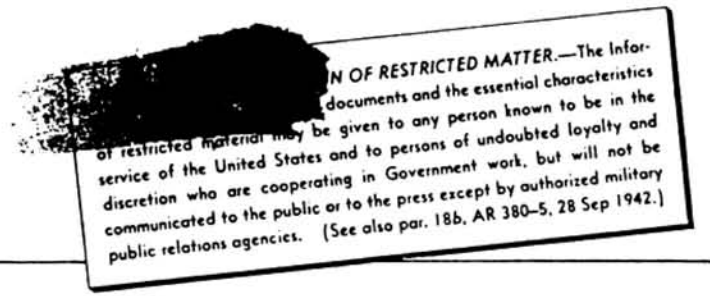
TM 11-227

WAR DEPARTMENT TECHNICAL MANUAL

SIGNAL COMMUNICATION EQUIPMENT DIRECTORY

RADIO COMMUNICATION EQUIPMENT



WAR DEPARTMENT • 10 APRIL 1944

WAR DEPARTMENT TECHNICAL MANUAL

TM 11-227 • RESTRICTED

This manual supersedes the Secret Information Letter; other special Communication Equipment Directories, and the Signal Communication Equipment Directory, April 1943 Issue, formerly published by the Chief Signal Officer.

SIGNAL COMMUNICATION EQUIPMENT DIRECTORY

RADIO COMMUNICATION EQUIPMENT

WAR DEPARTMENT • 10 APRIL 1944

United States Government Printing Office

Washington : 1944

WAR DEPARTMENT,
WASHINGTON 25, D. C., ---- ---------- ----

TM 11-227, Signal Communication Equipment Directory—Radio Communication Equipment, is published for the information and guidance of all concerned.

[A. G. 300.7 (10 Mar. 44).]

BY ORDER OF THE SECRETARY OF WAR:

G. C. MARSHALL,
Chief of Staff.

OFFICIAL:

J. A. ULIO,
Major General,
The Adjutant General.

DISTRIBUTION:

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.2
TM11:227
Apr.1944

RESTRICTED

SIGNAL COMMUNICATION EQUIPMENT DIRECTORY - RADIO COMMUNICATION EQUIPMENT.

THE PURPOSE OF THIS MANUAL IS TO PRESENT, IN A SINGLE VOLUME, A CONDENSATION AND COMPILATION OF DATA PERTAINING TO SIGNAL CORPS RADIO COMMUNICATION EQUIPMENT. IT IS ISSUED IN LOOSE-LEAF FORM, SO THAT ADDITIONAL SHEETS OR REVISIONS OF OLD SHEETS CAN BE ADDED.

THE TABLE OF CONTENTS IN THE FRONT OF THE VOLUME LISTS ALL SETS BY FUNCTIONAL GROUPS, SHOWING PAGE NUMBERS; THE INDEX IN THE BACK OF THE VOLUME LISTS ALL THE SETS DESCRIBED IN ALPHABETICAL AND NUMERICAL ORDER, SHOWING INDIVIDUAL PAGE NUMBERS; AND, FINALLY, THE PAGES OF THE BOOK ARE ASSEMBLED SO THAT THE NOMENCLATURE OF THE SETS RUNS ALPHABETICALLY AND NUMERICALLY THROUGHOUT.

THIS MANUAL SUPERSEDES THE SECRET INFORMATION LETTER; OTHER SPECIAL COMMUNICATION EQUIPMENT DIRECTORIES, AND THE SIGNAL COMMUNICATION EQUIPMENT DIRECTORY, APRIL 1943 ISSUE, FORMERLY PUBLISHED BY THE CHIEF SIGNAL OFFICER.

(ALL INFORMATION CONTAINED HEREIN IS BASED ON LATEST DATA AVAILABLE 1 MARCH 1944)

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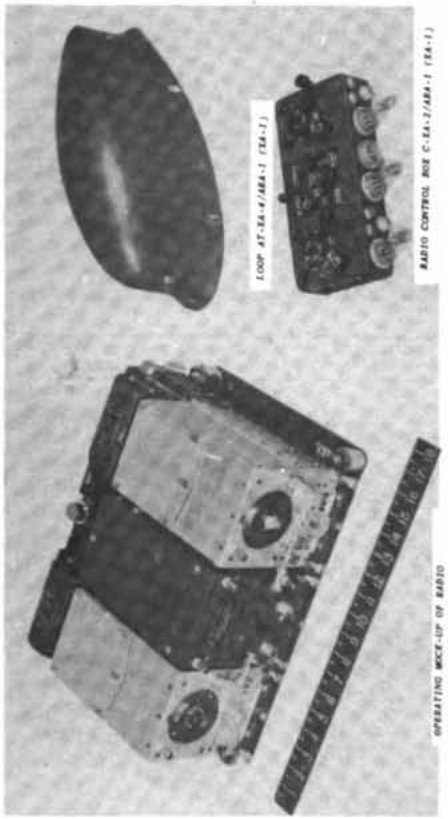
INSTRUCTIONAL LITERATURE:	STATUS:	
	CHANGE IN STATUS:	

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

NOMENCLATURE DESIGNATION: **AN/ARA-1**



COMPONENTS OF RADIO COMPASS ADAPTER AN/ARA-1(XA-1)
(MODULATOR UNIT MD-XA-1/ARA-1(XA-1) SHOWN MOUNTED BETWEEN MODIFIED RECEIVERS OF RADIO SET SCR-274-N

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) .190 - 1.5

NUMBER OF CRYSTALS: None

PRESET FREQUENCIES: None

ANTENNA: Fixed or rotatable loop and sense antenna.

TUNING: (MO OR XTAL) Single Control.

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 28 Volts D. C.

SIMILAR SETS: SCR-186

POWER OUTPUT: (WATTS) None

TUBES: (Type and Number) 1-12SK7
1-12SR7
2-12AH7GT.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: Used with BC-453-B and/or BC-946 to give aural or visual left-right radio compass operation.

RANGE: Maximum 300 miles, depending upon transmitter.

TO COMMUNICATE WITH:

TO REPLACE IN PART: Any Aircraft left-right Compass.

TRANSPORTATION: Airborne.

TYPE OF SIGNAL: CW - MCW - Voice.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
Compass Modulator				7.0#	
Indicator 1-75-A				1.87#	UNCLASSIFIED
Indicator 1-65-A				1.75#	UNCLASSIFIED
Control Box				3.00#	
COMBINED WEIGHT OF COMPONENTS:				14#	(Approximate)
COMBINED VOLUME OF COMPONENTS:				400 Cu. In.	
SHIP TONNAGE:					

AN/ARN-5

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS:

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE:

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (MC) 335

NUMBER OF CRYSTALS: NONE

PRESET FREQUENCIES: ONE

ANTENNA: AS-27/ARN-5

TUNING: (MC OR XTAL)

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 24 V. AIRCRAFT BATTERY.

SIMILAR SETS: NONE.

POWER OUTPUT: (WATTS) NONE.

TUBES: (TYPE AND NUMBER) (TENTATIVE)
(BENDIX MODEL) 2-12AH7GT; 1-28D7; 1-955.
(CROSLEY MODEL) 1-12SR7GT; 2-12SN7GT; 1-28D7; 8-6AK5.
(EMERSON MODEL) 1-6SL7GT; 1-12SN7GT; 1-28D7; 1-955.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: AIRBORN GLIDE PATH RECEIVER FOR GIVING PILOT VERTICAL GUIDANCE FOR INSTRUMENT APPROACH OR LANDING.

RANGE:

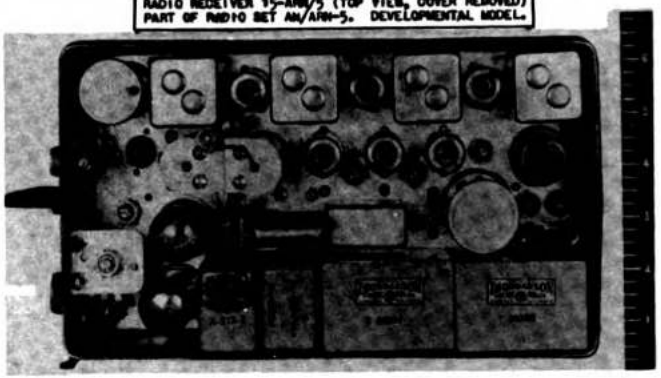
TO COMMUNICATE WITH: AN/CRN-2

TO REPLACE IN PART: AN/ARN-5 IS A PART OF A SYSTEM WHICH REPLACES SCR-241.

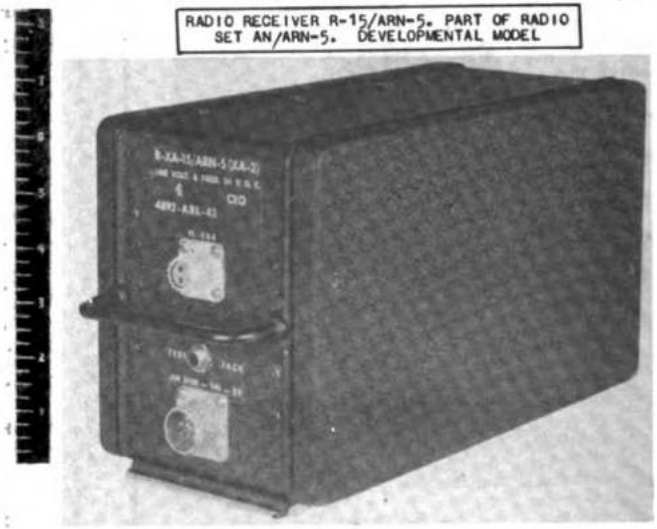
TRANSPORTATION: AIRBORN

TYPE OF SIGNAL: MCW, VOICE

RADIO RECEIVER R-15-ARN/5 (TOP VIEW, COVER REMOVED) PART OF RADIO SET AN/ARN-5. DEVELOPMENTAL MODEL.



RADIO RECEIVER R-15/ARN-5. PART OF RADIO SET AN/ARN-5. DEVELOPMENTAL MODEL



PART C- PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

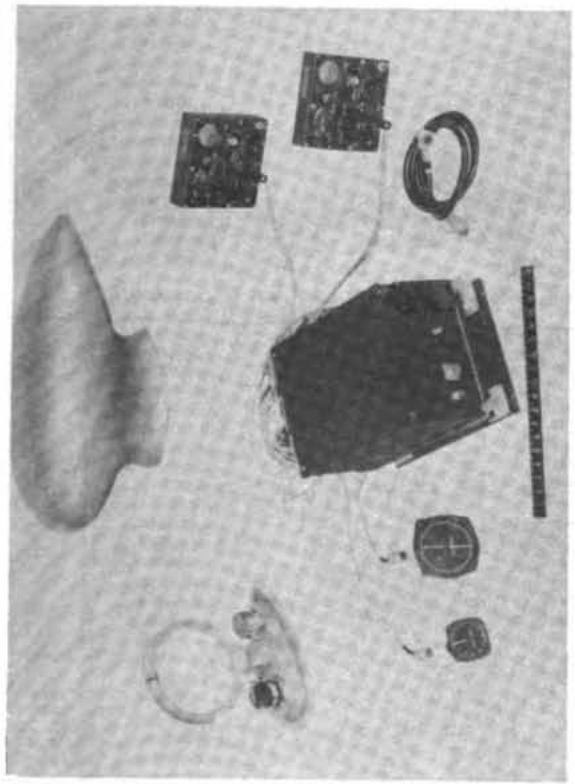
ITEM	DIMENSIONS			WEIGHT	CLASSIFICATION
	HEIGHT	WIDTH	DEPTH		
RADIO RECEIVER, R-15/ARN-5; R-47/ARN-5 OR R-57/ARN-5	6-1/2"	6"	8"	8#	
COMBINED WEIGHT OF COMPONENTS:				10# APPROX.	
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					

(AIRCRAFT RADIO: RADIO NAVIGATION.)

INSTRUCTIONAL LITERATURE:	STATUS:	
	CHANGE IN STATUS:	

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

NOMENCLATURE DESIGNATION: **AN/ARN-6**



RADIO COMPASS AN/ARN-6

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) .100 to 1.750

NUMBER OF CRYSTALS:

PRESET FREQUENCIES:

ANTENNA: Loop, fixed or rotatable, with remote indication of loop position. (Dual remote control and one set of local controls.)

TUNING: (MO or XTAL)

SENSITIVITY: 50 Microvolts/Meter. SELECTIVITY ----

POWER SOURCE: 24 Volts DC

SIMILAR SETS: SCR-269 (AN/ARN-6 is to be smaller than Radio Set SCR-269)

POWER OUTPUT (WATTS) None

TUBES: (Type and Number)

Tube data not available at present.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: Automatic Radio Compass similar to SCR-269 primarily used for navigation. Installed in airplanes.

Range (Miles)

TO COMMUNICATE WITH:

TO REPLACE IN PART: SCR-269. (NOTE: Radio Set AN/ARN-6 is to be lighter in weight than Radio Set SCR-269 and will also be simpler to operate.)

TRANSPORTATION: Airborne installation

TYPE OF SIGNAL: CW - MCW and Voice.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
1 Radio Compass Unit					
2 Radio Control Box					
1 Loop					
2 Indicators					
(No further data on components available at present.)					
COMBINED WEIGHT OF COMPONENTS: (ESTIMATED)				50#	
COMBINED VOLUME OF COMPONENTS:				1500------CUBIC INCHES Maximum	
SHIP TONNAGE:					

THIS SHEET IS CLASSIFIED: RESTRICTED

*AN/ARN-7

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: *ARMY-NAVY-BRITISH STANDARD BY J.A.C. CASE #205.

INSTRUCTIONAL LITERATURE:

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 0.1 - 1.75

NUMBER OF CRYSTALS: NONE

PRESET FREQUENCIES: NONE

ANTENNA: LOOP AND SENSE ANTENNA

TUNING: (MO OR XTAL) REMOTE MANUAL

SENSITIVITY: 40 MV./METER

SELECTIVITY: 10 TIMES RESONANT INPUT FOR 6.3KC BANDWIDTH.

POWER SOURCE: 110 V. 400 CYCLES A-C

SIMILAR SETS: SCR-269 (INTERCHANGEABLE BY COMPONENTS)

POWER OUTPUT: (WATTS)

TUBES: (TYPE AND NUMBER) 2 - VT - 66, 1 - VT - 74, 4 - VT - 86, 1 - VT - 87, 2 - VT - 93, 1 VT - 94, 1 VT - 96, 1 VT -105, 2 VT -109

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: AIRBORN AUTOMATIC DIRECTION-FINDER. GIVES AUTOMATIC BEARING INDICATION OF THE DIRECTION OF ARRIVAL OF RADIO FREQUENCY ENERGY. ALSO AURAL RECEPTION OF CW, MCW, OR VOICE ON LOOP OR ANTENNA.

RANGE: ACCURATE BEARINGS TO ABOUT 100 MILES DAYTIME. SUBJECT TO NIGHT EFFECT ERRORS.

TO COMMUNICATE WITH:

TO REPLACE IN PART: SCR-269

TRANSPORTATION: AIRBORNE

TYPE OF SIGNAL: CW, MCW, VOICE

RADIO COMPASS UNIT *R-5/ARN-7 PART OF DEVELOPMENTAL MODEL OF RADIO COMPASS *AN/ARN-7

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

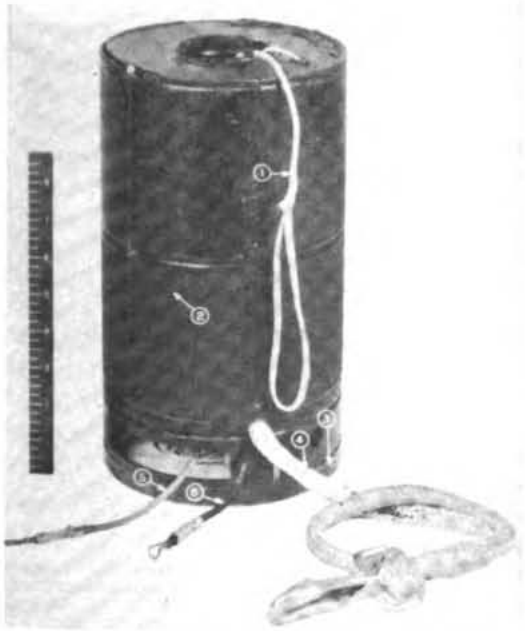
ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
1 RADIO COMPASS UNIT	7 7/8"	12"	19 13/16"		RESTRICTED
2 RADIO CONTROL BOX	7 1/2"	7 1/2"	3 15/16"	3.76#	RESTRICTED
1 LOOP LP-21	25 3/8"	14 31/32"	9"	10.37#	UNCLASSIFIED
1 INDICATOR I-81	3 1/4"	3 1/4"	3 11/16"	.75#	UNCLASSIFIED
1 INDICATOR I-82	5 1/8"	5 1/8"	4 3/32"	1.19#	UNCLASSIFIED
1 RELAY BK-22	11 3/4"	7"	3"	6.40#	UNCLASSIFIED
COMBINED WEIGHT OF COMPONENTS:				75 LBS.	
COMBINED VOLUME OF COMPONENTS:				5121 CU.	IN.
SHIP TONNAGE:				0.0296T	

FRONT PANEL VIEW OF RADIO CONTROL BOX *C-4/ARN-7 PART OF DEVELOPMENTAL MODEL OF RADIO COMPASS *AN/ARN-7

THIS SHEET IS CLASSIFIED: RESTRICTED

(AIRCRAFT RADIO: RADIO NAVIGATION.)

INSTRUCTIONAL LITERATURE:	STATUS:		NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION:	**AN/CRN-1**
	CHANGE IN STATUS:				



PARACHUTE MX-91/CRN-1; PART OF RADIO TRANSMITTING EQUIPMENT AN/CRN-1

(1) STATIC LINE. (2) CONTAINER FOR PARACHUTE AND SISTER RING RELEASE MECHANISM. (3) METAL BAND. (4) LOAD LINE. (5) RED CORD, TO BE FASTENED TO PULL SWITCH LOOP (6) BLACK CORD TO BE FASTENED TO FLOAT CORD LOOP. (7) SNAP FASTNER, (TO BE ATTACHED TO HANDLE ON OUTER CASE.

RADIO TRANSMITTING EQUIPMENT AN/CRN-1 (SIDE VIEW, CONTAINERS EXTENDED). (1) ANTENNA. (2) DELAYED TIMER CONTROL KNOB. (3) INNER CONTAINER. (4) OUTER CONTAINER.

PART A – TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 1.45 - 1.70

NUMBER OF CRYSTALS: None

PRESET FREQUENCIES:

ANTENNA: Telescoping whip

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: Batteries

SIMILAR SETS: None

POWER OUTPUT: (WATTS) Less than one

TUBES: (Type and Number) 2 - 6V6GT

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: When dropped into the sea from aircraft, automatically transmits a signal for homing by means of Radio Compass SCR-269. Works 12 hours and then sinks.

RANGE: 50 miles over sea water.

TO COMMUNICATE WITH: SCR-269

TO REPLACE IN PART:

TRANSPORTATION: Air

TYPE OF SIGNAL: C. W.

PART C – PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	DIMENSIONS WIDTH	DIMENSIONS DEPTH	WEIGHT	CLASSIFICATION
Radio Transmitter T-2/CRN - 1	4' *	8" diameter			Restricted
Battery BA-201/CRN-1					Unclassified
* Height of Transmitter not extended.					
COMBINED WEIGHT OF COMPONENTS:		35#			
COMBINED VOLUME OF COMPONENTS:		1.5 cu. ft.			
SHIP TONNAGE:					

AN/CRN-2

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: STANDARD 5 Feb 44

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE:

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 330 to 340

NUMBER OF CRYSTALS: 1

PRESET FREQUENCIES: 335 Mc.

ANTENNA: Folded dipoles

TUNING: (MO OR XTAL) XTAL

SENSITIVITY: SELECTIVITY:

POWER SOURCE: PE-141 Motor Generator (115 V 60 cycles)

SIMILAR SETS:

POWER OUTPUT: (Watts) 25 watts of CW power.

TUBES: (Type and Number)

1-6J5	1-8298
2-6SJ7	1-832
1-6SK7	2-856
3-5Y4G	4-8025
3-6SN7GT	1-VR90
1-9002	1-VR150

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: Is a glide path transmitter which gives the angle of approach. This is indicated on a Horizontal Pointer contained in the AN/ARN-4, Instrument Landing Receiving Equipment.

RANGE: (Miles) 15 miles at 3000 ft.

TO COMMUNICATE WITH: AN/ARN-5

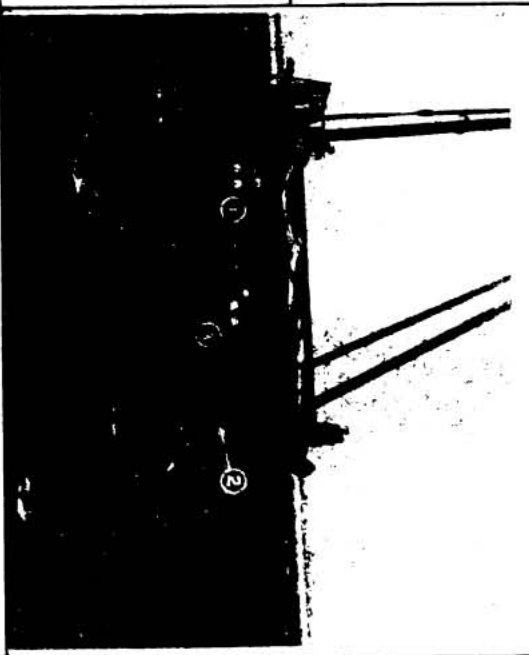
TO REPLACE IN PART:

TRANSPORTATION: Installed in air-transportable Trailer.

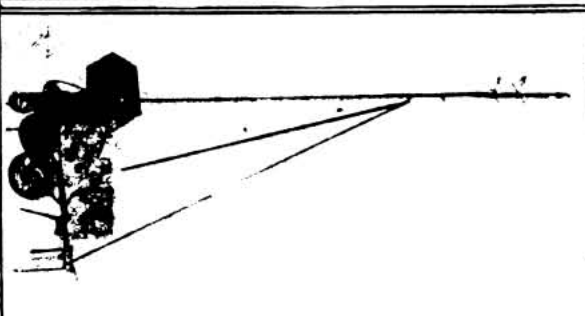
TYPE OF SIGNAL: Straight line glide path - double beam MCW system.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS			WEIGHT	CLASSIFICATION
	HEIGHT	WIDTH	DEPTH		
(NOT YET DEFINITELY DETERMINED)					
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME:					
SHIP TONNAGE:					

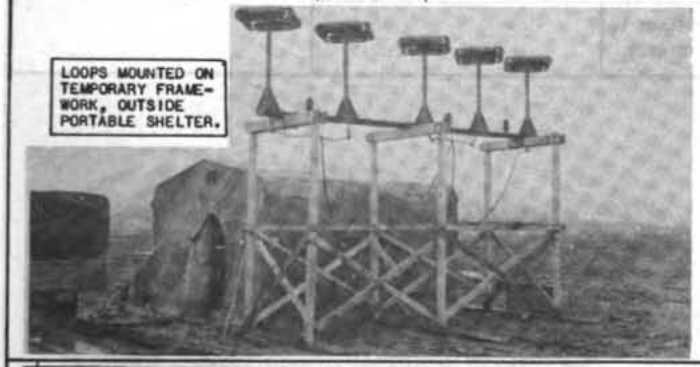


RADIO SET AN/CRN-2 (GLIDE PATH TRANSMITTING EQUIPMENT SET UP FOR OPERATION) DEVELOPMENTAL MODEL.
(1) Transmitter and Modulator. (2) Gasoline Engine Power Supply.
(3) Rectifier Power Supply.



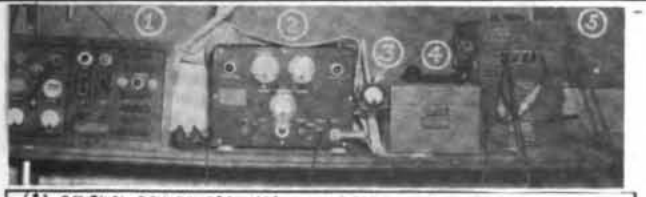
RADIO SET, AN/CRN-2 (INSTRUMENT LANDING GLIDE PATH) DEVELOPMENTAL MODEL

INSTRUCTIONAL LITERATURE: AN-08-10-183 (HMI)	STATUS:	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION: **AN/CRN-3**



LOOPS MOUNTED ON TEMPORARY FRAME-WORK, OUTSIDE PORTABLE SHELTER.

(1) TRANSMITTER BC-751. (2) MODULATOR & BRIDGE BC-752. (3) COURSE DETECTOR BC-754 (PORTABLE). (4) FIELD INTENSITY METER BC-755.



(1) CONTROL BOX BC-915. (2) INDICATOR BOX BC-777. (3) VOLTMETER IS-176. (4) CASE CS-72. (5) RADIO SET SCR-610.

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 108.3-110.3

NUMBER OF CRYSTALS: 3 OR 6

PRESET FREQUENCIES: 108.3, 108.7, 109.1, 109.5, 109.9, 110.3.

ANTENNA: 5 ALFORD LOOPS IN SAME HORIZONTAL PLANE.

TUNING: (MO OR XTAL) XTAL

SENSITIVITY: SELECTIVITY:

POWER SOURCE: POWER UNIT-PE-141 OR 110V, 60 CYCLES.

SIMILAR SETS: AN/MRN-1

POWER OUTPUT: (WATTS) 25

TUBES: (TYPE AND NUMBER) 1 BC-751 TRANS: 4-807W; 3-HK257; 1-6H6; 1-6F6; 1-6SN7GT; 1-5V4G; 4-836; 2-VR-150-30 1-BC-753 COURSE DETECTOR: 1-9002; 1-6SF5; 1-6K6GT; 1-6X5GT. 1-BC-754 COURSE DETECTOR: 1-1R5; 1-957; 2-1LN 5; 1-1S5; 1-3S4. 1-BC-755 INDICATOR BOX: 2-1 S 5; 1-BC-777 INTENSITY METER: 1-6H6; 2-6SC7.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: GROUND LOCALIZER TRANSMITTER TO PROVIDE AZIMUTH GUIDANCE OF AIRCRAFT FOR BLIND APPROACH OR INSTRUMENT LANDING. THIS SET HAS SAME COMPONENTS AS AN/MRN-1 PACKED FOR AIR TRANSPORT INSTEAD OF INSTALLED IN TRUCK K-53.

RANGE: 75 MILES

TO COMMUNICATE WITH: RC-103

TO REPLACE IN PART: ARMY A-1 INSTRUMENT LANDING SYSTEM.

TRANSPORTATION: AIR

TYPE OF SIGNAL: CW, MCW, VOICE.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	DIMENSIONS WIDTH	DIMENSIONS DEPTH	WEIGHT	CLASSIFICATION
RADIO TRANSMITTER EQUIPMENT RC-107					RESTRICTED
LOCALIZER TRANSMITTER EQUIPMENT CONSISTS OF:					UNCLASSIFIED
CONTROL BOX BC-915				800 #	RESTRICTED
RADIO TRANSMITTER BC-751				550 #	RESTRICTED
MODULATOR & BRIDGE BC-752				300 #	RESTRICTED
COURSE DETECTOR BC-753 (FIXED)				80 #	RESTRICTED
COURSE DETECTOR BC-754 (PORTABLE)				25 #	RESTRICTED
FIELD INTENSITY METER BC-755				25 #	RESTRICTED
INDICATOR BC-777 (ALARM)				70 #	RESTRICTED
ANTENNA EQUIPMENT RC-109				450 #	RESTRICTED
RADIO SET SCR-610				135 #	UNCLASSIFIED
HEATER M-321				100 #	
MAINTENANCE PARTS & TOOLS				500 #	
SURVEYING INSTRUMENT				60 #	
CRYSTAL UNIT DC-8					UNCLASSIFIED
VOLTMETER IS-175 (BALANCED R.F.)					UNCLASSIFIED
VOLTMETER IS-176 (UNBALANCED R.F.)					UNCLASSIFIED
COMBINED WEIGHT OF COMPONENTS:				3095 #	
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					

THIS SHEET IS CLASSIFIED: RESTRICTED

AN/CRN-5

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS:

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE:

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 100 - 156 TUNED OVER 5 Mc BAND.

NUMBER OF CRYSTALS: UNDER DEVELOPMENT.

PRESET FREQUENCIES: NOT YET DETERMINED.

ANTENNA: VERTICALLY POLARIZED.

TUNING: (MO OR XTAL) XTAL

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 115 VOLT 60 CYCLE SINGLE PHASE. GENERATOR CAPACITY 2 KVA-AC AND 6 VOLT 20 AMP. DC

SIMILAR SETS: AN/CRN-5

POWER OUTPUT: (WATTS) CONE OF SILENCE 25 WATTS (ARL-117-1) RADIO TRANS. 100 WATTS CARRIER & 50 WATTS SIDE BAND ARL-119.

TUBES: (TYPE AND NUMBER)

1-6AC7	4-6SN7GT	2-829
1-6B8	2-6V6GT	2-832
3-6H6	3-6X5GT	6-836
1-6J5	2-1B5	1-VR150
2-6SJ7	1-957	
1-6SK7	4-807	

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: PORTABLE U.H.F. RADIO TWO COURSE AURAL RADIO RANGE WITH STATION IDENTIFICATION, PERIODIC QUADRANT IDENTIFICATION, AND SIMULTANEOUS PHONE TRANSMISSION.

RANGE: (MILES) 80

TO COMMUNICATE WITH: SCR-522

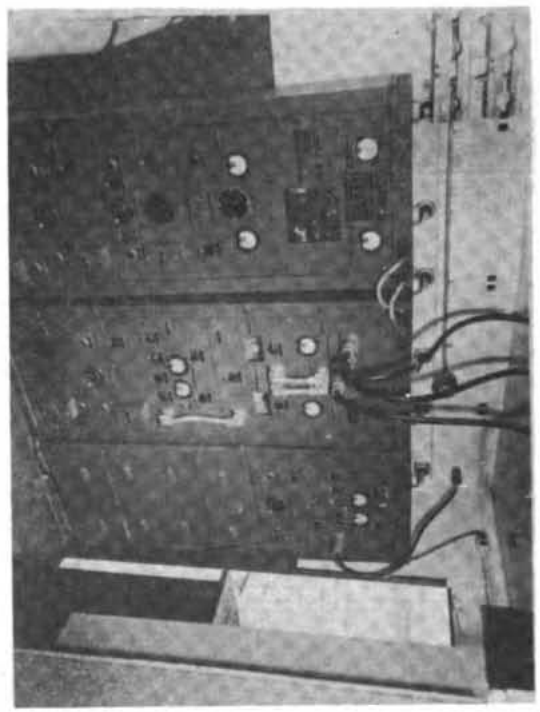
TO REPLACE IN PART: SCR-277

TRANSPORTATION: AIR

TYPE OF SIGNAL: CW; MCW, AND VOICE.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
(NOT YET DEFINITELY DETERMINED)					
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					



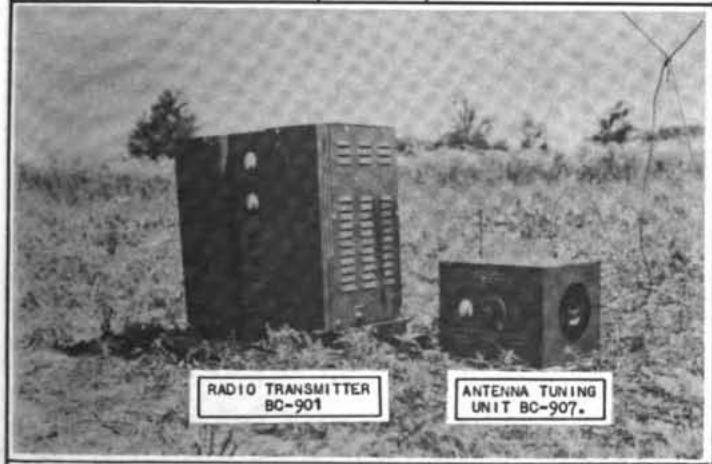
RADIO SET AN/CRN-5 TRANSMITTING EQUIPMENT

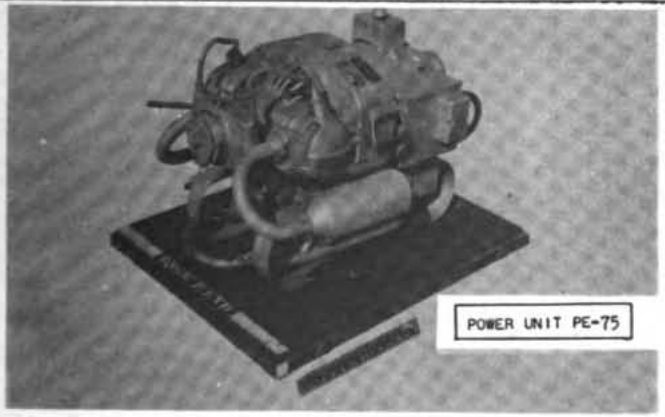
THIS SHEET IS CLASSIFIED: RESTRICTED

INSTRUCTIONAL LITERATURE:	STATUS:	
	CHANGE IN STATUS:	

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

NOMENCLATURE DESIGNATION: **AN/GRN-1**





RADIO SET AN/GRN-1 SHOWING COMPONENTS

PART A – TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: 0.2 - 0.4

NUMBER OF CRYSTALS: PER SPECIAL ORDER.

PRESET FREQUENCIES: NONE

ANTENNA: SPECIAL - 200 MMF, 7 OHMS OR LESS.

TUNING: (MO OR XTAL) XTAL

SENSITIVITY: SELECTIVITY:

POWER SOURCE: POWER UNIT PE-75 OR 110 VOLTS 50 - 60 CYCLES. 550 VOLT-AMPERES

SIMILAR SETS: NONE

POWER OUTPUT: (WATTS) 50

TUBES: (TYPE AND NUMBER) 5 VT-145 (5Z3)
5 VT- 94 (6J5)
6 VT-100 (807)

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: A GROUND RADIO BEACON TO WHICH AIRCRAFT CAN HOME OR TAKE BEARINGS.

RANGE: 100 MILES OVER LAND OR 300 MILES OVER SEA WATER.

TO COMMUNICATE WITH: SCR-269

TO REPLACE IN PART: NONE

TRANSPORTATION:

TYPE OF SIGNAL: CW, MCW, VOICE.

PART C – PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	DIMENSIONS WIDTH	DIMENSIONS DEPTH	WEIGHT	CLASSIFICATION
RADIO TRANSMITTER BC-901	25"	28"	16"	205 #	UNCLASSIFIED
POWER UNIT PE-75	36"	19"	27"	330 #	UNCLASSIFIED
COMBINED WEIGHT OF COMPONENTS:			ABOUT	800 LBS.	COMPLETE
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					

AN-MRN-1

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: STANDARD 3 JUL 42

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: AN-08-10-183 (HMI)

PART A - TECHNICAL CHARACTERISTICS (CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (MC) 108.3-110.3

NUMBER OF CRYSTALS: ONE

PRESET FREQUENCIES: ONE

ANTENNA: FIVE ALFORD LOOPS IN SAME HORIZONTAL PLANE.

TUNING: (MO OR XTAL) XTAL

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 110 VOLTS 60 CYCLE AC GASOLINE ENGINE-DRIVEN MOTOR GENERATOR.

SIMILAR SETS: AN/CRN-3.

POWER OUTPUT: (WATTS) 25

TUBES: (TYPE AND NUMBER) 1-BC-751 TRANS: 4-807W; 3-HK257; 1-6H6; 1-6F6; 1-6SN7GT; 1-5V4G; 4-836; 2-VR-150-30. 1-BC-753 COURSE DETECTOR: 1-9002; 1-6SF5; 1-6K6GT; 1-6X5GT. 1-BC-754 COURSE DETECTOR: 1-1R5; 1-957; 2-1 LN 5; 1-1S5; 1-3S4. 1-BC-755 INDICATOR BOX: 2-1 S 5; 1-BC-777 INTENSITY METER: 1-6H6; 2-6SC7.

PART B - TACTICAL CHARACTERISTICS (CLASSIFICATION: RESTRICTED)

USE: TRANSMITS AND MONITORS A LOCALIZED BEAM FOR USE IN MAKING INSTRUMENT LANDING AFTER AIRCRAFT HAS ARRIVED IN THE VICINITY OF THE AIRPORT.

RANGE: (MILES) 40 AT 2500 FT., 70 AT 6000 FT., 100 AT 10,000 FT.

TO COMMUNICATE WITH: RC-103

TO REPLACE IN PART: SCR-241

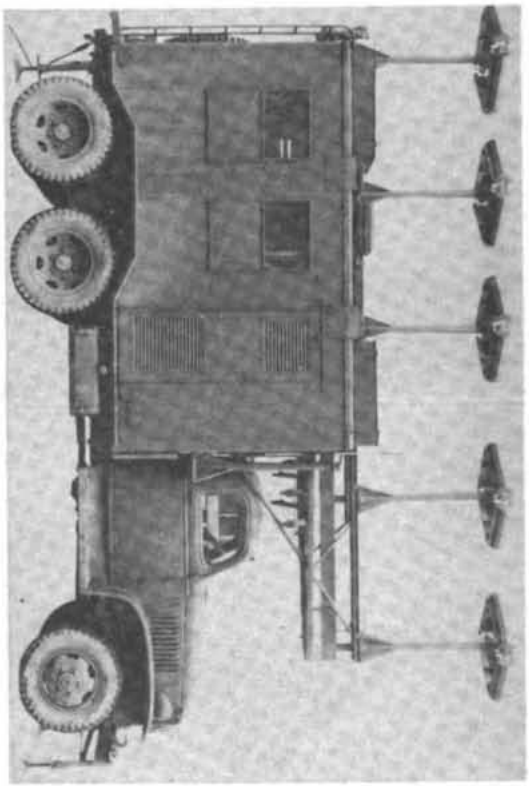
TRANSPORTATION: TRUCK

TYPE OF SIGNAL: CW AND MCW, AND VOICE.

PART C - PRINCIPAL COMPONENTS (CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RADIO TRANSMITTER EQUIPMENT RC-107					RESTRICTED
LOCALIZER TRANSMITTER EQUIPMENT CONSISTS OF :					
CONTROL BOX BC-915				800 #	UNCLASSIFIED
RADIO TRANSMITTER BC-751				550 #	RESTRICTED
MODULATOR & BRIDGE BC-752				300 #	RESTRICTED
COURSE DETECTOR BC-753 (FIXED)				80 #	RESTRICTED
COURSE DETECTOR BC-754 (PORTABLE)				25 #	RESTRICTED
FIELD INTENSITY METER BC-755				25 #	RESTRICTED
INDICATOR BC-777 (ALARM)				70 #	RESTRICTED
ANTENNA EQUIPMENT RC-109				450 #	RESTRICTED
RADIO SET SCR-610				135 #	UNCLASSIFIED
HEATER M-321				100 #	
MAINTENANCE PARTS & TOOLS				500 #	
SURVEYING INSTRUMENT				60 #	
CRYSTAL UNIT DC-8					UNCLASSIFIED
VOLTMETER IS-175 (BALANCED R.F.)					UNCLASSIFIED
VOLTMETER IS-176 (UNBALANCED R.F.)					UNCLASSIFIED
TRUCK- K-53				11,700 #	UNCLASSIFIED
COMBINED WEIGHT OF COMPONENTS:				14,795 #	
COMBINED VOLUME OF COMPONENTS:	INSTALLED IN K-53		TRUCK, 80-100 CU. FT.		APPROX.
SHIP TONNAGE:					

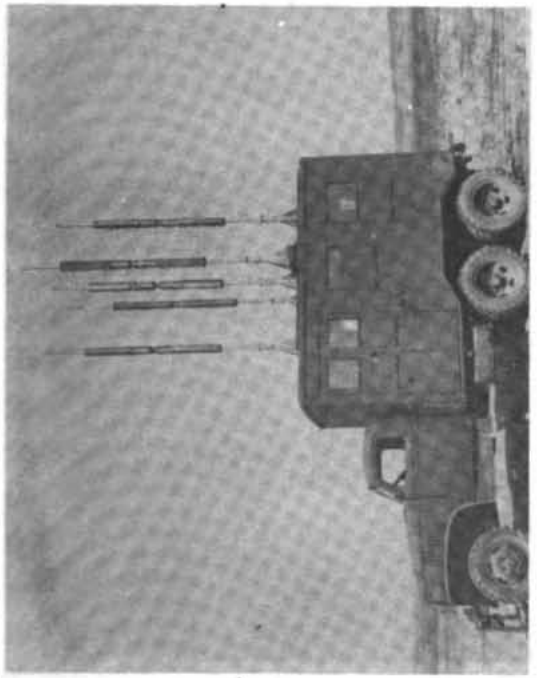
RADIO SET AN/MRN-1 INSTALLED IN TRUCK K-53



COMPRISES EQUIPMENT FOR TRANSMITTING AND MONITORING A LOCALIZER BEAM WITH A USABLE RANGE OF 20 MILES FOR USE IN MAKING INSTRUMENT LANDINGS AFTER THE AIRPLANE HAS ARRIVED IN THE VICINITY OF THE AIRPORT.

(AN/MRN-1 FURNISHED WITH TRUCK K-53. AN/CRN-3 DOES NOT INCLUDE TRUCK)

INSTRUCTIONAL LITERATURE:	STATUS:		NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION:	**AN/MRN-2**
	CHANGE IN STATUS:				



DEVELOPMENTAL MODEL OF RADIO SET AN/MRN-2
(LEFT SIDE VIEW, ANTENNAS SET UP READY FOR OPERATION)

Date 3-31-43
Neg. No. D 1265 R

PHOTOGRAPHIC AND REPRODUCTION SECTION
AIRCRAFT RADIO LABORATORY, WRIGHT FIELD, O

PART A – TECHNICAL CHARACTERISTICS

(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 100 - 156 TUNES OVER 5 Mc. BAND.

NUMBER OF CRYSTALS: UNDER DEVELOPMENT.

PRESET FREQUENCIES: NOT YET DETERMINED.

ANTENNA: VERTICALLY POLARIZED

TUNING: (MO OR XTAL) XTAL

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 115 VOLT 60 CYCLE SINGLE PHASE. GENERATOR CAPACITY 2 KVA-AC AND 6 VOLT 20 AMP. DC.

SIMILAR SETS: AN/CRN-5

POWER OUTPUT: (WATTS) CONE OF SILENCE 25 WATTS (ARL-117-1) RADIO TRANS. 100 WATTS CARRIER & 50 WATTS SIDE BAND ARL -119.

TUBES: (TYPE AND NUMBER)

1-6AC7	4-6SN7GT	2-829
1-688	2-6V6VT	2-832
3-6H6	3-6X5GT	6-836
1-6J5	1-1S5	1-VR150
2-6SJ7	1-957	
1-6SK7	4-807	

PART B - TACTICAL CHARACTERISTICS

(CLASSIFICATION: RESTRICTED)

USE: PORTABLE U.H.F. RADIO TWO COURSE AURAL RADIO RANGE WITH STATION IDENTIFICATION, PERIODIC QUADRANT IDENTIFICATION, AND SIMULTANEOUS PHONE TRANSMISSION.

RANGE: (MILES) 80

TO COMMUNICATE WITH: SCR-522

TO REPLACE IN PART: SCR-277

TRANSPORTATION: TRUCK

TYPE OF SIGNAL: CW; MCW, AND VOICE.

PART C – PRINCIPAL COMPONENTS

(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS			WEIGHT	CLASSIFICATION
	HEIGHT	WIDTH	DEPTH		
(NOT YET DEFINITELY DETERMINED)					
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					

AN/MRN-3

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: STANDARD 23 Oct 43

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE:

PART A – TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (M_0) 75

NUMBER OF CRYSTALS: None

PRESET FREQUENCIES: One

ANTENNA: One Horizontal Dipole

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 110 V. 50 – 60 Cycles A.C. Power Unit PE-88, or Power Unit PE-214.

SIMILAR SETS:

POWER OUTPUT: (Watts) One

TUBES: (TYPE AND NUMBER) RC-115 Uses: 1-VT-74(5Z4); 2-VT-139 (VR-150-30); 1-VT-188 (7E6); 2-VT-189, (7F7); 1-7N7; 5-705. SCR-610: 1-BC-659-A; Uses: 5-1LN5; 2-1291; 4-1299; 1 1U4; 1-1294; 1-LC6. 1 PE-117 Uses: 1 VR-90-30; 1 CK1005.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: Transmits vertical pattern to be received by RC-39, RC-43, RC-193, marking reference points in instrument landing system

RANGE: 10,000 feet, overhead.

TO COMMUNICATE WITH: RC-39, RC-43, RC-193, RC193Z

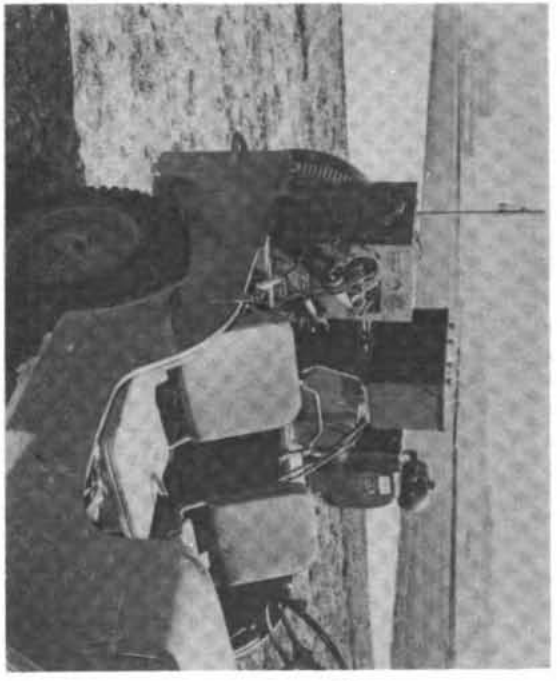
TO REPLACE IN PART: BC-302.

TRANSPORTATION: Jeep.

TYPE OF SIGNAL: CW; MCW.

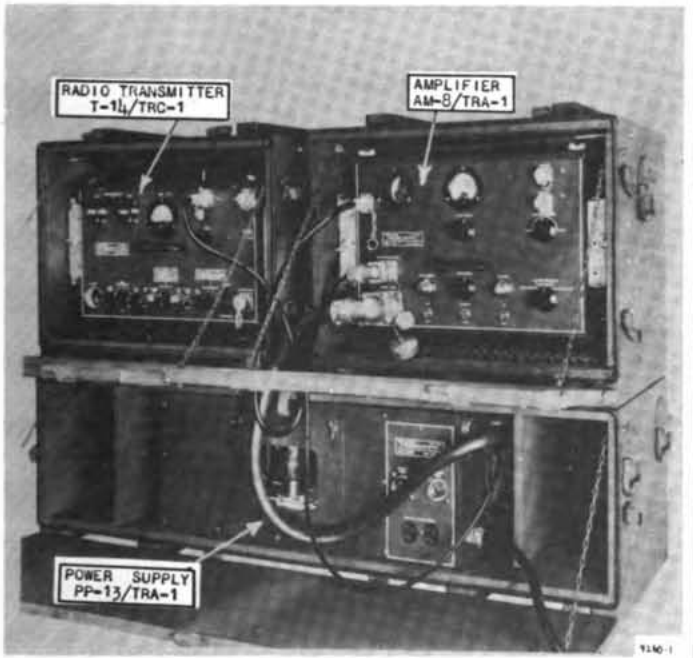
PART C – PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
Marker Beacon Transmitting Equipment RC-115	18"	12"	20"	37#	UNCLASSIFIED
Power Unit PE-88 or Power Unit PE-214 *				45#	RESTRICTED
Radio Set SCR-610					UNCLASSIFIED
1/4-Ton 4 x 4 Truck ("Jeep")	72"	63"	132"		
					*PE-214 IS UNCLASSIFIED
COMBINED WEIGHT OF COMPONENTS:				250# Plus	Jeep.
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					



MARKER BEACON SET/AN/MRN-3 SET UP FOR OPERATION FROM TRUCK

INSTRUCTIONAL LITERATURE:	STATUS:		NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION: **AN/TRA-1**
	CHANGE IN STATUS:			



Radio Transmitter T-14/TRC-1, Amplifier AM-8/TRA-1, and Power Supply PP-13/TRA-1, Placement

RADIO SET AN/TRA-1 IS A 250-WATT RF AMPLIFIER EQUIPMENT FOR USE IN CONNECTION WITH THE RADIO TERMINAL SET AN/TRC-3, A RADIO RELAY SET AN/TRC-4, AND RADIO SET AN/TRC-1 TO INCREASE THE STRENGTH OF THE TRANSMITTED SIGNAL AND THE NORMAL OPERATION RANGE OF UNITS WITHIN THE RELAY SYSTEM. USED WITH BUT NOT PART OF: RADIO TERMINAL SETS AN/TRC-3; RADIO RELAY SET AN/TRC-4 AND RADIO SET AN/TRC-1.

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (MC) 70 - 100

NUMBER OF CRYSTALS: NONE (AMPLIFIER UNIT)

PRESET FREQUENCIES: NONE

ANTENNA: 3 ELEMENT PARASITIC BEAM.

TUNING: (MO OR XTAL)

SENSITIVITY: SELECTIVITY:

POWER SOURCE: POWER SUPPLY PP-13/TRA-1

SIMILAR SETS: NONE

POWER OUTPUT: (WATTS) 250

TUBES: (TYPE AND NUMBER) 2 HK-257-B

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: ARMY GROUND FORCES; ARMY SERVICE FORCES.

RANGE: MINIMUM 25 MILES, MAXIMUM ACCORDING TO TERRAIN.

TO COMMUNICATE WITH: AN/TRC-1, AN/TRC-3. AN/TRC-4.

TO REPLACE IN PART: NONE

TRANSPORTATION: VEHICULAR

TYPE OF SIGNAL: FM

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
AMPLIFIER AM-8/TRA-1					RESTRICTED
POWER SUPPLY PP-13/TRA-1					UNCLASSIFIED
SPARE PARTS KIT MK-11/TRA-1					UNCLASSIFIED
FOR ANTENNA EQUIPMENT SEE BASIC SETS TRC-1, TRC-3 AND TRC-4.					
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					

THIS SHEET IS CLASSIFIED: RESTRICTED

AN/TRC-1

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: STANDARD 18 Oct 43

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE:

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 70 - 100

NUMBER OF CRYSTALS: Bank of 16 per set

PRESET FREQUENCIES: One

ANTENNA: 3 Element Horizontal on 40 ft. mast.

TUNING: (MO OR XTAL) XTAL

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 115/230 V, A.C., 50/60 cycles, single phase.

SIMILAR SETS: AN/TRC-3 AN/TRC-4

POWER OUTPUT: (WATTS) 50 on Voice

TUBES: (TYPE AND NUMBER)

Trans. T-14/TRC-1		Recvr. R-19/TRC-1	
1	6SL7GT	1	7W7
1	6AC7	2	7C7
4	6V6GT	2	6K6
1	6J5GT	1	6SL7GT
1	815	1	6V6GT
		2	6J5GT
		1	6X5GT

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: Air Forces, Signal Corps.

RANGE: (MILES) 25

TO COMMUNICATE WITH: AN/TRC-1

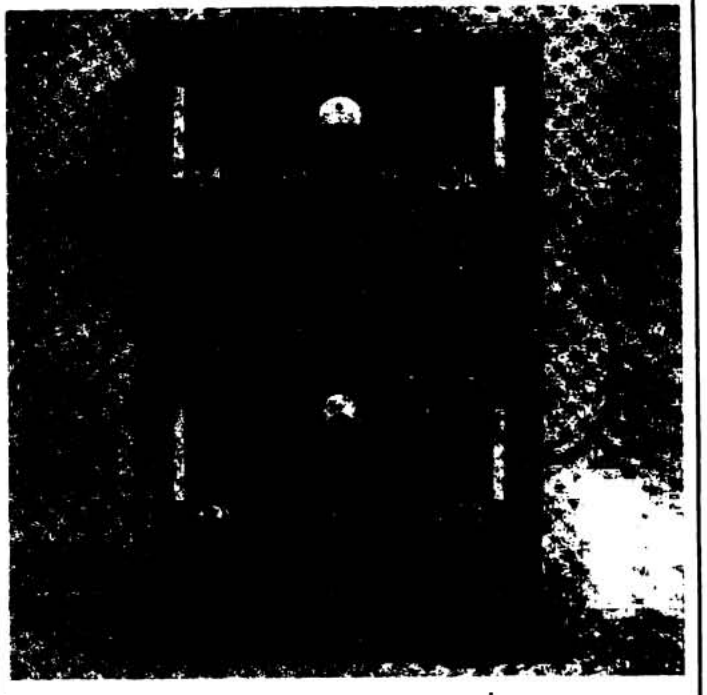
TO REPLACE IN PART: F.M. Link Co. Commercial Model 1498.

TRANSPORTATION: Vehicle

TYPE OF SIGNAL: F.M.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
Trans. T-14/TRC-1	See Remarks			64#	Restricted
Recvr. R-19/TRC-1	See Remarks			42#	Restricted
Power Unit PE-75					Unclassified
Antenna AS-19/TRC-1					Restricted
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					



RADIO RECEIVER R-19/TRC-1, AND RADIO TRANSMITTER T-14/TRC-1
PART OF RADIO SET AN/TRC-1

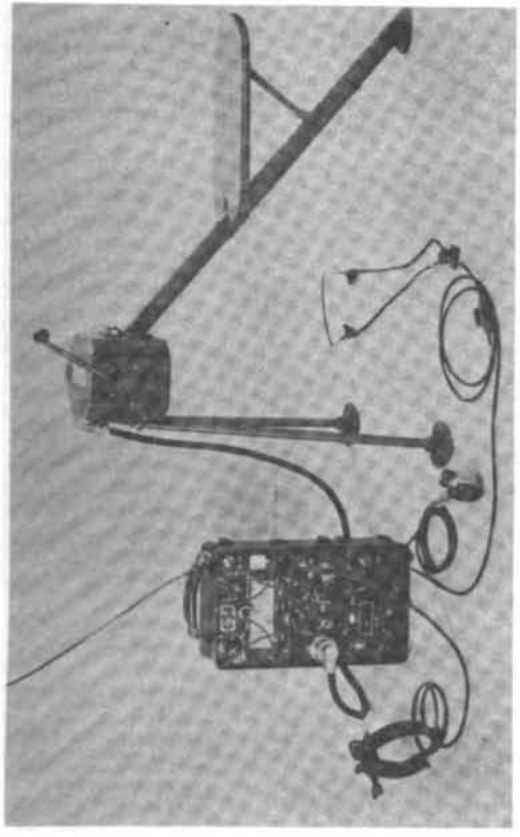
Transmitter and Receiver are each housed in separate carrying cases. Transmitter Case weighs 32 Lbs. Receiver Case weighs 48-1/2 Lbs., including cables, spare tubes, tools etc. Each case measures 22-3/4" x 16-1/2" x 19-1/4". Radio Terminal Set AN/TRC-3 and Radio Relay Set AN/TRC-4 employ same receiver and transmitter as AN/TRC-1 in a Radio Relay system arrangement used for special purposes.

THIS SHEET IS CLASSIFIED: RESTRICTED

INSTRUCTIONAL LITERATURE:	STATUS:	STANDARD 25 Aug 43
	CHANGE IN STATUS:	

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

NOMENCLATURE DESIGNATION: **AN/TRC-2**



BASIC COMPONENTS OF RADIO SET AN/TRC-2, SET UP FOR FIELD OPERATION, SHOWING GENERATOR AND STEEL TAPE ANTENNA. TWO IDENTICAL TRANSMITTER-RECEIVER UNITS OF THE TYPE PICTURED ARE USED WITH RADIO SET AN/TRC-2 DIFFERING IN FREQUENCY COVERAGE ONLY. THIS EQUIPMENT IS DESIGNED FOR RESISTANCE TO TROPICAL CONDITIONS; HIGH HUMIDITY AND EXTREME HIGH AND LOW TEMPERATURE.

PART A – TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 2 -6.5 (BC-1306-3.8-6.5); RT-12/TRC-2 (2-3.5)

NUMBER OF CRYSTALS: 6 PER SET

PRESET FREQUENCIES:

ANTENNA: A CHOICE; 2 INVERTED L TYPE WITH COUNTERPOISE OR ½ WAVE HORIZONTAL

TUNING: (MO OR XTAL) MO AND XTAL

SENSITIVITY: SELECTIVITY:

POWER SOURCE: HAND GENERATOR GN-53 OR POWER UNIT PE-162

SIMILAR SETS: SCR-694

POWER OUTPUT: (WATTS) 30 ON A-1; 6 ON A-3

TUBES: (TYPE AND NUMBER) 4-1L4, 4-1R5, 2-1S5, 4-3A4, 2-3Q4, 2-2E22, 2-VR105

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: SPECIAL, LONG RANGE, MAN PACK SET FOR COMMUNICATION FROM ISOLATED UNITS TO HEADQUARTERS.

RANGE: APPROXIMATELY 100 MILES ON CW

TO COMMUNICATE WITH: SCR-299; SCR-694

TO REPLACE IN PART: NONE.

TRANSPORTATION: MAN PACK, REQUIRES 12 TO 14 MEN.

TYPE OF SIGNAL: A-1; A-3 (AM)

PART C – PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
TRANS. & REC. RT-12/TRC-2					RESTRICTED
TRANS. & REC. BC-1306					RESTRICTED
HAND GENERATOR GN-53					UNCLASSIFIED
GASOLINE ENGINE DRIVEN GEN. PE-162					
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					

THIS SHEET IS CLASSIFIED: RESTRICTED

AN/TRC-3

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS:

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE:

PART A - TECHNICAL CHARACTERISTICS

(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 70-100 MEGACYCLES (300 CHANNELS)

NUMBER OF CRYSTALS: 964 (BANK OF 900 ON 300 FREQUENCIES PLUS 64 CRYSTALS ON 16 "BASIC" FREQUENCIES.

PRESET FREQUENCIES: ONE.

ANTENNA: 3 ELEMENT HORIZONTAL ARRAY.

TUNING: (MO OR XTAL)XTAL(RECEIVER AND TRANSMITTER)

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 115 VOLT AC, 60 CYCLE, SINGLE PHASE, (POWER UNIT PE-75)

SIMILAR SETS: AN/TRC-1, AN/TRC-4

POWER OUTPUT: (WATTS) 50

TUBES: (TYPE AND NUMBER) 5-6AC7, 2-6H6, 8-6SH7, 2-5R4GY, 3-6SL7GT, 3-6SN7GT, 5-6V6GT, 1-6X5GT, 1-829

PART B - TACTICAL CHARACTERISTICS

(CLASSIFICATION: RESTRICTED)

USE: ARMY GROUND FORCES, ARMY SERVICE FORCES.

RANGE: 25-33 MILES, OR MORE ACCORDING TO TERRAIN AND USE OF AMPLIFIER EQUIPMENT AN/TRA-1.

TO COMMUNICATE WITH: AN/TRC-1, AN/TRC-4 AND F.M. LINK MODEL 1498, 1505.

TO REPLACE IN PART: NONE

TRANSPORTATION: VEHICULAR

TYPE OF SIGNAL: A-3 (FM)

THE TWO RADIO RECEIVERS, R-19/TRC-1 AND TRANSMITTERS, T-14/TRC-1, IN CHESTS AS PICTURED BELOW, ARE PROPER COMPONENTS FOR RADIO SET AN/TRC-3, BUT THE CORDING SHOWN IS NOT THAT USED TO PERFORM THE FUNCTIONS OF AN/TRC-3. RADIO TERMINAL SET AN/TRC-3 IS USED WITH, AND CONNECTIONS ARE NORMALLY MADE TO, CARRIER TELEPHONE TERMINAL EQUIPMENT TC-21, AND/OR CARRIER TELEGRAPH TERMINAL EQUIPMENT TC22 FOR MULTI-CHANNEL CARRIER COMMUNICATION SYSTEMS

PART C - PRINCIPAL COMPONENTS

(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	DIMENSIONS WIDTH	DIMENSIONS DEPTH	WEIGHT	CLASSIFICATION
2 TRANSMITTER T-14/TRC-1					RESTRICTED
2 RECEIVER R-19/TRC-1					RESTRICTED
2 ANTENNA SYSTEM AS-19/TRC-1					RESTRICTED
3 POWER UNIT PE-75					UNCLASSIFIED
1 MAINTENANCE EQUIPMENT MK-5/TRC-3					RESTRICTED
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					

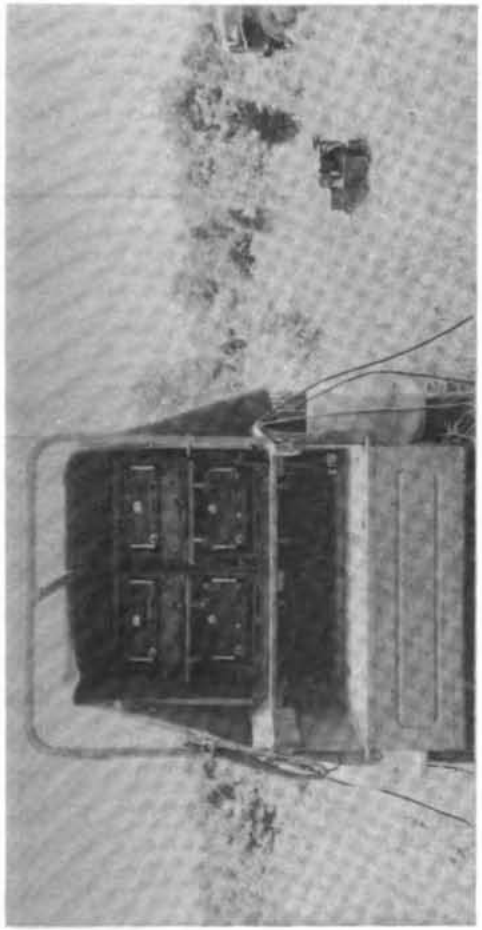
RADIO SET AN/TRC-3 IS A 50 WATT, FM, RADIO RECEIVING AND TRANSMITTING TERMINAL STATION OF A RADIO RELAY MULTI OR SINGLE-CHANNEL COMMUNICATION SYSTEM WITH OR WITHOUT CARRIER EQUIPMENT TC-21 AND TC-22 (NOT A PART OF AN/TRC-3) TWO RADIO TERMINAL SETS, AN/TRC-3 CONSTITUTE THE MINIMUM REQUIREMENTS FOR A MULTI-CHANNEL COMMUNICATION SYSTEM. WHERE DISTANCE BETWEEN THE TWO IS TOO GREAT FOR SINGLE JUMP OPERATION, RADIO RELAY SETS AN/TRC-4 ARE PLACED AT INTERMEDIATE POINTS, AS REQUIRED. RADIO SETS AN/TRC-3 AND AN/TRC-4 ARE SUPPLIED WITH SUFFICIENT STANDBY EQUIPMENT TO ASSURE 24-HOUR CONTINUOUS OPERATION.

THIS SHEET IS CLASSIFIED: RESTRICTED

INSTRUCTIONAL LITERATURE:	STATUS:	
	CHANGE IN STATUS:	

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

NOMENCLATURE DESIGNATION: **AN/TRC-4**



PHOTOGRAPH SHOWS SOME OF THE COMPONENTS OF RADIO RELAY SET AN/TRC-4. THE SET BEING HOUSED IN WEAPONS CARRIER, FOR FIXED OPERATION. THIS PHOTOGRAPH, HOWEVER, DOES NOT SHOW NORMAL STANDBY EQUIPMENT TO PROVIDE 24-HOUR CONTINUOUS OPERATION. ILLUSTRATED INSTALLATION IN WEAPONS CARRIER SHOULD NOT BE CONSTRUED AS NORMAL PRACTICE.

AN/TRC-4 IS A 50 WATT, FM RADIO RECEIVING AND TRANSMITTING EQUIPMENT FOR USE AS A REPEATER STATION IN A RADIO RELAY, MULTI, OR SINGLE-CHANNEL COMMUNICATION SYSTEM. AUDIO CHARACTERISTICS: FLAT RESPONSE 200-12,000 CPS. THIS SET HAS STANDBY EQUIPMENT FOR 24-HOUR CONTINUOUS OPERATION.

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 70-100 (300 CHANNEL)

NUMBER OF CRYSTALS: 96 WITH SET, ON 16 "BASIC" FREQUENCIES. FOR ADDITIONAL CRYSTALS, SEE CASE CY-44/TRC-1 CONTAINING 900 CRYSTALS, (PART OF RADIO TERMINAL SET AN/TRC-3)

PRESET FREQUENCIES: ONE

ANTENNA: 3 ELEMENT HORIZONTAL ARRAY.

TUNING: (MO OR XTAL) XTAL (RECEIVER & TRANSMITTER)

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 115 VOLT AC 60 CYCLE, SINGLE PHASE (POWER UNIT PE-75)

SIMILAR SETS: AN/TRC-1, AN/TRC-3

POWER OUTPUT: (WATTS) 50

TUBES: (TYPE AND NUMBER) 10-6AC7, 4-6H6, 15-6SH7, 4-5R4GY, 5-6SL7GT, 5-6SN7GT, 10-6V6GT, 2-6X5GT, 2-829

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE:

RANGE: 25-33 MILES (OR MORE ACCORDING TO TERRAIN AND USE OF AMP. AN/TRA-1)

TO COMMUNICATE WITH: AN/TRC-1, AN/TRC-3 (AND F.M. LINK TYPE 1498 OR 1505)

TO REPLACE IN PART: NONE

TRANSPORTATION: VEHICULAR

TYPE OF SIGNAL: A-3 (FM)

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	DIMENSIONS WIDTH	DIMENSIONS DEPTH	WEIGHT	CLASSIFICATION
3 TRANSMITTER T-14/TRC-1					RESTRICTED
3 RECEIVER R-19/TRC-1					RESTRICTED
4 ANTENNA SYSTEM AS-19/TRC-1					RESTRICTED
3 POWER UNIT PE-75					UNCLASSIFIED
1 MAINTENANCE EQUIPMENT MK-6/TRC-4					RESTRICTED
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					

RC-39

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: STANDARD 25 Oct 39

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: (HMI) 08-10-29

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) 62 to 80

NUMBER OF CRYSTALS: None

PRESET FREQUENCIES: 75 Mc.

ANTENNA: 1/2 wave antenna

TUNING: (MO OR XTAL)

SENSITIVITY: About 2000 microvolts/meter

SELECTIVITY:

POWER SOURCE: 12 volts from aircraft battery and high voltage from Radio Compass.

SIMILAR SETS: RC-43

POWER OUTPUT: (WATTS)

TUBES: (Type and Number) (1) VT-53
(1) VT-104

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: To receive 75 Mc. Marker Beacon signals.

RANGE:

TO COMMUNICATE WITH: RC-115, AN/MRN-3

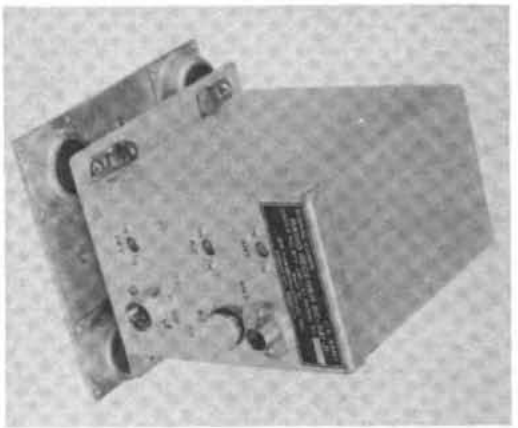
TO REPLACE IN PART: RC-20

TRANSPORTATION: Airborne

TYPE OF SIGNAL: M. C. W.

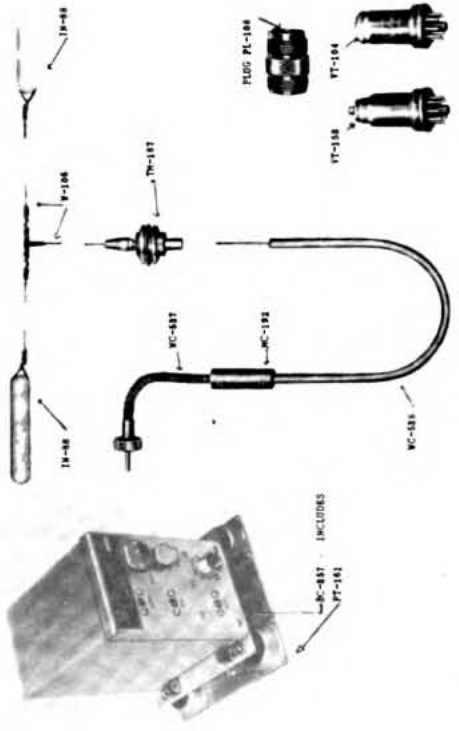
PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
Radio Receiver BC-341	5 3/8 "	5 3/8 "	3 7/16 "	2.65 #	Unclassified
COMBINED WEIGHT OF COMPONENTS:				4.50 #	
COMBINED VOLUME OF COMPONENTS:				1 cu.ft.	
SHIP TONNAGE:					



RADIO RECEIVER BC-341

INSTRUCTIONAL LITERATURE: (HMI) 08-10-29	STATUS:	STANDARD 31 Oct 39	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION: **RC-43**
	CHANGE IN STATUS:			



MARKER BEACON RECEIVING EQUIPMENT RC-43, COMPONENTS

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) 62 TO 80

NUMBER OF CRYSTALS: NONE

PRESET FREQUENCIES: 75 Mc.

ANTENNA: 1/2 WAVE ANTENNA

TUNING: (MO OR XTAL)

SENSITIVITY: ABOUT 2000 MICROVOLTS/METER

SELECTIVITY:

POWER SOURCE: 24 VOLTS FROM AIRCRAFT BATTERY AND HIGH VOLTAGE FROM RADIO COMPASS.

SIMILAR SETS: RC-39

POWER OUTPUT: (WATTS) NONE

TUBES: (TYPE AND NUMBER) (1) VT - 153
(1) VT - 104

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: TO RECEIVE 75 Mc. MARKER BEACON SIGNALS.

RANGE:

TO COMMUNICATE WITH: RC-115, AN/MRN-3

TO REPLACE IN PART: RC-20

TRANSPORTATION: AIRBORNE

TYPE OF SIGNAL: M.C.W.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	DIMENSIONS WIDTH	DIMENSIONS DEPTH	WEIGHT	CLASSIFICATION
RADIO RECEIVER BC-357	5 3/8 "	5 3/8 "	3 7/16 "	2.65 #	UNCLASSIFIED
COMBINED WEIGHT OF COMPONENTS:				4.50 #	
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					

THIS SHEET IS CLASSIFIED: RESTRICTED

RC-103

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: STANDARD 4 MAR 43

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: TO 08-10-104, AND AN 08-10-187 (ON RC-103-A)

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (MC) 108.3-110.3

NUMBER OF CRYSTALS: 3-6

PRESET FREQUENCIES: 3-6

ANTENNA: AN-100 OR AS-27/ARN-5

TUNING: (MO OR XTAL) XTAL

SENSITIVITY: 20MV/METER

SELECTIVITY: 6DB DOWN AT 130 KC BANDWIDTH

POWER SOURCE: 12 OR 24 V. AIRCRAFT BATTERY

SIMILAR SETS: NONE

POWER OUTPUT: (WATTS)

TUBES: (TYPE AND NUMBER)
1 VT-104 (12SQ7)
2 VT-133 (12SR7)
1 VT-134 (12A6)
1 VT-207 (12AH7-GT)
2 VT-209 (12SQ7)
3 VT-269 (WE-717A)

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: AIRBORNE LOCALIZER RECEIVER FOR AZIMUTH GUIDANCE OF PILOT IN INSTRUMENT APPROACH OR LANDING.

RANGE: LINE OF SIGHT

TO COMMUNICATE WITH: AN/MRN-1, AN/CRN-3, AN/CRN-7.

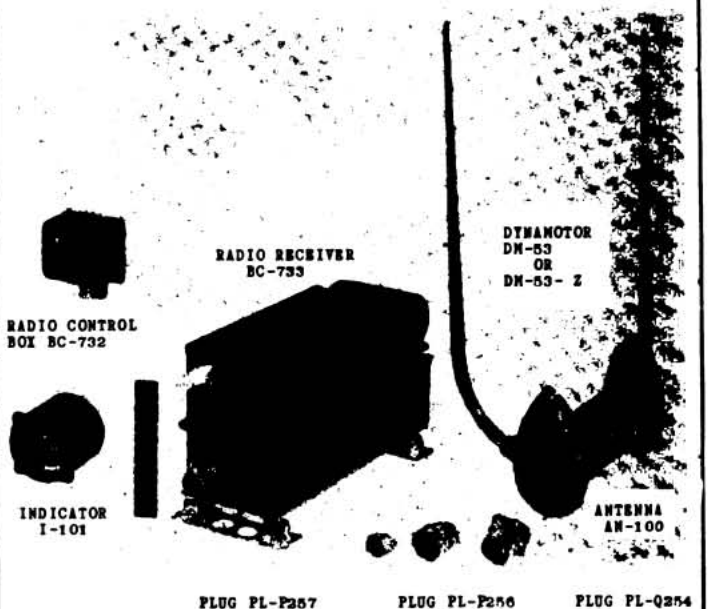
TO REPLACE IN PART: NONE

TRANSPORTATION: AIRBORNE

TYPE OF SIGNAL: CW, MCW, SIMULTANEOUS VOICE.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RECEIVER BC-733	7 3/32"	5"	13 3/8"	21.1#	RESTRICTED
CONTROL BOX BC-732	2 5/8"	3 9/32"	3"	.56#	RESTRICTED
DYNAMOTOR DM-53(24V.) OR DM-53Z (12V.)	3 1/8"	2 3/4"	5"	3.#	RESTRICTED
COMBINED WEIGHT OF COMPONENTS:			ABOUT	30 LBS	
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					



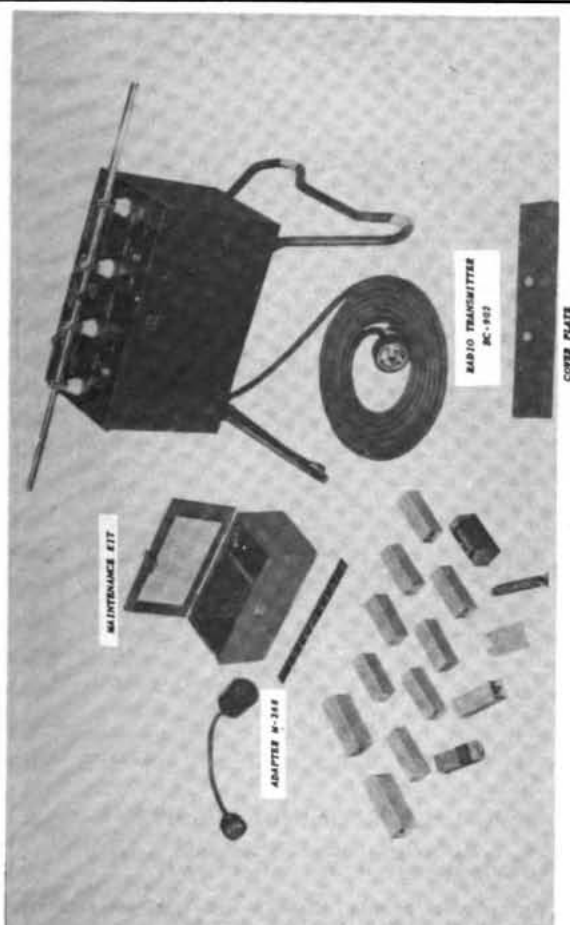
PRINCIPAL COMPONENTS OF RADIO RECEIVING EQUIPMENT RC-103 OR RC-103-Z

AIRCRAFT RADIO LABORATORY, WRIGHT FIELD, OHIO
OFFICIAL PHOTOGRAPH - NOT FOR PUBLICATION

ARL-8818-43

THIS SHEET IS CLASSIFIED: RESTRICTED

INSTRUCTIONAL LITERATURE:	STATUS:	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION:
(HMI)AN-08-10-176 (ON RC-115-A)	CHANGE IN STATUS:		**RC-115**



COMPONENTS OF MARKER BEACON TRANSMITTING EQUIPMENT RC-115-A

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (MC) NONE

NUMBER OF CRYSTALS: NONE

PRESET FREQUENCIES: 75 MC.

ANTENNA: ONE DIPOLE

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 115 V 50-60 CYCLES 110 WATTS

SIMILAR SETS: NONE

POWER OUTPUT: (WATTS) ONE

TUBES: (TYPE AND NUMBER)

1	VT-74 (5Z4)
2	VT-139 (VR-150-30)
1	VT-188 (7E6)
2	VT-189 (7F7)
1	7N7
5	7C5

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: MARKER BEACON TRANSMITTER TO INDICATE SPOT ON GROUND TO AIRCRAFT. USED IN BLIND APPROACH OR INSTRUMENT LANDING.

RANGE: 10,000 FEET STRAIGHT UP.

TO COMMUNICATE WITH: RC-39, RC-43, RC-193, RC-1932, AN/ARN-8.

TO REPLACE IN PART: BC-302

TRANSPORTATION: PLANE OR ANY VEHICLE.

TYPE OF SIGNAL: CW, MCW-400, 1300, 3000 CYCLES KEYED 6 DOTS PER SECOND OR 2 DASHES PER SECOND.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RADIO TRANSMITTER BC-902	22"	31"	18"	51#	RESTRICTED
COMBINED WEIGHT OF COMPONENTS:				51#	
COMBINED VOLUME OF COMPONENTS:			7.5 CU. FT.		
SHIP TONNAGE:					

THIS SHEET IS CLASSIFIED: RESTRICTED

RC-193, 193-Z

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS:

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE:

(HMI) AN-08-10-194

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 75

NUMBER OF CRYSTALS: None

PRESET FREQUENCIES: (Mc) 75

ANTENNA: 1/2 wave

TUNING: (MO or XTAL) None

SENSITIVITY: About 2000 microvolts/meter

SELECTIVITY:

POWER SOURCE: Low and High Voltage supplied by Airplane 24 V. Battery. See Note*

SIMILAR SETS: RC-39, RC-43

POWER OUTPUT (WATTS)

TUBES: (Type and Number) (1) 6SH7
(1) 6SL7-GT(VT-229)
(1) 12SN7-GT

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: To receive 75 Mc Marker Beacon signals.

RANGE: Does not apply.

TO COMMUNICATE WITH: RC-115, AN/MRN-3

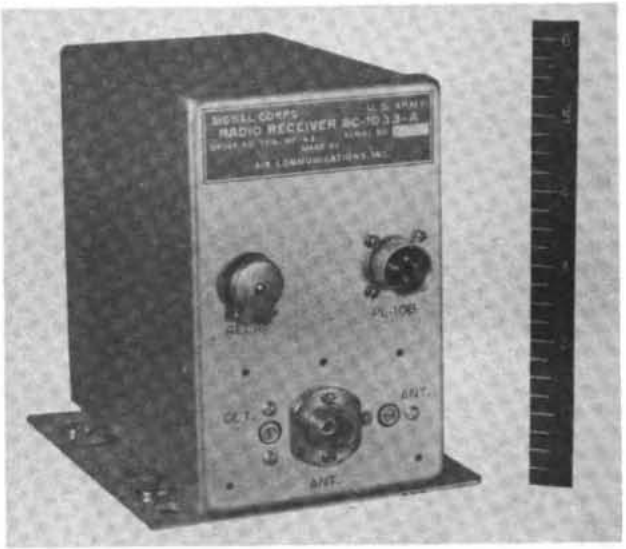
TO REPLACE IN PART: RC-39, RC-43

TRANSPORTATION: Airborne

TYPE OF SIGNAL: M.C.W.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
Radio Receiver BC-1023 & 1033	5 3/8"	5 3/8"	3 7/16"	2.47#	RESTRICTED
COMBINED WEIGHT OF COMPONENTS:				3.17#	
COMBINED VOLUME OF COMPONENTS:				.5 cu.ft.	
SHIP TONNAGE:				4.5 lbs. (approx.)	



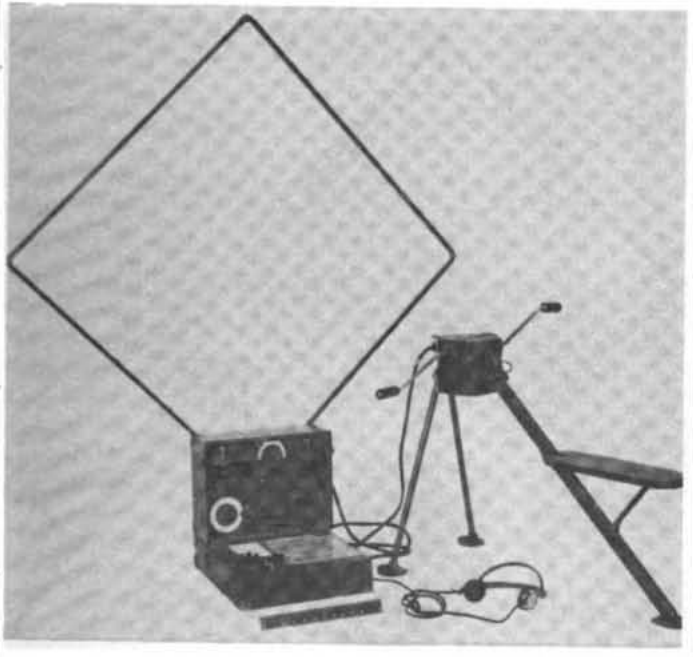
RADIO RECEIVER BC-1033, FRONT VIEW. PART OF RC-193 AND RC-193-Z.

This Receiver differs from RC-39 and RC-43 in that it does not require any high voltage supply.

* NOTE REGARDING POWER SOURCE: RC-193 and RC-193-Z are identical except that RC-193-Z works from 12 V. Battery.

THIS SHEET IS CLASSIFIED: RESTRICTED

INSTRUCTIONAL LITERATURE: TM-11-237	STATUS:	OBSOLETE 1 Feb 44	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION:	SCR-131
	CHANGE IN STATUS:				



RADIO SET SCR -131 IN OPERATING POSITION

LOW POWER, PORTABLE COMMUNICATION SET, REPLACED BY SCR-284

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: TRANSMITTER 3.96 TO 4.36. (MO)

NUMBER OF CRYSTALS: NONE

PRESET FREQUENCIES: NONE

ANTENNA: LOOP LP-7

TUNING (MO OR CRYSTAL): MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: TRANSMITTER: HAND GENERATOR 10x400v. RECEIVER: DRY BATTERY 4½ & 45 v.

SIMILAR SETS: SCR-161 (DIFFERENT FREQUENCY)

POWER OUTPUT: 5 WATTS

TUBES: (TYPE AND NUMBER) 1 - TYPE 10 VT-25
3 - TYPE 864 VT-24

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: USED BY INFANTRY, ARMORED FORCE FOR COMMAND COMMUNICATION BETWEEN BRIGADE AND REGIMENTS AND BATTALIONS OF THE INFANTRY DIVISION. ON GROUND: INF, BHQ, Co., REGT HQ Co., Bn., SEC COM PLAT.

RANGE: 5 MILES.

TO COMMUNICATE WITH: SCR-131, SCR-193, SCR-245 AND SCR-288.

TO REPLACE IN PART: SCR-77-8

TRANSPORTATION: CARRIED BY VEHICLE, OR 2-MAN PACK.

TYPE OF SIGNAL: CW ONLY.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
TRANSMITTER & RECEIVER, BC-148				22#	
HAND GENERATOR, GN-35				20-1/4#	
ANTENNA LOOP, LP-7				1-5/8#	
COMBINED WEIGHT OF COMPONENTS:				76#	
COMBINED VOLUME OF COMPONENTS:				6 CU. FT.	
SHIP TONNAGE:				90#	

SCR-161

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION

STATUS: OBSOLETE 1 Feb 44

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: TM 11-237

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) Trans. 4.37 to 5.1.

NUMBER OF CRYSTALS: None

ANTENNA: Loop LP-7

TUNING: (MO or XTAL): MO

SENSITIVITY: SELECTIVITY:

POWER SOURCES: Trans.- Hand Generator
Recvr.- Dry Battery 4-1/2 & 45 v.

SIMILAR SOURCE: SCR-131 (Different Frequency)

POWER OUTPUT: (Watts) 5

TUBES: (Type and Number) 1 BC-151 Trans.-Recvr.
1 - Type 10 VT-25
3 - Type 864 VT-24

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: Used by Field Artillery. Command Communication between Div. Artillery and Regiment and from Regiment to Battalions. Also used for Liaison Purposes between Artillery Units. On Ground: BHQ. Lt. Med. & Hvy. Regt. Hq. Bn. Hq.

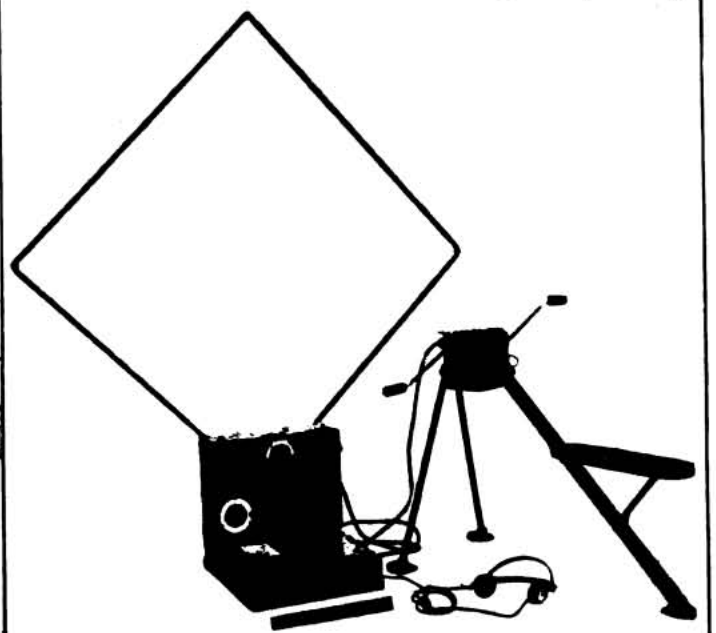
RANGE: (Miles) 5

TO COMMUNICATE WITH: SCR-161, SCR-288 and SCR-245.

TO REPLACE IN PART: SCR-77-B and 105.

TRANSPORTATION: Carried in Vehicle, Two-man Pack, or Horse pack.

TYPE OF SIGNAL: CW Only.



RADIO SET SCR-161 IN OPERATING POSITION

LOW POWER, PORTABLE COMMUNICATION SET, REPLACED BY SCR-284

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
1 Radio Receiver & Transmitter BC-151				22 #	UNCLASSIFIED
1 Hand Generator GN-35				20 1/4#	UNCLASSIFIED
1 Antenna Loop LP-7				1 5/8#	UNCLASSIFIED
COMBINED WEIGHT OF COMPONENTS:				76#	
COMBINED VOLUME:				6 cu.Ft.	
SHIP TONNAGE:				90#	

INSTRUCTIONAL LITERATURE: TR 1210-31	STATUS:	OBSOLETE 1 Feb 44
	CHANGE IN STATUS:	

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

NOMENCLATURE DESIGNATION: **SCR-171**

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) Trans. 2.64 to 3.04.

NUMBER OF CRYSTALS: None.

PRESET FREQUENCIES: None

ANTENNA: 60 Ft. "L" Type with counterpoise on Ground.

TUNING (MO or XTAL): MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: Trans.-Hand generator GN-35 10 & 400 v. Recvr.-4.5 & 45 v. Dry Batteries.

SIMILAR SETS: SCR-131, and 161 (Except Frequency and Antenna).

POWER OUTPUT: (Watts) 5

TUBES: (Type and Number) 1 - Type 10 VT-25
3 - Type 864 VT-24

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: Used by Infantry, Field Artillery, Signal Corps, Air Corps, for Cond. Com. between Div. Hq. and Brigades. Also between Div. Hq and Regiment.

RANGE: (Miles) 15

TO COMMUNICATE WITH: SCR-171, SCR-203, SCR-245, SCR-193 and SCR-238.

TO REPLACE IN PART: SCR-79-A, and 130.

TRANSPORTATION: Carried in vehicle, operated on ground.

TYPE OF SIGNAL: CW Only.

RADIO RECEIVER AND TRANSMITTER BC-156 (PART OF RADIO SET SCR-171) IN OPERATING POSITION.

LOW POWER, FIELD COMMUNICATION SET, REPLACED BY SCR-284

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
Radio Receiver & Transmitter BC-156				24 #	UNCLASSIFIED
Generator GN-35				20 1/4#	UNCLASSIFIED
Antenna AN-19				1.5 #	UNCLASSIFIED
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME:					
SHIP TONNAGE:				216 #	

SCR-177

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: STANDARD 26 Dec 33

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: TM 11-232

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) TRANS: .4 TO .8; 1.5 TO 4.5 RECVR: .4 TO 1.0; 1.5 TO 4.5.

NUMBER OF CRYSTALS: NONE

PRESET FREQUENCIES: NONE

ANTENNA: CROW-FOOT .4 TO .8 MC./1.5 TO 4.5: INVERTED "L". AN-21-A, 22-A, 23, 25, 26, & 27.

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: TRANS. BC-191-A. RECVR. BD-AA-69; BD-AB-69; BD-AC-69; BD-AD-69; BD-AE-69; WITH 12- V. STORAGE BATTERY.

SIMILAR SETS: SCR-188

POWER OUTPUT: (WATTS) 75 AT 85% MOD.

TUBES: (TYPE AND NUMBER) TUBE CONTENT OF 177-A: 1 BC-189-A: 3 36; 1 38; 4 39/44. 1 BC-191-A: 1 10; 4 211.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: SIG C: SIG BN, DIV SIG CO, R.I. CO, AA REGT HQ, AA BN HQ CO.
CAC: (TD) BHQ, REGT HQ, BN HQ.
FY ARTY: (HD) BHQ, REGT HQ, BN HQ, BTRY (LTRD) AC.

RANGE: (MILES) CW-100; TONE-70; VOICE-30.

TO COMMUNICATE WITH: SCR-177-B; SCR-187; SCR-193; SCR-238; SCR-287.

TO REPLACE IN PART: SCR-132-A; SCR-136.

TRANSPORTATION: CARRIED IN VEHICLE OPERATED ON GROUND.

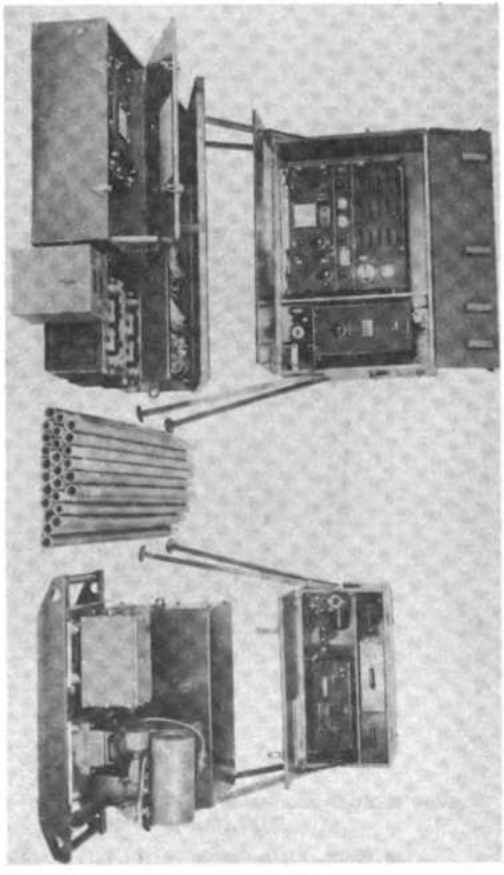
TYPE OF SIGNAL: CW; TONE; VOICE; A.M.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RADIO TRANS. BC-191-A					UNCLASSIFIED
RADIO RECVR. BC-189-A					UNCLASSIFIED
POWER UNIT PE-49					UNCLASSIFIED
COMBINED WEIGHT OF COMPONENTS:				860#	
COMBINED VOLUME:				20 Cu.Ft.	
SHIP TONNAGE:					

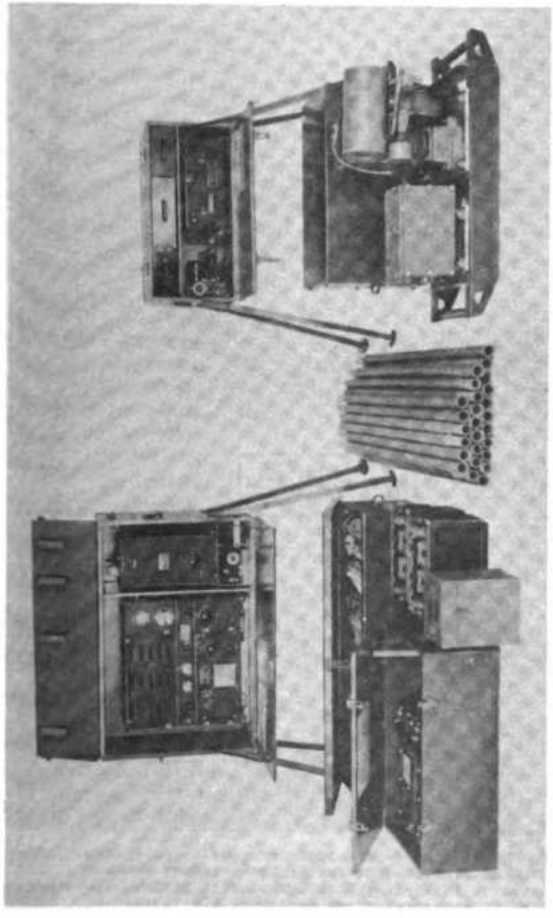
RADIO SET SCR-177-A. PRINCIPAL COMPONENTS.

MEDIUM POWER, MEDIUM FREQUENCY, GROUND COMMUNICATION SET. POINT-TO-POINT AND GROUND-TO-AIR COMMUNICATION. THE "A" MODEL DIFFERS FROM THE ORIGINAL IN THAT IT INCLUDES AN IMPROVED TRANSMITTER; THE "B" MODEL DIFFERS FROM THE OTHERS IN THAT THE RECEIVER FREQUENCIES ARE COVERED BY TWO RECEIVERS WITH BUILT-IN COILS IN LIEU OF ONE RECEIVER WITH SEPARATE COIL SETS. SCR-177-B USES RECEIVERS BC-312 AND BC-314 UNION TUNE .150 TO 18.0 MC. TO BE PARTIALLY REPLACED BY SCR-543, MEDIUM POWER GROUND SET. SEE SCR-177-B



INSTRUCTIONAL LITERATURE: TM 11-232	STATUS:	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION:
	CHANGE IN STATUS:		

SCR-177-B



RADIO SET SCR-177--PRINCIPAL COMPONENTS

RADIO SET SCR-177-B IS THE SAME AS RADIO SET SCR-177 EXCEPT SCR-177-B USES RECEIVERS BC-312 AND BC-314 INSTEAD OF BC-189-A SHOWN IN ABOVE PHOTOGRAPH.

PART A - TECHNICAL CHARACTERISTICS

(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) TRANS. .4 - .8; 1.5 - 4.5
RECVR. .15 - 18.0

NUMBER OF CRYSTALS: NONE

PRESET FREQUENCIES: NONE

ANTENNA: CROW-FOOT .4 TO .8 Mc/1.5 TO 4.5: INVERTED "L". AN-21-A, 22-A, 23,25,26 & 27.

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: TRANS. PE-49; RECVR. DM-21, AND 12V BATTERY.

SIMILAR SETS: SCR-188-A

POWER OUTPUT: (WATTS) 75 @ 100% MOD.

TUBES: (TYPE AND NUMBER) 4-6C5
2-6F6
8-6K7
2-6L7
2-6R7
1-10
4-211SPL

PART B - TACTICAL CHARACTERISTICS

(CLASSIFICATION:)

USE: SIG C: SIG BN, DIV SIG CO, R. I. CO, AA REGT HQ, AA BN HQ CO.
CAC: (TD) BHQ, REGT HQ. BN HQ.
FY ARTY: (HD) BHQ, REGT HQ, BN HQ, BTRY ((LTRD) AC.

RANGE: (MILES) CW-100; TONE-70; VOICE-30.

TO COMMUNICATE WITH: SCR-177-B; SCR-187; SCR-193; SCR-238-A; SCR-287-A.

TO REPLACE IN PART: SCR-132-A; SCR-136; SCR-177-A.

TRANSPORTATION: CARRIED IN VEHICLE, OPERATED ON GROUND.

TYPE OF SIGNAL: CW; TONE; VOICE; A.M.

PART C - PRINCIPAL COMPONENTS

(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
TRANS. BC-191					
RECVR. BC-314					
RECVR. BC-312					
POWER UNIT PE-49					
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					

SCR-178

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: OBSOLETE 4 Feb 44

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: TM 11-231

PART A – TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) Trans. 2.4 - 3.7. Recvr. 2.4 - 3.7.

NUMBER OF CRYSTALS: None

PRESET FRQUENCIES: None

ANTENNA: 27 Ft. Fishpole with Counterpoise.

TUNING (MO or XTAL): MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: Trans.-Hand Generator 8 & 500 v. Recvr.-Dry Batteries - 4 BA-2; 4 BA-23 and 2 BA-27.

SIMILAR SETS: SCR-179

POWER OUTPUT: (Watts)CW - 5; Tone - 3; Voice - 2.2 Tone - 100%, Voice - 90% Modulation.

TUBES: (Type and Number) Tubes: 1 BC-186, Recvr. 2 Type 30, 2 Type 34. 1 BC-187-A: 1 Type 10, 1 Type 865. 1 Modulator BC-188-A: 2 Type 30.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: Used by Field Artillery. On Ground: FA, Med., Hvy, & Lt. Bn HQ, BHQ, Regt Hq. for Point to Point, and ground to plane between all FA units, (except Pack) and aircraft for observation purposes.

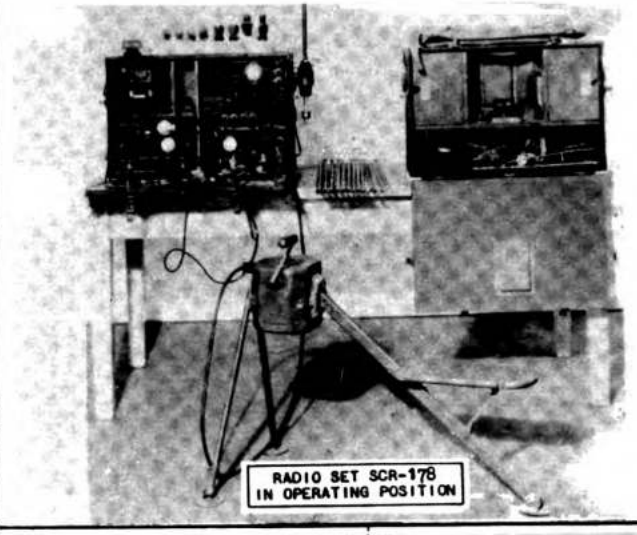
RANGE: (Miles) Point to point: cw-25; Tone-20; Voice-10. Air to ground: CW-100; Tone-75; Voice-30.

TO COMMUNICATE WITH: SCR-178; SCR-179 and SCR-238.

TO REPLACE IN PART: SCR-109-A.

TRANSPORTATION: Carried in vehicle.

TYPE OF SIGNAL: CW, Tone, Voice.



RADIO SET SCR-178 IN OPERATING POSITION

PART C – PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
1 Radio Trans. BC-187-(A)				12.2#	UNCLASSIFIED
1 Radio Modulator BC-188-(A)				6.1#	UNCLASSIFIED
1 Radio Recvr. BC-186				9.2#	UNCLASSIFIED
1 Generator GN-37				30.0#	UNCLASSIFIED
COMBINED WEIGHT OF COMPONENTS:				200 #	
COMBINED VOLUME:				14 Cu.Ft.	
SHIP TONNAGE:				224 #	

RADIO SET SCR-178 OPERATING POSITION IN FIELD

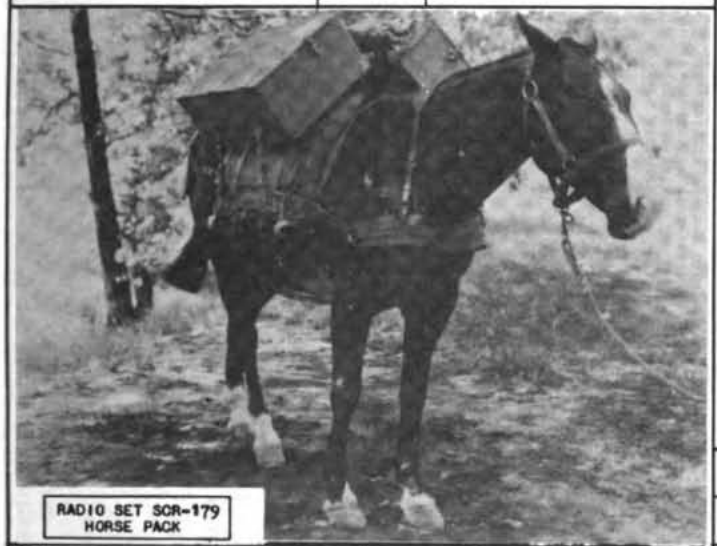
Radio Set SCR-178 is a low power set for point-to-point and Ground-to-Air communication between Field Artillery and observation aircraft. When carried in a pack this set is called SCR-179. H. F. Replacement for Radio Set SCR-109-A.

INSTRUCTIONAL LITERATURE:	STATUS:	OBSOLETE 4 FEB 44
TM 11-231	CHANGE IN STATUS:	

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

NOMENCLATURE DESIGNATION:

SCR-179



RADIO SET SCR-179 HORSE PACK

RADIO SET SCR-179 OPERATING POSITION IN FIELD

RADIO SET SCR-179, IS A LOW POWER SET FOR POINT-TO-POINT AND GROUND-TO-AIR COMMUNICATION. THIS SET IS IDENTICAL WITH RADIO SET SCR-178 EXCEPT CARRYING CASES HAVE PACK SADDLE HANGERS.

PART A - TECHNICAL CHARACTERISTICS

(CLASSIFICATION:)

FREQUENCY RANGE: TRANSMITTER, 2.4 - 3.7
RECEIVER, 2.4 - 3.7

NUMBER OF CRYSTALS: NONE

PRESET FREQUENCIES: NONE

ANTENNA: 27 FOOT FISHPOLE, WITH COUNTERPOISE.

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: RADIO GENERATOR GN-37, 8 AND 500 V. DRY BATTERIES AS FOLLOWS: 4 BA-2; 4 BA-23; 2 BA-27.

SIMILAR SETS: SCR-178.

POWER OUTPUT: (WATTS) CW-5; TONE-3; VOICE-2.2, TONE-100%; VOICE-90% MODULATION.

TUBES: (TYPE AND NUMBER) 1 BC-186 USES: 2, 30; 2, 34. 1 BC-187-A USES: 1, 10; 1, 865; 1 BC-188-A USES: 2, 30.

PART B - TACTICAL CHARACTERISTICS

(CLASSIFICATION:)

USE: FIELD ARTILLERY, HORSE AND PACK ARTILLERY, OPERATED ON GROUND.

RANGE: (MILES) POINT-TO-POINT: CW-25; TONE-20; VOICE-10. AIR-TO-GROUND: CW-100; TONE-75; VOICE-30.

TO COMMUNICATE WITH: RADIO SET SCR-178; SCR-179, AND SCR-238.

TO REPLACE IN PART: RADIO SET SCR-109-A

TRANSPORTATION: HORSE PACK.

TYPE OF SIGNAL: CW - TONE - VOICE. (A.M.)

PART C - PRINCIPAL COMPONENTS

(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RADIO MODULATOR, BC-188					
RADIO TRANSMITTER, BC-187					
RADIO RECEIVER, BC-186					
RADIO GENERATOR GN-37					
COMBINED WEIGHT OF COMPONENTS:				203#	
COMBINED VOLUME OF COMPONENTS:				5 CU.FT.	
SHIP TONNAGE:					

SCR-183

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: LIMITED STANDARD 13 Nov 43

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: TM 11-200

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: RECEIVING - 201-398 Kc, 4150-7700 Kc. TRANSMITTING - 2500-7700 Kc.

NUMBER OF CRYSTALS: NONE

PRESET FREQUENCIES: NONE

ANTENNA: RECVR.- 5 FT. VERTICAL MAST ANTENNA. TRANS.- "T" OR "L" TYPE 16 TO 18 FT. LONG.

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 12 VOLT PLANE BATTERY.

SIMILAR SETS: SIMILAR TO SCR-283 EXCEPT 12 V.

POWER OUTPUT: (WATTS) VOICE 3.3; TONE 3.2; CW 4.0.

TUBES: (TYPE AND NUMBER) 4 TYPE 39/44
1 TYPE 37
1 TYPE 38
2 TYPE 10
2 TYPE 45 SPL.

(TUBE CONTENT SHOWN ABOVE PERTAINS TO SCR-AB-183)

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: COMMAND SET - PLANE-TO-PLANE; PLANE-TO-GROUND COMMUNICATIONS.

RANGE: (MILES) 30-45 MILES PLANE-TO-PLANE. 10-20 MILES PLANE-TO-GROUND.

TO COMMUNICATE WITH: OTHER EQUIPMENT WITHIN RANGE OF EACH OTHER COVERING SAME FREQUENCIES.

TO REPLACE IN PART:

TRANSPORTATION: AIRBORNE INSTALLATION.

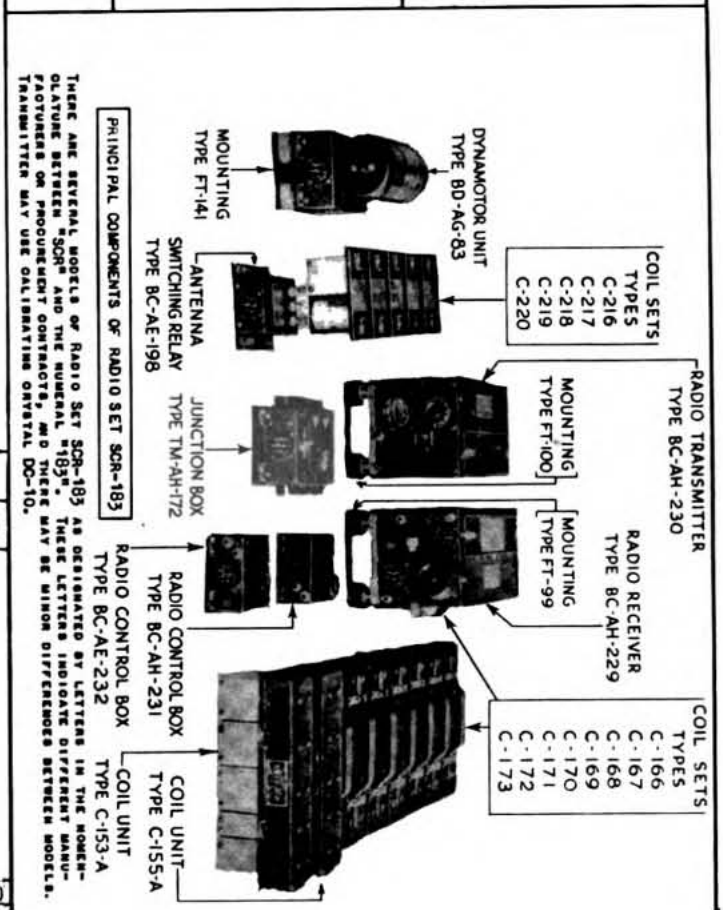
TYPE OF SIGNAL: CW; TONE; VOICE.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RADIO RECVR. BC-229	7 5/8	8 1/4	15 11/16	12.0	
RADIO TRANS. BC-230	7 5/8	6 5/8	13 1/4	10.2	
DYNAMOTOR UNIT BC-83 BD-83				9.9	
RADIO CONTROL BOX BC-231	4 5/8	4	2 7/16	.9	
RADIO CONTROL BOX BC-232	2 7/16	4	4 5/8	.9	
ANTENNA SW. RELAY BC-198	4 9/16	4 5/8	2 3/4	1.1	
2 RECVR COIL SETS (ONE IS A DUAL COIL)					
6 TRANS. COIL SETS.					
COMBINED WEIGHT OF COMPONENTS:				43.3# (INCLUDING MINOR COMP)	
COMBINED VOLUME:				1.65 CU. FT.	
SHIP TONNAGE:					

PRINCIPAL COMPONENTS OF RADIO SET SCR-183

THERE ARE SEVERAL MODELS OF RADIO SET SCR-183 AS DESIGNATED BY LETTERS IN THE NOMENCLATURE BETWEEN "SCR" AND THE NUMERAL "183". THESE LETTERS INDICATE DIFFERENT MANUFACTURERS OR PROCUREMENT CONTRACTS, AND THERE MAY BE MINOR DIFFERENCES BETWEEN MODELS. TRANSMITTER MAY USE CALIBRATING CRYSTAL DC-10.



(LOW FREQUENCY AND HIGH FREQUENCY AIRBORNE LIAISON SET)

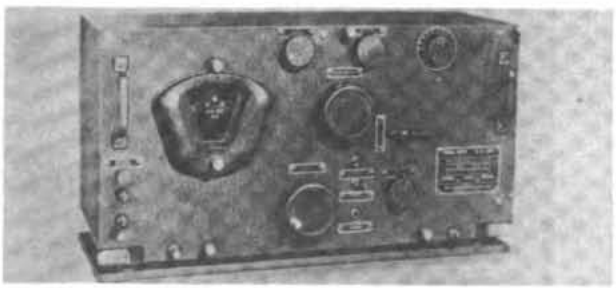
SCR-187

INSTRUCTIONAL LITERATURE:
COVERED BY BOOKS FOR TRANS. BC-191 & RECEIVER BC-224
BC-191-A, B, C, D, & AA-191 TM-11-800
BC-191-N - TO 08-10-165
BC-224-A-TO 08-10-24
BC-224-B - TO 08-10-25
BC-224-C - TO 08-10-47
BC-224-D - IB STOCK NO. 2C 4224 D/1
BC-224-E, G, H -TO 08-10-79
BC-224-F, K - TO 08-10-180
BC-224-L - TO 08-10-164

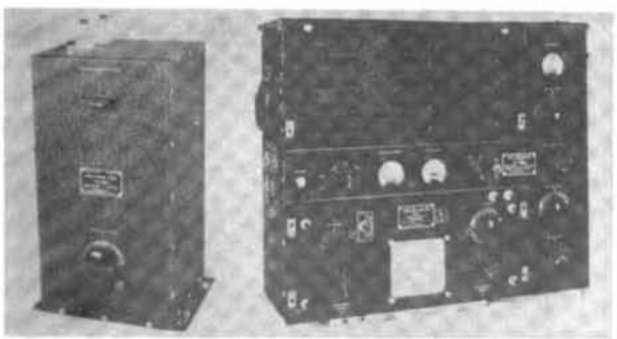
STATUS:	LIMITED STANDARD 13 Nov 43
CHANGE IN STATUS:	

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

NOMENCLATURE DESIGNATION:



RADIO RECEIVER BC-224



ANTENNA TUNING UNIT BC-306.

RADIO TRANSMITTER BC-191 (TRANSMITTER TUNING UNIT TU-5 IN PLACE)

RADIO SET SCR-187. COMPONENTS.

RECEIVER BC-224 CONTAINS CRYSTAL FILTER.

PART A - TECHNICAL CHARACTERISTICS

(CLASSIFICATION:)

FREQUENCY RANGE: RECVR.- 1.5 - 18 Mc.
TRANS.- 1.5 - 12.5 Mc.; 200-500 Kc; 600-1500 Kc.

NUMBER OF CRYSTALS: NONE

PRESET FREQUENCIES: NONE

ANTENNA: TRAILING WIRE

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 12 - 14 VOLT AIRPLANE BATTERY SUPPLY

SIMILAR SETS: SCR-287

POWER OUTPUT: (WATTS) 30 - 60 WATTS.

TUBES: (TYPE AND NUMBER) SCR-AA-197 USES:
TRANS. - 4 VT-4-B
1 VT-25
RECVR. - 1 VT-37
1 VT-38
4 VT-49

PART B - TACTICAL CHARACTERISTICS

(CLASSIFICATION:)

USE: AIR-TO-AIR, AIR-TO-GROUND COMMUNICATION LIAISON SET.

RANGE: (MILES) 50 TO SEVERAL HUNDRED MILES.

TO COMMUNICATE WITH: SCR-188; SCR-193; SCR-197; SCR-299.

TO REPLACE IN PART:

TRANSPORTATION: AIRBORN INSTALLATION.

TYPE OF SIGNAL: VOICE, TONE, CW.

PART C - PRINCIPAL COMPONENTS

(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RADIO TRANS. BC-191	21 21/32	23 1/8	9 5/16	55	
RADIO RECVR. BC-224	18 21/32	10 1/2	9 1/2	40	
DYNAMOTOR UNIT BD-77	11 21/32	16 3/4	8	44	
RADIO CONTROL BOX BC-309	3 9/16	3 1/2	2 7/32	.42	
ANTENNA TUNING UNIT BC-306	17 3/4	9 1/2	9 1/8	9.75	
TRANSMITTER TUNING UNIT TU-3	7 5/8	16 3/4	8 3/4	13	
TRANSMITTER TUNING UNIT TU-5	7 5/8	16 3/4	8 3/4	13	
TRANSMITTER TUNING UNIT TU-6	7 5/8	16 3/4	8 3/4	13	
TRANSMITTER TUNING UNIT TU-7	7 5/8	16 3/4	8 3/4	13	
TRANSMITTER TUNING UNIT TU-8	7 5/8	16 3/4	8 3/4	13	
TRANSMITTER TUNING UNIT TU-9	7 5/8	16 3/4	8 3/4	13	
TRANSMITTER TUNING UNIT TU-10	7 5/8	16 3/4	8 3/4	13	

NOTE: DUE TO VARIATIONS IN AIRCRAFT INSTALLATIONS, BOTH WEIGHTS AND VOLUMES OF COMPLETE SETS VARY CONSIDERABLY AND THE FIGURES SHOWN ARE THEREFORE APPROXIMATE.

COMBINED WEIGHT OF COMPONENTS:				250 LBS. APPROX.	
COMBINED VOLUME:				6 CU. FT. APPROX.	
SHIP TONNAGE:					

SCR-188

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS:	STANDARD 26 Dec 33	INSTRUCTIONAL LITERATURE: TM 11-233.
CHANGE IN STATUS:		

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: Trans.: 1.5 - 12.5. Recvr.: 0.4 - 13.0 Mc.

NUMBER OF CRYSTALS: 1 as Xtal oscillator.

PRESET FREQUENCIES:

ANTENNA: Inverted L (¼ or 3/4 wave). AN-22-A, 23-A, 25, 26, 27, & 28.

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: Trans. PE-49-A; Recvr. BD-AA-69; BD-AB-69; BD-AC-69; BD-AD-69; BD-AE-69, with 12 V storage battery.

SIMILAR SETS: SCR-177-A except frequency.

POWER OUTPUT: (Watts) 75 at 85% Modulation Tone; Voice.

TUBES: (Type and Number) 1 BC-189-A: 3 type 36; 1 type 38; 4 type 39/44. 1 BC-AA-191: 1 type 10 4 type 211 spl.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: AC Pursuit: Sqdn, grp, wng.
Attack : Sqdn, grp, wng. Obs.
Sig Co : AWS Co.

RANGE: (Miles) CW-100; Tone-70; Voice-30.

TO COMMUNICATE WITH: SCR-183; SCR-187; SCR-188; SCR-197; SCR-240-A; SCR-259-A; SCR-261-A; SCR-274-N; SCR-283; SCR-287; SCR-238-A.

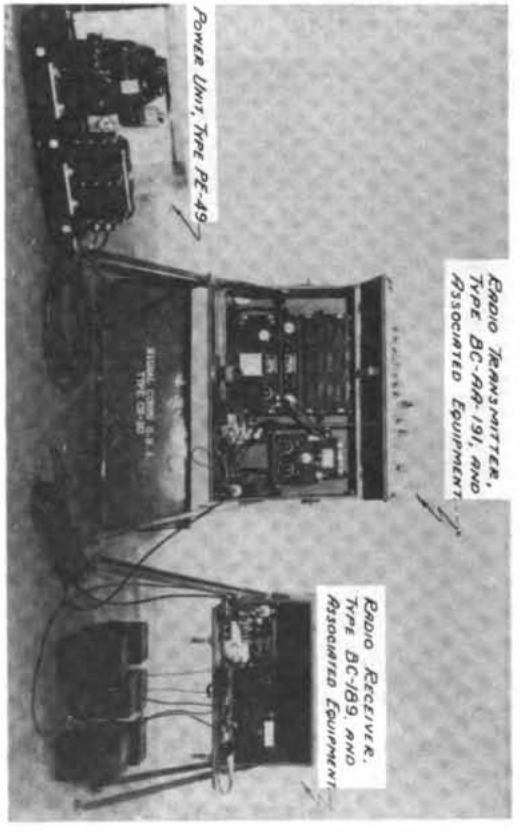
TO REPLACE IN PART: NONE

TRANSPORTATION: Vehicles or planes (operated on ground only).

TYPE OF SIGNAL: CW; Tone; Voice. (A.M.)

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

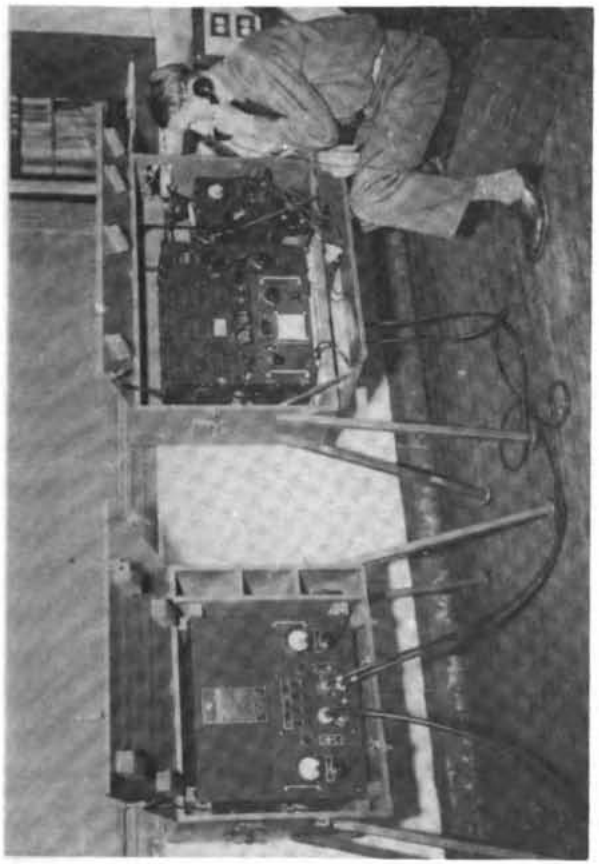
ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
Radio Trans. BC-AA-191					UNCLASSIFIED
Radio Recvr. BC-189-A					UNCLASSIFIED
Power Unit PE-49					UNCLASSIFIED
COMBINED WEIGHT OF COMPONENTS:				1,150#	
COMBINED VOLUME OF COMPONENTS:				25 cu.ft.	
SHIP TONNAGE:					



RADIO SET SCR-188, IN OPERATING POSITION.

INSTRUCTIONAL LITERATURE: TM 11-233	STATUS:	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION:
	CHANGE IN STATUS:		

SCR-188-A



RADIO SET SCR-188-A SHOWING TRANSMITTER SET UP IN ACTION

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) TRANS. 1.5 - 12.5
RECVR. 1.5 - 18.0

NUMBER OF CRYSTALS:

PRESET FREQUENCIES:

ANTENNA: INVERTED L (¼ OR 3/4 WAVE). AN-22-A, 25-A, 25, 26, 27, & 28.

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: TRANS. & RECVR. PE-75. TRANS. RECTIFIER RA-36. RECVR. RECTIFIER RA-20.

SIMILAR SETS: SCR-177-B

POWER OUTPUT: (WATTS) 75 @ 85% MOD. TONE & VOICE.

TUBES: (TYPE AND NUMBER)

1-5W4	1-6L7	1-10
3-6C5	1-6R7	4-211SPL
1-6F6	1-6X5GT	2-866A
4-6K7		

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: AC PURSUIT: SQDN, GRP, WNG.
ATTACK : SQDN, GRP, WNG, OBS.
SIG C : AWS Co.

RANGE: (MILES) CW 100; TONE 70; VOICE 30.

TO COMMUNICATE WITH: SCR-183; SCR-187; SCR-188; SCR-197; SCR-240-A; SCR-259-A; SCR-261-A; SCR-274-N; SCR-283; SCR-287; SCR-288-A.

TO REPLACE IN PART: NONE

TRANSPORTATION: VEHICLES OR PLANES (OPERATED ON 6 ROUND ONLY).

TYPE OF SIGNAL: CW; TONE; VOICE. (A.M.)

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
TRANS. BC-191					UNCLASSIFIED
RECVR. BC-342					UNCLASSIFIED
POWER UNIT PE-75					UNCLASSIFIED
RECTIFIER RA-34					UNCLASSIFIED
COMBINED WEIGHT OF COMPONENTS:				1385#	
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					

SCR-193

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: STANDARD 5 Dec 33

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: TM 11-275

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (MO) TRANS.: 1.5 - 4.5. RECVR.: 1.5 - 18.0.

NUMBER OF CRYSTALS: NONE

PRESET FREQUENCIES: NONE

ANTENNA: 15' FISHPOLE ON FLEXIBLE MAST BASE MP-14 OR MP-37.

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: TRANS. DYNAMOTOR UNIT BD-77; RECVR. DYNAMOTOR INTEGRAL. 12 V CAR BATTERY.

SIMILAR SETS: SCR-177-B

POWER OUTPUT: (WATTS) 75 AT 100% MODULATED.

TUBES: (TYPE AND NUMBER)
- 8 VT-4-B; 4 IN USE, 4 SPARE.
- 2 VT-25; 1 IN USE, 1 SPARE.
- 6 VT-36; 3 IN USE, 3 SPARE.
- 2 VT-38; 1 IN USE, 1 SPARE.
- 8 VT-49; 4 IN USE, 4 SPARE.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: CAV.: RGM SQ, HQ TR (H&M), SERV. TR. (H&M).
ENGRS: BN, AVN, REGT, ARMD BN.
SIG C: CO ARMD, CO & TR OPN.
TANKS, SCOUT CARS, HALF TRACKS ETC.

RANGE: (MILES) STATIONARY - CW-60; TONE-40; VOICE-20. MOVING - CW-30; TONE-20; VOICE-15.

TO COMMUNICATE WITH: SCR-131; SCR-171; SCR-177; SCR-178; SCR-187; SCR-193; SCR-203; SCR-209; SCR-210; SCR-238; SCR-245; SCR-259; SCR-287.

TO REPLACE IN PART:

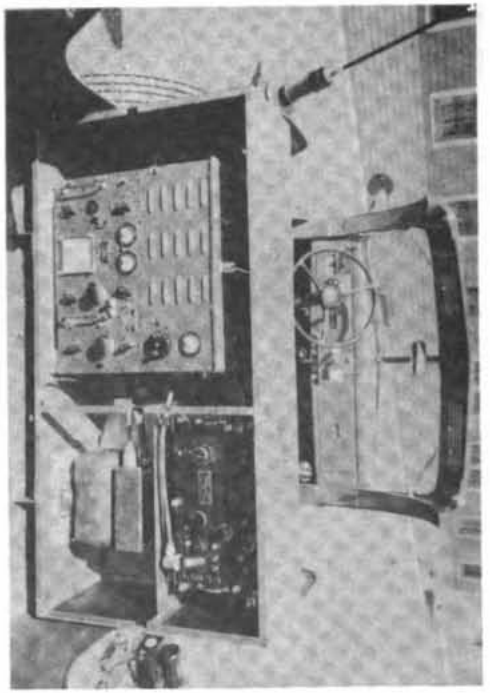
TRANSPORTATION: LT. TANKS M2, MED TANK T4, COMBAT CAR M-1, SCOUT CAR M-2, ARMD CAR T-11, ARMD CAR M-1.

TYPE OF SIGNAL: CW; TONE; VOICE; (A.M.)

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RADIO TRANS. BC-191					UNCLASSIFIED
RADIO RECVR. BC-312					UNCLASSIFIED
DYNAMOTOR BD-77					UNCLASSIFIED
COMBINED WEIGHT OF COMPONENTS:				200 #	
COMBINED VOLUME:				7 CU. FT.	
SHIP TONNAGE:					

RADIO SET SCR-193-E
INSTALLATION IN TRUCK, 1/2-TON 4 X 4 COMMAND (RADIO)



RADIO SET SCR-193 IS A VEHICULAR COMMUNICATION SET. IN INFANTRY IT HAS BEEN REPLACED BY RADIO SET SCR-245. INSTALLATION IN VEHICLES FOR INTERCOMMUNICATION. MODIFICATIONS OF THIS SET ARE ADAPTED TO DIFFERENT TYPES OF VEHICLES, INCLUDING TANKS, SCOUT CARS AND COMBAT CARS. SCR-193-D IS THE SET USED FOR SCOUT CARS, M3A1. DIFFERENCES MAINLY IN CORD LENGTHS. (WHEN RADIO SET SCR-193 IS ISSUED TO CAVALRY UNITS, FREQUENCIES OF 2.0 - 3.0 MC. ARE ASSIGNED.)

INSTRUCTIONAL LITERATURE: TM 11-238	STATUS:	LIMITED STANDARD 18 Mar 43	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION: SCR-194
	CHANGE IN STATUS:			

RADIO SET SCR-194 ASSEMBLED VIEW.

"Walkie-Talkie" physically similar to field pack. Can be operated while being carried as a one-man pack or from a vehicle. Normally only two sets can be netted. To be replaced by SCR-300. Partially replaced in AF by SCR-509 and 510. Replaced in FA by SCR-609 and 610. Can be remote controlled or operated through telephone switchboard, when Remote Control Equipment RC-66 is used.

PART A - TECHNICAL CHARACTERISTICS

(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) 27.7 to 52.2.

NUMBER OF CRYSTALS: 1 for calibration.

PRESET FREQUENCIES: None.

ANTENNA: Adjustable Rod for ground use (12 sections max.). Three section fishpole for vehicle. 1/2-Rhombic Antenna equipment RC-63 may be added for greater distance.

TUNING (MO or XTAL): MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: Dry Batteries BA-32.

SIMILAR SETS: SCR-195 except for frequency.

POWER OUTPUT: (Watts) .75 @ 60% Modulation.

TUBES: (Type and Number) BC-222 Transceiver,
Tubes: 1 Type 33
1 Type 30 Spl.

PART B - TACTICAL CHARACTERISTICS

(CLASSIFICATION:)

USE: Used by Field Artillery, Signal Corps, Armored Forces.

RANGE: (Miles) 5

TO COMMUNICATE WITH: SCR-194 only.

TO REPLACE IN PART: SCR-161 for short range Liaison.

TRANSPORTATION: Man Pack or in vehicle.

TYPE OF SIGNAL: Voice.

PART C - PRINCIPAL COMPONENTS

(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
Recvr. & Trans. BC-222 in bag with batteries, Antenna, Headset, and Microphone.	1 Cubic Foot			25.10#	UNCLASSIFIED
Auxiliary Equipment and Spare Parts in Chest CH-33	2 Cubic Feet			64.1#0	UNCLASSIFIED
COMBINED WEIGHT OF COMPONENTS:				90 #	
COMBINED VOLUME:				1.1 Cu.Ft.	
SHIP TONNAGE:				103 #	

SCR-195

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS:	OBSOLETE 28 JAN 44	INSTRUCTIONAL LITERATURE: TM 11-238
CHANGE IN STATUS:		

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION)

FREQUENCY RANGE: (MC) 52.8 TO 65.8

NUMBER OF CRYSTALS: 1 USED FOR CALIBRATION. REFERENCE.

PRESET FREQUENCIES: NONE.

ANTENNA: 8 SECTION -ADJUSTABLE ROD FOR GROUND USE. TWO SECTION FISHPOLE ON FLEXIBLE MOUNTING FOR VEHICLE.

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: DRY BATTERIES BA-32.

SIMILAR SETS: SCR -194 EXCEPT FOR FREQUENCY.

POWER OUTPUT: (WATTS) .5 60% MODULATION.

TUBES: (TYPE AND NUMBER) "WALKIE-TALKIE 1 BC-322: TUBES: 1 TYPE 33, 1 TYPE 30 SPL.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION)

USE: USE BY THE INFANTRY, SIGNAL CORPS, PARACHUTE BATTALIONS. POINT TO POINT COMMUNICATION.

RANGE: (MILES) 3

TO COMMUNICATE WITH: SCR-195 ONLY.

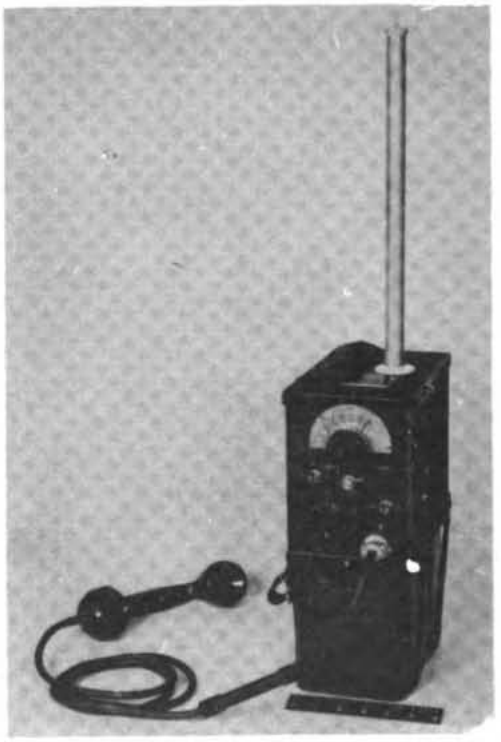
TO REPLACE IN PART: NONE.

TRANSPORTATION: MAN PACK, OR IN VEHICLE.

TYPE OF SIGNAL: VOICE.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RADIO RECVR. & TRANS. BC-322 IN BAG WITH BATTERIES, ANTENNA, AND HANDSET.				26.85#	UNCLASSIFIED
AUXILIARY EQUIPMENT AND SPARE PARTS IN CHEST CH-33.				64.14#	UNCLASSIFIED
COMBINED WEIGHT OF COMPONENTS:				91 #	
COMBINED VOLUME:				1.1CU.FT.	
SHIP TONNAGE:				104 #	



RADIO SET SCR-195. ASSEMBLED VIEW

CAN BE OPERATED WHILE BEING CARRIED AS A ONE-MAN PACK OR FROM A VEHICLE "WALKIE-TALKIE" - PHYSICALLY SIMILAR TO FIELD PACK. NORMALLY, ONLY TWO SETS CAN BE NETTED. REPLACED BY SCR-300.

INSTRUCTIONAL LITERATURE:	STATUS:	LIMITED STANDARD 13 Jul 43	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION:
TM 11-805	CHANGE IN STATUS:			SCR-197

RADIO SET SCR-197-A
INTERIOR VIEW OF TRAILER K-19 SHOWING RADIO OPERATOR'S SECTION

GROUND-TO-AIR LONG RANGE MOBILE SET. TRANSMITTER AND POWER UNIT INSTALLED IN TRUCK K-18. THREE RECEIVERS, TELEPHONE SWITCHBOARD, TYPEWRITERS AND TELETYPEWRITERS INSTALLED IN TRAILER K-19.

PART A - TECHNICAL CHARACTERISTICS

(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) TRANS. 1.5 - 18.0. RECVR. 1.5 - 18.0.

NUMBER OF CRYSTALS: TRANS. - 5; 1 IN EACH RECVR.

PRESET FREQUENCIES: 5 XTAL AND 5 MECHANICAL.

ANTENNA: 100 FT. WITH COUNTERPOISE, SUSPENDED BETWEEN TRUCK AND SECTIONAL MAST OR 7 SECTION 40' POLE TYPE ANTENNA.

TUNING: (MO OR XTAL) MO AND XTAL.

SENSITIVITY: SELECTIVITY:

POWER SOURCE: TRANS: COMMERCIAL 220/110 V 60 CYCLE GENERATOR GN-42-A. RECVR: COMMERCIAL 110 V 60 CYCLE POWER UNIT PE-75.

SIMILAR SETS: SCR-299; SCR-399; SCR-499.

POWER OUTPUT: (WATTS) CW-400; TONE-125; VOICE-125 100% MODULATION.

TUBES: (TYPE AND NUMBER) SCR-197-A USES: 6 VT-42-A; 6 VT-46-A; 12 VT-65; 9 VT-66; 6 VT-76; 3 VT-80; 3 VT-83; 6 VT-84; 24 VT-86; 6 VT-87; 6 VT-88; 6 VT-97; 12 VT-101; 9 VT-106; 3 TYPE 913; 6 TYPE KU-610.

PART B - TACTICAL CHARACTERISTICS

(CLASSIFICATION:)

USE: SIGNAL CORPS, AIR CORPS. GROUND TO AIR, LONG RANGE.

RANGE: (MILES) CW & STATIONARY - 1000.

TO COMMUNICATE WITH: SCR-177; SCR-183; SCR-187; SCR-188-A; SCR-197; SCR-238; SCR-240; SCR-261; SCR-274-N; SCR-283.

TO REPLACE IN PART: NONE

TRANSPORTATION: VEHICULAR. (VEHICLES INCLUDED)

TYPE OF SIGNAL: CW; TONE; VOICE.

PART C - PRINCIPAL COMPONENTS

(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RADIO TRANS. BC-325					
RADIO RECVR. BC-342 (3)					
TRUCK K-18					
TRAILER K-19					
COMBINED WEIGHT OF COMPONENTS:				15,000# APPROX.	
COMBINED VOLUME:				1947 CU. FT.	
SHIP TONNAGE:					

SCR-203

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS:	LIMITED STANDARD 6 Feb 43	INSTRUCTIONAL LITERATURE: TM 11-239
CHANGE IN STATUS:		

PART A – TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) Trans.: 2.2 - 3.06. Recvr.: 2.1 - 3.1.

NUMBER OF CRYSTALS: None

PRESET FREQUENCIES:

ANTENNA: 24' 8 section fishpole when used on ground. For mounted operation fewer sections are used.

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: GN-35: 8 & 350 V. Dry batteries: 1½ V; 4½ V; & 90 V.

SIMILAR SETS:

POWER OUTPUT: (Watts) 7.5 at 60% Modulation.

TUBES: (Type and Number) 1 BC-227 or BC-227-A: 5 type 864. 1 BC-228 or BC-228-A: 2 type 10; 1 type 50.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: Cavalry, FA Units and Signal Corps.

RANGE: (Miles) On ground: CW-30; Tone-20; Voice-5. Moving: CW-10; Tone-6; Voice-3.

TO COMMUNICATE WITH: SCR-193; 203; 209; 210; 238; 187; 245.

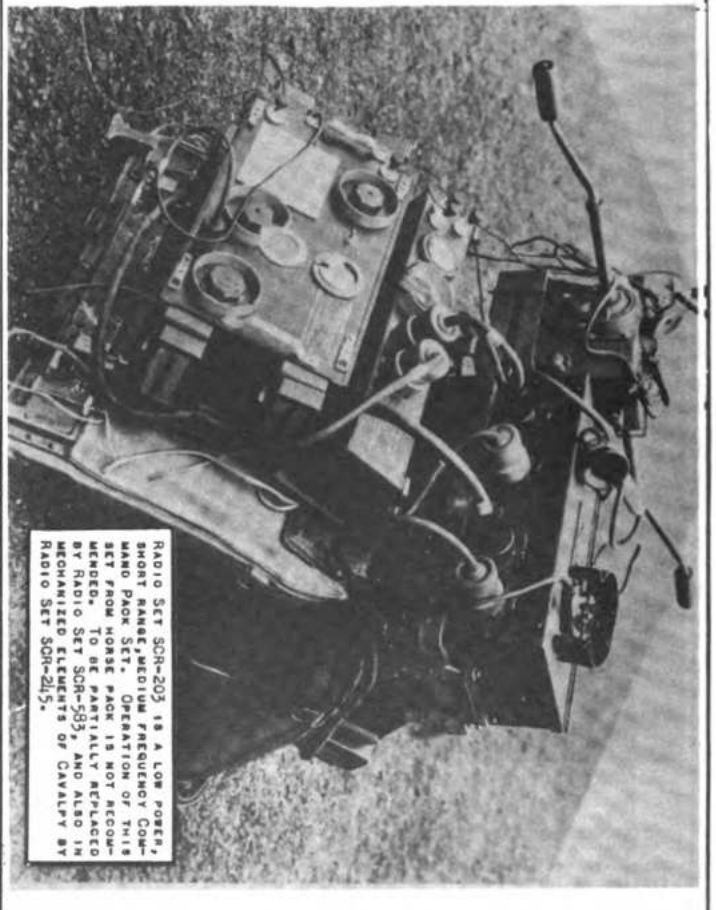
TO REPLACE IN PART: SCR-127; 163-A.

TRANSPORTATION: Horse pack; vehicle.

TYPE OF SIGNAL: CW; Tone; Voice.

PART C – PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
Transmitter BC-228-A or BC-228					
Receiver BC-227-A or BC-227					
Hand Generator GN-35					
COMBINED WEIGHT OF COMPONENTS:				160#	
COMBINED VOLUME:				10 Cu.Ft.	
SHIP TONNAGE:					



Radio Set SCR-203 is a low power, short range, medium frequency Command Pack Set. Operation of this set from horse pack is not recommended. To be partially replaced by Radio Set SCR-583, and also in mechanized elements of Cavalry by Radio Set SCR-245.

INSTRUCTIONAL LITERATURE:	STATUS:	LIMITED STANDARD 11 JUN 42	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION:	SCR-206
(SCR-206-D) TM-11-240-D (SCR-206-F) TM-11-240-F	CHANGE IN STATUS:				

RADIO SET SCR-206 IN OPERATING POSITION

PART A - TECHNICAL CHARACTERISTICS

(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) 0.2 - 18.0

NUMBER OF CRYSTALS: NONE

PRESET FREQUENCIES: NONE

ANTENNA: LOOP

TUNING: (MO OR XTAL)

SENSITIVITY: 20 - 100 MICROVOLTS PER METER.

SELECTIVITY:

POWER SOURCE: 6-VOLT STORAGE BATTERY.

SIMILAR SETS: SCR-503

POWER OUTPUT: (WATTS)

TUBES: (TYPE AND NUMBER) 1 VT-94, 3 VT-117, 1 VT-98, 1 VT-150, 2 VT-103, 1 VT-152

(NOTE: THE TUBE LINE-UP IS FOR SCR-206-D. EACH MODEL HAS DIFFERENT SET OF TUBES.)

PART B - TACTICAL CHARACTERISTICS

(CLASSIFICATION:)

USE: TO INTERCEPT AND LOCATE ENEMY GROUND STATIONS.

RANGE: (MILES) SHORT

TO COMMUNICATE WITH: NOT APPLICABLE.

TO REPLACE IN PART:

TRANSPORTATION: PORTABLE

TYPE OF SIGNAL: NOT APPLICABLE.

PART C - PRINCIPAL COMPONENTS

(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RECEIVER BC-470	24 1/8"	16 3/8"	15 1/2"	65.5#	
ANTENNA (SENSE) (EACH SECT.)	35 5/8"			1.5#	
LOOP LP-22	17 5/8"	15 "	5 "	4.6#	
BATTERY BOX	11 1/2"	23 "	16 1/4"	38.6#	
COMBINED WEIGHT OF COMPONENTS:	INCLUDING CORDS, CHESTS,			383#	
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					

SCR-209

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: LIMITED STANDARD 13 Dec 37

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: IB Stock No. 608209

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) Trans. 2.2 - 2.6. Recvr. 1.5 - 18.0 (BC-312); 2.0 - 3.0 (BC-189)

NUMBER OF CRYSTALS: None

PRESET FREQUENCIES:

ANTENNA: 15' 5 section fishpole on MP-14 or 37.

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: Motor Generator and Battery Unit PE-48. Recvr. Dynamotor Unit BD-69.

SIMILAR SETS:

POWER OUTPUT: (Watts) CW-8.5; Tone-7.5; Voice-7.5 60% Mod. Tone, 40% Voice.

TUBES: (Type and Number)
2 VT-25
3 VT-36
1 VT-38
4 VT-49
1 VT-50

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: Combat and Scout Cars.

RANGE: (Miles) Stationary: CW-30; Tone-20; Voice-5. Moving: CW-10; Tone-6; Voice-3.

TO COMMUNICATE WITH: SCR-193; SCR-203; SCR-209; SCR-210; SCR-238.

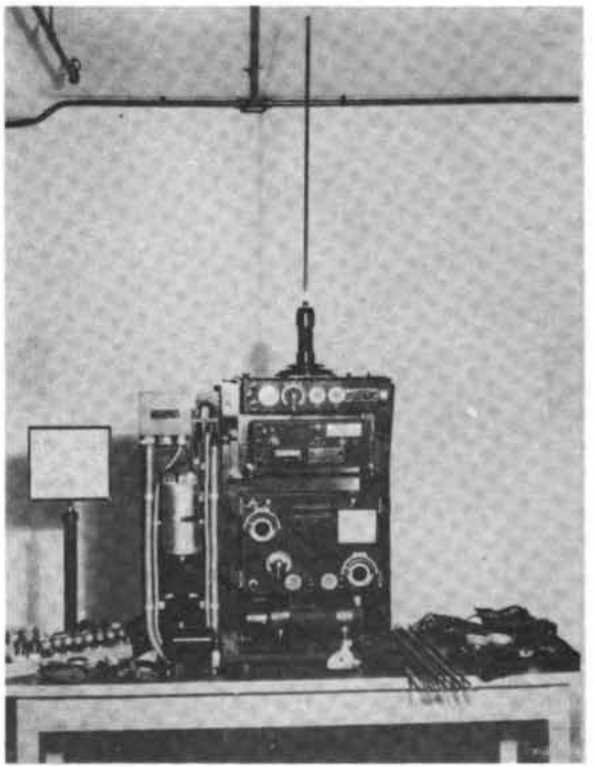
TO REPLACE IN PART: SCR-189; 199.

TRANSPORTATION: Vehicles.

TYPE OF SIGNAL: CW; Tone; Voice; AM

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

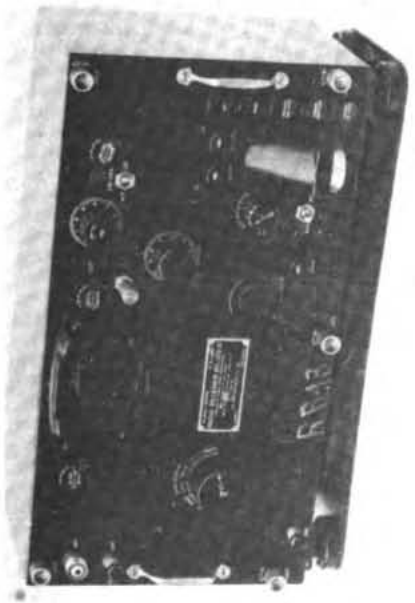
ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
Radio Trans. BC-176-A					UNCLASSIFIED
Radio Trans. Recvr. BC-189					UNCLASSIFIED
Radio Recvr. BC-312-A-B-C-D.					UNCLASSIFIED
Motor Generator PE-48					
COMBINED WEIGHT OF COMPONENTS:				163#	
COMBINED VOLUME:				4 Cu.Ft.	
SHIP TONNAGE:					



RADIO SET SCR-209 IN OPERATING POSITION.

VERY FEW OF THESE SETS USING RECEIVER BC-189 ARE NOW IN USE. SCR-209 IS BEING REPLACED BY SCR-245.

INSTRUCTIONAL LITERATURE:	STATUS:	LIMITED STANDARD 24 Nov 42	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION:
TM 11-272	CHANGE IN STATUS:			SCR-210



RADIO RECEIVER BC-312,
PRINCIPAL COMPONENT OF RADIO SET SCR-210.

RADIO SET SCR-210 USES RECEIVER ONLY. SUFFIX LETTER DENOTES VEHICLE IN WHICH THE SET IS USED. RADIO SET SCR-210 REPLACED BY SCR-538.

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: 1.5 - 18.0 (RECEIVER ONLY)

NUMBER OF CRYSTALS:

PRESET FREQUENCIES: NONE

ANTENNA: 15' 5 SECTION FISHPOLE ON MP-14 OR 37.

TUNING: (MO OR XTAL)

SENSITIVITY: SELECTIVITY:

POWER SOURCE: DYNAMOTOR INTEGRAL /12V OR 24V CAR BATTERY.

SIMILAR SETS:

POWER OUTPUT: (WATTS)

TUBES: (TYPE AND NUMBER) SCR-210-A USES 1 BC-312:
2 6C5
1 6F6
2 6K7
1 6L7
1 6R7GT
2 6K7GT

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: SIGNAL CORSP SCHOOL & ARMD F REPL TRNG CEN BY BN ARMS. IN ANY VEHICLE WHERE SEPARATE RECEIVER IS REQUIRED.

RANGE: (MILES)

TO COMMUNICATE WITH:

TO REPLACE IN PART: SCR-190

TRANSPORTATION: VEHICLE

TYPE OF SIGNAL: CW; TONE; VOICE.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RADIO RECVR, BC-312 ORIGINAL MODEL USES RECVR. BC-189 (KNOWN AS SCR-210)					UNCLASSIFIED
COMBINED WEIGHT OF COMPONENTS:				71#	
COMBINED VOLUME:				2 CU.FT.	
SHIP TONNAGE:					

SCR-211

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: STANDARD 3 JUN 36

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: SCR-211 - TM 11-300, 11-300, J, L, T, Q, AA, AC

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (MC) .125 - 20.

NUMBER OF CRYSTALS: 2 CRYSTAL DC-9-F.

PRESET FREQUENCIES: NONE

ANTENNA: 2 TO 3 FOOT No. 12 B&S HARD DRAWN BUS.

TUNING: (MO OR XTAL) XTAL

SENSITIVITY: SELECTIVITY:

POWER SOURCE: BA-23-(4); BA-2-(6)

SIMILAR SETS:

POWER OUTPUT: (WATTS)

TUBES: (TYPE AND NUMBER) SCR-211-C -
(1 BC-221-C)
1 TYPE 76
1 TYPE 77
1 TYPE 6A7

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: FOR CALIBRATING AND ADJUSTING AIRCRAFT AND FIELD RADIO SETS.

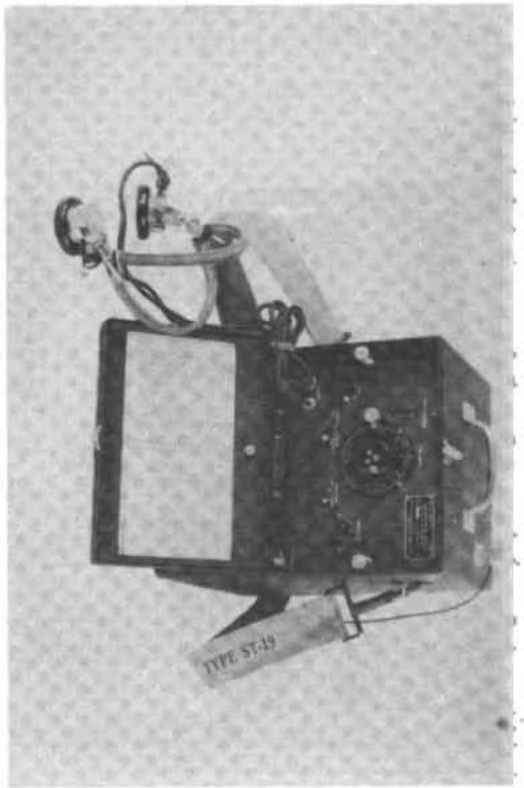
RANGE: (MILES)

TO COMMUNICATE WITH:

TO REPLACE IN PART:

TRANSPORTATION: PORTABLE

TYPE OF SIGNAL:

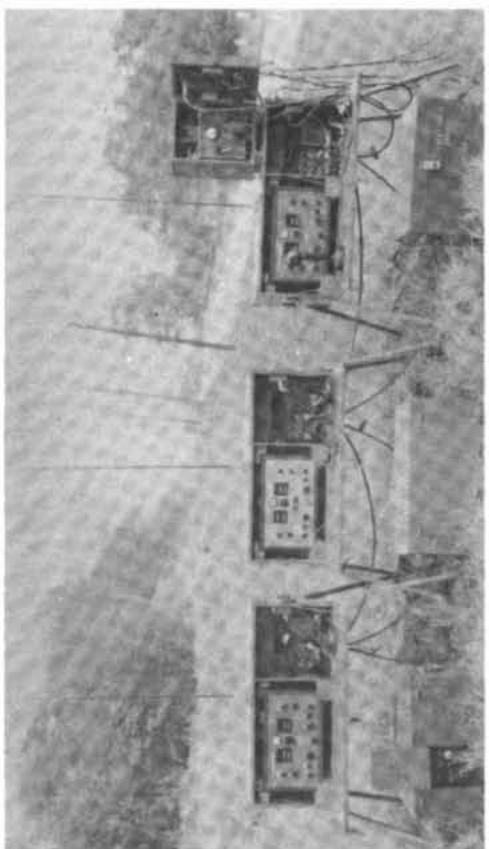


Repeater, Set SCR-211-B
Set SCR-211-B - Ready for Use

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
FREQUENCY METER BC-221	13.13	10.13	9.44	17.16	
CRYSTAL UNIT DC-9					
CALIBRATION BOOK MC-177					
COMBINED WEIGHT OF COMPONENTS:				38 (COMPLETE WITH BATRY	
COMBINED VOLUME:					
SHIP TONNAGE:					

INSTRUCTIONAL LITERATURE:	STATUS:		NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION: SCR-237
	CHANGE IN STATUS:			



PRINCIPAL COMPONENTS of RADIO SET SCR-237-T3 at LOCATION NO. 2 (Receiver Location)
Front View - Set Up for Field Operation

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) TRANS.: .2 - 1.5; 2 - 18.
RECVR.: 1.5 - 18.

NUMBER OF CRYSTALS:

PRESET FREQUENCIES: 10

ANTENNA: INVERTED L.

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 110V AC 60 CYCLES AUX. POWER EQPT. GASOLINE ENGINE GEN. 110V 60 CYCLES AC, PE-75.

SIMILAR SETS:

POWER OUTPUT: (WATTS) APPROX. 90

TUBES: (TYPE AND NUMBER)

NO TUBE COMPLEMENT AVAILABLE.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: AIR CORPS: ON GROUND - AIR CORPS SQUADRONS. GROUND-TO-AIR, POINT-TO-POINT COMMUNICATION.

RANGE: (MILES) 750 USING CW GROUND-TO-AIR.

TO COMMUNICATE WITH: SCR-183; SCR-187; SCR-188; SCR-193; SCR-197; SCR-238; SCR-240; SCR-245; SCR-261; SCR-274; SCR-283; SCR-284; SCR-287; SCR-506; SCR-536.

TO REPLACE IN PART: SCR-188-A

TRANSPORTATION: TRUCK OR CARGO AIRCRAFT - OPERATION AS FIXED STATION.

TYPE OF SIGNAL: CW; TONE; VOICE.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
1 TRANSMITTER ANBT-3 (NAVY ATC) 3 RECEIVERS BC-342	(MINIMUM CONSISTENT WITH BEST ENGINEERING PRACTICE)				RESTRICTED UNCLASSIFIED
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME:					
SHIP TONNAGE:					

SCR-242

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: LIMITED STANDARD 10 Nov 42

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: TO 08-10-11, 21, 27

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) .15 - 1.5, 1.75 WITH MODIFICATION KITS.

NUMBER OF CRYSTALS: NONE

PRESET FREQUENCIES: ---

ANTENNA: VERTICAL MAST 5' OR 7.6' & LOOP ANTENNA MOUNTED ON AIRPLANE WITH REMOTE CONTROL OF ROTATION.

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 14 VOLT D.C. AND DYNAMOTOR DM-18

SIMILAR SETS: SCR-186

POWER OUTPUT: (WATTS) RECEIVES ONLY.

TUBES: (TYPE AND NUMBER)
1 VT-66
6 VT-86
1 VT-87
1 VT-93
1 VT-94
2 VT-96

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: AURAL RECEPTION OF MODULATED RADIO FREQUENCY ENERGY OR VISUAL UNIDIRECTIONAL, RIGHT-LEFT INDICATION OF THE DIRECTION OF ARRIVAL OF RADIO FREQUENCY ENERGY WITH RESPECT TO THE PLANE OF THE LOOP AND SIMULTANEOUS "ON COURSE" AURAL RECEPTION OF MODULATED RADIO FREQUENCY ENERGY. NAVIGATION & HOMING AID IN AIRCRAFT.

RANGE: (MILES) ---

TO COMMUNICATE WITH: ---

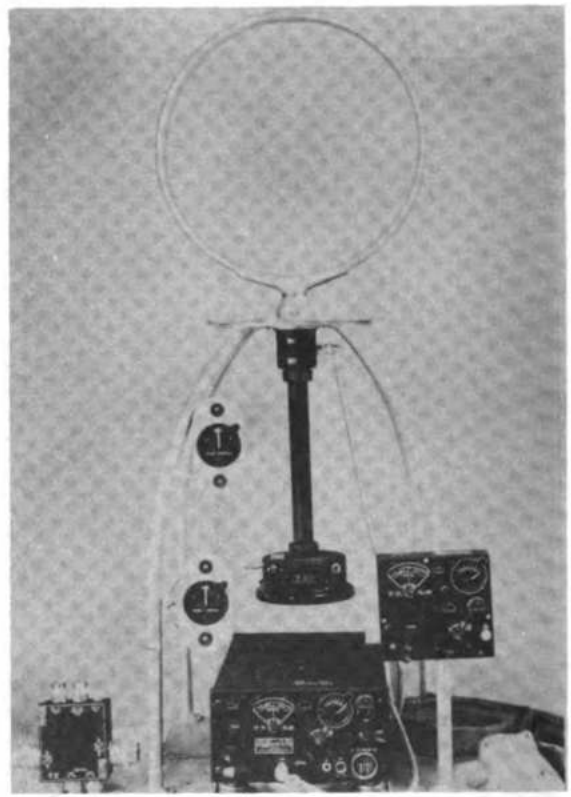
TO REPLACE IN PART: SCR-186

TRANSPORTATION: AIRCRAFT INSTALLATION.

TYPE OF SIGNAL: RECEIVES CW; TONE; VOICE.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
BC-310-A RADIO COMPASS UNIT	7 1/8	18 1/2	11 5/8	42.1	
BC-311-A RADIO CONTROL BOX	7	7	3 3/4	5.2	
LP-13-A LOOP	23 3/4	20 3/4	2 1/4	3.5	
CS-8-A LOOP MOUNTING	22 1/2	7 1/2	7 1/2	9.2	
M-169-A LOOP MOUNTING CAP	2 1/4	2 1/4	1 5/8	0.2	
I-65 COMPASS INDICATOR	3 1/4	3 1/4	3	1.3	
MC-124 TUNING SHAFT	3/4	3/4		1.8	
MC-127 TUNING UNIT	1 1/2	1 1/2	1 1/4	0.1	
TM-180-A JUNCTION BOX (FOR PLANES WHICH DO NOT CONTAIN BUILT IN PANEL OR JUNCTION BOX).	5 3/8	6 3/4	2 13/16	1.7	
COMBINED WEIGHT OF COMPONENTS:				62.4 65.1 WITH TM-180-A	
COMBINED VOLUME:				1129.52 1267.25 WITH TM-180-A	
SHIP TONNAGE:				0.025 APPROX.	



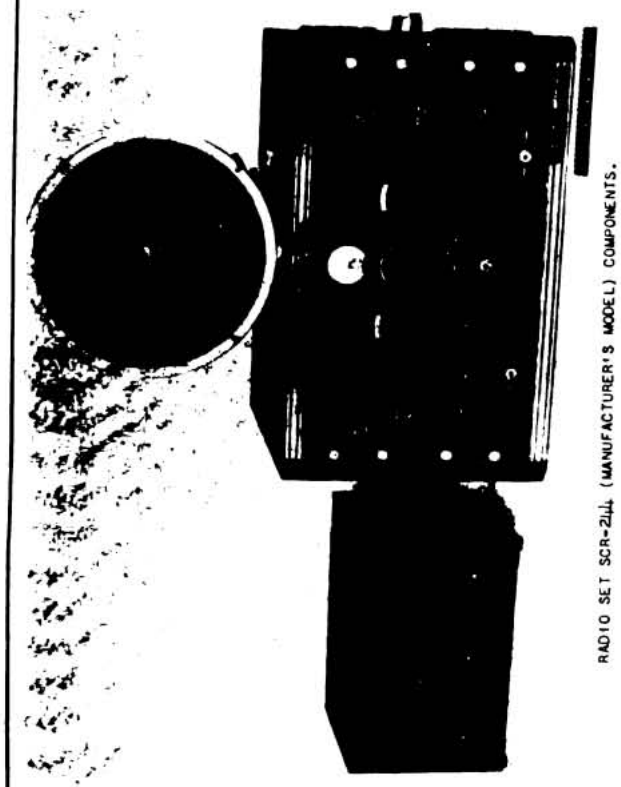
GENERAL VIEW OF SET IN OPERATING POSITION

SCR-242 IS AN AIRCRAFT RADIO COMPASS, MANUALLY TUNED FROM LOCAL OR REMOTE STATION.

INSTRUCTIONAL LITERATURE:	STATUS:	STANDARD 2 MAR 36
	CHANGE IN STATUS:	

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

NOMENCLATURE DESIGNATION: **SCR-244**



RADIO SET SCR-244 (MANUFACTURER'S MODEL) COMPONENTS.
SCR-244 COMES IN RACK AND CABINET MOUNTING. COMMERCIAL HAMMARLUND SUPER-PRO RECEIVER.

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION)

FREQUENCY RANGE: (Mc) 0.54 - 20

NUMBER OF CRYSTALS: NONE

PRESET FREQUENCIES: NONE

ANTENNA:

TUNING: (MO OR XTAL) NOT APPLICABLE

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 105/125 VOLTS, A-C

SIMILAR SETS:

POWER OUTPUT: (WATTS) NOT APPLICABLE

TUBES: (TYPE AND NUMBER)

1	VT-65	1	VT-87	1	VT-96
3	VT-66	2	VT-90	1	VT-116
3	VT-86	1	VT-91	3	VT-117

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION)

USE: INTERCEPT RECEIVER FOR COMMUNICATION AND MONITORING PURPOSES.

RANGE: (MILES) DOES NOT APPLY

TO COMMUNICATE WITH:

TO REPLACE IN PART:

TRANSPORTATION:

TYPE OF SIGNAL: AM - CW

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RECEIVER	12.25"	23"	16.5"	70#	
POWER UNIT	8.25"	13"	8.5"	39#	
COMBINED WEIGHT OF COMPONENTS				115#	
COMBINED VOLUME OF COMPONENTS					
SHIP TONNAGE					

SCR-245

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: STANDARD 10 JUN 37

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: TM 11-272

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (MC) TRANS. 2.0 - 4.5. MAY BE EXTENDED TO 5.2 MC. BY USING TU-25-A. RECVR. 1.5 - 18.0.

NUMBER OF CRYSTALS: 4 IN TRANS.

PRESET FREQUENCIES: 4

ANTENNA: 15 FT., FIVE SECTION FISHPOLE ON FLEXIBLE MAST BASE MP-14 OR 37.

TUNING: (MO OR XTAL) BOTH.

SENSITIVITY: SELECTIVITY:

POWER SOURCE: TRANS.: DYNAMOTOR UNIT 12 V. STORAGE BATTERY. RECVR.: INTEGRAL DYNAMOTOR 12 V. STORAGE BATTERY.

SIMILAR SETS:

POWER OUTPUT: (WATTS) 10 100% MODULATION.

TUBES: (TYPE AND NUMBER) 1 BC-223-A TRANS.: 2 TYPE 801-A & 3 TYPE 46. 1 BC-312 RECVR.: 2-6C5; 1-6 F 6; 2-6 K-7-(NOTE: 6K7GT AUTHORIZED RECENTLY) 2- ; 1- 6 L 7; 1 - 6 R 7.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: USED BY AF, SIG C, INF, CAV, FA.

RANGE: (MILES) CW-45; TONE-35; VOICE 20.

TO COMMUNICATE WITH: SCR-131; SCR-171; SCR-177; SCR-187; SCR-193; SCR-203; SCR-209; SCR-210; SCR-238; SCR-245; SCR-259; SCR-287; SCR-288.

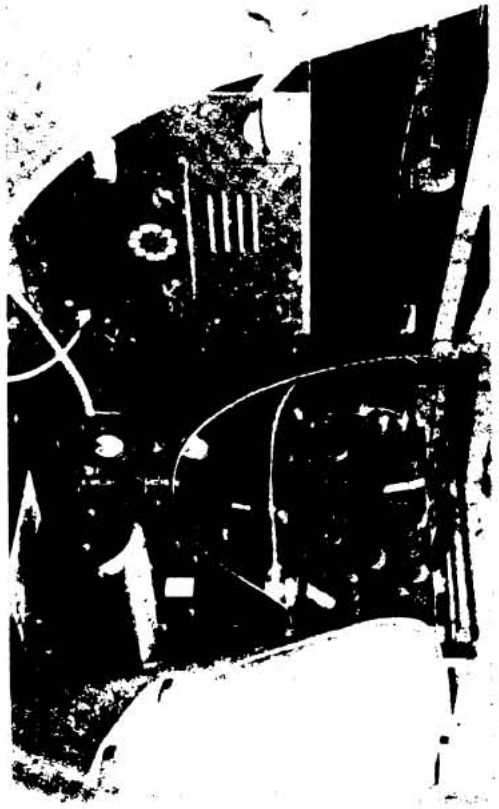
TO REPLACE IN PART: SCR-189, 193, 199, AND 209.

TRANSPORTATION: TRANSPORTED AND OPERATED IN VEHICLES

TYPE OF SIGNAL: CW; TONE; VOICE.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

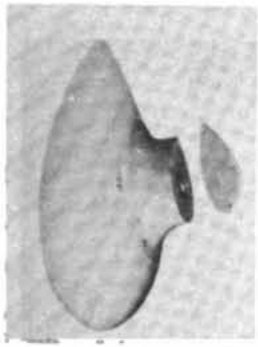
ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RADIO TRANS. BC-223	14 1/2"	20 1/8"	8 3/4"	26.5#	UNCLASSIFIED
RADIO RECVR. BC-312	10 5/8"	18 "	8 5/8"	42 #	UNCLASSIFIED
VEHICULAR ANTENNA	-	-	-	-	UNCLASSIFIED
DYNAMOTOR UNIT PE-55	12 "	13 3/8"	7 5/8"	33 #	UNCLASSIFIED
COMBINED WEIGHT OF COMPONENTS:				285#	
COMBINED VOLUME:				5 CU.FT.	
SHIP TONNAGE:					



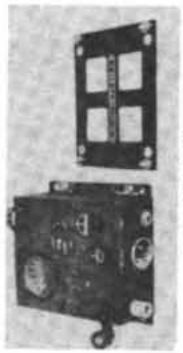
RADIO SET SCR-245 INSTALLED IN 1/2 TON 4X4 COMMAND VEHICLE

VEHICULAR RADIO SET, MOST WIDELY USED MEDIUM RANGE MOBILE SET IN ARMY. TO BE PARTIALLY REPLACED IN AF BY SCR-506, 508 AND 528. SEVERAL MODIFICATIONS ARE AVAILABLE FOR INSTALLATION IN VARIOUS TYPES OF VEHICLES. SUFFIX LETTER DENOTES VEHICLE E.G. SCR-245-M IS THE SET FOR LIGHT TANK M 3 1 DIFFERENCED ARE MAINLY IN CORD LENGTHS. "X" AFTER NOMENCLATURE DENOTES 24 V. EQUIPMENT.

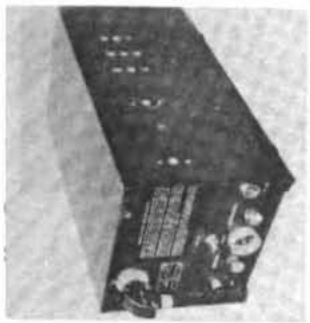
INSTRUCTIONAL LITERATURE: TO 08-10-39	STATUS:	LIMITED STANDARD 10 Nov 42	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION: SCR-246
	CHANGE IN STATUS:			



LOOP LP - 17



CONTROL BOX BC - 374



SET BOX BC - 373

INDICATOR I - 70

RADIO COMPASS SCR-246 - PRINCIPAL COMPONENTS

NORMALLY CONSUMES 70 WATTS AND SUPPLIES VOLTAGE TO MARKER BEACON RECEIVER.

PART A – TECHNICAL CHARACTERISTICS

(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) 195 - 420 Kc.

NUMBER OF CRYSTALS: None

PRESET FREQUENCIES: None

ANTENNA: 8" Loop & nondirectional (usually vertical) No local, one remote control position.

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 12 volt storage battery and DM-29.

SIMILAR SETS: SCR-276 except for input voltage.

POWER INPUT: (Watts) 70 watts consumption.

TUBES: (Type and Number) SCR-246-A uses 1-BC-373-A

Tubes: 2 - 6C5
4 - 6K7
1 - 6L7
2 - 6J7
2 - 6B8
2 - 6V6

PART B - TACTICAL CHARACTERISTICS

(CLASSIFICATION:)

USE: Navigational instrument. Radio Compass homing device. Provides visual, unidirectional, right-left indication showing direction of the radio signal source with respect to the aircraft heading. May also be used as a radio range or radio broadcast receiver providing aural reception of modulated signals.

RANGE: (Miles)

TO COMMUNICATE WITH: Receives only radio beacon transmission.

TO REPLACE IN PART:

TRANSPORTATION: Aircraft installation.

TYPE OF SIGNAL: MCW

PART C – PRINCIPAL COMPONENTS

(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
Radio Compass Unit BC-373					Restricted
Radio Control Box BC-374					Restricted
Loop LP-17					
Indicator					Restricted
COMBINED WEIGHT OF COMPONENTS:				38.5 lbs.	
COMBINED VOLUME:	8"	8"	15 5/8"		
SHIP TONNAGE:					

NOTE: Due to variations in aircraft installations both weights and volumes of complete sets vary considerable and the figures shown are therefore approximations.

THIS SHEET IS CLASSIFIED: **RESTRICTED**

SCR-255

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS:	LIMITED STANDARD 11 Jun 42	INSTRUCTIONAL LITERATURE: TM 11-861
CHANGE IN STATUS:		

PART A – TECHNICAL CHARACTERISTICS
(CLASSIFICATION: **RESTRICTED**)

FREQUENCY RANGE: (Mc) .54 - 30

NUMBER OF CRYSTALS: None

PRESET FREQUENCIES: None

ANTENNA: Adcock

TUNING: (MO OR XTAL)

SENSITIVITY: 20 - 100 microvolts/meter

SELECTIVITY:

POWER SOURCE: 6V storage battery.

SIMILAR SETS: None

POWER OUTPUT: (WATTS)

TUBES: (TYPE AND NUMBER) 1 VT-66, 3 VT-86, 3 VT-91, 1 VT-99, 1 VT-126, 1 VT-163

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: For use in the field to locate enemy transmitters.

RANGE: Medium

TO COMMUNICATE WITH:

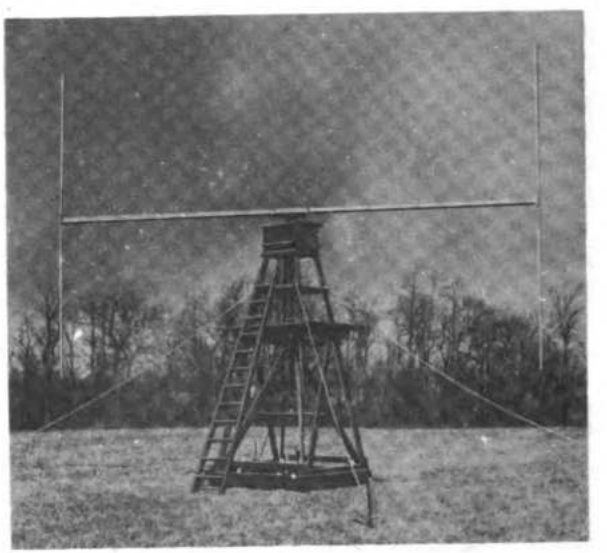
TO REPLACE IN PART: None

TRANSPORTATION: Cargo Truck

TYPE OF SIGNAL:

PART C – PRINCIPAL COMPONENTS
(CLASSIFICATION: **RESTRICTED**)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
Remote Control Unit	99"	23"	20"	50#	
Adcock Antenna		24'		172#	
Radio Recvr. BC-903				51#	
Target Trans. BC-904				21 1/2#	
Tower TR-19	8 1/4'	6'	6'	705#	
Including series of chests, batteries, vibrator etc.				297¼#	
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					

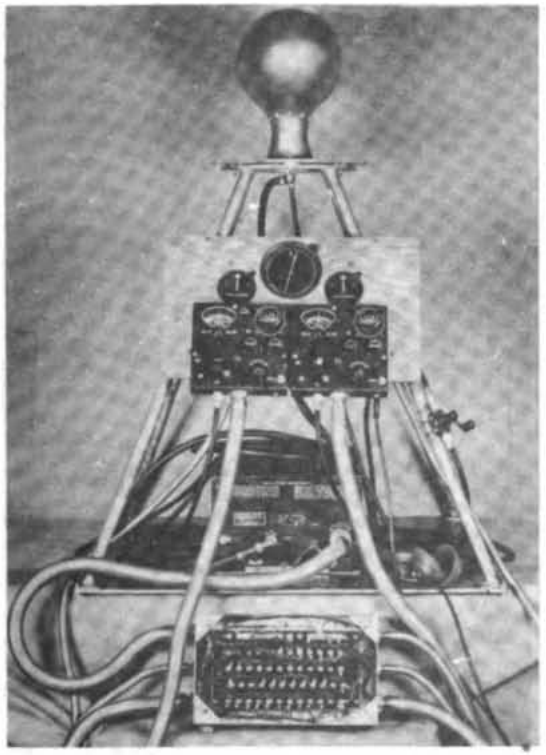


RADIO SET SCR-255
BEAM MOUNTED FOR OPERATION

RECEIVER AND ANTENNA AT TOP OF 12-FOOT TOWER AND IS OPERATED BY REMOTE CONTROL UNIT AT GROUND LEVEL.

THIS SHEET IS CLASSIFIED: RESTRICTED

INSTRUCTIONAL LITERATURE: TO 08-10-64	STATUS:	LIMITED STANDARD 10 Nov 42	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION: SCR-263
	CHANGE IN STATUS:			



RADIO COMPASS SCR-263-A. GENERAL VIEW OF SET

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Kc) 200 TO 1,750 (IN 3 BANDS)

NUMBER OF CRYSTALS: NONE

PRESET FREQUENCIES:

ANTENNA: 8" LOOP & NONDIRECTIONAL ANTENNA WITH ONE OR TWO REMOTE CONTROL POSITIONS.

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 24 TO 28 VOLTS DC (2.65 TO 3 AMPERES) STORAGE BATTERY IN AIRCRAFT.

SIMILAR SETS: SCR-242-B, SCR-280, SCR-273

POWER OUTPUT: (WATTS) RECEIVES ONLY.

TUBES: (TYPE AND NUMBER) SCR-263-A USES 1-BC-443-A
1 - 6F6 1 - 6SC7
6 - 6K7
1 - 6L7
1 - 6B8
1 - 6J5
1 - 6N7

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: PROVIDES: VISUAL, UNIDIRECTIONAL, RIGHT-LEFT INDICATION OF THE DIRECTION OF ARRIVAL OF RADIO FREQUENCY ENERGY WITH RESPECT TO THE PLANE OF THE LOOP AND SIMULTANEOUS "ON COURSE" AURAL RECEPTION OF MODULATED RADIO FREQUENCY ENERGY. AURAL RECEPTION OF MODULATED RADIO FREQUENCY USING A NON-DIRECTIVE ANTENNA, AURAL RECEPTION OF MODULATED RADIO FREQUENCY USING LOOP ANTENNA, AURAL NULL INDICATIONS OF DIRECTION OF ARRIVAL OF MODULATED RADIO FREQUENCY USING LOOP ANTENNA.

RANGE: (MILES)

TO COMMUNICATE WITH:

TO REPLACE IN PART:

TRANSPORTATION: AIRCRAFT INSTALLATION.

TYPE OF SIGNAL: CW & MCW.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
BC-443-A RADIO COMPASS UNIT	7 7/8	12	19 13/16	42.0	
2 BC-444-A RADIO CONTROL BOX	7 1/2	7 1/2	3 15/16	4.0 EA.	
LP-19-A LOOP	25 5/8	13 1/2	9	7.06	
1-65-D COMPASS INDICATOR	3 1/4	3 1/4	4 9/32	1.6	
1-75 INDICATOR	5 1/8	5 1/8	2 11/16	1.37	
NOTE: DUE TO VARIATIONS IN AIRCRAFT INSTALLATIONS, BOTH WEIGHTS AND VOLUMES OF COMPLETE SETS VARY CONSIDERABLY AND THE FIGURES SHOWN ARE THEREFORE APPROXIMATE.					
COMBINED WEIGHT OF COMPONENTS:				56.59	
COMBINED VOLUME:				5327 CU. IN.	
SHIP TONNAGE:				0.0445 T	

SCR-269

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: STANDARD 25 JAN 40

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: TO 08-10-110, 175

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Kc) 200 TO 1,750 Kc.
COVERED IN 3 BANDS: 200 - 410; 410 - 850; 850 - 1,750.

NUMBER OF CRYSTALS: NONE

PRESET FREQUENCIES:

ANTENNA: 8" LOOP & FIXED VERTICAL MAST WITH ONE OR TWO REMOTE CONTROL POSITIONS AND AUTOMATIC ROTATION.

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 24 VOLT BATTERY, 12 VOLT BATTERY.

SIMILAR SETS: SCR-263 EXCEPT AUTOMATIC FEATURES.

POWER OUTPUT: (WATTS) RECEIVER ONLY.

TUBES: (TYPE AND NUMBER) SCR-269-A USES:

2	VT-66	1	VT-94
1	VT-74	1	VT-96
4	VT-86	1	VT-105
1	VT-87	2	VT-109
2	VT-93		

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: NAVIGATIONAL INSTRUMENT. PROVIDES AUTOMATIC BEARING INDICATION OF THE DIRECTION OF ARRIVAL OF RADIO FREQUENCY ENERGY AND SIMULTANEOUS AURAL RECEPTION OF MODULATED RADIO FREQUENCY, DIRECTIONAL ANTENNA, AURAL RECEPTION OF MODULATED RADIO FREQUENCY USING LOOP ANTENNA. SCR-269-C HAS PROVISION FOR RECEPTION OF UNMODULATED R.F. IN ALL THE ABOVE CASES.

RANGE: (MILES)

TO COMMUNICATE WITH:

TO REPLACE IN PART: SCR-242, 263, 280

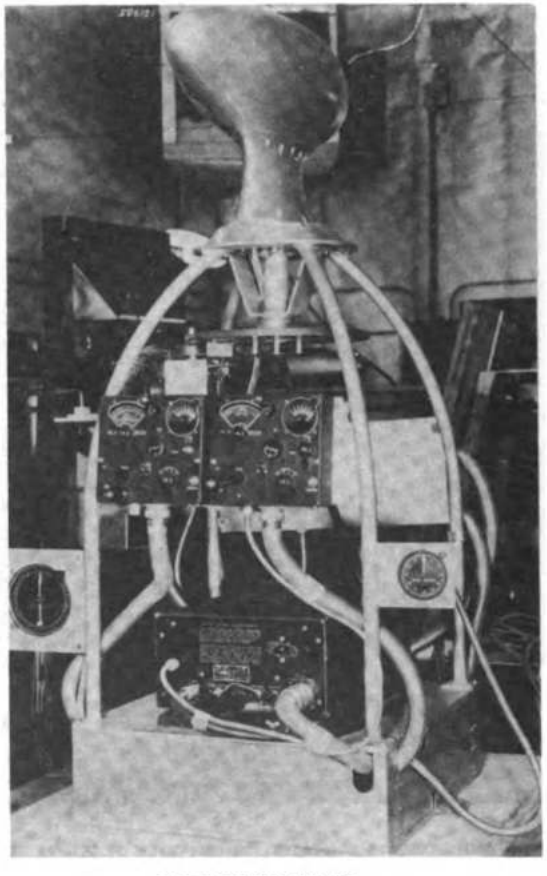
TRANSPORTATION: AIRCRAFT INSTALLATION

TYPE OF SIGNAL: CW, MCW, VOICE.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RADIO COMPASS UNIT BC-433-A	7 7/8	12	19 13/16	46.87 LBS.	
2 RADIO CONTROL BOX BC-434-A	7 1/2	7 1/2	3 15/16	3.76	
LOOP LP-21-A	25 3/8	14 31/32	9	10.37	
INDICATOR I-81-A	3 1/4	3 1/4	3 11/16	.75	
INDICATOR I-82-A	5 1/8	5 1/8	4 3/32	1.19	
RELAY BK-22-A OR E	11 3/4	7	3	6.40	
COMBINED WEIGHT OF COMPONENTS:				73.10 LBS.	
COMBINED VOLUME:				5121 CU. IN.	
SHIP TONNAGE:				0.0296T	

NOTE: DUE TO VARIATIONS IN AIRCRAFT INSTALLATIONS, BOTH WEIGHTS AND VOLUMES OF COMPLETE SETS VARY CONSIDERABLY THE FIGURES SHOWN ARE THEREFORE APPROXIMATE.

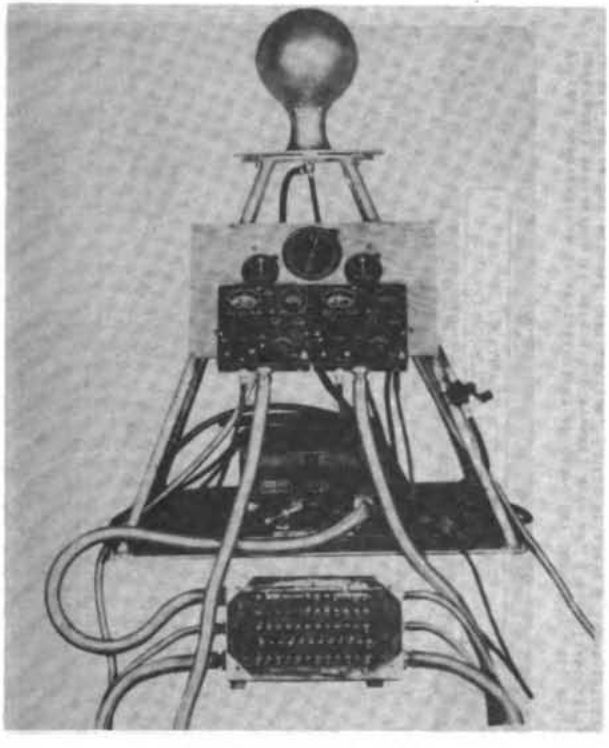


RADIO COMPASS SCR-269

INSTRUCTIONAL LITERATURE:	STATUS:	LIMITED STANDARD 10 Nov 42
TO 08-10-43.	CHANGE IN STATUS:	

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

NOMENCLATURE DESIGNATION: **SCR-273**



RADIO COMPASS SCR - 273

PRINCIPAL COMPONENTS

PART A - TECHNICAL CHARACTERISTICS

(CLASSIFICATION:)

FREQUENCY RANGE: (Kc) 150 TO 1,500 COVERED IN 3 BANDS.

NUMBER OF CRYSTALS: NONE

PRESET FREQUENCIES:

ANTENNA: 8" LOOP AND FIXED NONDIRECTIONAL MAST. ROTATABLE LOOP WITH TWO REMOTE CONTROL POSITIONS.

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 12 TO 14 VOLTS DC

SIMILAR SETS: SCR-263 EXCEPT SCR-273 USES 12 - 14 VOLT SUPPLY.

POWER OUTPUT: (WATTS) RECEIVES ONLY.

TUBES: (TYPE AND NUMBER) SCR-273-A USES 1 BC-413-A:

1 - 6F6	1 - 6V5
6 - 6K7	1 - 6N7
1 - 6L7	1 - 6SC7
1 - 6B8	

PART B - TACTICAL CHARACTERISTICS

(CLASSIFICATION:)

USE: PROVIDES: VISUAL, UNIDIRECTIONAL, RIGHT-LEFT INDICATION OF THE ARRIVAL OF RADIO FREQUENCY ENERGY WITH RESPECT TO THE LOOP AND SIMULTANEOUS "ON COURSE" AURAL RECEPTION OF MODULATED RADIO FREQUENCY ENERGY, AURAL RECEPTION OF MOD. R.F. USING A NON-DIRECTIONAL ANTENNA, AURAL RECEPTION OF MODULATED R.F. USING LOOP ANTENNA, AURAL-NULL DIRECTIONAL INDICATIONS OF THE ARRIVAL OF MODULATED R.F. WITH RESPECT TO THE PLANE OF THE LOOP ANTENNA.

RANGE: (MILES)

TO COMMUNICATE WITH:

TO REPLACE IN PART:

TRANSPORTATION: AIRCRAFT INSTALLATION.

TYPE OF SIGNAL: CW, MCW, VOICE.

PART C - PRINCIPAL COMPONENTS

(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RADIO COMPASS UNIT BC-413-A	7 7/8	12	19 13/16	42.00	
2 RADIO CONTROL BOX BC-414-A	7 1/2	7 1/2	3 15/16	4 EA.	
LOOP LP-19-A	25 3/8	13 1/2	9	7.06	
2 COMPASS INDICATOR I-65-C	3 1/4	3 1/4	3 29/32	1.75	
INDICATOR I-75A	5 1/8	5 1/8	2 11/16	1.85	
RELAY BK-21-A	11	7	3	5.94	
COMBINED WEIGHT OF COMPONENTS:				72.124	
COMBINED VOLUME:	12"	7 7/8"	19 13/16"	5740.25 CU. IN.	
SHIP TONNAGE:				0.003 T	

NOTE: DUE TO VARIATIONS IN AIRCRAFT INSTALLATIONS, BOTH WEIGHTS AND VOLUMES OF COMPLETE SETS VARY CONSIDERABLY AND THE FIGURES SHOWN ARE THEREFORE APPROXIMATE.

SCR-274-N

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: STANDARD 20 Sep 40

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: (HMI) TO 08-10-50

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) Trans: 4.0-5.3; 5.3-7.0; 7.0-9.1. Recvr: .19-.55; 3.0-6.0; 6.0-9.1.

NUMBER OF CRYSTALS: 1 Calibrating Crystal per trans. for 3.0-9.1 Mc.

PRESET FREQUENCIES: 1 on each Trans.

ANTENNA: Long fore & aft "inverted L" or "T"

TUNING: (MO or XTAL) MO on H.F.

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 22 to 30 v. power source -DC power from airplane.

SIMILAR SETS: Superbeded SCR-261,283,183.

POWER OUTPUT: (Watts) 40 CW; 20 Voice;

TUBES: (Type and Number) 1 BC-456-A Modulator Unit: 1 VT-135; 1 VT-136; 1 VT 139. 3 Sets for Recvr: 3 VT-131; 1 VT-132; 1 VT-133; 1 VT-134. 2 sets for Trans.: 2 VT-136; 1 VT-137; 1 VT-138.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: For intercommunication as a command set. Plane-to plane, plane-to- control tower.

RANGE: (Miles) 150 CW; 75 Voice (approx.)

TO COMMUNICATE WITH: Plane & Control Tower.

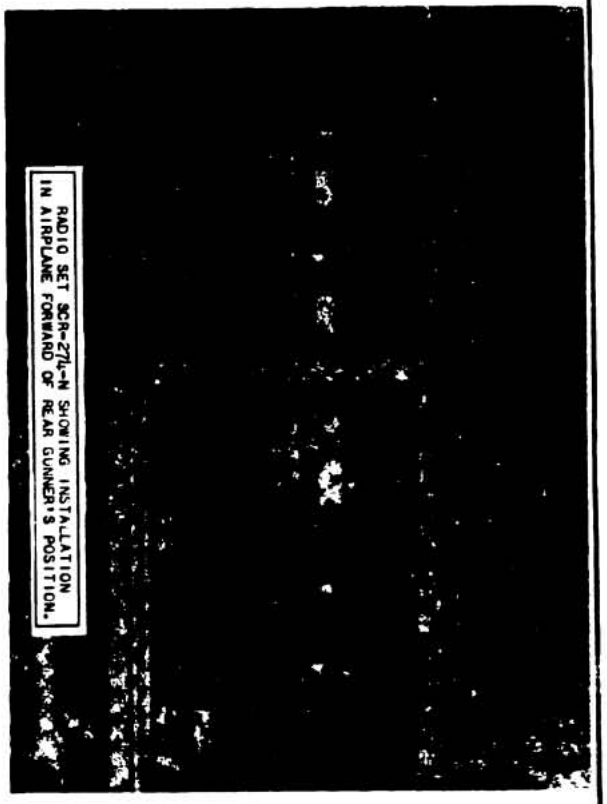
TO REPLACE IN PART: SCR-183, 283.

TRANSPORTATION: Airborne installation.

TYPE OF SIGNAL: Voice, CW, MCW amplitude modulated.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

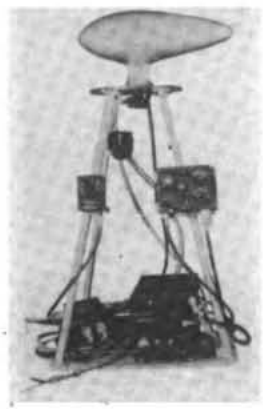
ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
Recvr. BC-453-A; BC-454-A; BC-455-A; BC-946-A Ea-	7 11/32"	4 27/32"	10 23/32"	9.0#	Restricted
(3 Recvr) Control Box BC-450-A	4 1/8 "	9 1/8 "	5 15/32"	2.7#	Restricted
(1 Recvr) Control Box BC-473-A	4 1/8 "	5 1/4 "	5 11/32"	1.0#	Restricted
(2 Recvr) Control Box BC-496-A	4 1/8 "	6 3/8 "	5 11/32"	1.7#	Restricted
Trans. BC-457-A; BC-458-A; BC-459-A; BC-696-A. Ea.	8 13/16"	5 1/2 "	11 13/16"	8.8#	Restricted
Control Box BC-451-A	3 7/32 "	4 1/8 "	4 3/8 "	1.0#	Restricted
Modulator-Unit BC-456-A	7 11/16 "	8 5/8 "	10 1/8 "	9.0#	Restricted
Antenna Relay Unit BC-442-A	6 9/16 "	5 5/8 "	5 "	2.0#	Restricted
	*(Combined weight of above approx.)			76#	
*Weight for installation of 3 Recvrs. and 2 Trans.	Complete.				
NOTE: Due to variations in aircraft installations, sets vary considerably and the figures shown	both weights and volumes of are therefore approximate.			complete	
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME OF COMPONENTS:				41/3	cu.ft. Approx.
SHIP TONNAGE:					Average Installation



RADIO SET SCR-274-N SHOWING INSTALLATION IN AIRPLANE FORWARD OF REAR GUNNER'S POSITION.

Various combinations of installations of Radio Set SCR-274-N are possible with consequent variations in weight and volume, such as, 1 each Transmitter and Receiver, or as the average installation, 3 Receivers and 2 Transmitters. Radio Set SCR-274-N is being replaced in Fighter Aircraft by VHF Command Set, SCR-522

INSTRUCTIONAL LITERATURE: TO 08-10-45	STATUS:	LIMITED STANDARD 10 Nov 42	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION: SCR-276
	CHANGE IN STATUS:			



RADIO COMPASS SCR-276 SHOWING MAJOR COMPONENTS
REMOTE STARTING AND STOPPING CONTROL

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Kc) 195 TO 420

NUMBER OF CRYSTALS: NONE

PRESET FREQUENCIES:

ANTENNA: 8" LOOP AND NONDIRECTIONAL FIXED ANTENNA.

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 24 TO 28 VOLTS DC AND DM-39-A.

SIMILAR SETS: SCR-246-A EXCEPT SCR-276 24 - 28 VOLT SUPPLY.

POWER OUTPUT: (WATTS)

TUBES: (TYPE AND NUMBER) SCR-276-A USES 1 BC-383-A:
2 - 6C5
4 - 6K7
1 - 6L7
2 - 6J7
2 - 6B8
2 - 6V6

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: NAVIGATIONAL INSTRUMENT. PROVIDES VISUAL, UNIDIRECTIONAL RIGHT-LEFT INDICATION SHOWING THE DIRECTION OF THE RADIO SIGNAL SOURCE WITH RESPECT TO THE AIRCRAFT HEADING. MAY ALSO BE USED AS A RADIO RANGE OR WEATHER BROADCAST RECEIVER PROVIDING AURAL RECEPTION OF MODULATED RADIO SIGNALS. ALSO SUPPLIES VOLTAGE TO MARKER BEACON RECEIVER.

RANGE: (MILES)

TO COMMUNICATE WITH:

TO REPLACE IN PART:

TRANSPORTATION: AIRCRAFT INSTALLATION.

TYPE OF SIGNAL: CW, MCW

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
COMPASS INDICATOR I-73-A	3 1/4	3 1/4	3 17/32	1.50	
FLEXIBLE CONDUIT ASSEMBLY & JUNCTION BOX				9.62	
LOOP LP-17-A	25 9/16	11 3/32	9	6.22	
RADIO COMPASS UNIT BC-383-A	8	8	15 5/8	26.1	
RADIO CONTROL BOX BC-440-A	5 3/4	5 1/8	3 23/32	2.78	
NOTE: DUE TO VARIATIONS IN AIRCRAFT INSTALLATIONS, BOTH WEIGHTS AND VOLUMES OF COMPLETE SETS VARY CONSIDERABLY AND THE FIGURES SHOWN ARE THEREFORE APPROXIMATE.					
COMBINED WEIGHT OF COMPONENTS:				46.22	
COMBINED VOLUME:	8"	8"	15 5/8"	3686.2	
SHIP TONNAGE:				.0212 T	

THIS SHEET IS CLASSIFIED: **RESTRICTED**

SCR-277

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: STANDARD 9 JUN 41

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: (HMI) 08-10-10 (ON SCR-277-A, B, C)

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (MC) 0.2 - 0.4

NUMBER OF CRYSTALS: NONE

PRESET FREQUENCIES: NONE

ANTENNA: CROSSED LOOPS 70 FEET HIGH

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: POWER UNIT PE-90 OR 110V 50 - 60 CYCLES.

SIMILAR SETS: NONE

POWER OUTPUT: (WATTS) 800

TUBES: (TYPE AND NUMBER)
2 VT-100 (807)
1 VT-154 (814)
1 F-128-A
1 VT-145 (523)
2 VT-46-A 866/866-A
2 VT-42-A F-872-A

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: HIGH POWER MOBILE RADIO RANGE STATION FOR RADIO GUIDANCE OF AIRCRAFT. USES A-N KEYING.

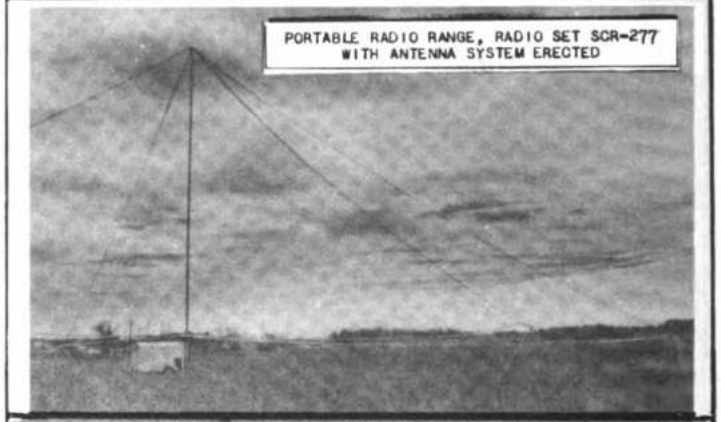
RANGE: AT LEAST 300 MILES.

TO COMMUNICATE WITH: ANY 0.2 - 0.4 MC. RECEIVER.

TO REPLACE IN PART: NONE

TRANSPORTATION: MOBILE IN K-29 TRAILER.

TYPE OF SIGNAL: CW, MCW, VOICE.



PORTABLE RADIO RANGE, RADIO SET SCR-277 WITH ANTENNA SYSTEM ERECTED

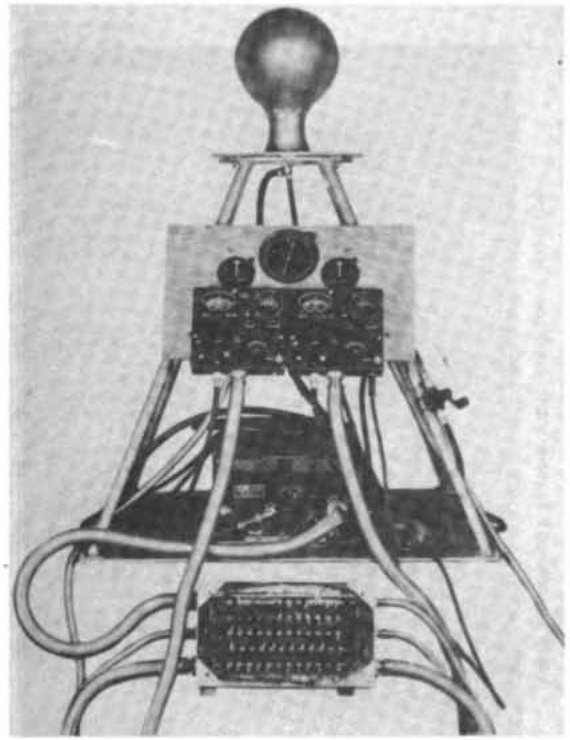
RADIO SET SCR-277, INSTALLED IN TRAILER K-29

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
ANTENNA TUNING UNIT BC-469	33"	24"	16"	141#	RESTRICTED
GONIOMETER UNIT BC-468	44"	22"	29"	234#	RESTRICTED
MAST MA-4-A	76'	7" DIA.		250#	RESTRICTED
POWER UNIT PE-90	51"	36"	35"	1075#	RESTRICTED
RADIO TRANSMITTER BC-467	49"	54"	22"	555#	
TRAILER K-29	200"	76"	106"	3359#	
RADIO RECEIVER BC-342	18"	9"	10"	61#	
COMBINED WEIGHT OF COMPONENTS:				7000#	
COMBINED VOLUME OF COMPONENTS:				875 CU.FT.	
SHIP TONNAGE:				3.5	

THIS SHEET IS CLASSIFIED: RESTRICTED

INSTRUCTIONAL LITERATURE: TO 08-10-93	STATUS:	LIMITED STANDARD 10 Nov 42	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION: SCR-280
	CHANGE IN STATUS:			



RADIO COMPASS SCR - 280
PRINCIPAL COMPONENTS

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Kc) 200 TO 1,750 COVERED IN 3 BANDS.

NUMBER OF CRYSTALS: NONE

PRESET FREQUENCIES:

ANTENNA: 8" LOOP AND FIXED NONDIRECTIONAL (MANUALLY OPERATED)

TUNING: (MD OR XTAL) MD

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 12 VOLTS DC

SIMILAR SETS: SCR-263 WHICH OPERATES FROM 24 - 28 VOLT POWER SOURCE SCR-273-A EXCEPT FREQUENCY.

POWER OUTPUT: (WATTS) RECEPTION ONLY.

TUBES: (TYPE AND NUMBER) SCR-280-A USES:

1 - 6F6	1 - 6J5
6 - 6K7	1 - 6N7
1 - 6L7	1 - 6SC7
1 - 6B8	

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: PROVIDES: VISUAL, UNIDIRECTIONAL, RIGHT-LEFT INDICATION, AURAL RECEPTION OF MODULATED RADIO FREQUENCY ENERGY USING LOOP ANTENNA, AURAL RECEPTION OF MODULATED R.F. USING NONDIRECTIONAL ANTENNA, AURAL NULL DIRECTIONAL INDICATIONS OF THE ARRIVAL OF MODULATED RADIO FREQUENCY ENERGY WITH RESPECT TO THE PLANE OF THE LOOP USING A LOOP ANTENNA.

RANGE: (MILES)

TO COMMUNICATE WITH:

TO REPLACE IN PART:

TRANSPORTATION: AIRCRAFT INSTALLATION.

TYPE OF SIGNAL: CW; MCW.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RADIO COMPASS UNIT BC-431-A	7 7/8	12	19 13/16	42.0	
2-RADIO CONTROL BOX BC-432-B	7 1/2	7 1/2	3 15/16	8.0 (4# EA.)	
LOOP LP-19-A	25 3/8	13 1/2	9	7.06	
2-COMPASS INDICATOR I-65-D	3 1/4	3 1/4	4 9/32	3.2 (1.6# EA.)	
INDICATOR I-75					

NOTE: DUE TO VARIATIONS IN AIRCRAFT INSTALLATIONS, BOTH WEIGHTS AND VOLUMES OF COMPLETE SETS VARY CONSIDERABLY AND FIGURES SHOWN ARE THEREFORE APPROXIMATE.

COMBINED WEIGHT OF COMPONENTS:				71.82#	
COMBINED VOLUME:				582# CU. IN. APPROX.	
SHIP TONNAGE:				0.0338 T	

SCR-282

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: LIMITED STANDARD 10 Nov 42

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: TO 08-10-27

PART A – TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Kc) 150 - 1,500 Kc.

NUMBER OF CRYSTALS: NONE

PRESET FREQUENCIES: NONE

ANTENNA: LOOP AND FIXED VERTICAL ANTENNA.

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 24 - 28 VOLTS DC, AIRCRAFT BATTERY.

SIMILAR SETS: SCR-242 WHICH USES 12 VOLT POWER SOURCE.

POWER OUTPUT: (WATTS)

TUBES: (TYPE AND NUMBER)
1 VT-66
6 VT-86
1 VT-87
1 VT-93
1 VT-94
2 VT-96

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: TO PROVIDE AURAL RECEPTION OF MODULATED RADIO FREQUENCY ENERGY OR VISUAL, UNI-DIRECTIONAL, RIGHT-LEFT INDICATION OF THE DIRECTION OF ARRIVAL OF RADIO FREQUENCY ENERGY WITH RESPECT TO THE PLANE OF THE LOOP AND SIMULTANEOUS "ON COURSE", AURAL RECEPTION OF MODULATED RADIO FREQUENCY.

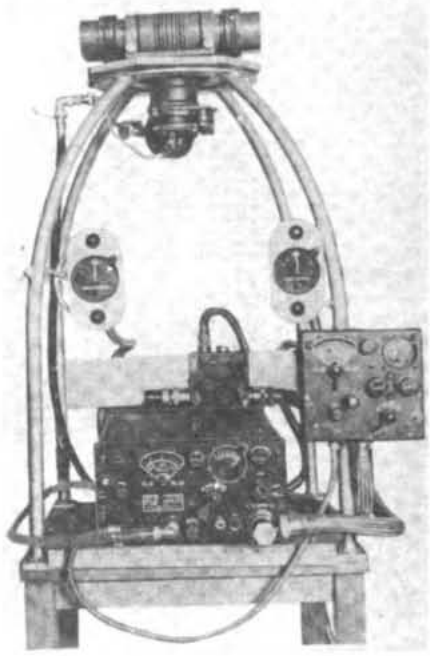
RANGE: (MILES)

TO COMMUNICATE WITH:

TO REPLACE IN PART: SCR-186

TRANSPORTATION: AIRCRAFT INSTALLATION

TYPE OF SIGNAL: CW & MCW



RADIO COMPASS SCR-282 IN OPERATING POSITION - SHOWING COMPONENTS

PART C – PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

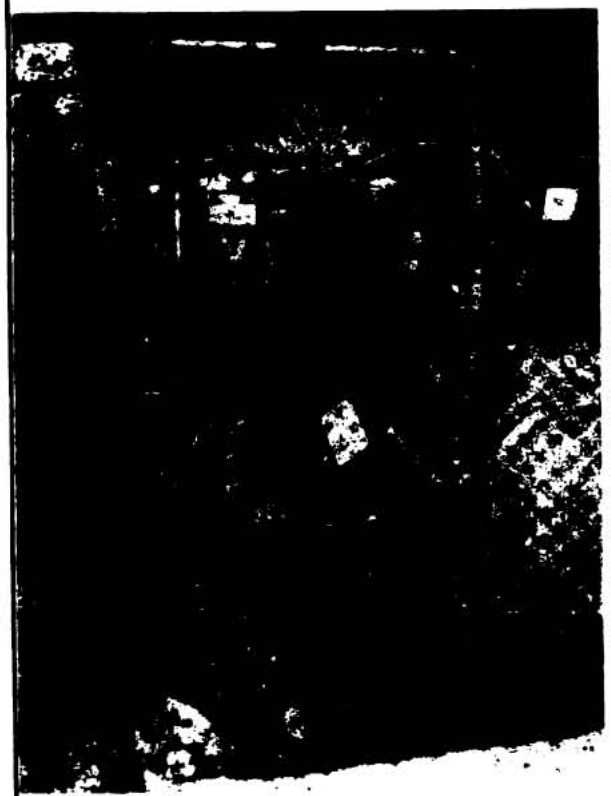
ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RADIO COMPASS UNIT BC-310	7	12	20 1/2	45.3	
RADIO CONTROL BOX BC-311	7 1/2	7 1/2	3 15/16	4.3	
LOOP LP-18-C				7.1	
INDICATOR I-75-A					
COMBINED WEIGHT OF COMPONENTS:				65# APPROX.	
COMBINED VOLUME:					
SHIP TONNAGE:					

NOTE: DUE TO VARIATIONS IN AIRCRAFT INSTALLATIONS, BOTH WEIGHTS AND VOLUMES OF COMPLETE SETS VARY CONSIDERABLY AND THE FIGURES SHOWN ARE THEREFORE APPROXIMATE.

THIS SHEET IS CLASSIFIED: UNCLASSIFIED

INSTRUCTIONAL LITERATURE: TM 11-200	STATUS:	LIMITED STANDARD 13 Nov 43	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION:
	CHANGE IN STATUS:			

SCR-283



RADIO SET SCR-283 SHOWING RADIO OPERATOR'S POSITION

CALIBRATING CRYSTAL DQ-10 MAY BE USED WITH TRANSMITTER BC-430. RADIO SET SCR-283 IS BEING REPLACED BY RADIO SET SCR-274-N AND/OR SCR-522.

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Kc) RECEIVING- 201-398 Kc, 4150-7700 Kc. TRANSMITTING- 2500-7700 Kc.

NUMBER OF CRYSTALS: NONE

PRESET FREQUENCIES: NONE

ANTENNA: RECVR: 5 FT. VERTICAL MAST. TRANS: "T" OR "L" TYPE 16 TO 18 FT. LONG.

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 24 VOLT PLANE BATTERY

SIMILAR SETS: SCR-183 EXCEPT 24 V.

POWER OUTPUT: (WATTS) VOICE 3.3; MCW 3.2; CW 4.0.

TUBE: (TYPE AND NUMBER) SCR-AL-283 USES:
4 TYPE 39
1 TYPE 37
1 TYPE 38
2 TYPE 10
2 TYPE 45 SPL.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: COMMAND SET - PLANE-TO-PLANE; PLANE-TO-GROUND COMMUNICATIONS.

RANGE: (MILES) 30-45 MILES PLANE-TO-PLANE. 10-20 MILES PLANE-TO-GROUND.

TO COMMUNICATE WITH: OTHER EQUIPMENT WITHIN RANGE COVERING SAME FREQUENCIES.

TO REPLACE IN PART:

TRANSPORTATION: AIRBORNE

TYPE OF SIGNAL: TONE, VOICE

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RADIO RECVR. BC-429	7 5/8	8 1/4	15 11/16	12	
RADIO TRANS. BC-430	7 5/8	6 5/8	13 1/4	10.2	
DYNAMOTOR BD-93				9.9	
RADIO CONTROL BOX BC-231	4 5/8	4	2 7/16	.9	
RADIO CONTROL BOX BC-232	2 7/16	4	4 5/8	.9	
ANTENNA SW. RELAY BC-408	4 9/16	4 5/8	2 3/4	1.1	
2 RECVR COIL SETS (ONE IS A DUAL COIL)					
6 TRANS COIL SETS.					
COMBINED WEIGHT OF COMPONENTS:				43.3# (INCLUDING MINOR ITEMS)	
COMBINED VOLUME:				1.5 CU.FT.	
SHIP TONNAGE:					

THIS SHEET IS CLASSIFIED: UNCLASSIFIED

SCR-284

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: LIMITED STANDARD 28 JAN 44

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: TM 11-275-A

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) 3.8 TO 5.8

NUMBER OF CRYSTALS: 1 IN CALIBRATOR.

PRESET FREQUENCIES: NONE

ANTENNA: 15' FIVE SECTION FISHPOLE TYPE FOR TRUCK USE. 25' EIGHT SECTION FISHPOLE WHEN STATIONARY OR FOR FIELD USE. L TYPE WIRE

TUNING: (MO OR XTAL) MO WITH XTAL CALIBRATOR.

SENSITIVITY: SELECTIVITY:

POWER SOURCE: HAND GENERATOR GN-45-A OR POWER UNIT PE-103 (12 VOLT) RECVR. BY DRY BATTERIES OR POWER CONVERTER UNIT PE-104 (6 OR 12 V.)

SIMILAR SETS: SCR-288

POWER OUTPUT: (WATTS) HIGH POWER: CW-20; VOICE-5 LOW POWER: CW-8; VOICE-2.

TUBES: (TYPE AND NUMBER) 1 BC-654-A TRANS. & RECVR. RECVR: 4 3Q5GT; 1 1-N 5 GT; 3 1-N 5 GT; 1 1-A 7 GT. TRANS: 4 3Q 5 GT; 2 307-A.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: INFANTRY, FIELD ARTILLERY, SIGNAL CORPS. ON GROUND OR IN VEHICLE. FOR COMMAND PURPOSES FROM DIV. HQ. DOWN TO AND INCLUDING BATTALIONS. FOR COMMUNICATIONS WITH TANK DESTROYER UNITS.

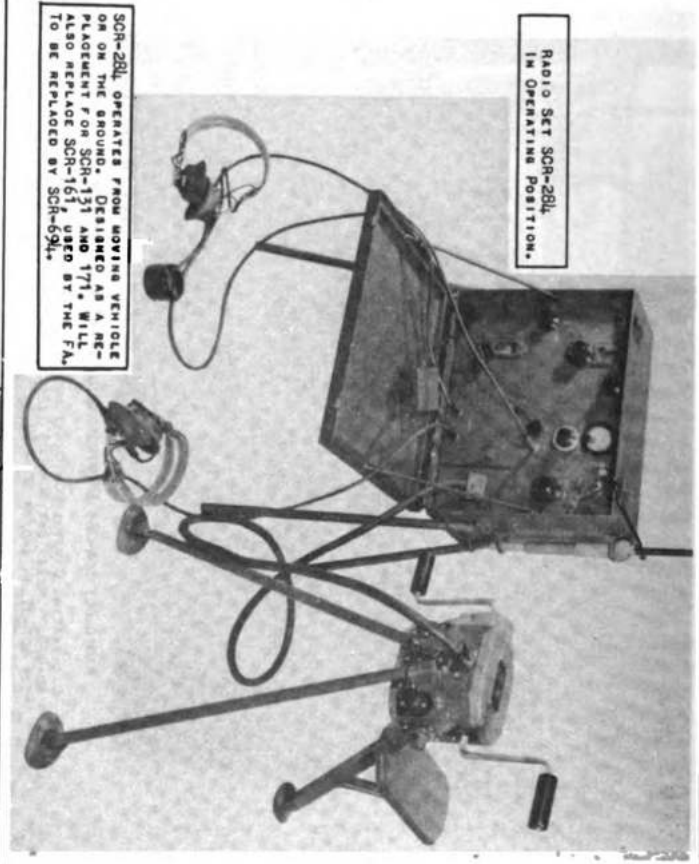
RANGE: (MILES) CW-30; VOICE-7.

TO COMMUNICATE WITH: SCR-131; SCR-161; SCR-183; SCR-274-N; SCR-284; SCR-288; SCR-536.

TO REPLACE IN PART: SCR-131; SCR-161; SCR-171; SCR-288.

TRANSPORTATION: TWO OR THREE MEN, OR IN VEHICLE.

TYPE OF SIGNAL: CW; VOICE.



SCR-284 OPERATES FROM MOVING VEHICLE OR ON THE GROUND. DESIGNED AS A REPLACEMENT FOR SCR-131 AND 171. WILL ALSO REPLACE SCR-161. USED BY THE FA. TO BE REPLACED BY SCR-694.

RADIO SET SCR-284 IN OPERATING POSITION.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	DIMENSIONS WIDTH	DIMENSIONS DEPTH	WEIGHT	CLASSIFICATION
RECVR. & TRANS. BC-654	14 "	18 "	9 3/4"	44#	UNCLASSIFIED
GENERATOR GN-45	9 "	6 1/4"	6 3/4"	22#	UNCLASSIFIED
POWER UNIT PE-103	12 3/4"	16 1/2"	5 1/2"	53#	UNCLASSIFIED
REMOTE CONTROL UNIT RM-29	6 1/4"	10 1/8"	8 1/2"	15#	UNCLASSIFIED
COMBINED WEIGHT OF COMPONENTS:				250#	
COMBINED VOLUME:					
SHIP TONNAGE:					

INSTRUCTIONAL LITERATURE:	STATUS:	SCR-287-A STANDARD 31 Oct 39
BC-348-C - TO 08-10-47 BC-375-C - TO 08-10-60	CHANGE IN STATUS:	

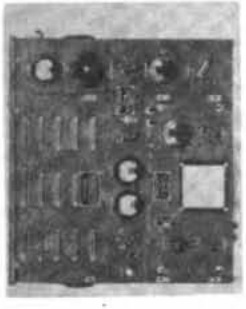
NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

NOMENCLATURE DESIGNATION:

SCR-287

RADIO RECEIVER BC-348-B

DYNAMOTOR UNIT PE-73-B



RADIO TRANSMITTER BC-375-C

REEL RL-30-B

RADIO SET SCR-287-A. PRINCIPAL COMPONENTS (RECEIVER BC-348-C CONTAINS CRYSTAL FILTER.)

PART A - TECHNICAL CHARACTERISTICS

(CLASSIFICATION:)

FREQUENCY RANGE: 1.5 - 18 Recvr. Mc.
Trans.- 1.5 - 12.5 Mc.; 260-500 Kc.; 650-1500 Kc

NUMBER OF CRYSTALS: None

PRESET FREQUENCIES: None

ANTENNA: Trailing Wire Antenna.

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 24 volts, DC and PE-73

SIMILAR SETS: SCR-187 except 12 V.

POWER OUTPUT: (Watts) 60 @ 12 Mc/s, 30 @ 1.5 Mc/s.

TUBES: (Type and Number) SCR-287-A uses:

Trans:		Recvr:	
4	VT-4-C	1	VT-48
1	VT-25	1	VT-65
		1	VT-70
		3	VT-86
		1	VT-91
		1	VT-93

PART B - TACTICAL CHARACTERISTICS

(CLASSIFICATION:)

USE: Airborne Liaison Set. Air-to-Air, Air-to-Ground communication.

RANGE: (Miles) 50 to several hundred miles.

TO COMMUNICATE WITH: SCR-188; SCR-193; SCR-197 and SCR-299.

TO REPLACE IN PART:

TRANSPORTATION: Installed in Aircraft.

TYPE OF SIGNAL: CW; MCW; Voice.

PART C - PRINCIPAL COMPONENTS

(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	DIMENSIONS WIDTH	DIMENSIONS DEPTH	WEIGHT	CLASSIFICATION
Radio Receiver BC-348-C	18	10 1/2	9 1/2	35.2	
Radio Transmitter BC-375-C	21 21/32	23 1/8	9 5/16	53	
Antenna Tuning Unit BC-306-A	17 3/4	9 1/2	9 1/8	9.75	
Dynamotor Unit PE-73-B	11	11	7 1/2	39	
Transmitter Tuning Unit TU-5-A	7 5/8	16 3/4	8 3/4	13	
Transmitter Tuning Unit TU-6-A	7 5/8	16 3/4	8 3/4	13	
Transmitter Tuning Unit TU-7-A	7 5/8	16 3/4	8 3/4	13	
Transmitter Tuning Unit TU-8-A	7 5/8	16 3/4	8 3/4	13	
Transmitter Tuning Unit TU-9-A	7 5/8	16 3/4	8 3/4	13	
Transmitter Tuning Unit TU-10-A	7 5/8	16 3/4	8 3/4	13	
Transmitter Tuning Unit TU-22-A	7 5/8	16 3/4	8 3/4	13	

NOTE: Due to variations in aircraft installations, both weights and volumes of complete sets vary considerably and the figures shown are therefore approximate.

COMBINED WEIGHT OF COMPONENTS:				250# approx.	
COMBINED VOLUME:				6 cu. ft. approx.	
SHIP TONNAGE:					

THIS SHEET IS CLASSIFIED: UNCLASSIFIED

SCR-288

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION

STATUS:

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: TM 11-250.

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION)

FREQUENCY RANGE: TRANS.: 3.5 - 6.3. (Mc)
RECVR.: 2.3 - 6.5 (Mc)

NUMBER OF CRYSTALS:

PRESET FREQUENCIES:

ANTENNA: 35' STRAIGHT INSULATED WIRE WITH COUNTERPOISE.

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: TRANS: GENERATOR GN-44.
RECVR. GENERATOR GN-44 OR DRY BATTERIES.

SIMILAR SETS: SCR-284.

POWER OUTPUT: (WATTS) 4 75% MODULATION ON VOICE AND CW.

TUBES: (TYPE AND NUMBER) SCR-288 USES: 3 VT-107
1 VT-146
1 VT-147
1 VT-148
1 VT-149

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: INF: B, REGT. BN.
FA: DIV. ARTY, REGT, BN.
SIG C: CO.

RANGE: (MILES) STATIONARY: 30 USING CW; 15 USING VOICE.

TO COMMUNICATE WITH: SCR-131; SCR-161; SCR-193; SCR-238; SCR-245.

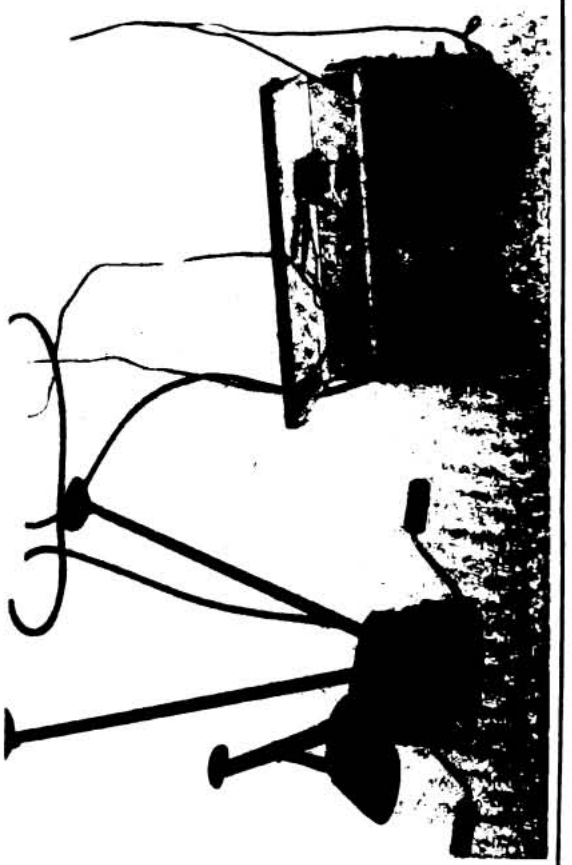
TO REPLACE IN PART: SCR-131; 161; 171.

TRANSPORTATION: 2 MAN LOAD.

TYPE OF SIGNAL: CW; VOICE.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

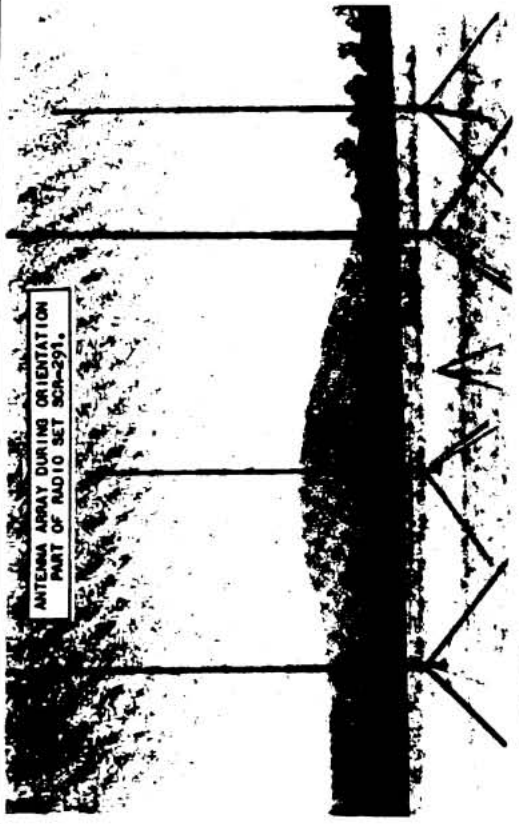
ITEM	DIMENSIONS			WEIGHT	CLASSIFICATION
	HEIGHT	WIDTH	DEPTH		
RADIO TRANS. & RECVR. BC-474	18"	9 1/2"	7 1/2"	84#	
COMBINED WEIGHT OF COMPONENTS:				84#	
COMBINED VOLUME:					
SHIP TONNAGE:					



RADIO SET SCR-288
Prepared for Operation

THIS SHEET IS CLASSIFIED: UNCLASSIFIED

INSTRUCTIONAL LITERATURE:	STATUS:	STANDARD 20 Nov 42	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION: **SCR-291**
	CHANGE IN STATUS:			



ANTENNA ARRAY DURING ORIENTATION
PART OF RADIO SET SCR-291.

THIS DIRECTION FINDER EMPLOYS AN ELECTRICALLY ROTATED GONIOMETER AND GIVES INSTANTANEOUS INDICATION OF BEARING, PERMITTING EVALUATION OF WORTH OF BEARING. PURCHASED EXCLUSIVELY FOR AAF AND LEND-LEASE.

* TECHNICAL CHARACTERISTICS: (TUBES, TYPE & NUMBER) RADIO RECEIVER BC-1147: 1 5U4G (VT-244); 1 6A6 VT-90; 1 6J5 (VT-94); 1 6B7 (VT-150); 1 6B7 (VT-116); 1 6SH7; 4 6SK7 (VT-117); 1 6SQ7 (VT-103); 1 6V6-GT (VT-107-A); 1 VR-150-20 (VT-139); TRANSMITTER BC-1141: 1 1R5 (VT-171); 1 1291 (VT-182) CONTROL PANEL PM-31: 1 2A2 (VT-119); 1 5U4G (VT-244); 1 6A6 (VT-112); 1 6L6G (VT-115); 1 VR-105-30 (VT-200.) PHASE INVERTER MC-411: (DIRECTIONAL) 5 7V7. PHASE INVERTER MC-415 (SENSE) 4 7V7. BEARING INDICATOR BC-1159: 1 SYLVANIA 5BP1.

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 2 - 10

NUMBER OF CRYSTALS: DOES NOT APPLY

PRESET FREQUENCIES: DOES NOT APPLY

ANTENNA: MODIFIED U ADCOCK

TUNING: (MO OR XTAL) DOES NOT APPLY

SENSITIVITY: 10 MICROVOLTS/METER FOR 10DB SIGNAL/NOISE RATIO.

SELECTIVITY:

POWER SOURCE: 110V. AC PORTABLE GENERATOR (KOHLER 1M-21A)

SIMILAR SETS: SCR-502

POWER OUTPUT: (WATTS) DOES NOT APPLY

TUBES: (TYPE AND NUMBER) SEE NOTE *

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: TO DIRECT FLIGHT OF FRIENDLY PLANES AND DETECT DIRECTION OF ENEMY TRANSMITTERS, PARTICULARLY AIRCRAFT.

RANGE: LONG

TO COMMUNICATE WITH: DOES NOT APPLY.

TO REPLACE IN PART: SCR-551 IN PART.

TRANSPORTATION: AIR

TYPE OF SIGNAL: DOES NOT APPLY.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
1 CHEST CH-161 CONTAINING: 1 RECVR. BC-1147 1 CONTROL PANEL PM-31 1 TELEPHONE PANEL PM-32 1 RACK FM-61	37"	28"	29"	400#	
1 CHEST CH-162 CONTAINING: 1 GONIOMETER MC-412 1 BEARING INDICATOR BC-1159	26"	16"	48"	212#	
3 CRATES, CONTAINING: (EACH) 1 SHELTER HO-20 (D/F)	17"	40"	73"	595#	
1 CRATE CONTAINING: 1 SHELTER HO-19 (POWER UNIT)	14"	49"	65"	368#	
3 CRATES CONTAINING: (EACH) 7 ANTENNA EQUIPMENT RC-223	21"	22"	112"	390#	
2 POWER UNITS, KOHLER 1M-21A (EACH)	35"	15"	37"	497#	
1 GASOLINE HEATER, EVANS HV-203000					
OTHER ASSOCIATED EQUIPMENT INCLUDING R.F. CABLES, REELS, TEST EQUIPMENT.					
COMBINED WEIGHT OF COMPONENTS:				6900#	
COMBINED VOLUME OF COMPONENTS:				350 Cu.FT.	
SHIP TONNAGE:					

SCR-293

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: LIMITED STANDARD 23 APR 43

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: IB - STOCK # 608293

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (MC) 20.0 - 27.9

NUMBER OF CRYSTALS: 5 IN RECVR. 5 IN TRANS.

PRESET FREQUENCIES: 5

ANTENNA: 9' FISHPOLE AN-42-A TYPE TO BE MOUNTED ON TURRET (WITH 2' EXTENSION FOR LOWER FREQ).

TUNING: (MO OR XTAL) XTAL

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 12 OR 24 V - VEHICULAR BATTERY.

SIMILAR SETS: SCR-508

POWER OUTPUT: (WATTS) HIGH POWER-25 WATTS. LOW POWER-1/2 WATT

TUBES: (TYPE AND NUMBER) SCR-293-A USES:

4 6AC7	4 12K8
5 12A6	4 12H6
2 12SJ7	2 12SA7
1 1625	2 12SL7GT

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: AF: IN TANK UNITS UP TO BNS.

RANGE: (MILES) 5 MOVING; 7 STATIONARY.

TO COMMUNICATE WITH: SCR-293; SCR-294; SCR-508; SCR-509; SCR-510; SCR-528; SCR-538.

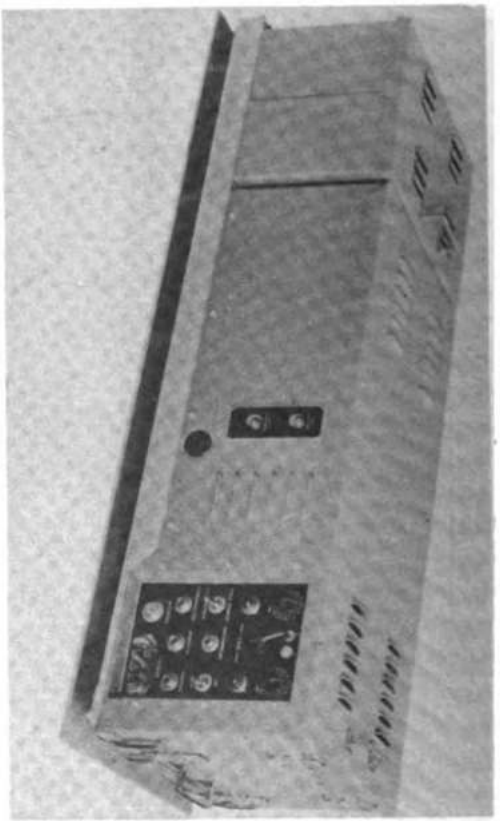
TO REPLACE IN PART: SCR-193; SCR-245.

TRANSPORTATION: TANK

TYPE OF SIGNAL: VOICE (FM)

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
LINK TRANS., RECVR. TYPE, 25 UFX, AND SEPARATE RECVR. TYPE, 11 TKR. RADIO RECVR. & TRANS. BC-500 RECVR. BC-499.	12"x14½"x 34" TO BE PLACED IN LEFT SPONSON OF LIGHT TANK (2.6 CU.FT.)			115#	UNCLASSIFIED
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME:					
SHIP TONNAGE:					

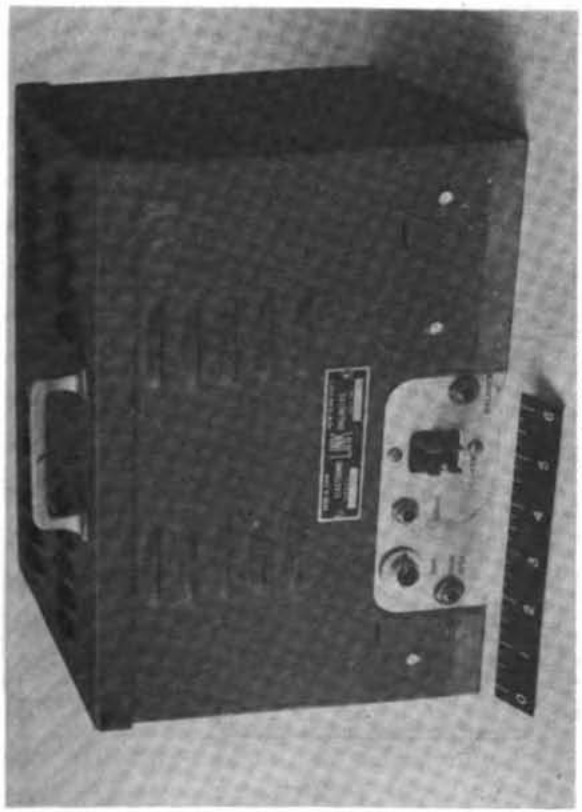


RADIO RECEIVER AND TRANSMITTER BC-500
PART OF RADIO SET SCR-293
SHORT RANGE, VEHICULAR FM TRANSMITTER AND RECEIVER
REPLACED BY SCR-508. USES THROAT MICROPHONE

INSTRUCTIONAL LITERATURE:	STATUS:	LIMITED STANDARD 23 APR 43
	CHANGE IN STATUS:	

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

NOMENCLATURE DESIGNATION: **SCR-294**



RADIO SET SCR-294
RADIO RECEIVER BC-499. FRONT VIEW
(VEHICULAR FM RECEIVER. REPLACED BY SCR-538)

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) 20.0 - 27.9 (RECEIVER ONLY)

NUMBER OF CRYSTALS: 5 (RECVR.)

PRESET FREQUENCIES: 5

ANTENNA: 9' FISHPOLE (AN-42-A)

TUNING: (MO OR XTAL)

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 12 OR 24 V CAR BATTERY.

SIMILAR SETS: SCR-538

POWER OUTPUT: (WATTS)

TUBES: (TYPE AND NUMBER) SCR-294-A USES:

2 12K8	2 6AC7
2 12SJ7	2 12A6
1 12SL7GT	2 12H6

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: AF: IN TANKS AND VEHICLES.

RANGE: (MILES)

TO COMMUNICATE WITH: SCR-293; SCR-508; SCR-509; SCR-510; SCR-528:

TO REPLACE IN PART: SCR-210

TRANSPORTATION: TANKS AND VEHICLES.

TYPE OF SIGNAL: FM RECEIVER.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RADIO RECVR. BC-499	14"	14 1/2"	34"	56#	UNCLASSIFIED
COMBINED WEIGHT OF COMPONENTS:				56#	
COMBINED VOLUME:				0.6 CU.FT.	
SHIP TONNAGE:					

SCR-298

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: STANDARD 21 Nov 43

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: IB - Stock # 6D 8293

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) 30 - 40

NUMBER OF CRYSTALS: 1

PRESET FREQUENCIES: 1 (NO SELECTION)

ANTENNA: WHIP

TUNING: (MO OR XTAL) XTAL

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 6 V VEHICULAR BATTERY.

SIMILAR SETS: SCR-293

POWER OUTPUT: (WATTS) 25

TUBES: (TYPE AND NUMBER) EARLY MODEL USED:
1 EARLY LINK 11-UF MODEL RECVR. - 2 6K8; 1 6D8G;
2 6AC7/1852; 2 6SJ7; 2 6H6; 1 6V6; 1 6K6GT.
1 EARLY LINK 25 UFM MODEL TRANS. - 4 7C7;
2 7A8; 1 7C5; 1 807.
NOTE: INFORMATION AVAILABLE STATES-SCR-298 LATE MODEL USES: 1 35UFM (ED 2 OR 3); 1 11UF (ED 3).

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: USED BY UMPIRE PERSONNEL.

RANGE: (MILES) STATIONARY-10; MOVING-7.

TO COMMUNICATE WITH: SCR-608; SCR-609; SCR-610; SCR-628; SCR-808; SCR-828.

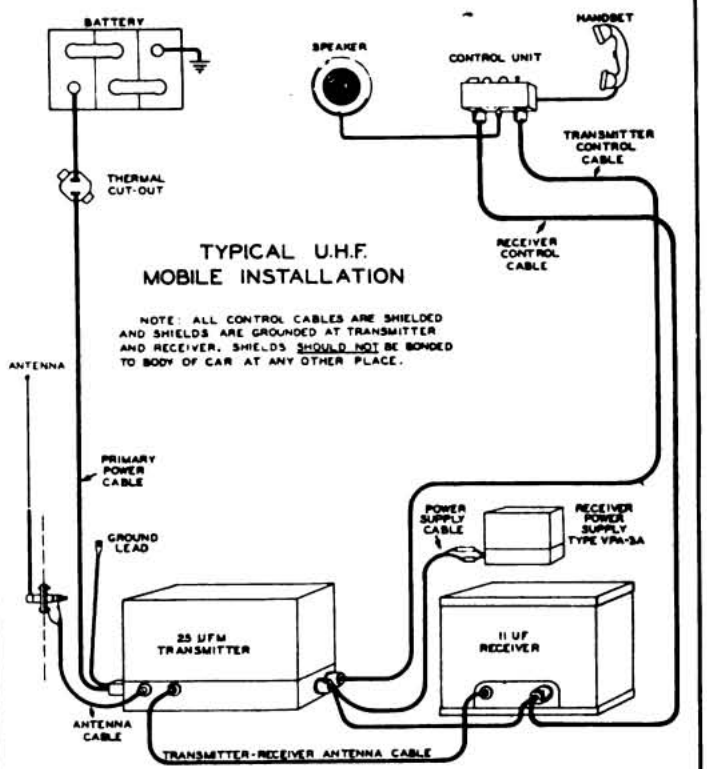
TO REPLACE IN PART:

TRANSPORTATION: VEHICLE

TYPE OF SIGNAL: VOICE (FM)

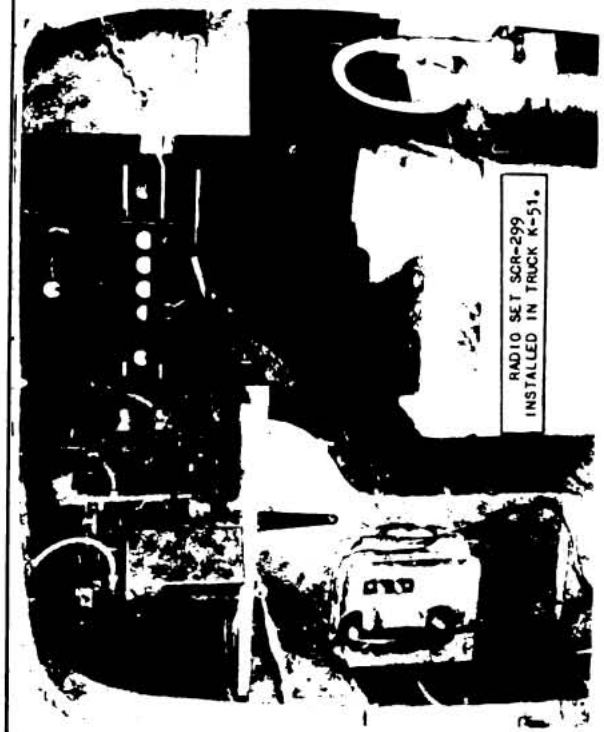
PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
TRANS. 25-UFM	9 "	17 "	8 1/4"	29 #	
RECVR. 11-UF	9 "	13 "	7 1/2"	17 1/2#	
POWER UNIT VPA-3A	8 1/2"	4 1/4"	5 "	7 1/4#	
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME:					
SHIP TONNAGE:					



ENGINEER'S DRAWING OF SCR-298 COMPONENTS, SHOWING INTERCONNECTIONS.

INSTRUCTIONAL LITERATURE:	STATUS:	LIMITED STANDARD 16 Jul 43	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION:
SCR-299-A, B - TM 11-280-B SCR-299-C - IB Stock No. SCR-299-D - IB Stock No. SCR-299-E	CHANGE IN STATUS:			SCR-299



RADIO SET SCR-299-(A,B,C, & D) ISSUED WITH TRUCK K-51 AND TRAILER K-52 AS INTEGRAL PARTS. SCR-399 AND SCR-499 ISSUED WITH SHELTER HO-17 AS A COMPONENT PART. 2 1/2 TON 6X6 CARGO TRUCK WILL BE FURNISHED BY ORDNANCE BUT IS NOT A PART OF THE SET. MAJOR COMPONENTS IN CHEST. PACKAGED FOR AIR TRANSPORT (SPECIAL D MODEL). SEE SCR-399 AND SCR-499.

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION)

FREQUENCY RANGE: (Mc) TRANS.: 2 - 8.0
RECVR.: 1.5 - 18.0

NUMBER OF CRYSTALS: 36 FURNISHED.

PRESET FREQUENCIES: 3

ANTENNA: WHIP OR LONG WIRE.

TUNING: (MO OR XTAL) BOTH

SENSITIVITY: SELECTIVITY:

POWER SOURCE: COMMERCIAL 110V AC OR 95.

SIMILAR SETS: SCR-399; SCR-499.

POWER OUTPUT: (WATTS) 400 CW; 300 VOICE.

TUBES: (TYPE AND NUMBER) SCR-299-A USES:
1 BC-312- - 2 6C5; 1 6F6; 4 6K7; 1 6L7; 1 6R7.
1 BC-342- - 2 6C5; 1 6F6; 4 6K7; 1 6L7; 1 6R7;
1 5W4. 1 BC-614-B - 3 6SN7GT; 1 6SR7; 1 6S47;
1 6J5; 1 80. 1 BC-610-B - 1 6V6; 1 6L6; 2 807;
1 250; 2 100; 2 2A3; 2 523; 2 866A; 3 VR150-30.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION)

USE: SIGNAL CORPS, AIRFORCE, FIELD ARTILLERY, CALVARY, INFANTRY. COMPONENTS INSTALLED IN VEHICLES.

RANGE: (MILES) 250-CW; 100-VOICE.

TO COMMUNICATE WITH: SCR-177; SCR-183; SCR-187; SCR-193; SCR-197; SCR-209; SCR-237; SCR-238; SCR-245; SCR-274-N; SCR-283; SCR-284; SCR-285; SCR-287; SCR-288; SCR-506; SCR-511; SCR-536; SCR-543; SCR-583.

TO REPLACE IN PART: SCR-197

TRANSPORTATION: POWER UNITS PE-95 IN 1 TON TRAILER. SHELTER HO-17 WITH COMPONENTS INSTALLED MOUNTS ON 2½ TON, 6X6 CARGO TRUCK (TRUCK NOT PART OF SET) (LONG WHEELBASE).

TYPE OF SIGNAL: CW; VOICE (AM)

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION RESTRICTED)

ITEM	DIMENSIONS HEIGHT	DIMENSIONS WIDTH	DIMENSIONS DEPTH	WEIGHT	CLASSIFICATION
TRANS. BC-610					UNCLASSIFIED
RECVR. BC-312 & BC-342					UNCLASSIFIED
SPEECH AMPLIFIER BC-614-A, B, C, D.					UNCLASSIFIED
ANT. TUNING UNIT BC-729					UNCLASSIFIED
POWER UNIT PE-95					UNCLASSIFIED
TRUCK K-51					UNCLASSIFIED
TRAILER K-52					UNCLASSIFIED
COMBINED WEIGHT OF COMPONENTS:		(RADIO COMPONENTS ONLY)		1000# APPROX.	
COMBINED VOLUME:					
SHIP TONNAGE:					

THIS SHEET IS CLASSIFIED: UNCLASSIFIED

SCR-300

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: STANDARD 27 Oct 42

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: TM 11-242

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) 40.0 - 48.0

NUMBER OF CRYSTALS: 2

PRESET FREQUENCIES: None

ANTENNA: Fishpole Type.

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: Light or heavy duty (for longer operational hours) Plug-in type dry cell battery containing the voltages for all tube elements in one unit.

SIMILAR SETS: SCR-194 and SCR-195

POWER OUTPUT: (Watts) Approximately 1

TUBES: (Type and Number) VHF Portable. 1 BC-1000 uses:

1 - 1-R-5	1 - 1-A-3
3 - 1-S-5	5 - 1-L-4
6 - 1-T-4	2 - 3-A-4

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: Infantry, Field Artillery, Coast Artillery, Advanced Field Artillery, Coast Artillery and Infantry Units.

RANGE: (Miles) 3 to 5.

TO COMMUNICATE WITH: SCR-300 only.

TO REPLACE IN PART: SCR-194 and SCR-195.

TRANSPORTATION: Man-Pack.

TYPE OF SIGNAL: FM - Voice.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
Receiver and Transmitter BC-1000	15"	10"	6"	17#	
Battery BA-70				15#	
Battery BA-80				10#	
Antenna AN-130					
Antenna AN-131					
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME OF COMPONENTS:				1200	
SHIP TONNAGE:				cu. ft.	

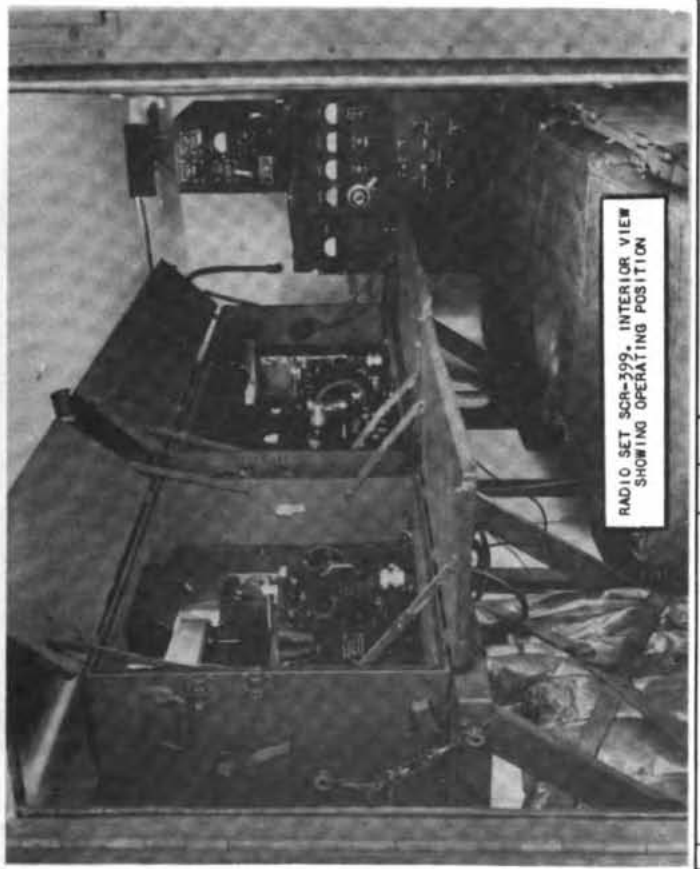
RADIO SET SCR-300 IS A SMALL PORTABLE SET FOR USE BY ADVANCED FIELD ARTILLERY AND INFANTRY UNITS. CAPABLE OF BEING NETTED. FREQUENCY MODULATED.

RADIO SET SCR-300. COVER OPEN, SHOWING CONTROLS.

THIS SHEET IS CLASSIFIED: UNCLASSIFIED

INSTRUCTIONAL LITERATURE: TM 11-281	STATUS:	STANDARD 8 JUN 43	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION:
	CHANGE IN STATUS:			

SCR-399



PART A – TECHNICAL CHARACTERISTICS

(CLASSIFICATION:)

FREQUENCY RANGE: (MC) TRANS. 2.0 - 18.0
RECVR. 1.5 - 18.0

NUMBER OF CRYSTALS: 36

PRESET FREQUENCIES: 3

ANTENNA: WHIP OR LONG WIRE

TUNING: (MO OR XTAL) BOTH

SENSITIVITY: SELECTIVITY:

POWER SOURCE: A.C. 110 VOLTS, 60 CYCLE, SINGLE PHASE; POWER UNIT PE-95.

SIMILAR SETS: SCR-299-A, B, C, D

POWER OUTPUT: (WATTS) 400 CW, 300 VOICE (2-8 MC); 300 CW, 250 VOICE (8-12 MC); 275 CW, 200 VOICE (12-18 MC).

TUBES: (TYPE AND NUMBER) 1 BC-312:2 6C5,1 6F6,4 6K7 1 6L7,1 6R7.1BC-342:2 6C5,1 6F6,4 6K7,1 6L7,1 6R7, 1 5W4.1BC-614-B:3 6SN7GT,1 6SR7,1 6SQ7,1 6J5,1 80. 1 BC-610-B:1 6V6,2 100,1 6L6,2 2A3,2 807,2 523, 1 250 2 866A, 3 VR-150-30.

PART B - TACTICAL CHARACTERISTICS

(CLASSIFICATION:)

USE: SIG C; AC; AF; FA; CAV; INF.

RANGE: (MILES) 250 CW; 100 VOICE.

TO COMMUNICATE WITH: SCR-177; SCR-183; SCR-187; SCR-193; SCR-197; SCR-209; SCR-237; SCR-238; SCR-245; SCR-274-N; SCR-283; SCR-284; SCR-285; SCR-287; SCR-288; SCR-506; SCR-511; SCR-536; SCR-543; SCR-583.

TO REPLACE IN PART: SCR-197; SCR-299.

TRANSPORTATION: POWER UNIT PE-95 IN 1 TON TRAILER. SHELTER HO-17 WITH COMPONENTS INSTALLED MOUNTS ON 2 1/2 TON, 6X6 CARGO TRUCK.

TYPE OF SIGNAL: CW, VOICE (AM)

PART C – PRINCIPAL COMPONENTS

(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	DIMENSIONS WIDTH	DIMENSIONS DEPTH	WEIGHT	CLASSIFICATION
TRANS. BC-610					
RECEIVERS BC-312 & BC-342					
SPEECH AMPLIFIER BC-614-E					
ANTENNA TUNING UNIT BC-939					
TRAILER K-52 (POWER UNIT) INCLUDES POWER UNIT PE-95					
JUNCTION BOX JB-70					
SHELTER HO-17					
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					

THIS SHEET IS CLASSIFIED: UNCLASSIFIED

SCR-499

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: STANDARD 8 JUN 43

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: TM 11-281

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) TRANS. 2.0 - 18.0
RECVR. 1.5 - 18.0

NUMBER OF CRYSTALS: 36

PRESET FREQUENCIES: 3

ANTENNA: WHIP OR LONG WIRE

TUNING: (MO OR XTAL) BOTH

SENSITIVITY: SELECTIVITY:

POWER SOURCE: AC 110 VOLTS, 60 CYCLES, SINGL PHASE OR PE-95.

SIMILAR SETS: SCR-177-B; SCR-188-A; SCR-399 WITHOUT SHELTER HO-17 AND WITHOUT 1-TON 2X0 TRAILER.

POWER OUTPUT: (WATTS) 400 CW, 300 VOICE (2-8MC); 300 CW, 250 VOICE (8-12MC); 275 CW, 200 VOICE (12-18 MC).

TUBES: (TYPE AND NUMBER) 1 BC-312: 2 6C5, 1 6F6, 4 6K7, 1 6L7, 1 6P7. 1 BC-342: 2 6C5, 1 6F6, 4 6K7, 1 6L7, 1 6P7, 1 5R4, 1 BC-614-B: 3 6SN7GT, 1 6SR7, 1 6 SQ7, 1 6J5, 1 80. 1 BC-610-B 1 6V6, 1 6L6, 2 807, 1 250, 2 100, 2 2A3, 2 5Z3 2 866A 3 VR-150-30.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: SIG C, AC, AF, FA, CAV, INF. COMPONENTS INSTALLED IN VEHICLES.

RANGE: (MILES) 250 CW; 100 VOICE.

TO COMMUNICATE WITH: SCR-177; SCR-183; SCR-187; SCR-193; SCR-197; SCR-209; SCR-237; SCR-238; SCR-245; SCR-274-N; SCR-283; SCR-284; SCR-285; SCR-287; SCR-288; SCR-506; SCR-511; SCR-536; SCR-543; SCR-583.

TO REPLACE IN PART: SCR-299.

TRANSPORTATION: COMPONENTS PACKED FOR AIRBORNE SHIPMENT. (NO SHELTER OR TRAILER PROVIDED)

TYPE OF SIGNAL: CW; VOICE (AM)

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
TRANS. BC-610					
RECVRS. BC-312, BC-342					
SPEECH AMPLIFIER BC-614-E					
ANT. TUNING UNIT BC-939					
POWER UNIT PE-95					
JUNCTION BOX JB-70					
COMBINED WEIGHT OF COMPONENTS					
COMBINED VOLUME OF COMPONENTS					
SHIP TONNAGE					

RADIO SET SCR-499 INCLUDES RADIO COMPONENTS OF RADIO SET SCR-399 PACKED FOR AIRBORNE SHIPMENT; DOES NOT INCLUDE SHELTER HO-17 AND TRAILER, K-52 FOR POWER UNIT. ABOVE PHOTOGRAPH SHOWS COMPONENTS IN SHELTER HO-17.

THIS SHEET IS CLASSIFIED: UNCLASSIFIED

INSTRUCTIONAL LITERATURE:	STATUS:	SUBSTITUTE STANDARD 11 JUN 42	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION:
	CHANGE IN STATUS:			

SCR-503

RADIO SET SCR-503

THIS SET COMES IN 2 UNITS - LOW FREQUENCY UNIT .1 TO 1.0 MC, HIGH FREQUENCY UNIT 1.0 TO 3 MCS. THIRD UNIT UNDER DEVELOPMENT TO COVER RANGE OF 3 TO 18 MC.

PART A - TECHNICAL CHARACTERISTICS

(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) .1 - 3.0

NUMBER OF CRYSTALS: None

PRESET FREQUENCIES: None

ANTENNA: Crossed Loops

TUNING: (MO OR XTAL) Does not apply

SENSITIVITY: 5 - 25 microvolts/meter

SELECTIVITY:

POWER SOURCE: 12V Storage Battery

SIMILAR SET: SCR-206

POWER OUTPUT: (WATTS) Does not apply

TUBES: (TYPE AND NUMBER)

Low Freq. Unit:	High Freq. Unit:
2 VT-161	1 VT-107
6 VT-209	1 VT-153
1 VT-153	2 VT-161
2 VT-162	2 VT-162
1 VT-134	4 VT-209

PART B - TACTICAL CHARACTERISTICS

(CLASSIFICATION:)

USE: A portable direction finder for field use in locating enemy transmitters.

RANGE: Short

TO COMMUNICATE WITH: Does not apply.

TO REPLACE IN PART: SCR-206

TRANSPORTATION: Portable

TYPE OF SIGNAL: Does not apply

PART C - PRINCIPAL COMPONENTS

(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
Azimuth Scale M-333	-----	-----	-----	-----	
Loop LP-23	10"	10"	3"	6.5#	
Loop LP-33	10"	10"	3"	6.0#	
Receiver BC-1003	8"	12"	14-1/2	38.5#	
Receiver BC-973	8"	12"	14-1/2"	36.5#	
Battery, Storage 12V	10-5/16"	13"	7-1/8"	63.5#	
Tripod LG-15	29"	5-1/2"	5-1/2"	9 #	
Dynamotor PE-133	7-3/8"	6-5/8"	4-3/16"	9#	
Battery Chest CH-113	23-7/8"	27-7/8"	9"	33#	
COMBINED WEIGHT OF COMPONENTS: Including Brackets, Chests, Cords, etc.				157.5#	
COMBINED VOLUME OF COMPONENTS:				4.3 Cu.Ft.	
SHIP TONNAGE:					

SCR-504

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS:

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE:

TM 11-862 (FOR SCR-504-A)

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) .1 - 65

NUMBER OF DRYSTALS: NONE

PRESET FREQUENCIES: NONE

ANTENNA: LOOP

TUNING: (MO OR XTAL) DOES NOT APPLY

SENSITIVITY: 50 - 200 MICROVOLTS/METER

SELECTIVITY:

POWER SOURCE: MINIATURE STORAGE BATTERY (BB-51, BB-52)

SIMILAR SETS: NONE

POWER OUTPUT: (WATTS)

TUBES: (TYPE AND NUMBER)
1 1LB4 1 VT-177
1 VT-178 5 VT-179

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: THIS EQUIPMENT IS INTENDED TO BE USED FOR INTELLIGENCE PURPOSES, PARTICULARLY FOR THE SPECIFIC LOCATION OF UNAUTHORIZED TRANSMITTERS.

RANGE: SHORT

TO COMMUNICATE WITH: DOES NOT APPLY.

TO REPLACE IN PART:

TRANSPORTATION: PORTABLE

TYPE OF SIGNAL: DOES NOT APPLY.

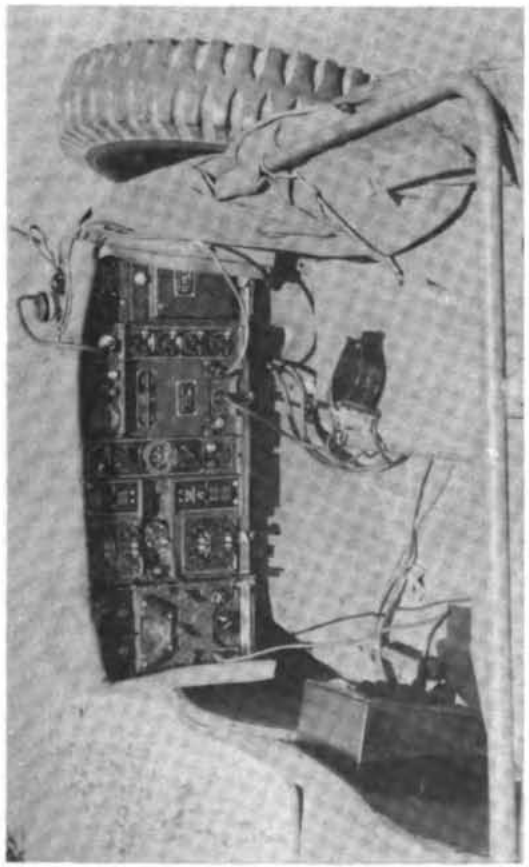
PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RADIO RECEIVER BC-792	6"	18"	13"	25#	
BATTERY CHARGER PE-128	9 3/4"	12"	8"	16#	
HEADSET HS-34	----	----	------	1 oz.	
COMBINED WEIGHT OF COMPONENTS:				55#	
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					

RADIO SET SCR-504

RADIO RECEIVER BC-792, A HAND PORTABLE DIRECTION FINDER, MOUNTED IN SUIT CASE AND READY FOR OPERATION. SHOWING EXTENDED SENSE ANTENNA, EXTERNAL CONTROLS AND MINIATURE HEADSET OF THE HEARING-AID TYPE. BATTERY CHARGER PE-128 IS USED AS PART OF SET BUT IS NOT NECESSARILY TAKEN ALONG WITH RECEIVER ON OPERATING MISSIONS.

INSTRUCTIONAL LITERATURE: TM 11-630	STATUS:	STANDARD 19 Dec 41	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION:	SCR-506
	CHANGE IN STATUS:				



RADIO SET SCR-506-A . INSTALLED in TRUCK, 1/4-TON 4 X 4
Front View . Showing Control Panel

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) Trans. 2-4.5; Recvr. 2 -6

NUMBER OF CRYSTALS: 1 (xtal calibrator)

PRESET FREQUENCIES: 4

ANTENNA: 15' fishpole to used while moving, with 10' extension to be used while at a halt.

TUNING: (MO or XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: Vehicular power system 12 or 24 v. input.

SIMILAR SETS:

POWER OUTPUT: (Watts) 100 CW; 25 watts Voice

TUBES: (Type and Number) SCR-506 uses: 1-BC-652-A: 2-6 SC 7; 2-12 SK 7; 2-12 K 8; 1-12 SR 7; 1-12 C 8; 1-6 K 8; 1-6 Y 6 G; 1-12 SG 7; 1-BC-653-A: 1-807; 2-814; 2-1613; 2-VR-105-30. NOTE: 506-A also listed: has 18 tubes, also IDENTICAL with SCR-506 shown above.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: TD; Armd F; Cav; Engrs; FA; Sig C; used in light tank M-3 & in other armored vehicles.

RANGE: (Miles) 70 CW; 25 Voice.

TO COMMUNICATE WITH: SCR-131; SCR-171; SCR-187; SCR-193; SCR-203; SCR-209; SCR-210; SCR-238; SCR-245; SCR-259; SCR-287.

TO REPLACE IN PART: SCR-193-in AF

TRANSPORTATION (and Operation): in vehicle in which set is installed.

TYPE OF SIGNAL: CW; Voice (AM)

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS			WEIGHT	CLASSIFICATION
	HEIGHT	WIDTH	DEPTH		
Trans. BC-653, Recvr. BC-652	13 13/16"	33 1/8"	14 1/4"	176#	
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME:					
SHIP TONNAGE:					

SCR-508

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS:

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE:

TM 11-600

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) 20.0 to 27.9

NUMBER OF CRYSTALS: 80

PRESET FREQUENCIES: 10 (Push Button Selection).

ANTENNA: 9 Ft. Fishpole

TUNING: (MO or XTAL) XTAL

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 12 or 24 volt battery.

SIMILAR SETS: SCR-608 except frequency.

POWER OUTPUT: (Watts) 25 100% Modulation.

TUBES: (Type and Number) BC-603-C Receiver 1 Tube Type 6 H 6; 1 Tube Type 6 J 5; 1 Tube Type 6 V 6 GT; 3 Tubes Type 6 A C 7; 2 Tubes Type 12 SG 7; 2 Tubes Type 6 SL 7 GT. BC-604-C Transmitter 7 Type 1619 Tubes; 1 Type 1624 Tubes.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: Armored Force, Field Artillery. Installation in command tanks and vehicles of AF, GHQ., Corps and Divisions where it is necessary to monitor 2 frequencies simultaneously.

RANGE: (Miles) 7 in motion.

TO COMMUNICATE WITH: SCR-293; SCR-294; SCR-508; SCR-509; SCR-510; SCR-528; SCR-538.

TO REPLACE IN PART: SCR-193; SCR-245; SCR-293.

TRANSPORTATION: Vehicle.

TYPE OF SIGNAL: Voice; FM.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

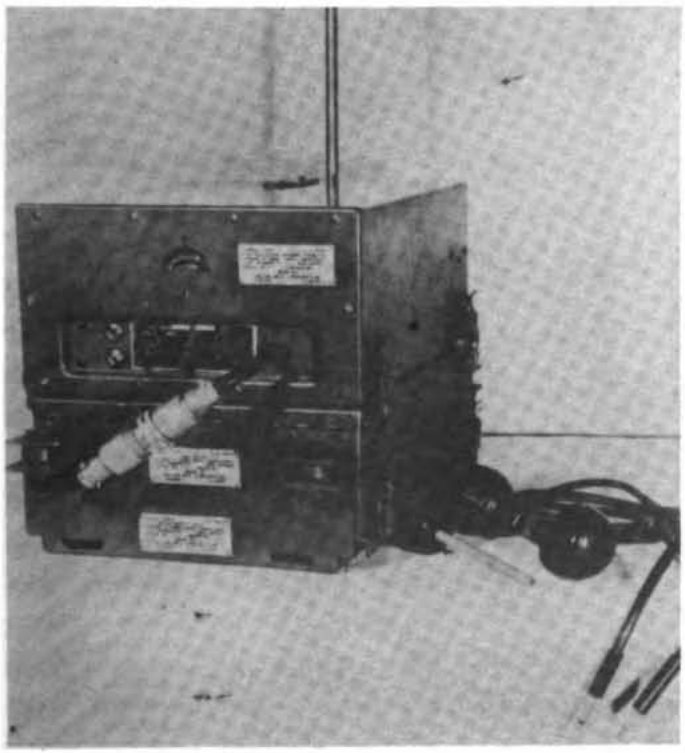
ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
Transmitter BC-604				67#	
Receiver (2) BC-603				70# (35# ea)	
Mounting Base FT-237				44#	
Vehicle Antenna				-----	
COMBINED WEIGHT OF COMPONENTS:				181#	
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					

SCR-508 IS A SHORT RANGE, VEHICULAR, FM SET. ARMORED FORCE COMMAND SET (AF 111). HAS INTEGRAL INTERPHONE AMPLIFIER. NOTE: RADIO SETS SCR-508; SCR-528 AND SCR-538 ALL USE COMMON COMPONENTS AS FOLLOWS:

SCR-508	1 TRANSMITTER; 2 RECEIVERS
SCR-528	1 TRANSMITTER; 1 RECEIVER
SCR-538	1 RECEIVER

INSTRUCTIONAL LITERATURE: TM 11-605	STATUS:	STANDARD 14 JUL 41	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION:
	CHANGE IN STATUS:			

SCR-509



RADIO SET SCR-509 SET UP FOR OPERATION

RADIO SET SCR-509 IS A LIGHT WEIGHT, SHORT RANGE FREQUENCY MODULATED SET.

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) 20.0 - 27.9

NUMBER OF CRYSTALS: 80

PRESET FREQUENCIES: 2

ANTENNA: 8 FT. FISHPOLE (ANT. AN-45)

TUNING: (MO OR XTAL) XTAL

SENSITIVITY: SELECTIVITY:

POWER SOURCE: DRY BATTERIES BA-39; BA-40; BA-41.

SIMILAR SETS: SCR-510

POWER OUTPUT: (WATTS) 1.8 100% MODULATION.

TUBES: (TYPE AND NUMBER) SCR-509-A USES:
1 BC-620-A - 4 1LN5; 1 1LC6; 4 1299; 1 1294;
1 1LH4; 2 1291.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: ARMD FORCE: TK BN; ARMD REGT; INF REGT. SHORT RANGE RECONNAISSANCE AND SIMILAR MISSIONS.

RANGE: (MILES) 5 ON GROUND.

TO COMMUNICATE WITH: SCR-293; SCR-294; SCR-508; SCR-509; SCR-510; SCR-528; SCR-538.

TO REPLACE IN PART: SCR-195 WITHIN THE ARMORED FORCE.

TRANSPORTATION: MAN ON FOOT OR IN ANY VEHICLE.

TYPE OF SIGNAL: VOICE; (FM)

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RADIO RECEIVER & TRANSMITTER BC-620.					
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					

SCR-510

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: STANDARD 15 JUL 41

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: TM 11-605

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) 20.0 - 27.9

NUMBER OF CRYSTALS: 80

PRESET FREQUENCIES: 2

ANTENNA: 8 FT. TELESCOPIC MAST, AND VEHICULAR WHIP.

TUNING: (MO OR XTAL) XTAL

SENSITIVITY: SELECTIVITY:

POWER SOURCE: DRY BATTERIES OR VIBRATOR PACK FOR OPERATION FROM ANY 6 OR 12 V VEHICULAR BATTERY.

SIMILAR SETS: SCR-509 WHICH USES DRY BATTERIES ONLY.

POWER OUTPUT: (WATTS) 1.8 100% MODULATION.

TUBES: (TYPE AND NUMBER) SCR-510-A USES: 1 BC-620-A - 4 1LN5; 1 1LC6; 4 1299; 1 1294; 1 1LH4; 2 1291. 1 PE-97-A - 1 VR90-30; 1 CK1005.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: FA: ARMD BTRY; MED: CO BN ARMD; SIG C: CO ARMD; ARMD F; TD: BN. USED BY FORWARD OBSERVERS FOR LIAISON PURPOSES.

RANGE: (MILES) 5 IN MOTION.

TO COMMUNICATE WITH: SCR-293; SCR-294; SCR-508; SCR-509; SCR-510; SCR-528; SCR-538.

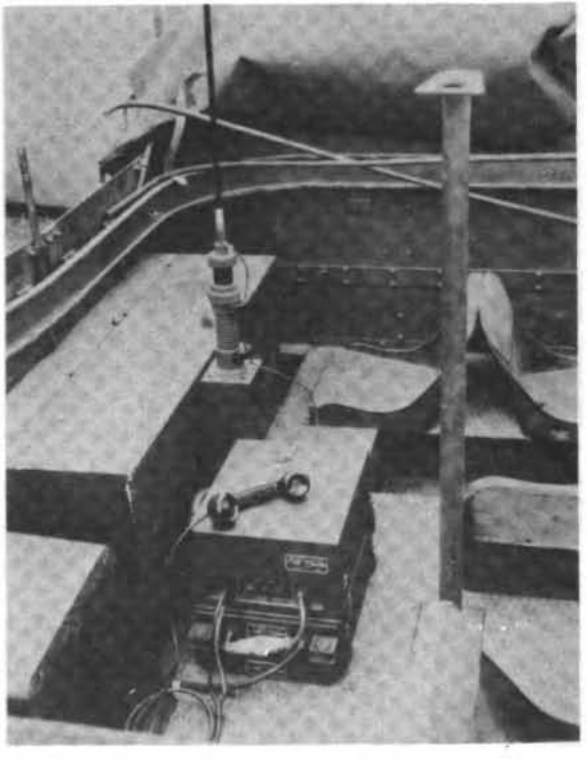
TO REPLACE IN PART: SCR-194; SCR-195.

TRANSPORTATION: TRANSPORTED & OPERATED IN VEHICLE OR CARRIED BY MAN ON FOOT.

TYPE OF SIGNAL: VOICE (FM)

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

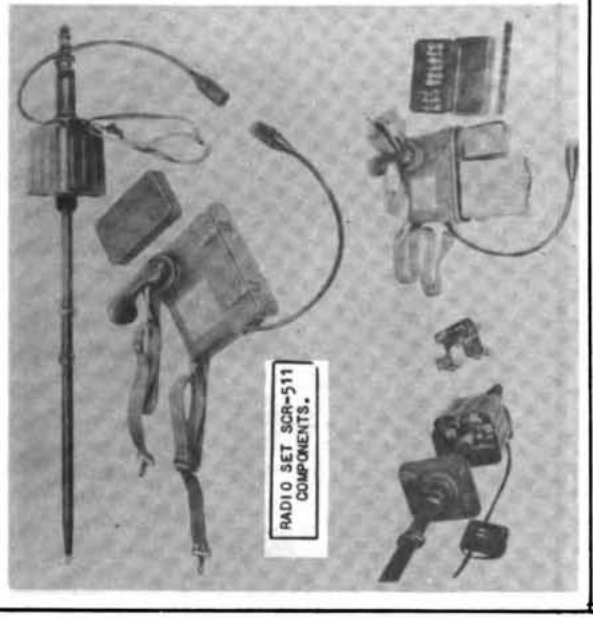
ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RECVR. & TRANS. BC-620. PLATE SUPPLY UNIT PE-97					
COMBINED WEIGHT OF COMPONENTS:				65#	
COMBINED VOLUME:				1.3 CU. FT.	
SHIP TONNAGE:					



RADIO SET SCR-510 SHOWING SET INSTALLED IN RIGHT CENTER SECTION OF SCOUT CAR M 3 A 1

RADIO SET SCR-510 IS THE SAME AS RADIO SET SCR-509 EXCEPT FOR THE ADDITION OF VEHICULAR COMPONENTS. SHORT RANGE FREQUENCY MODULATED VEHICULAR OR GROUND RADIO SET. MAY ALSO BE USED AS SHORT RANGE MOBILE COMMAND SET.

INSTRUCTIONAL LITERATURE: TM 11-245	STATUS: STANDARD 1 JUN 42	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION: **SCR-511**
	CHANGE IN STATUS:		



RADIO SET SCR-511 IS A LIGHT WEIGHT VOICE-OPERATED SET USED FOR COMMUNICATION BETWEEN SMALL UNITS OF THE CAVALRY. THIS SET CAN BE USED BY PERSONNEL WHO ARE NOT TRAINED RADIO SPECIALISTS.

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) 3.0 - 6.0.

NUMBER OF CRYSTALS: 2 IN EACH TUNING UNIT; 13 TUNING UNITS/ SET AUTHORIZED.

PRESET FREQUENCIES: 1 TUNING UNIT INSTALLED; 1 SPARE TUNING UNIT CARRIED WITH SET.

ANTENNA: TELESCOPE MAST. THIS ANTENNA ACTUATES SET'S ON-OFF SWITCH WHEN EXTENDED.

TUNING: (MO OR XTAL) XTAL

SENSITIVITY: SELECTIVITY:

POWER SOURCE: INTEGRAL DRY BATTERIES BA-49.

SIMILAR SETS: NONE

POWER OUTPUT: (WATTS) 0.75

TUBES: (TYPE AND NUMBER) RADIO RECVR. BC-1147: 1 5U4G(VT-244) 1 6H6,(VT-90)1 6J5(VT-94)1 6SA7(VT-150)1 6SH7,1 6SJ7(VT-116) 4 6SK7 (VT-117)1 6SQ7(VT-103)1 6V6-GT(VT-107-A)1 VR-150-30 (VT-139)TARGET TRANSMITTER BC-1149:1 1R5(VT-171)1 1291(VT-182) CONTROL PANEL PN-31:1 2X2(VT-119)1 5U4G(VT-244)1 6AC7(VT-112) 1 6L6G(VT-115)1 VR-105-30(VT-200)

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: CAV. TR; ENGR. CO. & TR; INF: PARA, MTN, & AIRBORNE UNITS; SIG C: CO MTN DIV; CO MTZ DIV; CO AMPHIBIAN.

RANGE: (MILES) 5 NORMAL

TO COMMUNICATE WITH:

TO REPLACE IN PART:

TRANSPORTATION: MAN ON FOOT, HORSE, OR VEHICLE.

TYPE OF SIGNAL: VOICE (AM)

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RADIO RECVR. & TRANS. BC-745					
TUNING UNIT BC-746					
POWER SUPPLY UNIT PE-157					
CHEST UNIT T-39					
MOUNTING FT-338					
BATTERY BA-49					
COMBINED WEIGHT OF COMPONENTS:				208	
COMBINED VOLUME:				0.5 CU.FT.	
SHIP TONNAGE:					

THIS SHEET IS CLASSIFIED: RESTRICTED

SCR-522

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: STANDARD 8 Sep 41

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: TO 08-10-105

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 100 - 156 Mcs

NUMBER OF CRYSTALS: 8 (4 trans. 4 Recvr.)

PRESET FREQUENCIES: 4 preset channels both Recvr. & Trans.

ANTENNA: AN-74 & AN-74-A; AN-104 & AN-104-A - 1/4 wave, vertical mast.

TUNING: (MO OR XTAL) Crystal tuning

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 28 volts. Primary Source and PE-94

SIMILAR SETS: Radio Set SCR-542-(12 volt version of SCR-522

POWER OUTPUT: (Watts) 6 watts voice.

TUBES: (Type and Number) SCR-522-A uses:

1 - 12J5GT	3 - 12SG7
1 - 1208	2 - 832
1 - 9002	3 - 12A6
3 - 9003	1 - 6Q6G
1 - 12AH7GT	2 - 6SS7

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: Air Corps - Used in all types of aircraft. For: Air-to-Air; Air-to-Ground Communication.

RANGE: (Miles) 130 at 10,000 feet. (line of sight)

TO COMMUNICATE WITH: Other airplanes equipped with SCR-522 or SCR-542, or equivalent VHF Command Equipment, also ground installations having sufficient VHF ground facilities.

TO REPLACE IN PART: SCR-274-N and SCR-283.

TRANSPORTATION: Airborne installation.

TYPE OF SIGNAL: Voice and special tone signal when used with contactor equipment RC-96.

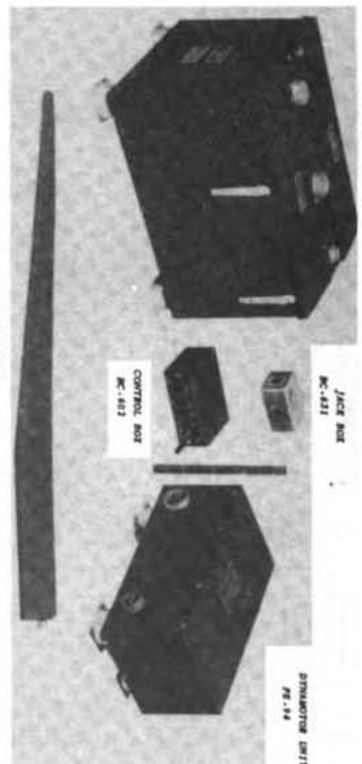
PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
Case CS-80 containing: Radio Transmitter BC-625, Radio Receiver BC-624, Rack FT-244	16 5/32"	12 9/16"	10 11/16"	49#	
Dynamotor PE-94	12 25/32"	8 27/32"	6 15/64"	37#	
Radio Control Box BC-602	5 7/8	5 9/16"	2 1/2"	2.4#	
COMBINED WEIGHT OF COMPONENTS:				91# approx.	
COMBINED VOLUME:				1.8 cu. ft. approx.	
SHIP TONNAGE:					

COMPONENTS OF RADIO SET SCR-522 AND ANTENNA AN-104

PHOTOGRAPHIC AND REPRODUCTION SECTION AIRCRAFT RADIO LABORATORY WRIGHT FIELD

Date 6-4-43
Neg. No. D 2435 R



THIS SHEET IS CLASSIFIED: RESTRICTED

INSTRUCTIONAL LITERATURE: TM 11-600	STATUS:	STANDARD 22 JUL 41	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION:
	CHANGE IN STATUS:			

SCR-528

RADIO SET SCR-528
INSTALLED IN DODGE TRUCK, 3/4-TON 4 X 4 COMMAND
VEHICULAR, SHORT RANGE FM TRANSMITTER AND RECEIVER. SEE SCR-508.

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) 20.0 TO 27.9

NUMBER OF CRYSTALS: 80

PRESET FREQUENCIES: 10

ANTENNA: 9 FOOT FISHPOLE

TUNING (MO OR XTAL): XTAL

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 12v: (XMTR) DM-35 (RECVR.) DM-34
24v: (XMTR) DM-37 (RECVR.) DM-36

SIMILAR SETS: SAME AS SCR-508 MINUS ONE RADIO RECEIVER BC-603.

POWER OUTPUT: (WATTS) 25 AT 100% MODULATION

TUBES: (TYPE AND NUMBER) SCR-528 USES:
1-BC-603-C REC.: 1-6H6; 1-6J5; 1-6V6GT; 3-6AC7/1852; 2-12 SG 7; 2-6 SL7 GT. 1-BC-604-C TRANS.: 7-1619; 1-1624.
(TUBE CONTENTS MAY VARY IN DIFFERENT MODELS. MODEL 528-C IS CITED TO SHOW TUBE CONTENT AS BEING FM RLY TYPICAL.)

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: CAV; ENGRS; FA; MED DEPT; QMC; ARMD F; INTERMEDIATE COMMAND TANKS & VEHICLES OF ARMORED FORCE, GHQ, CORPS AND DIVISIONS.

RANGE: (MILES) 7 WHILE IN MOTION

TO COMMUNICATE WITH: SCR-293; SCR-294 SCR-508; SCR-509; SCR-510; SCR-528; SCR-538.

TO REPLACE IN PART: SCR-293; SCR-245 IN ARMORED FORCE.

TRANSPORTATION: AND OPERATION IN VEHICLES.

TYPE OF SIGNAL: VOICE (FM)

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	DIMENSIONS WIDTH	DIMENSIONS DEPTH	WEIGHT	CLASSIFICATION
TRANSMITTER BC-604 (INTEGRAL INTERPHONE) RECEIVER BC-603 MOUNTING FT-237	14"	14 1/2"	34"	175 #	
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME:					
SHIP TONNAGE:					

SCR-536

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS:

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: TM 11-235

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (MC) 3.5 TO 6.0

NUMBER OF CRYSTALS: ONE TRANSMITTING AND ONE RECEIVING CRYSTAL REQUIRED PER CHANNEL.

PRESET FREQUENCIES: ONE PRESET CHANNEL PROVIDED.

ANTENNA: 44" WHIP ANTENNA - TELESCOPES INTO SET BOX. RECEIVER IS TURNED ON WHEN ANTENNA IS EXTENDED.

TUNING: (MO OR XTAL) CRYSTAL.

SENSITIVITY: SELECTIVITY:

POWER SOURCE: SELF CONTAINED DRY BATTERIES.

SIMILAR SETS: NONE

POWER OUTPUT: (WATTS) .027

TUBES: (TYPE AND NUMBER) 1 BC-611-B TRANSCEIVER. TUBES: 1, 1 R 5 TUBE; 1, 1 S 5 TUBE; 1, 1 T 4 TUBE; 2, 3 S 4 TUBE.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: USED BY PARACHUTE TROOPS, AIRBORNE TROOPS, AND ANTI-TANK UNITS OF THE INFANTRY FOR SHORT RANGE COMMUNICATION.

RANGE: (MILES) 1 1/2

TO COMMUNICATE WITH: SCR-187; SCR-188; SCR-193; SCR-245; SCR-274-N; SCR-283; SCR-287; SCR-288.

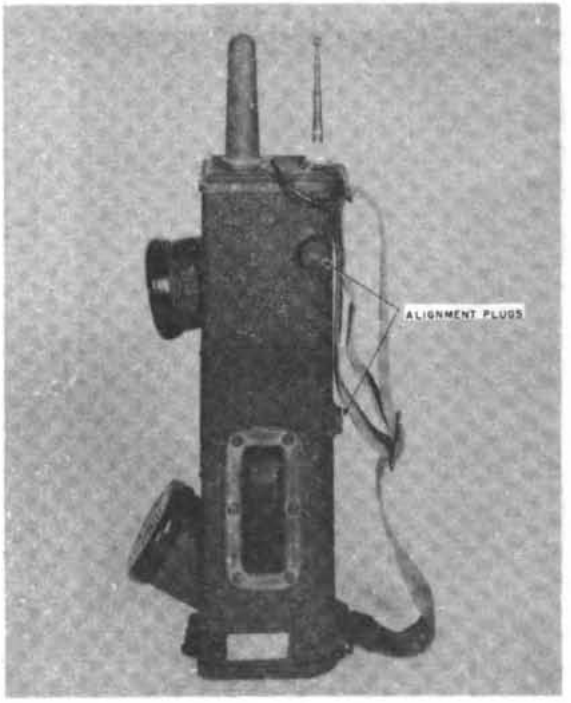
TO REPLACE IN PART: NONE.

TRANSPORTATION: MAN PACK

TYPE OF SIGNAL: VOICE ONLY. (AM)

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

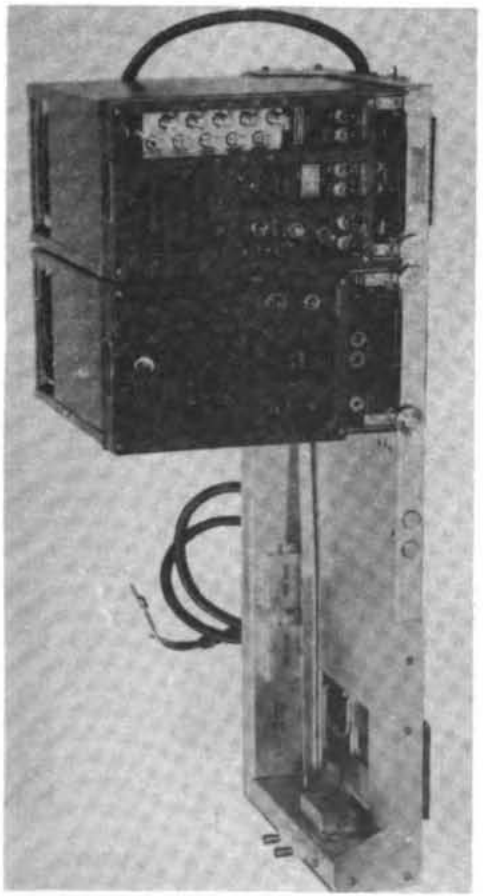
ITEM	DIMENSIONS			WEIGHT	CLASSIFICATION
	HEIGHT	WIDTH	DEPTH		
RECEIVER AND TRANSMITTER BC-611	15 3/4"	5 3/8"	3 3/4"	5.5#	
COMBINED WEIGHT OF COMPONENTS:				6#	
COMBINED VOLUME OF COMPONENTS:				480 CU. IN.	
SHIP TONNAGE:				8 #	



RADIO SET SCR-536

RADIO SET SCR-536 IS A VERY COMPACT RECEIVER - TRANSMITTER RESEMBLING AN OVERSIZE TELEPHONE HAND SET. COMPLETE WITH BATTERIES, ANTENNA, TRANSMITTER, RECEIVER, - AND HAND SET IN ONE CASE.

INSTRUCTIONAL LITERATURE: TM 11-600	STATUS: STANDARD 29 Apr 41	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION: SCR-538
	CHANGE IN STATUS:		



RADIO SET SCR-538 FRONT VIEW

RECEIVER ONLY. COMPRISES ONE RECEIVER AND A SEPARATE INTERPHONE AMPLIFIER. SAME MOUNTING BASE FT-237 IS USED AS FOR SCR-508 AND 528 PERMITTING USE OF THE COMPONENTS OF ANY OF THESE SETS; SCR-508 WHOLLY OCCUPIES THE MOUNTING BASE AND SCR-528 ONLY PARTLY. SEE SCR-508.

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE (Mc) 20 TO 27.9 (RECEIVER ONLY)

NUMBER OF CRYSTALS:

PRESET FREQUENCIES: 10 - PUSH BUTTON SELECTION

ANTENNA: 9 FT. FISHPOLE

TUNING: (MO OR XTAL)

SENSITIVITY: SELECTIVITY:

POWER SOURCE: VEHICLE BATTERY (12 V OR 24 V)

SIMILAR SETS:

POWER OUTPUT: (WATTS)

TUBES: (TYPE AND NUMBER) SCR-538 USES: 1-BC-603-A; 1-BC-605-A. 1-BC-603-A: 2-6 SL 7 GT; 1-6H6; 1-6J5; 1-6V6 GT; 3-6AC 7/1852; 2-12SG7. 1-605-A: 2-1619 TUBES.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: CAW; MEDZ & MTZD; ARMD F; TANK AND MAINTENANCE UNITS.

RANGE: (MILES)

TO COMMUNICATE WITH: SCR-293; SCR-508; SCR-509; SCR-510; SCR-528.

TO REPLACE IN PART: SCR-210; SCR-294.

TRANSPORTATION: TRANSPORTED AND OPERATED IN VEHICLE

TYPE OF SIGNAL: VOICE (FM)

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	DIMENSIONS WIDTH	DIMENSIONS DEPTH	WEIGHT	CLASSIFICATION
RECEIVER BC-603. INTERPHONE AMP. BC-605 MOUNTING FT-237, MAST BASE MP-37 OR 57	14 "	14 1/2"	34 "	135 #	
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME:					
SHIP TONNAGE:					

THIS SHEET IS CLASSIFIED: RESTRICTED

SCR-542

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS:

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE:

TO 08-10-105

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 100 - 156 Mcs.

NUMBER OF CRYSTALS: 8 (4 Transmitters - 4 Receivers)

PRESET FREQUENCIES: 4 preset channels, both receivers and transmitters.

ANTENNA: 1/4 wave, vertical mast - AN-74 & AN- 74-A AN-104 & AN-104-A.

TUNING: (MO OR XTAL) XTAL tuning.

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 12 volt primary source and PE-98

SIMILAR SETS: SCR-522 (except voltage)

POWER OUTPUT: 6 Watts Voice.

TUBES: (Type and Number) SCR-542-A uses:

1 - 12J5GT	3 - 12SQ7
1 - 12C8	2 - 832
1 - 9002	3 - 12A6
3 - 9003	1 - 6G6G
1 - 12AH7GT	2 - 6SS7

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: Air Corps - Used in all types of aircraft. For: air-to-air, air-to-ground communication.

RANGE: (Miles) 130 at 1000 ft. (line of sight).

TO COMMUNICATE WITH: Other airplanes equipped with SCR-522 or SCR-542, or equivalent VHF Command Equipment, also ground installations having sufficient BHF ground facilities.

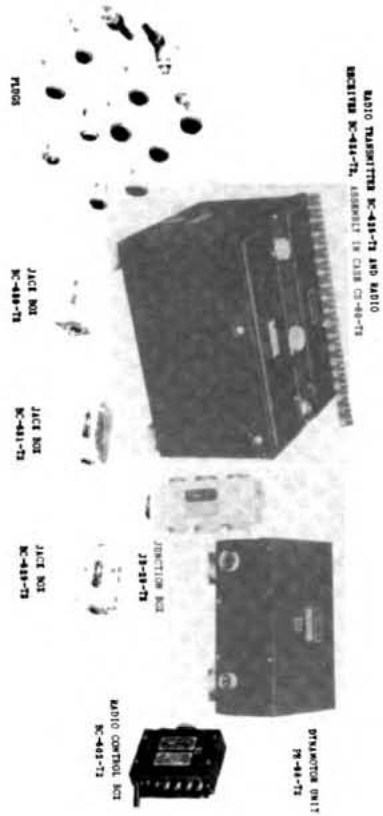
TO REPLACE IN PART:

TRANSPORTATION: Airborne installation.

TYPE OF SIGNAL: Voice and special tone signal when used with contactor equipment RC-96.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
Case CS-80 containing: Radio Transmitter BC-625, Radio Receiver BC-624, Rack FT-244	16 5/32"	12 9/16"	10 11/16"	49#	
Dynamotor PE-98	12 25/32"	8 27/32"	6 15/64"	37#	
Radio Control Box BC-602	5 7/8"	5 9/16"	2 1/2"	2.4#	
COMBINED WEIGHT OF COMPONENTS:				91 #	Approximately
COMBINED VOLUME OF COMPONENTS:				1.8 cu	ft Approx.
SHIP TONNAGE:					



PRINCIPAL COMPONENTS OF RADIO SET SCR-542.

THIS SHEET IS CLASSIFIED: RESTRICTED

INSTRUCTIONAL LITERATURE: TM 11-625	STATUS:	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION: **SCR-543**
	CHANGE IN STATUS:		

MEDIUM POWER MOBILE COMMAND SET. CAPABLE OF OPERATION IN A MOVING VEHICLE

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) 1.68 - 4.45

NUMBER OF CRYSTALS: 6

PRESET FREQUENCIES: 6

ANTENNA: 15' WHIP ANTENNA.

TUNING: (MO OR XTAL) XTAL

SENSITIVITY: SELECTIVITY:

POWER SOURCE: POWER SUPPLY UNIT PE-110 115V AC, POWER UNIT PE-108.

SIMILAR SETS:

POWER OUTPUT: (WATTS) 45

TUBES: (TYPE AND NUMBER) SCR-543-C USES: 1 BC-669 - 1 6H6; 1 6J5; 2 807; 1 6L6; 4 6L6G; 3 6SK7; 1 12J5GT; 1 6SA7; 1 6K6GT. 1 PE-110-C-1 TYPE 80; 4 5Z3.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: CAC: FIRING BATTERY, BARRAGE BALOON UNITS, & AA UNITS.

RANGE: (MILES) 15 MOVING. 20-30 STATIONARY.

TO COMMUNICATE WITH:

TO REPLACE IN PART:

TRANSPORTATION: VEHICLE. (CAN BE DISMOUNTED QUICKLY AND OPERATED WITH INCREASED RANGE AS FIELD STATION)

TYPE OF SIGNAL: VOICE ONLY (AM)

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RECEIVER & TRANSMITTER BC-669,	28 1/2"	20 3/8"	29 3/4"	181#	
POWER UNIT PE-110	22 1/2"	15 1/4"	26 3/4"	163#	
POWER UNIT PE-108	24"	28"	23 3/4"	320#	
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					

SCR-551

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: SUBSTITUTE STANDARD 11 JUN 42

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: TM 11-247 (FOR SCR-551-A)

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) 2.0 TO 20.0

NUMBER OF CRYSTALS: NONE

PRESET FREQUENCIES: NONE

ANTENNA: ADCOCK

TUNING: (MO OR XTAL) DOES NOT APPLY

SENSITIVITY: 5 - 30 MICROVOLTS/METER

SELECTIVITY:

POWER SOURCE: 6V STORAGE BATTERY

SIMILAR SETS: SCR-255, 555, 556

POWER OUTPUT: (WATTS)

TUBES: (TYPE AND NUMBER)

1	VT-66	3	VT-80
3	VT-86	3	VT-90
3	VT-91	1	VT-99
2	VT-105	4	VT-116
6	VT-124	1	VT-163
4	6SF5	1	38P1 (C.R.)

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: RADIO DIRECTION FINDER FOR LOCATING ENEMY TRANSMITTERS AND FOR NAVIGATIONAL AID TO FRIENDLY AIRCRAFT.

RANGE:

TO COMMUNICATE WITH: DOES NOT APPLY

TO REPLACE IN PART: SCR-255

TRANSPORTATION: 2½ TON CARGO TRUCK

TYPE OF SIGNAL: DOES NOT APPLY

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
CS-121 CONTAINING:			15 1/2"	212#	
VIBRATOR UNIT PE-151				20#	
CONTROL PANEL PN-21				29#	
OSCILLOSCOPE BC-991				38#	
RADIO RECEIVER BC-976	40"			40#	
TOWER TR-51	15'	5 1/2'	9'	616#	
ADCOCK ANTENNA		13 '		33#	
SHELTER HO-11	86"	80 "	80"	205#	
COMBINED WEIGHT OF COMPONENTS: INCLUDING CHESTS, LADDER, BATTERIES				2600#	
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					

RADIO SET SCR-551
PREPARED FOR DIRECTION FINDING

EQUIPMENT AND OPERATOR ROTATE ON TOP OF 15-FOOT TOWER. GIVES AURAL NULL AND LEFT-RIGHT BEARING INDICATION ON OSCILLOSCOPE.

INSTRUCTIONAL LITERATURE:	STATUS:	STANDARD 30 Oct 42
	CHANGE IN STATUS:	

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

NOMENCLATURE DESIGNATION: **SCR-555**

RADIO SET SCR-555
PREPARED FOR DIRECTION FINDING

GIVES AURAL NULL OR LEFT-RIGHT METER BEARING INDICATION. OPERATOR ROTATES WITH EQUIPMENT AT BASE OF TOWER. SAME AS RADIO SET SCR-556 EXCEPT FOR FREQUENCY RANGE.

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) 18 - 65

NUMBER OF CRYSTALS: None

PRESET FREQUENCIES: None

ANTENNA: Adcock

TUNING: (MO OR XTAL) Does not apply

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 12 V Storage Battery

SIMILAR SETS: SCR-551; SCR-556

POWER OUTPUT: (WATTS) Does not apply

TUBES: (TYPE AND NUMBER)

1	VT-90	2	VT-94
2	VT-112	2	VT-131
1	VT-198-A	3	VT-209
1	VT-211	1	VT-233
2	VT-268		

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: Radio direction finder for locating enemy transmitters.

RANGE:

TO COMMUNICATE WITH: Does not apply

TO REPLACE IN PART: None

TRANSPORTATION: Cargo Truck

TYPE OF SIGNAL: Does not apply

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
Tower and Shelter Assembly TR-25 packed in 5 chests:					
1 Chest CH-135 containing 3 shelter side sections	64"	59"	10"	329#	
1 Chest CH-136 containing roof section	64"	62"	9"	257#	
1 Chest CH-137 containing 3 lower tower legs, 3 upper tower legs, 1 apex block, and 3 wedges	90"	12"	11"	270#	
1 Chest CH-201 containing floor section	72"	72"	7"	251#	
1 Chest CH-202 containing 3 base sills, Target Tripod LG-23-B, Compass Tripod LG-14-B, and Ground Rod GP-28	12"	120"	8"	200#	
Antenna Mast Assembly AN-105 packed in Chest CH-105	104"	15"	14"	215#	
Pedestal Assembly FT-365 packed in Chest CH-126	30"	54"	36"	194#	
Receiver Cabinet CS-155 containing 1 Receiver RC-1005, 1 Power Unit PE-155, and 1 Cord CD-1028	28"	26"	16"	170#	
Miscellaneous accessories	---	---	---	552#	
Note: Dimensions and weights shown are for chests, including components packed therein.					
COMBINED WEIGHT OF COMPONENTS:				2,438#	
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					

THIS SHEET IS CLASSIFIED: **RESTRICTED**

SCR-561

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: STANDARD AS COMPONENT OF SCS-2

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE:

PART A - TECHNICAL CHARACTERISTICS (CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) Control Set SCR-561 is the operations block of Control Net System SCS-2 and contains no radio equipment. Housed in buildings not part of control set.

NUMBER OF CRYSTALS: None

PRESET FREQUENCIES: None

ANTENNA: None

TUNING: (MO OR XTAL) None

SENSITIVITY: SELECTIVITY:

POWER SOURCE: Power Unit PE-99 (7½ KVA 110V. 3 phase 60 cycle); also provisions for using commercial power from a 110V 2 wire service.)

SIMILAR SETS: Control Set SCR-642

POWER OUTPUT: (WATTS)

TUBES: (Type and Number) Chargers: 1 89048. Repeater EE-99-T3: 12 3Q5GT; 12 1N5GT. Tube tester 504-A Supreme: 1 71-A; 1 Neon Bulb. Voltohmyst Model 165 RCA: 2 6K6GT; 1 6X5GT. Ballantine Volt Meter 300-A: 1 6J7; 2 6SJ7; 1 6X5GT; 1 6H6; 2 CD-2005. Oscilloscope 155 RCA: 1 3AP1-906P1; 2 6C6; 2 80; 1 884. Generator 205-A: 1 6S7; 1 6F6; 26SF5; 2 6L6G; 1 5Y4; 1 6H6.

PART B - TACTICAL CHARACTERISTICS (CLASSIFICATION: RESTRICTED)

USE: Control set used as an operations block which provides the necessary control equipment and auxilliaries to permit simultaneous operational control of up to four aircraft squadrons, for ground control of interceptor pursuit operations.

RANGE: (Miles) See SCR-562; SCR-563 etc.

TO COMMUNICATE WITH: Radio Sets SCR-562, SCR-563; SCR-564; SCR-565; SCR-566, and SCR-567 and also with aircraft equipped with Radio Set SCR-522.

TO REPLACE IN PART:

TRANSPORTATION: None

TYPE OF SIGNAL: See below

CONTROL UNIT RM-25 FRONT VIEW INSTALLED FOR OPERATION. PART OF CONTROL SET, SCR-561.

CONTROL UNIT RM-28-A. TOP VIEW OF PANEL

DISTRIBUTION PANEL BD-102-A. FRONT VIEW OF ASSEMBLY CABINET DOOR OPEN.

CONTROL UNIT RM-26-A, ASSEMBLED. SHOWING PLUG PL-196

PART C - PRINCIPAL COMPONENTS (CLASSIFICATION: RESTRICTED)

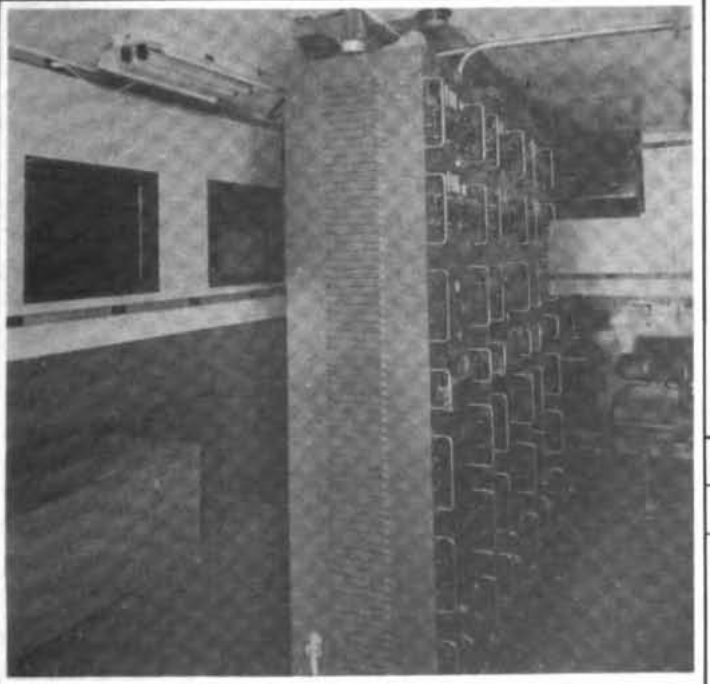
ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
1 Power Unit PE-99 each	55"	28"	50"	1600	Restricted
5 Control Unit RM-25 each	20"	11 1/4"	11 1/4"	44	Restricted
3 Control Unit RM-26 each	11 7/8"	9"	8"	20	Restricted
1 Control Unit RM-28	14 1/2"	12"	7"	35	Restricted
1 Distribution Panel BD-102	77 1/4"	24 1/4"	24"	300	Restricted
6 Telephone Repeater EE-99 each	8"	14 1/2"	11 1/2"	47	Restricted
2 Telephone EE-8 each				9 1/2	Restricted
COMBINED WEIGHT OF COMPONENTS:				10,500 #	
COMBINED VOLUME:				325 Cu.Ft.	
SHIP TONNAGE:				5 1/4	

RADIO SET SCR-561. PRINCIPAL COMPONENTS.

Control Set SCR-561 contains no radio equipment, but, by interconnecting wire lines and remote control facilities with radio sets listed, communication is carried on with these stations and also with aircraft operator. Control Set SCR-561 is the operations block of Control Net System, SCS-2, and contains no radio equipment. Housed in buildings not part of control set.

THIS SHEET IS CLASSIFIED: RESTRICTED

INSTRUCTIONAL LITERATURE:	STATUS:	STANDARD AS COMPONENT OF SCS-2	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION:
	CHANGE IN STATUS:			SCR-562



TRANSMITTING EQUIPMENT KE-1-A. PART OF RADIO SET SCR-562
LOCATION OF TRANSMITTERS IN TRAILER K-35

SAME AS RADIO SET SCR-632 EXCEPT SEMI-MOBILE. TECHNICAL CHARACTERISTICS: TRANSMITTER BC-640 HAS PROVISIONS FOR BOTH LOCAL AND REMOTE MODULATION. PLATE VOLTAGE RELAY ACTUATED THROUGH THE MICROPHONE CIRCUIT TO PREVENT CARRIER RADIATION WHEN NOT BEING MODULATED.

SIX (6) INCOMING WIRE LINES ARE BROUGHT INTO THE CONTROL UNIT RM-27 (MONITOR UNIT) AND THEN TO THE INPUT OF THE TRANSMITTER BC-640. THE CONTROL UNIT RM-27 HAS PROVISIONS FOR PATCHING THE INCOMING LINE TO THE SIX (6) TRANSMITTERS, MONITORING AND ADJUSTING THE VOLUME OF THE INCOMING SIGNAL TO THE TRANSMITTER. INTERCOMMUNICATION WITH THE OPERATIONS BLOCK IS ALSO PROVIDED. SIX (6) TRANSMITTERS ARE PROVIDED BY PATCHING TOGETHER THE TWO (2) TRAILERS K-35.

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 100-156

NUMBER OF CRYSTALS: FIVE (5) IN USE (FULL CRYSTAL COMPLEMENT WILL BE DETERMINED BY AAF).

PRESET FREQUENCIES: FIVE

ANTENNA: VERTICAL DIPOL MOUNTED ON 90' MAST.

TUNING: (MO OR XTAL) XTAL.

SENSITIVITY: SELECTIVITY:

POWER SOURCE: POWER UNIT PE-99 (7½KVA, 110V 3 PHASE 60 CYCLE); ALSO PROVISION FOR USING COMMERCIAL POWER FROM 110V 2 WIRE SERVICE.

SIMILAR SETS: RADIO SETS SCR-632 (FIXED).

POWER OUTPUT: (WATTS) 50 (APPROXIMATELY)

TUBES: (TYPE AND NUMBER) 6-BC-640 TRANS: 8 EACH, (48) 523; 4 EACH (24) 6J5; 3 EACH (18) 1613; 2 EACH (12) 811; 1 EACH (6) 807; 5 EACH (30) HK24G. 1-OSCILLOSCOPE RCA #155: 1-3AP1/906P1; 2-6C6; 2-80; 1-884; 1-VOLT OHMYST RCA-165; 2-6K6GT; 1-6X5GT.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: VHF RADIO TRANSMITTING STATION FOR GROUND CONTROL OF INTERCEPTOR PURSUIT OPERATIONS. PART OF CONTROL NET SYSTEM SCS-2. PROVIDES 5 INDEPENDENT CHANNELS OF RADIO TRANSMISSION.

RANGE: (MILES) 135 MILES WITH AIRCRAFT AT AN ALTITUDE GREATER THAN 10,000 FT.

TO COMMUNICATE WITH: CONTROL SET SCR-561 BY TELEPHONE AND BY RADIO WITH FIGHTER AIRCRAFT EQUIPPED WITH RADIO SET SCR-522.

TO REPLACE IN PART:

TRANSPORTATION: TWO (2) TRAILERS. EACH TRAILER K-35 HAS 3 EACH TRANSMITTERS BC-640, MAKING A TOTAL OF 6.

TYPE OF SIGNAL: VOICE MCW

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
6 TRANSMITTERS BC-640 (1 SPARE)	72"	21"	20"	515#	
2 CONTROL UNITS RM-27	19"	11 3/8"	10 1/2"	29#	
2 POWER UNITS PE-99	55"	28"	50"	1600#	
8 ANTENNA EQUIPMENT RC-81	12"	28 5/8"	38 1/2"	4#	
2 TRAILERS K-35 EACH	120"	96"	194	6500#	
2 ONE-TON CARGO TRAILERS	72"	72"	144"	1300 #	
4 ANTENNA AN-56 EACH MADE UP - Box 1	188"	43 1/2"	25 3/4"	2000#	
Box 2	76 1/2"	91 1/2"	23 1/2"	667#	
Box 3	13 1/2"	5 1/2"	147 1/2"	190#	
Box 4	35 1/2"	26 1/2"	17 1/2"	490#	
Box 5	36 5/8	34 3/4"	17 1/2"	495#	
COMBINED WEIGHT OF COMPONENTS:				43000 LBS	
COMBINED VOLUME OF COMPONENTS:				5100 CU. FT.	
SHIP TONNAGE:				21 1/2	TON.

SCR-563

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS:

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE:

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 100 - 156

NUMBER OF CRYSTALS: 5 IN USE (FULL XTAL COMPLEMENT TO BE DETERMINED BY AAF).

PRESET FREQUENCIES: 6 RECEIVERS BC-639 CONTAINED IN SCR-563 ARE NOT CRYSTAL CONTROLLED BUT ARE CALIBRATED BY MEANS OF THE FREQUENCY METER BC-638. THE FREQUENCY METER IS SET UP FOR 5 CRYSTALS WHICH ARE SELECTED BY MEANS OF A 5-POINT SWITCH. 1 XTAL IS NEEDED FOR EACH FREQUENCY.

ANTENNA: VERTICAL DIPOLES MOUNTED ON 90' MAST.

TUNING: (MO OR XTAL) VARIABLE

SENSITIVITY: 2-3 μv/METER 50 MW OUTPUT.

SELECTIVITY: 2 TIMES DOWN LESS 100 Kc. 1000 TIMES DOWN MORE 350 Kc.

POWER SOURCE: POWER UNIT PE-99 (7½ KVA 110V 3 PHASE 60 CYCLE); ALSO HAS PROVISIONS FOR USING COMMERCIAL POWER FROM A 110V 2 WIRE SERVICE.

SIMILAR SETS: SCR-633 (FIXED)

POWER OUTPUT: (WATTS) 1 (DISTORTED). ½w(10% DISTORTION.)

TUBES: (TYPE AND NUMBER) RECEIVING SET FOR SCS-2. 6 BC-639-A: 18 9003; 6 9002; 24 6SQ7; 6 6K6GT; 6 6SN7. 1 BC-638-A: 1 5V4G; 1 9002; 2 9003; 1 6L5G; 1 6E5; 1 6SK7. 6 RA-42-A: 6 5V4G.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: VHF RADIO RECEIVING STATION FOR GROUND CONTROL OF INTERCEPTOR PURSUIT OPERATIONS. PART OF CONTROL NET SYSTEM SCS-2. PROVIDES 5 CHANNELS OF RADIO RECEIVING.

RANGE: (MILES) DETERMINED BY OUTPUT OF AIRBORNE TRANSMITTER.

TO COMMUNICATE WITH: CONTROL SET SCR-561 BY TELEPHONE AND BY RADIO WITH FIGHTER AIRCRAFT EQUIPPED WITH RADIO SET SCR-522.

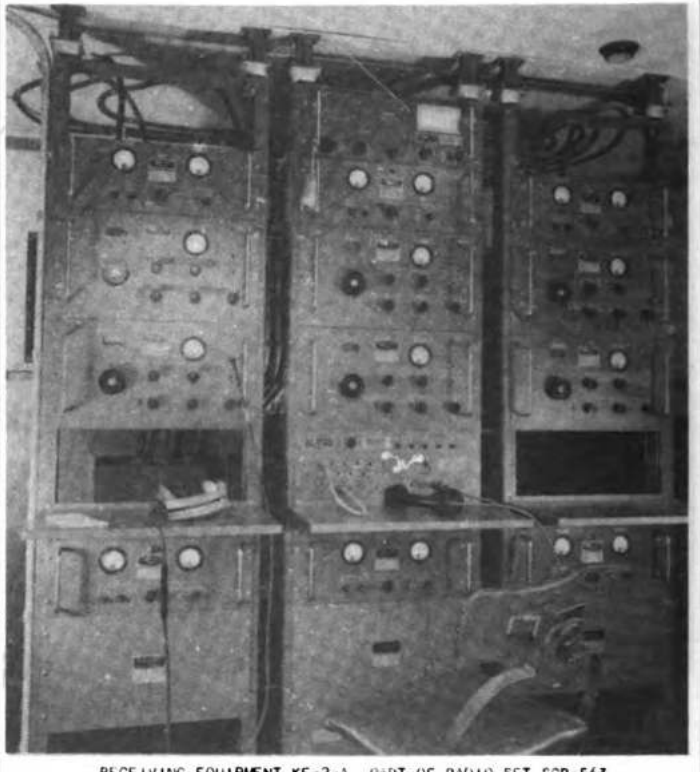
TO REPLACE IN PART:

TRANSPORTATION: 1 TRAILER K-35. 1 ONE-TON CARGO TRAILER.

TYPE OF SIGNAL: RECEIVERS VOICE, TONE MODULATED SIGNAL AND CW.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
1 TRAILER K-35	120"	96"	194"	6500#	
1 ONE-TON CARGO TRAILER	72"	72"	144"	1300#	
6 RECEIVERS BC-639 (1 SPARE)	10 1/2"	19"	13 1/4"	36#	
1 CONTROL UNIT RM-23	5"	19"	8 1/2"	18#	
8 ANTENNA EQUIPMENT RC-81 2 EACH	12"	28 1/2"	38 1/2"	4#	
1 POWER UNIT PE-99	55"	28"	50"	1600#	
1 FREQUENCY METER BC-638	11 1/2"	19"	7"	35#	
6 RECTIFIER RA-42 (1 SPARE)	7"	19"	8 1/2"	26#	
3 SOCKET PANEL PN-4	10 1/2"	19"	3 1/8"	7#	
1 FUSE PANEL PM-15	5"	19"	5"	21#	
4 ANTENNA AN-56 EACH MADE UP:					
Box - 1	188"	43 1/2"	25 3/4"	2000#	
Box - 2	76 1/2"	91 1/2"	23 1/2"	667#	
Box - 3	13 1/2"	5 1/2"	11.7 1/2"	190#	
Box - 4	35 1/2"	26 1/2"	17 1/2"	490#	
Box - 5	36 5/8"	34 3/4"	17 1/2"	495#	
COMBINED WEIGHT OF COMPONENTS				29,000 #	
COMBINED VOLUME OF COMPONENTS				3000 CU. FT.	
SHIP TONNAGE				14 1/2 T	

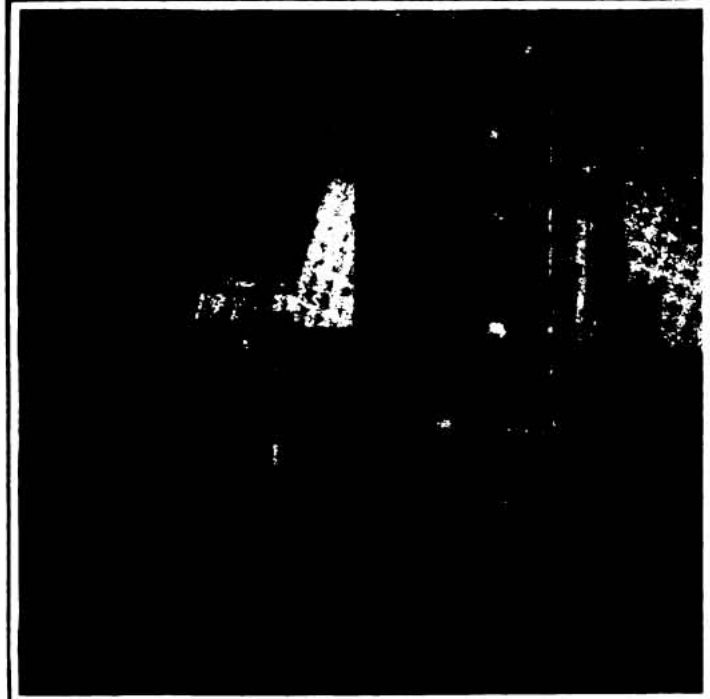


RECEIVING EQUIPMENT KE-2-A, PART OF RADIO SET SCR-563 OPERATOR'S POSITION.

CONTROLLER LOCATED AT THE OPERATIONS BLOCK (SCR-561) COMMUNICATES WITH PILOT BY MEANS OF THE RECEIVER OF THE SCR-563 OVER WIRE LINE CONNECTIONS.

INSTRUCTIONAL LITERATURE:	STATUS:	STANDARD AS COMPONENT OF SCS-2	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION	NOMENCLATURE DESIGNATION:
	CHANGE IN STATUS:			

SCR-564



RADIO SET SCR-564 . PART of CONTROL NET SYSTEM SCS-2
Front View of Radio Receiving Equipment RC-78-A
And Lower Portion of Antenna Equipment RC-82

*PRESET FREQUENCIES: Crystals are contained in the Frequency Meter BC-638 used to calibrate and adjust the Recvr. BC-639. The Recvr. BC-639 is not crystal controlled. The frequency meter BC-638 can be set up on 5 different crystal controlled frequencies at one time. The desired xtal selected by a 5-position switch. The above performance data is for Recvr. BC-639.

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 100-156

NUMBER OF CRYSTALS: Two (2) in use (Complete xtal complement to be determined by AAF)

PRESET FREQUENCIES: Two (2) (See Below*)

ANTENNA: Adcock-directional D/F with sense

TUNING: (MC OR XTAL) Variable

SENSITIVITY: 2-3 microvolts/meter at 50mw.

SELECTIVITY: 2 times down less 100 kc. 1000 times down more 350 kc.

POWER SOURCE: Power Unit PE-99 (7½ KVA 110V. 60 cycle 3 phase. Also provisions for using commercial power from a 110V 2 wire service.

SIMILAR SETS:

POWER OUTPUT: (Watts) 1 watt (distorted) ½w (10% distortion)

TUBES: (Type and Number) 1 BC-638 - 1 5V4G; 1 9002; 2 9003; 1 6L5G; 1 6E5; 1 6SK7. 2 BC-639 - 6 9005; 2 9002; 8 6SQ7; 2 6SQ7; 2 6K6GT. 2 RA-42 - 2 5V4G.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: Sector Homing D/F Station for ground control of interceptor pursuit operations. Part of Control Net System SCS-2. By utilizing a sector transmitter the D/F operator homes the aircraft by the "talk down method".

RANGE: (Miles) Determined by output of airborne transmitter and height of aircraft.

TO COMMUNICATE WITH: Fighter aircraft equipped with Radio SCR-522 by radio and with SCR-561 by telephone.

TO REPLACE IN PART:

TRANSPORTATION: None

TYPE OF SIGNAL: Receives voice, tone modulated signal and CW.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
(Packed in 12 boxes Total 1983 cu. ft.)					
1 Tower TR-17				21,146#	Restricted
1 Power Unit PE-99	55"	28"	50"	1600	Restricted
1 Shelter HO-3	24"	60"	72"	626	Restricted
2 Receivers BC-639	10 1/2"	19"	13 1/4"	36	Restricted
2 Rectifier RA-42	7"	19"	8 5/8"	26	Restricted
1 Frequency Meter BC-638	11 1/2"	19"	7"	35	Restricted
1 Socket Panel PN-4	10 1/2"	19"	3/8"	7	Restricted
1 Fuse Panel PN-15	5"	19"	5"	2#	Restricted
1 Antenna Equipment RC-82				150	Restricted
1 Control Unit RM-24	5"	19"	11"	21	Restricted
COMBINED WEIGHT OF COMPONENTS:				33,500#	
COMBINED VOLUME:				2200 FT.	
SHIP TONNAGE:				16 3/4	

SCR-565

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION

STATUS: STANDARD AS COMPONENT OF SCS-2

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE:

PART A - TECHNICAL CHARACTERISTICS (CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 100-156

NUMBER OF CRYSTALS: 2 IN USE (COMPLETE XTAL COMPLEMENT TO BE DETERMINED BY AAF)

PRESET FREQUENCIES: 2 SEE NOTE *

ANTENNA: VERTICAL ADCOCK D/F WITH SENSING FACILITIES.

TUNING: (MO OR XTAL) VARIABLE

SENSITIVITY: SELECTIVITY:

POWER SOURCE: POWER UNIT PE-99 (7½ KVA 110V 60 CYCLE 3 PHASE); ALSO HAS PROVISIONS FOR USING COMMERCIAL POWER FROM A 110V 2 WIRE SERVICE.

SIMILAR SETS:

POWER OUTPUT: (WATTS) 1 WATT (DISTORTED) ½ WATT (10% DISTORTION)

TUBES: (TYPE AND NUMBER) 1 BC-638 - 1 5V4G; 1 9002; 2 9003; 1 6L5G; 1 6E5; 1 6SK7. 2 BC-639 - 6 9003; 2 9002; 8 6SG7; 2 6SQ7; 2 6K6GT. 2 RA-42 - 2 5V4G.

PART B - TACTICAL CHARACTERISTICS (CLASSIFICATION: RESTRICTED)

USE: D/F FIXED STATION FOR GROUND CONTROL OF INTERCEPTOR PURSUIT OPERATIONS. PART OF CONTROL NET SYSTEM SCS-2. TWO OR MORE RADIO SETS SCR-565 ARE USED FOR DETERMINING AZIMUTH BEARING OF AIRCRAFT EQUIPPED WITH RADIO SET SCR-522. SIMULTANEOUS BEARINGS ARE TAKEN AND TELEPHONED TO THE OPERATIONS BLOCK (SCR-561) AND BY TRIANGULATION, THE POSITION OF THE AIRCRAFT IS FIXED.

RANGE: (MILES)

TO COMMUNICATE WITH: CONTROL SET SCR-561 BY TELEPHONE AND BY RADIO WITH FIGHTER AIRCRAFT EQUIPPED WITH SCR-522.

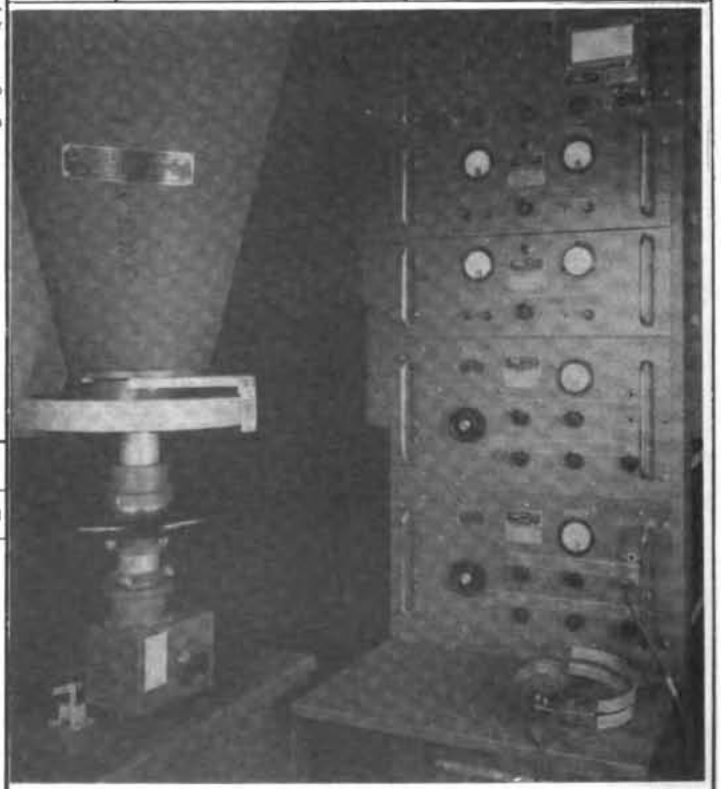
TO REPLACE IN PART:

TRANSPORTATION: NONE

TYPE OF SIGNAL: RECEIVES VOICE, TONE MODULATED SIGNAL AND CW.

PART C - PRINCIPAL COMPONENTS (CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
(PACKED IN 12 BOXES)					
1 TOWER TR-17	TOTAL	1983 CU.	FT.	21,146#	RESTRICTED
1 SHELTER HO-3 (KNOCKED DOWN)	24"	60"	72"	626#	RESTRICTED
1 POWER UNIT PE-99	55"	28"	50"	1,600	RESTRICTED
1 RADIO RECEIVING EQUIP. RC-79	60"	24"	12"	300	RESTRICTED
1 ANTENNA EQUIPMENT RC-82				150	RESTRICTED
COMBINED WEIGHT OF COMPONENTS:				33,500#	APPROXIMATELY
COMBINED VOLUME:				2,200	CU. FT. "
SHIP TONNAGE:				16 3/4	TONS "



RADIO SET SCR-565
Operator's Position

*PRESET FREQUENCIES: CRYSTALS ARE CONTAINED IN THE FREQUENCY METER BC-638 USED TO CALIBRATE AND ADJUST THE RECEIVER BC-639. THE RECEIVER BC-639 IS NOT CRYSTAL CONTROLLED. THE FREQUENCY METER BC-638 CAN BE SET UP ON 5 DIFFERENT CRYSTAL CONTROLLED FREQUENCIES AT ONE TIME AND THE DESIRED XTAL SELECTED BY A 5-POSITION SWITCH.

INSTRUCTIONAL LITERATURE:	STATUS	
	CHANGE IN STATUS	

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION

NOMENCLATURE DESIGNATION

SCR-566

MOBILE HOMING EQUIPMENT ME-3-A. PART OF RADIO SET SCR-566. RADIO OPERATOR'S POSITION.

SCR-566 USES RECEIVER BC-639 FOR D/F. CONTAINS COMPONENTS OF SCR-522 FOR COMMUNICATION WITH AIRCRAFT. RADIO COMPONENTS ALSO OPERATE FROM STORAGE BATTERY POWER. D/F ANTENNA IS USED FOR BOTH D/F AND COMMUNICATION.

*TUBES: (TYPE AND NUMBER) 1 BC-624-A: 1 9002; 3 9003; 1 12J5GT; 1 12C8; 3 12SG7; 1 12AH7GT. 1 BC-625-A: 1 6L6G; 3 12A6; 2 6S2-A; 2 6SS7. 1 BC-639 - 3 9003; 1 9002; 4 6SH7; 1 6K6GT. 1 BC - 655- 1 95S; 1 A5GT.

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION RESTRICTED)

FREQUENCY RANGE: (Mc) 100 - 156

NUMBER OF CRYSTALS: 9 IN USE (FULL XTAL COMPLEMENT TO BE DETERMINED BY AAF)

PRESET FREQUENCIES: 9 (4 IN BC-624; 4 IN BC-625; 1 IN BC-638).

ANTENNA: VERTICAL ADCOCK D/F WITH SENSING FACILITIES.

TUNING (MO OR XTAL) BC-624; BC-625; XTAL; BC-639 VARIABLE.

SENSITIVITY: 2-3 MICROVOLTS/METER AT 50 Mc.

SELECTIVITY: 2 TIMES DOWN LESS 100 KC. 1000 TIMES DOWN MORE 350 KC.

POWER SOURCE: STORAGE BATTERY AND POWER UNIT PE-99 (7½ KVA 110V 3 PHASE, 60 CYCLE); ALSO PROVISIONS FOR USING COMMERCIAL POWER FROM A 110V 2 WIRE SERVICE.

SIMILAR SETS: RADIO SET SCR-575.

POWER OUTPUT: (WATTS) TRANSMITTER BC-625 OUTPUT 6 WATTS MINIMUM.

TUBES: (TYPE AND NUMBER) SEE NOTE *

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION RESTRICTED)

USE: MOBILE D/F STATION FOR GROUND CONTROL OF INTERCEPTOR PURSUIT OPERATION. PART OF CONTROL NET SYSTEM SCS-2. USED AS A MOBILE HOMING AND D/F STATION FOR PLANES EQUIPPED WITH RADIO SET SCR-522.

RANGE: (MILES) 135 MILES WITH AIRCRAFT AT 10,000 FEET.

TO COMMUNICATE WITH: CONTROL SET SCR-561 BY TELEPHONE AND BY RADIO WITH FIGHTER AIRCRAFT EQUIPPED WITH RADIO SET SCR-522.

TO REPLACE IN PART:

TRANSPORTATION: ONE (1) TRUCK K-53, 1 TRAILER K-63 (POWER)

TYPE OF SIGNAL: VOICE AND MCW.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
1 TRUCK K-53	130"	96"	256"	13,365 #	
1 ANTENNA EQUIPMENT RC-43				100 #	
1 ONE-TON CARGO TRAILER	72"	72"	144"	1,300 #	
1 RECEIVER BC-639	10 1/2"	19"	13 1/2"	36 #	
1 DYNAMOTOR UNIT PN-100	6"	19"	10 1/2"	23 #	
1 DYNAMOTOR UNIT PE-94	6 1/2"	9"	6 1/2"	30 #	
1 RECEIVER BC-624	6"	15 1/2"	9"	14 1/2#	
1 TRANSMITTER BC-625	5"	15 1/2"	9"	16 1/2#	
1 CONTROL UNIT BC-18	5"	19"	6 3/4"	16#	
1 POWER UNIT PE-99	55"	28"	50"	1,600 #	
1 CONTROL BOX BC- 602	6"	5 1/2"	2 1/2"	2 #	
1 OSCILLATOR TEST EQUIPMENT RC-93 (BC-655)	10 1/2"	9"	6 3/4"	12 #	
COMBINED WEIGHT OF COMPONENTS				15,000#	APPROXIMATELY
COMBINED VOLUME OF COMPONENTS				2500 CU.	FT. "
SHIP TONNAGE				9 TONS	"

SCR-567

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION

STATUS: STANDARD AS COMPONENT OF SCS-2

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE:

PART A – TECHNICAL CHARACTERISTICS (CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 100-156

NUMBER OF CRYSTALS: IN USE; 2 IN TRANSMITTER STATION, 2 IN RECEIVER STATION (FULL XTAL COMPLEMENT TO BE DETERMINED BY AAF)

PRESET FREQUENCIES: 2 IN TRANSMITTER STATION, 2 IN RECEIVER STATION (FREQ. METER)

ANTENNA: VERTICAL DIPOLES MOUNTED ON 50' MAST.

TUNING: (MO OR XTAL) TRANSMITTERS XTAL-RECEIVERS VARIABLE.

SENSITIVITY: 2-3 MICROVOLTS/METER AT 50MW.

SELECTIVITY: 2 TIMES DOWN LESS 100 KC. 1000 TIMES DOWN MORE 350 KC.

POWER SOURCE: POWER UNIT PE-99 (71/2 KVA 110V 3 PHASE 60 CYCLE); ALSO HAS PROVISION FOR OPERATION ON COMMERCIAL POWER FROM A 110V 2 WIRE SERVICE.

SIMILAR SETS: RADIO SET SCR-573 AND SCR-574; ALSO RADIO SET SCR-637 (FIXED)

POWER OUTPUT: (WATTS) 50 WATTS FROM TRANSMITTER. 1/2 WATT RECEIVER.

TUBES: (TYPE AND NUMBER) SEE NOTE *

PART B - TACTICAL CHARACTERISTICS (CLASSIFICATION: RESTRICTED)

USE: FORWARD RELAY STATION FOR GROUND CONTROL OF INTERCEPTOR PURSUIT OPERATIONS. PART OF CONTROL NET SYSTEM SCS-2 PROVIDES 2 INDEPENDENT CHANNELS RECEIVING AND TRANSMITTING FOR EXTENDING THE RANGE OF RADIO SETS SCR-562 AND SCR-563 WHEN USED AS PART OF THE FIGHTER CONTROL SYSTEM

RANGE: (MILES) 135 MILES WITH AIRCRAFT AT 10,000 FEET.

TO COMMUNICATE WITH: CONTROL SET SCR-561 BY TELEPHONE AND BY RADIO WITH FIGHTER AIRCRAFT EQUIPPED WITH RADIO SET SCR-522.

TO REPLACE IN PART:

TRANSPORTATION: 2 TRUCK K-53, 2 ONE-TON CARGO TRAILER.

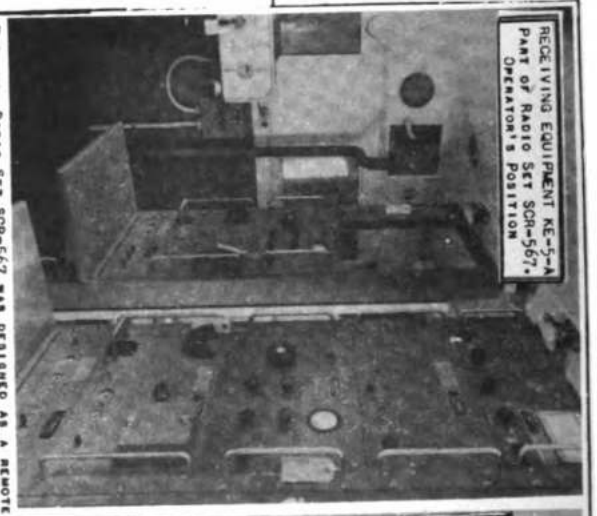
TYPE OF SIGNAL: VOICE AND MCW

PART C – PRINCIPAL COMPONENTS (CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
2 TRUCKS K-53 EACH	130"	96"	256"	13,385	RESTRICTED
2 ONE-TON CARGO TRAILERS EACH	72"	72"	144"	1,300	RESTRICTED
2 POWER UNIT PE-99 EACH	55"	28"	50"	1,600	RESTRICTED
2 TRANSMITTERS BC-640 EACH	72"	21"	20"	515	RESTRICTED
2 RECEIVERS BC-639 EACH	10 1/2"	19"	13 1/2"	36	RESTRICTED
1 FREQUENCY METER BC-638	11 1/2"	19"	7"	35	RESTRICTED
2 ANTENNA AN-57 EACH	TOTAL	100 CU. FT	2500		RESTRICTED
4 ANTENNA EQUIPMENT RC-81 EACH	12"	28 1/2"	38 1/2"	4	RESTRICTED
2 CONTROL UNITS RM-18 EACH	5"	19"	8"	16	RESTRICTED
2 AMPLIFIER BC-686	12"	19"	11"	36	RESTRICTED
2 RECTIFIER RA-42 EACH	7"	19"	8 1/2"	26	RESTRICTED
1 FUSE PANEL PN-15	5"	19"	5"	24	RESTRICTED
1 FUSE PANEL PN-5	4 3/4"	19"	3 1/2"	15	RESTRICTED
1 RELAY UNIT BC-685	8 3/4"	19"	14 1/4"	46	RESTRICTED
COMBINED WEIGHT OF COMPONENTS:				40,000#	APPROX.
COMBINED VOLUME OF COMPONENTS:				5,000 CU FT.	"
SHIP TONNAGE:				20 TONS	"

ALTHOUGH RADIO SET SCR-567 WAS DESIGNED AS A REMOTE CONTROLLED FORWARD RELAY STATION OF THE SCS-2 SYSTEM, IT CAN BE USED SEPARATELY. 1 RADIO SET SCR-567 IS EQUIVALENT TO 1 RADIO SET SCR-573 AND 1 RADIO SET SCR-574. TRANS. STATION CONTAINS 2 TRANS-BC-640. RECVR. STATION CONTAINS 2 RECVRS. BC-639.

* SCR-567 USES: RA-42: 1-5Y4G; BC-686: 2-25L6; BC-638-A: 1-5Y4G; 1-9002; 2-9003; 1-6L6G; 1-6SA7; BC-639-A: 3-9003; 1-9002; 4-6SJ7; 1-6SQ7; 1-6K6GT; BC-640: 8-523; 4-6L6; 3-1613; 2-811; 1-807; 5-NE2401; RCA #185 VOLT OHMYST: 2-6X6GT; 1-6X5GT. SUPREME TUBE TESTER #504-A: 1-71-A. 1-NEON BULB 1/4 WATT. GE TUNGAR CHARGER: 6RB, 3581: 1-GE TUNGAR #189048.



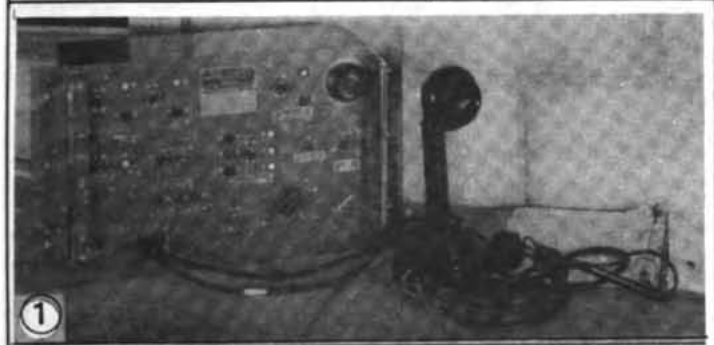
RECEIVING EQUIPMENT KE-5-A PART OF RADIO SET SCR-567. OPERATOR'S POSITION

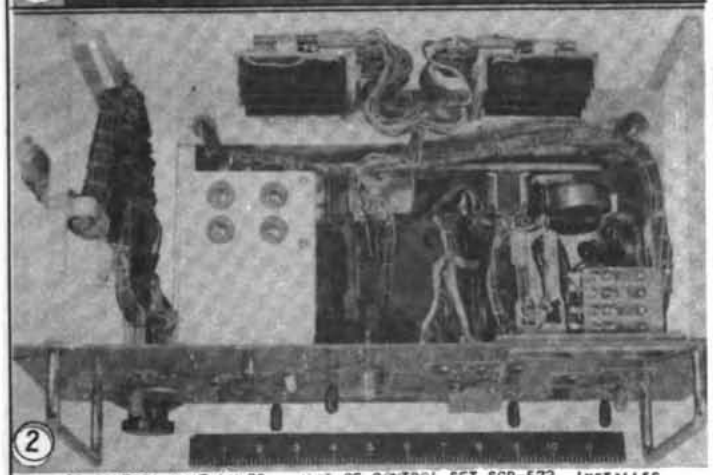
ANTENNA AN-57. PART OF RADIO SET SCR-567. SHOWING EQUIPMENT SET UP FOR OPERATION.

INSTRUCTIONAL LITERATURE:	STATUS:	STANDARD 20 Nov 43
	CHANGE IN STATUS:	

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

NOMENCLATURE DESIGNATION: **SCR-572**





(1) CONTROL UNIT RM-25. PART OF CONTROL SET SCR-572. INSTALLED FOR OPERATION. (2) CONTROL UNIT RM-25-A, BOTTOM VIEW OF CHASSIS

CONTROL SET SCR-572 IS AN OPERATIONS BLOCK OF A FIGHTER CONTROL SYSTEM AND CONTAINS NO RADIO EQUIPMENT, BUT, BY MEANS OF INTERCONNECTING WIRE LINES AND REMOTE CONTROL FACILITIES WITH THE RADIO SETS LISTED, COMMUNICATION IS CARRIED ON WITH THESE STATIONS AND ALSO WITH THE AIRCRAFT OPERATOR. THIS SET ALSO CONTAINS FACILITIES FOR PLOTTING DATA RECEIVED FROM THE D/F STATION SCR-575.

PART A – TECHNICAL CHARACTERISTICS

(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) THE CONTROL SET SCR-572 IS AN OPERATIONS BLOCK OF A FIGHTER CONTROL SYSTEM AND CONTAINS NO RADIO EQUIPMENT.

NUMBER OF CRYSTALS: NONE

PRESET FREQUENCIES: NONE

ANTENNA: NONE

TUNING: (MO OR XTAL) NONE

SENSITIVITY:

SELECTIVITY:

POWER SOURCE: POWER UNIT PE-99 (7½ KVA 110V 3 PHASE 60 CYCLE) ALSO HAS PROVISIONS FOR USING COMMERCIAL POWER FROM A 110V 2 WIRE SERVICE.

SIMILAR SETS: CONTROL SET SCR-642 (FIXED)

POWER OUTPUT: (WATTS)

TUBES: (TYPE AND NUMBER) 3-BC-687; 12-25L6.

PART B - TACTICAL CHARACTERISTICS

(CLASSIFICATION: RESTRICTED)

USE: CONTROL SET USED AS AN OPERATIONS BLOCK WHICH PROVIDES THE NECESSARY CONTROL EQUIPMENT AND AUXILLIARIES TO PERMIT SIMULTANEOUS OPERATIONAL CONTROL OF UP TO TWO (2) AIRCRAFT SQUADRONS FOR GROUND CONTROL OF INTERCEPTOR PURSUIT OPERATIONS.

RANGE: (MILES) MINIMUM OF 135 MILES WITH AIRCRAFT AT 10,000 FT.

TO COMMUNICATE WITH: SCR-573 SCR-574 SCR-575 AND WITH AIRCRAFT EQUIPPED WITH SCR-522

TO REPLACE IN PART:

TRANSPORTATION: TRAILER K-55; 1½ TON TRACTOR TRUCK; 1 TON CARGO TRAILER.

TYPE OF SIGNAL:

PART C – PRINCIPAL COMPONENTS

(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
3 CONTROL UNITS RM-25 EACH	20"	11 1/4"	11 1/4"	44#	
2 CONTROL UNITS RM-26 EACH	11 7/8"	9"	8"	20#	
1 CONTROL UNIT RM-28 EACH	14 1/2"	12"	7"	35#	
3 SWITCHBOARDS BD-72 EACH	12"	12"	24"	68#	
20 TELEPHONE REPEATERS EE-99	8"	14 1/2"	11 1/2"	47#	
1 TRAILER K-55	120"	96"	254"	8500#	
1 ONE-TON CARGO TRAILER (POWER)	72"	72"	144"	2860#	
1 ONE-AND-ONE-HALF TON TRACTOR TRUCK	84"	84"	204"	8000#	
3 RELAY UNIT BC-687	9"	19"	12 1/2"	35#	
COMBINED WEIGHT OF COMPONENTS:				20,000 LBS.	
COMBINED VOLUME:				4,000 CU FT.	
SHIP TONNAGE:				10 TONS	

SCR-573

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: STANDARD 20 Nov 43

INSTRUCTIONAL LITERATURE:

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 100-156

NUMBER OF CRYSTALS: 2 IN USE (FULL XTAL COMPLEMENT TO BE DETERMINED BY AAF).

PRESET FREQUENCIES: 2

ANTENNA: VERTICAL DIPOLE MOUNTED ON 76' MAST.

TUNING: (MO OR XTAL) XTAL

SENSITIVITY: SELECTIVITY:

POWER SOURCE: POWER UNIT PE-99 (7½ KVA 110V 60 CYCLE 3 PHASE); ALSO HAS PROVISIONS FOR USING COMMERCIAL POWER FROM A 110V 2 WIRE SERVICE.

SIMILAR SETS: TRANS. STATION OF SCR-567.

POWER OUTPUT: (WATTS) 50

TUBES: (TYPE AND NUMBER) 2-BC640 TRANS; 16-523; 8-6W5; 6-1613; 4-811; 2-807; 1C-HK-24G. 1-RCA #155 OSCILLOSCOPE; 2-6C6; 2-80; 1-684; 1-3AP1/906-P1. 1-RCA #TE65 VOLTOHMYST; 2-6K6GT; 1-6X5GT.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: TWO CHANNEL TRANS. STATION FOR THE GROUND CONTROL OF INTERCEPTOR PURSUIT OPERATION. PART OF CONTROL NET SYSTEM SCS-3.

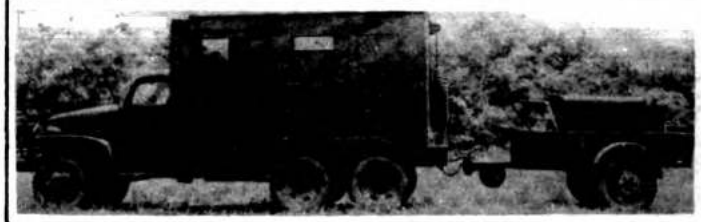
RANGE: (MILES) MINIMUM OF 135 MILES WITH AIRCRAFT AT 10,000 FT.

TO COMMUNICATE WITH: CONTROL SET SCR-572, RADIO SETS SCR-574, 575 AND AIRCRAFT EQUIPPED WITH RADIO SET SCR-522.

TO REPLACE IN PART:

TRANSPORTATION: 1 TRUCK K-53 1 ONE-TON CARGO TRAILER.

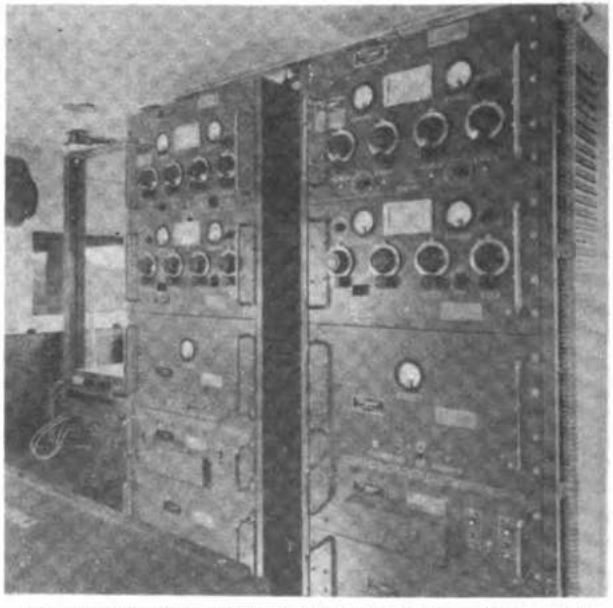
TYPE OF SIGNAL: TRANSMITS VOICE AND MCW.



RADIO SET SCR-573 (RADIO TRANSMITTING STATION) PART OF NET CONTROL SYSTEM SCS-3, SHOWING TRAILER K-63 ATTACHED TO TRUCK K-53, PREPARED FOR TRAVELLING.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
1 TRUCK K-53	130"	96"	256"	13,385	RESTRICTED
1 TRAILER K-63 (POWER)	72	72	144	2,600	RESTRICTED
2 TRANS. BC-640 EACH	72	21	20	515	RESTRICTED
1 CONTROL UNIT RM-27	11 3/8	19	10 1/2	29	RESTRICTED
1 ANTENNA AN-86	PACKED IN 5 PACKAGES 25 CU.FT.		APPROX.	743	RESTRICTED
2 ANTENNA EQUIP. RC-81 EACH	12	28	38	4	RESTRICTED
COMBINED WEIGHT OF COMPONENTS:				17,500# APPROX.	
COMBINED VOLUME:				2,275 CU. FT. APPROX.	
SHIP TONNAGE:				8 3/4 T APPROX.	



RADIO SET SCR-573. INTERIOR VIEW SHOWING RADIO TRANSMITTERS BC-640 AND CONTROL UNIT RM-27.

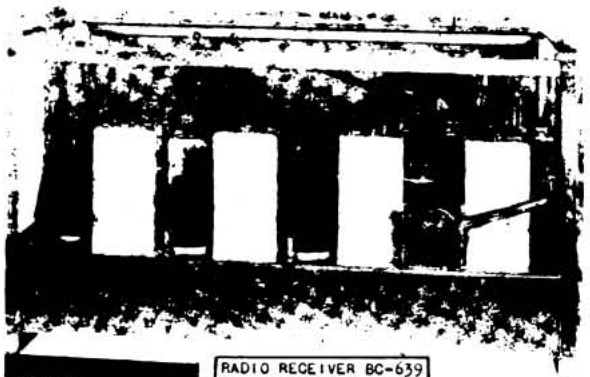
RADIO SET SCR-573 (RADIO TRANSMITTING STATION) IS SIMILAR IN OPERATION TO RADIO SET SCR-562, EXCEPT THAT IT CONTAINS TWO TRANSMITTERS BC-640 INSTEAD OF A TOTAL OF SIX.

INSTRUCTIONAL LITERATURE:	STATUS:	STANDARD 20 Nov 43
	CHANGE IN STATUS:	

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION

NOMENCLATURE DESIGNATION:

SCR-574



RADIO RECEIVER BC-639 REAR VIEW OF CHASSIS.

RADIO SET SCR-574. PART OF NET CONTROL SYSTEM SCS-3. VIEW SHOWING REMOVABLE EQUIPMENT CARRIED IN VEHICLE.

RADIO SET SCR-575 CONTAINS 2 RECEIVERS BC-639 FOR SIMULTANEOUS OPERATION. THESE RECEIVERS ARE NOT CRYSTAL CONTROLLED BUT ARE CALIBRATED BY MEANS OF FREQUENCY METER BC-638 WHICH USES 5 CRYSTALS. THE APPROPRIATE CRYSTAL IS SELECTED BY MEANS OF A 5-POINT SWITCH.

PART A - TECHNICAL CHARACTERISTICS

(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 100-156

NUMBER OF CRYSTALS: 2 IN USE (FULL COMPLEMENT TO BE DETERMINED BY AAF).

PRESET FREQUENCIES: VARIABLE (DIAL SETTING CHECKED WITH CRYSTAL CONTROLLED FREQUENCY METER.)

ANTENNA: VERTICAL DIPOLE MOUNTED ON 76' MAST.

TUNING: (MO OR XTAL)

SENSITIVITY: 2-3MV/METER AT 50 MW SIGNAL RATIO 10 TO 1.

SELECTIVITY: 2 TIMES DOWN LESS 100 Kc. 1000 TIMES DOWN MORE 350 Kc.

POWER SOURCE: POWER UNIT PE-99 (7½ KVA 110V 3 PHASE 60 CYCLE); ALSO HAS PROVISIONS FOR USING COMMERCIAL POWER FROM A 110V 2 WIRE SERVICE.

SIMILAR SETS: RECEIVER STATION OF SCR-567

POWER OUTPUT: (WATTS) RECEIVER BC-639 1 WATT (DISTORTED) ½ W (10% DISTORTION).

TUBES: (TYPE AND NUMBER) BC-638: 1-6SK7; 1-9002; 2-9003; 1-5V4G; 1-6L5G; 1-6E5. BC-639: 1-9002; 3-9003; 1-6SQ7; 1-6K6GT; 4-6SG7. BC-686: 3-25L6. RA-42: 1-5V4G.

PART B - TACTICAL CHARACTERISTICS

(CLASSIFICATION: RESTRICTED)

USE: TWO CHANNEL RECEIVER STATION FOR GROUND CONTROL OF INTERCEPTOR PURSUIT OPERATIONS. PART OF CONTROL NET SYSTEM SCS-3.

RANGE: (MILES) MINIMUM OF 135 MILES WITH AIRCRAFT AT 10,000 FT.

TO COMMUNICATE WITH: CONTROL SET SCR-572 RADIO SET SCR-573 AND AIRCRAFT EQUIPPED WITH SCR-522.

TO REPLACE IN PART:

TRANSPORTATION: 1 TRUCK K-53, 1 ONE-TON CARGO TRAILER.

TYPE OF SIGNAL: RECEIVES VOICE, TONE MODULATED AND C. W.

PART C - PRINCIPAL COMPONENTS

(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
1 TRUCK K-53	130"	96"	256"	13,385	RESTRICTED
1 TRAILER K-63 (POWER)				2,860	RESTRICTED
2 RECEIVERS BC-639 EACH	10 1/2	19	13 1/2	36	RESTRICTED
2 RECTIFIERS RA-42 EACH	7	19	8 1/2	26	RESTRICTED
1 FREQUENCY METER BC-638	11 1/2	19	7	35	RESTRICTED
2 CONTROL UNITS BC-18 EACH	5	19	8 3/4	16	RESTRICTED
2 AMPLIFIER BC-686 EACH	12	19	11	36	RESTRICTED
1 FUSE PANEL PN-15	5	19	5	24	RESTRICTED
1 FUSE PANEL PN-5	2 1/2	19	4 5/8	15	RESTRICTED
2 FRAMES FM-39 EACH	72	20	3	121	RESTRICTED
1 ANTENNA AN-86	PACKED IN 5 PACKAGES 25 CU. FT.		APPROX.	743	RESTRICTED
2 ANTENNA EQUIPMENT RC-81	12	28 1/2	38 1/2	4	RESTRICTED
COMBINED WEIGHT OF COMPONENTS:				16,500# APPROX.	
COMBINED VOLUME:				2,275 CU. FT. APPROX.	
SHIP TONNAGE:				8 1/4 T	APPROX.

SCR-575

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS:

INSTRUCTIONAL LITERATURE:

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 100-156

NUMBER OF CRYSTALS: 4 in BC-624; 4 in BC-625; 5 in BC-638.

PRESET FREQUENCIES: 4 each receiving and transmitting.

ANTENNA: Rotatable Adcock D/F with sense facilities.

TUNING: (MO OR XTAL) XTAL on communications R&T. Variable on D/F receiver.

SENSITIVITY: 2-3 microvolts/meter

SELECTIVITY: 2 times down less than 100 Kc. 1000 times down more than 350 Kc.

POWER SOURCE: Power Unit PE-99 and storage batteries; also operates from commercial power 110V. 2 wire.

SIMILAR SETS: SCR-566 and SCR-645 (Fixed).

POWER OUTPUT: (Watts) Communications Transmitters 6 watts minimum.

TUBES: (Type and Number) BC-639: 1-6SQ7; 1-6K6GT; 1-9002; 3-9003; 4-6SQ7. RA-42: 1-5V4G. BC-638: 1-9002; 2-9003; 1-5V4G; 1-6L5G; 1-6SK7; 1-6E5. BC-624: 1-9002; 3-9003; 1-12J5GT; 1-12C8; 1-12AH7GT; 3-12SQ7. BC-625: 2-832; 3-12A6; 1-6Q6G; 2-6S37. BC-687: 4-25L6GT. RC-93: 1-958; 1-1A5GT.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: Mobile direction finding station for ground control of interceptor pursuit operations. Part of Control Net System SCS-3. Used as D/F station for obtaining bearing on aircraft equipped with radio set SCR-522 for purposes of homing and D/F plotting.

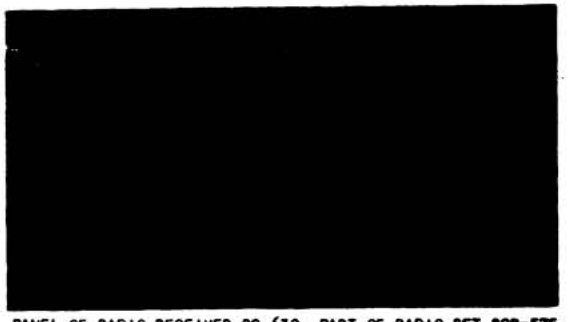
RANGE: (Miles) Minimum of 135 miles with aircraft at 10,000 Ft.

TO COMMUNICATE WITH: Fighter aircraft equipped with SCR-522.

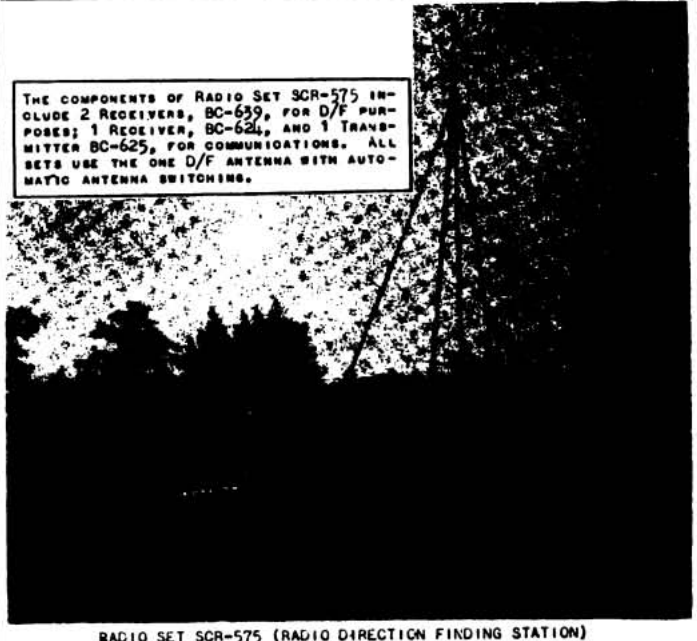
TO REPLACE IN PART: None

TRANSPORTATION: 1 Truck K-53, 1 Trailer K-63 (Power)

TYPE OF SIGNAL: Receives voice, tone modulated and C.W. Transmits voice modulation.



PANEL OF RADIO RECEIVER BC-639. PART OF RADIO SET SCR-575.



THE COMPONENTS OF RADIO SET SCR-575 INCLUDE 2 RECEIVERS, BC-639, FOR D/F PURPOSES; 1 RECEIVER, BC-624, AND 1 TRANSMITTER BC-625, FOR COMMUNICATIONS. ALL SETS USE THE ONE D/F ANTENNA WITH AUTOMATIC ANTENNA SWITCHING.

RADIO SET SCR-575 (RADIO DIRECTION FINDING STATION) ANTENNA EQUIPMENT RC-153 RAISED IN POSITION.

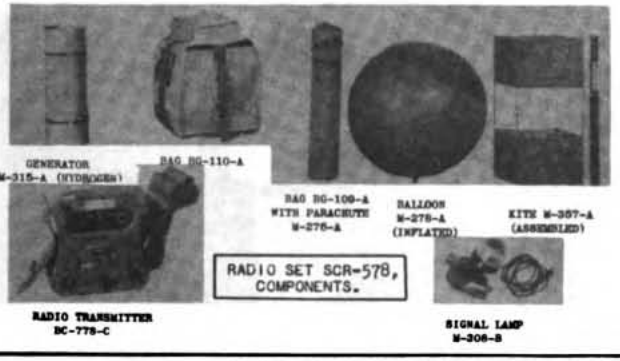
PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

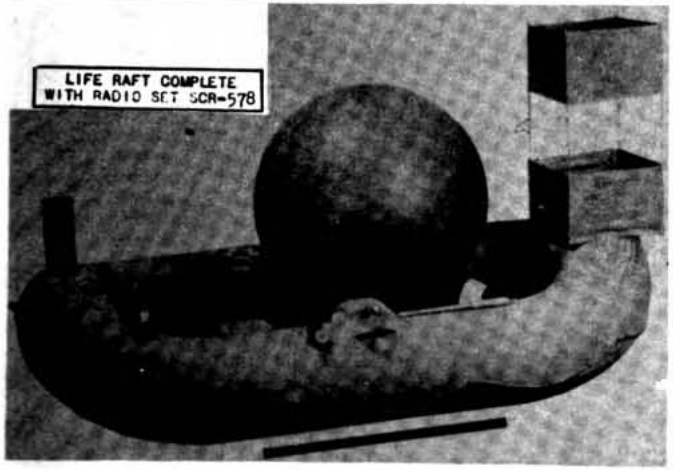
ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
1 Truck K-53	130"	96"	256"	13,385#	Restricted
1 Trailer K-63 (Power)	72	72	144	2,860#	Restricted
2 Receivers BC-639 each	10 1/2	19	13 1/2	36#	Restricted
2 Rectifiers RA-42 each	7	19	8 1/2	26#	Restricted
1 Frequency Meter BC-638	11 1/2	19	7	35#	Restricted
1 Receiver BC-624	6	15 1/2	9	14#	Restricted
1 Transmitter BC-625	6	15 1/2	9	16#	Restricted
1 Antenna Equipment RC-153				150#	Restricted
1 Oscillator Test Equipment RC-93	10 1/2	9	6 3/4	12#	Restricted
1 Dynamotor Unit PE-94	7	13	9	36#	Restricted
1 Fuse Panel PN-15	5	19	5	24#	Restricted
1 Fuse Panel PN-5	2 1/2	19	4 5/8	15#	Restricted
1 Dynamotor Unit PE-100	6	19	10 1/2	23#	Restricted
1 Control Unit RM-18	5	19	8 3/4	16#	Restricted
1 Control Panel MN-25	6 1/4	19	7	16#	Restricted
1 Relay Unit BC-667	9	19	12 1/2	46#	Restricted
COMBINED WEIGHT OF COMPONENTS:				16,500#	approx.
COMBINED VOLUME OF COMPONENTS:				2,272 cu.	ft. approx.
SHIP TONNAGE:				8 1/4 T	approx.

INSTRUCTIONAL LITERATURE: AN 08-10-94	STATUS:	STANDARD 1 Feb 42
	CHANGE IN STATUS:	

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

NOMENCLATURE DESIGNATION: **SCR-578**





RADIO SET SCR-578, CARRIED BY BOMBARDMENT AND RECONNAISSANCE AIRCRAFT, ALSO BY SOME AIR TRANSPORT COMMAND AIRCRAFT, OVER-WATER FLIGHTS.

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (MC) INTERNATIONAL DISTRESS FREQUENCY .500 MODULATED AT 1000 CPS.

NUMBER OF CRYSTALS: NONE

PRESET FREQUENCIES: PRETUNED TO .500 MC.

ANTENNA: 300 FT. ANTENNA WIRE W-148, WOUND ON REEL RL-48 AND RAISED BY BALLOON M-278-A OR KITE M-277-A.

TUNING: (MO OR XTAL)

SENSITIVITY: SELECTIVITY:

POWER SOURCE: BUILT-IN GENERATOR, OPERATED BY HAND CRANK GC-18-A.

SIMILAR SETS: CAPTURED GERMAN "NOT-SENDER".

POWER OUTPUT: (WATTS) 4.8

TUBES: (TYPE AND NUMBER)

1 - BC 778-B TRANS:

1 - 12-A-6
1 - 12-SC-7

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: PORTABLE TRANSMITTER USED IN RUBBER DINGHIES FOR SEA-RESCUE PURPOSES. SHAPED TO FIT BETWEEN THE KNEES OF AN OPERATOR. IT IS WATERTIGHT AND WILL FLOAT.

RANGE: (MILES) 200 (TO AIRCRAFT AT 2000 FT).

TO COMMUNICATE WITH: SCR-187, SCR-287, RADIO COMPASS SCR-269.

TO REPLACE IN PART:

TRANSPORTATION: AIRCRAFT (PORTABLE TRANS. USED FOR SEA-RESCUE).

TYPE OF SIGNAL: MCW (1000 CPS) AUTOMATIC S.O.S. AND MANUAL KEYING ON FIXED DISTRESS FREQUENCY .500 MCS.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
2 ROLLS - 300 FT. EA ANTENNA WIRE W-148	---	---	---	1.1	
1 BAG - HOUSING FOR ACCESSORIES BG-109	39 1/2"	X 7" DIA.		3.2	
1 BAG - HOUSING FOR TRANSMITTER BG-110	---	---	---	1.4	
2 BALLOONS M-278	---	---	---	2.4	
1 HAND CRANK GC-18	---	---	---	.45	
2 GENERATORS M-315 (HYDROGEN)	---	---	---	5.92	
2 BALLOON INFLATING TUBES	---	---	---	1.6	
1 KITE M-277	---	---	---	1.45	
1 RADIO TRANSMITTER BC-778	10 1/2"	9 1/2"	9"	15.1	
1 SIGNAL LAMP M-308	---	---	---	.2	
1 PARACHUTE M-276	---	---	---	1.0	
COMBINED WEIGHT OF COMPONENTS:				35# APPROX.	
COMBINED VOLUME:				3 TO 4 CU FT. APPROX.	
SHIP TONNAGE:					

SCR-583

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION

STATUS: STANDARD 6 Feb 43

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE:

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION)

FREQUENCY RANGE: (Mc) 2.2 - 4.6

NUMBER OF CRYSTALS: 4

PRESET FREQUENCIES: 4

ANTENNA: "FISHPOLE" MOVING 6', STATIONARY 20'.

TUNING: (MO OR XTAL) BOTH

SENSITIVITY: SELECTIVITY:

POWER SOURCE: DRY BATTERY FOR RECVR. AND HAND GENERATOR FOR TRANS., OR VEHICLE BATTERY, 6 OR 12 V. FOR TRANSMITTER AND RECEIVER.

SIMILAR SETS:

POWER OUTPUT: (WATTS)

TUBES: (TYPE AND NUMBER)

1 RECVR. - 4 1T4, 1 1R5, 1 1S5, 1 VR-90-30, 1 1S4

1 TRANS. - 1 1S4, 1 HY65, 1 TS-70, 4 1T4

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: CAV: MTZD, MECZ, & HORSE ROM UNITS.

RANGE: (MILES) 35 MILES ON LOW POWER CW, MAXIMUM 60 MILES ON HIGH POWER CW.

TO COMMUNICATE WITH:

TO REPLACE IN PART: SCR-203

TRANSPORTATION: HORSE PACK OR VEHICLE.

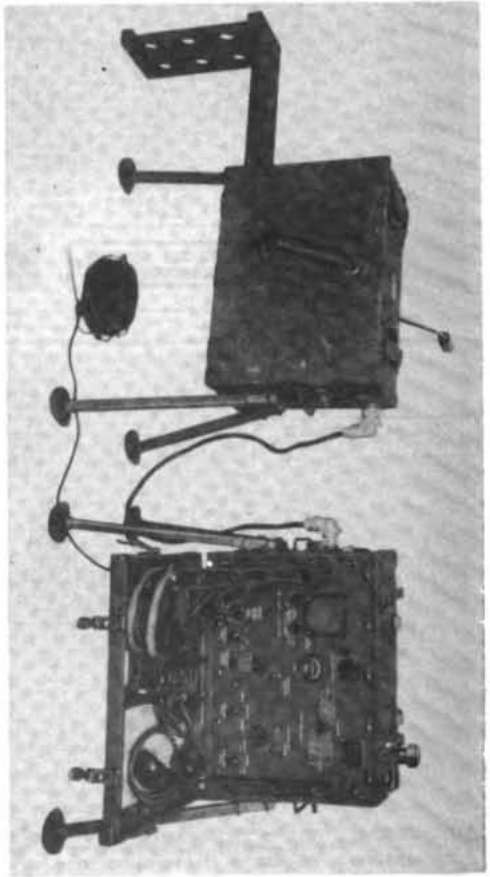
TYPE OF SIGNAL: CW; VOICE (AM)

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RADIO RECVR. & TRANS. BC-1209					UNCLASSIFIED
POWER UNIT PE-152					
POWER CONVERTER UNIT PE-154					
GENERATOR GN-54					
COMBINED WEIGHT OF COMPONENTS:				120#	
COMBINED VOLUME:				24 CU. FT.	
SHIP TONNAGE:					

RADIO SET SCR-583 - PREPARED FOR FIELD OPERATION

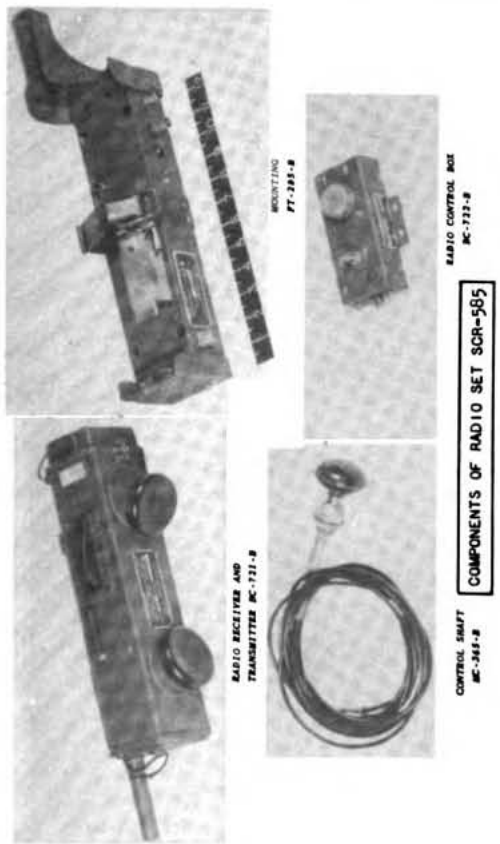
TO PROVIDE FOR CW OPERATION ON LOW AND HIGH POWER, AND VOICE OPERATION ON LOW POWER ONLY.



INSTRUCTIONAL LITERATURE:	STATUS:	LIMITED STANDARD 2 Dec 43
(HMI) 08-10-123 (ON SCR-585-A)	CHANGE IN STATUS:	

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

NOMENCLATURE DESIGNATION: **SCR-585**



COMPONENTS OF RADIO SET SCR-585

EACH UNIT IS ADJUSTED TO OPERATE ON ONLY ONE FREQUENCY AT A TIME. RECEPTION AND TRANSMISSION ARE ON THE SAME FREQUENCY. RADIO SET SCR-585 BEING REPLACED BY INTERPHONE COMMUNICATION SIMILAR TO TYPES USED BY THE BRITISH.

PART A – TECHNICAL CHARACTERISTICS

(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) 3.5 - 6 (RECEPTION & TRANSMISSION) SEE REMARKS.

NUMBER OF CRYSTALS: 2

PRESET FREQUENCIES: 1 EA. TRANSMITTING & RECEIVING

ANTENNA: TELESCOPIC ANTENNA 39" LONG.

TUNING: (MO OR XTAL) CRYSTAL

SENSITIVITY: SELECTIVITY:

POWER SOURCE: SELF CONTAINED - "A" BATTERY BA-37 (1.5 V), "B" BATTERY BA-38 (103.5 V).

SIMILAR SETS: SCR-536

POWER OUTPUT: (WATTS)

TUBES: (TYPE AND NUMBER)

1 - BC - 721-A: 2 - 1R5, 1 - 1T4, 2 - 3S4

PART B - TACTICAL CHARACTERISTICS

(CLASSIFICATION:)

USE: DUAL PURPOSE RADIO RECEIVER AND TRANSMITTER, DESIGNED FOR TWO-WAY CONVERSATION. TO BE USED IN TOWED GLIDERS THEN TO BE REMOVED AND USED FOR GROUND COMMUNICATION.

RANGE: (MILES) 100 FT TO 1 MILE.

TO COMMUNICATE WITH: OTHER RADIO SETS SCR-585.

TO REPLACE IN PART:

TRANSPORTATION: ORIGINALLY FOR GLIDER-TOW PLANE INTERCOMMUNICATION (INSTALLED)

TYPE OF SIGNAL: VOICE AND TONE MODULATED RECEPTION, VOICE MODULATED TRANSMISSION.

PART C – PRINCIPAL COMPONENTS

(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RADIO RECEIVER AND TRANSMITTER BC-721-B	6	5 1/2	17 1/16	6.0	
RADIO CONTROL BOX BC-722-B	1 13/16	5 7/8	3 1/4	.87	
CONTROL SHAFT MC-355-B	---	---	---	.5	
MOUNTING FT-295-B	---	---	---	3.3	
COMBINED WEIGHT OF COMPONENTS:				11 1/2#	APPROX.
COMBINED VOLUME:				2 CU.FT.	APPROX.
SHIP TONNAGE:					

NOTE: DUE TO VARIATIONS IN AIRCRAFT INSTALLATIONS BOTH WEIGHTS AND VOLUMES OF COMPLETE SETS VARY CONSIDERABLE AND THE FIGURES SHOWN ARE THEREFORE APPROXIMATE.

THIS SHEET IS CLASSIFIED: UNCLASSIFIED

SCR-593

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS:	STANDARD 19 Feb 44	INSTRUCTIONAL LITERATURE: TM 11-859
CHANGE IN STATUS:		

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) 2.0 - 6.0 (Receiver only)

NUMBER OF CRYSTALS: None

PRESET FREQUENCIES: 4 (selected by push button)

ANTENNA: Vertical rod. AN-75-A.

TUNING: (MO OR XTAL)

SENSITIVITY: SELECTIVITY:

POWER SOURCE: Self contained, similar to GE portable receiver Model LB-530 BB-54-A Vibrator VB-8 & VB-9.

SIMILAR SETS: None

POWER OUTPUT: (Watts)

TUBES: (Type and Number) 1 BC-728-A -
1 1R5
1 1S5
3 1T4
2 3S4

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: Engrs: Mtzd, Mtn & combat units; CAC: AA, & Bar Bln units.

RANGE: (Miles) to receive signals from SCR-543 up to 20 miles.

TO COMMUNICATE WITH: SCR-543; (SCR-593 Receiver only)

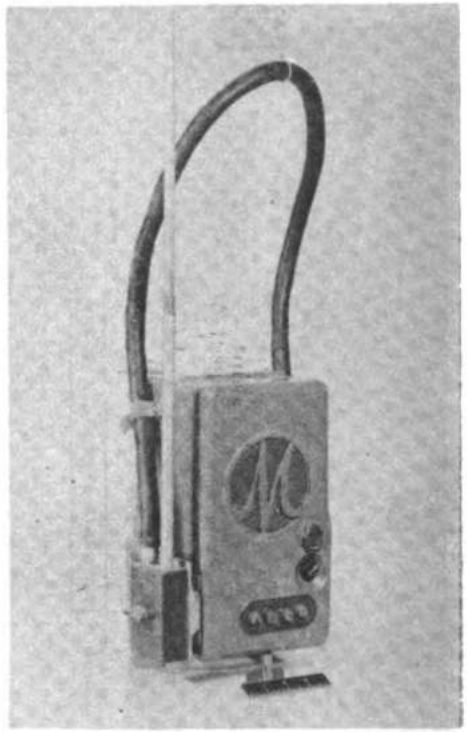
TO REPLACE IN PART: None

TRANSPORTATION: Carried by one man. To be operated on ground or in vehicle.

TYPE OF SIGNAL: Voice (AM)

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
Receiver, BC-728	11 9/16"	8 3/8"	5 5/8"	15#	
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME:					
SHIP TONNAGE:					

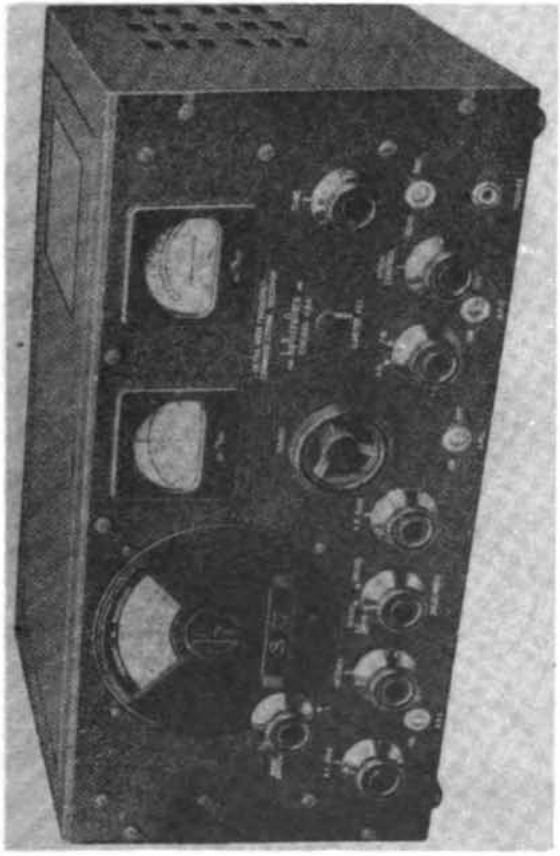


RADIO SET SCR-593 PREPARED FOR OPERATION

Portable radio Receiver. Alert or warning signals. Accessories self contained.

THIS SHEET IS CLASSIFIED: UNCLASSIFIED

INSTRUCTIONAL LITERATURE:	STATUS:	SUBSTITUTE STANDARD 27 May 42	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION:	SCR-607
	CHANGE IN STATUS:				



FRONT VIEW OF RADIO RECEIVER BC-787, PART OF RADIO SET SCR-607.

RADIO SET SCR-607 IS A MODIFIED COMMERCIAL HALLICRAFTERS MODEL S-27 OR S-36 RADIO RECEIVER.

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) 27.-- 145.

NUMBER OF CRYSTALS: None

PRESET FREQUENCIES: None

ANTENNA: 3 TIERS, HORIZONTAL DIAPOLES (1 FOR EACH OF THE 3 BANDS OF RECEIVER) MOUNTED ON 21-½' MAST.

TUNING: (MO OR XTAL) DOES NOT APPLY

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 110V A.C.

SIMILAR SETS: None

POWER OUTPUT: (WATTS) DOES NOT APPLY

TUBES: (TYPE AND NUMBER)

2	VT-90	1	VT-121
1	VT-94	1	VT-139
2	VT-107	1	VT-145
2	VT-112	1	VT-165
1	VT-117	1	VT-176
1	VT-120	1	VT-238

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: AN INTERCEPT RECEIVER FOR MONITORING PURPOSES.

RANGE: DOES NOT APPLY

TO COMMUNICATE WITH: DOES NOT APPLY

TO REPLACE IN PART: None

TRANSPORTATION: ANY AVAILABLE VEHICLE.

TYPE OF SIGNAL:

RECEIVES AM AND FM.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RECEIVER BC-787	9 3/8"	19"	14"	63#	
ANTENNA RC-154	360	-----	-----	20#	
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					

SCR-608

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: STANDARD 29 SEP 41

CHANGE IN * STATUS:

INSTRUCTIONAL LITERATURE: TM 11-620

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION)

FREQUENCY RANGE: (MC) 27.0 - 38.9

NUMBER OF CRYSTALS: 120

PRESET FREQUENCIES: 10 (PUSH-BUTTON SELECTION)

ANTENNA: FISHPOLE TYPE.

TUNING: (MO OR XTAL) CRYSTAL.

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 12 OR 24 V. VEHICLE BATTERY WITH DYNAMOTORS.

SIMILAR SETS: SCR-508 (EXCEPT FREQUENCY BAND)

POWER OUTPUT: (WATTS) 35

TUBES: (TYPE AND NUMBER) BC-683-(A) RECVR: 3 TYPE 6 AC-7; 1 TYPE 6J5; 2 TYPE 12 SQ7; 1 TYPE 6H6; 1 TYPE 6V6GT; 2 TYPE 6 SL7GT. BC-684-(A) TRANS: 7 TYPE 1619; 1 TYPE 1624.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: USED BY FIELD ARTILLERY, SIGNAL CORPS.

RANGE: (MILES) 10 TO 15 VOICE.

TO COMMUNICATE WITH: SCR-608; SCR-609; SCR-610; SCR-628.

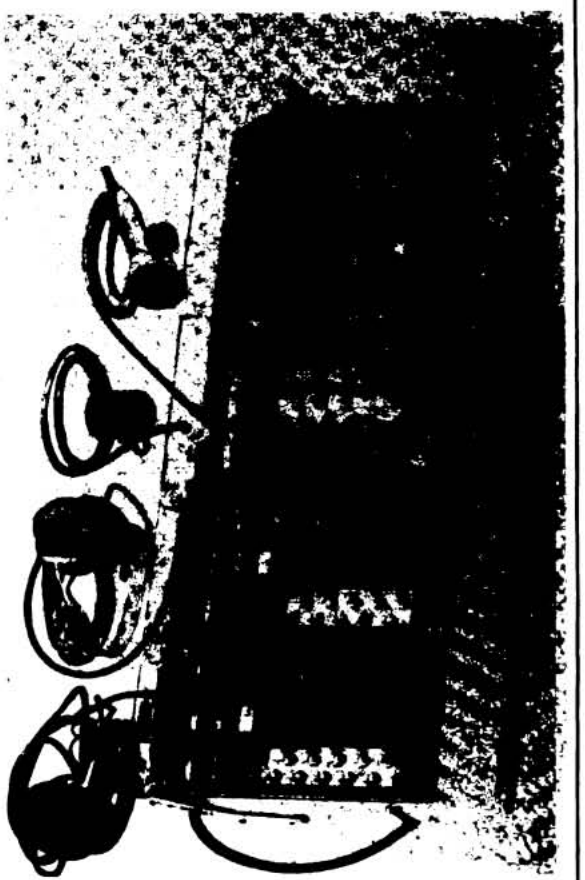
TO REPLACE IN PART: SCR-161; SCR-284; SCR-194; SCR-288

TRANSPORTATION: VEHICLES.

TYPE OF SIGNAL: FM; VOICE ONLY.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

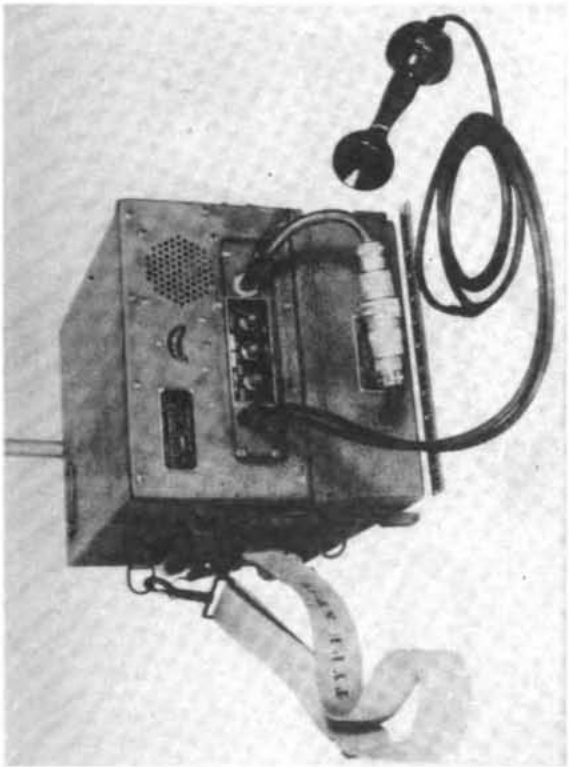
ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
1 RADIO TRANS. BC-684				67#	
2 RADIO RECVR. BC-683				70#(35# EA.)	
1 MOUNTING FT-237				44#	
1 REMOTE CONTROL UNIT RM-29				15#	
COMBINED WEIGHT OF COMPONENTS:				306#	
COMBINED VOLUME:					
SHIP TONNAGE:					



RADIO SET SCR-608 SET UP FOR OPERATION

VEHICULAR SET FOR OPERATION BY NON RADIO SPECIALISTS. INCLUDES TEN CHANNELS OF RADIO SET SCR-508 TO PERMIT COMMUNICATION WITH THE ARMORED FORCE. REMOTE CONTROL.

INSTRUCTIONAL LITERATURE:	STATUS:	STANDARD 29 SEP 41	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION:
TM 11-615-A	CHANGE IN STATUS:			SCR-609



RADIO SET SCR-609. SET UP FOR FIELD OPERATION

RADIO SET SCR-609 IS A PORTABLE SET CAPABLE OF BEING CARRIED IN ANY VEHICLE OF THE FIELD ARTILLERY. RADIO SETS SCR-609 AND SCR-610 ARE THE SAME EXCEPT FOR POWER SUPPLY. RADIO SET SCR-609 USES BATTERIES. RADIO SET SCR-610 IS EQUIPPED WITH A POWER SUPPLY TO OPERATE FROM VEHICULAR BATTERY AS WELL AS SELF-CONTAINED BATTERY SUPPLY IN CASE CS-79.

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) 27.0 - 38.9

NUMBER OF CRYSTALS: 120

PRESET FREQUENCIES: 2

ANTENNA: FISHPOLE TYPE AN-29-C

TUNING: (MO OR XTAL) XTAL

SENSITIVITY: SELECTIVITY:

POWER SOURCE: DRY BATTERIES; BA-39, 40, 41.

SIMILAR SETS: SCR-610 EXCEPT FOR POWER SUPPLY.

POWER OUTPUT: (WATTS) 2

TUBES: (TYPE AND NUMBER) 1 BC-659-A -
5 1LN5
2 1291
4 1299
1 1LH4
1 1294
1 1LC6

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: FA: SHORT RANGE RECONNAISSANCE, FIRE CONTROL & SIMILAR USES.

RANGE: (MILES) 5

TO COMMUNICATE WITH: SCR-608; SCR-609; SCR-610; SCR-628.

TO REPLACE IN PART: SCR-161; SCR-194; SCR-284; SCR-288.

TRANSPORTATION: VEHICLE, OR MAN PACK.

TYPE OF SIGNAL: VOICE (FM)

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RECVR. & TRANS. BC-659					
CASE CS-79 (FOR BATTERIES)					
REMOTE CONTROL UNIT RM-29					
COMBINED WEIGHT OF COMPONENTS:				170#	
COMBINED VOLUME:				1.3 CU. FT.	
SHIP TONNAGE:					

SCR-610

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: STANDARD 29 SEP 41

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: TM 11-615-A

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) 27.0 - 38.9

NUMBER OF CRYSTALS: 120

PRESET FREQUENCIES: TWO PRE-SET XTAL CONTROLLED CHANNELS.

ANTENNA: FISHPOLE TYPE. AN-29-C AND VEHICULAR WHIP.

TUNING: (MO OR XTAL) XTAL

SENSITIVITY: SELECTIVITY:

POWER SOURCE: DRY BATTERIES; POWER UNIT PE-117

SIMILAR SETS: SCR-609 (EXCEPT FOR ADDED POWER PACK)

POWER OUTPUT: (WATTS) 2

TUBES: (TYPE AND NUMBER) 1 BC-659 USED; 5 1LN5; 2 1291; 4 1299; 1 1LH4; 1 1294; 1 1LC6. 1 PE-117 USED 1 VR-90-30; 1 CK1005.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: CWS: SMOKE GEN CO; FA: LIAISON OFFICERS FORWARD OBSERVERS, AND FOR INTRA-BATTERY AND INTRA-BN. COMMUNICATION.

RANGE: (MILES) 5

TO COMMUNICATE WITH: SCR-608; SCR-609; SCR-610; SCR-628.

TO REPLACE IN PART: SCR-161; SCR-194; SCR-284; SCR-288.

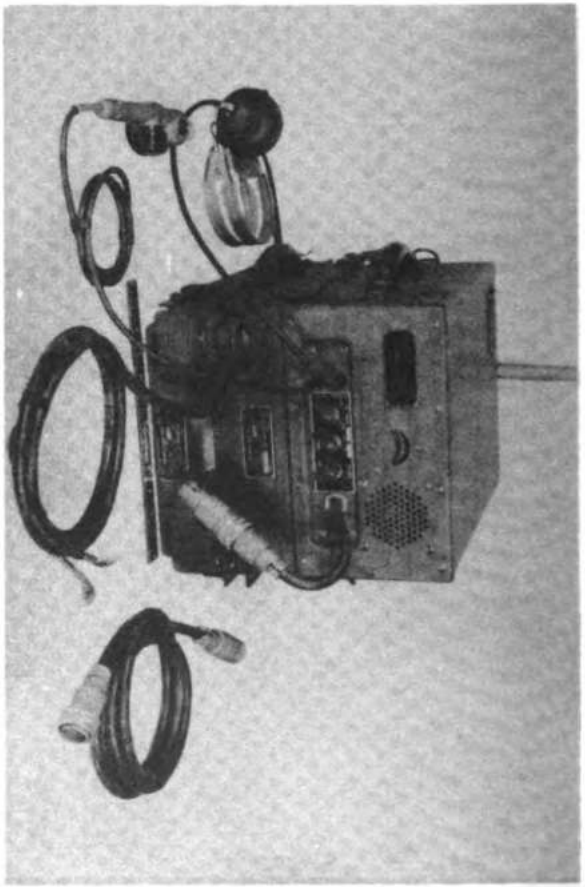
TRANSPORTATION: TRANSPORTED & OPERATED IN VEHICLE OR CARRIED BY MAN ON FOOT.

TYPE OF SIGNAL: VOICE (FM)

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RECVR. & TRANS. BC-659					
PLATE SUPPLY UNIT PE-117					
MOUNTING FT-250					
REMOTE CONTROL UNIT RM-29					
CASE CS-79 (FOR BATTERIES).					
COMBINED WEIGHT OF COMPONENTS:				177#	
COMBINED VOLUME:				1.3 CU. FT.	
SHIP TONNAGE:					

RADIO SET SCR-610, SET UP FOR MOBILE OPERATION

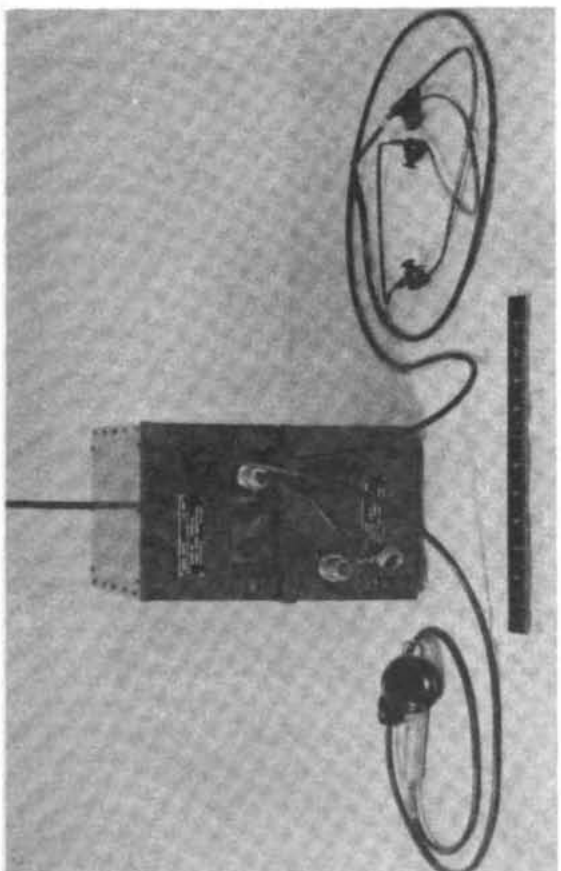


RADIO SET SCR-610 IS A PORTABLE SET, CAPABLE OF BEING CARRIED IN VEHICLE OF FIELD ARTILLERY, ALSO PORTABLE AS ONE-MAN LOAD. OPERATION DOES NOT REQUIRE RADIO SPECIALISTS. REMOTE CONTROLLED.

INSTRUCTIONAL LITERATURE:	STATUS:	
	CHANGE IN STATUS:	

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

NOMENCLATURE DESIGNATION: **SCR-619**



RADIO SET SCR-619
SET UP FOR FIELD OPERATION.

RADIO SET SCR-619 IS CLASSIFIED AS REQUIRED TYPE; DEVELOPMENT TYPE; LIMITED PROCUREMENT TYPE, FOR PRODUCTION OR SERVICE TEST MODELS AFTER TEST OF EXPERIMENTAL LABORATORY MODEL SHOWN IN ILLUSTRATION.

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 27 - 38.9

NUMBER OF CRYSTALS: 22

PRESET FREQUENCIES: 2

ANTENNA:

TUNING: (MO OR XTAL) XTAL

SENSITIVITY: SELECTIVITY:

POWER SOURCE:

SIMILAR SETS: SCR-609; SCR-610.

POWER OUTPUT: (WATTS) 2

TUBES: (TYPE AND NUMBER)

6 1L4
1 1R5
3 1S5
5 3A5
1 1A5

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: FIELD ARTILLERY.

RANGE: (MILES) APPROX. 5

TO COMMUNICATE WITH: SCR-608; SCR-609; SCR-628.

TO REPLACE IN PART: SCR-609; SCR-610.

TRANSPORTATION: MAN CARRIED, ANIMAL PACK, OR FIELD ARTILLERY VEHICLE.

TYPE OF SIGNAL: VOICE, (FM)

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	DIMENSIONS WIDTH	DIMENSIONS DEPTH	WEIGHT	CLASSIFICATION
(IN DEVELOPMENT STAGE - COMPONENTS NOT YET DEFINITELY DETERMINED)					
COMBINED WEIGHT OF COMPONENTS:		NOT TO EXCEED		250	
COMBINED VOLUME:					
SHIP TONNAGE:					

THIS SHEET IS CLASSIFIED: **RESTRICTED**

SCR-624

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS:	STANDARD 31 Mar 43
CHANGE IN STATUS:	

INSTRUCTIONAL LITERATURE: (HMI) AN 08-10-185 (ON SCR-624-A)

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 100 - 156

NUMBER OF CRYSTALS: 8

PRESET FREQUENCIES: 4 PRESET CHANNELS, BOTH TRANS. & RECVR.

ANTENNA: "J" ANTENNA ON 50 FT. MAST.

TUNING: (MO OR XTAL) XTAL

SENSITIVITY: SELECTIVITY:

POWER SOURCE: GASOLINE ENGINE DRIVEN GENERATOR 110 V. AC.

SIMILAR SETS: USES SAME TRANSMITTER AND RECEIVER COMPONENTS AS SCR-522 AND SCR-542.

POWER OUTPUT: (WATTS) 6 WATTS VOICE.

TUBES: (TYPE AND NUMBER) 1-BC-624A RECVR: 1-12J5GT; 1-1208; 1-9002; 3-9003; 1-12AH7GT; 3-12SG7. 1-BC 625A TRANS: 2-832; 3-12A6; 1-6G6G; 2-6SS7. 1-RA 62 RECTIFIER: 2-5U4G; 1-6x5 GT.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: POINT-TO-POINT ON GROUND, GROUND STATION OR GROUND-TO-AIR COMMUNICATIONS.

RANGE: (MILES) LINE-OF-SIGHT, MAXIMUM OF 130 MILES GROUND-TO-AIR.

TO COMMUNICATE WITH: SCR-522; SCR-542, AND SIMILAR VHF AIRCRAFT COMMAND SETS.

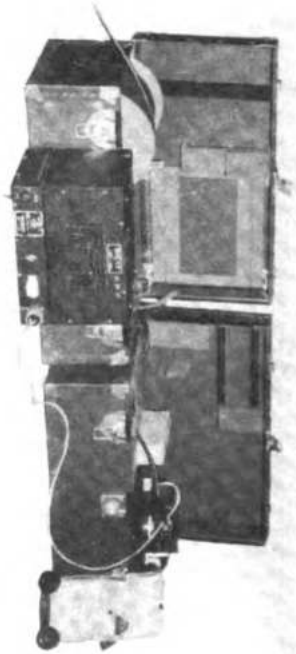
TO REPLACE IN PART:

TRANSPORTATION: AIR TRANSPORTABLE, AND TRUCKS.

TYPE OF SIGNAL: VOICE

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
1 CHEST CH-173-A	34"	16 3/4"	13 3/4"	134#	
1 CHEST CH-172-A	34"	16 3/4"	13 3/4"	205#	
1 CHEST CH-170-A	47 1/4"	14 3/8"	6 3/8"	41#	
1 ANTENNA MAST MA-7-A, CONSISTING OF:					
1 STRAP CRATE (50 FT. PLYWOOD MAST)	11'	16 1/2"	12"	152#	
1 STAYS BOX	23 3/4"	16 3/4"	12 1/4"	121#	
1 SPARE PARTS BOX	27"	13 1/2"	11"	45#	
1 POWER UNIT PE-75	36"	19 1/2"	26 1/2"	322#	
COMBINED WEIGHT OF COMPONENTS:				1020 LBS.	
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					



RADIO SET SCR-624, SET UP FOR OPERATION.

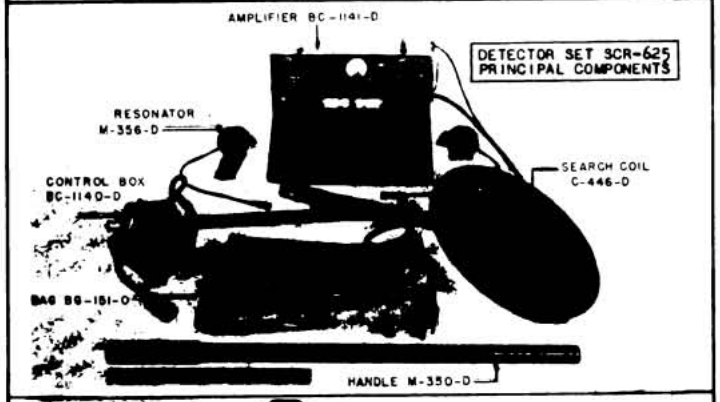
THIS SHEET IS CLASSIFIED: RESTRICTED

INSTRUCTIONAL LITERATURE:	STATUS:	STANDARD 22 Sep 42
TM 11-1122 (SCR-625-A,B,C,D,E)	CHANGE IN STATUS:	

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

NOMENCLATURE DESIGNATION:

SCR-625



PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc)

NUMBER OF CRYSTALS:

PRESET FREQUENCIES: 1 Kc.

ANTENNA:

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 2 EA. BATTERY BA-30; 1 EA. BATTERY BA-38.

SIMILAR SETS: NONE

POWER OUTPUT: (WATTS)

TUBES: (TYPE AND NUMBER) 1EA. 106GT; 2 EA. VT-146 (1N5GT)

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: USED FOR DETECTING ANTI-TANK AND ANTI-PERSONNEL LAND MINES.

RANGE: ABOUT 2 FT.

TO COMMUNICATE WITH:

TO REPLACE IN PART:

TRANSPORTATION: PORTABLE BY 1 MAN.

TYPE OF SIGNAL: VISUAL INDICATION ON METER; AUDIBLE INDICATION IN RESONATOR WORN ON LEFT SHOULDER OF USER.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
AMPLIFIER BC-1141	14 "	6 "	5"	5#	UNCLASSIFIED
CHEST CH-156	28 1/4"	8 1/4"	15"	23#	UNCLASSIFIED
CONTROL BOX BC-1140	7 "	7 "	5"	3#	UNCLASSIFIED
HANDLE M-350	28 1/2"	1 1/8" DIAMETER		12oz.	UNCLASSIFIED
RESONATOR M-356	3 "	3" DIAMETER		3oz.	UNCLASSIFIED
SEARCH COIL C-446	1 "	13" DIAMETER		3#	UNCLASSIFIED
COMBINED WEIGHT OF COMPONENTS				58 1/2#	
COMBINED VOLUME OF COMPONENTS	28 1/4"	8 1/4"	15"	WHEN PACKED IN CH-156	
SHIP TONNAGE					

SCR-628

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: STANDARD 29 Sep 41

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: TM 11-620

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) 27 - 38.9

NUMBER OF CRYSTALS: 120

PRESET FREQUENCIES: 10 INSTANTANEOUS SELECTION WHILE MOVING OR HALTED.

ANTENNA: FISHPOLE TYPE, VEHICULAR.

TUNING: (MO OR XTAL) XTAL

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 12 VOLT VEHICULAR BATTERY.

SIMILAR SETS: SCR-528 (DIFFERENT FREQUENCY) SCR-608 BUT WITH ONLY ONE RECEIVER.

POWER OUTPUT: (WATTS) 35

TUBES: (TYPE AND NUMBER)

1 BC-683 - 3 6AC7, 1 6J5, 2 12SQ7, 1 6H6, 1 6V6GT, 2 6SL7GT

1 BC-684 - 7 1619, 1 1624

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: CWS: SMOKE GEN CO; FA: AA AND AT WARNING AND CONTROL NETS, BN. C.P., FIRE CONTROL AND FIRE-DIRECTION NETS AND INTRA-BN COMMUNICATION.

RANGE: (MILES) MOVING - 10 MILES; HALTED - 15 MILES

TO COMMUNICATE WITH: SCR-608; SCR-609; SCR-610; SCR-628.

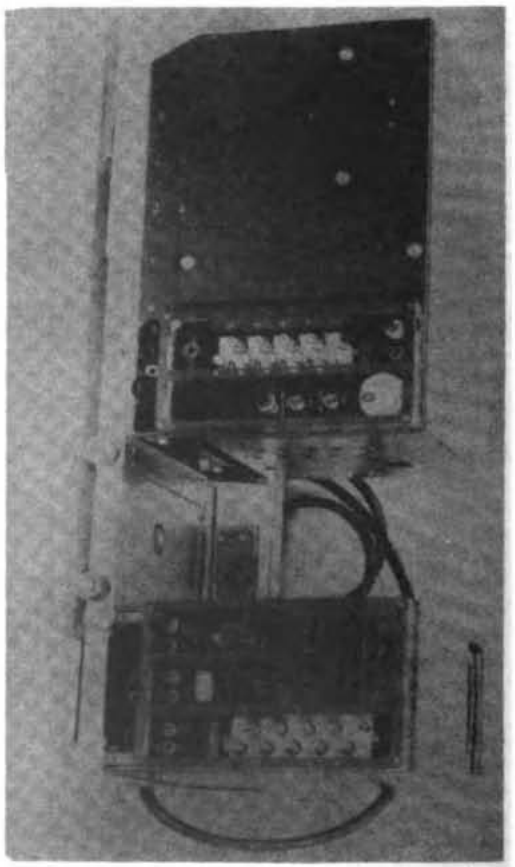
TO REPLACE IN PART: SCR-194; SCR-245.

TRANSPORTATION: TRANSPORTED & OPERATED IN VEHICLES.

TYPE OF SIGNAL: VOICE (FM)

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
TRANS. BC-684 RECVR. BC-683 MOUNTING FT-237 ANTENNA MAST BASE MP-48 REMOTE CONTROL UNIT RM-29.	14"	14.5"	34"	190#	
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME:					
SHIP TONNAGE:					

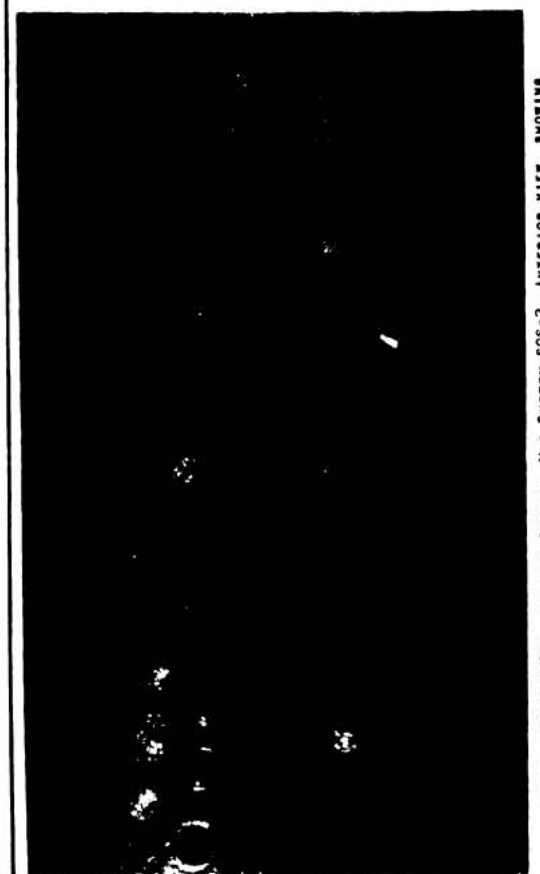


RADIO SET SCR-628

FOR OPERATION ON VOICE BY PERSONS WHO ARE NOT RADIO SPECIALISTS.

INSTRUCTIONAL LITERATURE:	STATUS:		NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION:
	CHANGE IN STATUS:			

SCR-632



RADIO SET SCR-632. PART OF CONTROL NET SYSTEM SCS-2. INTERIOR VIEW, SHOWING SIX RADIO TRANSMITTERS BC-640, AND MONITORING EQUIPMENT RC-80 INSTALLED IN DUGOUT.

SAME AS RADIO SET SCR-562 EXCEPT HOUSED IN FIXED BUILDINGS NOT PART OF THE RADIO SET. A QUANTITY OF SCR-562 SETS WERE DEMOBILIZED AS SCR-632 AT THE REQUEST OF THE AAF.

SIX (6) INCOMING WIRE LINES ARE BROUGHT INTO THE CONTROL UNIT RM-27 (MONITOR UNIT) AND THENCE TO THE INPUT OF THE TRANSMITTER BC-640. THE RM-27 HAS PROVISIONS FOR PATCHING THE INCOMING LINES TO THE 6 TRANSMITTERS, MONITORING AND ADJUSTING THE VOLUME OF THE INCOMING SIGNAL TO THE TRANSMITTER, AND INTERCOMMUNICATION WITH THE OPERATIONS BLOCK.

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 109 - 156

NUMBER OF CRYSTALS: 5 IN USE (FULL CRYSTAL COMPLEMENT WILL BE DETERMINED BY AAF).

PRESET FREQUENCIES: 5

ANTENNA: VERTICAL DIPOLE MOUNTED ON 90' MAST.

TUNING: (MO OR XTAL) XTAL.

SENSITIVITY: SELECTIVITY:

POWER SOURCE: POWER UNIT PE-99 (7½ KVA 110V 3 PHASE 60 CYCLE); ALSO PROVISION FOR USING COMMERCIAL POWER FROM 110V 2 WIRE SERVICE.

SIMILAR SETS: SCR-562

POWER OUTPUT: (WATTS) 50 (APPROXIMATELY)

TUBES: (TYPE AND NUMBER) 6-BC-640 TRANS: 8 EACH, (48) 523; 4 EACH (24) 6J5; 3 EACH (18) 1613; 2 EACH (12) 811; 1 EACH (6) 807; 5 EACH (30) HK24G. 1-OSCILLOSCOPE RCA #155; 1-3AP1/906P1; 2-6C6; 2-80; 1-884. 1-VOLT OHMYST RCA-165; 2-6K6GT; 1-6X5GT.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: VHF RADIO TRANSMITTING STATION FOR GROUND CONTROL OF INTERCEPTOR PURSUIT OPERATIONS. PART OF CONTROL NET SYSTEM SCS-2. PROVIDES 5 INDEPENDENT CHANNELS OF RADIO TRANSMISSION.

RANGE: (MILES) 135 MILES WITH AIRCRAFT AT AN ALTITUDE GREATER THAN 10,000 FT.

TO COMMUNICATE WITH: CONTROL SET SCR-561 BY TELEPHONE AND BY RADIO WITH FIGHTER AIRCRAFT EQUIPPED WITH RADIO SET SCR-522.

TO REPLACE IN PART:

TRANSPORTATION:

TYPE OF SIGNAL: VOICE AND MCW.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
6 TRANSMITTERS BC-640 (1 SPARE)	72"	21"	20"	515#	
2 CONTROL UNITS RM-27	19"	11 3/8"	10 1/2"	29#	
2 POWER UNITS PE-99	55"	28"	50"	1,600#	
8 ANTENNA EQUIPMENT RC-81	12"	28 5/8"	38 1/2"	4#	
4 ANTENNA AN-56 EACH MADE UP:					
Box 1	188"	43 1/2"	25 3/4"	2,000#	
Box 2	76 1/2"	91 1/2"	25 1/2	667#	
Box 3	13 1/2"	5 1/2"	147 1/2"	190#	
Box 4	35 1/2"	26 1/2"	17 1/2"	490#	
Box 5	36 5/8"	34 3/4"	17 1/2"	495#	
COMBINED WEIGHT OF COMPONENTS:				24,500#	
COMBINED VOLUME OF COMPONENTS:				900 CU. FT.	
SHIP TONNAGE:				12 1/4 T.	

THIS SHEET IS CLASSIFIED: **RESTRICTED**

SCR-633

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS:

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE:

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 100-156

NUMBER OF CRYSTALS: 6 IN USE (FULL XTAL COMPLEMENT TO BE DETERMINED BY AAF).

PRESET FREQUENCIES: 6 RECEIVERS. BC-639 CONTAINED IN SCR-563 ARE NOT CRYSTAL CONTROLLED BUT ARE CALIBRATED BY MEANS OF THE FREQUENCY METER BC-638. THE FREQUENCY METER IS SET UP FOR 5 CRYSTALS WHICH ARE SELECTED BY MEANS OF A 5-POINT SWITCH. 1 XTAL IS NEEDED FOR EACH FREQUENCY.

ANTENNA: VERTICAL DIPOLES MOUNTED ON 90' MAST.

TUNING: (MO OR XTAL) VARIABLE

SENSITIVITY: 2-3 v/METER 50 MW OUTPUT.

SELECTIVITY: 2 TIMES DOWN LESS 100 Kc. 1000 TIMES DOWN MORE 350 Kc.

POWER SOURCE: POWER UNIT PE-99 (7½ KVA 110V 3 PHASE 60 CYCLE); ALSO HAS PROVISIONS FOR USING COMMERCIAL POWER FROM A 110V 2 WIRE SERVICE.

SIMILAR SETS: SCR-563

POWER OUTPUT: (WATTS) 1 (DISTORTED) ½ W 10% DISTORTION.

TUBES: (TYPE AND NUMBER) RECEIVING SET FOR SCS-2.
6 BC-639-A: 18 9003; 6 9002; 2 6SG7; 6 6K6GT; 6 6SQ7.
1 BC-638-A: 1 5V4G; 1 9002; 2 9003; 1 6L5G; 1 6E5;
1 6SK7. 6RA-42-A: 6 5V4G.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: VHF RADIO RECEIVING STATION FOR GROUND CONTROL OF INTERCEPTOR PURSUIT OPERATIONS. PART OF CONTROL NET SYSTEM SCS-2. PROVIDES 5 CHANNELS OF RADIO RECEIVING.

RANGE: (MILES) DETERMINED BY OUTPUT OF AIRBORNE TRANSMITTER.

TO COMMUNICATE WITH: CONTROL SET SCR-561 BY TELEPHONE AND BY RADIO WITH FIGHTER AIRCRAFT EQUIPPED WITH RADIO SET SCR-522.

TO REPLACE IN PART:

TRANSPORTATION:

TYPE OF SIGNAL: RECEIVES VOICE, TONE MODULATED SIGNAL AND CW.

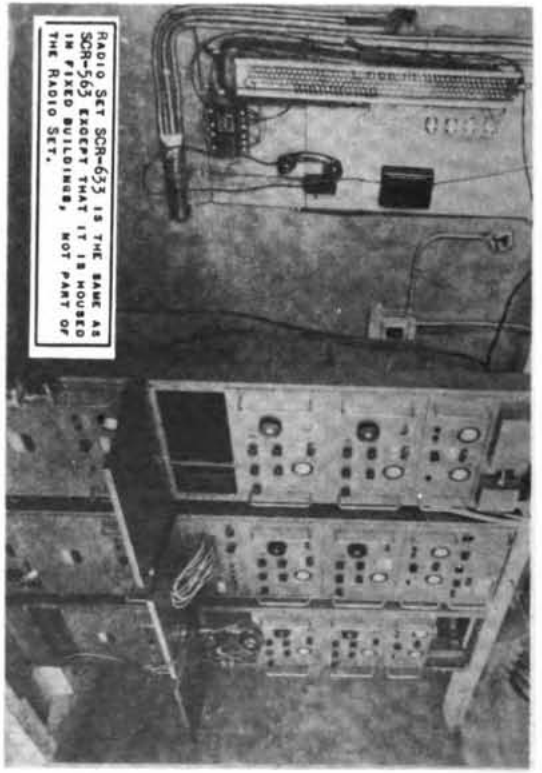
PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
6 RECEIVERS BC-639 (1 SPARE)	10 1/2"	19"	13 1/4"	36#	
1 CONTROL UNIT RM-23	5"	19"	8 1/2"	18#	
8 ANTENNA EQUIPMENT RC-81	12"	28 1/2"	38 1/2"	4#	
1 POWER UNIT PE-99	55"	28"	50"	1600#	
1 FREQUENCY METER BC-638	11 1/2"	19"	7"	35#	
6 RECTIFIER UNITS RA-42 (1 SPARE)	7"	19"	8 1/2"	26#	
3 SOCKET PANEL PN-4	10 1/2"	19"	3 1/8"	7#	
1 FUSE PANEL PN-15	5"	19"	5"	2#	
4 ANTENNA AN-56 EACH MADE UP: Box 1	188"	43 1/2"	25 3/4"	2000#	
Box 2	76 1/2"	91 1/2"	23 1/2"	667#	
Box 3	13 1/2"	5 1/2"	147 1/2"	190#	
Box 4	35 1/2"	26 1/2"	17 1/2"	490#	
Box 5	36 5/8"	34 3/4"	17 1/2"	495#	
COMBINED WEIGHT OF COMPONENTS:				19,500#	
COMBINED VOLUME OF COMPONENTS:				700 cu. ft.	
SHIP TONNAGE:				9 3/4 T.	

RADIO SET SCR-633. PART OF CONTROL NET SYSTEM SCS-2

Showing Front 3/4 View of Radio Receiving Equipment and Communications Panel installed in Dugout Shelter

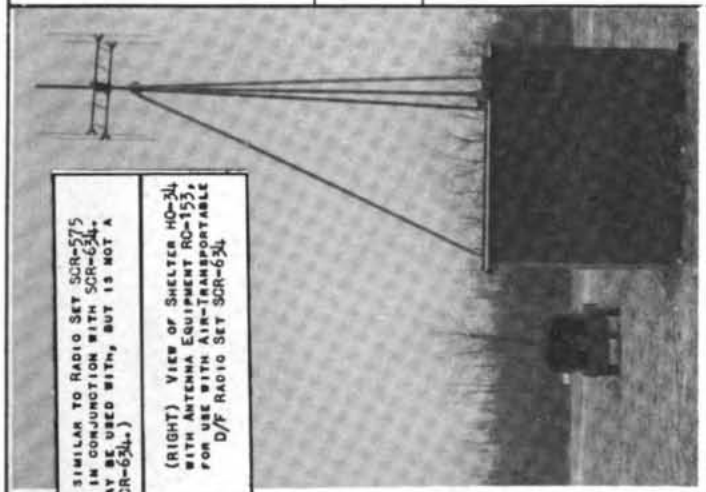
WAC 9-25-43 SIGNAL CORPS GROUND SIGNAL SERVICE 9435



RADIO SET SCR-633 IS THE SAME AS SCR-563 EXCEPT THAT IT IS HOUSED IN FIXED BUILDINGS, NOT PART OF THE RADIO SET.

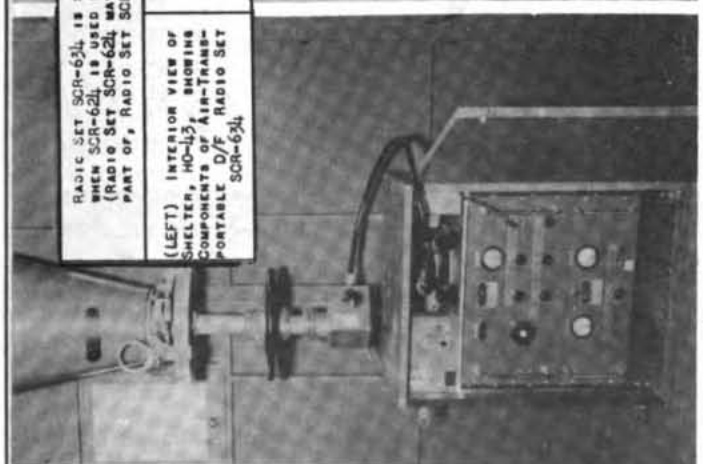
THIS SHEET IS CLASSIFIED: **RESTRICTED**

INSTRUCTIONAL LITERATURE:	STATUS:		NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION: **SCR-634**
	CHANGE IN STATUS:			



RADIO SET SCR-634 IS SIMILAR TO RADIO SET SCR-575 WHEN SCR-624 IS USED IN CONJUNCTION WITH SCR-634. (RADIO SET SCR-624 MAY BE USED WITH, BUT IS NOT A PART OF, RADIO SET SCR-634.)

(RIGHT) VIEW OF SHELTER HO-34 WITH ANTENNA EQUIPMENT RC-153, FOR USE WITH AIR-TRANSPORTABLE D/F RADIO SET SCR-634



(LEFT) INTERIOR VIEW OF SHELTER, HO-43, SHOWING COMPONENTS OF AIR-TRANSPORTABLE D/F RADIO SET SCR-634

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 100 - 156

NUMBER OF CRYSTALS: None

PRESET FREQUENCIES: By Receiver Calibration Dial. Transmitter BC-655 (Target).

ANTENNA: Adcock-Directional D/F with sensing.

TUNING: (MO OR XTAL) Variable.

SENSITIVITY: 2-3 Microvolts/Meter at 50 MW

SELECTIVITY: 2 times down less 100 Kc, 1,000 times down more than 350 Kc.

POWER SOURCE: Power Unit PE-75 2.5 KVA, 110 volts single phase 60 cycles or Power Unit PE-214, 300 Watt 120 volts, Single Phase 60 cycle (Both gasoline engines).

SIMILAR SETS: SCR-565

POWER OUTPUT: (WATTS) 1 (Distorted) 1/2 (10% distortion).

TUBES: (Type and Number)

Receiver BC-639:	Rectifier RA-42
1 6SQ7	1 5V4G
1 6K6GT	
1 9002	Transmitter: BC-655, Target
3 9003	1 958
4 6SG7	1 1A5GT

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: Radio Set SCR-634-A is an air transportable self-contained field operated Radio Direction Finder (D/F) station used primarily with other units of the same kind as a fixed D/F station or as a home D/F station when Radio Set SCR-624 is added. All equipment is housed in Shelter HO-34-A.

RANGE: Determined by output of Airborne Transmitter.

TO COMMUNICATE WITH: Fighter Aircraft Equipped with Radio Set SCR-522.

TO REPLACE IN PART:

TRANSPORTATION: Designed as an Air Transportable VHF Direction Finder Station.

TYPE OF SIGNAL: Receives Voice, Tone Modulated Singal and C.W.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
1 Receiver BC-639	10 1/2"	19"	13 1/4"	36#	
1 Rectifier Unit RA-42	7 "	19"	8 1/2"	26#	
1 Antenna Equipment RC-153-B				298#	
1 Transmitter BC-655 (Target)	10 1/2"	9"	6 3/4"	13#	
1 Power Unit PE-75 or PE-214	40 "	19"	27 1/2"	300#	
1 Shelter HO-34	64 "	90"	84 "	625#	
1 Control Unit RM-38	7 3/4"	6 1/2"	6 "	5.5#	
COMBINED WEIGHT OF COMPONENTS:				1,035 #	(Approximately)
COMBINED VOLUME OF COMPONENTS:				311 Cu.	Ft. (Aprox)
SHIP TONNAGE:				1,035 Air 1 Ton when Export Packed	Transportable

SCR-637

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS:

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE:

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 100 - 156

NUMBER OF CRYSTALS: In use: 2 in transmitter station 2 in receiver station (full xtal complement to be determined by AAF).

PRESET FREQUENCIES: 2 in Transmitter station, 2 in receiver station (frequency meter)

ANTENNA: Vertical dipoles mounted on 50' mast.

TUNING: (MO or XTAL) Transmitters Xtal-Receivers variable.

SENSITIVITY: 2-3 v/meter @ 50 MW.

SELECTIVITY: 2 times down less 100 Kc. 1000 times down more 350 Kc.

POWER SOURCE: Power Unit PE-99 (7½ KVA 110V 3 phase 60 cycle); also has provision for operation on commercial power from a 110V 2 wire service.

SIMILAR SETS: SCR-573, SCR-574; also SCR-567.

POWER OUTPUT: (Watts) 50 watts from transmitter ½ watt receiver.

TUBE: (Type and Number) SEE NOTE *

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: Forward relay station for ground control of interceptor pursuit operations. Part of Control Net System SCS-2 provides 2 independent channels receiving and transmitting for extending the range of Radio Sets SCR-562 and SCR-563 when used as part of the fighter control system.

RANGE: (Miles) 135 miles with aircraft at 10,000 ft.

TO COMMUNICATE WITH: Control Set SCR-561 by telephone and by radio with Fighter Aircraft equipped with Radio Set SCR-522.

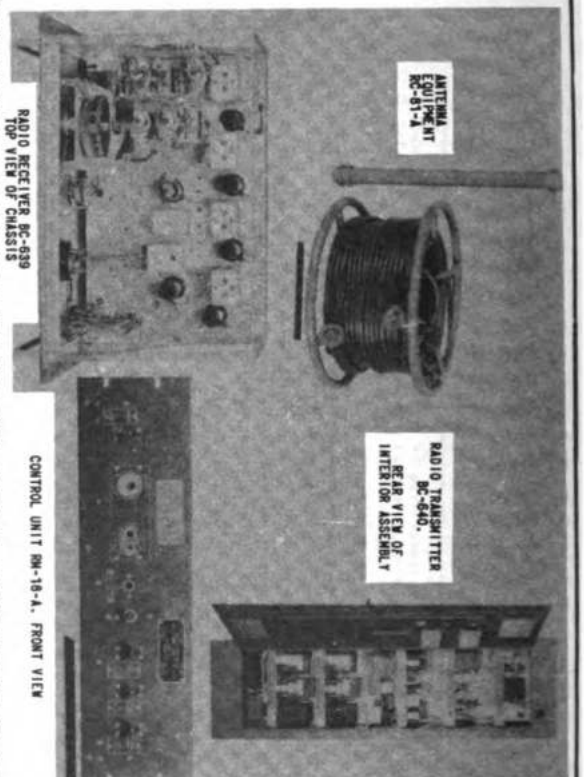
TO REPLACE IN PART:

TRANSPORTATION: Fixed

TYPE OF SIGNAL: Voice and MCW.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
2 Power Unit PE-99 each	55"	28"	50"	1,600 #	
2 Transmitters BC-640 each	22"	21"	20"	515 #	
2 Receivers BC-639 each	10 1/2"	19"	13 1/2"	36 #	
1 Frequency Meter BC-638	11 1/2"	19"	7	35 #	
2 Antenna AN-57 each	Total 10	0 ow. ft.		2,500 #	
4 Antenna Equipment RC-81 each	12"	28 1/2"	38 1/2"	4 #	
2 Control Units RM-18 each	5"	19"	8"	16 #	
2 Amplifier BC-686 each	12"	19"	11"	36 #	
2 Rectifier RA-42	7"	19"	8 1/2"	26 #	
1 Fuse Panel PN-15	5"	19"	5"	24 #	
1 Fuse Panel PN-5	4 3/4"	19"	3 1/2"	15 #	
1 Relay Unit BC-685	8 3/4"	19"	14 1/4"	46 #	
COMBINED WEIGHT OF COMPONENTS:				16,000 #	Approximately
COMBINED VOLUME OF COMPONENTS:				900 cu. ft.	Approximately
SHIP TONNAGE:				8 Tons	Approximately



BADIO SET SCR-637 IS THE SAME AS SCR-567 EXCEPT HOUSED IN FIXED BUILDINGS NOT PART OF THE SET. A QUANTITY OF RADIO SETS SCR-567 WAS DEMOBILIZED AS RADIO SET SCR-637 AT THE REQUEST OF THE AAF.

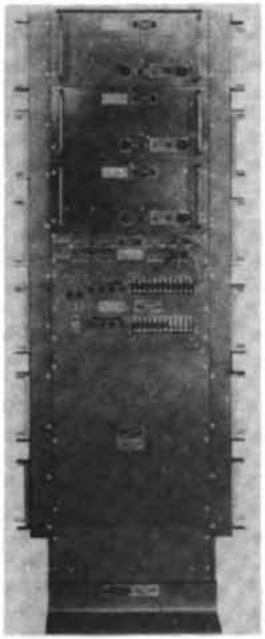
*TUBES: (Type and Number) RA-42: 1-5V4G. BC-686: 3-25L6. BC-638-A: 1-5V4G; 1-9002; 2-9003; 1-6L5G; 1-6E5; 1-6SK7. BC-639-A: 3-9003; 1-9002; 4-6SG7; 1-6K6GT. BC-640: 8-5Z3; 4-6V5; 3-1613; 2-811; 1-807; 5-HK24G; RCA #165 Volt Ohmyst; 2-6K6GT; 1-6X5GT. Supreme Tube Tester #504-A: 1-71-A, 1-Neon Bulb 1/4 watt. GE Tungar Charger: 6RB, 3381: 1-GE Tungar #189048.

INSTRUCTIONAL LITERATURE:	STATUS:	STANDARD 20 Nov 43
	CHANGE IN STATUS:	

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

NOMENCLATURE DESIGNATION:

SCR-642



(LEFT) CONTROL EQUIPMENT FOR SCR-642.

(ABOVE) TELEPHONE REPEATER EE-99. CASE COVERS OPEN SHOWING CONTROL PANEL AND BATTERY COMPARTMENT DOOR

CONTROL UNIT RM-26, ASSEMBLED. SHOWING PLUG PL-198

RADIO SET SCR-642 IS THE SAME AS CONTROL SET SCR-527 EXCEPT THAT IT IS HOUSED IN FIXED BUILDINGS NOT PART OF THE SET.

PART A – TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (MC) THE CONTROL SET SCR-642 IS AN OPERATIONS BLOCK OF A FIGHTER CONTROL SYSTEM AND CONTAINS NO RADIO EQUIPMENT.

NUMBER OF CRYSTALS: NONE

PRESET FREQUENCIES: NONE

ANTENNA: NONE

TUNING: (MO OR XTAL) NONE

SENSITIVITY: SELECTIVITY:

POWER SOURCE: POWER UNIT PE-99 (7½ KVA 110V 3 PHASE 60 CYCLE) ALSO HAS PROVISIONS FOR USING COMMERCIAL POWER FROM A 110V 2 WIRE SERVICE.

SIMILAR SETS: CONTROL SET SCR-572.

POWER OUTPUT: (WATTS)

TUBES: (TYPE AND NUMBER) 3-BC-687; 12-25L6.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: CONTROL SET USED AS AN OPERATIONS BLOCK WHICH PROVIDES THE NECESSARY CONTROL EQUIPMENT AND AUXILLIARIES TO PERMIT SIMULTANEOUS OPERATIONAL CONTROL OF UP TO TWO (2) AIRCRAFT SQUADRONS FOR GROUND CONTROL OF INTERCEPTOR PURSUIT OPERATIONS.

RANGE: (MILES) MINIMUM OF 135 MILES WITH AIRCRAFT AT 10,000 FT.

TO COMMUNICATE WITH: RADIO SET SCR-573 OR SCR-643, SCR-574, OR SCR-644, SCR-575 OR SCR-645 BY TELEPHONE AND BY RADIO WITH FIGHTER AIRCRAFT EQUIPPED WITH SCR-522.

TO REPLACE IN PART:

TRANSPORTATION:

TYPE OF SIGNAL:

PART C – PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
3 CONTROL UNITS RM-25 EACH	20 "	11 1/4"	11 1/4"	44#	
2 CONTROL UNITS RM-26 EACH	11 7/8"	9 "	8 "	20#	
1 CONTROL UNIT RM-28	14 1/2"	12 "	7 "	35#	
3 SWITCHBOARDS BD-72 EACH	12 "	12 "	24 "	68#	
20 TELEPHONE REPEATERS EE-99	8 "	14 1/2"	11 1/2"	47#	
3 RELAY UNIT BC-687	9"	12 1/2"	9"	35#	
COMBINED WEIGHT OF COMPONENTS:				4,000#	
COMBINED VOLUME:				200 CU. FT.	
SHIP TONNAGE:				2T	

SCR-643

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: STANDARD 20 Nov 43

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE:

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 100-156

NUMBER OF CRYSTALS: 2 IN USE (FULL XTAL COMPLEMENT TO BE DETERMINED BY AAF).

PRESET FREQUENCIES: 2
ANTENNA: VERTICAL DIPOLE MOUNTED ON 76' MAST.
TUNING: (MO OR XTAL) XTAL

SENSITIVITY: SELECTIVITY:

POWER SOURCE: POWER UNIT PE-99 (7½ KVA 110V 60 CYCLE 3 PHASE); ALSO HAS PROVISIONS FOR USING COMMERCIAL POWER FROM A 110V 2 WIRE SERVICE.

SIMILAR SETS: TRANS. STATION OF SCR-567.

POWER OUTPUT: (WATTS) 50

TUBES: (TYPE AND NUMBER) SCR-643 USES:

16-523	2-606
8-645	2-80
6-1613	1-884
4-811	1-3AP1/906P1
2-807	2-6K6 GT
10-HK24	1-6 X 5 GT.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: TWO CHANNEL TRANS. STATION FOR THE GROUND CONTROL OF INTERCEPTOR PURSUIT OPERATION. PART OF CONTROL NET SYSTEM SCS-3.

RANGE: (MILES) MINIMUM OF 135 MILES WITH AIRCRAFT AT 10,000 FT.

TO COMMUNICATE WITH: CONTROL SET SCR-572 OR SCR-642, RADIO SET SCR-574 OR SCR-644, SCR-575 OR SCR-645 BY TELEPHONE AND BY RADIO WITH FIGHTER AIRCRAFT EQUIPPED WITH RADIO SET SCR-522.

TO REPLACE IN PART:

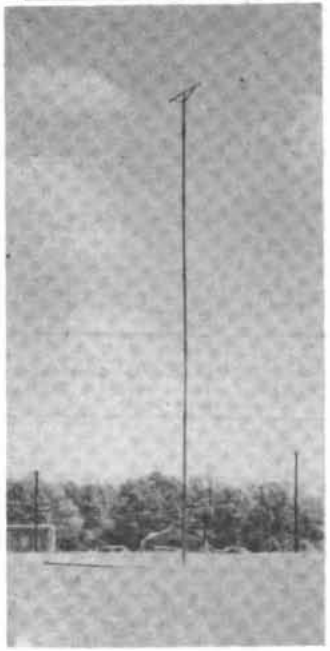
TRANSPORTATION:

TYPE OF SIGNAL: TRANSMITS VOICE AND MCW.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
2 TRANS. BC-640	72"	21"	20"	515	RESTRICTED
1 CONTROL UNIT RM-27	11 3/8	19	10 1/2	29	RESTRICTED
1 ANTENNA AN-86	PACKED IN 25 CU.FT.	5 PACKAGES APPROX.		743	RESTRICTED
2 ANTENNA EQUIP. RC-81	12	28	38	4	RESTRICTED
COMBINED WEIGHT OF COMPONENTS:				3,000# APPROX.	
COMBINED VOLUME:				450 CU.FT. APPROX.	
SHIP TONNAGE:				1 1/2 T APPROX.	

ANTENNA AN-86 FOR USE WITH NET CONTROL SYSTEM, SCS-3. (SHOWING MAST ERECTED)



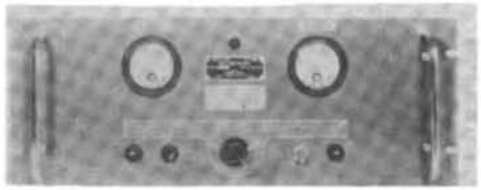
RADIO TRANSMITTER BC-640 REAR VIEW OF INTERIOR ASSEMBLY

SAME AS RADIO SET SCR-573 EXCEPT HOUSED IN BUILDING NOT PART OF THE RADIO SET. A QUANTITY OF RADIO SET SCR-573 WAS DEMOBILIZED TO RADIO SET SCR-643 AT THE REQUEST OF THE AAF. THIS SET CONTAINS 2 TRANSMITTERS BC-640 FOR SIMULTANEOUS OPERATION. SIMILAR IN OPERATION TO RADIO SET SCR-562 EXCEPT THAT IT CONTAINS 2 TRANSMITTERS BC-640, INSTEAD OF 6.

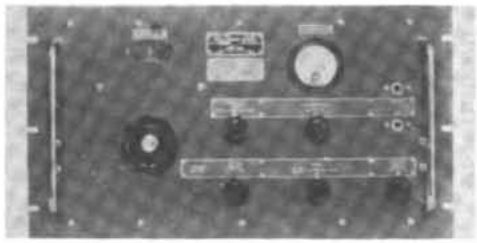
INSTRUCTIONAL LITERATURE:	STATUS:	STANDARD 20 Nov 43
	CHANGE IN STATUS:	

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

NOMENCLATURE DESIGNATION: **SCR-644**



RECTIFIER RA-42. FRONT VIEW



RADIO RECEIVER BC-639. FRONT VIEW

FREQUENCY METER BC-638. FRONT VIEW SHOWING CRYSTAL COMPARTMENT COVER REMOVED

RADIO SET SCR-644 IS THE SAME AS SCR-574 EXCEPT HOUSED IN BUILDINGS NOT PART OF THE RADIO SET. A QUANTITY OF RADIO SETS SCR-574 WAS DEMOBILIZED AS RADIO SETS SCR-644 AT THE REQUEST OF THE AAF.

PART A – TECHNICAL CHARACTERISTICS

(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 100-156

NUMBER OF CRYSTALS: 2 IN USE (FULL COMPLEMENT TO BE DETERMINED BY AAF).

PRESET FREQUENCIES: VARIABLE (DIAL SETTING CHECKED WITH CRYSTAL CONTROLLED FREQUENCY METER.)

ANTENNA: VERTICAL DIPOLE MOUNTED ON 76' MAST.

TUNING: (MO OR XTAL)

SENSITIVITY: 2-3MV/METER AT 50 MW SIGNAL RATIO 10 TO 1.

SELECTIVITY: 2 TIMES DOWN LESS 100 Kc. 1000 TIMES DOWN MORE 350 Kc.

POWER SOURCE: POWER UNIT PE-99 (7½ KVA 110V 3 PHASE 60 CYCLE); ALSO HAS PROVISIONS FOR USING COMMERCIAL POWER FROM A 110V 2 WIRE SERVICE.

SIMILAR SETS: RECEIVER STATION OF SCR-567.

POWER OUTPUT: (WATTS) RECEIVER BC-639 1 WATT DISTORTED ½ W 10% DISTORTION.

TUBES: (TYPE AND NUMBER) BC-638: 1-6SK7; 1-9002; 2-9003; 1-5V4G; 1-6L5G; 1-6E5. BC-639: 1-9002; 3-9003; 1-6SQ7; 1-6K6GT; 4-6SQ7. BC-686: 3-25L6. RA-42: 1-5V4G.

PART B - TACTICAL CHARACTERISTICS

(CLASSIFICATION: RESTRICTED)

USE: TWO CHANNEL RECEIVER STATION FOR GROUND CONTROL OF INTERCEPTOR PURSUIT OPERATIONS. PART OF CONTROL NET SYSTEM SCS-3.

RANGE: (MILES) MINIMUM OF 135 MILES WITH AIRCRAFT AT 10,000 FT.

TO COMMUNICATE WITH: CONTROL SET SCR-572 OR SCR-642, RADIO SET SCR-573 OR SCR-643 BY TELEPHONE AND BY RADIO WITH FIGHTER AIRCRAFT EQUIPPED WITH SCR-522.

TO REPLACE IN PART:

TRANSPORTATION:

TYPE OF SIGNAL: RECEIVES VOICE, TONE MODULATED AND CW.

PART C – PRINCIPAL COMPONENTS

(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
2 RECEIVERS BC- 639 EACH	10 1/2"	19"	13 1/2"	36	RESTRICTED
2 RECTIFIERS RA-42 EACH	7	19	8 1/2	26	RESTRICTED
1 FREQUENCY METER BC-638	11 1/2	19	7	35	RESTRICTED
2 CONTROL UNITS RM-18 EACH	5	19	8 3/4	16	RESTRICTED
2 AMPLIFIER BC-686	12	19	11	36	RESTRICTED
1 FUSE PANEL PN-15	5	19	5	24	RESTRICTED
1 FUSE PANEL PN-5	2 1/2	19	4 5/8	15	RESTRICTED
2 FRAMES FM-39 EACH	72	20	3	121	RESTRICTED
1 ANTENNA AN-86	PACKED IN 5 PACKAGES 25 CU.FT.		APPROX.	743	RESTRICTED
2 ANTENNA EQUIPMENT RC-81	12	28 1/2	38 1/2	4	RESTRICTED
COMBINED WEIGHT OF COMPONENTS:				2,500#	APPROX.
COMBINED VOLUME:				400 CU.FT.	APPROX.
SHIP TONNAGE:				1 1/4 T	APPROX.

THIS SHEET IS CLASSIFIED: **RESTRICTED**

SCR-645

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS:

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE:

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 100- 156

NUMBER OF CRYSTALS: 4 IN BC-624; 4 IN BC-625; 5 IN BC-638.

PRESET FREQUENCIES: 4 EACH RECEIVING AND TRANSMITTING.

ANTENNA: ROTATABLE ADCOCK D/F WITH SENSE FACILITIES.

TUNING: (MO OR XTAL) XTAL ON COMMUNICATIONS R&T. VARIABLE ON D/F RECEIVER.

SENSITIVITY: 2-3 MICROVOLTS/METER.

SELECTIVITY: 2 TIMES DOWN LESS THAN 100 Kc. 1000 TIMES DOWN MORE THAN 350 Kc.

POWER SOURCE: POWER UNIT PE-99 AND STORAGE BATTERIES, ALSO COMMERCIAL POWER 110 VOLT 2 WIRE.

SIMILAR SETS: SCR-566 AND SCR-575

POWER OUTPUT: (WATTS) COMMUNICATIONS TRANSMITTER 6 WATTS MINIMUM.

TUBES: (TYPE AND NUMBER) BC-639: 1-6SQ7; 1-6K6GT; 1-9002; 3-9003; 4-6SG7. RA-42: 1-5V4G. BC-638: 1-9002; 2-9003; 1-5V4G; 1-6L5G; 1-6SK7; 1-6E5. BC-624: 1-9002; 3-9003; 1-12J5GT; 1-12C8; 1-12AH7GT; 3-12SG7. BC-625: 2-832; 3-12A6; 1-6G6G; 2-6SS7. BC-687 4-25L6GT. RC-93: 1-958; 1-1A5GT.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: MOBILE DIRECTION FINDING STATION FOR GROUND CONTROL OF INTERCEPTOR PURSUIT OPERATIONS. PART OF CONTROL NET SYSTEM SCS-3. USED AS D/F STATION FOR OBTAINING BEARING ON AIRCRAFT EQUIPPED WITH RADIO SET SCR-522 FOR PURPOSES OF HOMING AND D/F PLOTTING.

RANGE: (MILES) MINIMUM OF 135 MILES WITH AIRCRAFT AT 10,000 FT.

TO COMMUNICATE WITH: CONTROL SET SCR-572 OR SCR-642. RADIO SET SCR-573 OR SCR-643 BY TELEPHONE AND BY RADIO WITH FIGHTER AIRCRAFT EQUIPPED WITH SCR-522.

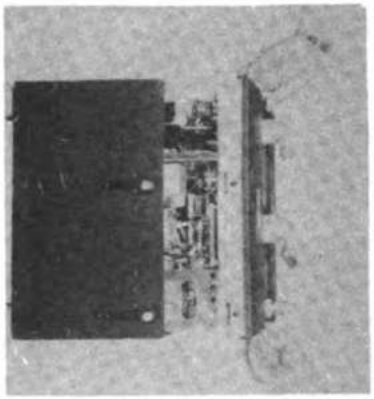
TO REPLACE IN PART: NONE

TRANSPORTATION: FIXED.

TYPE OF SIGNAL: RECEIVES VOICE, TONE MODULATED AND CW. TRANSMITS VOICE MODULATION.

PART C- PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

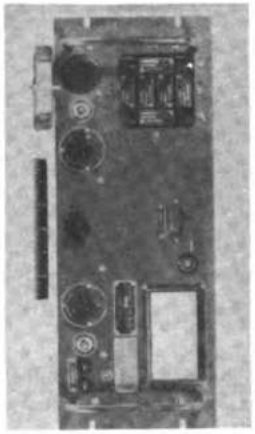
ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
2 RECEIVERS BC-639 EACH	10 1/2"	19"	13 1/2"	36#	
2 RECTIFIERS RA-42 EACH	7 "	19"	8 1/2"	26#	
1 FREQUENCY METER BC-638	11 1/2"	19"	7"	35#	
1 RECEIVER BC-624	6"	15 1/2"	9"	14 1/2#	
1 TRANSMITTER BC-625	6"	15 1/2"	9"	16 1/4#	
1 ANTENNA EQUIPMENT RC-153				150 #	
1 OSCILLATOR TEST EQUIPMENT RC-93	10 1/2"	9 "	6 3/4 "	12#	
1 DYNAMOTOR UNIT PE-94	7"	13"	9"	36#	
1 FUSE PANEL PN-15	5"	19"	5"	24#	
1 FUSE PANEL PN-5	2 1/2"	19"	4 5/8"	15#	
1 DYNAMOTOR UNIT PE-100	6 "	19"	10 1/2"	23#	
1 CONTROL UNIT RM-18	5"	19"	8 3/4"	16#	
1 CONTROL PANEL PN-25	6 1/4"	19"	7"	16#	
1 RELAY UNIT BC-687	9"	19"	12 1/2"	46#	
1 TOWER TR-17	PACKED IN 12 BOXES		1983 CU.FT	21,146	
1 SHELTER HO-3	24"	60"	72"	626	
COMBINED WEIGHT OF COMPONENTS:				24,000#	APPROXIMATELY
COMBINED VOLUME OF COMPONENTS:				2,200 CU. FT. APPROX.	
SHIP TONNAGE:				12 TON	APPROXIMATELY



RADIO RECEIVER BC-624, RADIO TRANSMITTER BC-625 SHOWING PROCEDURE OF REMOVING CASE.

FUSE PANEL PN-15. FRONT VIEW

RADIO SET SCR-645 IS THE SAME AS SCR-575 EXCEPT HOUSED IN TOWER TR-17, INSTEAD OF IN VEHICLE. A QUANTITY OF SCR-575-SETS WERE DEMOBILIZED AS SCR-645 AT THE REQUEST OF THE ARMY AIR FORCES.



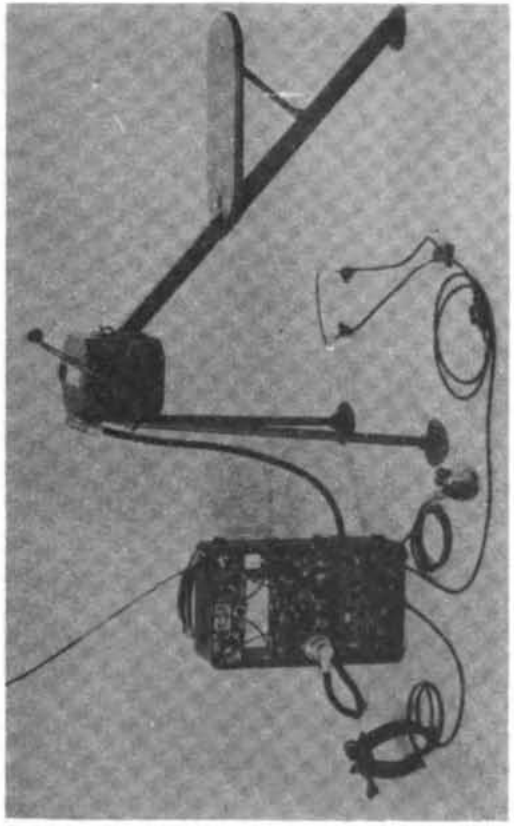
FREQUENCY METER BC-638. FRONT VIEW SHOWING CRYSTAL COMPARTMENT COVER REMOVED.

RECTIFIER RA-42. FRONT VIEW

THIS SHEET IS CLASSIFIED: **RESTRICTED**

INSTRUCTIONAL LITERATURE:	STATUS:	STANDARD 28 JUL 43	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION:
	CHANGE IN STATUS:			

SCR-694



COMPONENTS OF RADIO SET ACR-694, SET UP FOR FIELD OPERATION SHOWING GENERATOR AND STEEL TAPE ANTENNA.

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) 3.8 - 6.5

NUMBER OF CRYSTAL: 2

PRESET FREQUENCIES: 2

ANTENNA: 15' whip AN-123, 124.

TUNING: (MO OR XTAL) Both

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 6 or 12 V vehicle battery with Vibrator Unit PE-237, Hand Generator GN-57 for field use or Battery BA-48 for Recvr. only.

SIMILAR SETS:

POWER OUTPUT: (Watts) Vehicle operation A1-25, A3-7; Field operation A1-20, A3-5.

TUBES: (Type and Number) 1 Trans.: 2 3A4; 1 HY65; 1 TS70; 1 VR105-30. 1 Recvr.: 3 1T4; 1 1R5; 1 1S5; 1 3Q4.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: Infantry; Parachute; Mountain & Airborne Troops.

RANGE: (Miles) Stationary CW-30; Voice-15; moving CW-15; Voice-7.

TO COMMUNICATE WITH: SCR-284; SCR-511; SCR-536.

TO REPLACE IN PART: SCR-284.

TRANSPORTATION: Vehicle or man pack.

TYPE OF SIGNAL: CW; Voice (AM).

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS			WEIGHT	CLASSIFICATION
	HEIGHT	WIDTH	DEPTH		
Trans. & Recvr. BC-1306 Vibrator Unit PE-237 Generator GN-57	14 1/2"	9"	4 - 5"	27# (Recvr. & Trans. only)	
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME:					
SHIP TONNAGE:					

SCR-704

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: STANDARD 2 Nov 43

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE:

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) 1.25 - 40

NUMBER OF CRYSTALS: HAS CRYSTAL FILTER

PRESET FREQUENCIES: NONE

ANTENNA:

TUNING: (MO OR XTAL) DOES NOT APPLY

SENSITIVITY: 1 MICROVOLT INPUT TO RECEIVER.

SELECTIVITY: VARIABLE

POWER SOURCE: 115/230 VOLT 50 - 60 CYCLES AC

SIMILAR SETS: SCR-244

POWER OUTPUT: (WATTS) DOES NOT APPLY.

TUBES: (TYPE AND NUMBER) 1 VT-65; 3 VT-66; 3 VT-86; 1 VT-87; 2 VT-90; 1 VT-91; 1 VT-96; 1 VT-116; 3 VT-117.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: INTERCEPT RECEIVER FOR COMMUNICATION AND MONITORING PURPOSES.

RANGE: DOES NOT APPLY.

TO COMMUNICATE WITH:

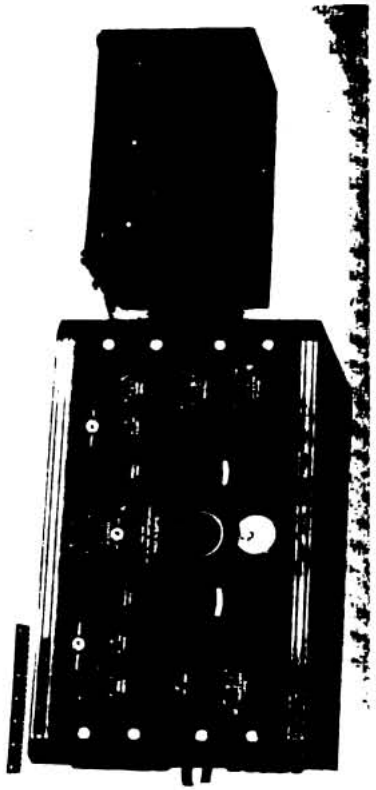
TO REPLACE IN PART:

TRANSPORTATION: IN VEHICLE OR PLANE.

TYPE OF SIGNAL: AM & CW.

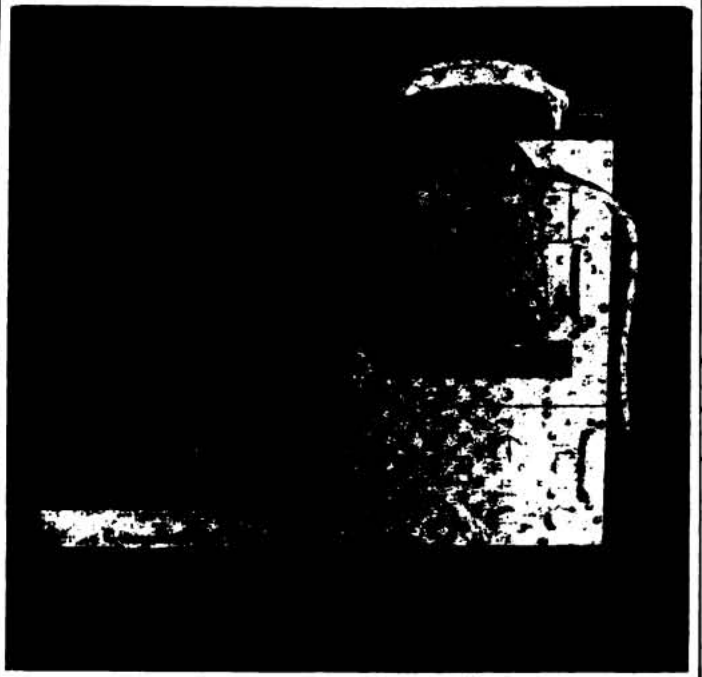
PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS			WEIGHT	CLASSIFICATION
	HEIGHT	WIDTH	DEPTH		
RADIO RECEIVER BC-794	12.25"	23"	16.5"	70#	
POWER SUPPLY UNIT RA-94	8.25"	13"	8.5"	39#	
COMBINED WEIGHT OF COMPONENTS:				109#	
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					



RADIO SET SCR-704. FRONT VIEW, SHOWING COMPONENTS

INSTRUCTIONAL LITERATURE:	STATUS:		NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION: SCR-714
	CHANGE IN STATUS:			



RADIO SET SCR-714-AW. FRONT VIEW. SPARE TUBE COMPARTMENT REMOVED

NO MILITARY REQUIREMENT ADVANCED FOR THIS SET. RECEIVER IS SAME AS USED IN DEVELOPMENT MODEL OF RADIO SET SCR-694, AND WAS PROCURED IN SMALL QUANTITY FOR SPECIAL PURPOSE AS RADIO SET SCR-714-AW.

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

FREQUENCY RANGE: (Mc) 3.8 - 6 (RECEIVER ONLY)

NUMBER OF CRYSTALS: NONE

PRESET FREQUENCIES: NONE

ANTENNA: LONG WIRE

TUNING: (MO OR XTAL)

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 12 V VEHICLE BATTERY OR HAND GENERATOR.

SIMILAR SETS:

POWER OUTPUT: (WATTS)

TUBES: (TYPE AND NUMBER)

4 1T4
1 1R5
1 1S5
1 3Q4

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION: RESTRICTED)

USE: INFANTRY PARACHUTE AIRBORNE TROOPS.

RANGE: (MILES)

TO COMMUNICATE WITH:

TO REPLACE IN PART:

TRANSPORTATION: VEHICLE OR MAN PACK

TYPE OF SIGNAL: CW; VOICE (AM)

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS			WEIGHT	CLASSIFICATION
	HEIGHT	WIDTH	DEPTH		
RADIO RECVR. BC-1137-A MOUNTING FT-382	14"	9"	5"		RESTRICTED
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME:					
SHIP TONNAGE:					

SCR-808

NOMENCLATURE DESIGNATION

NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.

STATUS: STANDARD 10 Jul 42

CHANGE IN STATUS:

INSTRUCTIONAL LITERATURE: TM 11-601

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) 27.0 - 38.9.

NUMBER OF CRYSTALS: 2(1 per Recvr.).

PRESET FREQUENCIES: Any 4 of 120 available.

ANTENNA: Sectional Mast Type. Vehicular.

TUNING: (MO or XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: Vehicular Battery 12 or 24 v.

SIMILAR SETS: SCR-708; SCR-828.

POWER OUTPUT: (Watts) 35

TUBES: (Type and Number) BC-923- Recvrs: 4 Type 6 A C 7; 2 Type 6SJ7 Spl.; 2 Type 12SA7; 4 Type 12SG7; 4 Type 12SJ7; 2 Type 6H6; 4 Type 6SL7GT; 2 Type 6V6GT; 2 Type VR15030; 6 Type 12SC7. BC-924- Trans; 2 Type 6SJ7 Spl.; 1 Type VR-150-30; 1 Type 6AG7; 2 Type 815; 1 Type 6J5; 1 Type 6SL7GT; 1 Type 6V6GT.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: Company and Higher Commanders. Tank Destroyer Command. Field Artillery.

RANGE: (Miles) 10 miles in open vehicle, moving; 5-7 miles in tanks moving.

TO COMMUNICATE WITH: SCR-608; SCR-609; SCR-610; SCR-628; 10 channels to be common with SCR-508; SCR-509; SCR-510.

TO REPLACE IN PART: SCR-608.

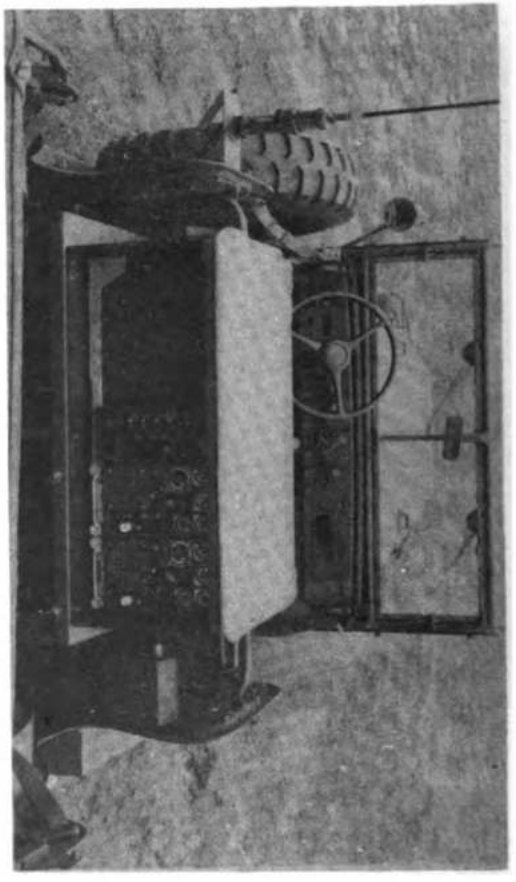
TRANSPORTATION: Motor vehicle in which it is installed.

TYPE OF SIGNAL: FM; Voice only.

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION:)

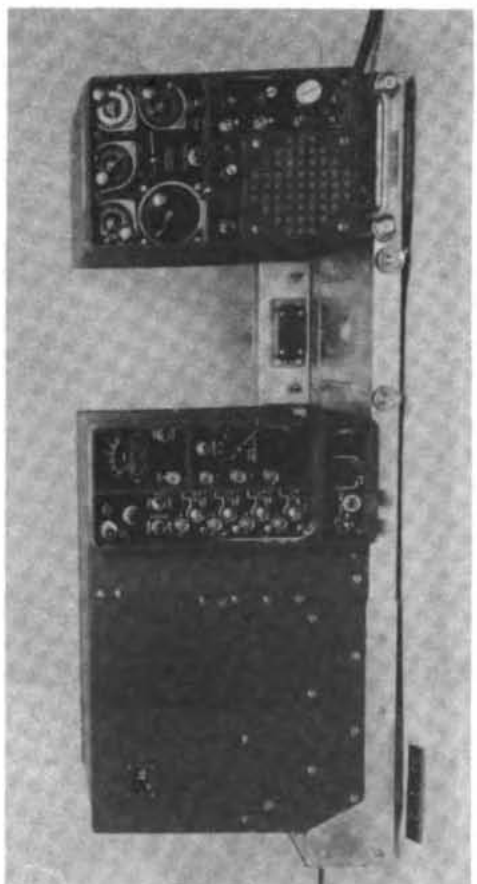
ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
1 Radio Trans. BC-924					
2 Radio Recvr. BC-923					
1 Mounting FT-237					
COMBINED WEIGHT OF COMPONENTS:				225# (Approx.)	
COMBINED VOLUME:	14 1/2"	34"	14"		
SHIP TONNAGE:					

RADIO SET SCR-808. INSTALLED IN DODGE TRUCK, 3/4-TON 4 x 4 COMMAND (RADIO)



Radio Set SCR-808, is similar to Radio Set SCR-608, for which set it is a crystal saver model. However it includes Receiver BC-923 and Transmitter BC-924 in place of BC-683 and BC-684 respectively. Set is crystal calibrated, using only one crystal per receiver instead of the 120 crystals used in SCR-608. It is a vehicular set for operation on voice by persons who are not radio specialists. Components comparable in sizes and be lights to those of Radio Set SCR-608 for which SCR-808 is a possible replacement with advantages resulting from MO operation, using crystal in calibration circuit.

INSTRUCTIONAL LITERATURE: TM 11-601	STATUS: STANDARD 10 Jul 42	NOTE: SEE INDIVIDUAL SECTIONS FOR SECTION CLASSIFICATION.	NOMENCLATURE DESIGNATION: SCR-828
	CHANGE IN STATUS:		



RADIO SET SCR-828, MOUNTED ON BASE FT-237
MASTER OSCILLATOR VERSION OF SCR-628. SEE SCR-808.

PART A - TECHNICAL CHARACTERISTICS
(CLASSIFICATION:)

FREQUENCY RANGE: (Mc) 27 - 38.9

NUMBER OF CRYSTALS: 1 (XTAL CALIB.)

PRESET FREQUENCIES: 4

ANTENNA: SECTIONAL MAST TYPE, VEHICULAR.

TUNING: (MO OR XTAL) MO

SENSITIVITY: SELECTIVITY:

POWER SOURCE: 12 OR 24V. VEHICLE BATTERY. DYNAMOTOR DM-64 & DM-65 FOR 12V INPUT WITH RECVR. & TRANS. RESPECTIVELY. DYNAMOTOR DM-66 & DM-47 FOR 24V INPUT WITH RECVR. & TRANS. RESPECTIVELY.

SIMILAR SETS: SCR-728

POWER OUTPUT: (WATTS) 35

TUBES: (TYPE AND NUMBER) SCR-828: 2-6AC-7/1852; 3-6SJ7SP; 1-12 SA7; 2-12SG 7; 2-12SJ7; 1-6M6; 3-6BL7GT; 2-6V6GT; 2-VR150.30; 3-12-SC 7; 1-6AG7; 2-815; 1-6J5.

PART B - TACTICAL CHARACTERISTICS
(CLASSIFICATION:)

USE: FA: PLATOON COMMANDERS; TANK DESTROYER UNITS.

RANGE: (MILES) 5-7 IN TANKS; 10 MILES IN OPEN VEHICLES.

TO COMMUNICATE WITH: SCR-608; SCR-609; SCR-610; SCR- 628.

TO REPLACE IN PART: SCR-628.

TRANSPORTATION: VEHICLE

TYPE OF SIGNAL: VOICE (F.M.)

PART C - PRINCIPAL COMPONENTS
(CLASSIFICATION: RESTRICTED)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
RADIO TRANS. BC-924	14 "	34"	14 1/2"		
RADIO RECVR. BC-923					
MOUNTING FT-237					
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME:					
SHIP TONNAGE:					

TC-8

NOMENCLATURE DESIGNATION

STATUS:

CHANGE IN STATUS:

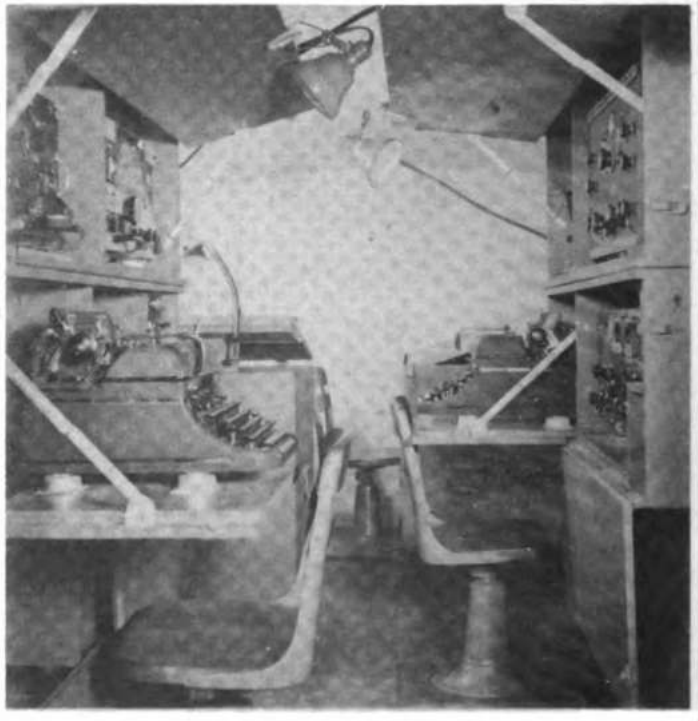
INSTRUCTIONAL LITERATURE: STI ON TC-8 T 1

(CLASSIFICATION: UNCLASSIFIED)

RADIO DIRECTION FINDER CENTRAL TC-8.

EQUIPMENT CONTAINED IN 2 SHELTERS HO-27 EACH CARRIED BY CARGO TRUCK, 2 1/2 TON 6X6 FOR PURPOSE OF COORDINATION AND PLOTTING INFORMATION RECEIVED BY RADIO AND WIRE FROM DIRECTION FINDER STATIONS.

INCLUDES RADIO RECEIVING APPARATUS, TELEPHONE SWITCHBOARD, PLOTTING BOARD, AND INTERCOMMUNICATION AND MONITORING SYSTEM. RADIO DIRECTION FINDERS ARE NOT INCLUDED WITH THIS CENTRAL BUT ARE USED WITH IT.



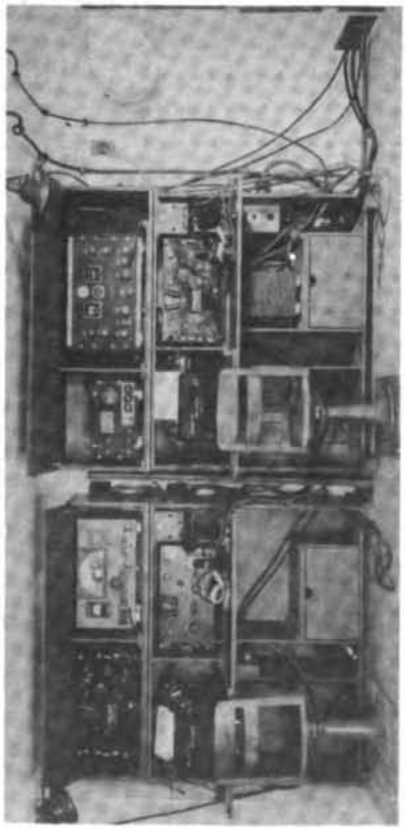
RADIO D/F CENTRAL TC-8 SHOWING OPERATING POSITIONS. HOUSED IN SHELTER HO-27.

PRINCIPAL COMPONENTS

(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
SHELTERS (2 EACH) HO-27	66.5"	74"	138"	1750 #	
RECEIVER BC-342 (2 EACH)	9.75"	18"	9"	46 #	
RECEIVER BC-344 (1 EACH)	9.75"	18"	9"	46 #	
RECEIVER BC-787 (1 EACH)	9.5 "	19"	14.25"	63 #	
RECEIVER BC-794 (1 EACH)	12.25"	23"	16.5"	70 #	
RECEIVER BC-969 (1 EACH)	10 "	19"	19"	80 #	
TAPE RECORDER BC-1016	10.25"	19.25"	14.75"	80 #	
VOICE RECORDER (DICTAPHONE) TCB-2P	12 "	29"	14"	98 #	
VOICE REPRODUCER (DICTAPHONE) TCB-TU	14 "	14"	17"	80 #	
SWITCHBOARD BD-72	13.25"	25.5"	9.5	72 #	
INTERCOMMUNICATION SYSTEM RC-238					
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					

INSTRUCTIONAL LITERATURE: STI ON TC-9 T1	STATUS:		NOMENCLATURE DESIGNATION:	TC-9
	CHANGE IN STATUS:			



RADIO INTERCEPT CONTROL TC-9 SHOWING OPERATING POSITIONS. HOUSED IN ONE SHELTER HO-27.

(CLASSIFICATION: UNCLASSIFIED)

RADIO INTERCEPT CENTRAL TC-9.

EQUIPMENT CONTAINED IN 3 SHELTERS. HO-27 EACH CARRIED BY TRUCK, CARGO, 2 1/2 TON 6X6 FOR PURPOSE OF INTER - CEPTING, RECORDING, INTERPRETING, RADIO COMMUNICATIONS. CONSISTS OF RADIO RECEIVERS, RECORDERS, SWITCHBOARD, ANTENNA, INTERCOMMUNICATION AND MONITORING SYSTEM.

PRINCIPAL COMPONENTS
(CLASSIFICATION:)

ITEM	DIMENSIONS HEIGHT	WIDTH	DEPTH	WEIGHT	CLASSIFICATION
SHELTER HO-27 (3 EACH)	66.5"	74"	138"	1750 #	
RECEIVER BC-342 (5 EACH)	9.75"	18"	9"	46 #	
RECEIVER BC-344 (3 EACH)	9.75 "	18"	9"	46 #	
RECEIVER BC-787 (2 EACH)	9.5"	19"	14.25"	63 #	
RECEIVER BC-794 (1 EACH)	12.25"	23"	16.5"	70 #	
RECEIVER BC-969 (1 EACH)	10"	19"	19"	80 #	
RECORDER BC-1016(1 EACH)	10.25"	19.25"	14.75"	80 #	
VOICE RECORDER (DICTAPHONE TCB-2P)	12"	29"	14"	98 #	
VOICE REPRODUCER (DICTAPHONE TCB-TU)	14"	14"	17"	80 #	
SWITCHBOARD BD-72	13.25"	25.5"	9.5"	72 #	
TELETYPE PRINTER TG-7	15.5"	21.5"	18"	215 #	
COMBINED WEIGHT OF COMPONENTS:					
COMBINED VOLUME OF COMPONENTS:					
SHIP TONNAGE:					

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