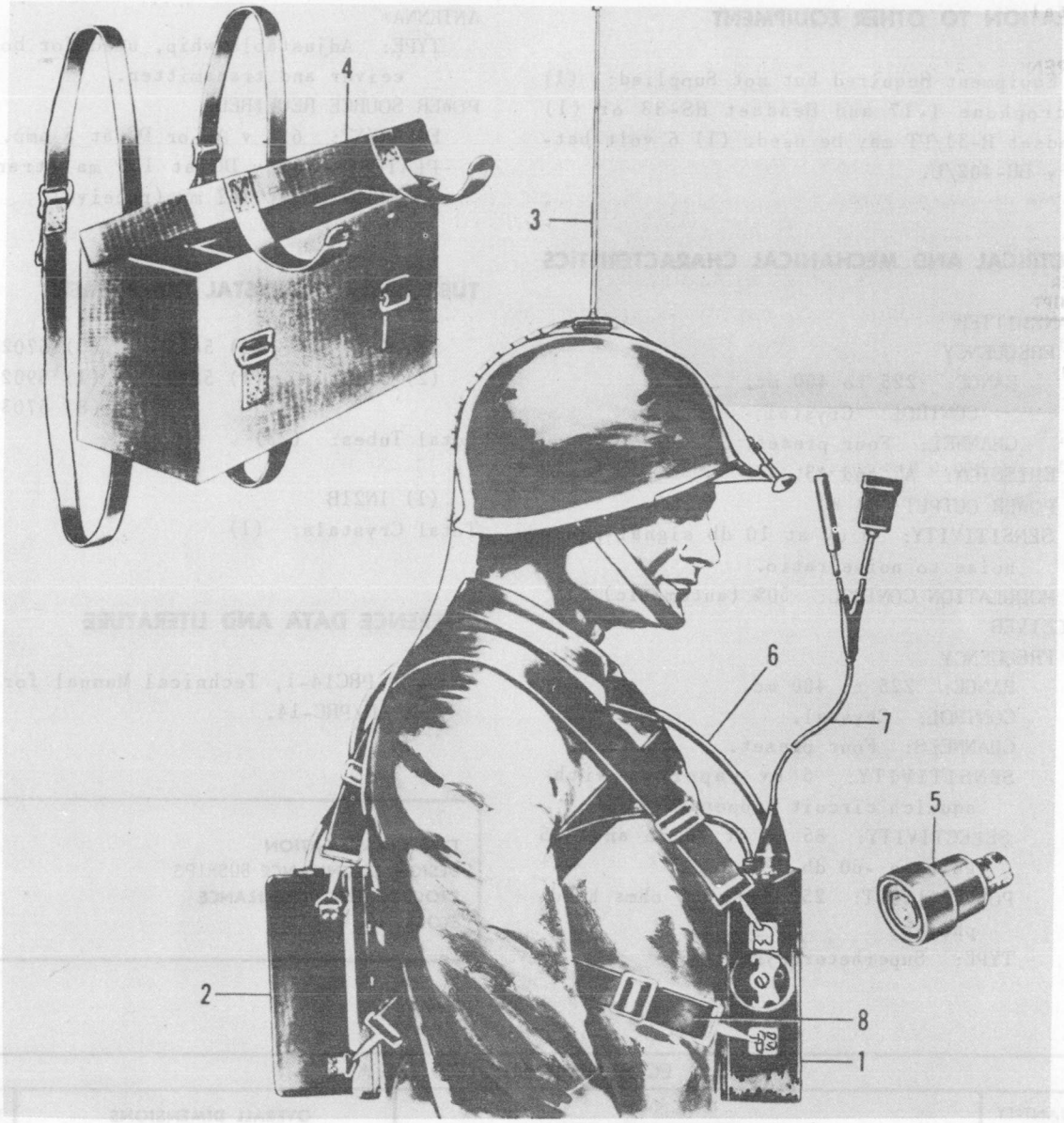


1. Receiver-Transmitter RT-271/PRC-14
2. Power Supply PP-855/PRC-14
3. Antenna Assembly AT-387/PRC-14
4. Bag, radio set CW-293/PRC-14
5. Ammeter ME-68/PRC-14
6. Power Cable Assembly CX-2097/U
7. Special Purpose Cable Assembly CX-2098/U
8. Harness Radio Set ST-124/PRC-14

Radio Set AN/PRC-14

FUNCTIONAL DESCRIPTION

The AN/PRC-14 is a portable UHF Transceiver designed to provide line-of-sight communication between ground personnel and aircraft. With aircraft at an altitude of 5000 feet or more, operation up to 30 miles may be anticipated. With aircraft at lower altitudes, terrain will control the reliability and range of operation. Emergency ground-to-ground operation is practical within the line-of-sight limitations.

Radio-Transceivers

AN/PRC-14 RADIO SET

April 1958

RELATION TO OTHER EQUIPMENT

Equipment Required but not Supplied: (1) Microphone T-17 and Headset HS-33 or (1) Handset H-33/PT may be used. (1) 6 volt battery BB-402/U.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TRANSMITTER
- FREQUENCY
  - RANGE: 225 to 400 mc.
  - CONTROL: Crystal.
  - CHANNEL: Four preset.
- EMISSION: A2 and A3.
- POWER OUTPUT: 1 W.
- SENSITIVITY: 5 uv at 10 db signal-plus-noise to noise ratio.
- MODULATION CONTROL: 50% (automatic).

RECEIVER
- FREQUENCY
  - RANGE: 225 to 400 mc.
  - CONTROL: Crystal.
  - CHANNELS: Four preset.
  - SENSITIVITY: 5 uv (approx) with squelch circuit inoperative
  - SELECTIVITY: 85 kc at -6 db and 225 kc at a -60 db.
  - POWER OUTPUT: 250 mw to 500 ohms headphones.
  - TYPE: Superheterodyne.

ANTENNA
- TYPE: Adjustable whip, used for both receiver and transmitter.

POWER SOURCE REQUIRED
- FILAMENT: 6.3 v AC or DC at 5 amp.
- PLATES: 135 v DC at 155 ma (transmit) 135 v DC at 147 ma (receive).

TUBE AND/OR CRYSTAL COMPLEMENT

(5) 5647	(1) 5675	(5) 5702WA
(2) 5719	(1) 5899	(1) 5902
		(8) 5703

Total Tubes: (23)

(1) 1N21B

Total Crystals: (1)

REFERENCE DATA AND LITERATURE

AN16-30-PRC14-1, Technical Manual for Radio Set AN/PRC-14.

TYPE CLASSIFICATION
DESIGN COGNIZANCE BUSHIPS
PROCUREMENT COGNIZANCE
STOCK NO.

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Radio Receiver-Transmitter RT-271/PRC-14		
1	Antenna AT-387/PRC-14		
1	Harness, Radio Set ST-124/PRC-14		
1	Cable Assembly, Electrical, Power CX-2097/U	2-1/2 x 3 ft	
1	Cable Assembly, Special Purpose Electrical CX-2098/U	1-1/2 x 1 ft	
1	Ammeter ME-68/PRC-14		
1	Power Supply PP-955/PRC-14		
1	Bag, Radio Set CW-293/PRC-14		

Radio-Transceivers

RADIO SET AN/PRC-17

Radio Set AN/PRC-17

FUNCTIONAL DESCRIPTION

The AN/PRC-17 is a lightweight, portable equipment designed to provide two-way voice communication between a life raft and searching ships or aircraft. It also provides for The Transmission of an audio tone which may be continuous or keyed at a slow rate.

No field changes in effect at time of preparation (15 February 1957).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

FREQUENCIES: 121.5 and 243 mc.
POWER OUTPUT: 65 mw.
EMISSION: A2, A3.
FREQUENCY CONTROL: Crystal.
POWER REQUIREMENTS: 1.1 to 1.34 v DC and 105 to 135 v DC dry cell batteries.
TYPE ANTENNA: Whip.

MANUFACTURER'S OR CONTRACTOR'S DATA

Telephonics Corporation, Huntington, N.Y.
Contract NOas-51-216.
Contract NOas-52-798.
Contract NOas-53-555, dated 29 April 1953.
Contract NOas-53-1019, dated 13 July 1953.
Contract NOas-10361.
Approximate Cost: $210.00 with equipment spares.

TUBE AND/OR CRYSTAL COMPLEMENT

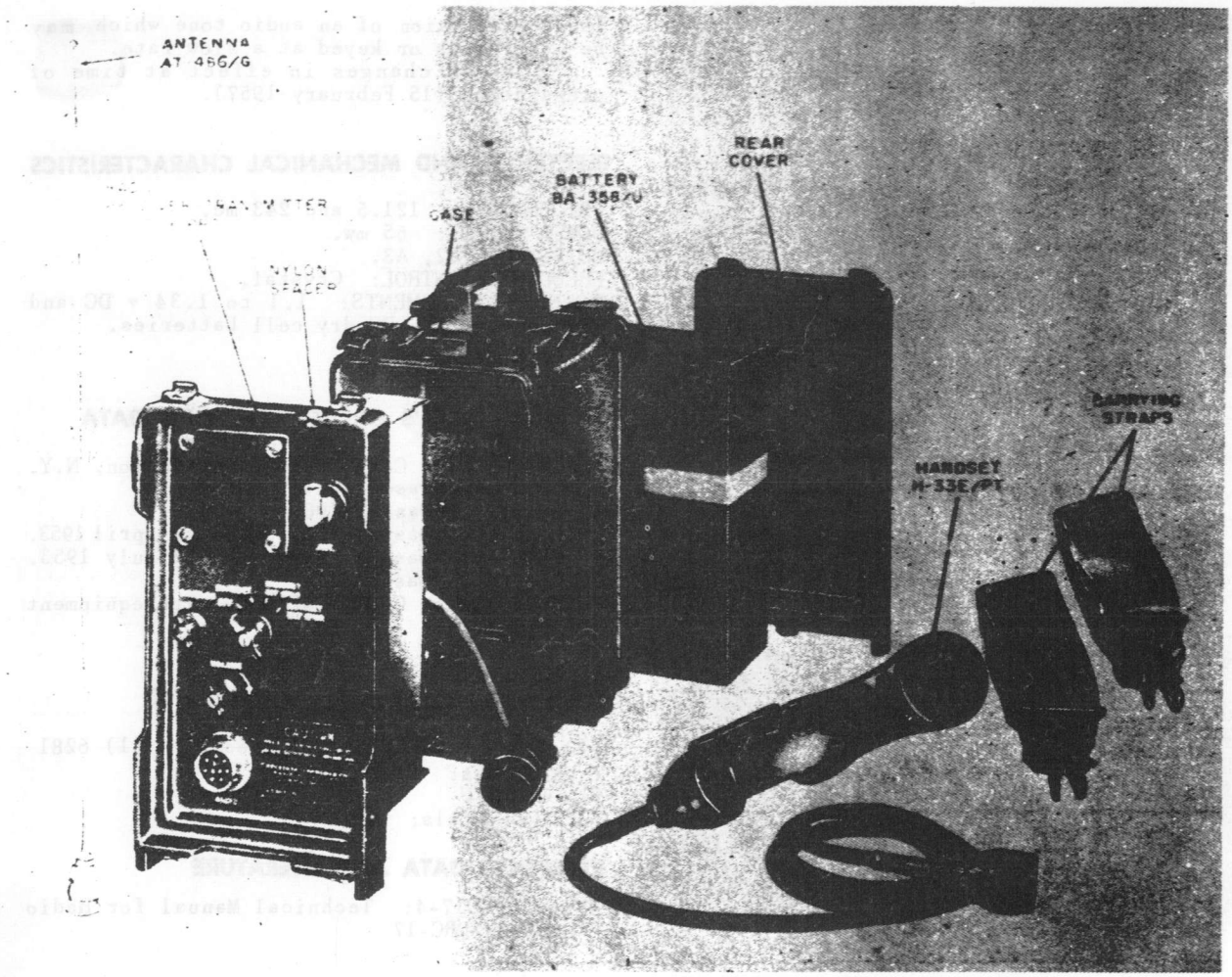
(1) 3V4 (2) 5676 (3) 6397 (1) 6281
Total Tubes: (7)
(1) CR-23/U
Total Crystals: (1)

REFERENCE DATA AND LITERATURE

AN16-30PRC17-4: Technical Manual for Radio Set AN/PRC-17

TYPE CLASSIFICATION
DESIGN COGNIZANCE BUAER
PROCUREMENT COGNIZANCE MIL-R-7121(Aer)
STOCK NO.

RADIO SET AN/PRC-21



Radio Set AN/PRC-21

FUNCTIONAL DESCRIPTION

The AN/PRC-21 is a low-power, portable, FM, transmitter-receiver which operates on any preset frequency within the VHF range of 152 to 174 mc. The radio set is intended for nontactical purposes and is designed to provide reliable voice communication over a distance range of 1 mile between one or two Radio Sets AN/PRC-21 and other FM radio sets operating on the same frequency.

No field changes in effect at time of preparation (3 April 1957).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

RECEIVER

FREQUENCY RANGE: 152 to 174 mc.
TYPE: double conversion superheterodyne.
TYPE SIGNAL RECEIVED: FM ±15 kc deviation
PRESET FREQUENCY: 1.
INTERMEDIATE FREQUENCY
  VARIABLE: 28.4 to 32.8 mc.
  FIXED: 2.5 mc.
SPURIOUS RESPONSE: −60 db below desired response.
SENSITIVITY: better than 2 uv for 20 db quieting.
FREQUENCY CONTROL
  TYPE: crystal.
  CRYSTAL RANGE: 30.9 to 35.3 mc.
AUDIO RESPONSE: 300 to 3500 cps.
OUTPUT LEVEL
  INTERNAL SPEAKER: 200 mw in 3.2 ohms.
  HANDSET: 10 mw in 300 ohms.

Radio-Transceiver

AN/PRC-21 RADIO SET

October 1957

TRANSMITTER

FREQUENCY RANGE: 152 to 174 mc.
TYPE: crystal-controlled FM.
RANGE: 1/2 to 1 mi.
TYPE MODULATION: FM, derived from phase modulation.
FREQUENCY DEVIATION: ±15 kc for 100% modulation at 1,000 cps.
TYPE TRANSMISSION: voice.
CRYSTAL FREQUENCY RANGE: 4.75 to 5.4375 mc.
POWER OUTPUT: 150 mw.
OUTPUT IMPEDANCE: 50 ohms.

TUBE AND/OR CRYSTAL COMPLEMENT

Total Tubes: (19) Type Not Available.

(1) CR-23/U
(1) CR-18/U
Total Crystals: (2)

REFERENCE DATA AND LITERATURE

TM11-610: Technical Manual for RADIO SET AN/PRC-21.

TYPE CLASSIFICATION
DESIGN COGNIZANCE TASSA
PROCUREMENT COGNIZANCE
STOCK NO.

SHIPPING DATA

NUMBER OF BOXES	CONTENTS AND IDENTIFICATION	VOLUME (Cu.Ft.)	OVERALL DIMENSIONS (inches)	WEIGHT PACKED (lbs.)
1	Radio Set AN/PRC-21	0.84	8-7/8 x 10-3/4 x 17-1/8	43

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Radio Receiver-Transmitter RT-209/PRC	5-3/4 x 8-1/8 x 12	13.5
1	Handset H-33E/PT	1-1/2 x 3-1/4 x 8-3/8	0.85
2	Carrying Strap	1/16 x 2 x 48	0.5
1	Battery BA-358/U	2-5/8 x 4-5/16 x 8-9/16	5.25
1	Antenna AT-486/G	1/2 x 1/2 x 18	0.12
1	Set Running Spares	2-3/4 x 4-1/8 x 9-7/8	2
2	Technical Manual TM11-610	1/2 x 8-1/2 x 11	1

April 1958

Radio-Transceivers

RADIO SET AN/PRC-22

FUNCTIONAL DESCRIPTION

The AN/PRC-22 is designed as a handy talkie Portable Radio Set. The AN/PRC is a ultra high frequency (UHF) radio transmitter and receiver for voice communication.

No field changes in effect at time of preparation (3 July 1958).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF EMISSION: A3 voice type.
POWER OUTPUT: 300 mw.
NUMBER OF CHANNELS: 1760 channels.
OPERATING FREQUENCY RANGE
TRANSMITTER AND RECEIVER: 225 to 399.9 mc.
OPERATING POWER RQMT: By batteries.

MANUFACTURER'S OR CONTRACTOR'S DATA

Air Associates Inc., Orange, N.J.

Contract NObsr-52660, dated 28 June 1951.

TUBE AND/OR CRYSTAL COMPLEMENT

Electron Tube and Crystal data not available.

REFERENCE DATA AND LITERATURE

Nomenclature Card AN/PRC-22 for Radio Set.

TYPE CLASSIFICATION	
DESIGN COGNIZANCE	BUSHIPS
PROCUREMENT COGNIZANCE	MIL-R-16159(SHIPS)
STOCK NO.	
R.D.B. IDENT. NO.	

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Radio Set AN/PRC-22 including: (1) R.F. Tuner (1) I.F. Amplifier (1) Power Supply		

April 1958

Radio-Transceiver

RADIO SET AN/PRC-25

FUNCTIONAL DESCRIPTION

The AN/PRC-25 provides FM voice communication over the range of 20 to 70 mc. It uses Battery BA-279/U as a power source. The AN/PRC-25 is a portable Radio Set.

No field changes in effect at time of preparation (13 May 1958).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF EMISSION: F3.
POWER OUTPUT: 3/4 W.
FREQUENCY DATA: 20 to 70 mc.
NUMBER OF CHANNELS: 6 (preset).
OPERATING POWER REQUIREMENTS: Battery operated.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes and Crystals available.

REFERENCE DATA AND LITERATURE

Nomenclature Card for Radio Set AN/PRC-25.
NAVSHIPS Form 4457 for Radio Set AN/PRC-25.

TYPE CLASSIFICATION	
DESIGN COGNIZANCE	TASSA
PROCUREMENT COGNIZANCE	SIG SCL-1368
STOCK NO.	

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Radio Set AN/PRC-25		15

RADIO SET AN/PRC-27

FUNCTIONAL DESCRIPTION

The AN/PRC-27 is designed as a one man pack equipment and is completely self contained, capable of operation while being carried and it is watertight in the operating condition. This radio set provides two way voice communication on 4 preset channels in the frequency range of 225 to 400 mc and is expected to be used by ground troops for close air support purposes.

No field changes in effect at time of preparation (13 May 1958).

RELATION TO OTHER EQUIPMENT

The AN/PRC-27 is similar to Navy Model MAY except it is lighter, and it is meant to replace the MAY.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF EMISSION: A3.
NUMBER OF CHANNELS: 4.
POWER OUTPUT: 2 W.
OPERATING FREQUENCY: 225 to 400 mc.
POWER INPUT: Dry batteries.

MANUFACTURER'S OR CONTRACTOR'S DATA

Designers for Industry, Cleveland, Ohio.
Contract NObsr-63367 dated March 1953.

TUBE AND/OR CRYSTAL COMPLEMENT

Electron Tubes and Crystal data not available.

REFERENCE DATA AND LITERATURE

NAVSHIPS Form 4457 for Radio Set AN/PRC-27.

TYPE CLASSIFICATION
DESIGN COGNIZANCE BUSHIPS
PROCUREMENT COGNIZANCE SHIPS R-1037A
STOCK NO.

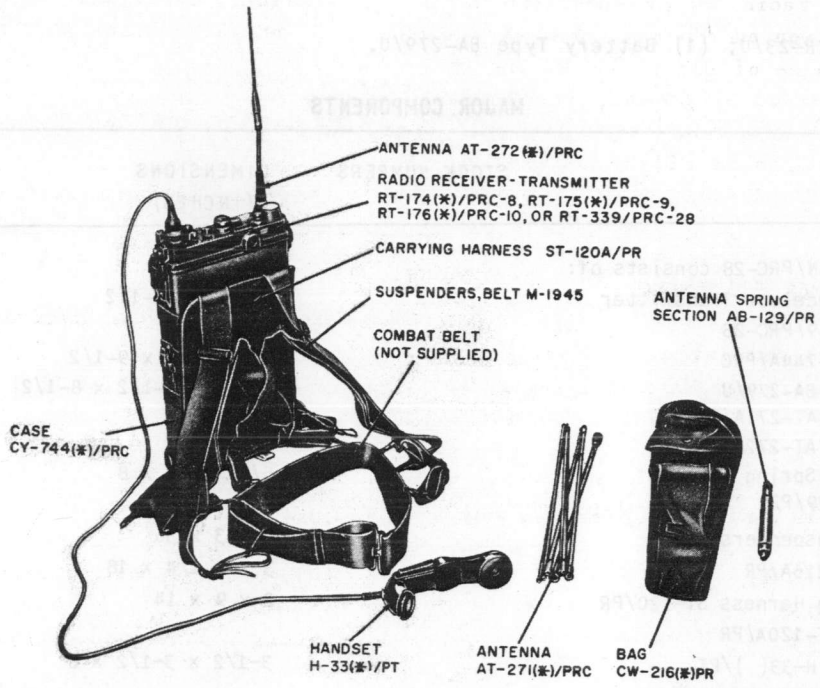
EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Radio Set AN/PRC-27	3 X 12 X 19	25

26 June 1962		5820-698-8332		RADIO SET AN/PRC-28
Cog Service:	TASSA FSN:	5820-644-4832 W/S	Functional Class:	

	USA	USN	USAF
TYPE CLASS:	Used by	Used by	

MANUFACTURER'S NAME/CODE NUMBER: Radio Corp. of America, RCA Victor Div., (79089).



Radio Set AN/PRC-28

FUNCTIONAL DESCRIPTION:

The Radio Set AN/PRC-28 is designed as a low-power frequency-modulated (FM) receiver-transmitter. It is portable and pack-mounted. The radio set can be used for homing; and provisions are made for remote operation and unattended relay operation.

No field changes in effect at time of preparation (17 January 1962).

TECHNICAL CHARACTERISTICS:

TYPE OF INSTALLATION: Portable, pack-mounted.
TYPE OF EMISSION: F3 type.
TYPE OF RECEIVER: Superheterodyne (Single conversion).
TYPE OF MODULATION: Frequency-Modulated (FM).
TYPE OF FREQUENCY CONTROL: Crystal.
FREQUENCY RANGE: 30 to 42 mc.
NUMBER OF CHANNELS: 1 channel.

AN/PRC-28 RADIO SET

POWER OUTPUT: 0.9 W.
OPERATING POWER RQMT: One battery BA-279/U required but not supplied.

RELATION TO OTHER EQUIPMENT:

The AN/PRC-28 is similar to Radio Sets AN/PRC-10, AN/PRC-9, and AN/PRC-8 except for frequency coverage and equipment supplied.

EQUIPMENT REQUIRED BUT NOT SUPPLIED:

(1) Crystal CR-23/U; (1) Battery Type BA-279/U.

MAJOR COMPONENTS

QTY	ITEM	STOCK NUMBERS	DIMENSIONS (INCHES)	WEIGHT (LBS)
1	Radio Set AN/PRC-28 consists of:			
1	Radio Receiver-Transmitter RT-339/PRC-28		3 x 9 x 10-1/2	9
1	Case CY-744A/PRC		3 x 9-1/2 x 9-1/2	1-1/2
1	Battery BA-279/U		2-1/4 x 8-1/2 x 8-1/2	8
1	Antenna AT-271A/PRC		113 lg	1/3
1	Antenna AT-272A/PRC		36-1/2	1/2
1	Antenna Spring Section AB-129/PR		5/8 x 5/8 x 8	2
1	Belt, Suspenders M1945		3 x 3 x 36	1/2
1	Bag CW-216A/PR		3 x 5-1/4 x 18	1/2
1	Carrying Harness ST-120/PR or ST-120A/PR		2 x 9 x 14	3/4
1	Handset H-33( )/PT		3-1/2 x 3-1/2 x 8	7/8
1	Set of Equipment Spares			2
2	Technical Manual TM11-5820-292-10		1/4 x 8 x 10-1/2	

REFERENCE DATA AND LITERATURE:

TM11-5820-292-10: Technical Manual for Radio Sets AN/PRC-8,-8A,-9,-9A,-10,-10A, and AN/PRC-28.

TUBE, CRYSTAL AND/OR SEMI-CONDUCTOR DATA:

TUBES: (1) 5A6 (1) 1AD4 (1) 5678 (1) 5672 (1) 6286

CRYSTALS: (1) CR-23/U

SEMI-CONDUCTORS: (2) 1N28

SHIPPING DATA

PKGS	VOLUME (CU FT)	WEIGHT (LBS)

PROCUREMENT DATA

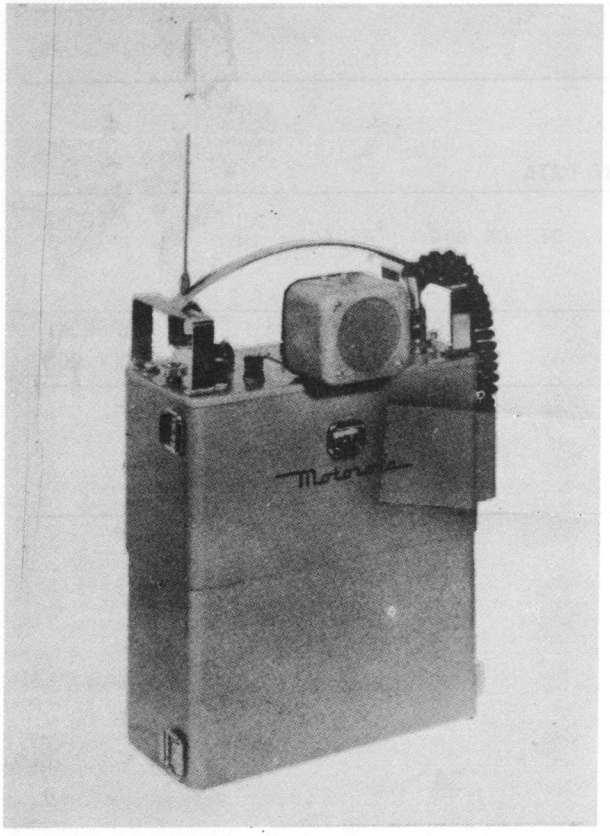
PROCURING SERVICE: TASSA
SPEC &/OR DWG:

DESIGN COG: TASSA

CONTRACTOR	LOCATION	CONTRACT OR ORDER NO.	APPROX. UNIT COST
Radio Corp. of America, RCA Victor Division	Camden, New Jersey	MIPR-53-39364, 29 January 1953 MIPR-54-47060	

September 1956

RADIO SET AN/PRC-29



Radio Set AN/PRC-29

FUNCTIONAL DESCRIPTION

The AN/PRC-29 is a 2-way FM communication unit. It is a portable self-powered transmitter and receiver contained in a single housing for easy transportation. The Pack will provide dependable communications over average terrain for a nominal distance of 1 to 2 miles. Increased range can be obtained by elevating the antenna above the average terrain.

No field changes in effect at time of preparations (20 June 1956).

RELATION TO OTHER EQUIPMENT

Equipment Required but not Supplied: (1) Tuning Tool, (1) Voltomyst.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

FREQUENCY RANGE: 30 to 42 mc.
TYPE OF EMISSION: F3.
TYPE OF CONTROL: Crystal.
TRANSMITTER RF POWER OUTPUT: 750 mw.
TRANSMITTER MODULATION: ±15 kc for 100%.
TRANSMITTER AUDIO INPUT: 0.3 v.
RECEIVER SENSITIVITY: 0.5 mv.
RECEIVER SELECTIVITY: 75 db.
RECEIVER AUDIO OUTPUT: 100 mw.

MANUFACTURER'S OR CONTRACTOR'S DATA

Motorola Communications and Electronics Div., Chicago, Ill.
Contract NObsr-64259, dated 20 Sept 1954

TUBE AND/OR CRYSTAL COMPLEMENT

(4) 5672 (5) 2E36 (9) 5678 (1) 2E42
(1) 3S4 (1) 3B4 (1) 3V4 (2) CK705
Total Tubes: (24)

(1) CO7 (1) CO3
Total Crystals: (2)

REFERENCE DATA AND LITERATURE

Technical Manual (Motorola 68P836276-0) for Radio Set AN/PRC-29.

TYPE CLASSIFICATION
DESIGN COGNIZANCE BUSHIPS
PROCUREMENT COGNIZANCE
STOCK NO.

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Radio Set AN/PRC-29 consists of:	5 x 12-1/8 x 15-1/8	23.7
1	Channel Transmitter Assembly TA120		
1	Channel Receiver Assembly TA124		
1	Control Panel TU135-N		
1	Battery Power Supply P-9096		
1	Antenna P-8653-A	43 lg	
1	Microphone P-9094-A		
1	Carrying Strap Kit K-9098		
1	Carrying Case K-9099		

RADIO SET AN/PRC-30

FUNCTIONAL DESCRIPTION

The AN/PRC-30 is a miniature radio set incorporating transistors. The primary function is for ground communication over short distances.

No field changes in effect at time of preparation (13 May 1958).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

POWER INPUT: Dry Batteries.
POWER OUTPUT: 100 mw.
OPERATING FREQUENCY: 25 to 50 mc (500 yards).
TYPE OF EMISSION: A3.
NUMBER OF CHANNELS: 2 preset.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes and Crystals Available.

REFERENCE DATA AND LITERATURE

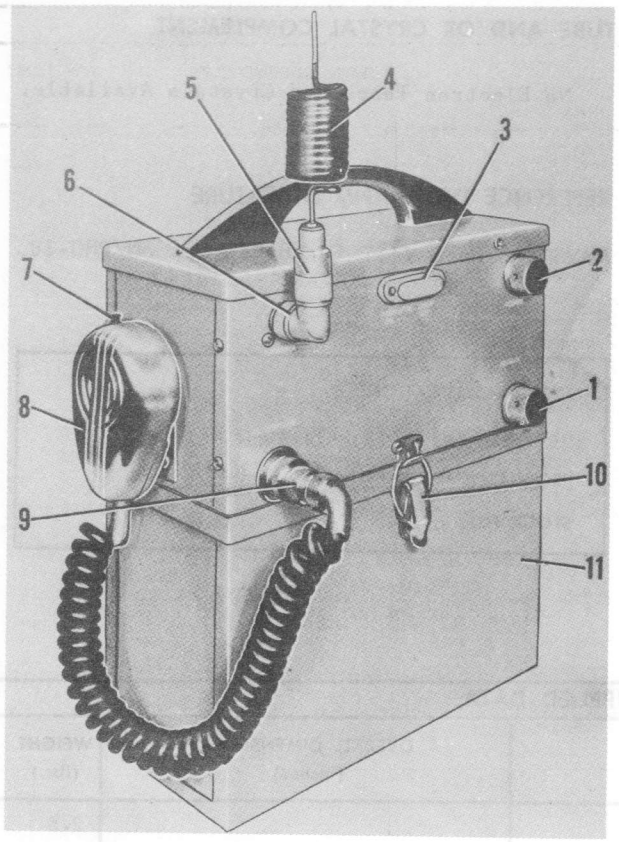
NAVSHIPS Form 4457 for Radio Set AN/PRC-30.

TYPE CLASSIFICATION
DESIGN COGNIZANCE TASSA
PROCUREMENT COGNIZANCE
STOCK NO.

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Radio Set AN/PRC-30		2.5

RADIO SET



Radio Set AN/PRC-33

1. Noise Squelch Control
2. On-Off Volume Control
3. Pilot Light
4. Antenna
5. Connector Adaptor
6. Antenna Input Connector
7. "Press to talk" Switch
8. Microphone
9. Microphone Input Connector
10. Latch
11. Battery Compartment

FUNCTIONAL DESCRIPTION

The AN/PRC-33 is a complete receiver-transmitter unit designed for two way communication. It is supplied as a complete unit to fulfill the requirements of a complete portable station. The unit may be hand carried or back carried. It may also be used as a semi-fixed unit by setting it on the ground or other positions as the service conditions require. The unit is usable under all normal field conditions and has been engineered to with-stand considerable shock and moisture.

No field changes in effect at time of preparation (19 June 1956).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

FREQUENCY RANGE: 30 to 42 mc.
TRANSMITTER POWER OUTPUT: 3/4 W.
TRANSMITTER FREQUENCY DEVIATION: ±15 kc.
TRANSMITTER SPURIOUS RADIATION: 40 db.
TRANSMITTER FREQUENCY STABILITY: ±0.005%.
RECEIVER SENSITIVITY: 0.5 mv.
RECEIVER SELECTIVITY: 75 db ±8 kc.
SPURIOUS RESPONSES: 75 db.
RECEIVER AUDIO OUTPUT: 0.1 W.
TYPE OF EMISSION: F3.

MANUFACTURER'S OR CONTRACTOR'S DATA

Industrial Radio Corp., Chicago, Illinois
Contract NObsr 64749, dated 14 Sept. 1955.

TUBE AND/OR CRYSTAL COMPLEMENT

(8) 1AD4	(1) 1AJ5	(1) 3A4
(2) 3B4	(2) 5672	(1) 5676
(6) 5678		

Total Tubes: (21)

(2) AT-6

Total Crystals: (2)

REFERENCE DATA AND LITERATURE

NAVSHIPS 92651: Technical Manual Radio Set AN/PRC-33.

TYPE CLASSIFICATION
DESIGN COGNIZANCE
PROCUREMENT COGNIZANCE
STOCK NO.

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Radio Receiver-Transmitter RT-359/PRC-33		
1	Antenna AT-673/PRC-33		
1	Case, Receiver-Transmitter CY-1916/PRC-33	4-1/2 X 10 X 11-1/2	15
1	Microphone		
1	Battery, Burgess A, No. 8F		
3	Battery, Burgess B, No. M39		

Radio-Transceivers

RADIO SET AN/PRC-38

FUNCTIONAL DESCRIPTION

The AN/PRC-38 is designed as a ultra-high frequency (UHF) Man-Pack radio set for tactical use in support of amphibious operations.

No field changes in effect at time of preparation (3 July 1958).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF EMISSION: A3 voice type.
NUMBER OF BANDS: 1 band.
NUMBER OF CHANNELS: 1000 to 2000.
OPERATING FREQUENCY RANGE
TRANSMITTER AND RECEIVER: 20 to 70 mc.
OPERATING POWER RQMT: 115 v AC, 60 cps, 1 ph or 27.5 v DC for internal battery.

MANUFACTURER'S OR CONTRACTOR'S DATA

Avco Mfg Corp, Lawrence, Mass.

Contract NObsr-72714, dated 4 June 1957.

TUBE AND/OR CRYSTAL COMPLEMENT

Electron Tube and Crystal data not available.

REFERENCE DATA AND LITERATURE

Nomenclature Card AN/PRC-38 for Radio Set.

TYPE CLASSIFICATION
DESIGN COGNIZANCE BUSHIPS
PROCUREMENT COGNIZANCE SHIPS-R-2719
STOCK NO.

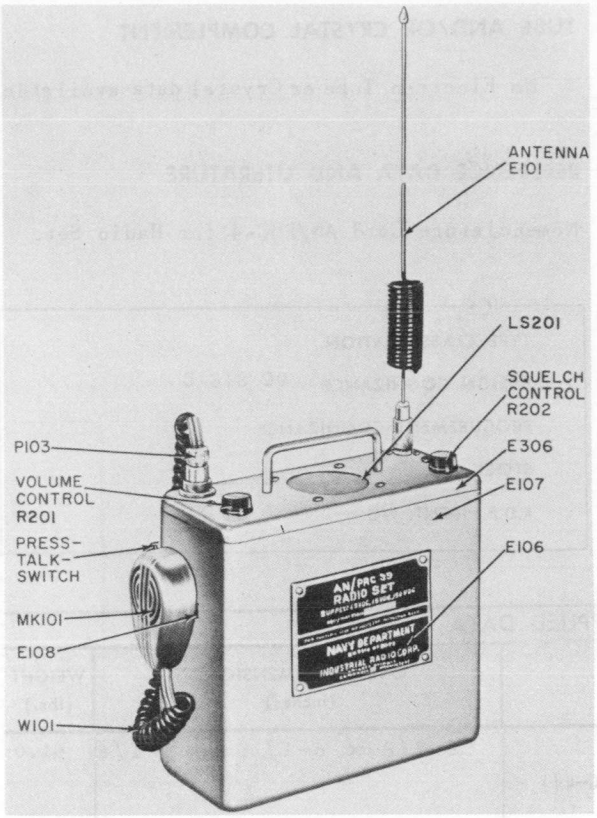
EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Radio Set AN/PRC-38 Incl: (1) Receiver-Transmitter (1) Battery-Pack		

February 1960

Radio-Transceivers

RADIO SET AN/PRC-39



Radio Set AN/PRC-39

FUNCTIONAL DESCRIPTION

Radio Set AN/PRC-39 is a portable wide-band FM transmitter-receiver. It has an effective range of one to ten miles depending on environmental conditions.

No field changes in effect at time of preparation.(11 August 1959).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

FREQUENCY RANGE: 30 to 42 mc.

TYPE OF CONTROL: Crystal.

TYPE OF EMISSION: F3.

RECEIVER OUTPUT: 300 mw, into a 3.2 ohm 3 in. speaker.

IF FREQUENCY: 8.5 mc (high); 300 kc (low).

FREQUENCY STABILITY: ±0.0025% (transmitter).

TRANSMITTER OUTPUT: 1.5 W.

ANTENNA: 1/4 wave whip type.

POWER REQUIREMENTS: Batteries: (2) 75 v, (2) 7.5 v, (1) 1.5 v.

MANUFACTURER'S OR CONTRACTOR'S DATA

Industrial Radio Corp., Chicago, Illinois.
Contract NObsr-71895.

TUBE AND/OR CRYSTAL COMPLEMENT

(1) 1AD4 (2) 6526

Total Tubes: (3)

No Crystal data available.

REFERENCE DATA AND LITERATURE

Manuscript Copy of RADIO SET AN/PRC-39.

TYPE CLASSIFICATION	
DESIGN COGNIZANCE	USN, BUSHIPS
PROCUREMENT COGNIZANCE	SPEC MIL-R-19117 REVA-TYPE I
STOCK NO.	
R.D.B. IDENT. NO.	

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Radio Set AN/PRC-39		

Radio-Transceivers

RADIO SET AN/PRC-4( )

FUNCTIONAL DESCRIPTION

The AN/PRC-4 is a lightweight push-to-talk radio set having a range of 100 feet to 1 mile, for use by parachute troops. The AN/PRC-4 operates on a preset frequency within the range of 2 to 10 megacycles which is determined by the selection of tuning unit as supplied before each field operation.

No field changes in effect at time of preparation (24 June 1958).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

OPERATING RANGE: 100 ft to 1 mile.
OPERATING FREQUENCY RANGE: 2 to 10 mc.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tube or Crystal data available.

REFERENCE DATA AND LITERATURE

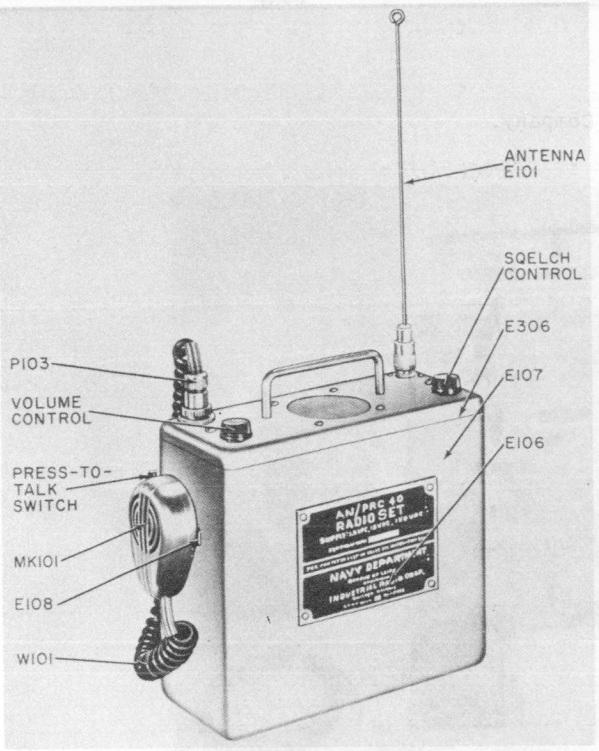
Nomenclature Card AN/PRC-4 for Radio Set.

TYPE CLASSIFICATION	
DESIGN COGNIZANCE	OC SIG O
PROCUREMENT COGNIZANCE	
STOCK NO.	
R.D.B. IDENT. NO.	

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Radio Set AN/PRC-4 Including: (1) Transmitter Receiver RT-20()/PRC-4() (1) Tuning Unit TN-7()/PRC-4() (1) Self Contain Power Supply Including: (1) Battery BA-37 (1) Battery BA-38 or: (1) Vibrator Pack PP-17()/PRC-4() which operates from 2 v storage battery (1) Chest Unit H-8()/PRC-4()	2-7/8 x 6-1/4 x 13-1/8	61.0

RADIO SET AN/PRC-40



Radio Set AN/PRC-40

FUNCTIONAL DESCRIPTION

Radio Set AN/PRC-40 is a portable narrow-band FM transmitter-receiver. It has an effect range of one to ten miles depending on environmental conditions. Average operating conditions, however, permit voice communication at a distance of approx two miles between two portable Radio Sets.

No field changes in effect at time of preparation (14 August 1959).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

FREQUENCY RANGE: 132 to 152 mc, 1 preset frequency.
TYPE OF CONTROL: Crystal.
TYPE OF EMISSION: F3.
POWER OUTPUT: 1 W max (transmitter).
RECEIVER OUTPUT: 500 mw into a 3.2 ohm 3 inch speaker.
IF FREQUENCY: 8.5 mc (high), 300 kc (low).
OSCILLATOR CRYSTAL FREQUENCY
HIGH: Determined by incoming signal.
LOW: 8200.00 kc.
TRANSMITTER STABILITY: ±0.002% at 25° C.
TRANSMITTER CRYSTAL FREQUENCY: 1/12th of the carrier frequency.
TRANSMITTER OUTPUT: 1 W.
ANTENNA: 1/4 wave whip type.
POWER REQUIREMENTS: Batteries (1) 1.5 v, (2) 7.5 v, (2) 75 v.

MANUFACTURER'S OR CONTRACTOR'S DATA

Industrial Radio Corp., Chicago, Ill.
Contract NObsr-71895.

TUBE AND/OR CRYSTAL COMPLEMENT

(3) 6526

Total Tubes: (3)

No Crystals data Available.

REFERENCE DATA AND LITERATURE

Technical Manual for Radio Set AN/PRC-40.

TYPE CLASSIFICATION	(NAVY)
DESIGN COGNIZANCE	USN, BUSHIPS
PROCUREMENT COGNIZANCE	SPEC: MIL-R-19117 REV A TYPE II
STOCK NO.	
R.D.B. IDENT. NO.	

SHIPPING DATA

NUMBER OF BOXES	CONTENTS AND IDENTIFICATION	VOLUME (Cu.Ft.)	OVERALL DIMENSIONS (inches)	WEIGHT PACKED (lbs.)
1	Radio Set AN/PRC-40			

EQUIPMENT SUPPLIED DATA

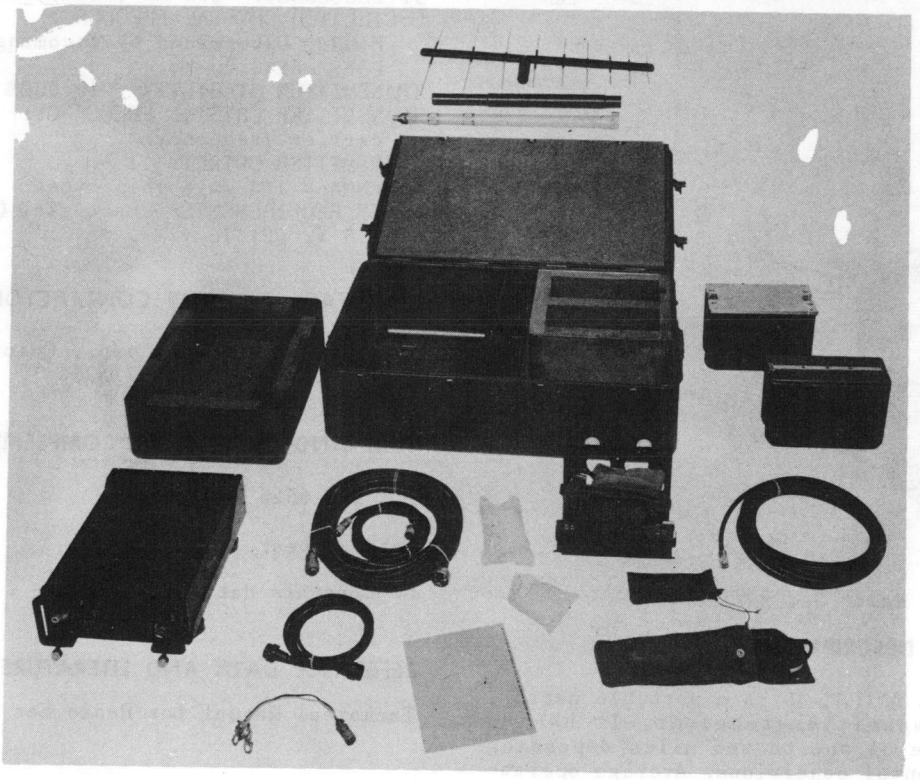
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Radio Set AN/PRC-40		

22 June 1962

Cog Service:	FSN:	RADIO SET AN/PRC-41(XN-1) Functional Class:
	USA	USN USAF

TYPE CLASS:

MANUFACTURER'S NAME/CODE NUMBER: Collins Radio Company.



Radio Set AN/PRC-41(XN-1)

FUNCTIONAL DESCRIPTION:

Radio Set AN/PRC-41(XN-1) is a light weight portable UHF receiver-transmitter which uses type A3 emission on any one of 1750 channels spaced 100 kc in the frequency range of 225.0 to 399.9 mc. All controls including the frequency selector knobs are an integral part of the water-proof receiver-transmitter unit. Automatic relay operation is provided when two Receiver-Transmitter Unit 1 are used together. For man-pack operation a 26.5 v water-proof battery (DC Power Supply Unit 2) attached to the receiver-transmitter unit provides the required primary power. For vehicular operation, power is provided by the 26.5 v vehicle battery. A 115 v or 230 v ac to 26.5 v dc converter power supply (AC Power Supply Unit 3) is provided for fixed station operation. The transmitter output power of Unit 1 is 3 watts.

No field changes in effect at time of preparation (11 October 1960).

QTY	ITEM	STOCK NUMBERS	DIMENSIONS (INCHES)	WEIGHT (LBS)
1	OMNI-Directional Antenna Unit 5		1-5/8 dia x 23-5/8	1.1
1	Mounting Unit 6		5-9/16 x 11-1/4 x 16-7/32	2.3
1	Case, Electronic Equipment Unit 7		15-1/2 x 20-1/2 x 32-1/4	53
1	AC Power Cable Assembly Unit 8			5.5
1	DC Power Cable Assembly Unit 9			1.0
1	RF Cable Assembly Unit 10			2.3
1	Relaying Cable Assembly Unit 11			0.875
1	Antenna Mast Unit 12		2-1/2 dia x 28	3.5
1	DC Adapter (Accessory)			1.0
1	Pack Harness (Accessory)			2.5
1	Tool Kit (Accessory)			0.25
1	Handset H-33/PT (Govt Furnished)			1.125
1	Rucksack Frame (Govt Furnished)			2.0
2	Technical Manual NAVSHIPS 93714			

REFERENCE DATA AND LITERATURE:

NAVSHIPS 93714: Technical Manual for Radio Set AN/PRC-41(XN-1).

TUBE, CRYSTAL AND/OR SEMI-CONDUCTOR DATA:

TUBES: (1) 6939 (5) 7077 (3) 7554

CRYSTALS: (39) MIL-C-3098

SEMI-CONDUCTORS: (4) 2N329A (2) 2N334 (3) 2N335 (1) 2N337 (3) 2N338 (5) 2N656
(1) 2N702 (1) 2N1016A (1) 2N1132 (3) 2N1142 (3) 2N1481 (11) 3N35
(7) 2N1486 (1) 2N716

SHIPPING DATA

PKGS	VOLUME (CU FT)	WEIGHT (LBS)
1	11.2	200
1	2.5	6

PROCUREMENT DATA

PROCURING SERVICE: DESIGN COG: USN, BuShips
SPEC &/OR DWG:

CONTRACTOR	LOCATION	CONTRACT OR ORDER NO.	APPROX. UNIT COST
Collins Radio Company	Cedar Rapids, Iowa	NObsr-72821	

AN/PRC-41(XN-1) RADIO SET

TECHNICAL CHARACTERISTICS:

POWER REQUIREMENTS: 26.5 v dc porm 10% or 115 or 230 v porm 10%, 50 to 400 cyc, single ph.
FREQUENCY DATA
RANGE: 225.0 to 399.9 mc.
CHANNELS: 1750 spaced at 100 kc intervals over the range.
STABILITY: Porm 12 kc.
DUTY CYCLE: 1 minute transmit; 9 minutes receive.
TYPE OF FREQUENCY CONTROL: Crystal.
TRANSMITTER DATA
POWER OUTPUT: 3 W unmodulated power into a 50 ohm load. Power output is independent of altitude.
MODULATION: AM.
MODULATION SENSITIVITY: Carbon microphone input of 1.0 v.
MODULATION CAPABILITY: 100% (adjusted to clip between 70 to 90%).
TRANSMITTER FIDELITY: Porm 1 db, M3 db, from 300 to 3500 cps.
TRANSMITTER DISTORTION: Less than 10% with modulation 3 db below clipping level.
RECEIVER DATA
SENSITIVITY: 3 uv signal modulated 30% at 1000 cps produces 20 mw at a signal-plus-noise to noise ratio of 10 db or greater.
SELECTIVITY
6 DB: 47 kc min.
60 DB: 120 kc max.
IMAGES AND SPURIOUS RESPONSE: 70 db down.
IF REJECTION: 80 db down.
AVC CHARACTERISTICS: Output within porm 3 db from 10 to 100,000 uv.
BLOCKING: No blocking for input signals up to 0.5 v.
SQUELCH OPERATION: A change in audio output of at least 10 db is effected by a 1 db change in input signal.
ULTIMATE SIGNAL-PLUS NOISE TO NOISE RATIO: At least 35 db (measured at 1000 uv).
AUDIO OUTPUT: 450 mw into a 300 ohm load with 90% modulation.
AUDIO FIDELITY: P1, M3 db from 300 to 3500 cps.
AUDIO DISTORTION: Less than 10% at 50 mw output.
GUARD RECEIVER SELECTIVITY: 6 db M50 kc min; 60 db M200 kc max (complete separate receiver except audio amplifier).

RELATION TO OTHER EQUIPMENT: None.

EQUIPMENT REQUIRED BUT NOT SUPPLIED: None.

MAJOR COMPONENTS

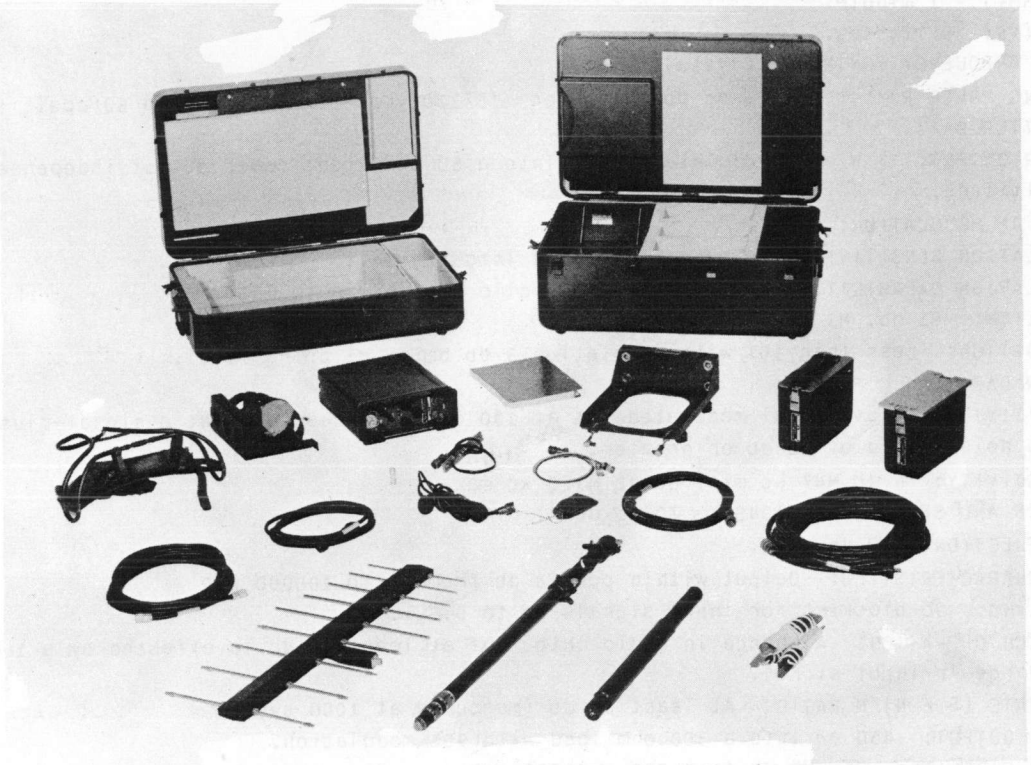
QTY	ITEM	STOCK NUMBERS	DIMENSIONS (INCHES)	WEIGHT (LBS)
1	Radio Receiver-Transmitter Unit 1		4-5/16 x 11-1/16 x 13-3/4	22
1	DC Power Supply Unit 2		4 x 7-3/8 x 10-3/4	15.75
1	AC Power Supply Unit 3		5-1/4 x 7-1/2 x 10-3/4	15.4
1	Directional Antenna Unit 4		1-3/4 x 10-1/4 x 31-1/2	4.2

29 August 1962 RADIO SET AN/PRC-41(XN-2)

Cog Service: USN FSN: Functional Class:

	USA	USN	USAF
TYPE CLASS:	Pln/Std	Pln/Std	

MANUFACTURER'S NAME/CODE NUMBER: Collins Radio Co., (13499).



Radio Set AN/PRC-41(XN-2)

FUNCTIONAL DESCRIPTION:

The Radio Set AN/PRC-41(XN-2) is a light-weight, portable UHF transceiver which may be used for man-pack, vehicular, or fixed station operations. The radio set provides amplitude modulated (AM) communications on any one of 1750 channels spaced 100 kilocycles apart in the frequency range of 225.0 to 399.9 megacycles. All controls, including the frequency selector knobs, are an integral part of the waterproof receiver-transmitter unit. Automatic relay operation is provided when two (2) receiver-transmitter units are used together. For man-pack operation, a 26.5 volt waterproof battery attached to the receiver-transmitter unit provides primary power. For vehicular operation, power is provided by the 26.5 volt, vehicles A115/230 v ac to 26.5 v dc converter power supply is provided for fixed station operation.

No field changes in effect at time of preparation (21 May 1962).

TECHNICAL CHARACTERISTICS:

FREQUENCY RANGE: 225.0 to 399.9 mc.
NUMBER OF CHANNELS: 1750.
CHANNEL SPACING: 100 kc.
STABILITY: Porm 12 kc.
DUTY CYCLE
  TRANSMIT: 1 minute.
  RECEIVE: 9 minutes.
TYPE OF FREQUENCY CONTROL: Crystal.
OPERATING POWER RQMT: 26.5 v dc porm 10%, or 115/230 v ac porm 10%, 50 to 60 cps.
TRANSMITTER DATA
  POWER OUTPUT: 3 W of unmodulated power into a 50 ohm load; power output independent of altitude.
  TYPE OF MODULATION: AM.
  MODULATION SENSITIVITY: Carbon microphone into 1.0 volt.
  MODULATION CAPABILITY: 100% (adjusted to clip between 70 to 90%).
  FIDELITY: P1 db, M3 db, 300 to 3500 cps.
  DISTORTION: Less than 10% with modulation 3 db below clipping level.
RECEIVER DATA
  SENSITIVITY: 3 uv signal modulated 30% at 100 cps produces 20 mw at a signal-plus-noise to noise ratio of 10 db or greater.
  SELECTIVITY: 6 db M47 kc min; 60 db M120 kc max.
  IMAGES AND SPURIOUS RESPONSE: 70 db down.
  IF REJECTION: 80 db down.
  AVC CHARACTERISTICS: Output within porm 3 db from 10 to 100000 uv.
  BLOCKING: No blocking for input signals up to 0.5 v.
  SQUELCH OPERATION: A change in audio output of at least 10 db is effected by a 1 db change in input signal.
  ULTIMATE (S ≠ N)/N RATIO: At least 35 db (measured at 1000 uv).
  AUDIO OUTPUT: 450 mw into a 300 ohm load with 90% modulation.
  AUDIO FIDELITY: P1, M3 db from 300 to 3500 cps.
  AUDIO DISTORTION: Less than 10% at 50 mw output.
  GUARD RECEIVER SELECTIVITY: 6 db M50 kc min; 60 db M200 kc max.

RELATION TO OTHER EQUIPMENT: None.

EQUIPMENT REQUIRED BUT NOT SUPPLIED: None.

MAJOR COMPONENTS

QTY	ITEM	STOCK NUMBERS	DIMENSIONS (INCHES)	WEIGHT (LBS)
1	Radio Set AN/PRC-41(XN-2) consists of:			
1	Radio Receiver-Transmitter Unit #1 of AN/PRC-41(XN-2)		4-5/16 x 11-1/16 x 13-3/4	22-1/2
1	DC Power Supply Unit #2 of		4 x 7-3/8 x 10-3/4	16

QTY	ITEM	STOCK NUMBERS	DIMENSIONS (INCHES)	WEIGHT (LBS)
	AN/PRC-41(XN-2)			
1	AC Power Supply Unit #3 of AN/PRC-41(XN-2)		5-1/4 x 7-1/2 x 10-3/4	14-1/2
1	Directional Antenna Unit #4 of AN/PRC-41(XN-2)		1-3/4 x 10-1/4 x 31-1/2	4-1/2
1	Omnidirectional Antenna Unit #5 of AN/PRC-41(XN-2)		1-5/8 dia x 23-5/8	1.1
1	Mounting Unit #6 of AN/PRC-41(XN-2)		5-9/16 x 11-1/4 x 16-7/32	2.4
1	Electronic Equipment Case Unit #7 of AN/PRC-41(XN-2)		14-5/8 x 20-1/8 x 32-1/8	60
1	Antenna Mast Unit #12 of AN/PRC-41(XN-2)		2-1/2 dia x 28	2.63
1	Electronic Equipment Case Unit #13 of AN/PRC-41(XN-2)		11-7/16 x 20-1/8 x 32-1/8	47
1	Mounting Unit #14 of AN/PRC-41(XN-2)		3/8 x 5-1/4 x 10-3/4	2.12
1	Pack Harness & Rucksack Frame			4.5
1	Handset H-33/PT			1.1

REFERENCE DATA AND LITERATURE:

NAVSHIPS 93714: Technical Manual for Radio Set AN/PRC-41(XN-2).

TUBE, CRYSTAL AND/OR SEMI-CONDUCTOR DATA:

TUBES: (4) 7077 (4) 7554 (1) 6442

CRYSTALS: None used.

SEMI-CONDUCTORS: (4) 1N647 (1) 1N1591A (5) 1N251 (10) 1N457 (1) SV-1025 (5) 1N249
(1) 1N1819A (1) 1N1602

TRANSISTORS: (7) 2N1486 (11) J335 (1) 2N716 (10) 2N338 (1) 2N1132 (5) 2N329A
(4) 2N1481 (3) 2N656 (4) 2N1195 (1) 2N1016A

SHIPPING DATA

PKGS	VOLUME (CU FT)	WEIGHT (LBS)

PROCUREMENT DATA

PROCURING SERVICE: USN DESIGN COG: USN, BuShips
SPEC &/OR DWG:

AN/PRC-41(XN-2) RADIO SET

CONTRACTOR	LOCATION	CONTRACT OR ORDER NO.	APPROX. UNIT COST
Collins Radio Co.	Cedar Rapids, Iowa	NObsr-72821, 9 June 1958	

Radio-Transceivers

RADIO SET AN/PRC-42 ( )

FUNCTIONAL DESCRIPTION

The AN/PRC-42( ) is designed as a portable transceiver for tactical use in the support of amphibious operations.

No field changes in effect at time of preparation (12 January 1961).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

OUTPUT SIGNAL CHARACTERISTICS: Single Sideband.

TRANSMITTER DATA

TYPE OF EMISSION: A3 type.
POWER OUTPUT: 200 W max.
NUMBER OF BANDS: 1 band.
NUMBER OF CHANNELS: 10,000 to 20,000.
FREQUENCY RANGE: 2 to 12 mc.

RECEIVER DATA

TYPE OF EMISSION: A3 type.
POWER OUTPUT: 200 W.
NUMBER OF BANDS: 1 band.
NUMBER OF CHANNELS: 10,000 to 20,000.
FREQUENCY RANGE: 2 to 12 mc.

TYPE OF INSTALLATION: Portable Man-Pack.

OPERATING POWER RQMT: 115 v ac, 60 cps, single ph; 27.5 v dc (Internal Batteries).

MANUFACTURER'S OR CONTRACTOR'S DATA

AVCO Mfg Corp., Lawrence, Mass.

P. R. 826-86104.
Contract NObsr-77507, dated 28 November 1958.

TUBE AND/OR CRYSTAL COMPLEMENT

Electron Tube and/or Crystal data not available.

REFERENCE DATA AND LITERATURE

NAVSHIPS 93400: Preliminary Data Form for Radio Set AN/PRC-42( ).

TYPE CLASSIFICATION (NAVY)
DESIGN COGNIZANCE NAVY BUSHIPS
PROCUREMENT COGNIZANCE
STOCK NO.
R.D.B. IDENT. NO.

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Radio Set AN/PRC-4( ) consists of:		
1	Receiver-Transmitter		
1	Battery Pack		
1	Carrying Harness		

October 1960

Radio-Transceivers

RADIO SET AN/PRC-45(XN-1)

FUNCTIONAL DESCRIPTION

The AN/PRC-45(XN-1) is designed to receive and transmit single sideband and Amplitude Modulation (AM), and used for general purpose, portable communications. It is intended as replacement for existing portable and vehicular-mounted TCS-( ) type equipment.

No field changes in effect at time of preparation (1 February 1960).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF FREQUENCY CONTROL: Variable oscillator.
TYPE OF ANTENNA: 15 ft Fiberglass Whip.
TYPE OF EMISSION: 4A3a and 4A9a.
IMPEDANCE: 50 ohms.
OPERATING FREQUENCY RANGE: 2 to 18 mc.
OPERATING POWER RQMT: 24 v DC rechargeable battery or external 24 v DC source.

MANUFACTURER'S OR CONTRACTOR'S DATA

Stromberg-Carlson Co., Rochester, N. Y.
Contract NObsr-77628, dated 16 June 1959.

TUBE AND/OR CRYSTAL COMPLEMENT

Electron Tube and Crystal Data not available.

REFERENCE DATA AND LITERATURE

NAVSHIPS 93400: Preliminary Data Form for Radio Set AN/PRC-45(XN-1).

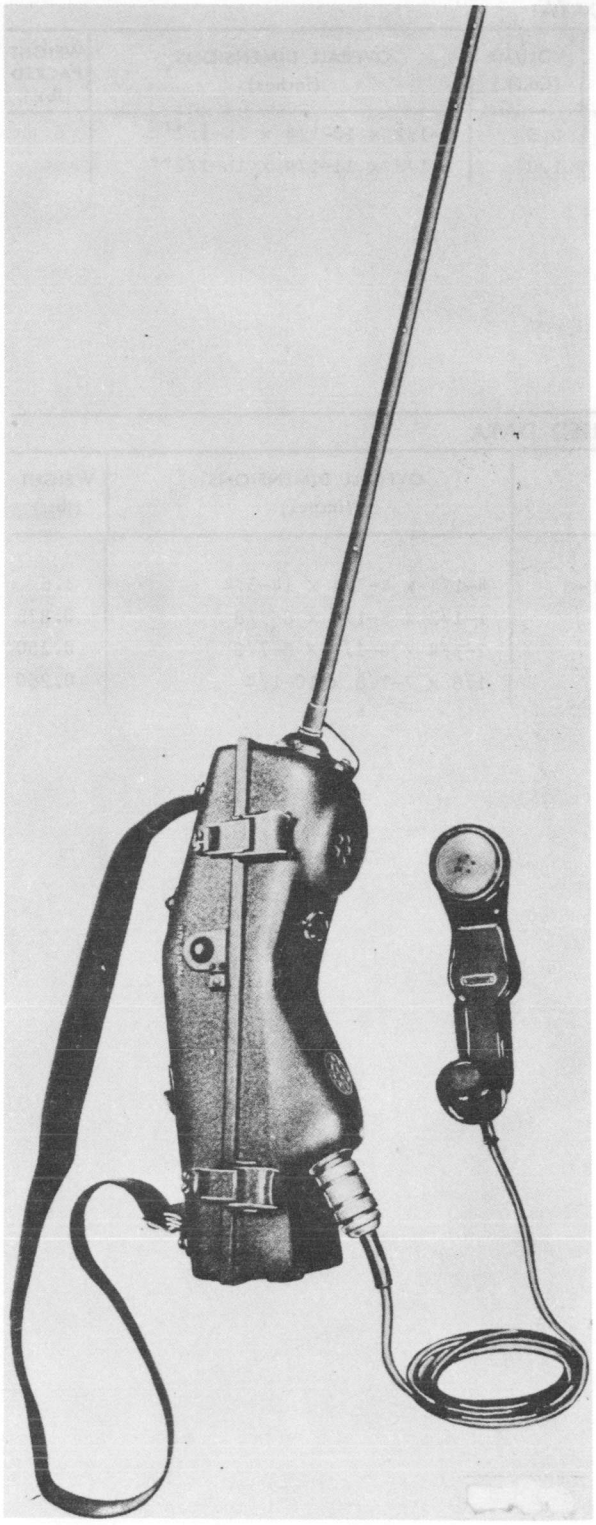
TYPE CLASSIFICATION (NAVY)
DESIGN COGNIZANCE USN, BUSHIPS
PROCUREMENT COGNIZANCE SPEC: SHIPS-R-3304
STOCK NO.

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Transceiver and Power Supply	11-1/2 X 14 X 15 approx	approx 40
1	Antenna Load Unit		
1	Fiberglass Whip Antenna		
1	Remote Control Unit		
1	Dynamic, Noise Cancelling Microphone		

April 1958

RADIO SET AN/PRC-6



Radio Set AN/PRC-6

FUNCTIONAL DESCRIPTION

Radio Set AN/PRC-6 is used for voice communication over short distances. The radio set is designed to send (transmit) or receive frequency-modulated (fm) radio signals on any one of 43 operating frequencies (channels) within the frequency range of 47 to 55.4 megacycles (mc). The same operating frequency is used for transmitting and receiving.

No field changes in effect at time of preparation (29 January 1958).

RELATION TO OTHER EQUIPMENT

Equipment Required but not Supplied: One battery type BA-270/U.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

DISTANCE RANGE: Approx 1 mile.
TYPE OF RADIO SET: FM.
TYPE OF COMMUNICATION: Voice.
ANTENNA: 2 foot flexible steel whip.
FREQUENCY RANGE: 47 to 55.4 mc.
OPERATING CHANNELS: 43. Only one operating channel can be used at a time.

MANUFACTURER'S OR CONTRACTOR'S DATA

Utilities Electronics, Newark, N.J.

TUBE AND/OR CRYSTAL COMPLEMENT

(1) 2G21
(1) 3B4
Total Tubes: (13)
(1) 1N69
Total Crystals: (3)
(2) 5676
(6) 5678
(3) 5672
(2) 1N70

REFERENCE DATA AND LITERATURE

TM-11-296 Technical Manual for Radio Set AN/PRC-6

TYPE CLASSIFICATION
DESIGN COGNIZANCE MIL-R-10250
PROCUREMENT COGNIZANCE
STOCK NO.

AN/PRC-6 RADIO SET

April 1958

SHIPPING DATA

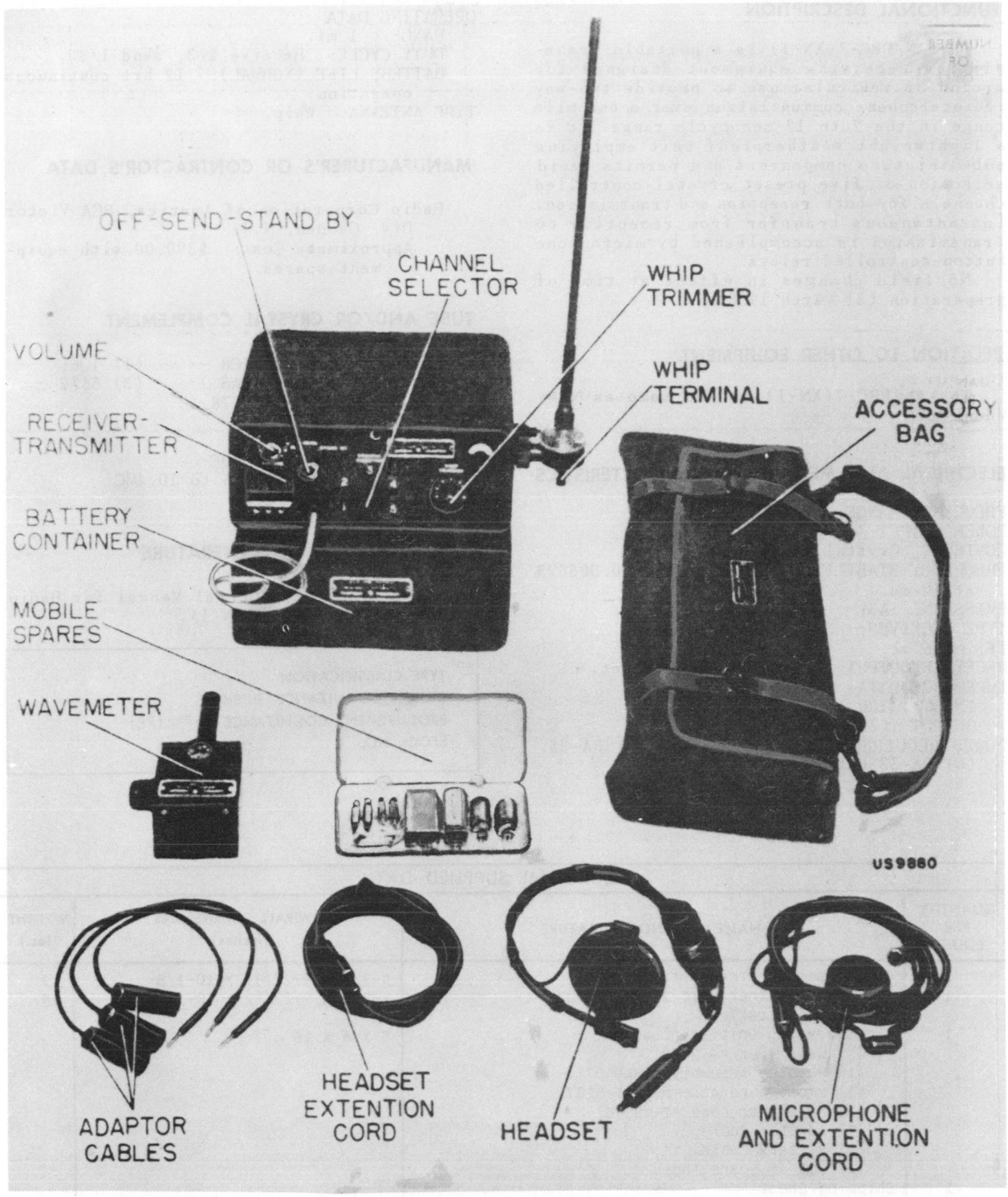
NUMBER OF BOXES	CONTENTS AND IDENTIFICATION	VOLUME (Cu.Ft.)	OVERALL DIMENSIONS (inches)	WEIGHT PACKED (lbs.)
1	Radio Set AN/PRC-6 including: (1) Set of Spare Tubes	0.5 1.0	5-1/2 x 10-1/4 x 15-1/2* 6-1/2 x 11-1/4 x 16-1/2**	5

* Domestic Shipment

**Export Shipment

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Radio Set AN/PRC-6 consisting of:		
	(1) Radio Receiver-Transmitter RT-196/PRC-6	4-1/4 x 4-3/4 x 14-3/4	3.5
	(1) Handset H-33C/PT	1-1/2 x 3-1/4 x 8-3/8	0.875
	(1) Set of Tubes	2-3/4 x 4-1/8 x 8-7/8	0.250
	(2) Technical Manuals	1/8 x 7-7/8 x 10-1/4	0.250



Radio Equipment AN/PRC-7(XN-1)

Radio-Transceivers

AN/PRC-7(XN-1) RADIO EQUIPMENT

FUNCTIONAL DESCRIPTION

The AN/PRC-7(XN-1) is a portable transmitting-receiving equipment designed for ground or vehicular use to provide two-way radiotelephone communication over a one mile range in the 2 to 12 megacycle range. It is a lightweight weatherproof unit employing sub-miniature components and permits rapid selection of five preset crystal-controlled channels for both reception and transmission. Instantaneous transfer from reception to transmission is accomplished by microphone button-controlled relays.

No field changes in effect at time of preparation (31 March 1958).

RELATION TO OTHER EQUIPMENT

The AN/PRC-7(XN-1) is the same as Navy Model MBN.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

FREQUENCY RANGE: 2 to 12 mc.
POWER OUTPUT: 0.8 W.
CONTROL: Crystal.
FREQUENCY STABILITY: 0.017% at 2 mc, 0.00567% at 12 mc.
EMISSION: A3.
TYPE RECEIVER: Superheterodyne.
IF: 1.6 mc.
RECEIVER OUTPUT: 75 mw max to headset.
IMPEDANCE DATA
INPUT: 100 ohms.
OUTPUT: 300 ohms.
POWER REQUIREMENTS: (1) BA-34, (2) BA-35, (6) BA-53 batteries.

OPERATING DATA
RANGE: 1 mi.
DUTY CYCLE: Receive 2/3, send 1/3.
BATTERY LIFE (NORMAL): 12 hrs continuous operation.
TYPE ANTENNA: Whip.

MANUFACTURER'S OR CONTRACTOR'S DATA

Radio Corporation of America, RCA Victor Div, Camden, N.J.
Approximate Cost: $390.00 with equipment spares.

TUBE AND/OR CRYSTAL COMPLEMENT

(1) 1AD4	(2) 1C8	(1) 1Q6
(1) 3A4	(2) 3A5	(3) 5672
(1) 5676	(4) 5678	

Total Tubes: (15)

(1) 1N47	(5) 400C
(1) 1600KC	(5) 3.6 to 10.4MC

Total Crystals: (12)

REFERENCE DATA AND LITERATURE

NAVSHIPS 91389: Technical Manual for Radio Equipment AN/PRC-7(XN-1).

TYPE CLASSIFICATION
DESIGN COGNIZANCE BUSHIPS
PROCUREMENT COGNIZANCE 16T34(RE)
STOCK NO.

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Radio Receiver-Transmitter Unit 1	4-3/8 X 9-27/32 X 10-1/8	9
1	Battery Container Unit 2 including: Set of Batteries	4-3/8 X 9-27/32 X 10-1/8	15
1	Accessory Bag Unit 3 including: (1) Wavemeter FR-20/U (1) Headset Assembly NT-49507 (1) Microphone Assembly NT-51071 (1) Extension Cord NT-49576 (3) Adapter Cable (1) Battery Cable (1) Set of Spare Tubes	5 X 6 X 16	
1	Shipping Chest		

RADIO SET AN/PRC-7

FUNCTIONAL DESCRIPTION

The AN/PRC-is designed as a portable transmitting and receiving unit, for ground or vehicular use to provide two-way radiotelephone communication over a one mile range, in the 2 to 12 megacycle (MC) frequency range. It is a lightweight weatherproof unit employing subminature components and permits rapid selection of five presets crystal controlled channels for both reception and transmission. Instantaneous transfer from reception to transmission is accomplished by microphone button-controlled relays.

No field changes in effect at time of preparation (15 March 1960).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF RECEIVER: Superhetrodyne.
TYPE OF CONTROL: Crystal.
TYPE OF ANTENNA: Whip.
FREQUENCY STABILITY: 0.01 7% at 2 mc, 0.00567% at 12 mc.
TYPE OF EMISSION: A3.
POWER OUTPUT: 0.8 W.
RECEIVER OUTPUT: 75 mw max to headset.
IMPEDANCE
INPUT: 100 ohms.
OUTPUT: 300 ohms.
INTERMEDIATE FREQUENCY: 1.6 mc.
OPERATING DATA
RANGE: 1 mile.
DUTY CYCLE: Receive 2/3, Send 1/3.
BATTERY LIFE (NORMAL): 12 hrs continous operation.
OPERATING POWER RQMT: (2) BA-48 type batteries or (2) BA-48R type batteries.

MANUFACTURER'S OR CONTRACTOR'S DATA

Radio Corp. of America, RCA Victor Division, Camden, New Jersey.

TUBE AND/OR CRYSTAL COMPLEMENT

(1) 1AD4	(1) 3A4	(1) 5676
(2) 1C8	(2) 3A5	(4) 5678
(1) 106	(3) 5672	

Total Tubes: (15)

Crystals

(1) 1N47	(1) 1600KC
(5) 400C	(5) 3.6 to 10.4MC

Total Crystals: (12)

REFERENCE DATA AND LITERATURE

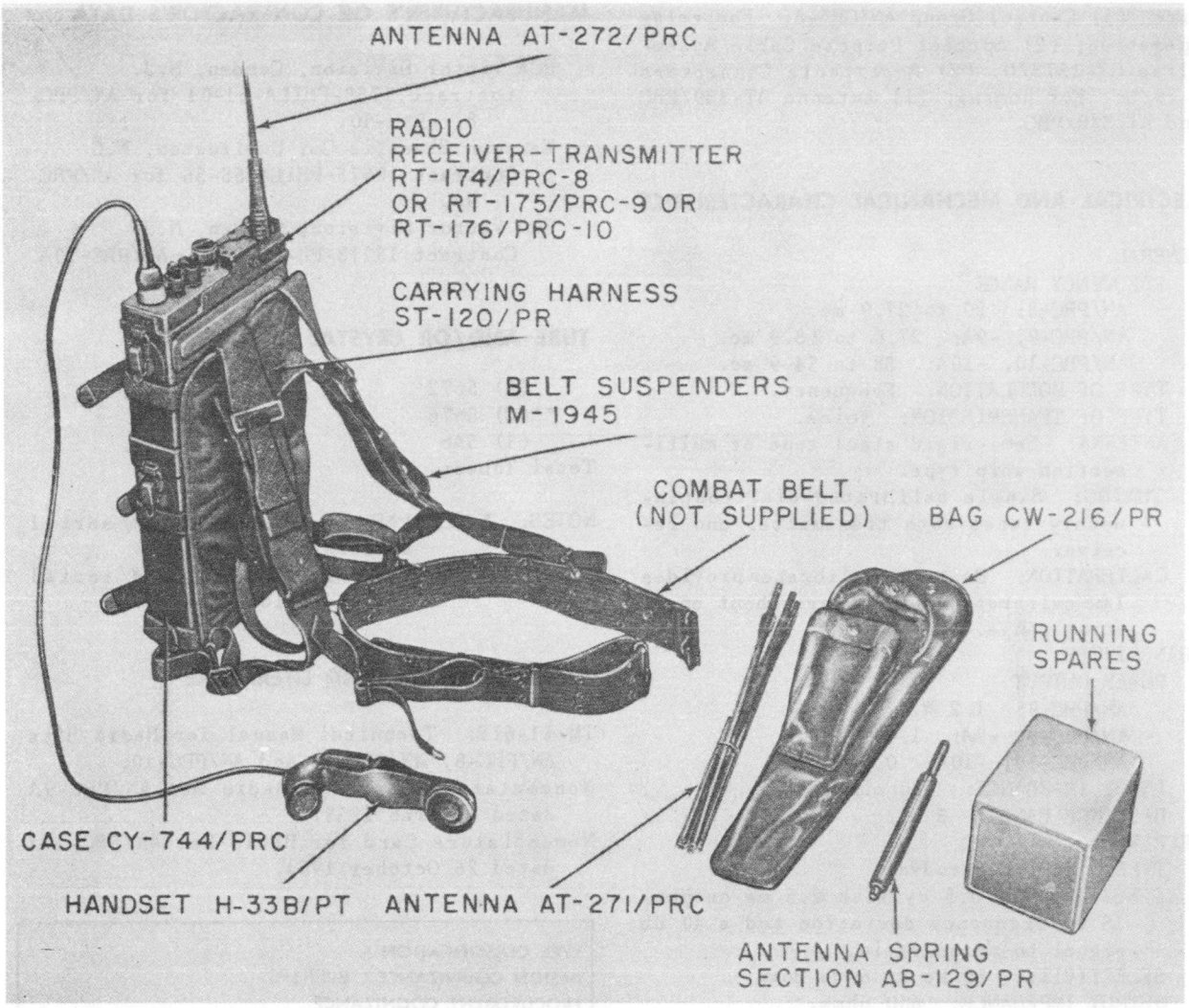
Nomenclature Card AN/PRC-7 for Radio Set.
NAVSHIPS 91389: Technical Manual for AN/PRC-7(XN-1) Radio Set.

TYPE CLASSIFICATION (NAVY)
DESIGN COGNIZANCE NAVY 16T34(RE)
PROCUREMENT COGNIZANCE NAVY 16T34CRE
STOCK NO.
R.D.B. IDENT. NO.

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Radio Receiver-Transmitter	4-3/8 X 9-27/32 X 10-1/8	9
1	Battery Container including Set of batteries	4-3/8 X 9-27/32 X 10-1/8	15
1	Accessory Bag	5 X 6 X 16	
1	Shipping Chest		

RADIO SET AN/PRC-8, -9, -9A, -10, -10A



Radio Set AN/PRC-8,-9, or -10

FUNCTIONAL DESCRIPTION

The AN/PRC-8, -9, -9A, -10, -10A are portable frequency modulated radio sets designed to provide man-pack communications for armored, artillery, and infantry units. They may be operated in aircraft, in vehicles, in semi-permanent ground installations, or while being carried by the operator. Provision is made for homing use, remote operation and unattended relay operation using two sets.

These sets are electrically and mechanically similar but differ in their operating frequencies and in the components that determine these frequencies. The AN/PRC-9A and, -10A are austere versions of the AN/PRC-9 and, -10 respectively.

No field changes in effect at time of preparation (3 October 1957).

RELATION TO OTHER EQUIPMENT

Equipment Required but not Supplied: For Vehicular installation; Amplifier-Power Supply AM-598/U and accessories. For remote operations; (2) 1.5 v Batteries BA-30, (1) 45 v Battery BA-414/U, two miles of telephone

wire, (1) Control Group AN/GRA-6: For relay operation; (2) Special Purpose Cable Assemblies CX-1575/U, (2) Receptacle Connectors U-79/U: For homing; (1) Antenna AT-339/PRC and AT-340/PRC.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

GENERAL

FREQUENCY RANGE
AN/PRC-8: 20 to 27.9 mc.
AN/PRC-9, -9A: 27.0 to 38.9 mc.
AN/PRC-10, -10A: 38 to 54.9 mc.

TYPE OF MODULATION: Frequency.

TYPE OF TRANSMISSION: Voice.

ANTENNA: Semi-rigid steel tape or multi-section whip type.

TUNING: Single calibrated dial continuously tunes both transmitter and receiver.

CALIBRATION: Built-in calibrater provides 1 mc calibration points throughout operating range.

TRANSMITTER

POWER OUTPUT
AN/PRC-8: 1.2 W.
AN/PRC-9, -9A: 1.0 W.
AN/PRC-10, -10A: 0.9 W.

INPUT IMPEDANCE: 150 ohms.

DISTANCE RANGE: 5 mi.

RECEIVER

TYPE: Superheterodyne.

SENSITIVITY: 0.5 uv with 2.5 mw output, 15 kc frequency deviation and a 10 db signal to noise ratio.

SELECTIVITY: 80 kc at 6 db down.

OUTPUT IMPEDANCE: 600 ohms.

INTERMEDIATE FREQUENCY: 4.3 mc.

POWER SOURCE REQUIRED: 6 v and 135 v DC.

MANUFACTURER'S OR CONTRACTOR'S DATA

RCA Victor Division, Camden, N.J.
Contract 1758-PHILA-51-01 for AN/PRC-8, -9, -10.

Western Electric Co, Burlington, N.C.
Contract 10575-PHILA-55-55 for AN/PRC-9A.

RCA Victor Division, Camden, N.J.
Contract 15178-PH-52-55 for AN/PRC-10A.

TUBE AND/OR CRYSTAL COMPLEMENT

(2) 5672	*(2) 1AD4
**(2) 5676	(9) 5678
(1) 5A6	

Total Tubes: (16)

NOTES: *(1) 1AD4 on AN/PRC-10 W/serial numbers below 6500.
**(3) 5676 on AN/PRC-10 W/serial numbers below 6500.

REFERENCE DATA AND LITERATURE

TM-11-612: Technical Manual for Radio Sets AN/PRC-8, AN/PRC-9, and AN/PRC-10.

Nonemclature Card for Radio Set AN/PRC-9A dated 4 March 1955.

Nomenclature Card for Radio Set AN/PRC-10A dated 26 October 1954.

TYPE CLASSIFICATION
DESIGN COGNIZANCE BUSHIPS
PROCUREMENT COGNIZANCE
STOCK NO.

SHIPPING DATA

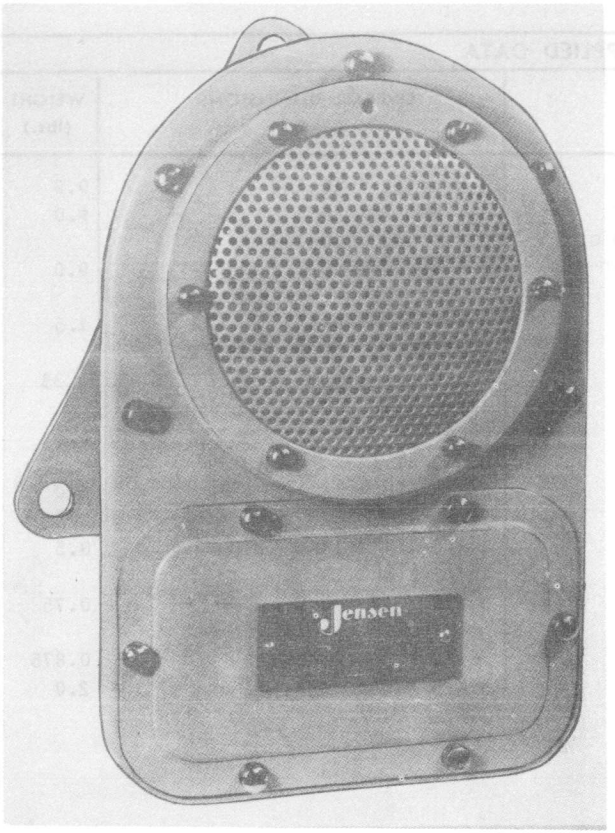
NUMBER OF BOXES	CONTENTS AND IDENTIFICATION	VOLUME (Cu.Ft.)	OVERALL DIMENSIONS (inches)	WEIGHT PACKED (lbs.)
1	Radio Set AN/PRC-8 or	3.33	15 X 15 X 25-1/2	30.0
1	Radio Set AN/PRC-9 or	3.33	15 X 15 X 25-1/2	30.0
1	Radio Set AN/PRC-9A or			
1	Radio Set AN/PRC-10 or	3.33	15 X 15 X 25-1/2	30.0
1	Radio Set AN/PRC-10A			

EQUIPMENT SUPPLIED DATA

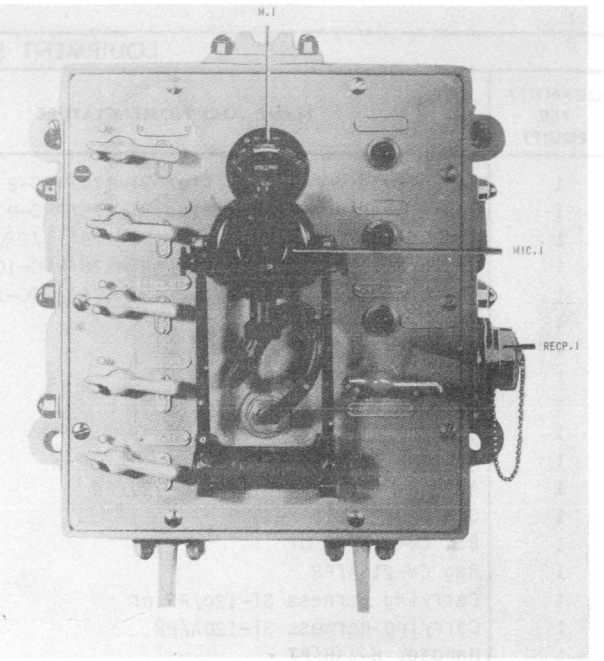
QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Radio-Receiver-Transmitter RT-174/PRC-8 or	3 X 9-1/2 X 10-1/2	9.0
1	Radio Receiver-Transmitter RT-175/PRC-9 or	3 X 9-1/2 X 10-1/2	9.0
1	Radio Receiver-Transmitter RT-175( )/PRC-9 or	3 X 9-1/2 X 10-1/2	
1	Radio Receiver-Transmitter RT-176/PRC-10 or	3 X 9-1/2 X 10-1/2	9.0
1	Radio Receiver-Transmitter RT-176A/PRC-10		
1	Case CY-744/PRC or	3 X 9-1/2 X 9-1/2	1.5
1	Case CY-744A/PRC	2-25/32 X 9-19/64 X 9-1/2	
1	Antenna AT-271/PRC or	3/4 dia X 113	0.33
1	Antenna AT-271A/PRC	112-3/4 lg	
1	Antenna AT-272/PRC or	.875 dia X 36-1/2	0.5
1	Antenna AT-272A/PRC	30-13/32 lg	
1	Antenna Spring Section AB-129/PR	5/8 X 5/8 X 8	2.0
1	Suspender Belt M-1945	36 lg	0.5
1	Bag CW-216/PR or	3 X 5-1/4 X 18	0.5
1	Bag CW-216A/PR	4-1/2 X 6 X 19	
1	Carrying Harness ST-120/PR or	2 X 9 X 14	0.75
1	Carrying Harness ST-120A/PR		
1	Handset H-33B/PT	3-1/2 X 3-1/2 X 8	0.875
1	Set of Equipment Spares	5 X 5 X 5	2.0

BATTLE ANNOUNCING EQUIPMENT

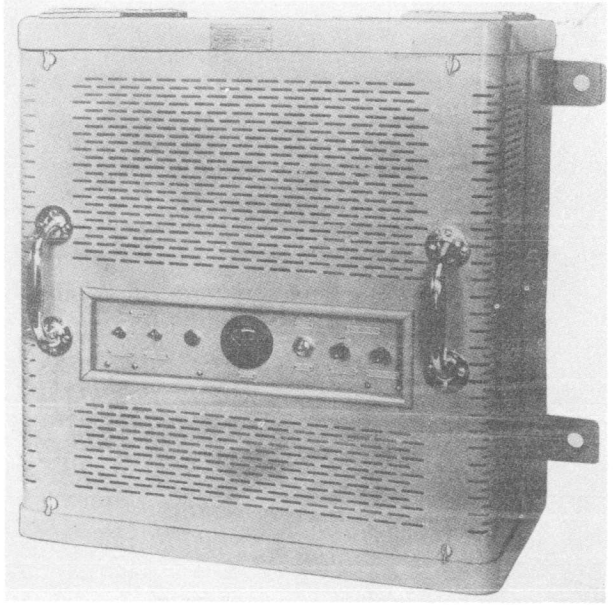
AN/SIA-10



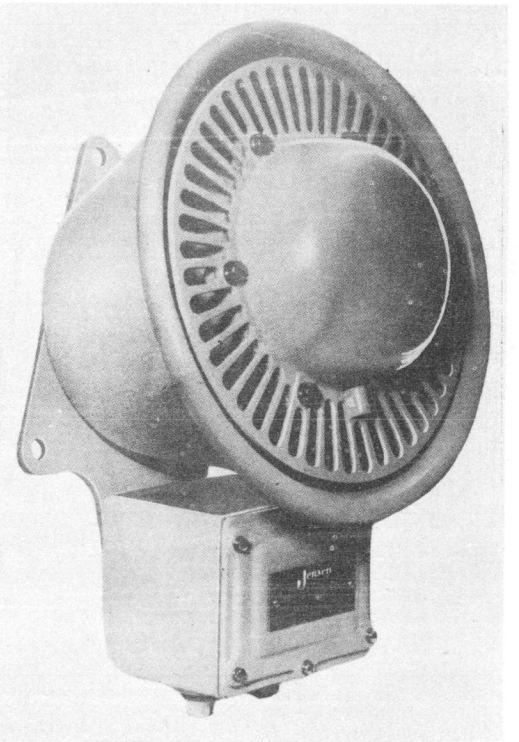
Model N-259 Class-L, N-258 Class-S



Transmitter Class "A" N-251-16

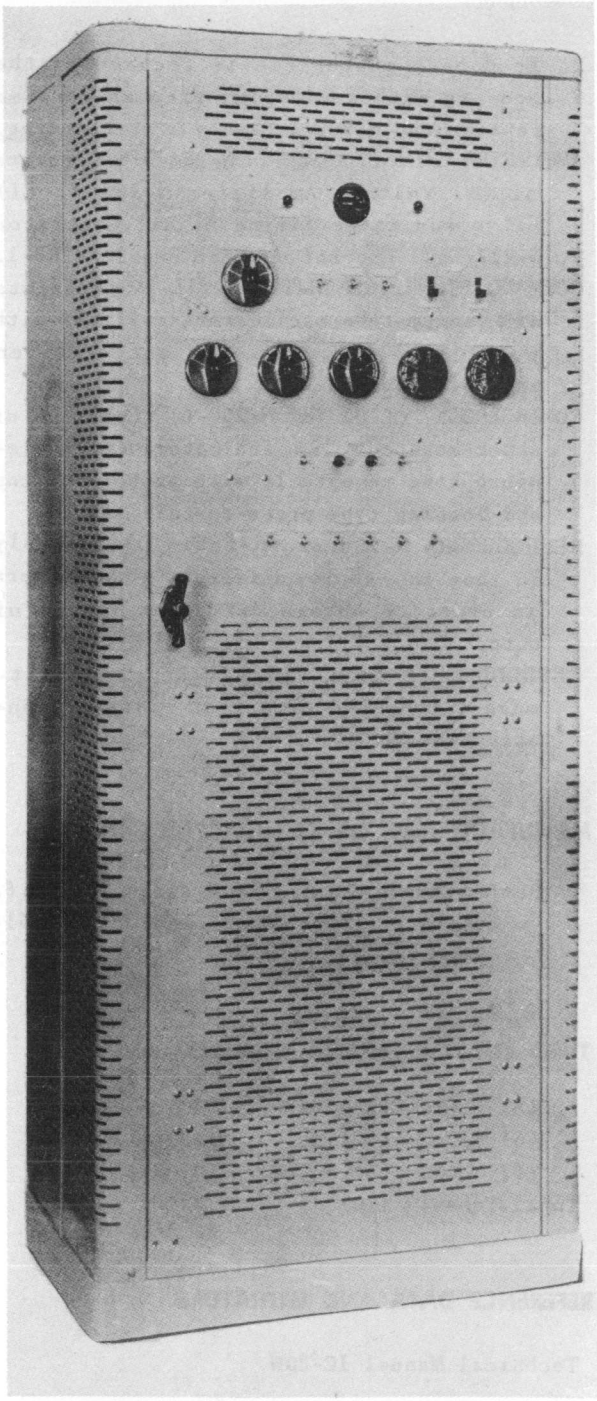


Amplifier and Control Cabinet N-254-3

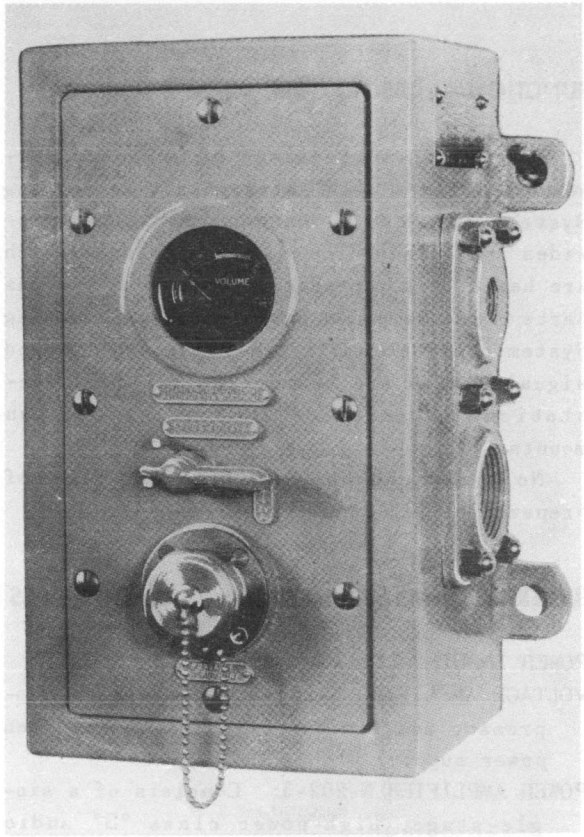


Model N-256 Class-H, N-257 Class-M

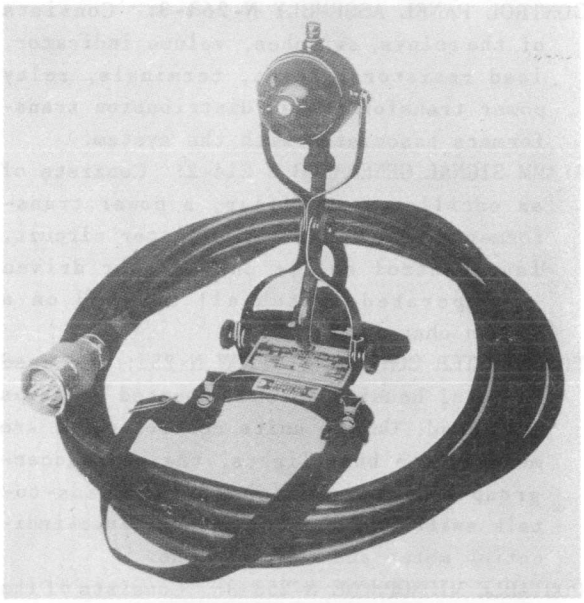
AN/SIA-10 BATTLE ANNOUNCING EQUIPMENT



Amplifier and Control Cabinet N-289-4



Control Box Class "E" N-290-6



Portable Transmitter

BATTLE ANNOUNCING EQUIPMENT AN/SIA-10

FUNCTIONAL DESCRIPTION

The AN/SIA-10 consists of a General Announcing System and a Antiaircraft Announcing System. The General Announcing System provides amplified voice and alarm signals which are heard from reproducers located at various parts of the ship. The Antiaircraft Announcing System provides amplified voice and command signals which are heard from selected gun-stations reproducers located at the gun mounts.

No field changes in effect at time of preparation (12 June 1956).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

POWER INPUT: 115 v AC.

VOLTAGE AMPLIFIER N-201-3: Contains a compressor and limiter circuits and its own power supply.

POWER AMPLIFIER N-202-3: Consists of a single-stage, high-power class "B" audio amplifier using four type 811 tubes in push-pull parallel.

CONTROL PANEL ASSEMBLY N-263-3: Consists of the relays, switches, volume indicator, load resistors, fuses, terminals, relay power transformers and distribution transformers associated with the system.

ALARM SIGNAL GENERATOR N-214-2: Consists of an oscillator-amplifier, a power transformer with rectifier and filter circuit, four control relays and a motor driven cam-operated switch all mounted on a common chassis.

TRANSMITTER CONTROL STATION N-251: Encased in metal housing which is mounted on ships bulk head. On the units control panel are mounted the busy lights, the reproducer-group selector switches, the press-to-talk switch, a shock-mounted volume-indicating meter and a microphone.

PORTABLE MICROPHONE N-253-3: Consists of the microphone motor, the press-to-talk switch, a resistor-condenser equalizing pad and the microphone housing. An Anti-feed back mouthpiece is secured to the housing with a clamping ring which also retains the motor assembly in the housing.

AMPLIFIER CABINET ASSEMBLY N-254-3: Consists of (1) Voltage Amplifier N-201-3, (1) Salvo and cease firing Signal Generator N-217, (1) Control and Test Panel N-287-1.

COMMAND SIGNAL GENERATOR N-217-1: Consists of a vacuum-tube oscillator-amplifier with power supply, relays and motor-driven variable condenser.

CONTROL BOX, CLASS "E" N-290-6: Consists of shock-mounted volume indicator, a portable-microphone receptacle with protecting cap and locking type press-to-talk switch.

REPRODUCERS N-256 and N-257: Differ only in that they employ different transformers in order to obtain different levels of output.

REPRODUCER N-259: Is of the permanent-magnet type and of direct radiator construction.

MANUFACTURER'S OR CONTRACTOR'S DATA

Remler Company, LTD., San Francisco, Calif.
Contract: NObsr 11185 and NObsr 11761-Lot II.

TUBE AND/OR CRYSTAL COMPLEMENT

(6) 6SK7	(6) 6SJ7	(10) 6SN7-GT
(6) 6J5	(12) 6L6-G	(12) 6X5-GT
(6) 5U4-G	(4) 866-A	(8) 811

Total Tubes: (70)

REFERENCE DATA AND LITERATURE

Technical Manual IC-30W

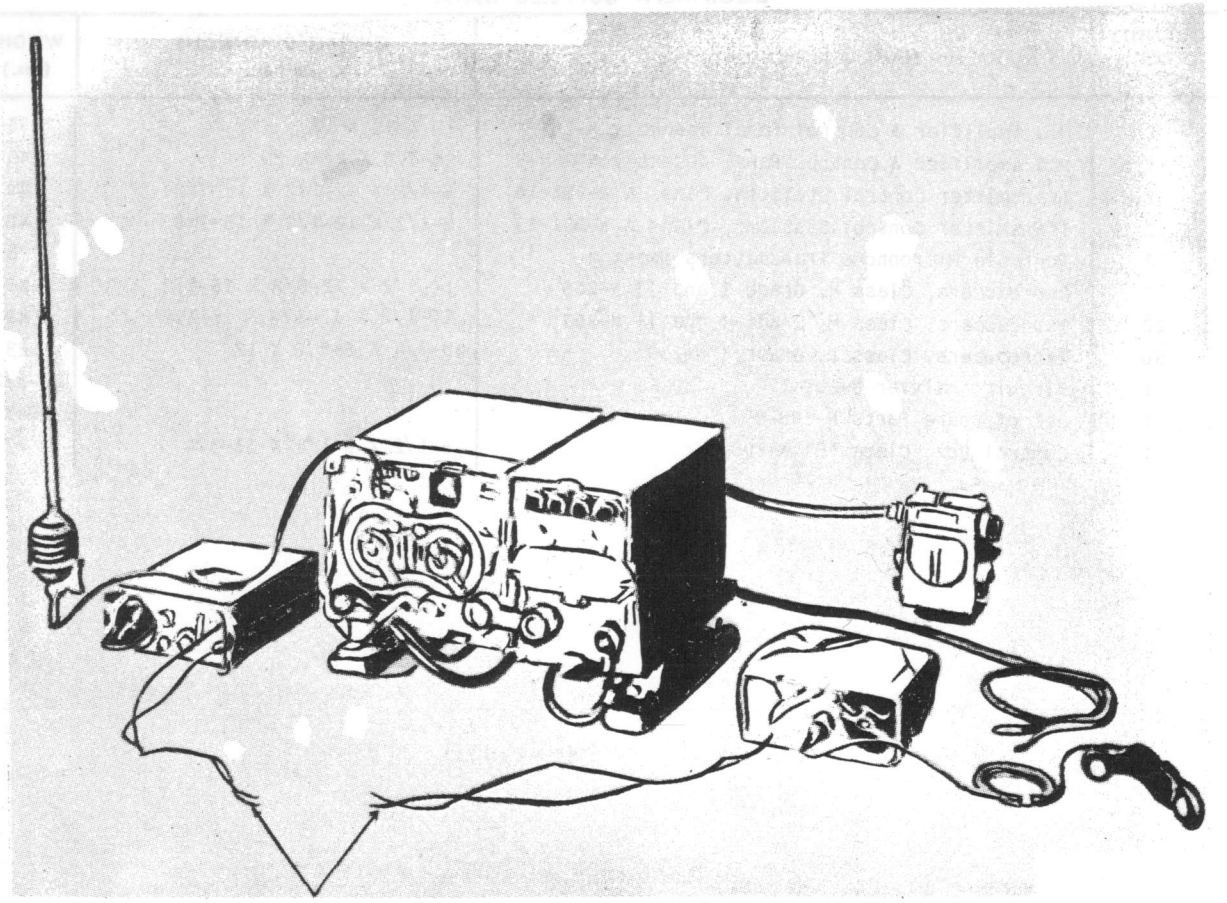
TYPE CLASSIFICATION
DESIGN COGNIZANCE
PROCUREMENT COGNIZANCE
STOCK NO.

AN/SIA-10 BATTLE ANNOUNCING EQUIPMENT

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	MCG Amplifier & Control Panel Assembly N-289-4	20 X 30 X 72	1175
1	MCA Amplifier & Control Panel Assembly N-254-3	16-7/8 X 26 X 29	265
2	Transmitter Control Stations, Class A N-251-16	8-1/2 X 12-1/2 X 15-7/8	48
2	Transmitter Control Stations, Class A_N-251-17	8-1/2 X 12-1/2 X 15-7/8	48
2	Portable Microphone Transmitters N-253-3		5
7	Reproducers, Class H, Grade I and II N-256	10-1/2 X 12-5/8 X 15-1/2	49
10	Reproducers, Class M, Grade I and II N-257	10-1/2 X 12-5/8 X 15-1/2	49
50	Reproducers, Class L, Grade I N-259	5-3/4 X 8-5/8 X 12	23
1	Circuit Analyzer N-209-1		13-1/2
1	Set of Spare Parts N-208-6		943
1	Control Box, Class "E" N-290-6	6-1/2 X 9-1/4 X 11-3/4	22

RADIO SETS AN/SRC-10, 10X, 10Y, 11, 11X, 11Y, 12, 12X, 12Y



Radio Set AN/SRC-10, 10X, 10Y, 11, 11X, 11Y, 12, 12X, 12Y

FUNCTIONAL DESCRIPTION

The AN/SRC-10, 10X, 10Y, 11, 11X, 11Y, 12, 12X and 12Y provide FM radiotelephone facilities within the frequency range of 20 to 54.9 mc, each receiver-transmitter covering a portion of that range. The equipments can be installed and operated in trucks, personnel carriers, armored utility vehicles, weapons carriers, and other authorized vehicles. The equipments are designed primarily for short range operation (10 to 15 miles). These equipments are shipboard installed for amphibious communications.

Data on this sheet reflects the following field changes: FC 1 and 2 (20 August 1956).

RELATION TO OTHER EQUIPMENT

The AN/SRC-10, 10X, 10Y, 11, 11X, 11Y, 12, 12X and 12Y nomenclature has been assigned to identify the Navy equivalent to Army Radio Sets AN/VRC-8, 9 and 10 with power inputs of 24 v dc, 12 v dc, and 115 v ac.

EQUIPMENT REQUIRED BUT NOT SUPPLIED

Control Group required (4) 1.5 v Batteries BA-30, (1) 45 v Battery BA-414/U; F/C #1 should be provided to ships with radio remote control switchboards; Control Box C-375/VRC and Loudspeaker CS-166/U are supplied as required; Interconnecting Cable WM-46/U, Coaxial Cable RG-10/U are supplied as required and (2) Coaxial Plugs UG-21()/U are furnished by the installing activity.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

FREQUENCY RANGE
AN/SRC-10, 10X, 10Y: 20 to 27.9 mc.

Radio-Transceivers

AN/SRC-10, 10X, 10Y, 11, 11X, 11Y, 12, 12X, 12Y RADIO SETS

AN/SRC-11, 11X, 11Y: 27 to 38.9 mc.
AN/SRC-12, 12X, 12Y: 38 to 54.9 mc.

TYPE OF EMISSION AND RECEPTION: Voice and 1600 cps FM signals.

TYPE OF TUNING: Continuous or channel selection.

FREQUENCY CHANNELS
AN/SRC-10, 10X, 10Y: 80 channels.
AN/SRC-11, 11X, 11Y: 120 channels.
AN/SRC-12, 12X, 12Y: 170 channels.

CHANNEL SPACING: Every 100 kc.

PRESETTING: Any two channels.

RANGE: 10 to 15 miles.

POWER OUTPUT
TRANSMITTER: High 16 W. Low 2 W (approx).
RECEIVER: 1 W into 600 ohm speaker, 50 mw into 600 ohm phones. (A third output of approx 30 mw at fixed level output is not used).

RECEIVER TYPE: Double conversion superheterodyne.

MICROPHONE INPUT IMPEDANCE: 150 ohms.

AUDIO OUTPUT IMPEDANCE: 600 ohms at all audio output terminals.

RECEIVER SENSITIVITY: 30 db signal plus noise to noise ratio with 1/2 uv input signal.

POWER REQUIREMENTS
AN/SRC-10, 11, 12: 24 v dc.
AN/SRC-10X, 11X, 12X: 12 v dc.
AN/SRC-10Y, 11Y, 12Y: 115 v ac, 60 cps, single ph.

MANUFACTURER'S OR CONTRACTOR'S DATA

DeJur-Amsco Corp., Long Island City, N. Y.
Contract DA-36-039-SC-47969.
Signal Corps Supply Agency, Philadelphia, Pa.
Contract MIPR 800-29092-52, dated 23 June 1952.
Contract MIPR 800-29502, dated 23 June 1952.
Contract MIPR 53-800-99239.
Philco Corp., Philadelphia, Pa.
Contract NObsr-63403, dated 30 June 1953.

TUBE AND/OR CRYSTAL COMPLEMENT

AN/SRC-10, 10X, 11, 11X, 12, 12X

(2) 1A3	(2) 1AE4
(2) 1L4	(4) 1R5
(1) 1S5	(4) 1U4
(1) 2E24	(1) 3A4
(3) 3A5	(2) 3B4
(4) 3Q4	(2) 1007
(1) 5654/6AK5W	(1) 6626/OA2WA
(1) 6627/OB2WA	

Total Tubes: (31)

AN/SRC-10Y, 11Y, 12Y

(2) 1A3	(2) 1AE4
(2) 1L4	(4) 1R5
(1) 1S5	(4) 1U4
(1) 2E24	(1) 3A4
(3) 3A5	(2) 3B4
(4) 3Q4	(1) 5654/6AK5W

Total Tubes: (27) Excluding Power Supply PP-1175/SR.

No Crystals.

REFERENCE DATA AND LITERATURE

TM 11-286: Technical Manual for Radio Sets AN/SRC-10, 10X, 10Y, 11, 11X, 11Y and 12, 12X, 12Y. (AN/VRC-8, 9, and 10).
BUSHIPS LTR S67/1-7 Ser 881E-1-3528, dated 1 September 1955.

TYPE CLASSIFICATION (NAVY)
DESIGN COGNIZANCE TASSA
PROCUREMENT COGNIZANCE
STOCK NO.

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT			NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
AN/SRC-					
10	10X	10Y			
1	1	1	Receiver-Transmitter RT-66/GRC	9 x 11-1/4 x 13	35
	1		Power Supply PP-109/GR (12 v)	8 x 9 x 13	33
1			Power Supply PP-112/GR (24 v)	8 x 9 x 13	33
		1	Power Supply PP-1175/SR (115 v ac)	7-5/16 x 9-1/4 x 12-7/8	
1	1	1	Mounting MT-299/GR	4 x 13 x 20	24
1	1	1	Antenna Assembly AN/SRA-3		

RADIO SETS AN/SRC-10, 10X, 10Y, 11, 11X, 11Y, 12, 12X, 12Y

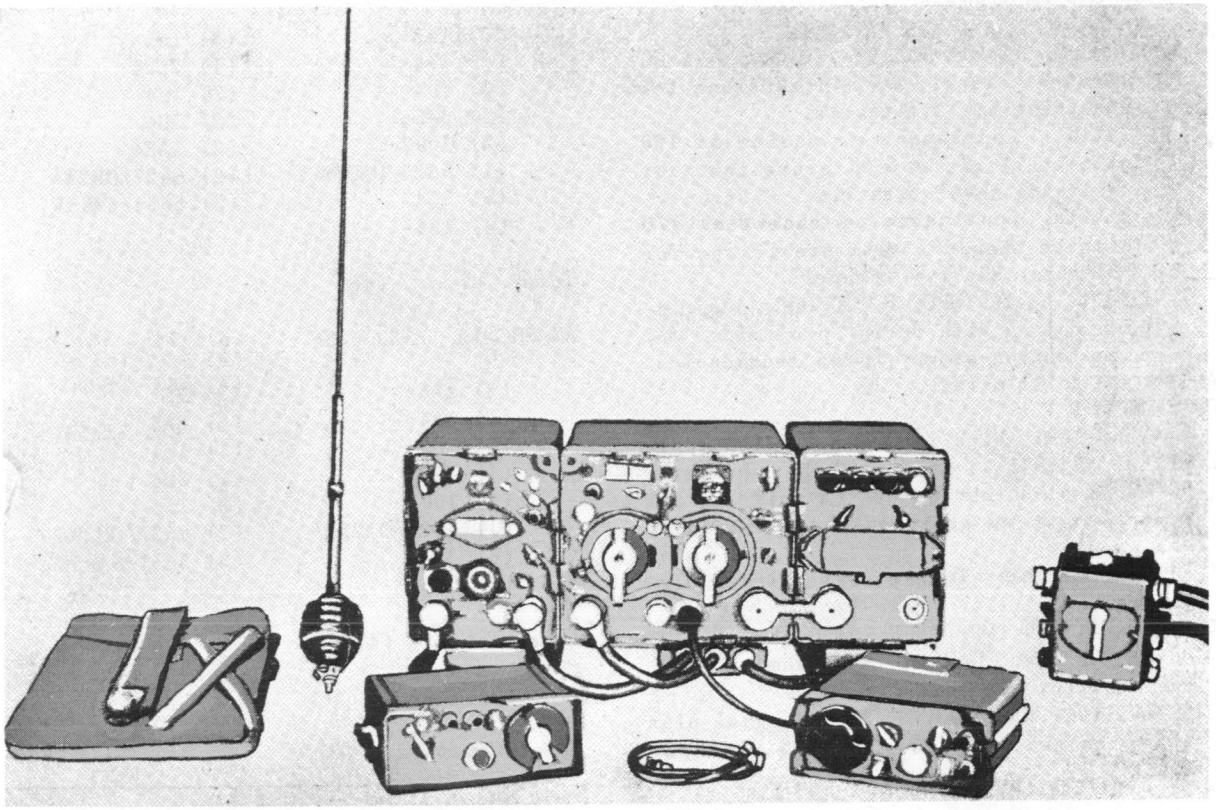
EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT			NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
	AN/SRC				
10	10X	10Y			
1*	1*	1*	Handset H-33/PT	2-1/16 x 3 x 3	2
1	1	1	Special Purpose Cable Assembly CX-1211/U		0.4
1*	1		Control Adaptor MX-1583/SRC		
		1	Control Adapter MX-1986/SRC		
2	2	2	Technical Manual TM11-286		
11	11X	11Y			
1	1	1	Receiver-Transmitter RT-67/GRC	9 x 11-1/4 x 13	35
	1		Power Supply PP-109/GR (12 v) or	8 x 9 x 13	33
1			Power Supply PP-112/GR (24 v)	8 x 9 x 13	33
		1	Power Supply PP-1175/SR (115 v ac)	7-5/16 x 9-1/4 x 12-7/8	
1	1	1	Mounting MT-299/GR	4 x 13 x 20	24
1	1	1	Antenna Assembly AN/SRA-3		
1*	1*	1*	Handset H-33/PT	2-1/16 x 3 x 3	2
1	1	1	Special Purpose Cable Assembly CX-1211/U		0.4
1	1		Control Adapter MX-1583/SRC		
		1	Control Adapter MX-1986/SRC		
2	2	2	Technical Manual TM11-286		
12	12X	12Y			
1	1	1	Receiver-Transmitter RT-68/GRC	9 x 11-1/4 x 13	35
	1		Power Supply PP-109/GR (12 v) or	8 x 9 x 13	33
1			Power Supply PP-112/GR (24 v)	8 x 9 x 13	33
		1	Power Supply PP-1175/SR (115 v ac)	7-5/16 x 9-1/4 x 12-7/8	3.5
1	1	1	Mounting MT-299/GR	4 x 13 x 20	24
1	1	1	Antenna Assembly AN/SRA-3		
1*	1*	1*	Handset H-33/PT	2-1/16 x 3 x 3	2
1	1	1	Special Purpose Cable Assembly CX-1211/U		0.4
1	1		Control Adapter MX-1583/SRC		
		1	Control Adapter MX-1986/SRC		
2	2	2	Technical Manual TM11-286		

* One additional H-33/PT should be supplied for each control box installed.

Radio-Transceivers

RADIO SETS AN/SRC-13, 13X, 13Y, 14, 14X, 14Y, 15, 15X, 15Y



No Reduction Radio Set AN/SRC-13

FUNCTIONAL DESCRIPTION

The AN/SRC-13, 13X, 13Y, 14, 14X, 14Y, 15, 15X and 15Y provides FM radiotelephone facilities within the frequency range of 20 to 54.9 mc, each receiver-transmitter covering a portion of that range. The equipments can be installed and operated in trucks, personnel carriers armored utility vehicles, weapon carriers, and other authorized vehicles. The equipments are designed primarily for short range operation (10 to 15 miles). These equipments are shipboard installed for amphibious communications.

Data on this sheet reflects the following field changes, F/C#1 and 2 (21 August 1956).

RELATION TO OTHER EQUIPMENT

The AN/SRC-13, 13X, 13Y, 14, 14X, 14Y, 15, 15X and 15Y nomenclature has been assigned to identify the Navy equivalent to Army Radio Sets.

AN/VRC-16, 17 and 18 with power inputs of 24 v dc, 12 v dc and 115 v ac.

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(4) 1.5 v Batteries BA-30, (1) 45 v Battery BA-414/U; F/C #1 should be provided to ship with radio remote control switchboards; Control Box C-375/URC and Loudspeaker LS-166/U are supplied as required; Interconnecting Cable WM-46/U, Coaxial Cable RG-10/U are supplied as required and (4) Plugs UG-21()/U are furnished by the installing activity.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

FREQUENCY RANGE

RT-66/GRC:	20 to 27.9 mc.
RT-67/GRC:	27 to 38.9 mc.
RT-68/GRC:	38 to 54.9 mc.
R-108/GRC:	20 to 28 mc.
R-109/GRC:	27 to 39 mc.
R-110/GRC:	38 to 55 mc.

Radio-Transceivers

AN/SRC-13, 13X, 13Y, 14, 14X, 14Y, 15, 15X, 15Y — RADIO SETS

TYPE OF EMISSION AND RECEPTION: Voice and 1600 cps FM signals.

TYPE OF TUNING

RT-66/GRC: Continuous or choice of 80 detented channels with provisions for presetting any 2 channels.

RT-67/GRC: Continuous or choice of 120 detented channels with provisions for presetting any 2 channels.

RT-68/GRC: Continuous or choice of 170 detented channels with provisions for presetting any two channels.

R-108/GRC, R-109/GRC, R-110/GRC: Continuous tuning with detent provisions for preselection of any three frequencies.

RANGE: 10 to 15 miles.

POWER OUTPUT

TRANSMITTER: High 16 W, Low 2 W (approx).

RECEIVERS (EACH): 1 W into 600 ohms speakers, 50 mw into 600 ohm phones (a third output of approx 30 mw at fixed-level output is not used).

TYPE OF RECEIVERS: Double conversion superheterodyne.

MICROPHONE INPUT IMPEDANCE: 150 ohms.

AUDIO OUTPUT IMPEDANCE: 600 ohms at all audio output terminals.

SENSITIVITY OF RECEIVERS: 30 db signal plus noise to noise ratio with 1/2 uv input signal.

MANUFACTURER'S OR CONTRACTOR'S DATA

JFD Manufacturing Co., Brooklyn, N. Y.
Contract DA-36-039-SC-12166, dated 31 October 1951.

Signal Corps Supply Agency, Philadelphia, Pa.
Contract MIPR-800-39141, dated 29 September 1952.

TUBE AND/OR CRYSTAL COMPLEMENT

AN/SRC-13, 13X, 13Y

(3) 1A3	(4) 1R5
(4) 1L4	(3) 1S5
(2) 1AE4	(6) 1U4
(1) 6626/OA2WA	(2) 6627/OB2WA
(1) 2E24	(2) 3B4
(5) 3A5	(1) 3A4
(3) 5654/AK5W	(2) 1007
(6) 3Q4	

Total Tubes: (45)

AN/SRC-14, 14X, 14Y

(3) 1A3	(3) 1S5
(1) 3A4	(1) 2E24
(3) 1L4	(7) 1U4
(5) 3A5	(2) 3B4
(2) 1007	(2) 1AE4
(1) 6626/UA2WA	(2) 6627/OB2WA
(6) 3Q4	(3) 5654/6AK5W
(4) 1R5	

Total Tubes: (45)

AN/SRC-15, 15X, 15Y

(3) 1A3	(3) 1S5
(1) 3A4	(5) 3A5
(2) 1AE4	(7) 1U4
(1) 2E24	(2) 3B4
(2) 1007	(3) 114
(1) 6626/OA2WA	(2) 6627/OB2WA
(6) 3Q4	(3) 5654/6AK5W
(6) 1R5	

Total Tubes: (47)

(3) 1N34A

Total Crystals: (3)

REFERENCE DATA AND LITERATURE

TM11-611: Technical Manual for Radio Sets AN/SRC-13, 13X, 13Y, AN/SRC-14, 14X, 14Y and AN/SRC-15, 15X, 15Y.

BUSHIPS LTR S67/1-7 Ser 881E-1-3528, dated 1 September 1955.

TYPE CLASSIFICATION (NAVY)
DESIGN COGNIZANCE TASSA
PROCUREMENT COGNIZANCE
STOCK NO.

RADIO SETS

AN/SRC-13, 13X, 13Y, 14, 14X, 14Y, 15, 15X, 15Y

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT			NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
AN/SRC					
13	13X	13Y			
1	1	1	Receiver-Transmitter RT-66/GRC	9 x 11-1/4 x 13	35
1	1	1	Radio Receiver R-108/GRC	7-1/4 x 9 x 13	35
1			Power Supply PP-112 (24 v dc)	8 x 9 x 13	33
	1		Power Supply-109 (12 v dc)	8 x 9 x 13	33
		1	Power Supply PP-1175/SR (115 v ac)	7-5/16 x 9-1/4 x 12-7/8	
1			Power Supply PP-282 (24 v dc)	3 x 4-1/2 x 6	6
	1		Power Supply PP-281 (12 v dc)	3 x 4-1/2 x 6	6
1	1	1	Mounting MT-327/GRC	4 x 13 x 20	28
2	2	2	Antenna Assembly AN/SRA-3		
1*	1*	1*	Handset H-33/PT	2-1/16 x 3 x 3	
1	1	1	Special Purpose Cable Assembly CX-1211/U		
1	1		Control Adapter MX-1583-SRC		
		1	Control Adapter MX-1986/SRC		
2	2	2	Technical Manual TM11-611		
AN/SRC					
14	14X	14Y			
1	1	1	Receiver-Transmitter RT-67/GRC	9 x 11-1/4 x 13	35
1	1	1	Radio Receiver R-109/GRC	7-1/4 x 9 x 13	35
1			Power Supply PP-112 (24 v dc)	8 x 9 x 13	33
	1		Power Supply PP-109 (24 v dc)	8 x 9 x 13	33
1			Power Supply PP-282 (24 v dc)	3 x 4-1/2 x 6	6
	1		Power Supply PP-281 (12 v dc)	3 x 4-1/2 x 6	6
		1	Power Supply PP-1175/SR (115 v ac)	7-5/16 x 9-1/4 x 12-7/8	
1	1	1	Mounting MT-327/GRC	4 x 13 x 20	28
2	2	2	Antenna Assembly AN/SRA-3		
1	1	1	Handset H-33/PT	2-1/16 x 3 x 3	2
1	1	1	Special Purpose Cable Assembly CX-1211/U		0.4
1	1		Control Adapter MX-1583/SRC		
		1	Control Adapter MX-1986/SRC		
2	2	2	Technical Manual TM11-611		
AN/SRC					
15	15X	15Y			
1	1	1	Receiver-Transmitter RT-68/GRC	9 x 11-1/4 x 13	35
1	1	1	Radio Receiver R-110/GRC	7-1/4 x 9 x 12-13/16	20-1/4
1			Power Supply PP-112/GR (24 v dc)	8 x 9 x 13	33
	1		Power Supply PP-109/GR (12 v dc)	8 x 9 x 13	33
		1	Power Supply PP-1175/SR (115 v dc)	7-5/16 x 9-1/4 x 12-7/8	
1			Power Supply PP-282/GRC (24 v dc)	3 x 4-1/2 x 6	6
	1		Power Supply PP-281/GRC (12 v dc)	3 x 4-1/2 x 6	6
1	1	1	Mounting MT-327/GR	4 x 13 x 20	28
2	2	2	Antenna Assembly AN/SRA-3		
1*	1*	1*	Handset H-33()/PT	2-1/16 x 3 x 3	2
1	1	1	Special Purpose Cable Assembly CX-1211/U		0.4
1	1		Control Adapter MX-1583/SRC		
		1	Control Adapter MX-1986/SRC		
2	2	2	Technical Manual TM-611		

* one additional H-33/PT should be supplied for each Control Box installed

COMMUNICATIONS CENTRAL AN/SRC-16(XN-1)

FUNCTIONAL DESCRIPTION

The AN/SRC-16(XN-1) is the R.F. equipment which forms part of the Naval Tactical Data System (NTDS) and the High Capacity Communications System (HCCS). It is capable of providing simultaneous and independent operation of four circuits, each of which shall be of simplex or full duplex operation on any frequency within the range of 2 to 30 megacycles, except for the Type "B" amplifiers.

No Field changes in effect at time of preparation (12 October 1960).

RELATION TO OTHER EQUIPMENT

The AN/SRC-16(XN-1) is used with but not part of Terminal Set, Telegraph AN/SSC-1(XN-1) and Data Terminal Set AN/SSQ-29(XN-2).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF INSTALLATION: Shipboard installed.
OPERATING FREQUENCY RANGE: 2 to 30 mc.
OPERATING POWER RQMT: 115 v ac, 60 cps, single ph; 440 v ac, 60 cps, 3 ph.

MANUFACTURER'S OR CONTRACTOR'S DATA

Collins Radio Co., Richardson, Texas.
Contract NObsr-77503, dated 18 July 1958.

TUBE AND/OR CRYSTAL COMPLEMENT

Electron Tube and/or Crystal data not available.

REFERENCE DATA AND LITERATURE

NAVSHIPS 93400: Preliminary Data Form for Communications Central AN/SRC-16(XN-1).

TYPE CLASSIFICATION (NAVY)
DESIGN COGNIZANCE NAVY BUSHIPS
PROCUREMENT COGNIZANCE SHIPS-1-3076
STOCK NO.
R.D.B. IDENT. NO.

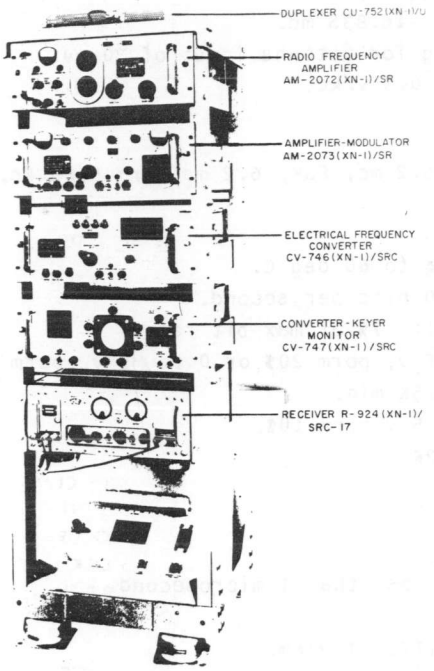
EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Communications Central AN/SRC-16(XN-1) Consists of:		
4	Linear Power Amplifier Units		
4	Frequency Generator Units		
4	Radio Frequency Translator Units		
4	Audio Frequency Translator Units		
2	Radiated Power Control and Receiver Attenuator Units		
1	Antenna Multicoupler Unit		
2	Linear Power Amplifier Units (Type B)		
2	Primary Frequency Standard Units		
1	Operating Console		
1	Programmed Test Unit		
2	Antenna Switching and Patching Units		

Cog Service: USN FSN: Functional Class:

	USA	USN	USAF
TYPE CLASS:	Used by	Used by	

MANUFACTURER'S NAME/CODE NUMBER: Mansons Laboratories Incorporated, (93279).



Radio Set AN/SRC-17(XN-1)

FUNCTIONAL DESCRIPTION:

The Radio Set AN/SRC-17(XN-1) is designed to transmit 100 watts of Frequency Modulated (FM) carrier or a 100% voice modulated amplitude Modulated (AM) carrier, and to receive either FM or AM.

No field changes in effect at time of preparation (17 January 1962).

TECHNICAL CHARACTERISTICS:

TYPE OF INSTALLATION: Ship or Shore.
TYPE OF EMISSION: F1.
OPERATING FREQUENCY RANGE: 225 to 400 mc.
ELECTRICAL FREQUENCY CONVERTER CV-746 (XN-1)/SRC.
FREQUENCY RANGE
TRANSMITTER: 225 to 400 mc.

RECEIVER: 243.6 to 418.6 mc.
TYPE OF FREQUENCY CONTROL: Crystal synthesizer.
TEMPERATURE RANGE: 0 deg to 65 deg C.
OUTPUT IMPEDANCE
TRANSMITTER: 50 ohms.
RECEIVER: 90 ohms.
POWER OUTPUT
TRANSMITTER: 0.5 to 1.5 W.
RECEIVER: 100 mw.

CONVERTER-KEYER-MONITOR CV-747(XN-1)/SRC
LOCAL OSCILLATOR FREQUENCY: 16.835 mc.
SENSITIVITY: 30 db quieting for antenna input of 30 uv.
DISCRIMINATOR SENSITIVITY: 0.3 v/kc.
CLIPPING LEVEL: 18 db.
KEYER
CARRIER FREQUENCY: AM, 6.2 mc, FSK, 6.2 mc porm 6.66 kc.
MARK FREQUENCY: 6.2 mc.
SPACE FREQUENCY: 6.2 mc.
TEMPERATURE RANGE: 0 deg to 60 deg C.
MAXIMUM BIT RATE: 13,000 bits per second.
PHASE DISTORTION (JITTER): 7% at max bit rate.
DATA INPUT LEVEL: Porm 5 v, porm 20% or 0 to M5 v, porm 20%.
DATA INPUT IMPEDANCE: 2.5K min.
DATA OUTPUT LEVEL: Porm 5 v porm 10%.
DATA OUTPUT IMPEDANCE: 2K.

MONITOR GENERATOR
FREQUENCY: 30 to 9000 cps.
SIGNAL LEVEL: 0 to M5 v.
SIGNAL RISE AND FALL TIME: Less than 1 microsecond.

MONITOR OSCILLOSCOPE
VERTICAL AMPLIFIER SENSITIVITY: 1 v/cm.
VERTICAL AMPLIFIER BANDWIDTH: 400 kc.
SWEEP FREQUENCY RANGES: 2 to 20 cps, 12 to 140 cps, 110 to 1150 cps, 900 to 8500 cps.

RECEIVER R-924(XN-1)/SRC-17
NUMBER OF PRESET FREQUENCIES: 1.
TYPE OF FREQUENCY CONTROL: Crystal controlled oscillator.
TYPE OF RECEIVER: Superheterodyne.
TYPE OF RECEPTION: AM, Voice, FM and FSK.
MAXIMUM AUDIO DISTORTION: 7%.
CRYSTAL FREQUENCIES: 20.3000 to 34.8833 mc.
ANTENNA INPUT IMPEDANCE: 51 ohms.
AUDIO CHANNEL OUTPUT IMPEDANCE: 600 ohms.

AMPLIFIER-MODULATOR AM-2073(XN-1)/SR
FREQUENCY RANGE: 225 to 400 mc.
INPUT POWER: 0.5 to 1.5 W.
INPUT IMPEDANCE: 50 ohms.
OUTPUT POWER: 10 to 15 W.
OUTPUT IMPEDANCE: 50 ohms.
AUDIO INPUT: 0.15 to 3 v.

AUDIO INPUT IMPEDANCE: 600 ohms.
MODULATION POWER OUTPUT: 2.5 W max.
MODULATION DISTORTION: 10% max.
PERCENT MODULATION: 95% screen modulation.
CLIPPING: 16 to 20 db.

RADIO FREQUENCY AMPLIFIER AM-2072(XN-1)/SR
FREQUENCY RANGE: 225 to 400 mc.
POWER OUTPUT
FREQUENCY MODULATION: 100 W.
AMPLITUDE MODULATION: 100% voice.

DUPLEXER CU-752(XN-1)/U
POWER LEVEL
MAXIMUM PEAK POWER: 400 W.
AVERAGE PEAK POWER: 200 W.
PULSE RATE: 500 cycles max.
DUTY CYCLE: 50% max.
POWER LEAKAGE: Less than 1 W across the band at 100 W level.
RECOVERY TIME: 100 microseconds.
BANDWIDTH: 225 to 400 mc.
VSWR: 1.6: 1 max.
INSERTION LOSS: 0.8 db max.
FIRING POWER: 20 W minimum input.

RELATION TO OTHER EQUIPMENT:

The AN/SRC-17(XN-1) is designed as part of AN/SRC-16( ) and others.
The AN/SRC-17(XN-1) is designed to be used with, but not part of OA-2099( )/SRC-17.

EQUIPMENT REQUIRED BUT NOT SUPPLIED: None.

MAJOR COMPONENTS

QTY	ITEM	STOCK NUMBERS	DIMENSIONS (INCHES)	WEIGHT (LBS)
1	Radio Set AN/SRC-17(XN-1) consists of:			
1	Electronic Frequency Converter CV-746(XN-1)/SRC		16-7/8 x 18-5/16 x 18-5/16	
1	Converter-Keyer-Monitor CV-747(XN-1)/SRC		6-31/32 x 16-3/8 x 20-1/2	
1	Receiver R-924(XN-1)/SRC-17		6-31/32 x 16-3/8 x 20-1/2	
1	Amplifier-Modulator AM-2073/SR		6-31/32 x 16-3/8 x 20-1/2	
1	Radio Frequency Amplifier AM-2072(XN-1)/SR		6-31/32 x 16-3/8 x 20-1/2	
1	Duplexer CU-752(XN-1)/U		1-1/2 x 15-1/2 x 21	

AN/SRC-17(XN-1) RADIO SET

REFERENCE DATA AND LITERATURE:

NAVSHIPS 93493: Technical Manual for Radio Set AN/SRC-17(XN-1).

TUBE, CRYSTAL AND/OR SEMI-CONDUCTOR DATA:

TUBES: (1) 3RP1A (13) 12AT7 (4) 6U8 (3) 6AS6 (4) 6AH6 (1) 6CL6 (1) 6AN5
(2) 6442 (1) 5675 (1) 5636 (1) 5896 (4) 6AQ5 (1) 5636/5719 (1) 6AL5
(1) 6AU6 (1) 6AK5 (2) 6816 (2) 5814 (1) 5751

CRYSTALS: (11) CR-24/U

SEMI-CONDUCTORS: (1) 1N54 (1) 2X1N705 (2) 2X1N294

TRANSISTORS: (2) 2N428 (2) 2N527A

SHIPPING DATA

PKGS	VOLUME (CU FT)	WEIGHT (LBS)

PROCUREMENT DATA

PROCURING SERVICE: USN
DESIGN COG: USN, BuShips
SPEC &/OR DWG: SHIPS-M-2720 Addendium 3

CONTRACTOR	LOCATION	CONTRACT OR ORDER NO.	APPROX. UNIT COST
Mansons Laboratories Inc. Model no. N480	Stamford, Connecticut	NObsr-72730, 18 June 1957	

17 September 1962 RADIO SET AN/SRC-20

Cog Service: USN FSN: Functional Class:

USA	USN	USAF

TYPE CLASS: Used by Used by

MANUFACTURER'S NAME/CODE NUMBER: Collins Radio Co., (13499).

(No Illustration Available)

FUNCTIONAL DESCRIPTION:

The Radio Set AN/SRC-20 is designed as a surface-to-air or surface-to-surface shipboard or fixed station Ultra High Frequency (UHF) communication equipment that provides simplex amplitude modulation. Provisions are included for complete control, including preset channel selection, from as many as four remote control points. Circuits are provided so that two (2) sets may be interconnected for two (2) way automatic retransmission operation. Provisions are included for operation with special purpose equipment requiring broadband audio.

During transmission, the 15 to 20 watt output of the exciter, Radio Set AN/URC-9, is amplified to 100 watts minimum carrier level. In case of failure of the power amplifier, the 15 to 20 watt output of the exciter can be used for emergency communications.

No field changes in effect at time of preparation (23 May 1962).

TECHNICAL CHARACTERISTICS:

RADIO SET AN/URC-9 CHARACTERISTICS

FREQUENCY RANGE: 225.0 to 399.9 mc.

NUMBER OF CHANNELS: 1750.

CHANNEL SPACING: 100 kc.

CHANNEL SELECTION TIME: 8 seconds max.

NUMBER OF PRESET CHANNELS: 19 plus 1 manually tuned channel.

FREQUENCY STABILITY: Within porm 12 kc of nominal channel frequency over the ambient temperature range of M55 deg C to 65 deg C.

OPERATING POWER RQMT

VOLTAGE: 115/230 v ac.

FREQUENCY: 50 to 60 cps.

POWER FACTOR RECEIVING: 250 W at 92%.

POWER FACTOR TRANSMITTING: 400 W at 95%.

AN/URC-9 TRANSMITTING CHARACTERISTICS

POWER OUTPUT: More than 15 W into 50 ohm nominal resistive load.

TYPE OF MODULATION: AM.

FIDELITY: Within porm 3 db from 300 to 3500 cps, 1000 cps reference.

AUDIO DISTORTION: Less than 10%.

SIDETONE: 175 mw from receiver audio output into 600 ohm load.

BROADBAND CAPABILITY: Auxiliary input to modulator permits modulation of carrier with frequencies from 300 to 25000 cps.

DUTY CYCLE: Continuous transmission with 85% modulation at 60 deg C ambient temperature.

RETRANSMISSION: Audio and control circuits provided.

AN/URC-9 RECEIVING CHARACTERISTICS

SENSITIVITY: 6 uv or less (in series with 50 ohm) for a 10 db signal-plus-noise-to-noise

ratio.

SELECTIVITY: 6 db at 7 kc, 60 db at 145 kc.

IF REJECTION: More than 100 db attenuation.

IMAGE RESPONSE: More than 60 db attenuation.

SPURIOUS RESPONSE: Frequencies 100 kc or more from carrier are attenuated over 60 db.

AUDIO FREQUENCY RESPONSE: Within porm 3 db from 300 to 3500 cps.

AUDIO DISTORTION: 10% max.

AUDIO OUTPUTS

HEADSETS AND REMOTE OUTPUT: 2 w, 600 ohms.

RETRANSMISSION OUTPUT: 10 milliwatts, 600 ohm (receive audio).

BROADBAND OUTPUT: 1 v, 600 ohms, 300 to 25000 cps.

AVC TIME CONSTANT: Approx 0.15 second.

RADIO FREQUENCY AMPLIFIER AM-1565/URC CHARACTERISTICS

FREQUENCY RANGE: 225.0 to 399.9 mc.

CHANNEL SELECTION TIME: Less than 10 seconds.

RF POWER OUTPUT: 100 W minimum carrier.

OUTPUT IMPEDANCE: 50 ohms nominal.

RF EXCITATION REQUIRED: Less than 15 w.

INPUT IMPEDANCE: 50 ohms noninal.

ENVELOPE DISTORTION: 5% max at 95% modulation.

SPURIOUS RADIATION: 60 db below carrier level.

RADIO SET CONTROL C-3866/SRC CHARACTERISTICS

NUMBER OF CHANNELS: 19.

CHANNEL SELECTION TIME: Approx 1 second.

MICROPHONE CIRCUIT: Matches 82 ohm microphone input circuit of AN/URC-9 to the 600 ohm output of the radio-telephone unit.

AUDIO ISOLATION CIRCUIT: Isolates the AN/URC-9 receive audio output, which has one side grounded, from the radio-telephone unit ungrounded audio circuit.

RELATION TO OTHER EQUIPMENT:

The AN/SRC-20 is similar to Radio Set AN/SRC-21 except for carrier power output, and amplifier components.

EQUIPMENT REQUIRED BUT NOT SUPPLIED: None.

MAJOR COMPONENTS

QTY	ITEM	STOCK NUMBERS	DIMENSIONS (INCHES)	WEIGHT (LBS)
1	Radio Set AN/SRC-20 consists of		22-1/16 x 26-21/32 x 52-1/2	511
1	Radio Set AN/URC-9		12-1/4 x 19 x 19-1/2	157
1	RF Amplifier AM-1565/URC		15-3/4 x 19 x 21-3/4	215
1	Radio Set Control C-3866/SRC		10-1/2 x 17-5/32 x 19	55
1	Electrical Equipment Rack MT-229/UR		22-1/16 x 23-7/32 x 52-17/32	84

REFERENCE DATA AND LITERATURE:

CDS-385: Collins Radio Company Commercial Brochure for Radio Set AN/SRC-20.

TUBE, CRYSTAL AND/OR SEMI-CONDUCTOR DATA:

TUBES: Data not available.

CRYSTALS: Data not available.

SEMI-CONDUCTORS: Data not available.

SHIPPING DATA

PKGS	VOLUME (CU FT)	WEIGHT (LBS)

PROCUREMENT DATA

PROCURING SERVICE: USN
SPEC &/OR DWG: SHIPS-R-3827

DESIGN COG: USN, BuShips

CONTRACTOR	LOCATION	CONTRACT OR ORDER NO.	APPROX. UNIT COST
Collins Radio Company	Cedar Rapids, Iowa	PR627DS-16039	

23 August 1962

Cog Service: USN FSN: RADIO SET AN/SRC-21

Functional Class:

USA	USN	USAF

TYPE CLASS: Used by Used by

MANUFACTURER'S NAME/CODE NUMBER: Collins Radio Company, (13499).

(No Illustration Available)

FUNCTIONAL DESCRIPTION:

The Radio Set AN/SRC-21 is designed as a surface-to-surface or surface-to-air shipboard or fixed station Ultra High Frequency (UHF) communication equipment which provides simplex amplitude modulation. Provisions are included for complete control, including preset channel selection, from as many as four (4) remote control points. Circuits are provided so that two (2) sets may be interconnected for two (2) automatic retransmission operation. Provisions are included for operation with special purpose equipment requiring broadband audio.

No field changes in effect at time of preparation (23 May 1962).

TECHNICAL CHARACTERISTICS:

RADIO SET AN/URC-9 DATA

FREQUENCY RANGE: 225.0 to 399.9 mc.

TYPE OF FREQUENCY CONTROL: Crystal.

FREQUENCY STABILITY: Within porm 12 kc of normal channel frequency, over ambient temperature of M55 deg C to 65 deg C.

NUMBER OF CHANNELS: 1750.

CHANNEL SPACING: 100 kc.

CHANNEL SELECTION TIME: 8 seconds max.

NUMBER OF PRESET CHANNELS: 19 P1 manually tuned channel.

AN/URC-9 TRANSMITTER DATA

POWER OUTPUT: More 15 W into 50 ohm nominal resistive load.

TYPE OF MODULATION: AM.

FIDELITY: Within porm 3 db from 300-3500 cps, 1000 cps reference.

AUDIO DISTORTION: Less than 10%.

SIDETONE: 175 mw from receiver audio output into 600 ohm load.

BROADBAND CAPABILITY: Auxiliary input to modulator permits modulation of carrier with frequencies from 300 to 25000 cps.

DUTY CYCLE: Continuous transmission with 85% modulation at 65 deg C ambient temperature.

RETRANSMISSION: Audio & Control circuits provided.

AN/URC-9 RECEIVING DATA

SENSITIVITY: 6 uv or less (in series w/50 ohms) for a 10 db signal-plus-noise to noise ratio.

SELECTIVITY: 6 db at 75 kc, 60 db at 145 kc.

I.F. REJECTION: More than 100 db attenuation.

IMAGE RESPONSE: More than 60 db attenuation.

SPURIOUS RESPONSE: Frequencies 100 kc or more from carrier are attenuated over 60 db.

A.F. RESPONSE: Within porm 3 db from 300 to 3500 cps.

AUDIO DISTORTION: 10% max.

AUDIO OUTPUTS
HEADSET AND REMOTE OUTPUT: 2 W, 600 ohms.
RETRANSMISSION OUTPUT: 10 mw, 600 ohms.
BROADBAND OUTPUT: 1 v, 600 ohms, 300-2500 cps.
AVC TIME CONSTANT: Approx 0.15 second.

RADIO SET CONTROL C-3866/SRC DATA
NUMBER OF CHANNELS: 19.
CHANNEL SELECTION TIME: Approx 1 second.
OPERATING POWER RQMT: 115/230 v ac, 60 cps, 40 W at 85% pf; 12 v dc.
MICROPHONE CIRCUIT: Matches 82 ohm microphone input circuit of AN/URC-9 to the 600 ohm output of the radio telephone unit.
AUDIO ISOLATION CIRCUIT: Isolates the AN/URC-9 receive audio output, which one side grounded, from the radio telephone unit ungrounded audio circuit.

RELATION TO OTHER EQUIPMENT:

The AN/SRC-21 is similar to Radio Set AN/SRC-20 except that it contains no linear power amplifier.

EQUIPMENT REQUIRED BUT NOT SUPPLIED: None.

MAJOR COMPONENTS

QTY	ITEM	STOCK NUMBERS	DIMENSIONS (INCHES)	WEIGHT (LBS)
1	Radio Set AN/SRC-21 consist of:		22-1/16 x 26-5/16 x 35-1/32	284
1	Radio Set AN/URC-9		12-1/4 x 19 x 19-1/2	157
1	Radio Set Control C-3877/SRC		10-1/2 x 17-5/32 x 19	55
1	Electrical Equipment Rack MT-2300/UR		22-1/16 x 26-5/16 x 35-1/32	72

REFERENCE DATA AND LITERATURE:

CDS-385: Collins Radio Co. Commerical Brochure for Radio Set AN/SRC-21.

TUBE, CRYSTAL AND/OR SEMI-CONDUCTOR DATA:

TUBES: Data not available.

CRYSTALS: Data not available.

SEMI-CONDUCTORS: Data not available.

SHIPPING DATA

PKGS	VOLUME (CU FT)	WEIGHT (LBS)

PROCUREMENT DATA

PROCURING SERVICE: USN
SPEC &/OR DWG: SHIPS-R-3827

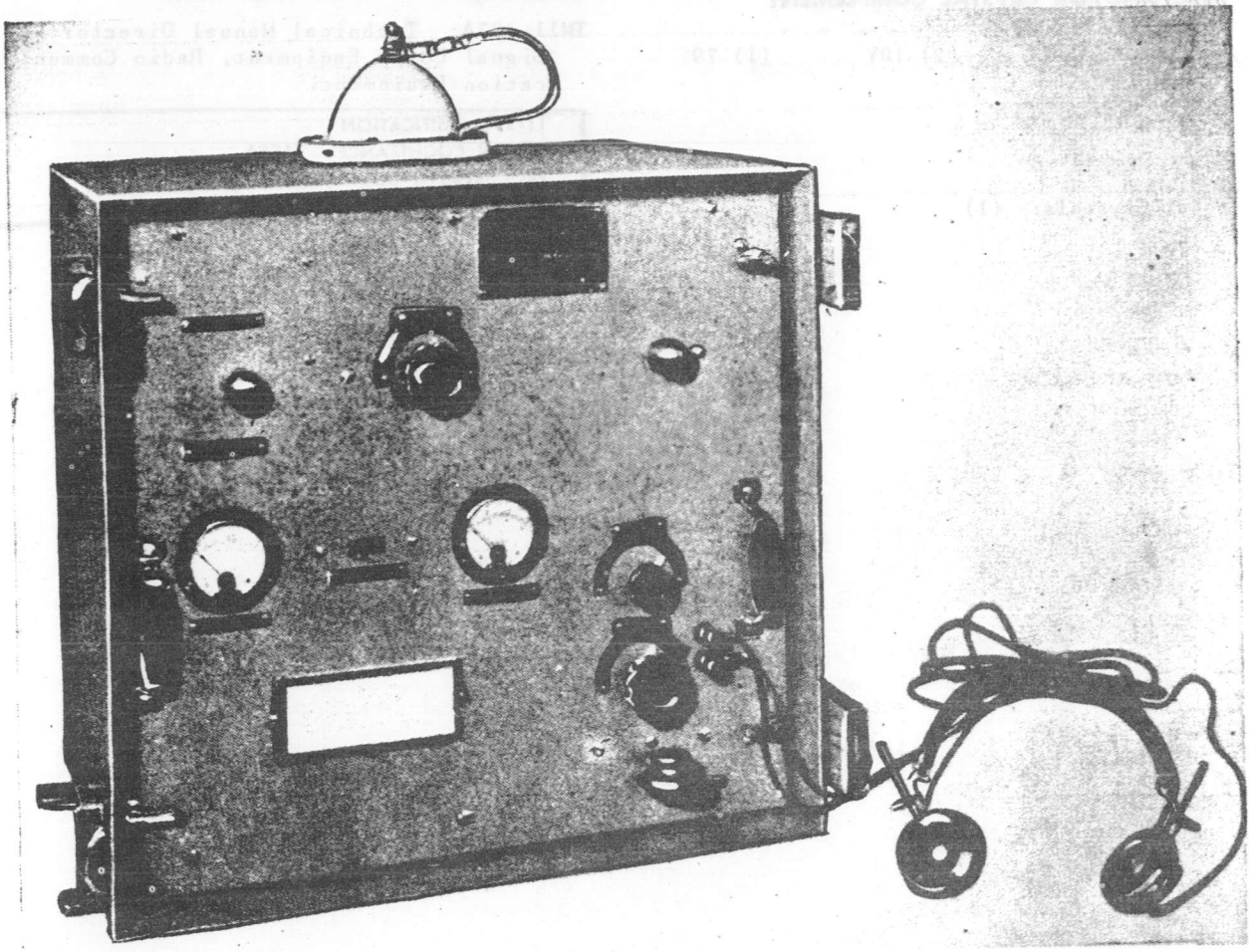
DESIGN COG: USN, BuShips

CONTRACTOR	LOCATION	CONTRACT OR ORDER NO.	APPROX. UNIT COST
Collins Radio Co.	Cedar Rapids, Iowa	PR627D5-16039	

October 1957

Radio-Transceivers

RADIO SET AN/SRC-3



Radio Set AN/SRC-3

FUNCTIONAL DESCRIPTION

The AN/SRC-3 is a short range communication set designed to transmit and receive SOS signals on the international distress frequency. It is designed for installation in lifeboats for communication with radio sets within the frequency range of mobile stations and ships.

No field changes in effect at time of preparation (21 February 1957).

RELATION TO OTHER EQUIPMENT

The AN/SRC-3 is the Radiomarine Corporation of America Model ET-8007.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

FREQUENCY RANGE
TRANSMITTER: 500 kc fixed.
RECEIVER: 350 to 550 kc.
FREQUENCY CONTROL: Crystal.
POWER OUTPUT: 50 W.
EMISSION: ICW.
RECEIVER: Amplitude, ICW, and CW.
POWER REQUIREMENTS: (2) 12 v storage batteries in parallel and (1) 45 v dry battery, 25 amps at 12 v.

MANUFACTURER'S OR CONTRACTOR'S DATA

Radiomarine Corp of America, New York, N.Y.

AN/SRC-3 RADIO SET

TUBE AND/OR CRYSTAL COMPLEMENT

(1) 38 (2) 10Y (1) 79

Total Tubes: (4)

(1) 0.5 MC

Total Crystals: (1)

REFERENCE DATA AND LITERATURE

TM11-487A: Technical Manual Directory of Signal Corps Equipment, Radio Communication Equipment.

TYPE CLASSIFICATION	
DESIGN COGNIZANCE	TASSA
PROCUREMENT COGNIZANCE	
STOCK NO.	

RADIO SET AN/SRC-5

FUNCTIONAL DESCRIPTION

The AN/SRC-5 is a low power, very high frequency receiver-transmitter that is capable of working with the TBS or MBF equipments on A3 emission. It is designed for ship to ship communications, it is portable and has quick frequency shift characteristics.

No field changes in effect at time of preparation (1 April 1960).

REFERENCE DATA AND LITERATURE

The AN/SRC-5 is designed to be used with but not part of the TBS or MBF equipments.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF EMISSION: A2 type.
NUMBER OF BANDS: 1 band.
FREQUENCY RANGE: 60-0 to 80-0 mc.
POWER OUTPUT: 15 W.
OPERATING POWER RQMT: 115 v AC, 60 cps, single ph, 115 v DC.

TUBE AND/OR CRYSTAL COMPLEMENT

Electron Tube and/or Crystal data not available.

RELATION TO OTHER EQUIPMENT

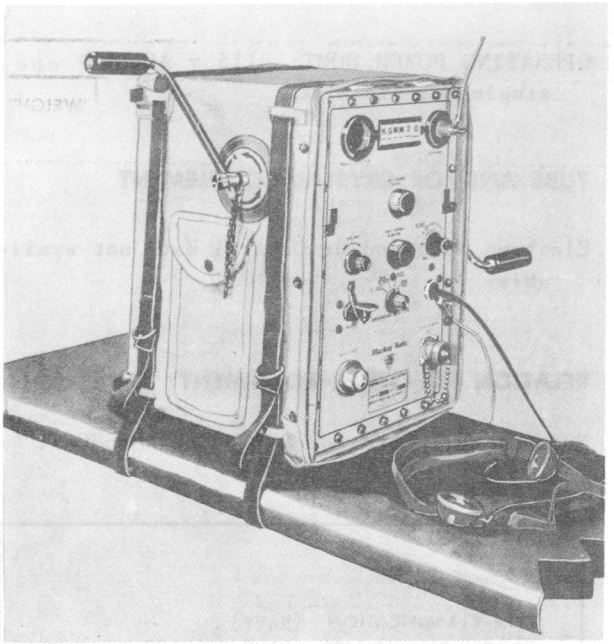
Nomenclature Card for Radio Set AN/SRC-5.

TYPE CLASSIFICATION (NAVY)
DESIGN COGNIZANCE NAVY BUSHIPS
PROCUREMENT COGNIZANCE
STOCK NO.
R.D.B. IDENT. NO.

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Radio Set AN/SRC-5		

RADIO SET AN/SRC-6A



Radio Set AN/SRC-6A

FUNCTIONAL DESCRIPTION

The AN/SRC-6A is designed for use in lifeboats for sending and receiving distress signals. It is entirely self-contained radiotelegraph transmitter-receiver. The equipment is provided for communication on the 500 kc distress frequency and on the long range 8364 kc channel between survival craft and between such craft and rescue vessels or aircraft. All power required is provided by a built-in hand cranked electric generator. It is designed for use by personnel not trained in radio communications.

No field changes in effect at time of preparation (20 June 1956).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

POWER SUPPLY
- TYPE: Hand-cranked electric generator.
- CRANKING SPEED: 50 rpm to 70 rpm.
- CRANKING EFFORT: Less than 0.095 horsepower, (0.15 hp FCC allowable max.)
- OUTPUT: 425 v DC, 0.05 amp; 6.32 v DC, 2.25 amp.
- VOLTAGE REGULATION: 2% by solenoid operated direct acting finger-type regulator.

TRANSMITTER
- POWER OUTPUT: 500 kc, not less than 1.7 W into 10 ohms and 75 mmf, (not less than 0.25 W into 1 ohm and 75 mmf 8364 kc, not less than 4.0 W into 40 ohms.

OPERATING FREQUENCY: 500 kc and 8364 kc.
- MAX. DEVIATION FROM NOMINAL FREQUENCY
  - 500 KC: 0.02%.
  - 8364 KC: 0.02%.
- TYPE OF EMISSION: A-2
- MODULATION FREQUENCY: 550 cps.
- MODULATION PERCENTAGE: 70% min.
- ANTENNA CHARACTERISTIC
  - 500 KC: 75 to 500 mmf and 1 to 20 ohms.
  - 8364 KC: 30 to 300 ohms.

RECEIVER
- FREQUENCY RANGE: 492 kc to 508 kc (fixed tuned), 8366 kc to 8745 kc (tunable).
- SENSITIVITY
  - 500 KC: 100 mv max, (200 mv is FCC allowable max).
  - 8364 KC: 200 mv max (1000 mv is FCC allowable max).
- SELECTIVITY: Within 6 db between 492 kc 508 kc; within 3 db between 8 kc off resonance in 8 mc band.
- AUDIO CHARACTERISTIC: Within 6 db between 400 cps and 1400 cps

MANUFACTURER'S OR CONTRACTOR'S DATA

Mackay Radio and Telegraph Co. Inc., New York, N.Y.
Contract NObsr-64078 dated, 9 December 1953.

TUBE AND/OR CRYSTAL COMPLEMENT

(1) 6UB
(6) 6BJ6
(3) 12AT7
(1) 6AQ5
Total Tubes: (6)

(2) BH6A
Total Crystals: (2)

REFERENCE DATA AND LITERATURE

NAVSHIPS 92207: Technical Manual for Radio Set AN/SRC-6A.

TYPE CLASSIFICATION	
DESIGN COGNIZANCE	TASSA
PROCUREMENT COGNIZANCE	
STOCK NO.	

AN/SRC-6A RADIO SET

December 1956

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Radio Set AN/SRC-6A	11-1/2 x 14-7/16 x 20-1/2	57

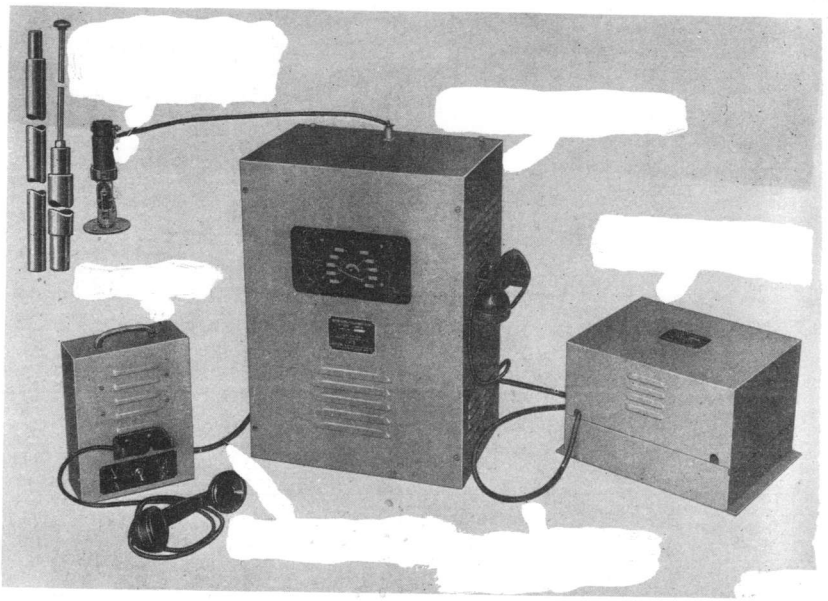
3 July 1962 RADIO SET AN/SRC-8AZ

Cog Service: TASSA FSN: Functional Class:

USA	USN	USAF

TYPE CLASS: Used by Used by

MANUFACTURER'S NAME/CODE NUMBER: Munston Mfg & Service Inc., (74096).



Radio Set AN/SRC-8AZ

FUNCTIONAL DESCRIPTION:

The Radio Set AN/SRC-8AZ is designed as an Amplitude Modulated (AM), single band, ten (10) channel radio receiver and transmitter of voice signals over the frequency range of 2000 to 3500 megacycles (MC). The Radio Set is used as a Marine Radio Telephone.

No field changes in effect at time of preparation (18 January 1962).

TECHNICAL CHARACTERISTICS:

RECEIVER DATA

TYPE: Superheterodyne.

TYPE OF FREQUENCY CONTROL: Crystal.

TYPE OF EMISSION: AM (A3) type.

NUMBER OF BANDS: 1 band.

NUMBER OF PRESET CHANNELS: 10 channels.

AN/SRC-8AZ RADIO SET

FREQUENCY RANGE: 2.0 to 3.5 mc.
INTERMEDIATE FREQUENCY: 456 kc.
BANDWIDTH: 5.5 kc (6 db down), 28 kc (60 db down).
MAXIMUM AUDIO OUTPUT: 2 W (1 W at 10% distortion).

TRANSMITTER DATA

TYPE: Crystal-controlled oscillator, untuned buffer, modulated power amplifier.
TYPE OF MODULATION: Voice-amplitude modulation.
NUMBER OF BANDS: 1 band.
NUMBER OF PRESET CHANNELS: 10 channels.
FREQUENCY RANGE: 2.0 to 3.5 mc.
EFFECTIVE COVERAGE: 50 to 200 miles.
POWER OUTPUT: 50 W, carrier.

OPERATING POWER RQMT: 24 v dc.

RELATION TO OTHER EQUIPMENT: None.

EQUIPMENT REQUIRED BUT NOT SUPPLIED: None.

MAJOR COMPONENTS

QTY	ITEM	STOCK NUMBERS	DIMENSIONS (INCHES)	WEIGHT (LBS)
1	Radio Set AN/SRC-8AZ consists of:			
1	Radio-Receiver-Transmitter RT-306A/SRC-8		10-1/4 x 18-1/2 x 23	63
1	Converter-Dynamotor CV-522( )/SRC-8		8-1/2 x 10-3/4 x 14-3/8	31
1	Electrical Special Purpose Ass'y CX-3761/SRC-8		144 lg	
1	Set of Equipment Spares			
1	Antenna AT-609( )/SRC		168 lg	16
1	Control C-1429A/SRC-8		9-1/8 x 12 x 13-1/16	11

REFERENCE DATA AND LITERATURE:

TM11 253, TO 31R2-2SRC8-11: Technical Manual for Radio Sets AN/SRC-8, -8X, -8AZ and AN/SRC-8XX.

TUBE, CRYSTAL AND/OR SEMI-CONDUCTOR DATA:

TUBES: (1) 6SK7 (1) 6K8 (1) 6K7 (1) 6B8 (1) 6H6 (1) 6SL7GT (2) 6V6GT (1) 6J5 (4) 807 (1) 5Y3GT

CRYSTALS: None used.

SEMI-CONDUCTORS: None used.

SHIPPING DATA

PKGS	VOLUME (CU FT)	WEIGHT (LBS)

PROCUREMENT DATA

PROCURING SERVICE: TASSA
SPEC &/OR DWG:

DESIGN COG: TASSA

CONTRACTOR	LOCATION	CONTRACT OR ORDER NO.	APPROX. UNIT COST
Munston Mfg & Service Inc. Pt. no. MTS-120/24DC	New York, N. Y.	28589-PHILA-55-55(31)	

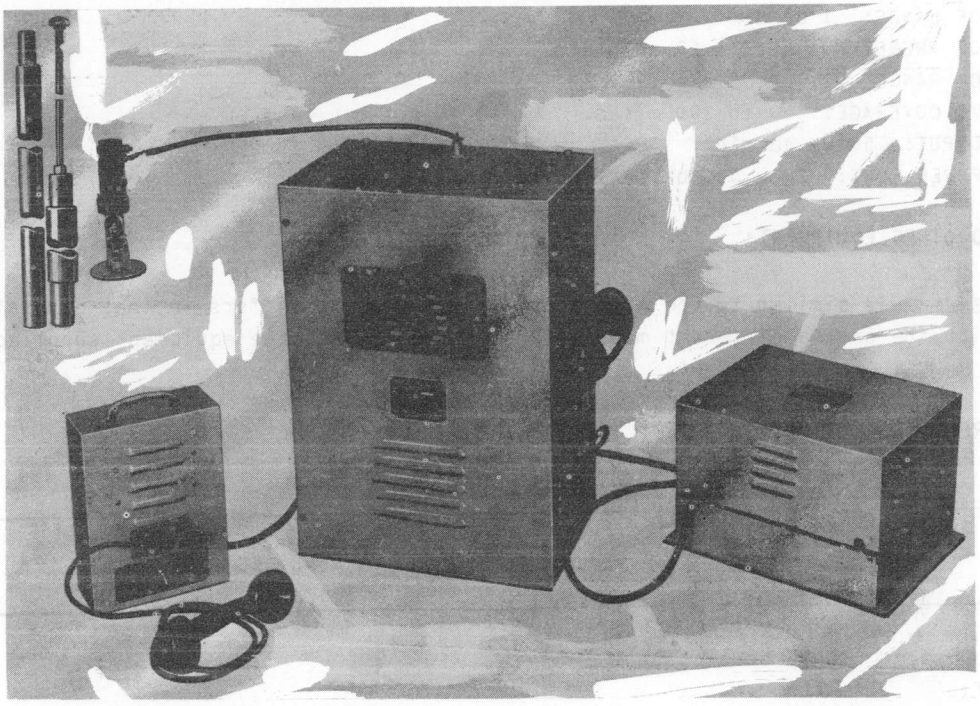
28 June 1962 RADIO SET AN/SRC-8Z

Cog Service: TASSA **FSN:** **Functional Class:**

USA	USN	USAF

TYPE CLASS: Used by Used by

MANUFACTURER'S NAME/CODE NUMBER: Ray Jefferson Inc., (82143).



Radio Set AN/SRC-8Z

FUNCTIONAL DESCRIPTION:

The Radio Set AN/SRC-8Z is designed as an Amplitude Modulated (AM), single band, ten (10) channel radio receiver and transmitter of voice signals over the frequency range of 2000 to 3500 megacycles (MC). The Radio Set is used as a Marine Radio Telephone Set for ship to ship or ship to shore communications.

No field changes in effect at time of preparation (19 January 1962).

TECHNICAL CHARACTERISTICS:

RECEIVER DATA

TYPE: Superheterodyne.

TYPE OF FREQUENCY CONTROL: Crystal.

TYPE OF EMISSION: AM (A3) type.

NUMBER OF BANDS: 1 band.

NUMBER OF PRESET CHANNELS: 10 channels.
FREQUENCY RANGE: 2.0 to 3.5 mc.
INTERMEDIATE FREQUENCY: 456 kc.
BANDWIDTH: 5.5 kc (6 db down); 28 kc (60 db down).
MAXIMUM AUDIO OUTPUT: 2 W (1 W at 10% distortion).
MAXIMUM POWER OUTPUT: 50 W max.

TRANSMITTER DATA

TYPE: Crystal-controlled oscillator, untuned buffer, modulated power amplifier.
TYPE OF MODULATION: Voice-amplitude modulation.
NUMBER OF BANDS: 1 band.
NUMBER OF PRESET CHANNELS: 10 channels.
FREQUENCY RANGE: 2.0 to 3.5 mc.
EFFECTIVE COVERAGE: 50 to 200 miles.
POWER OUTPUT: 50 W, carrier.

OPERATING POWER RQMT: 24 v dc, battery operation.

RELATION TO OTHER EQUIPMENT:

The AN/SRC-8Z is similar to the AN/SRC-8AZ except that it differs in that crystals are not supplied with the set; a different manufacturer makes it, and the equipment supplied is different.

EQUIPMENT REQUIRED BUT NOT SUPPLIED: None.

MAJOR COMPONENTS

QTY	ITEM	STOCK NUMBERS	DIMENSIONS (INCHES)	WEIGHT (LBS)
1	Radio Set AN/SRC-8Z consists of:			
1	Radio-Transmitter RT-327/SRC-8Z		10-1/4 x 18-1/2 x 23	63
1	Dynamotor DY-124/SRC-8Z		3-1/2 x 4-1/4 x 5-17/32	
1	Dynamotor DY-125/SRC-8Z		3-1/2 x 4-1/4 x 5-17/32	

REFERENCE DATA AND LITERATURE:

TM11-253, TO 31R2-2SRC8-11: Technical Manual for Radio Sets AN/SRC-8, -8X, -8AZ, -8XX and AN/SRC-8Z.

TUBE, CRYSTAL AND SEMI-CONDUCTOR DATA:

TUBES: (1) 6B8 (1) 6H6 (2) 6J5 (1) 6K7 (1) 6K8 (1) 6SK7Y (1) 6SL7WGT (4) 807 (2) 6V6GTY

CRYSTALS: Data not available.

SEMI-CONDUCTORS: None used.

SHIPPING DATA

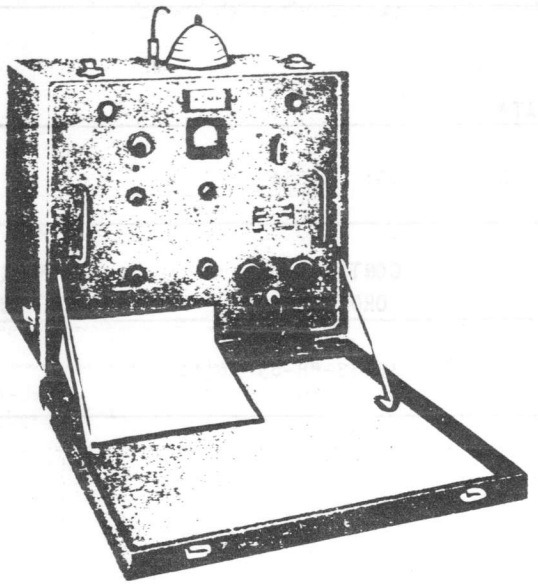
PKGS	VOLUME (CU FT)	WEIGHT (LBS)

PROCUREMENT DATA

PROCURING SERVICE: TASSA DESIGN COG: TASSA
SPEC &/OR DWG:

CONTRACTOR	LOCATION	CONTRACT OR ORDER NO.	APPROX. UNIT COST
Ray Jefferson Inc. Model no. 914 (24 v dc)	Freeport, N. Y.	33753-PH-53-36(61)	

RADIO SET AN/SRC-9



Radio Set AN/SRC-9

FUNCTIONAL DESCRIPTION

The AN/SRC-9 has been designed primarily for use on lifeboats to promote safety of personnel at sea. It is a rugged, compact, non-portable radio telegraph transmitter-receiver. This equipment is designed for communication between survival craft and rescue vessels on the International Distress Frequency, 500 kc, as well as on the longer-range, frequency of 8364 kc. All power required for the operation of this radio equipment is provided by a 12 v storage battery.

The equipments design is such as to insure effective use by personnel not trained in radio communications. Simplified, explicit directions for such operation are fastened to the equipment. A built-in Distress Signal Keyer enable automatic transmission of sequences of the International Auto Alarm Signal and SOS signals on 500 kc, followed on 8364 kc by more SOS signals and by a long dash for direction determining receivers.

The equipment is housed in a splash-proof aluminum cabinet. The panel mounted operating controls are protected by a cabinet cover which when opened for operation of the equipment provides a convenient chart table and writing surface.

No field changes in effect at time of preparation (27 August 1956).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TRANSMITTER

OUTPUT FREQUENCIES: 500 kc and 8364 kc.
FREQUENCY CONTROL: Crystal.
POWER OUTPUT
500 KC: Not less than 30 W into 10 ohms and 100 uuf.
8364 KC: Not less than 40 W into 40 ohms.

TYPE OF EMISSION: A2.
MODULATION FREQUENCY: 600 cps approx.
MODULATION PERCENTAGE: 70% minimum.
FREQUENCY DEVIATION FROM NOMINAL
500 KC: 0.02%.
8364 KC: 0.02%.

RECEIVER
FREQUENCY RANGE: 495 kc to 508 kc, (fixed tuned), 8100 kc to 8900 kc (tunable).
SENSITIVITY
500 KC: Less than 25 uv.
8364 KC: Less than 100 uv.
SELECTIVITY: Within 6 db between 492 kc and 508 kc.
AUDIO CHARACTERISTICS: Within 6 db between 400 cps and 1400 cps.
OUTPUT IMPEDANCE: 15000 ohms at 1000 cps.

POWER SUPPLY
LOW VOLTAGE DYNAMOTOR
INPUT: 3.4 amp at 12 v DC.
OUTPUT: 85 ma at 250 v DC.
HIGH VOLTAGE MOTOR-ALTERNATOR
INPUT: 25 amp at 12 v DC.
OUTPUT: 300 ma at 440 v AC, 600 cps.

SIGNAL KEYER
KEYING CYCLE: 2 minutes.
500 KC: 12A/A dashes, 3 SOS signals.
8364 KC: 3 SOS signals, 30 sec D/F dash.
KEYING MOTOR: Constant speed 12 v DC, 2 rpm.

MANUFACTURER'S OR CONTRACTOR'S DATA

Mackay Radio And Telegraph Company, Inc., New York, 14, N.Y.
Contract NObsr 64203, dated 21 May 1954.
Type No. 402-A.
Approximate Cost: $950.00 with equipment spares.

TUBE AND/OR CRYSTAL COMPLEMENT

(2) 6U8 (1) 12AT7 (1) 12BA6
(2) 6AQ5 (2) 6146

Total Tubes: (8)

REFERENCE DATA AND LITERATURE

NAVSHIPS 92364: Technical Manual for AN/SRC-9.

TYPE CLASSIFICATION
DESIGN COGNIZANCE BUSHIPS
PROCUREMENT COGNIZANCE SHIPS-R-1472
STOCK NO.

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Transmitter-Receiver Type 402A	15 X 21 X 22	92
1	Insulated Wire (35 in.) w/Insulators (2)		
1	Set of Tools		
1	Technical Manual		
1	Set of Spare Parts		