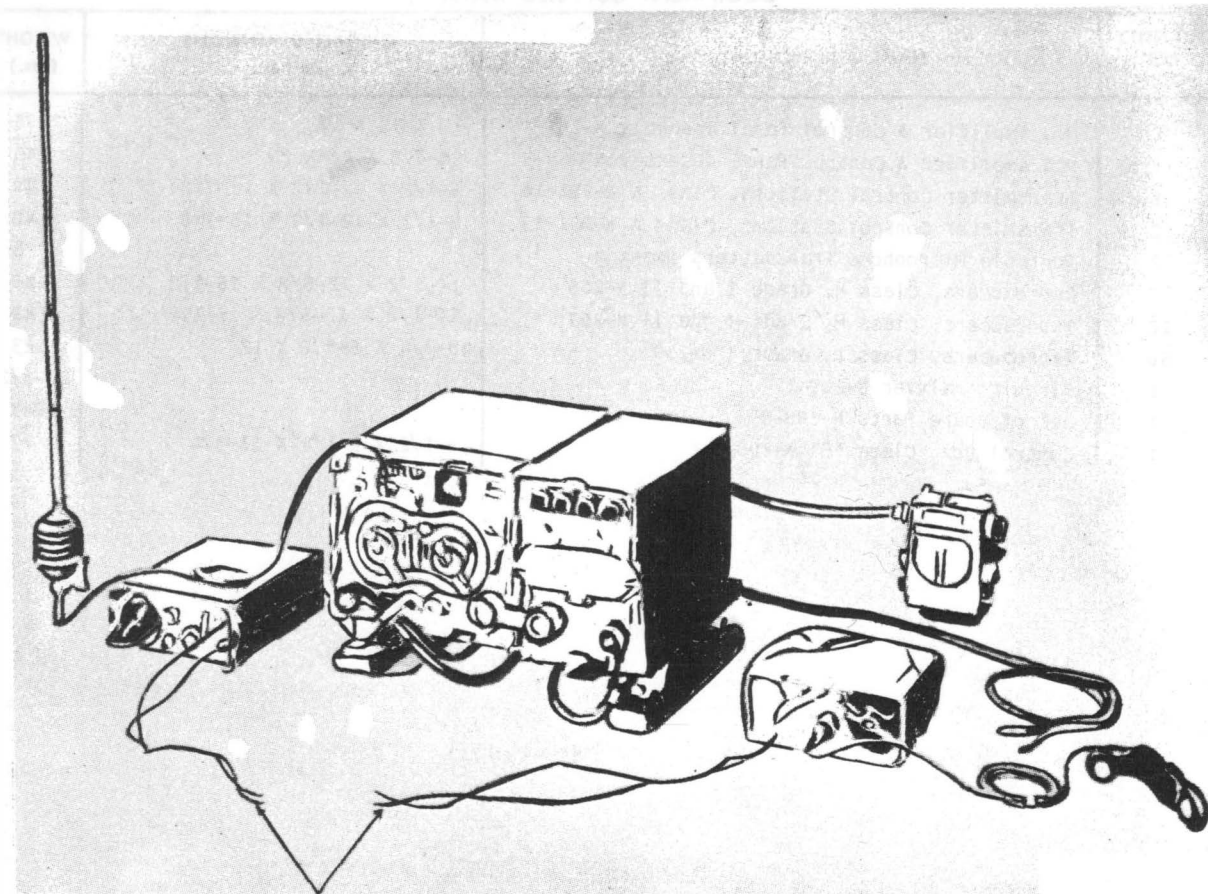


June 1961

Radio-Transceivers

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.

June 1961

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 selec-
tion.

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 super-
heterodyne.

MICROPHONE INPUT IMPEDANCE: 150 ohms.

AUDIO OUTPUT IMPEDANCE: 600 ohms at all au-
dio 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/GR	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		

June 1961

Radio-Transceivers

RADIO SETS

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

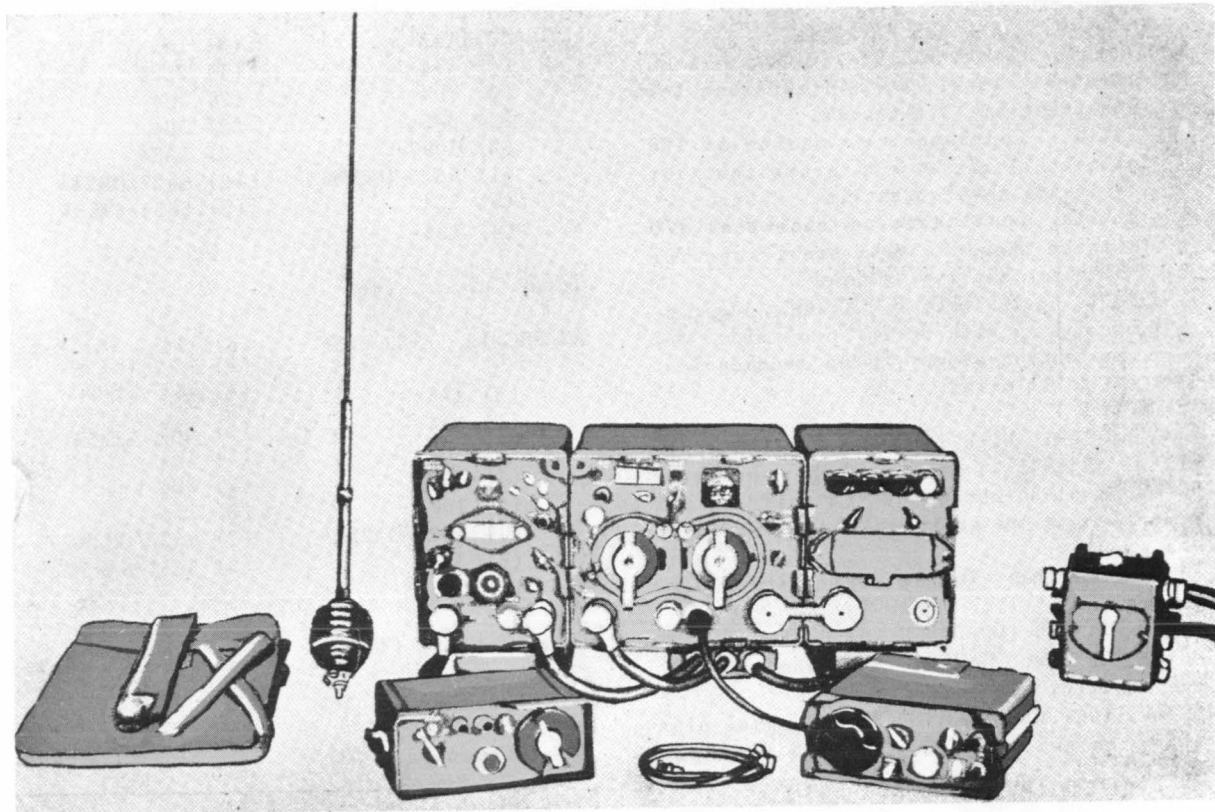
EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT			NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1*	1*	1*			
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		
AN/SRC					
10	10X	10Y			
		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 Adaptor 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 Adaptor 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 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.

October 1960

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: Contin-
uous 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 super-
heterodyne.

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 Sep-
tember 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/OA2WA	(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