tone, cw.

POWER REQUIREMENTS: 45 w, 115 v, 50/60 cyc ac or
90 w, 230 v, 50/60 cyc ac or
115 v dc or ac or, using Fixed Resistor MX-1024/U,
230 v dc or ac.

PHYSICAL CHARACTERISTICS

Radio Receiver R-203/SR weighs 77 pounds net, volume 2.15 cu ft. Packed for domestic shipment: total weight 145 pounds, total volume 12 cu ft. Shipped in 1 package.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 22 Jan 52	**AN/SRR-TYPE** AN/COMP TYPE NUMBER: R-213/SR RADIO RECEIVER



Radio Receiver R-213/SR is a transportable, a-m (voice, tone, and cw) receiving equipment used for communication in the low-, medium-, and high-frequency bands in shipborne and similar marine applications or in fixed land stations.

This equipment is a self-contained, table model radio receiver inclosed in a metal cabinet and provided with a shock mount. It has a built-in loudspeaker and jacks for high- or low- impedance headphones and is provided with a beat-frequency oscillator, automatic or manual volume control, and electrical band-spread tuning.

Operates in four frequency bands and uses a doublet or other suitable antenna array.

Can be operated from either a-c or d-c power.

AN/SRR- TYPE	INSTRUCTION LITERATURE: None
	CLASSIFICATION OF EQUIPMENT: Unclassified
R-213/SR :AN/COMP TYPE NUMBER	USING SERVICE : Army
RADIO RECEIVER	DATE OF THIS SHEET: 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio receiver	11-3/4 x 21 x 13-1/16	63
1	Line filter unit	7-1/4 x 6-7/8 x 3-5/8	5
1	External resistor unit	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Primarily shipboard.

INSTALLATION: Shipboard or fixed station.

APPROXIMATE RANGE (IN MILES): Medium-long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRT-1, -3, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -329, -339, -365, -401, -447, -610; MBS; MQ; OA-60/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES:

Band 1: 0.21 — 0.55
Band 2: 1.90 — 5.40
Band 3: 5.2 — 12.0
Band 4: 11.5 — 25.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, tone, voice.

POWER REQUIREMENTS: 45 w, 115 v ac or dc.
90 w, 250 v ac or dc w/325-ohm, 75-w external resistor unit.

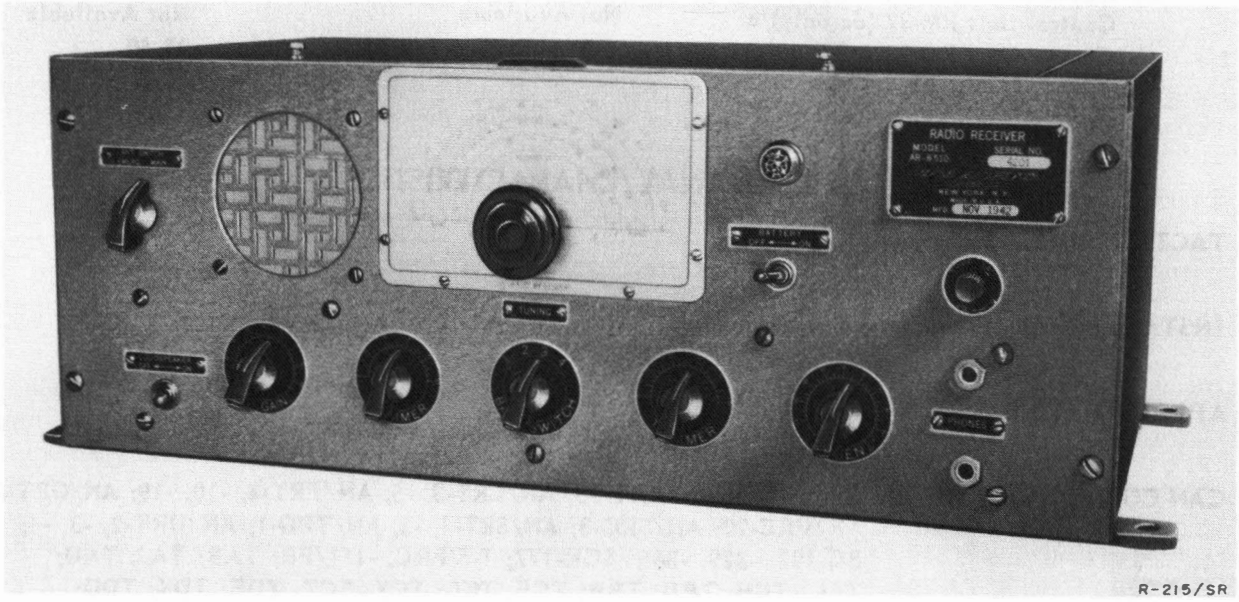
PHYSICAL CHARACTERISTICS

Radio Receiver R-213/SR measures 11-3/4 x 21 x 13-1/16 inches, net weight 68 pounds, volume 2.2 cu ft. Packed for domestic shipment: total weight 100 pounds, total volume 4.5 cu ft.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 15 Feb 52

AN/SRR-TYPE

AN/COMP TYPE NUMBER: R-215/SR
RADIO RECEIVER



R-215/SR

Radio Receiver R-215/SR is a medium-range, a-m (cw and mcw) receiving equipment which operates in the very-low-, low-, and medium-frequency ranges in shipboard or equivalent communicatior applications.

This equipment consists essentially of a commercial (RMCA AR-8510) table model radio receiver and includes a-c or d-c power supply components.

It operates by means of a conventional long wire or ship's antenna.

Operates from 110 v dc,, 115 v ac, or 6-v storage battery plus 90 v of dry battery B supply.

AN/SRR-TYPE	INSTRUCTION LITERATURE: None
R-215/SR : AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVER	USING SERVICE : Army
	DATE OF THIS SHEET : 15 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver R-215/SR	8-1/4 x 22 x 13	39
1	Control Unit RM-37 (dc only) or	Not Available	Not Available
1	Control Unit RM-23-A (ac only)	8-3/8 x 17 x 6-7/8	21.50

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Transports.

INSTALLATION: Fixed ground or shipboard.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-8; AN/ART-13; AN/CRT-3, -5; AN/FRT-4, -10, -19; AN/GRT-2; AN/MRC-20; AN/SRC-3; AN/SRT-1, -3; AN/TRQ-1; AN/URT-2, -3, -4; BC-191, -329, -365; SCR-177; T-5/FRC, -171/FR; TAB; TAJ; TAQ; TBL; TBN; TBU; TBW; TCE; TCG; TCY; TCZ; TDE; TDK; TDO; Marconi TH-41-B; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.015 - 0.65, in 4 bands.

Band 1: 0.015 — 0.038
Band 2: 0.038 — 0.1
Band 3: 0.1 — 0.25
Band 4: 0.25 — 0.65.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw and cw.

POWER REQUIREMENTS: 6-v battery and 90-v battery or 110 v dc or 35 w, 115 v, 60 cyc ac.

PHYSICAL CHARACTERISTICS

Radio Receiver R-215/SR weighs 50.5 pounds net.

STATUS: Std

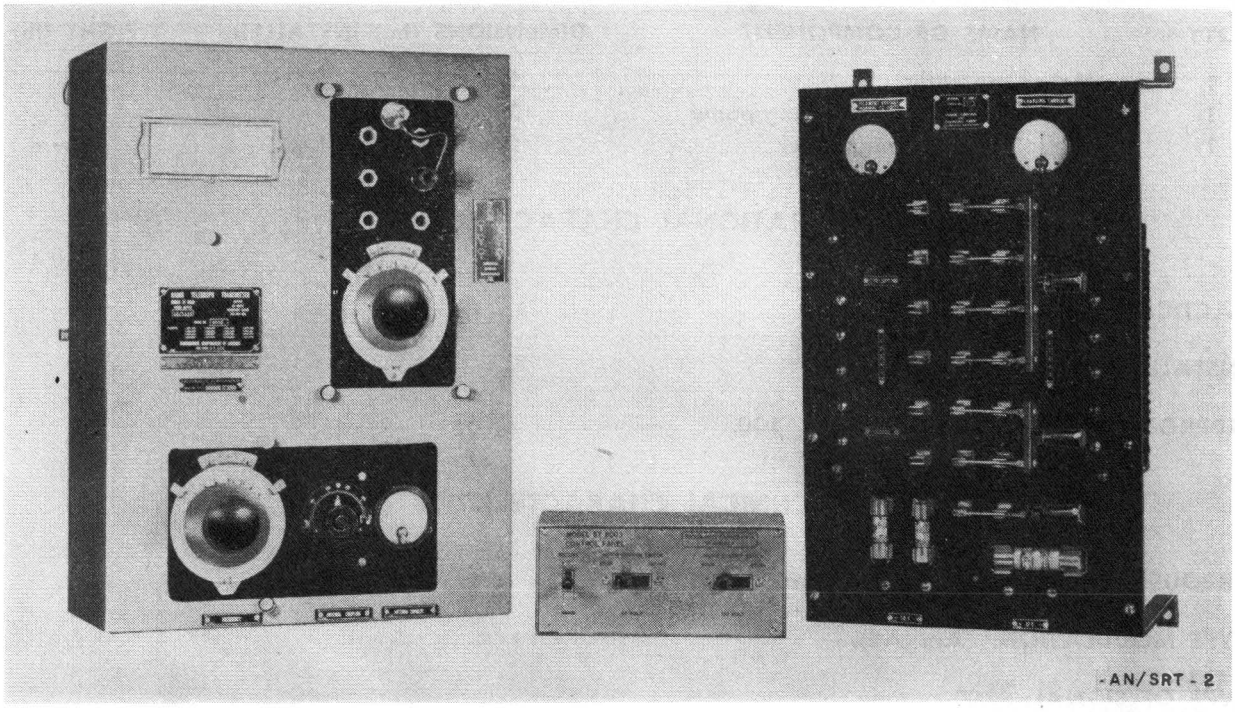
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 15 June 1956

AN/SRT–2

RADIO TRANSMITTING SET



Radio Transmitting Set AN/SRT–2 is used on small boats as the main or emergency transmitter. It is operated in the standard international medium frequency band for ship-to-ship and ship-to-shore communication.

This equipment consists essentially of a commercial (Radiomarine Model ET 8003) radiotelegraph transmitter and can be operated from a 110-volt dc power source or from a 12-volt storage battery capable of supplying 45 amperes for a 6-hour period.

AN/SRT–2

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: TM 11–831

USING SERVICE: USA

DATE OF THIS SHEET: 15 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Motor generator	9⅛ x 30 x 9¼	128
1	Power control and charging panel	21 x 12 x 9½	24
1	Radiotelegraph transmitter	20⅞ x 15⅞ x 11⅛	26

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): 100.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .355 to .5.

TYPE MODULATION: Am (A2).

TYPE OF SIGNAL: 700-cy tone.

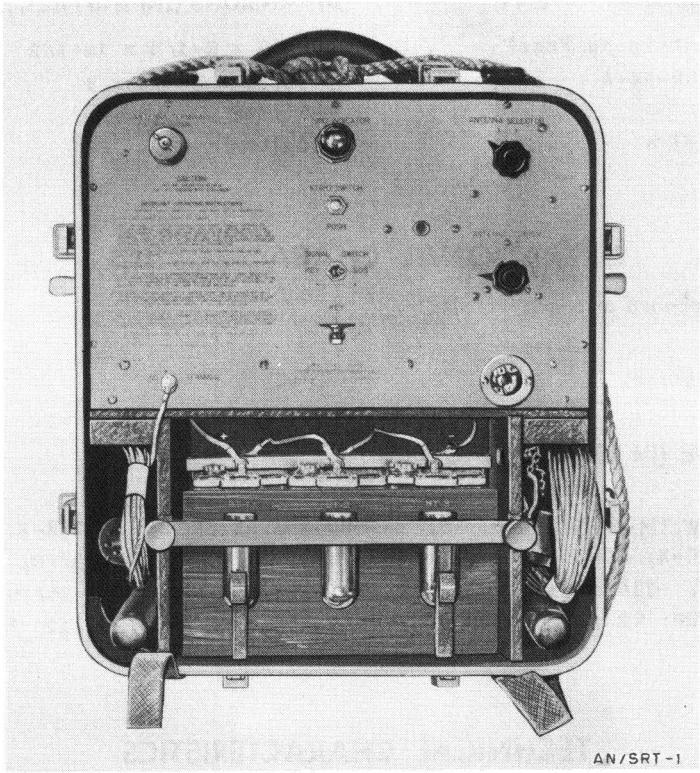
POWER OUTPUT: 30 w.

POWER REQUIREMENTS: 12 v, 45 amp dc or 110/115 v, 4 amp dc.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		195			
DOMESTIC PACK:		330			2
EXPORT PACK:					

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 8 Jan 52	**AN/SRT-1** RADIO TRANSMITTING SET



Radio Transmitting Set AN/SRT-1 is a compact, fixed-frequency, single-channel, a-m radio receiver designed for operation in the distress-frequency band by means of c-w and i-c-w signals. It is designed to be carried on shipboard for use in life-saving rafts and similar craft but may be used for emergency c-w communication.

This equipment consists of a radio receiver having a built-in telegraph key (for manual code transmission). It includes a 6-v storage battery, conventional and phantom antenna, and related accessories.

This set can be arranged for automatic transmission of SOS signals, plus a long dash, 6 times in 2 minutes, and will then shut down. Can be operated once each hour for 48 hours without recharge of battery.

AN/SRT-1

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: TM 11-830
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army, Navy
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Battery Charging Panel	20-1/4 x 8-1/4 x 14-1/2	16
1	Battery BB-54-A	3-31/32 x 5-1/2 x 3	4.50
1	Rope	480 (long)	1.75
2	Antenna Wire	600 (long)	1.875

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or rescue craft.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): 50 to 100.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/URR-23; AN/VRC-4; BC-314, -344, -348, -453, -779; MBS; R-62/PR, -96/SR, -129/U, -203/SR, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -388/URR; RAK; RAL; RAS; RBA; RBB; RBH; RBL; RBM; RCH; RDF; SCR-177; ARC Type 12; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.5.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw and icw.

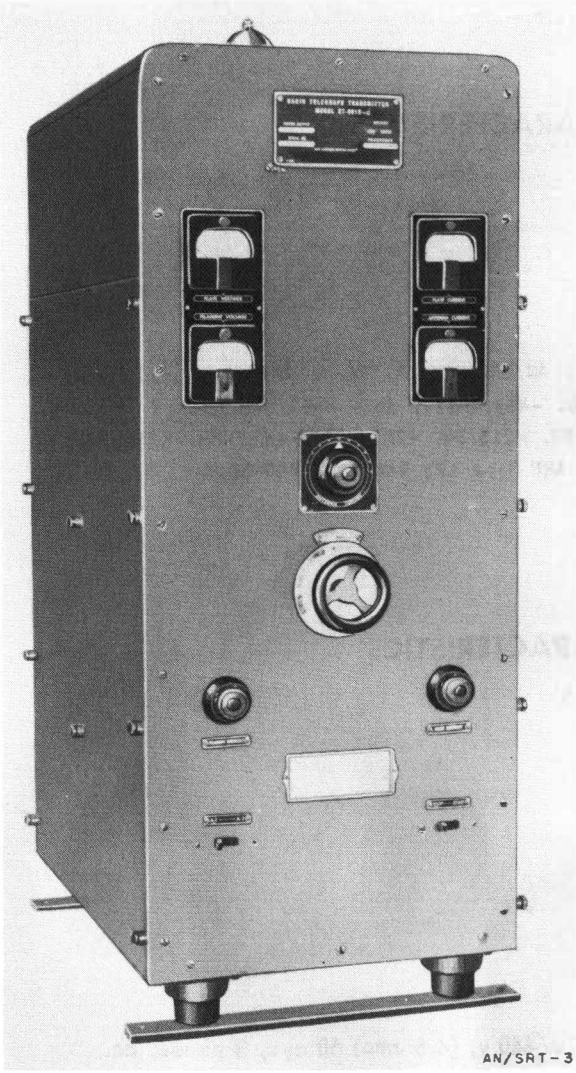
POWER OUTPUT: 5 w.

POWER REQUIREMENTS: 6 v, (16 amp) dc (storage battery).

PHYSICAL CHARACTERISTICS

Radio Transmitting Set AN/SRT-1 measures 18 x 16 x 12 inches, net weight 60 pounds, volume 2 cu ft. Packed for domestic shipment: total weight 150 pounds, total volume 10.3 cu ft. Packed for export shipment: total weight 190 pounds, 11.46 cu ft. Shipped in 2 packages both domestic and export.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 8 Jan 52	**AN/SRT-3** RADIO TRANSMITTING SET



AN/SRT-3

Radio Transmitting Set AN/SRT-3 is a medium-power, medium-range, crystal-controlled a-m (cw and mcw) transmitting equipment for ship-to-ship and ship-to-shore communication in the intermediate-frequency range.

This equipment consists of a floor-type transmitting assembly which is fitted with shock-mountings and includes a motor generator, plus associated components.

It can be used in emergencies by adding an emergency panel and a small dynamotor.

Operates in eight preset frequency channels and uses the normal ship's antenna system.

AN/SRT-3

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: None
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Motor Generator	14-1/8 x 27-3/4 x 9-3/4	225
1	Transmitter	44-3/4 x 17-3/8 x 28-3/4	200

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Fixed station.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: A N/ARC-5, -9; AN/GRR-3; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/URR-23; AN/VRC-4; BC-314, -344, -348, -453, -779; MBS; R-62/PR, -96/SR, -129/U, -203/SR, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -388/URR; RAK; RAL; RAS; RBA; RBB; RBH; RBL; RBM; RCH; RDF; SCR-177; ARC Type 12; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.35 - 0.515.

TYPE MODULATION: Am.

TYPE OF SIGNAL: cw, and mcw.

POWER OUTPUT: Mcw: 300 w; cw: 200 w.

POWER REQUIREMENTS: 1,300 w, 150/230 v, dc; 220/440 v, (4.5 amp) 60 cyc, 3 phase, ac.

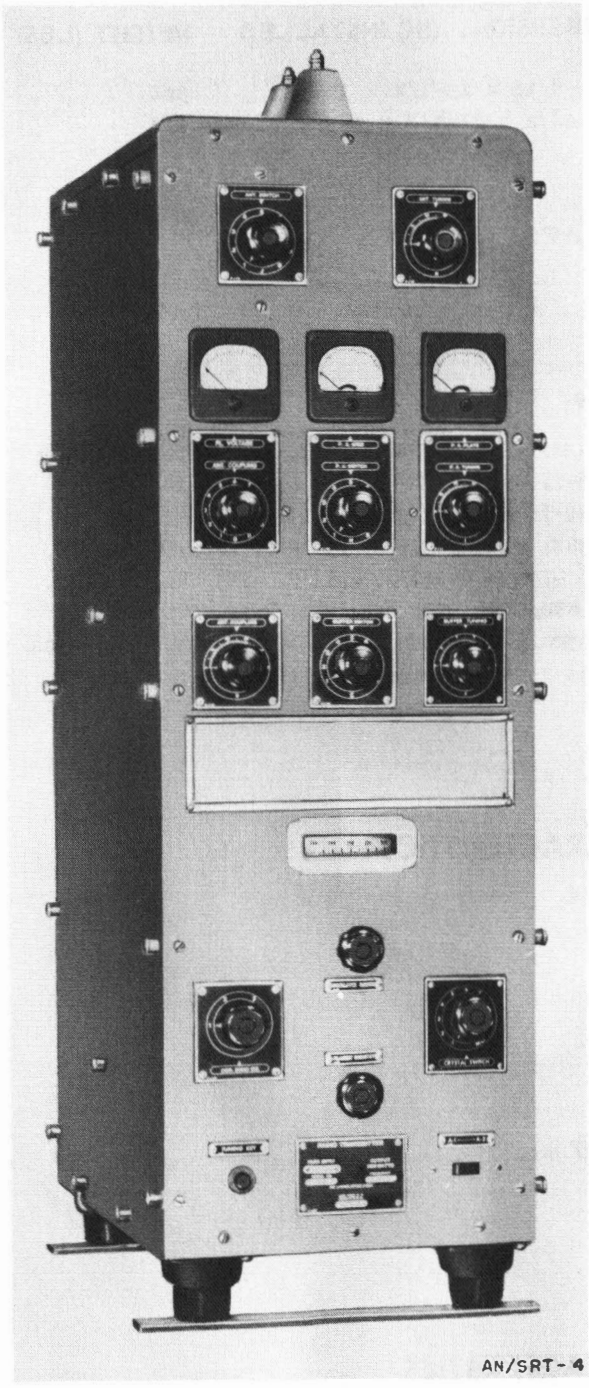
PHYSICAL CHARACTERISTICS

Radio Transmitting Set AN/SRT-3 measures 45-3/16 x 17-3/4 x 29, net weight 425 pounds.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

AN/SRT-4

RADIO TRANSMITTING SET



AN/SRT-4

Radio Transmitting Set AN/SRT-4 is a low-power, medium-range, l-f and m-f, a-m (cw and mcw) transmitting equipment designed for use aboard ship in ship-to-ship or ship-to-shore communication in the m-f and h-f bands.

This equipment consists of a single, shock-mounted, floor type cabinet containing the operating components and control apparatus. It includes a motor generator and motor starter, control panel, crystal units, and related items. It operates on two preset frequencies and uses the ship's antenna array.

Requires about 1,300-w dc.

AN/SRT-4

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: None
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitting Set AN/SRT-4	45-3/16 x 13-1/4 x 19-1/2	360
1	Motor Generator	14-1/8 x 27-3/4 x 9-3/4	225

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Fixed shipboard.

APPROXIMATE RANGE (IN MILES): Medium and long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -12, -13, -28; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -90/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.00 - 22.14.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw.

POWER OUTPUT: 200 w below 17 mc, 150 w above 17 mc.

POWER REQUIREMENTS: 1,300 w, 115 v, dc.

PHYSICAL CHARACTERISTICS

Radio Transmitting Set AN/SRT-4 weighs 585 pounds net, volume 7 cu ft.

STATUS: L/Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 21 June 1956

AN/SRT–10

RADIO TRANSMITTING SET

NO PHOTOGRAPH AVAILABLE

Radio Transmitting Set AN/SRT–10 is a 50-watt am (cw, voice) marine telephone and telegraph radio transmitter used on small ships. Provisions are included for its operation by remote control.

This set operates from a 115-volt ac or a 24-, 32-, or 110-volt dc source. When operating from the dc source, a motor starter and a suitable converter (not supplied) must be used.

This equipment is functionally identical with Radio Transmitter T–83/SR.

AN/SRT-10

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: TM 11-837

USING SERVICE: USA

DATE OF THIS SHEET: 21 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Power Supply PP-462/U		
1	Motor Starter RE-79/SRT-10		
1	Radio Transmitter T-240/SRT-10		
	(For complete list of components, see appropriate supply manuals.)		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne; fixed stations.

APPROXIMATE RANGE (IN MILES): 25.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.7 to 8.7.

TYPE MODULATION: Am (A1, A3).

TYPE OF SIGNAL: Cw, voice.

POWER OUTPUT: 50 w.

POWER REQUIREMENTS: 450 w, 115 v, 50/60 cy ac; 500 w, 24, 32, or 110 v dc.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:					3

STATUS:

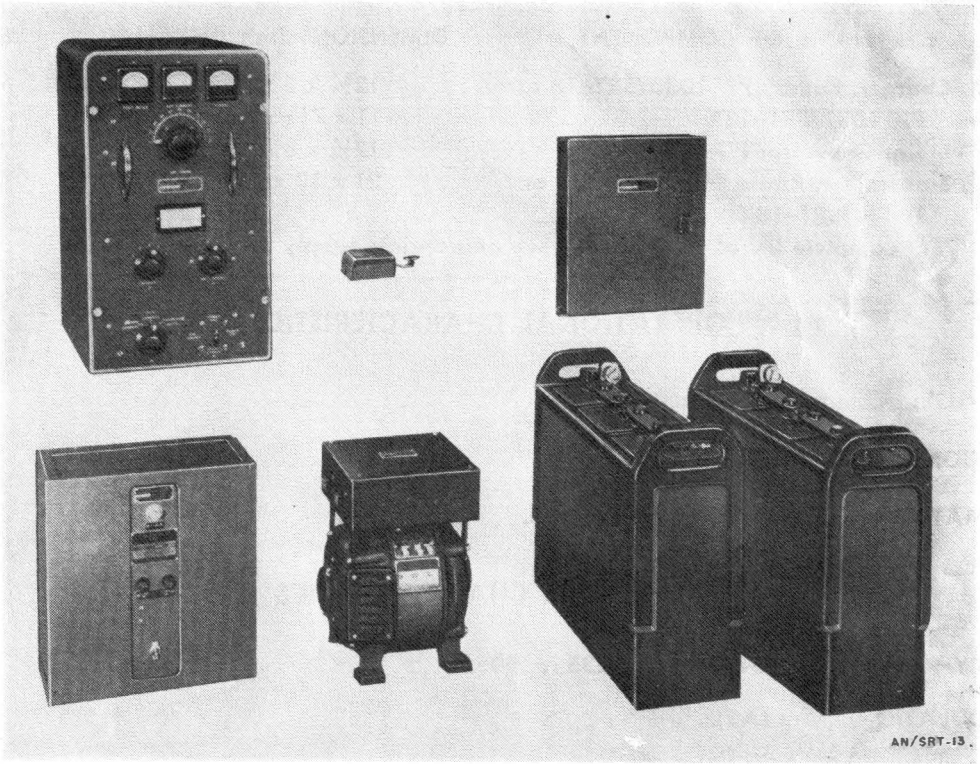
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 22 June 1956

AN/SRT–13( )

TRANSMITTING SET, RADIO



Radio Transmitting Set AN/SRT–13( ) is a marine emergency radio telegraph transmitting set. It consists of a radio transmitter, a motor generator, a terminal box, a battery charger, two storage batteries, and accessories.

Radio Transmitting Sets AN/SRT–13 and AN/SRT–13X are identical, except for the battery charging circuit and the battery charger. Radio Transmitters T–433/SRT–13 and T–434/SRT–13X are not interchangeable, unless circuit changes are made to permit battery charging with the particular battery charger used.

This equipment is operated from two 6-volt batteries that may be charged by Battery Charger PP–1030/SRT–13 from a 115-volt ac source, or by Battery Charger PP–1031/SRT–13X from a 115-volt dc source.

AN/SRT-13( )

TRANSMITTING SET, RADIO

INSTRUCTION LITERATURE: TM 11-844

USING SERVICE: USA

DATE OF THIS SHEET: 22 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Charger, Battery PP-1030/SRT-13 or	12¾ x 8⅝ x 12¼	29
	PP-1031/SRT-13X	11 x 7⅛ x 10¾	10
1	Motor-Generator PU-277/SRT	12⅛ x 8¼ x 9⅝	52
1	Transmitter, Radio T-433/SRT-13 or T-434/SRT-13X	21 x 13 x 18½	75

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Emergency marine transmitter.

INSTALLATION: Shipborne; fixed stations.

APPROXIMATE RANGE (IN MILES): 50 to 100.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .35 to .505.

TYPE MODULATION: Am (A2).

TYPE OF SIGNAL: Tone.

POWER OUTPUT: 40 w.

POWER REQUIREMENTS: 12 v dc.

PHYSICAL CHARACTERISTICS

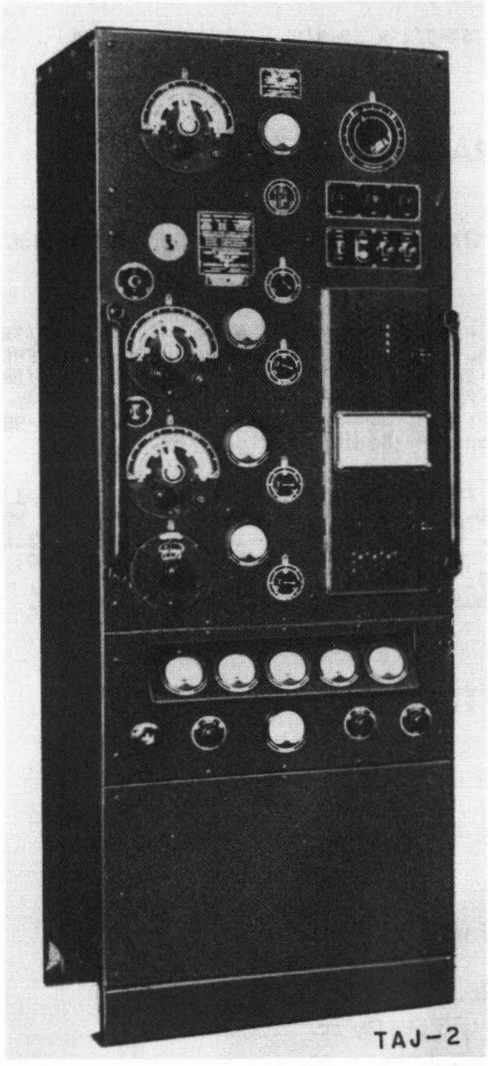
	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
AN/SRT-13		477	7.2		
AN/SRT-13X		458	6.9		
DOMESTIC PACK:					
EXPORT PACK:					
AN/SRT-13		635	17.8		
AN/SRT-13X		610	16.8		4

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 May 52

AN/SRT-TYPE

SERVICE TYPE NUMBER: TAJ-2 through -10

500 WATT TRANSMITTING EQUIPMENT



TAJ-2

500 Watt Transmitting Equipments TAJ-2 through -10 are general purpose, m-f, medium-power, a-m (cw and mcw) radiotelegraph transmitters for shipboard use. The transmitters may be operated locally or from a remote point over a standard four- or six-wire control system.

These equipments have continuously variable master oscillator frequency control, while the TAJ-2 and -3 use crystal control.

The TAJ-8 through -10 transmitters may be relay keyed at speeds up to 100 wpm on cw and vacuum tube keyed at speeds up to 50 wpm on mcw.

The type of transmitter and power equipment used depends upon the power source available.

AN/SRT-TYPE

TAJ-2 through -10 :SERVICE TYPE NUMBER

500 WATT TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 95288, 900,248
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 May 52

MAJOR COMPONENTS

QUANT		NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1		Radio Transmitter CG-4440 or -4444; CRV-52009, -52022; CAY-52029;	70 x 26-7/8 x 19	450
		CG-52078; CRR-52142, or -52143;	72 x 27 x 24	645
		CG-52140, -52167, or -52189	72-1/4 x 27 x 24	610
1	*	Motor-Generator Set CG-4083, -4084,	18 x 33-3/8 x 18	527
		-21044, -21045, -21296, -21297,	20 x 71-3/4 x 17	860
		-21298, -21466, -21467, -21468, -21456, -21456A, -21571	18 x 64-3/4 x 12-3/4	960

* Does not apply to TAJ-4, -5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH:

TAJ-2, -3: AN/FRR-4, -28; AN/GRR-2, -3; AN/MRC-5, -8, -20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-4; BC-314, -344, -348, -453, 779, -1004; MBS; OA-58/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBG; RBH; RBL; RBM; RBO; RCF; RCG; RCH; RDF; RDM; SCR-177, -244, -274, -614; AR-88 (RCA); ARC Type 12; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TAJ-4 through -10; AN/ARC-5, -8; AN/FRR-4, -28; AN/GRR-2, -3; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-4; BC-314, -344, -348, -453, -779, -1004; MBS; OA-58/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBG; RBH; RBL; RBM; RBO; RCF; RCG; RCH; RDF; RDM; SCR-177, -244, -274, -614; AR-88 (RCA); ARC Type 12; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: TAJ-2, -3: 0.195 - 0.60
TAJ-4 through -10: 0.175 - 0.60.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw.

POWER OUTPUT: TAJ-2 through -7: 500 w.
TAJ-8 through -10: 500 w on cw, 250 w on mcw.

POWER REQUIREMENTS: TAJ-2, -3: 3 kw, 115/230 v dc.
TAJ-4: 2.82 kw, 230 v, 60 cyc, 3 phase, ac.
TAJ-5, -6, -7, -9: 440 v, 60 cyc, 3 phase, ac.
TAJ-8: 220/440 v, 60 cyc, 3 phase, ac or 3.2/3.46 kw, 115/230 v dc.
TAJ-10: 440 v, 60 cyc, 3 phase, ac or 3.2/3.46 kw, 115/230 v dc.

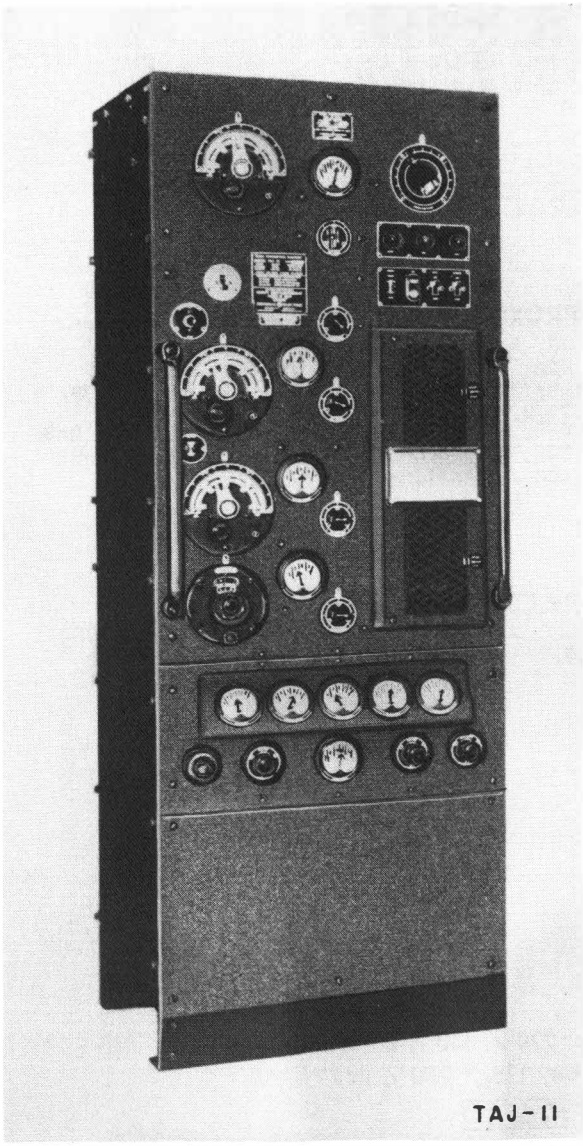
PHYSICAL CHARACTERISTICS

Information on 500 Watt Transmitting Equipments TAJ-2 through -10 not available.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 May 52

AN/SRT-TYPE

SERVICE TYPE NUMBER: TAJ-11, -12, -14, -15, -18, -19
500 WATT TRANSMITTING EQUIPMENT



TAJ-11

500 Watt Transmitting Equipments TAJ-11, -12, -14, -15, -18, -19 are general purpose, m-f, medium power a-m (cw, mcw) radiotelegraph transmitters for shipboard use. The transmitters may be operated locally, or remotely over a standard four- or six- wire control system.

These equipments employ continuously variable master oscillator frequency control. They may be relay keyed at speeds up to 100 wpm on cw and vacuum tube keyed at speeds up to 50 wpm.

The type of transmitter and power equipment employed is dependent upon power source available.

AN/SRT-TYPE

TAJ-11, -12, -14, -15, -18, -19 :SERVICE TYPE NUMBER

500 WATT TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,863; 900,833; 900,492-IB
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CG-52240, -52240-A,	74 x 27 x 25	540
	-52241, -52241A, CRR-52259, -52260	74 x 27 x 25	540
1	Motor-Generator Set CG-21756, -21756A,	20 x 76-1/2 x 19-3/4	960
	-21757, -21757A, -27158, -21956,	20 x 76-1/2 x 19-3/4	1,040
	-21783, -21784, -21785	20 x 76-1/2 x 18-3/4	850
1	Magnetic Controller CAO-21752, -21753,	23-3/4 x 14-1/4 x 13-1/4	70
	CG-21754, -21755, CAE-21874, -21875,	22 x 18-1/4 x 12-1/4	101
	CG-211086, -211087, -211088, -211089	17-5/16 x 11-9/16 x 10-5/8	55

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AM/ARC-5, -8; AN/FRR-4, -28; AN/GRR-2, -3; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-4; BC-314, -344, -348, -453, -779, -1004; MBS; OA-58/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBG; RBH; RBL; RBM; RBO; RCF; RCG; RCH; RDF; RDM; SCR-177, -244, -274, - 14; AR-88 (RCA); ARC Type 12; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.175 - 0.60.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw.

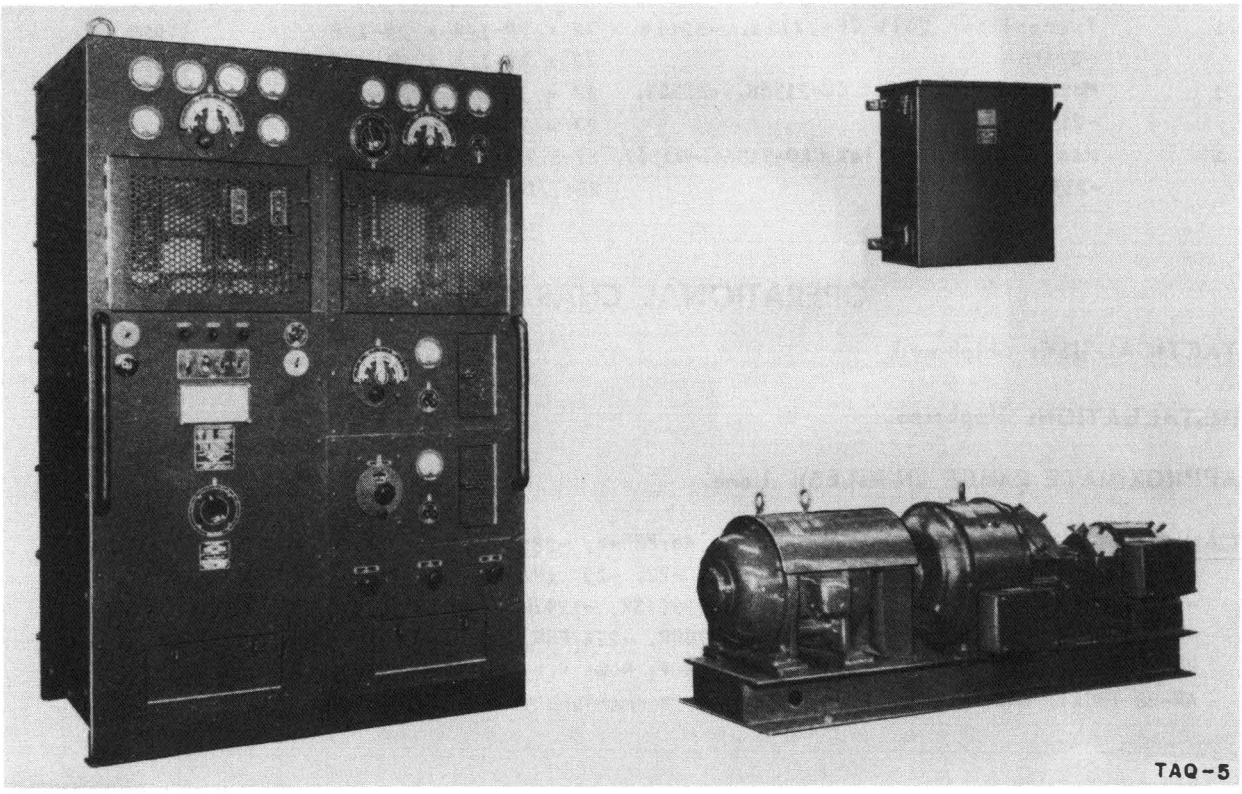
POWER OUTPUT: 500 w on cw, 250 w on mcw.

POWER REQUIREMENTS: TAJ-11, -12, -14, -18, -19: 220 / 440 v, 60 cyc, 3 phase, ac; or 3.2/3.46 kw, 115 / 230 v, dc.
TAJ-15: 3.40 kw, 230 v dc.

PHYSICAL CHARACTERISTICS

Information on 500 Watt Transmitting Equipments TAJ-11, -12, -14, -15, -18, -19 not available.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 2 May 52	**AN/SRT-TYPE** SERVICE TYPE NUMBER: TAQ-5 2 KW TRANSMITTING EQUIPMENT



TAQ-5

2 KW Transmitting Equipment TAQ-5 is a shipboard radio transmitter of unmodulated or modulated telegraph signals within the low frequency range.

There are four different versions of this equipment, permitting operation from either a 115-v d-c, a 230-v d-c, a 220-v a-c, or a 440-v a-c power source.

This transmitter can be operated locally, or from a remote point by means of a Navy standard 4- or 6-wire remote control unit.

AN/SRT-TYPE

TAQ-5 :SERVICE TYPE NUMBER

2 KW TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,248
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter Unit CG-52113, -52114,	72 x 49-1/4 x 34-1/8	985
	-52115	72 x 49-1/4 x 34-1/8	1,050
1	Motor Generator Set CG-21358, -21359,	27 x 78-3/8 x 22-1/4	1,325
	-21360	27 x 71-5/8 x 22-1/4	1,185
1	Magnetic Controller CAO-21366,-21367,	22-1/2 x 13-1/2 x 14-1/2	109
	-21368, -21369	26-7/16 x 25-15/16 x 12-19/32	140

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/FRR-4, -28; AN/GRR-2, -3; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-4; BC-314, -344, -348, -453, -779, -1004; MBS; OA-58/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBG; RBH; RBL; RBM; RBO; RCF; RCG; RCH; RDF; RDM; SCR-177, -244, -274, -614; AR-88 (RCA); ARC Type 12; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.175 - 0.600.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw.

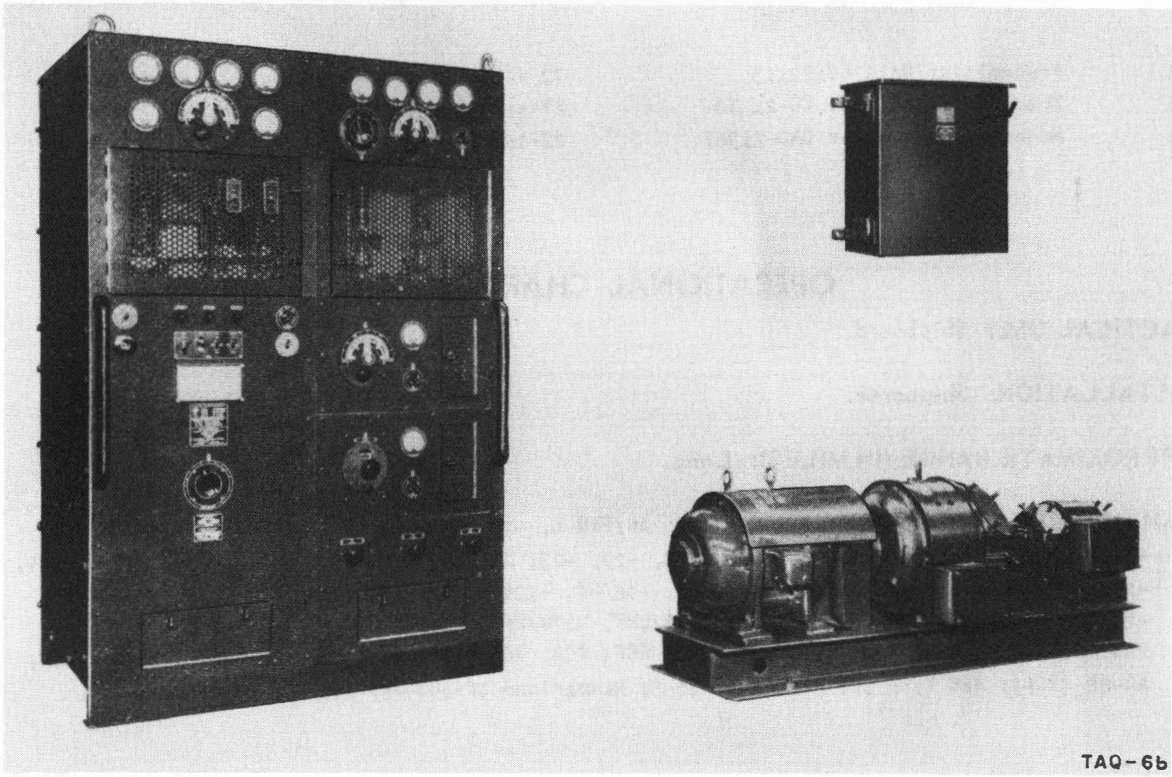
POWER OUTPUT: Cw: 2 kw.
Mcw: 1 kw.

POWER REQUIREMENTS: 8 kw, 440 v, 60 cyc, 3 phase, ac; or 8 kw, 220 v, 60 cyc, 3 phase, ac; or 8.6 kw, 230 v, dc; or 8.6 kw, 115 v, dc.

PHYSICAL CHARACTERISTICS

2 KW Transmitting Equipment TAQ-5 measures 72 x 63-3/4 x 34-1/8 inches.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 2 May 52	AN/SRT-TYPE SERVICE TYPE NUMBER: TAQ-6b 2 KW TRANSMITTING EQUIPMENT



TAQ-6b

2 KW Transmitting Equipment TAQ-6b is a shipboard, 2 kw radio transmitter of unmodulated, or modulated telegraph signals within the low-frequency range.

This equipment is the modified version of the TAQ-6 which was originally built for operation from a 115-v dc source. After modification, the equipment can operate from 230-v dc.

The radio transmitter component and the motor generator set have also been modified, and the original magnetic controller is replaced.

The equipment can be operated locally, or controlled from a remote point by means of a Navy standard 4- or 6-wire remote control unit.

AN/SRT-TYPE

TAQ-6b :SERVICE TYPE NUMBER

2 KW TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,248
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter Unit CG-52113	72 x 49-1/4 x 34-1/8	985
1	Motor Generator Set CG-21358	27 x 78-3/8 x 22-1/4	1,325
1	Magnetic Controller CAO-21367	22-1/2 x 13-1/2 x 14-1/2	94

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/FRR-4, -28; AN/GRR-2, -3; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-4; BC-314, -344, -348, -453, -779, -1004; MBS; OA-58/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBG; RBH; RBL; RBM; RBO; RCF; RCG; RCH; RDF; RDM; SCR-177, -244, -274, -614; AR-88 (RCA); ARC Type 12; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.175 - 0.600.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw.

POWER OUTPUT: Cw: 2 kw.
Mcw: 1 kw.

POWER REQUIREMENTS: 8.6 kw, 230 v, dc.

PHYSICAL CHARACTERISTICS

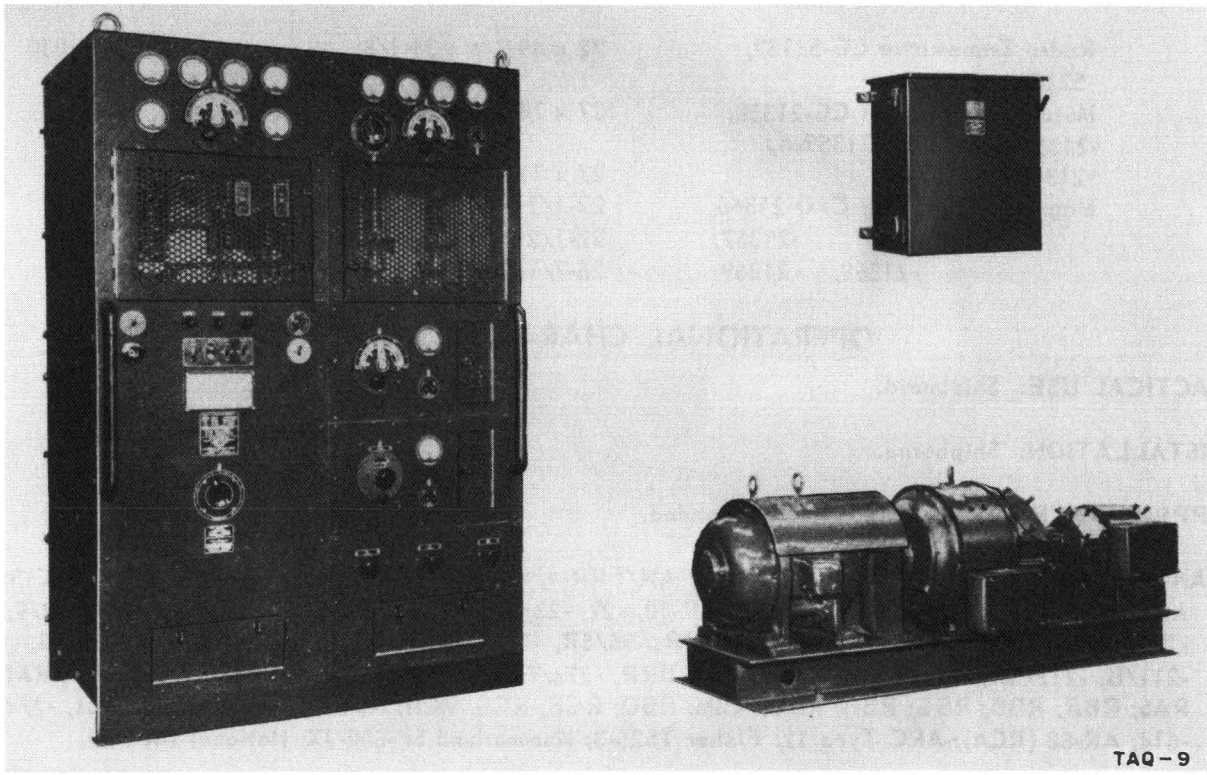
2 KW Transmitting Equipment TAQ-6b measures 72 x 63-3/4 x 34-1/8 inches.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 2 May 52

AN/SRT-TYPE

SERVICE TYPE NUMBER: TAQ-9

2 KW TRANSMITTING EQUIPMENT



2 KW Transmitting Equipment TAQ-9 is a shipboard radio transmitter of unmodulated, or modulated, telegraph signals within the l-f spectrum.

Four different versions of this equipment are available and permit operation from a power source of either 115 v dc, 230 v dc, 220 v ac, or 440 v ac.

Can be operated locally or controlled from a remote point by means of a Navy standard four- or six-wire remote control unit.

AN/SRT-TYPE

TAQ-9 :SERVICE TYPE NUMBER
2 KW TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,273
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CG-52182, -52183	72 x 49-1/4 x 34-1/8	985 or 1,050
1	Motor Generator Set CG-21358, -21358-A; -21359, -21359-A;	27 x 78-3/8 x 22-1/4	1,325
	-21360, -21360-A	27 x 71-5/8 x 22-1/4	1,185
1	Magnetic Controller CAO-21366,	22-1/2 x 16-1/2 x 14-1/2	109
	-21367,	22-1/2 x 13-1/2 x 14-1/2	74
	-21368, -21369	26-7/16 x 26-61/64 x 12-19/32	140

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Extended.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/FRR-4, -28; AN/GRR-2, -3; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-4; BC-314, -344, -348, -453, -779, -1004; MBS; OA-58/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBG; RBH; RBL; RBM; RBO; RCF; RCG; RCH; RDF; RDM; SCR-177, -244, -274, -614; AR-88 (RCA); ARC Type 12; Fisher TS25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.175 - 0.600.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw.

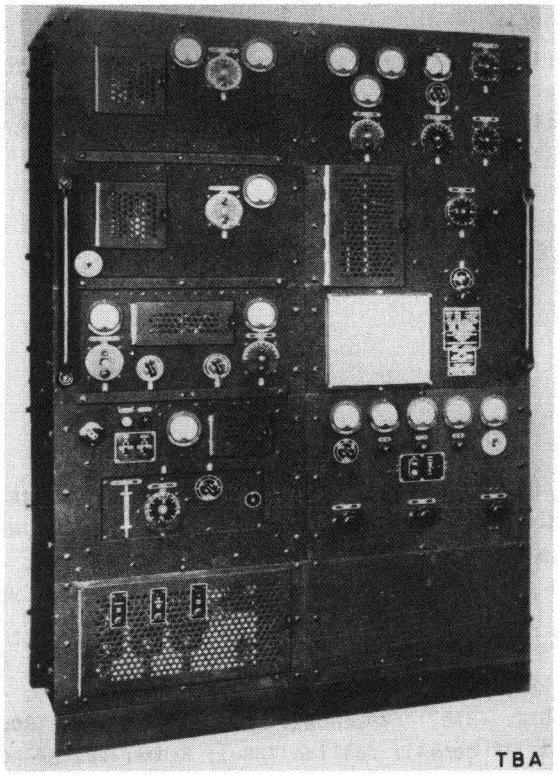
POWER OUTPUT: Cw; 2 kw.
Mcw; 1 kw.

POWER REQUIREMENTS: 8 kw, 220 v, 60 cyc, 3 phase or
8 kw, 440 v, 60 cyc, 3 phase or
8.6 kw, 230 v dc or
8.6 kw, 115/120 v dc.

PHYSICAL CHARACTERISTICS

2 KW Transmitting Equipment TAQ-9 measures 72 x 63-3/4 x 34-1/8 inches.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 Apr 52	**AN/SRT-TYPE** SERVICE TYPE NUMBER: TBA RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TBA is a medium power h-f ship-to-shore and ship-to-ship radio-telegraph transmitter for use on large surface vessels.

It may be keyed at speeds up to 100 wpm throughout its frequency range.

Sixteen crystal-controlled channels are provided.

A single-wire antenna is recommended for frequencies between 4.0 to 8.0 mc, either a single-wire or a horizontal doublet type is recommended at frequencies above 8.0 mc.

AN/SRT-TYPE	INSTRUCTION LITERATURE: NavShips 95289
TBA :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CG-4613	72 x 49 x 33-5/32	1,010
1	Motor Generator Set CG-12A396	23-11/16 x 80-1/4 x 23-3/8	1,660
1	Magnetic Controller CG-4615	23-3/4 x 16-1/2 x 13-11/16	72
1	Filter Unit CG-4614	25-1/8 x 15-1/8 x 6-3/16	82

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Medium to long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-3, -4, -9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -22; AN/PRC-7, -8, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -5, -8, -13, -16, -20; AN/VRQ-1; BC-312, -342, -348, -779, -794, -1004; MBS; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4.0 - 26.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw.

POWER OUTPUT: At 4 mc:- 1 w; at 26 mc: 600 w.

POWER REQUIREMENTS: 6.3 kw, 230 v, dc.

PHYSICAL CHARACTERISTICS

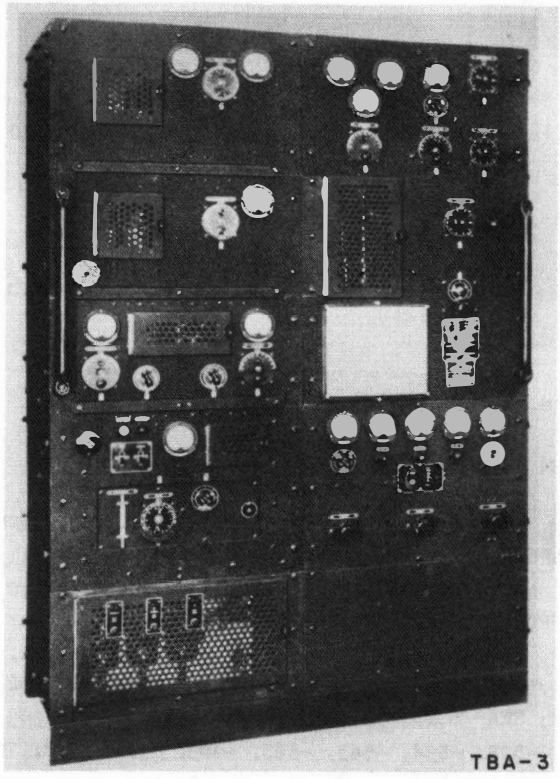
Radio Transmitting Equipment TBA measures 72 x 49 x 33-5/32 inches, net weight 2,828 pounds.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Apr 52

AN/SRT-TYPE

SERVICE TYPE NUMBER: TBA-3

RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TBA-3 is a medium power ship-to-ship and ship-to-shore, h-f, radiotelegraph transmitter for surface vessels.

It may be keyed at speeds up to 100 wpm at all frequencies within its range.

Frequency is controlled by means of a continuously variable master oscillator.

A single-wire antenna is recommended for all frequencies.

This transmitter can be controlled at a remote site by means of a standard 4- or 6-wire Navy control unit.

AN/SRT-TYPE

TBA-3 :SERVICE TYPE NUMBER

RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,398

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Navy

DATE OF THIS SHEET: 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter Unit CG-52116	72 x 49 x 43-1/8	975
1	Motor Generator Set CG-21375	17-9/16 x 70-7/16 x 16	815
1	Magnetic Controller CG-21373, -21374	21-1/8 x 20-1/4 x 10-1/4	65

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-3, -4, -9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -22; AN/PRC-7, -8, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -5, -8, -13, -16, -20; AN/VRQ-1; BC-312, -342, -348, -779, -794, -1004; MBS; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4.0 - 26.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw.

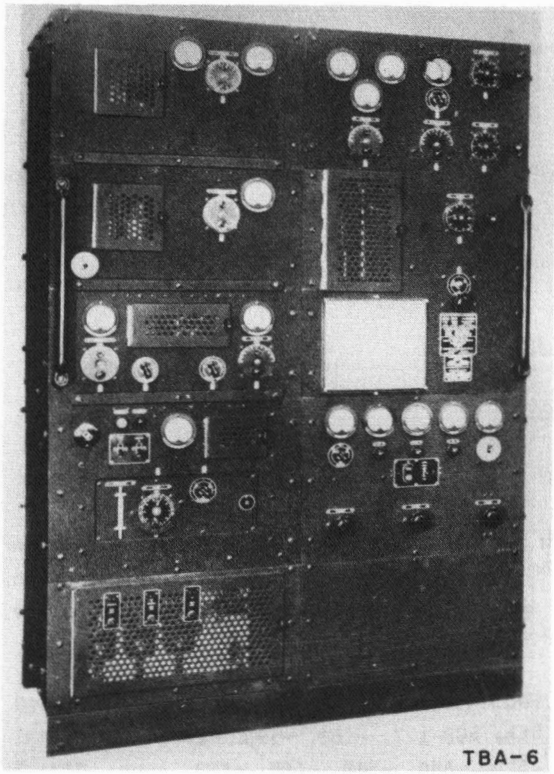
POWER OUTPUT: 1 kw.

POWER REQUIREMENTS: 4,980 w, 220/440 v, 60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TBA-3 measures 72 x 49 x 43-1/8 inches.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 Apr 52	**AN/SRT-TYPE** SERVICE TYPE NUMBER: TBA-6 RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TBA-6 is a medium power, ship-to-shore and ship-to-ship, h-f, radiotelegraph transmitter for surface vessels.

It may be keyed at speeds up to 100 wpm at all frequencies within its range.

A single-wire vertical antenna is recommended for all frequencies.

It has a continuously variable master oscillator.

This transmitter can be controlled at a remote site by means of a standard 4- or 6-wire Navy control unit.

AN/SRT-TYPE

TBA-6 :SERVICE TYPE NUMBER

RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,406
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CG-52195, -52196, -52197	72 x 49 x 24-7/8	953
1	Motor Generator Set CG-21375-A,	17-9/16 x 70-7/16 x 16	815
	-21595, -21596	19-13/16 x 63-5/8 x 18-5/8	915
1	Magnetic Controller CG-21374,	22-1/8 x 20-1/4 x 10-1/4	65
	-21591, -21592	22 X 17-9/32 x 15-1/4	65

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-3, -4, -9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -22; AN/PRC-7, -8, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -5, -8, -13, -16, -20; AN/VRQ-1; BC-312, -342, -348, -779, -794, -1004; MBS; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4.0 - 26.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw.

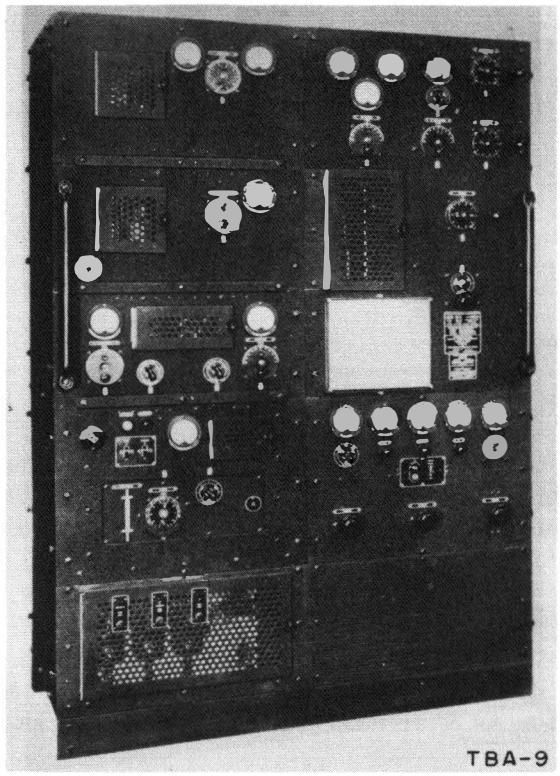
POWER OUTPUT: 1 kw.

POWER REQUIREMENTS: 4.6 kw, 220/440 v, 60 cyc, 3 phase; or 5.3 kw, 115/230 v, dc.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TBA-6 measures 72 x 49 x 24-7/8 inches.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 Apr 52	**AN/SRT-TYPE** SERVICE TYPE NUMBER: TBA-9 RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TBA-9 is a medium power, ship-to-shore, h-f, radiotelegraph transmitter.

It may be keyed at speeds up to 100 wpm throughout its frequency range.

A single vertical-wire antenna is recommended for this transmitter.

This equipment can be operated from a remote location with a standard four- or six-wire Navy control unit.

Frequency control is by means of a continuously variable oscillator.

AN/SRT-TYPE

TBA-9 :SERVICE TYPE NUMBER

RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,454

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Navy

DATE OF THIS SHEET : 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CG-52281	72 x 49 x 31-1/8	1,044
2	Motor Generator Set CG-21899	19-15/16 x 71-5/16 x 16-5/8	820
2	Magnetic Controller CG-21898	23-7/8 x 21-7/16 x 9-1/16	74

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (I N MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-3, -4, -9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -22; AN/PRC-7, -8, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -5, -8, -13, -16, -20; AN/VRQ-1; BC-312, -342, -348, -779, -794, -1004; MBS; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U , -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; T80; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 18S-4 (AF Model): Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4.0 - 26.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw.

POWER OUTPUT: 1 kw.

POWER REQUIREMENTS: 4.6 kw, 440 v, 60 cyc, 3 phase, ac.

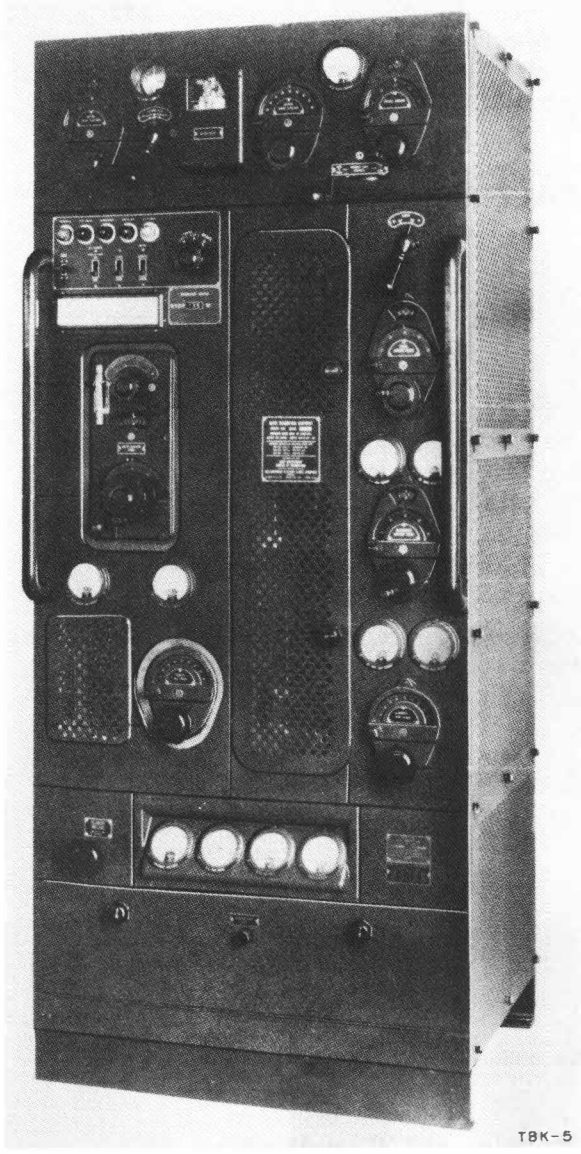
PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TBA-9 measures 72 x 49 x 31-1/8 inches, net weight 3,174 pounds, volume 80.1 cu ft, 2 ship tons. Packed for domestic shipment: total weight 5,374 pounds, total volume 99 cu ft, 2.47 ship tons. Shipped in 11 packages.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 8 May 52

AN/SRT-TYPE

SERVICE TYPE NUMBER: TBK-5
RADIO TRANSMITTING EQUIPMENT



TBK-5

Radio Transmitting Equipment TBK-5 is a ship-board a-m (cw) radiotelegraph transmitter of h-f communication. The transmitter may be keyed at speeds up to 100 wpm. Provisions are made for variation from full-power to low-power operation of 75 w in the frequency range of 2.0 to 9.05 mc.

This equipment uses master oscillator control and is continuously variable over the frequency range.

It may be controlled and keyed by use of the standard four-wire remote control system. The transmitter, motor generator system components, and starter are bolted to the deck.

A different combination of major components is used for each of three power sources which may be available for operation of the equipment.

AN/SRT-TYPE

TBK-5 :SERVICE TYPE NUMBER

RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 8 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter Unit CAY-52064,	72 x 32 x 24	695
	or -52066	72 x 32 x 24	662
1	Motor CAY-21242, -21243, -21244	13-9/16 x 14-3/8 x 22	900
1	Generator CAY-21240	13-5/8 x 15-7/8 x 28-3/4	900
1	Low Voltage Generator and Exciter CAY-21241	13-5/8 x 14-11/16 x 18-3/8	900

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw.

POWER OUTPUT: 2.0 to 18.1 mc: 500 w.
2.0 to 9.05 mc (power amplifier disconnected): 75 w.

POWER REQUIREMENTS: 3.51 kw, 440 v, 60 cyc, 3 phase, ac, or 3.38 kw, 115/230 v, dc.

PHYSICAL CHARACTERISTICS

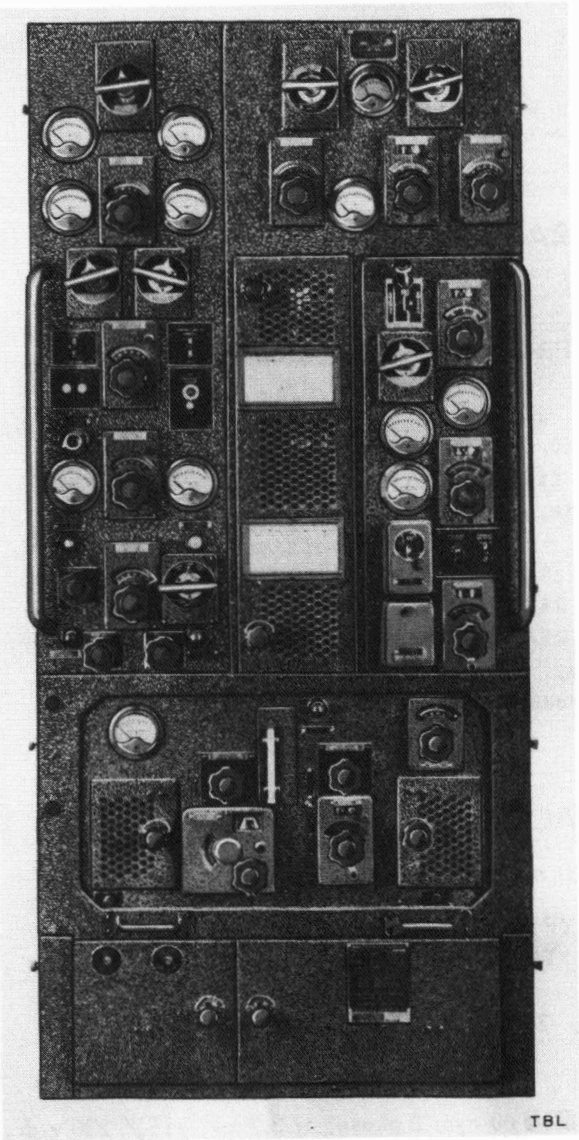
Radio Transmitting Equipment TBK-5 measures 72 x 32 x 24 inches, net weight 2,176 pounds, volume 32.3 cu ft, 0.8 ship ton.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/SRT-TYPE

SERVICE TYPE NUMBER: TBL, TBL-2, -3

RADIO TRANSMITTING EQUIPMENT



TBL

Radio Transmitting Equipments TBL, TBL-2 and -3 are general purpose, medium-power m-f/h-f a-m (cw, mcw, voice) transmitters for shipboard use.

The transmitters have two separate r-f circuits to cover the m-f and h-f bands, only one of which is used at a time.

In the TBL, the m-f band is controlled by a crystal oscillator, and the h-f band is controlled by a master oscillator.

TBL-2 and -3 employ master oscillator control of both m-f and h-f bands. With the use of suitable speech input equipment, the TBL-2 and -3 provide voice transmission throughout their respective frequency ranges.

The type of transmitter, generator, and power line units employed by the TBL series is dependent upon the power source, or sources, which are available aboard ship.

AN/SRT-TYPE

TBL, TBL-2, -3 :SERVICE TYPE NUMBER

RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: Not Available

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Navy

DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter Unit CRV-52042, CRV-52043, CAY-52059, -52060, -52061, -52082, -52083, -52084	72 x 32 x 24	800
1	Motor CC-21155, -21154, -21229, -21230, -21231, -21229A, -21230A, -21231A	15 x 16-1/8 x 20-7/8	Not Available
1	Generator CC-21156, -21157, CC-21232, -21233, -21233A	15 x 13 x 18 12-7/8 x 15-13/16 x 19-5/8	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne. APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13, AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -314, -342, -344, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBL; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDF; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.175 - 0.60 and 2.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: TBL: Cw, mcw.
TBL-2 and -3: Voice, cw, mcw.

POWER OUTPUT: TBL: 200 w. TBL-2 and -3: A1, 200 w; A2, 100 w; A3, 50 w.

POWER REQUIREMENTS: TBL: 115 / 230 v, dc.
TBL-2 and -3: 3.4 kw, 440 v, 60 cyc, 3 phase; or 3.2 kw, 115 / 230 v dc.

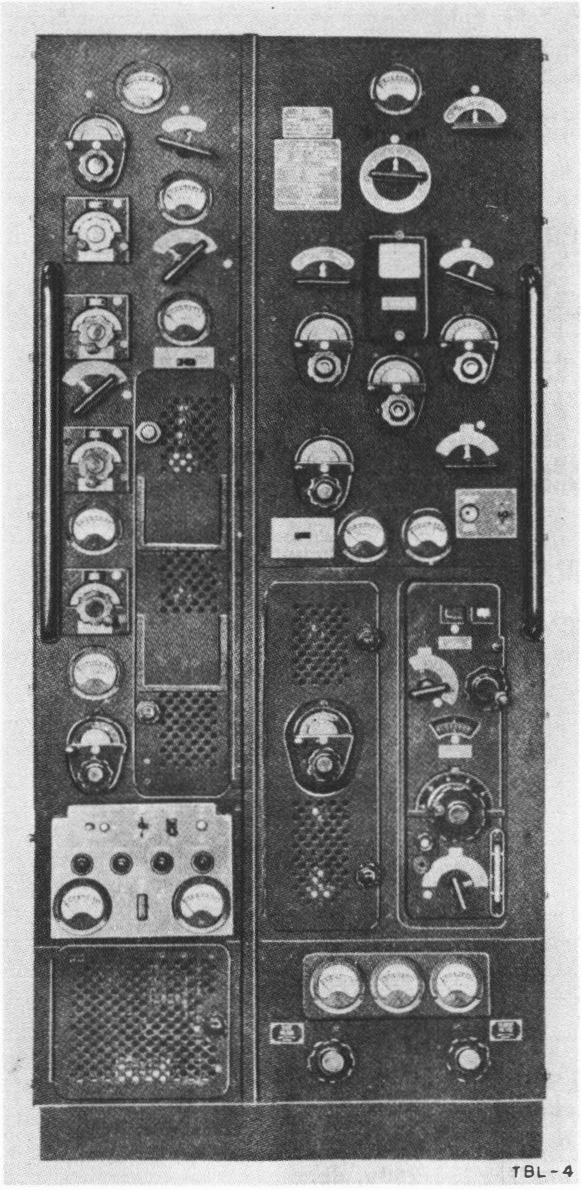
PHYSICAL CHARACTERISTICS

Information on Radio Transmitting Equipments TBL, TBL-2 and -3 not available.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/SRT-TYPE

SERVICE TYPE NUMBER: TBL-4, -5, -6, -7, -8, -9, -12, -13
RADIO TRANSMITTING EQUIPMENT



TBL-4

Radio Transmitting Equipments TBL-4, -5, -6, -7, -8, -9, -12 and -13 are general purpose, a-m (cw, mcw, voice), medium-power, m-f/h-f, radiotelegraph transmitters used aboard ship. This equipment may be operated locally or from a remote station by use of a standard four- or six-wire control system.

Keying speeds up to 100 wpm are possible, and when suitable speech input equipment is used, voice transmission is possible throughout the frequency range.

This transmitter incorporates two separate master oscillator controlled r-f circuits to cover the m-f and h-f bands. Only one band may be used at a time.

With the exception of the TBL-9, (which operates on 220-v ac only) any of the transmitting equipments may consist of various type transmitters, motor generators, and line equipment, dependent upon the power source available.

AN/SRT-TYPE

TBL-4, -5, -6, -7, -8, -9, -12, -13 :SERVICE TYPE NUMBER

RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,373; 900,381

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Navy

DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter	72 x 32-1/4 x 24-1/2	Not Available
1	Motor-Generator	20 x 61 x 13-1/4	" "
1	Magnetic Controller	18-3/4 x 11-11/16 x 9-13/16	" "
1	Filter Unit	18-1/4 x 16-1/4 x 10-1/8	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -314, -342, -344, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBL; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDF; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBQ; TBX; TCH; TCP; TCS; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.175 - 0.60 and 2.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw, cw.

POWER OUTPUT: A1: 200 w.
A2: 100 w.
A3: 50 w.

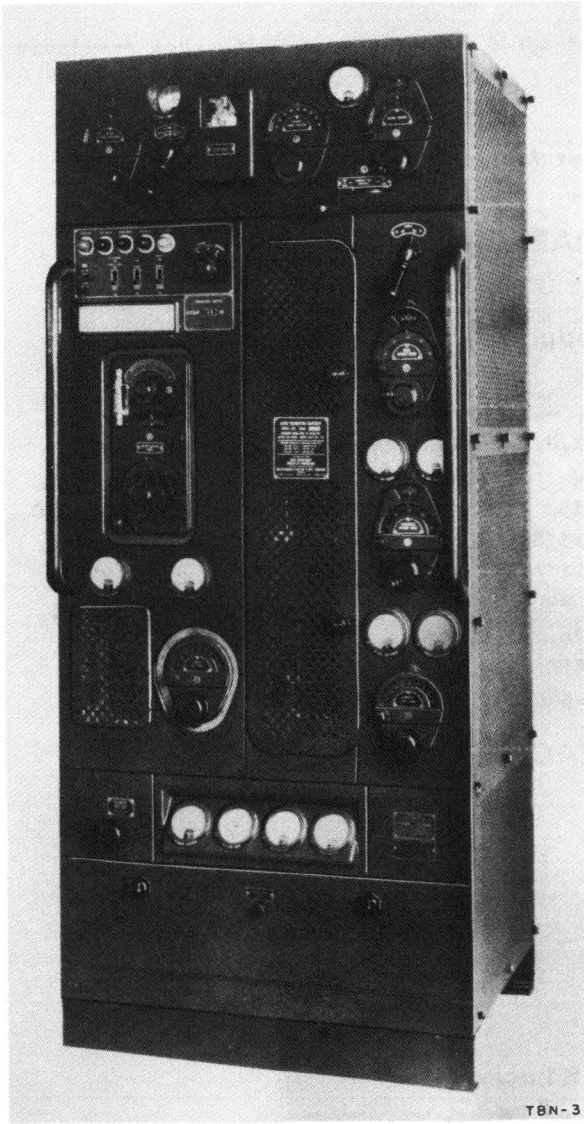
POWER REQUIREMENTS:

TBL-4: 3.4 kw, 220/440 v, 60 cyc, 3 phase, ac; or 3.5 kw, 115/230-250 v dc.
TBL-5,-7, -12, -13: 3.2 kw, 440 v, 60 cyc, 3 phase, ac; or 3.4 kw, 115/230 v, dc.
TBL-6: 3.2 kw, 220/440 v, 60 cyc, 3 phase ac; or 3.4 kw, 115/230 v, dc.
TBL-8: 3.4 kw, 440 v, 60 cyc, 3 phase, ac; 3.5 kw, 115/230-250 v, dc.
TBL-9: 3.4 kw, 220 v, 60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Information on Radio Transmitting Equipment TBL-4, -5,-6, -7, -8, -9, -12, -13 not available.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 May 52	**AN/SRT-TYPE** SERVICE TYPE NUMBER: TBN-3 RADIO TRANSMITTING EQUIPMENT



TBN-3

Radio Transmitting Equipment TBN-3 is a combined m-f and h-f equipment for shipboard a-m (cw, mcw, voice) transmission. Two separate transmitter units are alternately operated from a common rectifier. The h-f transmitter is arranged for cw, mcw, and voice transmission, while the m-f unit operates on cw and mcw only.

These transmitters may be keyed at speeds up to 100 wpm.

The full power output of either transmitter may be varied down to 25% of the maximum for telegraphic signaling.

These transmitters are master oscillator controlled, and are continuously variable over their frequency ranges.

Provisions are made for remote control using the standard four-wire control system.

Speech input equipment is provided for remote telephone operation of the h-f transmitter.

AN/SRT-TYPE

TBN-3 :SERVICE TYPE NUMBER
RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Rectifier CAY-20033	72 x 38 x 24	1,460
2	Transmitter Unit CAY-52046, -52048	72 x 32 x 24	748
1	Single-Channel Speech Input Equipment Consisting of:	24-13/16 x 16-5/8 x 24-5/16	Not Available
	1 Rectifier Power Unit-Telephone CW-20039		
	1 Master Monitor Unit CW-23072	Not Available	" "
	1 Station Control Unit CW-23070	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne, fixed.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ARR-15; AN/FRR-3, -4, -7, -12, -28; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -314, -342, -344, -348, -453, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -90/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBL; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDF; RDM; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -543, -593, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.3 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw, cw.

POWER OUTPUT: HF Transmitter: 500 w at 2.0 to 18.1 mc.
MF Transmitter: 1,000 w at 0.3 to 2.0 mc.

POWER REQUIREMENTS: 440 v, 60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

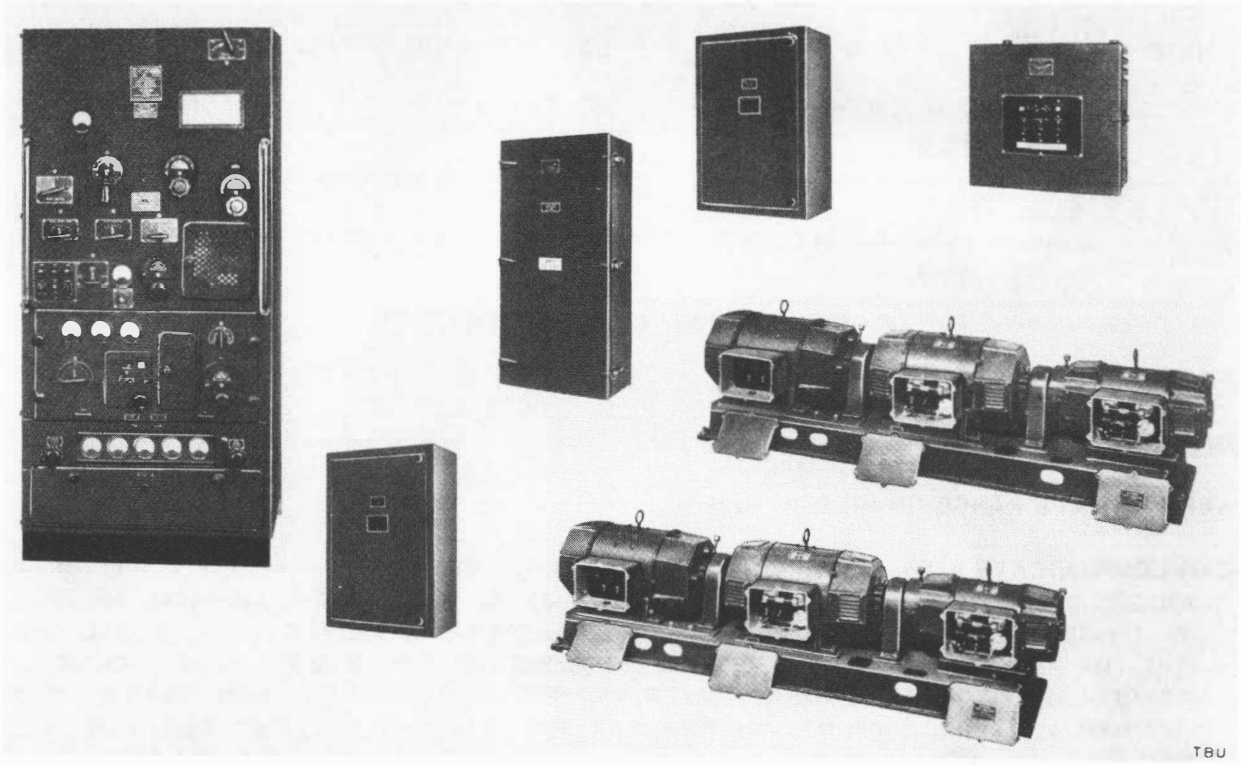
Radio Transmitting Equipment TBN-3 measures 72 x 102 x 24 inches.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclossified
USING SERVICE: Navy
DATE OF THIS SHEET: 2 May 52

AN/SRT-TYPE

SERVICE TYPE NUMBER: TBU, TBU-2

RADIO TELEGRAPH TRANSMITTING EQUIPMENT



Radio Telegraph Transmitting Equipments TBU and TBU-2 are medium-power, m-f radiotelegraph transmitters used on larger types of surface vessels. Frequency control is continuously variable throughout the frequency range 0.3 to 2.0 mc.

TBU and TBU-2 are similar to TBU-1 and TBU-3 except that the last two have been adapted for shore station installation.

Can be operated locally or can be keyed from a remote operating position by means of standard keying equipment.

For complete remote control operation, including start, key, and stop, a standard Navy four- or six-wire control unit can be used.

Telegraph keying speeds up to 100 wpm are possible by means of relay keying.

AN/ SRT-TYPE

TBU, TBU-2 :SERVICE TYPE NUMBER

RADIO TELEGRAPH TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,384

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Navy

DATE OF THIS SHEET: 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter Unit CAY-52123, -52124, -52222	72 x 34 x 24	769
1	Motor Generator Unit CAY-21447, -21448, -21673	22-1/8 x 20-3/4 x 77-1/16	1,205
1	Magnetic Controller CAY-21449, -21710, -21693	22-21/32 x 16-5/8 x 13-1/4	70

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25, -26; AN/ARR-15, AN/FRR-4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -20, -22; AN/PRC-7; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -314, -342, -344, -348, -453, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/SR, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBG; RBH; RBL; RBM; RBO; RBS; RCG; RCH; RDE; RDF; RDM; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -543, -593, -614, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.3 - 2.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, Mcw.

POWER OUTPUT: Cw: 1 kw.
Mcw; 500 w.

POWER REQUIREMENTS: 440 v, 60 cyc, 3 phase, ac or
230 v dc or
115 v dc.

PHYSICAL CHARACTERISTICS

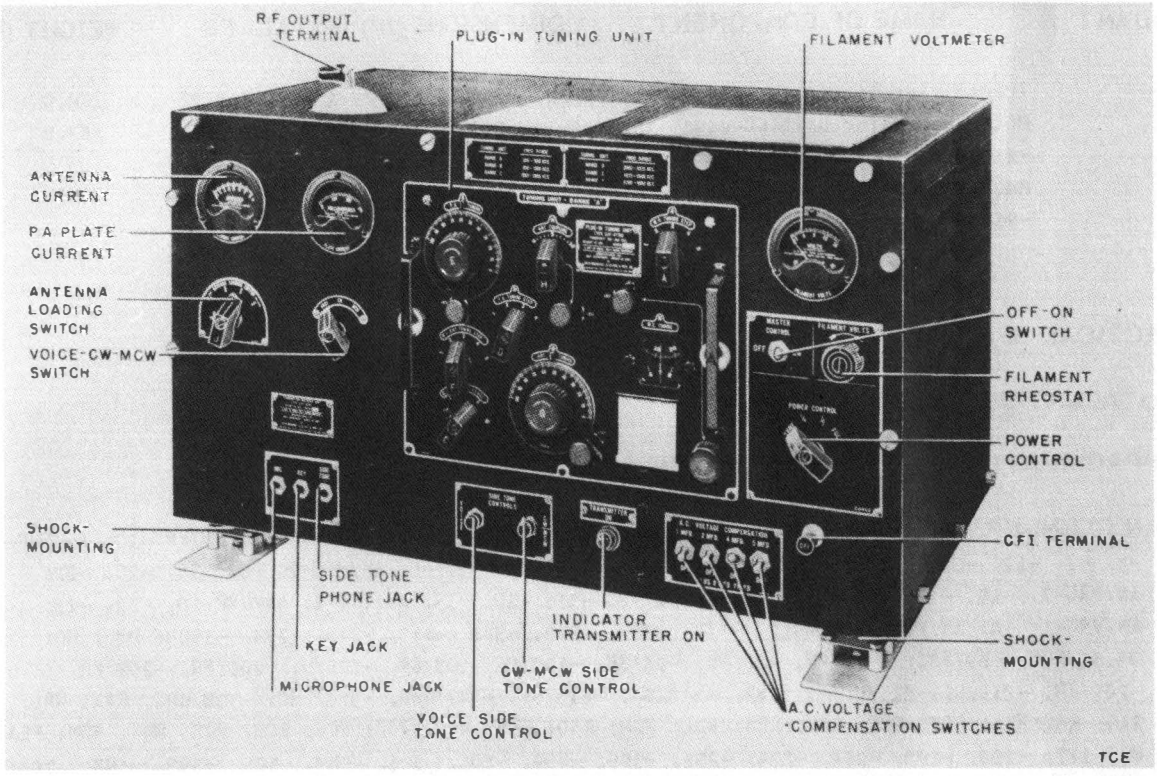
Radio Telegraph Transmitting Equipment TBU or TBU-2 measures 72 x 34 x 24 inches, net weight 2,350 pounds. Packed for domestic shipment: total weight 3,130 pounds, total volume 123.30 cu ft, 3.08 ship tons. Shipped in 11 packages.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/SRT-TYPE

SERVICE TYPE NUMBER: TCE

RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TCE is a compact, general purpose, low-power transmitter for small surface craft. When used in conjunction with a suitable receiver, it provides radiotelegraph, or radiotelephone, communication over the m-f/h-f ranges. Six plug-in-type tuning units cover the frequency range.

Different motor generator units, and magnetic controllers are supplied, dependent upon power sources available.

A single wire antenna can be used for transmission and reception (when the associated receiver is connected to the antenna transfer terminal of TCE).

This equipment can be operated from a remote location by means of a remote control unit, such as Navy Type CAY-23305.

AN/SRT-TYPE

TCE :SERVICE TYPE NUMBER
RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter-Rectifier Unit CAY-52129	14-15/16 x 24-1/8 x 17-3/32	58.0
1	Motor Generator Unit CC-21413 through -21416	26-1/2 x 12-1/2 x 10-1/2	157.0
1	Magnetic Controller CAY-21417 through -21420	20-1/2 x 13-1/2 x 12-1/4	60.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -314, -342, -344, -348, -453, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBL; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDF; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCP; TCS; Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.35 - 9.05 in 6 bands.

Band A: 0.35 - 0.8
Band B: 0.8 - 1.5
Band C: 1.5 - 3.0
Band D: 3.0 - 4.525
Band E: 4.525 - 6.5
Band F: 6.5 - 9.05.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

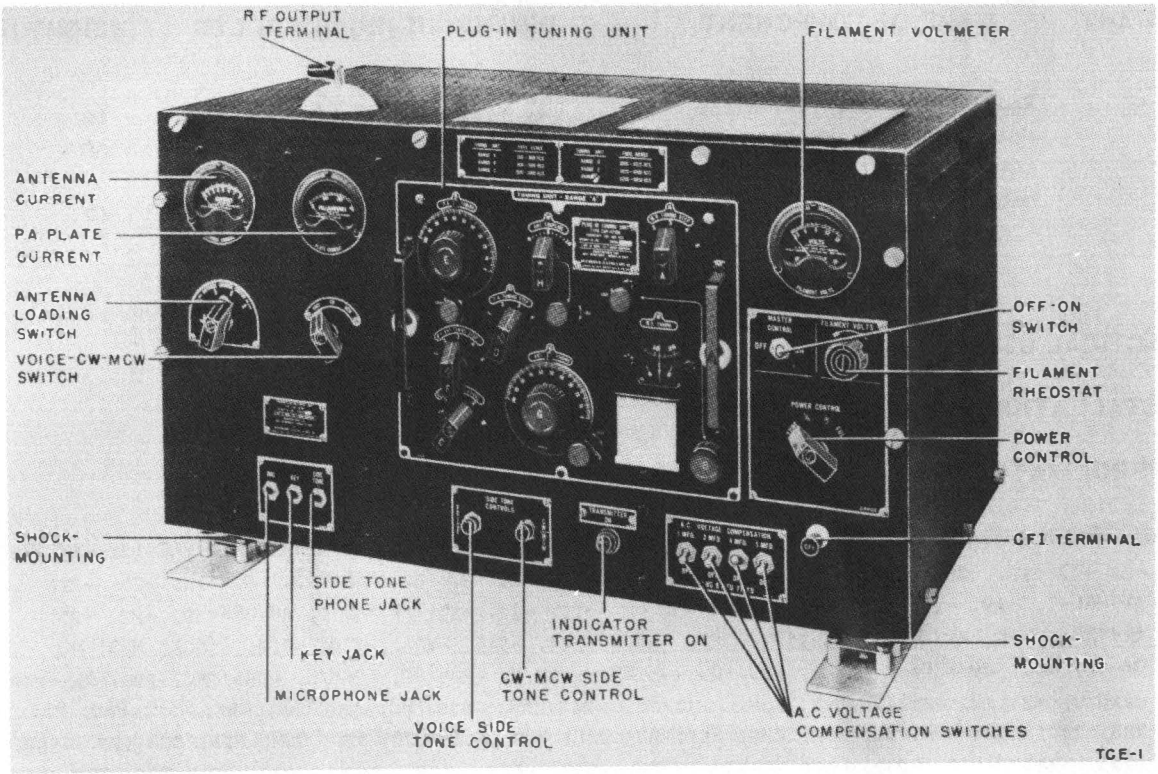
POWER OUTPUT: Cw or mcw: 125 w.
Voice: 40 w.

POWER REQUIREMENTS: 1,200 w, 115 v, 60 cyc, 1 phase, ac; or 24/32/120 v, dc.

PHYSICAL CHARACTERISTICS

Transmitting Equipment TCE measures 14-15/16 x 24-1/8 x 17-3/32 inches.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/SRT-TYPE** SERVICE TYPE NUMBER: TCE-1 RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TCE-1 is a compact, general purpose, low-power transmitter for small surface craft. It provides radiotelegraph or radiotelephone communications over the m-f/h-f ranges (when used in conjunction with a suitable receiver). Six plug-in type tuning units cover the frequency range.

Different motor generators and magnetic controllers are supplied, dependent upon power sources available.

A single wire antenna can be used for transmission and reception (if the associated receiver is connected to the antenna transfer terminal of this TCE-1).

This equipment can be operated from a remote location by means of a remote control unit such as Navy Type CAY-23245.

AN/SRT-TYPE

TCE-1 :SERVICE TYPE NUMBER

RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 95309
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CAY-52151	16 x 25-1/8 x 17-1/8	58
1	Motor Generator CC-21635 through CC-21638	12-1/2 x 28 x 14	160
1	Magnetic Controller CAY-21418, -21419, -21558, -21420	20-1/2 x 13-1/2 x 12-1/4	60

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -314, -342, -344, -348, -453, -779, -794, -1004; MBS; MQ; OA-58/FRC; -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBL; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDF; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCP; TCS; Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.35 - 9.05 in 6 bands.

Band A: 0.35 - 0.8
Band B: 0.80 - 1.5
Band C: 1.5 - 3.0
Band D: 3.0 - 4.525
Band E: 4.525 - 6.5
Band F: 6.5 - 9.05.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: Cw or mcw: 125 w.
Voice: 40 w.

POWER REQUIREMENTS: 1,200 w, 115 v, 60 cyc, 1 phase, ac; or 32/120/230 v, dc.

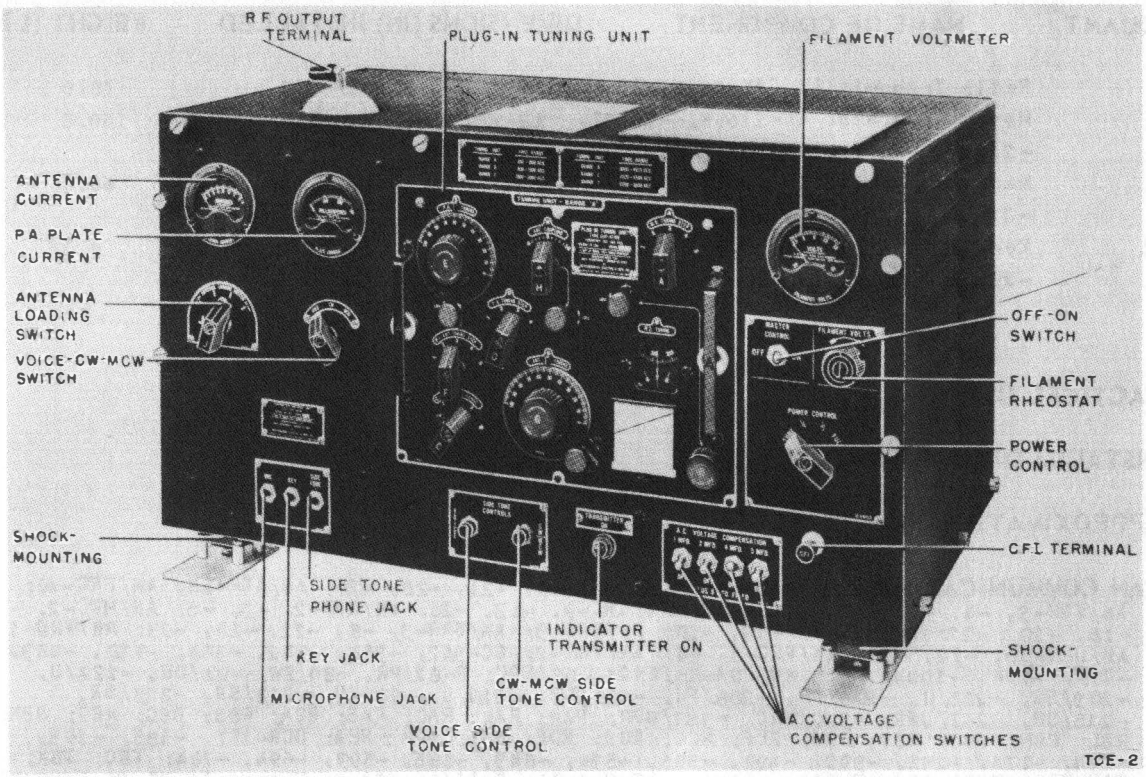
PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment measures 16 x 25-1/8 x 17-1/8 inches.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/SRT-TYPE

SERVICE TYPE NUMBER: TCE-2
RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TCE-2 is a compact, general purpose, low-power, transmitter for small craft. It provides radiotelegraph or radiotelephone communication over the m-f/h-f ranges when used in conjunction with a suitable receiver. Six plug-in type tuning units cover the frequency range.

Different motor generators and magnetic controllers are supplied, dependent upon power sources available.

A single wire antenna can be used for transmission and reception (if the associated receiver is connected to the antenna transfer terminal of the TCE-2).

This equipment is operated from a remote location by means of Remote Control Unit, Navy Types CAY-23305, or CAY-23245.

AN/SRT-TYPE	INSTRUCTION LITERATURE: NavShips 95319
TCE-2 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CAY-52151-AS	16 x 25-1/8 x 17-1/8	78.0
1	Motor Generator CC-21636, -21637, -21638, -21927, -21607	12-1/2 x 26-1/2 x 14	160.0
1	Magnetic Controller CAY-21873, -21558, -21420, -21846, -21847	20-1/2 x 15-1/2 x 12-1/4	60.0
1	Remote Control Unit CAY-23245, -23305	6-1/16 x 6 x 5-3/8	4.25

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC 9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -314, -342, -344, -348, -453, -779, -794, -1004; MBS; MQ; OA-58/FRC; -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBL; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDF; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCP; TCS; Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.35 - 9.05 in 6 ranges.

Band A: 0.35 - 0.8	Band C: 1.5 - 3.0	Band E: 4.525 - 6.5
Band B: 0.8 - 1.5	Band D: 3.0 - 4.525	Band F: 6.5 - 9.05.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: Cw or mcw: 125 w.
Voice: 40 w.

POWER REQUIREMENTS: 1,300 w, 115/230 v, 60 cyc, 1 phase, ac, or 208/440 v, 60 cyc, 3 phase, ac; or 115/230 v, dc.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TCE-2 measure 16 x 25-1/8 x 17-1/8 inches.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 Apr 52	**AN/SRT-TYPE** SERVICE TYPE NUMBER: TCY, TCY-1 PORTABLE EMERGENCY RADIO TRANS EQUIP



Portable Emergency Radio Transmitting Equipment TCY and TCY-1 are used for emergency or distress signaling by inexperienced personnel in lifeboats or liferafts. They radiate "SOS" or "SSS" signals on the international distress frequency of 0.5 mc.

This transmitter can be keyed both automatically and manually.

A roll of rubber-covered, flexible wire is supplied for the antenna, together with three insulators, and suitable fittings.

The antenna should be installed so that it retains certain basic electrical characteristics, however, the flexibility of the equipment is such that almost any length, or height of antenna can be used.

AN/SRT-TYPE	INSTRUCTION LITERATURE: NavShips 95324
TCY, TCY-1 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
PORTABLE EMERGENCY RADIO TRANS EQUIP	USING SERVICE : Navy
	DATE OF THIS SHEET: 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter Rectifier CFT-52236, -52236-A	16-1/4 x 21-1/4 x 9-3/8	60

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Lifeboats or liferafts.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Short, medium.

CAN COMMUNICATE WITH: AN/ARC-5, -9; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/URR-23; AN/VRC-4; BC-314, -344, -349, -453, -779; MBS; R-62/PR, -96/SR, -129/U, -203/SR, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -388/URR; RAK; RAL; RAS; RBA; RBB; RBH; RBL; RBM; RCH; RDF; SCR-177; ARC Type 12; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.5.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw.

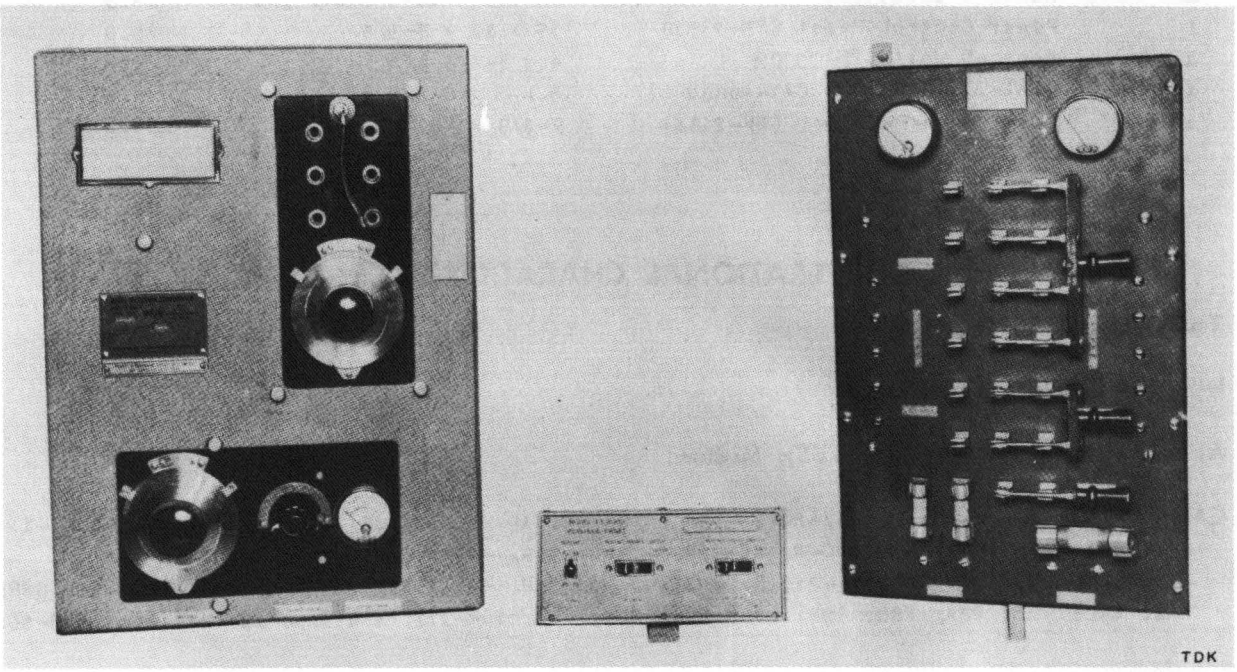
POWER OUTPUT: 5 w.

POWER REQUIREMENTS: Self-contained, 90 w, 6 v, dc. (Battery permits in excess of 48 cyc of operation, each cyc being of approximately two minutes duration, or 1-1/2 hours continuous keying.)

PHYSICAL CHARACTERISTICS

Portable Emergency Radio Transmitting Equipments TCY, TCY-1 measure 16-1/4 x 21-1/4 x 9-3/8 inches, net weight 60 pounds.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy, Army DATE OF THIS SHEET: 23 May 52	**AN/SRT-TYPE** SERVICE TYPE NUMBER: TDK EMERGENCY RADIO TELEGRAPH TRANSMITTER



Emergency Radio Telegraph Transmitter TDK is a-m (mcw) equipment for emergency m-f transmission aboard ship. It provides a high degree of reliability, together with simplified operation and minimum drain from the power supply circuits.

This transmitter uses a simple self-excited oscillator for frequency control.

It will operate from 115-v, d-c, or 12-v storage battery power sources. When it is used only for emergency service from a 12-v battery, no connections are needed to the 115-v motor: but 115-v, d-c must be connected to the power control panel for battery charging.

AN/SRT-TYPE

TDK :SERVICE TYPE NUMBER

EMERGENCY RADIO TELEGRAPH TRANSMITTER

INSTRUCTION LITERATURE: Not Available

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Navy, Army

DATE OF THIS SHEET : 23 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter Unit CRM-52269	20-1/8 x 15-1/8 x 7-1/2	26.0
1	Power Control Panel CRM-23310	19 x 12 x 8-3/8	25.0
1	Control Unit CRM-23309	4 x 9-1/8 x 5	4.5
1	Plate Transformer CAY-30892	5 x 5 x 5-3/4	8.5
1	Motor Generator Set CBP-21864	9-1/8 x 30 x 7-3/4	130.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/GRR-3; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/URR-23; AN/VRC-4; BC-314, -344, -348, -453, -779; MBS; R-62/PR, -96/SR, -129/U, -203/SR, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -388/URR; RAK; RAL; RAS; RBA; RBB; RBH; RBL; RBM; RCH; RDF; SCR-177; ARC Type 12; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.355 - 0.50.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw.

POWER OUTPUT: 30 w into a 750 uuf, 4 ohm antenna.

POWER REQUIREMENTS: 460 w, 115 v, dc; or 540 w, 12 v, dc (consisting of one BA-801 and one BA-802, 256-ampere-hour storage battery).

PHYSICAL CHARACTERISTICS

Emergency Radio Telegraph Transmitter TDK measures 20-1/8 x 15-1/8 x 7-1/2 inches.

STATUS: Std

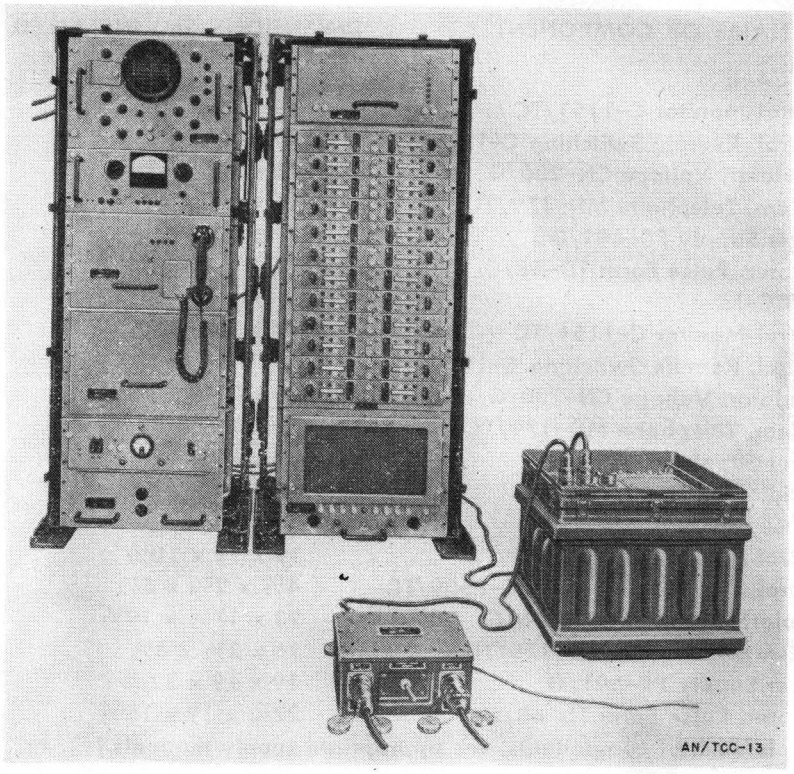
CLASSIFICATION OF EQUIPMENT:
Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 15 June 1956

AN/TCA–1, TCC–13, TRA–10

MULTIPLEXER GROUP; MULTIPLEXER SET; RESTORER GROUP, PULSE FORM



Multiplexer Group AN/TCA–1, Multiplexer Set AN/TCC–13 (shown above), and Pulse Form Restorer Group AN/TRA–10 are used as drop-and-insert terminals, terminal sets, and pulse form restorers, respectively, in 23- or 45-channel two-way microwave radio-relay systems.

Multiplexer Set AN/TCC–13 is operated in pairs, one at each end of the system, to combine 23 independent voice-frequency channels into a common video signal for transmission over a single rf carrier.

Multiplexer Group AN/TCA–1 provides eight independent voice-frequency channels at a repeater station. It is limited to a system using the AN/TCC–13.

Pulse Form Restorer Group AN/TRA–10 reshapes the 23- or 45-channel pulse train received from radio receiving equipment into a standard wave shape before feeding the transmitter at a relay station in a microwave radio-relay system.

Multiplexer Set AN/TCC–13 can be used only with a manual switchboard and can be operated on a two-wire or four-wire basis for each of 23 standard telephone channels.

AN/TCA–1, TCC–13, TRA–10

MULTIPLEXER GROUP; MULTIPLEXER SET; RESTORER GROUP, PULSE FORM

INSTRUCTION LITERATURE: TM 11–2141

USING SERVICE: USA

DATE OF THIS SHEET: 15 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	For AN/TCA–1:		
1	Control-Monitor C–1151/TC	19 x 19 x 10½	
2	Control, Remote Switching C–1509/TC	4½ x 2¾ x 5½	
1	Regulator, Voltage CN–236/G	23 x 17½ x 19½	215
16	Modem, Telephone MD–179/TC	16 x 2½ x 8½	5.5
1	Power Supply PP–691/G	19 x 19 x 12	123
1	Restorer, Pulse Form TD–68/G	22¾ x 19 x 15⅝	
	For AN/TCC–13:		
1	Control-Monitor C–1151/TC	19 x 19 x 10½	
2	Control, Remote Switching C–1509/TC	4½ x 2¾ x 5½	
1	Regulator, Voltage CN–236/G	23 x 17½ x 19½	215
24	Modem, Telephone MD–179/TC	16 x 2½ x 8½	5.5
1	Power Supply PP–691/G	19 x 19 x 12	123
1	Multiplexer TD–60/TCC–13	19 x 19 x 8¾	
	For AN/TRA–10:		
1	Control-Monitor C–1151/TC	19 x 19 x 10½	
2	Control, Remote Switching C–1509/TC	4½ x 2¾ x 5½	
1	Regulator, Voltage CN–236/G	23 x 17½ x 19½	215
4	Modem, Telephone MD–179/TC	16 x 2½ x 8½	5.5
1	Power Supply PP–691/G	19 x 19 x 12	123
1	Restorer, Pulse Form TD–68/G	22¾ x 19 x 15⅝	

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Corps and higher headquarters.

INSTALLATION: Ground, transportable.

MAXIMUM SYSTEM LENGTH: Extended.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Radio Set AN/TRC–29.

FACILITIES AFFORDED: 2 chan (TRA–10); 8 chan (TCA–1); 23 chan (TCC–13).

FREQUENCY:

Modulating Bandwidth: 300 to 3,500 cy.

Signaling: 20 cy.

Test: 1,000 cy.

TYPE MODULATION: Pulse pos; time div multiplexing.

TYPE RINGING: 20 cy.

POWER REQUIREMENTS: 785 w (TRA–10), 1.1 kw (TCA–1, TCC–13), 115/230 v, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
AN/TCA–1	26½ x 27 x 60 (ea rack)	1,264	55.1	1.4	
AN/TCC–13	26½ x 27 x 60 (ea rack)	1,284	55.1	1.4	
AN/TRA–10	26½ x 27 x 60	810	30.2	.8	
DOMESTIC PACK:					
EXPORT PACK:					
AN/TCA–1:		2,576	159.5	4	6
AN/TCC–13:		2,596	159.5	4	6
AN/TRA–10:		1,746	98.7	2.5	5

STATUS: Limited Standard	AN/TCA-TYPE
CLASSIFICATION OF EQUIPMENT: Unclassified	SERVICE TYPE NUMBER: UH
USING SERVICE: Navy	RADIO-LINE TERMINAL EQUIPMENT
DATE OF THIS SHEET: 29 May 52	



Radio-Line Terminal Equipment UH is control equipment used for a radio relay link. It separates the transmitting and receiving paths to the radio transmitter and receiver when a two-wire line is used for connection to a line terminal and provides a means of adjusting the levels to the required values in either two- or four-wire operation. It is used as a component of Portable Carrier Control System UF.

Telephone communication between radio line terminals (over the radio link) is possible but interrupts telegraph service. This equipment has two separate channels, one for passing the higher circuit frequencies and one for passing the lower circuit frequencies.

AN/TCA-TYPE

UH :SERVICE TYPE NUMBER

RADIO-LINE TERMINAL EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,223
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Control Unit CW-23427	Not Available	Not Available
2	Telephone Set Unit CW-51068	20 x 2-1/2 x 7	" "
2	Cabinet CW-10332	24-1/4 x 17-1/8 x 23-7/8	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground transportable.

CAN COMMUNICATE WITH: This is signal-modifying equipment used in conjunction with primary communication apparatus.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Between UH and UG, two- or four-wire line; between UH and radio link equipment, two-wire line.

FREQUENCY: 500 to 2,050 cps in two groups:
Low group - 500 to 1,235 cps.
High group - 1,235 to 2,050 cps.

TYPE OF MODULATION: Am.

POWER REQUIREMENTS: 15 w, 103 – 126 or 207 – 253 v, 50/60 cyc, 1 phase ac (per cabinet).

PHYSICAL CHARACTERISTICS

Radio-Line Terminal Equipment UH measures 24-1/4 x 17-1/8 x 23-7/8 inches, net weight 326 pounds, volume 11-1/4 cu ft. Packed for domestic shipment: total weight 746 pounds, total volume 27 cu ft, 0.675 ship ton.

STATUS: Std

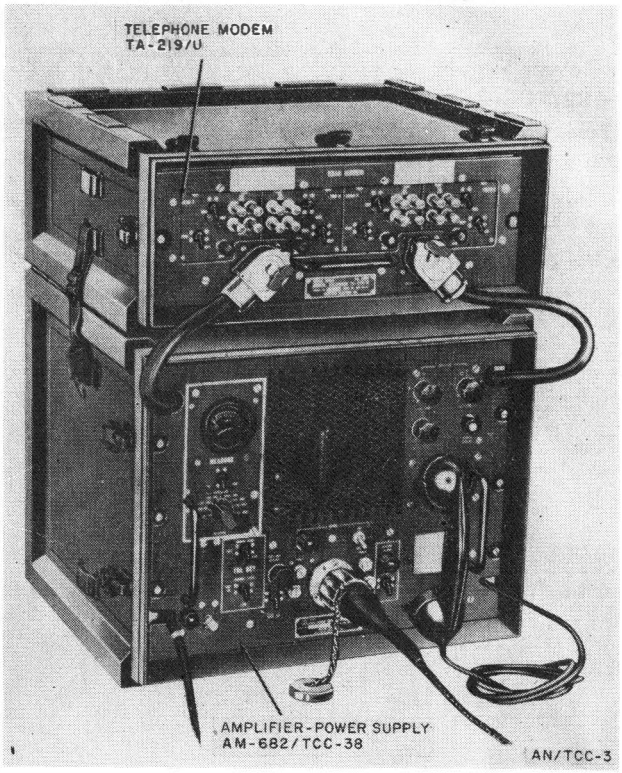
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 15 June 1956

AN/TCC–3, –23

TERMINAL, TELEPHONE



Telephone Terminals AN/TCC–3 and AN/TCC–23 are four-channel carrier telephone terminal sets used to provide four traffic channels and one order-wire channel over loaded spiral-four cable, or equivalent wire facilities; or to carry a single wide-band special service channel.

The AN/TCC–3 consists essentially of a telephone modem unit and an amplifier power supply. The AN/TCC–23 is composed of the AN/TCC–3 plus two power units (one spare) and accessory items.

Systems using this equipment may include such units as Telephone Repeaters AN/TCC–5 and can be operated with Radio Sets AN/GRC–10, AN/TRC–1, AN/TRC–8, and AN/TRC–24.

AN/TCC–3, –23

TERMINAL, TELEPHONE

INSTRUCTION LITERATURE: TM 11–2142

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 15 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	For AN/TCC–3:		
1	Amplifier-Power Supply AM–682/TCC–3	9⅛ x 18 1/16 x 20⅝	68 or 73
1	Modem, Telephone TA–219/U	17 1/16 x 18 1/16 x 20⅝	103
	For AN/TCC–23:		
1	Terminal, Telephone AN/TCC–3		
2	Power Unit PE–75	24½ x 19 x 36	330

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, transportable.

MAXIMUM SYSTEM LENGTH: 25 (100 mi w/AN/TCC–5).

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Spiral-four cable (unloaded) or four-wire facilities.

FACILITIES AFFORDED: 4 traffic chan plus 1 order wire chan or 1 wide-band chan; monitoring and talking on ea chan.

FREQUENCY:

Channel 1: 8 kc.
Channel 2: 12 kc.
Channel 3: 16 kc.
Channel 4: 20 kc.

FREQUENCY BANDS:

Order Wire: 300 to 3,100 cy.
Channel 1: 4,500 to 7,700 cy.
Channel 2: 8,500 to 11,700 cy.
Channel 3: 12,500 to 15,700 cy.
Channel 4: 16,000 to 19,700 cy.

TYPE MODULATION: Am (A3a).

TYPE RINGING: 1,600 cy.

POWER REQUIREMENTS: 125 w, 115/230 v, 50/60 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	26 3/16 x 18 1/16 x 20⅝	176 or 456.5	5.7		
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

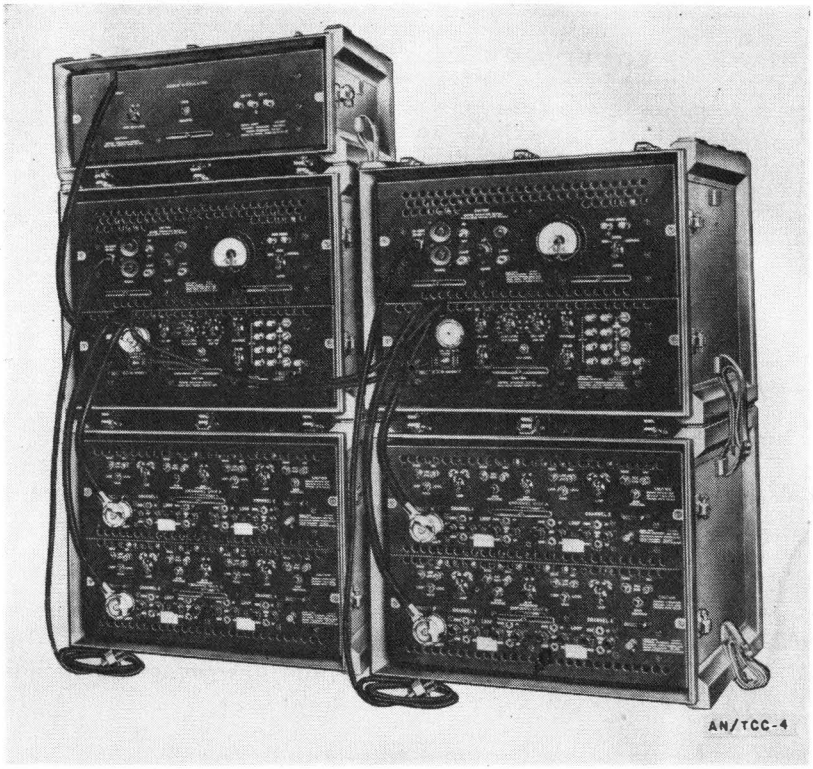
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 18 June 1956

AN/TCC–4, –20

TERMINAL, TELEGRAPH



Telegraph Terminals AN/TCC–4 and AN/TCC–20 are used for high-speed frequency-shift, voice-frequency, carrier telegraph communication over two-wire or four-wire systems.

These terminal sets are composed of different arrangements of the same basic operating components to provide 4, 8, or 16 communication channels over systems composed of open-wire, spiral-four cable, carrier telephone, and/or radio links in such systems, or a combination of such facilities.

They are used in point-to-point, trunk circuit, telegraph-through-telephone-channel, and telegraph-through-radio-link systems.

Different types of communication systems can be accommodated by varying the terminal arrangements and interconnecting facilities of this equipment.

AN/TCC–4, –20

TERMINAL, TELEGRAPH

INSTRUCTION LITERATURE: TM 11–2242

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 18 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	Telegraph Terminal Group TH–13/T[a]	16⅞ x 18⅛ x 20⅝	104
	Modem, Telegraph TH–14/T[a]	9 x 18⅛ x 20⅝	49
	Telegraph Modem Assembly TH–15/T[a]	16⅞ x 18⅛ x 20⅝	82

(For complete list of components, see appropriate supply manuals.)

[a]Quantity depends on type of system.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, transportable.

MAXIMUM SYSTEM LENGTH: Extended.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Teletypewriter at each term., Telegraph Terminal TH–5/TG, and interconnecting facilities, depending on type sys desired.

FACILITIES AFFORDED: 4-chan 2-wire, 4-chan 4-wire, 8-chan 2-wire, 8-chan 4-wire, 16-chan 4-wire (TCC–4); 4-chan 2-wire, 4-chan 4-wire, 8-chan 4-wire (TCC–20).

FREQUENCY: 425 to 2,975 cy (w/TH–14/T).
425 to 1,615 cy (w/o TH–14/T).

TYPE MODULATION: Fsk.

TYPE RINGING: 20 cy.

POWER REQUIREMENTS: 115/230 v, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:		495	22.7	.6	3

STATUS: Std

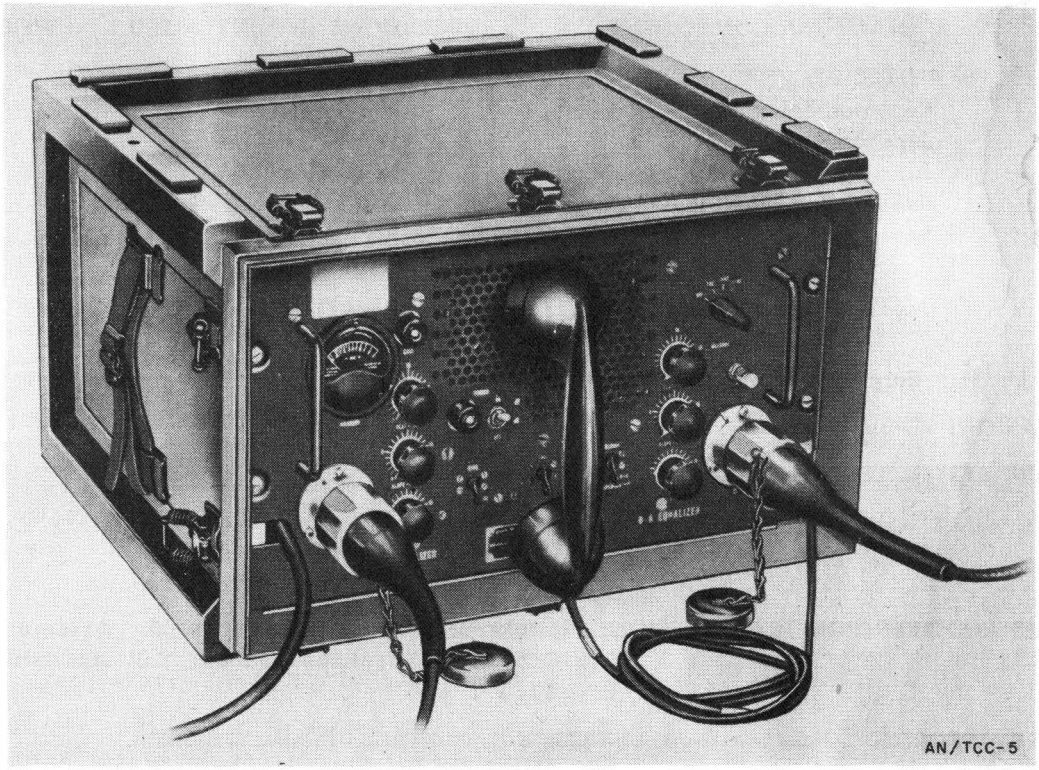
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 18 June 1956

AN/TCC–5, –22

REPEATER, TELEPHONE



Telephone Repeater AN/TCC–5 is a four-wire carrier telephone repeating equipment specifically designed for use at intermediate points of a system terminated by Telephone Terminal AN/TCC–3 to permit the addition of spiral-four cable sections within a system. It may also be operated with suitable radio terminal equipment in a radio link in such a system.

This equipment consists of a single major operating component that has its own power supply and includes provisions for ringing, monitoring, and connection facilities to the order-wire channel of the system.

Telephone Repeater AN/TCC–22 is composed of the AN/TCC–5 plus a power unit and accessory items.

AN/TCC–5, –22

REPEATER, TELEPHONE

INSTRUCTION LITERATURE: TM 11–2136

USING SERVICE: USA

DATE OF THIS SHEET: 18 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	For AN/TCC-22:		
1	Repeater, Telephone AN/TCC–5	12 3/16 x 18 1/16 x 20 5/8	86
1	Junction Box J–85/G	4 1/8 x 4 3/8 x 5 1/2	8
1	Junction Box JB–110	2 1/4 x 4 1/2 x 12 1/4	8.5
1	Ground Rod MX–148/G	72 lg x 3/4 dia	4
2	Power Unit PE–214–B	14 x 18 1/2 x 10	40

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Corps and higher headquarters.

INSTALLATION: Ground, fixed.

MAXIMUM SYSTEM LENGTH: 25 mi (ea rep); 100 mi (max).

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Spiral-four sys composed of Cable Assemblies CX–1065/G, w/Telephone Loading Coil Assemblies CU–260/G.

FACILITIES AFFORDED: Four message chan plus order-wire chan (both directions).

FREQUENCY:

Carrier Channels: 4,500 to 19,700 cy.
Order Wire: 300 to 3,100 cy.
Order-Wire Signaling Circuit: 1,600 cy.

TYPE RINGING: Ringer-oscillator.

POWER REQUIREMENTS: 115 or 230 v ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
AN/TCC–5	12 3/16 x 20 5/8 x 18 1/16	86	2.6		
DOMESTIC PACK:					
EXPORT PACK:					
AN/TCC–5		150	6.8		

STATUS: Std

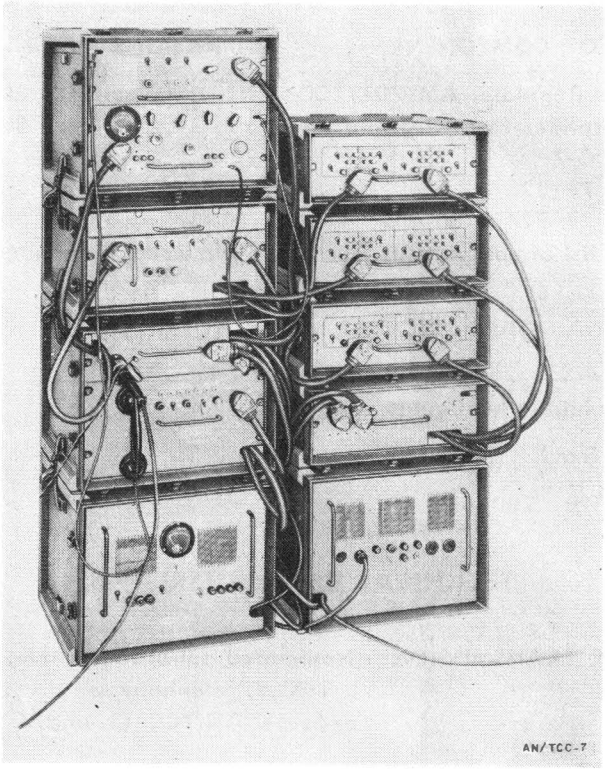
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 18 June 1956

AN/TCC–7

TERMINAL, TELEPHONE



Telephone Terminal AN/TCC–7 is used in a 12-channel carrier telephone facility composed of a single nonloaded spiral-four cable and/or radio-relay links of the system. Such a system includes attended Telephone Repeater AN/TCC–8 and unattended Telephone Repeater AN/TCC–11 to provide two-way transmission of 12 voice-frequency message channels and one order-wire circuit.

This equipment consists of an amplifier, a receiver-transmitter test set group, two power supplies, four telephone modems, and a telephone carrier frequency supply.

Radio equipment, such as Radio Set AN/TRC–24, may be inserted as a radio-relay link in the transmission path of the system.

AN/TCC-7

TERMINAL, TELEPHONE

INSTRUCTION LITERATURE: TM 11-2139

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 18 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Amplifier-Pilot Regulator AM-707/TCC-7	17 1/16 x 18 1/16 x 20 5/8	108
1	Receiver-Transmitter-Test Set Group OA-443/TCC-7	17 1/16 x 18 1/16 x 20 5/8	83
1	Power Supply PP-826/U	17 1/16 x 18 1/16 x 20 5/8	103
1	Power Supply PP-827/U	17 1/16 x 18 1/16 x 20 5/8	100

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Corps or higher headquarters.

INSTALLATION: Ground, fixed.

MAXIMUM SYSTEM LENGTH: 200 mi.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Nonloaded spiral-four cable, Telephone Repeater AN/TCC-8, Telephone Repeater AN/TCC-11, and/or rad links.

FACILITIES AFFORDED: 12 voice freq message chan; 1 order-wire chan; monitoring and ringing facilities on the order-wire chan.

FREQUENCY: .3 to 99 kc (over spiral-four cable); 12 to 60 kc (over spiral-four cable and/or rad links).

TYPE MODULATION: Am.

TYPE RINGING: 1,600 cy.

POWER REQUIREMENTS: 710 w, 115/230 v, 49/65 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		746	21.8	.5	
DOMESTIC PACK:					
EXPORT PACK:		1,258	51.2	1.3	9

STATUS: Std

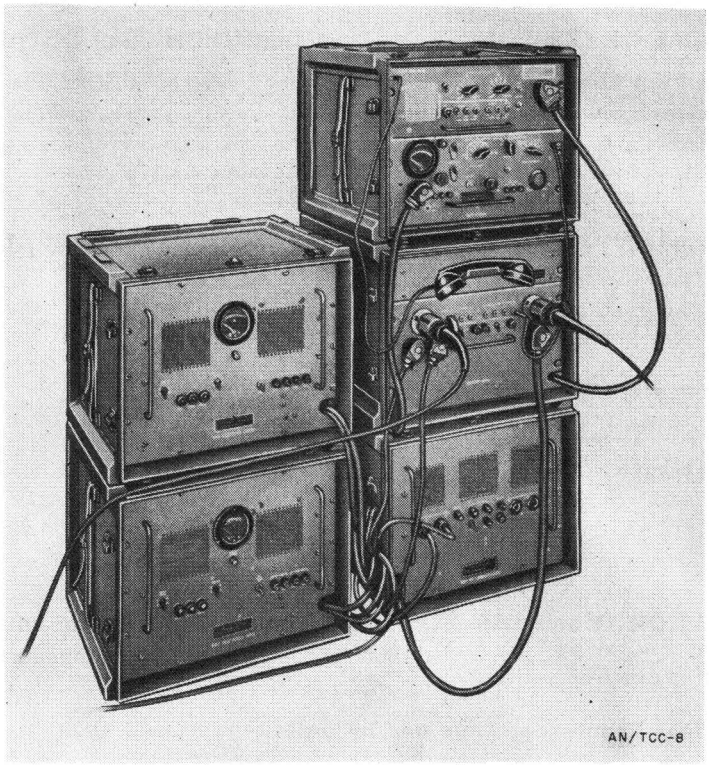
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 18 June 1956

AN/TCC–8, –21

REPEATER, TELEPHONE



Telephone Repeater AN/TCC–8 is the attended repeater element of a 12-channel carrier telephone system that includes Telephone Terminal AN/TCC–7 and unattended Telephone Repeater AN/TCC–11. Such a system can be operated over nonloaded spiral-four cable and/or radio links for distances up to 200 miles.

This equipment consists of an amplifier, a receiver-transmitter test set group, and two power supplies that also furnish power to one, two, or three unattended repeaters located in the system. A voice-frequency channel and a ringing signal are provided for communication between attended points of the system.

Telephone Repeater AN/TCC–21 is composed essentially of one AN/TCC–8 plus a power unit and accessories.

AN/TCC–8, –21

REPEATER, TELEPHONE

INSTRUCTION LITERATURE: TM 11–2140

USING SERVICE: USA

DATE OF THIS SHEET: 18 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Amplifier-Pilot Regulator AM–708/TCC–8	17 1/16 x 18 1/16 x 20 5/8	118
1	Receiver-Transmitter-Test Set Group OA–446/TCC–8	17 1/16 x 18 1/16 x 50 5/8	87
2	Power Unit PE–75–( ) (–21)	24 1/2 x 19 x 36	330
2	Power Supply PP–826/U	17 1/16 x 18 1/16 x 20 5/8	103
1	Power Supply PP–827/U	17 1/16 x 18 1/16 x 20 5/8	100

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Corps and higher headquarters.

INSTALLATION: Ground, fixed.

MAXIMUM SYSTEM LENGTH: 200 mi.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Single nonloaded spiral-four cable, Telephone Terminal AN/TCC–7, Telephone Repeater AN/TCC–11, and/or radio links.

FACILITIES AFFORDED: 12 message chan and an order-wire chan in both directions.

FREQUENCY: 12 to 60 kc (pilot freq: 68 kc; test freq: 83, 91, 99 kc).

ORDER-WIRE CHANNEL:

Frequency Range: 300 to 1,700 cy (line).

Signaling Frequency: 1,600 cy.

TYPE RINGING: Ringer-oscillator.

POWER REQUIREMENTS: 115/230 v ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
AN/TCC–8		511	18.4		
AN/TCC–21		1,171	39.4	.99	
DOMESTIC PACK:					
EXPORT PACK:					
AN/TCC–8		831	41.5	1	5

STATUS:

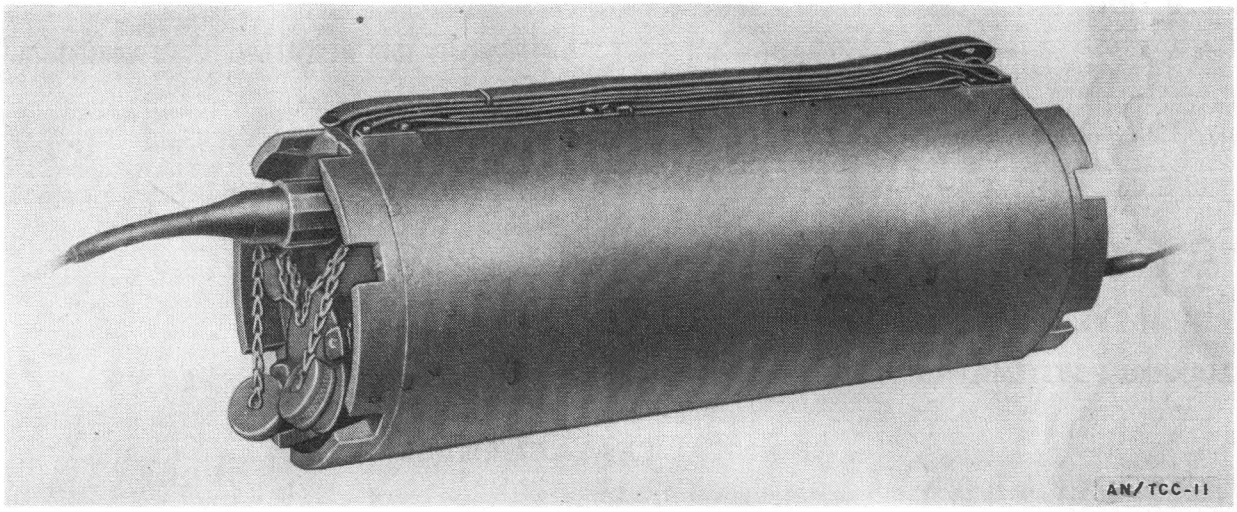
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 27 June 1956

AN/TCC–11

REPEATER, TELEPHONE



Telephone Repeater AN/TCC–11 is a four-wire, unattended, carrier-telephone repeater. It is used to extend the length of a 12-channel spiral-four carrier-telephone system that uses Telephone Terminals AN/TCC–7 and attended Telephone Repeaters AN/TCC–8. The extension obtained for each AN/TCC–11 added to the system is 5¾ miles.

This equipment contains facilities for amplifying, equalizing, and regulating the two-way transmission of a band of frequencies from 12 to 99 kc. This band contains 12 carrier-frequency message channels, a 68-kc pilot frequency, and three fault-finding frequencies of 83 kc, 91 kc, and 99 kc. Amplification is supplied to overcome cable loss at the various frequencies transmitted; regulation is applied to correct for changes in cable loss that occur with changes in temperature.

In addition, a means of ringing, talking, and listening at attended points is provided over an unamplified voice-frequency order-wire circuit.

AN/TCC–11

REPEATER, TELEPHONE

INSTRUCTION LITERATURE: TM 11–2148

USING SERVICE: USA

DATE OF THIS SHEET: 27 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, transportable.

MAXIMUM SYSTEM LENGTH: 5.75 mi between repeaters.

TECHNICAL CHARACTERISTICS

NUMBER AND TYPE OF FACILITIES: Extends the length of 12-chan carr-tel sys that uses Telephone Terminals AN/TCC–7 and Telephone Repeaters AN/TCC–8 at the attended pt.

POWER REQUIREMENTS: 148 v, .1 amp dc (cur reg).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	28¼ x 10	75	1.3		
DOMESTIC PACK:					
EXPORT PACK:		130	4.4		1

STATUS: Std

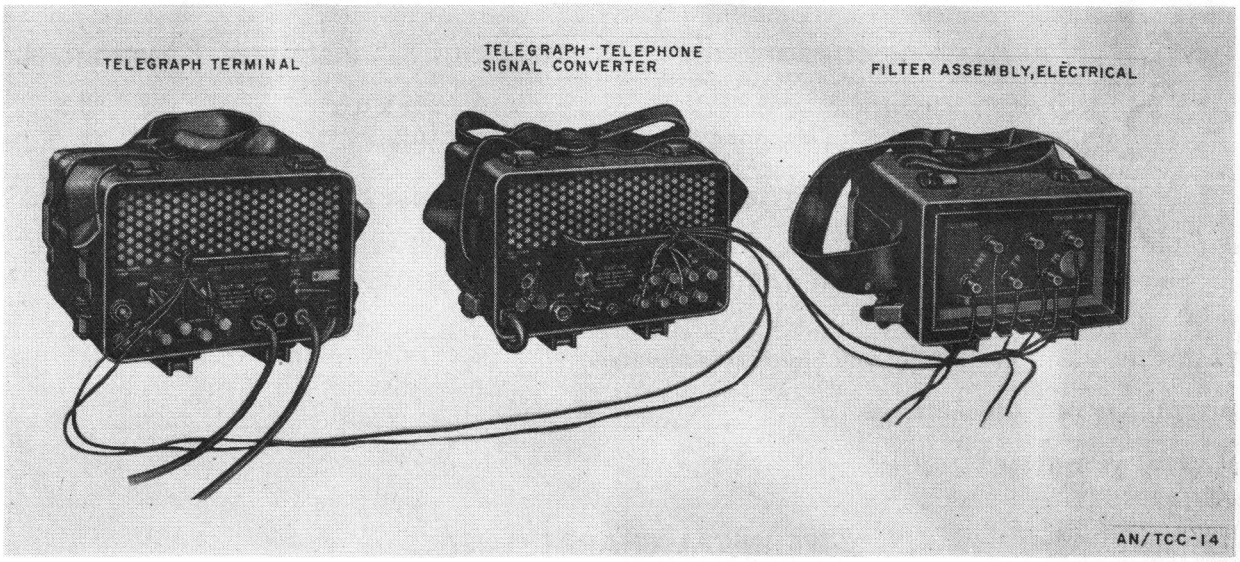
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

AN/TCC–14

TERMINAL, TELEGRAPH-TELEPHONE



Telegraph-Telephone Terminal AN/TCC–14 is an assemblage of three separate operating components that permits simultaneous transmission of telegraph pulses and speech.

This equipment can be operated in four different types of systems: point-to-point, networks connecting three or more teletypewriter stations, switched systems serving several teletypewriter stations, and push-to-talk remote control radio applications.

It is used in systems composed of two-wire, four-wire, carrier or voice-frequency telegraph facilities, and includes components enabling normal telephone ringing and supervision required for both local battery and common battery switchboards.

AN/TCC–14

TERMINAL, TELEGRAPH-TELEPHONE

INSTRUCTION LITERATURE: TM 11–2239

USING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Assembly, Electrical Filter F–98/U	10 x 8¾ x 6½	25.5
1	Converter, Telegraph-Telephone Signal TA–182/U	11 x 10½ x 7½	15
1	Terminal, Telegraph TH–5/TG	11 x 10½ x 7½	18.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Regimental and higher headquarters.

INSTALLATION: Ground, fixed.

MAXIMUM SYSTEM LENGTH:

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Two-wire, four-wire, voice freq, carrier, and/or radio remote cont.

FACILITIES AFFORDED: Alt tlg tel; simultaneous tlg tel; speech plus half-duplex, push-to-talk radio; and/or tlg only.

FREQUENCY:

Telegraph Terminal: Mark, 1,325 cy; space, 1,225 cy;
Electrical Filter Assembly: 1,275 cy (midfreq).

TYPE MODULATION: Fsk.

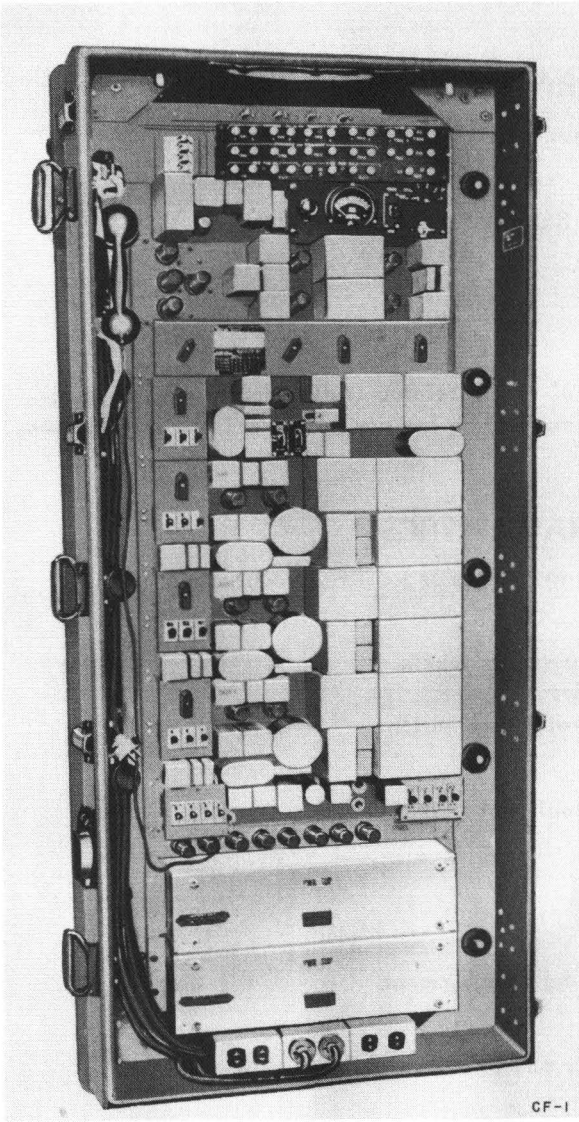
TYPE RINGING: 20 cy.

POWER REQUIREMENTS: 115 v ±10%, 50/60 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		58			
DOMESTIC PACK:		68.5	2.2		3
EXPORT PACK:		88.5	3.1		1

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 9 Jan 52	**AN/TCC-TYPE** SERVICE TYPE NUMBER: CF-1 TELEPHONE TERMINAL



Telephone Terminal CF-1 (carrier) is a transportable, four-channel, carrier telephone terminal equipment used in systems composed of spiral-four cable or equivalent facilities. It is used for long distance communication in systems serving division and higher headquarters.

This equipment consists of a single bay of apparatus which provides one voice-frequency, plus three carrier-frequency channels.

It requires additional equipment for ringing. It may used with other carrier terminal equipment to provide telephone and telegraph traffic handling, and transmission facilities. Distances up to about 100 miles are possible with repeaters at 25-mile intervals, over cable on the ground or in the air, and up to 400 miles over buried cable. Operation over nonrepeated circuits is possible up to 45 miles.

This terminal is the principal operating component of Telephone Terminal Set TC-21.

It operates from 115/230-v, a-c power and in emergencies can be operated from a 12-v storage battery.

AN/TCC-TYPE	INSTRUCTION LITERATURE: TM 11-341
CF-1 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELEPHONE TERMINAL	USING SERVICE: Army, Navy
	DATE OF THIS SHEET: 9 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division, corps, army and higher headquarters.

INSTALLATION: Ground, transportable. Operates in fixed or semifixed installations.

MAXIMUM SYSTEM LENGTH: 400 miles.

CAN COMMUNICATE WITH: Repeater, terminal, central office, related station equipment, and subsidiary apparatus which operates in the same connecting facility in tactical or cable systems.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Spiral-four cable or facility of equivalent quality.

FACILITIES AFFORDED: One v-f plus 3 carrier frequency channels.
CF-1-A;-two-wire termination.
CF-1-B;-two-wire and four-wire termination.

FREQUENCY: 200 to 12,000 cps; approximate band spacing of 2,600 cps.

TYPE OF MODULATION: Am (nominal).

TYPE RINGING: Voice frequency by means of extra ringing equipment.

POWER REQUIREMENTS: 115/230 v, 50/60 cyc ac; or one 12-v, two 6-v storage batteries in emergencies.

PHYSICAL CHARACTERISTICS

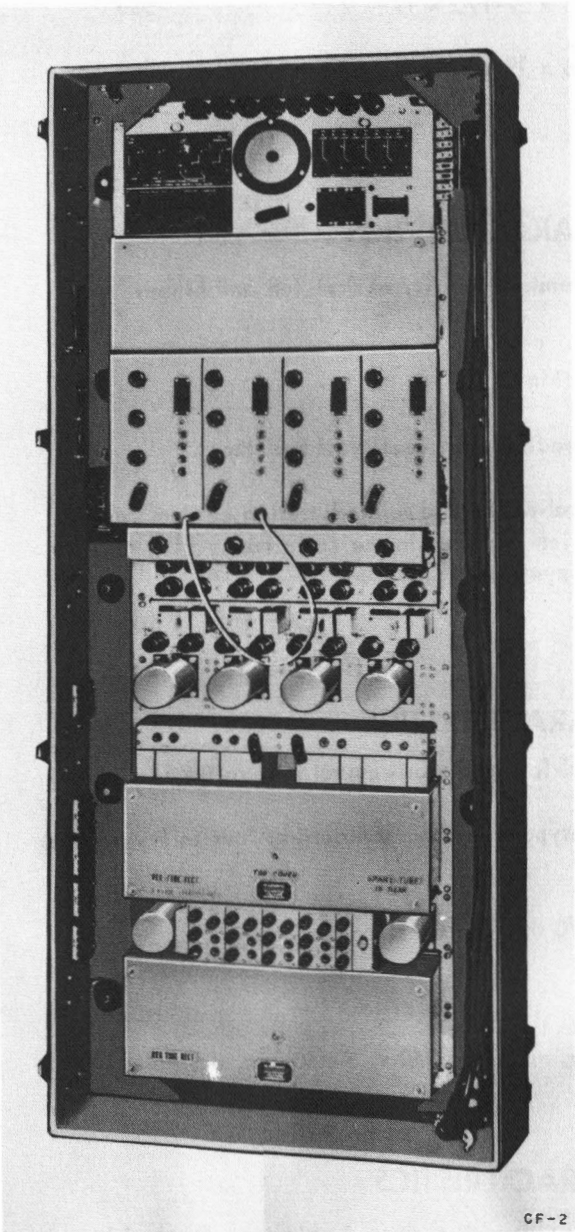
Telephone Terminal CF-1 measures 66 x 28 x 19 inches, net weight 475 pounds, volume 20.32 cu ft, 0.5 ship ton. Packed for export shipment: total weight 562 pounds, total volume 32 cu ft, 1.7 ship tons. Shipped in one package.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 26 Jan 52

AN/TCC-TYPE

SERVICE TYPE NUMBER: CF-2

TELEGRAPH TERMINAL



CF-2

Telegraph Terminal CF-2 is a transportable, four channel, v-f carrier terminal equipment used for two-way transmission of teletypewriter signals in each channel, and which operates over a channel of a carrier-telephone system derived by means of Telephone Terminal CF-1, Repeater CF-3, and associated equipment. It is used in spiral-four cable, or equivalent systems, serving division and higher headquarters.

This equipment consists of panel-mounted apparatus covering four channels, inclosed in a single cabinet; (CF-2-A, not illustrated here, consists of equivalent apparatus arranged in two cabinets but performing the identical service).

It can be installed adjacent to the carrier telephone terminal, but may be operated from a distant point over a two-wire circuit (between carrier telephone and telegraph bays) which has a net loss that does not exceed 8 db; or over any telephone circuit terminating on a two-wire basis (which has the required stability and freedom from interference) and the net loss of which does not exceed 25 db (at 500 - 2,050 cps).

Requires 200 to 250 w of 110-125 or 200-250-v ac.

AN/TCC-TYPE

CF-2 :SERVICE TYPE NUMBER

TELEGRAPH TERMINAL

INSTRUCTION LITERATURE: TM 11-355
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army, Navy
DATE OF THIS SHEET : 26 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Telegraph Terminal CF-2-A (1 Bay of equipment) or	66 x 27-1/2 x 19	530
1	Telegraph Terminal CF-2-B (2 Bays of equipment)	66 x 19 x 27-1/2	560

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Telegraph (teletypewriter) carrier terminal facility at division and higher headquarters.

INSTALLATION: Ground, transportable, in fixed locations.

MAXIMUM SYSTEM LENGTH: 100 miles or more; depending upon quality of facility.

CAN COMMUNICATE WITH: Repeater, terminal, central-office and related station equipment and subsidiary apparatus, which operates in the same connecting facility in tactical wire or cable systems.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Spiral-four cable or equivalent quality facilities.

FACILITIES AFFORDED: Two-wire or four-wire teletypewriter communication; four teletypewriter two-way channels.

FREQUENCY: 500 - 2,050 cps, 8 channels spaced 170 cps apart.

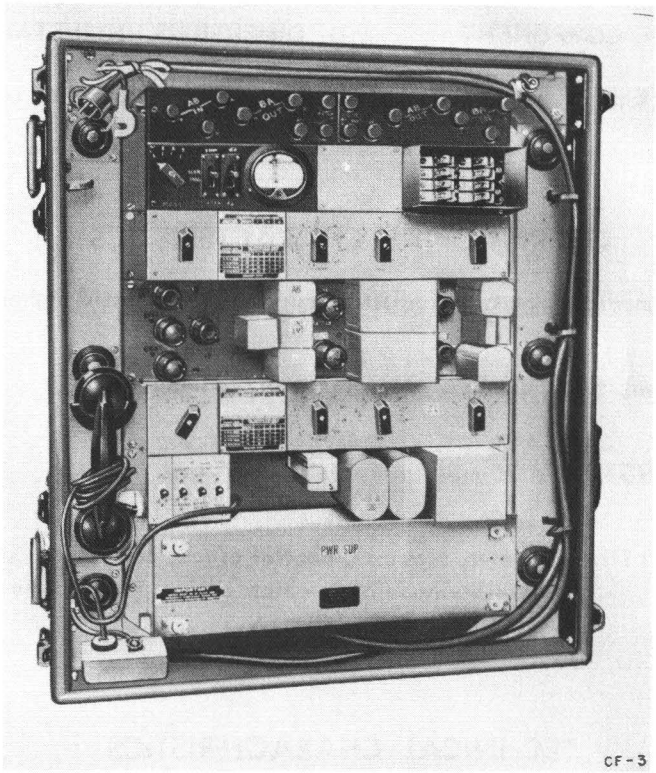
TYPE OF MODULATION: Am.

POWER REQUIREMENTS: 200 to 250 w, 100 – 125 v, or 200 – 250 v, 50/60 cyc, ac.

PHYSICAL CHARACTERISTICS

Telegraph Terminal CF-2-A weighs 1,060 pounds net, volume 40.6 cu ft, 1 ship ton. Packed for export shipment: total weight 1,450 pounds, total volume 84 cu ft, 2 ship tons. Shipped in 2 packages. Telegraph Terminal CF-2-B weighs 530 pounds net, volume 20.3 cu ft, 0.5 ship ton. Packed for export shipment: total weight 760 pounds, total volume 42 cu ft, 1 ship ton. Shipped in 1 package.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 9 Jan 52	**AN/TCC-TYPE** SERVICE TYPE NUMBER: CF-3 REPEATER



Repeater CF-3 is a carrier repeater equipment used to extend the range of telephone and telegraph carrier facilities using spiral-four or equivalent wire or cable in systems serving division, corps, or higher headquarters.

Equipment consists essentially of two one-way amplifiers and provides for deriving two d-c ground-return simplex circuits from the two associated cable pairs in each direction. One such circuit is used for signaling, the other may be used for d-c telegraph. Transmission in direction A-B is over one pair; B-A is over the other pair. Channel 1 uses the v-f band; channels 2, 3, and 4 are in the carrier-frequency range. Each telephone channel uses the same frequency in both directions.

The CF-3 is the primary operating component of Repeater Set TC-23 and can be storage battery operated in emergencies.

AN/TCC-TYPE	INSTRUCTION LITERATURE: TM 11-341, TM 11-4403
CF-3 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
REPEATER	USING SERVICE : Army
	DATE OF THIS SHEET : 9 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Intermediate points in facilities serving division and higher headquarters.

INSTALLATION: Ground; transportable. Operates in fixed locations.

MAXIMUM SYSTEM LENGTH: At 25-mile intervals in a system.

CAN COMMUNICATE WITH: Repeater, terminal, central office, and related station equipment and subsidiary apparatus which operate in the same connecting facility in tactical or cable systems.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Spiral-four or equivalent quality facilities.

FACILITIES AFFORDED: Four-wire telephone and telegraph.

FREQUENCY: 200 to 12,000 cyc.

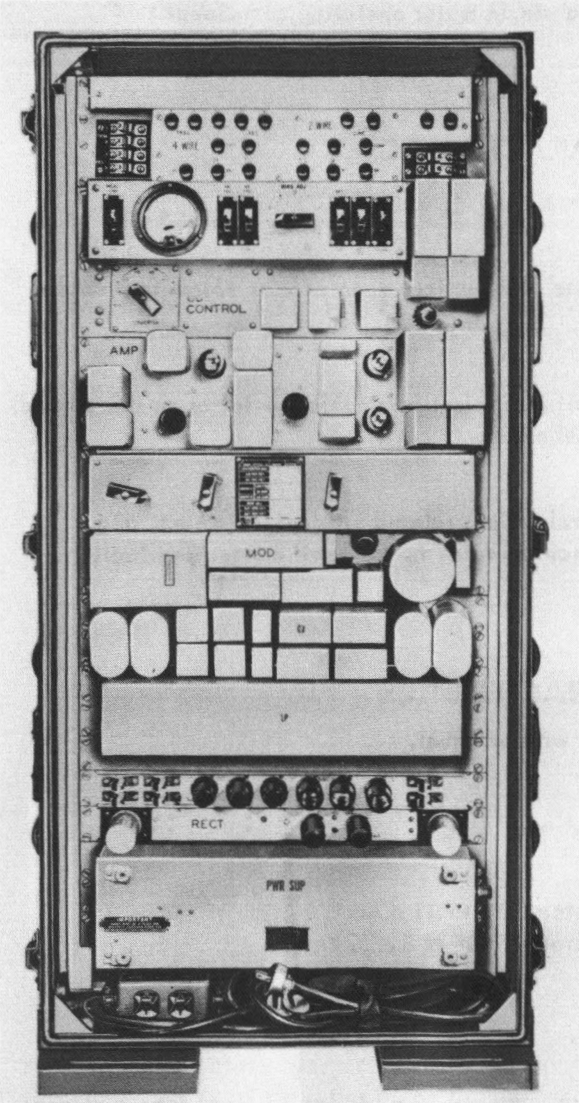
TYPE OF MODULATION: Am.

POWER REQUIREMENTS: 30 w 115/230 v, 50/60 cyc ac or 3.75 amp from 12-v storage battery in emergencies.

PHYSICAL CHARACTERISTICS

Repeater CF-3 measures 28 x 14 x 34 inches, net weight 225 pounds, volume 9 cu ft.
Packed for export shipment: total weight 340 pounds, total volume 17.9 cu ft. Shipped in 1 package.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 29 Dec 51	**AN/TCC-TYPE** SERVICE TYPE NUMBER: CF-4 CONVERTER



CF-4

Converter CF-4 is carrier-converter equipment, designed to be used at junctions of open wire and Telephone Terminal CF-1, or spiral-four cable, to change four-wire operation from the terminal (or the cable) to effective two-wire operation over the open wire pair. It is used in systems serving corps or higher headquarters.

This equipment consists of a single bay, or cabinet of apparatus which provides equivalent four-wire operation in direction B-A by maintaining the frequency of that channel in the 0.2 to 11.6 kc band, and by raising transmission in the A-B direction to the 20.85 to 32.25 kc band.

It is the primary operating component of Converter Set TC-33 and can be used at either terminal A or B, in systems using Repeater CF-5 at intermediate points to extend the operating range of an open wire system. It can also be used in conjunction with Repeater CF-3 at junctions between four-wire and two-wire facilities.

It operates from 115/230-v ac, or a 12-v storage battery.

AN/TCC-TYPE	INSTRUCTION LITERATURE: TM 11-2008, TM 11-4404
CF-4 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
CONVERTER	USING SERVICE : Army
	DATE OF THIS SHEET : 29 Jan 51

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: At corps, army, or higher headquarters.

INSTALLATION: At four-wire, two-wire junction points of a tactical open wire or spiral-four cable system.

MAXIMUM SYSTEM LENGTH: Six-db repeatered circuits on spiral-four cable (aerial or on the ground) 150 miles, (buried):- 400 miles.

CAN COMMUNICATE WITH: Repeater, terminal, central office, related station equipment, and subsidiary apparatus which operates in the same connecting facility.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Open wire or equal.

FACILITIES AFFORDED: Equivalent four-wire operation.

FREQUENCY: B-A direction (as converter B in a system) 0.2 to 11.6 kc.
A-B direction (as converter A in a system) 20.85 to 32.25 kc.

TYPE OF MODULATION: Am.

POWER REQUIREMENTS: 30 w, 115/230 v, 50/60 cyc, ac; and 12 v, dc (at 3.5 amp) from a storage battery.

PHYSICAL CHARACTERISTICS

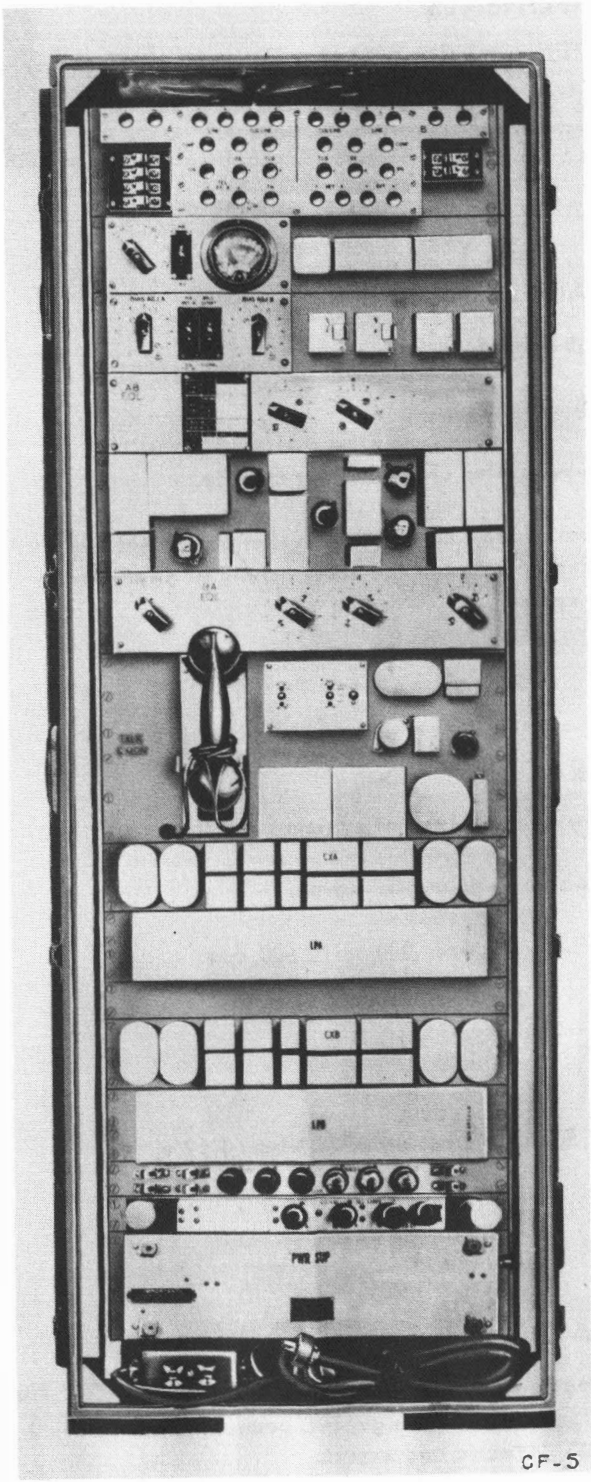
Converter CF-4 measures 49-1/2 x 24 x 17 inches, net weight 280 pounds, volume 11.6 cu ft.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 23 Jan 52

AN/TCC-TYPE

SERVICE TYPE NUMBER: CF-5

REPEATER



CF-5

Repeater CF-5 is a carrier repeater equipment used to extend the transmission range of open wire carrier systems in which Telephone Terminal CF-1, Converter CF-4, and related equipment are operated. It is used at intermediate points of communication systems serving division and higher headquarters.

This equipment consists essentially of two independent amplifiers, and related alarm, and signaling circuits arranged on relay rack panels and housed in a vertical cabinet as a single bay of equipment. Can be used in systems in which Converter CF-4 converts four-wire transmission to two-wire transmission, over a single open wire pair.

AN/TCC-TYPE	INSTRUCTION LITERATURE: TM 11-2008, -4405
CF-5 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
REPEATER	USING SERVICE : Army
	DATE OF THIS SHEET : 23 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: In open wire lines at division or higher headquarters.

INSTALLATION: Ground, transportable, operates in fixed locations.

MAXIMUM SYSTEM LENGTH: 150 miles dependent upon quality of connecting facility.

CAN COMMUNICATE WITH: Repeater, terminal, central office, and related station equipment and subsidiary apparatus which operates in the same connecting facility in tactical wire or cable systems.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Open-wire or equivalent system facilities.

FACILITIES AFFORDED: Two-wire, intermediate repeater range amplification.

FREQUENCY: A-B direction, 20,850 and 32,250 cps; B-A direction, 200 to 11,600 cps.

TYPE OF MODULATION: Am.

TYPE RINGING: Vf.

POWER REQUIREMENTS: 105 - 125, or 210 - 250 v, 50/60 cyc ac, 45 w, (4.5 amp) 12 v, dc from storage battery.

PHYSICAL CHARACTERISTICS

Repeater CF-5 weighs 380 pounds net. Packed for domestic shipment: total weight 450 pounds, total volume 22 cu ft, 1 ship ton. Packed for export shipment: total weight 690 pounds, total volume 40 pounds, 1 ship ton. Shipped in 1 package both domestic and export.

STATUS: L/Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 26 June 1956

AN/TCC–TYPE

SERVICE TYPE NUMBER: CF–6

TELEGRAPH TERMINAL

NO PHOTOGRAPH AVAILABLE

Telegraph Terminal CF–6 is a portable unit providing two channels of voice-frequency carrier telegraph. It may be used separately or in combination with Telegraph Terminal CF–2–( ).

A system using Telegraph Terminals CF–2–( ) and CF–6 is designed to operate over one channel of a four-channel telephone facility using Telephone Terminal CF–1–A. Such a system provides six two-way telegraph circuits.

In four-wire operation, transmission in each direction is over a separate line pair and each of the 12 channel frequencies can be transmitted in both directions. Eight of these 12 frequencies are provided by Telegraph Terminal CF–2–( ) and four by Telegraph Terminal CF–6. Two each of the CF–2–( ) and the CF–6 are required at each end of the carrier line.

AN/TCC–TYPE

INSTRUCTION LITERATURE: TM 11–2009

USING SERVICE: USA

DATE OF THIS SHEET: 26 June 1956

CF–6: SERVICE TYPE NUMBER

TELEGRAPH TERMINAL

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, transportable.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Normally u/w Telegraph Terminal CF–2–( ) (carr) and Telephone Terminal CF–1–A (carr).

FACILITIES AFFORDED: Two chan of voice-freq carr tlg.

FREQUENCY: 340 to 2,400 cy spaced 170 cy apart.

POWER REQUIREMENTS: 150 w, 115 or 230 v ±10%, 50/60 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	49⅜ x 24 x 17	400	12		
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: L/Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 21 June 1956

AN/TCC–TYPE

SERVICE TYPE NUMBER: CF–7

CARRIER HYBRID

NO PHOTOGRAPH AVAILABLE

Carrier Hybrid CF–7 is a unit used to connect Telephone Terminal CF–1–A (carrier) or Repeater CF–3–A (carrier), both of which are designed for four-wire operation, to a two-wire line. With this equipment, four two-way telephone circuits can be obtained over a single pair of wires. In addition, two dc ground-return telegraph circuits or one dc signaling circuit and one dc telegraph circuit can be obtained.

This equipment is used primarily with open-wire lines but may also be used on field wire or spiral-four cable.

Four voice-frequency telegraph channels can be made available in place of one of the telephone circuits by applying Telegraph Terminal CF–2–A or CF–2–B (carrier) at the telephone terminals.

This unit is similar to and interchangeable with Hybrid Circuit Network TA–255/TT.

AN/TCC–TYPE

INSTRUCTION LITERATURE: TM 11–2003

USING SERVICE: USA

DATE OF THIS SHEET: 21 June 1956

CF–7: SERVICE TYPE NUMBER

CARRIER HYBRID

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	(Equipment consists of a single major operating component.)		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, transportable.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Voice, dc tlg.

TYPE COMMUNICATION CIRCUITS: Field wire or spiral-four cable.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	18⅜ x 9½ x 7⅜	48	1		
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 22 June 1956

AN/TCC—TYPE

TA–31/U

NETWORK, HYBRID CIRCUIT

NO PHOTOGRAPH AVAILABLE.

Hybrid Circuit Network TA–31/U is a portable unit that electrically couples two- and four-wire circuits, and permits full-duplex operation in two-wire systems.

This equipment may be used in wire, radio, single- and double-ended, multichannel vf, and point-to-point systems. Provision is made for establishing simplex facilities, signaling, and remote control of radio transmitters. Additional equipment is required in systems used for remote control of radio transmitters, in simplex circuits, and where through signaling is required.

AN/TCC–TYPE

INSTRUCTION LITERATURE: TM 11–2144

USING SERVICE: USA

DATE OF THIS SHEET: 22 June 1956

TA–31/U

NETWORK, HYBRID CIRCUIT

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	(Equipment consists of a single major operating component.)		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Communications terminals.

INSTALLATION: Ground, fixed station.

MAXIMUM SYSTEM LENGTH:

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Two- or four-wire line from comm equip.

FACILITIES AFFORDED: Two- and four-wire lines.

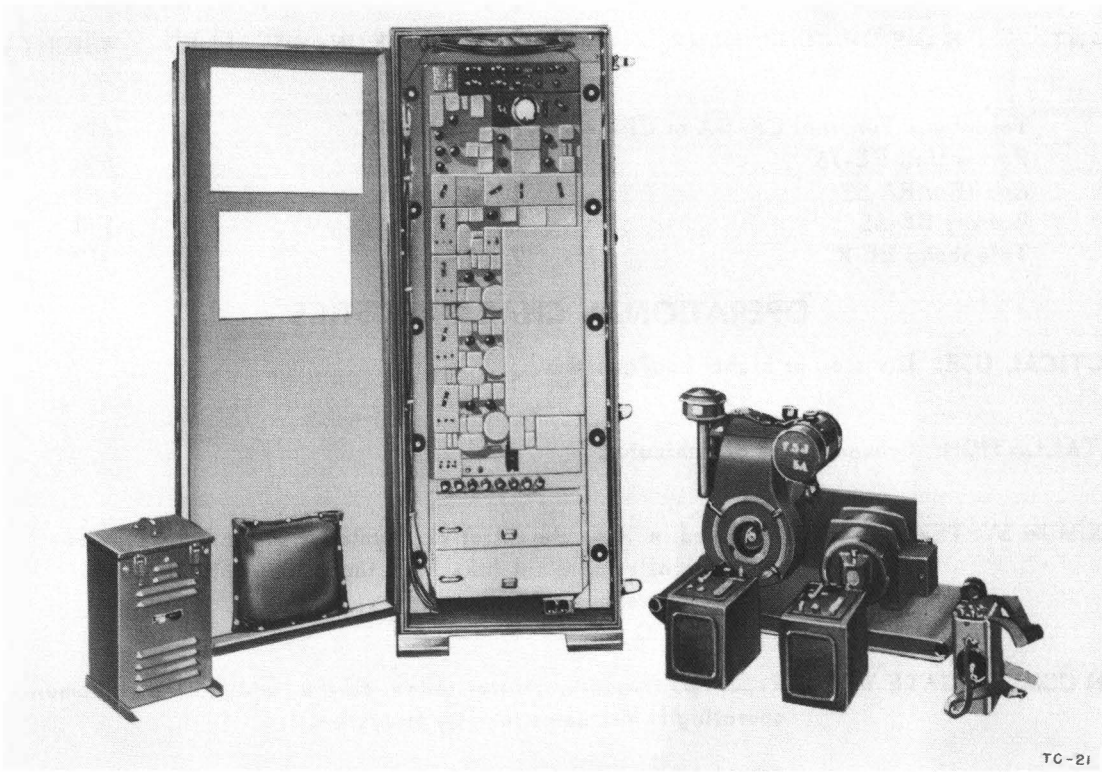
FREQUENCY: 250 to 3,200 cy.

IMPEDANCE: 600 to 4,000 ohms.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	9 x 11 x 16		.9		
DOMESTIC PACK:		43.5	1.9		1
EXPORT PACK:		70	3.25		1

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 4 Jan 52	**AN/TCC-TYPE** SERVICE TYPE NUMBER: TC-21 TELEPHONE TERMINAL SET



Telephone Terminal Set TC-21 is a carrier telephone terminal equipment which provides four v-f channels over a 100-mile spiral-four system, an open wire pair, or a combination of these facilities, for telephone and teletypewriter communication in long-range tactical carrier communication applications.

This equipment consists essentially of Telephone Terminal CF-1 (Carrier), plus rectifier and power unit components and related accessories.

It is usually installed at the terminal of a system in which Repeater Set TC-23 is used at intermediate points to extend the operating range. Also operated in conjunction with Repeater Sets TC-33 and TC-37 in open wire systems. Can also be used in a system in which one channel is transmitted over a radio link.

Operates from 115/230 v ac or, in emergencies, from a 12-v storage battery.

AN/TCC-TYPE

TC-21 :SERVICE TYPE NUMBER

TELEPHONE TERMINAL SET

INSTRUCTION LITERATURE: TM 11-341

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET: 4 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Telephone Terminal CF-1-A or CF-1-B	66 x 28 x 19	475
2	Power Unit PE-75	36 x 19 x 26	660
1	Rectifier RA-83	14 x 10 x 16	57
2	Battery BB-55	26 x 14 x 19	110
1	Telephone EE-8	7 x 16 x 7	10

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division or higher headquarters.

INSTALLATION: Ground, fixed or vehicular.

MAXIMUM SYSTEM LENGTH: Is used in 100-mile spiral-four system. Depends on type of system, allowable net loss, wire facilities available, and number of repeaters.

CAN COMMUNICATE WITH: Repeater, terminal, central office, carrier, and station equipment operating in the same facility or system.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Open wire or spiral-four cable.

FACILITIES AFFORDED: Two-wire or four-wire; four channels (one vf, three carrier); bandwidth, 2,600 cps per channel. Talking and monitoring facilities provided.

FREQUENCY: 200 to 12,000 cps.

TYPE OF MODULATION: Am.

TYPE RINGING: Vf (Ringing Equipment EE-101-A required at each terminal).

POWER REQUIREMENTS: 115/230 v ac, 50/60 cyc, or a 12-v storage battery (emergency operation).

PHYSICAL CHARACTERISTICS

Telephone Terminal Set TC-21 weighs 1,312 pounds net. Volume 46.7 cu ft.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 13 Feb 52

AN/TCC-TYPE

SERVICE TYPE NUMBER: TC-23
REPEATER SET



Repeater Set TC-23 is a transportable, four-wire, carrier repeater equipment used at intermediate points in a spiral-four cable carrier facility serving division and higher headquarters.

This equipment consists of the repeater component, a power unit, rectifier, and related accessories. It has facilities for transmitting, testing, and monitoring a v-f channel and for automatic transfer to emergency power supply.

Primary operating component of this equipment is part of Telephone Central Office Set AN/TCC-2 and is composed of repeater apparatus mounted on panels and contained in a wooden case. It is used with Telephone Terminal CF-1.

Operates on 115/230 v ac or 12-v storage battery.

AN/TCC-TYPE	INSTRUCTION LITERATURE: TM 11-341
	CLASSIFICATION OF EQUIPMENT: Unclassified
TC-23 :SERVICE TYPE NUMBER	USING SERVICE : Army
REPEATER SET	DATE OF THIS SHEET : 13 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Repeater CF-3	28 x 14 x 34	225
1	Power Unit PE-214	14-1/8 x 17-3/4 x 12-3/16	57
2	Battery BB-55	13 x 7 x 9-3/8 (ea)	110
1	Rectifier RA-83	14 x 10 x 16	51
1	Test Equipment IE-53	7 x 6 x 5-1/2	8
1	Tool Equipment TE-123	7 x 16 x 7	31

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division, communications zone, and zone of interior.

INSTALLATION: Ground; transportable.

CAN COMMUNICATE WITH: Carrier, terminal, central office, and related equipment operating in the same facility or composing the system.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED: Spiral-four cable.

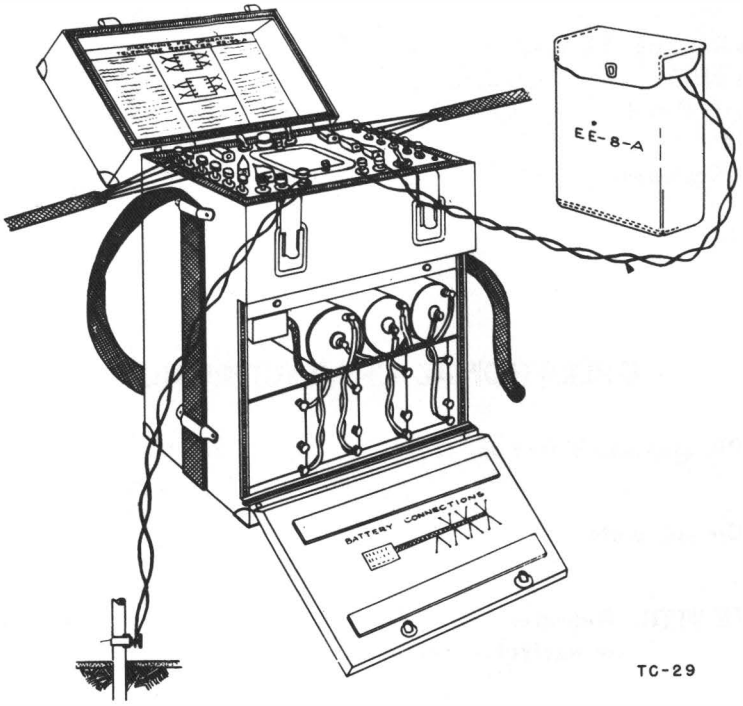
FACILITIES AFFORDED: Two simplexed circuits of the spiral-four transmission line.

POWER REQUIREMENTS: 115/230 v, 50/60 cyc ac or 12-v storage battery.

PHYSICAL CHARACTERISTICS

Repeater Set TC-23 weighs 482 pounds net, volume 22.5 cu ft. Packed for export shipment: total weight 1,036 pounds, total volume 35 cu ft, 1 ship ton.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Air Force DATE OF THIS SHEET: 15 Feb 52	AN/TCC-TYPE SERVICE TYPE NUMBER: TC-29 TELEPHONE REPEATER SET



TC-29

Telephone Repeater Set TC-29 is a portable repeating equipment used at intermediate or terminal points of a field telephone system to extend the transmissi on range of facilities serving division or higher headquarters.

This equipment consists of two amplifiers contained in a carrying case, two ground rods, and related components. It is designed for simplex operation as terminal equipment and for two-way operation over spiral-four transmission lines when used at intermediate points in a system.

Provides for monitoring and talking in either direction, and/or gain control of each of the two amplifiers, and impedance switching.

Operates from a storage battery or from dry cells which can be contained in the carrying case.

AN/TCC- TYPE

TC-29 : SERVICE TYPE NUMBER

TELEPHONE REPEATER SET

INSTRUCTION LITERATURE: TM 11-348

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army, Air Force

DATE OF THIS SHEET : 15 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Telephone Repeater EE-99-A	14 x 12 x 8	40
1	Telephone EE-8	4 x 8 x 10	10
1	Power Supply PE-204	5-1/2 x 5-3/4 x 6-3/4	10
1	Ground Rod	72 x 1/2 (dia)	4.15
	Accessory Equipment	Not Available	16

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher units.

INSTALLATION: Ground, portable.

CAN COMMUNICATE WITH: Repeater, terminal, or central office equipment operating in field wire or equivalent facilities or systems.

TECHNICAL CHARACTERISTICS

NUMBER AND TYPE OF FACILITIES: Field wire, open wire, and spiral- four facilities. Simplex and phantom circuit operation, with monitoring and talking in either direction.

POWER REQUIREMENTS: One 12-v storage battery or three Batteries BA-23 and four Batteries BA-36.

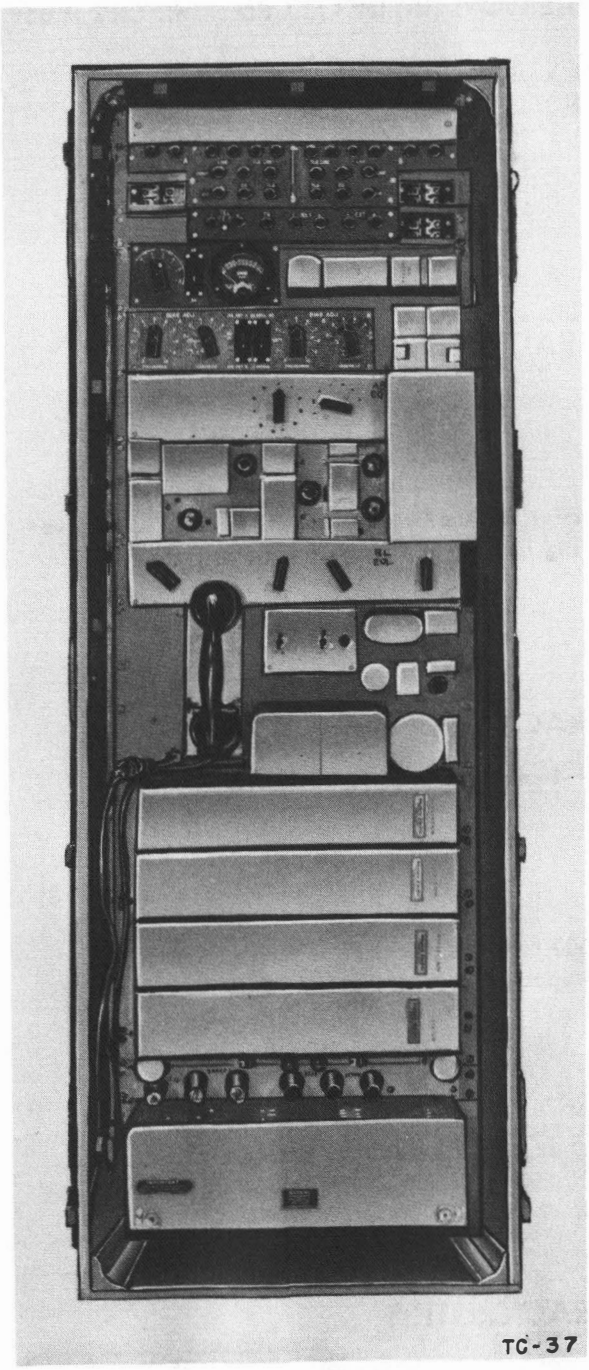
PHYSICAL CHARACTERISTICS

Telephone Repeater Set TC-29 weighs 80 pounds net.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 4 Jan 52

AN/TCC-TYPE

SERVICE TYPE NUMBER: TC-37
REPEATER SET



Repeater Set TC-37 is a two-wire, four-channel carrier repeater for extending the transmission range over open wire facilities in fixed plant applications at division or higher headquarters.

This equipment consists of Repeater CF-5, power unit and rectifier, and associated items. It is usually operated in conjunction with Converter Set TC-33 and Telephone Terminal Set TC-21.

This system provides four telephone channels, one of which is used for voice-frequency telegraph communication.

Operates on 110/220-v a-c power; it can be operated by a 12-v storage battery in emergencies.

AN/TCC-TYPE

TC-37 :SERVICE TYPE NUMBER

REPEATER SET

INSTRUCTION LITERATURE: TM 11-2008
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 4 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Repeater CF-5	24 x 19 x 65	380
1	Power Unit PE-214	12-3/16 x 14-1/8 x 17-1/8	56
1	Rectifier RA-83	14 x 10 x 16	57
2	Battery BB-55	26 x 14 x 19	110

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground.

CAN COMMUNICATE WITH: Repeater, or terminal carrier terminal equipment and related apparatus operating in the connecting facility or composing the system.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Spiral-4 cable, or facility of equivalent quality.

FACILITIES AFFORDED: Two-wire, 4 channels.

FREQUENCY: AB direction of transmission, 200-11,600 cps; BA direction of transmission, 20,850-32,250 cps. 2,600 cps channel spacing.

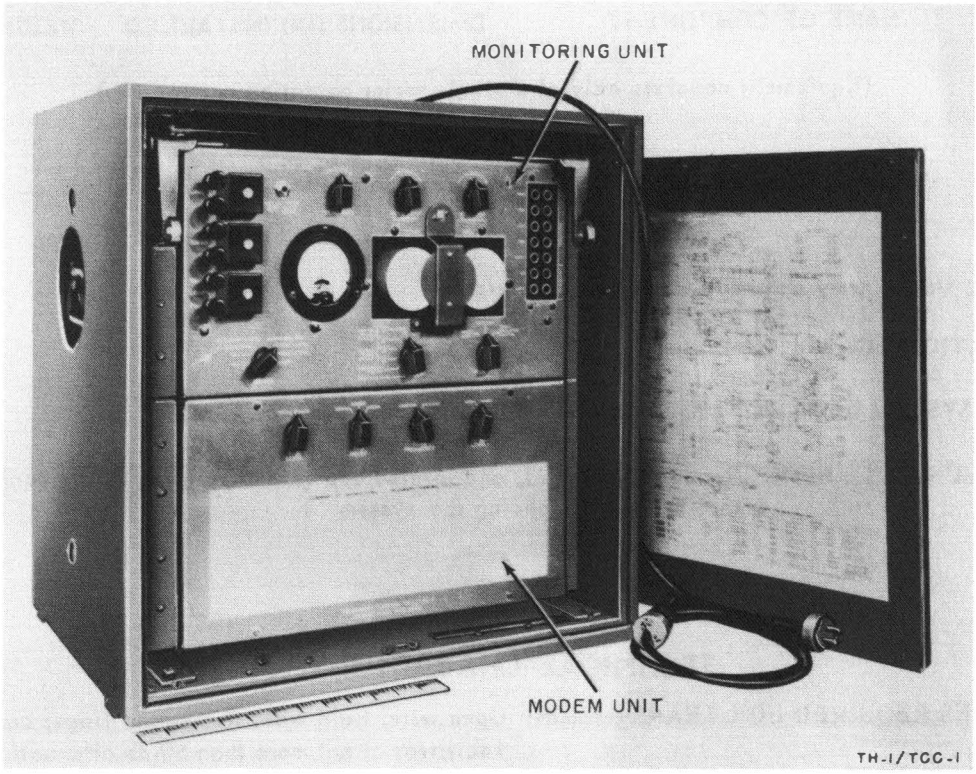
TYPE OF MODULATION: Am (nominal).

POWER REQUIREMENTS: 46 w 110/220 v, 50/60 cyc, ac, or a 12-v storage battery.

PHYSICAL CHARACTERISTICS

Repeater Set TC-37 packed for export shipment: total weight 942 pounds, total volume 48.1 cu ft, 1.2 ship tons. Shipped in 6 packages.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 30 Jun 52	**AN/TCC-TYPE** AN/COMP TYPE NUMBER: TH-1/TCC-1 TELEGRAPH TERMINAL



Telegraph Terminal TH-1/TCC-1 is a carrier telegraph equipment which provides two-way, v-f telegraph or teletypewriter communication over a portion of the frequency range of a v-f telephone circuit, and is used principally at fixed plant installations at Army and equivalent headquarters.

This equipment consists essentially of three panels of operating apparatus. One of these is called the modem unit, the second is the monitoring unit, and the third is a voice-frequency ringer panel. The monitoring unit panel is mounted above the modem unit panel in a wooden cabinet; the ringer panel is mounted at the top rear of the cabinet.

It can be used to provide speech-plus-duplex operation in connection with line facilities which may be open wire, cable, field wire, repeatered lines, or carrier facilities. Filter F-2/GG (not a component of this equipment) is required at intermediate points in the telephone circuit to separate telephone and telegraph circuit frequencies.

It operates from a 12-v storage battery or from 100 - 130 or 200 - 250-v ac.

AN/TCC-TYPE	INSTRUCTION LITERATURE: TM 11-2206
TH-1/TCC-1 :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELEGRAPH TERMINAL	USING SERVICE : Army, Navy
	DATE OF THIS SHEET : 30 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army and equivalent headquarters.

INSTALLATION: Ground, fixed plant.

MAXIMUM SYSTEM LENGTH: 620 miles (using 104-mil hd copper open wire).

CAN COMMUNICATE WITH: Repeater, terminal, and related apparatus operating in the connecting facility and composing the system.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Open wire, field wire, repeatered lines; carrier facilities of not more than 50-db attenuation.

FACILITIES AFFORDED: Speech, plus duplex.

FREQUENCY: Telephone Circuit: - 200 to 3,000 cps.
Telegraph Circuit: - 1,500 to 2,000 cps.

TYPE OF MODULATION: Am.

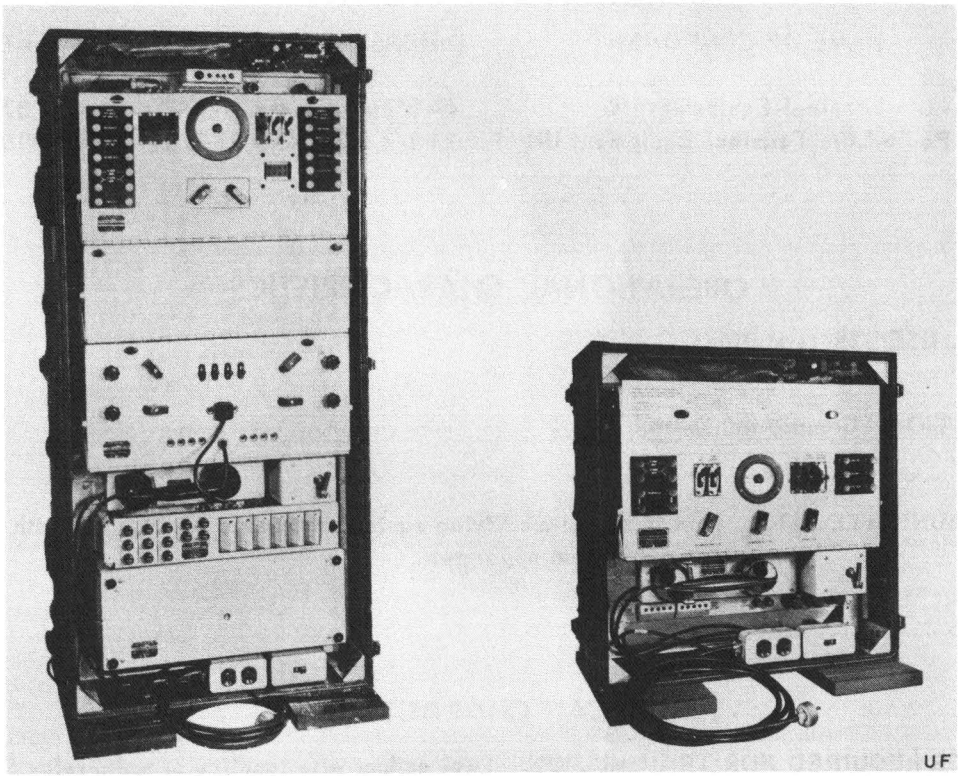
TYPE RINGING: v-f; 20-cyc (1,000 or 500-cyc signals interrupted at 19 cyc).

POWER REQUIREMENTS: (12.5 amp) from 12-v storage battery
160 w (maximum) at 100 - 130/200 - 250 v, 50/60 cyc, ac.

PHYSICAL CHARACTERISTICS

Telegraph Terminal TH-1/TCC-1 measures 22-1/4 x 21-1/4 x 17-3/4 inches, net weight 200 pounds, volume 5 cu ft.

STATUS: Limited Standard	AN/TCC- TYPE
CLASSIFICATION OF EQUIPMENT: Unclassified	SERVICE TYPE NUMBER: UF
USING SERVICE: Navy	PORTABLE CARRIER CONTROL SYSTEM
DATE OF THIS SHEET: 29 May 52	



Portable Carrier Control System UF is used in multichannel carrier telegraph operation over landlines or radio relay links. It converts d-c telegraph or teletypewriter signals into a-m (tone) voice frequencies for transmission over the line or radio link and reconverts such o-c signals to d-c signals.

A system of UF equipment consists of four Line Terminal Equipments UG and two Radio-Line Terminal Equipments UH.

These six equipments, and the necessary radio transmitting and receiving units for two radio channels (one for each direction of transmission), provide four two-way telegraph circuits.

An eight-channel system may be operated under favorable conditions of radio transmission.

For one eight-channel system, four additional UG equipments are required (total of eight).

AN/TCC-TYPE

UF :SERVICE TYPE NUMBER

PORTABLE CARRIER CONTROL SYSTEM

INSTRUCTION LITERATURE: NavShips 900,223
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
4	Line Terminal Equipment UG	49-1/2 x 24-1/4 x 17-1/8	373
2	Radio-Line Terminal Equipment UH	24-1/4 x 23-7/8 x 17-1/8	163

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, transportable.

CAN COMMUNICATE WITH: This is signal-modifying equipment used in conjunction with primary communication apparatus.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Two- or four-wire landline or radio relay link.

FACILITIES AFFORDED: Four channels, polar or neutral operation.

FREQUENCY: 595, 765, 935, 1,105, 1,445, 1,615, 1,785, and 1,955 cps.

TYPE OF MODULATION: Am.

TYPE RINGING: 20 cyc.

POWER REQUIREMENTS: Each UG: 135 w, 103 – 126 / 207 – 253 v, 50/60 cyc, 1 phase, ac.
Each UH: 15 w, 103 – 126 / 207 – 253 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

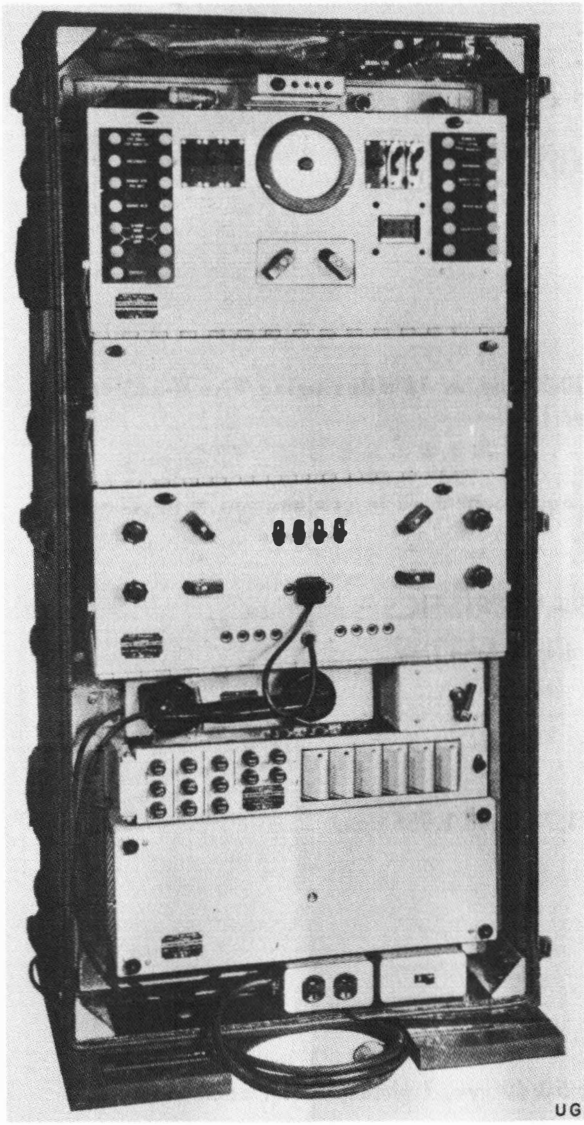
Information on Portable Carrier Control System UF not available.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 May 52

AN/TCC-TYPE

SERVICE TYPE NUMBER: UG

LINE TERMINAL EQUIPMENT



UG

Line Terminal Equipment UG converts d-c telegraph signals to a-c for carrier telegraphic transmission over a land line, or radio relay link, and reconverts such a-c signals to dc. The system consists of four, two-way telegraph circuits. These may be connected to either a two- or four-wire line.

Telephone communication between line terminals is provided. By means of two switches, one of which selects the operating frequencies for two oscillators, and the other selects the two corresponding filters for each circuit. Two circuits of a terminal unit may be operated on any one of four combinations of frequencies.

The system permits connection for either duplex or half-duplex operation, and is capable of handling manual telegraph, teletypewriter, and automatic tape recording.

Neutral or polar operation is possible.

The two- or four-wire line used with the system must have less than 25 db loss.

AN/TCC-TYPE	INSTRUCTION LITERATURE: NavShips 900,223
UG :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
LINE TERMINAL EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
4	Cabinet CW-10331	49-1/2 x 24-1/4 x 17-1/8	Not Available
4	Fuse Panelboard CW-28016	Not Available	" "
4	Line Control Unit CW-23426	" "	" "
4	Load Control Unit CW-50177	" "	" "
4	Rectifier Power Unit CW-20290	" "	" "
4	Telephone Set Unit CW-51068	20 x 2-1/2 x 7	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, transportable.

MAXIMUM SYSTEM LENGTH: 6 miles using Wire W-110-B line, or 16 miles using Wire W-143 or 19 gauge-quad nonloaded line.

CAN COMMUNICATE WITH: This is signal-modifying equipment used in conjunction with primary communication apparatus.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: 2- or 4-wire land line.

FACILITIES AFFORDED: 4 channels, polar or neutral keying.

FREQUENCY: 595, 765, 935, 1,105, 1,445, 1,615, 1,785, and 1,955 cps.

TYPE OF MODULATION: Am.

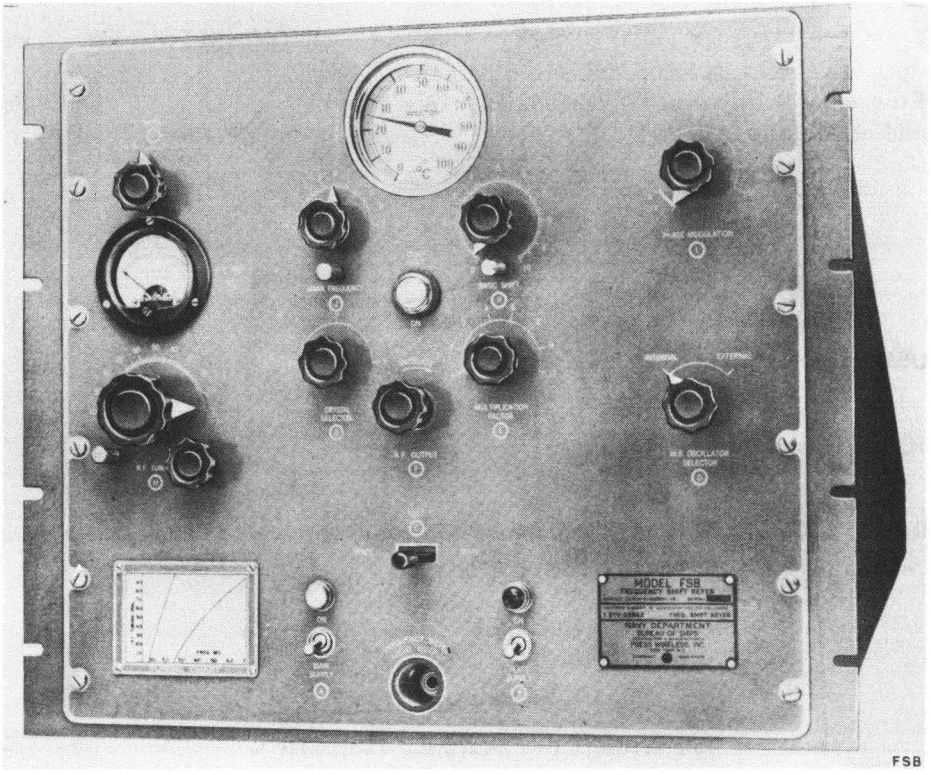
TYPE RINGING: 20 cyc.

POWER REQUIREMENTS: 135 w, 103-126/207-253 v, 50/60 cyc, 1 phase, ac (for each cabinet).

PHYSICAL CHARACTERISTICS

Line Terminal Equipment UG measures 49-1/2 x 34-1/2 x 24-1/4 inches, net weight 1,492 pounds, volume 48 cu ft, 1.2 ship tons. Packed for domestic shipment: total weight 2,840 pounds, total volume 90 cu ft, 2.25 ship tons.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/TGA-TYPE** SERVICE TYPE NUMBER: FSB FREQUENCY SHIFT KEYER EQUIPMENT



Frequency Shift Keyer Equipment FSB is an auxiliary keying equipment for radiotelegraph transmitter. It is used at shore stations to impress intelligence on an r-f carrier by the frequency-shift method to minimize the effects of fading, noise interference, and static disturbances at the receiving equipment. In addition to frequency-shift keying, facilities for phase modulation of the carrier and for use of the equipment in radiophoto frequency-shift transmission are provided.

The keyed input for this equipment may be any type of signal, including Morse code, teletypewriter, radiophoto, or facsimile.

A crystal oscillator with three preset channels is used and provision is made for the alternate use of an external oscillator, such as the transmitter oscillator.

The equipment may be permanently installed in the associated transmitter cabinet or mounted in a separate mobile cabinet. A coupler unit must be connected between the transmitter and frequency-shift keyer for impedance matching.

AN/TGA-TYPE

FSB :SERVICE TYPE NUMBER

FREQUENCY SHIFT KEYER EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,928
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Frequency Shift Keyer CYV-35062 and accessories	16 x 19 x 15	88

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, transportable.

CAN COMMUNICATE WITH: This is signal-modifying equipment used in conjunction with primary communication apparatus.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.0 - 6.7.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Frequency shift keying.

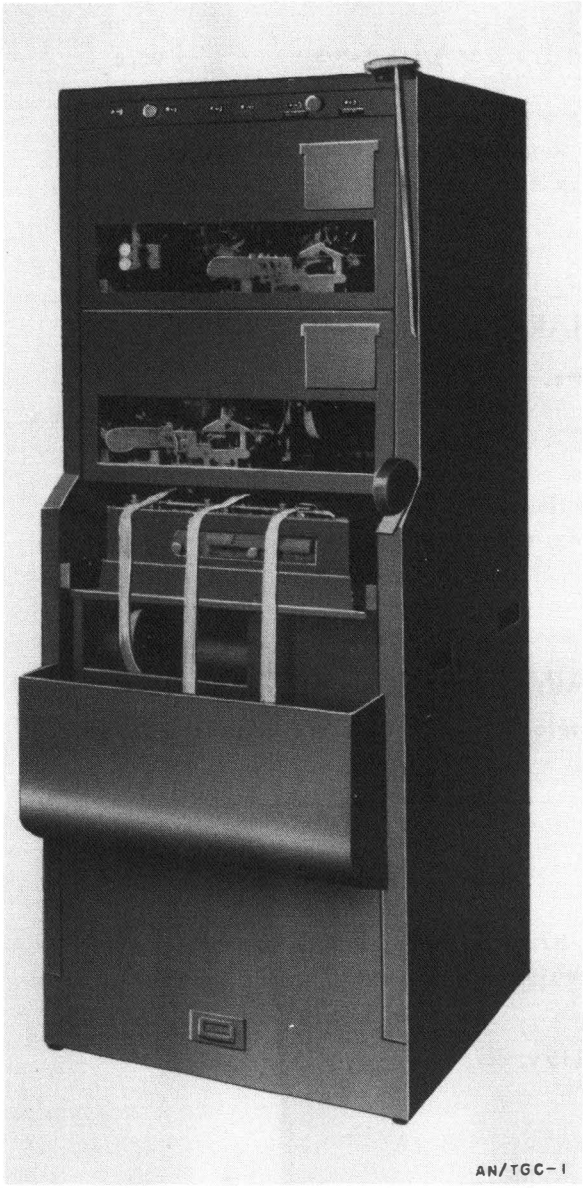
POWER OUTPUT: 2 w.

POWER REQUIREMENTS: 175 w, 115/230 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Frequency Shift Keyer Equipment FSB measures 16 x 19 x 15 inches, net weight 141 pounds, volume 7 cu ft. Packed for domestic shipment: total weight 315 pounds, total volume 15 cu ft. Shipped in 2 packages.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 18 Dec 51	**AN/TGC-1** TELETYPEWRITER SET



Teletypewriter Set AN/TGC-1 is an automatic, high-speed, multichannel, teletypewriter station equipment used for sending, receiving, or monitoring, by means of typed and perforated paper tape, at army and equivalent headquarters.

This equipment consists of a single operating assemblage composed of a multiple transmitter-distributor (which provides one number transmitter and two message transmitters) and two typing reperforators. It can be used for conventional duplex make-and-break, duplex polar, single, split duplex make-and-break, split duplex polar, and/or split single operation.

Several of these equipments may be installed side by side for handling large traffic loads. It can be used for tape relay operation, and is designed for continuous operation.

It operates on 115-v ac or dc; the tapewinder motor operates on ac only.

AN/TGC-1

TELETYPEWRITER SET

INSTRUCTION LITERATURE: TM 11-2203; AFM 102-2
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 18 Dec 51

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Cabinet, Console-type	24 x 24 x 65	250.0
2	Typing, Reperforator, w/motor	13 x 12 x 8	34.25
1	Multiple Transmitter-Distributor, w/motor	15-1/4 x 16-3/4 x 5-3/4	90.0
1	Tape winder, w/motor	12 x 6 x 11	10.0
1	5A Rectifier	5 x 15-3/4 x 6-3/4	35.0
1	Signal indicator panel	5 x 21 x 1-3/4	20.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Corps, army, and higher headquarters.

INSTALLATION: Ground, fixed station.

CAN COMMUNICATE WITH: Terminal, repeater or station apparatus over wire, cable, carrier or radioteletypewriter standard communication facilities, composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: No keyboard. Number release key; release key; tape feed-out key; break key; alarm switch.

OPERATING SPEED: 368.1 or 600.0 opm.

MOTOR CHARACTERISTICS: Series-governed motor, 87.6 cyc, tuning fork, 2,102 rpm; or a synchronous motor requiring no adjustment.

POWER REQUIREMENTS: 115 v, 50/60 cyc, ac; or 115 v, dc.

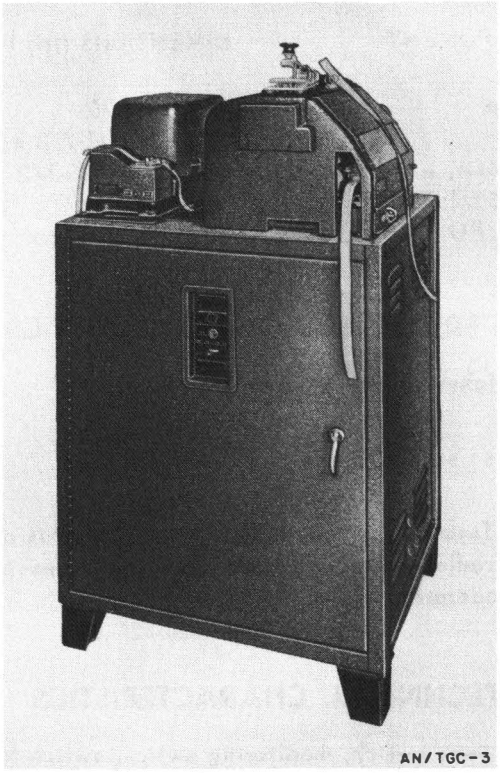
PHYSICAL CHARACTERISTICS

Teletypewriter Set AN/TGC-1 measures 65 x 24 x 24 inches, net weight 439.25 pounds, volume 21.6 cu ft, 0.54 ship ton. Packed for either domestic or export shipment: total weight 1,267 pounds, total volume 42.5 cu ft, 1.02 ship tons. Shipped in 5 packages.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 18 Dec 51

AN/TGC-3

TELETYPEWRITER SET



Teletypewriter Set AN/TGC-3 is automatic teletypewriter transmitting and receiving equipment used at army and higher headquarters for torn-tape switching or teletypewriter relay applications by means of typed and perforated paper tape.

This equipment consists essentially of a transmitter-distributor and a receiving-only typing reperforator. It includes an operating table and related accessories. Tape received by means of the reperforator unit can be used to transmit through the transmitter- distributor.

Operates in neutral or polar channels and can be used with telegraph terminal equipment and with Teletypewriter Repeater-Mixer AN/FGQ-1.

Operates from 115-v a-c or 120-v d-c, source.

AN/TGC-3

TELETYPEWRITER SET

INSTRUCTION LITERATURE: TM 11-2214
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 18 Dec 51

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Teletypewriter table	34 x 22 x 26	205
1	Power supply	13-5/16 x 11-7/8 x 20-3/4	89
1	Distributor-Transmitter, Teletypewriter TT-52/FG	9 x 9-3/8 x 15-1/2	33
1	Reperforator TT-53/FG	11-3/4 x 13-1/2 x 16-3/4	62.25

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army and higher headquarters.

INSTALLATION: Ground, fixed station.

CAN COMMUNICATE WITH: Terminal, repeater, or station apparatus over wire, cable, carrier, or radioteletype standard facilities composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Power switch, monitoring switch, switch for operation with radio terminal equipment, switch for testing equipment. Automatic transmission to line circuits from perforated tape. Automatic reception from line circuits in chadless perforated tape with typing. No keyboard. No facility for page printing.

OPERATING SPEED: 368 opm.

MOTOR CHARACTERISTICS: Series-governed motor; 87.6 cyc, 2,100 rpm.

POWER REQUIREMENTS: With power unit: 300 w, 95/125/190/250 v, 25/60 cyc ac.
Without power unit: D-c supply,-- 120 v (3), 0.8-amp drain.
A-c supply,-- 115 v, 60 cyc.

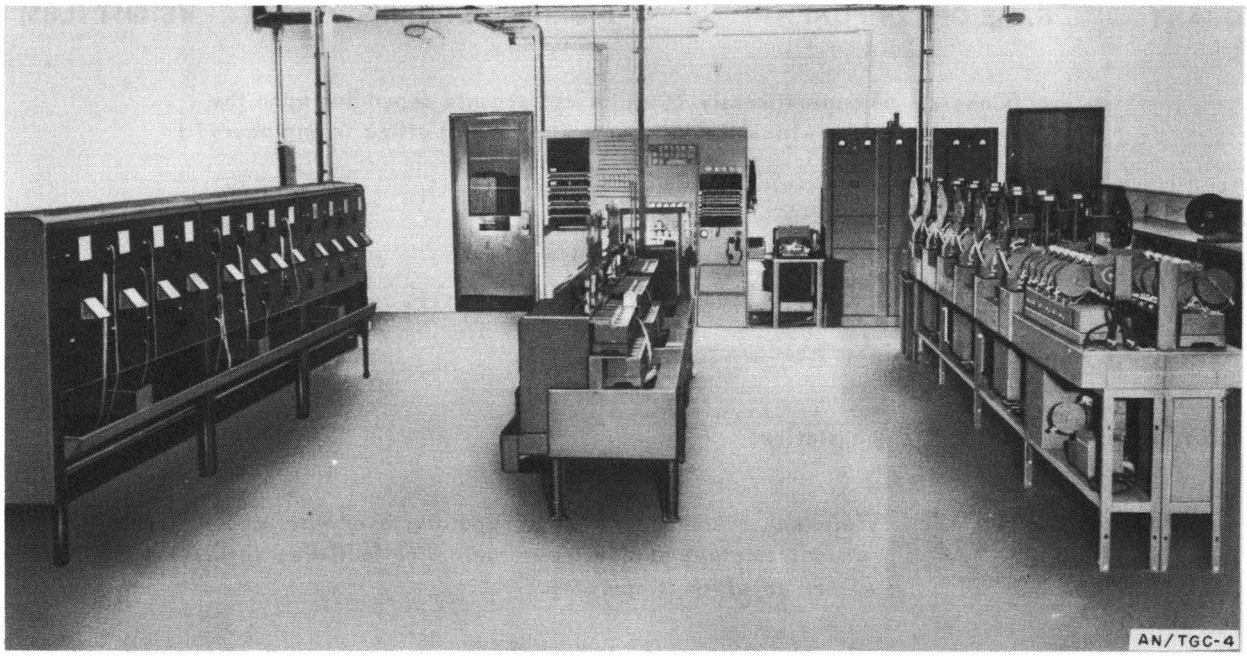
PHYSICAL CHARACTERISTICS

Teletypewriter Set AN/TGC-3 weighs 490 pounds net, volume 16 cu ft. Packed for either domestic or export shipment: total weight 663 pounds, total volume 33.8 cu ft, 0.86 ship ton. Shipped in 3 packages.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 5 Jan 52

AN/TGC-4

TELETYPEWRITER CENTRAL OFFICE SET



Teletypewriter Central Office Set AN/TGC-4 is a large semiautomatic tape relay facility for handling a large volume of teletypewriter traffic in fixed station applications. It must be specifically engineered and arranged for the traffic-handling requirements of the headquarters in which it is used.

It consists of automatic line finding, switching, transmitting, and receiving components and related items.

Provides for automatic reception and transmission of traffic, but operators are required to supervise and route messages.

Regulated 115-v, 60-cyc ac is required for the reperforator and transmitter motors, and for the pneumatic tube exhaust and other small motors.

A d-c supply at approximately 115 v (both positive and negative) with grounded neutral leg is required for various line and relay circuits.

AN/TGC-4

TELETYPEWRITER CENTRAL OFFICE SET

INSTRUCTION LITERATURE: TM 11-2212
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 5 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Consists of approximately 16 major components depending upon the requirements for which the teletypewriter central office is engineered.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army or higher headquarters.

INSTALLATION: Ground, fixed station.

CAN COMMUNICATE WITH: Terminal, repeater, or station apparatus over wire, cable, carrier, or radioteletype standard communication facilities composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Automatic reception, tape perforation with typing. Automatic transmission, perforated tape sending. Automatic line switching. Manual supervision.

OPERATING SPEED: 60 wpm (368 opm) but can be adjusted for operation at 66 wpm (404 opm) or 100 wpm (600 opm).

MOTOR CHARACTERISTICS: A-c synchronous motors, a-c series-governed motors, d-c supply.

POWER REQUIREMENTS: 115 v, 60 cyc ac and 115 v dc. Dependent upon quantity of operating components and their arrangement.

PHYSICAL CHARACTERISTICS

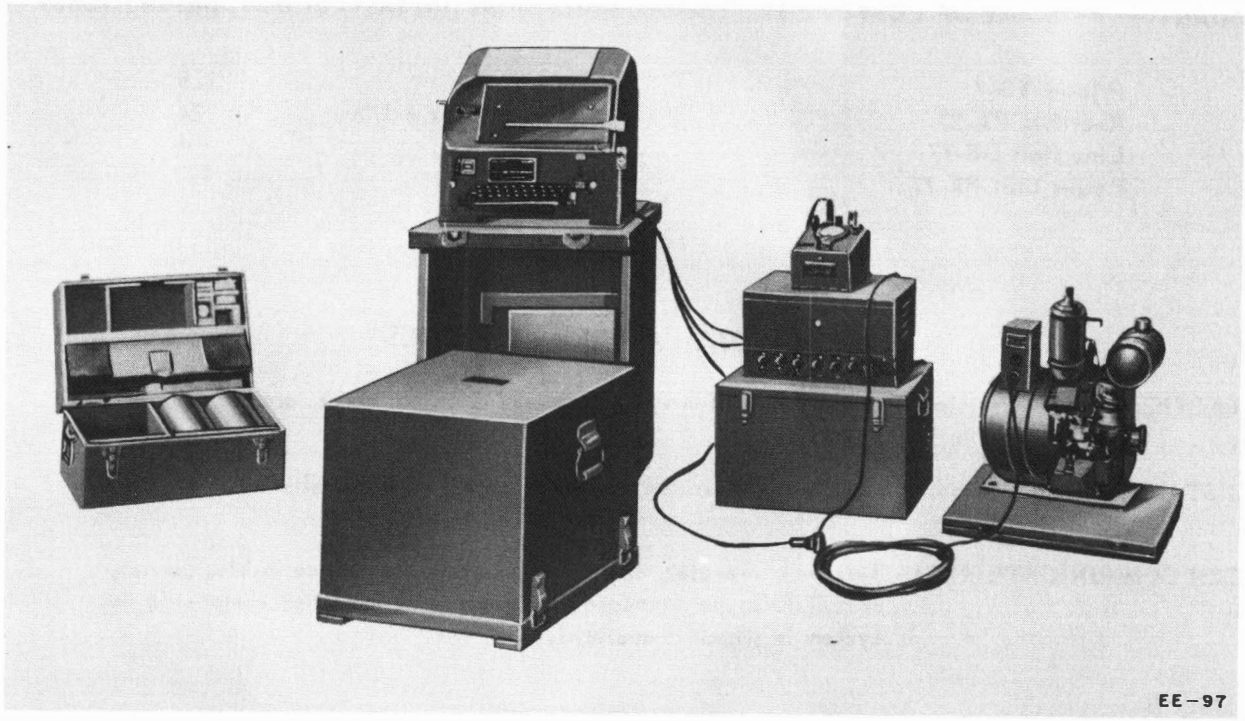
The dimensions, volume, and number of packages in which this equipment is shipped vary according to the requirements for which the teletypewriter central office set is engineered.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 2 Jan 52

AN/TGC-TYPE

SERVICE TYPE NUMBER: EE-97

TELEGRAPH PRINTER SET



EE-97

Telegraph Printer Set EE-97 is a complete transportable, field teletypewriter station used for transmitting and receiving telegraph communications at battalion and higher headquarters.

This equipment consists primarily of a conventional page-printing, sending and receiving teletypewriter (printer), line control unit, and power generating equipment contained in carrying cases.

Designed for quick installation in the open or under shelter, the set requires only connection to wire facilities to operate.

It operates as a teletypewriter terminal on field wire or cable facilities and radio circuits or operates in conjunction with carrier equipment.

Operates on 115 v dc or 50/60 cyc ac.

AN/TGC-TYPE	INSTRUCTION LITERATURE: TM 11-354
	CLASSIFICATION OF EQUIPMENT: Unclassified
EE-97 : SERVICE TYPE NUMBER	USING SERVICE : Army
TELEGRAPH PRINTER SET	DATE OF THIS SHEET : 2 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Printer TG-7	19 x 20 x 42	225
1	Rectifier RA-37	12-1/2 x 8-1/4 x 6-1/2	24
1	Line Unit BE-77	7-3/4 x 6 x 6	6
1	Power Unit PE-77	22 x 12 x 22	127

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division headquarters; infantry and armored division; corps, army.

INSTALLATION: Ground; transportable; operates in fixed location, under shelter or in the open.

CAN COMMUNICATE WITH: Terminal, repeater, or station apparatus over wire, cable, carrier, or radioteletype standard communication facilities composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Standard communication keyboard; break-in key; remote motor stop; shift and unshift; space-repeat; CAR-RET; line feed.

OPERATING SPEED: 60 wpm (368 opm) adjustable to 66 wpm (404 opm).

MOTOR CHARACTERISTICS: Series governed; 0.4 amp at 115 v dc from PE-77.

POWER REQUIREMENTS: PE-77; 250 w at 115 v dc.

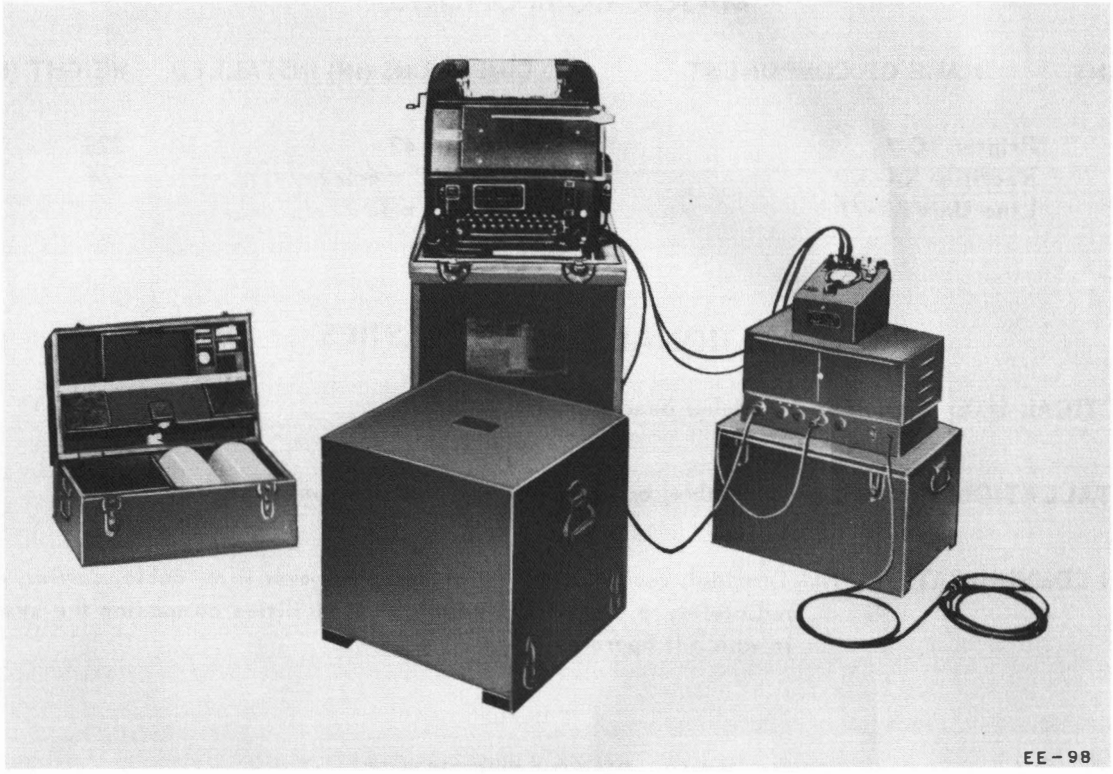
PHYSICAL CHARACTERISTICS

Telegraph Printer Set EE-97 weighs 412 pounds net, volume 16 cu ft. Packed for domestic shipment: total weight 431 pounds, total volume 18 cu ft. Packed for export shipment: total weight 700 pounds, total volume 40 cu ft, 1 ship ton. Shipped in 6 packages both domestic and export.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 2 Jan 52

AN/TGC-TYPE

SERVICE TYPE NUMBER: EE-98
TELETYPEWRITER SET



Teletypewriter Set EE-98 is a complete, transportable field teletypewriter station which requires only connection to power and communication lines in order to operate. It is used by battalion and higher headquarters.

This equipment consists of a conventional page-printing teletypewriter, line control unit, rectifier, and related accessories contained in carrying cases.

It can be used in conjunction with carrier terminal facilities and at teletypewriter centrals and radio terminals.

Designed for quick installation in the open or under shelter and connected for operation by means of cords and plug connectors.

Operated on power supplied by a conventional power source or by a field power unit.

AN/TGC- TYPE	INSTRUCTION LITERATURE: TM 11-354
EE-98 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELETYPEWRITER SET	USING SERVICE : Army
	DATE OF THIS SHEET : 2 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Printer TG-7	19 x 20 x 42	225
1	Rectifier RA-37	12-1/2 x 8 x 6-1/2	24
1	Line Unit BE-77	7-3/4 x 6 x 6	6

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Battalion and higher headquarters.

INSTALLATION: Ground; transportable; operates in fixed locations under shelter.

CAN COMMUNICATE WITH: Terminal, repeater, or station apparatus over wire, cable, carrier, or radioteletype standard communication facilities composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Standard communication keyboard; break-in key, remote motor stop; bell, shift and unshift; space-repeat; CAR-RET; line feed.

OPERATING SPEED: 60 wpm (368 opm) adjustable to 66 wpm (404 opm).

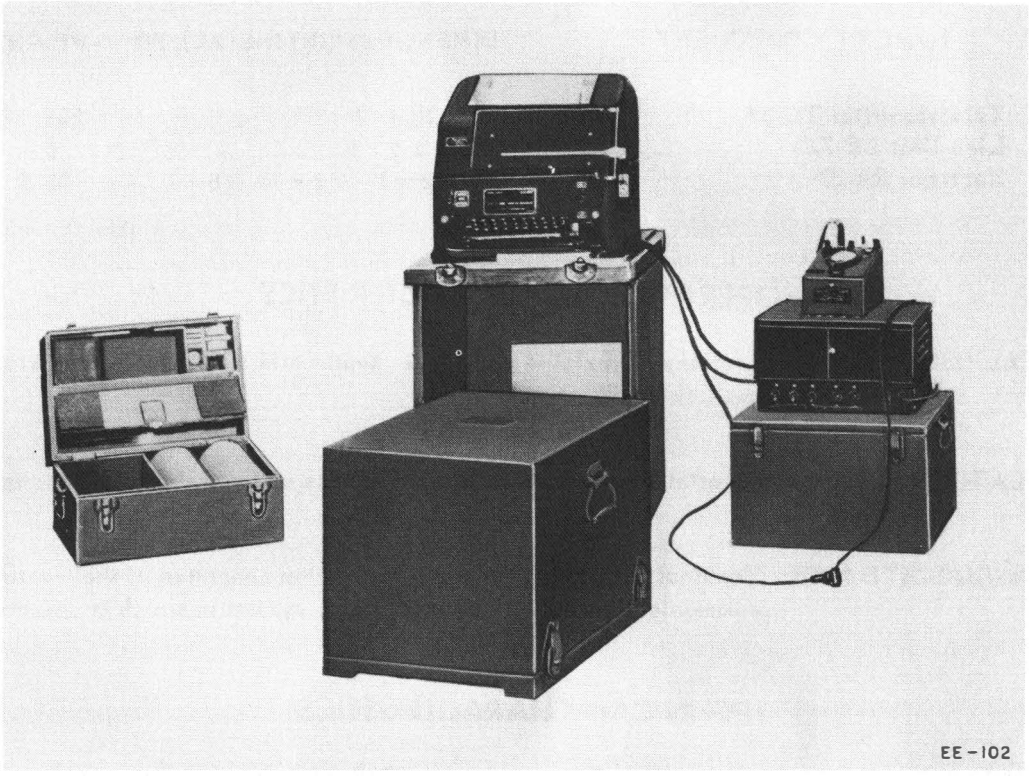
MOTOR CHARACTERISTICS: Series governed, 115 v dc or 250 v 50/60 cyc ac, 87.6 vps tuning fork speed adjusting frequency 1,800 rpm.

POWER REQUIREMENTS: 200 w, 115 v dc or 115 v 50/60 cyc ac.

PHYSICAL CHARACTERISTICS

Teletypewriter Set EE-98 weighs 326 pounds net, volume 11.75 cu ft. Packed for domestic shipment: total weight 431.5 pounds, total volume 18 cu ft, 0.6 ship ton. Packed for export shipment: total weight 560 pounds, total volume 32 cu ft, 0.8 ship ton. Shipped in 5 packages both domestic and export.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 2 Jan 52	**AN/TGC-TYPE** SERVICE TYPE NUMBER: EE-102 TELETYPEWRITER SET



Teletypewriter Set EE-102 is a transportable field teletypewriter equipment used in weather reporting stations at division and higher headquarters, air fields, and stations of the Air Weather Command for communication of weather data.

This equipment consists primarily of a page-printing field teletypewriter having a weather symbol keyboard, a line unit, power supply, rectifier, and associated accessories contained in carrying cases.

Designed for quick installation in the open or under shelter and connected for operation by means of cords and plug connectors.

Operates on 115v dc or 50/60 cyc ac or from 85/135 and 179/270 v ac by means of appropriate rectifier equipment.

AN/TGC-TYPE

EE-102 :SERVICE TYPE NUMBER

TELETYPEWRITER SET

INSTRUCTION LITERATURE: TM 11-354

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET : 2 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Teletypewriter TG-37	19 x 20 x 42	225
1	Line Unit BE-77	7-3/4 x 6 x 6	6
1	Rectifier RA-87	18-1/2 x 10-3/4 x 13-5/8	58.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: At weather stations at division and higher headquarters, air fields, and stations of Air Weather Command.

INSTALLATION: Ground; transportable; operates in fixed locations under shelter or in the open.

CAN COMMUNICATE WITH: Terminal, switching, repeater, or station apparatus of the weather communication facility composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Weather symbols; break-in key; CAR-RET; line feed; space-repeat; bell, shift and unshift.

OPERATING SPEED: 60 wpm (368 opm) adjustable to 66 wpm (404 opm).

MOTOR CHARACTERISTICS: Series governed; 115 v dc or 115 v 25/50/60 cyc ac; 87.6 vps tuning fork speed adjusting frequency; 1,800 rpm.

POWER REQUIREMENTS: 200 w, 115 v dc or 50/50 v ac; 85/135 and 179/270 v ac through Rectifier RA-87.

PHYSICAL CHARACTERISTICS

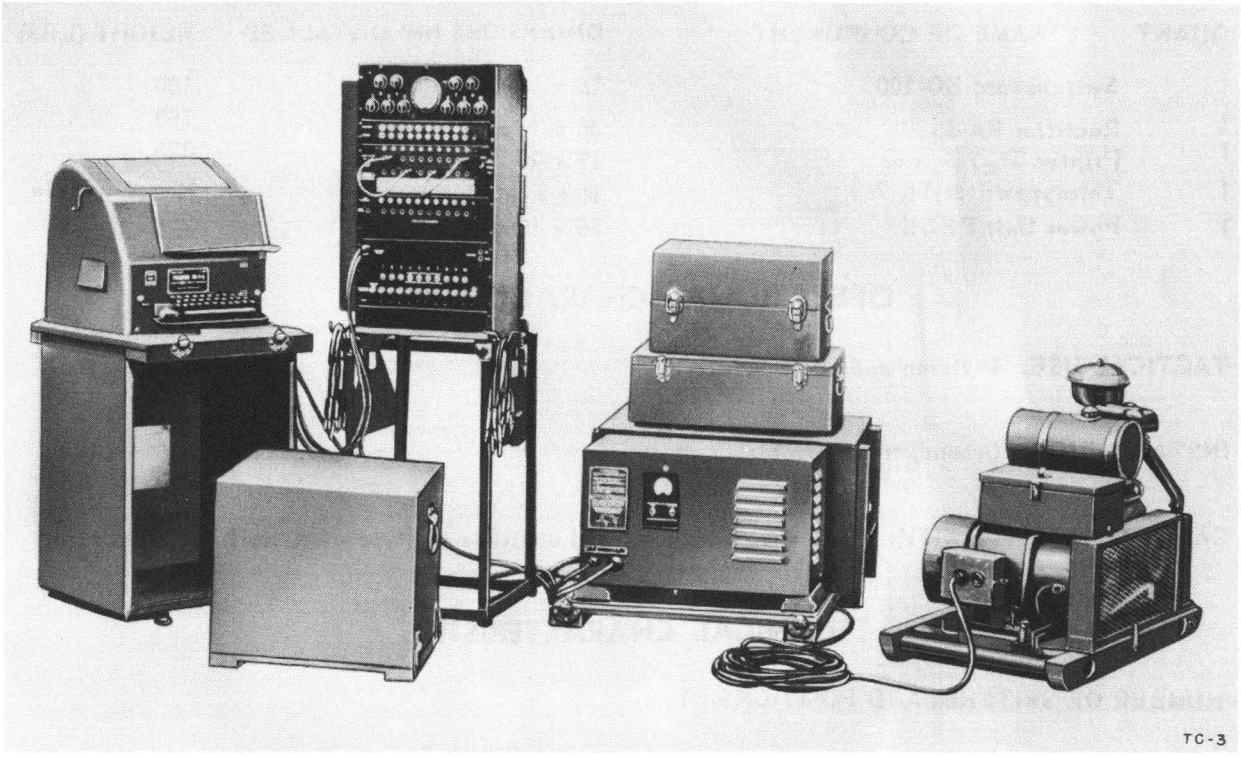
Teletypewriter Set EE-102 weighs 326 pounds net, total volume 11.75 cu ft. Packed for domestic shipment: total weight 328 pounds, total volume 12.25 cu ft, 0.6 ship ton. Shipped in 5 packages. Packed for export shipment: total weight 560 pounds, total volume 32 cu ft, 1.5 ship tons. Shipped in 8 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 14 Feb 52

AN/TGC-TYPE

SERVICE TYPE NUMBER: TC-3

TELEGRAPH CENTRAL OFFICE SET



Telegraph Central Office Set TC-3 is a complete transportable central office for receiving, transmitting, and switching tactical teletypewriter traffic in a field wire or cable system serving division or higher headquarters.

This equipment consists essentially of a switchboard, teletypewriter, and associated accessories. The switchboard (BD-100) provides switching and full repeating facilities for 10 lines (maximum) which may be ground return or metallic. Provides for supplying line current alone, or in conjunction with the remote station, or by the distant station alone.

Up to two switchboards may be added and operated in multiple with the switchboard of this equipment, when necessary to expand the capacity of this telegraph central office.

Operates on about 500 w of a-c power through appropriate current rectifying equipment.

AN/TGC-TYPE

TC-3 :SERVICE TYPE NUMBER

TELEGRAPH CENTRAL OFFICE SET

INSTRUCTION LITERATURE: TM 11-358

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army, Navy

DATE OF THIS SHEET : 14 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Switchboard BD-100	16 x 16 x 26	180
1	Rectifier RA-43	30 x 16 x 19	190
1	Printer TG-7-A - or	19 x 20 x 42	225
1	Teletypewriter TG-7-B	Not Available	Not Available
1	Power Unit PE-75	36 x 19 x 26	325

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and corps level.

INSTALLATION: Ground, transportable.

CAN COMMUNICATE WITH: Receives, transmits, and switches teletypewriter traffic in field wire or cable systems.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

MAXIMUM: 3.

MINIMUM: 1.

NUMBER AND TYPE OF CIRCUITS: (Per position):

Number of cord circuits: 1 (operator's).
Number of line circuits: 10.
Number of trunk circuits: 0.

POWER REQUIREMENTS: Rectifier RA-43 requiring about 500 w operates from 115/230 v, 50/60 cyc, single-phase ac and furnishes maximum output of (4.5 amp) dc at 115 v. Power Unit PE-75 furnishes 115 v, 60 cyc ac.

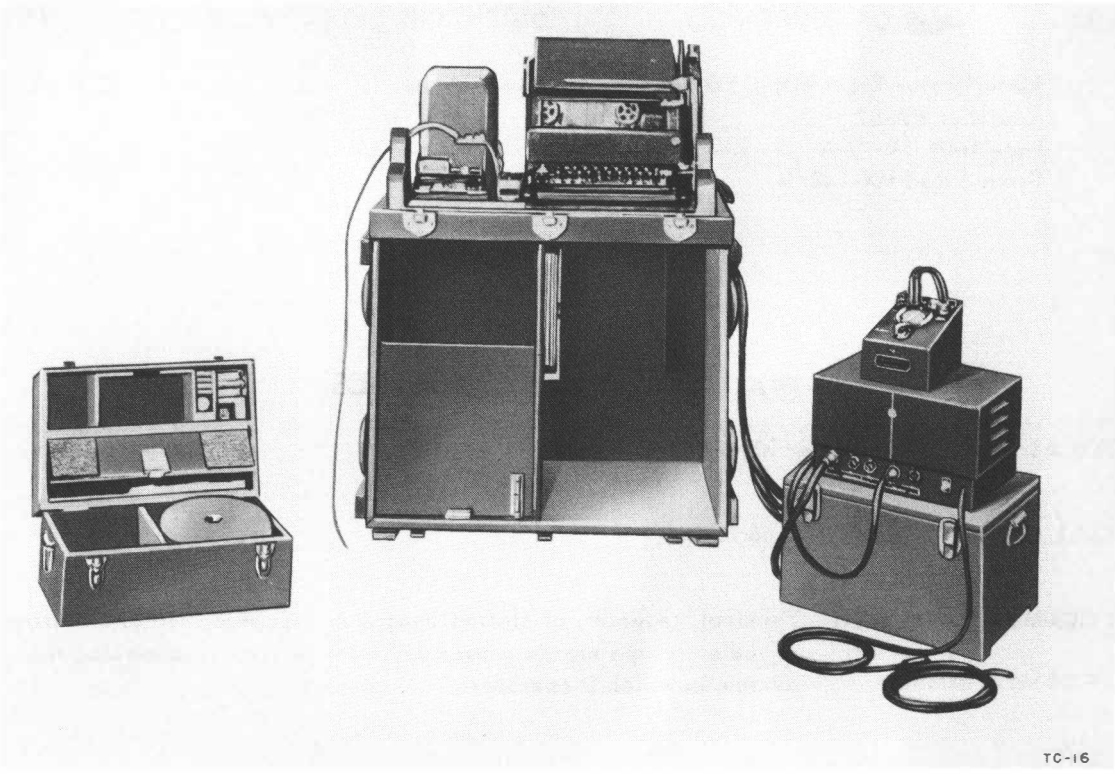
PHYSICAL CHARACTERISTICS

Telegraph Central Office Set TC-3 weighs 1,154 pounds net, volume 43.5 cu ft, 1.1 ship tons. Packed for domestic shipment: total weight 1,400 pounds, total volume 63.8 cu ft, 1.6 ship tons. Shipped in 9 packages. Packed for export shipment: total weight 1,683 pounds, total volume 93.3 cu ft, 2.4 ship tons. Shipped in 8 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 14 Feb 52

AN/TGC-TYPE

SERVICE TYPE NUMBER: TC-16
REPERFORATOR-TELETYPEWRITER SET



Reperforator-Teletypewriter Set TC-16 is a field, transportable, standard communication, automatic tape sending and receiving teletypewriter station equipment used at division and higher headquarters.

This equipment consists essentially of a reperforator transmitter having standard communication keyboard and type pallets, plus a transmitter-distributor, a line unit, rectifier, and accessory items. The line unit provides a means for measuring and adjusting for bias and distortion of line signals.

Can be connected to other teletypewriters in field wire or cable, open wire, carrier, or radio systems.

Operates from sources of 300 w, 85/135 v and 170/270 v ac.

AN/TGC-TYPE

TC-16 :SERVICE TYPE NUMBER
REPERFORATOR-TELETYPEWRITER SET

INSTRUCTION LITERATURE: TM 11-2201
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 14 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Reperforator-Transmitter TG-26-A	19 x 33 x 38	225
1	Rectifier RA-87	12-1/2 x 18-1/2 x 10-1/2	57
1	Line Unit BE-77-A	6 x 8-1/4 x 6-3/8	31
2	Ground Rod MX-148/G	72 long (each)	20

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, transportable.

CAN COMMUNICATE WITH: Terminal, repeater, or station apparatus over wire, cable, or carrier or radioteletype standard communication facilities composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING SPEED: 368.1 opm and 404 opm.

MOTOR CHARACTERISTICS: Series a-c governed.

POWER REQUIREMENTS: 300 w, 85/135 v and 170/270 v, 50/60 cyc ac.

PHYSICAL CHARACTERISTICS

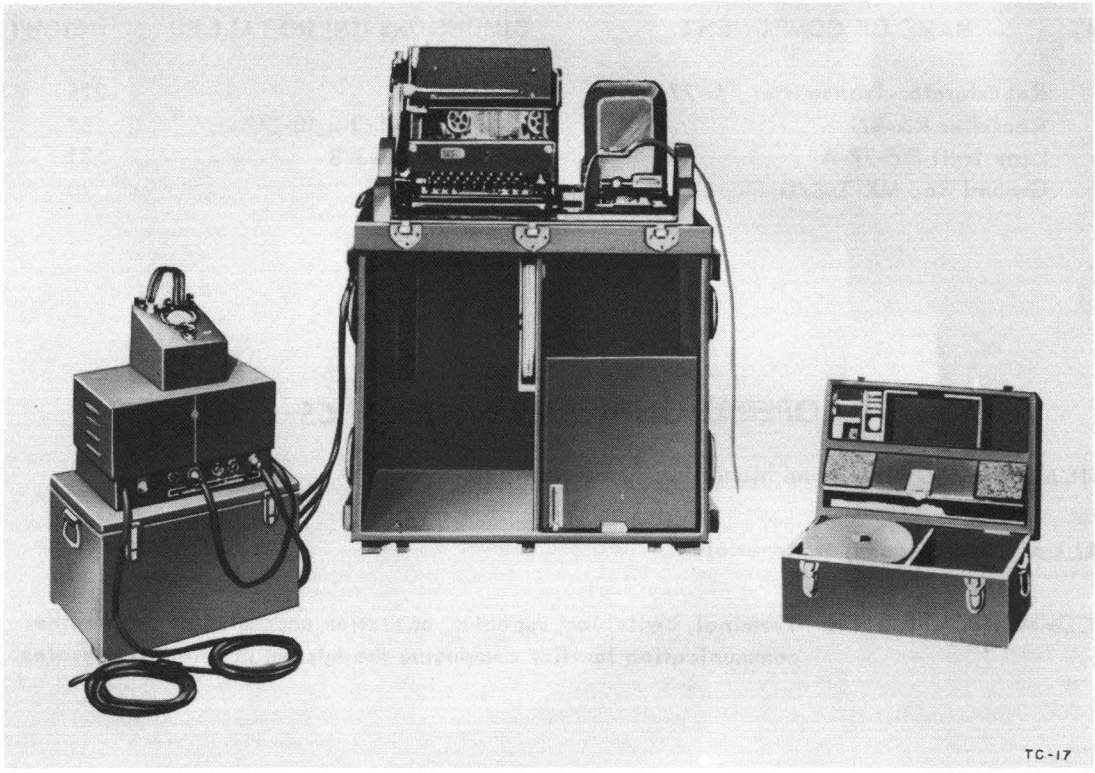
Reperforator-Teletypewriter Set TC-16 weighs 331 pounds net, volume 15 cu ft. Packed for export shipment: total weight 587 pounds, total volume 33 cu ft, 0.8 ship ton.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 14 Feb 52

AN/TGC-TYPE

SERVICE TYPE NUMBER: TC-17

REPERFORATOR-TELETYPEWRITER SET



Reperforator-Teletypewriter Set TC-17 (the weather communication version of Reperforator-Teletypewriter Set TC-16)is a transportable, field, automatic tape sending and receiving teletypewriter station equipment used for transmission and reception of weather data at air station of division and higher headquarters.

This equipment consists essentially of a reperforator transmitter having weather communication keyboard and type pallets, plus a transmitter-distributor, line unit, rectifier, and accessory items. The line unit is included to provide a means for measuring and adjusting for bias and distortion of line signals.

This set can be used in conjunction with other teletypewriter terminal equipment and station units and is powered by a 300-w 85/135-v or 170/270-v a-c source.

AN/TGC- TYPE

TC-17 :SERVICE TYPE NUMBER

REPERFORATOR-TELETYPEWRITER SET

INSTRUCTION LITERATURE: TM 11-2201

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET : 14 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Reperforator-Transmitter TG-27-A	19 x 33 x 38	225
1	Rectifier RA-87	12-1/2 x 18-1/2 x 10-1/2	57
1	Line Unit BE-77-A	6 x 8-1/4 x 6-3/8	31
2	Ground Rod MX-148/G	72 long (each)	20

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, transportable.

CAN COMMUNICATE WITH: Terminal, switching, repeater, or station apparatus of the weather communication facility composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING SPEED: 368.1 opm and 404 opm.

MOTOR CHARACTERISTICS: Series a-c governed.

POWER REQUIREMENTS: 300 w, 85/135 v and 170/270 v, 50/60 cyc ac.

PHYSICAL CHARACTERISTICS

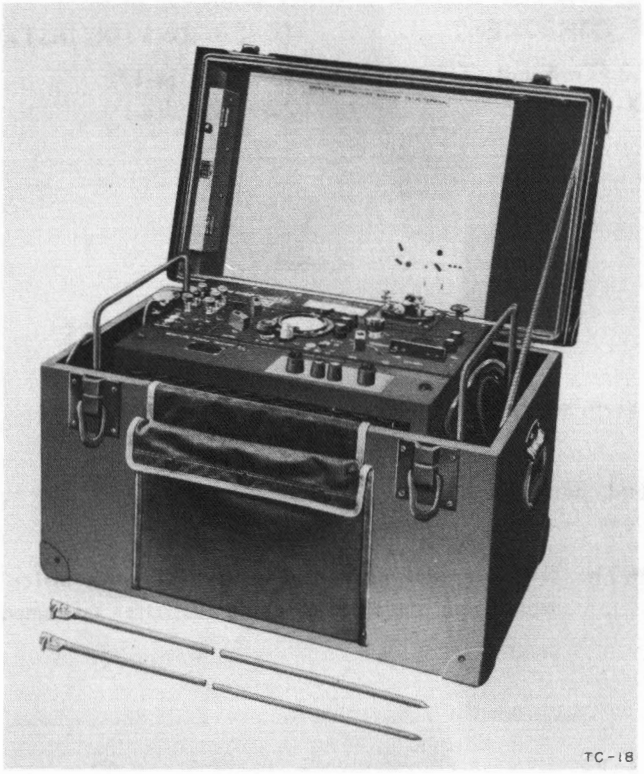
Reperforator-Teletypewriter Set TC-17 weighs 331 pounds net, volume 15 cu ft. Packed for export shipment: total weight 587 pounds, total volume 33 cu ft, 0.8 ship ton.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 17 Feb 52

AN/TGC-TYPE

SERVICE TYPE NUMBER: TC-18

REPEATER SET



Repeater Set TC-18 is a transportable, d-c telegraph terminal repeater equipment used in simplexed field-wire line circuits or in open-wire, composited, ground-return facilities which serve division and higher headquarters.

This equipment consists of a single primary operating component (Repeater TG-30) and two ground rods. It is used in facilities terminating at the remote end at another TG-30.

It is equipped with a hand telegraph key for use of supervisory and maintenance personnel and is usually operated on a half-duplex basis providing one channel of teletypewriter communication. It is designed to extend the operating range of teletypewriter station equipment.

It is operated from 95/125 or 190/250 v ac or 115 v dc.

AN/TGC-TYPE

TC-18 :SERVICE TYPE NUMBER
REPEATER SET

INSTRUCTION LITERATURE: TM 11-2004
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 17 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Repeater TG-30 (Terminal, Telegraph)	25 x 16 x 14-1/2	130
2	Ground Rod MX-148/G	72 x 3/4 (dia.)	9.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division, communications zone, and zone of interior.

INSTALLATION: Ground, portable.

CAN COMMUNICATE WITH: D-c telegraph repeater, terminal, central-office and station equipment which operate in connecting facilities or compose the system.

TECHNICAL CHARACTERISTICS

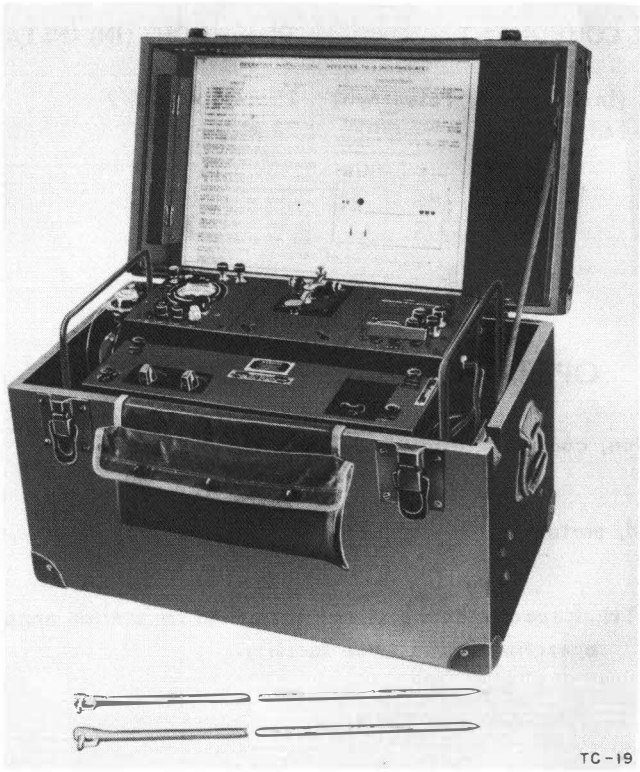
NUMBER AND TYPE OF FACILITIES: Simplexed field-wire, or open-wire (composited, ground return).
Line side: Polarential send, differential send; two-path.
Local side: 30- to 60-ma neutral-type circuit.

POWER REQUIREMENTS: 95-125 v or 190-250 v, 50/60 cyc ac or 115 v dc.

PHYSICAL CHARACTERISTICS

Repeater Set TC-18 weighs 140 pounds net, volume 3.4 cu ft. Packed for export shipment: total weight 195 pounds, total volume 6.5 cu ft.

STATUS: Standard	AN/TGC-TYPE
CLASSIFICATION OF EQUIPMENT: Unclassified	SERVICE TYPE NUMBER: TC-19
USING SERVICE: Army	REPEATER SET
DATE OF THIS SHEET: 18 Feb 52	



Repeater Set TC-19 is a portable, field, d-c telegraph repeater used for single operation at intermediate points between terminal repeater equipment in facilities serving division and higher headquarters.

This equipment consists essentially of a repeater, contained in a field-type carrying case, and two ground rods. It can repeat signals in either direction but in only one direction at a time. It provides one channel for telegraph communication on a simplexed, or composited, ground-return basis. When used as an intermediate repeater only one set can be used in the line circuit between two terminal repeaters.

The operating range of Repeater Set TC-18 can be extended by using this equipment.

It requires 95/125 or 190/250 v ac, or 115v dc, or a 12-v storage battery.

AN/TGC-TYPE

TC-19 :SERVICE TYPE NUMBER

REPEATER SET

INSTRUCTION LITERATURE: TM 11-2005

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET : 18 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Repeater TG-31 (Intermediate Telegraph)	25 x 16 x 14-1/2	120
2	Ground Rod MX-148/G	72 x 3/4 (dia)	9.5 (ea)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division, communications zone, and zone of interior.

INSTALLATION: Ground, portable.

CAN COMMUNICATE WITH: Repeater, terminal, central office, or station apparatus and equipment operating in the same facility.

TECHNICAL CHARACTERISTICS

NUMBER AND TYPE OF FACILITIES: Field wire or open wire; simplexed or composited.

POWER REQUIREMENTS: 190 w, 95-125 v or 190-250 v, 50/60 cyc ac; 115 w, 115 v dc; or 12-v storage battery.

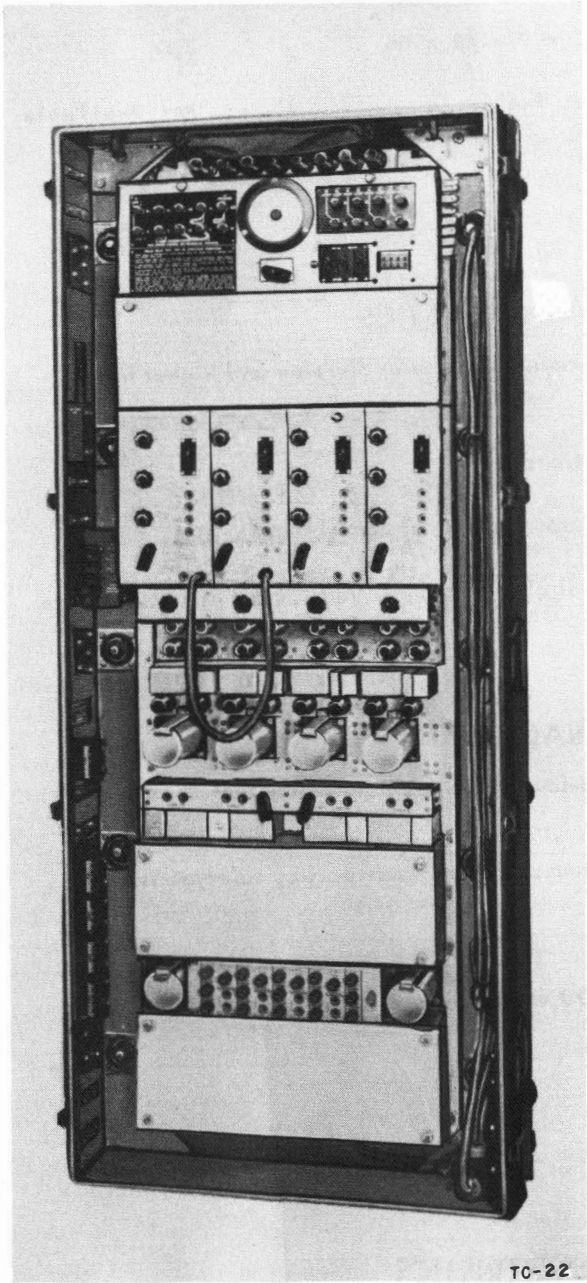
PHYSICAL CHARACTERISTICS

Repeater Set TC-19 weighs 140 pounds net, volume 3.5 cu ft. Packed for export shipment; total weight 186 pounds, total volume 13.23 cu ft.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 12 Feb 52

AN/TGC-TYPE

SERVICE TYPE NUMBER: TC-22
TELEGRAPH TERMINAL SET



Telegraph Terminal Set TC-22 is a transportable four-channel, v-f carrier telegraph terminal equipment which provides two-way transmission of teletypewriter signals in each channel, (operating in one channel of a carrier-telephone facility in which Telephone Terminal Set CF-1, and Repeaters CF-3, and related equipment are used). It is used at division or higher headquarters.

There are two models of this equipment: Telegraph Terminal Set TC-22-A consists of panel-mounted apparatus covering four channels, contained in two floor type cabinets; Terminal Set TC-22-B (illustrated above) consists of equivalent panel-mounted apparatus covering four-channels, contained in a single floor type cabinet.

This terminal set may be installed adjacent to a carrier-telephone terminal, or it may be operated over a two-wire and four-wire circuit (which has a net loss not exceeding 8 db) between telephone and telegraph terminals located at a distance from each other. It can also be operated over a telephone circuit terminating on a two-wire or four-wire basis (of the required stability and freedom from interference, and having a net loss not exceeding 25 db at 500 - 2,050 cps).

Operates on 200 - 250-w of 115- or 220-v ac.

AN/TGC-TYPE	INSTRUCTION LITERATURE: TM 11-355
TC-22 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELEGRAPH TERMINAL SET	USING SERVICE : Army
	DATE OF THIS SHEET : 12 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Telegraph Terminal CF-2-A (2 bays each)	19 x 27-1/2 x 66	530
1	Maintenance Equipment ME-75	Not Available	Not Available
1	Chest BC-5	" "	" "
2	Clamp TM-106	" "	" "
2	Ground Rod MX-148/G	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Telegraph (teletypewriter) carrier terminal facility at division and higher headquarters.

INSTALLATION: Ground, transportable, in fixed locations.

MAXIMUM SYSTEM LENGTH: 100 or more, depending upon quality of connecting facility.

CAN COMMUNICATE WITH: Repeater, terminal, central office, or carrier equipment operating in the same facility or system.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Spiral-four, or equivalent quality facilities.

FACILITIES AFFORDED: Two-wire teletypewriter communication, four-two-way teletypewriter channels.

FREQUENCY: 500 to 2,050 cps, 8 channels spaced 170 cps apart.

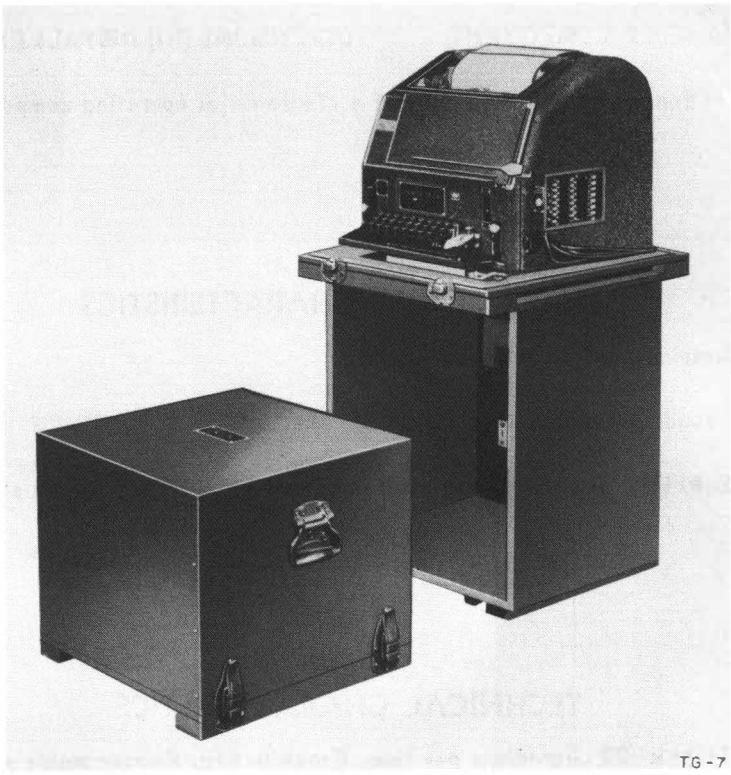
TYPE OF MODULATION: Am.

POWER REQUIREMENTS: 200 to 250 w, 100 - 125 v, or 200 - 250 v, 50/60 cyc, ac.

PHYSICAL CHARACTERISTICS

Telegraph Terminal Set TC-22 weighs 1,130 pounds net, volume 45 cu ft. Packed for export shipment: total weight 1,540 pounds, total volume 85 cu ft, 2.2 ship tons.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 18 Feb 52	**AN/TGC-TYPE** SERVICE TYPE NUMBER: TG-7 PRINTER



Printer TG-7 is a portable, page-printing, field teletypewriter station equipment and is used at regimental and higher headquarters.

This equipment consists essentially of a commercial (Teletype Corp Model 15) teletypewriter modified in accordance with military requirements and includes a keyboard transmitter, typing unit and associated base, a motor, and related accessories. It has a standard communication keyboard and type pallets. Teletypewriter TG-37 is used for weather data transmission.

The carrying case of this equipment is used as the operating table.

The equipment can be set up rapidly by means of plug-terminated cords which are provided.

Operates from 115-v dc, or 25/50/60-cyc, ac.

AN/TGC-TYPE	INSTRUCTION LITERATURE: TM 11-352
	CLASSIFICATION OF EQUIPMENT: Unclassified
TG-7 :SERVICE TYPE NUMBER	USING SERVICE: Army
PRINTER	DATE OF THIS SHEET: 18 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Regiment and higher headquarters.

INSTALLATION: Ground, portable.

CAN COMMUNICATE WITH: Terminal and repeater equipment operating in the same system.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: 72 characters per line, Break in key, Remote motor stop, Bell, Shift and Unshift, Space-Repeat, Carriage-Return, Line Feed.

OPERATING SPEED: 60 wpm, 368.1 opm, or 66 wpm, 404 opm.

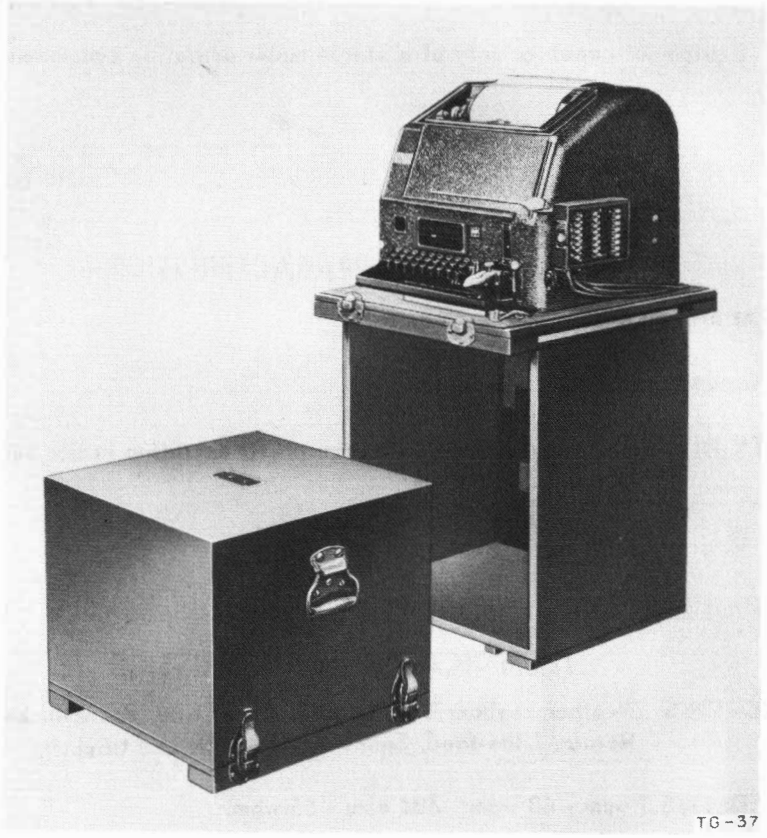
MOTOR CHARACTERISTICS: Series-governed, 115 v, dc, 25, or 50/60 cyc ac, 87.6 vps tuning fork frequency, 1,800 rpm.

POWER REQUIREMENTS: 110 w on 115 v, dc, 140 va on 115 v, 25 cyc ac, or 115v, 50/60 cyc, ac.

PHYSICAL CHARACTERISTICS

Printer TG-7 measures 20 x 19 x 42 inches, net weight 225 pounds, volume 8.8 cu ft. Packed for domestic shipment: total weight 250 pounds, total volume 13.8 cu ft. Shipped in 2 packages. Packed for export shipment: total weight 557 pounds, total volume 42 cu ft, 1.1 ship tons. Shipped in 3 packages.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 18 Feb 52	**AN/TGC-TYPE** SERVICE TYPE NUMBER: TG-37 TELETYPEWRITER



TG-37

Teletypewriter TG-37 is a portable, field, page-printing, teletypewriter station equipment having weather communication keyboard and type-pallets, and is used at division and higher headquarters.

This equipment consists essentially of a commercial (Teletype Corp Model 15) teletypewriter which has been modified for tactical use It includes a base, motor unit, keyboard, typing unit, and related accessories and is carried in field-type cases which are used to form the operating table and operator's seat.

It can receive and transmit messages but is not used for full-duplex operation. It is the weather communication version of Teletypewriter TG-7.

Operates on 110-v dc; 115-v, 25-cyc, or 50/60-cyc, ac.

AN/TGC-TYPE	INSTRUCTION LITERATURE: TM 11-352
TG-37 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELETYPEWRITER	USING SERVICE : Army
	DATE OF THIS SHEET : 18 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALL ED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: At division or higher headquarters.

INSTALLATION: Ground, portable.

CAN COMMUNICATE WITH: Terminal and repeater equipment operating in the same system.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Weather keyboard; 76 characters per line, Break-in key, Bell, Carriage-Return, Line-feed, Space repeat, Shift and Unshift.

OPERATING SPEED: 368.1 opm - 60 wpm: 404 opm - 66 wpm.

MOTOR CHARACTERISTICS: Governed-series, 115 v, dc, 25/50/60 cyc, ac, 87.6 vps tuning fork frequency, 1,800 rpm.

POWER REQUIREMENTS: 110 w on 115 v dc,
140 va on 115 v, 25 cyc ac; or
115 v, 50/60 cyc ac.

PHYSICAL CHARACTERISTICS

Teletypewriter TG-37 measures 20 x 19 x 42 inches, net weight 225 pounds, volume 8.8 cu ft. Packed for domestic shipment: total weight 250 pounds, total volume 13.8 cu ft. Shipped in 2 packages. Packed for export shipment: total weight 557 pounds, total volume 42.0 cu ft, 1.1 ship tons. Shipped in 3 packages.

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 29 June 1956

AN/TGC–TYPE

TH–5/TG

TERMINAL, TELEGRAPH

NO PHOTOGRAPH AVAILABLE

Telegraph Terminal TH–5/TG is a small, transportable, frequency-shift modulator and demodulator equipment used in one-way reversible operation of teletypewriter circuits over two-wire, four-wire, or radioteletype facilities.

This equipment can be operated in conjunction with associated equipment in circuits controlled by either local-battery or common-battery switchboards. It can also transmit and receive 20-cycle signaling current.

AN/TGC–TYPE

INSTRUCTION LITERATURE: TM 11–2239

USING SERVICE: USA

DATE OF THIS SHEET: 29 June 1956

TH–5/TG

TERMINAL, TELEGRAPH

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, transportable.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Assoc freq-shift conv and tty equip.

FACILITIES AFFORDED: Modulation of dc into 1,225- and 1,325-cy sig; demodulation of 1,225- and 1,325-cy sig to dc impulses for use; two-wire or four-wire termination.

FREQUENCY: 1,225 cy (space); 1,325 cy (mark).

TYPE MODULATION: Fsk.

TYPE RINGING: 20 cy.

POWER REQUIREMENTS: 60 w, 115 v, 50/60 cy ac.

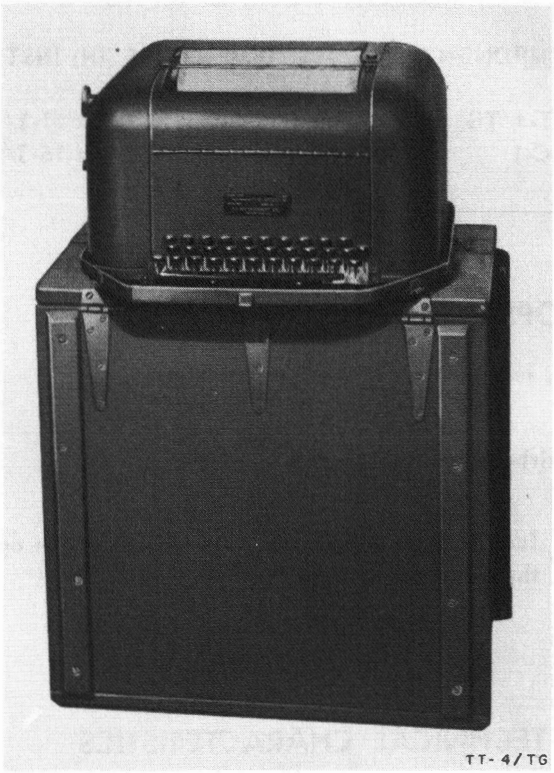
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	11 x 10½ x 7½	18.5	.5		
DOMESTIC PACK:		22.5	.78		1
EXPORT PACK:					

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 28 Dec 51

AN/TGC-TYPE

AN/COMP TYPE NUMBER: TT-4/TG
TELETYPEWRITER



Teletypewriter TT-4/TG is a portable, lightweight, page-printing teletypewriter for the transmission, monitoring, and reception of messages at battalion headquarters and communications centers of higher headquarters. It is immersionproof and may be floated during amphibious operations and can be carried on a standard QM packboard.

Normally used in neutral circuits only, this equipment may be adapted to receive and transmit polar signals. Can be connected to distant teletypewriters in field wire or cable, open wire, carrier, or radio systems. Can be arranged for half-duplex, full-duplex, receiving-only, or sending-only operation.

When suitable power for the motor and line is available, two or more Teletypewriters TT-4/TG may be connected directly and operated without associated line equipment.

This teletypewriter is the major operating component of tactical Teletypewriter Set AN/PGC-1 and fixed station Teletypewriter TT-61/FG.

AN/TGC-TYPE

TT-4/TG :AN/COMP TYPE NUMBER
TELETYPEWRITER

INSTRUCTION LITERATURE: TM 11-2234
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 28 Dec 51

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Teletypewriter TT-4/TG	22-1/2 x 18-7/8 x 11-1/4	43
1	Case CY-694/PGC-1	24-3/8 x 20-7/8 x 16-3/8	43.25

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Battalion, regiment, or higher headquarters.

INSTALLATION: Ground, airborne and shipborne.

CAN COMMUNICATE WITH: Identical, or equivalent, station equipment operating in or terminating the same connecting facility.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Keyboard operation, remote motor stop, and break-in facilities.

OPERATING SPEED: 368.1 opm (60 wpm); gears furnished for 600 opm (100 wpm). 72 characters per line.

MOTOR CHARACTERISTICS: Universal (ac or dc) series type; tuning fork speed adjusting frequency 180 vps; 3,600 rpm.

POWER REQUIREMENTS: 105-125 v dc or 105-125 v ac, 50/60 cyc, single phase, 150 w.

PHYSICAL CHARACTERISTICS

Teletypewriter TT-4/TG measures 36-1/2 x 20-7/8 x 16-3/8 inches, net weight 48 pounds, volume 2.73 cu ft. Packed for domestic shipment: total weight 90 pounds, total volume 5.98 cu ft. Packed for export shipment: total weight 95 pounds, total volume 12.15 cu ft. Shipped in 1 package both domestic and export.

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 20 June 1956

AN/TGT–TYPE

TA–255/TT

NETWORK, HYBRID CIRCUIT

NO PHOTOGRAPH AVAILABLE

Hybrid Circuit Network TA–255/TT is a portable unit used to connect four-wire line equipment (such as Telephone Terminal CF–1–( ) or Repeater CF–3–A) to a two-wire line. It can also be used to connect Radio Terminal Set AN/TRC–3 to a two-wire line.

This equipment will permit operation of a phantom circuit, two ground-return dc telegraph circuits, or one ground-return dc signaling and one ground-return dc telegraph circuit on the two-wire line.

One network is used at each junction of two-wire and four-wire lines. This equipment is designed for operation over open-wire lines but, in an emergency, it may be used on field wire or on one pair of Cable Assemblies CC–358.

This unit is similar to and interchangeable with Carrier Hybrid CF–7

AN/TGT–TYPE

INSTRUCTION LITERATURE: TM 11–2003A

USING SERVICE: USA

DATE OF THIS SHEET: 20 June 1956

TA–255/TT

NETWORK, HYBRID CIRCUIT

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, transportable.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Dc tlg and carrier tel.

TYPE OF COMMUNICATION CIRCUITS: Four two-way carrier tel ckt; two dc tlg ckt.

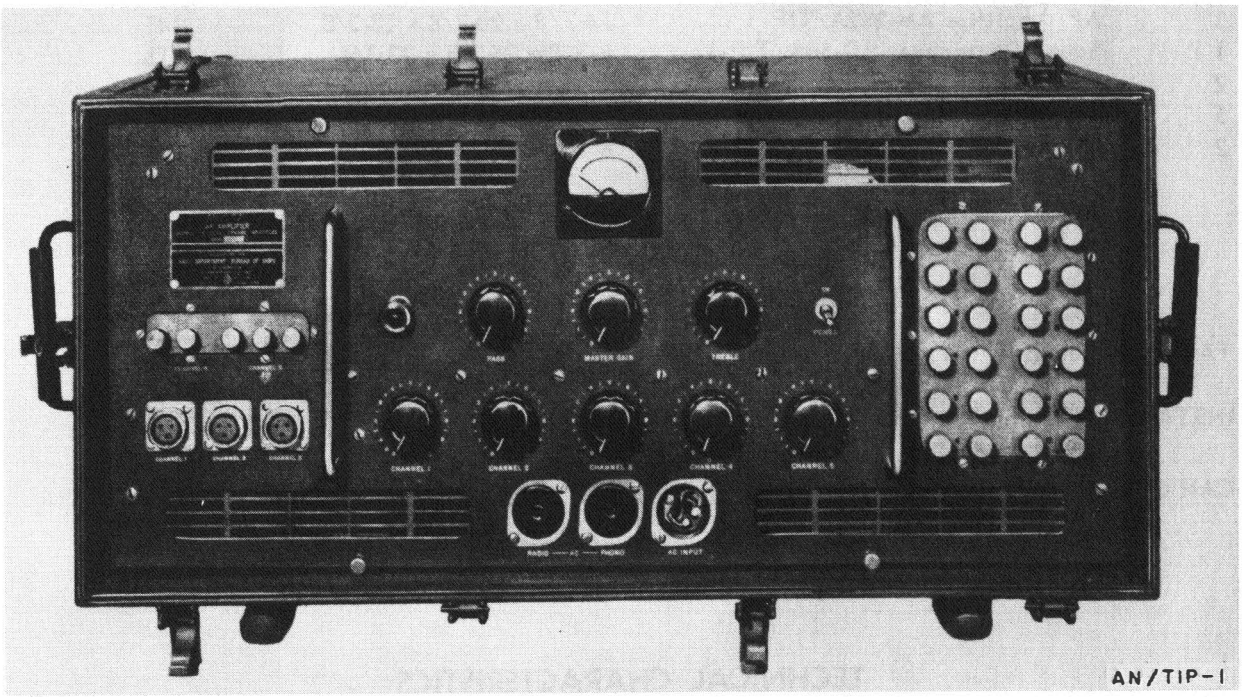
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	7 x 10 x 18½	45	.75		
DOMESTIC PACK:		48	.87		1
EXPORT PACK:		78	4.17		1

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 14 May 52

AN/TIP-1

PUBLIC ADDRESS SET



Public Address Sets AN/TIP-1 and AN/TIP-1A are designed to provide a high quality loudspeaker system for projecting voice, music, or other signals from microphones, electrical transcriptions, and radio receivers in auditoriums, stadiums, or buildings.

As many as 12 loudspeakers may be connected to the a-f amplifier.

This amplifier provides five separate input channels; three for microphone and/or reproducer, one for radio input, plus one miscellaneous channel. Each channel has an individual volume control, but all channels are controlled at a master volume control which regulates the over-all gain.

Radio Receiving Equipment RBO is usually used in conjunction with this equipment.

AN/TIP-1

PUBLIC ADDRESS SET

INSTRUCTION LITERATURE: NavShips 91168, 91419
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 14 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	AF Amplifier AM-282A/TIP-1	14-7/8 x 28-7/8 x 18-3/8	141
1	Sound Reproducer RD-56A/TIP-1	8-3/8 x 25-5/8 x 20-1/4	75
2	Dynamic Speaker CUL-491888A	18-1/4 x 28-7/8 x 23-3/4	60
5	Loudspeakers, Radial CUL-491887	18-1/2 x 54-3/8 x 19-1/2	22
2	Microphone CAFI-51096	8-1/4 x 37-5/8 x 15-5/8	42

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, transportable.

CAN COMMUNICATE WITH: This is sound-projecting equipment for directing speech or music to groups of personnel assembled as an audience.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Input: 5 channel; microphone, phonograph, and radio.
Output: 12 speakers.

TYPE CONTROLS: One volume control for each channel, master volume control for all channels, and separate bass and treble controls.

POWER OUTPUT: 60 w into 30 ohms.

POWER REQUIREMENTS: 300 w, 115 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Public Address Set AN/TIP-1 and -1A measures 14-7/8 x 49 x 18-1/2 inches, net weight 664 pounds, volume 49.8 cu ft, 1.25 ship tons. Packed for domestic shipment: total weight 910 pounds, total volume 78.2 cu ft, 1.96 ship tons.

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

AN/TIP–2

PUBLIC ADDRESS SET

NO PHOTOGRAPH AVAILABLE

Public Address Set AN/TIP–2 is a transportable, high-level, high-gain system for the distant projection of af signals during landing operations. It can be operated from a microphone or telephone-line signal input over a wide temperature range and under adverse weather conditions.

This equipment consists of an audio amplifier, a tripod-mounted loudspeaker, and an engine generator.

AN/TIP–2

PUBLIC ADDRESS SET

INSTRUCTION LITERATURE: TM 11–5554

USING SERVICE: USA, USN

DATE OF THIS SHEET: 11 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	AF Amplifier AM–302/TIP–2	14¼ x 34 x 19¾	220
1	Case CY–719/TIP–2	16¼ x 43¾ x 15¾	169
1	Case CY–760/TIP–2	20⅝ x 30⅛ x 19¾	190
1	Loudspeaker Assembly LS–153/TIP–2	24 x 17¼ x 13	106.5
1	Engine Generator PU–177/U	24¼ x 28¼ x 20⅝	215

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Directing landing operations.

INSTALLATION: Ground, transportable.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Sound projection; 10,000 ft (optimum conditions) 2,500 ft (battle conditions)

TYPE CONTROLS: Gain cont w/vol ind.

POWER OUTPUT: 500 w (350 to 5,000 cy).

POWER REQUIREMENTS: 1,100 w, 115 v, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		1,059	33		
DOMESTIC PACK:					
EXPORT PACK:		1,477	45	1.1	6

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 15 Feb 52

AN/TIQ-2

PUBLIC ADDRESS SET



Public Address Set AN/TIQ-2 is a transportable, medium-power, sound amplifying and projecting equipment used to project speech, music, or signals from radio, communication circuits, or records, for special service and morale applications or for use by military police and security troops.

This equipment consists essentially of a medium-power audio amplifier, a phonograph turntable, loudspeakers, and related accessories. It is contained in field-type carrying cases.

It can be operated from sources of 115/230-v a-c power or from a 6- or 12-v storage battery through Vibrator Power Supply PP-31/TIQ-2.

AN/TIQ-2

PUBLIC ADDRESS SET

INSTRUCTION LITERATURE: TM 11-2586
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 15 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Case CY-38/TIQ-2 (Amplifier AM-20/TIQ-2)	10 x 16 x 21	75.0
1	Case CY-38/TIQ-2 (Turntable MX-39/TIQ-2)	10 x 16 x 21	47.0
2	Loudspeaker LS-103/TIQ-2	19 x 25 (diameter)	22.0
2	Loudspeaker Stand MT-128/TIQ-2	48 (collapsed)	18.5
2	Microphone M-2/U	Not Available	0.875
2	Microphone stand	" "	4.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Signal company, infantry regiment of infantry divisions, military police company.

INSTALLATION: Ground.

CAN COMMUNICATE WITH: No specific equipment. Sound-in-air apparatus which projects sound to groups of personnel.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Seven input channels; two high-impedance microphones, two low-impedance microphones, one carbon microphone, one radio, one line or phonograph. Output transformer is vari-tapped for speaker matching. Output circuit tapped to provide input voltage for additional amplifier.

TYPE CONTROLS: Amplifier: Volume controls, tone control, on-off switch, power selector switch, and input selector switch.
Turntable: Off-voltage selector switch and motor switch.

POWER OUTPUT: 20 w (at less than 5% distortion).

POWER REQUIREMENTS: 175 w from: 115/230-v, 60-cyc source or 6- or 12-v storage battery through Vibrator Power Supply PP-31/TIQ-2.

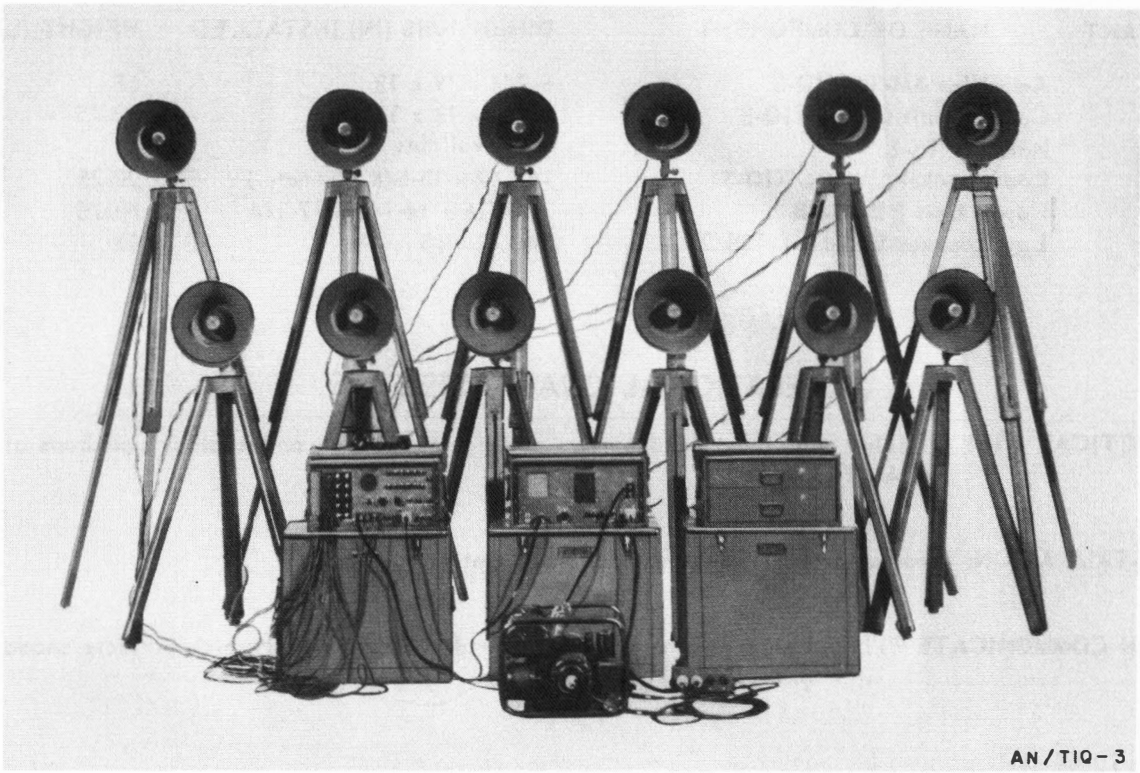
PHYSICAL CHARACTERISTICS

Public Address Set AN/TIQ-2 packed for export shipment: total weight 576 pounds, total volume 31.04 cu ft, 0.8 ship ton. Shipped in 3 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

AN/TIQ-3

PUBLIC ADDRESS SET



Public Address Set AN/TIQ-3 is a portable, sound amplifying and projecting equipment used for delivering commands or briefing instructions or for the control of groups of personnel at air fields and at division and higher headquarters.

This equipment consists essentially of an amplifier, a control unit, loudspeakers, a power unit, and accessories.

It can be modulated by a handset or microphone, its loudspeaker components (which are designed to function as speaker-microphones), a phonograph, or similar sound pick-up devices. It has a tone generator for signaling over the system.

Power is supplied by its power unit or an equivalent source of 115/230 v ac.

AN/TIQ-3

PUBLIC ADDRESS SET

INSTRUCTION LITERATURE: TM 11-2531
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Amplifier AM-34/TIQ-3	8-3/4 x 19 x 13	65
1	Control Unit C-104/TIQ-3	8-3/4 x 18 x 13	40.75
1	Handset TS-13	Not Available	1
12	Loudspeaker LS-104/TIQ-3	15-1/2 x 13-5/8 (diameter)	20.25
1	Power Unit PE-214-B	12-3/16 x 14-1/8 x 17-3/4	60.75
12	Loudspeaker Stand MT-128/TIQ-2	84-1/2 high	19

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters and fighter, bomber, and weather squadrons of the Air Force.

INSTALLATION: Ground, portable, designed for fixed station operation.

CAN COMMUNICATE WITH: No specific equipment. Sound-in-air apparatus which projects sound to groups of personnel.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: 12 loudspeakers, tone generator for signaling over system, provision for piped-in sound, intercommunication among any and all stations.

TYPE CONTROLS: Sound-mixing, volume, loudspeaker selector, press-to-talk.

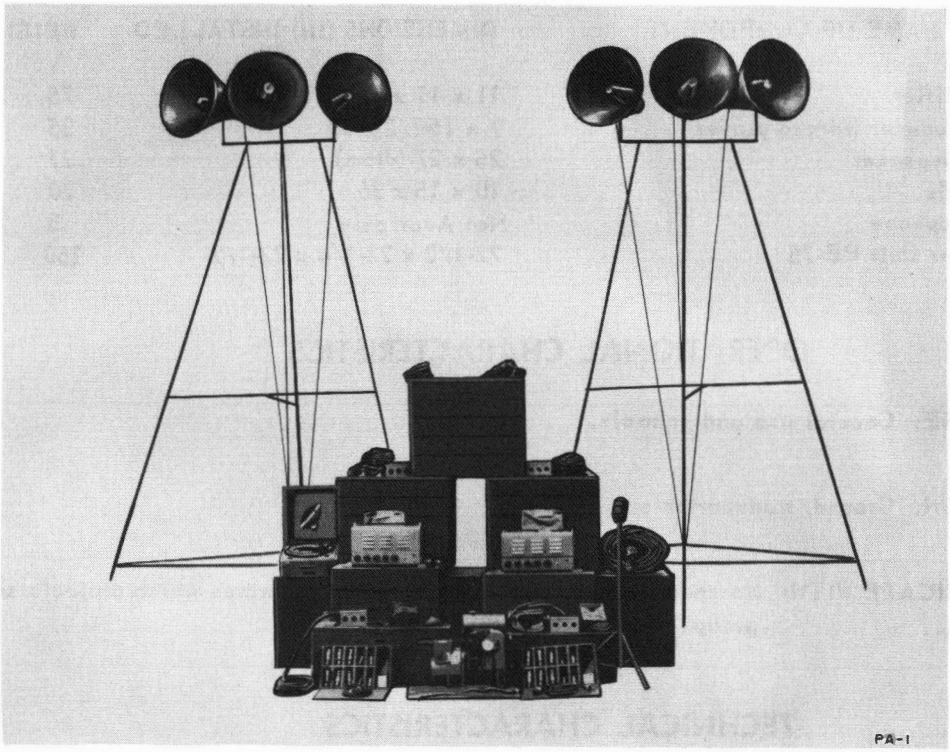
POWER OUTPUT: 50 w (not more than 10% distortion).

POWER REQUIREMENTS: 275 w, 115/230 v, 50 to 60 cyc ac. or Power Unit PE-214-B, or equal.

PHYSICAL CHARACTERISTICS

Public Address Set AN/TIQ-3 packed for export shipment: total weight 1,324 pounds, total volume 67.4 cu ft, 1.68 ship tons. Shipped in 8 packages.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 30 Jan 52	**AN/TIQ- TYPE** SERVICE TYPE NUMBER: PA-1 PUBLIC ADDRESS SET



Public Address Set PA-1 is a transportable, medium-power sound amplifying and projecting equipment used in conjunction with microphone, record player, radio, or equivalent sound signal sources for commands, briefing instructions, training and morale applications, and similar uses at posts, camps, and stations.

This equipment consists essentially of two 50-w audio amplifiers, an adjustable speed (78 and 33-1/3 rpm) record turntable, six loudspeaker units, power equipment, and accessories.

Provision is made for connection of a radio tuner. The set can cover an area of about 8,000 square feet and can be heard at a distance of 3,000 feet.

Operates on 115v ac.

AN/TIQ-TYPE	INSTRUCTION LITERATURE: TM 11-442
PA-1 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
PUBLIC ADDRESS SET	USING SERVICE : Army
	DATE OF THIS SHEET : 30 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Amplifier	11 x 11 x 18	75
1	Reproducer (record player)	9 x 15-1/2 x 19	35
6	Loudspeaker	25 x 27 (diam)	27
2	Stands	10 x 15 x 96	70
2	Microphone	Not Available	3
1	Power Unit PE-75	22-1/2 x 22-1/4 x 22-1/2	150

OPERATIONAL CHARACTERISTICS

TACTICAL USE: General use and schools.

INSTALLATION: Ground, transportable.

CAN COMMUNICATE WITH: No specific equipment. Sound-in-air apparatus which projects sound to groups of personnel.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Two microphone input; one two-speed (78- or 33-1/3-rpm) record player input; provision for radio tuner input. Two loudspeaker output channels.

TYPE CONTROLS: Amplifier: On-off, microphone, record, radio, master-gain, tone, music-speech, volume.

Record player: On-off, volume, tone.

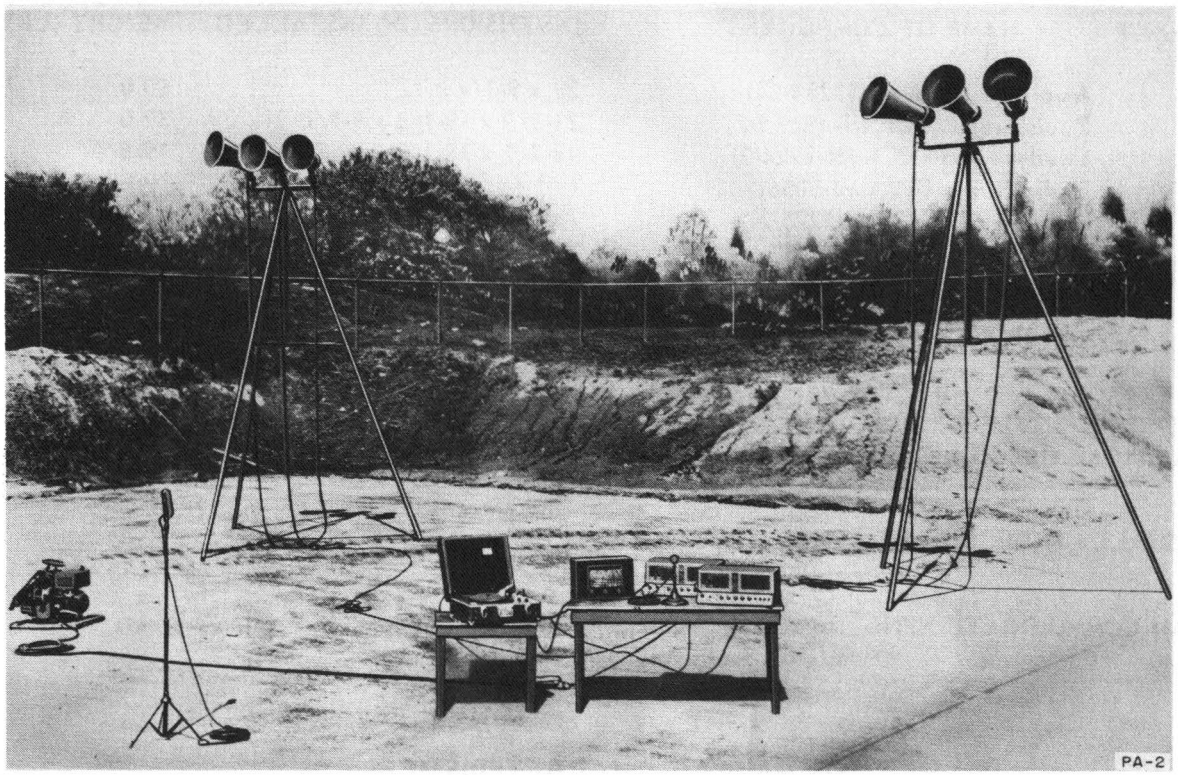
POWER OUTPUT: 50 w (normal); 100 w (maximum).

POWER REQUIREMENTS: 285 voltamperes at 105-125 v, 60 cyc ac.

PHYSICAL CHARACTERISTICS

Public Address Set PA-1 packed for export shipment: total weight 1,578 pounds, total volume 65 cu ft, 1.63 ship tons.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 23 Jan 52	**AN/TIQ- TYPE** SERVICE TYPE NUMBER: PA-2 PUBLIC ADDRESS SET



Public Address Set PA-2 is a transportable, medium-power, public address, or sound projecting equipment by means of which voice or music from a microphone, record player, or radio tuner can be amplified and projected to audiences. It is used for delivering commands, briefing, and training or for recreational and morale activities. It can be used on the ground, either indoors or outdoors.

This equipment consists essentially of two audio power amplifiers, a record player, an all-wave radio tuner, a power unit, microphones, loudspeakers, and related accessories.

The radio tuner has a frequency range from 0.54 to 22.5 mc which is covered in five bands. The announcing microphone and unidirectional pick-up microphone may be used independently or simultaneously. The record player is an adjustable two-speed (78 or 33-1/3 rpm) unit.

This equipment operates on commercial or auxiliary 115 v ac.

AN/TIQ-TYPE	INSTRUCTION LITERATURE: TM 11-449
PA-2 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
PUBLIC ADDRESS SET	USING SERVICE : Army
	DATE OF THIS SHEET : 23 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Amplifier (RCA MI-12214-GI)	29 x 9-1/4 x 12	50.0
1	Phonograph (RCA MI-4829-B)	21-1/2 x 19-1/8 x 9-1/2	32.0
6	Loudspeaker (RCA MI-2924-2)	18-1/2 x 18-1/2 x 29-3/4	19.5
1	Radio Tuner (RCA MI-5056)	Not Available	Not Available
1	Microphone (RCA MI-6226-J)	2-5/8 x 3 x 3-5/8	2.25
1	Microphone (RCA MI-2199)	3-3/4 x 8 x 2-5/8	2.0
1	Power Unit, 1 kw		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and equivalent levels.

INSTALLATION: Ground, transportable.

CAN COMMUNICATE WITH: No specific equipment. Sound-in-air apparatus which projects sound to groups of personnel.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Two microphone input channels, one record player input channel, one radio tuner input channel, and two loudspeaker output channels.

TYPE CONTROLS: Amplifier: MIC-1, MIC-2, master gain, low tone, high tone, on-off.
Record player: volume, tone, speed shifter, speed control, on-off.
Radio tuner: tuning, volume-on-off, tone, band selector.

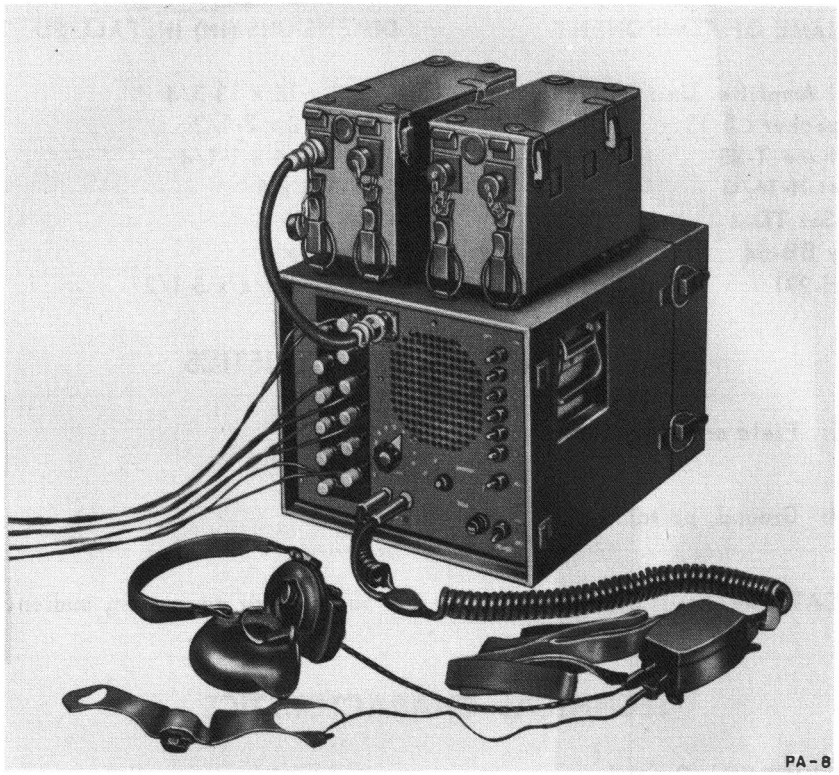
POWER OUTPUT: 50 w.

POWER REQUIREMENTS: 640 to 1,000 w, 115 v, 60 cyc ac from commercial power source or Power Unit PE-75, or equal.

PHYSICAL CHARACTERISTICS

Public Address Set PA-2 packed for export shipment: total weight 2,000 pounds, total volume 80 cu ft, 2 ship tons.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 31 Jan 52	AN/TIQ-TYPE SERVICE TYPE NUMBER: PA-8 INTERCOMMUNICATION SET



Intercommunication Set PA-8 is rugged, portable, sound-amplifying and projecting equipment used as a loudspeaker intercommunication system serving displaced elements of a field artillery battery.

This equipment consists of a single amplifier unit, battery boxes, a head-and-chest set, and related accessories. The master control unit and remote station speaker units are blastproof and waterproof.

It can be used for two-way half-duplex type communication and can interconnect up to six remote speaker station units on a single station or all call basis. Provides for calling the master or control station from a speaker station unit only when the master station selector switch is "on."

Operates from rechargeable 2-v batteries (Battery BB-54).

AN/TIQ-TYPE

PA-8 :SERVICE TYPE NUMBER
INTERCOMMUNICATION SET

INSTRUCTION LITERATURE: TM 11-2564
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 31 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Control Amplifier Unit BC-1346	10-5/8 x 16 x 13-3/4	36.
4	Loudspeaker LS-13	7 x 11-7/8 x 8-1/2	11.25
1	Microphone T-45	3/8 x 1-1/4 x 1-1/4	0.11
1	Headset H-16/U	8 x 3-3/4 x 6	0.75
1	Chest Set TD-4	1-3/8 x 3 x 6	0-7
9	Battery BB-54	5-1/2 x 3 x 4	3.25
1	Box CH-291	6-1/4 x 11-3/4 x 5-1/2	3.25

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Field artillery battery.

INSTALLATION: Ground, portable.

CAN COMMUNICATE WITH: No specific equipment. Sound-in-air equipment, audiences, or groups of personnel.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Central station can communicate with one or all remote stations on a listen-talk basis. Remote station can communicate with central station only if central station is standing by for that (or all) remote station.

TYPE CONTROLS:

Control-amplifier: Six speaker off-on switches; all-speakers off-on switch; listen-talk switch; volume control; on-off power switch.

POWER OUTPUT: 1.5 w.

POWER REQUIREMENTS: Three BB-54 in series 6 v from three batteries in series or from six batteries in series parallel.

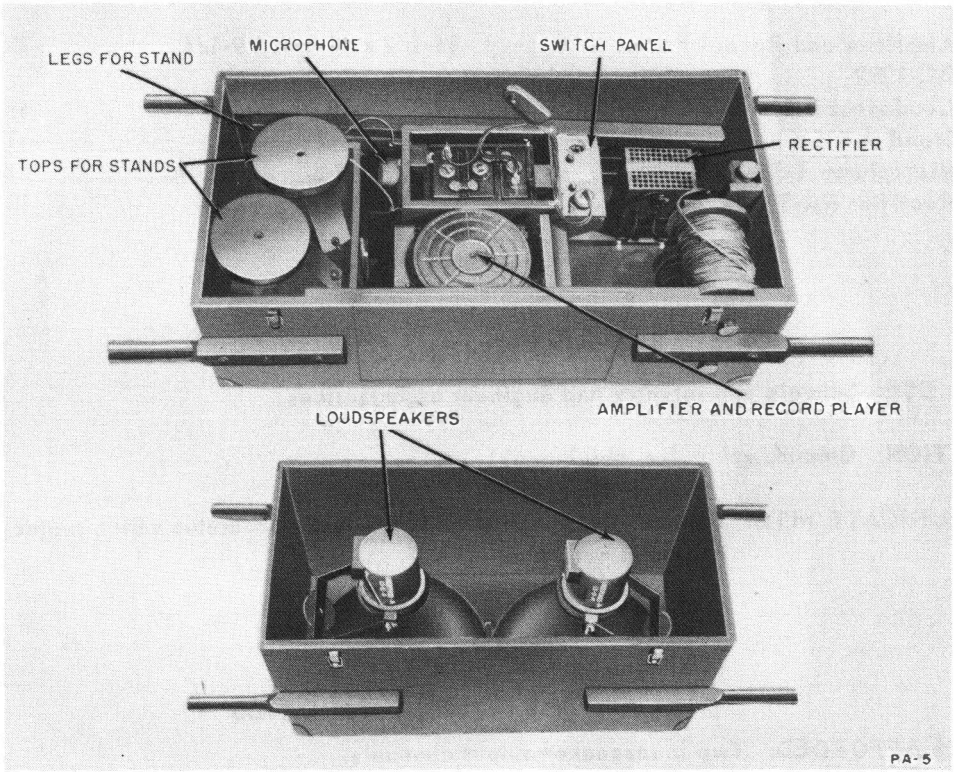
PHYSICAL CHARACTERISTICS

Intercommunication Set PA-8 weighs 125 pounds net, volume 4.5 cu ft. Packed for export shipment: total weight 296 pounds, total volume 17 cu ft. Shipped in four packages.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 9 Jan 52

AN/TNP-TYPE

SERVICE TYPE NUMBER: PA-5
PUBLIC ADDRESS SET



Public Address Set PA-5 is a portable public address or sound projecting equipment by means of which voice or music from a microphone or record input can be amplified and projected to audiences. It is used for delivering commands or for briefing in forward areas.

This set consists essentially of an amplifier-turntable, loudspeakers and microphone equipment, batteries, interconnecting cords, and other accessories. The complete equipment is contained in three chests, each of which can be carried by two men. Includes provision for mounting loudspeakers on tripods or on the cover of the largest chest. May be operated from a conventional 115-v power source or from a 6-v storage battery. Includes spare battery and battery charger. Does not include provision for input from wire or radio signals, piped-in sound, sound mixing, or for monitoring.

AN/TNP- TYPE

PA-5 :SERVICE TYPE NUMBER
PUBLIC ADDRESS SET

INSTRUCTION LITERATURE: TM 11-2504
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 9 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Amplifier and Record Player BC-1292	16-1/2 x 16-1/2 x 9-1/4	33.5
2	Loudspeaker LS-12	19-1/4 x 19 (diameter)	45.0
2	Stand M-405	48 x 36 x 32	1.13
1	Microphone T-55	5-3/16 x 2-5/8 x 1-15/16	Not Available
1	Rectifier RA-103	9-1/4 x 6-1/4 x 5-3/4	10.75

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Schools and infantry and engineer organizations.

INSTALLATION: Ground, vehicular, shipborne.

CAN COMMUNICATE WITH: No specific equipment. Sound-in-air apparatus which projects sound to groups of personnel.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Two loudspeaker output channels.
One microphone or amplifier-record-player input.

TYPE CONTROLS: Amplifier and record player: On-off, microphone volume, phono-volume, tone.
Rectifier charger: On-off.

POWER OUTPUT: On 115 v, 60 cyc, ac: 20 w.
On 6-v storage battery: 16 w.

POWER REQUIREMENTS: Amplifier only: 85 w, 115 v, 60 cyc, ac or 6-v storage battery, (11.5-amp) drain.
Amplifier and record player: 110 w, 115 v, 60 cyc, ac or 6-v storage battery, (15.5-amp) drain.

PHYSICAL CHARACTERISTICS

Public Address Set PA-5 packed for domestic shipment: total weight 475 pounds, total volume 18.1 cu ft. Packed for export shipment: total weight 575 pounds, total volume 22 cu ft, 0.55 ship ton. Shipped in 3 packages both domestic and export.

STATUS: Std

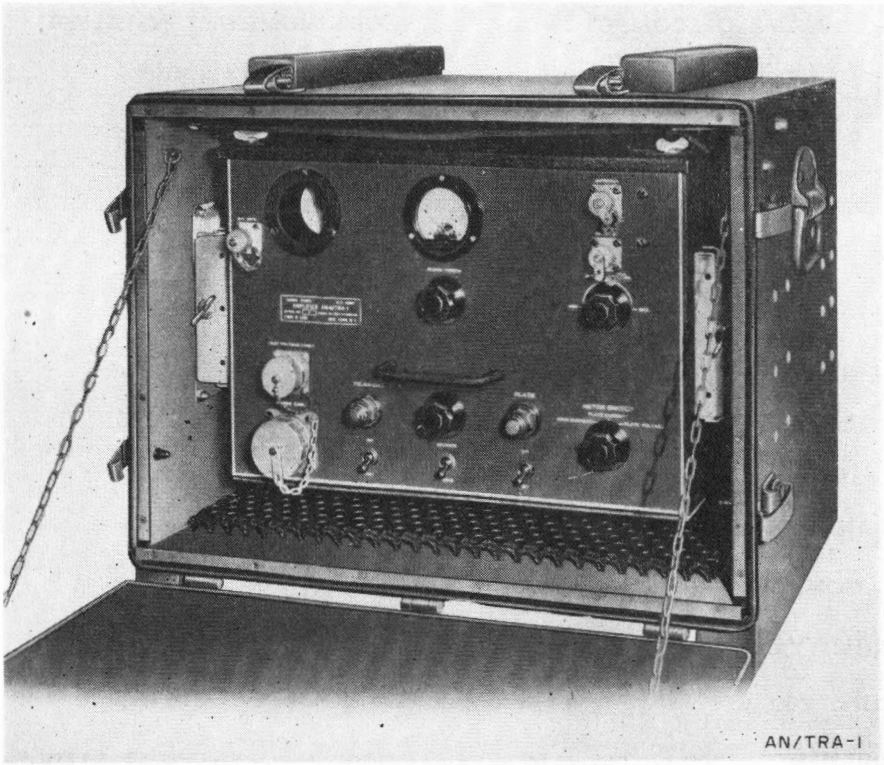
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

AN/TRA–1

AMPLIFIER EQUIPMENT



Amplifier Equipment AN/TRA–1 is a transportable, fm, high-power amplifier used to increase the power output and range of Radio Set AN/TRC–1, Radio Terminal Set AN/TRC–3, and Radio Relay Set AN/TRC–4.

The frequency range and power output of the various models of the amplifier are the same; it can be used with all models of Radio Transmitter T–14/TRC–1 (part of the AN/TRC–1, –3, and –4).

AN/TRA-1

AMPLIFIER EQUIPMENT

INSTRUCTION LITERATURE: TM 11-2601

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 11 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Amplifier AM-8/TRA-1	10¾ x 12¾ x 19⅛	48
1	Power Supply PP-13/TRA-1	9⅜ x 14 x 25	130

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Regimental or higher headquarters.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE: Line of sight.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 70 to 100.

TYPE MODULATION: Fm (F3).

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 200 w.

POWER REQUIREMENTS: 800 w, 115 v, 50/60 cy ac (from Power Supply PP-13/TRA-1).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		403			
DOMESTIC PACK:					
EXPORT PACK:		547			3

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 12 June 1956

AN/TRA-2

REMOTE CONTROL EQUIPMENT



Remote Control Equipment AN/TRA-2 is a transportable assemblage that permits operational control of Radio Set AN/TRC-1, Radio Terminal Set AN/TRC-3, and Radio Relay Set AN/TRC-4 from distances up to 2 miles. This equipment also enables automatic radio-relay operation when the transmitter and receiver of the radio set are more than 10 feet apart, and provides intercommunication between local and remote operating locations.

AN/TRA-2

REMOTE CONTROL EQUIPMENT

INSTRUCTION LITERATURE: TM 11-2621

USING SERVICE: USA

DATE OF THIS SHEET: 12 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Remote Control Unit C/112-TRA-2		
1	Control Unit C-113/TRA-2		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Regimental or higher headquarters.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE (IN MILES): 2.

TECHNICAL CHARACTERISTICS

POWER REQUIREMENTS: 115 or 230 v, 50/60 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: S/Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

AN/TRA–19

AMPLIFIER-POWER SUPPLY GROUP

NO PHOTOGRAPH AVAILABLE

Amplifier-Power Supply Group AN/TRA–19 is auxiliary equipment used with such vhf radio equipment as Radio Set AN/TRC–8, Radio Terminal Set AN/TRC–11, and Radio Relay Set AN/TRC–12 to extend the effective transmission range of the transmitter components of these equipments.

This group consists essentially of a Class C rf power amplifier and a power supply unit contained in a standardized equipment cabinet.

It can be used to improve transmission over long distances, grazing paths, and shadow areas, and to overcome other adverse conditions.

AN/TRA–19

AMPLIFIER-POWER SUPPLY GROUP

INSTRUCTION LITERATURE: TM 11–618A

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 19 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Amplifier, Radio Frequency AM–456/TRA–19	11 x 12 7/8 x 13 1/16	46
1	Case, Standardized Components, Electrical CY–1204/TRA–19	26 1/2 x 18 3/8 x 17 3/4	53
1	Power Supply PP–840/TRA–19	10 1/2 x 12 7/8 x 14 3/4	64

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Regimental and higher headquarters.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE (IN MILES): 100 (nom).

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 230 to 250.

TYPE MODULATION: Fm (F1, F3, F4).

TYPE OF SIGNAL: Voice, tty, facsimile.

POWER OUTPUT: 75 w (nom).

POWER REQUIREMENTS: 400 w, 115 or 230 v ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		164.2			
DOMESTIC PACK:					
EXPORT PACK:		275	13.7		1

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 12 June 1956

AN/TRA–TYPE

C–292( )/TRA–7

CONTROL UNIT



Control Unit C–292( )/TRA–7, together with other components of a radioteletype system, provides facilities for establishing radioteletype full-duplex, half-duplex, one-way reversible, emergency cw, or frequency-shift transmission and reception.

This equipment is a single component containing an integral power supply and may be used in several different systems such as those using Radio Set AN/GRC–26 or AN/MRC–2.

It is an electronic repeater of polar and neutral teletypewriter signals and converts polar telegraph signals received from a dual diversity converter into neutral signals received from a receiving teletypewriter. This control unit also translates neutral signals from a sending teletypewriter into polar signals for transmission over a wire line to control a frequency-shift exciter.

When not used in a specific system, this control unit may be located at the receiving station, the transmitting station, or any desired location within 10 miles of the two.

The C–292/TRA–7, C–292A/TRA–7, and C–292B/TRA–7 are functionally interchangeable and differ from each other in design details.

AN/TRA–TYPE

INSTRUCTION LITERATURE: TM 11–262

USING SERVICE: USA

DATE OF THIS SHEET: 12 June 1956

C–292( )/TRA–7

CONTROL UNIT

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL:

Input: Mark, +.025 amp; space, —.025 amp.

Output: Mark, +.02 amp; space, —.025 amp.

POWER REQUIREMENTS: 170 w, 115 v, 50/60 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

AN/TRA–TYPE

CV–31( )/TRA–7

DUAL DIVERSITY CONVERTER

NO PHOTOGRAPH AVAILABLE

Dual Diversity Converter CV–31( )/TRA–7 is a component of a radioteletype system that provides full-duplex, half-duplex, or one-way reversible, as well as emergency frequency-shift or cw transmission and reception.

This equipment consists of one component that contains its own meters, power supply, and oscillator. The oscillator provides an audible means of indicating mark and space signals, when required.

The output of each of the two receivers is applied to the dual diversity converter to combine the received frequency-shifted signals and to convert the stronger receiver output into dc neutral and polar signals.

The CV–31/TRA–7, CV–31A/TRA–7, CV–31B/TRA–7, CV–31C/TRA–7, and CV–31D/TRA–7 are identical except for minor electrical and mechanical differences.

AN/TRA–TYPE

CV–31( )/TRA–7

DUAL DIVERSITY CONVERTER

INSTRUCTION LITERATURE: TM 11–261

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 19 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	(Equipment consists of a single major operating component.)		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, transportable.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE: 400 to 470 kc (–31, –31A, –31B, early –31C); 440 to 510 kc (late –31C, –31D).

TYPE OF COMMUNICATION CIRCUITS: Radioteletype.

POWER REQUIREMENTS: 175 w, 115 v, 50/60 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	25¼ x 20⅝ x 22	220			
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 13 June 1956

AN/TRA–TYPE

O–39( )/TRA–7

FREQUENCY SHIFT EXCITER

NO PHOTOGRAPH AVAILABLE

Frequency Shift Exciter O–39( )/TRA–7 generates low-power rf signals to key such signals in accordance with the intelligence of a radioteletype code, and to feed them to a cw radio transmitter.

This equipment, which functions as the master oscillator of the radio transmitter with which it is used, is composed of a single primary operating component and accessory items.

The O–39/TRA–7, O–39A/TRA–7, and O–39B/TRA–7 are substantially identical except for minor electrical and mechanical differences.

AN/TRA–TYPE

O–39( )/TRA–7

FREQUENCY SHIFT EXCITER

INSTRUCTION LITERATURE: TM 11–257

USING SERVICE: USA

DATE OF THIS SHEET: 13 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL:

Dc Input: Mark, ±.02 amp; space, —.025 amp.

Frequency Shift: 212.5 to 850 cy (depending on the freq multiplication of the assoc rad xmtr).

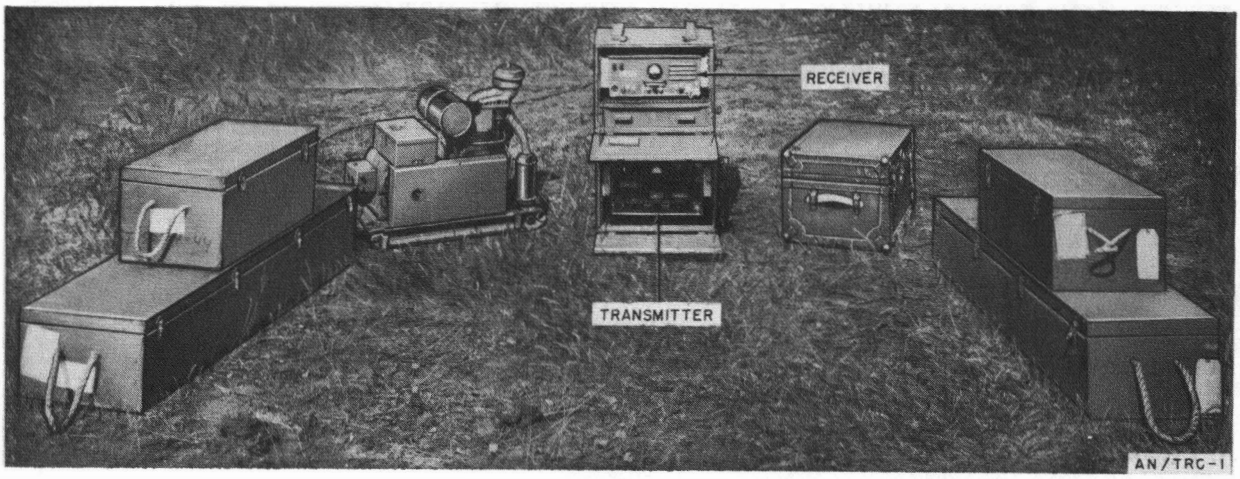
OUTPUT FREQUENCY: 2 to 6 mc.

POWER REQUIREMENTS: 185 w, 115 v, 50/60 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 20 Dec 51	**AN/TRC-1** RADIO SET



Radio Set AN/TRC-1 is a transportable, crystal-controlled, f-m radio receiving and transmitting equipment for radio relay or point-to-point communication in the v-h-f band. It is used at regimental or higher headquarters. When operated as the terminal of a radio relay link in a tactical communication system it provides one-way or simultaneous two-way facilities.

With appropriate auxiliary equipment, four channels of radioteletype or a single channel of facsimile signals can be accommodated.

The set can be operated from a distant control point on a two-wire or four-wire basis by means of Remote Control Equipment AN/TRA-2. Amplifier Equipment AN/TRA-1 can be added when necessary to increase transmitter power output. Antenna tower, dipole elements, power supply, and accessory items are included.

This equipment is intended for operation on an intermittent or prescheduled basis only. It does not include spare operating components.

For continuous operation, Radio Terminal Set AN/TRC-3, composed essentially of two Radio Sets AN/TRC-1, is available. Also, two AN/TRC-1 sets (including necessary spares) operating back-to-back at an intermediate point in a system constitute Radio Relay Set AN/TRC-4.

AN/TRC-1

RADIO SET

INSTRUCTION LITERATURE: TM 11-2601
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army, Navy
DATE OF THIS SHEET : 20 Dec 51

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver R-19/TRC-1	22-1/2 x 16 x 17-3/4	95
1	Radio Transmitter T-14/TRC-1	22-1/2 x 16 x 17-3/4	108
2	Antenna System AS-19/TRC-1	Not Available	470
1	Power Unit PE-75	26-1/2 x 19-1/2 x 36	330

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Regimental or higher headquarters.

INSTALLATION: Ground, field, transportable.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/TRC-1, -3, -4; AN/URR-10, -12; BC-787; R-137/GR; RBK; SCR-687.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 70.0 — 99.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice, teletypewriter (with additional equipment).

POWER OUTPUT: Transmitter, 50 w maximum, 10 w low power.

POWER REQUIREMENTS: Receiver: 100 w, 115 v, 50/60 cyc ac.
Transmitter: 250 w, 115 v, 50/60 cyc ac.
Commercial power source or Power Unit PE-75, or equal.

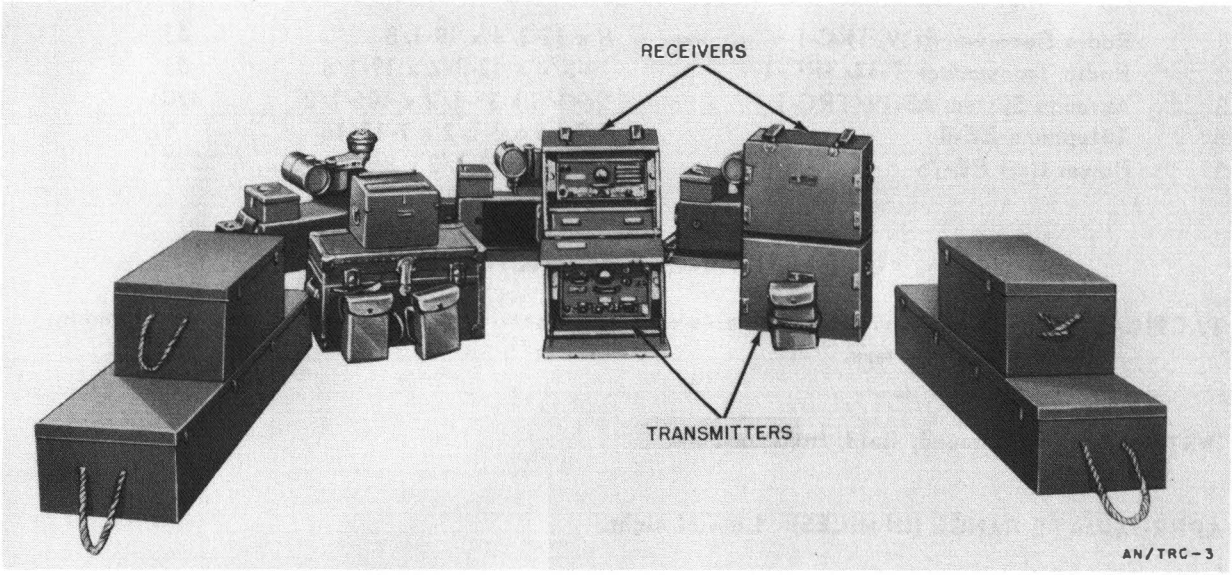
PHYSICAL CHARACTERISTICS

Radio Set AN/TRC-1 weighs 1,435 pounds net. Packed for export shipment: total weight 2,000 pounds, total volume 78 cu ft, 2 ship tons.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

AN/TRC-3

RADIO TERMINAL SET



Radio Terminal Set AN/TRC-3 is a transportable, crystal-controlled, f-m, field, radio transmitting and receiving equipment which can be used in point-to-point, single or multichannel communication or as the terminal of a radio relay link in a system serving division and higher headquarters.

This equipment consists essentially of two Radio Sets AN/TRC-1, one of which is a spare, assuring continuous operation. It can be used in conjunction with telephone and telegraph equipment to provide various combinations of voice, telegraph or teletypewriter, and facsimile communication.

It can operate in a system in which the remote terminal consists of another Radio Terminal Set AN/TRC-3, or Radio Set AN/TRC-1, and in which Radio Relay Set AN/TRC-4 may be used as the intermediate repeater facility.

When it is necessary to increase power output of the transmitter, Amplifier Equipment AN/TRA-1 (not a component of this equipment) can be used.

Operates from 115 v ac supplied by its power unit component.

AN/TRC-3

RADIO TERMINAL SET

INSTRUCTION LITERATURE: TM 11-2601
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Radio Receiver R-19/TRC-1	8 x 12-3/4 x 19-1/8	43
2	Radio Transmitter T-14/TRC-1	10-3/4 x 12-3/4 x 19-1/8	66
3	Antenna System AS-19/TRC-1	26-3/8 x 33-1/2 x 105-1/2	470
3	Telephone EE-8	9-9/16 x 3-1/2 x 7-11/16	9.75
3	Power Unit PE-75	26 1/2 x 19-1/2 x 36	330

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division signal companies and signal service teams at corps, army, and theater headquarters.

INSTALLATION: Ground, field, transportable.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/TRC-1, -3, -4; AN/URR-10, -12; BC-787; R-137/GR; RBK; SCR-687.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 70.0 – 99.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice, teletypewriter (with additional equipment).

POWER OUTPUT: Transmitter, 50 w maximum, 10 w low power.

POWER REQUIREMENTS: Receiver: 100 w, 115 v, 50/60 cyc ac.
Transmitter: 250 w, 115 v, 50/60 cyc ac
Commercial power source or Power Unit PE-75, or equal.

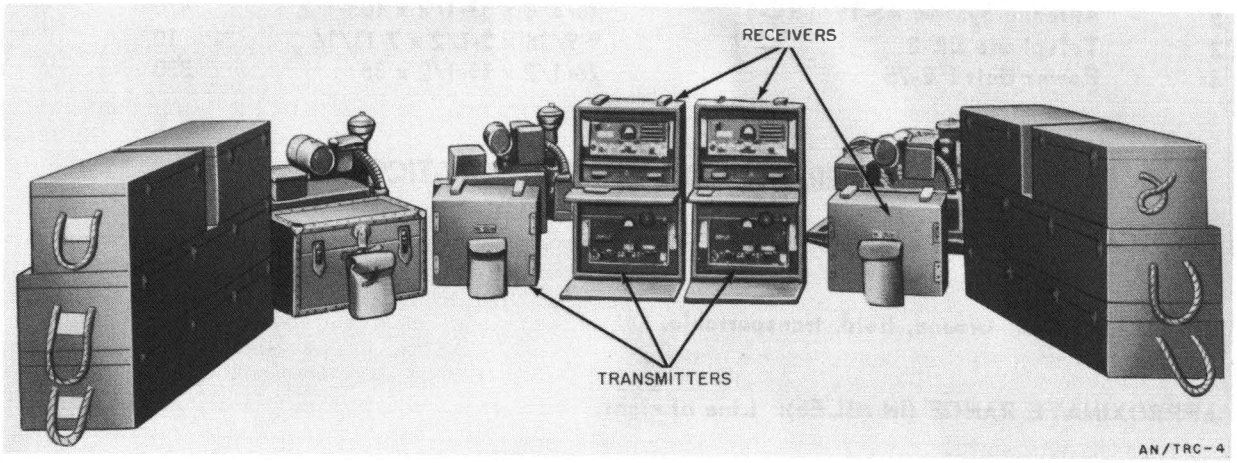
PHYSICAL CHARACTERISTICS

Radio Terminal Set AN/TRC-3 weighs 2,560 pounds net. Packed for export shipment: total weight 3,150 pounds, total volume 132 cu ft, 3.3 ship tons.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 8 Jan 52

AN/TRC-4

RADIO RELAY SET



Radio Relay Set AN/TRC-4 is a transportable, crystal-controlled, f-m, field, radio transmitting and receiving equipment which can be used in point-to-point, single or multichannel communication or as the repeater facility of a radio relay link of a system serving corps and equivalent headquarters.

This equipment consists essentially of two Radio Sets AN/TRC-1, operating back-to-back at intermediate points of a radio relay facility terminated by Radio Set AN/TRC-1 or Radio Terminal Set AN/TRC-3. It provides various combinations of voice, telegraph, teletypewriter, and facsimile channels. It includes spare operating components, antenna, power, and accessory items.

Amplifier Equipment AN/TRA-1 may be used to increase the transmitter output power of this radio relay set.

Operates from 115 v ac supplied by its power unit component.

AN/TRC-4

RADIO RELAY SET

INSTRUCTION LITERATURE: TM 11-2601
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army, Navy
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
4	Radio Receiver R-19/TRC-1	8 x 12-3/4 x 19-1/8	43
4	Radio Transmitter T-14/TRC-1	10-3/4 x 12-3/4 x 19-1/8	66
5	Antenna System AS-19/TRC-1	26-3/8 x 33-1/2 x 105-1/2	470
2	Telephone EE-8	9-9/16 x 3-1/2 x 7-11/16	10
4	Power Unit PE-75	26-1/2 x 19-1/2 x 36	330

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Corps and equivalent headquarters.

INSTALLATION: Ground, field, transportable.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/TRC-1, -3, -4; AN/URR-10, -12; BC-787; R-137/GR; RBK; SCR-687.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 70.0 — 99.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice, teletypewriter (with additional equipment).

POWER OUTPUT: Transmitter, 50 w maximum, 10 w low power.

POWER REQUIREMENTS: Receiver: 100 w, 115 v, 50/60 cyc ac.
Transmitter: 250 w, 115 v, 50/60 cyc ac.
Commercial power source or power Unit PE-75, or equal.

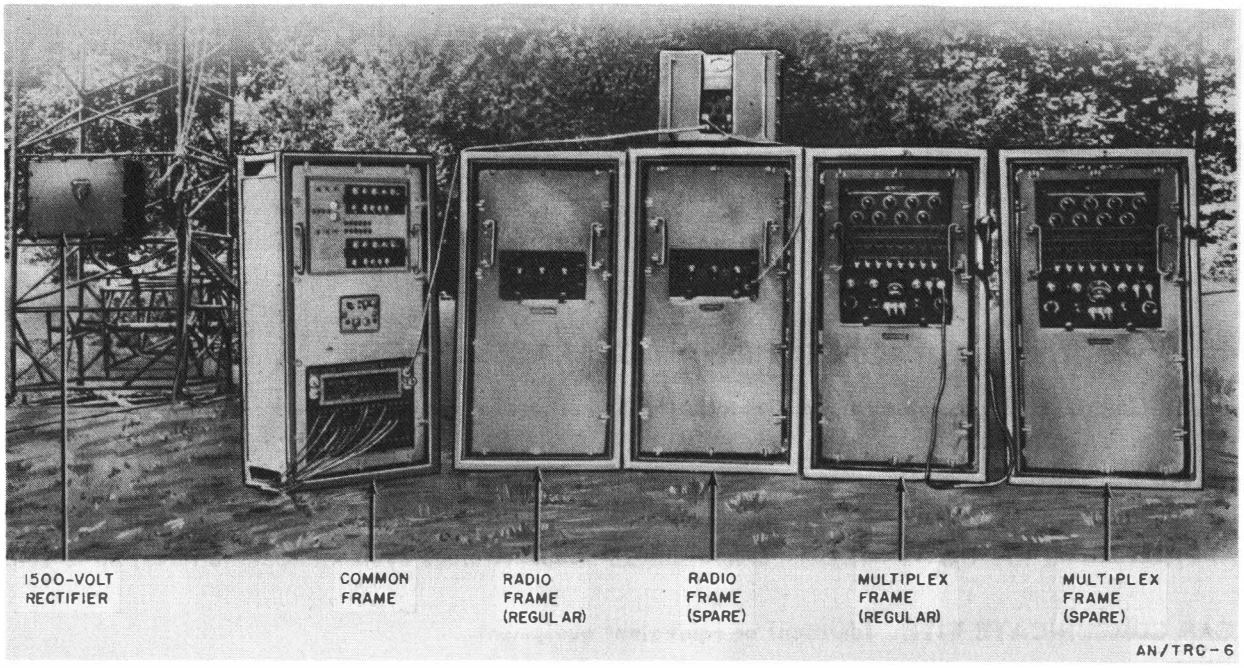
PHYSICAL CHARACTERISTICS

Radio Relay Set AN/TRC-4 packed for export shipment: total weight 4,500 pounds, total volume 187 cu ft, 4.7 ship tons.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 20 Dec 51

AN/TRC-6

RADIO SET



Radio Set AN/TRC-6 is a transportable, pulse-position-modulated, superhigh-frequency radio relay set used at terminals of a multichannel radio relay system in conjunction with v-f or carrier telegraph and telephone facilities. It is usually installed at permanent or semipermanent locations at higher headquarters.

This equipment provides eight two-way channels which may be terminated on a two-wire or four-wire basis with talking, monitoring, and ringing on each channel.

Equipment consists essentially of two receivers, two transmitters, two multiplex frames, a rectifier power unit antenna, and accessory components. It may be installed and operated in Shelter HO-17 or HO-27 and transported on a 2-1/2-ton cargo truck. It includes a trailer-drawn field power unit.

Two Radio Sets AN/TRC-6 can be operated back-to-back to provide radio relay or repeater facilities at an intermediate point of a radio relay link in a tactical communication system.

AN/TRC-6

RADIO SET

INSTRUCTION LITERATURE: TM 11-631
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 20 Dec 51

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Common Frame Assembly CY-75/TRC-6	48-1/4 x 13 x 25-1/2	190
2	Radio Frame Assembly CY-74/TRC-6	48-1/4 x 13 x 25-1/2	200
2	Multiplex Frame Assembly CY-76/TRC-6	48-1/4 x 13 x 25-1/2	260
2	Radio Transmitter T-57/TRC-6	12-1/4 x 18 x 17	45
2	Receiver-Converter CV-10/TRC-6	12-1/2 x 13 x 12-1/2	20
2	Rectifier Power Unit PP-71/TRC-6	19 x 13-1/2 x 20	112

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Radio relay team. Installed in higher headquarters.

INSTALLATION: Ground, fixed or fixed field, transportable.

APPROXIMATE RANGE (IN MILES): Single link 25 to 40. Average system(four radio links) up to 200.

CAN COMMUNICATE WITH: Identical or equivalent equipment.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4,350 — 4,800 in four bands.
Band A: 4,800 Band C: 4,500
Band B: 4,650 Band D: 4,350.

TYPE MODULATION: Pulse-position-modulated, time division.

TYPE OF SIGNAL: Voice, d-c telegraph and teletypewriter.

POWER OUTPUT: 0.2 w (average).

POWER REQUIREMENTS: 115-v, 50/60 cyc , 1,312-w (minimum), 3,400-w (maximum),single-phase ac. Commercial power source or Power Unit PE-197, or equal.

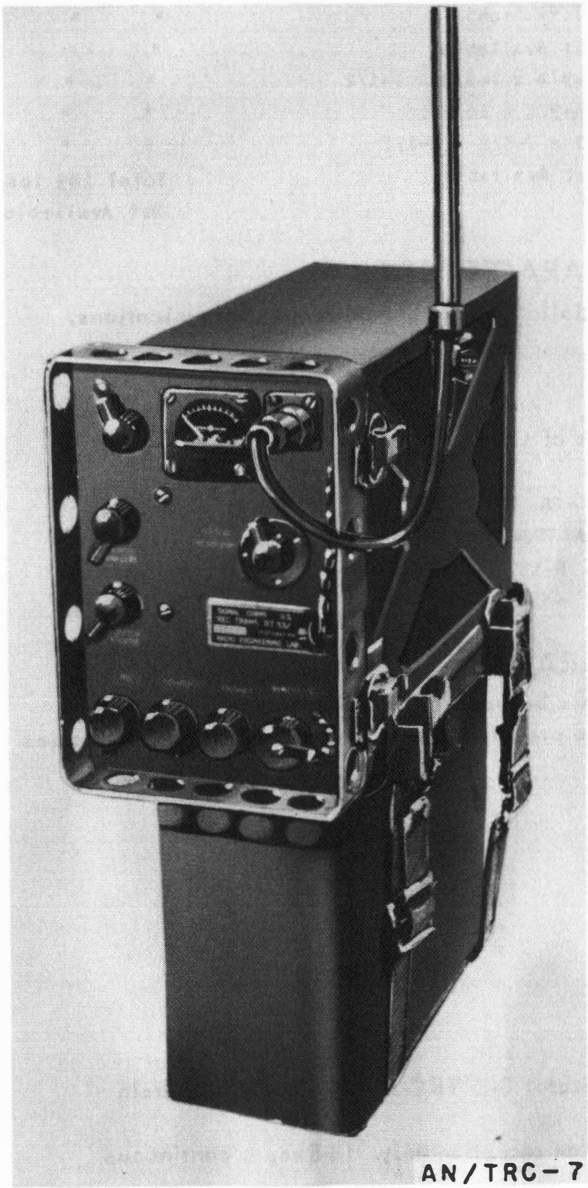
PHYSICAL CHARACTERISTICS

Radio Set AN/TRC-6 packed for domestic shipment: total weight 4,684 pounds.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 19 May 52

AN/TRC-7

RADIO SET



AN/TRC-7

Radio Set AN/TRC-7 is two-way v-h-f, a-m (voice) equipment normally used for ground-to-air communication, but can be used in point-to-point applications. It is designed to be man-transported in six canvas bags; no one bag weighing over 35 lbs. It is used primarily to provide communication between ground troops and aircraft using v-h-f two-way equipment.

Receiver-Transmitter RT-53B/TRC-7 consists of a single-conversion, crystal-controlled, superheterodyne receiver; the transmitter is crystal-controlled and amplitude modulated. This receiver-transmitter operates on any two preset, crystal-controlled channels (561 channels) in the v-h-f range.

This set is normally controlled locally, but can be controlled from a remote point up to two miles away by means of Remote Control Equipment RC-261.

Power may be supplied either from a Battery BA-70, or from hand-cranked Generator G-3/TRC-7, or both.

Battery life is a minimum of four hours for continuous transmission, and 20 hours maximum for continuous reception.

AN/TRC-7

RADIO SET

INSTRUCTION LITERATURE: TO 16-30TRC7-B
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET : 19 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-53B/TRC-7	5-1/2 x 13-1/2 x 9	Not Available
1	Antenna Assembly AS-110/TRC-7	30 ft high	" "
1	Antenna AT-59/TRC-7	Not Available	" "
1	Generator G-3/TRC-7	6-3/4 x 7-3/4 x 7-1/2	" "
6	Canvas Bags (overall size of 6 bags)	63-3/4 x 14 x 16	" "
1	Battary BA-70	10 x 7-5/8 x 4-1/2	" "
1 each	Headset HS-30-U, Handset H-23/U	Not Available	Total 143 lbs.
	Microphone T-45 and Cord CX-220/TRC-7	" "	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Issued as required to advanced installations for ground-to-air communications.

INSTALLATION: Ground, mobile, vehicular.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-16, -20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -12, -21; AN/URT-7, -10; AN/VRC-1; BC-639, -640; MAR; MBS; R-137/GR; RBK; RBQ; RC-103, -256, -257; RCK; RCO; SCR-522, -542, -573, -575, -607, -616, -624, -641, -643, -644; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 561 channels between 100 to 156.
Plug-in crystal-controlled, on either one of two preset channels (normal operating frequencies are 116.1 and 126.2.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 0.5 to 1.5 w.
Receiver: 60 mw.

POWER REQUIREMENTS: Battery B-70 or Hand Generator G-3/TRC-7 or both. Current drain 1.106 amp (maximum).
Battery Life: 20-25 hours on reception only. (4-5 hours continuous transmission).

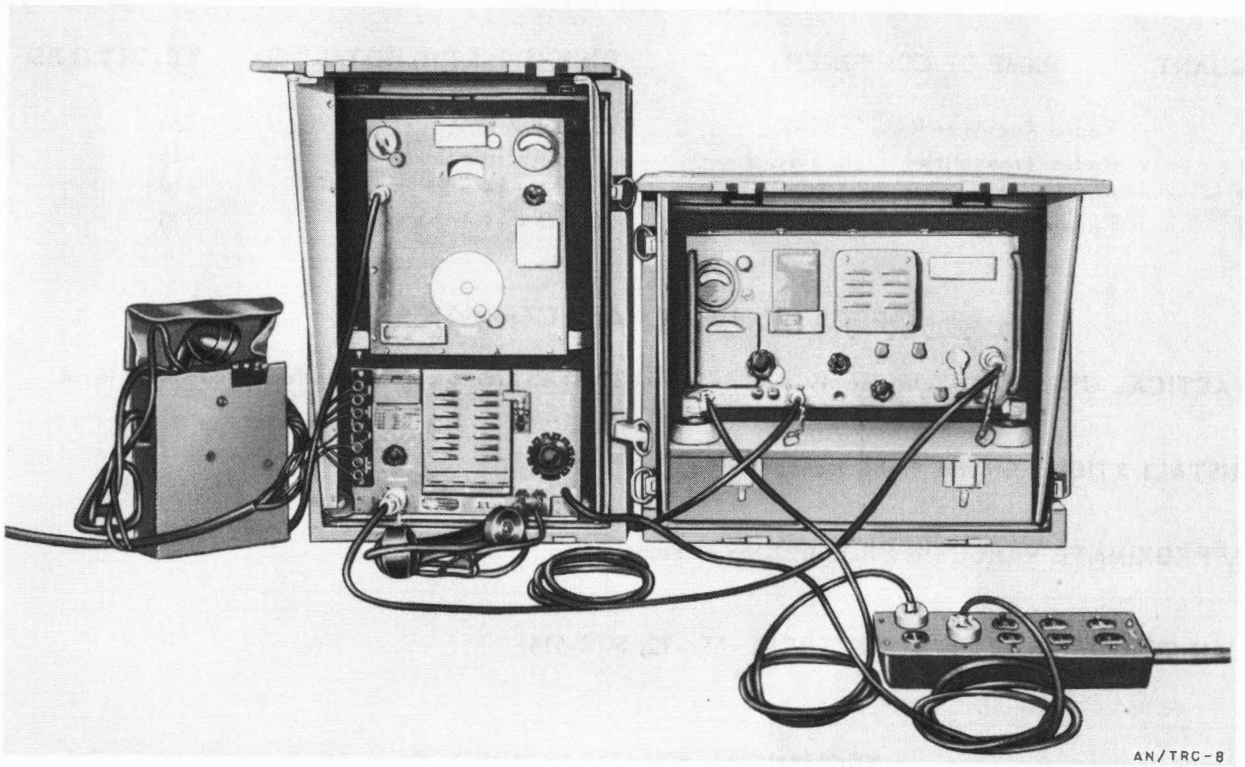
PHYSICAL CHARACTERISTICS

Radio Set AN/TRC-7B weighs 143 pounds net, volume 8.60 cu ft. Packed for either domestic or export shipment: total weight 157 pounds, total volume 9.4 cu ft. Shipped in 4 packages both domestic and export.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

AN/TRC-8

RADIO SET



Radio Set AN/TRC-8 is a transportable, v-h-f, f-m, single-channel radio receiving and transmitting equipment used for point-to-point or radio relay applications at division or higher headquarters.

This equipment consists of a radio transmitter, a radio receiver, an antenna, and power accessories but does not include spare operating components. It is intended for use on an intermittent or pre-scheduled basis. It is designed for communication by voice signals and, in conjunction with additional equipment, for radioteletype applications.

For continuous operation, spare operating components are added (constituting Radio Terminal Set AN/TRC-11). For radio relay use, the same primary operating components and the necessary spares (constituting Radio Relay Set AN/TRC-12) are operated back-to-back at intermediate points of a system.

Operates from power supplied by its field power unit or an equivalent source.

AN/TRC-8

RADIO SET

INSTRUCTION LITERATURE: TM 11-618
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver R-48/TRC-8	23 x 16 x 19	126
1	Radio Transmitter T-30/TRC-8	17-1/2 x 16 x 24-1/2	135
2	Antenna Assembly AS-52/TRC-8	33-1/2 x 14 x 24	110
1	Power Unit PE-75	26-1/2 x 19-1/2 x 36	330

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Radio relay at division or higher level and radio communication at company level.

INSTALLATION: Ground, field, transportable.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/TRC-8, -11, -12; SCR-616.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 230 — 250.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice, teletypewriter (with additional equipment).

POWER OUTPUT: Transmitter, 5 w.

POWER REQUIREMENTS: Receiver: 120 w, 115/230 v, 50/60 cyc ac.
Transmitter: 350 w, 115/230 v, 50/60 cyc ac.
Commercial power source or Power Unit PE-75, or equal.

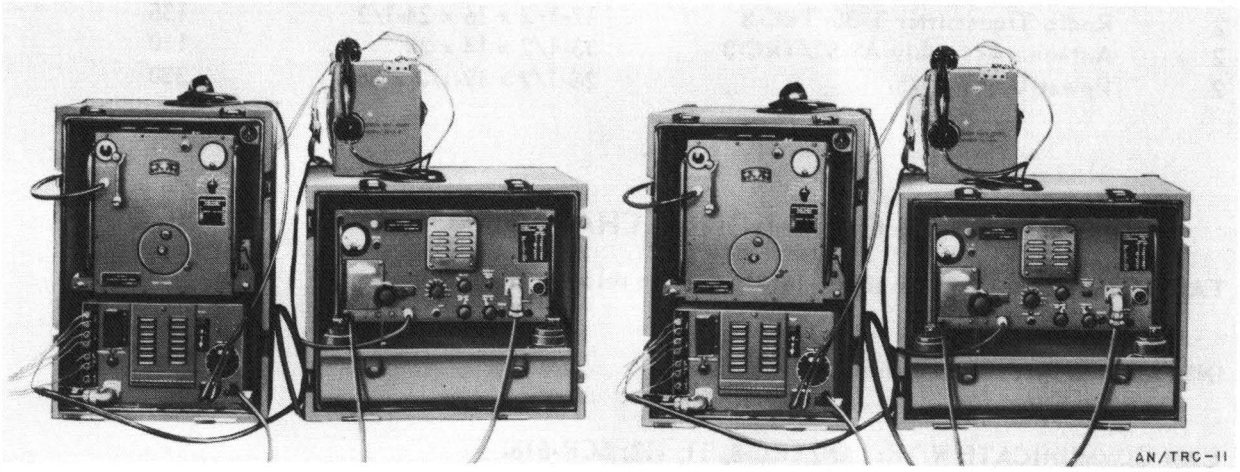
PHYSICAL CHARACTERISTICS

Radio Set AN/TRC-8 packed for domestic shipment: total weight 1,250 pounds, total volume 48 cu ft, 1.2 ship tons. Shipped in 9 packages.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 9 Jan 52

AN/TRC-11

RADIO TERMINAL SET



Radio Terminal Set AN/TRC-11 is a transportable, f-m (voice), v-h-f, transmitting and receiving equipment used for single-channel, point-to-point communication or as the terminal of a radio relay system serving division and higher headquarters.

This equipment consists essentially of two receivers and two transmitters (one of each being a spare), antenna components, and power equipment. It is designed for continuous operation. It can be used in single-channel applications on a half-duplex basis or, with additional equipment, for full-duplex radioteletype communication as the terminal of a radio link in a wire or cable system.

It is designed primarily to operate continuously as the terminal of a radio relay system in which the opposite or remote terminal equipment consists of Radio Set AN/TRC-8, or another AN/TRC-11, and in which Radio Relay Set AN/TRC-12 is used at intermediate points of the system as may be required to extend the distance range between terminals.

It requires 115/230 v ac to operate and can be powered by its power unit component or an equivalent source.

AN/TRC-11

RADIO TERMINAL SET

INSTRUCTION LITERATURE: TM 11-618
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 9 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Radio Receiver R-48/TRC-8	23 x 16 x 19	126
2	Radio Transmitter T-30/TRC-8	17-1/2 x 16 x 24-1/2	135
2	Antenna Assembly AS-52/TRC-8	33-1/2 x 14 x 24	110
2	Power Unit PE-75	26-1/2 x 19-1/2 x 36	330

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division signal level for radio relay or field radio use.

INSTALLATION: Ground, field, transportable.

CAN COMMUNICATE WITH: AN/TRC-8, 11, -12; SCR-616.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 230 — 250.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice, teletypewriter (with additional equipment).

POWER OUTPUT: Transmitter, 5 w.

POWER REQUIREMENTS: Receiver: 120 w, 115/230 v, 50/60 cyc ac.
Transmitter: 350 w, 115/230 v, 50/60 cyc ac.
Commercial power source or Power Unit PE-75, or equal.

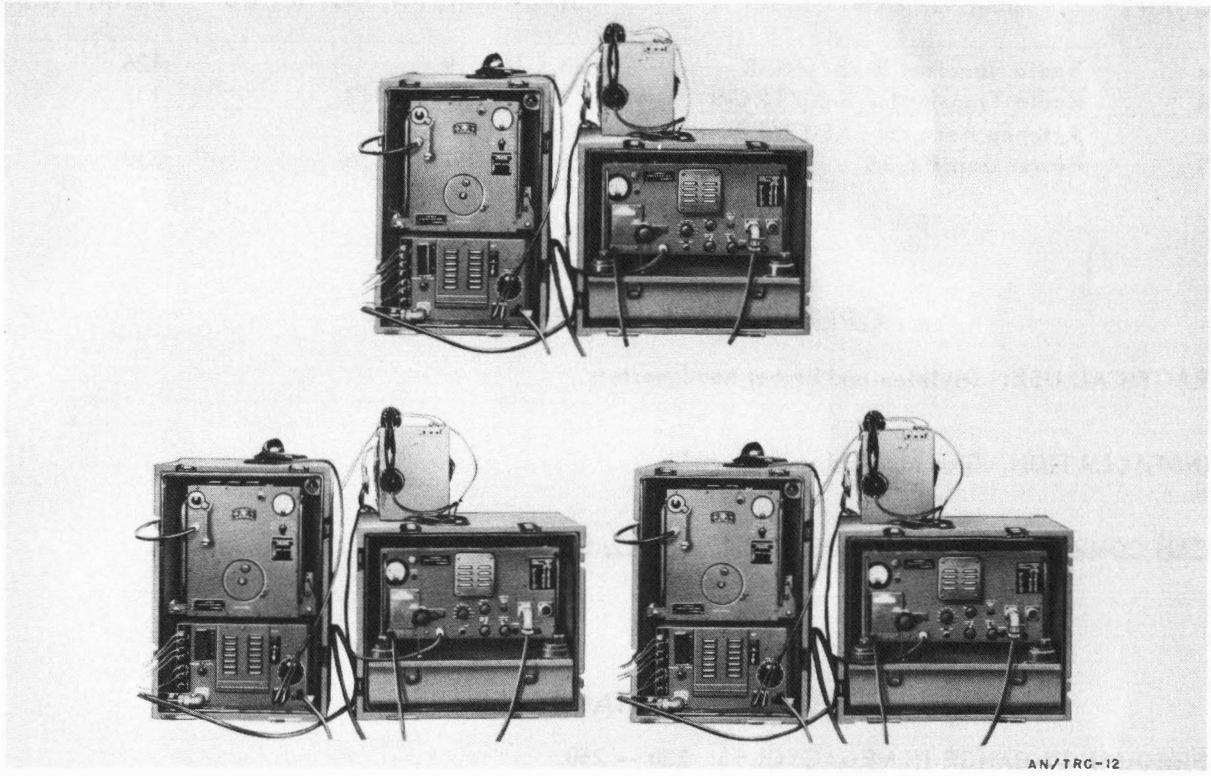
PHYSICAL CHARACTERISTICS

Radio Terminal Set AN/TRC-11 packed for domestic shipment: total weight 2,300 pounds, total volume 76 cu ft, 1.9 ship tons. Shipped in 13 packages.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Air Force
DATE OF THIS SHEET: 8 Jan 52

AN/TRC-12

RADIO RELAY SET



Radio Relay Set AN/TRC-12 is a transportable, f-m (voice), v-h-f transmitting and receiving equipment used for single-channel, point-to-point communication or as a repeater station at intermediate points of a radio relay system serving division and higher headquarters.

This equipment consists essentially of four radio transmitters and four radio receivers (one of each being a spare), antenna components, and power equipment. It is designed to be used primarily on a continuous basis for half-duplex or full-duplex communication in a system terminated by Radio Set AN/TRC-8 or Radio Terminal Set AN/TRC-11 or as a single-channel half-duplex voice communication facility.

It is powered by its power supply and requires 115/230 v ac.

AN/TRC-12

RADIO RELAY SET

INSTRUCTION LITERATURE: TM 11-618
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army, Air Force
DATE OF THIS SHEET : 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
4	Radio Receiver R-48/TRC-8	23 x 16 x 19	126
4	Radio Transmitter T-30/TRC-8	17-1/2 x 16 x 24-1/2	135
4	Antenna Assembly AS-52/TRC-8	33-1/2 x 14 x 24	110
3	Power Unit PE-75	26-1/2 x 19-1/2 x 36	330

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, field, transportable.

CAN COMMUNICATE WITH: AN/TRC-8, -11, -12; SCR-616.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 230 – 250.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice, teletypewriter.

POWER OUTPUT: Transmitter, 5 w.

POWER REQUIREMENTS: Receiver: 120 w, 115/230 v, 50/60 cyc ac.
Transmitter: 350 w, 115/230 v, 50/60 cyc ac.
Commercial power source or Power Unit PE-75, or equal.

PHYSICAL CHARACTERISTICS

Radio Relay Set AN/TRC-12 packed for domestic shipment: total weight 3,150 pounds, total volume 101 cu ft, 2.53 ship tons. Shipped in 18 packages.

STATUS: Std

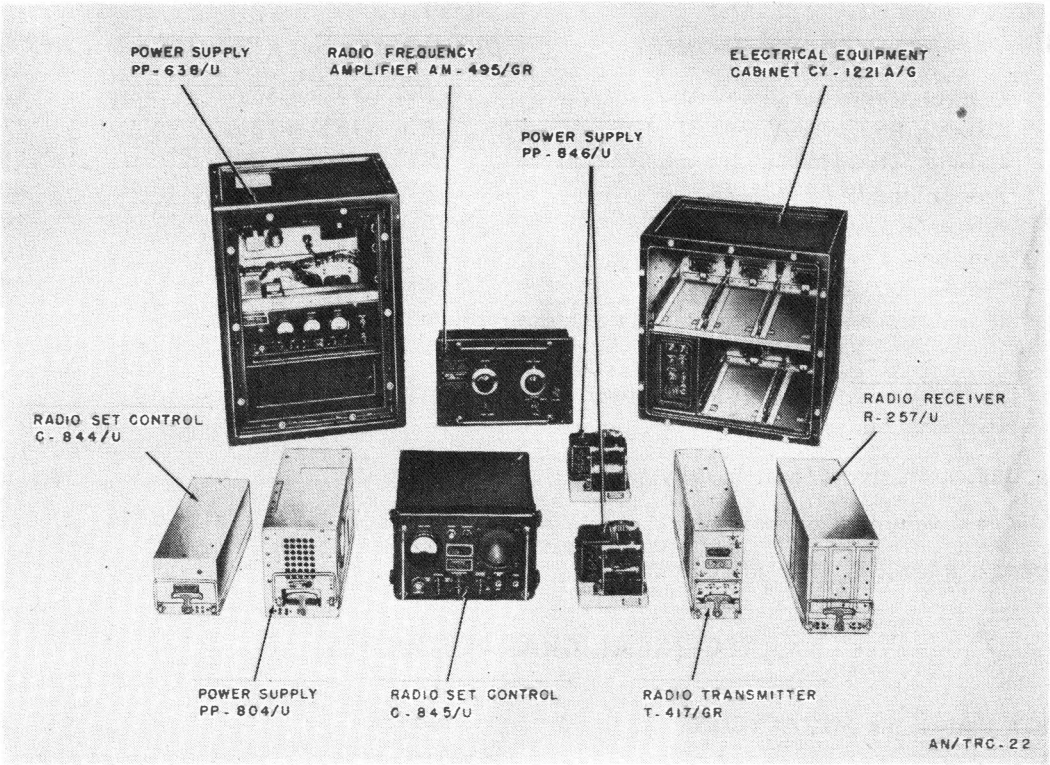
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 27 June 1956

AN/TRC-22

RADIO SET



Radio Set AN/TRC-22 is an fm (voice) vhf, crystal-controlled receiving and transmitting equipment, used by Military Police guard, and security organizations.

This equipment consists of a radio transmitter, power amplifier, receiver, and auxiliary components.

It is normally operated on a simplex basis but can be arranged for duplex operation by the addition of another receiver and an extra antenna. It can also provide automatic retransmission service between two stations too distant from each other for direct communication.

Remote control with intercommunication between the local and distant operating locations is provided by means of the radio set controls supplied.

AN/TRC-22

RADIO SET

INSTRUCTION LITERATURE: TM 11-691

USING SERVICE: USA

DATE OF THIS SHEET: 27 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Control, Radio Set C-844/U	8¾ x 14¾ x 5⅞	6.5
1	Control, Radio Set C-845/U	8⅞₁₆ x 13¾ x 13½	17.5
1	Cabinet, Electrical Equipment CY-1221/G	21¼ x 16⅞ x 20½	58
1	Power Supply PP-804/U	8⅝ x 7 x 14½	40
1	Power Supply PP-846/U	5⅛ x 6¼ x 7₁₁₁₆	10.5
1	Receiver, Radio R-257/U	8½ x 14½ x 5¾	19
1	Transmitter, Radio T-417/GR	8½ x 14½ x 4½	9

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: MP, guard, and security troops.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE: 10 mi; line of sight.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 25 to 50.

TYPE MODULATION: Fm (F3).

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 45 to 250 w.

POWER REQUIREMENTS:

PP-638/U: 660 w, 115/230 v, 60 cy ac.
PP-804/U: 230 va, 115/230 v, 50/65 cy ac.
PP-846/U: 46 va, 115/230 v, 50/65 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		419	15.4		
DOMESTIC PACK:		461	27	.7	4
EXPORT PACK:		618	30.7	.8	3

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 12 June 1956

AN/TRC–24, –35, –36

RADIO SET, RADIO TERMINAL SET, RADIO RELAY SET

NO PHOTOGRAPH AVAILABLE

Radio Set AN/TRC–24, Radio Terminal Set AN/TRC–35, and Radio Relay Set AN/TRC–36 are multichannel, fm (voice) transmitting and receiving equipments used to provide 12 channels of telephone communication in the uhf band. They are intended to be installed as a substitute for conventional wire and cable when installation of such facilities is impracticable.

The AN/TRC–24 consists of radio transmitting and receiving equipment and associated components; it can be used in point-to-point communication. The AN/TRC–35 is composed of the same primary operating components, with sufficient spares to enable uninterrupted operation as a terminal of a radio-relay system. Each AN/TRC–36 is made up of the required quantity of the same receiving and transmitting components as the AN/TRC–24 and AN/TRC–35 to permit continuous operation as a repeater station at intermediate points of the system.

Radio-relay telephone systems using this equipment can be operated in systems using carrier-telephone terminal and relay equipment, such as Telephone Terminal AN/TCC–7, attended Telephone Repeater AN/TCC–8, and unattended Telephone Repeater AN/TCC–11.

AN/TRC–24, –35, –36

RADIO SET, RADIO TERMINAL SET, RADIO RELAY SET

INSTRUCTION LITERATURE: TM 11–687

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 12 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	For AN/TRC–24:		
1	Radio Set Group OA–483/TRC		
	For AN/TRC–35:		
2	Radio Set Group OA–483/TRC		
	For AN/TRC–36:		
3	Radio Set Group OA–483/TRC		

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE: Line of sight (30 mi).

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 to 400.

TYPE MODULATION: Fm (F3).

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 50 to 120 w.

POWER REQUIREMENTS: 1 kw (approx), 115 v, 50/60 cy ac; (access. trans permits use of 95 to 130 v and 190 to 260 v).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		1,091	52.1		
DOMESTIC PACK:		2,561	140	3.5	18
EXPORT PACK:		2,561	140	3.5	18

AN/TRC–28

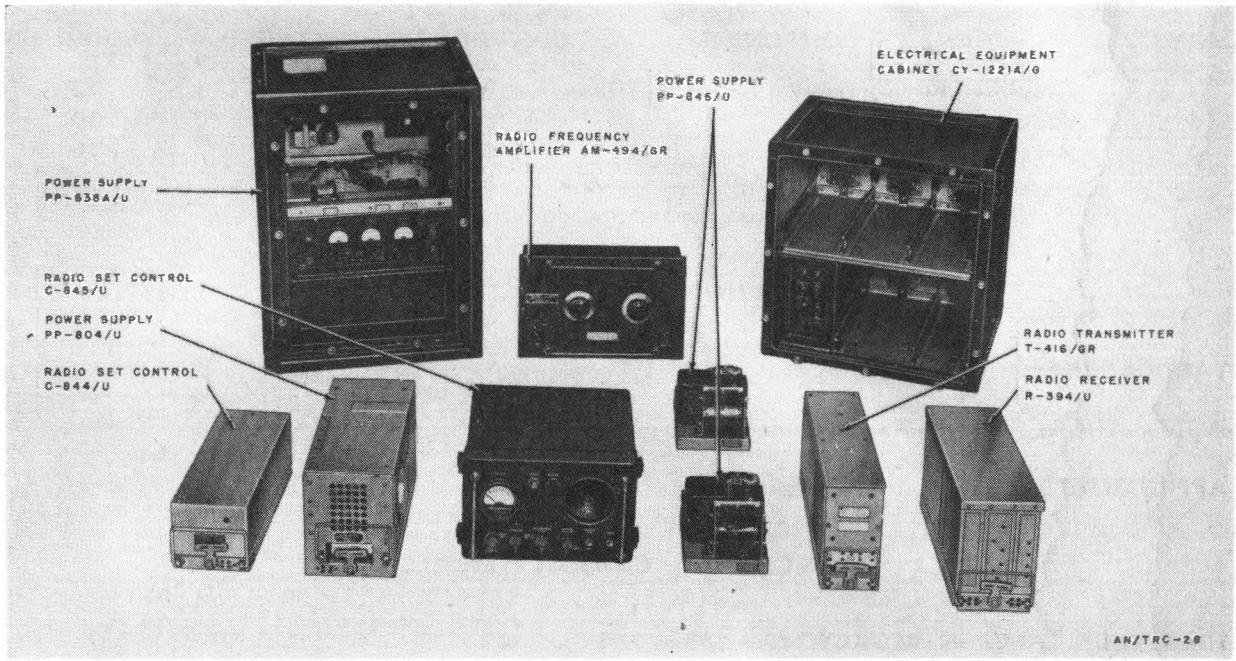
RADIO SET

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 12 June 1956



Radio Set AN/TRC–28 is vhf, fm voice communication equipment designed for fixed station operation, with remote control facilities up to 10 miles.

Operation is primarily simplex; duplex operation is possible with two frequency assignments.

This equipment may also be used as an automatic relay station (retransmission) to extend the distance between terminal stations; in this service, local start-stop must be used. Wire communication between station site and operating site is provided.

AN/TRC-28

RADIO SET

INSTRUCTION LITERATURE: TM 11-252

USING SERVICE: USA

DATE OF THIS SHEET: 12 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Amplifier, Radio Frequency AM-494/GR	9¾ x 9½ x 15	13½
1	Antenna AT-438/GR	6½ x 31 x 5½	10
1	Receiver, Radio R-394/U	8½ x 14½ x 5¾	19
1	Transmitter, Radio T-416/GR	8½ x 14½ x 4½	9

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE: Line of sight.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 152 to 174.

TYPE MODULATION: Fm (F3).

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 45 w (w/o ampl); 250 w (w/ampl).

POWER REQUIREMENTS: 230 va, 115 or 230 v, 50/65 cy ac (from Power Supply PP-804/U).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		423	15		
DOMESTIC PACK:		448	27.5	.7	5
EXPORT PACK:		621	30	.75	4

STATUS: Std

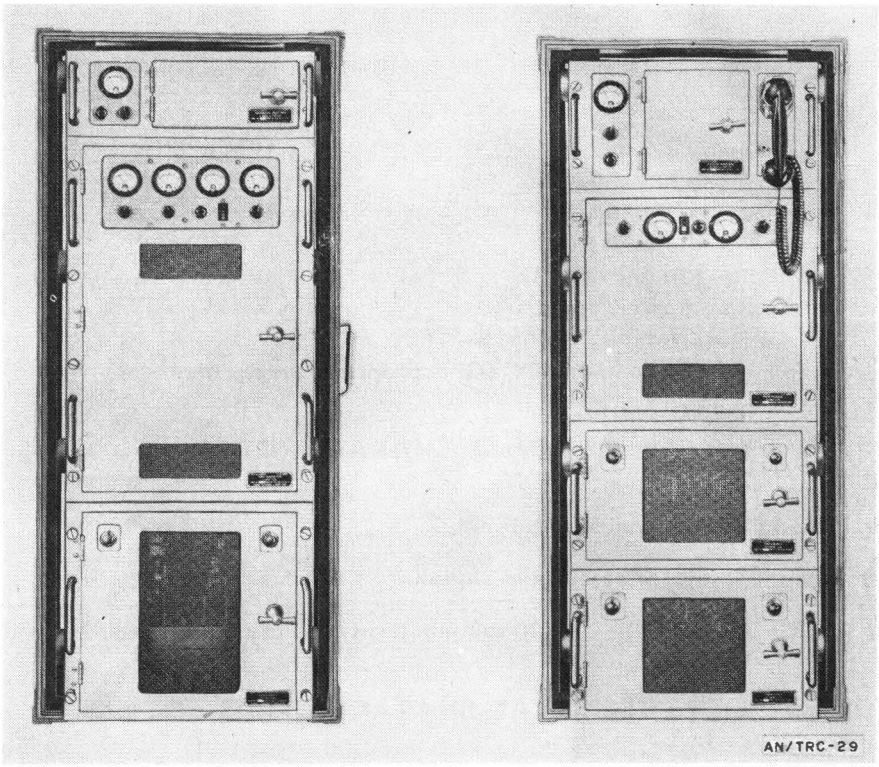
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 29 June 1956

AN/TRC–29, –38 thru –41

RADIO SET; RADIO TERMINAL SET; REPEATER SET, RADIO



Radio Set AN/TRC-29 is a two-way, multichannel fm, microwave receiving and transmitting equipment used in radio-relay systems. Although normally used in a rear area radio-relay system, it is built to satisfy full field service handling requirements. It is contained in equipment transit cases and can be transported by suitable military vehicles, or it can be mounted in standard relay racks.

This equipment consists of receivers, transmitters, and associated components for handling multichannel telephone, facsimile, telegraph, radar data, or television signals. It can be arranged in a radio-relay system as a terminal or as repeater stations with additional equipment.

This set is designed to operate continuously for long periods of time. It will provide communication trunk service over as many as 20 tandem hops to form circuits up to 600 miles in length.

Two Radio Sets AN/TRC–29 and one Multiplexer Set AN/TCC–13, designated as Radio Terminal Set AN/TRC–38, will handle 23 voice channels as a terminal station. Radio Repeater Set AN/TRC–39 is composed of three Radio Sets AN/TRC–29; Radio Repeater Set AN/TRC–40, of three Radio Sets AN/TRC–29 and one Pulse Form Restorer Group AN/TRA–10; and Radio Repeater Set AN/TRC–41, of three Radio Sets AN/TRC–29 and one Multiplexer Group AN/TCA–1.

AN/TRC–29, –38 thru –41

RADIO SET; RADIO TERMINAL SET; REPEATER SET, RADIO

INSTRUCTION LITERATURE: Commercial Instruction Book

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 29 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	For AN/TRC–29:		
	Power Supply PP–689/G	21 x 19⅜ x 21¼	
	Power Supply PP–690/G	21⅝ x 19⅜ x 12¼	
	Power Supply PP–764/G	21 x 19⅜ x 17½	
	Receiver, Radio R–418/G	21⅝ x 19⅜ x 19¼	
	Transmitter, Radio T–303/G	21 x 19⅜ x 17½	
	Transformer, Power, Fixed Autotransformer TF–146/G	27⅜ x 19⅛ x 19⅝	245

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant or tactical radio relay.

INSTALLATION: Ground, transportable; fixed station.

APPROXIMATE RANGE (IN MILES): 30 (20 tandem hops/sys, in 600-mi sys).

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1,700 to 2,400 (27 preset chan: 1,715 to 2,385 mc).

TYPE MODULATION: Fm (F1, F3, F4, F5, F9).

TYPE OF SIGNAL: Fsk, voice, facsimile, TV, composite.

POWER OUTPUT: 4 to 10 w.

POWER REQUIREMENTS: 2,300 w, 115/230 v, 50/60 cy ac.

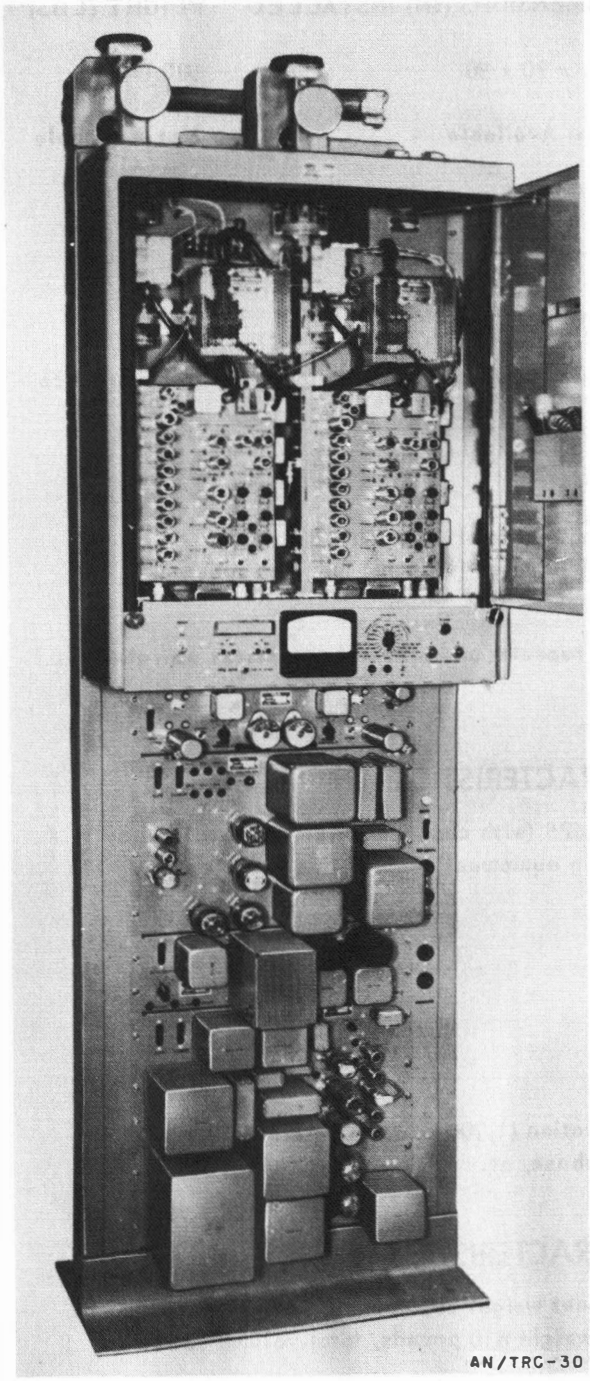
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
AN/TRC–29	60 x 64 x 26½	1,051	49.8		
DOMESTIC PACK:					
EXPORT PACK:		3,682	226.6	10.3	13

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 7 Jun 52

AN/TRC-30

RADIO SET



AN/TRC-30

Radio Set AN/TRC-30 is a microwave, f-m radio set used in two-way, (duplex) point-to-point radio relay systems.

This Radio Set consists of a radio transmitter, four feet parabola antenna, a reflector, and wave guide kit.

A complete system consists of two terminal sets, each with a receiver and transmitter, and a number of repeater sets, spaced 20 to 40 miles apart in tandem, sufficient to span the distance between the terminals.

When used with its associated multiplexing equipment (such as Philco CMT-4) the system is capable of expansion up to 24 telephone channels. Each channel may be further expanded to as many as 12 additional channels for telegraph, teletype, telemetering, signaling, and supervisory control circuits.

High-speed facsimile transmission is also possible by using two adjacent telephone channels as one.

With the use of smaller multiplexing units, one, four, or eight voice channels may be inserted, or dropped off, at any repeater station as may be required.

Power requirements are: 700 w of 115-v, 60-cyc, single phase, ac, per terminal, or repeater station, less heaters; with heaters power consumption is 1,200 w.

AN/TRC-30

RADIO SET

INSTRUCTION LITERATURE: Philco Books & Philco Training Manual CLR-6
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET: 7 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Philco CLR-6 Repeater/Terminal (in rack)	28 x 90 x 90	500 (each)
1	Philco Multiplexing Equipment (CMT-4)	Not Available	Not Available
1	Voice Termination Equipment (Used with but not part of.)	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued (at any organizational level), as project equipment in accordance with AFR 100-17.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE (IN MILES): Repeater spacing: Line of sight (20-40 miles)
Total range: 1,000 miles (or more) terminal spacing.

CAN COMMUNICATE WITH: Identical, or equivalent, repeater and terminal equipment operating in the same system.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 7,125 to 7,425 (with channel division determined by multiplexing equipment).

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice, cw, radioteletype.

POWER OUTPUT: 1 w.

POWER REQUIREMENTS: Per terminal or repeater station (1,200 w with heaters; 700 w without heaters) 115 v, 60 cyc, 1 phase, ac.

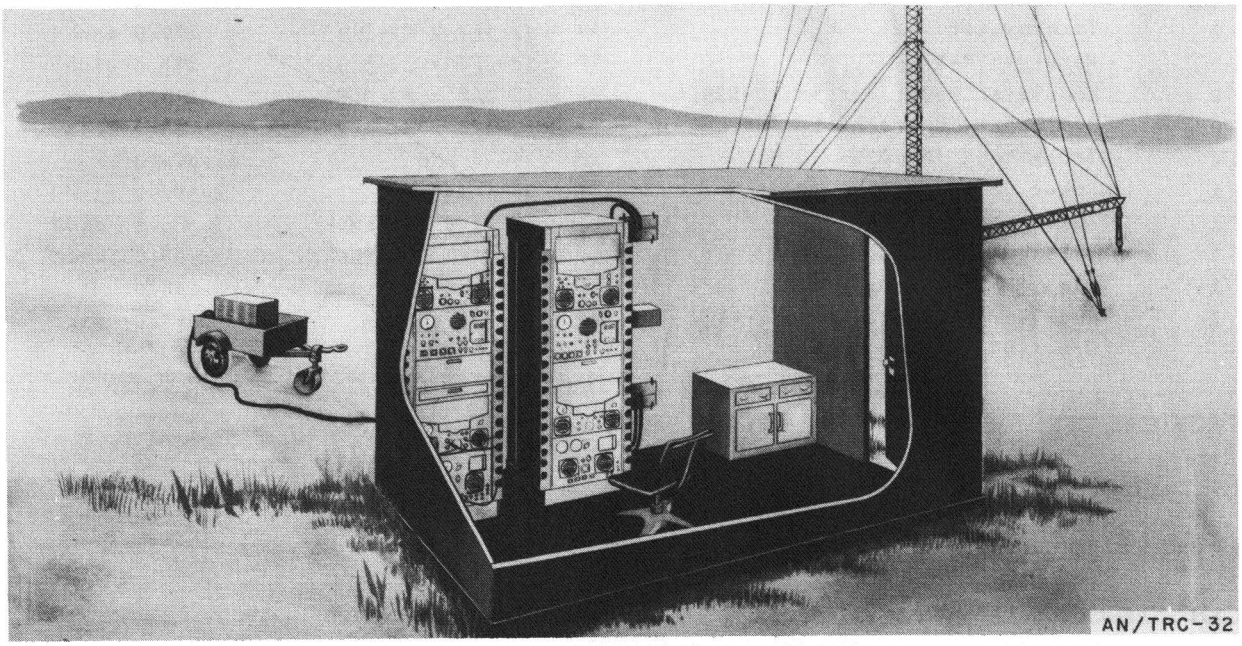
PHYSICAL CHARACTERISTICS

Radio Set AN/TRC-30 measures 28 x 90 x 90 inches, net weight 500 pounds, volume 131.25 cu ft. Packed for either domestic or export shipment: total weight 810 pounds, total volume 135 cu ft, 3.38 ship tons.
(Two units required for minimum terminal-to-terminal installation).

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Air Force
DATE OF THIS SHEET: 10 Jun 52

AN/TRC-32

RADIO SET



Radio Set AN/TRC-32 is a fixed, ground, or mobile u-h-f communication set for dual operation in the frequency range 225.0 to 399.9 mc. This radio set is a u-h-f vehicular installation designed to communicate primarily with aircraft equipped with Radio Sets AN/ARC-27, AN/ARC-33, AN/ARC-34, or similar equipments, installed in aircraft, to give complete coverage of all line-of-sight u-h-f ranges used in aircraft operations. The equipment supplied comprises two transmitters, two receivers and two units of all necessary items for dual operation.

Radio Transmitter T-217/GR operates on any 10 preset channels between 225.0 and 399.9 mc; Radio Receiver R-278/GR operates on any 10 preset channels between 225.0 and 399.9 mc, plus any two crystal-controlled guard frequencies in the 238.0 to 248.0 mc frequency range.

This equipment matches 53-ohm coaxial cable, such as RG-8/U. Two Antennas AT-197/GR and one Antenna AS-505/GR are supplied.

All equipment, with the necessary operating accessories, is normally transported in 2-1/2-ton truck (Modified K-53) and a 1/2-ton trailer for a power unit.

Remote control operation is possible for a maximum distance of 10 miles over a single field wire pair (for channel selection, push-to-talk and monitoring).

AN/TRC-32

RADIO SET

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE : Air Force
DATE OF THIS SHEET : 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Transmitter T-217/GR	19 x 12-1/4 x 22-3/8	150.0 each
2	Receiver R-278/GR	19 x 12-1/4 x 22-3/8	144.0 each
2	Modulator Power Supply MD-129/GR	19 x 12-1/4 x 22-3/8	180.0 each
2	Radio Set Control C-565/GR	19 x 12-1/4 x 11-1/2	90.0 each
1	Truck K-53 (Modified)	130 x 96 x 256	11,575.0
1	Power Unit	73 x 72 x 144	2,600.0
2	Antenna AT-197/GR	(Transported in Truck)	6.5 each
1	Antenna AS-505/GR	(Transported in Truck)	60.0 each
1	Mast AB-158/GR	(Transported in Truck)	650.0
2	Receiver-Transmitter Control Group OA-193/GR	23 x 13-1/2 x 21	105.0 each

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally used for air-to-ground traffic control at advanced air bases.

INSTALLATION: Ground, mobile, or fixed.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-12, -19, -27, -30, -33, -34; AN/GRC-16, -27, -29, -30, -32; AN/GRR-7; AN/GRT-3; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-32; AN/URC-4; AN/URR-9, -12, -13; AN/URT-10; MAR; MAY; R-278/GR; RDR; RDZ; SCR-616; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Dual operation is provided on a total of 1,750 channels with 100 kc separation in the frequency range 225.0 to 399.9 mc. Receivers also operate on any guard frequency between 238 to 248 mc.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, mcw.

POWER OUTPUT: Transmitter: 100 w (each).
Receiver: 3 w (each) (maximum).

POWER REQUIREMENTS: 115 / 230 v, 50/60 cyc, 1 phase, ac commercial power or Power Unit (Hobert Bros. Mfg. #5JB) 4.5 kw (approximately).

PHYSICAL CHARACTERISTICS

Radio Set AN/GRC-32 installed in truck weighs 16,750 pounds net, volume 2,270 cu ft, 56.8 ship tons. Packed for domestic or export shipment: total weight 16,750 pounds, total volume 2,270 cu ft, 56.8 ship tons. Shipped in 2 packages.

STATUS: S/Std

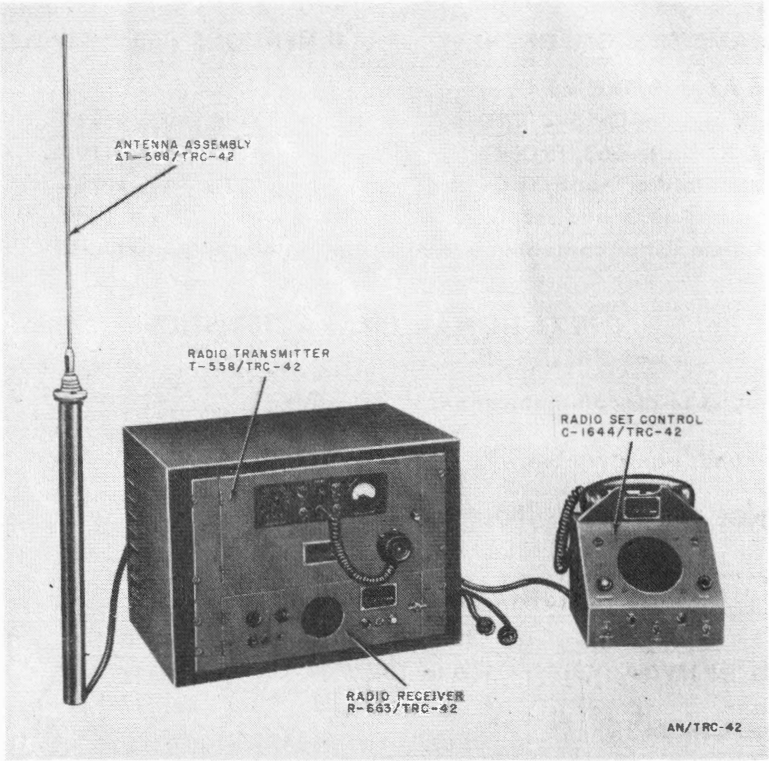
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

AN/TRC-42

RADIO SET



Radio Set AN/TRC-42 is a transportable vhf single-channel, two-way radio equipment used for ground-to-air communication.

This equipment consists of a radio receiver and a transmitter housed in a single cabinet, and includes a radio set control with handset and accessory items.

It may be operated in the cabinet supplied, or mounted on a standard 19-inch rack.

The radio set control enables operation of the radio equipment from a remote point.

AN/TRC–42

RADIO SET

INSTRUCTION LITERATURE: TM 11–221

USING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Antenna AT–588/TRC–42		
1	Control, Radio Set C–1644/TRC–42	11¾ x 9⅝ x 11	
1	Receiver, Radio R–663/TRC–42	5¼ x 15½ x 19	30
1	Transmitter, Radio T–558/TRC–42	8¾ x 14½ x 19	47
1	Cabinet (transmitter and receiver)	16 x 22¾ x 14¾	

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Ground-to-air communication.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE (IN MILES): 100.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 116 to 132.

TYPE MODULATION: Am (A3).

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 10 w.

POWER REQUIREMENTS: 350 w (max), 115 or 230 v, 50/60 cy, 1 ph ac.

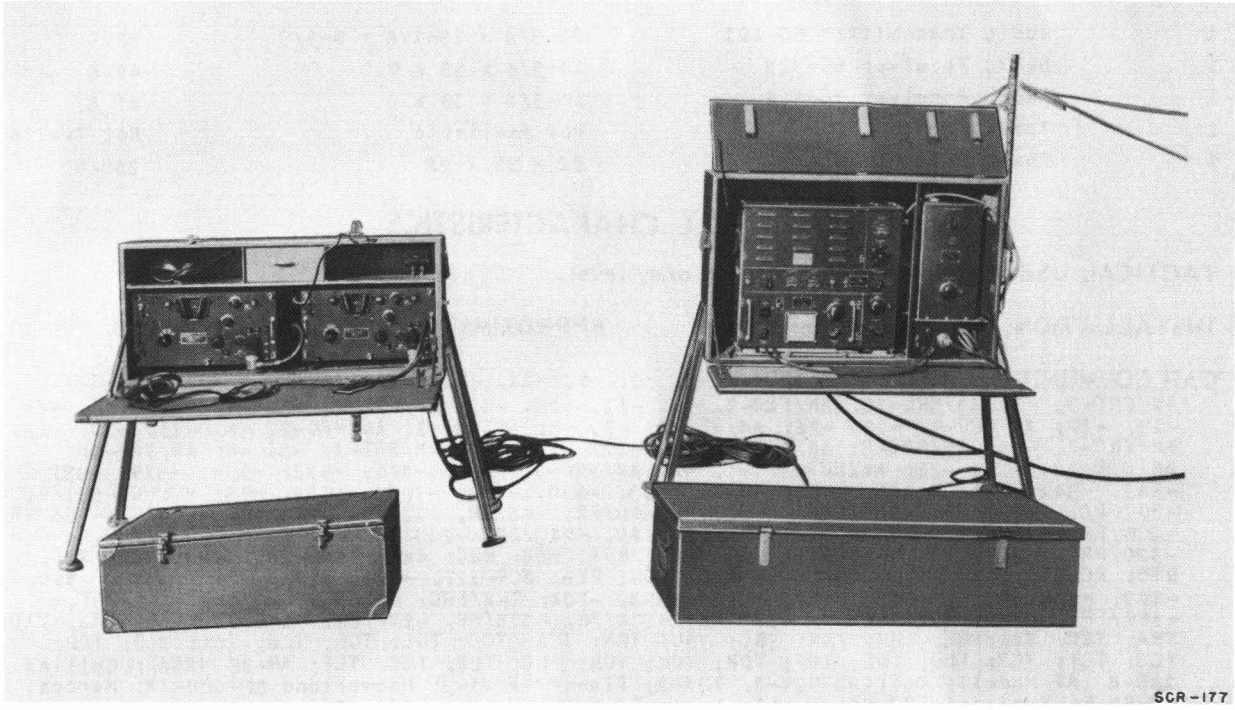
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		77			
DOMESTIC PACK:		140	8.16		2
EXPORT PACK:					

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 30 Jan 52

AN/TRC- TYPE

SERVICE TYPE NUMBER: SCR-177
RADIO SET



Radio Set SCR-177 is a transportable, a-m (voice and cw) radio station providing communication in the low- and medium-frequency ranges for ground-to-air, point-to-point, and similar applications at division and higher headquarters, and at air fields.

This equipment consists of general-purpose Radio Transmitter BC-191, related transmitter-tuning units, two radio receivers, and associated components. It is packed in carrying cases and can be installed under shelter or in the open, and has been operated in aircraft.

This set uses appropriate types of antenna systems and has provision for automatic antenna change-over in the transmitter.

It is powered by its gasoline-engine-driven field power unit component plus a 6-v storage battery.

AN/TRC-TYPE

SCR-177 :SERVICE TYPE NUMBER

RADIO SET

INSTRUCTION LITERATURE: TM 11-232
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 30 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-191	21-3/4 x 23-1/8 x 9-3/8	55.0
1	Radio Receiver BC-312	10-3/4 x 18 x 9	49.5
1	Radio Receiver BC-314	10-3/4 x 18 x 9	47.5
1	Tuning Unit	Not Available	Not Available
1	Power Unit PE-49	22 x 35 x 22	260.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Signal company, battery, army level.

INSTALLATION: Ground, transportable. **APPROXIMATE RANGE (IN MILES):** 100.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/FRT-4, -5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/SRT-1, -3, -4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -312, -314, -329, -339, -342, -344, -348, -365, -401, -447, -453, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBL; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDF; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK;TBL; TBM; TBN; TBO; TBU; TBX; TCB; TCC; TCE; TCG; TCH; TCK; TCO; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmitting: 0.4 - 0.8 and 1.5 - 4.5.
Receiving : 0.15 - 1.5 and 1.5 - 18.0.

TYPE MODULATION: AM.

TYPE OF SIGNAL: Voice, and cw.

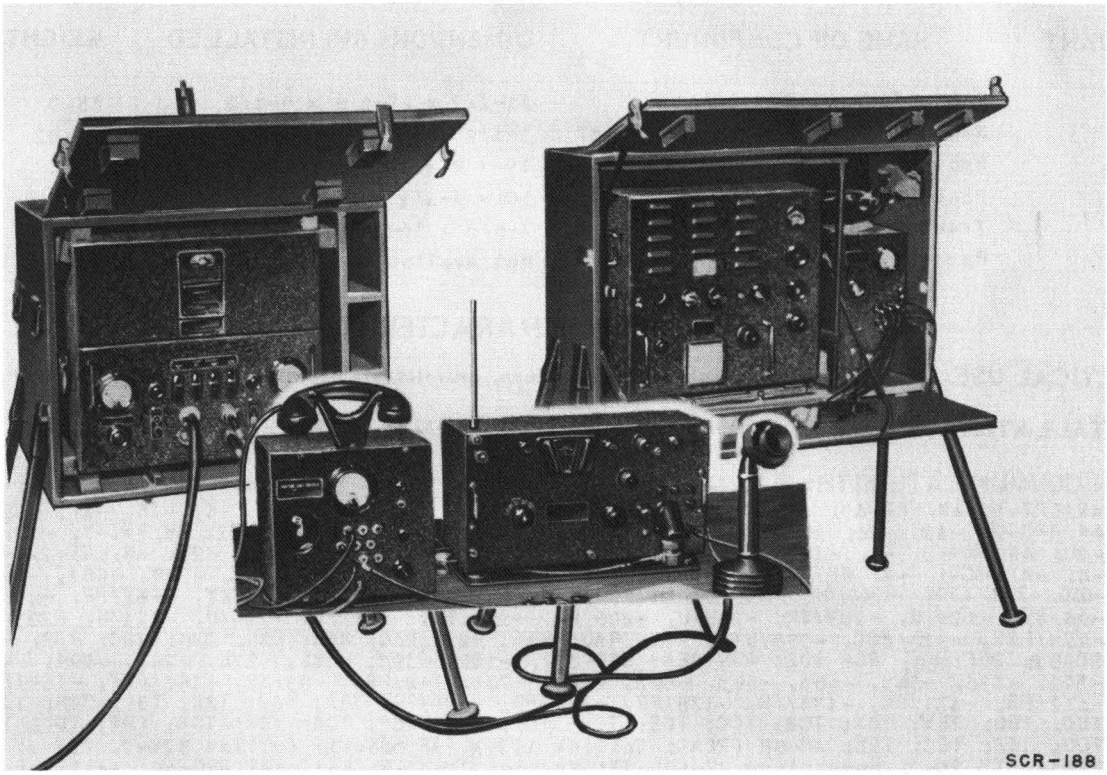
POWER OUTPUT: 75 w - cw.
25 w - voice.

POWER REQUIREMENTS: From 12-v battery and PE-49 (1,000-v at 350 ma and 14.6-v at 25).

PHYSICAL CHARACTERISTICS

Radio Set SCR-177 weighs 1,000 pounds net. Packed for export shipment: total weight 1,265 pounds, total volume 40 cu ft, 1 ship ton. Shipped in 5 packages.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 22 Jan 52	AN/TRC-TYPE SERVICE TYPE NUMBER: SCR-188 RADIO SET



Radio Set SCR-188 is a transportable, field, a-m (voice and cw) transmitting and receiving equipment used for air-ground, or point-to-point communication in the low-and medium-frequency band at division and higher headquarters.

This equipment consists essentially of general-purpose Radio Transmitter BC-191 which is also a major component of such equipment as Radio Sets SCR-177 and SCR-193. It is provided with tuning units for the selection of operating frequencies, and general-purpose Radio Receiver BC-342, a field power unit, remote control, and related items.

It can be used as a complete self-contained field tactical radio station and can be controlled from distances up to 5 miles away over a field telephone pair, and up to 7-1/2 miles over facilities of higher quality.

Operates from 115 or 230-v ac.

AN/TRC-TYPE

SCR-188 :SERVICE TYPE NUMBER
RADIO SET

INSTRUCTION LITERATURE: TM 11-233
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-191	21-1/2 x 23-1/8 x 9-1/2	55.0
1	Remote Control Equipment RC-47	3-1/2 x 3-1/2 x 2-1/4	0.42
1	Radio Receiver BC-342	10 x 9 x 18	61.5
1	Power Unit PE-75	36 x 9-1/2 x 26-1/2	290.0
6	Transmitter Tuning Units (each)	7-5/8 x 16-3/4 x 8-3/4	72.0
1	Rectifier RA-34	Not Available	240.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: At division and higher headquarters, antiaircraft battalion, engineers, 11-500 teams.

INSTALLATION: Ground, transportable. **APPROXIMATE RANGE (IN MILES):** 100.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -314, -339, -342, -344, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -608/FRT, R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH RDE; RDM REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -159/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCO; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmitter: 1.5 - 12.5.
Receiver : 1.5 - 18.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw.

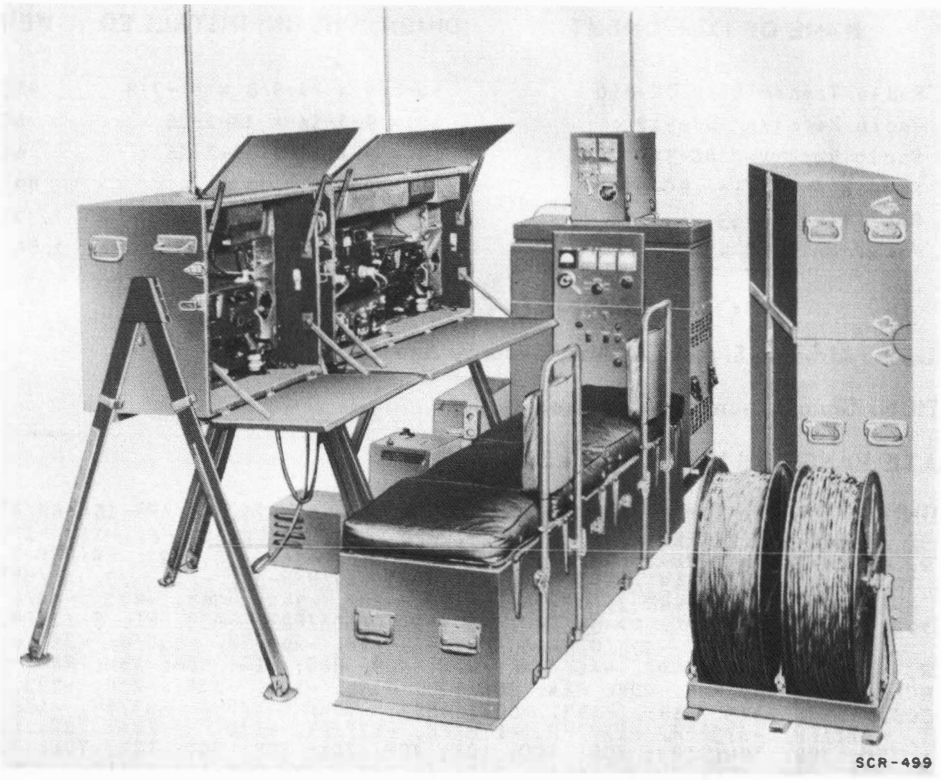
POWER OUTPUT: 75 w.

POWER REQUIREMENTS: 115/230 v, ac.

PHYSICAL CHARACTERISTICS

Radio Set SCR-188 weighs 1,385 pounds net. Packed for export shipment: total weight 2,018 pounds, total volume 100 cu ft, 2.5 ship tons.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 22 Jan 52	**AN/TRC-TYPE** SERVICE TYPE NUMBER: SCR-499 RADIO SET



Radio Set SCR-499 is the air transportable version of Radio Set SCR-399 and is a medium power, field radio station for a-m (voice, tone, and cw) communication to intermediate and long distances in semi-permanent or fixed station applications at division or higher headquarters.

This equipment consists of radio receiving and transmitting components plus associated power, and control accessories and is designed for installation in a sheltered or semipermanent location.

By means of standard remote control equipment this radio set can be operated from a distance of about two miles over a field telephone pair.

It can be arranged to operate in the 1-mc range by the addition of Frequency Conversion Kit MC-509.

It uses a long wire or doublet antenna and includes a 5kw field power unit.

AN/TRC-TYPE

SCR-499 :SERVICE TYPE NUMBER
RADIO SET

INSTRUCTION LITERATURE: TM 11-281
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-610	32-5/8 x 21-3/8 x 39-7/8	452.0
1	Radio Receiver BC-312	10 x 9-1/16 x 19-1/16	58.0
1	Radio Receiver BC-342	10 x 9-1/16 x 19-1/16	61.5
1	Speech Amplifier BC-614	16 x 9-1/4 x 11	Not Available
1	Rectifier RA-63	13-1/2 x 9-1/2 x 7-1/2	29.25
1	Power Unit PE-95	75-1/2 x 28-1/2 x 39-1/2	1,545.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Airborne Signal Co; Army Security Agency.

INSTALLATION: Ground, transportable fixed station.

APPROXIMATE RANGE (IN MILES): 100 - 250.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3,-4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13, AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT, R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR, RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDN; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBQ; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDQ; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmitting: 2 - 18 (in 3 bands)
Receiving: 1.5 - 18 (in 6 bands).

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone, or cw.

POWER OUTPUT: Cw: 400 w.
Voice: 300 w.

POWER REQUIREMENTS: Power Unit PE-95 and 12-v storage battery, or 2,500 w (minimum), 115-v, 60 cyc, ac commercial power.

PHYSICAL CHARACTERISTICS

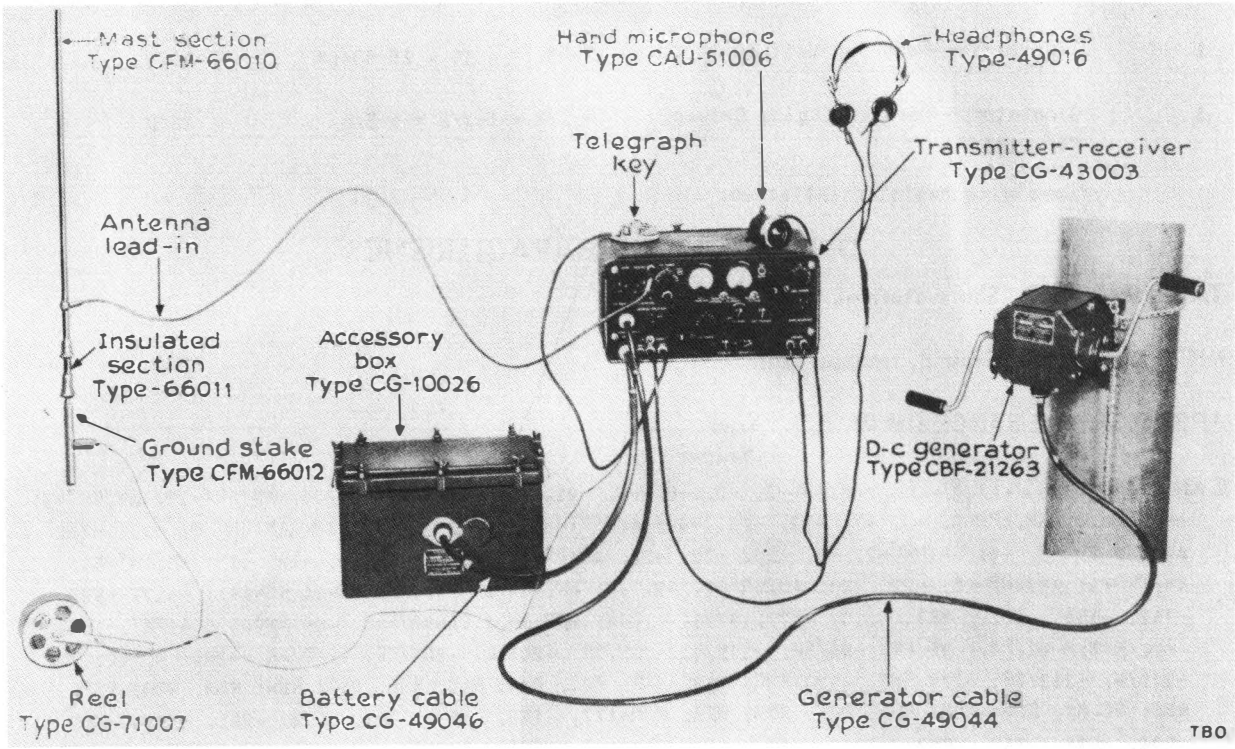
Radio Set SCR-499 weighs 3,000 pounds net. Packed for domestic shipment: total weight 6,595 pounds. Packed for export shipment: total weight 10,025 pounds, total volume 895 cu ft, 22.4 ship tons.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 23 May 52

AN/TRC-TYPE

SERVICE TYPE NUMBER: TBO

RADIO TRANSMITTING AND RECEIVING EQUIPMENT



Radio Transmitting and Receiving Equipment TBO is a compact, lightweight, transportable, h-f equipment for general purpose communication between shore stations, and between shore stations and surface craft, by a-m (cw, voice) signals.

This set is composed of a transmitter and receiver combined in a single cabinet, a hand generator, and an accessory (battery) box.

The transmitter has a continuously variable master oscillator and two crystal channels, the receiver uses a continuously variable oscillator for frequency control.

Either a vertical rod, or a single-wire T-type antenna can be used.

Auxiliary power supplies for the transmitter (dependent on various types of installations) are Navy Models EF Gasoline-Engine-Driven Generator Equipment, EG AC Motor Generator Equipment, EH DC Motor Generator Equipment, and CG-21265 Dynamotor Equipment.

AN/TRC-TYPE

TBO :SERVICE TYPE NUMBER
RADIO TRANSMITTING AND RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: GEI-854-1B
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 23 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter-Receiver Unit CG-43003	7-53/64 x 10 x 15-53/64	29.2
1	Generator - Hand or Engine Driven CBF-21263*	9-1/2 x 6-1/2 x 6-3/8	22.0

*Used with basic installation.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE (IN MILES): Cw: 30.
Voice: 15.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type WW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmitter: 2.0 - 3.5.
Receiver: 2.0 - 8.0.

TYPE MODULATION: Am. **TYPE OF SIGNAL:** Cw, voice.

POWER OUTPUT: Transmitter: Cw, 9 w; voice, 3 w.

POWER REQUIREMENTS:

Transmitter: 500 and 12.6 v, dc supplied by the hand generator. 3 v, supplied by two
Receiver: NT-19010 batteries; 90 and 135 v, supplied by three NT-19005 batteries; 6 and 15 v, supplied by two NT-19011 batteries.

PHYSICAL CHARACTERISTICS

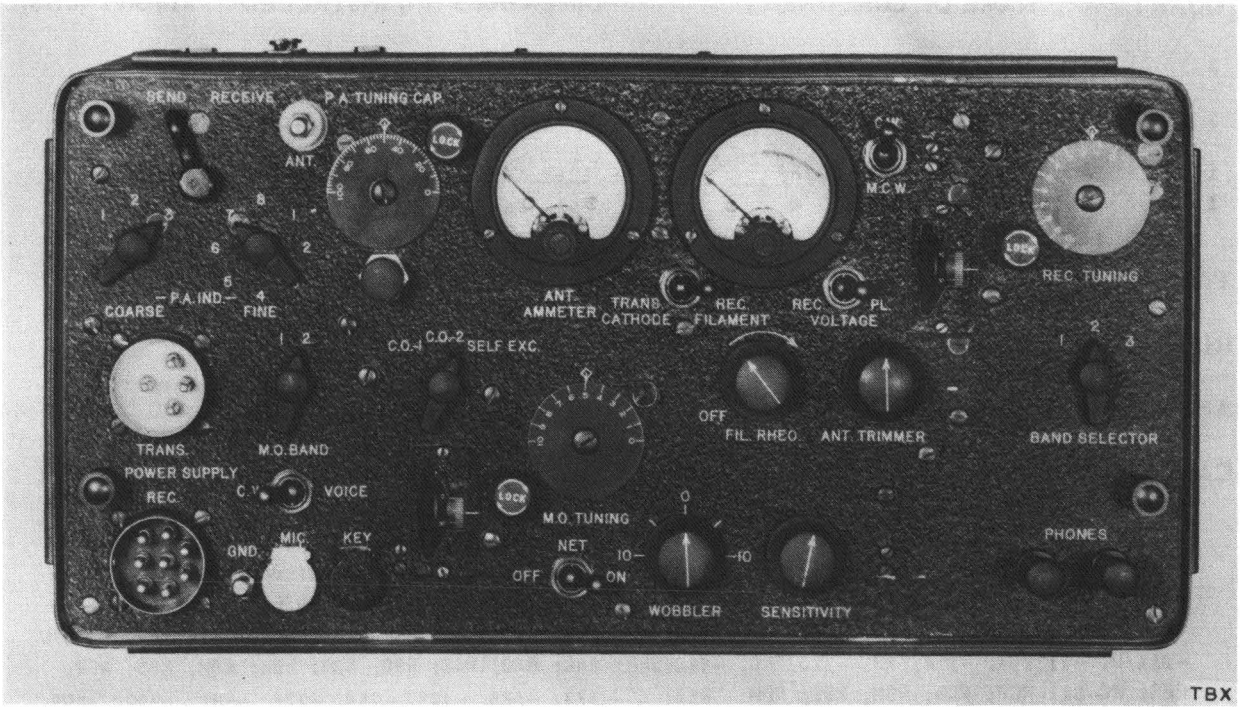
Radio Transmitting and Receiving Equipment TBO weighs 196 pounds net.
Packed for domestic shipment: total weight 196 pounds.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 8 May 52

AN/TRC-TYPE

SERVICE TYPE NO: TBX, TBX-1 through 8, and TBX-4a

PORTABLE RADIO TRANS & REC EQUIP



Portable Radio Transmitting and Receiving Equipments TBX, TBX-1 through -8, and TBX-4a are compact, lightweight, transportable h-f equipment for general purpose a-m (cw, mcw) communication between shore stations, and between shore stations and surface craft. Either a vertical rod or single-wire T-type antenna can be used.

The basic set is composed of a transmitter and receiver combined in a single cabinet, a hand generator, and an accessory (battery) box.

The transmitter provides a continuously variable master oscillator and two crystal channels, the receiver has a continuously variable oscillator for frequency control.

Auxiliary power supplies for the transmitter (dependent on the type of installation) are Navy Models EF Gasoline Engine Driven Generator Equipment, EG AC Motor Generator Equipment, EH DC Motor Generator Equipment and EJ Dynamotor Equipment.

Auxiliary power supplies for the receiver are Navy Models EL Auxiliary Rectifier Power Equipment, EM, EN, EO, and EP Auxiliary Dynamotor Equipment.

AN/TRC-TYPE

TBX, TBX-1 through 8, and TBX-4a :SERVICE TYPE NO.
PORTABLE RADIO TRANS & REC EQUIP

INSTRUCTION LITERATURE: GEI-16829
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 8 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter-Receiver Unit CG-43005	8-1/2 x 16-1/2 x 10	32.1
1	Generator (Hand or Engine Driven) CG-21263A	14-1/8 x 19-1/2 x 6-11/32	27.2
1	Accessory Box CG-10026A	10 x 16-1/2 x 7-53/64	34.1
1	Antenna Assembly	Not Available	11.2

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations, shipboard.

INSTALLATION: Ground, shipborne.

APPROXIMATE RANGE (IN MILES): Cw: 30.
Voice: 15.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -608/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCQ; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmitter: 2.0 - 4.525.
Receiver: 2.0 - 8.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, voice.

POWER OUTPUT: Cw: 9 w.
Voice: 3 w.

POWER REQUIREMENTS: Transmitter: 500, 12, and 6 v, dc supplied by hand generator; 3 v,
Receiver: supplied by two NT-19010 batteries; 90 and 135 v, supplied by three NT-19005 batteries; 6 and 15 v, supplied by two NT-19011 batteries.

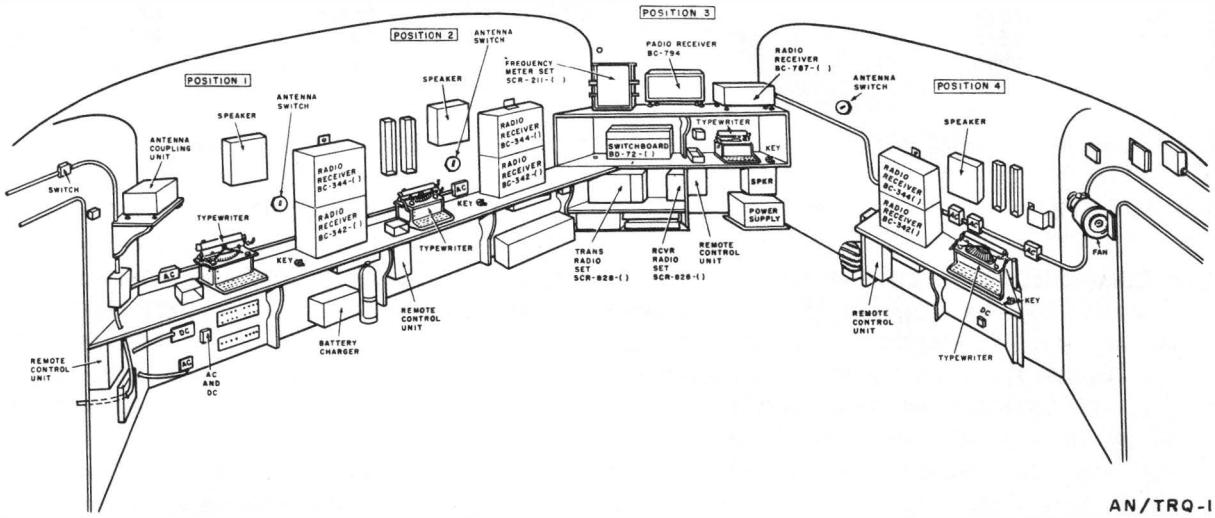
PHYSICAL CHARACTERISTICS

Information on Portable Radio Transmitting and Receiving Equipment TBX, TBX-1 through 8, and TBX-4a not available.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 11 Jan 52

AN/TRQ-1

RADIO CONTROL CENTRAL



AN/TRQ-1

Radio Control Central AN/TRQ-1 is a transportable control station used for monitoring intercept, and mobile communication applications in the m-f, h-f and v-h-f bands at corps and higher headquarters.

This equipment consists of radio components, telephone switching equipment, test items and accessories installed in a field type shelter which can be transported on a 2-1/2-ton 6 x 6, cargo truck. It includes necessary types of antenna equipment.

This set has four operating positions. At positions 1, 2, and 4, coverage of frequencies in the 0.15- to 18-mc range is maintained plus provision for wire communication with, and remote control of, radio transmitters located at distances up to 1 mile from the control central. Position 3, in addition, conducts communication by means of f-m radio and a 12-line switchboard, with similar control centrals.

The equipment derives its power from a trailer-drawn power unit and includes a battery charger.

AN/TRQ-1

RADIO CONTROL CENTRAL

INSTRUCTION LITERATURE: TM 11-2619
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 11 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
3	Radio Receiver BC-344	10 x 9-1/16 x 18-1/16	61.5
3	Radio Receiver BC-342	10 x 9-1/16 x 18-1/16	61.5
1	Radio Receiver BC-794	10-1/2 x 15-3/8 x 19	55
1	Radio Receiver BC-787	9-5/16 x 21-1/4 x 14-1/2	78
1	Radio Receiver BC-923	11-1/2 x 12-3/4 x 6-3/4	42
1	Radio Transmitter BC-924	11-1/2 x 10-1/2 x 18	49
1	Power Unit PE-95		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Corps and higher headquarters.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE (IN MILES): FM (Transmitting and Receiving) - Line of sight. AM (Receiving only) - Long.

CAN COMMUNICATE WITH: AN/ARC-1, -2, -3, -5, -8, -9, -18, -21, -25, -28, -36; AN/ARR-15; AN/ART-2, -3, -13, -14; AN/CRC-2, -3; AN/CRT-3, -5; AN/CRW-7; AN/FRC-6, -7, -9, -10; AN/FRR-3, -4, -7, -12, -28; AN/FRT-4, -6, -15, -17, -18, -19; AN/GRC-3, -4, -5, -6, -7, -8, -9, -13, -26, -30; AN/GRR-2, -3, -5; AN/GRT-2; AN/MRC-2, -5, -6, -16, -20, -22; AN/PRC-7, -8, -9, -10, -17, -19, -20; AN/TRC-7; AN/TRQ-1; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/SRT-1, -3, -4; AN/URC-4; AN/URR-10, -12, -21, -22, -23; AN/URT-2, -3, -4, -7, -10; AN/VRC-1, -2, -4, -5, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRR-2, -3, -4; AN/VRT-1; BC-191, -287, -312, -314, -329, -339, -342, -344, -348, -365, -401, -447, -453, -610, -639, -640, -729, -779, -794, -1004; MAN; MAW; MBF; MBS; MN; MQ; OA-58/FRC; OA-59/FRC; OA-60/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -137/GR, -203/SR, -205/U, -206/PQ, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBK; RBL; RBM; RBO; RBP; RBQ; RBS; RC-52, -130, -256, -257; RCF; RCG; RCH; RCK; RCO; RDE; RDF; RDM; REA; SCR-177, -188, -193, -244, -274-N, -281, -293, -294, -298, -399, -499, -506, -508, -509, -510, -522, -528, -536, -542, -543, -573, -574, -575, -585, -593, -607, -608, -609, -610, -614, -619, -624, -628, -641, -643, -644, -678, -694, -704, -809, -828; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBS; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCG; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDG; TDH; TDK; TDN; TDO; TDQ; TDT; TEB; TEC; TEF; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Positions 1, 2, and 4: 0.15 - 18.0. Position 3: 1.25 - 143.0; 27.0 - 38.9 (fm).

TYPE MODULATION: Positions 1, 2, and 4: Am. Position 3: Am and fm.

TYPE OF SIGNAL: Voice, tone, and cw.

POWER OUTPUT: Radio Transmitter BC-924: 30 to 35 w.

POWER REQUIREMENTS: Power Unit PE-95 (-G or-H); 10 kw, 115 v, 60 cyc ac; 12-v storage battery, 10 Batteries BA-30, and 6 Batteries BA-2.

PHYSICAL CHARACTERISTICS

Information on Radio Control Central AN/TRQ-1 not available.

STATUS: T/Std

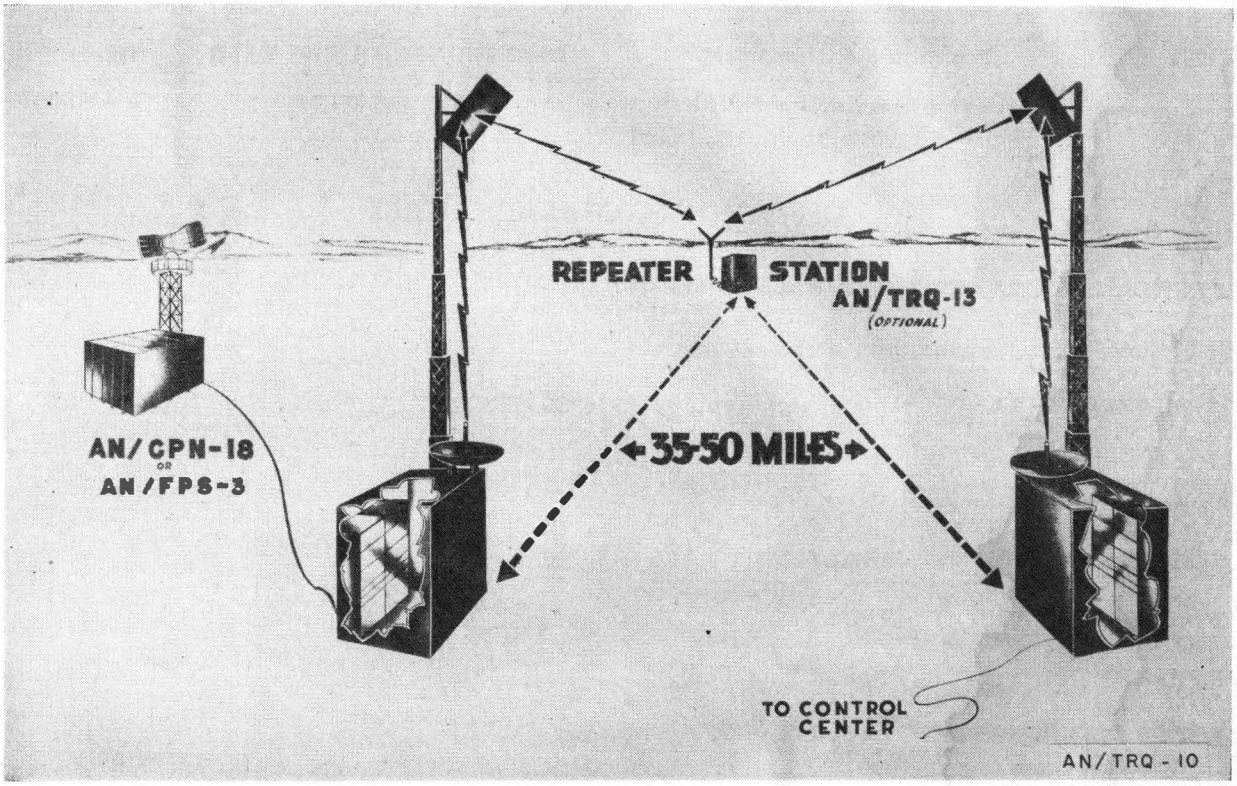
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

AN/TRQ–10

RADAR DATA TRANSFER SYSTEM



Radar Data Transfer System AN/TRQ–10 provides radio communication facilities for transmitting search radar data from such surveillance equipment as Radar Sets AN/CPN–18, AN/CPS–5, and AN/FPS–3, and from Radio Set AN/TPS–1, and for receiving such data at a remote control center.

This equipment consists of a radio transmitting set, at the radar site, to transmit radar search data and a radio receiving set, at the control center, to receive this data.

Approximately 2.5 kw is required to power each function. Towers and reflectors may be added if required.

The range of this equipment may be increased by using one or more Radio Repeater Sets AN/TRQ–13.

AN/TRQ-10

RADAR DATA TRANSFER SYSTEM

INSTRUCTION LITERATURE:

USING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Receiving Set, Radio AN/TRR-9	80 x 80 x 100	1,800
1	Transmitting Set, Radio AN/TRT-4	80 x 80 x 100	1,800

OPERATIONAL CHARACTERISTICS

TACTICAL USE: AACS, TAC, and special projects.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE: Line of sight (approx 35 to 50 mi).

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 7,125 to 8,000.

TYPE MODULATION: Fm (F9).

POWER OUTPUT: 100 mw (ea of four chan).

POWER REQUIREMENTS: 5 kw, 115 v, 60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		3,600	720	18	
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: T/Std

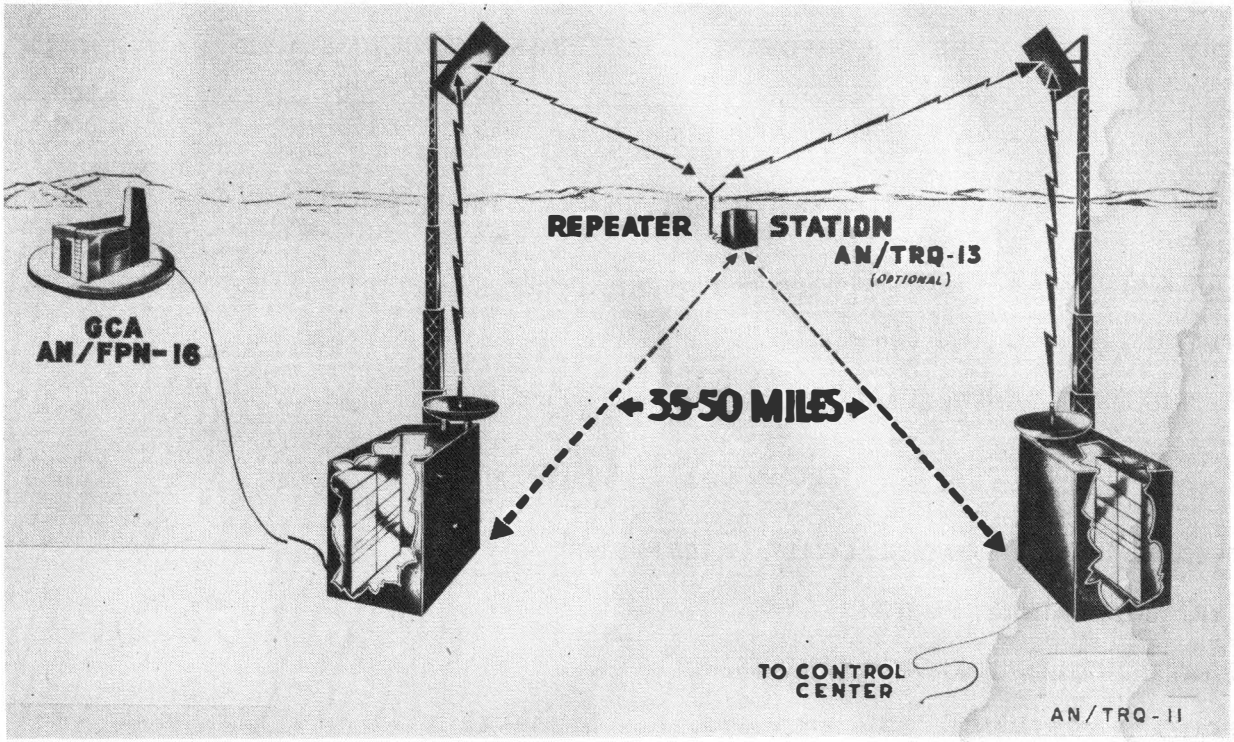
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

AN/TRQ–11

RADAR DATA TRANSFER SYSTEM



Radar Data Transfer System AN/TRQ–11 provides facilities for transmitting precision radar data via radio from a radar set and receiving such data at a remote control center. It is used to transmit precision GCA radar data from such equipment as Radar Set AN/FPN–16.

This equipment consists essentially of a radio transmitting set in Electrical Equipment Shelter S–118/TR at the radar site, to transmit the radar data, and a radio receiving set in another Electrical Equipment Shelter S–118/TR near the control center to receive this data.

Approximately 2.5 kw is required to power each function.

Towers and reflectors normally are not supplied with this equipment but may be added if required.

AN/TRQ-11

RADAR DATA TRANSFER SYSTEM

INSTRUCTION LITERATURE:

USING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Receiving set, radio	80 x 80 x 100	1,800
1	Transmitting set, radio	80 x 80 x 100	1,800

OPERATIONAL CHARACTERISTICS

TACTICAL USE: AACS, TAC, and special projects.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE: Line of sight (approx 35 to 50 mi).

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 7,125 to 8,000.

TYPE MODULATION: Fm (F9).

POWER OUTPUT: 100 mw (ea of four chan).

POWER REQUIREMENTS: 5 kw, 115 v, 60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		3,600	720	18	
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: T/Std

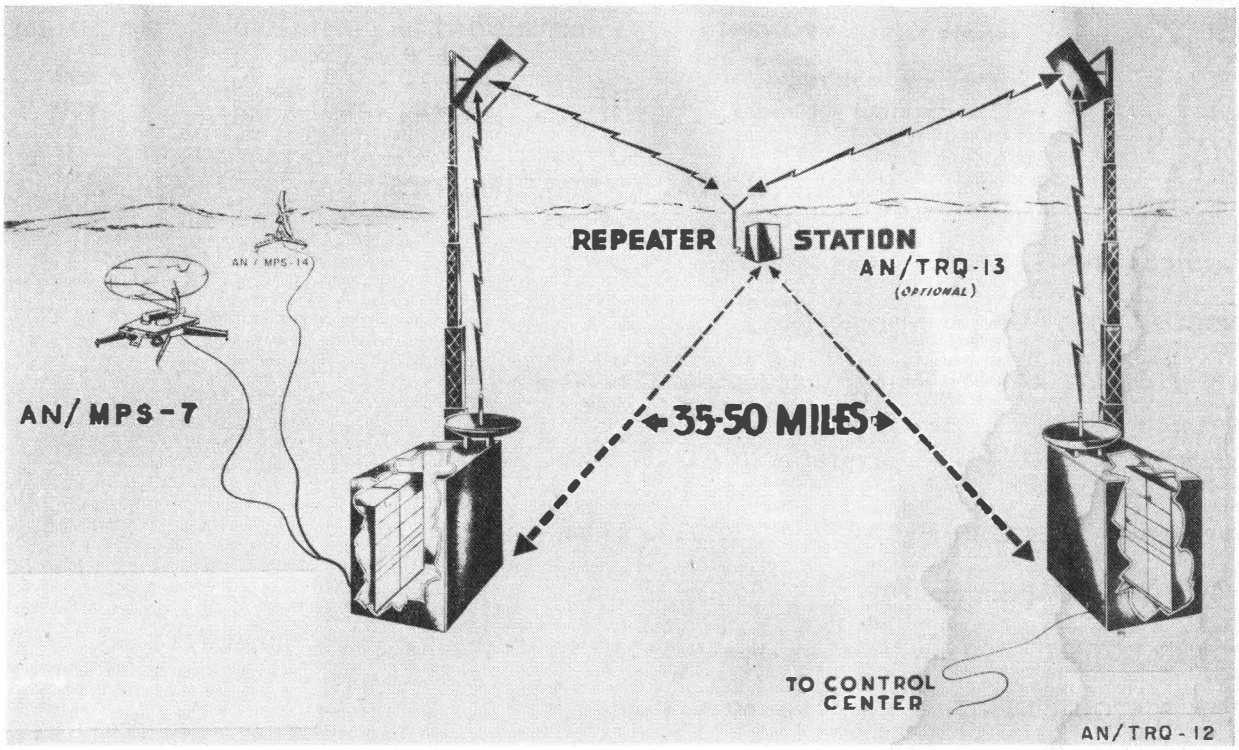
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

AN/TRQ-12

RADAR DATA TRANSFER SYSTEM



Radar Data Transfer System AN/TRQ–12 provides radio facilities for transmitting radar and height finder data respectively from such equipment as Radar Sets AN/FPS–3 and AN/FPS–6 to a control center.

This equipment consists of a radio transmitting set in Electrical Equipment Shelter S–118/TR at the radar site to transmit radar search and height finder data via radio, and a radio receiving set in another Electrical Equipment Shelter S–118/TR near the control center to receive this data.

Approximately 3 kw is required to power each function. Towers and reflectors normally are not supplied but may be added if required.

AN/TRQ-12

RADAR DATA TRANSFER SYSTEM

INSTRUCTION LITERATURE:

USING SERVICE: USAF (RAOC)

DATE OF THIS SHEET: 12 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Receiving set, radio	80 x 80 x 100	1,800
1	Transmitting set, radio	80 x 80 x 100	1,800

OPERATIONAL CHARACTERISTICS

TACTICAL USE: AACS, TAC, and special projects.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE: Line of sight (approx 35 to 50 mi).

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 7,125 to 8,000.

TYPE MODULATION: Fm (F9).

POWER OUTPUT: 100 mw (ea of six chan).

POWER REQUIREMENTS: 6 kw, 115 v, 60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		3,600	720	18	
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: T/Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

AN/TRQ–13

RADIO REPEATER SET



Radio Repeater Set AN/TRQ–13 provides facilities for increasing the range of Radar Data Transfer System AN/TRQ–10 so that radar data may be fed to a control center located up to approximately 500 miles from the radar site. The total distance of such a system depends on the number of radio repeater sets used.

This equipment is used to overcome distance or terrain obstacles.

Up to 15 repeater sets may be used to extend the range to a maximum of approximately 500 miles.

Towers and reflectors normally are not supplied but must be added if required.

AN/TRQ-13

RADIO REPEATER SET

INSTRUCTION LITERATURE:

USING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
2	Antenna Group AN/GRA-29		250
1	Receiver Group OA-997/TRR-9	75 x 22 x 15	300
1	Transmitter Group OA-998/TRT-4	75 x 22 x 15	300
1	Radio Repeater Group OA-1111/TRQ-13	75 x 22 x 15	300
1	Shelter, Electrical Equipment S-118/TR	80 x 80 x 100	1,000

OPERATIONAL CHARACTERISTICS

TACTICAL USE: AACS, TAC, and special projects.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE: Line of sight.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 7,125 to 8,000.

TYPE MODULATION: Fm (F9).

POWER OUTPUT: 1 mw (ea of eight chan).

POWER REQUIREMENTS: 2.5 kw, 115 v, 60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	80 x 80 x 100	2,000	360	9	
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

AN/TRR-2, TRT-1

RADIO SET

NO PHOTOGRAPH AVAILABLE

Radio Set AN/TRR-2 is the receiver used with Radio Set AN/TRT-1 (the transmitter) to form a system for the remote detonation of land and water mines.

A complete mine detonation system consists of one transmitter and any number of receivers. Mines can be detonated singly or in groups by selective detonation. The receiver is designed so that it causes the detonator to operate only upon reception of a signal at a predetermined radio frequency, modulated by a predetermined audio frequency, and pulsed according to a predetermined code. There are available 21,600 different combinations of such radio frequency, audio frequency, and pulse coding.

The receiver, designed for under water operation, is battery operated; the transmitter requires a 12- or 24-volt dynamotor power supply and can be installed on the ground or in vehicles, aircraft, or watercraft.

AN/TRR–2, TRT–1

RADIO SET

INSTRUCTION LITERATURE: TM 11–269

USING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Radio Transmitter T–87/TRT–1	23 x 24½ x 14	99
1	Radio receiver	20½ h x 9 dia	4

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Special.

INSTALLATION: Ground; transportable (aircraft or watercraft).

APPROXIMATE RANGE (IN MILES): 8 (land); 12 to 20 (water); 40 (air).

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 28 to 40.

TYPE MODULATION: Am (A2, A9).

TYPE OF SIGNAL: Tone, pulsed.

POWER OUTPUT: 40 to 50 (dependent on freq).

POWER REQUIREMENTS:

Receiver: Battery operated (8 BA–2, ea 22.5 v dc; 1 BA–34, 6 v dc; 2 BA–35, ea 1.5 v dc).

Transmitter: 456 w, 12 or 24 v dc.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET: AN/TRT–1:	28½ x 24½ x 14	119	5.36		
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

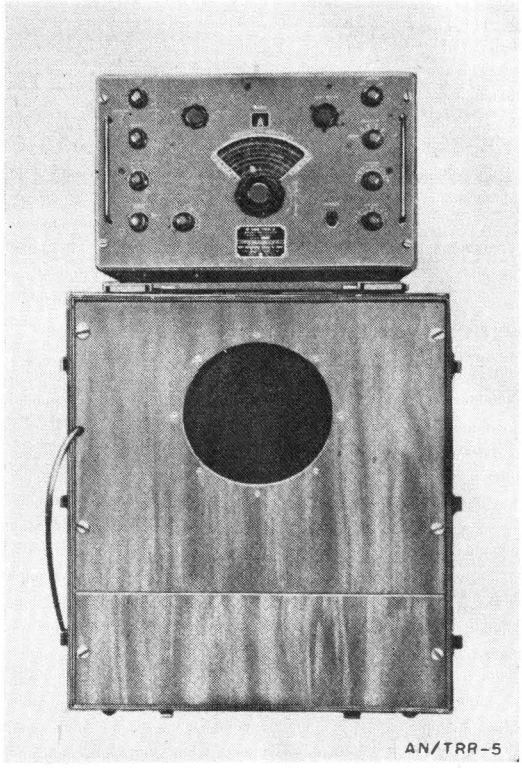
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 10 May 1956

AN/TRR-5

RADIO RECEIVING SET



Radio Receiving Set AN/TRR-5 is a transportable, general purpose communication and entertainment receiver ruggedly constructed for use under adverse weather conditions at shore stations. It has tone, selectivity, cw oscillator, automatic gain, and standby controls.

AN/TRR-5

RADIO RECEIVING SET

INSTRUCTION LITERATURE: NAVSHIPS 91454

USING SERVICE: USN

DATE OF THIS SHEET: 10 May 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Case CY-851/TRR-5	27¼ x 25 x 22½	65.4
1	Dynamic Loudspeaker LS-171/U	4 11/16 x 10 3/16 dia	3
1	Radio Receiver R-366/TRR-5	14 x 19¾ x 19⅜	83

(For complete list of major components, see instruction literature.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: General purpose communication.

INSTALLATION: Transportable.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .54 to 30 in five bands.

TYPE MODULATION: Am (A1, A2, A3).

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT:

POWER REQUIREMENTS: 112 w, 115 v, 60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	27¼ x 25 x 22½	65.4			
DOMESTIC PACK:		248	11.8		1
EXPORT PACK:					

STATUS: Std

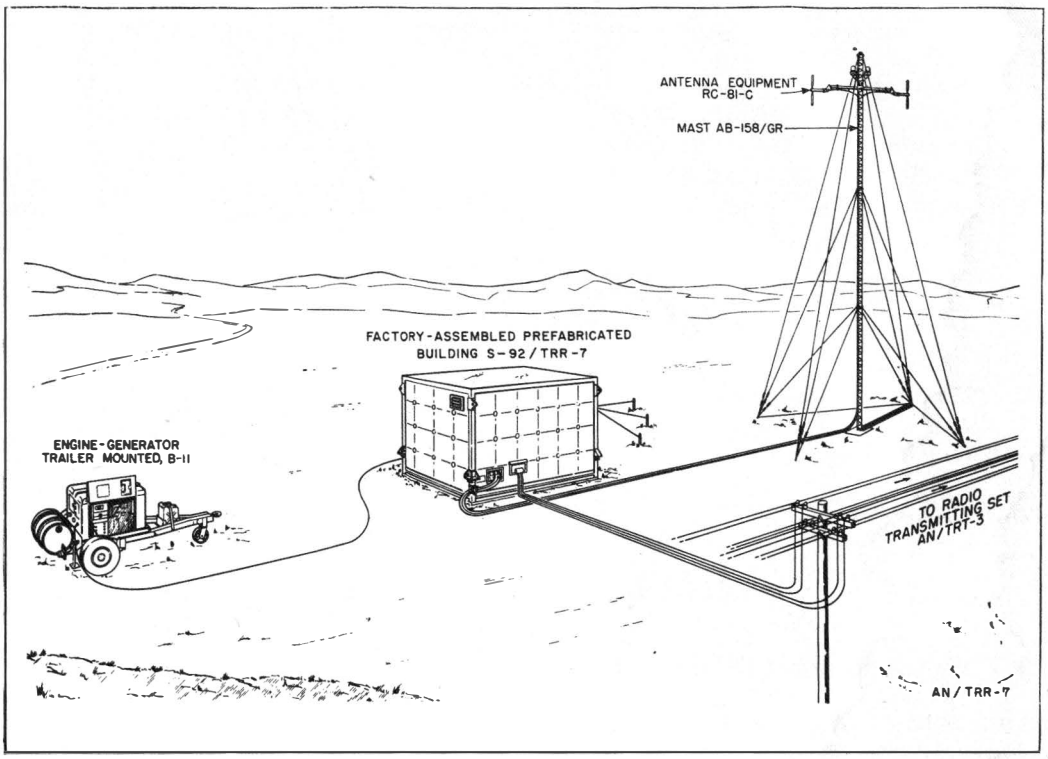
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF

DATE OF THIS SHEET: 12 June 1956

AN/TRR-7

RECEIVING SET, RADIO



Radio Receiving Set AN/TRR-7 is a complete mobile radio receiving station that is used for air-to-ground communications. It can also provide two-way ground-to-air communication when used with Radio Transmitting Set AN/TRT-3 (a complete mobile radio transmitting station that can be operated by remote control from the radio receiving site).

This equipment includes two radio receivers housed in a prefabricated building.

A trailer-mounted engine generator is provided to furnish power required when suitable commercial power is not available.

AN/TRR-7

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: TO 31R2-2TRR7-( )

USING SERVICE: USAF

DATE OF THIS SHEET: 12 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Engine Generator, Trailer Mounted B-11	125 x 63 x 65	2,450
1	Receiver Group OA-582/TRR-7	19 x 12⅞ x 11	394
1	Receiver Group OA-583/TRR-7	19 x 12⅞ x 11	268
2	Antenna Equipment RC-81-C		6.75
1	Building, Prefabricated, Factory-Assembled S-92/TRR-7	140¾ x 84 x 77	3,300

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Air-to-ground communication.

INSTALLATION: Mobile.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 to 156.

TYPE MODULATION: Am (A1, A3).

TYPE OF SIGNAL: Cw, voice.

POWER OUTPUT: 1.2 w.

POWER REQUIREMENTS: 6.3 v, 3.5 amp ac; 115 v, 1 ph ac (for lighting and ventilating sys blower motors); 210 v, 60 ma dc.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	140¾ x 84 x 77¾				
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 2 Jan 52	**AN/TRR-TYPE** SERVICE TYPE NUMBER: BC-787 RADIO RECEIVER



Radio Receiver BC-787 is a 3-band, a-m and f-m, voice and c-w equipment operating in the v-h-f range. It can be used in fixed plant point-to-point communication, for intercept or monitoring purposes, and for special applications in vehicles as a mobile equipment.

This equipment consists of a commercial (Hallicrafter S-36) table model, communication-type radio receiver, and a shock mount. It can be installed on a standard radio relay rack and arranged for stand-by operation at a distance by means of remote control equipment. It is the principal operating component of Radio Set SCR-607 and similar equipment.

Operates from 115/230 v ac, from dry batteries, or from a vehicular storage battery through appropriate power-modifying equipment.

AN/TRR-TYPE

BC-787 :SERVICE TYPE NUMBER

RADIO RECEIVER

INSTRUCTION LITERATURE: TM 11-867

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army

DATE OF THIS SHEET: 2 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Mounting FT-377-A	4-7/8 x 21-1/4 x 14-1/2	12
1	Radio Receiver BC-787	9-5/16 x 21-1/4 x 14-1/2	78

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Radio security detachments, Air Force flight test detachments.

INSTALLATION: Fixed station or mobile.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2, -3; AN/FRC-6, -7, -9; AN/GRC-3, -4, -5, -6, -7, -8, -30; AN/MRC-5, -16, -22; AN/PRC-6, -8, -9, -10, -16, -17, -20; AN/TRC-1, -3, -4, -7, -8, -11, -12; AN/TRQ-1; AN/URC-4; AN/URT-7, -10; AN/VRC-1, -2, -3, -5, -7, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRT-1; BC-640; MAN; MAW; MBF; MBS; MN; RC-257; SCR-177, -293, -298, -300, -508, -509, -510, -522, -528, -542, -573, -575, -608, -609, -610, -619, -624, -628, -641, -643, -808, -828; TBS; TBY; TDG; TDQ; TDT; Collins, 32V-2; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27.8 - 143, in 3 bands.
Band 1: 27.8 — 47.0
Band 2: 46 — 82
Band 3: 82 — 143

TYPE MODULATION: Am, fm.

TYPE OF SIGNAL: Voice cw.

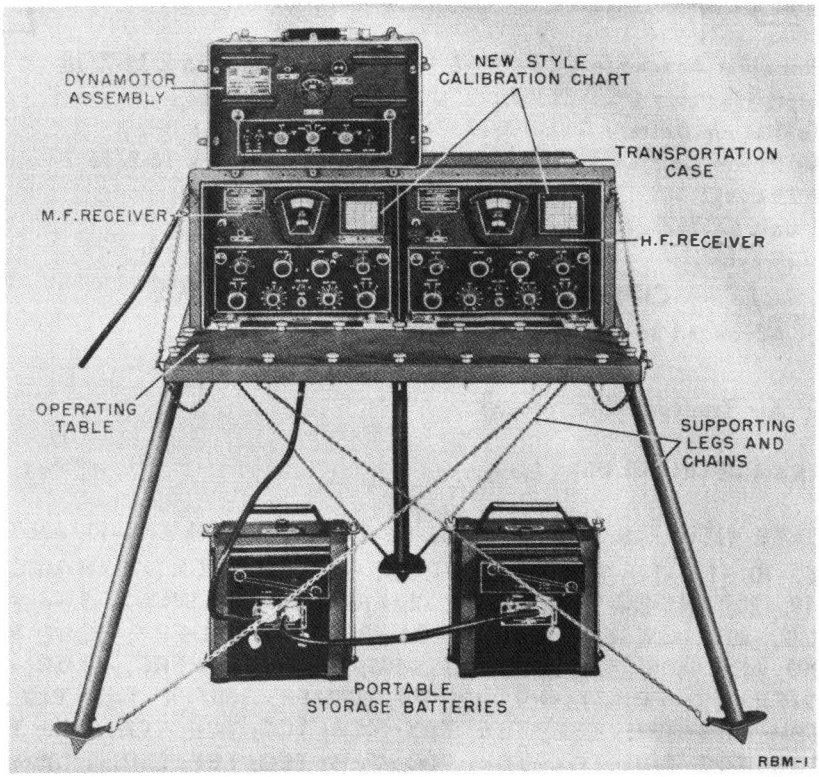
POWER OUTPUT: 3 w.

POWER REQUIREMENTS: 110 w, 115/230 v, 50/60 cyc ac; or A battery, 6 v at(4.5 amp)B battery, 270 v at 145 ma.

PHYSICAL CHARACTERISTICS

Radio Receiver BC-787 weighs 90 pounds net, volume 2.53 cu ft.

STATUS: Limited Standard	**AN/TRR-TYPE**
CLASSIFICATION OF EQUIPMENT: Unclassified	SERVICE TYPE NUMBER: RBM-1, -2, -3
USING SERVICE: Navy	PORTABLE RADIO RECEIVING EQUIPMENT
DATE OF THIS SHEET: 4 Apr 52	



Portable Radio Receiving Equipments RBM-1, -2, and -3 are primarily intended for general purpose field service. They consist of two receivers which may be operated separately or together, permitting simultaneous reception on the m-f and h-f range.

RBM-2 and RBM-3 include rectifier power supply units capable of operating from 25 cyc ac. RBM (series) is often used with a model TBW (series) radio transmitting equipment which includes a battery-charging unit.

These equipments are self-contained and can operate either from a source of a-c power or from a storage battery. Acid for the batteries is included; however, a means of charging the batteries must be provided.

Receiving antennas and headsets are required but not supplied.

AN/TRR-TYPE

RBM-1, -2, -3 :SERVICE TYPE NUMBER

PORTABLE RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,385
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 4 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver Assembly CCT-46078	12-7/16 x 29-1/16 x 19-7/16	95.0
1	Dynamotor Assembly CCT-21387	10-7/16 x 16 x 12	30.0
2	Portable Storage Battery CES-19017	12-1/2 x 11-3/4 x 8-3/4	41.0
1	Rectifier Power Unit CCT-20086, -20085 (25 cyc)	9-11/16 x 7-7/8 x 14-3/16	31.0
1	Control Unit CCT-23278, -23277 (25 cyc)	8-13/16 x 7 x 8	8.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Advanced bases, shore stations.

INSTALLATION: Air Transportable, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25,-26; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRT-1, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -329, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.2 - 20.0, in 8 bands:
M-f receiver: 0.2 — 0.36, 0.36 — 0.65, 0.65 — 1.14, 1.14 — 2.0.
H-f receiver: 2.0 — 3.6, 3.6 — 6.5, 6.5 — 11.4, 11.4 — 20.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice.

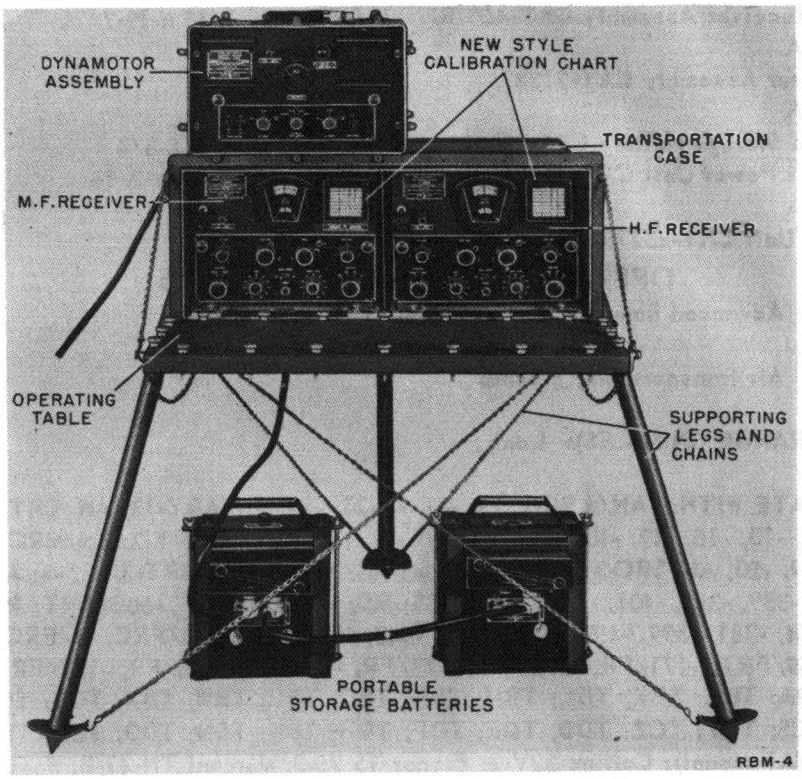
POWER OUTPUT: 50 mw into 600-ohm load.

POWER REQUIREMENTS: A-c operation: 80 w, 115 v, 25 — 60 cyc, 1 phase.
Battery operation: 122 w, 12 v.

PHYSICAL CHARACTERISTICS

Portable Radio Receiving Equipment RBM-1, -2, or -3 measures 52 x 45 x 47 inches, net weight 272 pounds, volume 64 cu ft. Packed for domestic shipment: total weight 590 pounds, total volume 32.55 cu ft, 1.6 ship tons. Shipped in 2 packages.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 4 Apr 52	**AN/TRR-TYPE** SERVICE TYPE NUMBER: RBM-4, -5 PORTABLE RADIO RECEIVING EQUIPMENT



Portable Radio Receiving Equipments RBM-4 and RBM-5 are intended primarily for general purpose field service. They consist of two receivers which may be operated separately or together, permitting simultaneous reception in the m-f and h-f ranges.

This equipment is self-contained and can operate on a-c power or a storage battery. Acid for the batteries is included; however, a means of charging the batteries must be provided.

This equipment is often used together with a Portable Radio Transmitting Equipment TBW series, which includes a battery charging unit.

Receiving antennas and headsets are required but not supplied.

AN/TRR-TYPE

RBM-4, -5 :SERVICE TYPE NUMBER

PORTABLE RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,385
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 4 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver Assembly CAY-46078, -46078-A	12-7/16 x 29-1/16 x 19-7/16	95
1	Dynamotor Assembly CAY-21387, -21387-A	10-7/16 x 16 x 12	30
2	Portable Storage Battery CES-19017	12-1/2 x 11-3/4 x 8-3/4	41
1	Rectifier Power Unit CAY-20086, -20086-A	9-11/16 x 7-7/8 x 14-3/16	31
1	Control Unit CAY-23278, -23278-A	8-13/16 x 7 x 8	11

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Advanced bases, shore stations.

INSTALLATION: Air transportable, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRT-1, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -329, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.20 - 20.0, in 8 bands.
M-f receiver: 0.20 — 0.36, 0.36 — 0.65, 0.65 — 1.14, 1.14 — 2.0.
H-f receiver: 2.0 — 3.6, 3.6 — 6.5, 6.5 — 11.4, 11.4 — 20.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice.

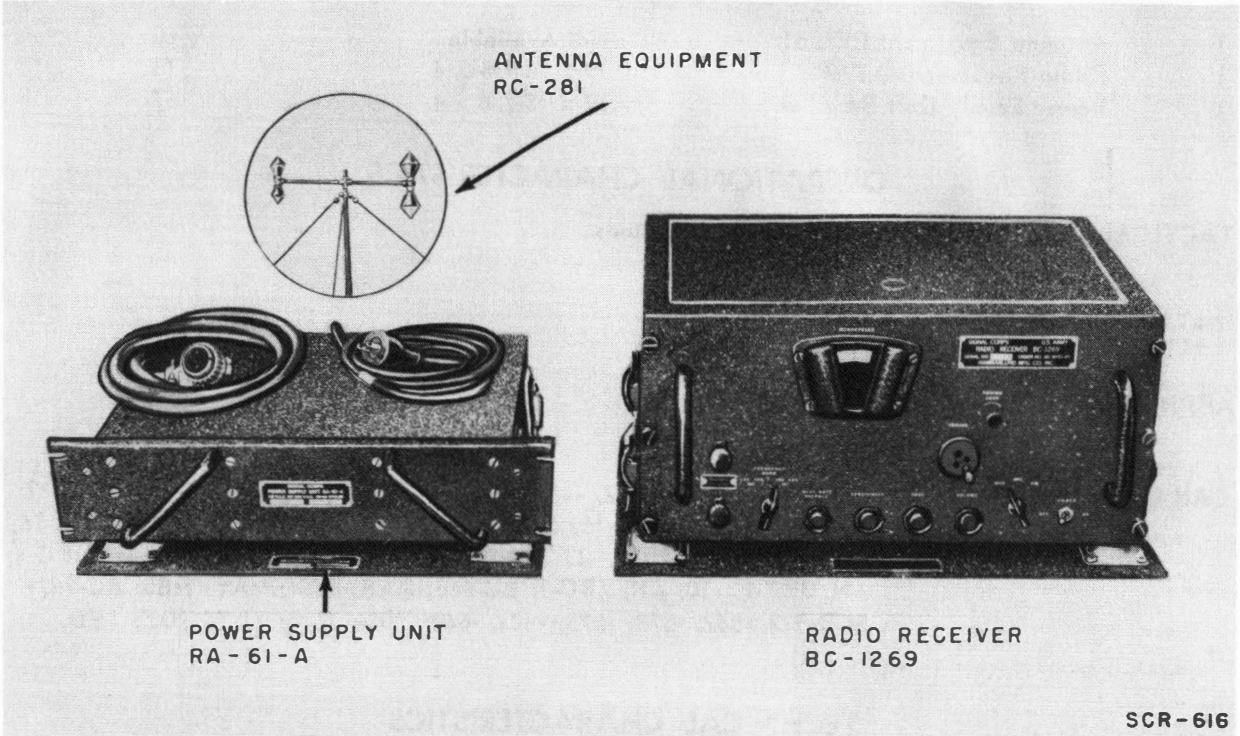
POWER OUTPUT: 50 mw into 600-ohm load.

POWER REQUIREMENTS: Battery operation: 122 w, 12 v.
A-c operation: 80 w, 115 v, 60 cyc, 1 phase.

PHYSICAL CHARACTERISTICS

Portable Radio Receiving Equipment RBM-4 or RBM-5 measures 52 x 45 x 47 inches, net weight 242 pounds, volume 64 cu ft, 1.6 ship tons. Packed for domestic shipment: total weight 590 pounds, total volume 32.55 cu ft, 0.81 ship ton. Shipped in 2 packages. (This equipment mounts on 4 relatively high legs which are removed when the equipment is packed for shipment.)

STATUS: Standard	AN/TRR-TYPE
CLASSIFICATION OF EQUIPMENT: Unclassified	SERVICE TYPE NUMBER: SCR-616 RADIO SET
USING SERVICE: Army	
DATE OF THIS SHEET: 20 Dec 51	



Radio Set SCR-616 is a compact, transportable, a-m and f-m (voice, tone, and cw) radio receiving equipment for intercept, monitoring, or communication applications in the v-h-f and u-h-f ranges.

This equipment consists of a shock-mounted radio receiver and associated power supply unit and includes a rotatable antenna array consisting of two center-fed biconical elements and accessories.

Can be operated from 110-v or 230-v a-c power or, by substituting Power Supply Unit PE-223 for the Power Supply Unit RA-61-A component, from a 12-v storage battery.

AN/TRR-TYPE

SCR-616 :SERVICE TYPE NUMBER

RADIO SET

INSTRUCTION LITERATURE: TM 11-260

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army

DATE OF THIS SHEET: 20 Dec 51

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Antenna Equipment RC-281	Not Available	60
1	Radio Receiver BC-1269	19 x 16 x 8-3/4	73
1	Power Supply Unit RA-61-A	19 x 13-7/8 x 4	67

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Issued to signal service battalions.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -12, -18, -19, -27, -28, -30, -33, -34, -36; AN/CRC-2; AN/FRC-7; AN/GRC-16, -27, -29, -30, -32; AN/GRT-3; AN/MRC-12, 16, -20, -22; AN/PRC-14, -17, -20; AN/TRC-7, -8, -11, -12, -32; AN/URC-4; AN/URT-7, -10; AN/VRC-1; BC-640; MAR; MAW; MAY; MBS; RC-257; SCR-522, -542, -573, -575, -624, -643; TDG; TDQ; TDT; TDZ; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 145 - 600, in 2 bands.
Band 1: 145 — 300.
Band 2: 300 — 600.

TYPE MODULATION: Am, fm.

TYPE OF SIGNAL: Voice, tone, cw.

POWER OUTPUT: 2.0 w high; 0.2 w low.

POWER REQUIREMENTS: 0.85 amp at 115 v (0.45 amp at 230 v), 50/60 cyc ac or 12 v dc (storage battery).

PHYSICAL CHARACTERISTICS

Radio Set SCR-616 weighs 197 pounds net, volume 3.96 cu ft. Packed for domestic or export shipment: total weight 250 pounds, total volume 16.05 cu ft. Shipped in 3 packages.

STATUS: Std

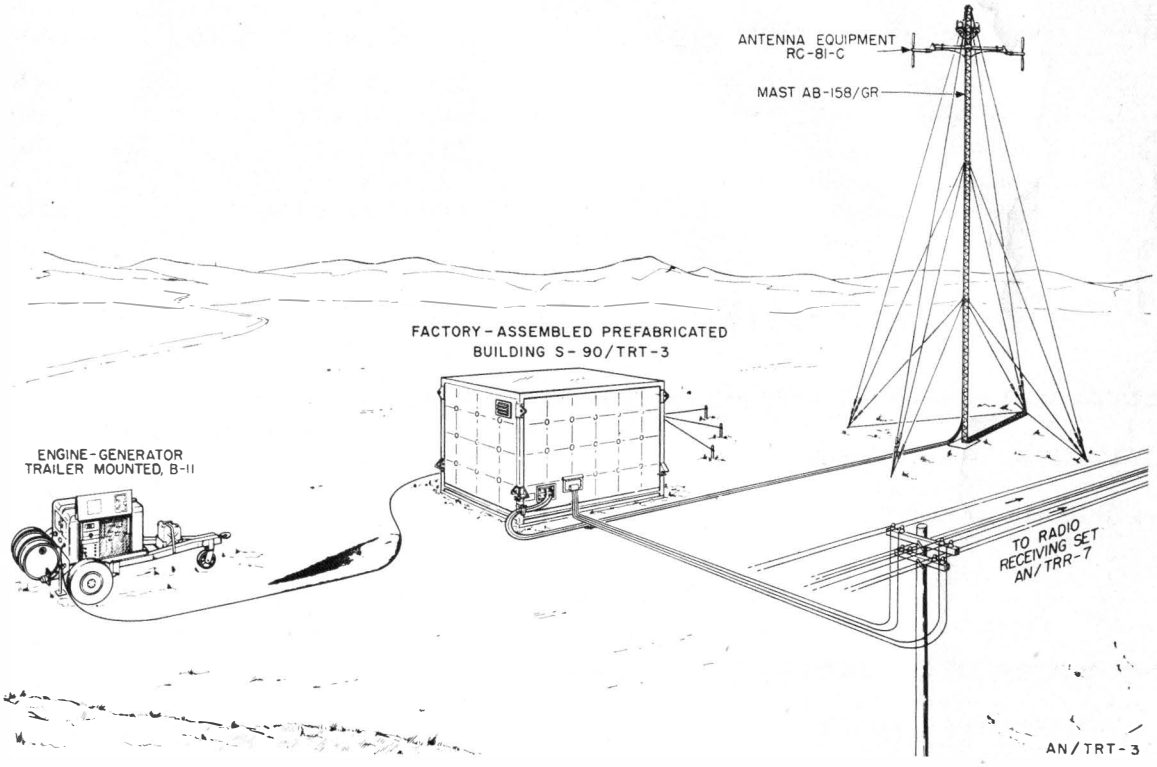
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF

DATE OF THIS SHEET: 12 June 1956

AN/TRT-3

TRANSMITTING SET, RADIO



Radio Transmitting Set AN/TRT–3 is a complete mobile radio transmitting station fully equipped for local or remote radiotelephone and radiotelegraph operation in ground-to-air communication applications. Its two radio transmitters can be operated simultaneously on any two desired channels. When operated in conjunction with Radio Receiving Set AN/TRR–7 (a complete mobile radio receiving station), two-way communication with aircraft and remote radiotelephone and radiotelegraph operation is possible.

This equipment consists of two transmitters housed in a prefabricated building. An engine generator set supplies the equipment in the building with ac power. Monitoring equipment provides facilities for local and remote radiotelegraph and remote radiotelephone operation of the transmitters, and also makes possible two-way telephone communication with as many as five mobile radio stations.

AN/TRT-3

TRANSMITTING SET, RADIO

INSTRUCTION LITERATURE: TO 31R2-2TRT3-[illegible]

USING SERVICE: USAF

DATE OF THIS SHEET: 12 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Engine-Generator, Trailer Mounted B-11	125 x 63 x 65	2,450
2	Radio Transmitter BC-640-D	21¼ x 20 x 72	601
1	Monitoring Equipment RC-80-A	72 x 20½ x 3	163
2	Antenna Equipment RC-81-C		6.75
1	Building, Prefabricated, Factory-Assembled S-90/TRT-3	140¾ x 84 x 77¾	3,300

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Ground-to-air and point-to-point communication.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE: Line of sight.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 to 156.

TYPE MODULATION: Am (A2, A3).

TYPE OF SIGNAL: Tone, voice.

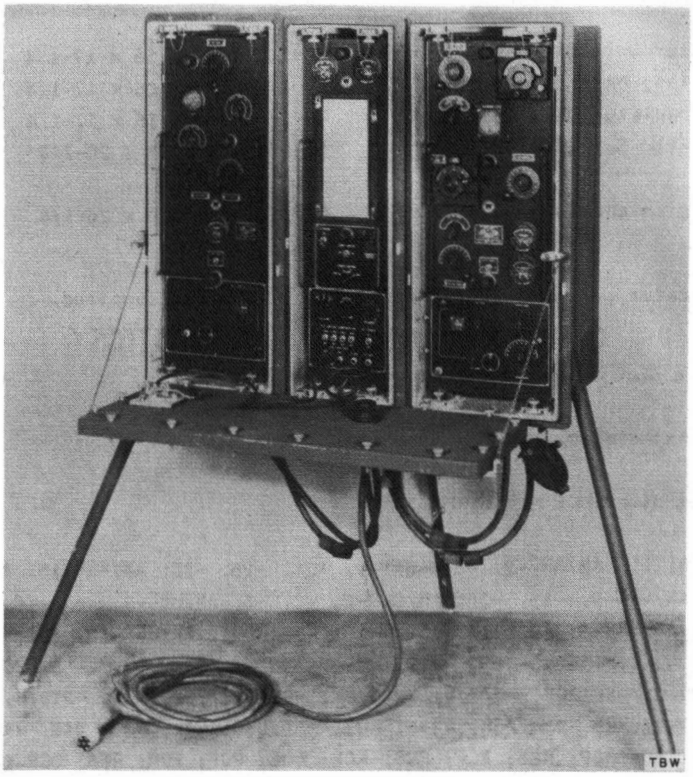
POWER OUTPUT: 50 w.

POWER REQUIREMENTS: 4.5 kw, 115/230 v, 50/60 cy, 1 ph ac (The B-11 is capable of supplying pwr if coml pwr is not available.)

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	140¾ x 84 x 77¾				
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 2 May 52	**AN/TRT-TYPE** SERVICE TYPE NUMBER: TBW, TBW-1 PORTABLE RADIO TRANSMITTING EQUIPMENT



Portable Radio Transmitting Equipments TBW and TBW-1 are general purpose equipments used primarily (in conjunction with suitable radio receiving units such as Portable Radio Receiving Equipment RBM (series), in establishing complete radio communication facilities at an advanced base.

These units are so designed that an entire system, including antennas, may be erected in less than one hour by a crew of six.

The antenna system consists of a two-wire l-f antenna; a single-wire h-f antenna, a two-wire counterpoise, and related masts, and guys.

The equipment is available with either a 115/230-v, 25-cyc motor generator set; a 115/230-v, 60-cyc motor generator set; or a gasoline engine generator set.

AN/TRT-TYPE

TBW, TBW-1 :SERVICE TYPE NUMBER

PORTABLE RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,246
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	IF Transmitter Unit CAY-52119	33-1/4 x 13-7/16 x 17-1/4	56.5
1	HF Transmitting Unit CAY-52120	33-1/4 x 13-7/16 x 17-1/4	86.5
1	Rectifier Modulator Unit CAY-20084	33-1/4 x 10-7/16 x 17-1/4	69.5
*	Motor Generator Set CDO-21648, -21652	14-1/2 x 32-1/2 x 20-7/8	296.0
*	Gasoline Engine and Generator Set CDO-73004	17-3/8 x 21-1/4 x 26-1/4	168.0

*Motor Generator set or gasoline engine generator set supplied.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations or advanced bases.

INSTALLATION: Transportable, ground.

APPROXIMATE RANGE (IN MILES): Short to medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; BC-312, -314, -342, -344, -348, -453, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBL; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDF; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCP; TCS; ARC Type 12; Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.35 - 1.0 and 3.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: Cw and mcw: 100 w.
Voice: 25 w.

POWER REQUIREMENTS: 2.19 kw, 115/230 v ($\pm$ 10%) 25 cyc, 1 phase, ac; or
2.19 kw, 115/230 v ($\pm$ 10%) 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

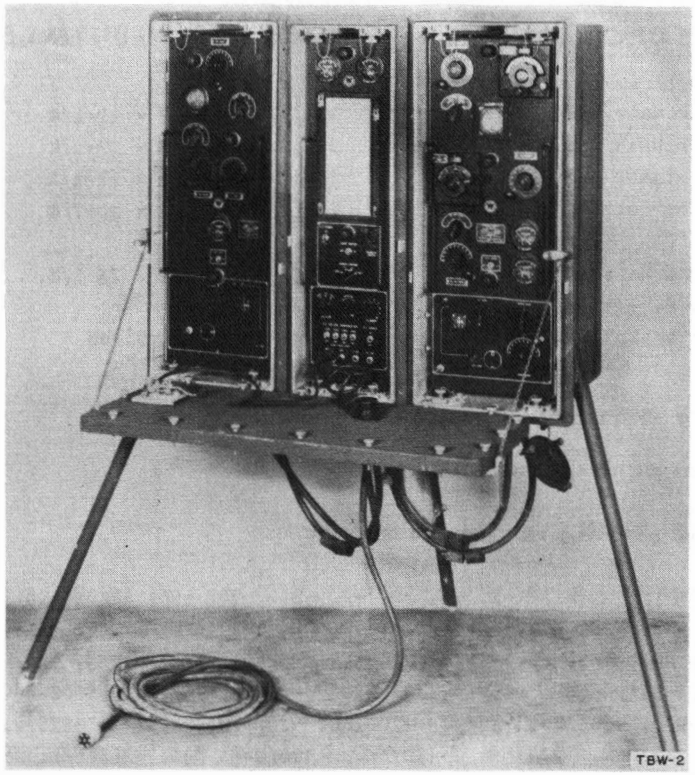
Portable Radio Transmitting Equipments TBW, TBW-1 measure 33-1/4 x 37-5/16 x 17-1/4 inches, net weight 595.5 pounds. Packed for domestic shipment: total weight 1,545 pounds, total volume 86.11 cu ft, 21.5 ship tons. Shipped in 8 packages.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 2 May 52

AN/TRT-TYPE

SERVICE TYPE NUMBER: TBW-2 through -5

PORTABLE RADIO TRANSMITTING EQUIPMENT



Portable Radio Transmitting Equipments TBW-2 through -5 are transportable general purpose radio transmitting equipments used as complete advanced-base radio communication stations, when used in conjunction with suitable receiving equipment such as Portable Radio Receiving Equipment RBM (series).

These units are so designed that an entire system, including antennas, may be erected in less than one hour by a crew of six.

The antenna system consists of a two-wire l-f antenna, a single-wire h-f antenna, a two-wire counterpoise, and related masts, and guys.

The equipment is available with either a 115/230-v, 25-cyc motor generator set, a 115/230-v, 60-cyc motor generator set, or a gasoline engine generator set.

TBW-2 is available also with a 230-v d-c motor generator set.

AN/TRT-TYPE

TBW-2 through -5 :SERVICE TYPE NUMBER
PORTABLE RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,247
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET: 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	IF Transmitter Unit CAY-52238	33-1/4 x 13-5/8 x 17-1/4	76.5
1	HF Transmitter Unit CAY-52239	33-1/4 x 13-5/8 x 17-1/4	84.0
1	Rectifier Modulator Unit CAY-20084	33-1/4 x 13-5/8 x 17-1/4	71.0
*	Motor Generator Set CDO-21652, -21648, -21737	14-1/2 x 32-1/2 x 20-7/8	296.0
*	Gasoline Engine Generator Set CDO-73004, -73004-A, -73004-B	17-3/8 x 21-1/4 x 26-1/4	168.0

*Motor Generator set or gasoline engine generator set supplied.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations or advanced bases.

INSTALLATION: Transportable, ground.

APPROXIMATE RANGE (IN MILES): Short to medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; BC-312, -314, -342, -344, -348, -453, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBQ; RBH; RBL; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDF; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCP; TCS; ARC Type 12; Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.35 - 1.0 and 3.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: Cw and mcw: 100 w.
Voice: 25 w.

POWER REQUIREMENTS: TBW-2 through -5: 2.19 kw, 115/230 v, 25 cyc, ac.
TBW-2 through -5: 2.19 kw, 115/230 v, 60 cyc, ac.
TBW-2 only: 2.19 kw, 230 v dc.

PHYSICAL CHARACTERISTICS

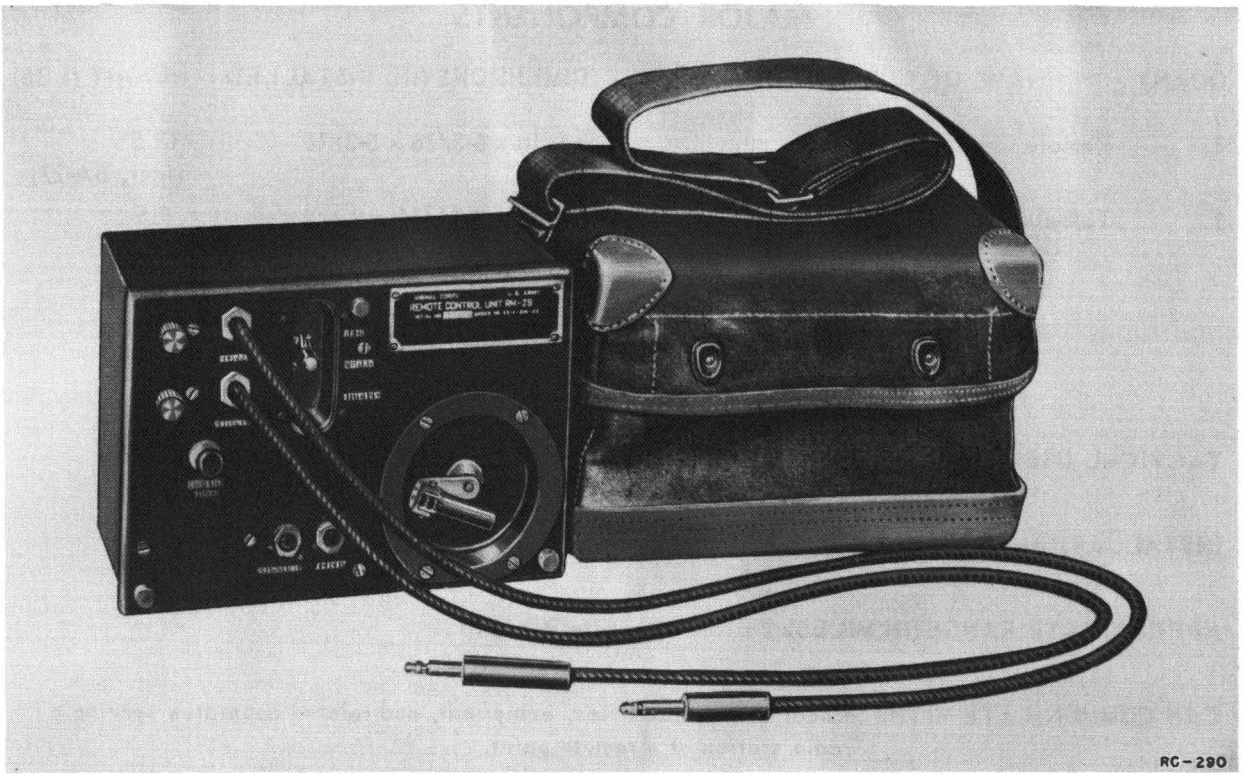
Portable Radio Transmitting Equipments TBW-2 through -5 measure 33-1/4 x 37-7/8 x 17-1/4 inches, net weight 578 pounds. Packed for domestic shipment: total weight 1,392 pounds, total volume 87,26 cu ft, 2.18 ship tons. Shipped in 4 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

AN/TTA-TYPE

SERVICE TYPE NUMBER: RC-290

REMOTE CONTROL EQUIPMENT



Remote Control Equipment RC-290 is an assemblage of items enabling the erection of a local battery telephone facility between a displaced operating and control position and the actual operating site of field radio equipment. It is used in conjunction with radio communication equipment organic to battalion level units.

This equipment consists essentially of a steel case inclosed Telephone EE-8 used at the radio set and a standard field Telephone EE-8 used at the remote control point. The connecting facility is usually a conventional field telephone pair.

The modes of operation available are telephone communication between the remote point and the radio operator, the control of radio equipment from the remote Telephone EE-8, voice circuit monitoring by the radio operator at the radio equipment, and operation of the radio set with monitoring at either the remote station or the radio set.

It is powered by dry batteries and uses the hand generator integral in the remote control unit or in a Telephone EE-8 for ringing.

AN/TTA-TYPE	INSTRUCTION LITERATURE: TM 11-308
RC-290 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
REMOTE CONTROL EQUIPMENT	USING SERVICE : Army
	DATE OF THIS SHEET : 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Remote Control Unit RM-29	9-5/16 x 6-5/16 x 5-3/16	13.5 (incl. BA-27)
1	Telephone EE-8	9-9/16 x 7-11/16 x 3-1/2	9.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Infantry, battalion and regimental level; division signal companies.

INSTALLATION: Ground; transportable.

APPROXIMATE RANGE (IN MILES): 2 miles over Wire WD-1/TT.

CAN COMMUNICATE WITH: Local battery facilities, equipment, and related apparatus serving a radio station at a remote point.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Voice.

TYPE COMMUNICATION CIRCUITS: Conventional field telephone.

CONTROLS: Selection of operational positions: RADIO, THROUGH, TELEPHONE.

POWER REQUIREMENTS: Battery BA-27.

PHYSICAL CHARACTERISTICS

Information on Remote Control Equipment RC-290 not available.

STATUS: S/Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 27 June 1956

AN/TTC-7

CENTRAL OFFICE, TELEPHONE, MANUAL

NO PHOTOGRAPH AVAILABLE

Manual Telephone Central Office AN/TTC-7 is a complete, transportable, three-position, multiple, field telephone exchange designed for rapid installation. It can handle local or common battery lines.

This equipment consists essentially of three two-panel, manual switchboards equipped for 200 lines and 25 trunks, and includes power and accessory components.

Each switchboard position is equipped with 15 cord circuits, for the handling of 45 simultaneous calls (by three positions); the face equipment of each is wired to accommodate 500 lines and 80 trunks. For each additional 200 lines, three more switchboard positions are required.

To handle more than 400 lines, multiplying on a four-panel basis is recommended; on such a basis the exchange can be expanded to accommodate 1,000 lines and 160 trunks.

AN/TTC-7

CENTRAL OFFICE, TELEPHONE, MANUAL

INSTRUCTION LITERATURE: TM 11-2146

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 27 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
3	Switchboard, Telephone Manual SB-249/TTC	72 x 26 3/16 x 26 1/2	850
1	Telephone Circuit, Line Relay TA-223/TTC	26 5/8 x 31 5/16 x 17	230
1	Telephone Circuit, Line Relay TA-224/TTC	26 5/8 x 31 5/16 x 17	275
1	Main Distributing Frame, Telephone TA-257/TTC	26 5/8 x 31 5/16 x 17	150

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, transportable.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 3 (min).

NUMBER AND TYPE OF CIRCUITS:

Manually Operated Equipment:

Number of Cord Circuits: 45.

Number of Line Circuits: 200.

Number of Trunk Circuits: 20.

RINGING: 20 cy at 90 v.

POWER REQUIREMENTS: 110 v ac; 48 v dc.

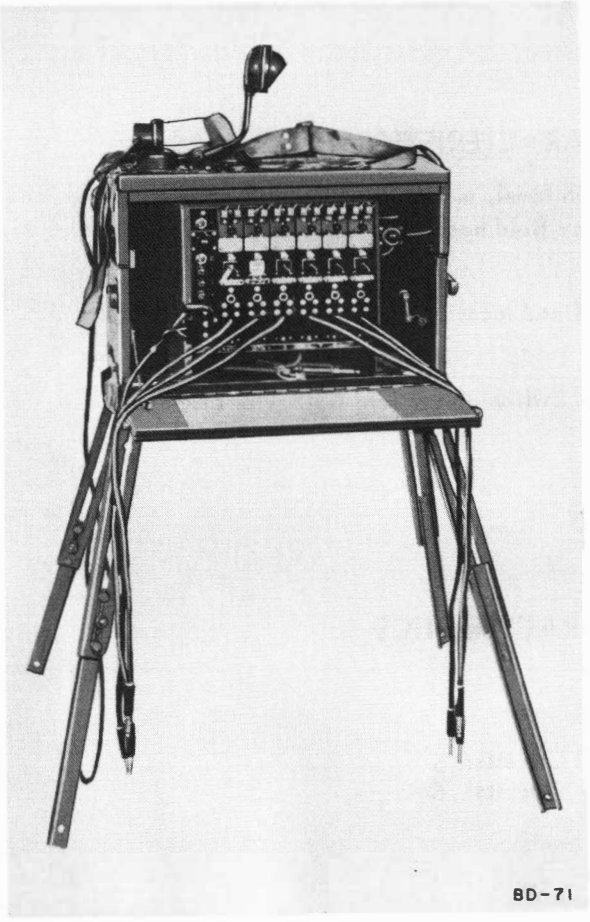
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
(3) SB-249/TTC	72 x 79 x 26 1/2	2,550	120		
DOMESTIC PACK:					
EXPORT PACK:		6,117	413	10.3	30

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 29 Jan 52

AN/TTC-TYPE

SERVICE TYPE NUMBER: BD-71
SWITCHBOARD


BD-71

Switchboard BD-71 is a portable, monocord, magneto telephone switchboard used for terminating and switching tactical field wire circuits at regimental and higher headquarters.

This equipment consists of all required apparatus, housed in a carrying case having adjustable legs, permitting a variety of installation arrangements. Repeating coils are permanently installed on two lines.

Two Switchboards BD-71 may be connected in parallel to accommodate additional lines.

The estimated range over nonloaded Wire W-110-B is from 14 to 22 miles.

Uses 6 flashlight type Batteries BA-30.

AN/TTC-TYPE

BD-71 :SERVICE TYPE NUMBER
SWITCHBOARD

INSTRUCTION LITERATURE: TM 11-330
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 29 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Switchboard BD-71 (bare unit)	Not Available	48
6	Switchboard Units EE-2	" "	Not Available
1	Chest Set H-18/GT, Headset HS-30, (operator's telephone set)	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: At companies, battery, and battalion level, in infantry and armored division, support organization corps, and army field hospitals.

INSTALLATION: Ground, transportable, operates in fixed location.

CAN COMMUNICATE WITH: Used for terminating and switching tactical field wire circuits.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

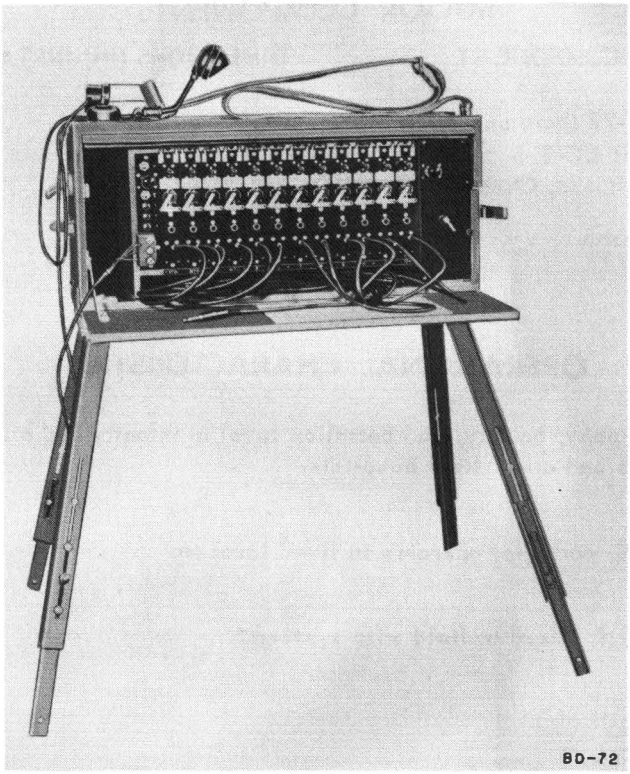
NUMBER AND TYPE OF CIRCUITS: Number of Cord Circuits: 6
Number of Line Circuits: 6.

POWER REQUIREMENTS: 6 each Battery BA-30.

PHYSICAL CHARACTERISTICS

Switchboard BD-71 weighs 48 pounds net, volume 1.5 cu ft. Packed for export shipment: total weight 84 pounds, total volume 4.6 cu ft. Shipped in 1 package.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 29 Jan 52	AN/TTC TYPE SERVICE TYPE NUMBER: BD-72 SWITCHBOARD



Switchboard BD-72 is a portable, monocord, magneto, manual, telephone switchboard used primarily in field wire systems serving company, battery, and battalion level in armored and infantry divisions.

This equipment consists of a switchboard fitted with all apparatus required, and arranged for transportation in the field in a carrying case. Has adjustable legs permitting different installation arrangements.

Repeating coils are permenently installed on four lines. Estimated range over Wire W-110-B (non-loaded) is from 14 to 22 miles. Two Switchboards BD-72 may be used together when necessary to provide additional line capacity, by trunking between them.

Operates from six flashlight-type Batteries BA-30.

AN/TTC TYPE	INSTRUCTION LITERATURE: TM 11-330
BD-72 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
SWITCHBOARD	USING SERVICE : Army
	DATE OF THIS SHEET : 29 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Switchboard BD-72 (bare unit)	Not Available	72
12	Switchboard Unit EE-2	" "	Not Available
1	(each) Headset HS-30, Chest Set H-18/GT.	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: At company, battery, and battalion level in infantry and armored divisions; support organizations in corps and army; field hospitals.

INSTALLATION: Ground; portable; operates in fixed location.

CAN COMMUNICATE WITH: Used in field wire systems.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

Number of Cord Circuits: 12.
Number of Line Circuits: 12.

POWER REQUIREMENTS: Six Batteries BA-30.

PHYSICAL CHARACTERISTICS

Switchboard BD-72 weighs 72 pounds net, volume 2 cu ft. Packed for export shipment: total weight 137 pounds, total volume 5 cu ft.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 23 Jan 52

AN/TTC-TYPE

SERVICE TYPE NUMBER: EE-89

TELEPHONE REPEATER



Telephone Repeater EE-89 is a portable, two-wire repeater equipment which is installed at intermediate points of a tactical field wire system (at junctions of sections having similar characteristics) to extend the normal transmission range of facilities serving division and higher headquarters.

Equipment consists of amplifier equipment and related control apparatus contained in a wooden field case fitted with carrying straps. The case has space for the necessary batteries.

May be used at the exact center of a loaded section but not at junctions of loaded and nonloaded sections. Two can be used in tandem in the same circuit.

Telephone EE-8 can be bridged across this equipment.

AN/TTC-TYPE

EE-89 : SERVICE TYPE NUMBER

TELEPHONE REPEATER

INSTRUCTION LITERATURE: TM 11-2006
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 23 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground; transportable; operates in fixed locations under shelter or in the open.

CAN COMMUNICATE WITH: Equipment and apparatus of field wire systems, operating in the same connecting facility.

TECHNICAL CHARACTERISTICS

NUMBER AND TYPE OF FACILITIES: Two-wire; same pair used for transmission in both directions. Provides for simplex telegraph and 20-cyc ringing over lines using one or more of these repeaters.

POWER REQUIREMENTS: Self-contained Battery BA-40.

PHYSICAL CHARACTERISTICS

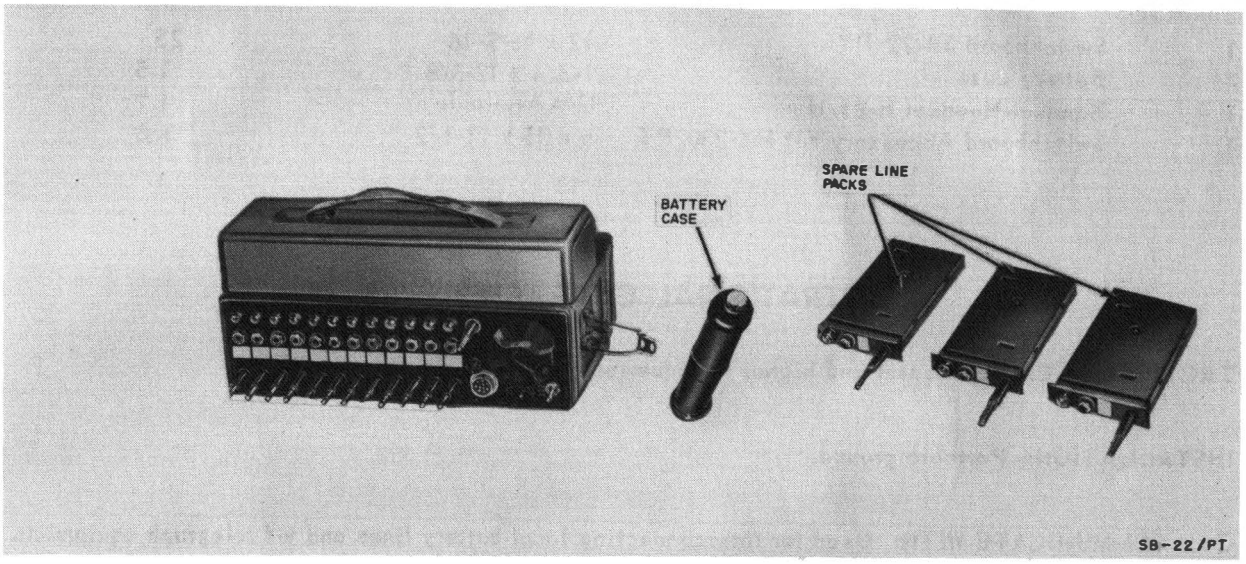
Telephone Repeater EE-89 measures 8-1/2 x 9 x 7 inches, net weight 6.5 pounds, volume 0.03 cu ft. Packed for domestic shipment: total weight 8 pounds, total volume 0.05 cu ft. Packed for export shipment: total weight 20 pounds, total volume 1 cu ft. Shipped in 1 package both domestic and export.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 10 Jun 52

AN/TTC-TYPE

AN/COMP TYPE NUMBER: SB-22/PT

SWITCHBOARD, TELEPHONE, MANUAL



Switchboard, Telephone, Manual SB-22/PT is a small, portable, 12-line, monocord switchboard for interconnecting local-battery lines and v-f telegraph equipment serving regimental and higher headquarters.

This equipment consists essentially of a case capable of accepting individually contained plug-in line packs and operator's pack, enabling rapid replacement of defective circuits. Line packs are designated Telephone Circuit, Line Jack TA-222/PT. The operator's pack is designated Telephone Circuit, Operator TA-221/PT and occupies the space at the right-hand end of the case, and includes a hand-generator for ringing. The equipment includes a battery case, operator's telephone set, and related accessories.

Two of these switchboards can be used together to handle 29 lines; in this application the operator's set is removed from one case and replaced by five line packs, and the two switchboards are then connected in series.

It operates from four flashlight-type Batteries BA-30.

AN/TTC-TYPE	INSTRUCTION LITERATURE: TM 11-2202
	CLASSIFICATION OF EQUIPMENT: Unclassified
SB-22/PT :AN/COMP TYPE NUMBER	USING SERVICE : Army
SWITCHBOARD, TELEPHONE, MANUAL	DATE OF THIS SHEET: 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Switchboard SB-22/PT	12 x 16-5/16	25
1	Battery case	1-3/4 x 12-5/8	1.5
1	Handset-Headset H-81/U	Not Available	1.2
1	Switchboard Accessory Kit MX-230/PT	5 x 15 x 11-1/2	3.8

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Regimental and higher headquarters.

INSTALLATION: Portable ground.

CAN COMMUNICATE WITH: Used for interconnecting local-battery lines and v-f telegraph equipment.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1

NUMBER AND TYPE OF CIRCUITS:

Number of cord circuits: 1.
Number of line circuits: 12.
Number of trunk circuits: None.

POWER REQUIREMENTS: Four Batteries BA-30.

PHYSICAL CHARACTERISTICS

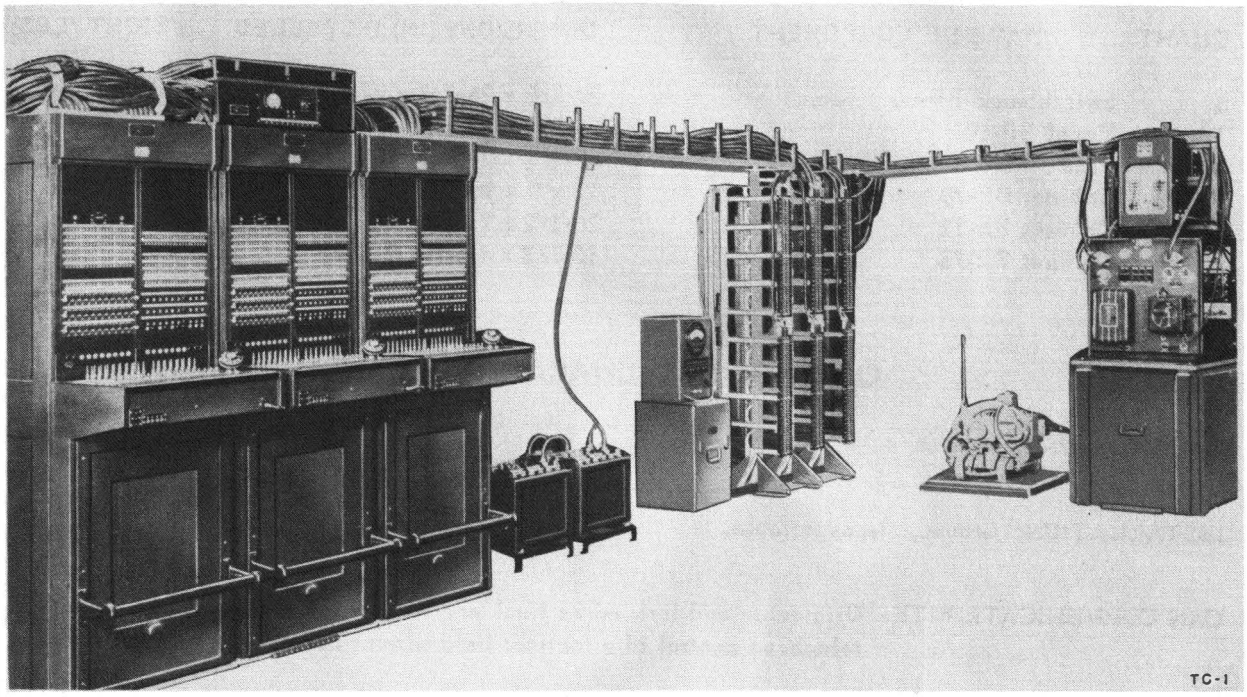
Switchboard, Telephone, Manual SB-22/PT measures 12 x 12 x 16-5/16 inches, volume 1.5 cu ft. Packed for export shipment: total weight 58 pounds, total volume 3.29 cu ft. Shipped in 1 package.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 23 Jan 52

AN/TTC-TYPE

SERVICE TYPE NUMBER: TC-1

TELEPHONE CENTRAL OFFICE SET



Telephone Central Office Set TC-1 is a complete, transportable, manual, telephone exchange which serves both local- and common-battery lines. It can handle local, and originate and terminate trunk and tie-line traffic and is used as a telephone central of a tactical field wire or cable system at army level.

This equipment consists essentially of a 3-position switch-racks, power equipment, and associated accessories.

Each switchboard section is a single-position, two-panel, manually operated unit arranged to serve magneto and common battery lines, and common battery manual and dial trunks.

Power is supplied by four Battery BB-46, one Panel BD-90, which includes ringing equipment, a rectifier, and a gasoline engine-driven field power unit.

Traffic-handling capacity of this central office may be increased as required by alternating the corresponding position of two TC-1 equipments in the same line-up.

AN/TTC-TYPE

TC-1 :SERVICE TYPE NUMBER

TELEPHONE CENTRAL OFFICE SET

INSTRUCTION LITERATURE: TM 11-335

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET : 23 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
3	Switchboard BD-80	37-7/8 x 26-3/8 x 77-9/16	739
1	Panel BD-90	35-1/2 x 25 x 26-1/4	230
3	Frame FM-19	17-1/4 x 23 x 80	180
1	Cabinet BE-70	12 x 9 x 18	32
1	Cabinet BE-72	26-1/2 x 7 x 9-3/16	61
1	Cabinet BE-75	13-1/3 x 4-5/8 x 9-3/4	25

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army.

INSTALLATION: Ground; transportable.

CAN COMMUNICATE WITH: Originates and terminates trunk and tie-line traffic and is used as a telephone central of a tactical field wire or cable system.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 3.

NUMBER AND TYPE OF CIRCUITS:

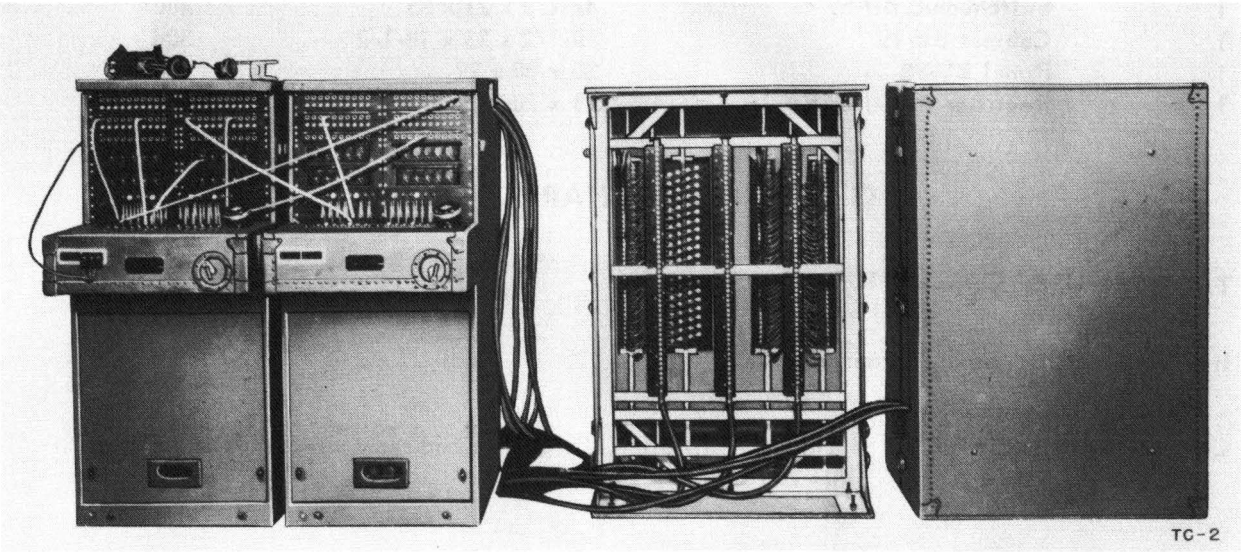
Number of cord circuits: 45 universal; 3 dial.
Number of line circuits: 90 local battery, 180 common battery.
Number of trunk circuits: 12 two-way to dial or manual office.

POWER REQUIREMENTS: Power Unit PE-75: 2.5 kva, 115 v, 60 cyc ac.
Rectifier RA-36: 12 amp; 0 to 65 v.
Battery BB-46: 90 amp-hr; 40 to 56 v .

PHYSICAL CHARACTERISTICS

Telephone Central Office Set TC-1 weighs 7,900 pounds net. Packed for export shipment: total weight 10,596 pounds, total volume 543 cu ft, 13.6 ship tons.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 23 Jan 52	**AN/TTC-TYPE** SERVICE TYPE NUMBER: TC-2 TELEPHONE CENTRAL OFFICE SET



Telephone Central Office Set TC-2 is a complete, transportable, telephone exchange designed to handle local traffic, and originating and terminating trunk and tie-line calls in field wire systems serving corps and higher headquarters.

This equipment consists essentially of a single-position local- and common-battery nonmultiple, 2-panel, manual switchboard, main distributing frame, power panel, rectifier, power unit, and associated accessories.

Two Switchboard BD-89 (the principle component of this equipment) can be connected and operated by one operator.

It is battery-operated.

AN/ TTC-TYPE

TC-2 : SERVICE TYPE NUMBER

TELEPHONE CENTRAL OFFICE SET

INSTRUCTION LITERATURE: TM 11-340

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET : 23 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Switchboard BD-89	47-1/2 x 21 x 35	400
1	Cabinet BE-79	40-1/2 x 23 x 18-1/2	300
1	Panel BD-98	30 x 30 x 29	110
1	Rectifier RA-91 or RA-36	21 x 20 x 11-3/4	130

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Corps and higher headquarters.

INSTALLATION: Ground: transportable.

CAN COMMUNICATE WITH: Handles local traffic. Originates and terminates trunk and tie-line calls in field wire systems.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

	Models BD-89-A through E	Model BD-89-G
Number of cord circuits:	13 universal; 1 dial.	
Number of line circuits:	20 L B; 37 C B.	40.
Number of trunk circuits:	2 C B; 1 dial.	4.

POWER REQUIREMENTS: Power Unit PE-75-( ): 2,500 w, 115 v, 60 cyc ac.
Rectifier RA-91 or RA-36: 2 to 12 amp, 6 to 48 v.
Storage Battery BB-46: 90 amp-hr, 40 to 56 v.

PHYSICAL CHARACTERISTICS

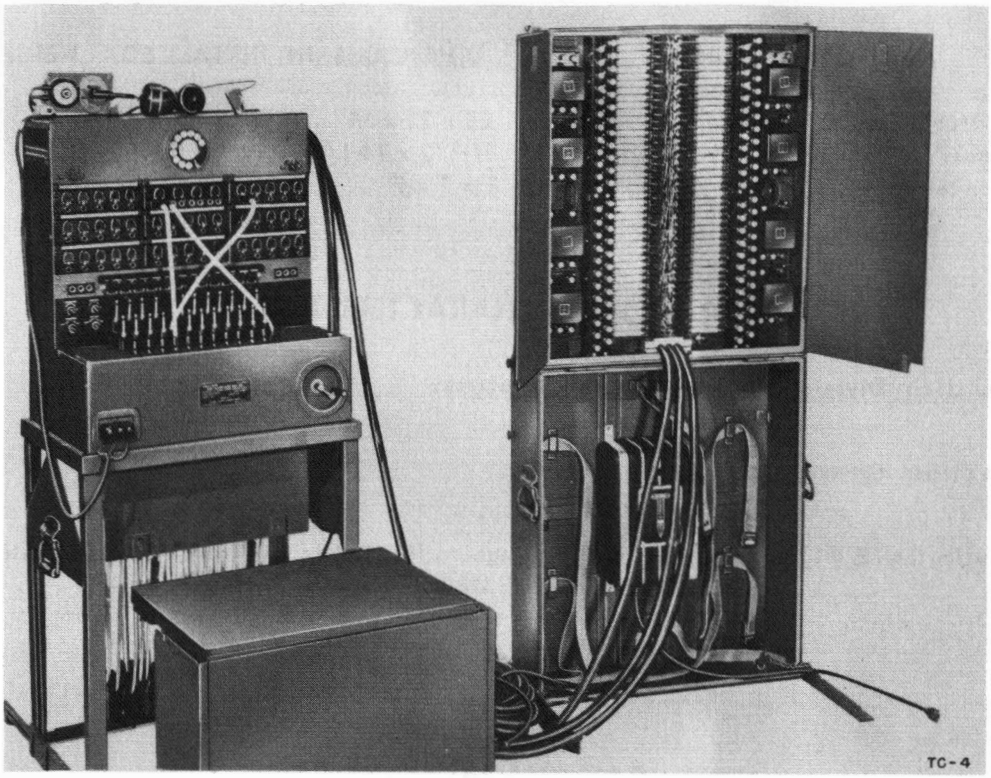
Telephone Central Office Set TC-2 weighs 2,900 pounds net. Packed for export shipment: total weight 3,412 pounds, total volume 146 cu ft, 3.6 ship tons.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 23 Jan 52

AN/TTC-TYPE

SERVICE TYPE NUMBER: TC-4

TELEPHONE CENTRAL OFFICE SET



Telephone Central Office Set TC-4 is a complete, transportable, field telephone exchange for handling magneto line traffic, and for originating and terminating common battery trunk line and ring-down tie line traffic at division level.

This equipment consists of a single-position, manual, nonmultiple switchboard, a power converter, and associated accessories. Currently, this equipment includes Headset HS-30, Chest Set H-18/GT, and Microphone T-45 rather than the head and chest set illustrated. It can be installed in a cargo truck for mobile telephone central applications.

Two Switchboards BD-96 (the principle component of this equipment) can be connected and operated by a single operator.

This central office set is dry battery operated.

AN/TTC-TYPE	INSTRUCTION LITERATURE: TM 11-332
TC-4 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELEPHONE CENTRAL OFFICE SET	USING SERVICE : Army
	DATE OF THIS SHEET: 23 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Switchboard BD-96	25 x 22 x 15	200
1	Panel BD-97	27-1/2 x 24-1/2 x 11	150
1	Converter M-222	8 x 7 x 7	11

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and equivalent headquarters.

INSTALLATION: Ground; transportable or mobile.

CAN COMMUNICATE WITH: Used for handling magneto line traffic, originates and terminates common battery trunk line and ring-down tie line traffic.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

Number of cord circuits: 12 universal; 1 dial.
Number of line circuits: 40 local battery.
Number of trunk circuits: 4 common battery, manual, or dial.

POWER REQUIREMENTS: Six Batteries BA-30 to furnish current for transmitter of operator's set and for night alarm buzzer.
Two Batteries BA-23 to furnish power to Converter M-222.

PHYSICAL CHARACTERISTICS

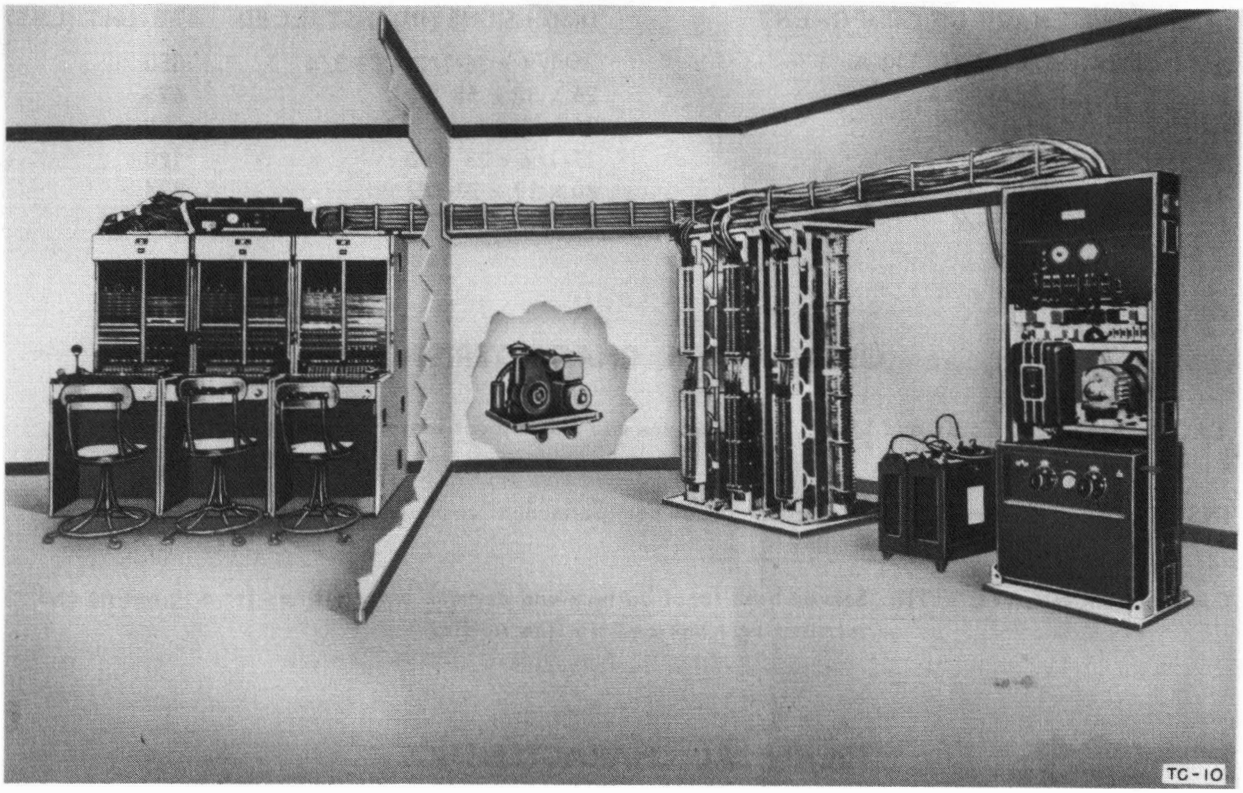
Telephone Central Office Set TC-4 weighs 590 pounds net. Packed for export shipment: total weight 650 pounds, total volume 21 cu ft, 0.5 ship ton.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 9 Jan 52

AN/TTC- TYPE

SERVICE TYPE NUMBER: TC-10

TELEPHONE CENTRAL OFFICE SET



Telephone Central Office Set TC-10 is a complete, transportable, 270-line manual telephone exchange. It serves both local battery and common battery lines, and is arranged for handling, originating, and terminating trunk and tie line traffic.

It is used for establishing tactical communications from forward areas to rear echelons.

This equipment can be connected into any existing telephone system, either manual or automatic. A maximum of 45 conversations can be handled simultaneously. Local battery line circuits can also be used for toll lines or two-way ring-down trunks. Trunks can be extended to manual or automatic exchanges.

AN/TTC-TYPE

TC-10 :SERVICE TYPE NUMBER

TELEPHONE CENTRAL OFFICE SET

INSTRUCTION LITERATURE: TM 11-338

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET : 9 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
3	Switchboard BD-110-A	26-1/4 x 36-1/2 x 63-3/4	850
1	Panel BD-132-A	26 x 18 x 58	625
1	Cabinet BE-72	26-1/2 x 7 x 9-3/16	61
3	Frame FM-19	17-1/4 x 23 x 80	180
2	Power Unit PE-75	40 x 19 x 27-1/2	324
4	Battery BB-46	15-1/2 x 6-1/2 x 14-9/16	119

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Corps and higher headquarters and fixed plant installations.

INSTALLATION: Ground; fixed; permanent or semipermanent communications centers.

CAN COMMUNICATE WITH: Serves both local battery and common battery lines for originating and terminating trunk and tie line traffic.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 3.

NUMBER AND TYPE OF CIRCUITS:

Number of cord circuits: 45 universal; 3 dial.
Number of line circuits: 270 (180 common battery, 90 local battery).
Number of trunk circuits: 12 two-way.

POWER REQUIREMENTS: 1,000 w, 110/120 v, ac, 50/60 cyc, single phase, or two Power Unit PE-75 (120 v, ac, 60 cyc, in combination with Panel BD-132-A.

PHYSICAL CHARACTERISTICS

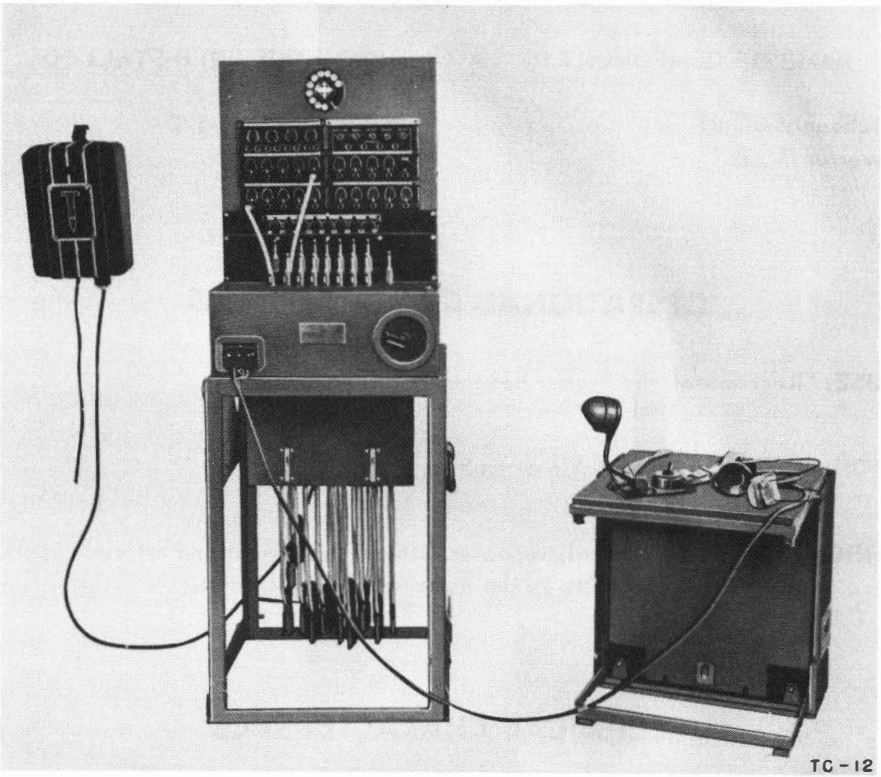
Telephone Central Office Set TC-10 weighs 7,300 pounds net. Packed for export shipment: total weight 10,593 pounds, total volume 543 cu ft, 13.6 ship tons.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 23 Jan 52

AN/TTC-TYPE

SERVICE TYPE NUMBER: TC-12

TELEPHONE CENTRAL OFFICE SET



Telephone Central Office Set TC-12 is a complete, transportable or mobile, tactical telephone exchange for handling, originating, and terminating trunk and tie line traffic and is used in field wire and cable systems serving regimental and higher headquarters.

This equipment consists essentially of a single-position, nonmultiple, manually operated telephone switchboard and related components. Currently this equipment includes Headset HS-30, Chest Set H-18/GT, and Microphone T-45 rather than the head and chest set illustrated.

It can be used for handling magneto line calls and for originating and terminating manual common battery, automatic (dial), and ring-down tie line traffic.

Two Switchboards BD-91 of this equipment (equivalent to two Telephone Central Office Sets TC-12) can be connected and operated by one operator.

This central office is dry battery operated.

AN/TTC-TYPE

TC-12 : SERVICE TYPE NUMBER

TELEPHONE CENTRAL OFFICE SET

INSTRUCTION LITERATURE: TM 11-336

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET: 23 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Switchboard BD-91	25-1/2 x 19 x 17-1/2	215
1	Converter M-222	8 x 7 x 7	11

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Regimental and higher headquarters.

INSTALLATION: Ground; transportable or mobile.

CAN COMMUNICATE WITH: Terminal, repeater, station equipment and related apparatus operating in the same facility or system.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1

NUMBER AND TYPE OF CIRCUITS:

Number of cord circuits: 8 universal; 1 dial.
Number of line circuits: 20 local battery.
Number of trunk circuits: 4 common battery, manual, and dial.

POWER REQUIREMENTS: Six Batteries BA-30 to furnish transmitter current for operator's telephone set and night alarm buzzer.
Two Batteries BA-23 to furnish power to Converter M-222.

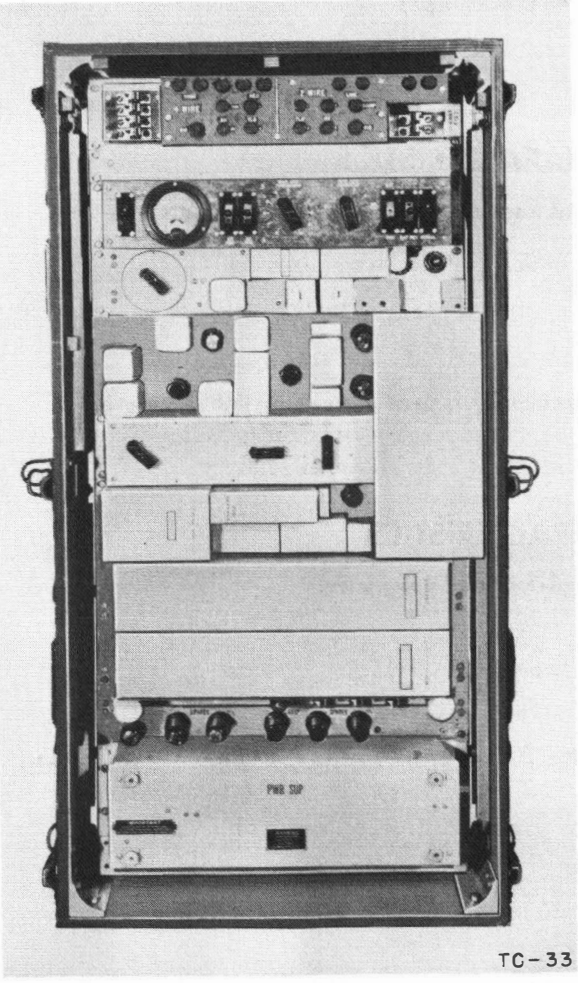
PHYSICAL CHARACTERISTICS

Telephone Central Office Set TC-12 weighs 234 pounds net, volume 5.27 cu ft. Packed for domestic shipment: total weight 415 pounds, total volume 16.27 cu ft. Shipped in 2 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 14 Feb 52

AN/TTC-TYPE

SERVICE TYPE NUMBER: TC-33
CONVERTER SET



TC-33

Converter Set TC-33 is a transportable, voice-frequency, group-modulator equipment used for adapting four-wire transmission to two-wire facilities, which is used at division and equivalent headquarters, in field telephone facilities.

This equipment consists of panel-mounted apparatus contained in a steel cabinet and is normally installed adjacent to a telephone terminal or a repeater.

It is designed for use with a four-channel v-f carrier telephone system and can provide equivalent four-wire operation over an open wire pair.

It may be used to monitor at adjacent telephone terminals, and one of its composite circuits may be used as a signal and alarm circuit.

Equipment is used in conjunction with a repeater set and is powered by 115/230-v ac but has provision for transfer from ac to storage battery operation.

AN/TTC-TYPE

TC-33 :SERVICE TYPE NUMBER

CONVERTER SET

INSTRUCTION LITERATURE: TM 11-2008
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 14 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Converter CF-4	24 x 17 x 49	300
2	Battery BB-55 (each)	13 x 7 x 9-3/8	110
1	Case CS-111 (Battery)	Not Available	Not Available
1	Chest BC-5	28-7/8 x 18-1/8 x 12	" "
2	Ground Rod MX-148/G	Not Available	" "
	Wire W-2 (2 lbs)	" "	2
	Wire W-143 (250 lbs)	" "	250

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division, communications zone, and zone of interior.

INSTALLATION: Ground transportable.

MAXIMUM SYSTEM LENGTH: 400 to 800 miles.

CAN COMMUNICATE WITH: Repeater and related system equipment composing the connecting facility.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Spiral-four and open wire.

FACILITIES AFFORDED: Four-wire convertible to two-wire.

FREQUENCY: 200 to 11,600 cps in one direction, and 20,850 to 32,250 cps in the other direction.

TYPE OF MODULATION: Am.

TYPE RINGING: Vf.

POWER REQUIREMENTS: 30 w, 115 / 230 v, 50/60 cyc, ac, or 12-v storage battery.

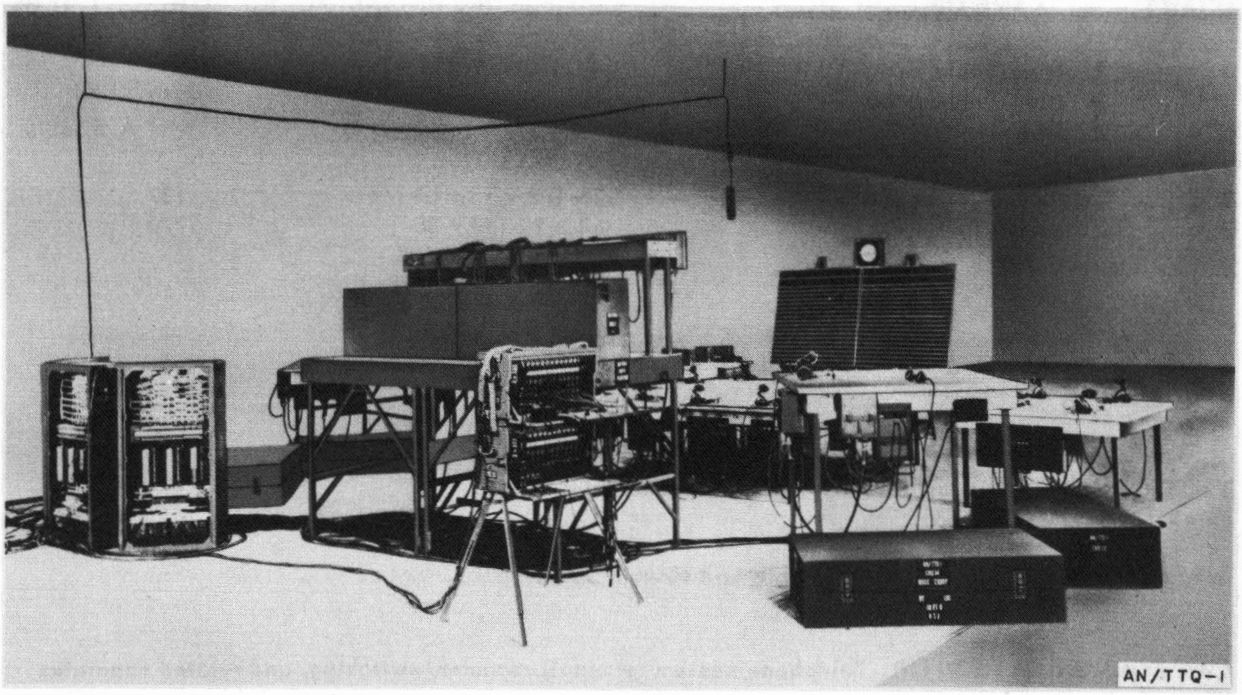
PHYSICAL CHARACTERISTICS

Converter Set TC-33 weighs 570 pounds net, volume 22 cu ft. Packed for export shipment: total weight 830 pounds, total volume 44 cu ft, 1.1 ship tons.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 6 Feb 52

AN/TTQ-1

OPERATIONS CENTER



Operations Center AN/TTQ-1 is a transportable filter and operations room which may be installed as a fixed or mobile control point in an air warning system. It is used at army or higher headquarters.

This operations center can be installed in permanent or semipermanent locations for filter, fighter control, and similar purposes.

It can be mounted in two 2-1/2-ton, 6 x 6 trucks and two 1-ton trailers to form a mobile or roving control center.

Provides facilities for receiving and plotting data on filter and operations boards, recording direction finding data on intercept boards, and resolving and relaying such data over communication lines.

Can be powered by the 6.3-kva power unit component or by an equivalent source.

AN/TTQ-1

OPERATIONS CENTER

INSTRUCTION LITERATURE: TM 11-438
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 6 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
4	Plotting Table FN-3/TTQ	47-3/4 x 47-3/4 x 28	255
4	Plotting Table FN-2/TTQ	46 x 12 x 28	255
2	Relay Unit RE-8/TTQ-1	19-3/4 x 8-1/2 x 5-1/2	Not Available
2	Relay Unit RE-24/TTQ	48 x 24 x 12	" "
2	Switchboard BD-72	28-1/2 x 15 x 10-1/4	137
2	Power Unit PE-197	44 x 22-1/4 x 30	770

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Support of army or higher headquarters.

INSTALLATION: Ground, fixed station or mobile.

CAN COMMUNICATE WITH: Telephone system terminal, repeater, switching, and related apparatus, and through these facilities to radio communication equipment operating in a fighter control system.

TECHNICAL CHARACTERISTICS

TYPE COMMUNICATION CIRCUITS: Conventional wire or radio.

POWER REQUIREMENTS: Power Unit PE-197 (6.3 kva, 120 v, 60 cyc).
40-amp-hr storage battery.

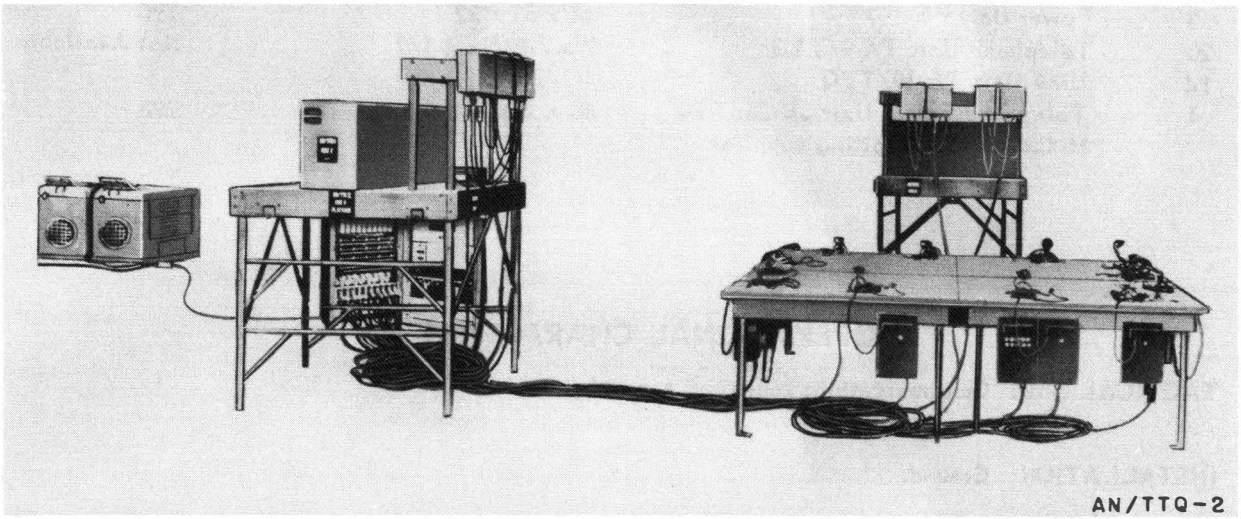
PHYSICAL CHARACTERISTICS

Operations Center AN/TTQ-1 packed for export shipment: total weight 6,500 pounds, total volume 260 cu ft, 6.5 ship tons. Shipped in 24 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 16 Jan 52

AN/TTQ-2

OPERATIONS CENTER



AN/TTQ-2

Operations Center AN/TTQ-2 is a complete, transportable assemblage of items which can be rapidly erected to serve as an antiaircraft operations room, an aircraft warning center or similar control center. It is designed to be used as the headquarters of an antiaircraft control system in the communications zone of a theater of operations and in the zone of interior.

This equipment consists essentially of telephone, line switching, lighting, and plotting equipment and includes items of furniture, a power supply, control components, and supplies.

Communication between this center and other military units or installations is maintained by radio and telephone facilities. Internal operational and administrative communication is conducted by means of an intercommunication system. Switchboard BD-95 is used to connect to incoming wire facilities and to switch internal telephones serving the center.

Power can be supplied by conventional or commercial sources of 115 v ac or by the power unit component.

AN/TTQ-2

OPERATIONS CENTER

INSTRUCTION LITERATURE: TM 11-448
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 16 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Relay Unit RE-24/TTQ-1	48 x 24 x 12	220
2	Power Unit PE-197	44 x 31 x 22	790
20	Telephone Unit TA-9/TTQ	9 x 7-5/8 x 4-1/2	Not Available
14	Line Unit TA-10/TTQ	4-1/2 x 5/8 x 9	" "
1	Telephone Power Unit SB-26/TTQ	48 x 24 x 12	298
	Miscellaneous plotting supplies		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Communications zones and zone of interior.

INSTALLATION: Ground.

CAN COMMUNICATE WITH: Telephone system terminal, switching, repeater, and station apparatus, and through these facilities to remotely located radio communication equipment forming a fighter control system.

TECHNICAL CHARACTERISTICS

TYPE COMMUNICATION CIRCUITS: Conventional wire and radio circuits.

CONTROLS: Eight radio channel control circuits.

POWER REQUIREMENTS: Commercial 115-v, 60-cyc source or from Power Unit PE-197.

PHYSICAL CHARACTERISTICS

Operations Center AN/TTQ-2 measures 240 x 264 x 108 inches. Packed for export shipment: total weight 7,836 pounds, total volume 318.5 cu ft, 8 ship tons. Shipped in 18 packages.

STATUS: Std

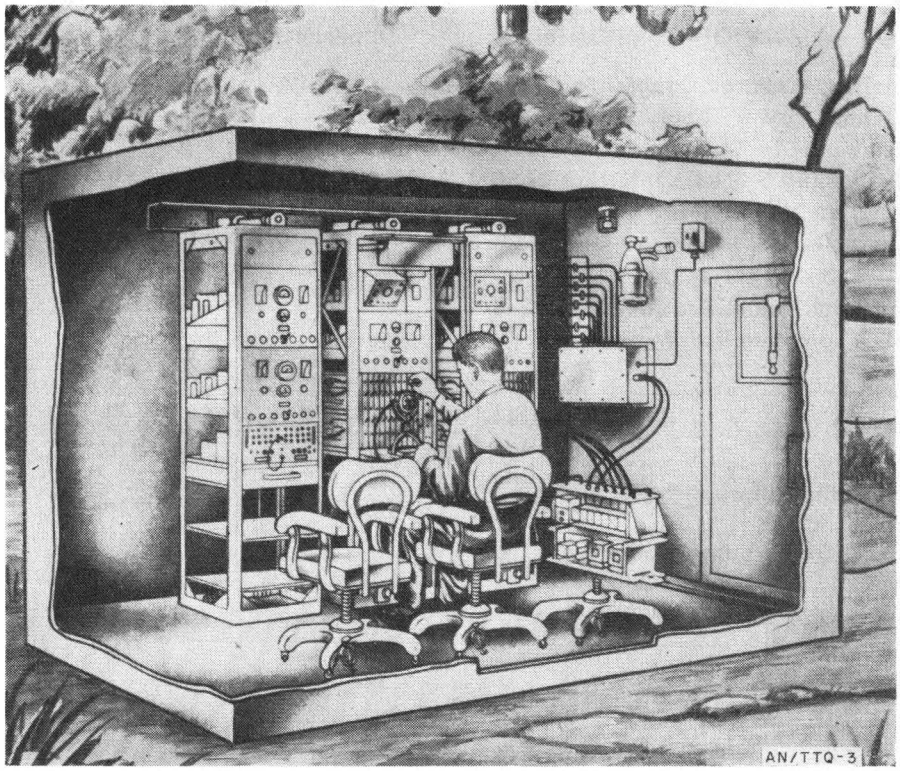
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 27 June 1956

AN/TTQ–3

RADIO INTERCEPT CONTROL SET



Radio Intercept Control Set AN/TTQ–3 provides facilities for the supervision and control of a number of such equipment as Radio Intercept Group OA–596/TTQ–3. In a complete radio intercept system, the AN/TTQ–3 can supervise and control eight such groups.

Operating in such a system, it provides monitoring of radio signals that are intercepted by the operating positions located at the remote groups; local monitoring of intercepted radio signals; wire communication with all operating positions; establishment of conference calls between all intercept operator positions that are connected through one control position; and coordination of direction-finding operations.

The components of this set are grouped into three operating positions. Two identical control operator positions provide communication and monitoring facilities for supervisory personnel. The third position provides similar facilities for the coordination of direction-finding operations. Wiring within the AN/TTQ–3 is such that each control operator position controls and supervises half the remote groups; the df tracker position can receive signals from all intercept operator positions.

AN/TTQ-3

RADIO INTERCEPT CONTROL SET

INSTRUCTION LITERATURE: TM 11-5067

USING SERVICE: USA

DATE OF THIS SHEET: 27 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Holder, Antenna Coupler MT-1032/GR	24½ x 10 x 17½	19
1	Control-Power Supply Group OA-323/G		128
1	Shelter S-44/G	136 x 71 x 74	2,127
2	Switchboard, Radio Intercept Control SB-213/TTQ-3	20¼ x 23¼ x 71½	1,166
1	Switchboard, Direction Finder Control SB-214/TTQ-3	20¼ x 23¼ x 71½	145
2	Test Set, Telephone TS-725/TTQ-3		46

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Special applications.

INSTALLATION: Ground, transportable.

TECHNICAL CHARACTERISTICS

POWER REQUIREMENTS: 1,500 w, 115 v, 55/65 cy ac.

PHYSICAL CHARACTERISTICS

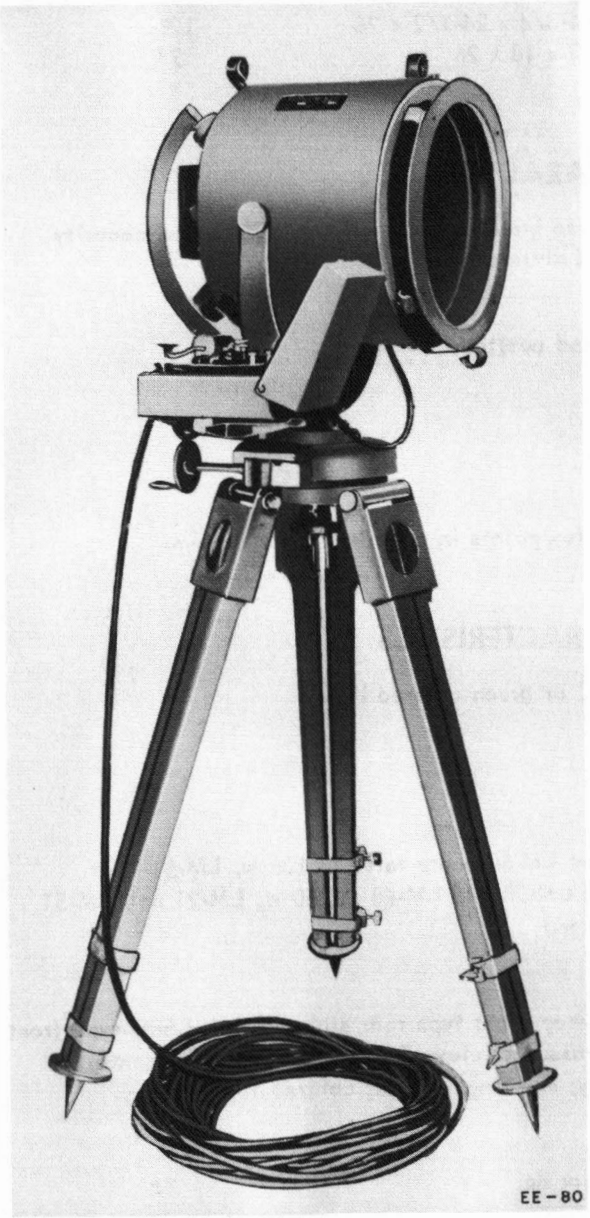
	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		3,897			
DOMESTIC PACK:					
EXPORT PACK:		6,000			

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 22 Jan 52

AN/TVC-TYPE

SERVICE TYPE NUMBER: EE-80

SIGNAL LAMP EQUIPMENT



Signal Lamp Equipment EE-80 is a portable, a-c or d-c operated, tripod-mounted signaling lamp in metal housing, with telegraph key, and is used for signaling with white or colored lights in Morse code.

It is used in the field or harbor defense, coastal signal station and similar applications.

Equipment consists of lamp housing with sighting and control fittings, telescoping tripod, white, red, or green light filters, and accessories.

Signal Lamp Equipment EE-80 includes Signal Lamp M-124; Signal Lamp Equipment EE-80-A uses Signal Lamp M-283, these lamps are interchangeable.

Signal Lamp Equipment EE-80 has been superseded by Signal Lamp Equipment EE-80-A.

AN/TVC-TYPE

EE-80 :SERVICE TYPE NUMBER

SIGNAL LAMP EQUIPMENT

INSTRUCTION LITERATURE: TM 11-390

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army

DATE OF THIS SHEET: 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Tripod LG-9	38-1/2 x 11	35
1	Chest CH-24	44-3/4 x 26-1/2 x 26	128
1	Signal Lamp M-124 or M-283, Filters, Lamps, Key J-47 etc.	30 x 18 x 26	74

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore signal stations, harbor defense installations, military police and security troops, infantry battalions, armored division traffic control.

INSTALLATION: Ground, portable, operates from fixed position.

APPROXIMATE RANGE (IN MILES): Day: - 7.
Night: - 45 .

CAN COMMUNICATE WITH: Observer stations, or relay points in a line-of-sight system.

TECHNICAL CHARACTERISTICS

NUMBER AND TYPE OF CHANNELS: 1 (white, red, or green colored light).

COMMUNICATION SPEED: Five wpm.

TYPE LIGHT SOURCE: Incandescent lamps. (Lamps LM-60-A are rated at 100 w; LM-51-A at 165 w; LM-20 and LM-60 at 250 w; LM-21 and LM-51 at 400 w.)

SPECIAL FEATURES: Lamp focusing adjustment, peep-sight type rear sight; crossed-hair-type front sight; gear adjustment mechanism for elevation and azimuthal alignment; telegraphic-type signaling key; masking louvres, colored light filters.

POWER REQUIREMENTS: 450 w of 110 ~ 120 v, ac or dc.

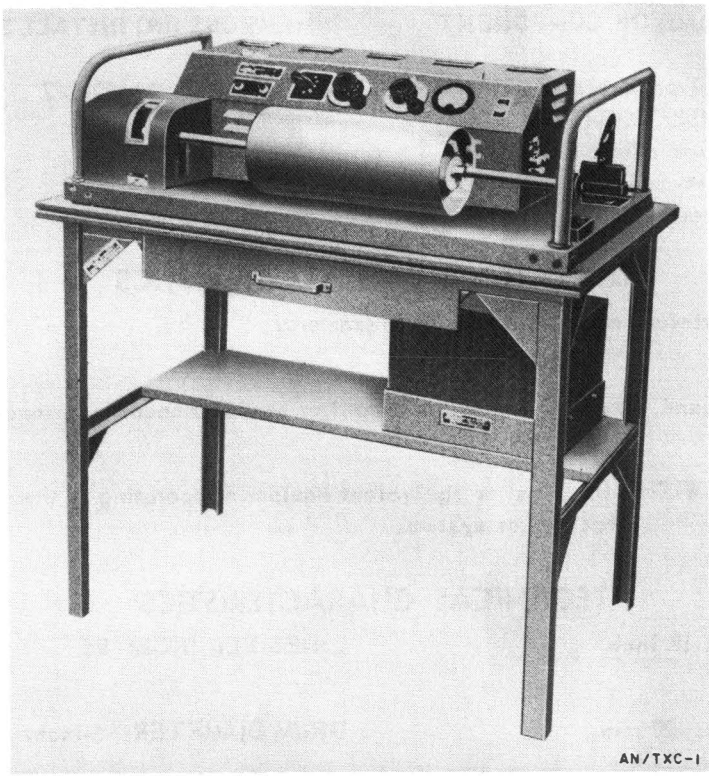
PHYSICAL CHARACTERISTICS

Signal Lamp Equipment EE-80 measures 60 x 60 x 60 inches, net weight 324 pounds, volume 4.0 cu ft.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 7 Feb 52

AN/TXC-1

FACSIMILE SET



Facsimile Set AN/TXC-1 is a transmitting and receiving equipment for communication of graphic material, such as documents, photographs, drawings, and charts, over conventional communication channels, and is used at division and higher headquarters.

This equipment consists essentially of a rotating drum and optical system and related control mechanisms which can be synchronized with transmitting or receiving facsimile sets operating on the same connecting facility.

This set can be used in wire lines by coupling directly to such facilities through input and output terminals provided on the equipment, or through a coil magnetically coupled to the receiver of a handset, or inductively to certain types of wire lines. It can also be used in radio circuits to produce an a-m signal by means of Converter CV-2/TX to operate on subcarrier frequencies; and by means of this converter in conjunction with Exciter Unit 0-5/FR to operate in frequency shift transmission.

Power requirements are: 250 w of 115-v ac.

AN/TXC-1

FACSIMILE SET

INSTRUCTION LITERATURE: TM 11-2258
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 7 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Facsimile Transceiver TT-1/TXC-1	40-1/2 x 15-1/2 x 22-1/2	218
1	Table MT-252/TXC-1	40 x 26 x 20	137
1	Rectifier Power Unit PP-86/TXC-1	17-1/2 x 15 x 15-1/4	89
1	Photographic Equipment PH-549/TXC-1 and spare parts	40 x 26 x 26	339

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division, corps or higher headquarters.

INSTALLATION: Ground, fixed station in permanent or semipermanent locations.

CAN COMMUNICATE WITH: Identical or equivalent equipment operating in the same connecting facility or system.

TECHNICAL CHARACTERISTICS

SIZE OF COPY: 12 x 18 inch.

LINES PER INCH: 96.

TRANSMISSION TIME: 20 min.

DRUM DIAMETER: 6-inch.

DRUM SPEED: 60 rpm.

PHASING SIGNAL: Pulse.

TYPE OF RECORDING: Direct, or photographic positive or negative.

TYPE OF MODULATION: The set itself is amplitude modulation. The frequency shift is in Converter CF-2/TX and is required only when the facsimile set is used on radio circuits.

TYPE TRANSMISSION FACILITIES REQUIRED: Balanced open wire, cable, or equal.

POWER REQUIREMENTS: 250 w at 100 to 130 v, 50/65 cyc.

PHYSICAL CHARACTERISTICS

Facsimile Set AN/TXC-1 weighs 190 pounds net, volume 10 cu ft. Packed for export shipment: total weight 783 pounds, total volume 39 cu ft, 1 ship ton.

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

AN/TXC–TYPE

CV–2( )/TX

CONVERTER

NO PHOTOGRAPH AVAILABLE

Converter CV–2( )/TX is used with Facsimile Equipment RC–120( ) to eliminate the effects of fading of facsimile signals sent over a regular am radio circuit.

This equipment consists of a converter, an indicator, cables, and accessories. It converts am facsimile signals to fm signals in the voice-frequency band. These signals are reconverted at the receiving end to am facsimile signals. A single converter is used with a facsimile transceiver for both sending and receiving.

The CV–2/TX and CV–2C/TX are functionally identical.

AN/TXC–TYPE

CV–2( )/TX

CONVERTER

INSTRUCTION LITERATURE: TM 11–2252A; TM 11–4021

USING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	For CV–2C/TX:		
1	Indicator ID–176/GX	3⅝ x 9⁹⁄₁₆ x 8⅝	3.1

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, transportable.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Converts am facsimile to fm voice.

POWER REQUIREMENTS: 100/130 v, 54/65 cy ac; 5.6 to 6.3 v dc.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET: CV–2C/TX	9½ x 11⁹⁄₁₆ x 13⅝	35	1.1		
DOMESTIC PACK:					
EXPORT PACK: CV–2C/TX		55	3.7		1

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 9 Feb 52

AN/TXC-TYPE

SERVICE TYPE NUMBER: RC-120

FACSIMILE EQUIPMENT



Facsimile Equipment RC-120 is a transmitting and receiving set used for communicating graphic copy. It will receive positive and negative photographs, printed or written copy, and similar material on film or direct on teledeltos paper which requires no processing. It is used in fixed stations over communication circuits serving corps and higher headquarters.

This equipment consists of a receiver-transmitter unit, power supply, and associated accessories. A portable dark room tent is included for field use.

Operates on conventional a-c power or storage batteries.

AN/TXC-TYPE	INSTRUCTION LITERATURE: TM 11-375-B
RC-120 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
FACSIMILE EQUIPMENT	USING SERVICE : Army
	DATE OF THIS SHEET : 9 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Facsimile Transceiver FX-1	22 x 12 x 10	60
1	Power Supply PE-150	8-3/4 x 11-1/2 x 14	60

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Corps and higher headquarters.

INSTALLATION: Fixed station.

CAN COMMUNICATE WITH: Identical or equivalent equipment or apparatus, operating in the connecting facility or system which can be adequately synchronized with this equipment.

TECHNICAL CHARACTERISTICS

SIZE OF COPY: Record direct: 6-1/4 x 7-3/8 inches.
Record photo: 6-3/4 x 7-3/8 inches.

TRANSMISSION TIME: Direct, and photo transmission: 7 minutes.

DRUM SPEED: 90 rpm.

TYPE OF RECORDING: Direct (teledeltos); photographic (positive and negative).

PHASING SIGNAL: Phase pulses.

TYPE OF MODULATION: Am.

TYPE TRANSMISSION FACILITIES REQUIRED: Regular voice communication lines, and/or radio terminals.

POWER REQUIREMENTS: 100 - 130 v, 50/60 cyc, ac; or, 6 v, dc (storage battery).

PHYSICAL CHARACTERISTICS

Information on Facsimile Equipment RC-120 not available.

STATUS: S/Std (–41,.–41A); Std (–41B)

CLASSIFICATION OF EQUIPMENT: Unclassified

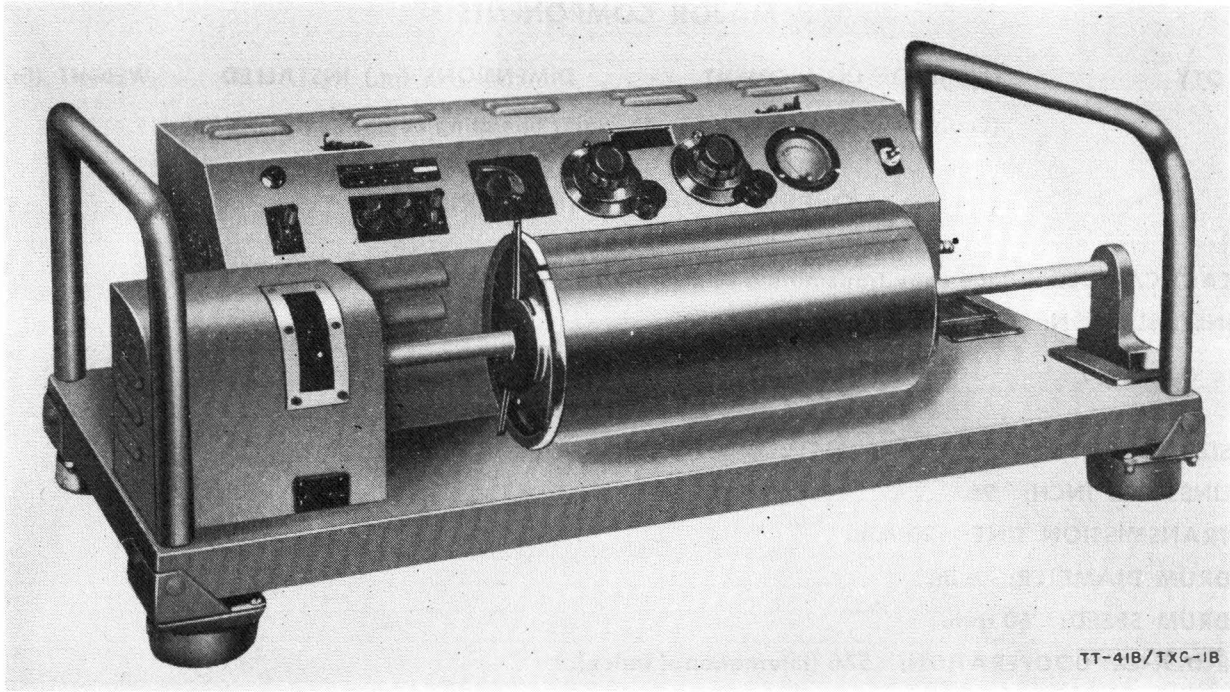
PREPARING SERVICE: USN

DATE OF THIS SHEET: 27 June 1956

AN/TXC–TYPE

TT–41( )/TXC–1B

FACSIMILE TRANSCEIVER



Facsimile Transceiver TT–41( )/TXC–1B is an electromechanical-optical facsimile set of the revolving drum type used for transmission and reception of maps, photographs, sketches, or text between fixed stations, over point-to-point radio or wire communication channels.

The major differences between the TT–41/TXC–1B, TT–41A/TXC–1B, and TT–41B/TXC–1B are those of replaceable parts.

Radio Modulator MD–168/UX is required for audio frequency-shift radio transmission; Frequency Shift Converter CV–172/U, for radio reception; and Keyer Adapter KY–44( )/FX and Frequency Shift Keyer KY–58/GRT or KY–75/SRT, for carrier-shift radio transmission.

AN/TXC–TYPE

TT–41( )/TXC–1B

FACSIMILE TRANSCEIVER

INSTRUCTION LITERATURE: NAVSHIPS 91068A

USING SERVICE: USN

DATE OF THIS SHEET: 27 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	(Equipment consists of a single major operating component.)		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Page copy transmitting and receiving.

INSTALLATION: Ground, transportable.

TECHNICAL CHARACTERISTICS

SIZE OF COPY: 12 x 19⅙ in. (–41); 12 x 18^{11}⁄$_{16}$ in. (–41A, –41B).

LINES PER INCH: 96.

TRANSMISSION TIME: 20 min.

DRUM DIAMETER: 6 in.

DRUM SPEED: 60 rpm.

INDEX OF COOPERATION: 576 (international index).

TYPE OF RECORDING: Direct or photographic.

PHASING SIGNAL: Pulse (1/sec).

TYPE MODULATION: Am, 1.8-kc carrier freq on wire lines.

TYPE TRANSMISSION FACILITIES REQUIRED: Conventional am (voice) radio xmtr, rcvr converter w/exciter, and cw radio xmtr and rcvr or wire transmission facilities.

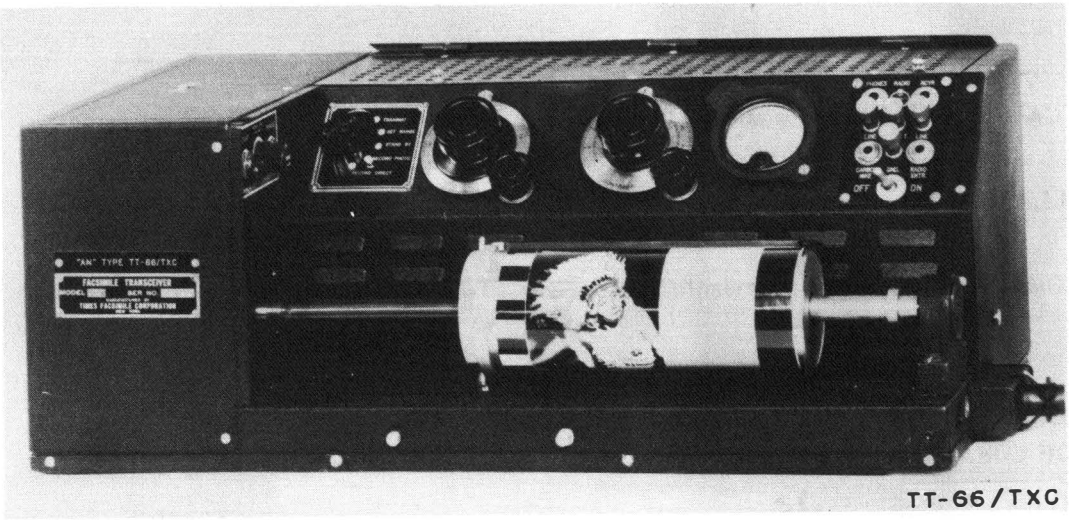
OUTPUT VOLTAGE LEVEL AND IMPEDANCE: 0 to +25 dbm, 600 ohms.

POWER REQUIREMENTS: 250 w, 100 to 130 v, 50/65 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
TT–41/TXC–1B	22½ x 35 x 18½	85			
TT–41A or TT–41B/TXC–1B	12¼ x 34⅝ x 17^{13}⁄$_{16}$	70			
DOMESTIC PACK:		218	12.7		1
EXPORT PACK:					

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 May 52	AN/TXC-TYPE AN/COMP TYPE NUMBER: TT-66/TXC FACSIMILE TRANSCEIVER



TT-66/TXC

Facsimile Transceiver TT-66/TXC is a transportable, general purpose transmitting and receiving unit for communication by means of photographic, written, or drawn material.

It consists essentially of a commercial (Times Facsimile Corp. Model CRA) equipment and is similar to Signal Corps Facsimile Transceiver FX-1, but is designed for two-speed operation.

This equipment is used with Rectifier Power Unit PP-86/TXC-1. It is not designed to operate from a battery power supply.

AN/TXC-TYPE	INSTRUCTION LITERATURE: Not Available
TT-66/TXC :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
FACSIMILE TRANSCEIVER	USING SERVICE : Navy
	DATE OF THIS SHEET: 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component).

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore communication stations.

INSTALLATION: Shipborne or shore.

CAN COMMUNICATE WITH: Facsimile Transceiver TT-66/TXC-1 and equivalent equipment.

TECHNICAL CHARACTERISTICS

SIZE OF COPY: 7 x 8-1/2 inches.

LINES PER INCH: 96.

TRANSMISSION TIME: 14 min. or 7 min.

DRUM DIAMETER: 2-3/4 inches.

DRUM SPEED: 45 or 90 rpm.

INDEX OF COOPERATION: 264.

TYPE OF RECORDING: Photographic or direct ("Teledeltos").

PHASING SIGNAL: (Prior to copy transmission).

TYPE OF MODULATION: Am (1800 cps carrier frequency).

TYPE TRANSMISSION FACILITIES REQUIRED: Wire or radio circuit capable of carrying voice (1200-2400 cps, compensated bandwidth).

POWER REQUIREMENTS: PP-86/TXC-1 required.

VOLTAGE LEVEL AND IMPEDANCE:
Output: 0 to +26 dbm (600 ohms).
Input: -45 to 0 dbm (600 ohms).

PHYSICAL CHARACTERISTICS

Facsimile Transceiver TT-66/TXC weighs 60 pounds net, volume 2 cu ft.

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

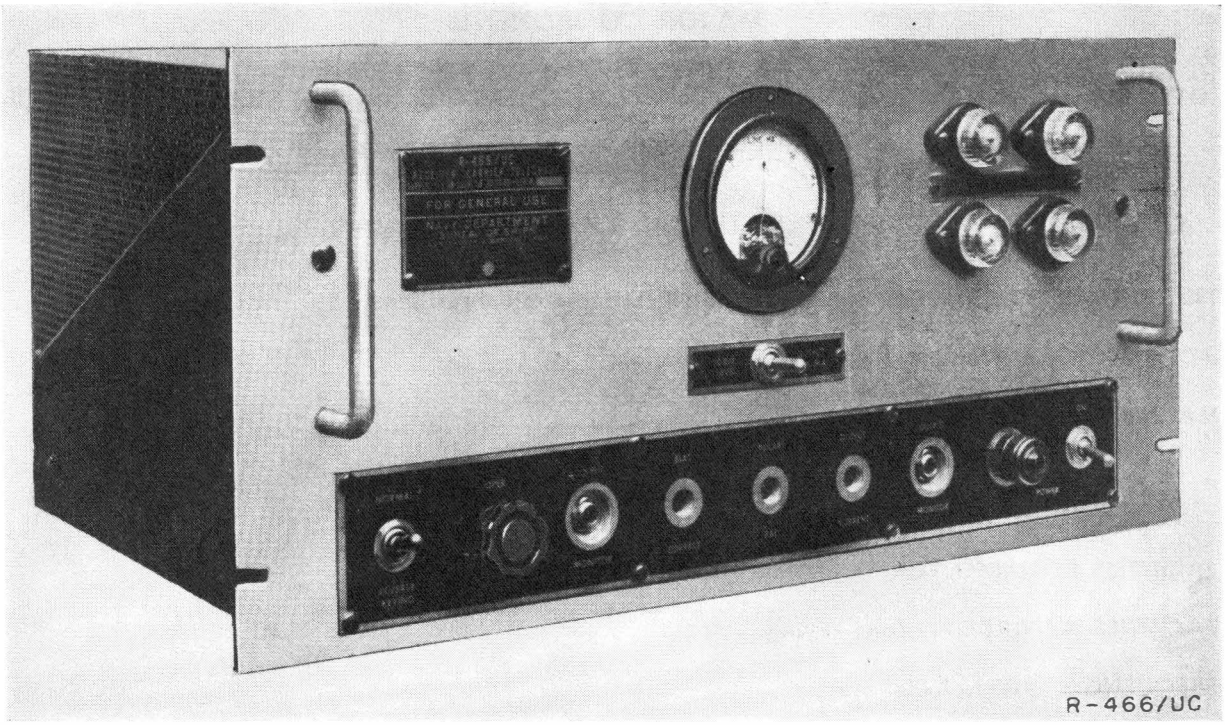
PREPARING SERVICE: USN

DATE OF THIS SHEET: 11 May 1956

AN/UCA—TYPE

R–466/UC

RECEIVER, CARRIER TELEGRAPH



Carrier Telegraph Receiver R–466/UC is capable of accepting an on-off tone telegraph signal and emitting a corresponding dc signal for use with such carrier terminal equipment as the AN/FCC–3.

This equipment can key a 20- to 60-ma neutral telegraph loop with battery supplied either from the receiver or the loop. It also may be used to key a 30-ma polar loop with battery supplied from the receiver.

AN/UCA–TYPE

R–466/UC

RECEIVER, CARRIER TELEGRAPH

STRUCTION LITERATURE: NAVSHIPS 91612

USING SERVICE: USN

DATE OF THIS SHEET: 11 May 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Operation with multichannel carrier terminal facilities.

INSTALLATION: Shipboard or shore, fixed station.

MAXIMUM SYSTEM LENGTH:

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION:

FACILITIES AFFORDED: Tone keying.

FREQUENCY: 400 to 8,000 cy.

TYPE MODULATION: Am.

TYPE RINGING:

POWER REQUIREMENTS: 150 w, 115/230 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	19 x 14 9/16 x 8	36.5	1.38		
DOMESTIC PACK:		94.5	9.25		1
EXPORT PACK:					

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

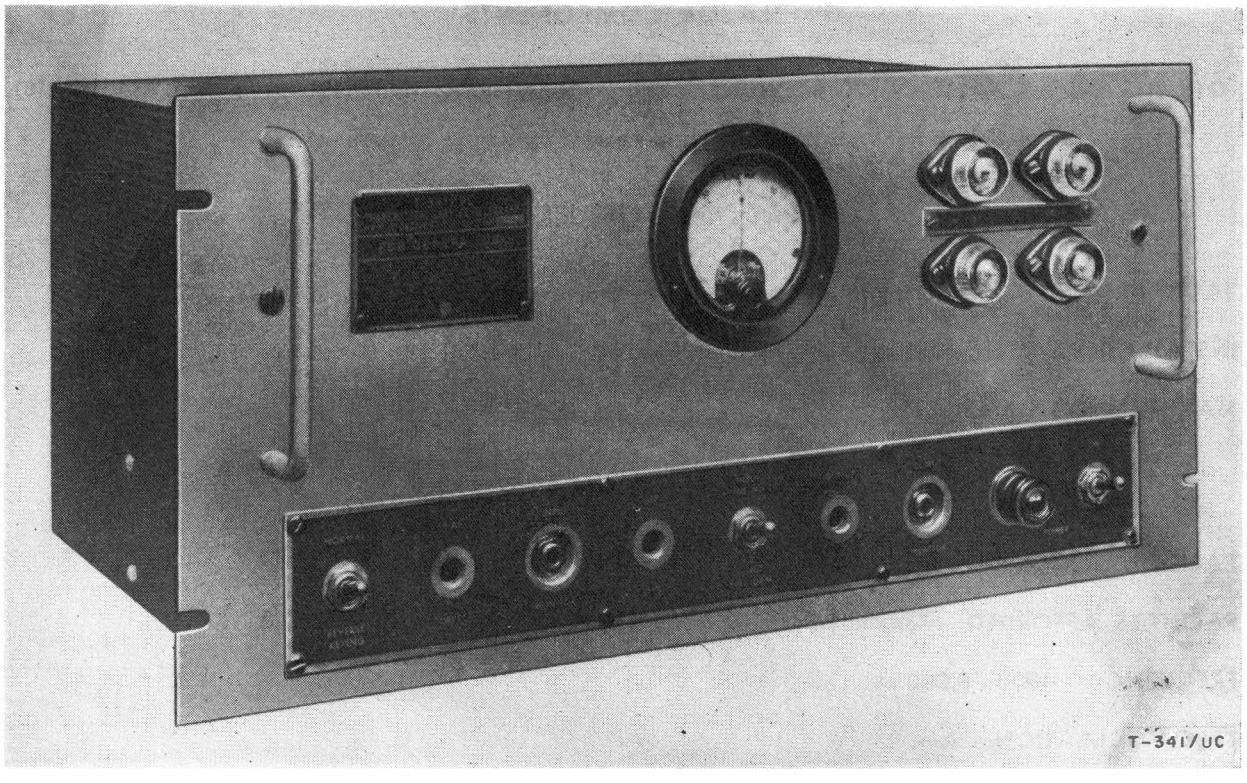
PREPARING SERVICE: USN

DATE OF THIS SHEET: 11 May 1956

AN/UCA—TYPE

T–341/UC

TRANSMITTER, CARRIER TELEGRAPH



Carrier Telegraph Transmitter T–341/UC is capable of accepting a dc telegraph signal and emitting a corresponding on-off tone signal for use with such carrier telegraph terminals as the AN/FCC–3.

This equipment can be keyed from a 20- to 60-ma neutral telegraph loop with battery supplied either from the transmitter or the loop. It is also capable of being keyed from a 30-ma loop with battery supplied from the loop.

AN/UCA–TYPE

T–341/UC

TRANSMITTER, CARRIER TELEGRAPH

INSTRUCTION LITERATURE: NAVSHIPS 91663

USING SERVICE: USN

DATE OF THIS SHEET: 11 May 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Operation with multichannel carrier terminal facilities.

INSTALLATION: Shipboard or shore, fixed station.

MAXIMUM SYSTEM LENGTH:

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION:

FACILITIES AFFORDED: Tone keying.

FREQUENCY: 400 to 8,000 cy.

TYPE MODULATION: Am.

TYPE RINGING:

POWER REQUIREMENTS: 70 w, 115/230 v, 50/60 cy ac.

PHYSICAL CHARACTERISTICS

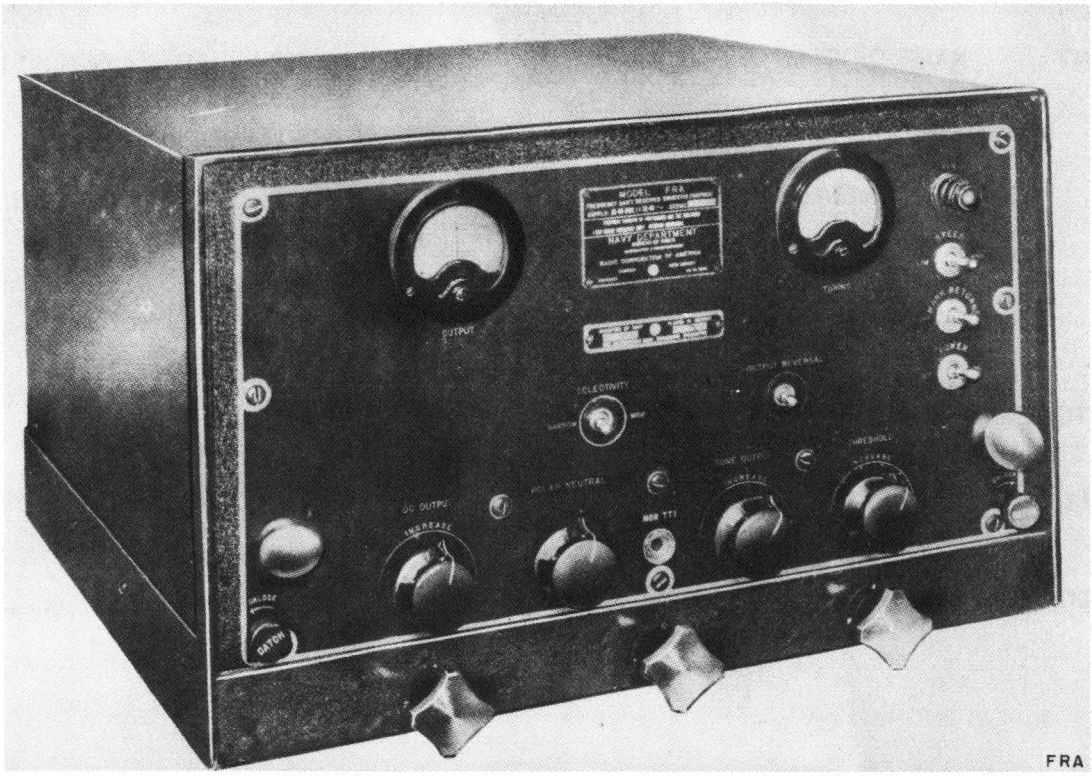
	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	19 x 14 9/16 x 8 23/32	34.5	1.38		
DOMESTIC PACK:		92.5	9.25		1
EXPORT PACK:					

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/UGA-TYPE

SERVICE TYPE NUMBER: FRA

FREQUENCY SHIFT RECEIVER CONVERTER EQUIPMENT



Frequency Shift Receiver Converter Equipment FRA is a single channel, i-f type set for translating radiotelegraph characters and furnishing d-c mark-and-space pulses for operation of a teletypewriter when used in conjunction with Radio Receiving Equipments RBB and RBC.

By means of Panoramic Coupling Kit 10563, signal voltage is coupled from the last i-f tube of the receiver equipment. It is used with associated receiver equipment to provide ship-to-shore and point-to-point radiotelegraph or radioteletype reception.

This converter unit is designed to operate on any magnitude of shifts from 100 $\pm$ 50 cyc to 1,000 $\pm$ 500 cyc. The mark-and-space carrier frequency most commonly received is, respectively, 425 cps above and 425 cps below the assigned frequency of the transmitter.

A mark-return circuit is embodied in the unit to prevent the output from remaining on space for a period longer than 200 milliseconds.

The equipment is designed for polar or neutral operation of the teletypewriter.

AN/UGA-TYPE

FRA :SERVICE TYPE NUMBER

FREQUENCY SHIFT RECEIVER CONVERTER EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,613
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Frequency Shift Receiver Converter CRV-35122	11-3/4 x 19-3/4 x 18-1/4	98
1	Panoramic Coupling Kit, CN-10563	4 x 3 x 2	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard, shore stations.

INSTALLATION: Shipborne, ground.

CAN COMMUNICATE WITH: This is signal-modifying equipment used in conjunction with primary communication apparatus.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.4.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Frequency-shift keying.

POWER OUTPUT: 60 ma dc for neutral or 25 ma dc for polar; into load impedance of 130 to 1,800 ohms.

POWER REQUIREMENTS: 135 w, 110 ~ 120 v, 60 cyc, 1 phase ac.

PHYSICAL CHARACTERISTICS

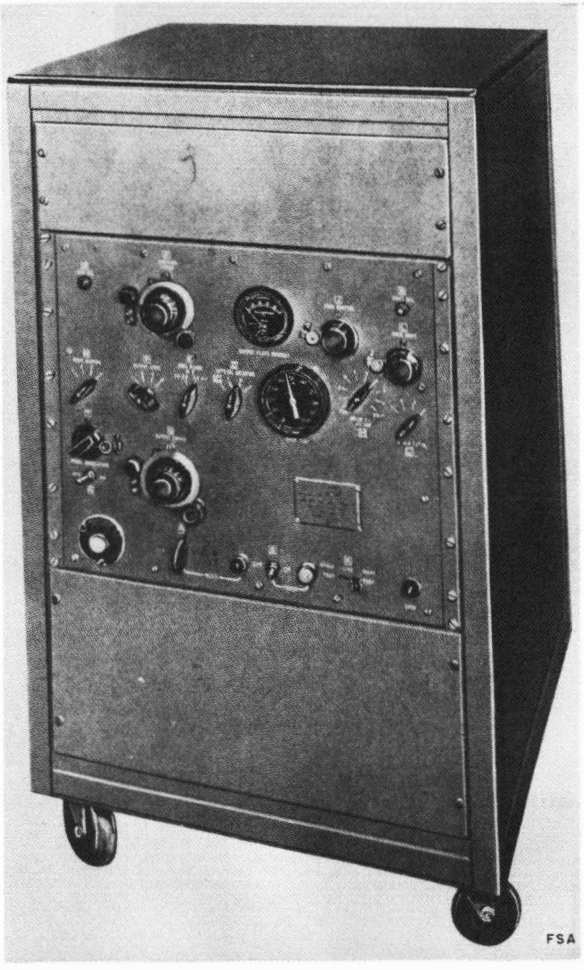
Frequency Shift Receiver Converter Equipment FRA measures 11-3/4 x 19-3/4 x 18-1/4 inches, net weight 175 pounds, volume 2.44 cu ft. Packed for domestic shipment: total weight 335 pounds.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 15 May 52

AN/UGA-TYPE

SERVICE TYPE NUMBER: FSA, FSA-a, -b

FREQUENCY SHIFT KEYER EQUIPMENT


FSA

Frequency Shift Keyer Equipments FSA, FSA-a, and FSA-b are auxiliary keying units used with shipborne or shore-based transmitters in long distance h-f telegraph systems to cause a radio transmitter to emit one frequency for a mark signal and a different frequency for a space signal (rather than to interrupt a single-frequency carrier). This two-frequency method of operation is less subject to distortion from radio fading and thus results in improved transmission. The keyer output is connected to the power amplifier of a radio transmitter. The FSA-a, and -b have provisions for facsimile operation as well as frequency-shift keying.

The keyer input frequency is 200 kc lower than the r-f output frequency. This frequency is obtained either from a self-contained crystal oscillator with three-preset channels or from an external oscillator which may be the oscillator of the associated transmitter.

Input telegraph signals up to 600 wpm can be handled. Signals may originate from a telegraph key, a teletypewriter keyboard, or a tape transmitter.

The equipment is mounted in a mobile cabinet for land installation, in a shock-resisting cabinet when used aboard ship, or inside the associated radio transmitter if space is available.

AN/UGA-TYPE

FSA, FSA-a, -b :SERVICE TYPE NUMBER

FREQUENCY SHIFT KEYER EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,754
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET: 15 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Frequency Shift Keyer CW-35060 *	16 x 19 x 18	130
1	Mobile Cabinet CW-10389	37 x 22 x 24	165
	or Shock Resisting Cabinet CW-10390	20 x 20 x 25	150

* Applies to FSA.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, or ground.

CAN COMMUNICATE WITH: This is signal-modifying equipment used in conjunction with primary communication apparatus.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.0 - 6.7 in 2 bands:

Band 1: 1.0 - 2.6. Band 2: 2.6 - 6.7.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: FSA: Frequency shift.
FSA-a, -b: Frequency shift, facsimile.

POWER OUTPUT: 20 v across 75 ohm.

POWER REQUIREMENTS: 200 w, 115 / 230 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Frequency Shift Keyer Equipments FSA, FSA-a, -b measure 37 x 22 x 24 inches, net weight 445 pounds, volume 11.3 cu ft. Packed for domestic shipment: total weight 752 pounds, total volume 42 cu ft, 1.5 ship tons.

STATUS: S/Std (–47, –48); Std (–47A, –48A)

CLASSIFICATION OF EQUIPMENT: Unclassified

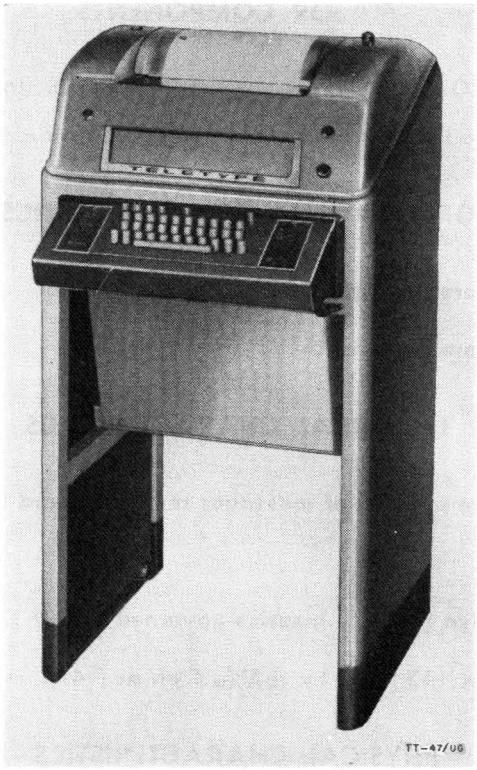
PREPARING SERVICE: USN

DATE OF THIS SHEET: 27 June 1956

AN/UGC–TYPE

TT–47( )/UG, TT–48( )/UG

TELETYPEWRITER



Teletypewriters TT–47( )/UG and TT–48( )/UG are used for transmission or reception over wire or radio communication circuits.

These teletypewriters are identical except for the type of motor used. The TT–47/UG and TT–47A/UG use a synchronous motor (PD–17/U or PD–17A/U); the TT–48/UG and TT–48A/UG use a series-governed motor (PD–18/U). The later models of these teletypewriters have an increased number of connectors in the terminals, a new and improved keyboard, and an increase to 85 characters per line, as well as various other electrical and mechanical improvements.

These equipments are similar to Teletypewriters TT–69( )/UG and TT–70( )/UG except for the type of cabinet supplied.

AN/UGC—TYPE

TT—47( )/UG, TT—48( )/UG

TELETYPEWRITER

INSTRUCTION LITERATURE: NAVSHIPS 91713

USING SERVICE: USN

DATE OF THIS SHEET: 27 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(For complete list of major components, see instruction literature.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard; shore installations.

INSTALLATION: Shipborne; shore stations.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Page printing of messages recd; keyboard typing of messages xmtd.

OPERATING SPEED: 368 opm.

MOTOR CHARACTERISTICS: Syn (–47( )); series-governed (–48( )).

POWER REQUIREMENTS: 65 w, 115 v, 60 cy ±5%, 1 ph ac (–47).

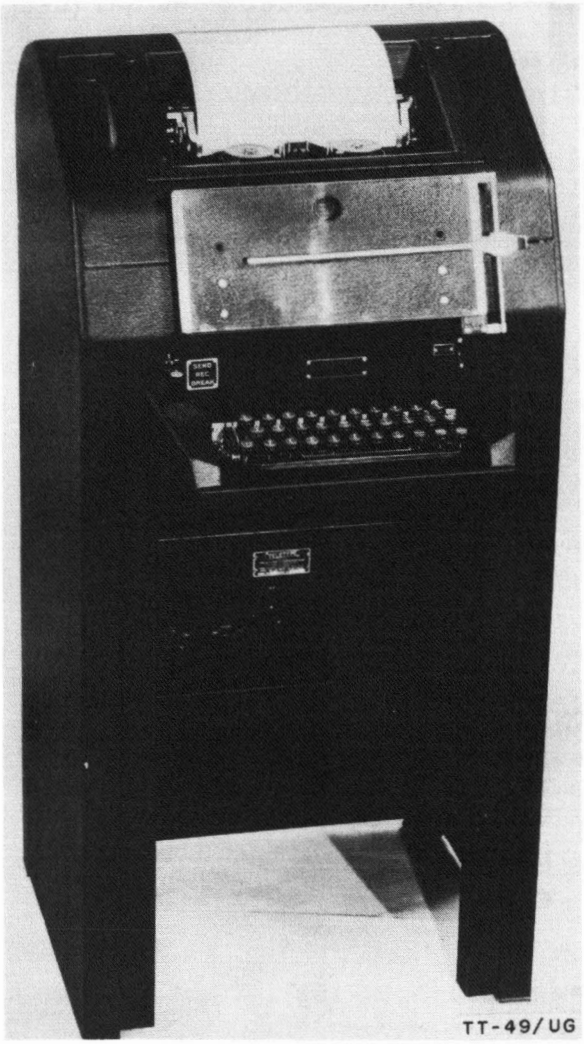
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	40½ x 20½ x 18¼	130			
DOMESTIC PACK:		315	24.09	.6	1
EXPORT PACK:					

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 8 May 52

AN/UGC-TYPE

AN/COMP TYPE NUMBER: TT-49/UG, TT-50/UG
TELETYPEWRITER



TT-49/UG

Teletypewriters TT-49/UG and TT-50/UG are page-printing teletypewriter station equipments used on shipboard, or at shore stations. They type English characters; 72 characters per line and are identical except for the motor unit component of each.

They are essentially similar to the commercial (Teletype Corp Model 15) teletypewriter with combined base-keyboard but have been modified for shipboard operation by use of aluminum side frames, a new carriage return assembly, and lighter weight carriage parts.

As a result of these modifications, they operate satisfactorily while tilted as much as 45 degrees.

AN/UGC-TYPE

TT-49/UG, TT-50/UG :AN/COMP TYPE NUMBER

TELETYPEWRITER

INSTRUCTION LITERATURE: NavShips 91128
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET: 8 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Typing Unit BP149/247	Not Available	Not Available
1	Base-Keyboard BBK200BJ/LD	" "	" "
1	Motor Unit MU40	" "	" "
1	Apparatus Cabinet AC203BJ	" "	" "
1	Gear Set 80437	" "	" "
1	Set of Equipment Spares 106965	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

CAN COMMUNICATE WITH: Terminal, repeater, and related equipment operating in the connecting facility or system.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Break-in, Remote motor stop, Bell, Blank, Shift and unshift, Space-repeat, Unshift on-space, Line feed, Carriage Return.

OPERATING SPEED: 368 opm; approximately 61 wpm.

MOTOR CHARACTERISTICS: TT-49/UG: Synchronous motor unit, for regulated power supply.
TT-50/UG: Series, governor-controlled, for unregulated power supply.

POWER REQUIREMENTS: TT-49/UG: 175 w, 115 v, 60 ($\pm$ 0.05) cyc, 1 phase, ac.
TT-50/UG: 175 w, 115 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Information on Teletypewriters TT-49/UG and TT-50/UG not available.

STATUS: S/Std (–69, –70); Std (–69A, –70A)

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 27 June 1956

AN/UGC–TYPE

TT–69( )/UG, TT–70( )/UG

TELETYPEWRITER



Teletypewriters TT–69( )/UG and TT–70( )/UG are used for transmission or reception over wire or radio communication circuits.

These teletypewriters are identical except for the types of motors used. The TT–69/UG and TT–69A/UG use a synchronous motor; the TT–70/UG and TT–70A/UG use a series-governed motor. The later models of these teletypewriters have an increased number of connectors in the terminals, a new and improved keyboard, and an increase to 85 characters per line, as well as various other electrical and mechanical improvements.

Except for the type of cabinet supplied, these equipments are similar to Teletypewriters TT–47( )/UG and TT–48( )/UG.

AN/UGC–TYPE

TT–69( )/UG, TT–70( )/UG

TELETYPEWRITER

INSTRUCTION LITERATURE: NAVSHIPS 91713

USING SERVICE: USN

DATE OF THIS SHEET: 27 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(For complete list of major components, see instruction literature.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard; shore installations.

INSTALLATION: Shipborne; ground.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Page printing of messages recd; keyboard typing of messages xmtd.

OPERATING SPEED: 368 opm.

MOTOR CHARACTERISTICS: Syn (–69( )); series-governed (–70( )).

POWER REQUIREMENTS: 65 w, 115 v ±10%, 60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	15½ x 20½ x 18¼	119	7.36		
DOMESTIC PACK:		250	18.88		
EXPORT PACK:					

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 28 June 1956

AN/UGC–TYPE

TT–176/UG

TELETYPEWRITER



Teletypewriter TT–176/UG is a general purpose transmitting and receiving page printer used to exchange typewritten messages between two or more ships (or stations) that are connected via a radio (or wire) telegraph channel.

The operating speed of this equipment is 60 words per minute but can be increased to 75 or 100 words per minute by replacing appropriate gears (not supplied).

AN/UGC-TYPE

TT-176/UG

TELETYPEWRITER

INSTRUCTION LITERATURE: NAVSHIPS 92361

USING SERVICE: USN

DATE OF THIS SHEET: 28 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	(Equipment consists of a single major operating component.)		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard; shore installations.

INSTALLATION: Shipborne; shore stations.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS:

OPERATING SPEED: 368 opm.

MOTOR CHARACTERISTICS: Syn (1,800 rpm).

POWER REQUIREMENTS: 65 w, 115 v, 60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	12 x 17 x 24	81	6.9		
DOMESTIC PACK:		230	19.7		
EXPORT PACK:					

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 20 June 1956

AN/UGR–TYPE

CV–62/U

CONVERTER, FREQUENCY SHIFT

NO PHOTOGRAPH AVAILABLE

Frequency Shift Converter CV–62/U is used to convert af, fsk signals or make-and-break teletypewriter signals into dc output pulses for the operation of a teletypewriter.

It is intended for use at the receiving terminal of a radioteletype system and is arranged for rack-and-panel mounting.

AN/UGR–TYPE

CV–62/U

CONVERTER, FREQUENCY SHIFT

INSTRUCTION LITERATURE:

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 20 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS(in.) INSTALLED	WEIGHT (lb)
	(Equipment consists of a single major operating component.)		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

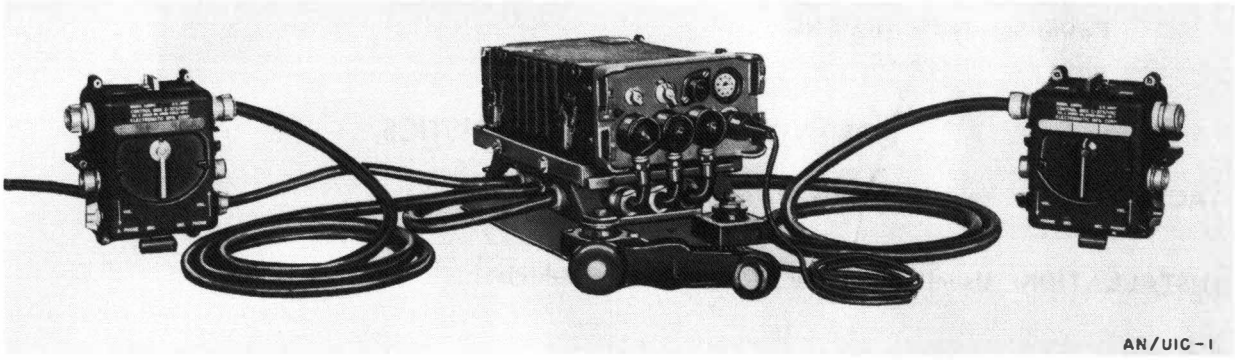
TYPE OF COMMUNICATION CIRCUITS: 1- or 2-chan diversity for fsk sig; ctr freq of 2,500 cy w/shifts of 100 to 1,100 cy.
1- or 2-chan diversity for make-and-break sig in the range of 500 to 5,000 cy.
1-chan (using ext discriminator) w/ctr freq bet. 850 and 5,000 cy.

POWER REQUIREMENTS: 130 va, 115 v ±10%, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	10½ x 13½ x 19	60	1.6		
DOMESTIC PACK:					
EXPORT PACK:		155	12.1		1

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 22 Jan 52	**AN/UIC-1** INTERCOMMUNICATION SET



AN/UIC-1

Intercommunication Set AN/UIC-1 is a vehicular interphone equipment used to provide two-way communication in inclosed or armored vehicles.

This equipment consists of an audio power amplifier, two interphone control stations, and power components plus accessories, depending upon the type of vehicle in which the system is installed. An additional control box can be added to the system.

This equipment provides control of one or two radio sets installed and operated within the vehicle equipped with this interphone system. It is designed for use in conjunction with the integrated series of radio equipment.

It is powered from vehicular 12-v or 24-v storage batteries through appropriate power supply components.

AN/UIC-1

INTERCOMMUNICATION SET

INSTRUCTION LITERATURE: TM 11-2643
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	AF Amplifier AM-65/GRC	4-1/4 x 12-7/8 x 7-7/8	10.0
2	Control Box C-375/VRC	6-13/16 x 3-1/4 x 7	3.25
1	Mounting MT-300/GR	3-1/16 x 13 x 8-5/16	10.0
1	Power Supply PP-281/GRC or Power Supply PP-282/GRC	4-1/4 x 5-3/4 x 2-15/16	5.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Vehicles of armored and artillery units.

INSTALLATION: Usually installed in large armored vehicles.

CAN COMMUNICATE WITH: Radio equipment and stations of the vehicle in which it provides interphone facilities.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Two or more stations. Each station can accommodate two operators; amplifier can accommodate another. Amplified signals supplied to all positions.

TYPE CONTROLS: Volume selector switch (on amplifier).
Two volume switches, a station selector switch, and a RADIO TRANS switch (on control box).

POWER OUTPUT: 0.35 to 1.8 w depending on input signal and channel.

POWER REQUIREMENTS: 3.85 amp at 12 v (using Power Supply PP-281/GRC) or
2.4 amp at 24 v (using Power Supply PP-282/GRC).

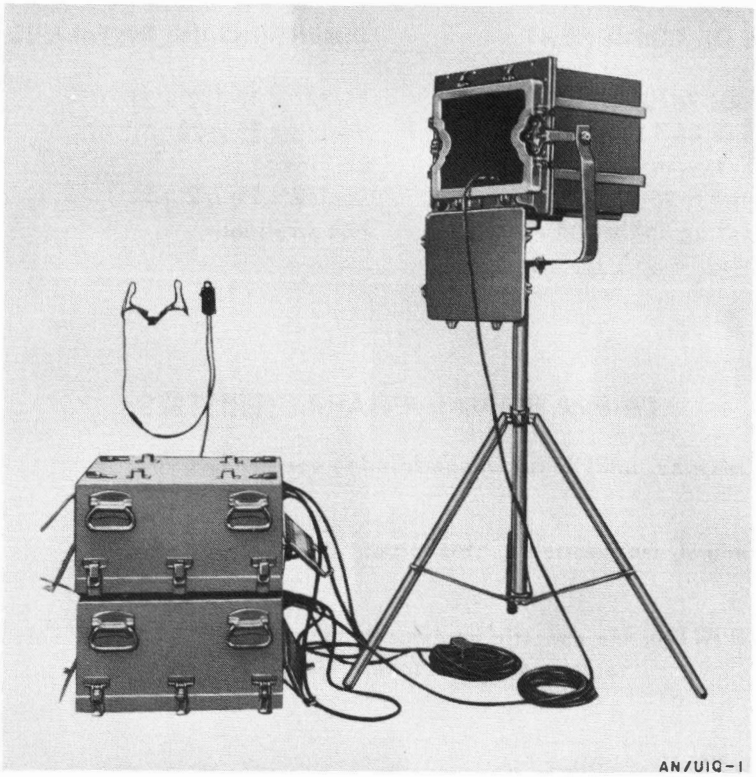
PHYSICAL CHARACTERISTICS

Intercommunication Set AN/UIC-1 weighs 38.3 pounds net, volume 0.78 cu ft. Packed for export shipment: total weight 71 pounds, total volume 1.72 cu ft. Shipped in 2 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 30 Jan 52

AN/UIQ-1

PUBLIC ADDRESS SET



Public Address Set AN/UIQ-1 is a high-power, transportable, field, sound amplifying and projecting equipment used to deliver commands, instructions, and similar matter to distances up to 2 miles. It is used to direct landings, command ground operations from aircraft, issue instructions to enemy personnel under combat conditions, and similar applications.

This equipment consists essentially of two amplifiers, which operate in parallel, and loudspeaker equipment with accessories.

There are two general types of this equipment, one of which (not illustrated) is equipped with a megaphone-type horn fitted to the loudspeaker face. This set is carried in watertight carrying cases permitting the floating of the equipment ashore during amphibious operations.

Power is derived from the two field power units which are components of this equipment.

AN/UIQ-1

PUBLIC ADDRESS SET

INSTRUCTION LITERATURE: TM 11-2505
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 30 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Amplifier AM-76/UIQ-1	11-3/4 x 17-1/2 x 21	123
1	Loudspeaker LS-111A/UIQ-1	16-1/2 x 21 x 22	
1	Tripod MT-356/UIQ-1	44 high	19
2	Power Unit PE-75	26-1/2 x 19-1/2 x 36	330
	Interconnecting cable and spare fuses, tubes, lamps	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company, army level, range training command.

INSTALLATION: Ground, transportable, shipborne.

CAN COMMUNICATE WITH: No specific equipment. Sound-in-air apparatus which projects sound to groups of personnel.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Single-channel public address and audio amplification.

TYPE CONTROLS: Volume and power on-off switches.

POWER OUTPUT: 350 w peak.

POWER REQUIREMENTS: Two Power Units PE-75 (one for each amplifier).

For each amplifier: 440 w rated / 520 w peak at input of 115-127 v, 60 cyc.

PHYSICAL CHARACTERISTICS

Information on Public Address Set AN/UIQ not available.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 11 Jan 52	**AN/UIQ-3** PUBLIC ADDRESS SET



Public Address Set AN/UIQ-3 is a transportable, high-power, long-range, sound amplifying and projecting equipment used for directing landings, commanding ground operations, issuing orders under combat conditions, and similar operations.

This equipment consists of corrosion-resistant components which are easily assembled, are water-tight when container covers are closed, and can be floated ashore during amphibious operations. May be operated on power supplied by a field power unit.

AN/UIQ-3

PUBLIC ADDRESS SET

INSTRUCTION LITERATURE: TM 11-2560
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 11 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Amplifier MC-225	11-3/4 x 17-1/2 x 21	157
1	Speaker AA-7	24-1/2 x 18-1/4 x 23-1/4	205
1	Stand	44 high	19
1	Microphone T-45	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Engineer, amphibious support regiment.

INSTALLATION: Ground, portable; and shipborne.

CAN COMMUNICATE WITH: No specific equipment. Sound-in-air apparatus which projects sound to groups of personnel.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Single-channel public address and audio amplification.

TYPE CONTROLS: Power: on-off switch.
Microphone: on-off switch.

POWER OUTPUT: 175 w.

POWER REQUIREMENTS: 115-127 v, 60 cyc single phase.
440 w at rated output (175 w).
520 w at peak output (350 w).

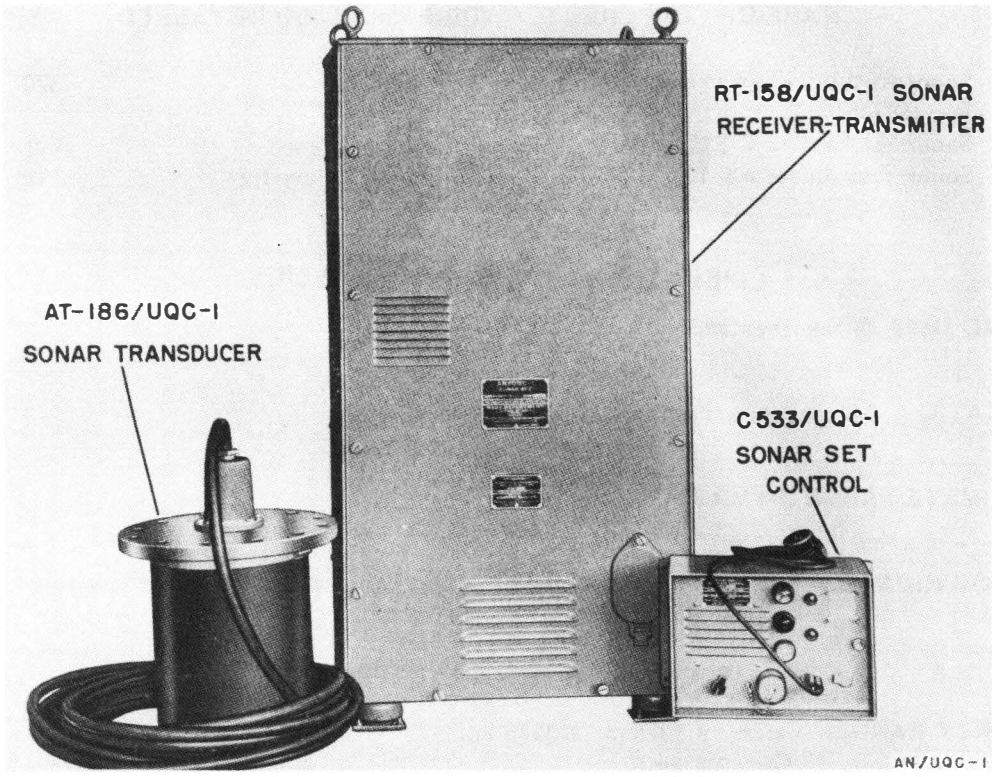
PHYSICAL CHARACTERISTICS

Public Address Set AN/UIQ-3 packed for export shipment: total weight 540 pounds, total volume 15.6 cu ft. Shipped in 5 packages.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/UQC-1

SONAR SET



Sonar Set AN/UQC-1 is a single side band, suppressed-carrier receiver-transmitter designed for underwater radiotelephone communication between submarines and surface craft.

It is used as a simple standard telephone. A microphone switch provides "transmit-receive" switching.

Provision is made for complete remote control of the equipment through use of Sonar Set Control C-533/UQC-1.

The transmitter-receiver, transducer, and control unit may be installed in widely separated parts of the ship.

AN/UQC-1

SONAR SET

INSTRUCTION LITERATURE: NavShips 91180
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Sonar Receiver-Transmitter RT-158/UQC-1	43 x 21 x 13	370
1	Sonar Set Control C-533/UQC-1	13-1/4 x 6-1/2 x 8	8
1	Sonar Transducer AT-186/UQC-1	16-1/2 x 12 diameter	118

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Submarines and surface craft.

INSTALLATION: Shipborne, submarine.

APPROXIMATE RANGE (IN MILES): 6.

CAN COMMUNICATE WITH: Sonar Set AN/UQC-1 and equivalent remote station apparatus.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE: Voice: 8.3375 to 11.0875 kc.
Cw: 8.8 kc.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, voice: Single side band, suppressed carrier.

POWER OUTPUT: Transmitter: 400 w to transducer;
125 w through transducer.
Receiver: 4 w into 3.2-ohm speaker.

POWER REQUIREMENTS: 1,200 w, 115 v, 60 cyc, 1 phase ac.

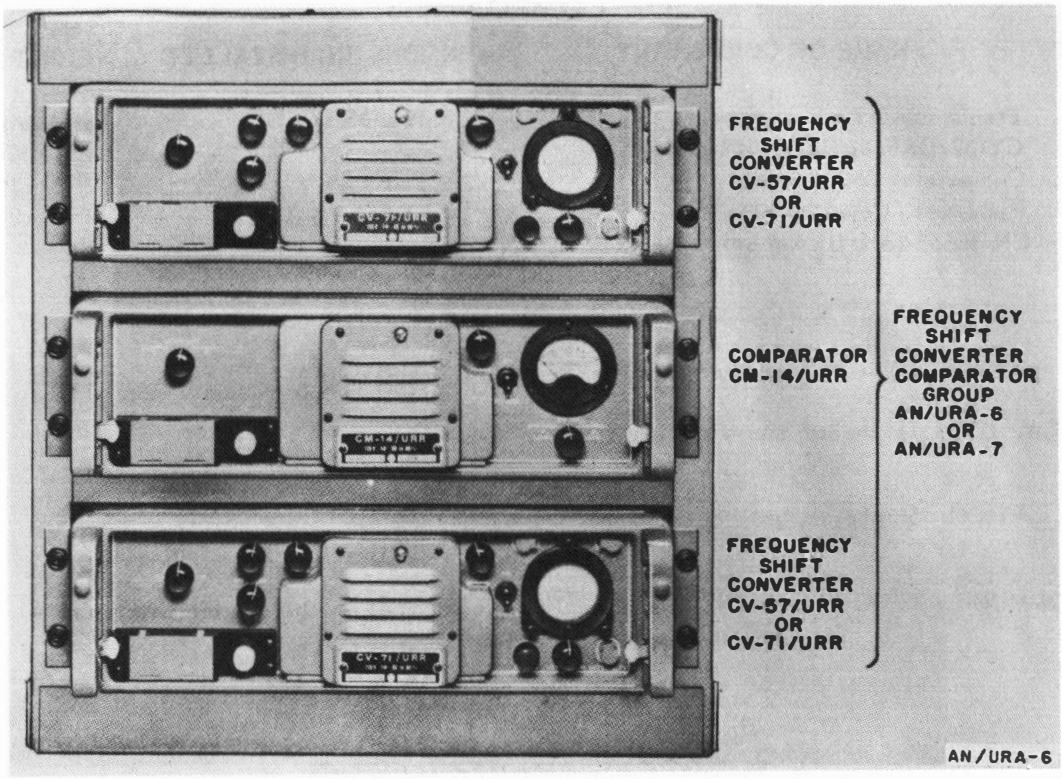
PHYSICAL CHARACTERISTICS

Sonar Set AN/UQC-1 measures 43 x 21 x 13 inches, net weight 601 pounds, volume 10.1 cu ft. Packed for domestic shipment: Total weight 819 pounds, total volume 26.7 cu ft. Shipped in 4 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/URA-6, -7

FREQUENCY SHIFT CONVERTER-COMPARATOR GROUP



Frequency Shift Converter-Comparator Groups AN/URA-6 and AN/URA-7 are dual diversity equipments designed for demodulating frequency-shift keyed radio telegraph signals (as derived from the i-f circuits of diversity radio receivers) to provide keying facilities for teletypewriters, printers, or other similar automatic recording devices.

Keying speeds are possible up to 100-dot cps; corresponding to four channel multiplex (100 wpm) each channel.

Both equipments are intended for table mounting, but the converter and comparator units may be removed and installed in a standard relay rack.

Typical companion receivers, for the AN/URA-6 are Radio Receiving Equipments RBB and RBC, and Diversity Radio Receiving Equipment of the RDM Series.

For the AN/URA-7, Diversity Radio Receiving Equipments RBP and RCP are satisfactory; any receiver having good stability and operating in correct frequency range can be used with these converters.

AN/URA-6, -7

FREQUENCY SHIFT CONVERTER-COMPARATOR GROUP

INSTRUCTION LITERATURE: NavShips 91355
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE : Navy
DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Frequency Shift Converter CV-57/URR or CV-71/URR	5-1/8 x 19 x 15-1/4	Not Available
1	Comparator CM-14/URR	5-1/8 x 19 x 15-1/4	" "
2	Panoramic Coupling Kit CN-10563 (AN/URA-6 only)	4-5/16 x 1-7/8 x 3-3/16	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard, shore stations.

INSTALLATION: Shipborne, ground.

CAN COMMUNICATE WITH: This is signal modifying equipment which operates with primary communication equipment.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: AN/URA-6: 395 — 470 kc.
AN/URA-7: 50 kc.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Frequency-shift keying.

POWER OUTPUT: Electron tube keying of 60 mc loop.
Tone: 12 mw into 600 ohm load.

POWER REQUIREMENTS: 240 w, 105 — 125 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Frequency Shift Converter-Comparator Group AN/URA-6,-7 measure 21-3/4 x 20-1/4 x 17-5/32 inches, volume 5.8 cu ft. Packed for domestic shipment: total volume 8.25 cu ft.

STATUS: S/Std (–8); Std (–8A, –8B)

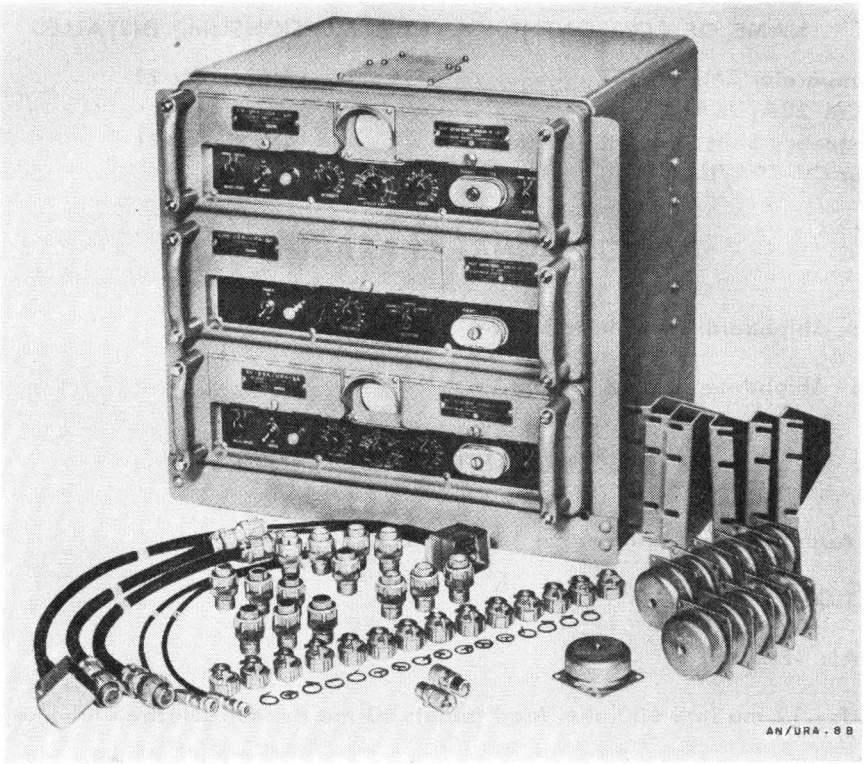
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 26 June 1956

AN/URA–8( )

FREQUENCY SHIFT CONVERTER-COMPARATOR GROUP



Frequency Shift Converter-Comparator Group AN/URA–8( ) operates from the audio outputs of each of two Radio Receiving Equipments RBA, RBB, RBC, or equivalent, in dual-diversity reception of frequency-shift transmissions, to key dc loop circuits to automatic teletypewriter printers.

This equipment will operate with the radio receivers arranged for either space-diversity or frequency-diversity reception.

The AN/URA–8, AN/URA–8A, and AN/URA–8B are functionally similar. They are issued in a table-type rack; however, the units may be mounted separately on individual sets of shock mounts, or each unit may be adapted for installation on a standard relay rack.

AN/URA-8( )

FREQUENCY SHIFT CONVERTER-COMPARATOR GROUP

INSTRUCTION LITERATURE: NAVSHIPS 91278; 91490

USING SERVICE: USN

DATE OF THIS SHEET: 26 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Comparator CM-14/URR or CM-22A/URA-8A	5¼ x 17 x 21	39
2	Frequency Shift Converter CV-60/URR or CV-89A/URA-8A	5¼ x 17 x 21	50

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard; shore installations.

INSTALLATION: Shipborne; ground stations.

TECHNICAL CHARACTERISTICS

FREQUENCY: Audio; w/ctr freq on either 1,000 or 2,550 cy.

TYPE MODULATION: Fm (F1).

TYPE OF SIGNAL: Fsk, tty.

POWER OUTPUT: 12 ma into 600-ohm load (tone); 60 ma tty loop (electron tube keying).

POWER REQUIREMENTS: 155 or 220 w, 105 to 125 v, 50/60 cy, 1 ph ac.

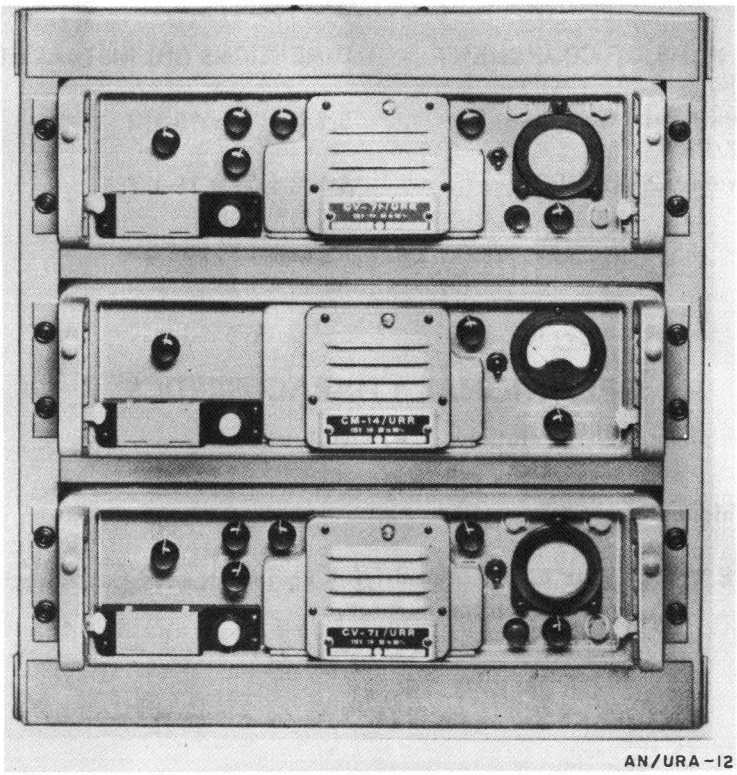
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	15¾ x 17 x 21	111			
DOMESTIC PACK:		401	13		2
EXPORT PACK:					

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 29 May 52

AN/URA-12

FREQUENCY SHIFT CONVERTER-COMPARATOR GROUP



AN/URA-12

Frequency Shift Converter-Comparator Group AN/URA-12 converts frequency-shift-keyed radiotelegraph signals (derived from the i-f circuits of radio receivers) into appropriate signals for the operation of teletypewriters or other similar automatic recording devices. Two radio receivers are used in a diversity arrangement; the comparator selects the stronger signal to control the teletypewriter loop and the keyed tone.

This equipment is used in conjunction with two radio receivers and a standard or a high speed teletypewriter with loop power supply. Any communications receiver with the correct intermediate frequency and good stability may be used with this equipment.

Keying speeds are possible up to 100 dot cps, corresponding to four-channel multiplex (100 wpm each channel).

It is installed in a single cabinet for table mounting, but may be removed for installation in a standard relay rack.

AN/URA-12

FREQUENCY SHIFT CONVERTER-COMPARATOR GROUP

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Frequency Shift Converter CV-227/URR	5-1/8 x 19 x 15-1/4	Not Available
1	Comparator CM-42/URR	5-1/8 x 19 x 15-1/4	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard, shore stations.

INSTALLATION: Shipborne, ground.

CAN COMMUNICATE WITH: This is signal-modifying equipment used in conjunction with primary communication apparatus.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.19 – 0.21.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Frequency-shift.

POWER OUTPUT: Electron tube keying of 60 ma teletype loop.
Tone: 12 mw into 600 ohm load.

POWER REQUIREMENTS: 240 w, 105-115-125 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Frequency Shift Converter-Comparator Group AN/URA-12 measures 22 x 20-1/4 x 14-1/2 inches.

STATUS:

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 28 June 1956

AN/URA–TYPE

CV–115/URR

CONVERTER, FREQUENCY SHIFT

NO PHOTOGRAPH AVAILABLE

Frequency Shift Converter CV–115/URR converts frequency-shift signals into dc output pulses that key the energizing loop circuit of an automatic receiving teletypewriter.

This equipment is designed for continuous duty and operates from the if (450 to 510 kc) output of a single radio receiver. It is capable of changing frequency-shift radioteletype signals into neutral dc pulses at speeds as high as 100 dot cycles per second. It has facilities that permit reversing the polarities of the output mark and space signals and for establishing mark output signals for adjusting purposes.

An intermediate control unit is required between the frequency shift converter and the teletypewriter to effect an impedance match between the two units.

This converter is used as a link in a complete radioteletype communication system. In addition to the CV–115/URR, a typical system includes a teletypewriter, a frequency-shift keyer, a radio transmitter, an antenna, a control unit and a teletypewriter printer.

AN/URA-TYPE

CV-115/URR

CONVERTER, FREQUENCY SHIFT

INSTRUCTION LITERATURE: TM 11-5085

USING SERVICE: USA

DATE OF THIS SHEET: 28 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed or mobile station.

TECHNICAL CHARACTERISTICS

IF INPUT FROM RECEIVER: 450 to 510 kc.

SIGNAL INPUT VOLTAGE: 100 uv (min).

INPUT FREQUENCY-SHIFT RANGE: 150 to 1,000 cy.

INPUT IMPEDANCE: 50 ohms.

CONTROLS: POWER ON-OFF; AFC ON-OFF; AFC SHIFT ADJUSTMENT; AFC THRESHOLD LEVEL adjustment; DRIFT INDICATOR; AFC-XTAL-MARK HOLD; AFC INDICATOR; signal input meter; discriminator meter.

POWER REQUIREMENTS: 110 w, 115 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	7⅜ x 13⅛ x 9	39	.5		
DOMESTIC PACK:					
EXPORT PACK:		43	1.95		1

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 28 June 1956

AN/URA–TYPE

CV–116/URR

CONVERTER, FREQUENCY SHIFT



Frequency Shift Converter CV–116/URR changes fsk signals into dc pulses to key the loop circuit of automatic teletypewriters that operate from the if output of one or two radio receivers arranged in either space or frequency diversity.

This equipment consists of the converter unit, cables, and accessories.

The converter unit is designed for continuous duty and is used as an operating link in a complete radioteletype communication system. In addition to the CV–116/URR, a typical system consists of a teletypewriter, a control unit, a frequency-shift keyer, a radio transmitter, two radio receivers, two antennas (one receiving and one transmitting), and a teletypewriter.

This equipment is used with such sets as Radio Receiving Set AN/FRR–38.

AN/URA–TYPE

INSTRUCTION LITERATURE: TM 11-2241

USING SERVICE: USA

DATE OF THIS SHEET: 28 June 1956

CV–116/URR

CONVERTER, FREQUENCY SHIFT

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
2	Cord CG–409A/U	72 lg	.3
1	Cable Assembly, Power Electrical CX–2491/U	72 lg	1.1
1	Frequency-shift converter unit	8¾ x 17 x 19	65

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

OPERATING SPEED: 100 dot cy.

POWER REQUIREMENTS: 200 w, 115 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	8¾ x 17 x 19	69	1.6		
DOMESTIC PACK:		110	4.13		1
EXPORT PACK:					

STATUS: S/S[illegible]

CLASSIFICATION OF EQUIPMENT: Unclassified

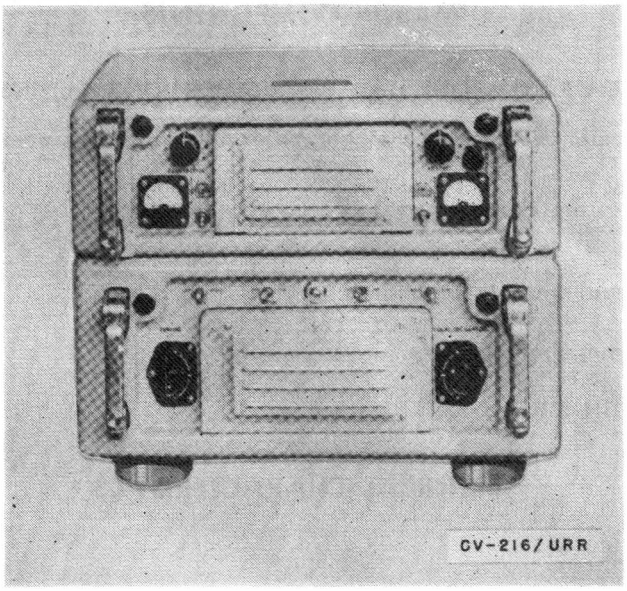
PREPARING SERVICE: USN

DATE OF THIS SHEET: 26 June 1956

AN/URA-TYPE

CV-216/URR

CONVERTER, SINGLE SIDEBAND



Single Sideband Converter CV-216/URR is an equipment that can be connected to a superheterodyne communication receiver to reproduce the audio intelligence contained in one sideband of a single, or double, sideband transmission.

This equipment, attached to a Navy general purpose receiver, can provide the following types of reception: (a) one sideband of tone-modulated signal; (b) one sideband only of conventional double sideband am signals having any degree of modulation to 100 percent; (c) one sideband only of double sideband phase-modulated signals with any degree of phase modulation up to one radian; (d) one sideband only of a single sideband suppressed carrier transmission having any degree of carrier suppression from full carrier to a level 26 db below that of full carrier.

AN/URA–TYPE

CV–216/URR

CONVERTER, SINGLE SIDEBAND

INSTRUCTION LITERATURE: NAVSHIPS 92456

USING SERVICE: USN

DATE OF THIS SHEET: 26 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	(Equipment consists of a single major operating component.)		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard; shore installations.

NSTALLATION: Shipborne; shore stations.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE: 200 kc.

TYPE MODULATION: Am (A2, A3), fm.

TYPE OF SIGNAL: Mcw, voice.

POWER OUTPUT:

POWER REQUIREMENTS: 105/115/125 v, 50/60 cy, 1 ph ac (self-contained full-wave rect).

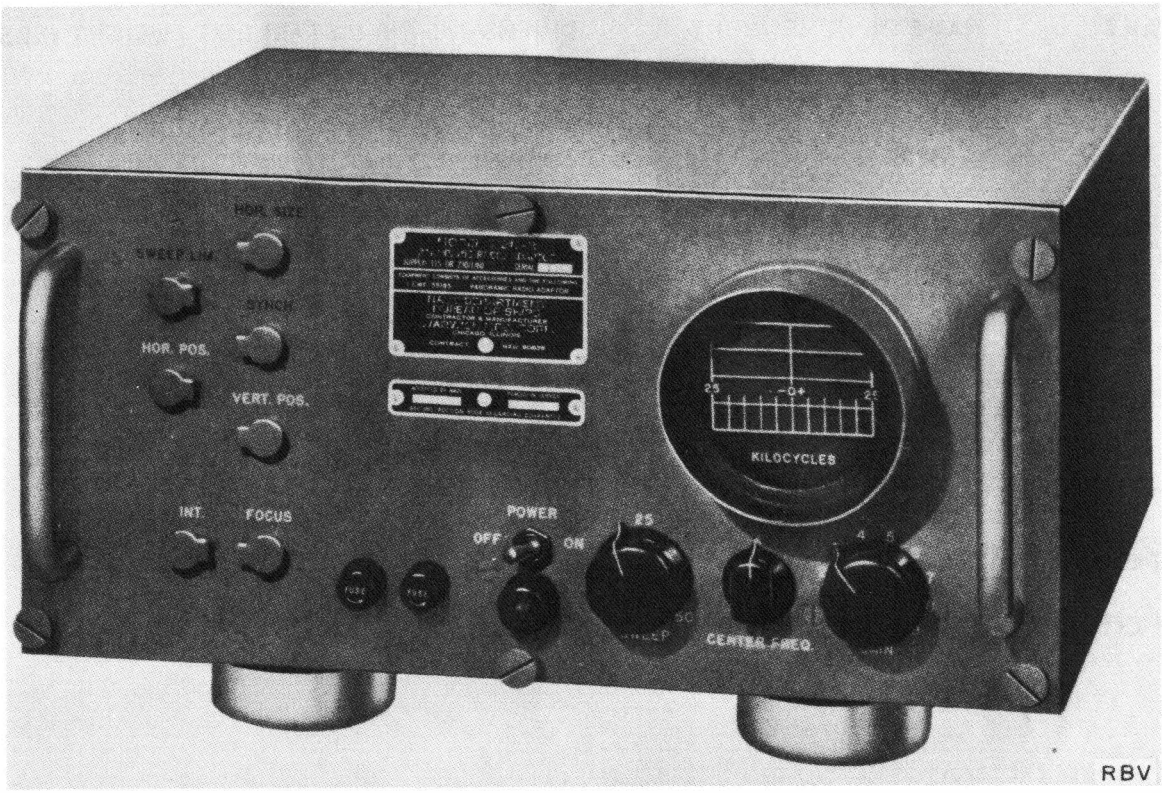
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	13¾ x 17⅛ x 17⁹⁄₁₆	120	2.5		
DOMESTIC PACK:		170	8.65		1
EXPORT PACK:					

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 Jun 52

AN/URA-TYPE

SERVICE TYPE NUMBER: RBV, RBV-1
PANORAMIC RADIO ADAPTOR



Panoramic Radio Adaptors RBV and RBV-1 are used for examination of r-f signals when connected to suitable radio receiving equipment. They present, as vertical deflections on a cathode ray tube, all signals receivable within a band which extends 0.05 mc on either side of the frequency to which the companion receivers are tuned.

This equipment permits determination of the strength, character, modulation, and frequency of received signals.

The companion receiver must be of the superheterodyne type having a 0.4 mc intermediate frequency, such as Radio Receiving Equipment RBC.

Panoramic Adaptor Unit CLP-10335, or equal is required to convert the receiver to panoramic operation.

AN/URA-TYPE	INSTRUCTION LITERATURE: NavShips 900,288; 900,501
RBV, RBV-1 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
PANORAMIC RADIO ADAPTOR	USING SERVICE : Navy
	DATE OF THIS SHEET : 9 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Panoramic Radio Adaptor		
	*CDN-55089 or	7-1/4 x 13 x 13-1/4	46
	**CDN-55089-A	8-3/4 x 13-1/2 x 15	44

*RBV.
**RBV-1.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

CAN COMMUNICATE WITH: Operates in conjunction with primary radio receiving equipment.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Input: 0.4 mc.
Sweep frequency: $\pm$ 0.050 .

TYPE MODULATION: Am, fm.

TYPE OF SIGNAL: Cw, mcw, voice, frequency shift keying, pulse.

POWER REQUIREMENTS: 60 w, 115/230 v, 50/70 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Panoramic Radio Adaptors RBV, RBV-1, measure 8-3/4 x 13-1/2 x 15 inches. Packed for domestic shipment: total weight 151 pounds, total volume 10.4 cu ft. Shipped in 1 package.

STATUS: Selected Minor Item

CLASSIFICATION OF EQUIPMENT: Unclassified

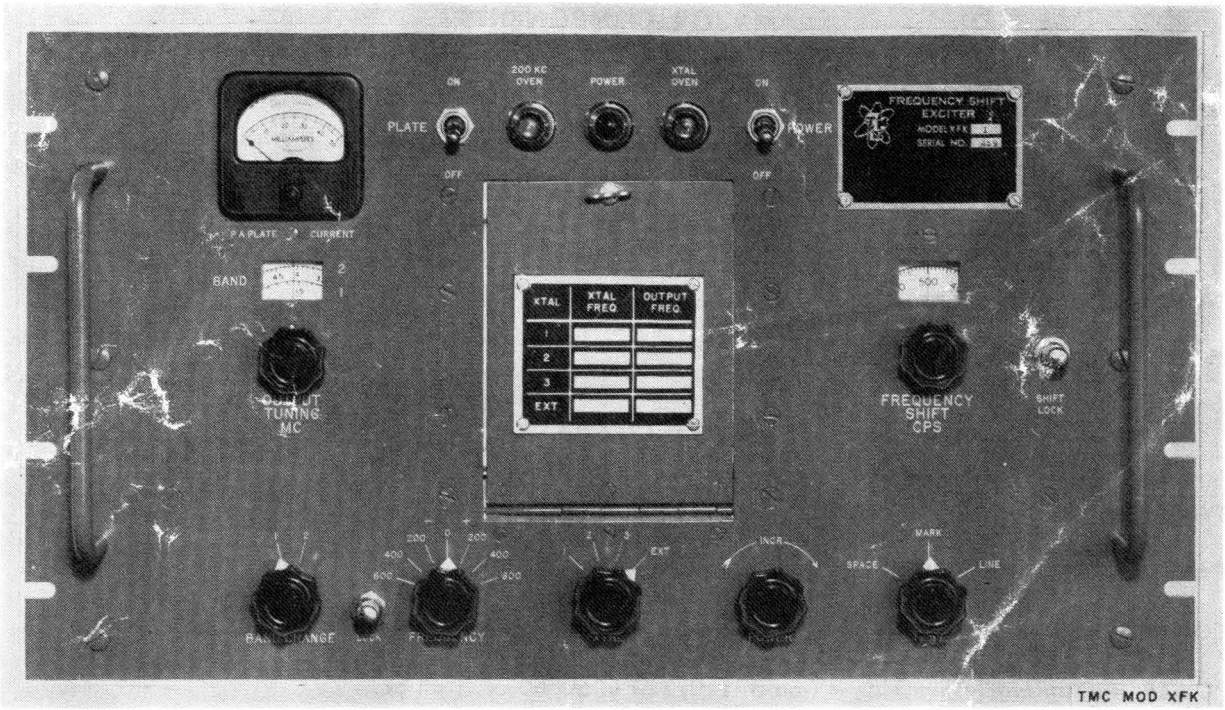
PREPARING SERVICE: USAF

DATE OF THIS SHEET: 12 June 1956

AN/URA–TYPE

COMMERCIAL TYPE NUMBER: TECHNICAL MATERIEL CORPORATION MODEL XFK

FREQUENCY SHIFT EXCITER



Technical Materiel Corporation Frequency Shift Exciter Model XFK replaces the crystal oscillator in a transmitter and provides mark and space carrier-shift transmission of teleprinter, telegraph, fm telephone, facsimile, or telephoto signals.

This equipment is a high stability, self-contained rf oscillator whose frequency is shifted in accordance with audio or pulsed signals. Carrier shift, adjustable up to 1,000 cycles is available, either linear with applied voltage or independent of applied voltage variations. Three preset crystal frequencies, or an external rf source, may be selected by a front panel control.

The exciter may be keyed by a contact closing to ground, polar or neutral positive teletypewriter signals, or a linear input (30,000-ohm impedance) source.

Maximum keying speed is 1,000 wpm. Output power is adjustable to 3 watts in the frequency range 1 to 6.9 mc. Rf output impedance is 50 to 70 ohms.

AN/URA–TYPE

INSTRUCTION LITERATURE: Commercial Instruction Book

USING SERVICE: USAF

DATE OF THIS SHEET: 12 June 1956

TECHNICAL: COMMERCIAL TYPE NUMBER MATERIEL CORPORATION MODEL XFK

FREQUENCY SHIFT EXCITER

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Fm (F0, F1, F2, F3, F4).

TYPE OF COMMUNICATION CIRCUITS: Conventional wire or rad.

CONTROLS: Primary power; plate power; output tuning; crystal or external oscillator selector.

POWER REQUIREMENTS: 180 w (max), 110/220 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	10½ x 19 x 16	40	2		
DOMESTIC PACK:		120	12		1
EXPORT PACK:		133	12		1

STATUS: A/Std

CLASSIFICATION OF EQUIPMENT: Unclassified

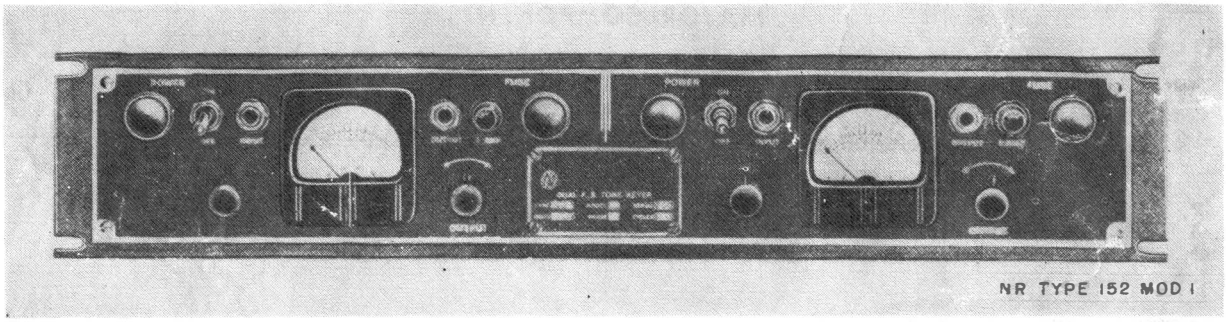
PREPARING SERVICE: USAF

DATE OF THIS SHEET: 12 June 1956

AN/URA–TYPE

COMMERCIAL TYPE NUMBER: NORTHERN RADIO TYPE 152 MODEL 1

DUAL FREQUENCY-SHIFT TONE CONVERTER



Northern Radio Dual Frequency-Shift Tone Converter Type 152 Model 1 is used as receiving terminal equipment of a multichannel communication system for teleprinter, telegraph, or telemetering operation over radio, microwave, or metallic circuits. The mark and space audio tones that comprise the signal input to the converter are utilized to produce dc signals at the converter's output.

This equipment consists of two completely separate frequency-shift telegraph receivers mounted on one standard rack panel. Each of the two converters is completely self-contained, including its own power supply, and will operate on any standard tone channel as selected by a Frequency Determining Network Type 152Z( ).

It is designed for use in a frequency division multiplex telegraph system. Such a system is one in which the simultaneous transmission and/or reception of more than one message over one line (pair of wires) is made possible by confining each message to a limited and separate portion of the audio spectrum.

When operated with an associated Dual Frequency-Shift Tone Keyer Type 153 Model 1, a complete multichannel frequency-shift tone-carrier system is obtained.

AN/URA–TYPE

INSTRUCTION LITERATURE: TO 31S1–4–1–( )

USING SERVICE: USAF

DATE OF THIS SHEET: 12 June 1956

NORTHERN: COMMERCIAL TYPE NUMBER
RADIO TYPE 152 MODEL 1

DUAL FREQUENCY-SHIFT TONE CONVERTER

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
2	Frequency Determing Network Type 152Z( )	2⅞ x 8¼ x 3¼	3

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Freq-shift audio tones.

TYPE OF COMMUNICATION CIRCUITS: Multichan wire and rad.

CONTROLS: Power on-off; sense; output.

POWER REQUIREMENTS: 40 w, 110/220 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	3½ x 19 x 15	28	.57		
DOMESTIC PACK:					1
EXPORT PACK:					1

STATUS: A/Std

CLASSIFICATION OF EQUIPMENT: Unclassified

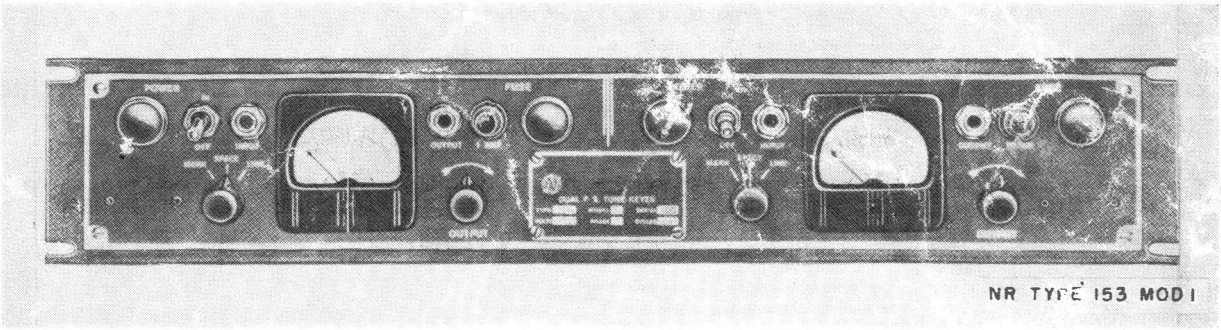
PREPARING SERVICE: USAF

DATE OF THIS SHEET: 12 June 1956

AN/URA–TYPE

COMMERCIAL TYPE NUMBER: NORTHERN RADIO TYPE 153 MODEL 1

DUAL FREQUENCY-SHIFT TONE KEYER



Northern Radio Dual Frequency-Shift Tone Keyer Type 153 Model 1 is used as the transmitting terminal of a multichannel communication system for telegraph, teleprinter, or telemetering operation over radio, microwave, or metallic circuits. The pulsed input signals are converted to frequency-shifted audio tones.

This equipment provides multiplexing capabilities for teletypewriter or telemetering facilities. By the use of 6 dual frequency-shift tone keyers, up to 12 teletypewriter signals can be multiplexed in a single voice channel.

It consists of two completely separate frequency-shift telegraph transmitters. Each of the two tone keyers is self-contained and operates in any of the standard tone channels. For teleprinter or telegraph operation the channel separation of the tones is usually 170 cycles and the keying speed does not usually exceed 100 wpm. The tone keyer may be keyed by one of the following sources: (1) dc current pulses, (2) dc voltage pulses, or (3) relay contacts.

When used with associated Dual Frequency-Shift Tone Converter Type 152 Model 1, a complete multichannel frequency-shift tone carrier system is obtained.

The output impedance is 600 ohms, unbalanced, and the output level is adjustable to +3 dbm.

AN/URA–TYPE

INSTRUCTION LITERATURE: TO 31S1–4–1–( )

USING SERVICE: USAF

DATE OF THIS SHEET: 12 June 1956

NORTHERN: COMMERCIAL TYPE NUMBER
RADIO TYPE 153 MODEL 1

DUAL FREQUENCY-SHIFT TONE KEYER

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
2	Frequency Determing Network Type 153Z( )	2⅞ x 8¼ x 3¼	3

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Freq-shift audio tones.

TYPE OF COMMUNICATION CIRCUITS: Multichan wire and rad.

CONTROLS: Power on-off; mark-space-line; output level.

POWER REQUIREMENTS: 50 w, 110/220 v, 50/60 cy, 1 ph ac.

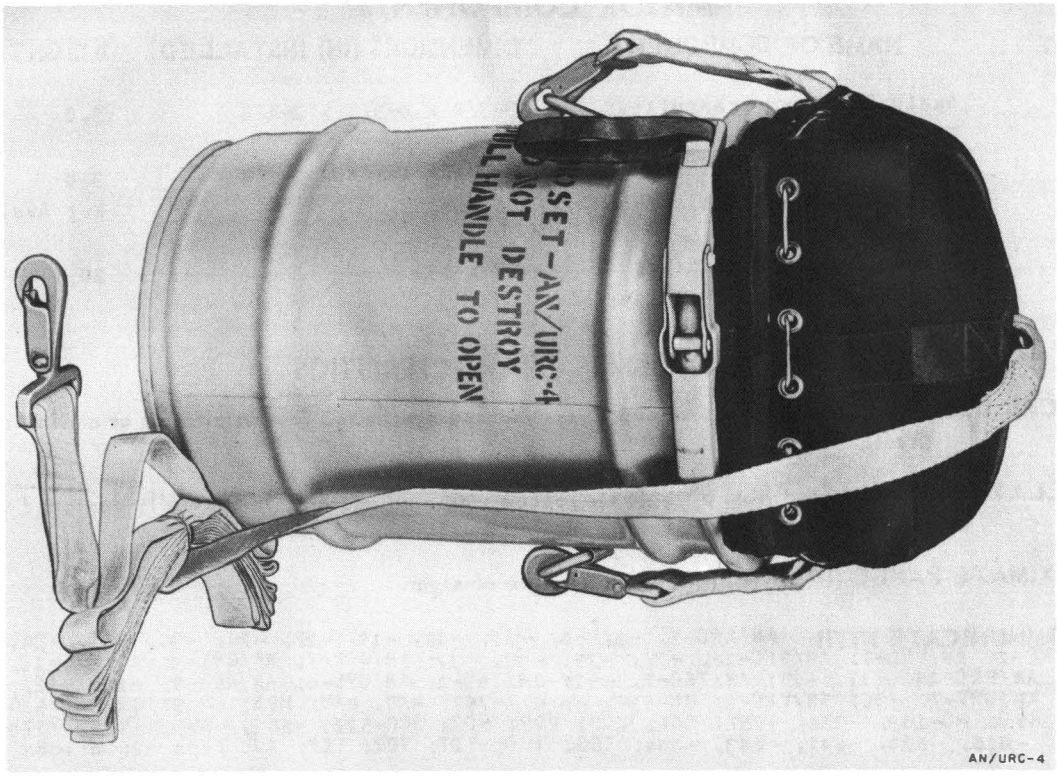
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	3½ x 19 x 15	28	.57		
DOMESTIC PACK:					1
EXPORT PACK:					1

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Air Force
DATE OF THIS SHEET: 12 May 52

AN/URC-4

RADIO SET



Radio Set AN/URC-4 is used under emergency rescue conditions for air-to-ground, and point-to-point communication. It is dropped from aircraft in a water tight container which will float on the surface of the water and is capable of communicating by voice, keyed tone, and continuous tone modulation.

The transmitter is crystal-controlled, and depending upon crystal in use, will operate on any preset frequency within the v-h-f band of 120 to 130 mc, or the u-h-f band of 240 to 260 mc.

The radio set consists of two small components: a battery power supply and a transmitter and receiver.

The antenna is located in the top of the radio set and can be quickly extended.

The receiver uses a super-regenerative circuit for minimum size and power consumption.

The equipment may be operated while in motion and will operate continuously for 24 hours in cycles of five minutes of transmitting, and five minutes of receiving.

The equipment can also be used for emergency airdrome traffic control.

AN/URC-4

RADIO SET

INSTRUCTION LITERATURE: TO 16-30URC4-2
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE : Air Force
DATE OF THIS SHEET : 12 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver-Transmitter RT-159/URC-4	3-3/4 x 6-3/4 x 2-1/4	3.0
1	Battery BA-1264/U	3-3/8 x 6-1/4 x 2-1/4	3.0
1	Special Purpose Cable Assembly CX-1093/U	66 long	Not Available
1	Droppable Kit consisting of Parachute, Cargo Container, Aerial Delivery	22 x 13	20.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used by survivors at sea to communicate with sea rescue aircraft or marine rescue craft.

INSTALLATION: Parachuted from aircraft for rescue work and operated in specially designed vest by survivor.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -12, -18, -19, -27, -28, -30, -33, -34, -36; AN/CRC-2; AN/FRC-7; AN/GRC-16, -27, -29, -30, -32; AN/GRR-7; AN/GRT-3; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-7, -32; AN/TRQ-1; AN/URC-4; AN/URR-9, -10, -12, -13, -21; AN/URT-7, -10; AN/VRC-1; BC-639, -640, -787; MAR; MAY; MBS; R-137/GR, -278/GR; RBK; RBQ; RC-103, -256, -257; RCK; RCO; RDR; RDZ; SCR-522, -542, -573, -574, -575, -607, -616, -624, -641, -643, -644; TDG; TDQ; TDT; TDZ; TED; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: One crystal-controlled preset frequency in the range of 120 — 130 or harmonic operation on 240 — 260.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone or mcw.

POWER OUTPUT: Receiver: 75 mw.
Transmitter: 35 mw.

POWER REQUIREMENTS: 125 v, 45 ma plate supply, dc, 125 v, 520 ma filament supply, dc. Battery life 24 hours when operated in cyc of 5 minutes transmitting and 5 minutes receiving. Batteries are contained in one unit.

PHYSICAL CHARACTERISTICS

Radio Set AN/URC-4 weighs 26.6 pounds net, volume 1.7 cu ft. Packed for either domestic or export shipment: total weight 29.3 pounds, total volume 1.9 cu ft. Shipped in 1 package both domestic and export.

STATUS: Std

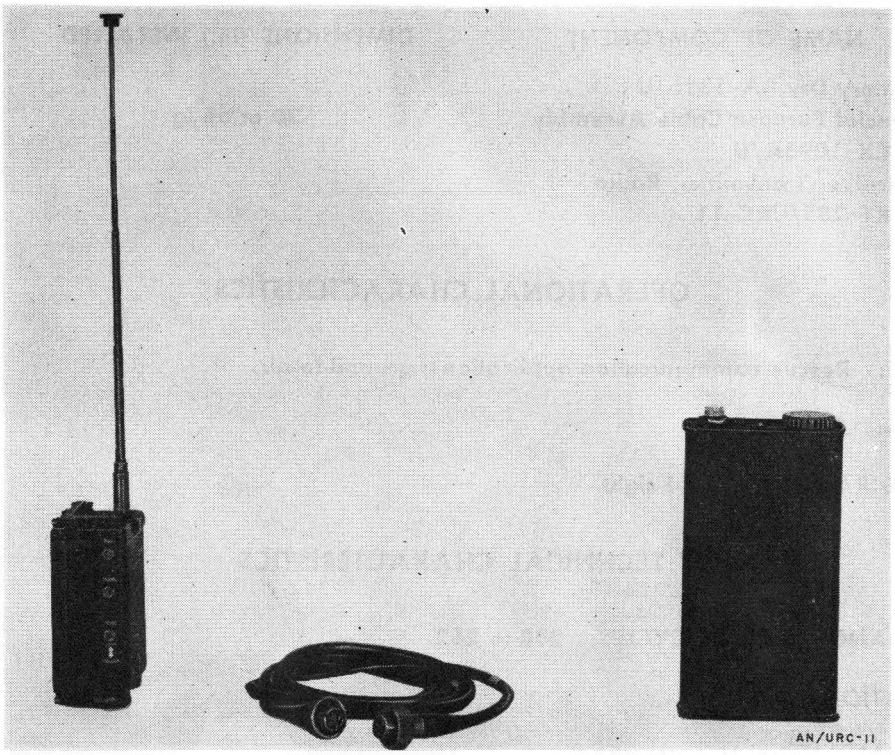
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF

DATE OF THIS SHEET: 6 June 1956

AN/URC–11

RADIO SET



Radio Set AN/URC–11 is a subminiature, lightweight, uhf receiver-transmitter used for two-way voice and keyed tone communication under emergency rescue conditions.

This equipment can operate on any preset frequency within the uhf band, and its receiver portion can be tuned, independently of the transmitter, to any frequency within the given range.

AN/URC–11

RADIO SET

INSTRUCTION LITERATURE: 12R2–2URC11–2

USING SERVICE: USAF

DATE OF THIS SHEET: 6 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Battery Dry BA–1315/U		
1	Special Purpose Cable Assembly CX–1093A/U	30 or 66 lg	
1	Receiver-Transmitter, Radio RT–285/URC–11		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Rescue communication applications; ground-to-air.

INSTALLATION: Airborne.

APPROXIMATE RANGE: Line of sight.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 238 to 263.

TYPE MODULATION: Am (A3).

TYPE OF SIGNAL: Voice, tone.

POWER OUTPUT: 25 mw (rcvr); 75 mw (xmtr).

POWER REQUIREMENTS: 1.25 v, 550 ma dc; 120 v, 35 ma dc (Under a continuous operating cy of 5 min xmtg and 5 min rcving, Dry Battery BA–1315/U has a nor life of 24 hr.).

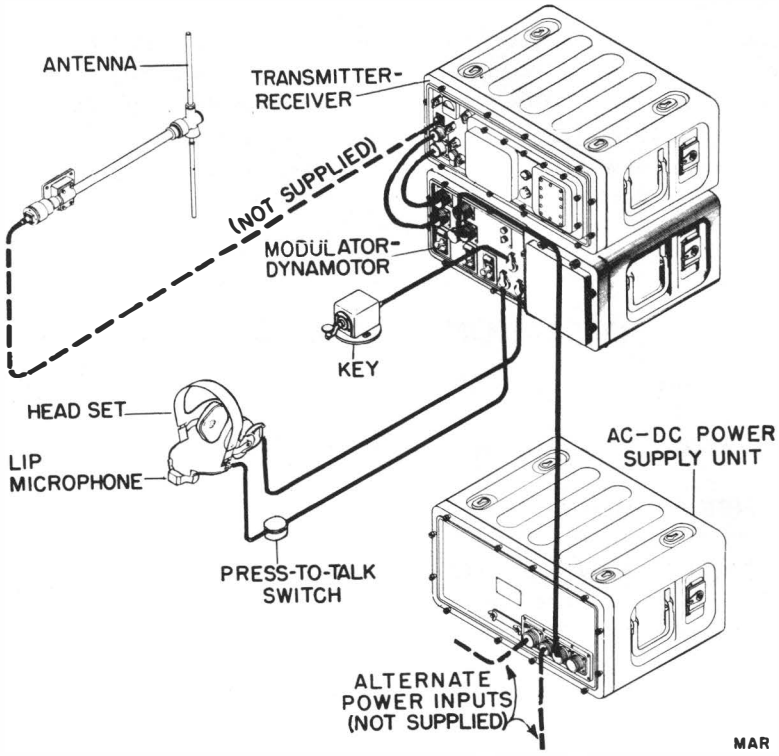
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 23 May 52

AN/URC-TYPE

SERVICE TYPE NUMBER: MAR
UHF RADIO TRANS & REC EQUIP



UHF Radio Transmitting and Receiving Equipment MAR is a general purpose, a-m (mcw, voice) transportable communication set, which uses a motor-driven selector mechanism for automatic selection of 10 preset crystal-controlled frequencies within the u-h-f band.

It is comprised of two units of the same form and size, one case containing the transmitter-receiver, the other, the modulator-dynamotor sections. In addition to these basic units, modification kits for shipboard, vehicular and field adaptions are supplied.

The use of these kits provides for widely varying power supply inputs, and operating environments.

Antenna Assembly Navy Type CRV-66147 is supplied for use with this equipment.

Remote Control Unit Navy Type CRV-23485 provides for remote control up to distances of one mile; communication between a remote and local operator, without resultant radio emission, is controlled by a panel switch on the modulator-dynamotor unit.

AN/URC-TYPE	INSTRUCTION LITERATURE: NavShips 900,719(A)
MAR :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
UHF RADIO TRANS & REC EQUIP	USING SERVICE : Navy
	DATE OF THIS SHEET: 23 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter-Receiver CRV-43067	9-1/2 x 21-1/4 x 16-1/4	45.0
1	Modulator-Dynamotor Unit CRV-50248	9-1/2 x 21-1/4 x 16-1/4	45.0
1	AC-DC Power Supply Unit CLG-20379	10-7/8 x 21-1/4 x 16-1/4	100.0
1	Antenna Assembly CRV-66147	22 x 2-1/2 x 25	3.5
1	Shipboard Installation Kit	Not Available	Not Available
1	Field Application Kit	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard, vehicles, or ground stations.

INSTALLATION: Shipborne, vehicular, ground transportable.

APPROXIMATE RANGE (IN MILES): Short.

CAN COMMUNICATE WITH: AN/ARC-12, -19, -27, -30, -33, -34; AN/GRC-16, -27, -29, -30, -32; AN/GRR-7; AN/GRT-3; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-32; AN/URC-4; AN/URR-9, -12, -13; AN/URT-10; MAR; MAY; R-278/GR; RDR; RDZ; SCR-616; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 225 - 390 on 10 preset frequencies.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

POWER OUTPUT: Transmitter: 8 w.
Receiver: 1 w into 600 ohm load.

POWER REQUIREMENTS: 430 w, 13 - 24/115/230 v, dc; or 430 w, 115/230 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

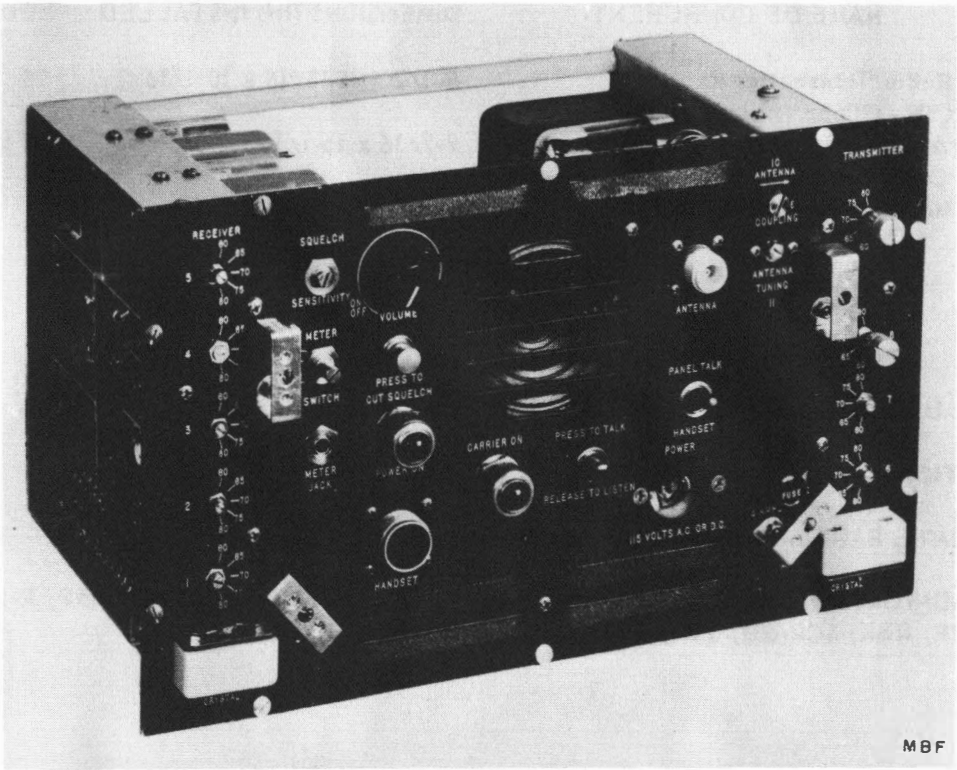
UHF Radio Transmitting and Receiving Equipment MAR measures19 x 21-1/4 x 16-1/4 inches, net weight 193.5 pounds, volume 6.7 cu ft. Packed for domestic shipment: total weight788 pounds, total volume 32.4 cu ft, 0.81 ship ton. Shipped in 5 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/URC-TYPE

SERVICE TYPE NUMBER: MBF

RADIO TRANS & REC EQUIP



Radio Transmitting and Receiving Equipment MBF is a general purpose, low-power, v-h-f transportable radiotelephone set used for communication over line-of-sight distances.

This receiver has noise-limiting and squelch circuits.

The receiver and transmitter each have one preset crystal-controlled frequency within the frequency range.

A (coaxial) Portable Antenna such as Navy Types COL-66155 and COL-66156 is used with this equipment.

AN/URC-TYPE	INSTRUCTION LITERATURE: NavShips 900,508
MBF :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANS & REC EQUIP	USING SERVICE: Navy
	DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter-Receiver COL-43065	9-1/2 x 15-13/16 x 10-1/16	26
1	Accessory Case COL-10406	9-7/16 x 15-1/16 x 9-3/8	27
1	Mounting Base COL-10479	1-1/4 x 14 x 8-1/4	2

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore.

INSTALLATION: Transportable, shipborne, ground.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/CRW-7; AN/URR-10, -12; AN/URT-10; BC-787; MBF; R-137/GR, -274/FRR; RBK; SCR-607; TBS; TBY.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 60 - 80.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 3 w.
Receiver: 1 w to speaker; 10 mw to headphones.

POWER REQUIREMENTS: 120 w, 115 v, 50/60 cyc, 1 phase, ac; or
120 w, 115 v, dc.

PHYSICAL CHARACTERISTICS

Radio Transmitting and Receiving Equipment MBF measure 9-1/2 x 15-13/16 x 10-1/16 inches, net weight 129 pounds. Packed for domestic shipment: total weight 218 pounds, total volume 1 1.7 cu ft. Shipped in 2 packages.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/URC-TYPE

SERVICE TYPE NUMBER: MN, MN-1 through -5

FM RADIO TRANSMITTING AND RECEIVING EQUIPMENT



FM Radio Transmitting and Receiving Equipment MN and MN-1 through -5are single-frequency, low-power radiotelephone sets designed for short-range general purpose communication. The equipment is installed aboard ship, at shore stations, on aircraft, and in vehicles. The MN, MN-4, and MN-5 are operated by remote control, and the MN-4 is used mainly by reconnaissance aircraft.

The transmitter utilizes direct crystal-control and phase-shift type of modulation, and the receiver is designed particularly for the crystal-controlled reception of the signals generated by the transmitter. Uses quarter- or half-wave vertical antenna-array.

AN/URC-TYPE

MN, MN-1 through -5 :SERVICE TYPE NUMBER

FM RADIO TRANSMITTING AND RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 95138, 95139, 95140, 95141, 95142, 95143

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Navy

DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter-Receiver Unit		
	CFL-43059,	9-3/16 x 10-7/16 x 22-3/8	39
	-43018,-43034, -43048	9-3/16 x 10-7/16 x 22-3/8	38
1	Remote Control Unit CFL-23285,	3-1/8 x 4-1/2 x 4-1/2	Not Available
	CFL-23378,	5-1/4 x 4 x 2-3/16	1.3
	CFL-23285A	4-1/2 x 3-1/8 x 7-13/16	2.1

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations, aircraft, shipboard, or vehicles.

INSTALLATION: Ground, airborne, shipborne, vehicular.

APPROXIMATE RANGE (IN MILES): 10.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-5, -6, -7, -8; AN/MRC-5, -16; AN/PRC-9, -10; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -3, -9, -10, -14, -15, -17, -18, -21, -22; AN/VRQ-2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-300, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 30 - 42.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

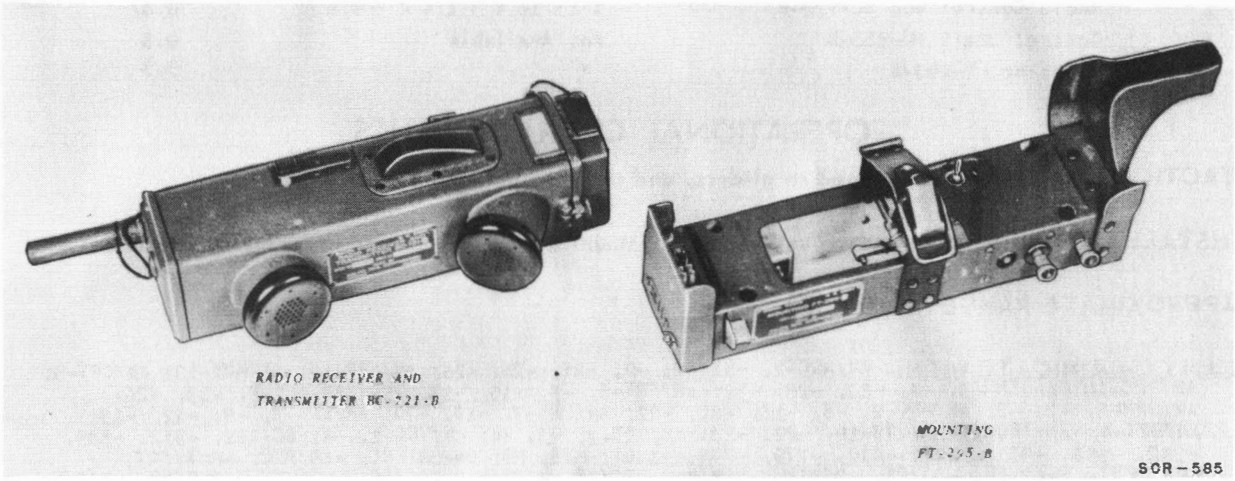
POWER OUTPUT: Transmitter: 2 w. Receiver: 1 w into 8-ohm output.

POWER REQUIREMENTS: MN: 90 w, 115 v, 50/60 cyc, 1 phase.
MN-1, -2, -3: 90 w, 115 v, 50/60 cyc , 1 phase or 6 v dc.
MN-4: 90 w, 12/15 v dc.
MN-5: 80 w, 115 v, 50/400 cyc or 13.5/27 v dc.

PHYSICAL CHARACTERISTICS

Information on FM Radio Transmitting and Receiving Equipment MN and MN-1 through -5 not available.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 10 Jun 52	**AN/URC-TYPE** SERVICE TYPE NUMBER: SCR-585 RADIO SET



Radio Set SCR-585 is a portable, man-carried, crystal-controlled handy-talkie and is the airborne version of Radio Set SCR-536. It operates on a single preset channel, voice modulated, for point-to-point or air-to-ground, two-way communications with a range of 100 feet, to one mile in the 3.5 to 6.0 mc band.

It is designed for glider installation with Mounting FT-295 which allows personnel to quickly remove the equipment for ground use as emergency short range, light, man-carried communication equipment.

This radio set may also be used in flight by glider personnel for intercommunication, using Control Shaft MC-355.

It has a built-in 39-inch long telescopic antenna. Equipment is powered by Battery BA-37 (1.5 v) and Battery BA-38 (103.5 v).

Under normal operating conditions battery life is approximately 19 hours.

AN/URC-TYPE

SCR-585 :SERVICE TYPE NUMBER

RADIO SET

INSTRUCTION LITERATURE: TM 11-227 & TM 11-235
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver and Transmitter BC-721-B	6 x 17-1/16 x 5-1/2	6.0
1	Radio Control Box BC-722-B	1-13/16 x 3-1/4 x 5-7/8	0.87
1	Control Shaft MC-355-B	Not Available	0.5
	Mounting FT-295-B	" "	3.3

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued to gliders, and air base personnel as required.

INSTALLATION: Airborne and ground portable: Mounting FT-295-B used in glider operation only.

APPROXIMATE RANGE (IN MILES): Short.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS: RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -2 4, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCO; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 3.5- 6.0 (reception and transmission) crystal-controlled on any one preset frequency.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Receiving: Voice or tone.
Transmitting: Voice.

POWER OUTPUT: Transmitter: 500 mw.
Receiver: 250 mw.

POWER REQUIREMENTS: 1 Battery BA-37 (1.5v) for filaments, and 1 Battery BA-38 (103.5 v) for B supply.

PHYSICAL CHARACTERISTICS

Radio Set SCR-585 measures 5-1/2 x 6 x 17-1/16 inches, net weight 11.5 pounds, volume 2 cu ft. Packed for domestic or export shipment: total weight 12 pounds, total volume 2.5 cu ft. Shipped in 1 package both domestic and export.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Apr 52

AN/URC-TYPE

SERVICE TYPE NUMBER: TBS, TBS-1 through -8
VHF RADIO TRANS & REC EQUIP



VHF Radio Transmitting and Receiving Equipments TBS and TBS-1 through -8 provide a-m (cw, voice) radio communication between surface craft, and between submarines and surface craft. They are crystal-controlled and provide for full control of the transmitter from remote positions.

Chief difference between models of the TBS series is the type of motor generators and magnetic controllers employed as follows:

MODEL OF EQUIPMENT	POWER SOURCE	MOTOR GENERATOR	MAGNETIC CONTROLLER
TBS, TBS-1, -2, -3, -4, -5, -7, -8	120-v dc	CG-21300, -21300-A, -211127	CRV-21319
TBS-3, -4, -5, -6, -7, -8	230-v dc	CG-21745, -211130	CRV-21804
TBS, TBS-3, -4	220-v ac	CG-21301	CRV-21320
TBS, TBS-1, -2, -3, -5, -6, -7	*440-v ac	CG-21302, -211129	CRV-21320

*Transformer CAT-30445 is used for 440-v operation.

AN/URC-TYPE

TBS, TBS-1 through -8 :SERVICE TYPE NUMBER

VHF RADIO TRANS & REC EQUIP

INSTRUCTION LITERATURE: NavShips 900,590
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CRV-52093, -52093-A	10-1/2 x 23-1/2 x 17-3/4	75
1	Radio Receiver CRV-46068, -46068-A, -46068-B	8-3/4 x 25-13/16 x 16-7/8	45
2	Remote Control Unit CRV-23135	5-11/16 x 10-7/16 x 7-1/4	9
*1	Antenna Assembly CRV-66015	Not Available	46
**1	Antenna Assembly CRV-66016	" "	46

*Surface craft type. **Submarine type.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard, submarine.

INSTALLATION: Shipborne, submarine.

APPROXIMATE RANGE (IN MILES): 10.

CAN COMMUNICATE WITH: AN/CRW-7; AN/URR-10, -12; AN/URT-10; BC-787; MBF; R-137/GR, -274/FRR; RBK; SCR-607; TBS; TBY.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 60 - 80.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

POWER OUTPUT: Transmitter: 50 w.
Receiver: 2 w.

POWER REQUIREMENTS: 1,152 w, 120 v, dc; 1,152 w, 230 v, dc; or (2.8 amp) per phase, 220 v, 60 cyc, 3 phase, ac; or (1.4 amp) per phase, 440 v, 60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

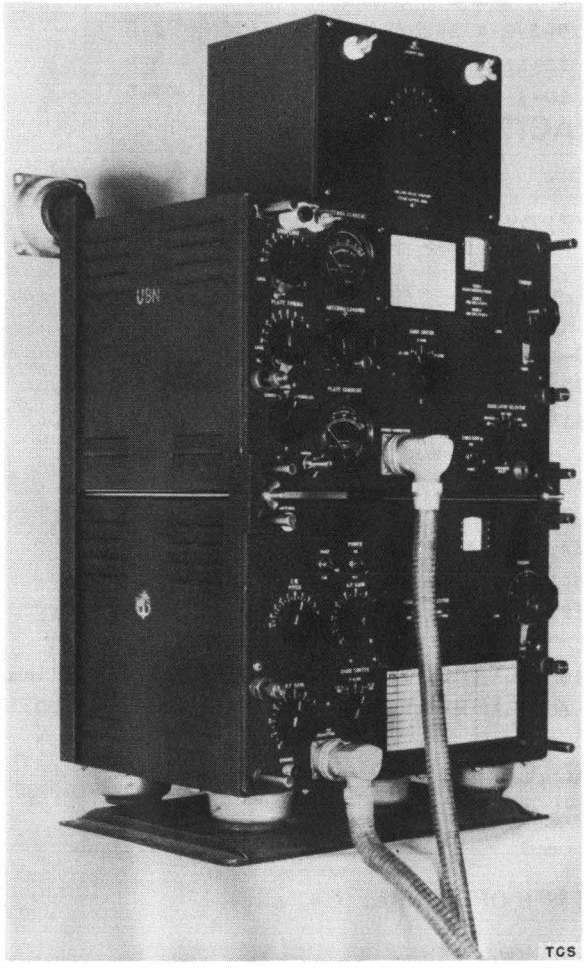
VHF Radio Transmitting and Receiving Equipments TBS, TBS-1 through 8 measure 19-1/4 x 25-13/16 x 17-3/4 inches. Packed for domestic Shipment: total weight 1,140 pounds, total volume 48.1 cu ft, 1.2 ship tons. Shipped in 9 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/URC-TYPE

SERVICE TYPE NUMBER: TCS, TCS-1 through -16

RADIO TRANS & REC EQUIP



Radio Transmitting and Receiving Equipments TCS, TCS-1 through -16 are general service, semi-portable, m-f, and h-f telegraph and telephone communication sets, for patrol and landing craft, reconnaissance vehicles, and similar application.

Transmitter frequency control is by means of a continuously variable oscillator or four crystal-controlled channels. The crystals may be operated either on their fundamental, or harmonic frequencies, or both.

The receiver is continuously variable over the operating frequency range.

A remote control unit is supplied to provide loud speaker operation and remote control at distances up to 20 feet from the power supply.

Power supplies are available for operation from the following power sources: 12, 24, 32, 115, and 230-v dc; 115 and 230-v ac.

AN/URC-TYPE

TCS, TCS-1 through -16 :SERVICE TYPE NUMBER

RADIO TRANS & REC EQUIP

INSTRUCTION LITERATURE: See note below*

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Navy

DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter NT-52245, -52245-A	11 x 13-3/4 x 11-13/16	48.0
1	Radio Receiver NT-46159, -46159-A	11-1/16 x 13-13/16 x 11-7/8	38.0
1	Remote Control Unit NT-23270, -23270-A	4-3/8 x 7-3/8 x 5-3/4	6.0
1	Antenna Loading Coil NT-47205	6 x 8-1/2 x 6-3/4	3.75
1	Dynamotor Assembly, or Motor Generator	9-5/8 x 8-25/32 x 12-15/16	35.0
	Assembly, or	12-1/8 x 16 x 22-1/2	115.0
	Rectifier Power Unit	10-1/8 x 17-1/4 x 16-1/4	93.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground, vehicular. **APPROXIMATE RANGE (IN MILES):** Short.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -314, -339, -342, -344, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -398/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCO; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.5-12.0 in three bands.
Band 1: 1.5-3.0. Band 2: 3.0 - 6.0. Band 3: 6.0 - 12.0.

TYPE MODULATION: Am. **TYPE OF SIGNAL:** Cw, voice.

POWER OUTPUT: Transmitter: 10 w on voice, 25 w on cw.
Receiver: 1.4 w, into 500 ohm load.

POWER REQUIREMENTS: Rectifier power units: 243 w, 115/230 v, 60 cyc, 1 phase, ac. Dynamotor assemblies: 205 w, 12 - 24 v, dc. Motor generator assemblies: 445 w, 24 v, dc; 474 w, 32 v, dc; 397 w, 115 v, dc; 385 w, 230 v, dc; 390 w, 115 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

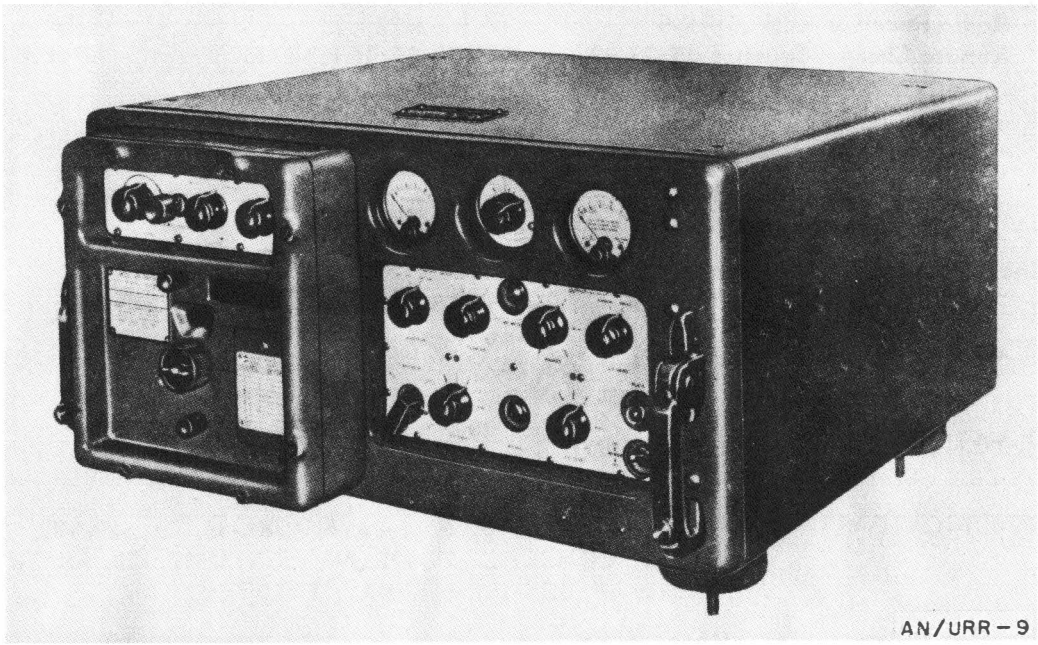
Radio Transmitting and Receiving Equipments TCS, TCS-1 through -16 measure 28 x 13-3/4 x 11-7/8 inches.

* Instruction Literature: NavShips 900,291; 900,269; 900,575; 900,612; 900,705; 95319; 95320; 95321; 95322; 95601.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/URR-9

RADIO RECEIVING SET


AN/URR-9

Radio Receiving Set AN/URR-9 is a general purpose u-h-f, a-m (voice) receiver for use in emergencies as a replacement for VHF Radio Receiving Equipment RDZ. It is designed for ship or shore use. This equipment has automatic (crystal) and manual (self-excited) frequency control. Selection of ten preset frequencies can be made manually, or automatically, by front panel controls, or automatically from up to four remote points by use of selector control units.

It is designed to operate with a vertically polarized, unbalanced broad-band, coaxial stub antenna (such as Antenna Assembly AS-390/SRC) or with a broad-band, dipole antenna (such as Antenna AT-150/SRC).

Special terminals can be connected to associated apparatus, such as a radio-frequency scanning unit to provide a visual picture of the signals received. Video output terminals are provided for connection of special apparatus not associated with the normal function of the receiver.

AN/URR-9

RADIO RECEIVING SET

INSTRUCTION LITERATURE: NavShips 91201
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver R-289/URR-9	13-1/8 x 22 x 23	150
* 1to 4	Remote Channel Selector NT-23492	5-1/4 x 4-9/16 x 3-5/16	Not Available

*Not supplied.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-12, -19, -27, -30, -33, -34; AN/GRC-16, -27, -29, -30, -32; AN/GRT-3; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-32; AN/URC-4; AN/URT-10; MAR; MAY; TDZ; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 225 - 400.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT:

Audio Channel:	60 mw into 600 ohm load, or 600 mw into 30 ohm load.
Phone Jack:	4 mw into 600 ohm load.
Video Channel:	1.5 v across 1,000 ohm load.
Scanning Channel:	More than 10,000 uv across 50 ohm load.

POWER REQUIREMENTS: 230 w, 115 v, 50/60 cyc, 1 phase, ac.

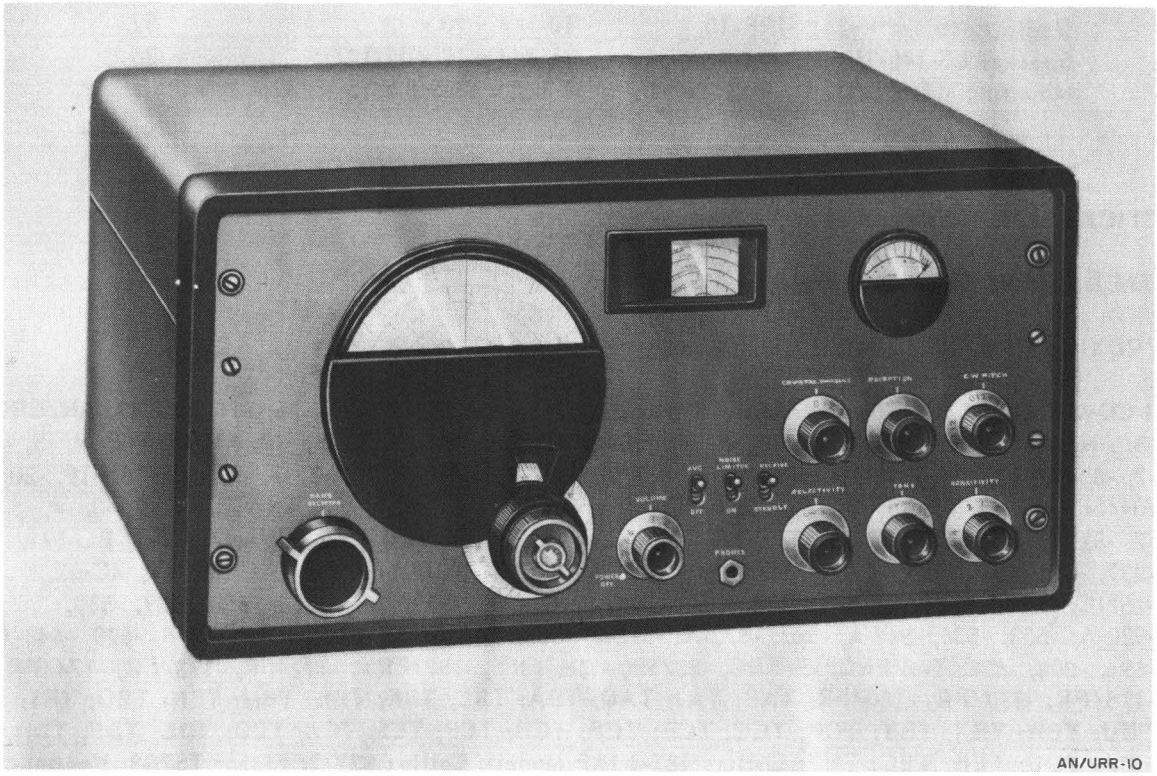
PHYSICAL CHARACTERISTICS

Radio Receiving Set AN/URR-9 measures 13-1/8 x 22 x 23 inches, net weight 226 pounds, volume 7.54 cu ft. Packed for domestic shipment: total weight 426 pounds, total volume 17.50 cu ft.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 Jun 52

AN/URR-10

RADIO RECEIVING SET



Radio Receiving Set AN/URR-10 is a general purpose, a-m/f-m (cw, mcw, voice) receiver for m-f, h-f and v-h-f communication applications on board ship or at shore stations.

This equipment consists essentially of a commercial (Hallicrafters SX-42) communication-type superheterodyne receiver having band-spread tuning in the 3.5-, 7.0-, 14.0- and 28.0-mc bands. It is provided with a beat-frequency oscillator, a stand-by switch, and variable selectivity circuits and operates from 105/120 v, 60 cyc ac or from batteries.

AN/URR-10

RADIO RECEIVING SET

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET: 9 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver R-231/URR-10	10-1/4 x 20 x 18	52
1	Speaker LS-140/U	11-3/4 x 17 x 12-1/2	26
1	Mounting MT-598/U	1-1/2 x 18-5/8 x 15-13/32	5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-1A, -2, -3, -5, -8, -9, -18, -21, -28, -36; AN/ART-13; AN/CRC-2, -3; AN/CRT-3; AN/FRC-6, -7, -8, -9, -10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-3, -4, -5, -6, -7, -8, -9, -13, -26, -30; AN/MRC-2, -5, -6, -16, -20, -22; AN/PRC-6, -7, -8, -9, -10, -16, -19, -20; AN/SRT-4; AN/TRC-1, -3, -4, -7B; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -2, -3, -4, -5, -7, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRT-1; BC-191, -339, -365, -401, -447, -640-D; MAN; MBF; MBS; MN; MQ-1; OA-60A/FRT, -60B/FRT; RC-52, -257-C; SCR-177, -188, -193, -274, -281, -293, -298, -300, -399, -499, -506, -508, -509, -510, -522-A, -528, -536, -542-A, -543, -573-A, -575-A, -585, -608, -609, -610, -619, -624-B, -628, -643-A, -694, -808, -828; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBS; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCF; TCH; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS25-3; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.54 - 110.0 in 6 bands.

Band 1: 0.54 – 1.62.
Band 2: 1.62 – 5.0.
Band 3: 5.0 – 15.0
Band 4: 15.0 – 30.0.
Band 5: 27.0 – 55.0.
Band 6: 55.0 – 110.

TYPE MODULATION: Am, fm.

TYPE OF SIGNAL: Cw, voice, mcw.

POWER REQUIREMENTS: 105–120 v, 50/60 cyc , 1 phase or 40 w, 270 v dc and 47 w, 6.3 v dc (from external batteries).

PHYSICAL CHARACTERISTICS

Radio Receiving Set AN/URR-10 measures 23-1/2 x 20 x 18 inches.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 Jun 52	**AN/URR-12** RADIO RECEIVING SET

NO PHOTOGRAPH AVAILABLE

Radio Receiving Set AN/URR-12 is a general purpose a-m/f-m (cw, mcw, voice) receiver for v-h-f communication applications on board ship or at shore stations.

This equipment has a double superheterodyne circuit including a beat-frequency oscillator, automatic noise limiter, variable sensitivity control, and receptacle for connecting to a panoramic adapter. It replaces the RBK series of radio receiving equipment.

AN/URR-12

RADIO RECEIVING SET

INSTRUCTION LITERATURE: Not available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consisits only of a single major operating component).

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground. Can be mounted in standard 19-inch cabinet.

APPROXIMATE RANGE (IN MILES): Long range on lower frequencies and line of sight on higher frequencies.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -12, -18, -27, -28, -30, -33, -34, -36; AN/CRC-2, -3; AN/FRC-6, 7, -9; AN/GRC-3, -4, -5, -6, -7, -8, -16, -27, -29, -30, -32; AN/GRT-3; AN/MRC-5, -12, -16, -22; AN/PRC-6, -8, -9, -10, -14, -16, -17, -20; AN/TRC-1, -3, -4, -7, -8, -11, -12, -32; AN/TRQ-1; AN/URC-4; AN/URT-7, -10; AN/VRC-1, -2, -3, -5, -7, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRT-1; BC-640; MAN; MAR; MAW; MAY:MBF; MBS; MN; RC-257; SCR-177, -293, -298, -300, -399, -499, -508; -509, -510, -522, -528, -542, -573, -575, -608, -609, -610, -619, -624, -628, -641, -643, -808, -828; TBS; TBY; TDG; TDQ; TDT; TDZ; TED; Collins 32V-2; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27 - 225, in 4 bands.

TYPE MODULATION: Am, fm.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER REQUIREMENTS: 80 w, 115 v, 50/60 cyc, 1 phase.

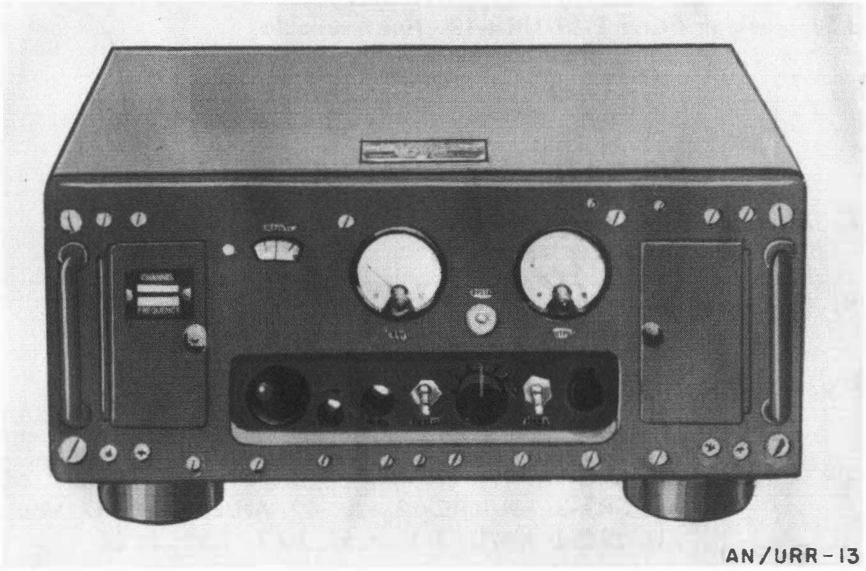
PHYSICAL CHARACTERISTICS

Radio Receiving Set AN/URR-12 measures 11 x 20-1/8 x 15 inches.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy, Air Force
DATE OF THIS SHEET: 29 May 52

AN/URR-13

RADIO RECEIVING SET



AN/URR-13

Radio Receiving Sets AN/URR-13 (including -A, -B, and -D) are general purpose, a-m (mcw, voice) equipments for use on Naval vessels, at Naval air and shore stations, or at other units of a military establishment, for u-h-f communication.

This equipment, replaces VHF Radio Receiving Equipment RED, and is used in conjunction with Radio Transmitting Equipment TED.

It may be operated on a single crystal-controlled channel, or by the self-excited conversion oscillator for continuously variable manual tuning.

Provision is made for connecting a panoramic type radio receiver to provide a visual picture of a received signal.

The receiver is designed to be used with a 1/4-wave broad-band antenna.

AN/URR-13

RADIO RECEIVING SET

INSTRUCTION LITERATURE: NavShips 91270
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy, Air Force
DATE OF THIS SHEET: 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver R-266/URR-13	7 X 19 x 19-1/8	57
1	Band Suppression Filter F-89/URR-13	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft traffic control stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/ARC-12, -19, -27, -30, -33, -34; AN/GRC-16, -27, -29, -30, -32; AN/GRT-3; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-32; AN/URC-4; AN/URT-10; MAR; MAY; TDZ; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 225 - 400.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw.

POWER OUTPUT: 60 mw into 600 ohm load or 600 mw into a 60 ohm load.

POWER REQUIREMENTS: 125 w, 110 – 120 v, 50/60 cyc, 1 phase, ac.

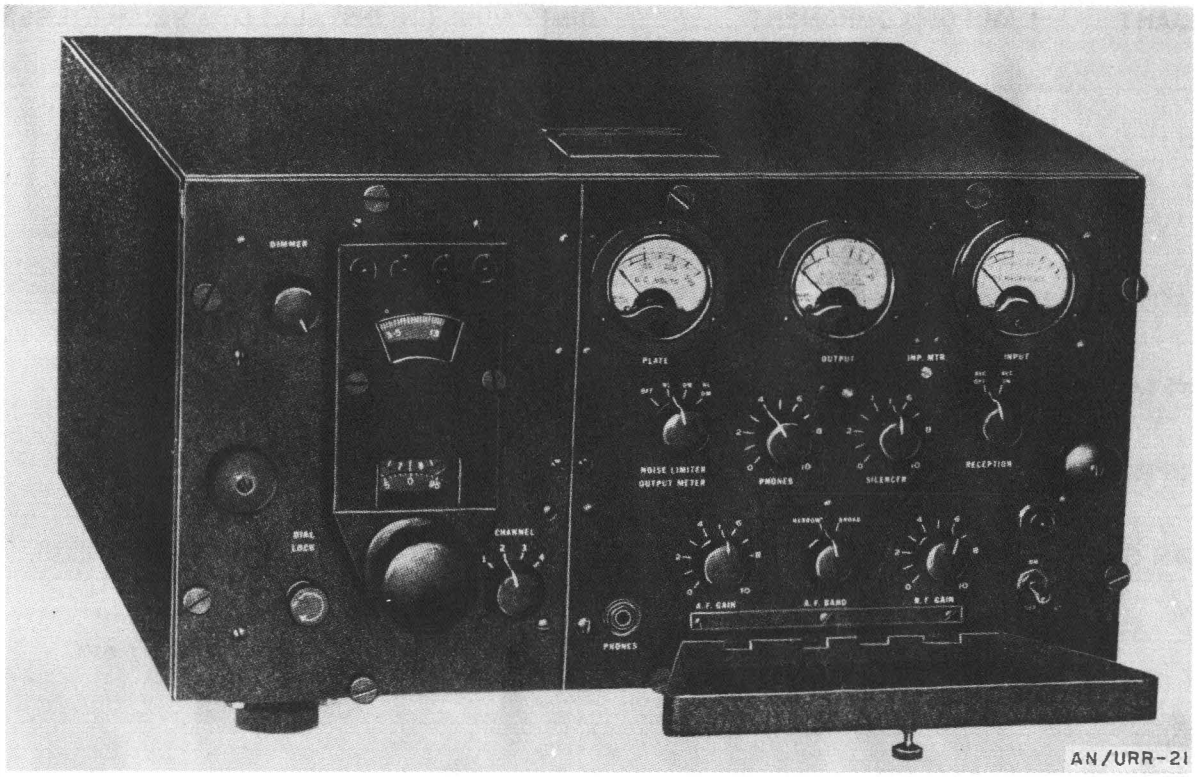
PHYSICAL CHARACTERISTICS

Radio Receiving Set AN/URR-13, (including -A, -B, -D) measures 8-7/16 x 17-1/2 x 19-1/8 inches. Packed for domestic shipment: total weight 167 pounds, total volume 7.4 cu ft. Shipped in one package.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 14 May 52

AN/URR-21

RADIO RECEIVING SET



Radio Receiving Sets AN/URR-21 and -21A are a-m (voice) v-h-f receivers used in conjunction with VHF Radio Transmitting Equipment TDQ on aircraft carriers, and at shore stations, for communicating with aircraft.

Four preset crystal-controlled channels are available, and the receivers feature a high degree of stability, freedom from cross modulation and radiation, and continuous tuning by means of a single dial.

In addition the AN/URR-21A employs a squelch circuit which operates when the input signal level drops below a predetermined value.

Both receivers are designed for use with a 50-ohm fixed antenna.

AN/URR-21

RADIO RECEIVING SET

INSTRUCTION LITERATURE: NavShips 91497
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 14 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver R-432/URR-21 or R-432A/URR-21	10-7/8 x 18-1/8 x 23	112

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft carriers or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-16, -20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URT-7, -10; AN/VRC-1; BC-640; MAW; MBS; RC-257; SCR-522, -542, -573, -575, -624, -641, -643; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 115 - 156.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 68 mw into a 600 ohm load.

POWER REQUIREMENTS: 106 w, 115 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Receiving Set AN/URR-21, -21A measure 10-7/8 x 18-1/8 x 23 inches.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/URR-22** RADIO RECEIVING SET

NO PHOTOGRAPH AVAILABLE

Radio Receiving Set AN/URR-22 is a morale and entertainment receiver for use aboard ship. It may be used as a replacement communications receiver in emergencies. Special features are a visual tuning indicator and high fidelity output.

This equipment is essentially a modification of Radio Receiving Equipment REE and will replace Radio Receiving Equipment RBO.

An open-wire high impedance type antenna is recommended for use with this equipment.

AN/URR-22

RADIO RECEIVING SET

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Medium to long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.535 - 18.6.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER REQUIREMENTS: 80 w, 115 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Receiving Set AN/URR-22 measures 12-1/2 x 18-1/16 x 17-1/2 inches.

STATUS: L/Std (–23); S/Std (–23A)

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 26 June 1956

AN/URR–23( )

RADIO RECEIVING SET



Radio Receiving Set AN/URR–23( ) is used for long-range ship or shore communication applications that require the highest order of stability and dial accuracy.

This equipment tunes with a normal setting error and drift of less than 1 kilocycle. The fundamental or harmonic output of the frequency oscillator is crystal controlled.

The AN/URR–23 consists essentially of a commercial (Collins model 51J–2) radio receiver; and the AN/URR–23A, of the Collins model 51J–3 receiver. Both receivers are similar but the A model has an antenna trimmer control and is fitted with chassis handles.

AN/URR-23( )

INSTRUCTION LITERATURE: NAVSHIPS 91678

USING SERVICE: USN

RADIO RECEIVING SET

DATE OF THIS SHEET: 26 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Dynamic Loudspeaker LS-175/U (-23) or LS-199/U (-23A)	10 9/16 x 15 x 8 7/8	
1	Radio Receiver R-381A/URR-23 (-23) or R-388/URR (-23A)	12 1/4 x 21 1/8 x 13 7/8	

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard; shore installations.

INSTALLATION: Shipborne; ground stations.

APPROXIMATE RANGE: Long.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .5 to 30.5 in 30 bands ea 1 mc wide.

TYPE MODULATION: Am (A1, A2, A3).

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: 1.5 w at 1,000 cy (less than 15% distortion).

POWER REQUIREMENTS: 85 w, 115/230 v, 45/70 cy, 1 ph ac.

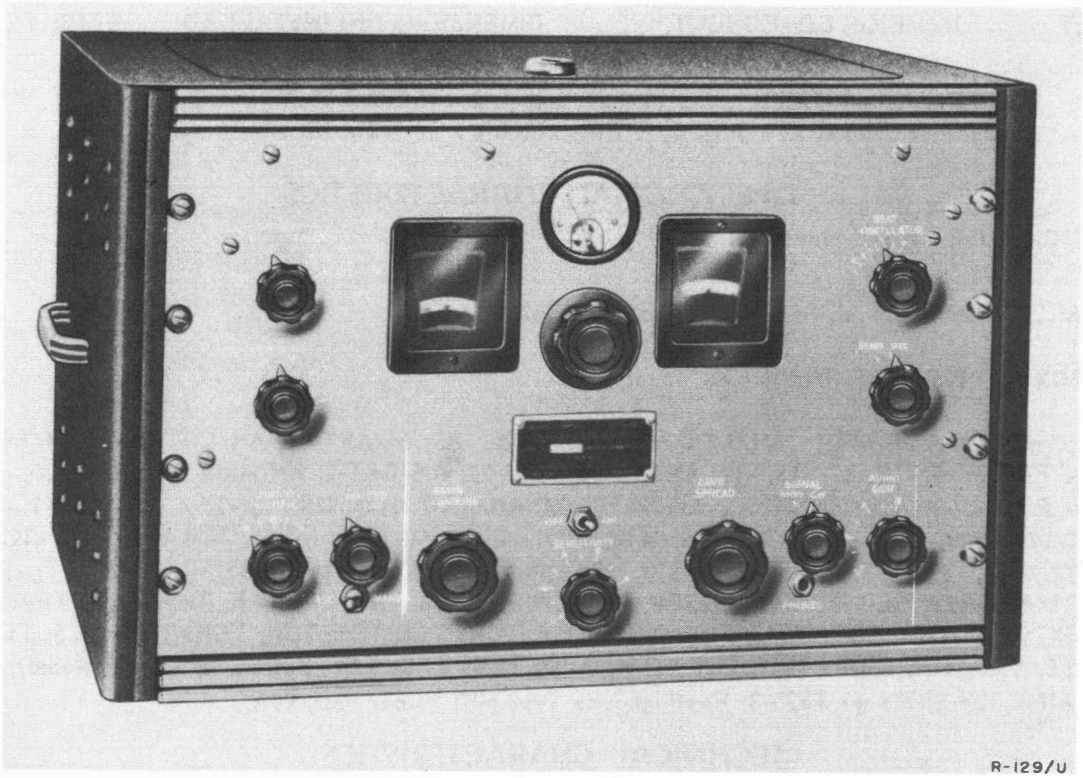
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	12 1/4 x 21 1/8 x 13 7/8				
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 22 Jan 52

AN/URR-TYPE

AN/COMP TYPE NUMBER: R-129/U
RADIO RECEIVER



Radio Receiver R-129/U is a transportable, a-m (voice, tone, and cw) radio receiving equipment which operates in the medium and high-frequency bands in fixed station communication, monitoring, or intercept applications.

This equipment is a table model, cabinet-inclosed radio receiver which can be removed from the cabinet and mounted on a standard relay rack. It can be installed and operated in a vehicle by means of appropriate shock mounts.

It uses a doublet antenna with balanced transmission line, a straight wire and ground, or similar antenna system.

Can be operated from 115- or 230-v a-c sources or by batteries in an emergency.

AN/URR-TYPE	INSTRUCTION LITERATURE: TM 11-866 TM 11-4054
R-129/U :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVER	USING SERVICE : Army
	DATE OF THIS SHEET : 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver R-129/U	10-1/2 x 15-3/8 x 19	55
	(in Cabinet CH-104-A)	12-1/4 x 16-1/2 x 23	73

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant use.

INSTALLATION: Ground, fixed station or vehicular.

APPROXIMATE RANGE (IN MILES): long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -20, -25; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRT-1, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -329, -339, -365, -401, -447, -610; MBS; MQ; OA-60/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS25-3; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.3 - 10.0, in five bands:

Band 1: 0.3 to 0.54.
Band 2: 0.54 to 1.16.
Band 3: 1.16 to 2.50.
Band 4: 2.50 to 5. 00.
Band 5: 5.00 to 10.00.

TYPE MODULATION: Am.

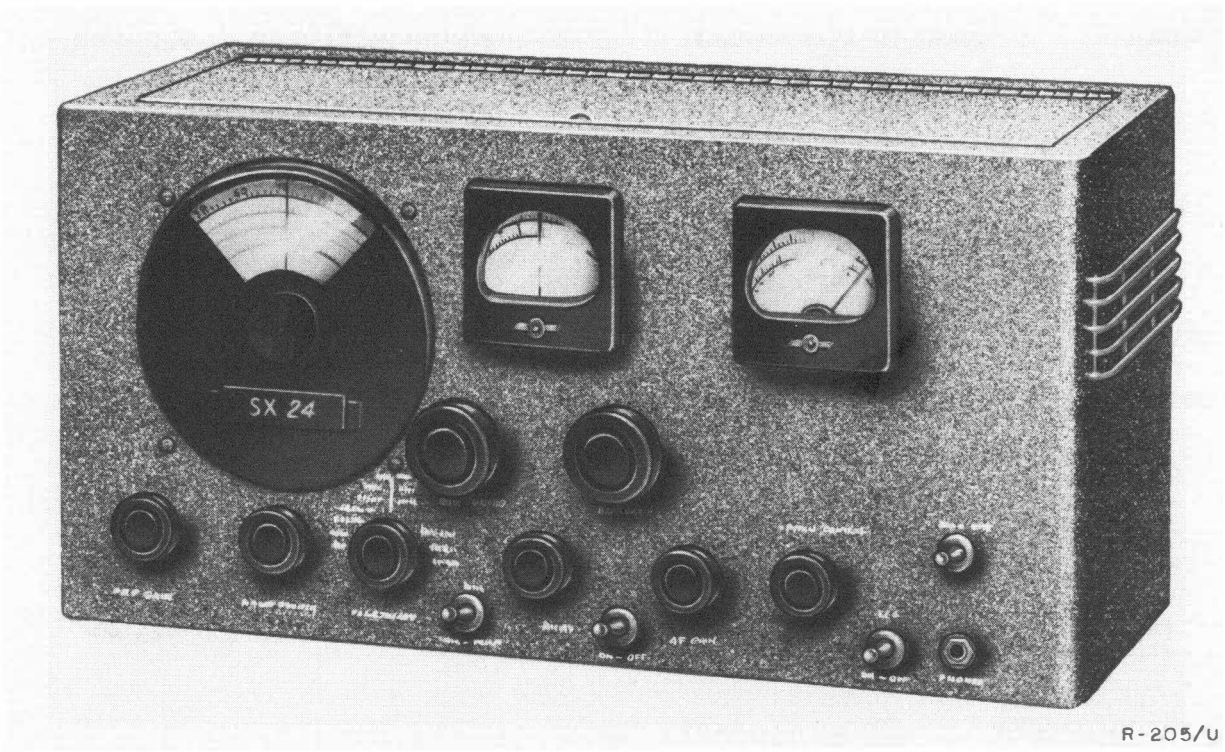
TYPE OF SIGNAL: Cw, voice, tone.

POWER REQUIREMENTS: Ac: 180 w, 95 to 130/190 to 260 v, 25/60 cyc or 180 w, 115/230 v, 50/60 cyc
Battery: One 6-v storage battery, five 45-v B batteries, and one 45-v C battery.

PHYSICAL CHARACTERISTICS

Radio Receiver R-129/U measures 10-1/2 x 15-3/8 x 19 inches, net weight 55 pounds, volume 1.8 cu ft. Packed for domestic shipment: total weight 57 pounds, total volume 2.6 cu ft. Packed for export shipment: total weight 90 pounds, total volume 4.3 cu ft. Shipped in 1 package both domestic and export.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 22 Jan 52	**AN/URR-TYPE** AN/COMP TYPE NUMBER: R-205/U RADIO RECEIVER



Radio Receiver R-205/U is a lightweight, transportable, radio receiving equipment used in a-m (voice, cw and mcw) communication in the medium- high- and v-h-f bands. It is used as fixed station equipment.

This equipment is a commercial (Hallicrafters SX-24) communications-type, table model, receiver which operates in four frequency bands. It is designed to maintain frequency stability over a wide range of line voltage, and ambient temperature and humidity conditions. It is provided with means for break-in relay operation, has panel controls for selection of, or adjustments for, r-f gain, crystal phasing, audio gain, band spread, selectivity, station selection, and similar operating features, and includes a beat-frequency oscillator.

This set uses a conventional straight wire antenna but can be operated in conjunction with more elaborate arrays.

It is operated from a 70-w source of 110-v ac or from a 6-v storage battery through appropriate power modifying equipment.

AN/URR-TYPE	INSTRUCTION LITERATURE: None
R-205/U :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVER	USING SERVICE : Army
	DATE OF THIS SHEET : 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component).

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant use.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE (IN MILES): Medium - long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/S T-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC. -83/SR, -158/F T, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -190/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.54 - 43.5 in 4 bands.

Band 1: 0.54 - 1.73
Band 2: 1.7 - 5.1
Band 3: 5.0 - 15.7
Band 4: 15.2 - 43.5 .

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, mcw.

POWER REQUIREMENTS: 70 w, 110 v, 50/60 cyc ac
or
6-v dc (supplied by a No. 301 Electronic Converter).

PHYSICAL CHARACTERISTICS

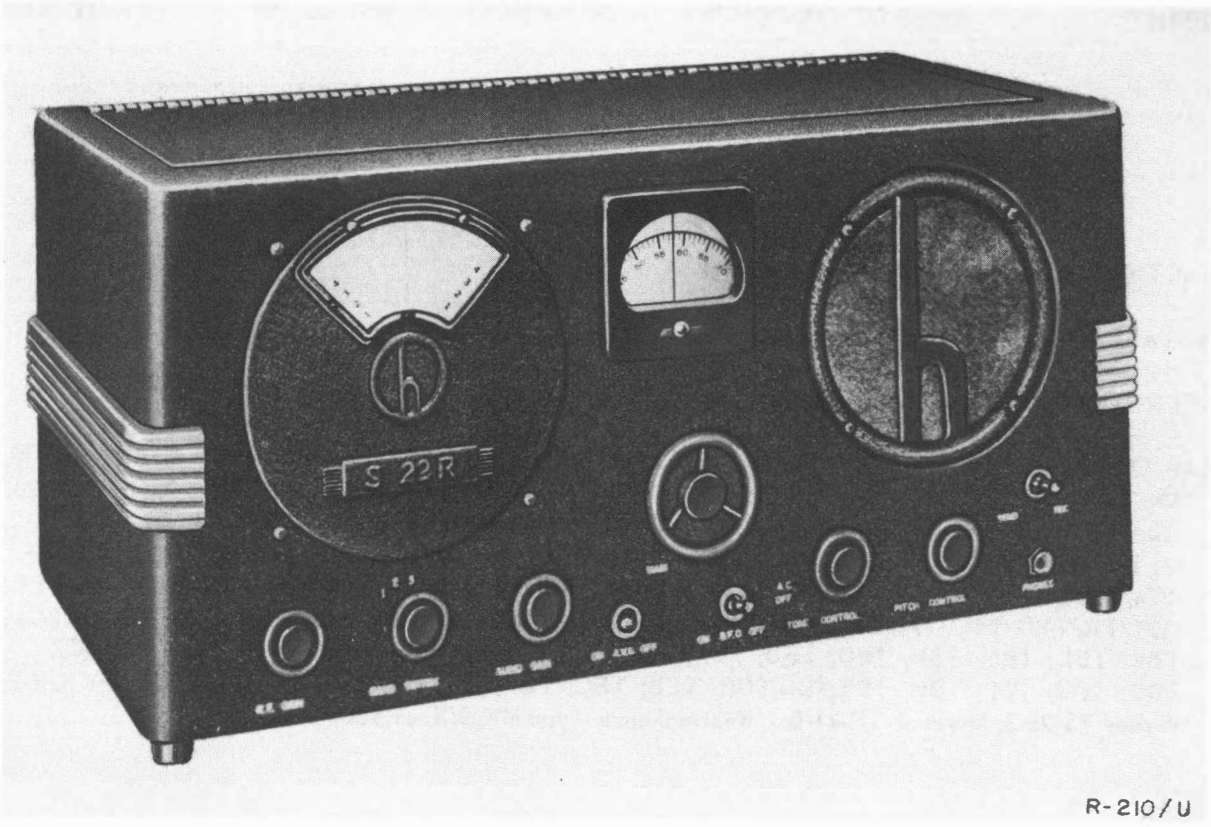
Radio Receiver R-205/U measures 19-1/2 x 9-1/2 x 10-1/8 inches, net weight 56 pounds, volume 1.16 cu ft.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 30 Jan 52

AN/URR-TYPE

AN/COMP TYPE NUMBER: R-210/U

RADIO RECEIVER



R-210/U

Radio Receiver R-210/U is a transportable, a-m (voice and cw) equipment used for point-to-point communication in the l-f, m-f, and h-f ranges at fixed plant installations.

This equipment consists essentially of a commercial (Hallicrafters S22R) table model radio receiver of the conventional communications type and consists of a single unit in a steel cabinet. It has a built-in loudspeaker and provision for headset operation. Its controls include r-f and a-f gain, pitch, band selection, avc, beat-frequency oscillator, and on-off switches.

It uses a long wire type antenna and can be operated from 110/125-v a-c or d-c power sources.

AN/URR-TYPE	INSTRUCTION LITERATURE: None
	CLASSIFICATION OF EQUIPMENT: Unclassified
R-210/U :AN/COMP TYPE NUMBER	USING SERVICE : Army, Navy
RADIO RECEIVER	DATE OF THIS SHEET : 30 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant and training.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-4, -5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRT-1, -3, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -329, -339, -365, -401, -447, -610; MBS; MQ; OA-60/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBX; TCB; TCC; TCE; TCG; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK;TDN;TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.11 _ 18.0, in four bands.

TYPE MODULATION: Am.

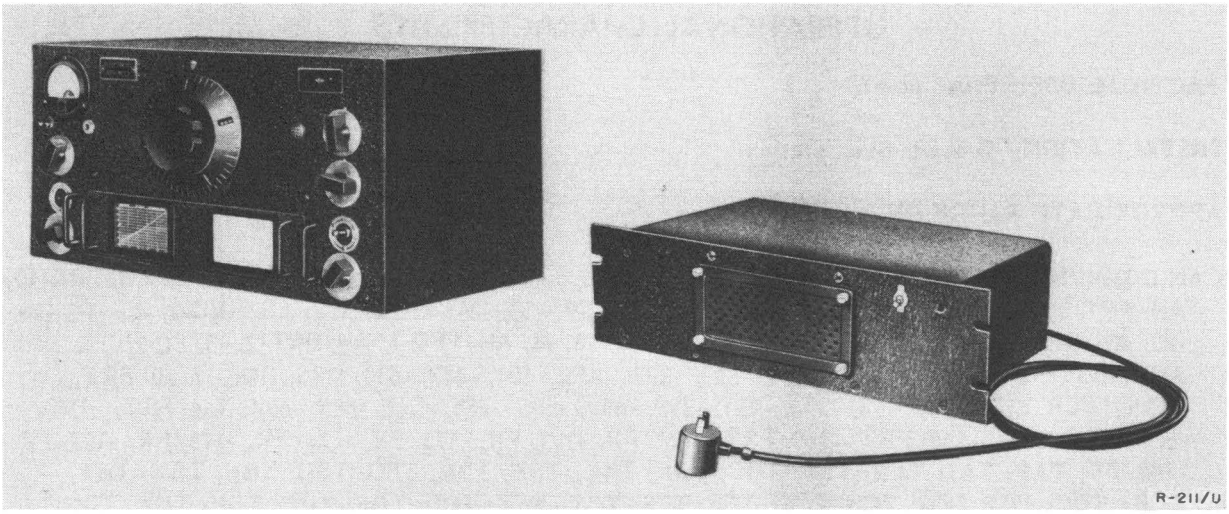
TYPE OF SIGNAL: Voice, cw,

POWER REQUIREMENTS: 50 w, 110_125 v dc or ac, 50/60 cyc.

PHYSICAL CHARACTERISTICS

Radio Receiver R-210/U measures 18 x 8-1/2 x 9-1/4 inches, net volume 1 cu ft. Packed for domestic shipment: total weight 31 pounds. Packed for export shipment: total weight 55 pounds, total volume 2 cu ft.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 22 Jan 52	**AN/URR-TYPE** AN/COMP TYPE NUMBER: R-211/U RADIO RECEIVER



Radio Receiver R-211/U is a general purpose, lightweight, a-m (voice, tone, and cw) receiving equipment used for fixed plant communication in the l-f, m-f, and h-f bands.

This equipment consists of a single radio receiver, which may be table- or rack-and-panel-mounted. Has an external power supply. Operates in nine frequency bands, selected by means of interchangeable coils, and has a crystal-controlled band-pass filter which operates at 0.456 mc.

This receiver can be operated with a conventional single wire or doublet antenna system.

Power required is 115v ac or 6 v dc (by means of appropriate power supply unit).

AN/URR-TYPE	INSTRUCTION LITERATURE: None
R-211/U : AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVER	USING SERVICE : Army
	DATE OF THIS SHEET : 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-4, -5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRT-1, -3, -4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -329, -339, -365, -401, -447, -610; MBS; MQ; OA-60/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCG; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.05 - 30.0, by use of 9 r-f coil sets:

Type J: 0.05 – 0.10.	Type F: 0.48 – 0.96.	Type C: 3.5 – 7.3
Type H: 0.10 – 0.20.	Type E: 0.90 – 2.05.	Type B: 7.0 – 14.4
Type G: 0.18 – 0.43.	Type D: 1.70 – 4.00.	Type A: 14.0 – 30.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, voice, tone.

POWER REQUIREMENTS: 115 v, 50/60 cyc ac with National Type SPU-697 Power Supply.
6 v, dc with National Type SPU-686-S Power Supply.

PHYSICAL CHARACTERISTICS

Radio Receiver R-211/U weighs 79.5 pounds net, volume 2.1 cu ft. Packed for domestic shipment: total weight 81 pounds, total volume 2.4 cu ft. Packed for export shipment: total weight 211 pounds, total volume 9.1 cu ft. Shipped in 3 packages both domestic and export.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 8 Jan 52	**AN/URR-TYPE** AN/COMP TYPE NUMBER: R-212/SR RADIO RECEIVER



Radio Receiver R-212/SR is a tuned-radio-frequency, a-m (cw, icw, and mcw) radiotelegraph receiving equipment used in shipborne and fixed station applications.

This equipment consists of a commercial (Federal 128 AY) receiver having a regenerative detector. It can be operated with a single wire-and-ground antenna system.

Operates on ac or dc or from storage or dry batteries and has a power-selection switch by means of which the power source can be selected.

AN/URR-TYPE

R-212/SR :AN/COMP TYPE NUMBER

RADIO RECEIVER

INSTRUCTION LITERATURE: TM 11-868

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET : 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component).

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne, fixed station. APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-8; AN/ART-13; AN/CRT-3, -5; AN/FRT-4, -10, -19; AN/GRT-2; AN/MRC-20; AN/SRC-3; AN/SRT-1, -3; AN/TRQ-1 AN/URT-2, -3, -4; BC-191, -329, -365; SCR-177; T-5/FRC, -171/FR; TAB; TAJ; TAQ; TBL; TBN; TBU; TBW; TCE; TCG; TCY; TCZ; TDE; TDK; TDO; Marconi TH-41-B; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.015 - 0.650, in four overlapping bands.

Band A: 0.015 - 0.041. Band C: 0.095 - 0.260.

Band B: 0.037 - 0.105. Band D: 0.240 - 0.650.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw and mcw.

POWER OUTPUT: 0.10 w with low distortion; 0.15 w without regard to distortion.

POWER REQUIREMENTS.

A-c line	D-c line plus A battery		Batteries	
	line	battery	A	B
36 w	0.17 amp	1.9 amp	1.9 amp	7-12 ma
115 v	115 v	6.3 v	6.3 v	90
60 cyc				

PHYSICAL CHARACTERISTICS

Radio Receiver R-212/SR weighs 43 pounds net, volume 1.5 cu ft.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 22 Jan 52	**AN/URR-TYPE** AN/COMP TYPE NUMBER: R-388/URR RADIO RECEIVER



R-388/URR

Radio Receiver R-388/URR is a general purpose, a-m (voice, cw, and frequency-shift keying) radio receiving equipment which operates in the m-f and h-f bands for fixed station or mobile applications.

This equipment, consisting of a single, self-contained, rack-mounted radio receiver having unusual stability and calibration accuracy, is especially useful for operating on known frequencies without searching or repeated readjustment and for reception of frequency-shift keying signals. Its features include a 100 kc crystal-calibrated oscillator, a coaxial antenna input connector, a coaxial connector for tapping the i-f output, and provision for connecting an external circuit to control the built-in remote-disabling relay. It can be operated by means of headphones or loudspeaker and in conjunction with straight wire or doublet type antenna systems.

Operates from conventional commercial type power or equivalent field power units

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AN/URR-TYPE	
R-388/URR	:AN/COMP TYPE NUMBER
RADIO RECEIVER	

INSTRUCTION LITERATURE: TM 11-854
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station or mobile.

APPROXIMATE RANGE (IN MILES): Extended.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.5 - 30.5.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, voice, frequency-shift keying

POWER REQUIREMENTS: 85w, 115/230 v, 45/70 cyc ac.

PHYSICAL CHARACTERISTICS

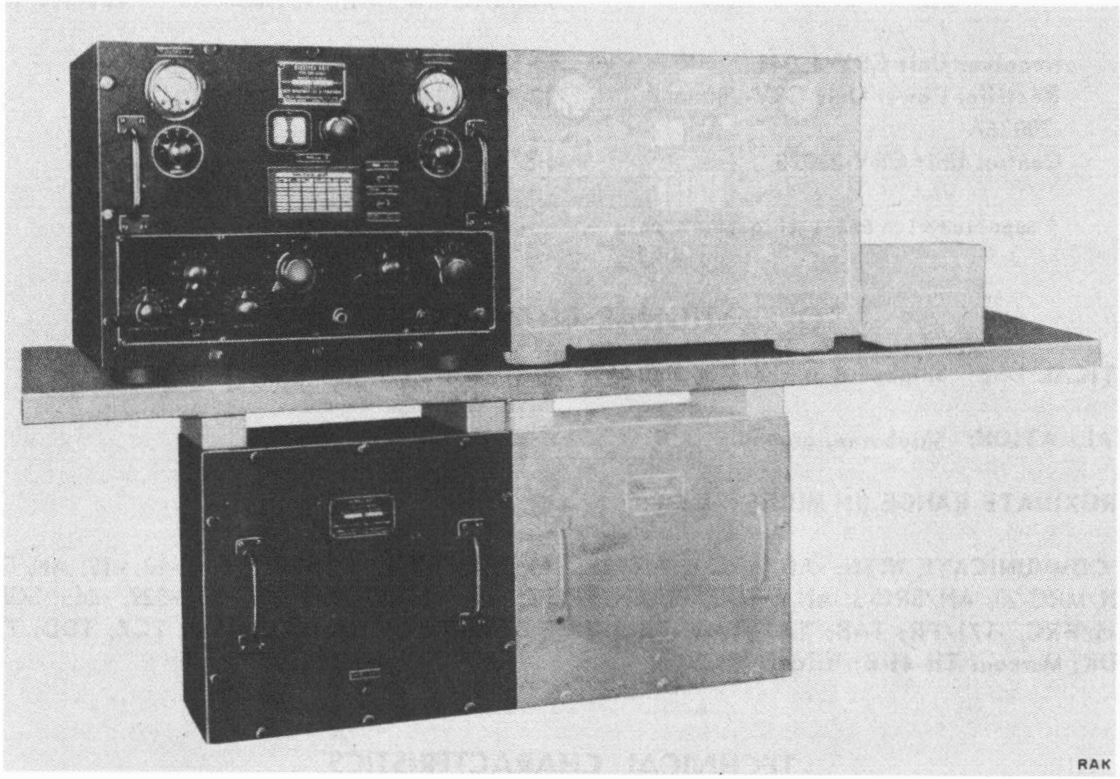
Radio Receiver R-388/URR measures 10-1/2 x 19 x 13-11/16 inches, net weight 35 pounds, volume 1.75 cu ft. Shipped in 1 package both domestic and export.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Mar 52

AN/URR-TYPE

SERVICE TYPE NUMBER: RAK, RAK-1 through 4

RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RAK, and RAK-1 through -4 are general purpose tuned-radio-frequency receivers designed primarily to receive radiotelegraph signals within the frequency range 0.015 to 0.600 mc. Voice reception is intelligible only above 0.2 mc.

These equipments are essentially identical. The RAK is battery operated only but, in an emergency, the RAK-1 through -4 can also be operated from batteries. These receivers are often installed adjacent to an RAL series receiver to form a complete two-channel installation for guarding two frequencies simultaneously. A separate control unit is supplied with the RAK-1 through -4 which permits this type of operation.

Equipment required but not supplied: 600-ohm headset and receiving antenna.

AN/URR-TYPE	INSTRUCTION LITERATURE: IB-23299; -23299-1; 23299-2; -26678
RAK, RAK-1 through 4 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET: 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver Unit CRV-46044	13-5/16 x 18 x 16-3/4	74
*1	Rectifier Power Unit CRV-20036, -20036A	12-1/4 x 14 x 8-5/8	41
*1	Control Unit CRV-23073	4-3/4 x 5-3/8 x 3-5/8	2

* Supplied with RAK-1 through -4 only.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-8; AN/ART-13; AN/CRT-3, -5; AN/FRT-4, -10, -19; AN/GRT-2; AN/MRC-20; AN/SRC-3; AN/SRT-1, -3; AN/TRQ-1; AN/URT-2, -3, -4; BC-191, -329, -365; SCR-177; T-5/FRC, -171/FR; TAB; TAJ; TAQ; TBL; TBN; TBU; TBW; TCE; TCG; TCY; TCZ; TDD; TDE; TDK; Marconi TH-41-B; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.015 - 0.600, in 6 bands.

Band 1: 0.015 – 0.025.
Band 2: 0.025 – 0.0435.
Band 3: 0.0435 – 0.0775.
Band 4: 0.0775 – 0.153.
Band 5: 0.153 – 0.308.
Band 6: 0.308 – 0.600.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice (above 0.2 mc).

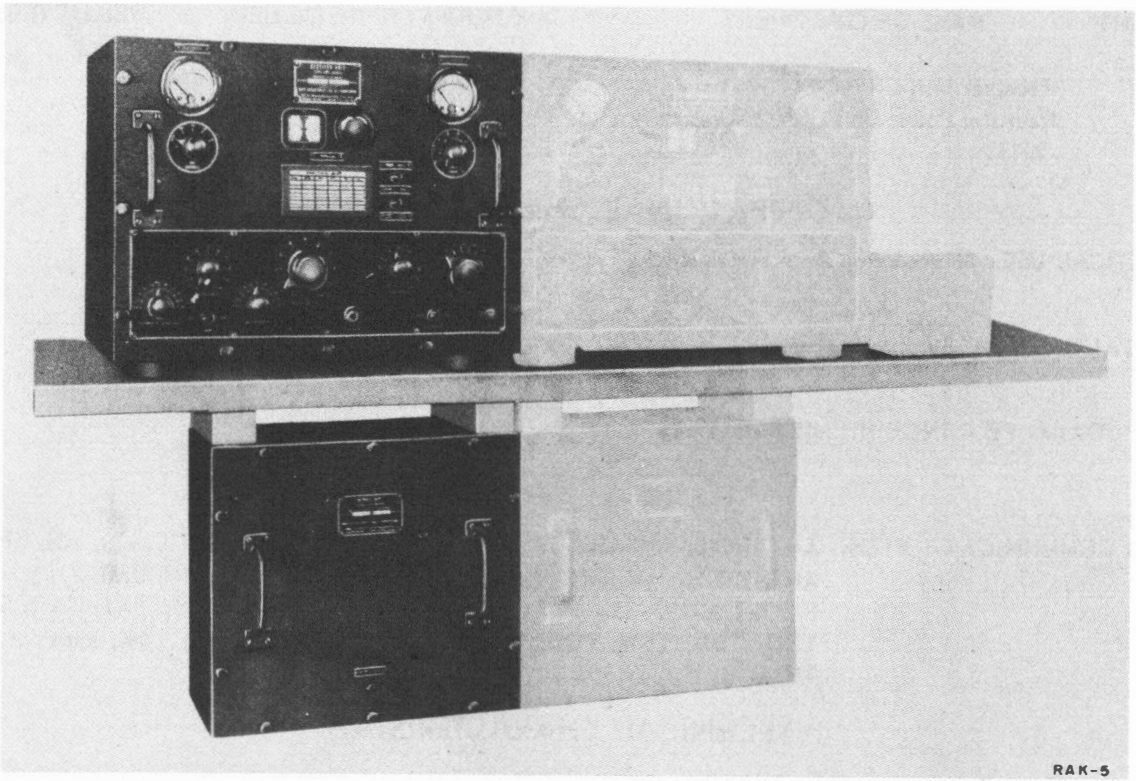
POWER OUTPUT: 170 mw.

POWER REQUIREMENTS: Without ballast tube: 60 w, 115 v (± 10%) 60 cyc, 1 phase.
With ballast tube: 200 w, 115 v (± 10%) 60 cyc, 1 phase.
Battery operation: 12.6 w, 6.3 v and 8.1 w, 180 v.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipments RAK and RAK-1 through 4 measure 26 x 18 x 16-3/4 inches each.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 Mar 52	**AN/URR-TYPE** SERVICE TYPE NUMBER: RAK-5, -6 RADIO RECEIVING EQUIPMENT



Radio Receiving Equipment RAK-5 and -6 are general purpose tuned r-f receivers designed primarily to receive telegraph signals within the range of frequencies from 0.015 to 0.600 mc. Voice reception is intelligible only above 0.2 mc.

Either the RAK-5 or RAK-6 is often installed adjacent to an RAL series receiver to form a complete two-channel installation for guarding two frequencies simultaneously. A separate control unit is supplied with the RAL-5 through -8 receivers which permits this type of operation.

In an emergency, the receiver can be operated directly from batteries.

Equipment required but not supplied: 600-ohm headset and receiving antenna.

AN/URR-TYPE	INSTRUCTION LITERATURE: IB-38043; NavShips 95231
RAK-5, -6 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver Unit CRV-46044, -46155	13-5/16 x 18 x 16-3/4	74
1	Rectifier Power Unit CRV-20036A, -20131	12-1/4 x 14 x 8-5/8	41

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-8; AN/ART-13; AN/CRT-3, -5; AN/FRT-4, -10, -19; AN/GRT-2; AN/MRC-20; AN/SRC-3; AN/SRT-1, -3; AN/TRQ-1; AN/URT-2, -3, -4; BC-191, -329, -365; SCR-177; T-5/FRC, -171/FR; TAB; TAJ; TAQ; TBL; TBN; TBU; TBW; TCE; TCG; TCY; TCZ; TDD; TDE; TDK; Marconi TH-41-B; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.015 - 0.600, in six bands.

Band 1: 0.015 – 0.025.
Band 2: 0.025 – 0.0435.
Band 3: 0.0435 – 0.0775.
Band 4: 0.0775 – 0.153.
Band 5: 0.153 – 0.308.
Band 6: 0.308 – 0.600.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice (above 0.2mc).

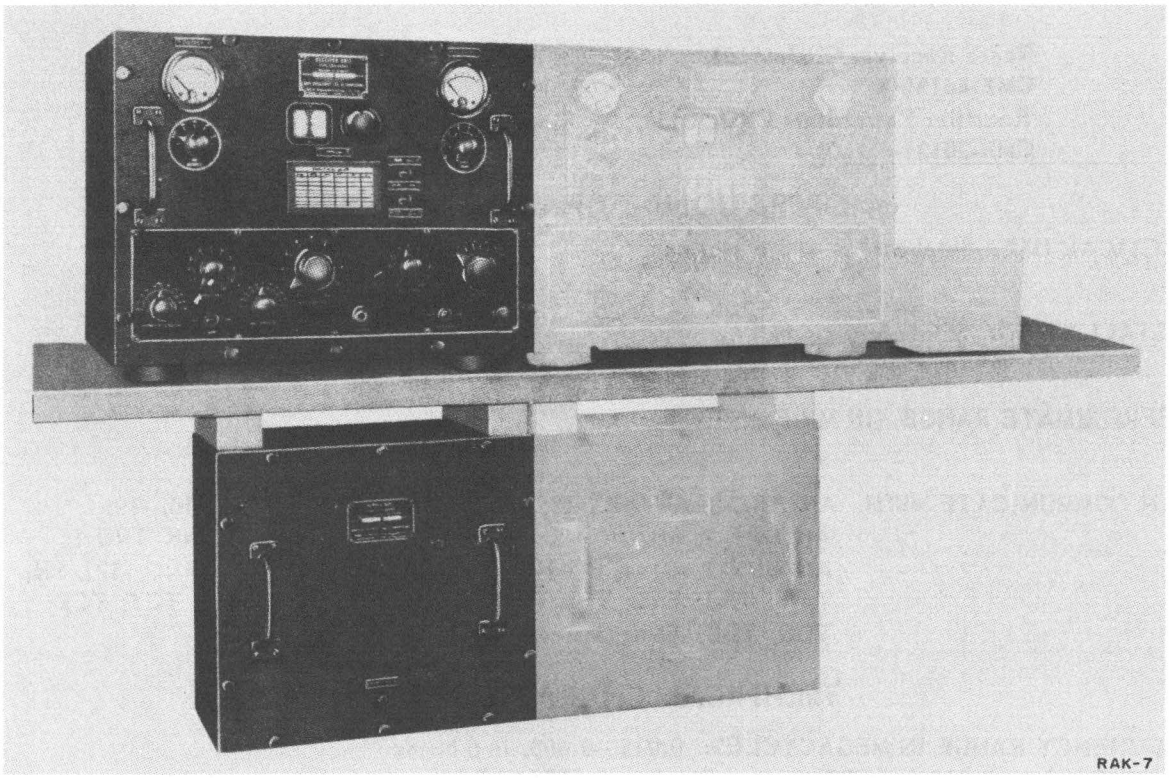
POWER OUTPUT: 170 mw.

POWER REQUIREMENTS: With ballast tube: 200 w, 115 v(± 10%) 60 cyc, 1 phase.
Without ballast tube: 60 w, 115 v(± 10%) 60 cyc, 1 phase.
Battery operation: 12.6 w, 6.3 v and 8.1 w, 180 v.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RAK-5 and -6 measures 26 x 18 x 16-3/4 inches each.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 Mar 52	**AN/URR-TYPE** SERVICE TYPE NUMBER: RAK-7, -8 RADIO RECEIVING EQUIPMENT


RAK-7

Radio Receiving Equipments RAK-7 and -8 are general purpose tuned-radio-frequency receivers designed primarily to receive telegraph signals within the frequency range 0.015 to 0.600 mc.

Each of these equipments is often installed adjacent to an RAL series receiver to form a complete two-channel installation for guarding two frequencies simultaneously. A separate control unit is supplied with the RAL-5 through -8 receivers which permits this type of operation.

In an emergency, the receiver can be operated directly from batteries.

Equipment required but not supplied: 600-ohm headset and receiving antenna.

AN/URR-TYPE

RAK-7, -8 :SERVICE TYPE NUMBER

RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,232; 900,480
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CND-46155, CMX-46155-A	13-5/16 x 18 x 16-3/4	74
1	Rectifier Power Unit CND-20131, CMX-20131-A	12-1/4 x 14 x 8-5/8	42

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-8; AN/ART-13; AN/CRT-3, -5; AN/FRT-4, -10, -19; AN/GRT-2; AN/MRC-20; AN/SRC-3; AN/SRT-1, -3; AN/TRQ-1; AN/URT-2, -3, -4; BC-191, -329, -365; SCR-177; T-5/FRC, -171/FR; TAB; TAJ; TAQ; TBL; TBN; TBU; TBW; TCE; TCG; TCY; TCZ; TDD; TDE; TDK; Marconi TH-41-B; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.015 - 0.600, in 6 bands.

Band 1: 0.015 – 0.025.
Band 2: 0.025 – 0.0435.
Band 3: 0.0435 – 0.0775.
Band 4: 0.0775 – 0.153.
Band 5: 0.153 – 0.308.
Band 6: 0.308 – 0.600.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice.

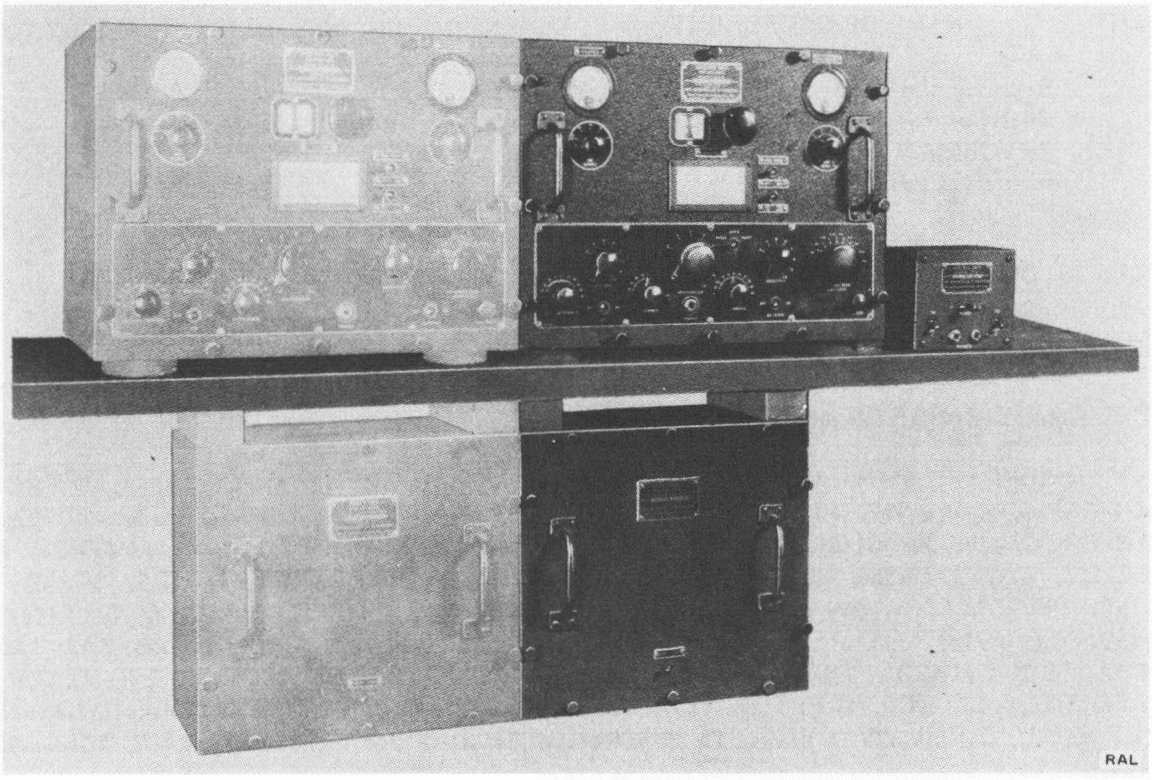
POWER OUTPUT: 170 mw.

POWER REQUIREMENTS: With ballast tube: 200 w, 110-120 v, 60 cyc, 1 phase.
Without ballast tube: 60 w, 110-120 v, 60 cyc, 1 phase.
Battery operation: 12.6 w, 6.3 v and 8.1 w, 180 v.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RAK-7 or -8 measures 26 x 18 x 16-3/4 inches, net weight 196 pounds, volume 4.7 cu ft. Packed for domestic shipment: total weight 371 pounds, total volume 16.9 cu ft. Shipped in 4 packages.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 Mar 52	**AN/URR-TYPE** SERVICE TYPE NUMBER: RAL, RAL-1 through -4 RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RAL and RAL-1 through -4 are general purpose radio receivers designed to receive radiotelegraph and voice signals within the frequency range 0.3 to 23.0 mc.

These receivers are essentially identical, but the RAL model is battery operated only.

They are often installed adjacent to an RAK (series) receiver to form a complete two-channel installation for guarding two frequencies simultaneously. A separate control unit is supplied with RAK-1 through -4 which permits this type of operation.

A 600-ohm headset and receiving antenna are required but not supplied.

Can be operated directly from batteries in an emergency.

AN/URR-TYPE

RAL, RAL-1 through 4 :SERVICE TYPE NUMBER
RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: IB-23900; -23900-1; -23900-2; -26679
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver Unit CRV-46045	13-5/16 x 18 x 16-3/4	69
1	Rectifier Power Unit CRV-20036, CRV-20036-A (supplied with RAL-1 through -4 only)	12-1/4 x 14 x 8-5/8	41

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRT-1, -3, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -329, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.3 - 23.0, in 9 bands.

Band 1: 0.3 – 0.49.
Band 2: 0.49 – 0.8.
Band 3: 0.8 – 1.33.
Band 4: 1.33 – 2.08.
Band 5: 2.08 – 3.4.
Band 6: 3.4 – 5.5.
Band 7: 5.5 – 8.8.
Band 8: 8.8 – 14.3.
Band 9: 14.3 – 23.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice.

POWER OUTPUT: 170 mw.

POWER REQUIREMENTS: With ballast tube: 200 w, 115 v(± 10%) 60 cyc, 1 phase.
Without ballast tube: 60 w, 115 v(± 10%) 60 cyc, 1 phase.
Battery operation: 12.6 w, 6.3 v and 8.1 w, 180 v.

PHYSICAL CHARACTERISTICS

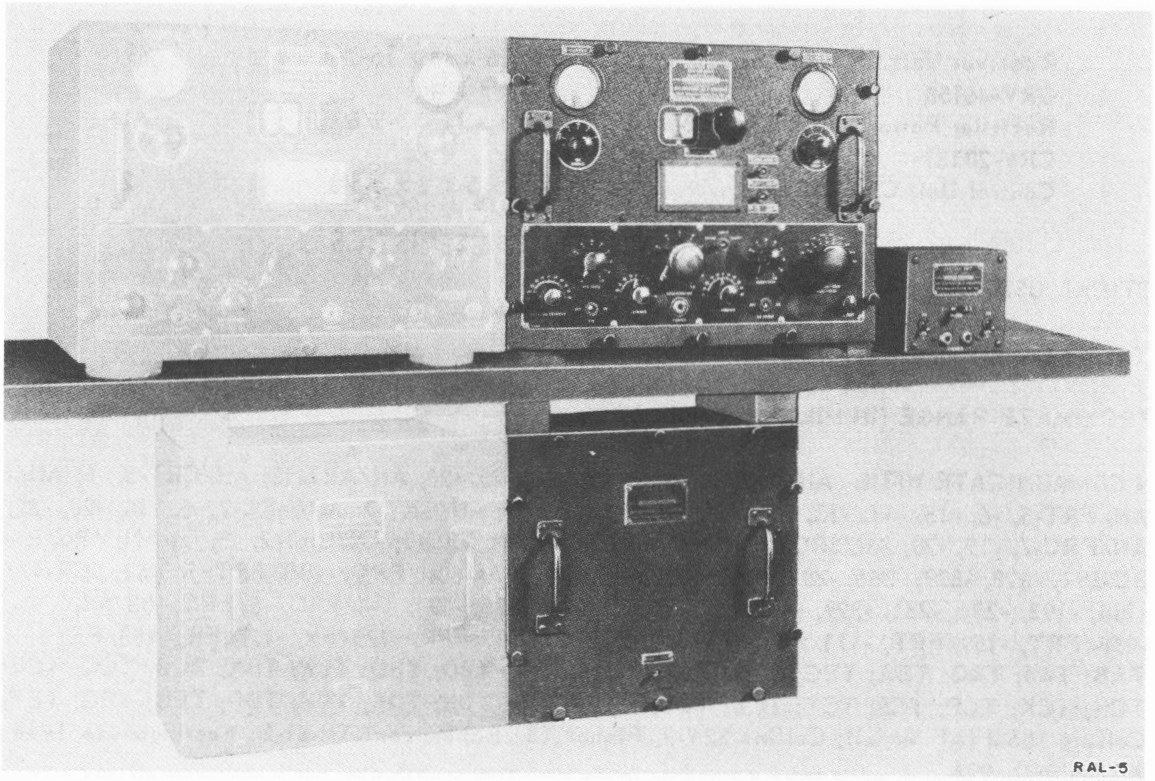
Radio Receiving Equipment RAL or RAL-1 through -4 measures 26 x 18 x 16-3/4.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Mar 52

AN/URR-TYPE

SERVICE TYPE NUMBER: RAL-5, -6

RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RAL-5 and RAL-6 are general purpose, tuned-radio-frequency receivers for receiving radiotelegraph and voice signals within the frequency range 0.3 to 23.0 mc.

This type of radio receiver is often installed adjacent to an RAK series receiver to form a complete two-channel installation for guarding two frequencies simultaneously. A separate control unit is supplied which permits this type of operation.

A 600-ohm headset and receiving antenna are required but not supplied.

Can be operated from batteries in an emergency.

AN/URR-TYPE	INSTRUCTION LITERATURE: IB-38044, NavShips 95233 CLASSIFICATION OF EQUIPMENT: Unclassified
RAL-5, -6 :SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO RECEIVING EQUIPMENT	DATE OF THIS SHEET : 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver Unit CRV-46045, CRV-46156	13-5/16 x 18 x 16-3/4	69
1	Rectifier Power Unit CRV-20036A, CRV-20131	12-1/4 x 14 x 8-5/8	41
1	Control Unit CRV-23073	4-3/4 x 5-3/8 x 3-5/8	2

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ART-13; AN/CRT-3, -5; AN/FRC-10, AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRT-1, -3, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -329, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 253; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.3 - 23.0, in 9 bands.

Band 1: 0.3 – 0.49.	Band 4: 1.33 – 2.08.	Band 7: 5.5 – 8.8.
Band 2: 0.49 – 0.8.	Band 5: 2.08 – 3.4.	Band 8: 8.8 – 14.3.
Band 3: 0.8 – 1.33.	Band 6: 3.4 – 5.5.	Band 9: 14.3 – 23.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice.

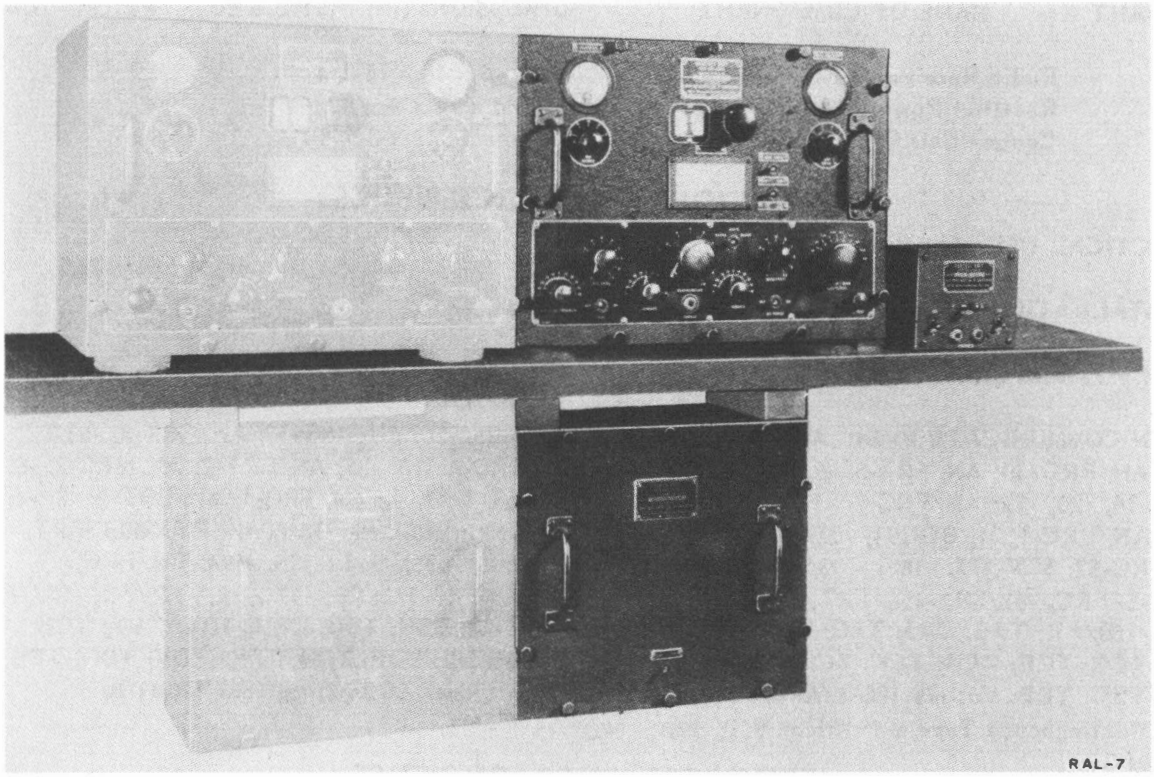
POWER OUTPUT: 170 mw.

POWER REQUIREMENTS: With ballast tube: 200 w, 110-120 v, 60 cyc, 1 phase.
Without ballast tube: 60 w, 110-120 v, 60 cyc, 1 phase.
Battery operation: 12.6 w, 6.3 v and 8.1 w, 180 v.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RAL-5 or RAL-6 measures 26 x 18 x 16-3/4 inches.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 Mar 52	**AN/URR TYPE** SERVICE TYPE NUMBER: RAL-7, -8 RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RAL-7 and RAL-8 are general purpose, tuned-radio-frequency receivers for receiving radiotelegraph and voice signals within the frequency range 0.3 to 23.0 mc.

This type of radio receiver is often installed adjacent to an RAK series receiver to form a complete two-channel installation for guarding two frequencies simultaneously. A separate control unit is supplied which permits this type of operation.

A 600-ohm headset and receiving antenna are required but not supplied.

Can be operated from batteries in an emergency.

AN/URR TYPE	INSTRUCTION LITERATURE: NavShips 900,480; 95234
RAL-7, -8 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET: 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CND-46156	13-5/16 x 18 x 16-3/4	69
1	Rectifier Power Unit CND-20131	12-1/4 x 14 x 8-5/8	42
1	Control Unit CND-23073	4-3/4 x 5-3/8 x 3-5/8	2

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5,-8, -9, -21, -25, -26; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRT-1, -3, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -329, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN: TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.3 - 23.0, in 9 bands.

Band 1: 0.3 – 0.49.	Band 4: 1.33 – 2.08.	Band 7: 5.5 – 8.8.
Band 2: 0.49 – 0.8.	Band 5: 2.08 – 3.4.	Band 8: 8.8 – 14.3.
Band 3: 0.8 – 1.33.	Band 6: 3.4 – 5.5.	Band 9: 14.3 – 23.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice.

POWER OUTPUT: 170 mw.

POWER REQUIREMENTS: With ballast tube: 200 w, 115 v(± 10%)60 cyc, 1 phase.
Without ballast tube: 60 w, 115 v(± 10%)60 cyc, 1 phase.
Battery operation: 12.6 w, 6.3 v and 8.1 w, 180 v.

PHYSICAL CHARACTERISTICS

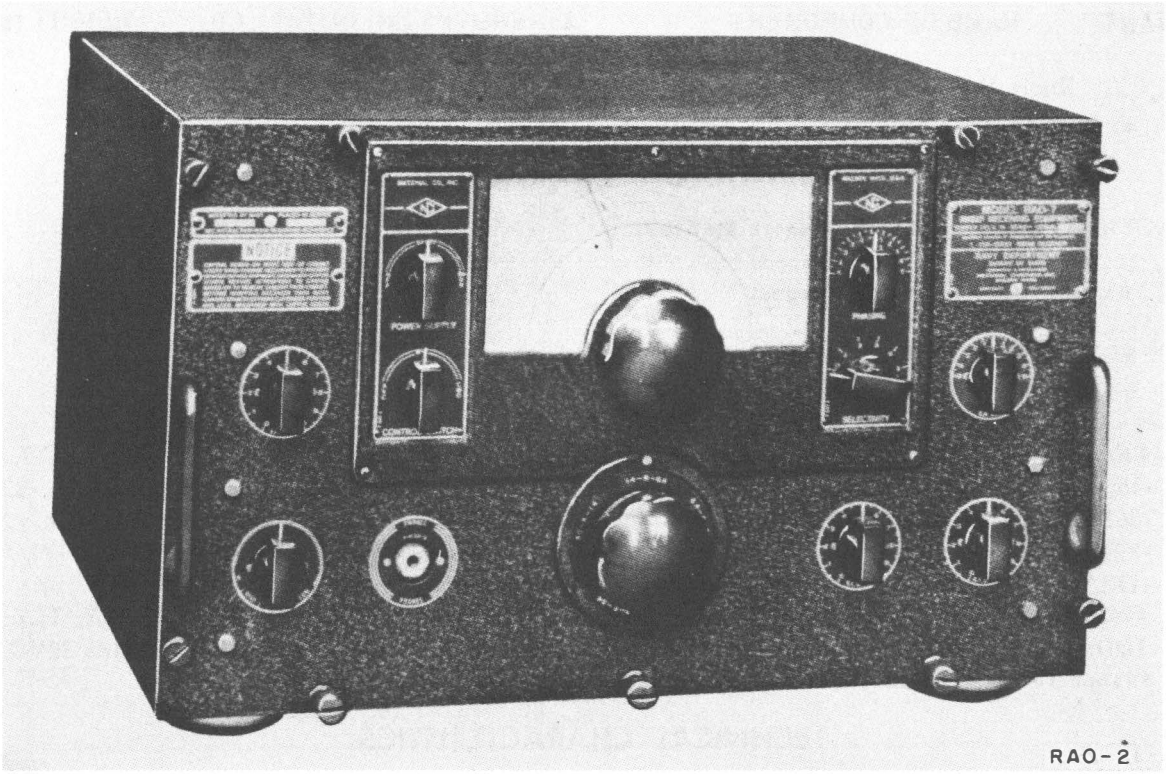
Radio Receiving Equipment RAL-7 or RAL-8 measures 26 x 18 x 16-3/4 inches, net weight 193 pounds, volume 4.7 cu ft. Packed for domestic shipment: total weight 304 pounds, total volume 16.9 cu ft. Shipped in 4 packages.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Mar 52

AN/URR-TYPE

SERVICE TYPE NUMBER: RAO-2, -3

RADIO RECEIVING EQUIPMENT



RAO-2

Radio Receiving Equipments RAO-2 and RAO-3 are general purpose receivers for receiving radiotelegraph or voice signals.

Radiation of r-f power from the internal heterodyne oscillator has been reduced to less than 400 uuw at the antenna terminals.

These receivers are identical, with the exception that RAO-3 has a coaxial antenna input receptacle for use with a shielded lead-in cable.

A headset or loudspeaker and receiving antenna are required but not supplied.

RAO-2 and RAO-3 can be operated directly from batteries in an emergency.

AN/URR-TYPE	INSTRUCTION LITERATURE: NavShips 900,351 and 900,359
RAO-2, -3 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET: 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CNA-46187, -46187-A	10-21/32 x 17-3/16 x 17-1/4	75

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.54 - 30.0, in 5 bands.

Band 1: 0.54 – 1.30.
Band 2: 1.3 – 2.8.
Band 3: 2.8 – 6.4.
Band 4: 6.4 – 14.0.
Band 5: 14.0 – 30.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice.

POWER OUTPUT: 0.3 w.

POWER REQUIREMENTS: 60 w, 115 v ($\pm$ 10%) 50/60 cyc, 1 phase.
Battery operation: 22 w, 6.3 v and 5.4 w, 135 v.

PHYSICAL CHARACTERISTICS

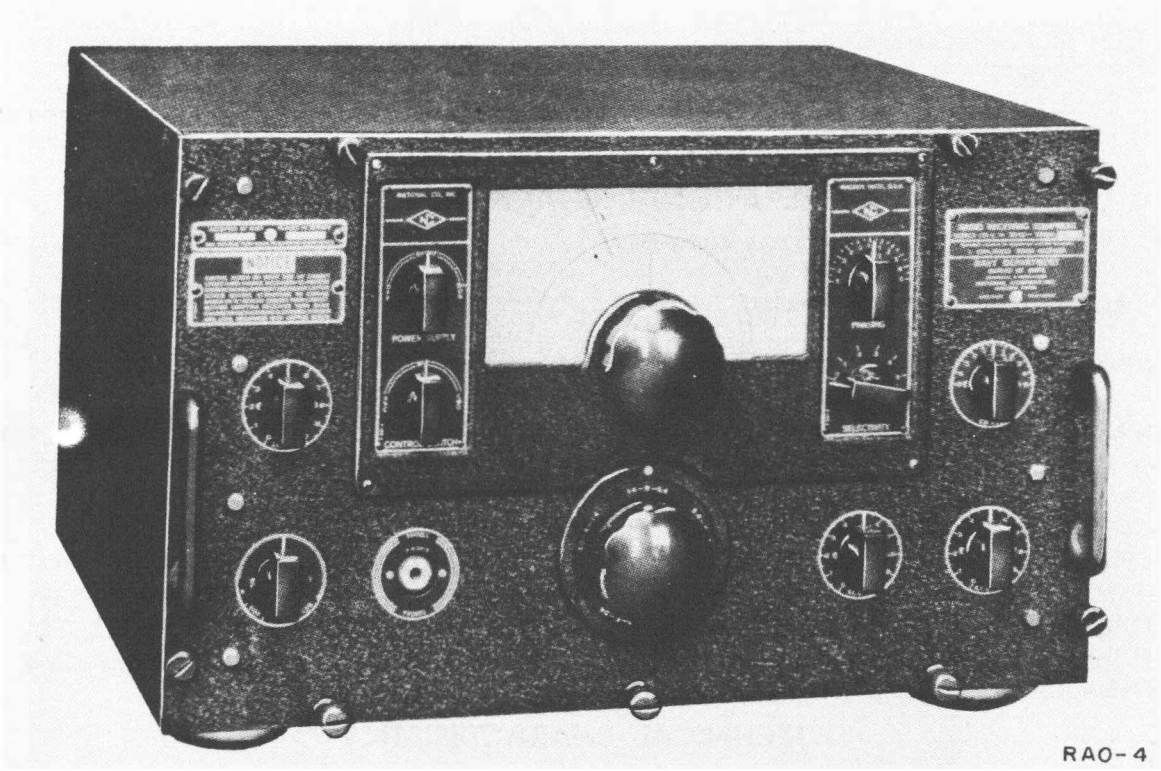
Radio Receiving Equipment RAO-2 or RAO-3 measures 12-1/4 x 17-11/16 x 19-1/8 inches, net weight 115 pounds. Packed for domestic shipment: total weight 165 pounds, total volume 6.8 cu ft. Shipped in 1 package.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Mar 52

AN/URR-TYPE

SERVICE TYPE NUMBER: RAO-4, -5

RADIO RECEIVING EQUIPMENT



RAO-4

Radio Receiving Equipments RAO-4 and RAO-5 are general purpose receivers for receiving radiotelegraph or voice signals. Radiation of r-f power from the internal heterodyne oscillator has been reduced to less than 400 uuw at the antenna terminals.

These receivers are identical in design, with the exception of the a-f output circuit.

RAO-4 is supplied with a headset; RAO-5 is supplied with a loudspeaker. A receiving antenna is required but not supplied.

These receivers can be operated directly from batteries in an emergency.

250554 O—53——62

AN/URR-TYPE

RAO-4, -5 :SERVICE TYPE NUMBER
RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,359 – 900,489
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CWQ-46187-B, -46229	10-21/32 x 17-3/16 x 17-1/4	75
1	Loudspeaker CJS-49493 (RAO-5 only)	8-5/8 x 8-1/4 x 5-1/8	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.54 - 30.0, in 5 bands.

Band 1: 0.54 – 1.30.
Band 2: 1.3 – 2.8,
Band 3: 2.8 – 6.4.
Band 4: 6.4 – 14.0.
Band 5: 14.0 – 30.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice.

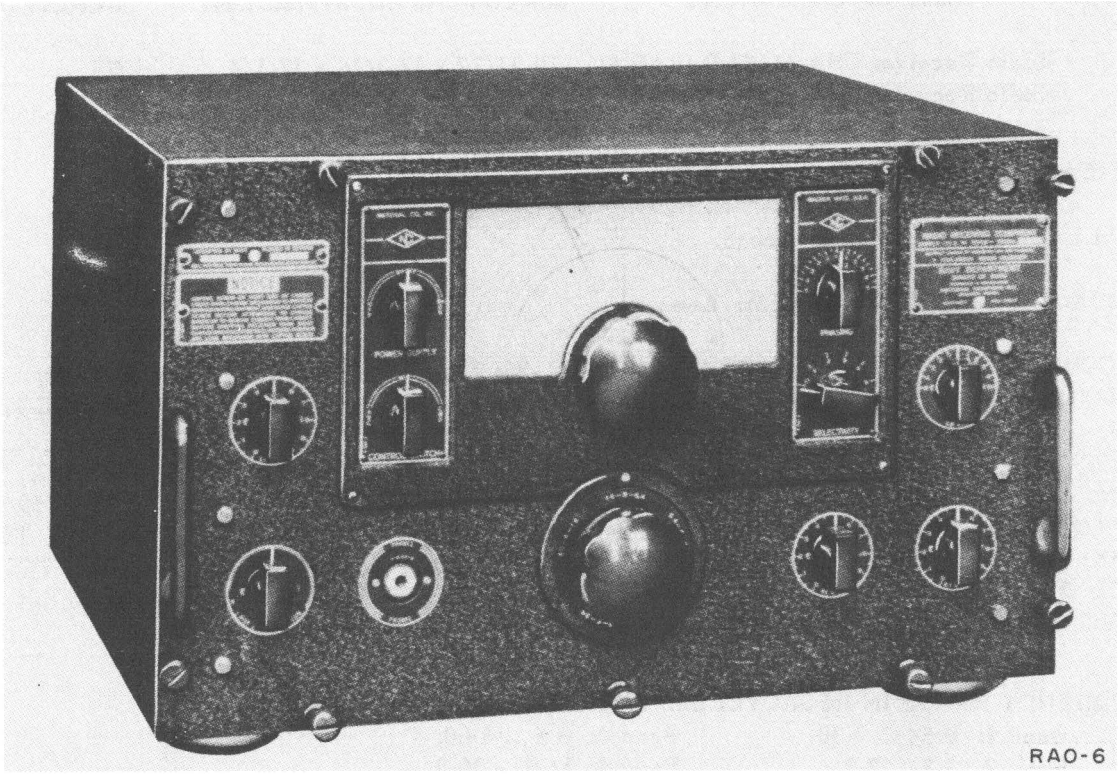
POWER OUTPUT: RAO-4: 0.3 w.
RAO-5: 0.015 for headset operation; 2.0 w for loudspeaker operation.

POWER REQUIREMENTS: 60 w, 115/230 v, 50/60 cyc, 1 phase.
Battery operation: 22 w, 6.3 v and 5.4 w, 135 v.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RAO-4 or RAO-5 measures 12-1/2 x 17-3/4 x 19-1/2 inches, net weight 90 pounds. Packed for domestic shipment: total weight 215 pounds, total volume 8.6 cu ft. Shipped in 1 package.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 Mar 52	AN/URR-TYPE SERVICE TYPE NUMBER: RAO-6, -7 RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RAO-6 and RAO-7 are general purpose, a-m (voice, cw, icw, and mcw) receivers of radiotelegraph or voice signals. Radiation of r-f power from the internal heterodyne oscillator has been reduced to less than 400 uuw at antenna terminals.

These sets each have a coaxial antenna input receptacle for a shielded lead-in cable. There is also an output socket for connection to an auxiliary panoramic adapter such as Navy Model OBH, or equivalent.

Headset or loudspeaker and antenna are required but not supplied.

These receivers can be operated directly from batteries in an emergency.

AN/URR-TYPE

RAO-6, -7 :SERVICE TYPE NUMBER

RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,351
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CNA-46187-D (RAO-6)	10-21/32 x 17-3/16 x 17-1/4	75
1	Radio Receiver CNA-46233 (RAO-7)	12-7/16 x 19 x 17-25/32	97

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne or ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 253; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.54 - 30.0, in 5 bands.

Band 1: 0.54 – 1.30.
Band 2: 1.3 – 2.8.
Band 3: 2.8 – 64.
Band 4: 6.4 – 14.0.
Band 5: 14.0 – 30.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice.

POWER OUTPUT: 0.3 w.

POWER REQUIREMENTS: 60 w, 115 v($\pm$ 10%) 50/60 cyc, 1 phase.

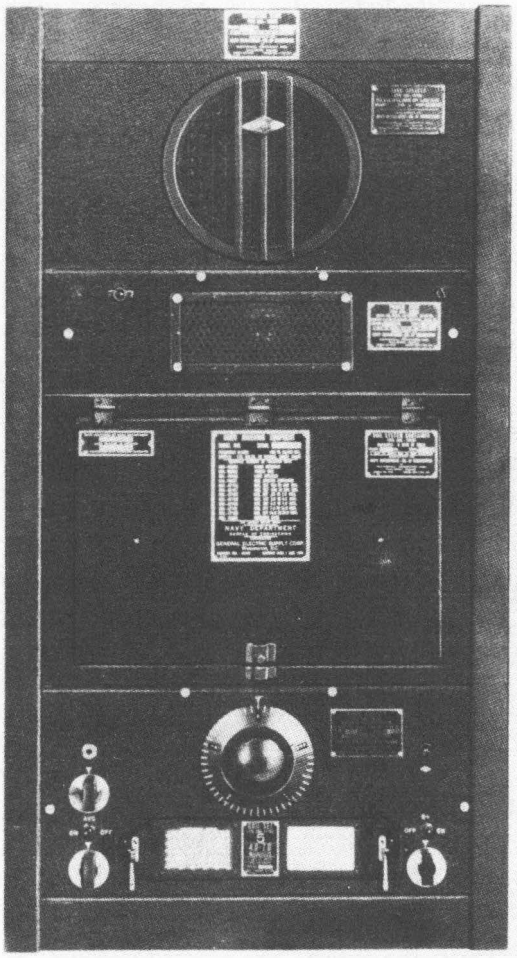
Battery operation: 22 w, 6.3 v and 5.4 w, 135 v.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RAO-6 measures 12-1/2 x 17-1/2 x 18-3/4 inches, net weight 127 pounds, volume 2.3 cu ft. Packed for domestic shipment: total weight 177 pounds, total volume 6.8 cu ft. Shipped in 1 package.

Radio Receiving Equipment RAO-7 measures 12-7/16 x 19 x 18-15/16 inches, net weight 169 pounds, volume 3.5 cu ft. Packed for domestic shipment: total weight 253 pounds, total volume 8.2 cu ft. Shipped in 2 packages.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 Mar 52	**AN/URR-TYPE** SERVICE TYPE NUMBER: RAS, RAS-1 Through-5 RADIO RECEIVING EQUIPMENT



RAS

Radio Receiving Equipments RAS and RAS-1 through -5 are general purpose, rack-installed, radio receivers of radiotelephone or radiotelegraph signals.

The antenna input circuit is suitable for operation with either a single wire antenna or a balanced feed line.

A combination headphone-jack/loudspeaker-switch is provided for selection of either headphone or loudspeaker reception.

Besides the "Plate Volts-On-Off" switch, there is a terminal strip at the rear for remote control connections, permitting silencing of the receiver when a nearby transmitter is being used.

A receiving antenna is required but not supplied.

Can be operated from batteries in an emergency.

AN/URR-TYPE

RAS, RAS-1 through-5 :SERVICE TYPE NUMBER

RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 95236 through 95239
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET: 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALL ED	WEIGHT (LBS)
1	Receiver Unit CNA-46080	8-3/4 x 19 x 10-1/4	35
1	Coil System Container CNA-10037	12-1/4 x 19 x 6-5/8	26
1	Rectifier Power Unit (50-60 cyc) CNA-20090 or Rectifier Power Unit (25 cyc) CNA-20089	5-1/4 x 19 x 9-3/4	22
1	Loudspeaker CNA-49105	8-3/4 x 19 x 4-1/16	9
1	Mounting Rack CNA-10036	39-1/2 x 20 1/2 x 12-3/8	27

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRT-1, -3, -4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -329, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.19 - 30.0 in 7 bands.

Band 1: 0.19 - 0.45
Band 2: 0.45 - 0.90
Band 3: 0.90 - 2.0
Band 4: 2.0 - 4.0
Band 5: 4.0 - 7.0
Band 6: 7.0 - 14.0
Band 7: 14.0 - 30.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice.

POWER OUTPUT: 10 mw, headphone output;
2 w, loudspeaker output.

POWER REQUIREMENTS: 70 w, 110 – 120 v, 50/60 cyc, 1 phase, ac.
70 w, 110 – 120 v, 25 cyc, 1 phase, ac.
Battery operation: 10 w, 180 v and 21 w, 6.3 v.

PHYSICAL CHARACTERISTICS

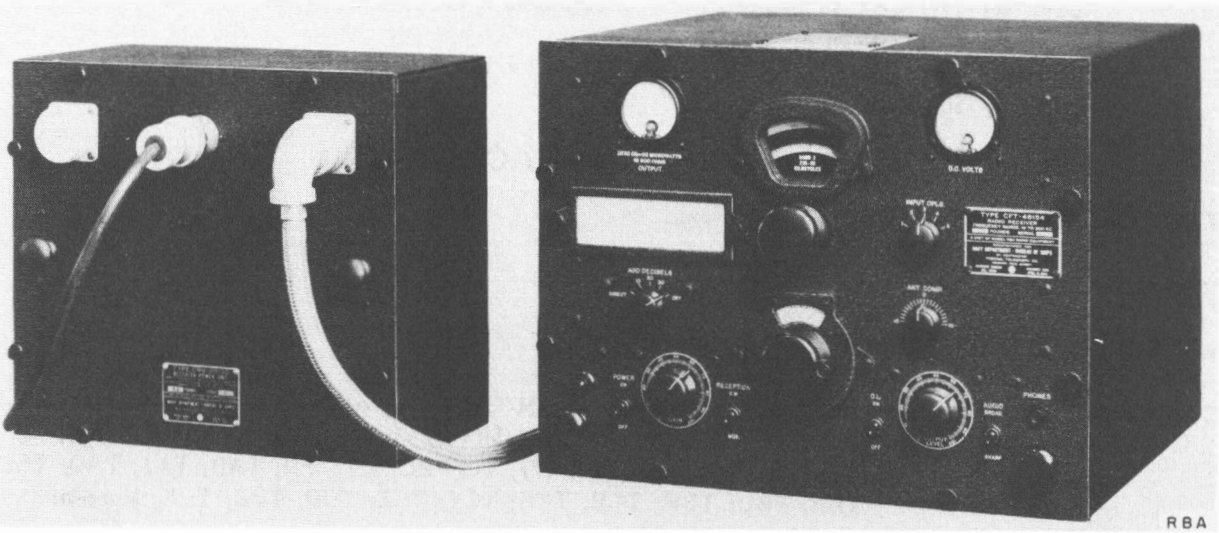
Each Radio Receiving Equipment RAS and RAS-1 through -5 measures 39-1/2 x 20-1/2 x 13-7/8 inches, net weight 140 pounds.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: See note below *
DATE OF THIS SHEET: 8 Apr 52

AN/URR-TYPE

SERVICE TYPE NUMBER: RBA, RBA-1, -2, -3, -5, -7

RADIO RECEIVING EQUIPMENT



RBA

Radio Receiving Equipments RBA, RBA-1, -2, -3, -5, and -7 are general purpose shipboard or shore station radio receivers of l-f and m-f signals.

These equipments include provision for operating a number of receivers from a common antenna and transmission line.

Automatic regulation of receiver output signal voltage (as a function of load resistance) permits from one to twenty 600-ohm headphones to be connected across the output circuit with less than 40 percent change in output voltage.

The various models of these equipments are electrically and mechanically interchangeable.

Sensitivity is 10 microvolt input for 6-mw output on c-w operation. Input impedance is adjustable over a wide range.

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*USING SERVICE: RBA, Navy, Army.
RBA-1, -2, -3, -5, -7 Navy.

AN/URR-TYPE	INSTRUCTION LITERATURE: NavShips 900, 473; NavShips 900, 708 CLASSIFICATION OF EQUIPMENT: Unclassified
RBA, RBA-1, -2, -3, -5 -7 :SERVICE TYPE NUMBER	USING SERVICE : See note below *
RADIO RECEIVING EQUIPMENT	DATE OF THIS SHEET : 8 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CFT-46154, -46154-A, -46154-B	13-31/32 x 18-1/8 x 17-19/64	95
1	Rectifier Power Unit CRV-20130, -20130-B, -20130-D	13-1/2 x 15 x 9-3/4	52

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Ground, shipborne.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-8; AN/ART-13; AN/CRT-3, -5; AN/FRT-4, -10, -19; AN/GRT-2; AN/MRC-20; AN/SRC-3; AN/SRT-1, -3; AN/TRQ-1; AN/URT-2, -3, -4; BC-191, -329, -365; SCR-177; T-5/FRC, -171/FR; TAB; TAJ; TAQ; TBL; TBN; TBU; TBW; TCE; TCG; TCY; TCZ; TDD; TDE; TDK; Marconi TH-41-B; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.015 - 0.6, in 4 bands.

Band 1: 0.015 – 0.038
Band 2: 0.038 – 0.095
Band 3: 0.095 – 0.235
Band 4: 0.235 – 0.600.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw and mcw on all bands. Voice reception is possible, but some distortion is present below 0.3 mc due to the high order of selectivity and a-f filters.

POWER OUTPUT: 50 mw into 600-ohm load; 500 mw into 30-ohm load.

POWER REQUIREMENTS: 66 w, 110 – 120 v, 55 / 65 cyc, 1 phase.

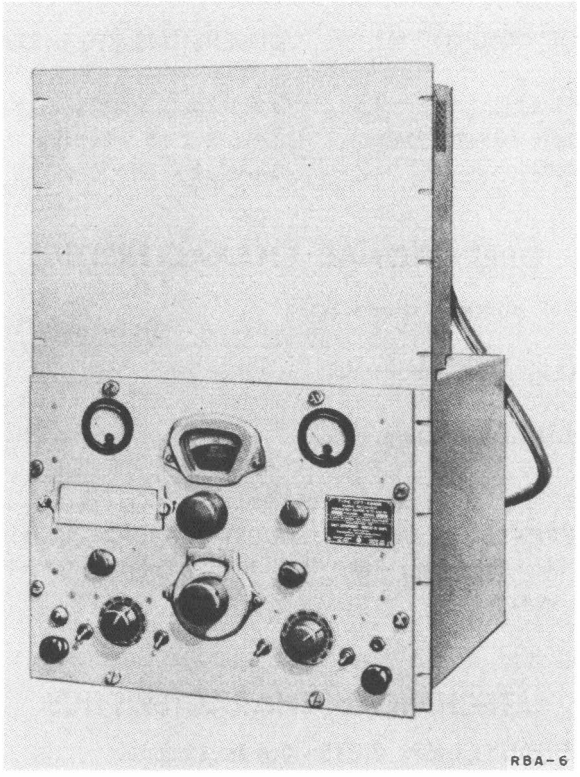
PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RBA, RBA-1, -2, -3, -5 or -7 measures 27-1/4 x 18-5/32 x 20-9/16 inches, net weight 147 pounds, volume 3.73 cu ft. Packed for domestic shipment: total weight 365 pounds, total volume 29.03 cu ft, 0.73 ship ton.

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*USING SERVICE: RBA, Navy, Army.
RBA-1, -2, -3, -5, -7 Navy.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 8 Apr 52	**AN/URR-TYPE** SERVICE TYPE NUMBER: RBA-6 RADIO RECEIVING EQUIPMENT



Radio Receiving Equipment RBA-6 is a general purpose, tuned r-f receiver used for shipboard or shore station radio reception in the low- and medium-frequency bands.

This receiver provides for operation of a number of receivers from a common antenna and transmission line.

Automatic regulation of receiver output signal voltage (as a function of load resistance) permits from one to twenty 600-ohm headphones to be connected across the output circuit with less than 40 percent change in output voltage.

It is electrically interchangeable with the RBA, RBA-1, -2, -3, -5.

Sensitivity is 10-uv input for 6-mw output on cw.

Input impedance is adjustable over a wide range.

AN/URR-TYPE	INSTRUCTION LITERATURE: NavShips 900,708 CLASSIFICATION OF EQUIPMENT: Unclassified
RBA-6 :SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO RECEIVING EQUIPMENT	DATE OF THIS SHEET: 8 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CFT-46300	13-31/32 x 18-1/8 x 17-19/64	95
1	Rectifier Power Unit CRV-20130-B	13-1/2 x 15 x 9-3/4	52
1	Mounting Shelf CAOP-10349-A	14-9/32 x 19 x 9-29/32	53

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Ground, shipborne, mounted.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-8; AN/ART-13; AN/CRT-3, -5; AN/FRT-4, -10, -19; AN/GRT-2; AN/MRC-20; AN/SRC-3; AN/SRT-1, -3; AN/TRQ-1; AN/URT-2, -3, -4; BC-191, -329, -365; SCR-177; T-5/FRC, -171/FR; TAB; TAJ; TAQ; TBL; TBN; TBU; TBW; TCE; TCG; TCY; TCZ; TDD; TDE; TDK; Marconi TH-41/B; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.015 - 0.6 in 4 bands.

Band 1: 0.015 - 0.038
Band 2: 0.038 - 0.095
Band 3: 0.095 - 0.235
Band 4: 0.235 - 0.600.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw and mcw on all bands. Voice reception is possible, but some distortion is present below 0.3 mc due to the high order of selectivity and audio frequency filters.

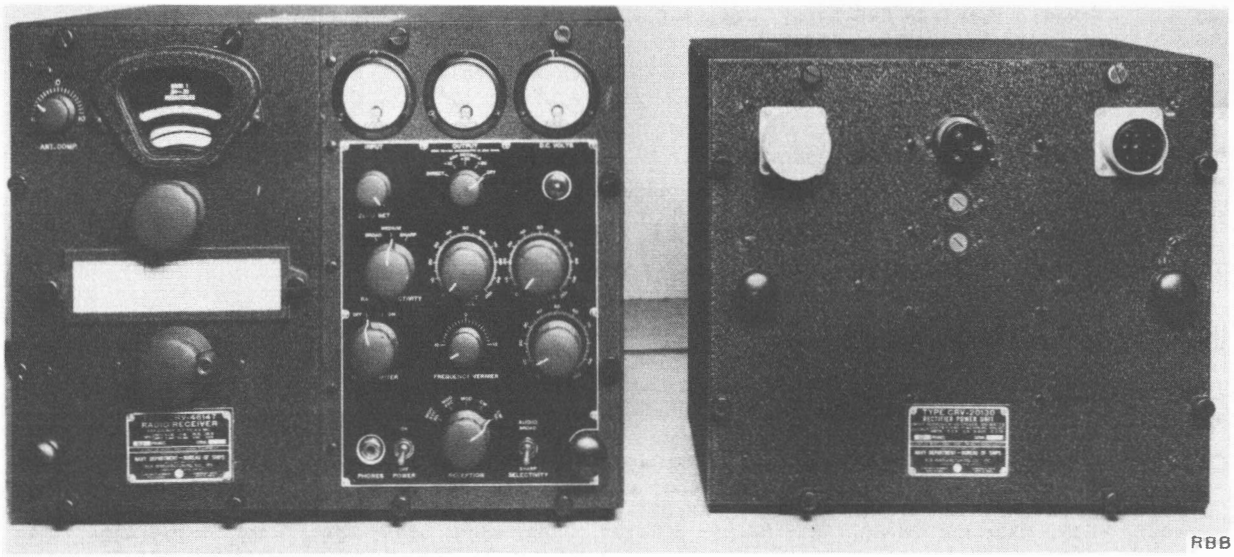
POWER OUTPUT: 50 mw into 600 ohm load; 500 mw into 30 ohm load.

POWER REQUIREMENTS: 66 w, 110 - 120 v, 55/65 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RBA-6 measures 28-9/16 x 19 x 9-3/4 inches, net weight 200 pounds, volume 3.9 cu ft. Packed for domestic shipment: total weight 365 pounds, total volume 29.03 cu ft, 0.73 ship ton.

STATUS: Substitute Standard	AN/URR-TYPE
CLASSIFICATION OF EQUIPMENT: Unclassified	SERVICE TYPE NUMBER: RBB, RBB-1 through -6
USING SERVICE: Navy	RADIO RECEIVING EQUIPMENT
DATE OF THIS SHEET: 29 Mar 52	



RBB

Radio Receiving Equipments RBB, RBB-1 through RBB-6 are general purpose receivers of radiotelegraph or telephone signals within the frequency band 0.5 to 4.0 mc.

RBB, RBB-1, -2, -3, and -5 are designed for shelf installation; RBB-4 and -6 are intended for relay rack installation.

Modifying kits are available which permit the adaptation of any RBB model to crystal-controlled reception, panoramic reception in conjunction with panoramic Radio Adaptor RBV series, and frequency shift reception in association with Frequency Shift Receiver Converter Equipments FRA and FRF.

It is often installed next to an RBC (series) receiver for continuous coverage of 0.5 to 27.0 mc.

A receiving antenna and headset are required but not supplied.

AN/URR-TYPE

RBB, RBB-1 through -6 :SERVICE TYPE NUMBER

RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,477; 91101; 91469
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CRV-46147, -46147-C, -46147-D, -46296, -46296-A	14-3/4 x 18-1/2 x 20-1/8	82
*1	Cabinet CRV-10350-A	Not Available	Not Available
1	Rectifier Power Unit CRV-20130, -20130-B	13-7/16 x 15 x 9-7/8	52
**1	Mounting Shelf CRV-10349-A	Not Available	Not Available

* Supplied with RBB-4 ** Supplied with RBB-4, RBB-6.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne or ground.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7; AN/SRC-3; AN/SRT-1, -3, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -365, -401, -447, -610; MBS; MQ; OA-60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -595, -694; T-4/FRC, -5/FRC, -83/SR, -159/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -190/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; Collins 18S-4 (AF Model); Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.5 - 4.0 in 4 bands.

Band 1: 0.50 - 0.84
Band 2: 0.84 - 1.41
Band 3: 1.41 - 2.37
Band 4: 2.37 - 4.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice.

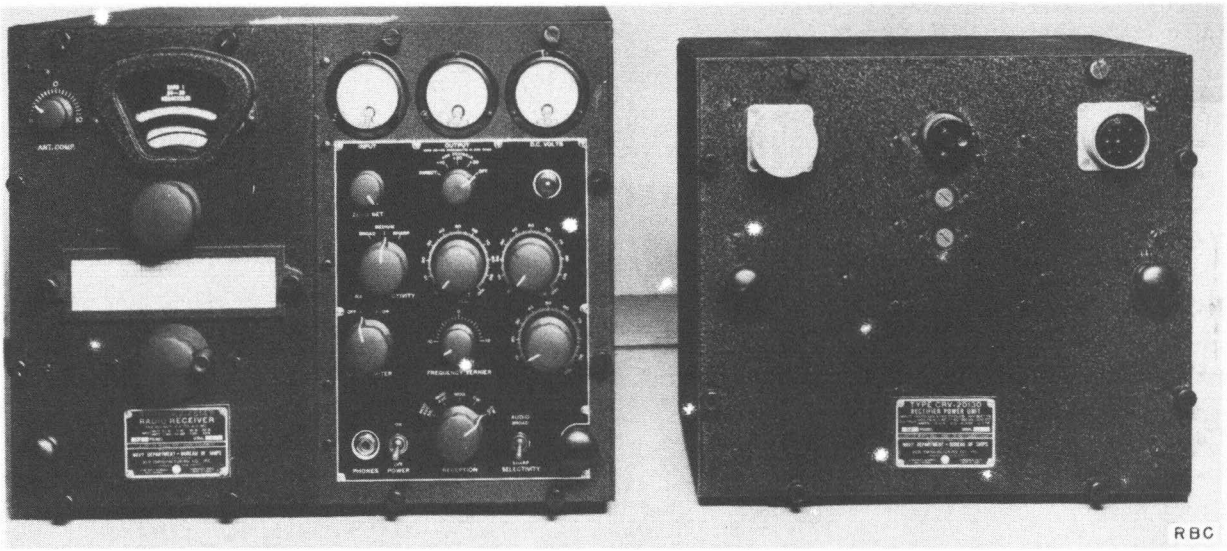
POWER OUTPUT: 15 mw into 600 ohms.

POWER REQUIREMENTS: 100 w, 110 - 120 v, 55/65 cyc, 1 phase, ac.
(In an emergency, the same power unit may be used for two receivers with a total power requirement of 160 w.)

PHYSICAL CHARACTERISTICS

Radio Receiving Equipments RBB, RBB-1 through RBB-6 measure 28-3/16 x 18-1/2 x 20-1/2 inches, net weight 166 pounds, volume 6.43 cu ft. Packed for domestic shipment: total weight 261 pounds, total volume 18.3 cu ft. Packed for export shipment: total weight 312 pounds, total volume 22.8 cu ft, 0.57 ship ton. Shipped in 2 packages both domestic and export.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 Mar 52	**AN/URR-TYPE** SERVICE TYPE NUMBER: RBC, RBC-1 through -6 RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RBC, RBC-1 through RBC-6 are general purpose, radiotelegraph, or radiotelephone receivers operating within the frequency band 4.0 to 27.0 mc.

RBC, RBC-1, -2, -3 and -5 are designed for shelf installation; RBC-4 and -6 are intended for relay rack installation.

Modifying kits are available which permit the adaptation of any RBC model to crystal-controlled reception, panoramic reception (in conjunction with Panoramic Radio Adaptor RBV series) and frequency-shift reception (in association with Frequency Shift Receiver Converter Equipments FRA and FRF).

This equipment is often installed next to an RBB (series) receiver for continuous coverage in the 0.5 to 27.0mc range.

A receiving antenna and headset are required but not supplied.

AN/URR-TYPE

RBC, RBC-1 through -6 :SERVICE TYPE NUMBER

RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,477; 91101; 91469
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CRV-46148, -46148-C, -46297, -46297-A	14-3/4 x 19-1/2 x 20-1/8	92
*1	Cabinet CRV-10350-A	13-31/32 x 17-9/16 x 19	Not Available
1	Rectifier Power Unit CRV-20130, -20130-B	13-7/16 x 15 x 9-7/8	52
**1	Mounting Shelf CRV-10348-A	13-31/32 x 17-1/8 x 19	Not Available

* Supplied with RBC-4. ** Supplied with RBC-4 RBC-6.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne or ground.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -401, -447, -610; MBS; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -399, -499, -506, -536, -543, -595, -694; T-4/FRC, -93/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCO; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4.0 - 27.0 in 4 bands.

Band 1: 4.00 - 6.45
Band 2: 6.45 - 10.30
Band 3: 10.30 - 16.50
Band 4: 16.50 - 27.00.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice.

POWER OUTPUT: 15 mw into 600 ohms.

POWER REQUIREMENTS: 100 w, 110 - 120 v, 55/65 cyc, 1 phase, ac.
(In an emergency, the same power unit may be used for two receivers with a total power requirement of 160 w.)

PHYSICAL CHARACTERISTICS

Radio Receiving Equipments RBC, RBC-1 through -6 measure 28-3/16 x 18-1/2 x 20-1/2 inches, net weight 166 pounds, volume 6.43 cu ft. Packed for domestic shipment: total weight 261 pounds, total volume 18.3 cu ft. Packed for export shipment: total weight 305 pounds, total volume 22.8 cu ft, 0.57 ship ton. Shipped in 2 packages both domestic and export.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 4 Apr 52

AN/URR-TYPE

SERVICE TYPE NUMBER: RBG, RBG-1, -2

RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RBG-1, and -2 are highly sensitive and selective general purpose receivers of radiotelephone or radiotelegraph signals. Crystal selectivity is provided for reception of traffic under adverse conditions.

All three of these models have band-spread tuning over the following 4 h-f bands: 4.0 to 4.60 mc, 8.0 to 9.60 mc, 12.0 to 13.60 mc, and 15.0 to 18.0 mc.

A single wire or a 500-ohm, balanced feed-line antenna is required but not supplied. A phone jack output is provided on the front panel but a headset is not supplied.

RBG and RBG-2 are designed for operation from a 50/60 cyc a-c source. RBG-1 is designed for 25- cyc operation.

AN/URR-TYPE	INSTRUCTION LITERATURE: NavShips 900,004
RBG, RBG-1, -2 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVING EQUIPMENT	USING SERVICE: Navy
	DATE OF THIS SHEET: 4 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CHC-46140 (50/60 cyc)	12-3/16 x 18-15/16 x 14-11/16	62
	or Radio Receiver CHC-46163 (25 cyc)	12-3/16 x 18-15/16 x 14-11/16	67
1	Loudspeaker CHC-49154	9-3/8 x 10-5/16 x 7-5/16	12

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.54 - 31.0, in 6 bands.

Band 1: 0.54 – 1.32	Band 4: 5.7 – 10.0
Band 2: 1.32 – 3.2	Band 5: 10.0 – 18.0
Band 3: 3.2 – 5.7	Band 6: 18.0 – 31.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice.

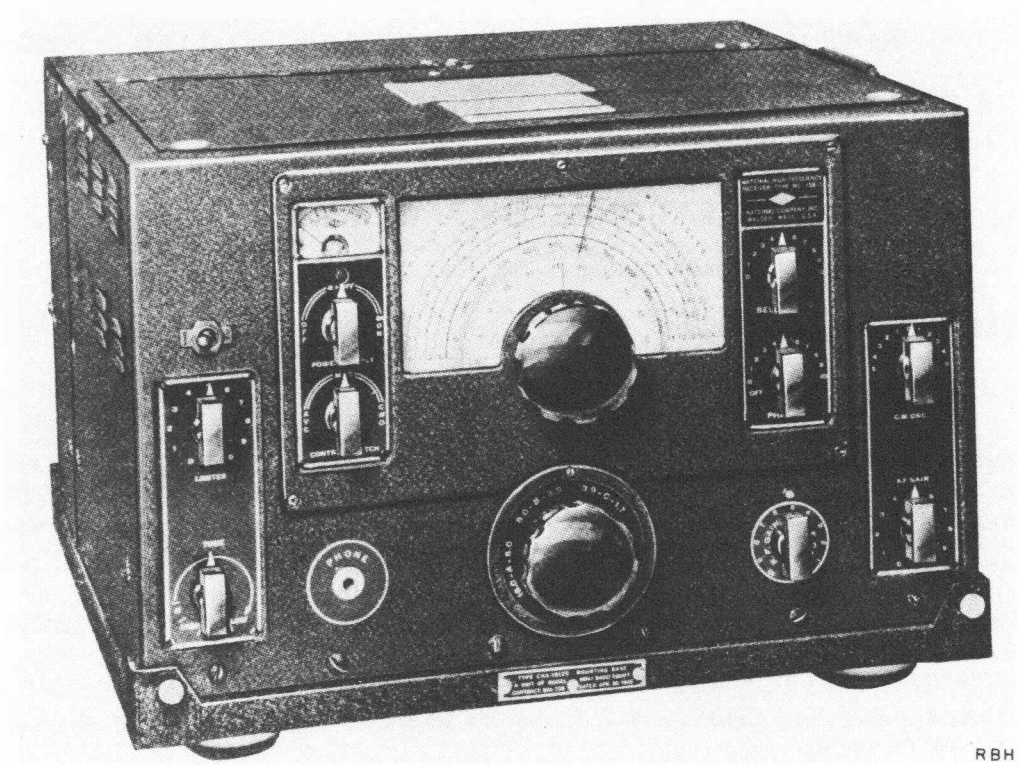
POWER OUTPUT: 10 mw into 600-ohm load for headset operation.
2 w into 5,000-ohm load for loudspeaker operation.

POWER REQUIREMENTS: 95 w, 110–120 v, 50/60 cyc, 1 phase.
95 w, 110–120 v, 25 cyc, 1 phase.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RBG, -1, -2 measures 21-9/16 x 18-15/16 x 14-11/16 inches, net weight 87 pounds, volume 3.2 cu ft.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 4 Apr 52	**AN/URR-TYPE** SERVICE TYPE NUMBER: RBH RADIO RECEIVING EQUIPMENT



RBH

Radio Receiving Equipment RBH is a general purpose radio receiver of radiotelegraph or voice signals. Radiation of r-f power from the internal heterodyne oscillator has been kept below safe limits to permit use of this receiver in the combat zone.

The antenna input circuit is suitable for use with either a single wire antenna or a balanced feed line (70 ohms).

The loudspeaker supplied with the equipment matches the loudspeaker output circuit of the receiver. A headset output jack is also provided (600 ohms). The loudspeaker is shorted out when the headset is connected.

Crystal selectivity is provided in the first i-f stage of the receiver.

A receiving antenna and headset are required but not supplied.

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AN/URR-TYPE	INSTRUCTION LITERATURE: NavShips 95242
RBH :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 4 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CNA-46144	11 x 17-9/16 x 13-3/8	55
1	Loudspeaker CNA-49106	9-1/2 x 10-1/4 x 7-3/8	11

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRT-1, -3, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -329, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.3 - 1.2 and 1.7 - 16.0, in 5 bands.

Band 1: 0.3 – 0.6
Band 2: 0.6 – 1.2
Band 3: 1.7 – 3.9
Band 4: 3.9 – 8.0
Band 5: 8.0 – 16.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice.

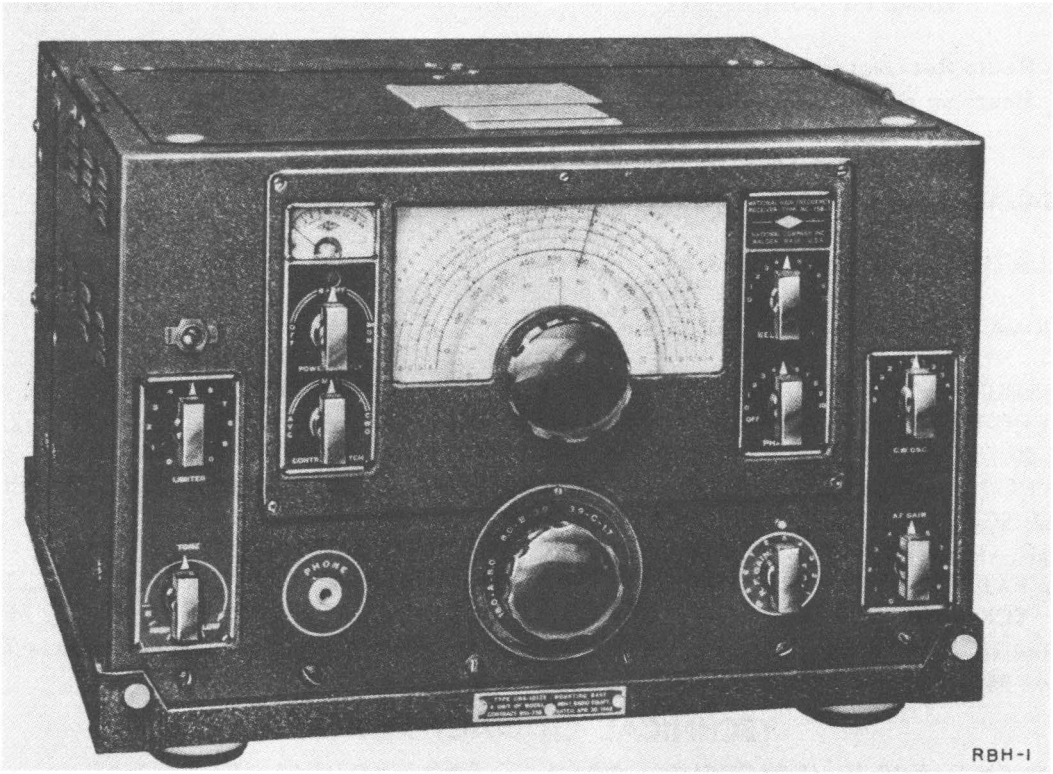
POWER OUTPUT: 12 mw into 600-ohm load or 2 w into 5,000-ohm load.

POWER REQUIREMENTS: 70 w, 115 v (± 10%) 50/62 cyc, 1 phase.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RBH measures 20-1/2 x 17-9/16 x 13-3/8 inches, net weight 85 pounds.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 Mar 52	**AN/URR-TYPE** SERVICE TYPE NUMBER: RBH-1, -2, -3 RADIO RECEIVING EQUIPMENT



RBH-1

Radio Receiving Equipments RBH-1, -2, and -3 are general purpose receivers of radiotelegraph or voice signals. Radiations of r-f power from the internal heterodyne oscillator have been reduced to less than 400 uuw at antenna terminals.

These receivers are similar in design and construction; RBH-3 has a coaxial antenna input jack and mating plug. All three models are supplied with mounting bases and can be operated directly from batteries in an emergency.

Crystal selectivity is provided in the first i-f stage.

A receiving antenna and a loudspeaker or headset are required but not supplied.

AN/URR-TYPE

RBH-1, -2, -3 :SERVICE TYPE NUMBER

RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,411
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CNA-46188, -46188-A	10-3/4 x 17-1/4 x 18-11/16	74
1	Mounting Base CNA-10125	2-9/16 x 17-21/32 x 17-1/32	5.75

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRT-1, -3, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -329, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB: TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.3 - 1.2 and 1.7 - 16.0, in 5 bands.

Band A: 8.0 _ 16.0
Band B: 3.9 _ 8.0
Band C: 1.7 _ 3.9
Band D: 0.6 _ 1.2
Band E: 0.3 _ 0.6.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice.

POWER OUTPUT: 300 mw into 600-ohm load.

POWER REQUIREMENTS: 60 w, 115 v($\pm$ 10%) 50 / 60 cyc, 1 phase.
Battery operation: 22 w, 6.3 v and 8 w, 180 v.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RBH-1, -2, or -3 measures 14-13/32 x 17-21/32 x 18-11/16 inches, net weight 109.75 pounds, volume 2.7 cu ft. Packed for domestic shipment: total weight 200 pounds, total volume 8.1 cu ft. Shipped in 1 package.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 Mar 52	**AN/URR-TYPE** SERVICE TYPE NUMBER: RBK, RBK-1, -2, -5, -7 thru 11 RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RBK and RBK-1, -2, -5, -7, -8, -9, -10, and -11 are v-h-f, general purpose radio receivers of either a-m or f-m radiotelephone and radiotelegraph signals.

These receivers are similar except that the RBK-7, -8, and -9 are equipped with a special jack for use with a panoramic adapter, and the RBK-5, -7, -8, and -9 can be operated from either 110- or 230-v a-c power sources.

Receiver disabling is provided by means of a "send-receive "switch and a special socket for connection to the control circuit of the associated transmitter.

A receiving antenna and a headset are required but not supplied.

AN/URR-TYPE

RBK, RBK-1, -2, -5,-7 thru 11 :SERVICE TYPE NUMBER

RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 95244, 95245

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Navy

DATE OF THIS SHEET : 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CHL-46130, -46130-A, -46130-B, -46162, 46241	9-3/8 x 19-1/8 x 14-3/16	63
1	Loudspeaker CHL-49149, or CHL-49172	9-1/4 x 10-1/4 x 7 10-7/8 x 16 x 11	Not Available 20

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2, -3; AN/FRC-6, -7, -9; AN/GRC-3, -4, -5, -6, -7, -8, -30; AN/MRC-5, -16, -22; AN/PRC-6, -8, -9, -10, -16, -17, -20; AN/TRC-1, -3, -4, -7, -8, -11, -12; AN/TRQ-1; AN/URC-4; AN/URT-7, -10; AN/VRC-1, -2, -3, -5, -7, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRT-1; BC-640; MAN; MAW; MBF; MBS; MN; RC-257; SCR-177, -293, -298, -300, -508, -509, -510, -522, -528, -542, -573, -575, -608, -609, -610, -619, -624, -628, -641, -643, -808, -828; TBS; TBY; TDG; TDQ; TDT; Collins 32V-2; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27.8 - 143, in 3 bands.
Band 1: 27.8 _ 46. Band 2: 46 _ 82. Band 3: 82 _ 143.

TYPE MODULATION: Am, fm.

TYPE OF SIGNAL: Cw, icw, mcw, voice.

POWER OUTFUT: 3 w into 500, 600, or 5,000 ohms.

POWER REQUIREMENTS: RBK, RBK-1, -2, -10, -11: 80 w, 110_125 v, 50/60 cyc, 1 phase.
RBK-5,-7, -8, -9: 80 w, 110_230 v, 50/60 cyc, 1 phase.
Battery operation: 28 w, 6.3 v and 35 w, 185 v.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipments RBK, RBK-1, -2, -5, and -7 through -11 measure 20-1/4 x 19-1/8 x 14-3/16 inches each.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 Mar 52	**AN/URR-TYPE** SERVICE TYPE NUMBER: RBK-12, -13 RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RBK-12 and RBK-13 are general purpose, v-h-f (am or fm) radio receivers of radiotelephone or radiotelegraph signals and can also be used with a panoramic reception adapter.

These receivers are similar to the RBK-14 except that they do not incorporate blanking circuits. However, both models incorporate a panoramic output socket for connection to equipments such as Dual Panoramic Radio Adaptor REM or Panoramic Radio Adaptor RBW-2M.

Receiver disabling is provided by means of a "send receive" switch and a special socket for connection to the control circuit of the associated transmitter.

A receiving antenna and a loudspeaker or headset are required but not supplied.

AN/URR-TYPE	INSTRUCTION LITERATURE: NavShips 900,235X
RBK-12, -13 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CHL 46130-C	9-5/16 x 19-1/8 x 15-13/16	100

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2, -3; AN/FRC-6, -7, -9; AN/GRC-3, -4, -5, -6, -7, -8, -30; AN/MRC-5, -16, -22; AN/PRC-6, -8, -9, -10, -16, -17, -20; AN/TRC-1, -3, -4, -7, -8, -11, -12; AN/TRQ-1; AN/URC-4; AN/URT-7, -10; AN/VRC-1, -2, -3, -5, -7, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRT-1; BC-640; MAN; MAW; MBF; MBS; MN; RC-257; SCR-177, -293, -298, -300, -508, -509, -510, -522, -528, -542, -573, -575, -608, -609, -610, -619, -624, -628, -641, -643, -808, -828; TBS; TBY; TDG; TDQ; TDT; Collins 32V-2; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27.8 - 143.0, in 3 bands.
Band 1: 27.8 _ 46. Band 2: 46 _ 82. Band 3: 82 _ 143.

TYPE MODULATION: Am, fm.

TYPE OF SIGNAL: Cw, icw, mcw, voice.

POWER OUTPUT: 3 w into 500, 600, or 5,000 ohms.

POWER REQUIREMENTS: 115 w, 115/230 v, 60 cyc, 1 phase.
Battery operations: 28 w, 6.3 v and 40 w, 270 v.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RBK-12 or -13 measures 9-5/16 x 19-1/8 x 15-13/16 inches, net weight 188 pounds, volume 1.7 cu ft. Packed for domestic shipment: total weight 228 pounds, total volume 5 cu ft. Shipped in 1 package.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 Mar 52	**AN/URR-TYPE** SERVICE TYPE NUMBER: RBK-15 RADIO RECEIVING EQUIPMENT



RBK-15

Radio Receiving Equipment RBK-15 is a general purpose, v-h-f (am or fm) radio receiver of radiotelephone or radiotelegraph signals. It can be used with a panoramic reception adapter.

This receiver is similar to the RBK-14 except that it does not incorporate the blanking circuit. It includes an r-f oscillator, a radiation suppressor, and a coaxial antenna input jack for use with a coaxial lead-in cable.

Receiver disabling is provided by means of a send-receive switch, located on the front panel, and a special socket for connection to the control circuit of the associated transmitter.

A receiving antenna and a loudspeaker or headset are required but not supplied.

AN/URR-TYPE	INSTRUCTION LITERATURE: Not available
RBK-15 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVING EQUIPMENT	USING SERVICE: Navy
	DATE OF THIS SHEET: 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CHL-46298	9-7/8 x 19-1/8 x 15-7/8	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2, -3; AN/FRC-6, -7, -9; AN/GRC-3, -4, -5, -6, -7, -8, -30; AN/MRC-5, -16, -22; AN/PRC-6, -8, -9, -10, -16, -17, -20; AN/TRC-1, -3, -4, -7, -8, -11, -12; AN/TRQ-1; AN/URC-4; AN/URT-7, -10; AN/VRC-1, -2, -5, -7, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRT-1; BC-640; MAN; MAW; MBF; MBS; MN; RC-257; SCR-177, -293, -298, -300, -508, -509, -510, -522, -528, -542, -573, -575, -608, -609, -610, -619, -624, -628, -641, -643, -808, -828; TBS; TBY; TDG; TDQ; TDT; Collins 32V-2; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27.8 - 143.0, in 3 bands.
Band 1: 27.8 _ 46. Band 2: 46 _ 82. Band 3: 82 _ 143.

TYPE MODULATION: Am, fm.

TYPE OF SIGNAL: Cw, icw, mcw, voice.

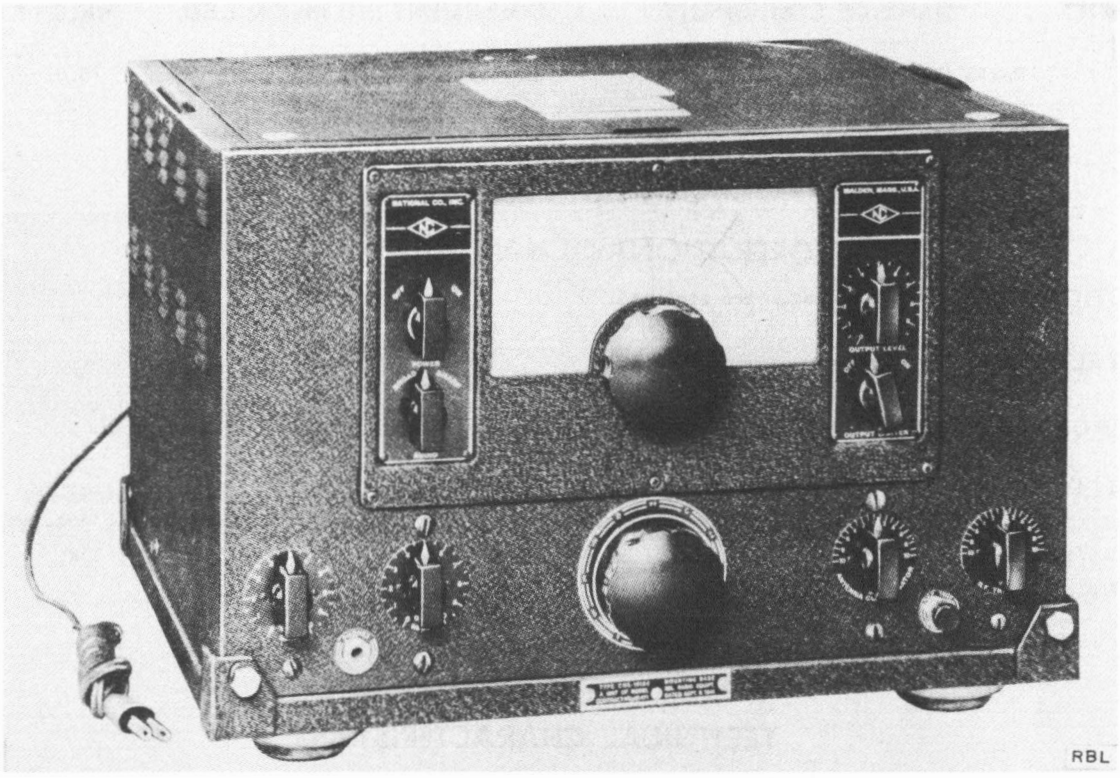
POWER OUTPUT: 3 w into 500, 600, or 5,000 ohms

POWER REQUIREMENTS: 115 w, 115/230 v, 60 cyc, 1 phase.
Battery operation: 28 w, 6.3 v and 40 w, 270 v.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RBK-15 measures 9-7/8 x 19-1/8 x 15-7/8 inches.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 4 Apr 52	**AN/URR-TYPE** SERVICE TYPE NUMBER: RBL, RBL-1, -2 RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RBL, RBL-1 and RBL-2 are general purpose, tuned r-f receivers of telegraph signals between 0.015 to 0.6 mc. Voice reception is only possible above 0.2 mc. The level of r-f radiations is kept below 400 uuw making their use safe within combat areas.

These three receivers are identical.

Either a single-wire antenna or an unbalanced feed line can be used.

A receiving antenna and a 600-ohm headset are required but not supplied.

They can be operated either from ac or batteries. A special battery power socket is provided.

AN/URR-TYPE	INSTRUCTION LITERATURE: NavShips 900,353
RBL, RBL-1, -2 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVING EQUIPMENT	USING SERVICE: Navy
	DATE OF THIS SHEET: 4 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CNA-46161	10-31/32 x 17-3/16 x 16-5/8	75.0
1	Mounting Base CNA-10124	2-9/16 x 17-17/32 x 16-5/16	5.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne or ground.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-9; AN/ART-13; AN/CRT-3, -5; AN/FRT-4, -10, -19; AN/GRT-2; AN/MRC-20; AN/SRC-3; AN/SRT-1, -3; AN/TRQ-1; AN/URT-2, -3, -4; BC-191, -329, -365; SCR-177; T-5/FRC, -171/FR; TAB; TAJ; TAQ; TBL; TBN; TBU; TBW; TCE; TCG; TCY; TCZ; TDD; TDE; TDK; Marconi TH-41-B; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.015 - 0.600 in 6 bands.

Band A: 0.015 - 0.025	Band C: 0.045 - 0.080	Band E: 0.155 - 0.310
Band B: 0.025 - 0.045	Band D: 0.080 - 0.155	Band F: 0.310 - 0.600.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice (above 0.2 mc).

POWER OUTPUT: 300 mw.

POWER REQUIREMENTS: 46 w, 115 v, 60 cyc, 1 phase, ac.
Battery operation: 14 w, 6.3 v and 4 w, 135 v, ac.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipments RBL, RBL-1, -2 measure 12-13/32 x 17-11/16 x 17-1/4 inches, net weight 105.5 pounds, volume 1.8 cu ft. Packed for domestic shipment: total weight 225 pounds, total volume 9.7 cu ft. Shipped in 1 package.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 4 Apr 52	**AN/URR-TYPE** SERVICE TYPE NUMBER: RBL-3, RBL-4 RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RBL-3 and RBL-4 are general purpose, tuned radio frequency receivers of telegraph signals between 0.015 and 0.6 mc. Voice reception is possible only above 0.2 mc. R-f radiations have been kept at a very low level making their use safe within combat areas.

RBL-3 and RBL-4 receivers are similar, and are fitted with a coaxial antenna input jack for use with a coaxial lead-in cable. RBL-4 can be operated either from 115-v or 230-v ac.

A receiving antenna and a 600-ohm headset are required but not supplied.

They can be operated from a source of a-c power or from batteries.

AN/URR-TYPE	INSTRUCTION LITERATURE: NavShips 900,292
RBL-3, RBL-4 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 4 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CWQ-46161-A, CWQ-46230	10-7/16 x 17-3/16 x 15-1/4	84*
1	Mounting Base CWQ-10124-A	2-5/8 x 17-5/8 x 15-1/2	Not Available

*Includes weight of Mounting Base CWQ-10124-A.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-8; AN/ART-13; AN/CRT-3, -5, AN/FRT-4; -10, -19; AN/GRT-2; AN/MRC-20; AN/SRC-3; AN/SRT-1, -3; AN/TRQ-1; AN/URT-2, -3, -4; BC-191, -329, -365; SCR-177; T-5/FRC, -171/FR; TAB; TAJ; TAQ; TBL; TBN; TBU; TBW; TCE; TCG; TCY; TCZ; TDD; TDE; TDK; Marconi TH-41-B; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.015 - 0.600 in 6 bands.

Band A: 0.015 - 0.025	Band C: 0.045 - 0.080	Band E: 0.155 - 0.310
Band B: 0.025 - 0.045	Band D: 0.080 - 0.155	Band F: 0.310 - 0.600.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice (above 0.2 mc).

POWER OUTPUT: 200 mw.

POWER REQUIREMENTS: RBL-3: 45 w, 115 v, 50/60 cyc, 1 phase, ac;
RBL-4: 45 w, 115/230 v, 50/60 cyc, 1 phase, ac
Battery operation: 14 w, 6.3 v and 4 w, 135 v, dc.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipments RBL-3, RBL-4 measure 12-5/16 x 17-5/8 x 17-5/16 inches. Packed for domestic shipment: total weight 201 pounds, total volume 7.6 cu ft. Shipped in 1 package.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 4 Apr 52	AN/URR-TYPE SERVICE TYPE NUMBER: RBL-5,-6 RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RBL-5 and -6 are general purpose radiotelegraph receivers which operate in the frequency range 0.015 to 0.6 mc. Voice reception is possible only above 0.2 mc. The level of r-f radiations is kept below 400 micromicrowatts, permitting their use within combat areas.

These two receivers are similar. The RBL-5is supplied with a mounting base and the RBL-6 is inclosed in a large metal cabinet with shock mounts and a drawer-type chassis.

They can be operated either from a source of a-c power or from batteries. A special battery cable and a-c jumper-plug receptacle are provided.

A coaxial antenna input receptacle permits the use of an unbalanced feed line or a single wire antenna.

A receiving antenna and a headset are required but not supplied.

AN/URR-TYPE	INSTRUCTION LITERATURE: NavShips 900, 350
RBL-5, -6 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVING EQUIPMENT	USING SERVICE: Navy
	DATE OF THIS SHEET: 4 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CNA-46161-B* or	10-21/32 x 17-3/16 x 16-5/8	80.5
	CNA-46235**	12-7/16 x 19 x 17-7/8	104.0
*1	Mounting Base CNA-10124	2-9/16 x 17-21/32 x 16-5/16	5.5

* Supplied with RBL-5
** Supplied with RBL-6

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Medium

CAN COMMUNICATE WITH: AN/ARC-8; AN/ART-13; AN/CRT-3, -5; AN/FRT-4, -10, -19; AN/GRT-2; AN/MRC-20; AN/SRC-3; AN/SRT-1, -3; AN/TRQ-1; AN/URT-2, -3, -4; BC-191, -329, -365; SCR-177; T-5/FRC, -171/FR; TAB; TAJ; TAQ; TBL; TBN; TBU; TBW; TCE; TCG; TCY; TCZ; TDD; TDE; TDK; Marconi TH-41-B; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.015 - 0.600, in six bands.

Band A: 0.015 – 0.025	Band D: 0.080 – 0.155
Band B: 0.025 – 0.045	Band E: 0.155 – 0.310
Band C: 0.045 – 0.080	Band F: 0.310 – 0.600.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice (above 0.2 mc).

POWER OUTPUT: 300 mw.

POWER REQUIREMENTS: 46 w, 115 v, 50/60 cyc, 1 phase.
Battery operation: 14 w, 6.3 v and 4 w, 135 v.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RBL-5, RBL-6 measures 12-13/32 x 17-21/32 x 18-1/16 inches, net weight 169 pounds, volume 5.1 cu ft. Packed for domestic shipment: total weight 255 pounds, total volume 8.75 cu ft. Shipped in 1 package.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 23 May 52	**AN/URR-TYPE** SERVICE TYPE NUMBER: RBO, RBO-1, -2, -3 RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RBO, RBO-1, -2, and -3 are a-m (tone, voice) broadcast (entertainment or morale) receivers for ship or shore station use. They are designed to provide high quality reception, using four output circuits to permit use of one headset and three loudspeakers.

These receivers are intended for use with loudspeakers; earphones are employed only for monitoring.

A phone input socket is provided for connection of a record player.

Special features and circuits are used to minimize r-f radiation.

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AN/URR-TYPE

RBO, RBO-1, -2, -3 :SERVICE TYPE NUMBER
RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET: 23 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver		
	CZC-46139	13-3/4 x 20-1/2 x 18-1/2	103
	CZC-46224	13-3/4 x 20-1/2 x 18-1/2	103
	CZC-46225	13-3/4 x 20-1/2 x 18-1/2	104
	CZC-46225-A	13-3/4 x 20-1/2 x 18-1/2	104

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Naval personnel quarters.

INSTALLATION: Shipborne, or shore.

APPROXIMATE RANGE (IN MILES): Medium to long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -25, -26; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -365, -401, -447, -610; MBS; OA-60A/FRT, -608/FRT; RC-52; SCR-177, -188, -193, -274, -399, -499, -536, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, 180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL;TBM; TBN; TBU; TBW; TCB; TCC; TCE; TCH; TCK; TCS; TCZ; TDD; TDE; TOF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.54 - 1.6 and 5.55 - 15.6 in 3 bands.
Band 1: 0.54 - 1.6 Band 2: 5.5 - 9.55 Band 3: 9.2 - 15.6.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone.

POWER OUTPUT: 2 w into 600 or 5,000 ohm load; 30 mw into 600 ohm load.

POWER REQUIREMENTS: 85 w, 110 - 125 v, 58/62 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipments RBO, RBO-1, -2, -3 measure 13-3/4 x 20-1/2 x 18-1/2 inches, net weight 104 pounds, volume 2.4 cu ft.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 4 Apr 52	**AN/URR-TYPE** SERVICE TYPE NUMBER: RBS, RBS-1 RADIO RECEIVING EQUIPMENT



RBS

Radio Receiving Equipments RBS and RBS-1 are general purpose receivers designed for headset or loudspeaker reception of radiotelegraph or radiotelephone signals. Radiations from the oscillator stage are kept below safety requirements. They are ruggedly constructed, enclosed in a splashproof cabinet, and equipped with a special rack for wall mounting.

RBS and RBS-1 are identical. Each equipment includes a mounting rack that accommodates the receiver and power unit.

Two adapters are supplied for use with a coaxial antenna lead-in cable.

A receiving antenna and a headset or loudspeaker are required but not supplied.

AN/URR-TYPE

RBS, RBS-1 :SERVICE TYPE NUMBER

RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,324
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET: 4 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CCT-46217 (with cabinet)	20-1/2 x 16-7/8 x 11-1/2	70
1	Mounting Rack CCT-10227	19 x 17-3/4 x 11-3/4	40
1	Rectifier Power-Amplifier Unit CCT-20235, -20235-A	10-3/4 x 14 x 11	51

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 - 20, in 4 bands.

Band 1: 2.0 _ 3.6
Band 2: 3.6 _ 6.5
Band 3: 6.5 _ 11.4
Band 4: 11.4 _ 20.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: 8 w into 600-ohm load for loudspeaker operation.
150 mw into 600-ohm load for headset operation.

POWER REQUIREMENTS: 120 w, 115 v, 50/60 cyc, 1 phase ac.

PHYSICAL CHARACTERISTICS

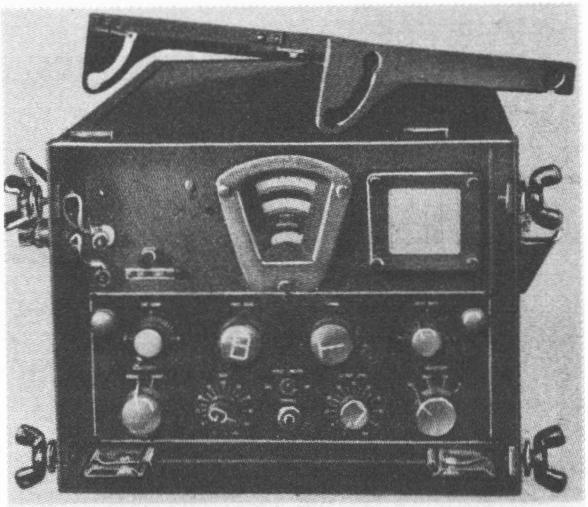
Radio Receiving Equipment RBS or RBS-1 measures 48 x 19-3/4 x 13 inches, net weight 242 pounds, volume 6.1 cu ft. Packed for domestic shipment: total weight 360 pounds, total volume 19.5 cu ft. Shipped in 1 package.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 4 Apr 52

AN/URR-TYPE

SERVICE TYPE NUMBER: RBS-2

RADIO RECEIVING EQUIPMENT



RBS-2

Radio Receiving Equipment RBS-2 is a general purpose receiver provided with a combination rectifier power-amplifier unit. It is designed for headset or loudspeaker reception of radiotelegraph or radiotelephone signals. Radiations from the oscillator stage are kept below safety requirements.

RBS-2 is similar to RBS and RBS-1 except for type of installation.

The receiver and power units are provided with shock mounts; mounting plates are used for table installation. Three special adapters are supplied for use with a coaxial antenna lead-in cable.

A receiving antenna and a headset or loudspeaker are required but not supplied.

AN/URR- TYPE	INSTRUCTION LITERATURE: NavShips 900,324
RBS-2 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 4 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CCT-46217-A	17 x 14-1/2 x 10	43
1	Rectifier Power-Amplifier Unit CCT-20235-B	10-3/4 x 16 x 11-1/4	56

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 - 20, in 4 bands.

Band 1: 2.0 – 3.6
Band 2: 3.6 – 6.5
Band 3: 6.5 – 11.4
Band 4: 11.4 – 20.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

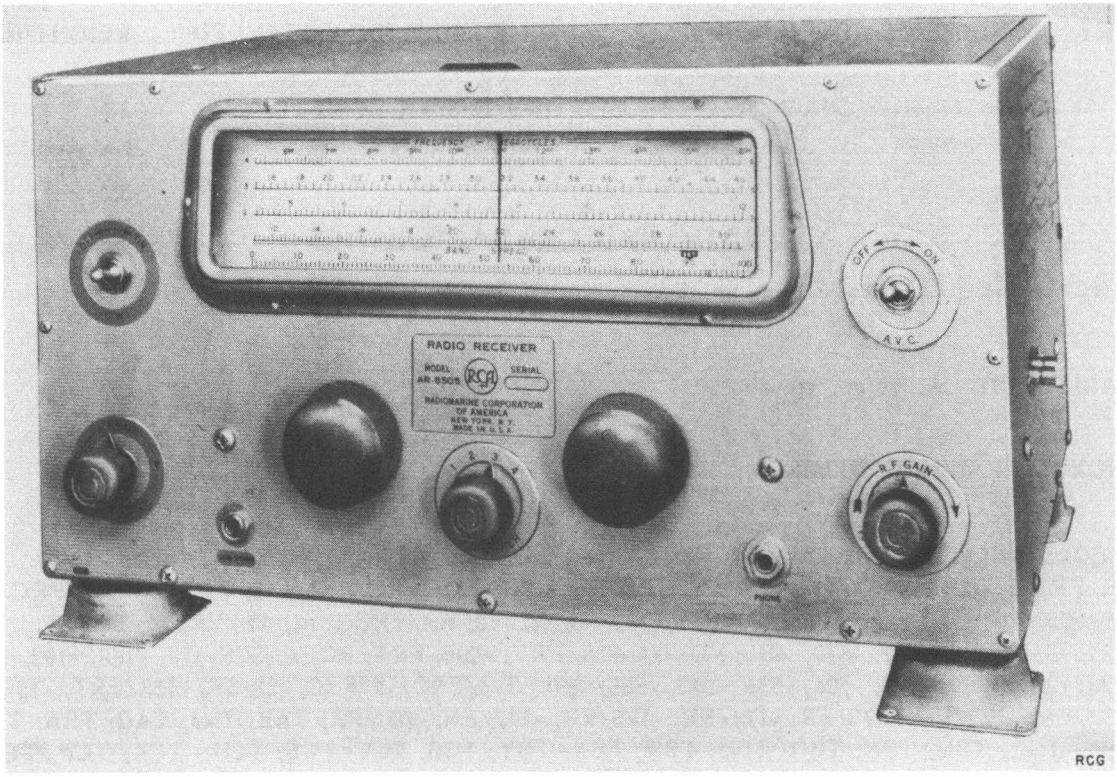
POWER OUTPUT: 8 w into 600-ohm load for loudspeaker operation.
150 mw into 600-ohm load for headset operation.

POWER REQUIREMENTS: 120 w, 115 v, 50/60 cyc, 1 phase.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RBS-2 measures 28 x 16 x 25 inches, net weight 179 pounds, volume 6 cu ft. Packed for domestic shipment: total weight 301 pounds, total volume 11.2 cu ft. Shipped in 3 packages.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 4 Apr 52	**AN/URR-TYPE** SERVICE TYPE NUMBER: RCG RADIO RECEIVING EQUIPMENT



Radio Receiving Equipment RCG is an a-c/d-c general purpose receiver of radiotelegraph or radiotelephone signals within the m-f and h-f ranges.

This equipment is complete and includes all necessary materials for setting up a doublet receiving antenna.

Because of the type of power supply used, no ground connection should be established between chassis and ground.

A phone output jack is provided for a headset (not supplied) having a d-c resistance of 2,000 to 3,000 ohms.

"Break-in" terminals and switch are provided for receiver disabling purposes.

AN/URR-TYPE

RCG :SERVICE TYPE NUMBER

RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 95256
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 4 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CNA-46200	10 x 17-3/4 x 12-1/4	33
1	Loudspeaker	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Advanced bases, shipboard.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.54 - 30.0, in 4 bands.

Band 1: 11.2 – 30.0
Band 2: 4.4 – 12.0
Band 3: 1.5 – 4.6
Band 4: 0.54 – 1.60.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice.

POWER REQUIREMENTS: 40.7 w, 110 v, 60 cyc, 1 phase or 40.7 w, 110 v d c.

PHYSICAL CHARACTERISTICS

Information on Radio Receiving Equipment RCG not available.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Apr 52

AN/URR-TYPE

SERVICE TYPE NUMBER: RCH

RADIO RECEIVING EQUIPMENT



RCH

Radio Receiving Equipment RCH is a general purpose receiver of radiotelegraph or radiotelephone signals in the m-f and h-f ranges. Radiations from the internal oscillator have been reduced to a safe level, permitting operation in combat areas.

This receiver has a mounting plate and shock mounts for table top installation.

Its audio output circuit can be connected (by means of a special socket) to the output of another receiver so that listening to either receiver or to both receivers simultaneously is possible.

A single wire or balanced feed line type antenna can be used.

AN/URR-TYPE	INSTRUCTION LITERATURE: NavShips 900,339
RCH :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET: 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CZC-46209	13-7/8 x 21 x 20-13/16	106

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-5, -8, -9, -21, -25; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-4, -5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRT-1, -3, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -329, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCG; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.08 - 0.56 and 1.9 - 24.0, in 5 bands.

Band 1: 0.08 – 0.22
Band 2: 0.21 – 0.56
Band 3: 1.9 – 5.1
Band 4: 4.5 – 12.0
Band 5: 8.8 – 24.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

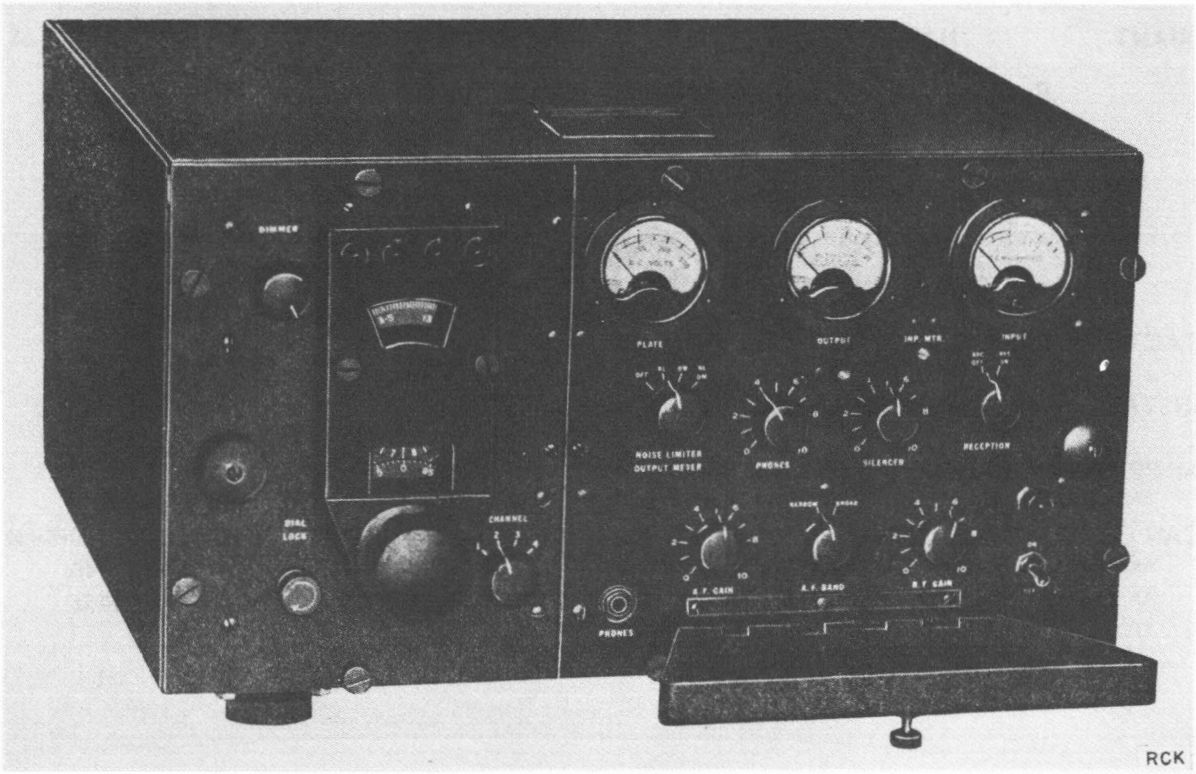
POWER OUTPUT: 100 mw for 600 - or 20,000-ohm headset.
2 w for 600-ohm loudspeaker.

POWER REQUIREMENTS: 86 w, 110-125 v, 58/62 cyc, 1 phase.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RCH measures 13-7/8 x 21 x 20-13/16.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 14 May 52	**AN/URR-TYPE** SERVICE TYPE NUMBER: RCK, RCK-a RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RCK and RCK-a are a-m (voice, mcw) v-h-f receivers used in conjunction with VHF Radio Transmitting Equipment TDQ on aircraft carriers and at shore stations for communicating with aircraft.

Four preset crystal-controlled channels are available, and the receivers have a high degree of stability, freedom from cross modulation and radiation, and continuous tuning by means of a single dial.

Both receivers are designed for use with a 50 ohm fixed antenna.

Reception of signals, by radio telephones or through remote control stations, is possible if a suitable power amplifier is connected between the receiver and the remote operating point.

RCK and RCK-a are identical equipments except that RCK-a has been modified to extend the upper limit of audio frequency response.

AN/URR-TYPE	INSTRUCTION LITERATURE: NavShips 900,228-1B
RCK, RCK-a :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 14 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CZC-46223 (RCK)	10-1/2 x 18-1/8 x 22-7/8	115

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft carriers and shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-16, -20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URT-7, -10; AN/VRC-1; BC-640; MAW; MBS; RC-257; SCR-522, -542, -573, -575, -624, -641, -643; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 115 - 156.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw.

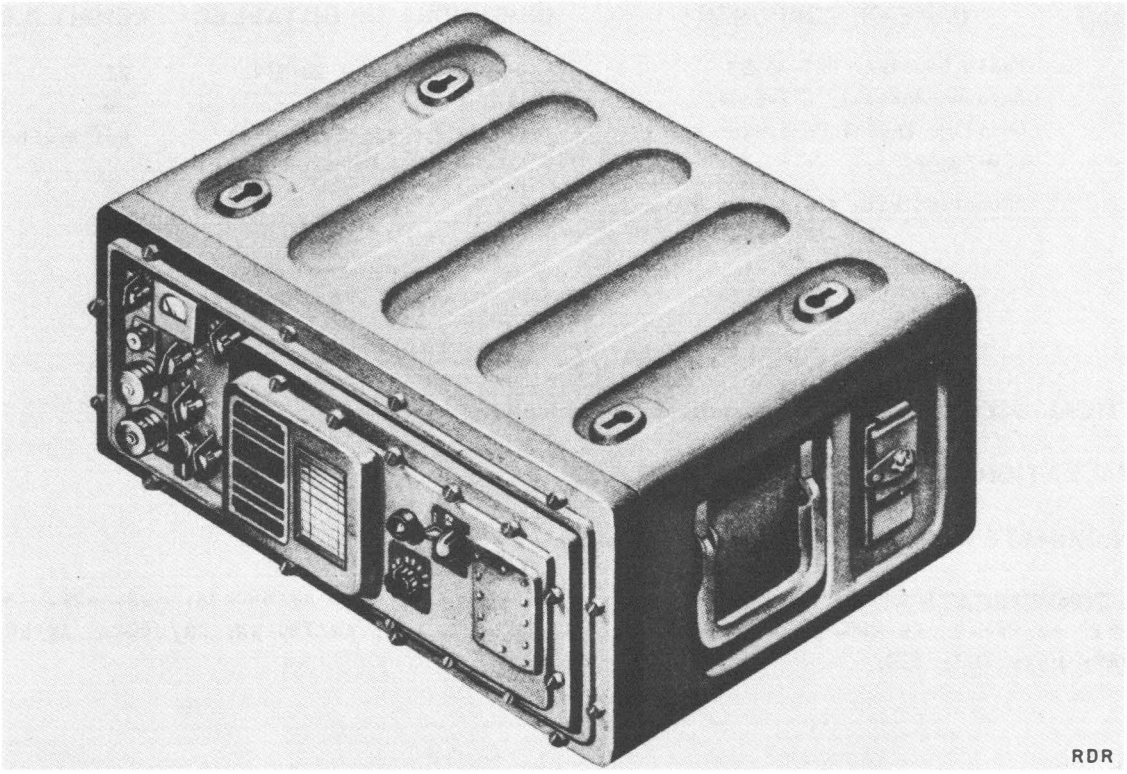
POWER OUTPUT: 15 mw into 600 ohms.

POWER REQUIREMENTS: 106 w, 115 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipments RCK, RCK-a measure 10-1/2 x 18-1/8 x 22-7/8 inches, net weight 115 pounds.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 Apr 52	**AN/URR-TYPE** SERVICE TYPE NUMBER: RDR PORTABLE RADIO RECEIVING EQUIPMENT



Portable Radio Receiving Equipment RDR is a general purpose, v-h-f/u-h-f, radio Telephone equipment used for ship, shore, field, and vehicular reception of tone signal or voice communication over line-of-sight distances. Ten preset crystal-controlled channels are available locally or remotely.

This equipment is supplied either for shipboard installation, (in which case power is derived from a Vibrator Power Unit CLG-20379, not supplied with the RDR), or for field, or vehicular installation. In the latter case, two shipping chests are supplied.

The vehicle's electrical system, or the gasoline engine generator set supply power to operate the receiver.

One Crystal in Holder CFT-40178 and a set of 10 crystals are required but not supplied.

AN/URR-TYPE	INSTRUCTION LITERATURE: NavShips 900,841
RDR :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
PORTABLE RADIO RECEIVING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CRV-46283	3-1/4 x 27-1/4 x 20-3/4	91
1	Antenna Assembly CRV-66147	7-1/8 x 31 x 8-1/4	26
1	Gasoline Engine Generator Set CCW-73037	12-9/16 x 9-5/8 x 15-19/32	Not Available

*Supplied with field type RDR only.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard, shore stations, or vehicular.

INSTALLATION: Shipborne, ground, vehicular.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/ARC-12, -19, -27, -30, -33, -34; AN/GRC-16, -27, -29, -30, -32; AN/GRT-3; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-32; AN/URC-4; AN/URT-10; MAR; MAY; TDZ; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 225 - 390.
10 crystal-controlled preset frequencies available.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

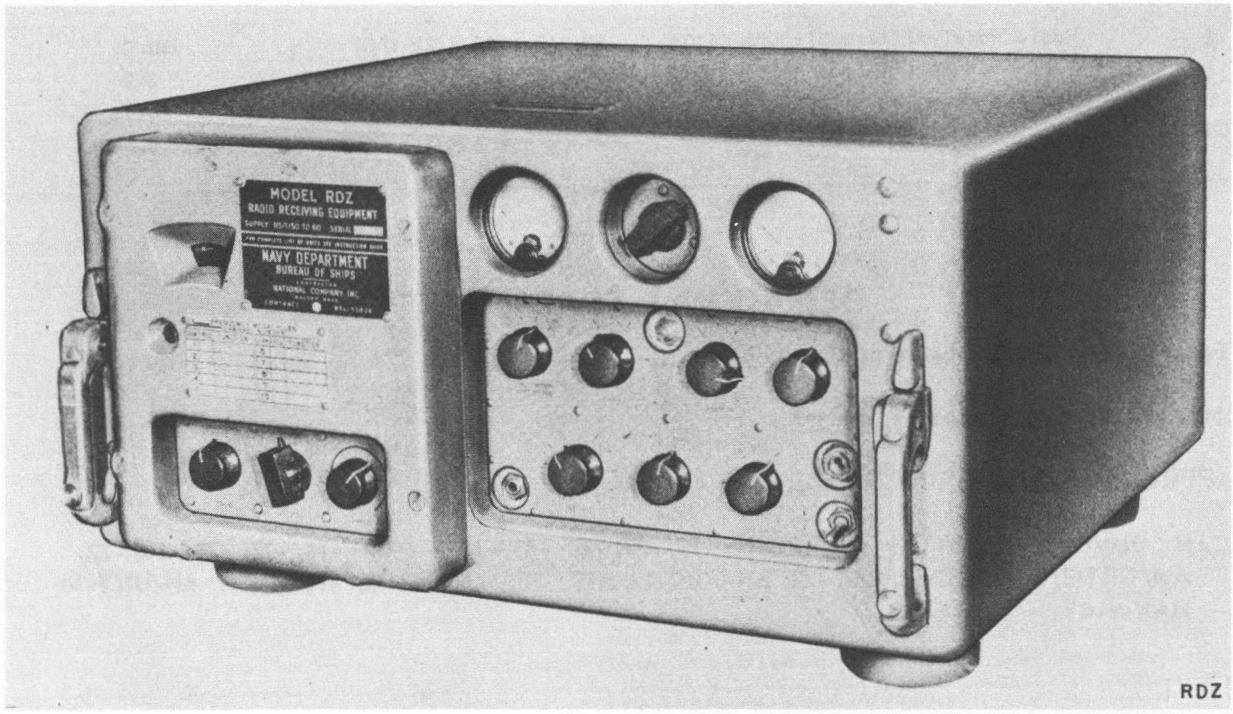
POWER OUTPUT: 1 w, 600 ohms.

POWER REQUIREMENTS: 145 w, 13 v, dc; or
145 w, 13 v, ac and 375 v, dc.

PHYSICAL CHARACTERISTICS

Portable Radio Receiving Equipment RDR measures 13-1/2 x 27-1/4 x 20-3/4 inches.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 Apr 52	**AN/URR-TYPE** SERVICE TYPE NUMBER: RDZ VHF RADIO RECEIVING EQUIPMENT



VHF Radio Receiving Equipment RDZ is a general purpose, crystal-controlled, radiotelephone receiver which operates in the v-h-f/u-h-f range of 225 to 400 mc.

This receiver has a remote channel selector, making the system rapidly tunable to any one of 10 preset, crystal-controlled channels.

It incorporates a frequency-scanning amplifier stage and a video-output amplifier stage, which make it adaptable to panoramic reception, when used in association with a display unit.

An antenna such as Antenna Assembly NT-66147, Antenna AT-150/SRC, or Antenna Assembly AS-390/SRC is required but not supplied.

AN/URR-TYPE

RDZ :SERVICE TYPE NUMBER

VHF RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 91331, 900,617
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET: 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver Assembly CNA-46275	13-1/8 x 22 x 22-5/32	150.0
1	Remote Channel Selector CNA-23492	4-9/16 x 5-1/4 x 3-5/16	2.0
2	Crystal Oven CNA-40148	2-1/4 x 3-21/32 x 2-19/32	0.75
100	Crystal Unit (Package) CNA-40162	1-1/2 x 9-1/4 x 5-1/4	2.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/ARC-12, -19, -27, -30, -33, -34; AN/GRC-16, -27, -29, -30, -32; AN/GRT-3; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-32; AN/URC-4; AN/URT-10; MAR; MAY; TDZ; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 225 - 400.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

POWER OUTPUT: Audio channel: 60 mw into 600 ohm load or 600 mw into 30 ohm load.
Phone jack: 4 mw into 600 ohm load.
Video channel: 1.5 v into 1,000 ohm load.

POWER REQUIREMENTS: 175 w, 110 – 120 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

VHF Radio Receiving Equipment RDZ measures 13-1/8 x 22 x 22-5/32 inches.

STATUS: Commercial CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 7 Feb 52	**AN/URR-TYPE** COMMERCIAL TYPE NUMBER: AR-88 (RCA) RADIO RECEIVER



AR-88 (RCA)

Radio Receiver RCA Model AR-88 is a commercial radio receiving equipment, two models of which have been procured. AR-88-D (shown above) is the cabinet-inclosed version and is used for a-m (voice, cw, and mcw) communication in the h-f range at corps and higher headquarters in point-to-point, ground-to-air, ship-to-shore, and similar applications.

AR-88-F (not illustrated here) is panel-mounted and is designed for triple diversity applications at fixed plant installations. Has been procured under official nomenclature Radio Receiver R-320/FRC, three of which are used in Radio Receiver Assembly OA-58A/FRC.

AR-88-F differs from AR-88-D by having automatic volume control, i-f gain, a diode output circuit, and provision for connection to a tone keyer rather than to a transmitter relay.

Both models operate in the same frequency range and require 100/165 or 190/260 v ac.

AN/URR-TYPE	INSTRUCTION LITERATURE: TM 11-880
AR-88 (RCA) :COMMERCIAL TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVER	USING SERVICE : Army
	DATE OF THIS SHEET : 7 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Corps, army, or higher headquarters.

INSTALLATION: Fixed, ground.

APPROXIMATE RANGE IN MILES: Extended.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN;TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model): Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES:

Band 1: 0.54 - 1.6
Band 2: 1.57 - 4.55
Band 3: 4.45 - 12.15
Band 4: 11.90 - 16.60
Band 5: 22.0 - 32.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, mcw.

POWER OUTPUT: 2.5 w (undistorted, audio).

POWER REQUIREMENTS: 100/165 / 190/260 v, 50/60 cyc ac.

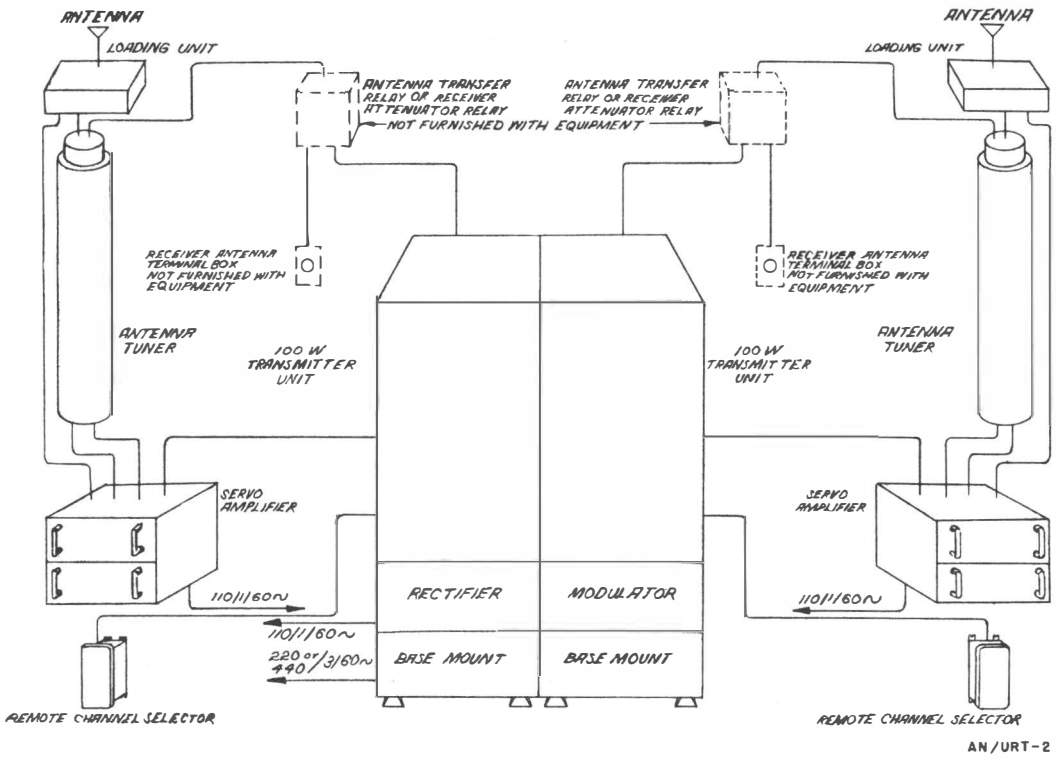
PHYSICAL CHARACTERISTICS

Radio Receiver AR-88 (RCA) packed for domestic shipment: total weight 140 pounds, total volume 8.15 cu ft.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/URT-2,-3,-4

RADIO TRANSMITTING SET



AN/URT-2

Radio Transmitting Sets AN/URT-2 and AN/URT-2X, -3, -3X, -4, -4X are medium-power m-f/h-f transmitters for ship-to-shore use. They operate in conjunction with such receivers as Radio Receiving Equipment RBA, RBB, and RBC and the shipboard remote control system. A crystal-controlled synthesizer provides frequency control of 10 preset channels.

This equipment provides two frequency bands, 300 kc to 26 mc and 2 mc to 26 mc, obtaining higher power output on the latter. The AN/URT-4 consists of the AN/URT-2 and 3, which may be operated simultaneously. The AN/URT-2 may be used as a replacement for Radio Transmitting Equipment TBL, TDE, or TCZ; the AN/URT-3 may replace Radio Transmitting Equipment TBA, TBK, TBM, or TCK. The AN/URT-2X, -3X and -4X are identical to the AN/URT-2, -3 and 4 respectively, except that they require a 400 cyc ac power source.

The transmitters are designed for use with either a 35 ft whip antenna or an L type wire antenna.

AN/URT-2,-3,-4

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE : Navy
DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT.	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
*1	Radio Transmitter	55-3/8 x 16 x 24	735
1	Radio Modulator MD-149/URT**	18-1/4 x 16 x 24	250
*1	Antenna Control Group OA-297/URT	17-7/8 x 18-11/16 x 14-1/2	135
1	Transmitter Control C-916/URT	5-1/4 x 4-3/4 x 10-5/8	5

* Two each for AN/URT-4 and -4X.
** Not applicable to AN/URT-2 and -2X

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28; AN/GRC-3, -4, -9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -8, -19, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4, -5, -8, -13, -16, -20; AN/VRQ-1; AN/VRR-2; BC-312, -314, -342, -344, -348, -453, -779, -794, -1004, MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBL; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDF; RDM; REA; SCR-177, -188, -193, -244, -274-N, -281, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model), Collins 75A-2; Fisher TS25-3; Hammerlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.3 - 26.0.

TYPE MODULATION: Am, fm.

TYPE OF SIGNAL: Cw, mcw, icw, tone, voice.

POWER OUTPUT: AN/URT-2: 100 w.
AN/URT-3: 100 or 500 w.
AN/URT-4; 100 w and 100 or 500 w (two-unit).

POWER REQUIREMENTS: AN/URT-2; 1,000 w, 115 v, 60 cyc, 1 phase. AN/URT-2X: 1,000 w, 115 v, 400 cyc, 1 phase. AN/URT-3: 800 w, 115 v, 60 cyc, 1 phase or 1,800 w, 220 v, 60 cyc, 3 phase. AN/URT-3 X: 800 w, 115 v, 400 cyc, 1 phase or 1,800 w, 220 v, 400 cyc; 3 phase. AN/URT-4: 1,800 w, 115 v, 60 cyc, 1 phase or 220/440 v, 60 cyc, 3 phase. AN/URT-4X: 1,800 w, 115 v, 400 cyc, 1 phase or 220/440 v, 400 cyc, 3 phase.

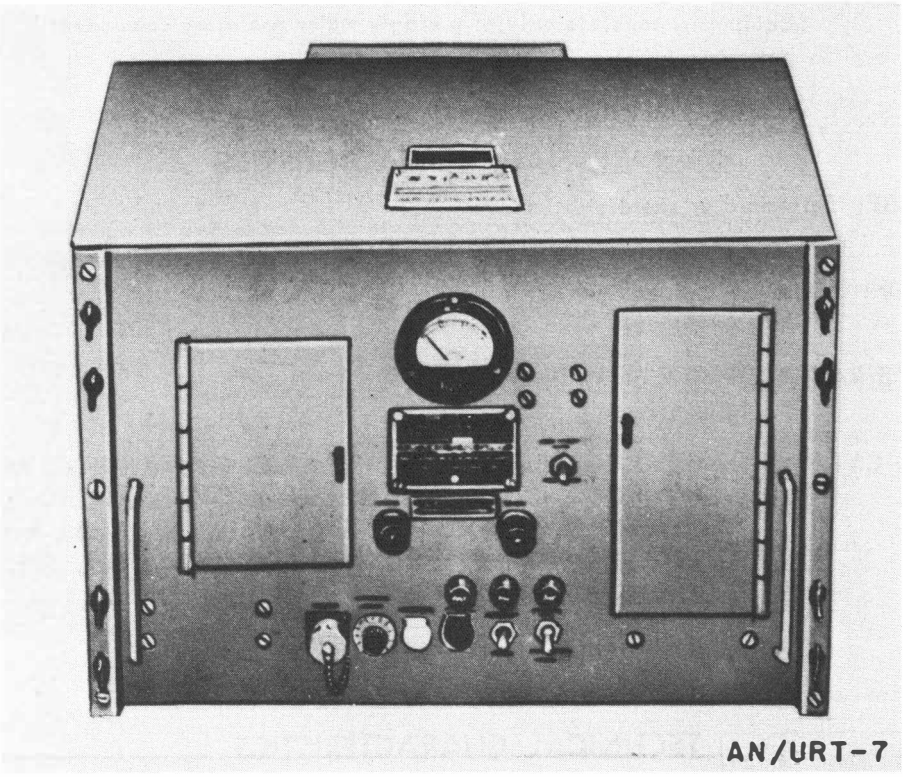
PHYSICAL CHARACTERISTICS

Information on Radio Transmitting Sets AN/URT-2, -2X, -3, -3X, -4, and -4X not available.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 23 May 52

AN/URT-7

TRANSMITTING SET, RADIO



AN/URT-7

Transmitting Set, Radio AN/URT-7 is a low-power, general purpose, v-h-f transmitter for use at ship or shore installations. A crystal oscillator provides frequency control of four preset channels. It can be keyed at speeds up to 40 words per minute.

This equipment is similar to, and will replace, VHF Radio Transmitting Equipment TDQ.

AN/URT-7

TRANSMITTING SET, RADIO

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 23 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-12, -21; AN/VRC-1; BC-639, -787; MAR; MBS; R-137/GR; RBK; RBQ; RC-256; RCK; RCO; SCR-522, -542, -574, -575, -607, -616, -624, -641, -644.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 115 - 156.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: 30 w.

POWER REQUIREMENTS: 750 w, 115 / 230 v, 60 cyc, 1 phase, ac.

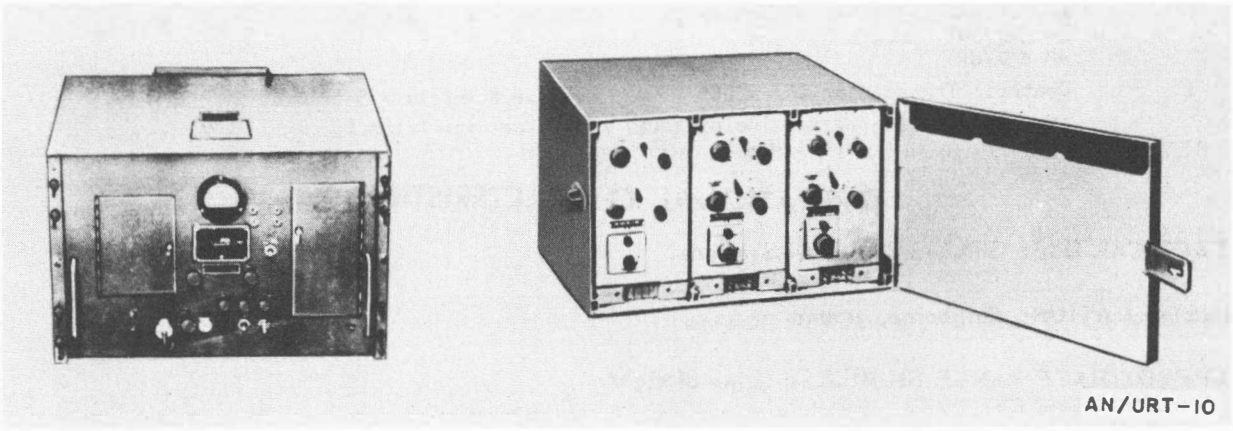
PHYSICAL CHARACTERISTICS

Information on Radio Transmitting Set AN/URT-7 not available.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 14 May 52

AN/URT-10

TRANSMITTING SET, RADIO



AN/URT-10

Transmitting Set, Radio AN/URT-10 is a v-h-f/u-h-f transmitter employed for a-m radiotelephone and mcw communication aboard ship or on shore.

The control unit is intended primarily for limited remote control up to five miles at shore stations; the transmitter can also be operated from standard shipboard remote units.

Four interchangeable units Amplifier-Oscillator AM-634/URT, AM-635/URT, AM--636/URT and AM-637/URT are provided to cover the frequency range, each employs a crystal-controlled master oscillator for frequency control.

Audio input to modulator and receiver monitoring is provided.

Two associated amplifier units are employed for monitoring purposes. The transmitter may be either table- or rack-mounted.

AN/URT-10

TRANSMITTING SET, RADIO

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 14 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter, Radio T-335/URT-10 includes one each:	13-23/32 x 19 x 16-1/2	146
	Amplifier-Oscillator AM-634/URT, AM-635/URT, AM-636/URT and AM-637/URT	9-31/32 x 5 x 14-1/2	30
1	Control, Transmitter CFT-23555	5-13/16 x 4-7/16 x 3-5/16	4
	(Weight of transmitter includes (1) amplifier-oscillator.)		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -12, -18, -19, -27, -28, -30, -33, -34, -36; AN/CRC-2; AN/CRW-7; AN/FRC-7; AN/FRR-12, -28, -32; AN/GRC-16, -27, -29, -30, -32; AN/GRR-2, -3, -7; AN/MRC-12, -16, -20, -22; AN/PRC-14, -17, -20; AN/SRR-13; AN/TRC-7, -32; AN/TRQ-1; AN/URC-4; AN/URR-9, -10, -12, -13, -21, -23; AN/VRC-1; AN/VRR-3; BC-639, -787, -794; MAR; MAW; MAY; MBF; MBS; OA-59/FRC; R-62/PR, -90/PR, -137/GR, -205/U, -211/U, -274/FRR, -278/GR, -320/FRC, -388/URR; RAO; RAS; RBG; RBK; RBQ; RC-103, -256; RCF; RCG; RCK; RCO; RDM; RDR; RDZ; SCR-522, -542, -574, -575, -607, -616, -624, -641, -644, -704; TBS; TBY; A 98 (RCA); ARC Type 12; Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 30 - 400 in 4 ranges.

AM-634/URT: 30 - 60 AM-636/URT: 115 - 225
AM-635/URT: 60 - 115 AM-637/URT: 225 - 400.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

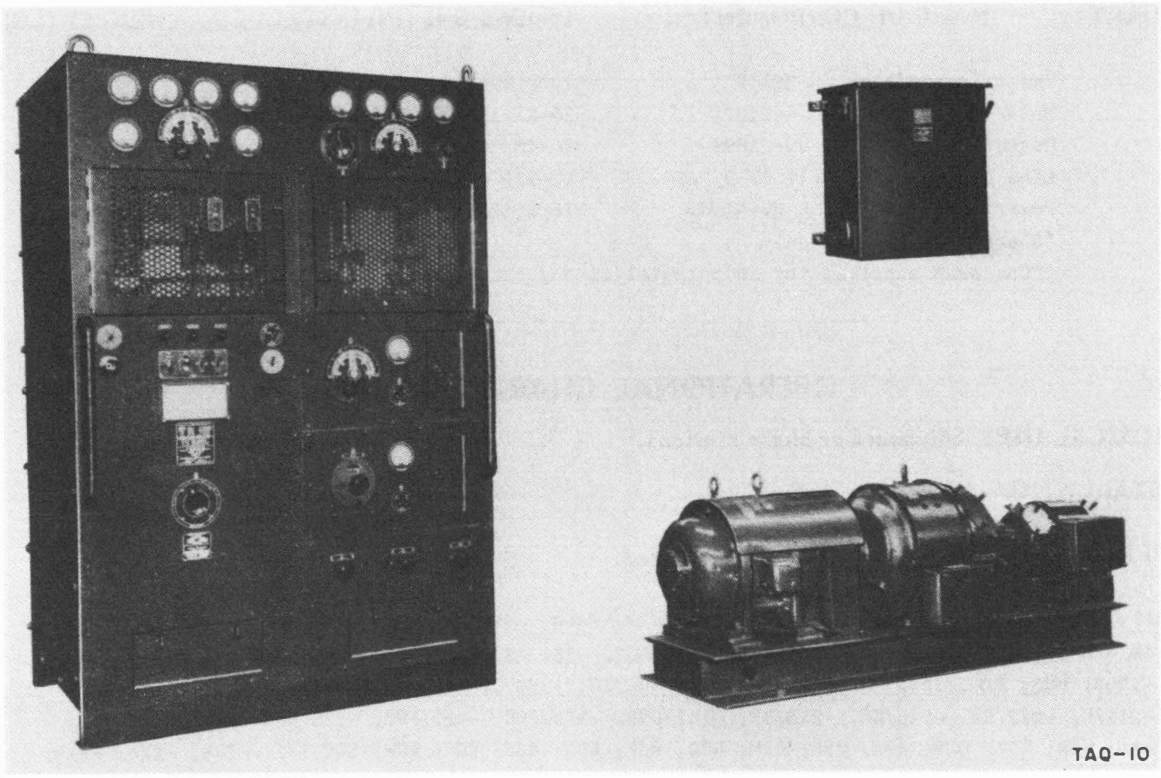
POWER OUTPUT: 15 to 30 w.

POWER REQUIREMENTS: 750 w, 115/230 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Transmitting Set, Radio AN/URT-10 measures 13-23/32 x 19 x 16-1/2 inches, net weight 240 pounds, volume 2.75. Packed for domestic shipment: Shipped in 3 packages.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 2 May 52	**AN/URT-TYPE** SERVICE TYPE NUMBER: TAQ-10 2 KW TRANSMITTING EQUIPMENT



TAQ-10

2 KW Transmitting Equipment TAQ-10 is a radio transmitter of unmodulated, or modulated telegraph signals within the low frequency range.

Two different component groupings of this equipment are available depending on installation requirements.

For shipboard installation, the equipment consists of three major units, and is similar to previous TAQ series models.

For shore installation, the motor generator set and magnetic controller are duplicated, and in addition, a power transfer switch and landline control unit make the installation more flexible.

Either remote or local control of the transmitter is possible.

AN/URT-TYPE	INSTRUCTION LITERATURE: NavShips 900,549 CLASSIFICATION OF EQUIPMENT: Unclassified
TAQ-10 :SERVICE TYPE NUMBER	USING SERVICE : Navy
2 KW TRANSMITTING EQUIPMENT	DATE OF THIS SHEET : 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CG-52279	72 x 49-1/4 x 34-1/8	960
**	Motor Generator Set CG-21892	26-11/16 x 71-5/8 x 21-1/2	1,200
**	Magnetic Controller CG-21896	26-15/16 x 24-7/8 x 10-7/8	100
*1	Land Line Control Unit CG-23269	42-1/8 x 24 x 14-1/2	165
*1	Power Transfer Switch CG-24092	16 x 12-1/2 x 9-1/4	26

*Shore installation only.

**One each supplied for ship installation, two each for shore installation.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Extended.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/FRR-4, -28; AN/GRR-2, -3; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-4; BC-314, -344, -348, -453, -779, -1004; MBS; OA-58/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBG; RBH; RBL; RBM; RBO; RCF; RCG; RCH; RDF; RDM; SCR-177, -244, -274, -614; AR-88 (RCA); ARC Type 12; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.175 - 0.600.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw.

POWER OUTPUT: Cw: 2 kw.
Mcw: 1 kw.

POWER REQUIREMENTS: 8 kw, 220 v, 60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

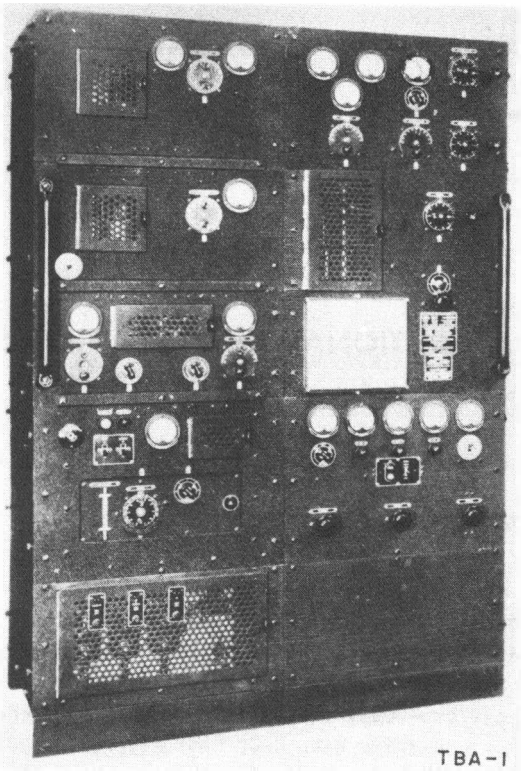
2 KW Transmitting Equipment TAQ-10 for shore installation measures 72 x 74-1/8 x 34-1/8 inches.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Apr 52

AN/URT-TYPE

SERVICE TYPE NUMBER: TBA-1

RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TBA-1 is a general purpose, medium power h-f radiotelegraph transmitter for use on surface vessels and at shore stations.

The equipment may be keyed at speeds up to 100 wpm throughout its frequency range.

Sixteen crystal-controlled channels are provided.

The transmitter operates best with a single-wire antenna below 8 mc. Above 8 mc either a single-wire or horizontal doublet antenna may be used.

AN/URT-TYPE	INSTRUCTION LITERATURE: NavShips 95290 CLASSIFICATION OF EQUIPMENT: Unclassified
TBA-1 :SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO TRANSMITTING EQUIPMENT	DATE OF THIS SHEET : 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter Unit CG-52011, -52012, -52007, -52010	72 x 49 x 33-5/32	1,215
1	Motor Generator Set CG-12A445, -12A444, -12A442, or -12A443	Not Available	1,977
1	Starter CG-4228, -4288A, -21014, -21001	Not Available	178
1	Filter Unit, CG-53007, -53008, -53005, -53003	Not Available	80

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Medium to long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32, AN/GRC-3, -4, -9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -22; AN/PRC-7, -8, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -5, -8, -13, -16, -20; AN/VRQ-1; BC-312, -342, -348, -779, -794, -1004; MBS; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4.0 - 26.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw.

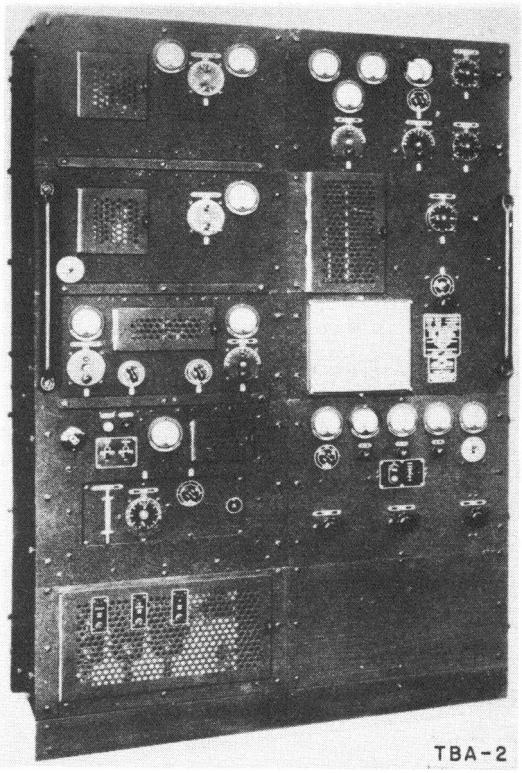
POWER OUTPUT: At 4.0 mc: 1 kw.
At 26.0 mc: 600 w.

POWER REQUIREMENTS: 6.5 kw, 220 v, 60 cyc, 3 phase, ac; or 5.9 kw, 440 v, 25 cyc, 3 phase, ac; or 6.4 kw, 230 v, dc; or 6.4 kw, 115 v, dc.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TBA-1 measures 72 x 49 x 33-5/32 inches.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 Apr 52	**AN/URT-TYPE** SERVICE TYPE NUMBER: TBA-2 RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TBA-2 is a general purpose, medium power h-f radiotelegraph transmitter designed for use aboard surface vessels and at shore stations.

It may be keyed at speeds up to 100 wpm throughout its frequency range.

Sixteen crystal-controlled channels are provided.

The transmitter operates best with a single-wire antenna at frequencies between 4.0 to 8.0 mc. A horizontal doublet, or a single-wire antenna is recommended for frequencies above 8 mc.

AN/URT-TYPE	INSTRUCTION LITERATURE: NavShips 95291
TBA-2 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTING EQUIPMENT	USING SERVICE: Navy
	DATE OF THIS SHEET: 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter Unit CG-52040	72 x 49 x 33-5/32	1,090
1	Rectifier Power Unit CG-20027	72 x 23 x 33-3/4	1,000

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Medium to long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-3, -4, -9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -22; AN/PRC-7, -8, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -5, -8, -13, -16, -20; AN/VRQ-1; BC-312, -342, -348, -779, -794, -1004; MBS; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4.0 - 26.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw.

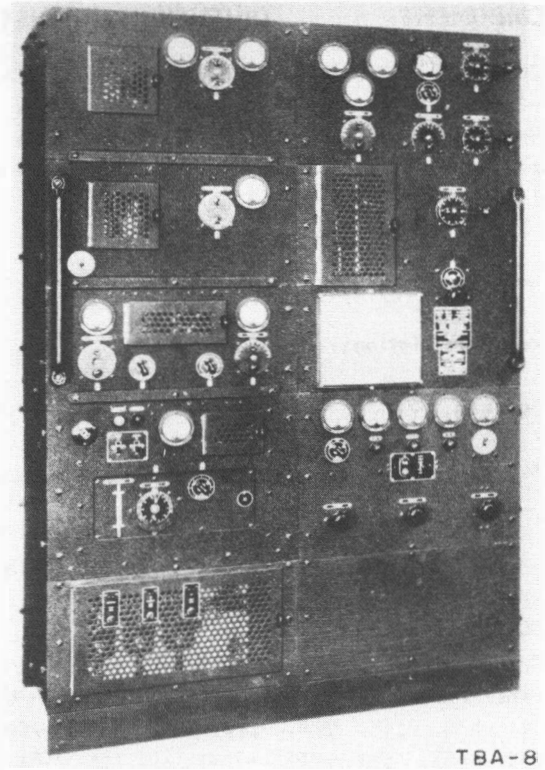
POWER OUTPUT: At 4.0 mc: 1 kw.
At 26.0 mc: 600 w.

POWER REQUIREMENTS: 5.28 kw, 440 v, 60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TBA-2 measures 72 x 72 x 33-3/4 inches.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 Apr 52	**AN/URT-TYPE** SERVICE TYPE NUMBER: TBA-8, -11 RADIO TRANSMITTING EQUIPMENT



TBA-8

Radio Transmitting Equipments TBA-8 and TBA-11 are general purpose, medium power, h-f, radiotelegraph transmitters for surface vessels or shore stations.

Relay keying speeds up to 100 wpm, and vacuum tube keying up to 500 wpm, are possible.

They can be used with single-wire antennas, or be connected to balanced 650-ohm transmission lines which are properly terminated into 650-ohm loads.

Frequency control is by means of a continuously variable oscillator.

These transmitters are designed for 220-v, 60-cyc, 3 phase, ac, but may be converted to 440-v, 60-cyc, 3 phase, ac operation for surface vessels.

AN/URT-TYPE	INSTRUCTION LITERATURE: NavShips 900,290
TBA-8, -11 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CG-52280, -52280-A	81-7/16 x 49 x 13-1/8	975
2	Motor Generator CG-21899	19-15/16 x 71-5/16 x 18-1/8	815
1	Land Line Control Unit CG-23269	42-1/8 x 24 x 15-3/4	160
2	Magnetic Controller CG-21897	23-7/8 x 21-7/16 x 9-1/16	70
1	Power Transfer Switch CG-24092	12-1/4 x 16 x 9-1/4	26

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-3, -4, -9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -22; AN/PRC-7, -8, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -5, -8, -13, -16, -20; AN/VRQ-1; BC-312, -342, -348, -779, -794, -1004; MBS; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U , -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4.0 - 26.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw.

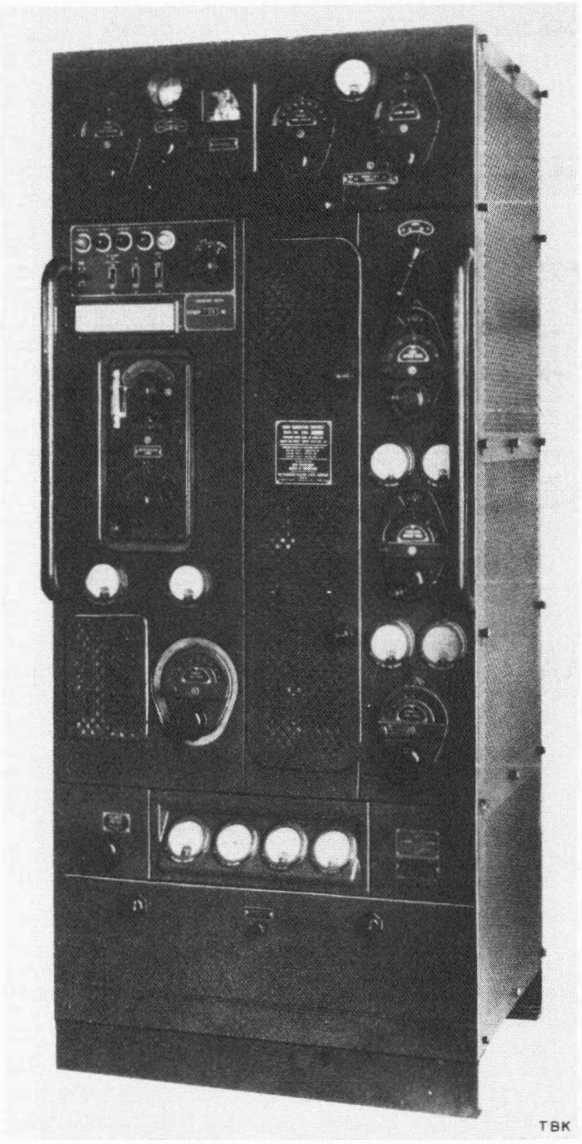
POWER OUTPUT: 1 kw.

POWER REQUIREMENTS: 4.6 kw, 220/440 v, 60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipments TBA-8, -11 measure 81-7/16 x 49 x 31-1/8 inches, net weight 3,325 pounds, volume 135.1 cu ft, 3.37 ship tons. Packed for domestic shipment: total weight 5,554 pounds, total volume 340.4 cu ft, 8.5 ship tons. Shipped in 12 packages.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 8 May 52	**AN/URT-TYPE** SERVICE TYPE NUMBER: TBK RADIO TRANSMITTING EQUIPMENT



TBK

Radio Transmitting Equipment TBK is a general purpose, a-m (cw), radiotelegraph transmitter for ship or shore use in h-f communications. Keying speeds up to 100 wpm are possible. The power output may be varied from the nominal full power to a minimum of 75 w.

This transmitter uses master oscillator frequency control and is continuously variable over its frequency range.

It has provisions for operation over the standard remote control system of Naval vessels.

A junction box is used where two transmitters and two rectifier equipments are installed near each other; the rectifier circuits are connected to the transmitters via the junction box.

A typical installation of this type uses a TBK and the 500 Watt Transmitting Equipment TAJ.

AN/URT-TYPE	INSTRUCTION LITERATURE: Not Available
	CLASSIFICATION OF EQUIPMENT: Unclassified
TBK :SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO TRANSMITTING EQUIPMENT	DATE OF THIS SHEET : 8 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter Unit CAY-52032	72 x 32 x 24	695
1	Rectifier Power Unit CAY-20018	71-7/8 x 23-15/16 x 22-7/8	975
1	Junction Box CAY-23055	46-1/8 x 23-7/16 x 11-7/8	150

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard, or shore stations.

INSTALLATION: Shipborne, ground. **APPROXIMATE RANGE (IN MILES):** Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; A /FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; A /GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -291, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw.

POWER OUTPUT: 2.0 - 18.1 mc: 500 w.
2.0 - 9.05 (power amplifier disconnected): 75 w.

POWER REQUIREMENTS: 440 v, 60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

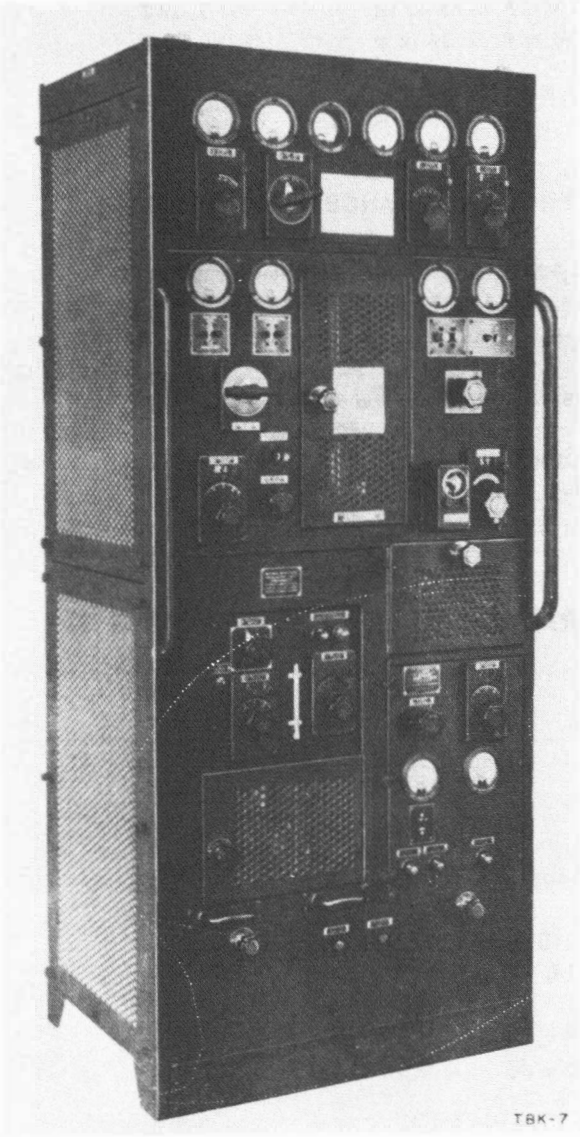
Radio Transmitting Equipment TBK weighs 2,020 pounds net, volume 55 cu ft, 1.37 ship tons.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 8 May 52

AN/URT-TYPE

SERVICE TYPE NO: TBK-7 thru 10, -12 thru -14, -17 thru -20

RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipments TBK-7 through -10, -12 through -14, and -17 through -20, are a-m (cw) radiotelegraph transmitters for use on all type Naval vessels, except certain types of submarines, for h-f communications. Keying speeds up to 100 wpm are possible. The transmitter power output may be varied from full power to a minimum of 75 w.

These transmitters are master oscillator control and are continuously variable over the frequency range.

Provisions are made for control over a standard four- or six-wire remote control system. Local operation from the transmitter panel is usually reserved for test purposes.

A vertical antenna 60 to 80 feet long is preferred.

The type transmitter, motor generator, and magnetic controller components used with the various equipments depends upon the power source available. Motor generators are of the three-unit type mounted on a single bedplate.

Power for operation of the magnetic controllers is obtained from the transmitter control circuits.

AN/URT-TYPE

TBK-7 thru 10, -12 thru -14, -17 thru -20: SERVICE TYPE NO.
RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: See note below*
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 8 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter	72 x 32 x 24-9/16	740
1	Motor Generator Unit	23 x 19 x 71-1/16	1,162
1	Magnetic Controller Unit	19-21/32 x 16 x 9	48

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or submarines.

INSTALLATION: Shipborne, submarine. **APPROXIMATE RANGE (IN MILES):** Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -595, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw.

POWER OUTPUT: 2.0 to 18.1 mc: 500 w.
2.0 to 9.05 mc (power amplifier disconnected): 75 w.

POWER REQUIREMENTS: TBK-7 and -18: 3.65 kw, 440 v, 60 cyc, 3 phase, ac.
TBK-8, -9, -10, -12, -13, -14, -17, -18: 220/440 v, 60 cyc, 3 phase, ac; or 115/230 v dc.
TBK-19: 3.34 kw, 220/440 v, 60 cyc, 3 phase, ac; or 230 v dc.
TBK-20: 3.83 kw, 115/230 v dc.

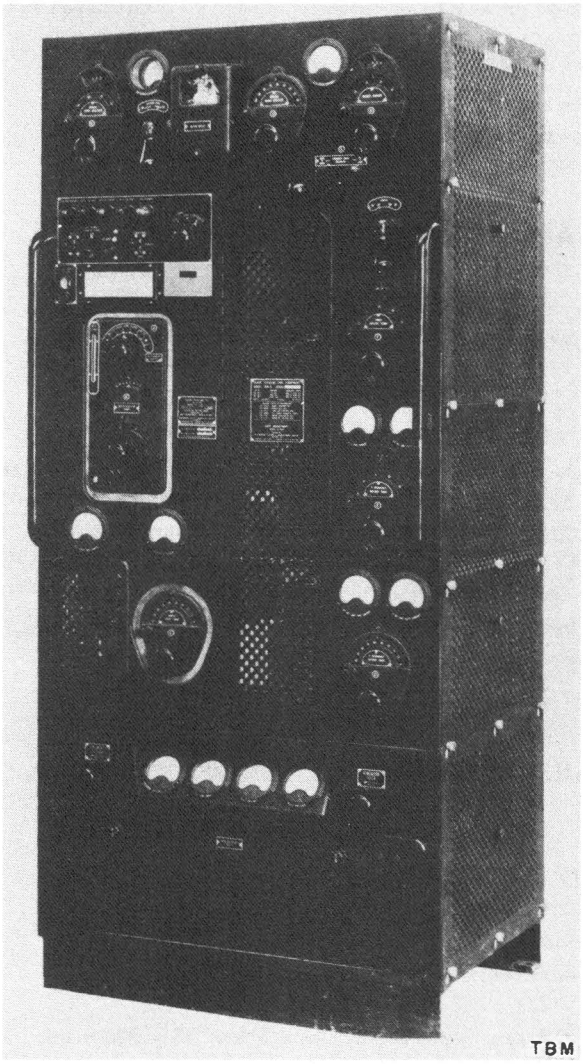
PHYSICAL CHARACTERISTICS

Radio Transmitting Equipments TBK-7 through -10, -12 through -14, -17 through -20 weigh 2,653 pounds net. Packed for domestic shipment: total weight 3,630 pounds, total volume 164.8 cu ft, 4.12 ship tons.

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*NavShips 95293; 95294; 900,380; 900,386; 900,388; 900,482.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 23 May 52	**AN/URT-TYPE** SERVICE TYPE NUMBER: TBM, TBM-4, -5, -7, -9, -11 RADIO TRANSMITTING EQUIPMENT



TBM

Radio Transmitting Equipments TBM, and TBM-4, -5, -7, -9 and -11 are a-m (cw, mcw, voice) radio transmitters used on all type Naval vessels, except certain types of submarines, in h-f communication. Keying speeds up to 100 wpm on cw, and 50 wpm on mcw, are possible. The transmitter power output may be reduced from full- to low-power of 75 w.

TBM consists of a transmitter and a rectifier-modulator unit only. The modulator units employed with the other TBM series equipments permit the use of accessory units, such as a master monitor unit and remote radiophone units. The type of transmitters, modulators and power units used, is determined by the power sources available.

This transmitter uses master oscillator control and is continuously variable over its frequency range.

It may be controlled locally, or from a remote point by means of a standard four- or six-wire control system.

On "voice" the carrier may be controlled manually or by a voice operated relay in the modulator.

A vertical antenna 60 to 80 feet long is preferred for use with the transmitter.

AN/URT-TYPE

TBM, TBM-4, -5, -7, -9, -11 :SERVICE TYPE NUMBER

RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,380; 900,388

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Navy

DATE OF THIS SHEET : 23 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter	72 x 32 x 24	780
1	Rectifier CAY-20033 *	72 x 32 x 24	Not Available
1	Modulator Unit CAY-50065, or 50065-A	72 x 18 x 24	385
1	Motor Generator Unit **	20-1/2 x 78-7/8 x 20-1/2	1,275
1	Magnetic Controller **	26-1/4 x 17-1/2 x 16-7/8	110

* TBM only.

* * Not part of TBM.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or submarines.

INSTALLATION: Shipborne, or submarine.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 18.1.

TYPE MODULATION: Am. **TYPE OF SIGNAL:** Cw, mcw, voice.

POWER OUTPUT: 2.0 to 18.1 mc: Cw, 500 w; mcw and voice, 350 w.
2.0 to 9.05 (power amplifier disconnected): Cw, 75 w.

POWER REQUIREMENTS: TBM-4: 4.9 kw, 220/440 v, 60 cyc, 3 phase, ac; or 4.7 kw, 115/230 v dc.
TBM and TBM-5: 4.9 kw, 440 v, 60 cyc, 3 phase, ac.
TBM-9: 4.9 kw, 440 v, 60 cyc, 3 phase, ac; or 4.7 kw, 230 v dc.
TBM-7 and -11: 4.37 kw, 440 v, 60 cyc, 3 phase, ac; or 4.37 kw, 115/230 v dc.

PHYSICAL CHARACTERISTICS

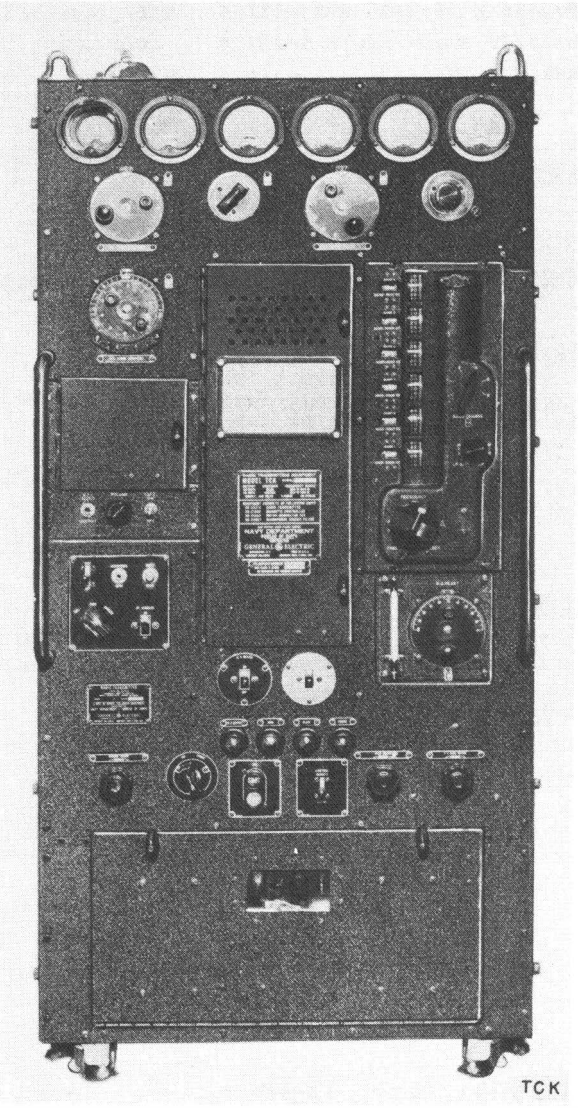
Radio Transmitting Equipment TBM, TBM-4, -5, -7, -9, -11 weighs 3,139 pounds net. Packed for domestic shipment: total weight 4,321 pounds, total volume 231 cu ft, 5.7 ship tons.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Apr 52

AN/URT-TYPE

SERVICE TYPE NUMBER: TCK, TCK-1, -2

RADIO TRANSMITTING EQUIPMENT



TCK

Radio Transmitting Equipments TCK, TCK-1, and -2 are general purpose, medium-power, m-f and h-f telegraph and telephone transmitters designed for ship or shore use.

The TCK (series) transmitters are small with a relatively high output, and are used where space is at a premium.

They may be operated from the front panel, or from a remote location by use of a standard four- or six-wire Navy control unit.

Frequency control is by means of a continuously variable master oscillator.

Single vertical-wire antennas are recommended for these transmitters.

The TCK is available with either a 220/440-v ac, 115-v dc, or 230-v dc motor generator set. The TCK-1 and -2 are furnished with 220/440-v, 60-cyc, 3 phase, ac, motor generator sets.

AN/URT-TYPE

TCK, TCK-1, -2 :SERVICE TYPE NUMBER

RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,210
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CG-52214, -52215, -52216, -52216-A	52-5/16 x 25 x 18-1/4	285
1	Magnetic Controller CG-21627, -21628, -21629, -21630	29-3/16 x 19-7/16 x 13-11/16 19-15/16 x 20-7/16 x 8-13/16	130 40
1	Motor Generator Set CG-21631, -21632, -21633	14-1/8 x 41-15/16 x 11-1/4	370

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground. **APPROXIMATE RANGE (IN MILES):** Medium, long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 18.1 in 6 bands.

Band 1: 2.0 - 3.0
Band 2: 3.0 - 4.5
Band 3: 4.5 - 6.0
Band 4: 6.0 - 9.0
Band 5: 9.0 - 12.0
Band 6: 12.0 - 18.1 .

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, voice.

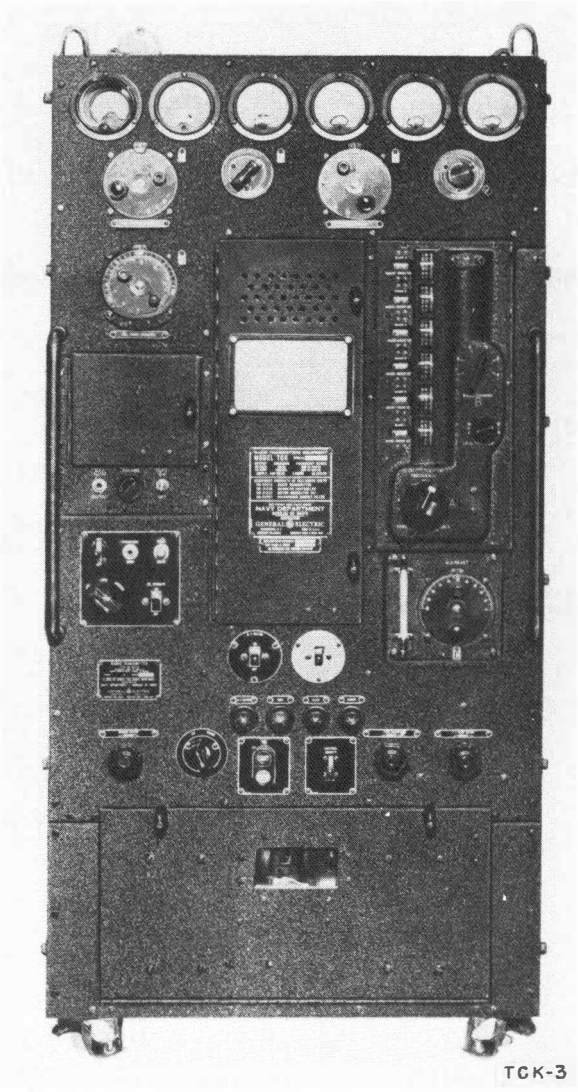
POWER OUTPUT: Cw: 400 w.
Voice: 100 w.

POWER REQUIREMENTS: TCK, TCK-1, -2: 2.4 kw, 220/440 v, 60 cyc, 3 phase, ac.
TCK: 2.3 kw, 115 v, dc.
TCK: 2.3 kw, 230 v, dc.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipments TCK, TCK-1, -2 measure 52-5/16 x 25 x 18-1/4 inches.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 Apr 52	**AN/URT-TYPE** SERVICE TYPE NUMBER: TCK-3, -5, -7 RADIO TRANSMITTING EQUIPMENT



TCK-3

Radio Transmitting Equipments TCK-3, -5, -7 are general purpose, medium-power, m-f and h-f telegraph and telephone transmitters designed for ship or shore station use.

TCK (series) are small with a relatively high output, and are used where space is at a premium.

They may be operated from the front panel or from a remote location by use of a standard four- or six-wire Navy control unit.

Frequency control is by means of a continuously variable master oscillator.

Single-wire vertical antennas are recommended for the TCK-3, -5, and -7.

TCK-3 is available with either a 220/440-v ac, 115-v, dc, or 230-v, dc motor generator set. TCK-5 is furnished with a 115-v, d-c motor generator set. TCK-7 has a 230-v dc motor generator set.

AN/URT-TYPE

TCK-3, -5, -7 :SERVICE TYPE NUMBER

RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,210
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CG-52214-A, -52215-A, 52216-A, -52345	52-5/16 x 25 x 18-1/4	285
1	Motor Generator Set CG-21631-A, -21632-A, -21633-A	14-1/8 x 41-15/16 x 11-1/4	345
1	Magnetic Controller CG-21627, -21628, -21629, -211297	29-3/16 x 19-7/16 x 13-11/16 17-5/16 x 11-9/16 x 10-5/8	130 46

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Medium, long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 18.1 in 6 bands.

Band 1: 2.0 - 3.0
Band 2: 3.0 - 4.5
Band 3: 4.5 - 6.0
Band 4: 6.0 - 9.0
Band 5: 9.0 - 12.0
Band 6: 12.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, voice.

POWER OUTPUT: Cw: 400 w.
Voice: 100 w.

POWER REQUIREMENTS: TCK-3, -5: 2.3 kw, 115 v dc.
TCK-3, -7: 2.3 kw, 230 v dc.
TCK-3: 2.4 kw, 220/440 v, 60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

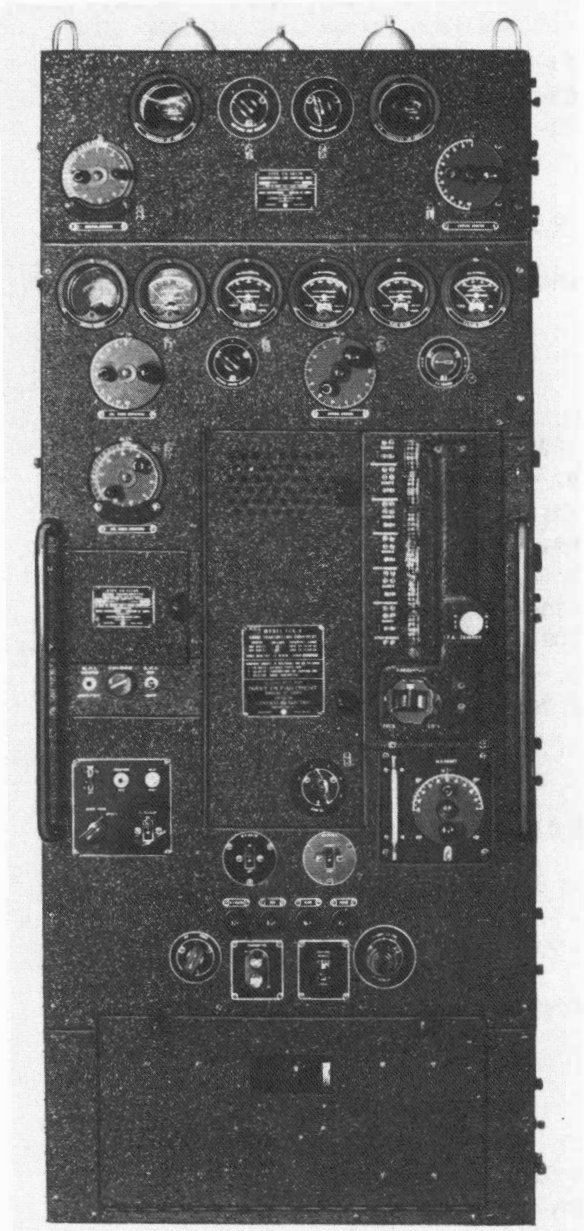
Radio Transmitting Equipments TCK-3, -5, -7 measure 52-5/16 x 25 x 18-1/4 inches.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Apr 52

AN/URT-TYPE

SERVICE TYPE NUMBER: TCK-4, -6

RADIO TRANSMITTING EQUIPMENT



TCK-4

Radio Transmitting Equipment TCK-4 and TCK-6 are medium-power, m-f, and h-f telegraph and telephone transmitters designed for general purpose and shore use. However, installation of shock mounting to the units adapt them to shipboard installation.

TCK (series) are small in size, with a relatively high output, and are used where space is at a premium.

They may be operated from the front panel or from a remote location by use of a standard four- or six-wire Navy control unit.

Frequency control is by means of a continuously variable master oscillator.

Either single vertical-wire antennas, or antennas having balanced transmission lines can be used.

AN/URT-TYPE	INSTRUCTION LITERATURE: NavShips 900,210
TCK-4, -6 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CG-52299	52-5/16 x 25 x 18-1/4	290
1	Rectifier Power Unit CG-20219	51-25/32 x 24-13/16 x 16	375
1	Transmission Line Coupling Unit CG-50139	11-15/32 x 25 x 16-3/32	65

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations, advanced bases, or shipboard.

INSTALLATION: Ground, shipborne.

APPROXIMATE RANGE (IN MILES): Medium, long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; RCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 18.1 in 6 bands.

Band 1: 2.0 - 3.0	Band 3: 4.5 - 6.0	Band 5: 9.0 - 12.0
Band 2: 3.0 - 4.5	Band 4: 6.0 - 9.0	Band 6: 12.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, voice.

POWER OUTPUT: Cw: 400 w.
Voice: 100 w.

POWER REQUIREMENTS: TCK-4: 1.8 kw, 115/230 v, 50/60 cyc, 1 phase, ac.
TCK-6: 1.8 kw, 220 v, 60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

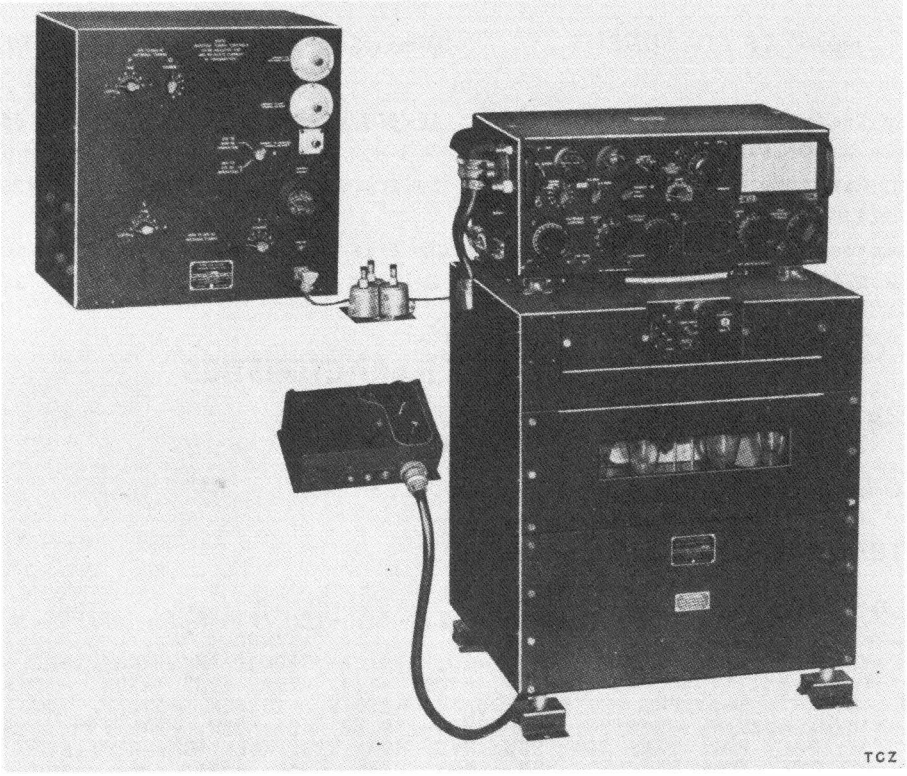
Radio Transmitting Equipments TCK-4, -6 measure 61-23/32 x 25 x 18-1/4 inches, net weight 880 pounds, volume 28.5 cu ft, 0.7 ship ton. Packed for domestic shipment: total weight 1,288 pounds, total volume 102.3 cu ft, 2.55 ship tons. Shipped in 3 packages.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/URT-TYPE

SERVICE TYPE NUMBER: TCZ

RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TCZ is a medium-power, general purpose, h-f equipment for ship or shore use . An autotune system allows rapid automatic selection of eleven preset frequencies; manual tuning throughout the frequency range is possible. A master oscillator is used for frequency control.

A frequency-limiting circuit, consisting of a combined tuning and load coil, is used to tune the transmitter power-amplifier over the 0.3 to 0.6 mc range. The loading coil must be manually tuned for each change of frequency.

Provision is made for break-in operation so that an associate receiver may be used with the transmitter.

Remote control, by means of one or more remote selector units, or 4- or 6-wire radiophone units, is possible.

This is a shipboard adaptation of the ATC Aircraft Radio Transmitting Equipment.

AN/URT-TYPE	INSTRUCTION LITERATURE: Not Available
	CLASSIFICATION OF EQUIPMENT: Unclassified
TCZ :SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO TRANSMITTING EQUIPMENT	DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter COL-52286	10-3/4 x 23-9/16 x 13-1/4	66.0
1	Remote Control Unit COL-23410	4-3/4 x 9-31/32 x 6-9/16	8.0
1	Motor Generator-Rectifier COL-211101 or	29-1/8 x 23-1/8 x 20-1/8	320.0
	Dynamotor Assembly COL-211102	29-7/16 x 23-7/16 x 20-1/8	210.0
1	Antenna Load Coil COL-47370	10-7/32 x 18-5/8 x 12-27/32	14.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRC-1; AN/URR-10, -22, -23; AN/VRC-1, -4; BC-312, -314, -342, -344, -348, -453, -779, -787, -794, -1004; MBS; MO; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBL; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDF; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.3 - 0.6 and 2 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, mcw.

POWER OUTPUT: 100 w.

POWER REQUIREMENTS: 650 w, 115 v, 60 cyc, 1 phase, ac; or 1,150 w, 115 v, dc.

PHYSICAL CHARACTERISTICS

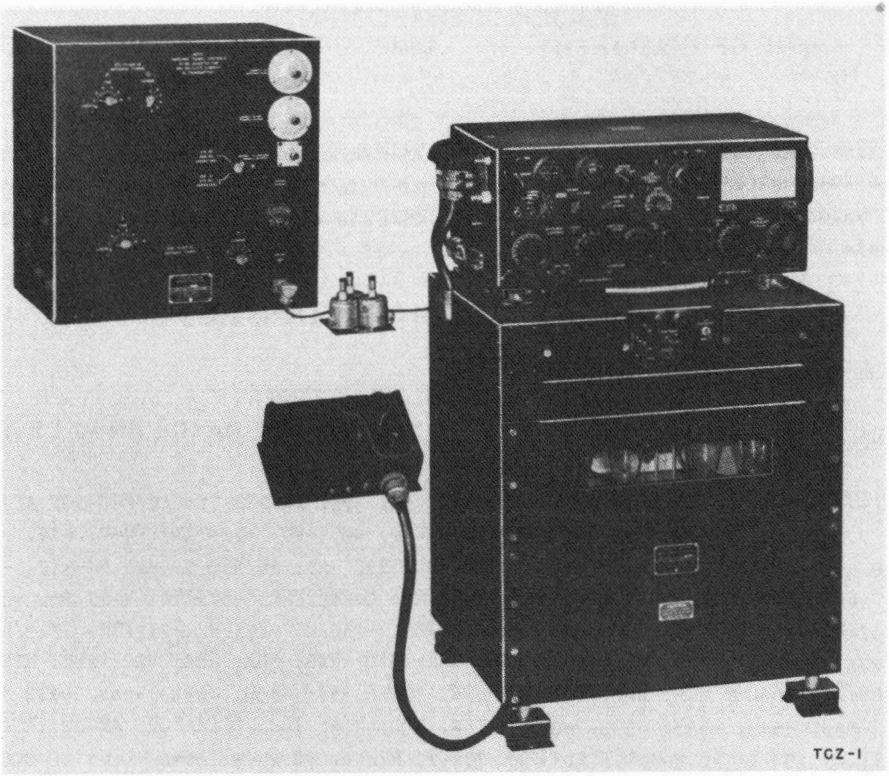
Radio Transmitting Equipment TCZ measures 40-3/16 x 23-9/16 x 20-1/8 inches.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/URT-TYPE

SERVICE TYPE NUMBER: TCZ-1, -2

RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipments TCZ-1 and -2 are medium-power, general purpose, h-f equipment for ship or shore station use. An autotune system allows rapid, automatic selection of 11 preset channels; manual tuning throughout the frequency range is possible. A master oscillator is used for frequency control.

A frequency-limiting circuit, consisting of a combined tuning and load coil is used to tune the power amplifier over the 0.2 to 1.5 mc frequency range. The loading coil must be manually tuned for each change of frequency.

Provision is made for break-in operation so that an associated receiver may be used with the transmitter.

Remote control, by means of one or more remote selector units, or four- or six-wire radiophone units, is possible.

Motor Generator Rectifier COL-211322 is used with TCZ-1 for operation from a-c sources; Dynamotor Assembly COL-211624 is used with TCZ-2 for d-c operation.

AN/URT-TYPE	INSTRUCTION LITERATURE: NavShips 900,481(a)
TCZ-1, -2 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter COL-52286-A	10-3/4 x 23-9/16 x 13-1/4	70
1	Antenna Load Coil COL-47505	19-3/4 x 18-5/8 x 15-1/2	48
1	Motor-Generator Rectifier COL-211322	29-7/16 x 23-7/16 x 20-1/8	320
	or Dynamotor Assembly COL-211624	29-7/16 x 23-7/16 x 20-1/8	210
1	Remote Control Unit COL-23410	4-3/8 x 9-31/32 x 6-1/2	8

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground. **APPROXIMATE RANGE (IN MI LES):** Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; BC-312, -314, -342, -344, -348, -453, -779, -787, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBL; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDF; RDM; REA; SCR-177; -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.2 - 1.5 and 2 - 18.1 in 13 bands.

Band 1: 2.0 - 2.4
Band 2: 2.4 - 3.0
Band 3: 3.0 - 3.6
Band 4: 3.6 - 4.0
Band 5: 4.0 - 4.8
Band 6: 4.8 - 6.0
Band 7: 6.0 - 7.2
Band 8: 7.2 - 9.0
Band 9: 9.0 - 10.8
Band 10: 10.8 - 12.0
Band 11: 12.0 - 14.4
Band 12: 14.4 - 18.1
Band 13: 0.2 - 1.5.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, mcw.

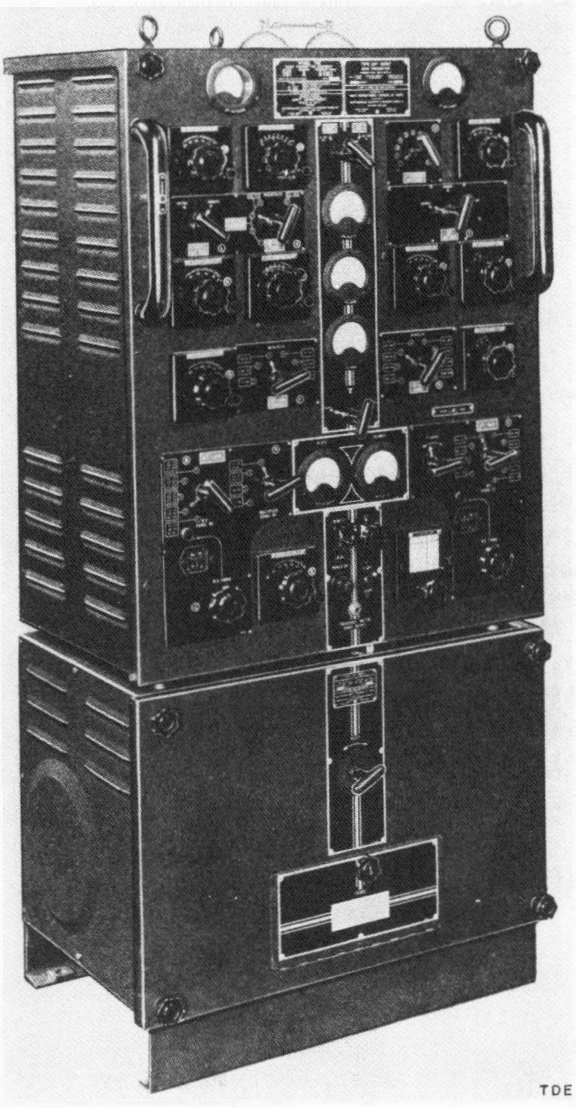
POWER OUTPUT: 100 w.

POWER REQUIREMENTS: TCZ-1: 1,200 w, 110 - 115 v, 50/60 cyc, 1 phase, ac.
TCZ-2: 1,300 w, 115 v, dc.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipments TCZ-1 and TCZ-2 measure 40-3/16 x 23-7/16 x 20-1/8 inches.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/URT-TYPE** SERVICE TYPE NUMBER: TDE, TDE-1 through-3 RADIO TRANSMITTING EQUIPMENT



TDE

Radio Transmitting Equipments TDE, TDE-1 through -3 are general purpose, m-f/h-f low-power a-m (cw, mcw, voice) sets especially designed for rapid installation aboard surface vessels, or in shore stations. Different models of the series are similar in design and operating characteristics; the major units vary with the type of power source available.

The output frequency is continuously variable and is obtained from two high stability self excited master oscillators.

These sets are readily matched to any type antenna, or may use separate antennas for the m-f and h-f sections.

They can be controlled and keyed by a remote control unit supplied; a standard four- or six-wire remote control system such as Radiophone Units 23211 or 23172.

A special auto transformer is supplied for operation from a 208-v, 60-cyc, 3 phase, a-c source.

AN/URT-TYPE

TDE, TDE-1 through-3 :SERVICE TYPE NUMBER
RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,389, 95328
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CAY-52267, -52267-A	39-13/16 x 28-1/4 x 20-1/2	334.0
1	Motor Generator and Rectifier Power Unit CAY-21848, -21849, -21850, -211030	22-13/16 x 28 x 19-7/16	372.0
1	Remote Control Unit CAY-23305, -23381	3-11/16 x 5-7/16 x 5-3/16	3.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard, shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ARR-15; AN/FRR-3, -4, -7, -12, -28; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -314, -342, -344, -348, -453, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBL; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDF; RDM; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -543, -593, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.3 - 1.5 and 1.5 - 18.1.

TYPE MODULATION: Am. **TYPE OF SIGNAL:** Cw, mcw, voice.

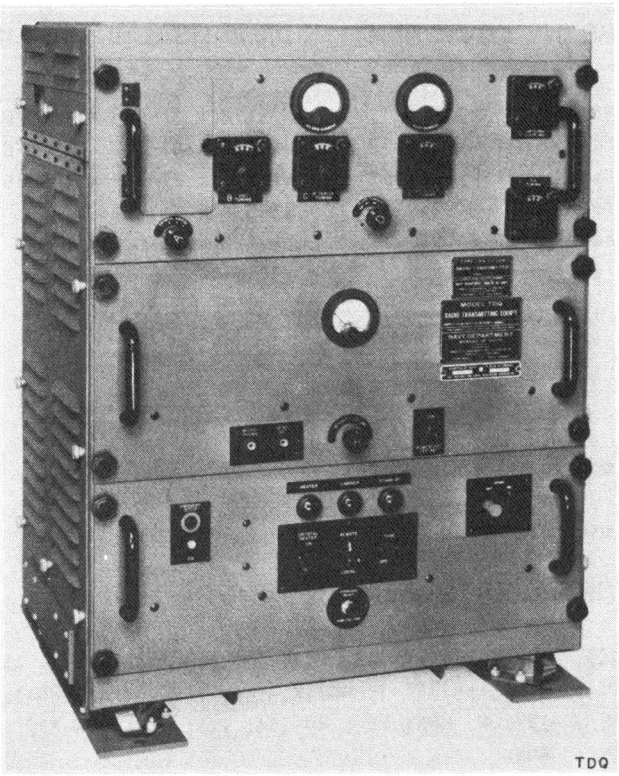
POWER OUTPUT: Cw: 125 w.
Mcw: 35 w.
Voice: 30 w.

POWER REQUIREMENTS: TDE, TDE-2: 1.2 kw, 115/230 v dc; or 1.2 kw, 220 /440 v, 60 cyc, 3 phase, ac. TDE-1, TDE-3: 1.2 kw, 115 /220 v, dc; or 1.2 kw, 115 /230 v, 60 cyc, 1 phase, ac; or 1.2 kw, 208 - 220 / 440 v, 60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipments TDE, TDE-1 through 3 measure 62-7/16 x 28-1/4 x 20-1/2 inches, net weight 829 to 866 pounds, volume 20 cu ft, 0.5 ship ton. Packed for domestic shipment: total weight 1,165 pounds, total volume 46.71 cu ft, 1.2 ship tons.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 May 52	**AN/URT-TYPE** SERVICE TYPE NUMBER: TDQ and TDQ-a VHF RADIO TRANSMITTING EQUIPMENT



VHF Radio Transmitting Equipments TDQ and TDQ-a are essentially low-power, general purpose, a-m (mcw, voice) radio transmitters for ship-to-shore, ground-to-air, ship-to-air, or point-to-point communication. They can be operated locally, or at a remote site by the standard four- or six-wire remote control system. Keying speeds up to 40 words per minute are possible.

This transmitter consists of an r-f unit, a modulator, and a power unit. These are supported on metal tracks within a single cabinet, and each may be withdrawn individually for ease of maintenance.

Navy Field Change No. 4 converts the TDQ to TDQ-a, to extend the a-f response, and to permit operation in conjunction with Navy Type Portable Carrier Control System UF, and Army Type CF-1-A Telephone Terminal equipment.

It operates on 115/230-v, a-c power. A step-down transformer permits operation from 440-v, ac.

It can also be operated on 115/230-v dc by using the proper motor generator and magnetic controller.

AN/URT-TYPE	INSTRUCTION LITERATURE: NavShips 900,474
TDQ and TDQ-a :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
VHF RADIO TRANSMITTING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CRV-52328	32-1/4 x 25-1/4 x 18-3/8	283
1	Motor Generator Unit CG-211092*	11-3/4 x 27-3/8 x 13-3/8	210
1	Motor Generator Unit CG-211093**	11-3/4 x 27-3/8 x 13-3/8	210
1	Line Transformer CRV-30984	13-3/4 x 11 x 9	57
1	Antenna Assembly CLS-66095	24-1/4 x 46-1/2 x 4-3/4	17

*For 115 v d-c power source. **For 230 v d-c power source.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Short.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-12, -21; AN/VRC-1; BC-639, -787; MAR; MBS; R-137/GR; RBK; RBQ; RC-256; RCK; RCO; SCR-522, -542, -574, -575, -607, -616, -624, -641, -644.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 115 - 156.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

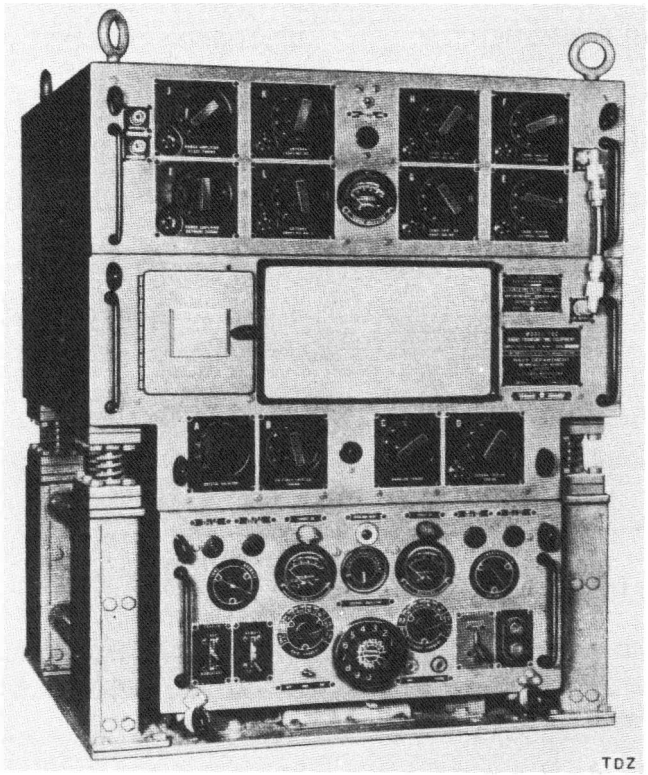
POWER OUTPUT: 15 w.

POWER REQUIREMENTS: 115/230/440 v, 50/60 cyc, 1 phase, ac; or 115/230 v, dc.

PHYSICAL CHARACTERISTICS

VHF Radio Transmitting Equipments TDQ and TDQ-a measure 32-1/4 x 25-1/4 x 18-3/8 inches.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Restricted USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/URT-TYPE** SERVICE TYPE NUMBER: TDZ RADIO TRANSMITTING EQUIPMENT


TDZ

Radio Transmitting Equipment TDZ is a medium-power, v-h-f/u-h-f, general purpose, multichannel equipment for ship or shore station use. It provides rapid automatic selection of 10 preset crystal-controlled channels (by the use of a telephone type dial) either at the transmi tter, or through use of a remote channel selector unit; or a six-wire radiophone remote control unit. Manual tuning throughout the frequency range is provided.

As many as four channel selector units and four radiophones may be used.

Keying is accomplished either locally, or at a remote station, and relay keying speeds up to 40 wpm are possible.

A vertical-dipole type antenna, such as Navy Type CRV-66147 can be used.

This equipment operates only from ac. When the power source is dc, power conversion equipment must be used to convert dc to ac.

AN/URT-TYPE	INSTRUCTION LITERATURE: NavShips 900,809, 91328
TDZ :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Restricted
RADIO TRANSMITTING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (I N) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CG-52342	32-1/16 x 24-3/4 x 25-11/16	760
*	Motor Generator Unit CGU-211403 or CGU-211405	13-1/2 x 31-15/16 x 10-1/4	250
*	Magnetic Controller CGU-211375 or CGU-211374	17-5/16 x 11-9/16 x 10-5/8	48
1	Remote Channel Selector Unit CG-23445	6-7/8 x 6-7/8 x 4-7/8	7

*Supplied for d-c operation.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard, shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/ARC-12, -19, -27, -30, -33, -34; AN/GRC-16, -27, -29, -30, -32; AN/GRR-7; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-32; AN/URC-4; AN/URR-9, -12, -13; MAR; MAY; R-278/GR; RDR; RDZ; SCR-616.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 225 -400.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw.

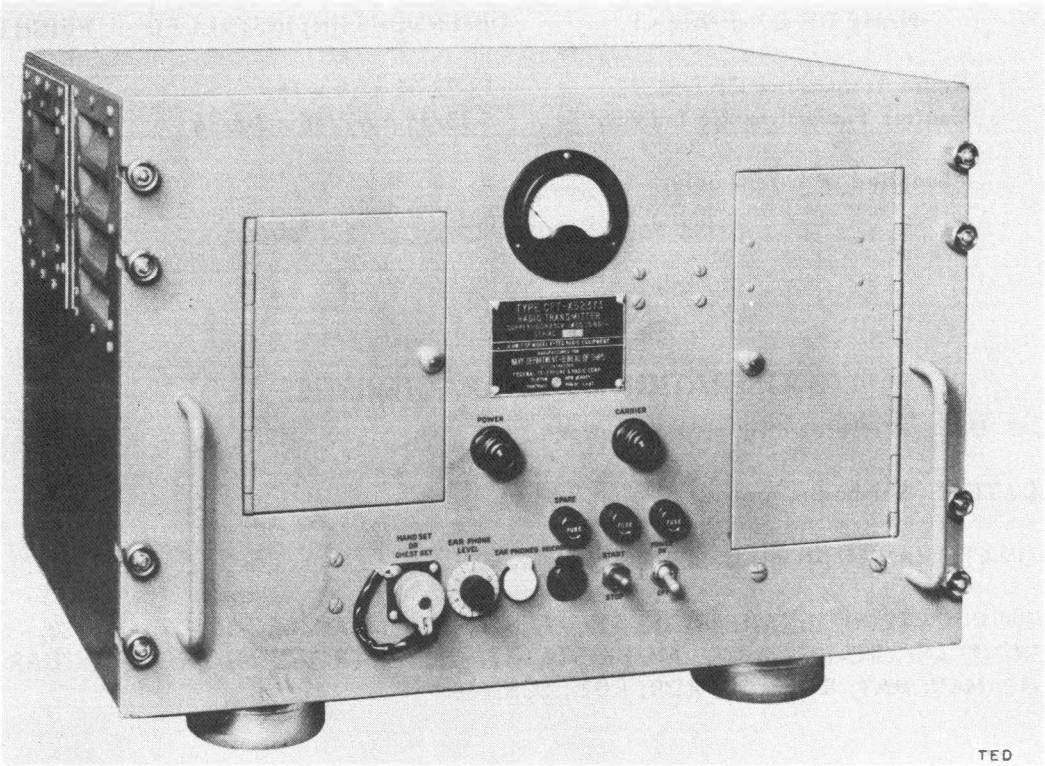
POWER OUTPUT: Unmodulated: 30 - 50 w.
Modulated: 30 - 60 w.

POWER REQUIREMENTS: 870/955/990 w, 110/220/440 v, 50/60 cyc, 1 phase, ac; or 1.6/1.53 kw, 115/230 v, dc.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TDZ packed for domestic shipment: total weight 1,800 pounds, total volume 101.2 cu ft, 2.5 ship tons. Shipped in 2 packages.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/URT-TYPE** SERVICE TYPE NUMBER: TED, TED-1 and -2 RADIO TRANSMITTING EQUIPMENT



TED

Radio Transmitting Equipments TED, TED-1 and -2 are low-power a-m (cw, mcw, voice) u-h-f radiotelephone transmitters used primarily for shipboard and shore station aircraft traffic control. It may be used in conjunction with an associated receiver, and can be controlled through use of two control units; one for local operation, and one for limited remote control. Remote operation also is possible by use of standard shipboard remote control units.

Four preset crystal-controlled channels are available. This transmitter is operated in conjunction with Radio Receiving Set AN/URR-13.

This equipment is designed to be used with either Antenna Assembly NT-66147 (which is a vertical mounted half-wave center-fed dipole), Antenna AT-150/SRC (a broad-band dipole), or Antenna Assembly AS-390/SRC (which is of the broad-band unbalanced type).

The type antenna used is dependent upon installation requirements.

It may be table operated or mounted in standard relay racks.

AN/URT-TYPE	INSTRUCTION LITERATURE: NavShips 91357
TED, TED-1 and -2 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CFT-52373	13-23/32 x 19 x 15	135
1	Control Transmitter CFT-23555*	5-13/16 x 4-7/16 x 3-5/16	4

*Supplied with TED only.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft traffic control stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/ARC-12, -19, -27, -30, -33, -34; AN/GRC-16, -27, -29, -30, -32; AN/GRR-7; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-32; AN/URC-4; AN/URR-9, -12, -13; MAR; MAY; R-278/GR; RDR; RDZ; SCR-616.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 225- 400.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: 15w.

POWER REQUIREMENTS: 750 w, 115/230 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipments TED, TED-1 and -2 measure 16-1/4 x 28-1/2 x 21-3/4 inches.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 May 52	**AN/UXA-TYPE** AN/COMP TYPE NUMBER: CV-97/UX FREQUENCY SHIFT CONVERTER

NO PHOTOGRAPH AVAILABLE

Frequency Shift Converter CV-97/UX limits and demodulates received frequency shift signals and converts them to a-m signals which are used to operate facsimile equipment. The resulting intelligence is used to modulate the a-f carrier which in turn is fed to the signal input of a suitable facsimile recorder.

This equipment is normally used in association with Radio Receiving Equipment RBC.

AN/UXA-TYPE

CV-97/UX :AN/COMP TYPE NUMBER

FREQUENCY SHIFT CONVERTER

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-converter	8-3/4 x 19 x 17	Not Available
1	Cabinet	11 x 22 x 18	90

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne or shore.

CAN COMMUNICATE WITH: This is signal-modifying equipment used in conjunction with primary communication apparatus.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Center frequency, 0.40. Frequency shift in $\pm$ 400 cps.

TYPE OF SIGNAL: Output is a-m 1-, 2-, or 3-kc signal.

POWER OUTPUT: 0 to + 20 dbm, 600 ohms.

POWER REQUIREMENTS: 115 / 230 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

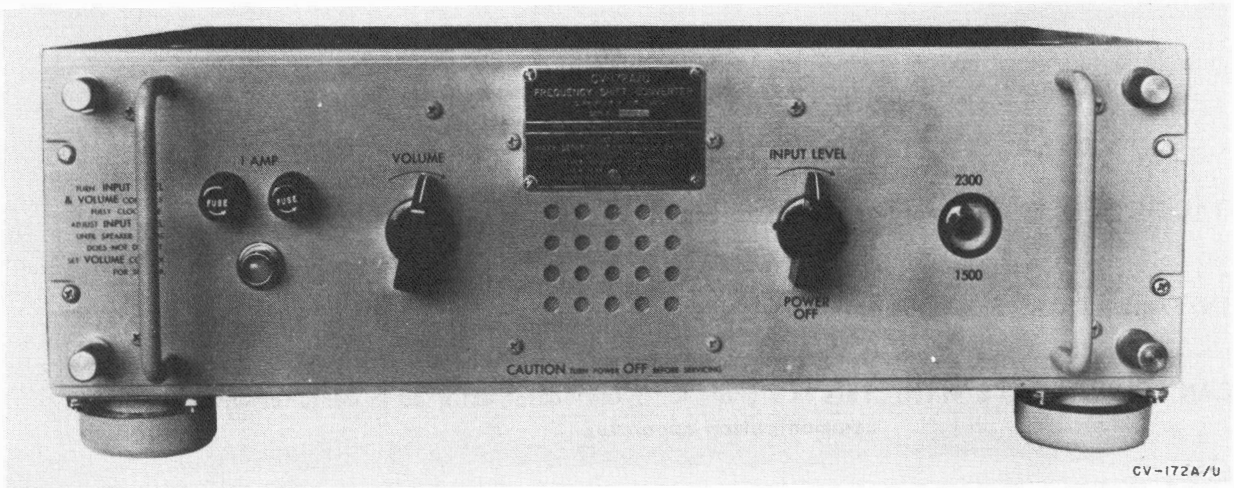
Frequency Shift Converter CV-97/UX weighs 90 pounds net, volume 2 cu ft.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 May 52

AN/UXA-TYPE

AN/COMP TYPE NUMBER: CV-172A/U

FREQUENCY SHIFT CONVERTER



Frequency Shift Converter CV-172A/U converts 1,500-2,300 cps facsimile signals (received from a radio circuit) to a-m signals for a facsimile recorder. The signals from the radio receiver are audio frequency shift signals in which 1,500 cps represents black and 2,300 cps represents white for the recorder.

Provision is made for aural monitoring of the incoming signal, and for visual checking of frequency limits.

This converter is primarily intended for use with Facsimile Recorder RD-92/UX. It is a modification of a commercial (Times Facsimile Corp Model RGD) facsimile frequency shift converter.

It has a balanced input of 500 ohms, and requires an input signal level of zero to -40 dbm.

AN/UXA-TYPE	INSTRUCTION LITERATURE: NavShips 91394
CV-172A/U :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
FREQUENCY SHIFT CONVERTER	USING SERVICE : Navy
	DATE OF THIS SHEET : 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

CAN COMMUNICATE WITH: This is signal-modifying equipment used in conjunction with primary communication apparatus.

TECHNICAL CHARACTERISTICS

FREQUENCY: 1500-2300 cps, frequency swing $\pm$ 400 cps.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Frequency shift keying.

POWER OUTPUT: .04 v a-c at 1500 cps and .009 v a-c at 2300 cps into a balanced 500 ohm line.

POWER REQUIREMENTS: 30 w, 100-130 v, 50/60 cyc.

PHYSICAL CHARACTERISTICS

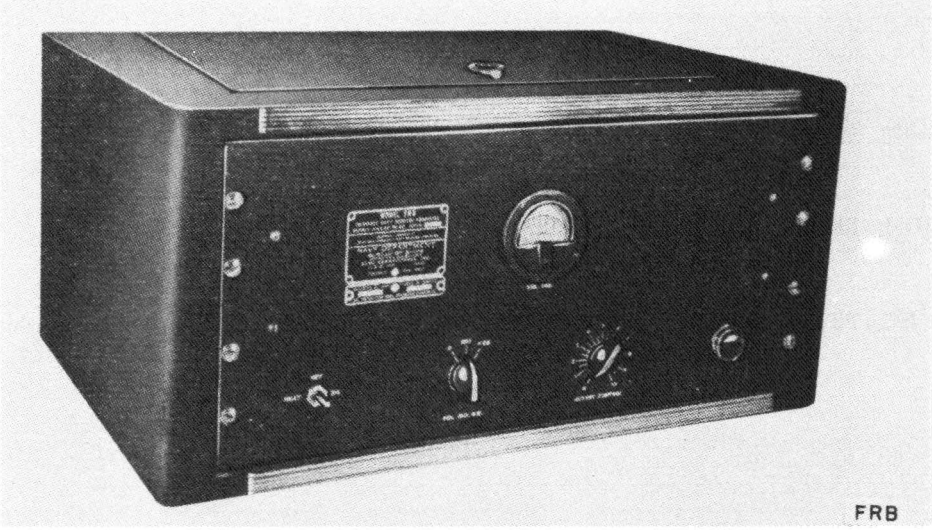
Frequency Shift Converter CV-172A/U measures 6-1/2 x 19 x 16-1/2 inches.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/UXA-TYPE

SERVICE TYPE NUMBER: FRB

FREQUENCY SHIFT RECEIVER EQUIPMENT



FRB

Frequency Shift Receiver Equipment FRB is used for the demodulation of facsimile or radio-photo frequency-shift signals, and is used aboard ship or at shore stations.

Audio fm keyer equipment FSJ is often used with this equipment to form a converter-inverter system in conjunction with Facsimile Transmitter-Receiver Equipment TT-41/TXC-1B, andTT-66/TXC.

AN/UXA-TYPE	INSTRUCTION LITERATURE: NavShips 95002
FRB :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Restricted
FREQUENCY SHIFT RECEIVER EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Frequency Shift Receiver CBCM-35123	10-1/2 x 22 x 14-3/4	74

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne or ground.

CAN COMMUNICATE WITH: This is signal-modifying equipment used in conjunction with primary communication apparatus.

TECHNICAL CHARACTERISTICS

FREQUENCY: 1.0 to 2.5 kc, and 2.1 to 3.0 kc.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Frequency shift.

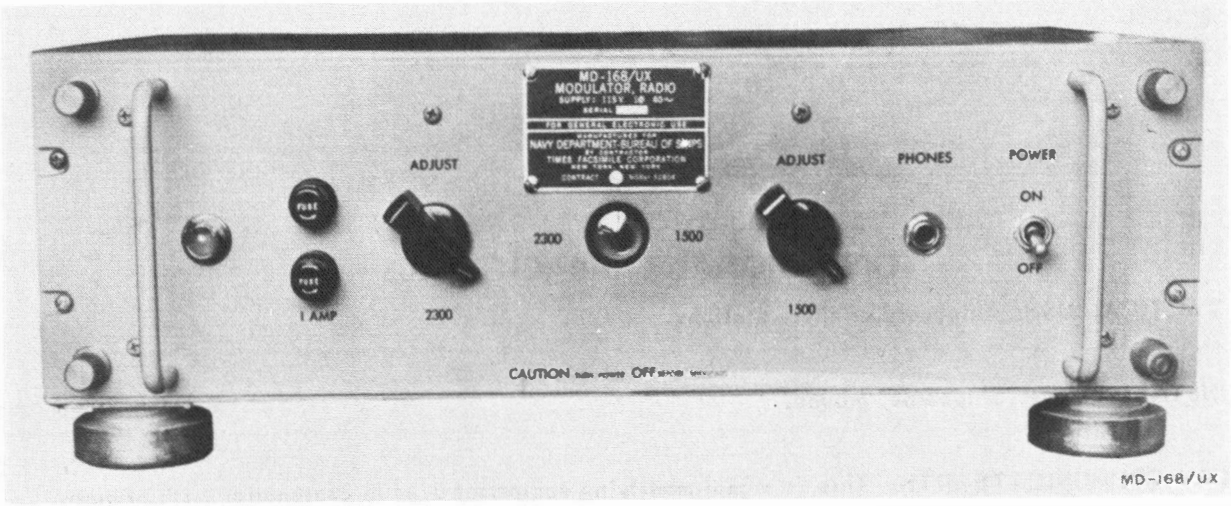
POWER OUTPUT: Output level: 0 dbm to +10 dbm across 600 ohm load.

POWER REQUIREMENTS: 87 w, 100-125 v, 60 cyc, 1 phase.

PHYSICAL CHARACTERISTICS

Frequency Shift Receiver Equipment FRB measures 10-1/2 x 22 x 14-3/4 inches, net weight 74 pounds, volume 1.97 cu ft.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 May 52	**AN/UXA-TYPE** AN/COMP TYPE NUMBER: MD-168/UX RADIO MODULATOR



Radio Modulator MD-168/UX is a subcarrier frequency-shift unit operating on frequencies of 1.5 to 10 kc. It converts amplitude-modulated facsimile signals to audio frequency-shift signals of constant amplitude, which in turn are used to modulate the carrier of a radio transmitter.

This modulator has provision for audio monitoring and visual indication of the frequency of transmitted signals.

Contrast ratio (maximum to minimum signal ratio) is zero to -40 dbm.

Frequency of maximum signal is 1,500 cps, and for minimum signal, 2,300 cps.

It consists essentially of commercial (Times Facsimile Corp Model CGR-1) equipment.

It can be used with any facsimile transmitter having an output within the range 1.5 to 10 kc, and keying speeds up to 900 cps.

AN/UXA-TYPE	INSTRUCTION LITERATURE: Not Available
	CLASSIFICATION OF EQUIPMENT: Unclassified
MD-168/UX :AN/COMP TYPE NUMBER	USING SERVICE : Navy
RADIO MODULATOR	DATE OF THIS SHEET : 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component).

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

CAN COMMUNICATE WITH: This is signal-modifying equipment used in conjunction with primary communication apparatus.

TECHNICAL CHARACTERISTICS

FREQUENCY: 1.5 to 10.0 kc.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Pulse.

POWER REQUIREMENTS: 70 w, 115 v, 60 cyc.

PHYSICAL CHARACTERISTICS

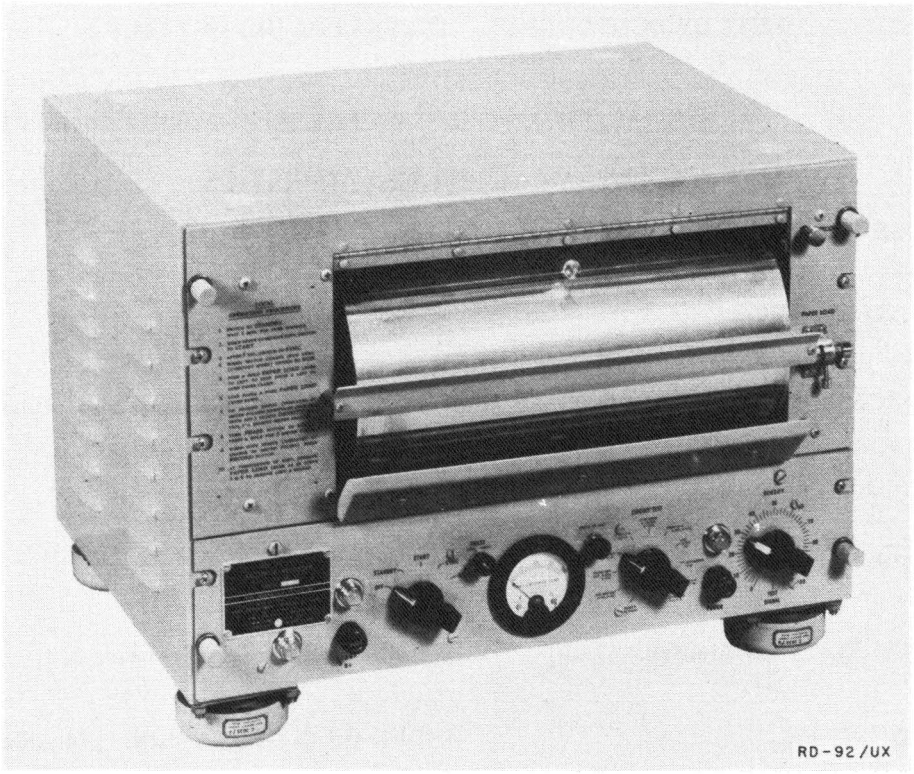
Radio Modulator MD-168/UX measures 5-3/8 x 16-1/2 x 19 inches.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 2 May 52

AN/UXH-TYPE

AN/COMP TYPE NUMBER: RD-92/UX

FACSIMILE RECORDER



Facsimile Recorder RD-92/UX is used to make direct recordings of copy transmitted by Facsimile Transceiver TT-41/TXC-1B. It may be used for recording facsimile signals from either wire or radio communication circuits.

This is a self-contained unit for table or relay rack mounting.

When used with wire lines, it can be connected directly to the line, or to an am receiver having a 500-ohm output.

For subcarrier f-m signals, Frequency Shift Converter CV-172/U is used, in addition to the associated radio receiver.

AN/UXH-TYPE

RD-92/UX :AN/COMP TYPE NUMBER

FACSIMILE RECORDER

INSTRUCTION LITERATURE: NavShips 91401
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component).

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Telephotograph receiving stations.

INSTALLATION: Ground.

CAN COMMUNICATE WITH: Facsimile Transceiver TT-41/TXC-1B, and equivalent facsimile equipment.

TECHNICAL CHARACTERISTICS

SIZE OF COPY: 12 x 18-3/4.

LINES PER INCH: 96.

TRANSMISSION TIME: 20 minutes.

DRUM DIAMETER: 6 inches.

DRUM SPEED: 60 rpm.

INDEX OF COOPERATION: 576 (International index).

TYPE OF RECORDING: Direct stylus.

PHASING SIGNAL: Pulses (1 per sec.).

TYPE OF MODULATION: Am; convertible to sub-carrier fm or frequency shift by addition of Frequency Shift Converter CV-172/U.

TYPE TRANSMISSION FACILITIES REQUIRED: Wire line: Voice-frequency (if less than 100 miles); greater distances require "schedule one" or "schedule two" facsimile circuit.
Radio: Am radio receiver with 500-ohm output.

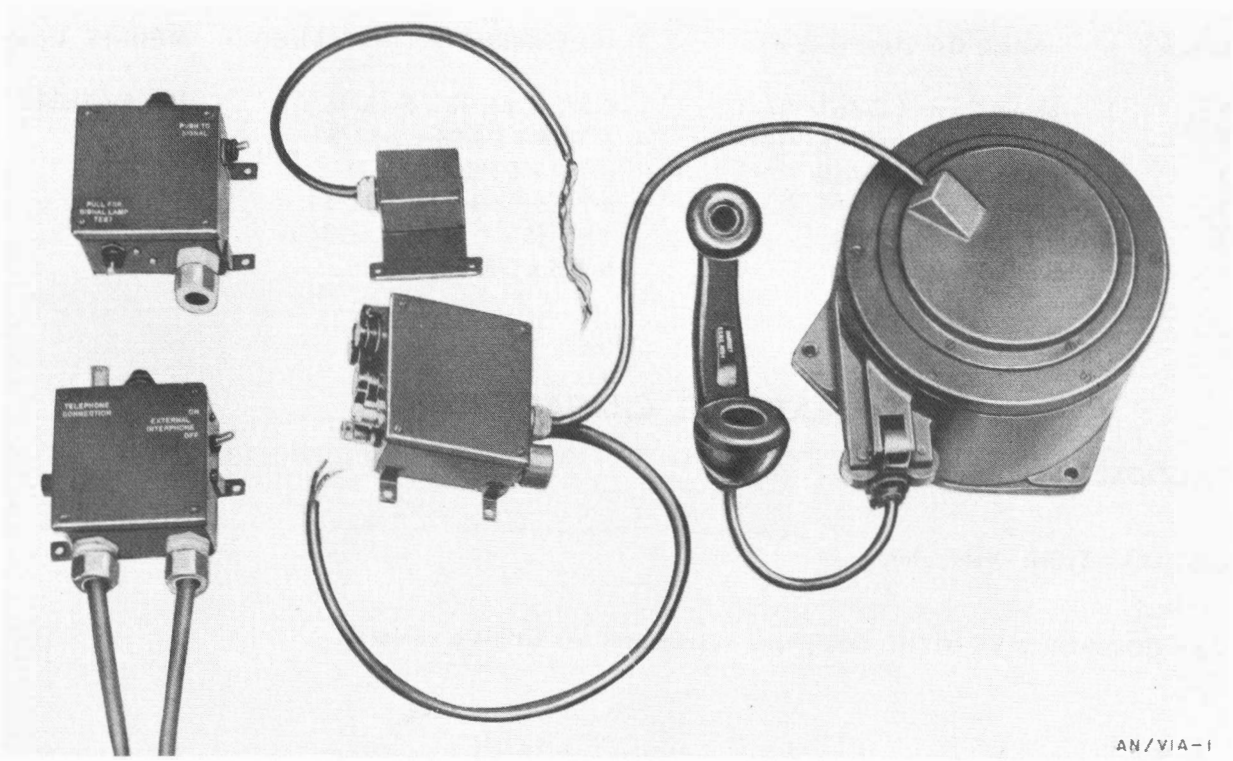
POWER REQUIREMENTS: 150 w, 90-130 v, 55/65 cyc, 1 phase.

INPUT VOLTAGE LEVEL AND IMPEDANCE:
Input signal level: 0 to -40 dbm.
Input impedance: 1600 ohms.
Input frequency: 500-10,000 cps.

PHYSICAL CHARACTERISTICS

Facsimile Recorder RD-92/UX measures 14-1/2 x 20 x 16-1/2 inches.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 22 Jan 52	**AN/VIA-1** AUXILIARY INTERPHONE EQUIPMENT



Auxiliary Interphone Equipment AN/VIA-1 is an assemblage of auxiliary components used to extend a vehicular interphone system to the exterior of the vehicle. It is used in inclosed or armored vehicles.

This equipment consists of interphone station control units which are installed within the vehicle and a cable reel which includes a handset and a control unit designed to be mounted on the exterior of the vehicle to provide an outside interphone station.

The stations of this system have call signal lamps to indicate that contact with the exterior station is desired.

The only adjustment provided is for control of volume.

It is powered by the electrical system of the vehicle in which the equipment is installed.

AN/VIA-1

AUXILIARY INTERPHONE EQUIPMENT

INSTRUCTION LITERATURE: TM 11-704
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Interphone Control C-663/VIA-1	6-3/8 x 4-7/16 x 5-15/16	Not Available
1	Interphone Control C-664/VIA-1	6-3/16 x 6-9/16 x 2-17/32	" "
1	Interphone Control C-665/VIA-1	8-1/2 x 5-5/8 x 3-13/16	" "
1	Interphone Control C-666/VIA-1	4-7/16 x 4-3/32 x 1-11/16	" "
1	Cable Reel RL-149/VIA-1	10-3/16 x 9-13/16 x 5-13/16	" "
1	Handset MTS-1 (USMC)	8-7/8 x 2-3/4 x 3-1/2	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Armored units.

INSTALLATION: Vehicular.

CAN COMMUNICATE WITH: Interphone system stations within a vehicle.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Can be used with Radio Sets SCR-508, -528, -608, -628, or AN/VRC-3 or with Interphone Equipment RC-99 or similar types of equipment.

TYPE CONTROLS: C-663: external interphone ON-OFF switch.
C-664: external interphone PUSH TO SIGNAL switch.
C-665: VOLUME.

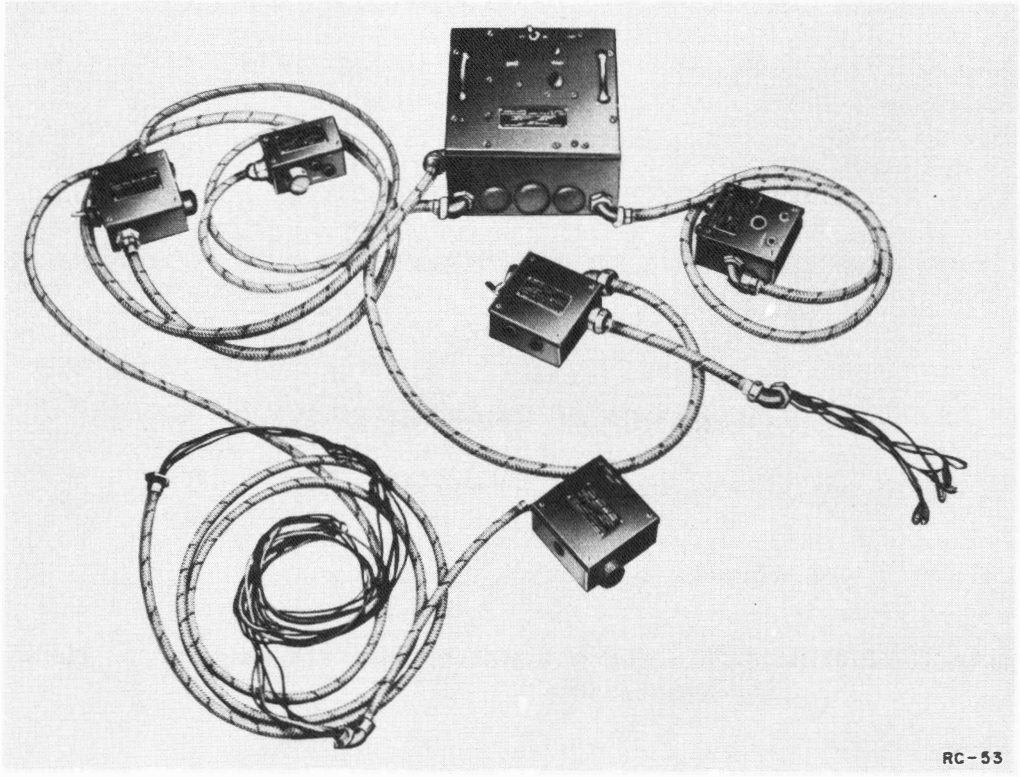
POWER OUTPUT: Dependent on interphone system.

POWER REQUIREMENTS: Draws required power from system to which it is connected.

PHYSICAL CHARACTERISTICS

Information on Auxiliary Interphone Equipment AN/VIA-1 not available.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 31 Jan 52	**AN/VIC-TYPE** SERVICE TYPE NUMBER: RC-53 INTERPHONE EQUIPMENT



Interphone Equipment RC-53 is a vehicular interphone communication system for tanks and other inclosed vehicles used in armored and infantry divisions.

This equipment consists essentially of an amplifier, control and jack boxes, and related components.

Through the equipment, the radio operator and tank commander may control the vehicular radio equipment and maintain communication contact.

It is powered by the vehicle's 12-v battery.

AN/VIC-TYPE	INSTRUCTION LITERATURE: TM 11-700
RC-53 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
INTERPHONE EQUIPMENT	USING SERVICE : Army
	DATE OF THIS SHEET : 31 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Interphone Amplifier BC-367	8-15/16 x 8-15/16 x 5-5/8	18.5
5	Microphone T-30-A	Not Available	.3
6	Headset HS-18	" "	Not Available
1	Control Box BC-422	5-11/16 x 2-3/16 x 4-3/16	2.0
1	Control Box BC-449	5-11/16 x 2-3/16 x 4-3/16	1.7
1	Jack Box BC-378,-379,-448	2-3/16 x 4-11/16 x 5-1/2	3.2
1	Terminal Block TM-183	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Armored vehicles, armored and infantry divisions.

INSTALLATION: Ground, vehicular.

CAN COMMUNICATE WITH: Radio equipment of the vehicle in which it serves as an internal interphone system.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Radio and voice; between interphone station.

TYPE CONTROLS: Selector switch, volume control, on-off switch.

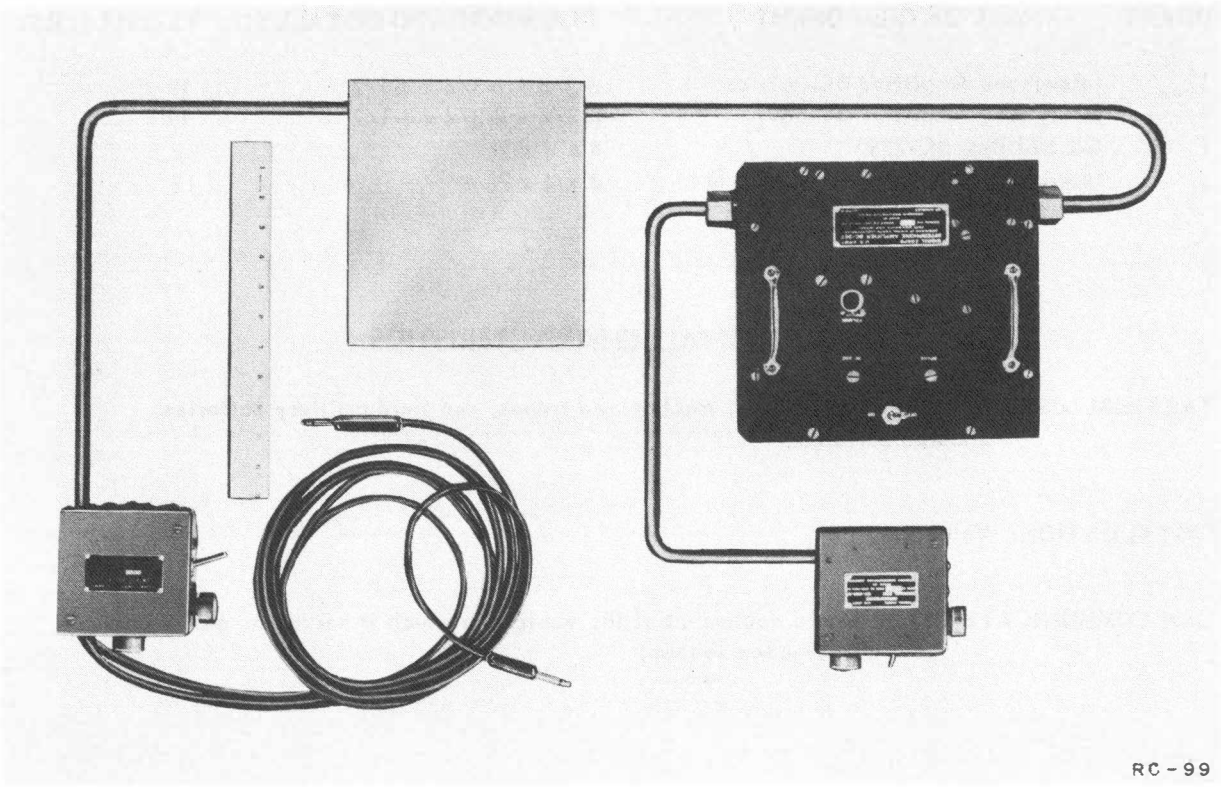
POWER OUTPUT: 2 w.

POWER REQUIREMENTS: 12-v storage battery, operating current: (3.0 to 3.5 amp).

PHYSICAL CHARACTERISTICS

Information on Interphone Equipment RC-53 not available.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 31 Jan 52	**AN/VIC-TYPE** SERVICE TYPE NUMBER RC-99 INTERPHONE EQUIPMENT



RC-99

Interphone Equipment RC-99 is a vehicular, multistation, intercommunication system used in inclosed vehicles of mechanized cavalry, artillery, and armored units.

This equipment consists of a master-station amplifier unit, two control boxes, and associated accessories. It provides intercommunication facilities between all stations of the system when installed within a vehicle and permits the radio operator and vehicle commander to retain partial control of the vehicle's radio equipment.

This interphone equipment is powered by the 12- or 24-v storage battery of the vehicle in which it is installed, through dynamotor equipment of the appropriate voltage.

AN/VIC-TYPE	INSTRUCTION LITERATURE: TM 11-702
RC-99 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
INTERPHONE EQUIPMENT	USING SERVICE : Army
	DATE OF THIS SHEET : 31 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Interphone Amplifier BC-367- or	8-3/4 x 8-3/4 x 4-1/2	19
1	Interphone Amplifier BC-667	8-3/4 x 8-3/4 x 4-1/2	19
1	Control Box BC-739	4 x 4 x 2	2.5
1	Interphone Control Box BC-606-D	4 x 4 x 2	2

OPERATIONAL CHARACTERISTICS

TACTICAL USE: In vehicles of cavalry, mechanized troops, and field artillery batteries, armored division.

INSTALLATION: Vehicular.

CAN COMMUNICATE WITH: Radio equipment of the vehicle in which it serves as an internal interphone system.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: a-f; voice frequency.

TYPE COMMUNICATION CIRCUITS: Interphone and radio communication circuits.

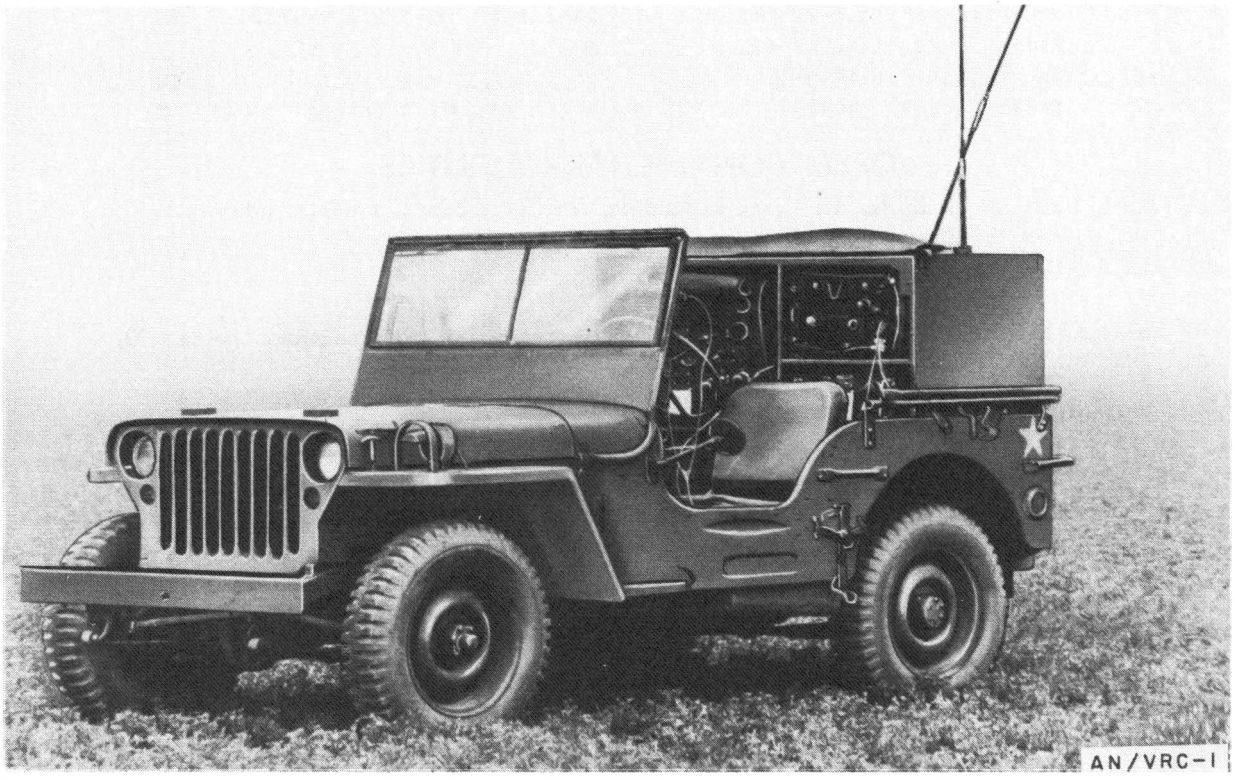
CONTROLS: Volume control; radio-interphone switch; and on-off switch.

POWER REQUIREMENTS: 12-v or 24-v storage battery and Dynamotor DM-45-A, 24 / 250 v, (0.05 amp).

PHYSICAL CHARACTERISTICS

Information on Interphone Equipment RC-99 not available.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 11 Jan 52	**AN/VRC-1** RADIO SET



Radio Set AN/VRC-1 is a short range, h-f and v-h-f, a-m (voice, tone, and cw) radio transmitting and receiving equipment which may be installed in vehicles for ground-to-air communication at Air Force bases and similar installations.

This equipment consists essentially of a ground communication transmitter and receiver, plus transmitting and receiving equipment designed for airborne use. It is usually used for communication in ground point-to-point nets but can be used as a beacon for compass-equipped aircraft and for h-f ground-air radio communication. Antenna and accessory equipment is included. It is powered by the 12-v storage battery of the vehicle in which it is installed.

AN/VRC-1

RADIO SET

INSTRUCTION LITERATURE: TM 11-271
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 11 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-191	21-21/32 x 23-1/8 x 9-5/16	68
1	Radio Transmitter BC-625	8-3/4 x 5-7/8 x 15-3/8	7
1	Radio Receiver BC-312	10 x 9-1/16 x 18-1/16	58
1	Radio Receiver BC-624	8-3/4 x 5-7/8 x 15-3/8	7

OPERATIONAL CHARACTERISTICS

TACTICAL USE: At airfields, Air Force squadrons, Air Force bases, schools, infantry.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE (IN MILES): V-h-f section: Line of sight. H-f section: Voice - 20, Tone - 40, Cw - 60 (approximate).

CAN COMMUNICATE WITH: AN/ARC-1, -2, -3, -5, -8, -18,-21, -25, -26, -36; AN/ARR-15; AN/ART-13; AN/CRC-2; AN/CRT-3; AN/FRC-7, -10; AN/FRR-3, -4, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26, -30; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -17, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -12, -21, -22, -23; AN/URT-2, -3, -4, -7, -10; AN/VRC-1, -4; BC-191, -312, -339, -342, -348, -401, -447, -610, -639, -640, -779, -794, -1004; MAW; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -137/GR; -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBK; RBM; RBO;RBP; RBQ; RBS; RC-52, -103, -256, -257; RCF; RCG; RCH; RCK; RCO; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -522, -536, -542, -543, -573, -574, -575, -585, -593, -607, -616, -624, -641, -643, -644, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCO; TCP; TCS; TCZ; TDE; TDF; TDG; TDH; TDN; TDO; TDQ; TDT; TEB; TEC; TEF; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmitters: BC-191 - 3 - 6.2, BC-625 - 100 - 156.
Receivers: BC-312 - 1.5 - 18, BC-624 - 100 - 156.

TYPE MODULATION: Am.

TYPE OF SIGNAL: H-f section: Cw, tone, and voice. V-h-f section: Voice.

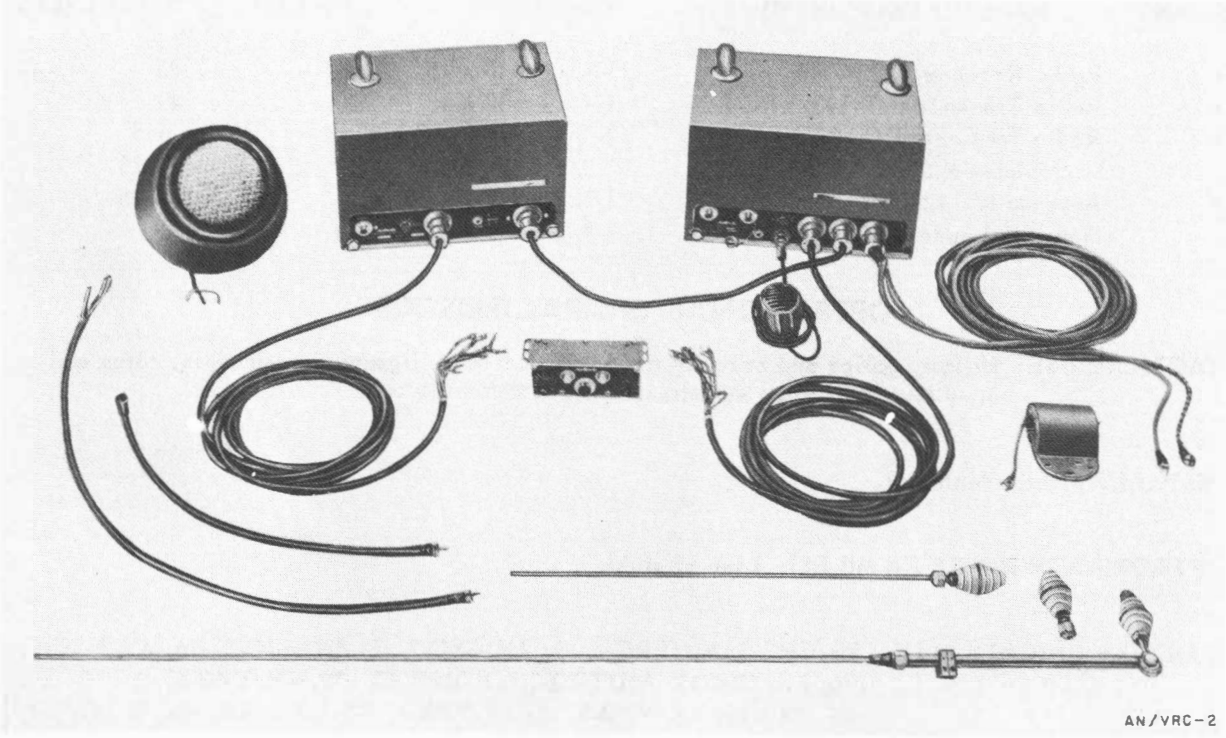
POWER OUTPUT: H-f section: 40.75 w. V-h-f section: 8 - 9 w.

POWER REQUIREMENTS: (65.7 amps)from 12 v vehicular storage battery (through dynamotors).

PHYSICAL CHARACTERISTICS

Information on Radio Set AN/VRC-1 not available.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 11 Jan 52	**AN/VRC-2** RADIO SET



Radio Set AN/VRC-2 is a vehicular, short-range, v-h-f, f-m (voice), radio receiving and transmitting equipment used by military police and security troops for highway traffic control and similar applications.

This equipment consists of a crystal-controlled radio transmitter and receiver controlled from the driver's position in a vehicle and is powered through individual vibrator power supply units by the storage battery of the vehicle in which the equipment is installed.

It uses a single telescopic whip-type antenna which is controlled by an antenna change-over relay located in the transmitter.

The transmitter component of some models of this equipment is equipped with a dynamotor.

AN/VRC-2

RADIO SET

INSTRUCTION LITERATURE: TM 11-607
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army, Navy
DATE OF THIS SHEET: 11 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver R-237/VR	11-1/2 x 10 x 15	35
1	Radio Transmitter T-193/VRC-2	11-1/2 x 10 x 15	41
1	Radio Set Control C-493/VRC-2	2-1/4 x 3-1/4 x 7-1/4	1.5
1	Microphone M-27/U	3-3/4 x 3-1/2 x 5	1.25
1	Antenna AT-129/VR	1-1/2 x 1-1/2 x 78	3.25
1	Dynamic Loudspeaker LS-158/U	9-1/2 x 4-1/4 (diameter)	5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Military police and security troops. Counterintelligence detachments, corps and army level, air force squadrons.

INSTALLATION: Vehicular.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-7, -8; AN/MRC-5, -16; AN/PRC-9, -10; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -3, -10, -15, -18, -22; AN/VRQ-2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-300, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 30 – 40.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 25 w.

POWER REQUIREMENTS: 6-v vehicular storage battery through vibrator power supplies.
Transmitter: (25 amp) at 6.3 v and (0.15 amp) at 540 v.
Receiver: (14.5 amp) at 6.3 v and (0.08 amp) at 250 v.

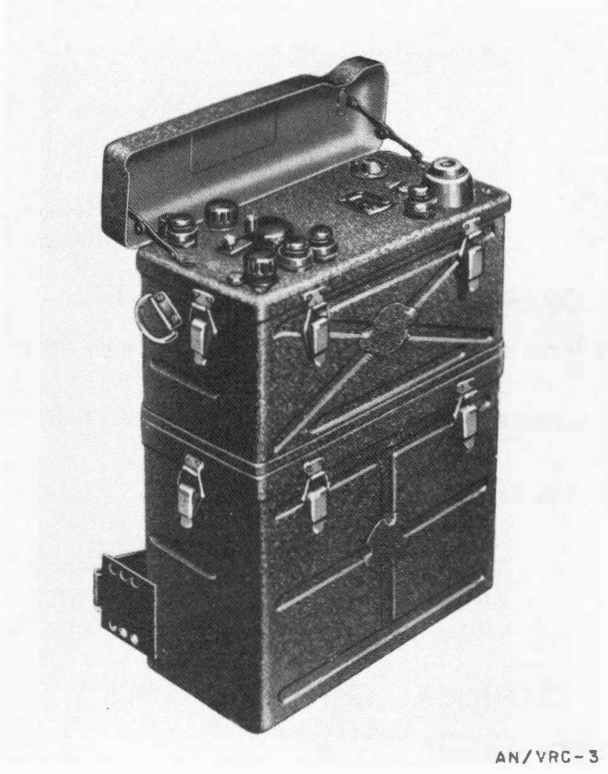
PHYSICAL CHARACTERISTICS

Radio Set AN/VRC-2 packed for export shipment: total weight 168 pounds, total volume 8 cu ft. Shipped in 2 packages.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 11 Jan 52

AN/VRC-3

RADIO SET



Radio Set AN/VRC-3 is the vehicular version of Radio Set SCR-300. It is a crystal-controlled, short-range, f-m (voice) transmitting and receiving equipment used for communication in the v-h-f band. It is used between tanks and supporting infantry.

This equipment consists of a dry battery operated receiver-and-transmitter component (BC-1000). It uses a whip-type antenna and includes Battery BA-70 which can be replaced by Battery Case CS-139.

AN/VRC-3

RADIO SET

INSTRUCTION LITERATURE: TM 11-637

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army

DATE OF THIS SHEET: 11 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver and Transmitter BC-1000	5-5/8 x 11-5/16 x 7-1/8	13
1	Battery BA-70	7-23/32 x 10-5/16 x 4-1/2	15
1	Case CS-128-A	9-3/8 x 10-15/16 x 7-1/4	3.66
2	Mast Section MS-116	38 x 3/8 (diameter)	Not Available
2	Mast Section MS-117	38 x 1/4 to 3/8 (diameter)	" "
2	Mast Section MS-118	38 x 1/8 to 1/4 (diameter)	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company level units organic to armored and infantry divisions.

INSTALLATION: Ground, vehicular. Operates on the move or at the halt.

APPROXIMATE RANGE (IN MILES): 3.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-3, -4, -5, -6, -7, -8; AN/PRC-6, -7, -10; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -3, -10, -15, -18, -22; AN/VRQ-3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-607.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 40 - 48.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

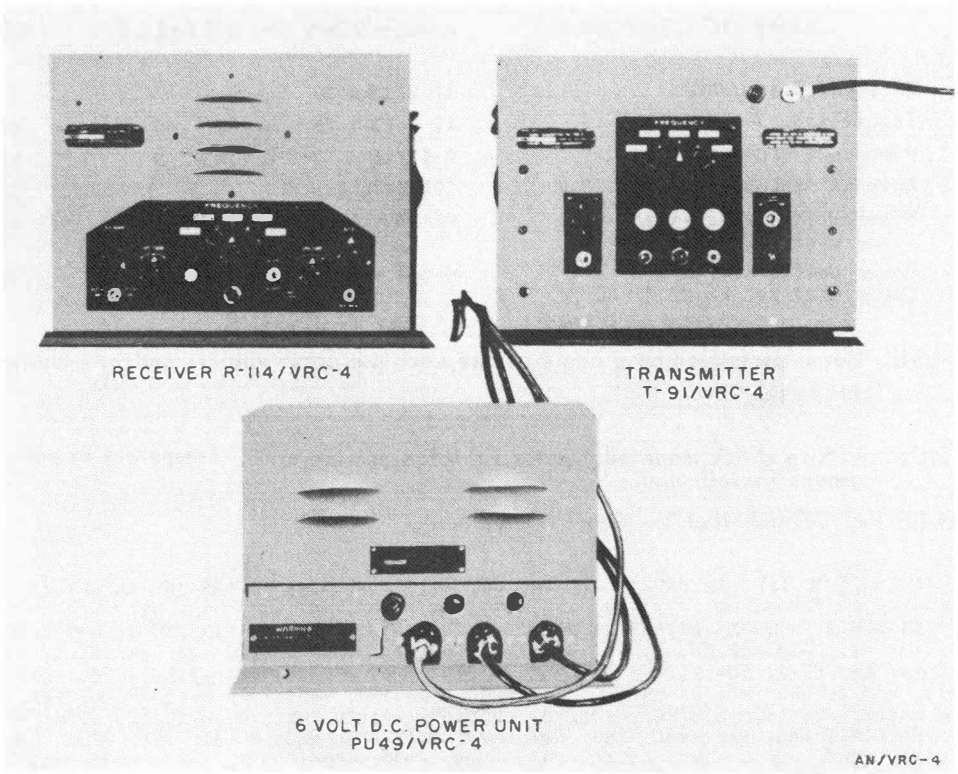
POWER OUTPUT: Transmitter: 0.3 w (r-f).
Receiver: 2 mw (r-f).

POWER REQUIREMENTS: Battery BA-70 (20/25 hr), Battery Case CS-139 (26 hr), or Vibrator Power Supply PP-114/VRC-3.

PHYSICAL CHARACTERISTICS

Radio Set AN/VRC-3 measures 17 x 11 x 7-1/4 inches, net weight 31.5 pounds, volume 0.8 cu ft. Packed for domestic shipment: total weight 35.5 pounds, total volume 1.9 cu ft. Packed for export shipment: total weight 215 (4 units), total volume 11.9 cu ft. Shipped in 1 package both domestic and export.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 10 Jun 52	**AN/VRC-4** RADIO SET



Radio Set AN/VRC-4 (similar to Fisher Radio Set TS25-3) is normally used for either fixed or mobile two-way, ground-to-air or point-to-point communication in the h-f range. The radio receiver component operates on any four preset channels in the range 1.7 to 8.7 mc, with continuous tuning from 0.19 to 0.51 mc. The radio transmitter operates on either voice or cw on any four preset channels in the frequency range 4 to 8 mc, and one tunable range 4 to 7 mc.

This equipment uses 35-foot vertical-whip Antenna Assembly AS-170/VRC-4.

Set can operate from 110 to 220-v, ac, or 6-v, dc.

Frequency Meter Set SCR-211 is supplied with this set for receiver calibration.

This equipment will be replaced by AN/VRC-19.

AN/VRC-4

RADIO SET

INSTRUCTION LITERATURE: TM 11-829
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver R-114/VRC-4	17 x 13 x 16	34.50
1	Transmitter T-91/VRC-4	17 x 13 x 16	39.00
1	Power Unit PU-49/VRC-4	9-13/16 x 10-5/8 x 13-7/8	32.00
1	Antenna Assembly AS-170/VRC-4	192 Height	10.75
1	Power Unit (Transmitter) Commercial No. PS-25 HIT-AC	9-3/4 x 10-11/16 x 15-7/8	47.50
1	Power Unit (Receiver) Commercial No. PS-25 HIRAC	9-3/4 x 6-13/16 x 11-11/16	15.00

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued on a basis of one each per crash vehicle and/or ambulance per air base.

INSTALLATION: Mobile shock mounted: motor vehicles, marine craft. Temporary or permanent ground installation.

APPROXIMATE RANGE (IN MILES): Short to medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRR-3, -4, -7, -12, -29, -32; AN/FRT-5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRR-3, -8, -12, -13; AN/SRT-1, -3, -4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -314, -329, -339, -342, -344, -348, -365, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-59/FRC, -59/FRC, -60A/ T, -608/FRT; R-62/PR, -90/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -389/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -291, -399, -499, -506, -536, -543, -595, -593, -704; T-4/FRC, -5/FRC, -93/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-8; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmitter: Any four preset channels, and one tuneable channel (4 to 7) in frequency range 1.7 – 8.7.
Receiver: Any four preset channels in the frequency range 1.7 – 8.7 and continuously tuneable 0.19 – 0.51.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Transmitter: Cw, voice.
Receiver: Cw, voice.

POWER OUTPUT: Transmitter: 25 w.
Receiver: 2 w.

POWER REQUIREMENTS:
Dc Receiver: 6 v,(6-1/2 amp.)
Dc Transmitter: 6 v,(42 amp.)
Ac Receiver, Transmitter: 340 w, 110/220 v, 50/60 cyc, 1 phase, ac.

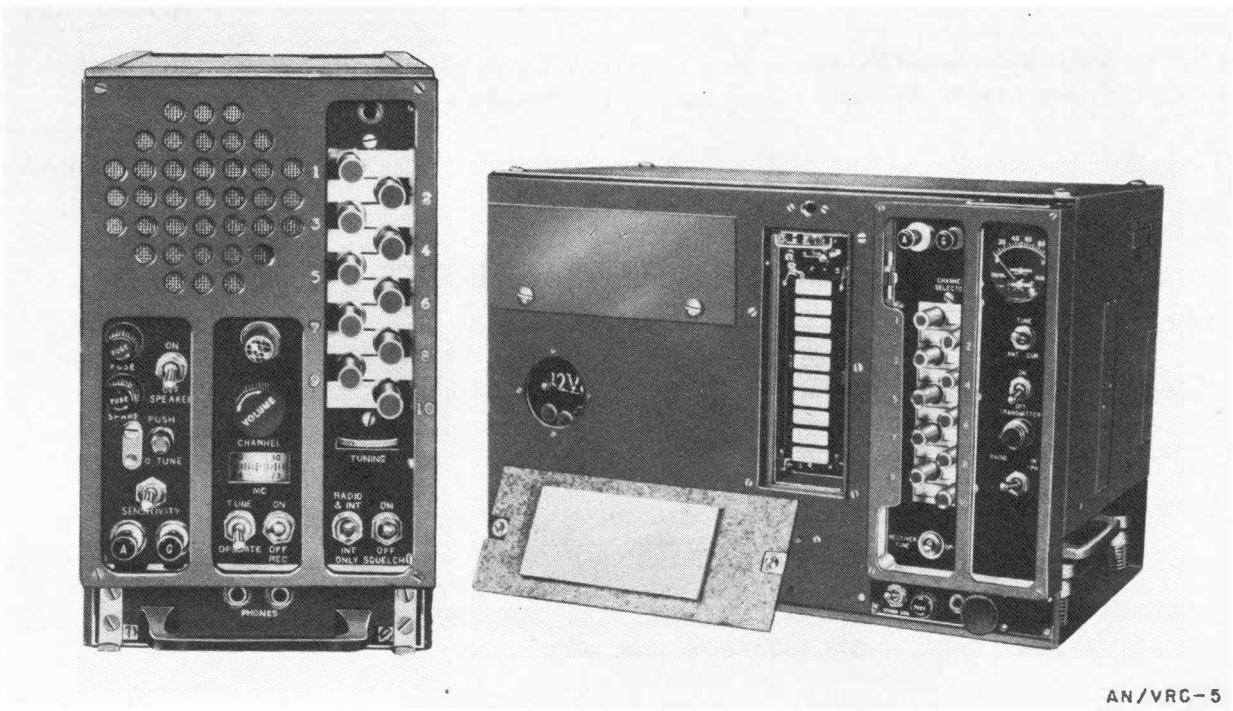
PHYSICAL CHARACTERISTICS

Radio Set AN/VRC-4 measures 60 x 47 x 15 inches, net weight 186 pounds, volume 30 cu ft, 0.75 ship ton. Packed for domestic or export shipment: total weight 200 pounds, total volume 33 cu ft, 0.82 ship ton. Shipped in 5 packages both domestic and export.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 22 Jan 52

AN/VRC-5

RADIO SET



AN/VRC-5

Radio Set AN/VRC-5 is a short-range, low-power, h-f, f-m (voice) radiotelephone equipment used for communication while installed in vehicles of the armored force.

This equipment consists of a crystal-controlled transmitter and a receiver, plus antenna and related accessories. The transmitter and the receiver operate on 10 preset channel frequencies which are selected by means of pushbuttons mounted on the front panels of each of these components.

A single whip-type antenna is used for transmission and reception, and provision is made for automatic disabling of receiver output during operation of the transmitter dynamotor.

Can be operated from the storage battery of the vehicle in which it is used by means of appropriate dynamotors which are installed within the housings of the transmitter and the receiver.

AN/VRC-5

RADIO SET

INSTRUCTION LITERATURE: TM 11-600
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-604	11-1/2 x 10-1/4 x 18	67
1	Radio Receiver BC-603	11-1/2 x 6-3/4 x 12-1/2	35

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Armored units.

INSTALLATION: Ground, vehicular.

APPROXIMATE RANGE (IN MILES): 10 - 15

CAN COMMUNICATE WITH: AN/FRT-5, -6; AN/GRC-3, -4, -5, -6; AN/MRC-3, -16; AN/PRC-8, -9; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/URT-2, -3, -4; AN/VRC-5, -8, -9, -13, -14, -16, -17, -20, -21; AN/VRQ-1, -2; BC-787; R-137/GR; RBK; SCR-293, -294, -298, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 20.0 - 27.9 (10 preset channels).

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

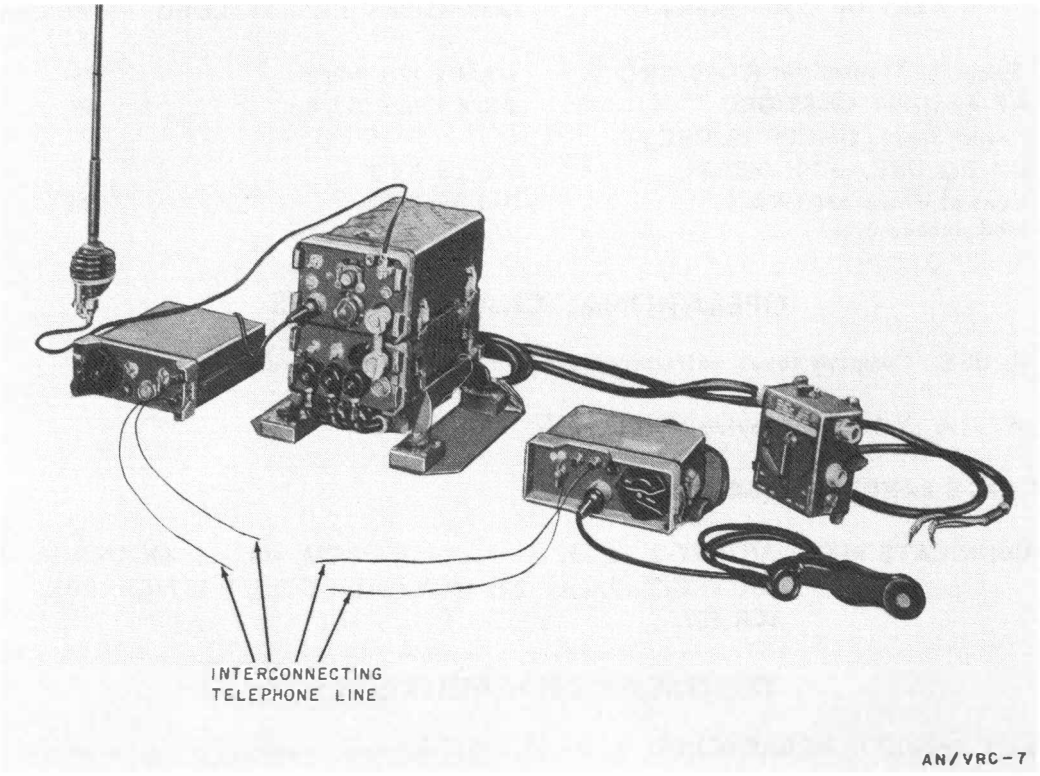
POWER OUTPUT: 30 w. (receiver: 2 w at speaker, 0.2 w at headset).

POWER REQUIREMENTS: (24 amp) from 12-v storage battery through Dynamotor DM-35 or
(14 amp) from 24-v storage battery through Dynamotor DM-37.

PHYSICAL CHARACTERISTICS

Radio Set AN/VRC-5 packed for export shipment: total weight 645 pounds, total volume 29.6 cu ft, 0.74 ship ton. Shipped in 6 packages.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 8 Jan 52	**AN/VRC-7** RADIO SET



Radio Set AN/VRC-7 is a short-range, f-m (voice), vehicular radiotelephone equipment used within and between artillery, infantry, and armored force units.

This set consists of the separate, short-range, low-power receiver-transmitter component designated as set 2 when used as part of radio sets of the integrated series such as Radio Sets AN/GRC-3 through AN/GRC-8.

Includes vehicular installation unit, power supply equipment, and interphone amplifier, plus various control and accessory equipment such as microphone, headset, and loudspeaker.

Can be operated by means of Control Group AN/GRA-6 from a remote point up to a distance of about 2 miles over a telephone pair.

AN/VRC-7

RADIO SET

INSTRUCTION LITERATURE: TM 11-285
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-70/GRC	4-3/4 x 13 x 7-7/8	25
1	AF Amplifier AM-65/GRC	4-3/4 x 13 x 7-7/8	15
1	Power Supply Unit PP-28/GRC, PP-282/GRC, or PP-448/GR	4-1/2 x 6 x 3	6
1	Control Group AN/GRA-6 (and accessories)	Not Available	96

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company level, units organic to armored and infantry divisions.

INSTALLATION: Vehicular, moving or at the halt.

APPROXIMATE RANGE (IN MILES): 3/4.

CAN COMMUNICATE WITH: AN/GRC-3, -4, -5, -6, -7, -8; AN/PRC-6, -10, -16; AN/URR-10, -12; AN/VRC-3, -7, -10, -22; AN/VRQ-3; BC-787; R-137/GR; RBK; SCR-607.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 47.0 - 58.4 (115 detented channels, two preselected channels, or continuous manual tuning).

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice only.

POWER OUTPUT: Transmitter, 500 mw (approximately).
Receiver, 75 mw (approximately).
Interphone, 350 mw (approximately).

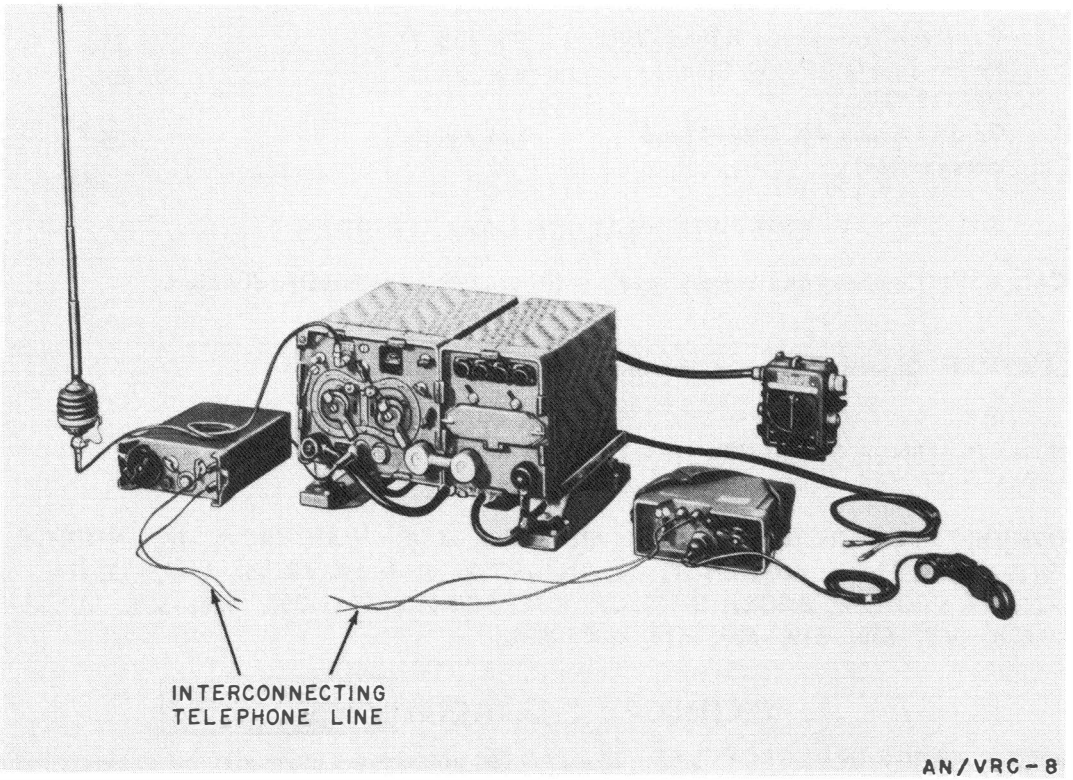
POWER REQUIREMENTS:

From vehicular storage battery:	6 v	12 v	24 v
Transmitting:	5.3	4.3	2.5 amp
Stand-by:	5.1	4.1	4.3 amp
Interphone:	2.6	2.6	1.4 amp

PHYSICAL CHARACTERISTICS

Radio Set AN/VRC-7 weighs 105 pounds net. Packed for export shipment: total weight 164 pounds, total volume 4.92 cu ft. Shipped in 3 packages.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 8 Jan 52	**AN/VRC-8** RADIO SET



Radio Set AN/VRC-8 is a short-range vehicular f-m (voice) equipment for communication within and between armored units, and for liaison between armored force and artillery units.

This set consists of the receiver-transmitter component designated as set 1, when used as part of radio sets of the integrated series such as Radio Sets AN/GRC-3 and AN/GRC-4. Vehicular installation unit, power supply equipment, control and accessory components are included.

This equipment can be operated from a remote point up to a distance of about two miles over a telephone pair, by means of Control Group AN/GRA-6.

AN/VRC-8

RADIO SET

INSTRUCTION LITERATURE: TM 11-286
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army, Navy
DATE OF THIS SHEET : 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-66/GRC	9 x 13 x 11-1/4	35
1	Power Supply PP-109/GR or PP-112/GR	9 x 13 x 8	33
1	Control Group AN/GRA-6 (and accessories)	Not Available	125

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company and battery level units organic to an armored division.

INSTALLATION: Ground, vehicular, moving or at the halt.

APPROXIMATE RANGE (IN MILES): 10 - 15.

CAN COMMUNICATE WITH: AN/FRT-5, -6; AN/GRC-3, -4, -5, -6; AN/MRC-3, -16; AN/PRC-8, -9; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/URT-2, -3, -4; AN/VRC-5, -8, -9, -13, -14, -16, -17, -20, -21; AN/VRQ-1, -2; BC-787; R-137/GR; RBK; SCR-293, -294, -298, -508,--509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828,

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 20 - 27.9 (80 preselected channels; 2 preselected channels; or continuous manual tuning).

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 16 w on high power; 2 w on low power.
Receiver: 1 w at loudspeaker; 50 mw at headphone terminals.

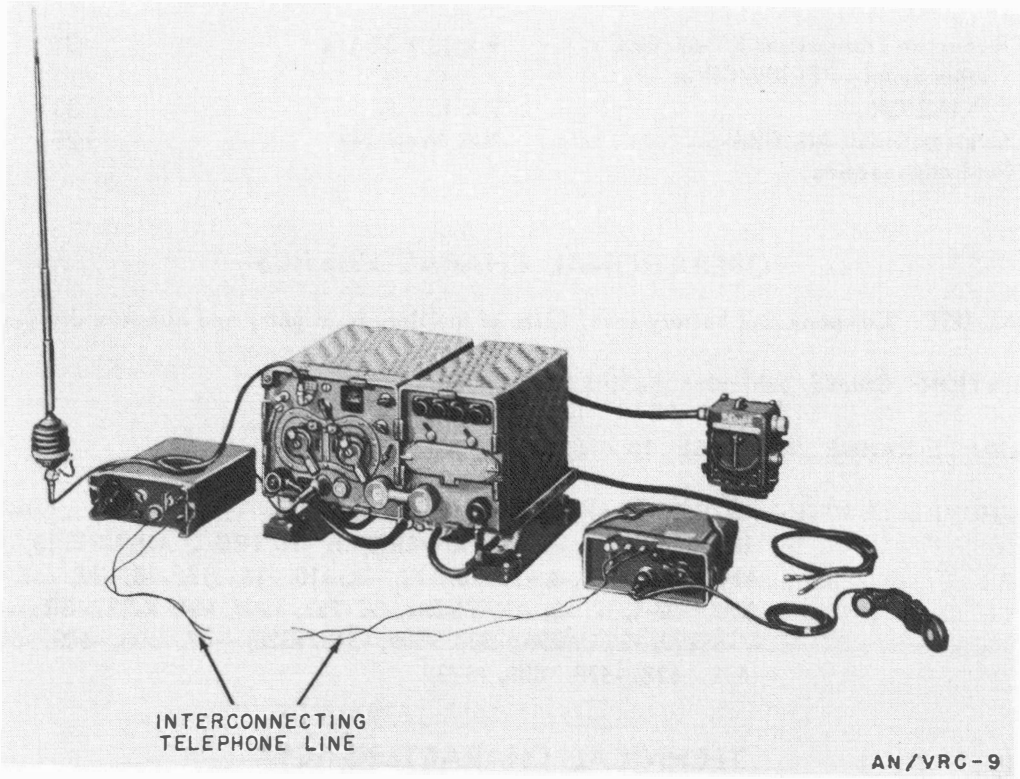
POWER REQUIREMENTS:

From vehicular storage battery:	12 v	24 v
Transmitting:	11.9	7.3 amps
Stand-by:	2.3	1.5

PHYSICAL CHARACTERISTICS

Radio Set AN/VRC-8 weighs 100 pounds net. Packed for export shipment: total weight 267 pounds, total volume 6.05 cu ft. Shipped in 3 packages.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 8 Jan 52	**AN/VRC-9** RADIO SET



Radio Set AN/VRC-9 is a short-range, vehicular, f-m (voice) equipment for communication within and between artillery units and for liaison between artillery, armored, and infantry units.

This set consists of the receiver-transmitter component designated as set 1 when used as part of radio sets of the integrated series such as Radio Sets AN/GRC-5 and AN/GRC-6. Vehicular installation unit, power supply equipment, and control and accessory items are included.

This equipment can be operated by means of Control Group AN/GRA-6 from a remote point up to a distance of about 2 miles over a telephone pair.

AN/VRC-9	INSTRUCTION LITERATURE: TM 11-286
	CLASSIFICATION OF EQUIPMENT: Unclassified
	USING SERVICE : Army, Navy
RADIO SET	DATE OF THIS SHEET : 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-67/GRC	9 x 13 x 11-1/4	35
1	Power Supply PP-109/GR or PP-112/GR	9 x 13 x 8	33
1	Control Group AN/GRA-6 (and accessories)	Not Available	125

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company and battery level units of artillery in infantry and airborne divisions.

INSTALLATION: Ground, vehicular, moving or at the halt.

APPROXIMATE RANGE (IN MILES): 10 - 15.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, 9; AN/GRC-3, -4, -5, -6, -7, -8; AN/MRC-5, -16; AN/PRC-8, -9, -10; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -5, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-293, -294, -298, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27.0 - 38.9 (120 detented channels, two preselected channels, or continuous manual tuning).

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter, 16 w on high power, 2 w on low power.
Receiver, 1 w at loudspeaker, 50 mw at headphone terminals.

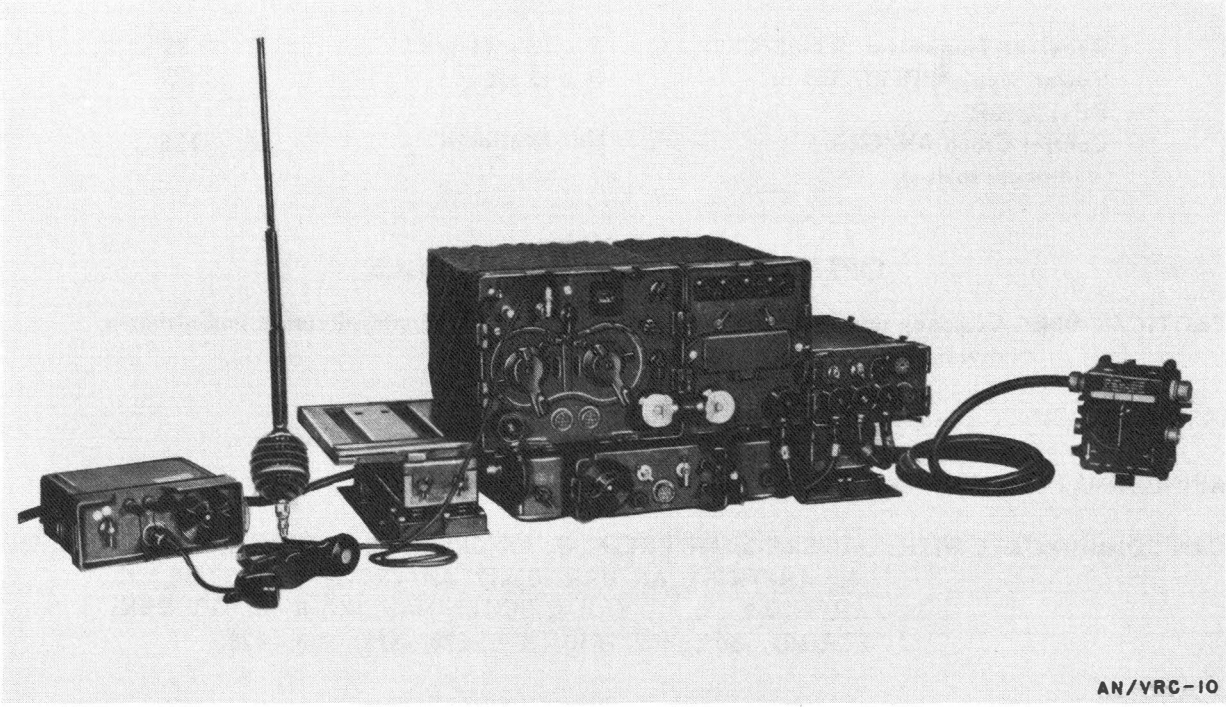
POWER REQUIREMENTS:

From vehicular storage battery:	12 v	24 v
Transmitting:	11.9	7.3 amp
Stand-by:	2.3	1.5 amp.

PHYSICAL CHARACTERISTICS

Radio Set AN/VRC-9 weighs 100 pounds net. Packed for export shipment: total weight 267 pounds, total volume 6.05 cu ft. Shipped in 3 packages.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 8 Jan 52	**AN/VRC-10** RADIO SET



AN/VRC-10

Radio Set AN/VRC-10 is short-range, vehicular, f-m (voice) equipment for communication within and between infantry units and for liaison between infantry and artillery units.

This set consists of the receiver-transmitter component designated as set 1 when used as part of radio sets of the integrated series such as Radio Sets AN/GRC-7 and AN/GRC-8. Vehicular installation unit, power supply equipment, and control and accessory items are included.

This equipment can be operated by means of Control Group AN/GRA-6 from a remote point up to a distance of about 2 miles over a telephone pair.

AN/VRC-10

RADIO SET

INSTRUCTION LITERATURE: TM 11-286
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army, Navy
DATE OF THIS SHEET : 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-68/GRC	9 x 13 x 11-1/4	35
1	Power Supply PP-109/GR or PP-112/GR	9 x 13 x 8	33
1	Control Group AN/GRA-6 (and accessories)	Not Available	125

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company and battery level units organic to an infantry division and airborne division.

INSTALLATION: Ground, vehicular, moving or at the halt.

APPROXIMATE RANGE (IN MILES): 10 - 15.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-7, -8; AN/MRC-5, -16; AN/PRC-9, -10; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -10, -15, -18, -22; AN/VRQ-2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 38.0 - 54.9 (170 detented channels, two preselected channels, or continuous manual tuning).

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter, 16 w on high power, 2 w on low power.
Receiver, 1 w at loudspeaker, 50 mw at headphone terminals.

POWER REQUIREMENTS: From vehicular storage battery:	12 v	24 v
Transmitting:	11.9	7.3 amp
Stand-by:	2.3	1.5 amp.

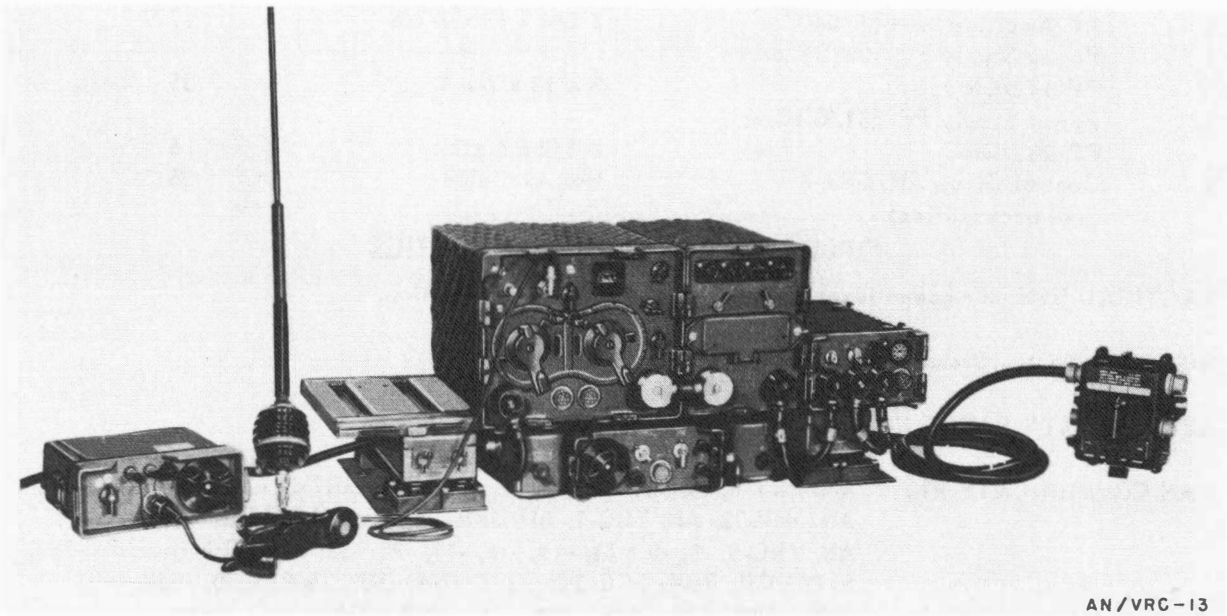
PHYSICAL CHARACTERISTICS

Radio Set AN/VRC-10 weighs 100 pounds net. Packed for export shipment: total weight 267 pounds, total volume 6.05 cu ft. Shipped in 3 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

AN/VRC-13

RADIO SET



AN/VRC-13

Radio Set AN/VRC-13 is a short-range, vehicular, f-m (voice) equipment for communication within and between armored units and for liaison between armored force and artillery units.

This set consists of the receiver-transmitter component designated as set 1 when used as part of radio sets of the integrated series such as Radio Sets AN/GRC-3 and AN/GRC-4. Vehicular installation unit, power supply equipment, interphone amplifier, antenna, and accessory components are included.

This equipment can be operated by means of Control Group AN/GRA-6 from a remote point up to a distance of about 2 miles over a telephone pair.

AN/VRC-13

RADIO SET

INSTRUCTION LITERATURE: TM 11-291
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-66/GRC	9 x 13 x 11-1/4	35
1	AF Amplifier AM-65/GRC	4-1/4 x 13 x 7-7/8	15.5
1	Power Supply PP-109/GR or PP-112/GR	9 x 13 x 7-1/4	35
1	Power Supply PP-281/GRC or PP-282/GRC	4-1/2 x 6 x 3	6
1	Control Group AN/GRA-6 (and accessories)	Not Available	96

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company level units organic to an armored division.

INSTALLATION: Ground, vehicular, moving or at the halt.

APPROXIMATE RANGE (IN MILES): 10 - 15.

CAN COMMUNICATE WITH: AN/FRT-5, -6; AN/GRC-3, -4, -5, -6; AN/MRC-3, -16; AN/PRC-8, -9; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/URT-2, -3, -4; AN/VRC-5, -8, -9, -13, -14, -16, -17, -20, -21; AN/VRQ-1, -2; BC-787; R-137/GR; RBK; SCR-293, -294, -298, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 20.0–27.9 (80 detented channels, two preselected channels, or continuous manual tuning).

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitting, 16 w on high power, 2 w on low power.
Receiving, 1 w at loudspeaker, 50 mw at headphone terminals.
Interphone, 350 mw.

POWER REQUIREMENTS: From vehicular storage battery:

	12 v	24 v
Transmitting:	11.9	7.3 amp
Stand-by:	2.3	1.5 amp
Interphone: (transmitting)	3.2	1.8 amp
(stand-by)	2.6	1.4 amp.

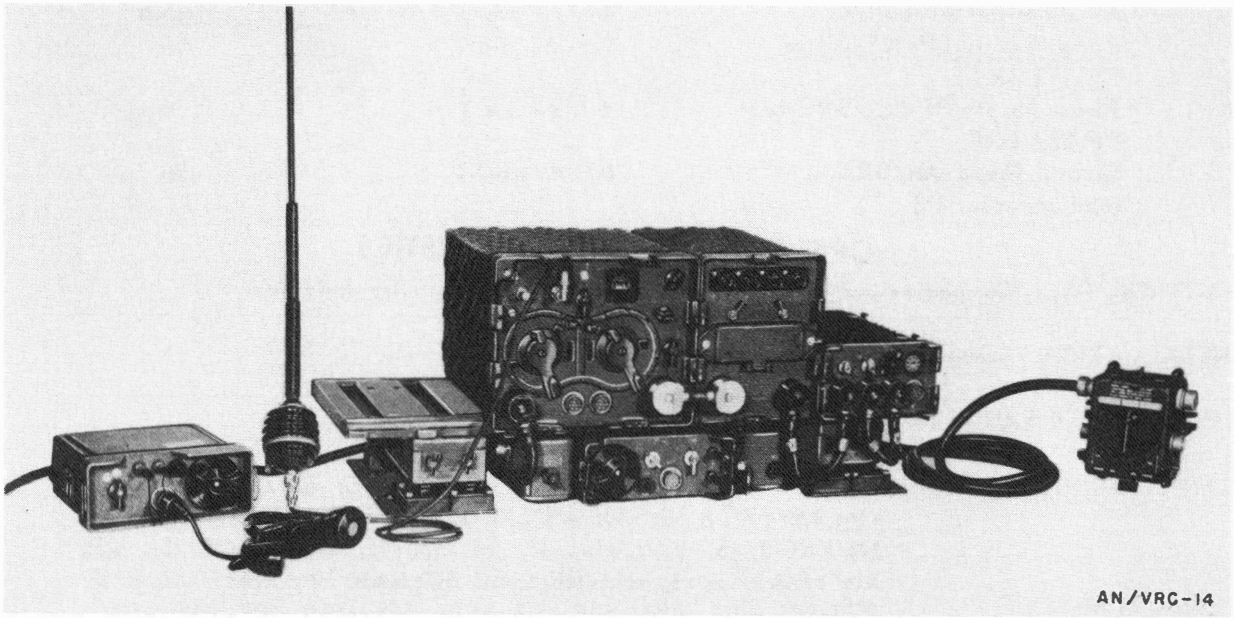
PHYSICAL CHARACTERISTICS

Radio Set AN/VRC-13 weighs 185 pounds net. Packed for export shipment: total weight 337 pounds, total volume 8.59 cu ft. Shipped in 3 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

AN/VRC-14

RADIO SET



Radio Set AN/VRC-14 is a short-range, vehicular, f-m (voice) equipment for communication within and between artillery units and for liaison between artillery, armored, and infantry units.

This set consists of the receiver-transmitter component designated as set 1 when used as part of radio sets of the integrated series such as Radio Sets AN/GRC-5 and AN/GRC-6. Vehicular installation unit, interphone amplifier equipment, power supply, and control and accessory items are included.

This equipment can be operated by means of Control Group AN/GRA-6 from a remote point up to a distance of about 2 miles over a telephone pair.

AN/VRC-14

RADIO SET

INSTRUCTION LITERATURE: TM 11-291
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-67/GRC	9 x 13 x 11-1/4	35
1	AF Amplifier AM-65/GRC	4-1/2 x 13 x 7-7/8	15.5
1	Power Supply PP-109/GR or PP-112-GR	9 x 13 x 7-1/4	35
1	Power Supply PP-281/GRC or PP-282/GRC	4-1/2 x 6 x 3	6
1	Control Group AN/GRA-6 (and accessories)	Not Available	96

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Companies and batteries organic to armored or infantry divisions.

INSTALLATION: Ground, vehicular, moving or at the halt.

APPROXIMATE RANGE (IN MILES): 10 - 15.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-3, -4, -5, -6, -7, -8; AN/MRC-5, -16; AN/PRC-8, -9, -10; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -5, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-293, -294, -298, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27.0 - 38.9 (120 detented channels, two preselected channels, or continuous manual tuning).

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitting, 16 w on high power, 2 w on low power.
Receiving, 1 w at loudspeaker, 50 mw at headphone terminals.
Interphone, 350 mw.

POWER REQUIREMENTS:

From vehicular storage battery:	12 v	24 v
Transmitting:	11.9	7.3 amp
Stand-by:	2.3	1.5 amp
Interphone: (transmitting)	3.2	1.8 amp
(stand-by)	2.6	1.4 amp.

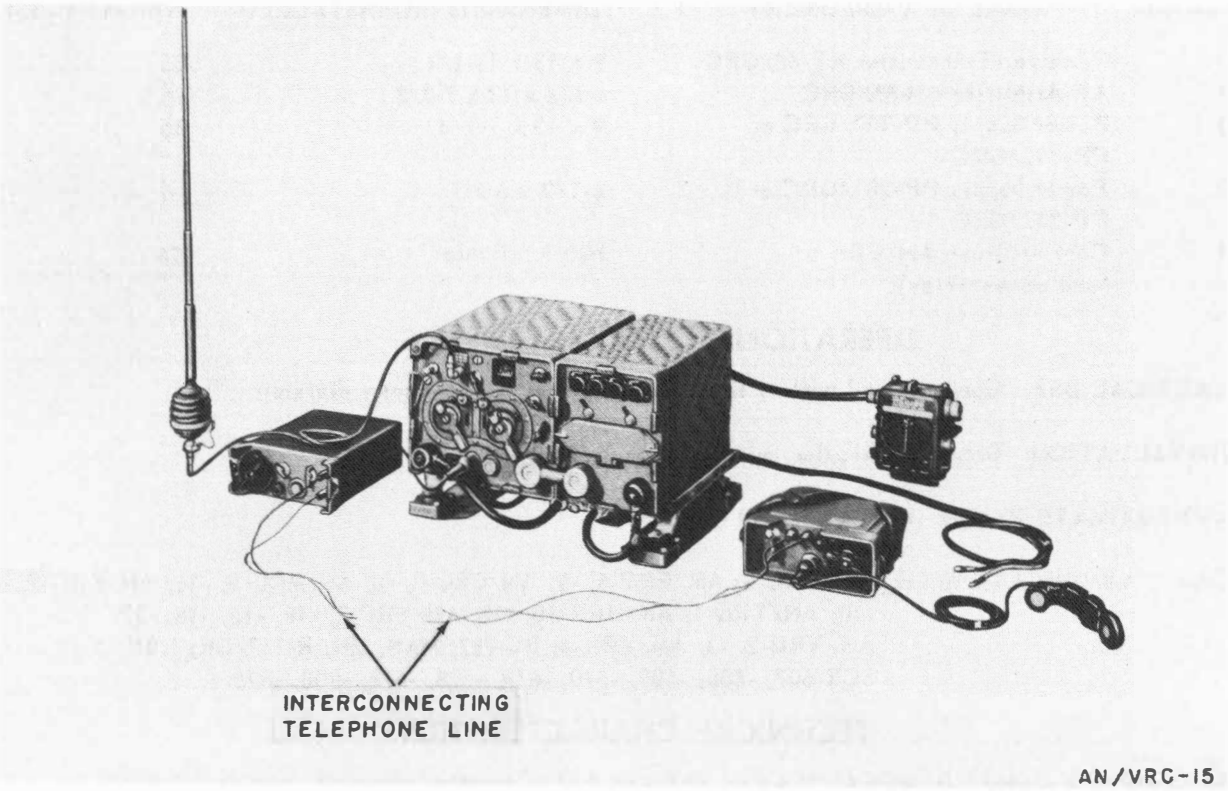
PHYSICAL CHARACTERISTICS

Radio Set AN/VRC-14 weighs 185 pounds net. Packed for export shipment: total weight 337 pounds, total volume 8.59 cu ft. Shipped in 3 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

AN/VRC-15

RADIO SET



AN/VRC-15

Radio Set AN/VRC-15 is a short-range, vehicular, f-m (voice) equipment for communication within and between infantry units and for liaison between infantry and artillery units.

This set consists of the receiver-transmitter component designated as set 1 when used as part of radio sets of the integrated series such as Radio Sets AN/GRC-7 and AN/GRC-8, plus power supply and control and accessory items. Vehicular installation unit and interphone amplifier are included.

This equipment can be operated by means of Control Group AN/GRA-6 from a remote point at a distance of about 2 miles over a telephone pair.

AN/VRC-15

RADIO SET

INSTRUCTION LITERATURE: TM 11-291
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-68/GRC	9 x 13 x 11-1/4	35
1	AF Amplifier AM-65/GRC	4-1/4 x 13 x 7-7/8	15.5
1	Power Supply PP-109/GRC or PP-112/GRC	9 x 13 x 7-1/4	35
1	Power Supply PP-281/GRC or PP-282/GRC	4-1/2 x 6 x 3	6
1	Control Group AN/GRA-6 (and accessories)	Not Available	96

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company and battery level units organic to an infantry division.

INSTALLATION: Ground, vehicular, moving or at the halt.

APPROXIMATE RANGE (IN MILES): 10 - 15.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-7, -8; AN/MRC-5, -16; AN/PRC-9, -10; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -10, -15, -18, -22; AN/VRQ-2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 38.0 - 54.9 (170 detented channels, two preselected channels, or continuous manual tuning).

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitting, 16 w on high power, 2 w on low power.
Receiving, 1 w at loudspeaker, 50 mw at headphone terminals.
Interphone, 350 mw.

POWER REQUIREMENTS:

From vehicular storage battery:	12 v	24 v
Transmitting:	11.9	7.3 amp
Stand-by:	2.3	1.5 amp
Interphone: (transmitting)	3.2	1.8 amp
(stand-by)	2.6	1.4 amp.

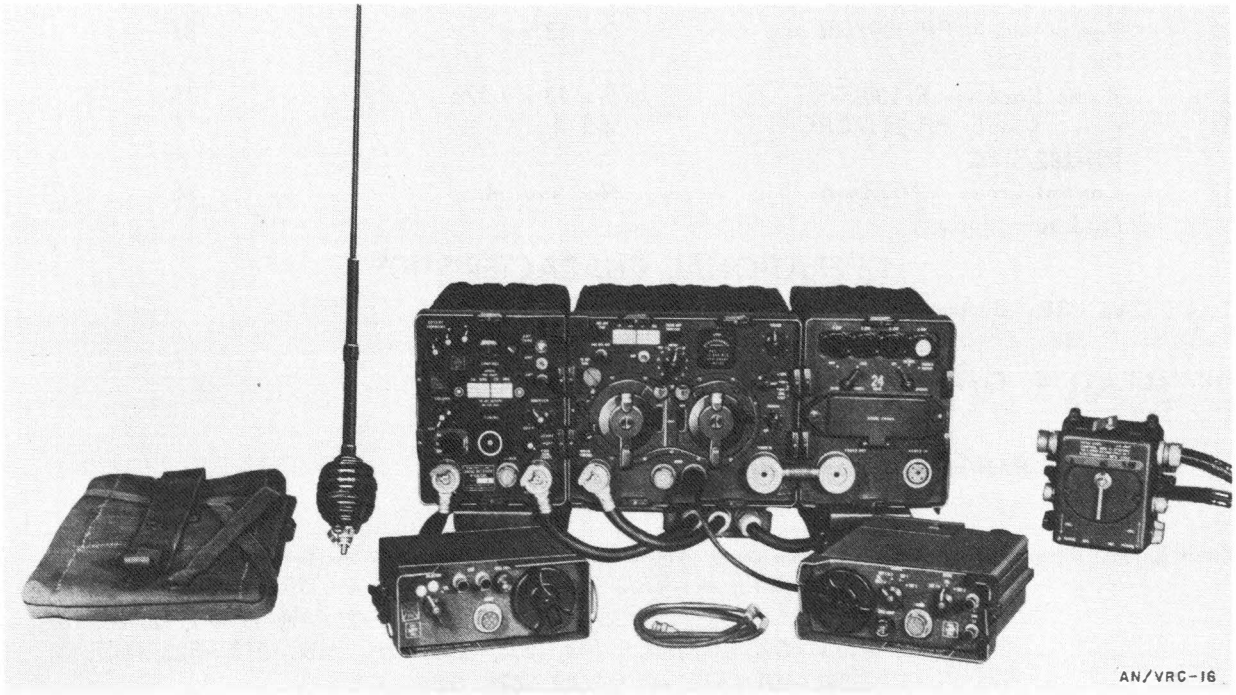
PHYSICAL CHARACTERISTICS

Radio Set AN/VRC-15 weighs 185 pounds net. Packed for export shipment: total weight 337 pounds, total volume 8.59 cu ft. Shipped in 3 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

AN/VRC-16

RADIO SET



Radio Set AN/VRC-16 is a short-range, vehicular, f-m (voice) equipment for communication within and between armored units and for liaison between armored force and artillery units.

This set consists of the receiver-transmitter component designated as set 1 when used as part of radio sets of the integrated series such as Radio Sets AN/GRC-3 and AN/GRC-4, plus the auxiliary receiver component of these sets. Vehicular installation unit, power supply equipment, antenna, and control components are included.

This equipment can be operated by means of Control Group AN/GRA-6 from a remote point up to a distance of about 2 miles over a telephone pair.

AN/VRC-16

RADIO SET

INSTRUCTION LITERATURE: TM 11-611
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-66/GRC	9 x 13 x 11-1/4	35
1	Power Supply PP-109/GR or PP-112/GR	9 x 13 x 8	33
1	Radio Receiver R-108/GRC	9 x 13 x 7-1/4	35
1	Power Supply PP-281/GRC or PP-282/GRC	4-1/4 x 6 x 3	6
1	Control Group AN/GRA-6 (and accessories)	Not Available	96

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Battery level units organic to an armored division.

INSTALLATION: Ground, vehicular, moving or at the halt.

APPROXIMATE RANGE (IN MILES): 10 - 15.

CAN COMMUNICATE WITH: AN/FRT-5,-6; AN/GRC-3, -4, -5,-6; AN/MRC-3, -16; AN/PRC-8, -9; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/URT-2, -3, -4; AN/VRC-5, -8, -9, -13, -14, -16, -17, -20, -21; AN/VRQ-1, -2; BC-787, R-137/GR; RBK; SCR-293, -294, -298, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 20.0 - 27.9

Receiver-Transmitter RT-66/GRC: 80 detented channels, two preselected channels, or continuous manual tuning.

Radio Receiver R-108/GRC: three preselected channels or continuous manual tuning.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitting, 16 w on high power, 2 w on low power.
Receiving, 1 w at loudspeaker, 50 mw at headphone terminals.

POWER REQUIREMENTS:

From vehicular storage battery:	12 v	24 v
Transmitting:	11.9	7.3 amp
Stand-by:	2.3	1.5 amp
Auxiliary receiver:	2.5	1.5 amp.

PHYSICAL CHARACTERISTICS

Radio Set AN/VRC-16 weighs 180 pounds net. Packed for export shipment: total weight 306 pounds, total volume 6.6 cu ft. Shipped in 3 packages.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 8 Jan 52	**AN/VRC-17** RADIO SET



Radio Set AN/VRC-17 is a short-range, vehicular, f-m (voice) equipment for communication within and between artillery units and for liaison between artillery, infantry, and armored units.

This set consists of the receiver-transmitter component designated as set 1 when used as part of radio sets of the integrated series such as Radio Sets AN/GRC-5 and AN/GRC-6, plus the auxiliary receiver component of these sets. Vehicular installation unit, power supply equipment, antenna, and control components are included.

This equipment can be operated by means of Control Group AN/GRA-6 from a remote point up to a distance of about 2 miles over a telephone pair.

AN/VRC-17

RADIO SET

INSTRUCTION LITERATURE: TM 11-611
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-67/GRC	9 x 13 x 11-1/4	35
1	Power Supply PP-109/GR or PP-112/GR	9 x 13 x 8	33
1	Radio Receiver R-109/GRC	9 x 13 x 7-1/4	35
1	Power Supply PP-281/GRC or PP-282/GRC	4-1/4 x 6 x 3	6
1	Control Group AN/GRA-6 (and accessories)	Not Available	96

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Battery level artillery units organic to airborne or infantry divisions.

INSTALLATION: Ground, vehicular, moving or at the halt.

APPROXIMATE RANGE (IN MILES): 10-15.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-3, -4, -5, -6, -7, -8; AN/MRC-5, -16; AN/PRC-8, -9, -10; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -5, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-293, -294, -298, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27.0 - 38.9.
Receiver-Transmitter RT-67/GRC: 120 detented channels, two preselected channels or continuous manual tuning.
Radio Receiver R-109/GRC: three preselected channels or continuous manual tuning.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitting, 16 w on high power, 2 w on low power.
Receiving, 1 w at loudspeaker, 50 mw at headphone terminals.

POWER REQUIREMENTS:

From vehicular storage battery:	12 v	24 v
Transmitting:	11.9	7.3 amp
Stand-by:	2.3	1.5 amp
Auxiliary receiver:	2.5	1.5 amp.

PHYSICAL CHARACTERISTICS

Radio Set AN/VRC-17 weighs 180 pounds net. Packed for export shipment: total weight 306 pounds, total volume 6.6 cu ft. Shipped in 3 packages.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 11 Jan 52	**AN/VRC-18** RADIO SET



Radio Set AN/VRC-18 is a short-range, vehicular, f-m (voice) transmitting and receiving equipment used for communication within and between infantry units and for liaison between infantry and artillery units.

This equipment consists of the receiver-transmitter component designated as set 1 when used as part of radio sets of the integrated series such as Radio Sets AN/GRC-7 and AN/GRC-8, plus the auxiliary receiver component of these sets. Vehicular installation unit, power supply equipment, antenna, and control components are included.

This equipment can be operated by means of Control Group AN/GRA-6 from a remote point up to a distance of about 2 miles over a telephone pair.

AN/VRC-18

RADIO SET

INSTRUCTION LITERATURE: TM 11-611
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 11 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-68/GRC	9 x 13 x 11-1/4	35
1	Power Supply PP-109/GR or PP-112/GR	9 x 13 x 8	33
1	Radio Receiver R-110/GRC	9 x 13 x 7-1/4	35
1	Power Supply PP-281/GRC or PP-282/GRC	4-1/4 x 6 x 3	6
1	Control Group AN/GRA-6 (and accessories)	Not Available	96

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company level units organic to an infantry division.

INSTALLATION: Ground, vehicular, moving or at the halt.

APPROXIMATE RANGE (IN MILES): 10 - 15.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-7, -8; AN/MRC-5, -16; AN/PRC-9, -10; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -10, -15, -18, -22; AN/VRQ-2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-607, -608, -609, -610, -619, -628, -678. -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 38.0 - 54.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter 16 w on high power, 2 w on low power.
Receiving 1 w at loudspeaker, 50 mw at headphone terminals.

POWER REQUIREMENTS: From vehicular storage battery:

	12 v	24 v
Transmitting:	11.9	7.3 amp
Stand-by:	2.3	1.5 amp
Auxiliary receiver:	2.5	1.5 amp.

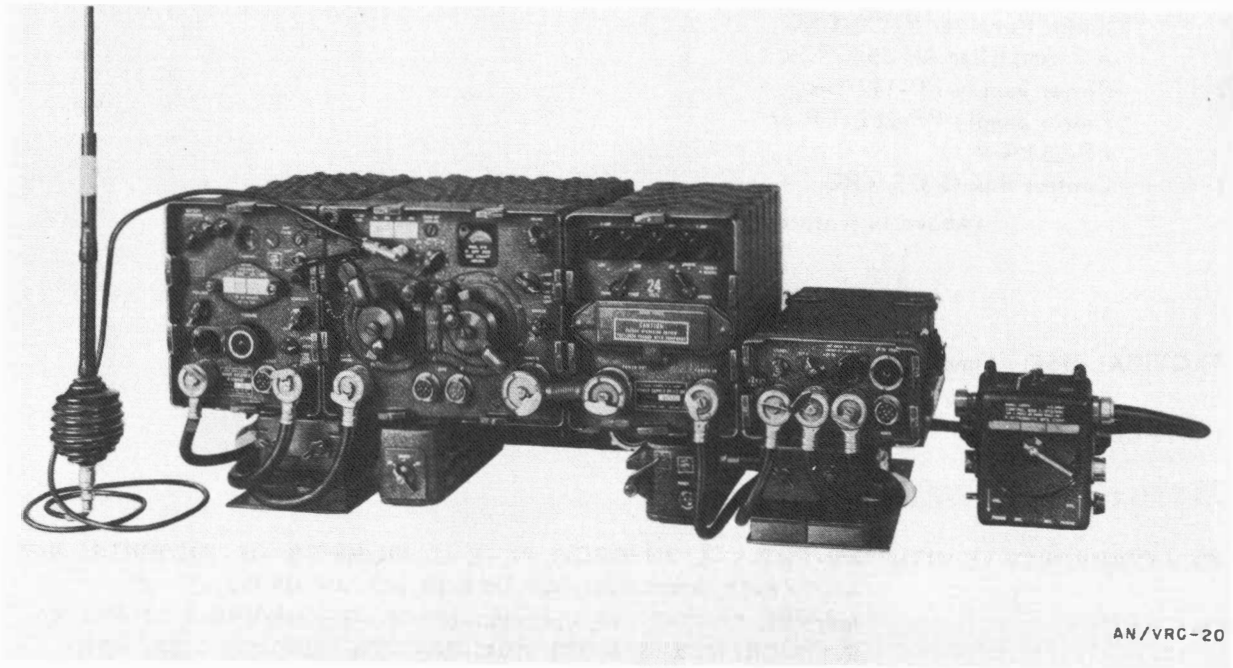
PHYSICAL CHARACTERISTICS

Radio Set AN/VRC-18 weighs 180 pounds net. Packed for export shipment: total weight 306 pounds, total volume 6.6 cu ft. Shipped in 3 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 24 Mar 52

AN/VRC-20

RADIO SET



Radio Set AN/VRC-20 is a vehicular, short-range, f-m (voice), radiotelephone equipment for communication within and between armored units and for liaison between armored and artillery units.

This equipment consists of the receiver-transmitter component designated as set 1 when used as part of such radio sets of the integrated series as Radio Sets AN/GRC-3 and AN/GRC-4, plus the auxiliary receiver component of these sets. Vehicular installation unit, power supply equipment, antenna, and control components are included.

AN/VRC-20

RADIO SET

INSTRUCTION LITERATURE: TM 11-642
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 24 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-66/GRC	Not Available	Not Available
1	Radio Receiver R-108/GRC	" "	" "
1	A-F Amplifier AM-65/GRC	" "	" "
1	Power Supply PP-112/GR	" "	" "
2	Power Supply PP-282/GR or PP-281/GR	" "	" "
1	Control Box C-375/VRC	" "	" "

(Above is tentative, nomenclature not yet definitely assigned).

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Armored and artillery units.

INSTALLATION: Vehicular.

APPROXIMATE RANGE (IN MILES): Short.

CAN COMMUNICATE WITH: AN/FRT-5, -6; AN/GRC-3, -4, -5, -6; AN/MRC-3, -16; AN/PRC-8, -9; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/URT-2, -3, -4; AN/VRC-5, -8, -9, -13, -14, -16, -17, -20, -21; AN/VRQ-1, -2; BC-787; R-137/GR; RBK; SCR-293, -294, -298, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 20.0 - 27.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 9 - 16 w.

POWER REQUIREMENTS: 12-v or 24-v storage battery.

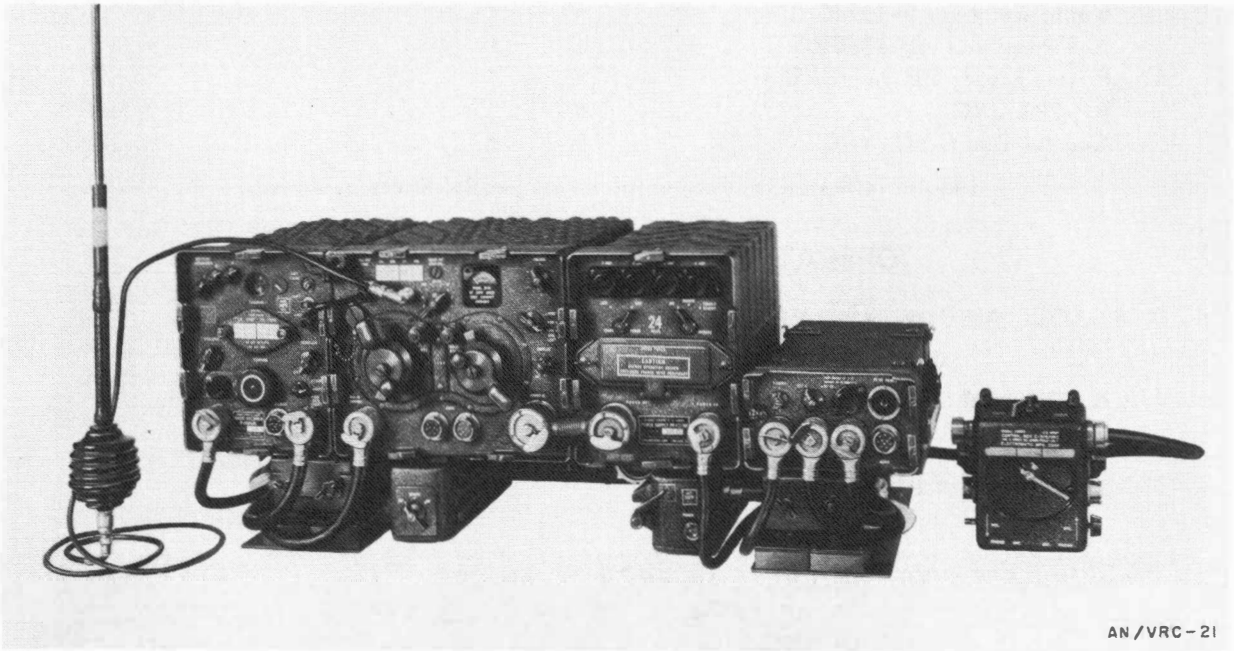
PHYSICAL CHARACTERISTICS

Information on Radio Set AN/VRC-20 not available.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 24 Mar 52

AN/VRC-21

RADIO SET



AN/VRC-21

Radio Set AN/VRC-21 is a vehicular, short-range, f-m (voice), radiotelephone equipment for communication within and between artillery units and for liaison between artillery, infantry, and armored units.

This equipment consists of the receiver-transmitter component designated as set 1 when used as part of such radio sets of the integrated series as Radio Sets AN/GRC-5 and AN/GRC-6, plus the auxiliary receiver component of these sets. Vehicular installation unit, power supply equipment, antenna, and control components are included.

AN/VRC-21

RADIO SET

INSTRUCTION LITERATURE: TM 11-642
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 24 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-67/GRC	Not Available	Not Available
1	Radio Receiver R-109/GRC	" "	" "
1	A-F Amplifier AM-65/GRC	" "	" "
2	Power Supply PP-281/GRC or	" "	" "
	PP-282/GRC	" "	" "
1	Control Box C-375/VRC	" "	" "

(Above is tentative, nomenclature not yet definitely assigned).

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Artillery, infantry, and armored units.

INSTALLATION: Vehicular

APPROXIMATE RANGE (IN MILES): Short.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-3, -4, -5, -6, -7, -8; AN/MRC-5, -16; AN/PRC-8, -9, -10; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -5, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-293, -294, -298, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27.0 - 38.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 9 - 16 w.

POWER REQUIREMENTS: 12-v or 24-v storage battery.

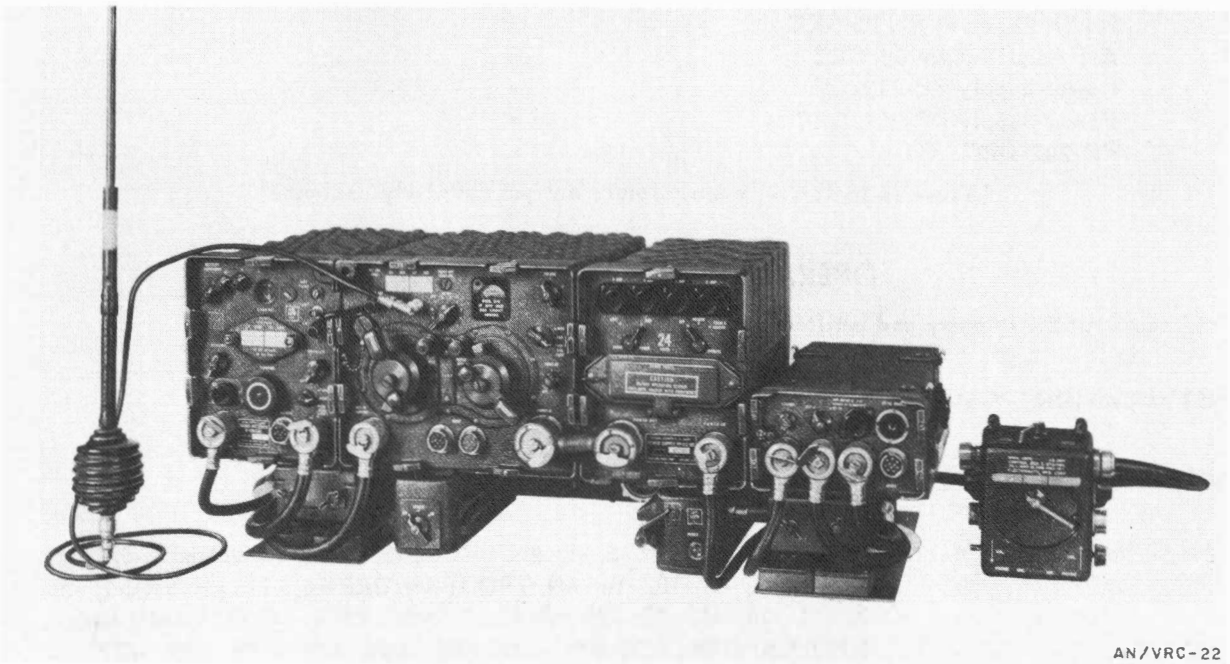
PHYSICAL CHARACTERISTICS

Information on Radio Set AN/VRC-21 not available.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 24 Mar 52

AN/VRC-22

RADIO SET



AN/VRC-22

Radio Set AN/VRC-22 is a vehicular, short-range, f-m (voice) radiotelephone equipment for communication within and between infantry units and for liaison between infantry and artillery units.

This equipment consists of the receiver-transmitter component designated as set 1 when used as part of such radio sets of the integrated series as Radio Sets AN/GRC-7 and AN/GRC-8, plus the auxiliary receiver component of these sets. Vehicular installation unit, interphone amplifier, power supply equipment, and antenna and accessory components are included.

AN/VRC-22

RADIO SET

INSTRUCTION LITERATURE: TM 11-642
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 24 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-68/GRC	Not Available	Not Available
1	Radio Receiver R-110/GRC	" "	" "
1	A-F Amplifier AM-65/GRC	" "	" "
1	Power Supply PP-112/GR	" "	" "
2	Power Supply PP-281/GRC or PP-282/GRC	" "	" "

(Above is tentative, nomenclature not yet definitely assigned).

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Infantry and artillery units.

INSTALLATION: Vehicular.

APPROXIMATE RANGE (IN MILES): Short.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-4, -5, -6, -7, -8; AN/MRC-5, -6; AN/PRC-6, -9, -10, -16; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -3, -7, -10, -15, -18, -22; AN/VRQ-2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-300, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 38.0 - 57.9
Receiver-Transmitter RT-68/GRC: 170 detented channels, two preselected channels, or continuous manual tuning.
Radio Receiver R-110/GRC: three preselected channels or continuous manual tuning.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

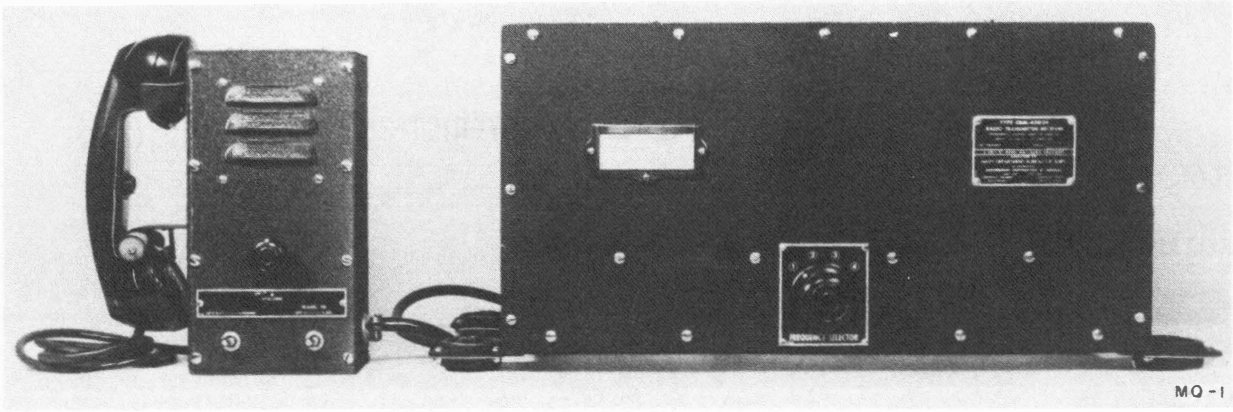
POWER OUTPUT: 9 - 16 w.

POWER REQUIREMENTS: 12-v or 24-v storage battery.

PHYSICAL CHARACTERISTICS

Information on Radio Set AN/VRC-22 not available.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 Apr 52	**AN/VRC-TYPE** SERVICE TYPE NUMBER: MQ-1 RADIOTELEPHONE EQUIPMENT



MQ-1

Radiotelephone Equipment MQ-1 is a general purpose, compact, low-power, m-f transmitter-receiver designed for two-way mobile radiotelephone communication.

Four preset crystal-controlled channels are provided in this transmitter-receiver, which are selected by a single control on the front panel.

Any simple single-wire antenna may be used with the MQ-1.

It has two self-contained, self-rectifying power supplies.

Remote control is provided, but does not include channel selection.

AN/VRC-TYPE	INSTRUCTION LITERATURE: NavShips 95144
MQ-1 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIOTELEPHONE EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter-Receiver CRM-43023 (6 v dc) or CRM-43024 (12 v dc)	10-3/8 x 23-5/8 x 13-7/8	40
1	Remote Control Unit CRM-23327	10-5/8 x 8-1/2 x 4	7

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Vehicular mobile communications.

INSTALLATION: Ground, vehicular.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, - 9/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -93/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 3.5.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

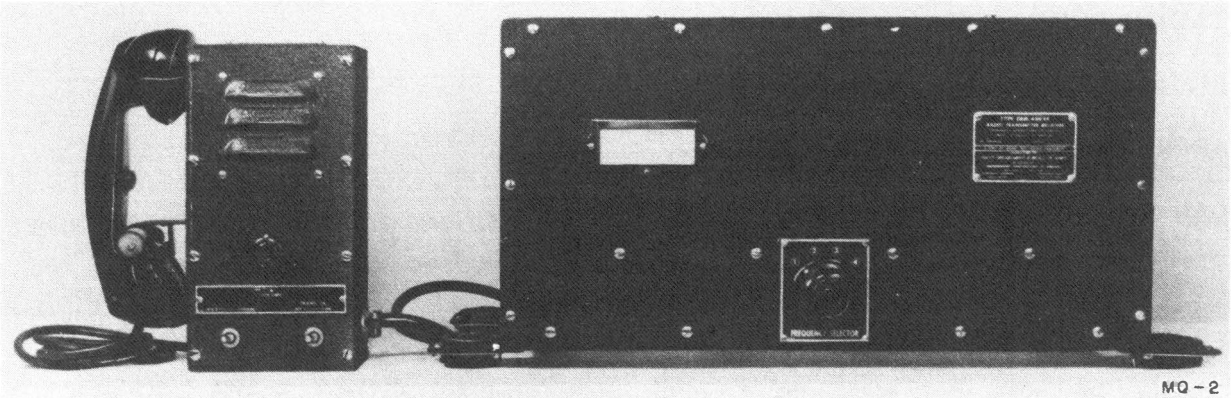
POWER OUTPUT: Transmitter: 5 w.
Receiver: 50 mw.

POWER REQUIREMENTS: 113 w, 6.3 v, dc; 151 w, 12.6 v, dc.

PHYSICAL CHARACTERISTICS

Radiotelephone Equipment MQ-1 measures 10-3/8 x 23-5/8 x 13-7/8 inches, net weight 75 pounds.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 Apr 52	**AN/VRC-TYPE** SERVICE TYPE NUMBER: MQ-2 RADIOTELEPHONE EQUIPMENT



MQ-2

Radiotelephone Equipment MQ-2 is a general purpose, compact, low-power, m-f transmitter-receiver designed for two-way mobile radiotelephone communication.

Four preset crystal-controlled channels are provided in this transmitter-receiver, which are selected by a single control on the front panel.

Any single-wire antenna may be used with the MQ-2.

AN/VRC-TYPE	INSTRUCTION LITERATURE: NavShips 95145
MQ-2 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIOTELEPHONE EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter-Receiver Unit CRM-43046	12-1/8 x 23-5/8 x 19-1/8	71

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Vehicular mobile communications.

INSTALLATION: Ground, vehicular.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -19; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -209/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -398/URR; RAL; RAO; RAS; RBB; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 19S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 3.5.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 5 w.
Receiver: 50 mw.

POWER REQUIREMENTS: 189 w, 6 v dc; 161 w, 115 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radiotelephone Equipment MQ-2 measures 12-1/8 x 23-5/8 x 18-1/8 inches, net weight 99 pounds.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 22 Jan 52

AN/VRC-TYPE

SERVICE TYPE NUMBER: SCR-193
RADIO SET



Radio Set SCR-193 is a medium-frequency a-m (voice and cw) field radio station used in command vehicles, by units at company, battalion, and division level.

This equipment consists essentially of general purpose Radio Transmitter BC-191 (with appropriate tuning units for frequency channels in which the set is operated), general purpose Radio Receiver BC-312, accessory items, and antenna components. The set is available in several models, each identified by model-letters indicating special application or design for the vehicle in which it is installed.

Radio Set SCR-193 is a vehicular application of primary operating components of Radio Sets SCR-177 and SCR-188.

Operates from vehicular storage battery and uses a whip-type antenna.

AN/VRC-TYPE	INSTRUCTION LITERATURE: TM 11-273
SCR-193 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO SET	USING SERVICE : Army
	DATE OF THIS SHEET : 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-191	21 x 23-1/8 x 9-1/2	55.75
3	Tuning Units (each)	7-3/4 x 16-3/4 x 8-3/4	46.5
1	Radio Receiver BC-312	18-3/4 x 18 x 9	58.0
1	Dynamotor Unit BD-77	11 x 11 x 7-1/2	37.3

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Engineer company, field artillery battalion, infantry division.

INSTALLATION: Ground, vehicular.

APPROXIMATE RANGE (IN MILES): 100.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -314, -339, -342, -344, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -608/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCO; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmitting: 1.5 - 6.2.
Receiving : 1.5 - 18.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice and cw.

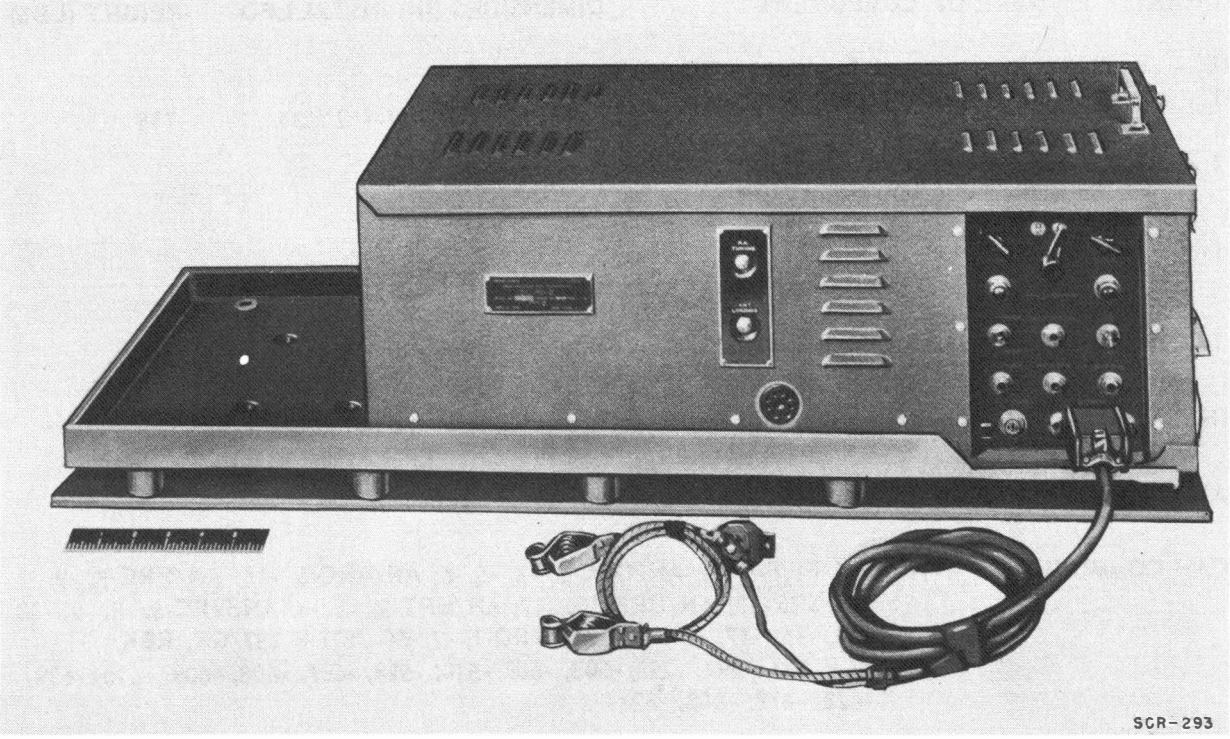
POWER OUTPUT: 75 w.

POWER REQUIREMENTS: Vehicular storage battery through BD-77.

PHYSICAL CHARACTERISTICS

Radio Set SCR-193 weighs 648 pounds net, volume 20 cu ft, 0.5 ship ton.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 30 Jan 52	**AN/VRC-TYPE** SERVICE TYPE NUMBER: SCR-293 RADIO SET



Radio Set SCR-293 is a vehicular short-range, medium-power, f-m (voice) equipment used in inclosed vehicles for two-way voice communication within and between armored units or between armored and infantry units.

This set consists of a receiver-transmitter plus an additional receiver (not shown in the illustration) mounted on a common shock mount and is powered by the storage battery of the vehicle in which it is installed. Radio Set SCR-293 is the 12-volt version, while the SCR-293-B is the 24- to 28-volt model of this equipment.

The additional receiver component Radio Receiver BC-499 mounted alone on the shock mount constitutes Radio Set SCR-294 (12 v) or SCR-294-B (24 v).

AN/VRC-TYPE

SCR-293 :SERVICE TYPE NUMBER

RADIO SET

INSTRUCTION LITERATURE: None

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army

DATE OF THIS SHEET: 30 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver and Transmitter BC-500)		
1	Radio Receiver BC-499)	Mounted: 12 x 14-1/2 x 34	115
1	Mounting FT-239)		
1	Antenna AN-42-A)		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Armored vehicles and command vehicles, infantry and armored divisions.

INSTALLATION: Ground, vehicular. Operates while moving or at the halt.

APPROXIMATE RANGE (IN MILES): 7 mi stationary, 15 mi maximum.

CAN COMMUNICATE WITH: AN/FRT-5, -6; AN/GRC-3, -4, -5, -6; AN/MRC-5, -16; AN/PRC-8, -9; AN/SRR-13; AN/URR-10, -12; AN/URT-2, -3, -4; AN/VRC-5, -8, -9, -13, -14, -16, -17, -20, -21; AN/VRQ-1, -2; BC-787; R-137/GR; RBK; SCR-293, -294, -298, -508, -509. -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 20 – 28; channels spaced 0.1mc apart; five preset channels.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice only.

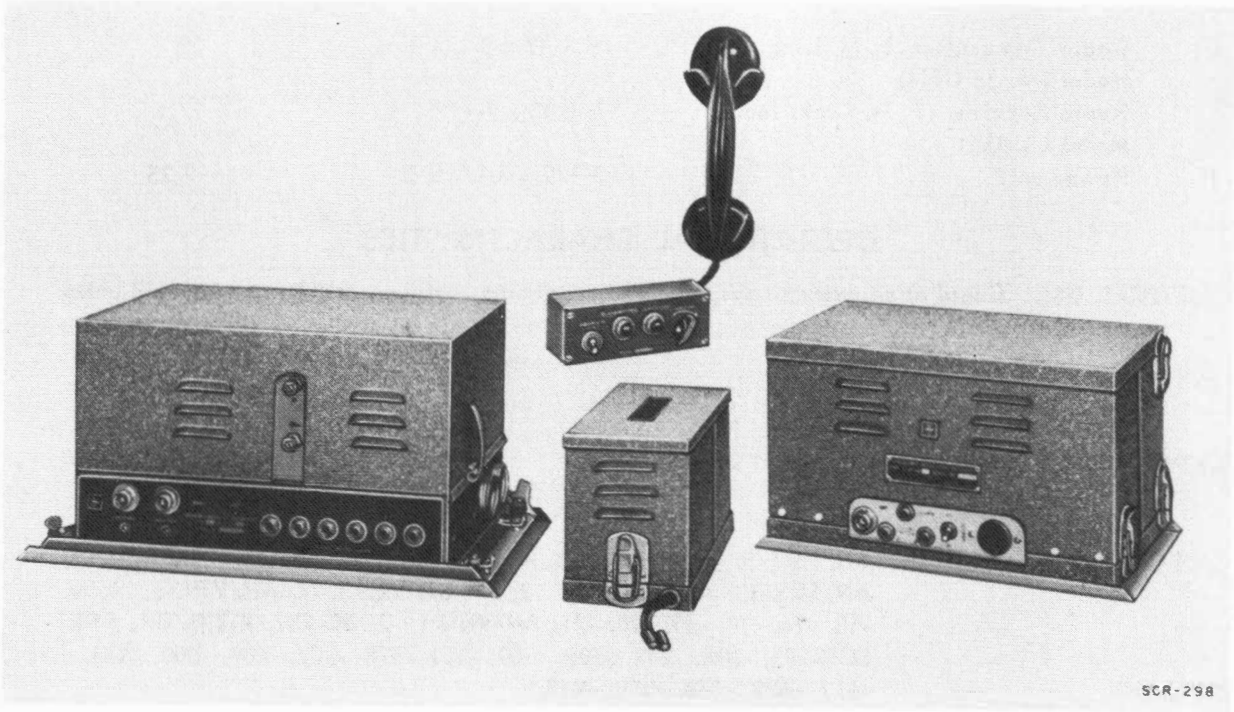
POWER OUTPUT: High: 25 w.
Low: 0.5 w.

POWER REQUIREMENTS: 12- or 24-v vehicular storage battery (depending upon model).

PHYSICAL CHARACTERISTICS

Information on Radio Set SCR-293 not available.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 22 Jan 52	**AN/VRC-TYPE** SERVICE TYPE NUMBER: SCR-298 RADIO SET



Radio Set SCR-298 is a vehicular, short-range, f-m (voice) transmitting and receiving equipment used by military police, security troops, and similar units.

This equipment is usually installed in the luggage carrier compartment of a vehicle and consists of a commercial police type radio receiver and transmitter with a power supply. The set is operated by means of a remote control unit installed in the driver's compartment.

Can be used to monitor or operate in radio communication nets serving field artillery or armored force. Operates on power derived from the battery of the vehicle in which it is installed.

AN/VRC-TYPE	INSTRUCTION LITERATURE: None
SCR-298 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO SET	USING SERVICE : Army, Navy
	DATE OF THIS SHEET : 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter (F. M. Link, Inc. Model No. 35 UFM)	9 X 17 x 8-1/4	29
1	Radio Receiver (F. M. Link, Inc. Model LL-UF)	9 x 13 x 7-1/2	17.5
1	Power unit	8-1/2 x 4-1/4 x 5	7.25

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Guard or security troops, armored or infantry division, artillery or armored units.

INSTALLATION: Ground, vehicular.

APPROXIMATE RANGE (IN MILES): 7 - 10.

CAN COMMUNICATE WITH: AN/FRT-5, -6; AN/GRC-3, -4, -5, -6; AN/MRC-5, -16; AN/PRC-8, -9; AN/SRR-13; AN/URR-10, -12; AN/URT-2, -3, -4; AN/VRC-5, -8, -9, -13, -14, -16, -17, -20, -21; AN/VRQ-1, -2; BC-787; R-137/GR; RBK; SCR-293, -294, -298, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 20 -28.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice only.

POWER OURPUT: 25 w.

POWER REQUIREMENTS: 6-v vehicular storage battery:
Transmitting: (32 amp).
Stand-by: (2.25 amp).

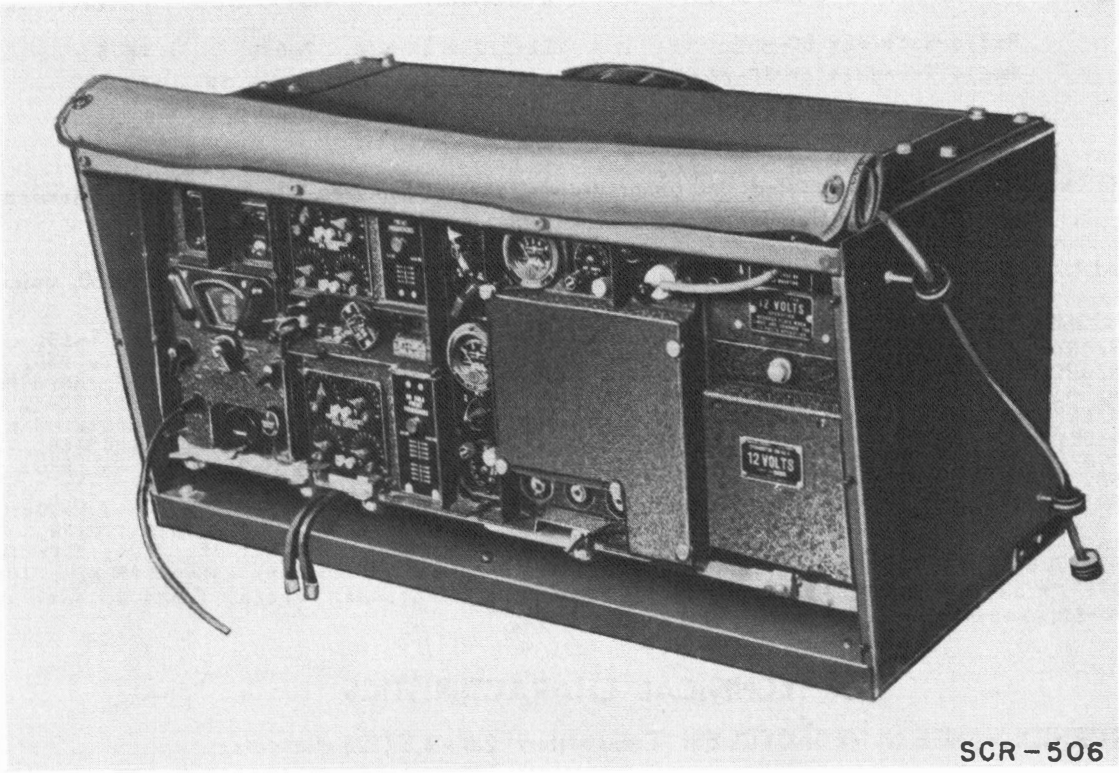
PHYSICAL CHARACTERISTICS

Radio Set SCR-298 weighs 75 pounds net. Packed for export shipment: total weight 185 pounds, total volume 15 cu ft.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 9 Jan 52

AN/VRC-TYPE

SERVICE TYPE NUMBER: SCR-506
RADIO SET



SCR-506

Radio Set SCR-506 is a medium power, a-m (voice) and cw, vehicular radio transmitting and receiving equipment used by motorized tactical units for ground-to-ground and ground-to-air communication in the medium frequency range.

This equipment consists of a radio transmitter and a radio receiver mounted on a vehicular shock mounting common to both, and includes antenna, cording and accessory items. It is usually installed in tanks, armored and amphibious vehicles, personnel carriers and similar vehicles, and has provision for rapidly adjusting, and operating over, any of five preselected channels.

Operates from the storage battery of the vehicle in which it is installed.

AN/VRC-TYPE

SCR-506 : SERVICE TYPE NUMBER

RADIO SET

INSTRUCTION LITERATURE: TM 11-630

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET: 9 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver BC-652	12-1/2 x 14-5/8 x 7-5/8	46.5
1	Radio Transmitter BC-653	12-1/2 x 14-5/8 x 25-19/32	143.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Infantry, armored, and armored-cavalry motorized elements. Air Force, Chemical Corps, artillery, infantry, Signal Corps, Army Security Agency.

INSTALLATION: Ground, vehicular. **APPROXIMATE RANGE (IN MILES):** cw - 50, voice - 20.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmitter: 2.0 - 4.5 (126 channels)
Receiver : 2.0 - 6.0 (201 channels, 2 bands)
Band 1: 2.0 - 3.5 (75 channels) Band 2: 3.5 - 6.0 (126 channels).

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice and cw.

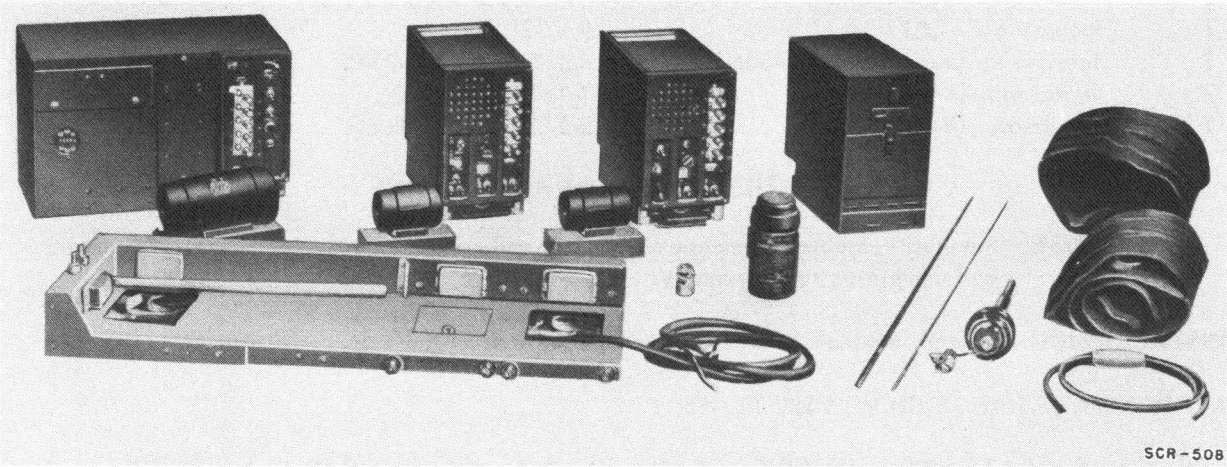
POWER OUTPUT: Transmitter: Cw 50 - 90 w
Voice 10 - 25 w.

POWER REQUIREMENTS: 12- or 24- v vehicular storage battery.

PHYSICAL CHARACTERISTICS

Radio Set SCR-506 measures 14-1/2 x 14-5/8 x 33 inches, net weight 357 pounds, volume 4.05 cu ft. Packed for domestic shipment: total volume 25 cu ft, 0.6 ship ton. Packed for export shipment: total weight 535 pounds, total volume 25 cu ft, 0.6 ship ton. Shipped in 4 packages both domestic and export.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 22 Jan 52	**AN/VRC-TYPE** SERVICE TYPE NUMBER: SCR-508 RADIO SET



Radio Set SCR-508 is a vehicular, medium-range, crystal-controlled, f-m (voice) radiotelephone equipment used by armored units.

This equipment consists of two receivers and one transmitter mounted on a common shock mount and provides a total of 20 receiving and 10 transmitting channels. It also provides for operation of the vehicular interphone system. Each receiver and the transmitter provide 80 frequency channels, 10 of which are preset, and are selected by means of push buttons mounted on the front panel of each. A whip-type vehicular antenna, set of crystals, and related accessories are included.

This set operates from power derived from the storage battery of the vehicle in which it is installed. The transmitter and each receiver has an individual dynamotor.

AN/VRC-TYPE	INSTRUCTION LITERATURE: TM 11-600
	CLASSIFICATION OF EQUIPMENT: Unclassified
SCR-508 :SERVICE TYPE NUMBER	USING SERVICE : Army, Navy
RADIO SET	DATE OF THIS SHEET : 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-604	11-1/2 x 10-1/4 x 18	67
2	Radio Receivers BC-603 (each)	11-1/2 x 6-3/4 x 12-1/2	35
1	Mounting FT-237	5 x 12 x 33	26
1	Interphone Control Box BC-606-H	4-1/2 x 2-1/4 x 4-1/4	1.8
2	Dynamotor DM -34 or 36 (each)	4-1/2 x 3 x 6-1/2	4.7
1	Dynamotor DM-35 or 37	5-1/2 x 4-1/2 x 8-1/4	9.2

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Armored vehicular elements of infantry and armored divisions. Cavalry squadron and amphibion tank company.

INSTALLATION: Ground, vehicular. Operates on the move or at the halt.

APPROXIMATE RANGE (IN MILES): 10 - 15.

CAN COMMUNICATE WITH: AN/FRT-5, -6; AN/GRC-3, -4, -5, -6; AN/MRC-3, -16; AN/PRC-8, -9; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/URT-2, -3, -4; AN/VRC-5, -8, -9, -13, -14, -16, -17, -20, -21; AN/VRQ-1, -2; BC-787; R-137/GR; RBK; SCR-293, -294, -298, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 20.0 - 27.9 (transmitter, 80 channels).

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 25 w.

POWER REQUIREMENTS:

Transmitter: 12-v vehicular battery through Dynamotor DM-35,
24-v vehicular battery through Dynamotor DM-37.

Receiver: 12-v vehicular battery through Dynamotor DM-34,
24-v vehicular battery through Dynamotor DM-36.

PHYSICAL CHARACTERISTICS

Radio Set SCR-508 packed for domestic or export shipment: total weight 710 pounds, total volume 31.6 cu ft, 0.75 ship ton. Shipped in 7 packages both domestic and export.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 22 Jan 52	**AN/VRC-TYPE** SERVICE TYPE NUMBER: SCR-510 RADIO SET



Radio Set SCR-510 is a pack and vehicular, short-range, low-power, f-m (voice), radiotelephone equipment used as a command set by field artillery, infantry, and armored units.

This equipment consists of a receiver-transmitter, power supply unit, and accessories. Provides 80 crystal-controlled channels spaced 100 kc apart, two of which can be preset.

Can be operated from a remote point over a telephone pair by means of standard remote control apparatus.

Operates on the ground from dry batteries in Case CS-79, and is then identical with Radio Set SCR-509.

AN/VRC-TYPE	INSTRUCTION LITERATURE: TM 11-605
	CLASSIFICATION OF EQUIPMENT: Unclassified
SCR-510 :SERVICE TYPE NUMBER	USING SERVICE : Army, Navy
RADIO SET	DATE OF THIS SHEET : 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver and Transmitter BC-620	6-3/4 x 13-3/16 x 14-15/16	27.20
1	Power Supply Unit PE-120, or Case CS-79	6 x 13-3/16 x 14-15/16	20.00

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Vehicular command set for field artillery, infantry and armored units. Cavalry squadron and ordnance battalion.

INSTALLATION: Ground, vehicular. Operates on the move or at the halt.

APPROXIMATE RANGE (IN MILES): 5.

CAN COMMUNICATE WITH: AN/FRT-5, -6; AN/GRC-3, -4, -5, -6; AN/MRC-3, -16; AN/PRC-8, -9; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/URT-2, -3, -4; AN/VRC-5, -8, -9, -13, -14, -16, -17, -20, -21; AN/VRQ-1, -2; BC-787; R-137/GR; RBK; SCR-293, -294, -298, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 20.0 - 27.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

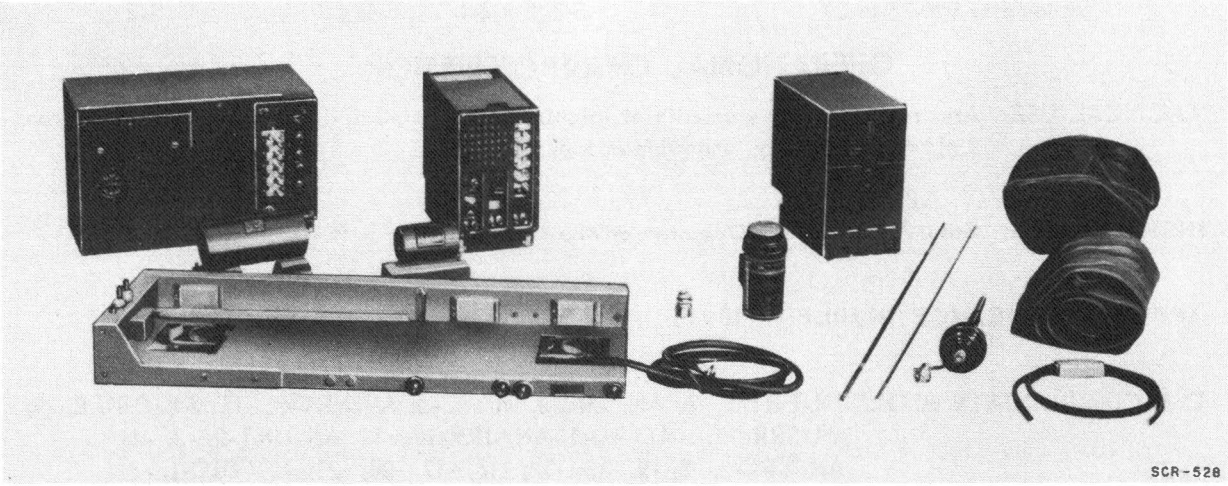
POWER OUTPUT: 1.8 w.

POWER REQUIREMENTS: For vehicular operation: 6- or 12-v vehicular storage battery, Battery BA-41, and Plate Supply Unit PE-97 or Power Supply Unit PE-120.

PHYSICAL CHARACTERISTICS

Radio Set SCR-510 packed for export shipment: total weight 235 pounds, total volume 12 cu ft.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 22 Jan 52	**AN/VRC- TYPE** SERVICE TYPE NUMBER: SCR-528 RADIO SET



Radio Set SCR-528 is a vehicular, short-range, crystal-controlled, f-m (voice), transmitting and receiving equipment used for radio communication by vehicles of armored units.

This equipment consists of a radio transmitter and radio receiver mounted on a shock mount common to both, dynamotors, antenna, and accessories. The transmitter and receiver operate on 10 preset channel frequencies which are selected by means of 10 push buttons on the front panels of these components. Set also provides for operation of the interphone system of inclosed armored vehicles.

The set operates from the storage battery of the vehicle in which the equipment is installed and can be provided with dynamotors for the voltage of the vehicular battery. Dynamotors are installed within the transmitter and the receiver components

AN/VRC- TYPE

SCR-528 : SERVICE TYPE NUMBER
RADIO SET

INSTRUCTION LITERATURE: TM 11-600
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army, Navy
DATE OF THIS SHEET: 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-604	11-1/2 x 10-1/4 x 18	67
1	Radio Receiver BC-603	11-1/2 x 6-3/4 x 12-1/2	35
1	Mounting FT-237	5 x 12 x 33	26
1	Interphone Control Box BC-606	4-1/2 x 2-1/4 x 4-1/4	1.8
1	Dynamotor DM-34 or 36	4-1/2 x 3 x 6-1/2	4.7
1	Dynamotor DM-35 or 37	5-1/2 x 4-1/2 x 8-1/4	9.2

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Armored vehicular elements ot intantry and armored divisions. Cavalry squadron, light tank company, amphibious tank company.

INSTALLATION: Ground, vehicular. Operates on the move ar at the halt.

APPROXIMATE RANGE (IN MILES): 10 -15.

CAN COMMUNICATE WITH: AN/FRT-5, -6; AN/GRC-3, -4, -5, -6; AN/MRC-3, -16; AN/PRC-8, -9; AN/SRR-13; AN/TRQ-1, AN/URR-10, -12; AN/URT-2, -3, -4; AN/VRC-5, -8, -9, -13, -14, -16, -17, -20, -21; AN/VRQ-1, -2; BC-787; R-137/GR; RBK; SCR-293, -294, -298, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

FREQUENCY RANGE IN MEGACYCLES: 20.0 - 27.9 at 0.1mc intervals (transmitter, 80 channels).

TECHNICAL CHARACTERISTICS

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 30 w.

POWER REQUIREMENTS:

Transmitter: 12-v vehicular battery through Dynamotor DM-35,
24-v vehicular battery through Dynamotor DM-37.

Receiver: 12-v vehicular battery through Dynamotor DM-34,
24-v vehicular battery through Dynamotor DM-36.

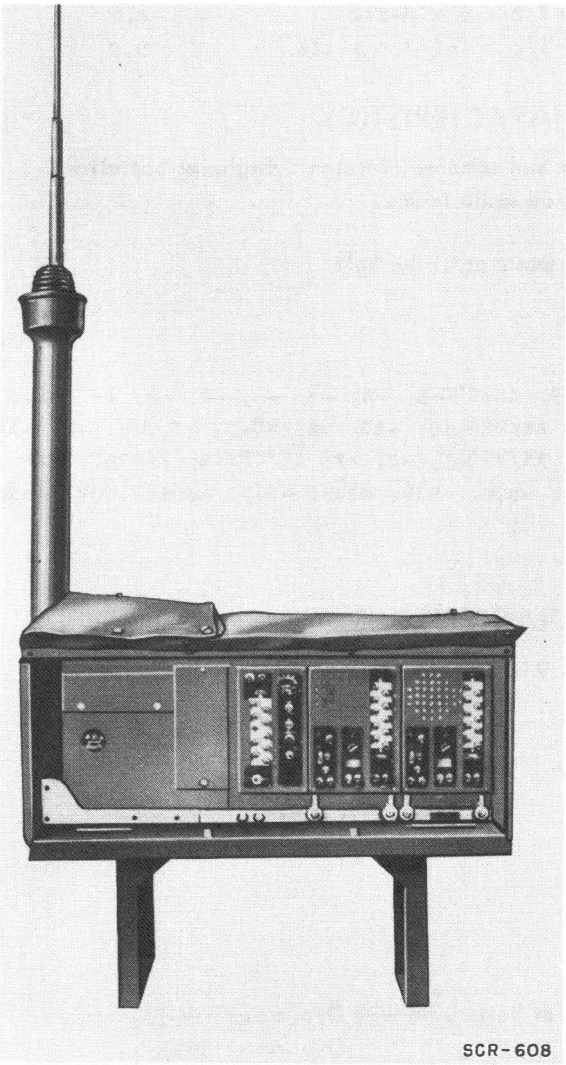
PHYSICAL CHARACTERISTICS

Radio Set SCR-528 packed for domestic or export shipment: total weight 645 pounds, total volume 29.6 cu ft, 0.75 ship ton. Shipped in 6 packages both domestic and export.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 30 Jan 52

AN/VRC-TYPE

SERVICE TYPE NUMBER: SCR-608
RADIO SET



SCR-608

Radio Set SCR-608 is a crystal-controlled, vehicular, short-range, low-power radiotelephone equipment used for f-m (voic e) communication in the frequency range assigned field artillery units.

This equipment consists essentially of two receivers and one transmitter, appropriate dynamotors, antenna components, and accessories.

The transmitter and each of the receivers provide 120 channel frequencies, 10 of which may be preset, in each case. Each of these components have on their respective front panels 10 push buttons for selecting frequency channels. There are thus provided 10 transmitting and 20 receiving channels.

This set provides for operation of the interphone equipment of the vehicle in which it is installed.

Through selection of appropriate dynamotors it can operate from 12- or 24-v vehicular storage batteries.

AN/VRC-TYPE

SCR-608 :SERVICE TYPE NUMBER
RADIO SET

INSTRUCTION LITERATURE: TM 11-620
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army, Navy
DATE OF THIS SHEET : 30 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-684	11-1/2 x 10-1/4 x 18	67.0
1	Mounting FT-237	5-1/2 x 13 x 33-5/8	44.0
2	Radio Receiver BC-683	11-1/2 x 6-3/4 x 12-1/2	35.0
2	Dynamotor DM-34	4-1/2 x 3 x 6-1/2	4.7
1	Dynamotor DM-35	5-1/2 x 4-1/2 x 8-1/4	9.2

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Field artillery elements of infantry and armored division. Engineer battalion, field artillery battery, military police radio teams.

INSTALLATION: Ground, vehicular, operates on the move or at the halt.

APPROXIMATE RANGE (IN MILES): 10 - 15.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-3, -4, -5, -6, -7, -8; AN/MRC-5, -16; AN/PRC-8, -9, -10; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -5, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-293, -294, -298, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27.0 - 38.9 in 120 channels.

TYPE MODULATION: Frequency modulated.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 20 w.

POWER REQUIREMENTS: Transmitter: 12-v vehicular battery through Dynamotor DM-35,
24-v " " " Dynamotor DM-37.
Receiver: 12-v " " " Dynamotor DM-34,
24-v " " " Dynamotor DM-36.

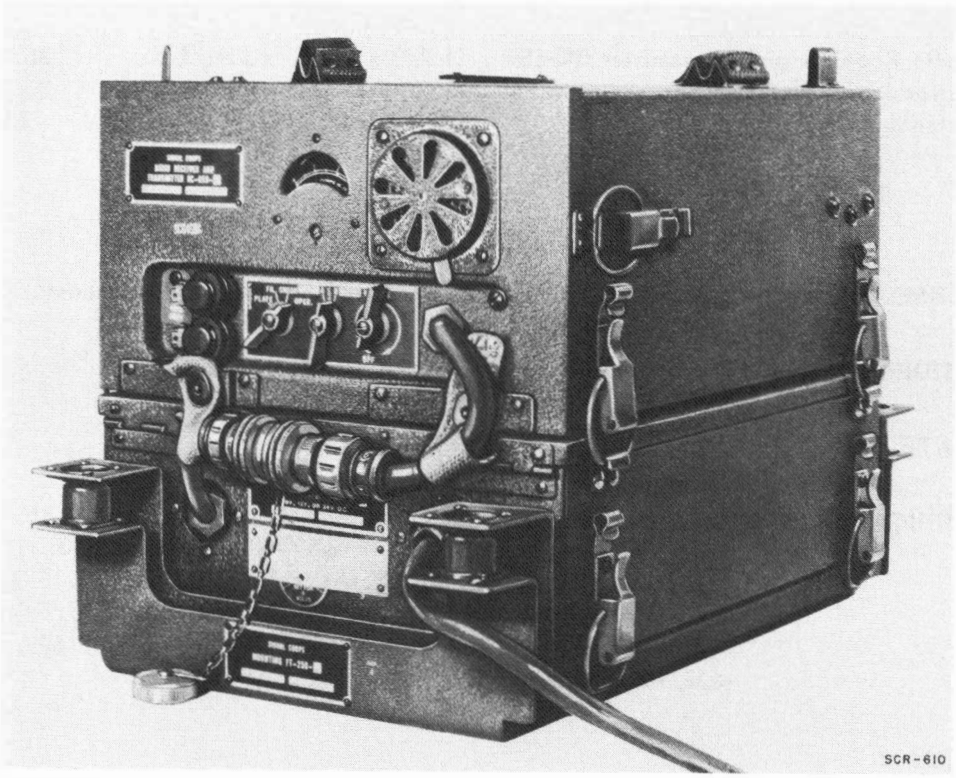
PHYSICAL CHARACTERISTICS

Radio Set SCR-608 packed for domestic or export shipment: total weight 660 pounds, total volume 31.6 cu ft, 0.75 ship ton. Shipped in 7 packages both domestic and export.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 22 Jan 52

AN/VRC-TYPE

SERVICE TYPE NUMBER: SCR-610
RADIO SET



Radio Set SCR-610 is a transportable and vehicular, short-range, low-power, f-m (voice) radiotelephone equipment used as a command set by field artillery units.

This equipment consists of a receiver-transmitter, power supply unit, and accessories. Provides 80 crystal-controlled channels spaced 100 kc apart, two of which can be preset. This equipment can be operated from a remote point over a telephone pair by means of standard remote control equipment. When operated on the ground from batteries (in Case CS-79) the equipment is identical with Radio Set SCR-609.

AN/VRC-TYPE	INSTRUCTION LITERATURE: TM 11-615
SCR-610 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO SET	USING SERVICE: Army, Navy
	DATE OF THIS SHEET: 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver and Transmitter BC-659	11-7/8 x 16-3/8 x 21-1/2	35.13
1	Power Supply Unit PE-120	8-7/8 x 16-1/2 x 18-7/8	33.8
1	Antenna AN-29	15-1/2 (collapsed)	2.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Engineer company, field artillery battery, and military police company.

INSTALLATION: Installed and operated in vehicles.

APPROXIMATE RANGE (IN MILES): 5.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-3, -4, -5, -6, -7, -8; AN/MRC-5,-16; AN/PRC-8, -9, -10; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -5, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-293, -294, -298, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27.0 – 38.9 (receiver and transmitter).

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

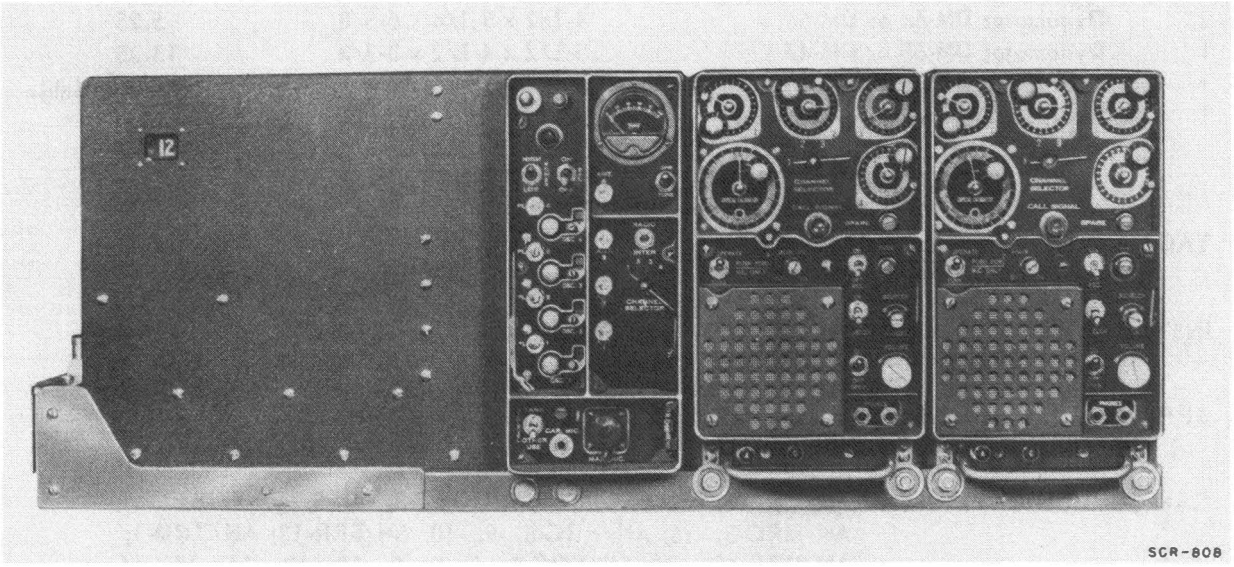
POWER OUTPUT: 1.3 w.

POWER REQUIREMENTS: Plate Supply Unit PE-117 from 6- or 12-v storage battery or Power Supply Unit PE-120 from 6-, 12-, or 24-v storage battery.

PHYSICAL CHARACTERISTICS

Radio Set SCR-610 packed for domestic shipment: total weight 248.5 pounds. Packed for export shipment: total weight 280 pounds, total volume 13.04 cu ft.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 31 Jan 52	**AN/VRC-TYPE** SERVICE TYPE NUMBER: SCR-808 RADIO SET



SCR-808

Radio Set SCR-808 is a vehicular, crystal-controlled, short-range, f-m (voice only) radiotelephone equipment used for coast artillery, military police, security, and similar operations.

This equipment uses a whip-type antenna and consists of a transmitter and two receivers installed on a common mount. It is capable of covering 120 channels spaced 100 kc apart, four of which are preset and are selected through a four-position selector switch.

This set is powered through an appropriate dynamotor by the 12- or 24- v storage battery of the vehicle in which it is installed.

AN/VRC-TYPE

SCR-808 : SERVICE TYPE NUMBER

RADIO SET

INSTRUCTION LITERATURE: TM 11-601

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army, Navy

DATE OF THIS SHEET : 31 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-924-A	11-1/2 x 10-1/2 x 18	49
2	Radio Receiver BC-923-A	11-1/2 x 12-3/4 x 6-3/4	42
2	Dynamotor DM-64 or DM-66	4-1/2 x 3-1/4 x 6-5/8	5.25
1	Dynamotor DM-65 or DM-47	5-1/2 x 4-1/2 x 8-3/4	13.25
1	Interphone Amplifier BC-692	Not Available	Not Available
1	Interphone Control Box BC-606	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Antiaircraft battery.

INSTALLATION: Vehicle.

APPROXIMATE RANGE (IN MILES): 15.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-3, -4, -5, -6, -7, -8; AN/MRC-5, -16; AN/PRC-8, -9, -10; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -5, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-293, -294, -298, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27.0 - 38.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 2 to 35 w.

POWER REQUIREMENTS: 12 / 24 v, dc.

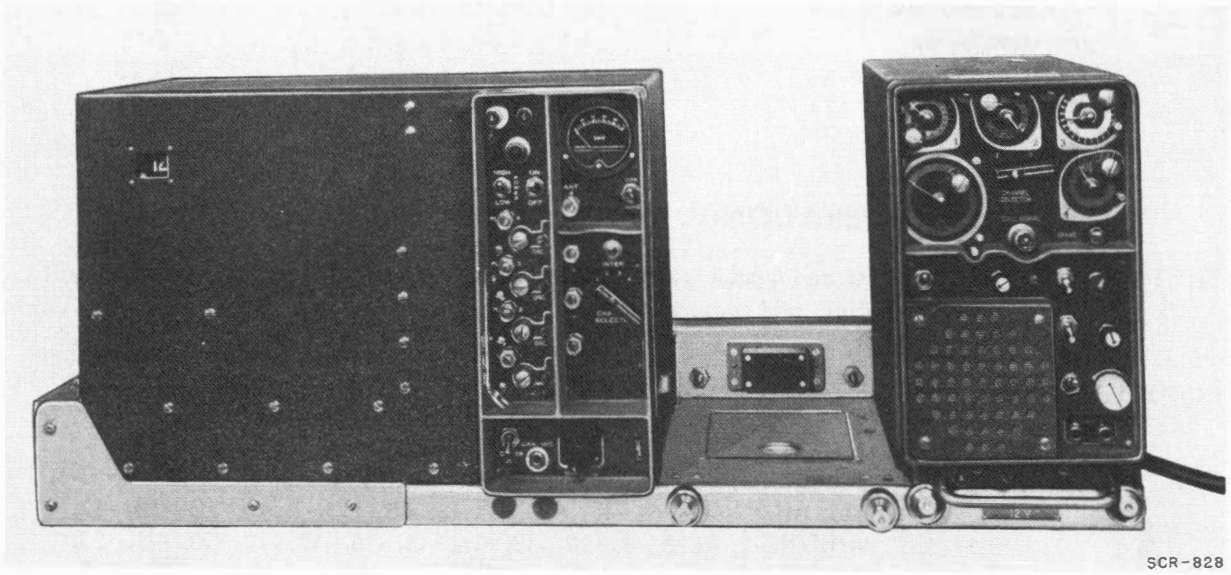
PHYSICAL CHARACTERISTICS

Radio Set SCR-808 weighs 373 pounds net. Packed for domestic shipment: total weight 533 pounds, total volume 28 cu ft. Shipped in 5 packages.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 28 Jan 52

AN/VRC-TYPE

SERVICE TYPE NUMBER: SCR-828
RADIO SET



SCR-828

Radio Set SCR-828 is a vehicular, v-h-f, short-range, f-m (voice), receiving and transmitting equipment used by coast artillery and military police units.

This equipment consists of a transmitter, a receiver installed on a common shock mount, and associated accessories. It operates on 120 channels, four of which are preset.

Set uses a whip-type vehicular antenna and has a crystal calibrator.

Power is obtained from the storage battery of the vehicle in which the equipment is installed, through appropriate dynamotors.

AN/VRC-TYPE	INSTRUCTION LITERATURE: TM 11-601
	CLASSIFICATION OF EQUIPMENT: Unclassified
SCR-828 :SERVICE TYPE NUMBER	USING SERVICE : Army
Radio Set	DATE OF THIS SHEET : 28 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-924-A	11-1/2 x 10-1/2 x 18	49
1	Radio Receiver BC-923-A	11-1/2 x 12-3/4 x 6-3/4	42
1	Dynamotor DM-64	4-1/2 x 3-1/4 x 6-5/8	5.25
1	Dynamotor DM-65	5-1/2 x 4-1/2 x 8-3/4	13.25
2	Mast Sections MS-117	39-1/2	0.66
2	Mast Sections MS-118	39-5/8	0.81

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Headquarters and headquarters battery, antiaircraft artillery, seacoast artillery; military police; and security troop units.

INSTALLATION: Ground, vehicular.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-3, -4, -5, -6, -7, -8; AN/MRC-5, -16; AN/PRC-8, -9, -10; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -5, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-293, -294, -298, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27.0 - 38.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: High: 30 to 35 w.

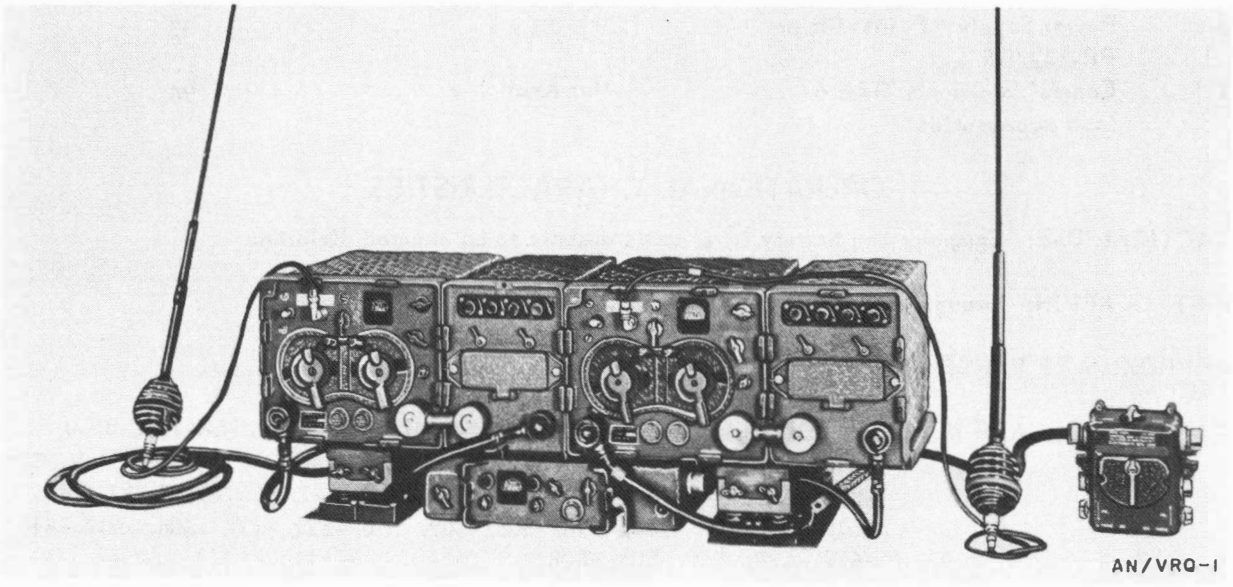
Low: 2 w.

POWER REQUIREMENTS: 12-v storage battery.

PHYSICAL CHARACTERISTICS

Radio Set SCR-828 packed for export shipment: total weight 373.5 pounds, total volume 18 cu ft.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 8 Jan 52	**AN/VRQ-1** RADIO SET



Radio Set AN/VRQ-1 is a short-range, vehicular, f-m (voice) equipment for point-to-point, retransmission, or radio relay communication within and between armored units or between armored and artillery units.

This set consists of two Receiver-Transmitters RT-66/GRC designated as set 1 when used as part of radio sets of the integrated series such as Radio Sets AN/GRC-3 and AN/GRC-4. Vehicular installation unit, power supply equipment, and control and accessory units are included.

This equipment can be operated by means of Control Group AN/GRA-6 from a remote point up to a distance of about 2 miles over a telephone pair.

AN/VRQ-1

RADIO SET

INSTRUCTION LITERATURE: TM 11-287
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Receiver-Transmitter RT-66/GRC	9 x 13 x 11-1/4	35
2	Power Supply PP-109/GR or PP-112/GR	9 x 13 x 8	33
1	Control Group AN/GRA-6 (and accessories)	Not Available	96

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company and battery level units organic to an armored division.

INSTALLATION: Ground, vehicular, moving or at the halt.

APPROXIMATE RANGE (IN MILES): 10 - 15.

CAN COMMUNICATE WITH: AN/FRT-5, -6; AN/GRC-3, -4, -5, -6; AN/MRC-3, -16; AN/PRC-8, -9; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/URT-2, -3, -4; AN/VRC-5, -8, -9, -13, -14, -16, -17, -20, -21; AN/VRQ-1, -2; BC-787, R-137/GR; RBK; SCR-293, -294, -298, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 20.0 - 27.9 (80 detented channels, two preselected channels, or continuous manual tuning at each RT-66/GRC).

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: (Each receiver-transmitter)

Transmitting:	High power	16 w
	Low power	2 w
Receiver:	Loudspeaker	1 w
	Headphone	50 mw

POWER REQUIREMENTS:

	12 v	24 v
From vehicular storage battery:		
Transmitting (each set):	11.9	(7.3 amp)
Stand-by (each set):	2.3	(1.5 amp)

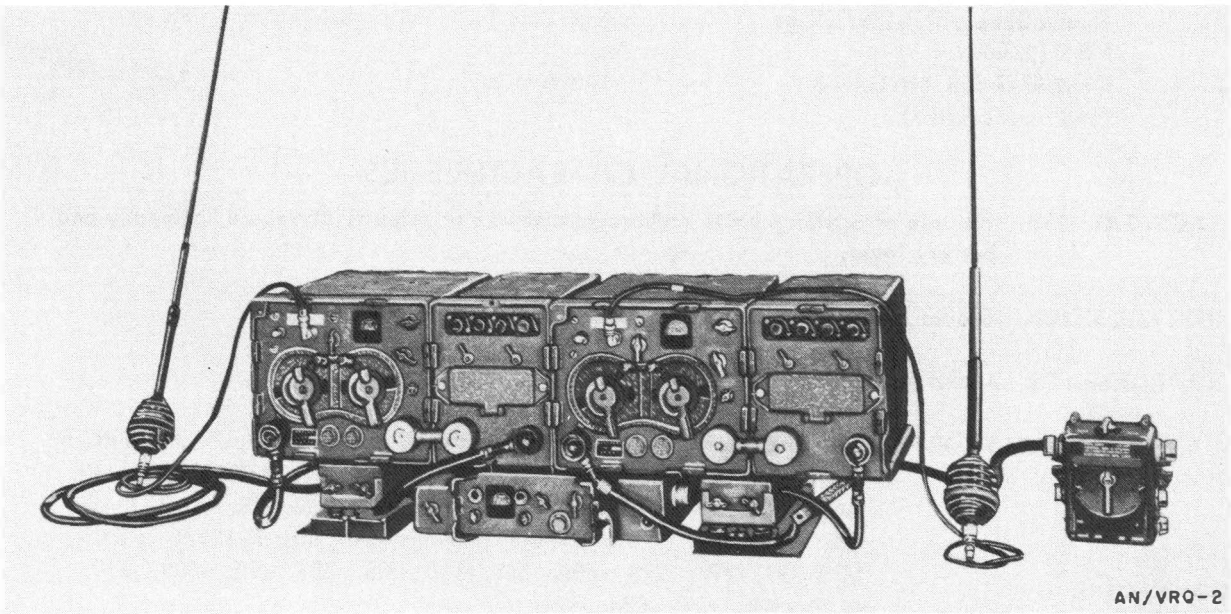
PHYSICAL CHARACTERISTICS

Radio Set AN/VRQ-1 packed for export shipment: total weight 427 pounds, total volume 8.4 cu ft. Shipped in 3 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

AN/VRQ-2

RADIO SET



AN/VRQ-2

Radio Set AN/VRQ-2 is a short-range, vehicular, f-m (voice) equipment for point-to-point, retransmission, or radio relay communication within and between artillery units or between artillery and armored or infantry units.

This set consists of two Receiver-Transmitters RT-67/GRC designated as set 1 when used as part of radio sets of the integrated series such as Radio Sets AN/GRC-5 and AN/GRC-6. Vehicular installation unit, power supply equipment, and control and accessory units are included.

This equipment can be operated by means of Control Group AN/GRA-6 from a remote point up to a distance of about 2 miles over a telephone pair.

AN/VRQ-2

RADIO SET

INSTRUCTION LITERATURE: TM 11-287
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Receiver-Transmitter RT-67/GRC	9 x 13 x 11-1/4	35
2	Power Supply PP-109/GR or PP-112/GR	9 x 13 x 8	33
1	Control Group AN/GRA-6 (and accessories)	Not Available	96

OPERATIONAL CHARACTERISTICS

TACTICAL USE: For use of artillery units organic to airborne or infantry divisions, company and battery level.

INSTALLATION: Ground, vehicular, moving or at the halt.

APPROXIMATE RANGE (IN MILES): 10 - 15.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-3, -4, -5, -6, -7, -8; AN/MRC-5, -16; AN/PRC-8, -9, -10; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -5, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-293, -294, -298, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27.0 - 38.9 (120 detented channels, two preselected channels, or continuous manual tuning at each RT-67/GRC).

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: (Each receiver-transmitter)

Transmitting:	High power	16 w
	Low power	2 w
Receiver:	Loudspeaker	1 w
	Headphone	50 mw

POWER REQUIREMENTS:

	12 v	24 v
From vehicular storage battery:		
Transmitting (each set):	11.9	(7.3 amp)
Stand-by (each set):	2.3	(1.5 amp)

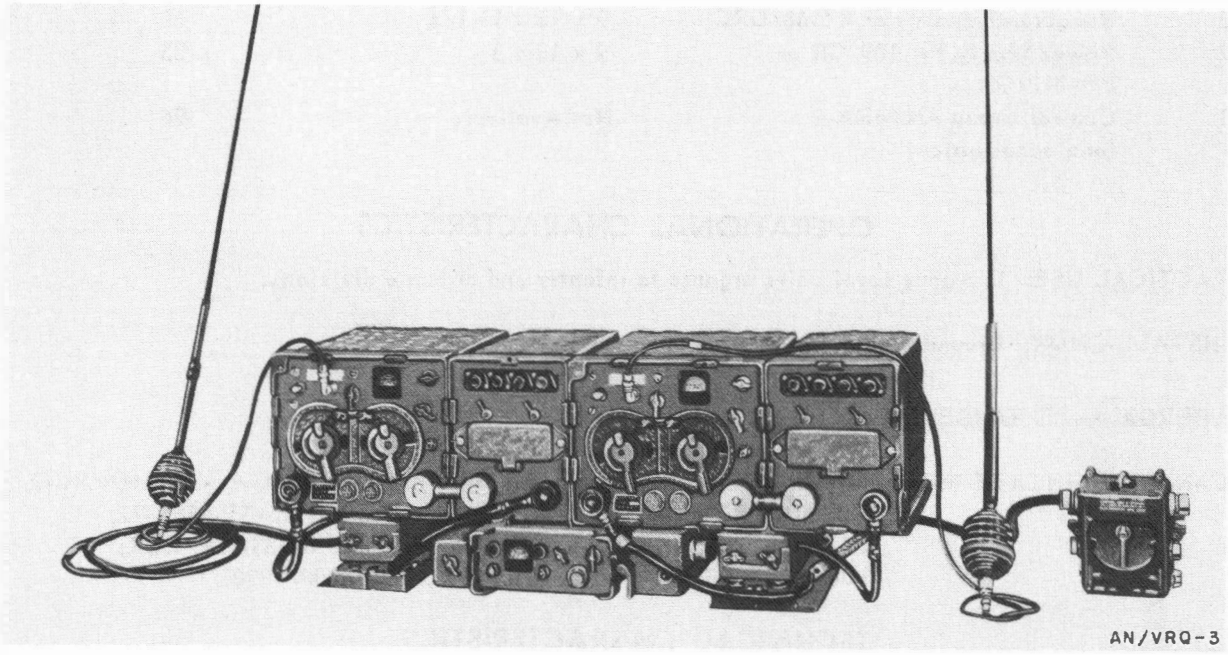
PHYSICAL CHARACTERISTICS

Radio Set AN/VRQ-2 packed for export shipment: total weight 427 pounds, total volume 8.4 cu ft. Shipped in 3 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

AN/VRQ-3

RADIO SET



Radio Set AN/VRQ-3 is a short-range, vehicular, f-m (voice) equipment for point-to-point, retransmission, or radio relay communication within and between infantry units and between artillery and infantry units.

This set consists of two Receiver-Transmitters RT-68/GRC designated as set 1 when used as part of radio sets of the integrated series such as Radio Sets AN/GRC-7 and AN/GRC-8. Vehicular installation unit, power supply equipment, and control and accessory units are included.

This equipment can be operated by means of Control Group AN/GRA-6 from a remote point up to a distance of about 2 miles over a telephone pair.

AN/VRQ-3

RADIO SET

INSTRUCTION LITERATURE: TM 11-287
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Receiver-Transmitter RT-68/GRC	9 x 13 x 11-1/4	35
2	Power Supply PP-109/GR or PP-112/GR	9 x 13 x 8	33
1	Control Group AN/GRA-6 (and accessories)	Not Available	96

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company level units organic to infantry and airborne divisions.

INSTALLATION: Ground, vehicular, moving or at the halt.

APPROXIMATE RANGE (IN MILES): 10 - 15.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-7, -8; AN/MRC-5, -16; AN/PRC-9, -10; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -10, -15, -18, -22; AN/VRQ-2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 38.0 - 54.9 (170 detented channels, two preselected channels, or continuous manual tuning at each RT-68/GRC).

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: (Each receiver-transmitter)

Transmitting:	High power	16 w
	Low power	2 w
Receiver:	Loudspeaker	1 w
	Headphones	50 mw.

POWER REQUIREMENTS:

	12 v	24 v
From vehicular storage battery:		
Transmitting (each set):	11.9	(7.3 amp)
Stand-by (each set):	2.3	(1.5 amp).

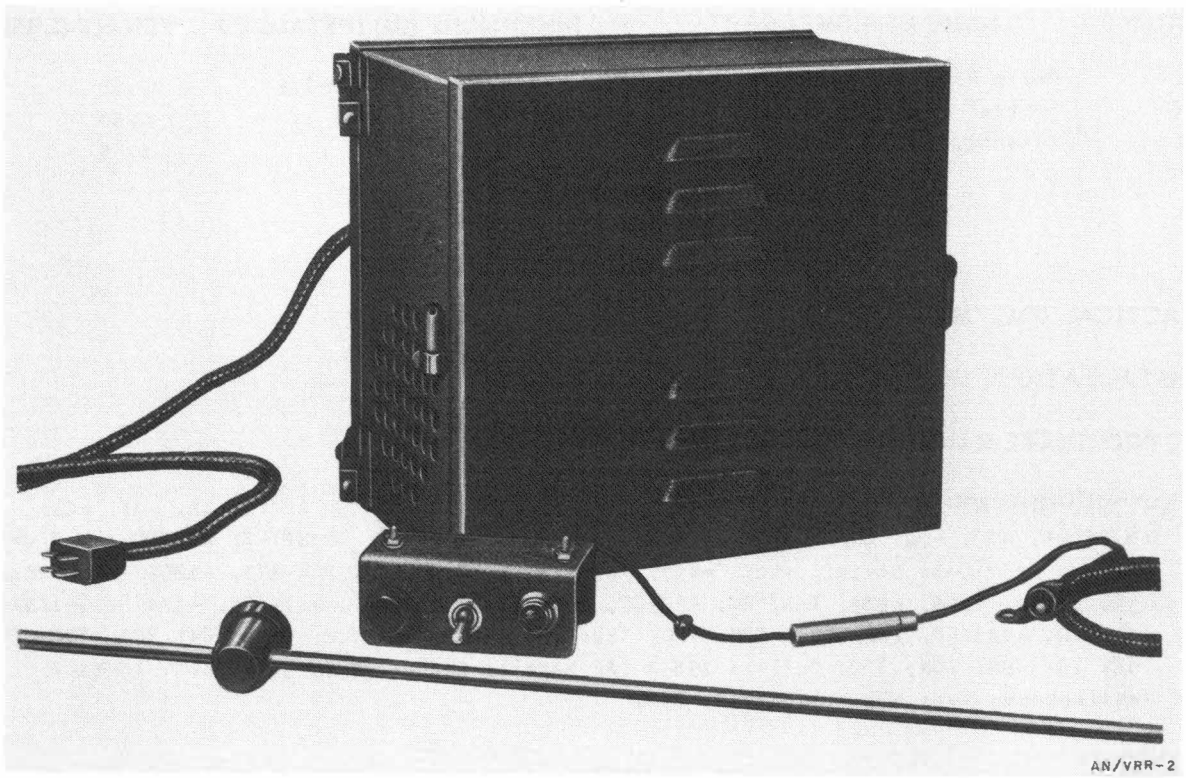
PHYSICAL CHARACTERISTICS

Radio Set AN/VRQ-3 packed for export shipment: total weight 427 pounds, total volume 8.4 cu ft. Shipped in 3 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 11 Jan 52

AN/VRR-2

RADIO RECEIVING SET



Radio Receiving Set AN/VRR-2 is a vehicular, single fixed-frequency, a-m (voice), medium range, receiving equipment used in traffic control, monitoring, and similar applications by military police, guard, and security troops.

This equipment consists essentially of a commercial (KAAR Type 11X) police-type radio receiver and associated components. The radio receiver, which has an integral loudspeaker, is designed to be installed under the dashboard or instrument panel of the vehicle, with the control unit at the driver's position.

Control of volume, power, and squelch circuit is provided. A vehicular-type antenna is included.

Operates from a 6-v vehicular storage battery.

AN/VRR-2

RADIO RECEIVING SET

INSTRUCTION LITERATURE: TM 11-888
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 11 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver KAAR Type 11X	9-1/4 x 9-3/8 x 11-7/8	17.00
1	Control Unit KAAR Type K-SR1	2 x 2-5/8 x 4	0.50
1	Antenna, Cable, Spare Parts, etc.	Not Available	6.75

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Military police and security troops.

INSTALLATION: Ground, vehicular, moving or at the halt.

APPROXIMATE RANGE (IN MILES): Short.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/FRT-15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-4; BC-191, -401, -447, -610; MBS; MQ; RC-52; SCR-177, -188, -193, 281, -399, -499, -506, -543; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBK; TBL; TBM; TBO; TBU; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; Collins 18S-4 (AF Model); Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.6 - 2.9.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone.

POWER OUTPUT: Nominal; integral loudspeaker.

POWER REQUIREMENTS: (4.5 amp) at 6 v from vehicular storage battery.

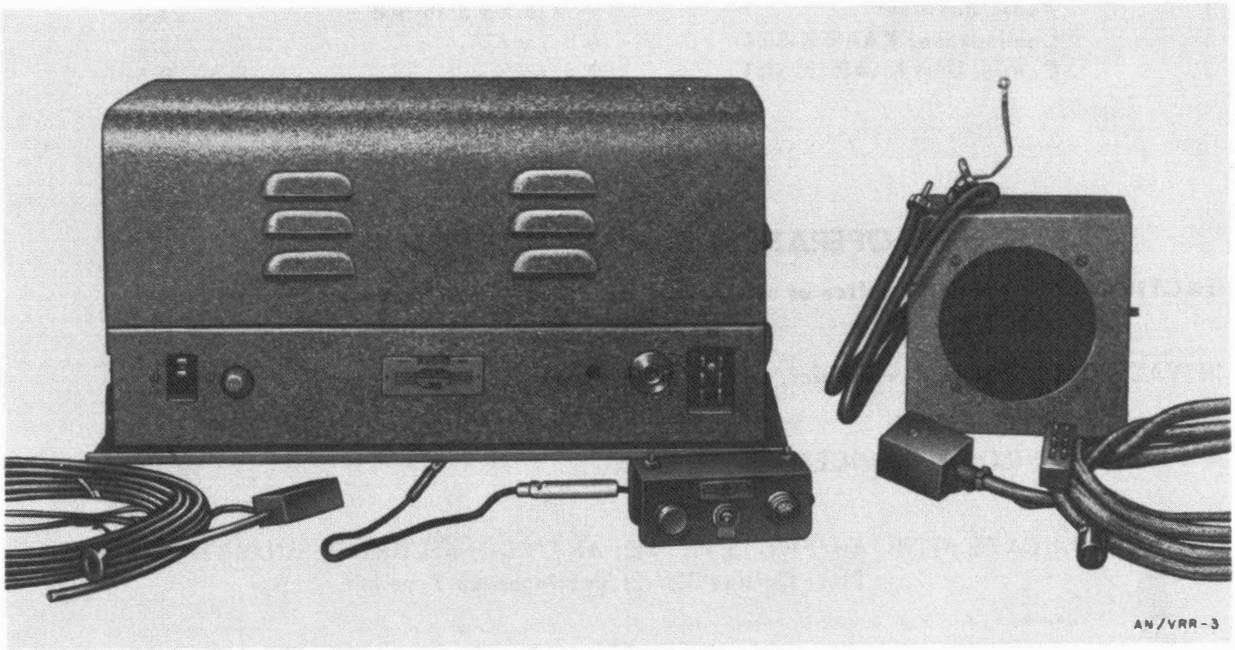
PHYSICAL CHARACTERISTICS

Radio Receiving Set AN/VRR-2 weighs 42 pounds net, volume 3 cu ft.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 31 Jan 52

AN/VRR-3

RADIO RECEIVING SET



Radio Receiver AN/VRR-3 is a vehicular, a-m (voice and tone) receiving equipment which operates on a single fixed frequency channel for traffic control, monitoring, and communication, by military police, security troops, and similar units at division and higher headquarters.

This equipment consists, essentially, of a commercial (KAAR) police-type, 10-tube superheterodyne radio receiver designed for installation in the luggage compartment of a patrol car with the loud-speaker and control head installed adjacent to the driver. Provides control of power, volume and squelch circuit from the driver's position. Cables, cords, and antenna are included.

It operates from the storage battery of the vehicle in which it is installed.

AN/VRR-3	INSTRUCTION LITERATURE: TM 11-887
	CLASSIFICATION OF EQUIPMENT: Unclassified
	USING SERVICE : Army
RADIO RECEIVING SET	DATE OF THIS SHEET: 31 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver	9-3/16 x 9 x 18-5/8	23.0
1	Loudspeaker KAAR K-SR1	6 x 3 x 6	3.0
1	Control Unit KAAR K-SR1	2 x 2-5/8 x 4	0.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Military police or security troops, division and higher headquarters.

INSTALLATION: Ground, vehicular, moving or at the halt.

APPROXIMATE RANGE (IN MILES): 5 - 10.

CAN COMMUNICATE WITH: AN/FRT-15, -17, -18; AN/TRQ-1; AN/URT-10; AN/VRT-1; T-173/FR; TBY; Collins 32V-2; Westinghouse Type MW.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 30 - 40 fixed, crystal-controlled.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone.

POWER OUTPUT: Nominal, 6-inch loudspeaker.

POWER REQUIREMENTS: (6 amp) from 6-v storage battery.

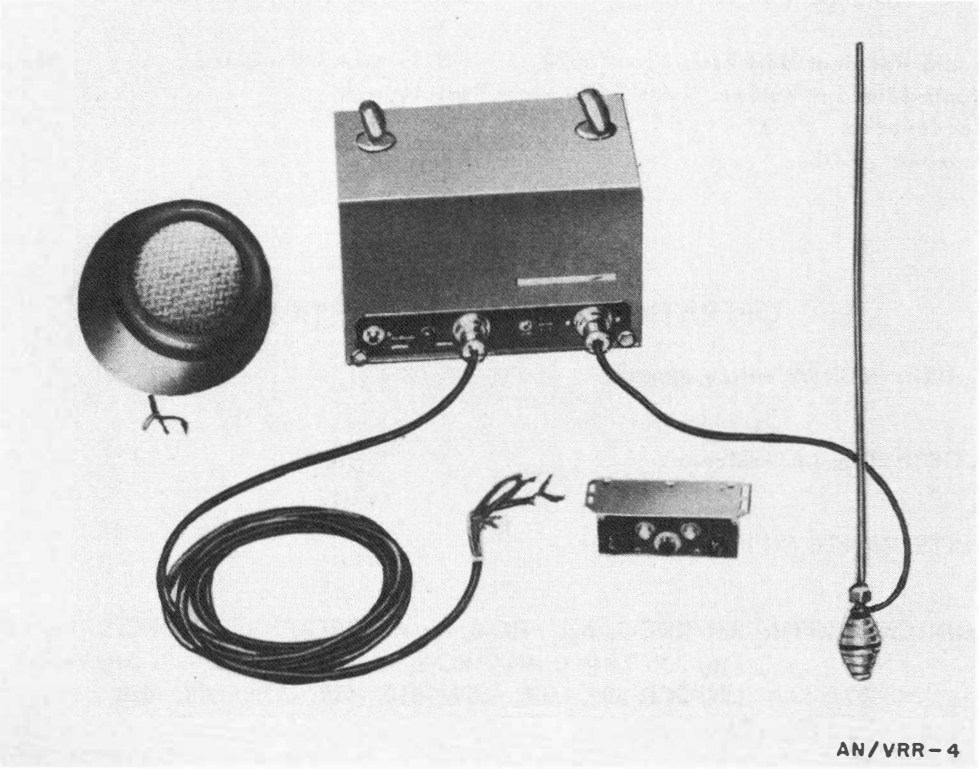
PHYSICAL CHARACTERISTICS

Radio Receiver Set AN/VRR-3 weighs 63 pounds net, volume 3.1 cu ft.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 15 Feb 52

AN/VRR-4

RADIO RECEIVING SET



AN/VRR-4

Radio Receiving Set AN/VRR-4 is a vehicular, short-range, f-m, fixed frequency, crystal-controlled radio receiver used by military police, guard, and security troops for traffic control and similar communication in the v-h-f band.

This equipment consists essentially of a commercial (Galvin FMR-13 v) police car radio receiver and loudspeaker, plus accessories.

This set is composed of the receiver components of Radio Set AN/VRC-2 and uses a whip-type vehicular antenna. It is powered by the storage battery of the vehicle in which it is installed.

AN/VRR-4

RADIO RECEIVING SET

INSTRUCTION LITERATURE: None
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 15 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver Unit FMR-13v (P8028)	9-5/16 x 14-3/4 x 9-1/2	Not Available
1	Control Head w/cables P-8022 (Galvin)	Not Available	" "
1	Loudspeaker P-327	" "	" "
1	Antenna P-253	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Military police, guards.

INSTALLATION: Ground, vehicular.

APPROXIMATE RANGE (IN MILES): Short.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-7, -8; AN/MRC-5, -16; AN/PRC-9, -10; AN/TRQ-1; AN/VRC-2, -3, -10, -15, -18, -22; AN/VRQ-2, -3; MAN; MN; SCR-300, -608, -609, -610, -619, -628, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 30 -40.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER REQUIREMENTS: (8 amp) at 6 v (storage battery).

PHYSICAL CHARACTERISTICS

Information on Radio Receiving Set AN/VRR-4 not available.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 15 Feb 52	AN/VRR-TYPE SERVICE TYPE NUMBER: SCR-294 RADIO SET



Radio Set SCR-294 is a vehicular, short-range, f-m (voice) radio receiving equipment used in armored vehicles. It is also part of Radio Set SCR-293 and is used as the "additional" receiver component of that equipment.

This equipment consists essentially of a single radio receiver and a shock mount. The receiver is capable of operating on five channels spaced 100 kc apart.

Radio Set SCR-294 is the 12-v model of this equipment; Radio Set SCR-294-B is the 24-v model.

Power is supplied by the battery of the vehicle in which the equipment is installed.

AN/VRR- TYPE	INSTRUCTION LITERATURE: None
SCR-294 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO SET	USING SERVICE : Army
	DATE OF THIS SHEET : 15 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver BC-499	9 x 9-1/2 x 12-1/4	19
1	Mounting FT-239	12-1/2 x 34-1/2 x 2-1/2	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Armored vehicles of infantry and armored divisions.

INSTALLATION: Ground, vehicular. Operates on the move or at the halt.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/FRT-5, -6; AN/GRC-3, -4, -5, -6; AN/MRC-5, -16; AN/PRC-8, -9; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-5, -8, -9, -13, -14, -16, -17, -20, -21; AN/VRQ-1, -2; SCR-293, -298, -508, -509, -510, -528, -608, -609, -610, -619, -628, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 20.0 - 27.9: channels spaced 0.1mc apart.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice only.

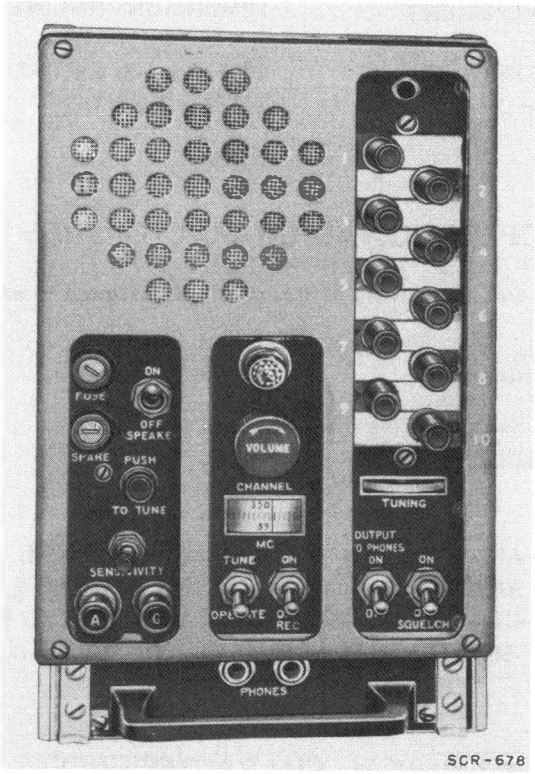
POWER OUTPUT: 0.5 (nominal) w.

POWER REQUIREMENTS: 12 v or 24 v dc (depending upon model).

PHYSICAL CHARACTERISTICS

Radio Set SCR-294 weighs 50 pounds net, volume 2.6 cu ft. Packed for domestic shipment: total weight 200 pounds.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 31 Jan 52	**AN/VRR-TYPE** SERVICE TYPE NUMBER: SCR-678 RADIO SET



Radio Set SCR-678 is a short-range, low-power, vehicular, f-m (voice) receiving equipment used for monitoring, intercept, and communication in the h-f band.

This equipment consists essentially of the radio receiver component of Radio Set SCR-608, plus a vehicular-type shock mount and related accessories. It operates on 10 crystal-controlled preset frequencies selected by means of push buttons arranged on the front panel. Uses a whip-type vehicular antenna.

Set is powered through an appropriate dynamotor mounted within the receiver and uses the storage battery (12 or 24 v) of the vehicle in which it is installed.

AN/VRR-TYPE	INSTRUCTION LITERATURE: TM 11-4036 (Receiver BC-683 Repair Instructions)
SCR-678 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO SET	USING SERVICE : Army
	DATE OF THIS SHEET : 31 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver BC-683	11-1/2 x 6-3/4 x 12-1/2	35
1	Dynamotor DM-34 or DM-36	4-1/2 x 3 x 6-1/2	4.7

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Reception and monitoring of frequencies assigned to artillery units.

INSTALLATION: Ground, vehicular.

APPROXIMATE RANGE (IN MILES): 15.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-3, -4, -5, -6, -7, -8; AN/MRC-5, -16; AN/PRC-8, -9, -10; AN/TRQ-1; AN/VRC-2, -5, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; MAN; MN; SCR-293, -298, -508, -509, -510, -528, -608, -609, -610, -619, -628, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27.0 - 38.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 2 w.

POWER REQUIREMENTS: 12 v dc or 24 v dc (depending on power supply).

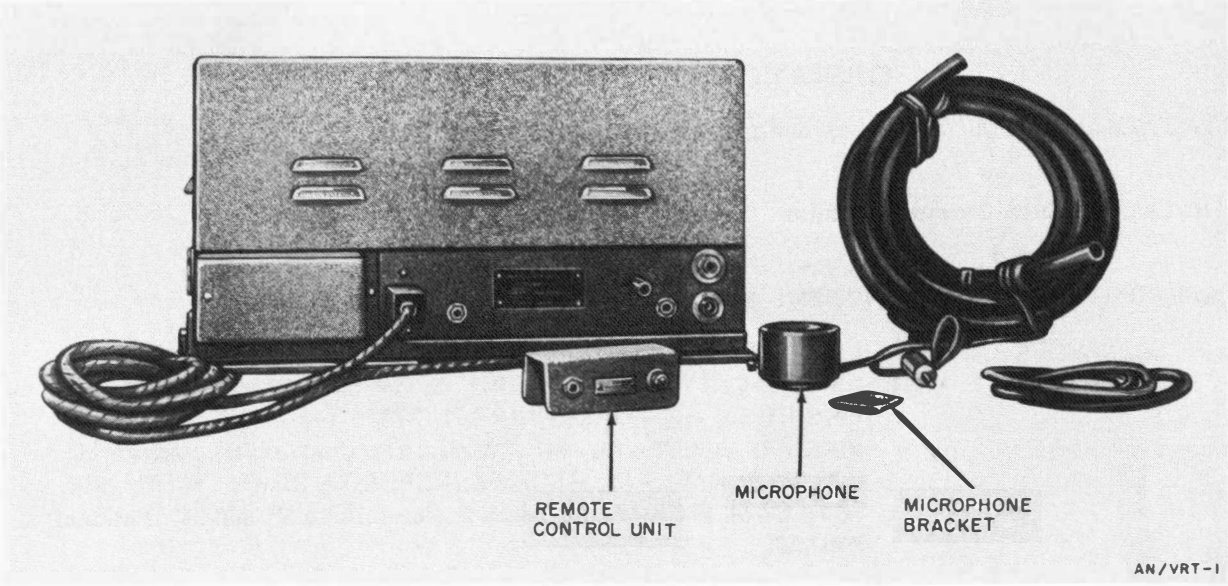
PHYSICAL CHARACTERISTICS

Radio Set SCR-678 measures 11-1/2 x 6-3/4 x 12-1/2 inches, net weight 40 pounds, volume 0.5 cu ft.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 11 Jan 52

AN/VRT-1

RADIO TRANSMITTING SET



Radio Transmitting Set AN/VRT-1 is a vehicular, short-range, high frequency, a-m (voice) equipment for use of military police, security troops, and similar units.

This equipment consists of a "police-type" radio transmitter and includes microphone, operator's remote control unit, and accessories permitting installation of the transmitter in the trunk of the vehicle or other convenient location. It uses a whip-type vehicular antenna.

It operates from the 6-volt battery of the vehicle in which it is installed. When operated from vehicular storage batteries of higher voltage appropriate current-modifying equipment must be added.

AN/VRT-1

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: TM 11-842
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 11 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Military police and security troops.

INSTALLATION: Ground, vehicular.

APPROXIMATE RANGE (IN MILES): 5.

CAN COMMUNICATE WITH: AN/FRR-12, -28, -32; AN/GRR-2, -3; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12, -23; AN/VRR-3; BC-787, -794; OA-58/FRC; R-62/PR, -80/PR, -137/GR, -205/U, -211/U, -274/FRR, -320/FRC, -388/URR; RAO; RAS; RBG;RBK; RCF; RCG; RDM; SCR-607, -704; TBY; AR-88 (RCA); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 30.0 - 40.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 22 w.

POWER REQUIREMENTS: 6-v vehicular battery.

PHYSICAL CHARACTERISTICS

Radio Transmitting Set AN/VRT-1 weighs 45 pounds net, volume 2.2 cu ft. Packed for domestic shipment: total weight 73 pounds, total volume 3.9 cu ft. Shipped in 2 packages.

ANNEX

ABBREVIATIONS USED IN JANAP 161

ac	alternating current
ac/dc	alternating current or direct current
af	audio frequency
AFR	Air Force Regulation
am	amplitude modulation
amp	amperes
approx	approximate(ly)
ARC	Aircraft Radio Corporation
ASA	Army Security Agency
avc	automatic volume control
bfo	beat-frequency oscillator
CAA	Civilian Aeronautics Administration
CAR–RET	carriage return (on teletypewriter keyboard)
CB	common battery
Co	company
comp	component
Corp	Corporation
cps	cycles per second
crt	cathode-ray tube
cw	continuous wave
cyc	cycles
db	decibels
dbm	decibels per milliwatt
dc	direct current
dia	diameter
ea	each
equip	equipment
Fed Tel	Federal Telephone and Radio Corporation
FIGS	figures (on teletypewriter keyboard)
fm	frequency modulation
fsk	frequency-shift keying
hf	high frequency
hr	hours
icw	interrupted continuous wave
if	intermediate frequency
in	inches
kc	kilocycles
kva	kilovolt-amperes
LB	local battery
lbs	pounds
lf	low frequency
LTRS	letters (on teletypewriter keyboard)
ma	milliamperes
MATS	Military Air Transport Service
max	maximum
mc	megacycles

mcw	modulated continuous wave
mf	medium frequency
mf/hf	medium frequency or high frequency
mi	miles
min	minimum (also minutes)
mm	millimeter
mmf	micromicrofarads
mw	milliwatts
No.	number
opm	operations per minute
Qm	Quartermaster
quant	quantity
RCA	Radio Corporation of America
rf	radio frequency
rpm	revolutions per minute
sec	second
SOS	international distress signal
trf	tuned radio frequency
uhf	ultrahigh frequency
uv	microvolt
uuw	micromicrowatts
v	volts
va	volt-amperes
vf	voice frequency
vhf	very-high frequency
vlf	very-low frequency
vps	vibrations per second
w	watts
w/	with
WECO	Western Electric Company
w/mtg	with mounting
wpm	words per minute

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