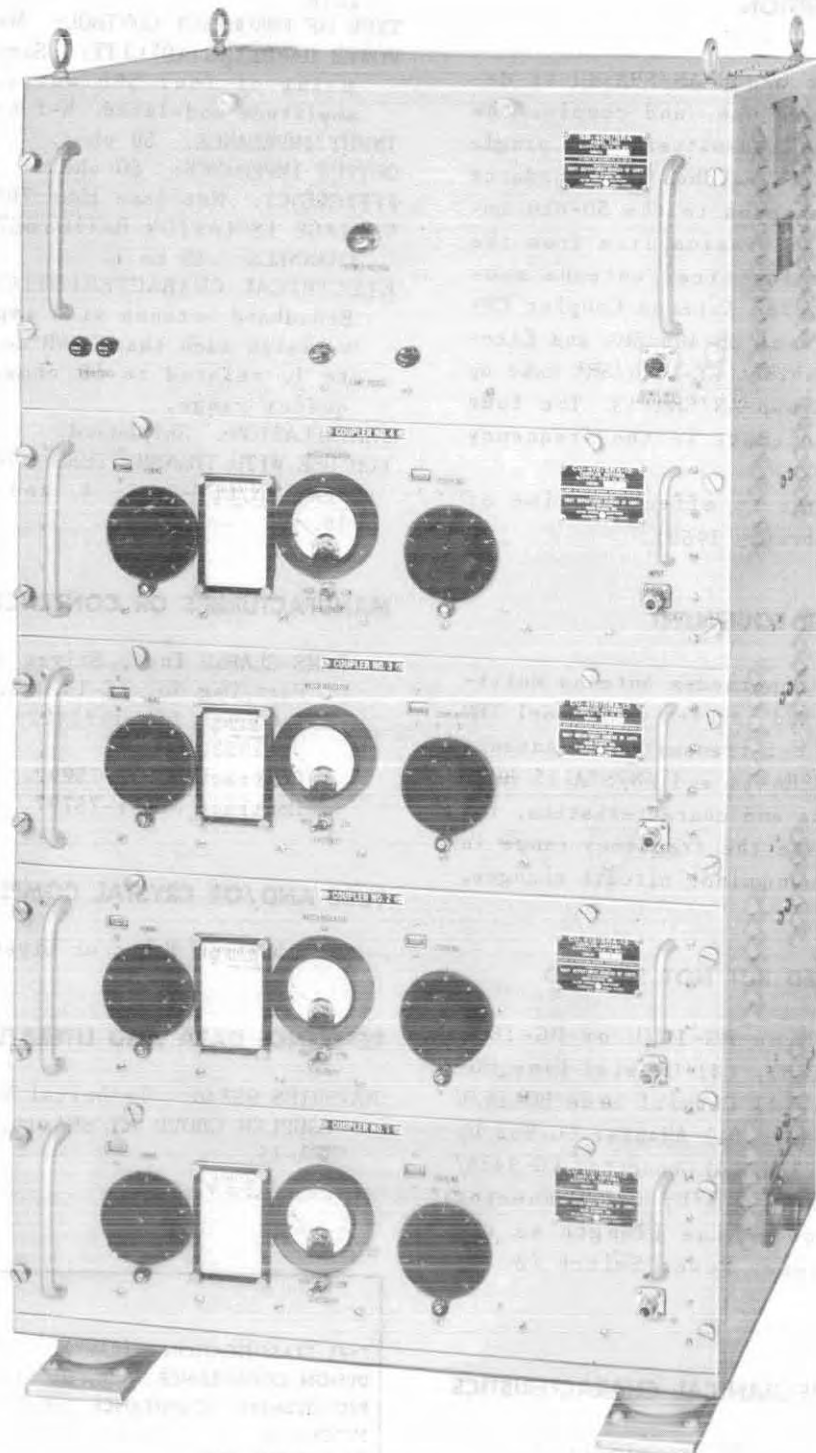


ANTENNA COUPLER GROUP



Antenna Coupler Group AN/SRA-13

August 1960

Radio-Auxiliary

AN/SRA-13**ANTENNA COUPLER GROUP****FUNCTIONAL DESCRIPTION**

Antenna Coupler Group AN/SRA-13 is designed for shipboard use, and couples the output of four radio transmitters to a single broadband antenna. It matches the impedance of the broadband antenna to the 50-ohm impedance of the transmission line from the transmitter. Four identical antenna couplers, each designated Antenna Coupler CU-419/SRA-13; Fuse Panel SB-406/SRA and Electrical Equipment Cabinet CY-1670/SRA make up Antenna Coupler Group AN/SRA-13. The four antenna couplers operate in the frequency range of 2 to 6 mc.

No field changes in effect at time of preparation (16 February 1960).

RELATION TO OTHER EQUIPMENT

This equipment supersedes Antenna Multi-coupler CU-301/UR and is used with model TBM or other approved h-f transmitters. Antenna Coupler Group AN/SRA-14 and AN/SRA-15 have identical functions and characteristics, the only differences are the frequency range in which they operate and minor circuit changes.

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(4) Coaxial Line RG-10/U or RG-18/U (length as required); (4) Coaxial Line RG-10/U (1 to 2 ft); (1) Coaxial Line RG-18/U (length as required); (4) Adapter UG-982/U; (4) Connector UG-23/U; (4) Connector UG-941A/U; (4) Connector UG-27A/U; (1) Connector UG-154/U; (1) Power Line (length as required); (1) Primary Power Switch (6 amp toggle).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

POWER SUPPLY: 115 v, 60 cy, single ph.

FREQUENCY RANGE: 2 to 6 mc.

TUNING BAND: One band, continuously vari-

able.

TYPE OF FREQUENCY CONTROL: Manual.

POWER HANDLING ABILITY: Simultaneous coupling of four 500 watts, 100 percent amplitude modulated, h-f transmitters.

INPUT IMPEDANCE: 50 ohms.

OUTPUT IMPEDANCE: 50 ohms.

EFFICIENCY: Not less than 70%.

VOLTAGE ISOLATION RATIO BETWEEN ADJACENT CHANNELS: 15 to 1.

ELECTRICAL CHARACTERISTICS OF ANTENNA: Broadband antenna with impedance characteristic such that VSWR does not exceed 3 to 1, related to 50 ohms, for the frequency range.

INSTALLATION: Shipboard.

FOR USE WITH TRANSMITTERS: Models TBM, TBK, TCK, AN/URT-2, 3, 4, and AN/SRT-14, 15, 16.

MANUFACTURER'S OR CONTRACTOR'S DATA

NEMS-CLARKE Inc., Silver Springs, Md.

Part/Dwg No. AC-13,050.

Contract NObsr-63422, dated 6 January 1953.

Contract NObsr-75292.

Contract NObsr-75797.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 92746: Technical Manual for ANTENNA COUPLER GROUP AN/SRA-13, AN/SRA-14, AN/SRA-15.

TYPE CLASSIFICATION (NAVY)
 DESIGN COGNIZANCE USN, BUSHIPS
 PROCUREMENT COGNIZANCE SPEC: SHIPS-C-3066
 STOCK NO.
 R.D.B. IDENT. NO.

UNCLASSIFIED
August 1960

Radio-Auxiliary
AN/SRA-13

ANTENNA COUPLER GROUP

SHIPPING DATA

NUMBER OF BOXES	CONTENTS AND IDENTIFICATION	VOLUME (Cu.Ft.)	OVERALL DIMENSIONS (inches)	WEIGHT PACKED (lbs.)
1	Antenna Coupler Group AN/SRA-13	18.8	22 X 29 X 51	416

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Antenna Coupler Group AN/SRA-13 includes:	20-1/2 X 26-1/4 X 46-3/4	176.5
4	Antenna Coupler CU-419/SRA-13	7-23/32 X 18-3/16 X 24-3/4	43
1	Fuse Panel SB-406/SRA	10-3/8 X 11-7/32 X 24-3/4	11.5
1	Electrical Equipment Cabinet CY-1670/SRA	20-1/2 X 26-1/4 X 46-3/4	122.5
2	Technical Manual NAVSHIPS 92746		

10 July 1962

Cog Service:

FSN: 5985-710-0098

ANTENNA COUPLER GROUP AN/SRA-13A

Functional Class:

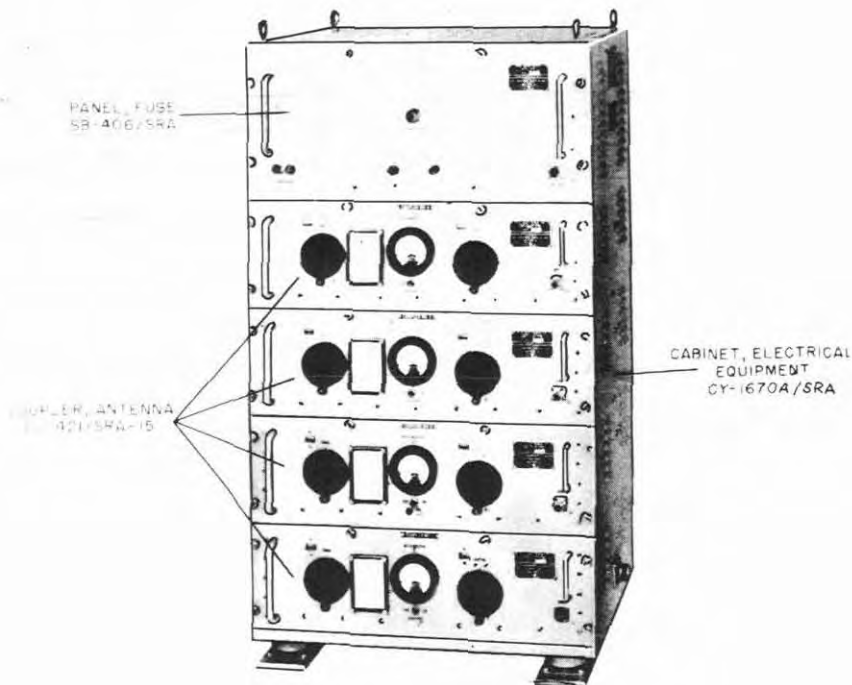
USA

USN

USAF

TYPE CLASS:

MANUFACTURER'S NAME/CODE NUMBER: Granite State Machine Company, Incorporated.



Antenna Coupler Group AN/SRA-13A

FUNCTIONAL DESCRIPTION:

The AN/SRA-13A is designed for shipboard use. The coupler group is capable of coupling four transmitters into a single broadband antenna. The coupler group must be operated independently with a broadband antenna designed to produce a voltage standing wave ratio no greater than 3 to 1 over its frequency at the output terminal of the coupler group. Each transmitter operating with a coupler group must be set to operate at channels spaced at least 10 per cent from any other frequency in the group. The principal function of this equipment is to provide an efficient means for operating, simultaneously, several transmitters, having output power up to 500 watts, into a single broadband antenna.

No field changes in effect at time of preparation (29 November 1960).

TECHNICAL CHARACTERISTICS:

TYPE OF FREQUENCY CONTROL: Manual.

TYPE OF INSTALLATION: Shipboard.

AN/SRA-13A ANTENNA COUPLER GROUP

TUNING BAND

NUMBER OF BANDS: One band, continuously variable, across the frequency range of each coupler group.

IMPEDANCE

INPUT IMPEDANCE: 50 ohms.

OUTPUT IMPEDANCE: 50 ohms.

VOLTAGE ISOLATION RATIO: Between adjacent channels for 10% frequency separation, 15 to 1 or greater.

METHOD OF COUPLING: Inductive capacitive.

OPERATING FREQUENCY RANGE: 2 to 6 mc.

OPERATING POWER RQMT: 115 v ac, 60 cps, single ph.

RELATION TO OTHER EQUIPMENT:

The AN/SRA-13A is used with but not part of Radio communication Equipment.

The AN/SRA-13A is similar to the AN/SRA-14A and the AN/SRA-15A except that they operate in different frequency ranges.

EQUIPMENT REQUIRED BUT NOT SUPPLIED:

(4) Coaxial Line RG-10/U or RG-18/U (length as required); (4) Coaxial Line RG-10/U (1 to 2 ft lg); (1) Coaxial Line RG-18/U (length as required); (4) Adapter UG-982/U or equal; (4) Connector UG-23/U or equal; (4) Connector UG-941A/U or equal; (4) Connector UG-27A/U or equal; (1) Connector UG-154/U or UG-216/U; (1) Power Line (length as required); (1) Primary Power Switch (6 amp toggle switch).

MAJOR COMPONENTS

QTY	ITEM	STOCK NUMBERS	DIMENSIONS (INCHES)	WEIGHT (LBS)
1	Coupler Group AN/SRA-13A		20-1/2 x 26-1/4 x 46-3/4	176-1/2
4	Coupler, Antenna CU-419/SRA-13		7-23/32 x 18-3/16 x 24-3/4	43 ea
1	Panel Fuse SB-406/SRA		10-3/8 x 11-7/32 x 24-3/4	11-1/2
1	Cabinet Electrical Cabinet CY-1670A/SRA		20-1/2 x 26-1/4 x 46-3/4	122-1/2
2	Technical Manual NAVSHIPS 92746		1/2 x 9 x 11-1/2	

REFERENCE DATA AND LITERATURE:

NAVSHIPS 92746: Technical Manual for Antenna Coupler Group AN/SRA-13, 13A, AN/SRA-14, 14A and AN/SRA-15, 15A.

TUBE, CRYSTAL AND/OR SEMI-CONDUCTOR DATA:

TUBES: None used.

CRYSTALS: None used.

SEMI-CONDUCTORS: None used.

SHIPPING DATA

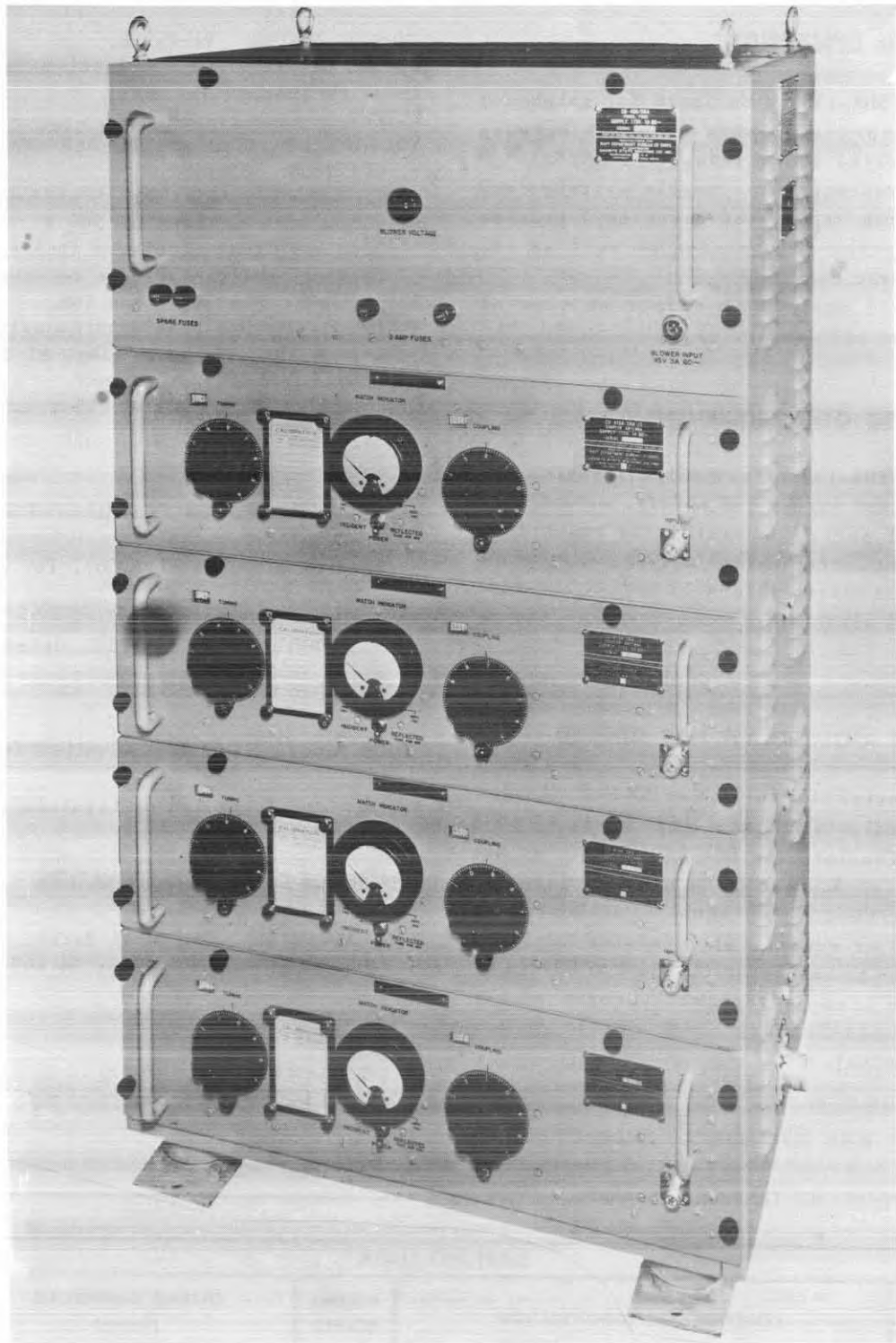
PKGS	VOLUME (CU FT)	WEIGHT (LBS)
	18.8	416

PROCUREMENT DATA

PR
S
OCURING SERVICE: DESIGN COG: USN, BuShips
PEC &/OR DWG: SHIPS-C-2888

CONTRACTOR	LOCATION	CONTRACT OR ORDER NO.	APPROX. UNIT COST
Granite State Machine Company, Incorporated Dwg no. 3-0-2	Manchester, New Hampshire	N0bsr-75524, 18 August 1958	

ANTENNA COUPLER GROUP



Antenna Coupler Group AN/SRA-13B

June 1961

AN/SRA-13B**ANTENNA COUPLER GROUP****FUNCTIONAL DESCRIPTION**

The AN/SRA-13B is designed for shipboard use. It provides impedance match between transmitter(s) and antenna. The AN/SRA-13B has been redesigned so, toggle switches and meters (with associated circuitry) provide incident power information as well as reflected power data.

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

RELATION TO OTHER EQUIPMENT

The AN/SRA-13B is virtually identical to AN/SRA-13 and AN/SRA-13A models, except that the actual parts comprising the redesigned area are not interchangeable with corresponding parts in models AN/SRA-13 and AN/SRA-13A. It is used with radio communications equipment.

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(4) Coaxial Line RG-10/U or RG-18/U (Length as required), (4) Coaxial Line RG-10 (1 to 2 ft), (1) Coaxial Line RG-18/U (Length as required), (4) Adapter UG-982/U or equal, (4) Connector UG-23/U or equal, (4) Connector UG-941A/U or equal, (4) Connector UG-27A/U or equal, (1) Connector UG-154/U or UG-216/U, (1) Power Line as required (Length as required), (1) Primary Power Switch (6 amp toggle switch).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF FREQUENCY CONTROL: Manual.

TYPE OF TUNING: Variable.
 METHOD OF COUPLING: Inductive-Capacitive.
 INPUT IMPEDANCE: 50 ohms.
 OUTPUT IMPEDANCE: 50 ohms.
 VOLTAGE ISOLATION RATIO BETWEEN ADJACENT CHANNELS: 15 to 1.
 POWER HANDLING ABILITY: Simultaneous coupling of a maximum of 500 W, r-f power, 100% amplitude modulated from each of four transmitters to a single antenna.
 EFFICIENCY: Not less than 70%.
 TUNING BAND: One band continuously variable across the frequency range of 2 to 6 mc.
 FREQUENCY RANGE: 2 to 6 mc.
 OPERATING POWER RQMT: 115 v ac, 60 cps, single ph, 500 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Granite State Machine Co., Inc., Manchester, N.H.
 Dwg no. 3-0-100.
 Contract NObsr-81222, dated 16 March 1960.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes and/or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 92746: Technical Manual for Antenna Coupler Group AN/SRA-13, 14 and 15.

TYPE CLASSIFICATION	(NAVY)
DESIGN COGNIZANCE	NAVY BUSHIPS
PROCUREMENT COGNIZANCE	SHIPS-C-3413 AMEND 1
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	Antenna Coupler Group AN/SRA-13B	24.8	24 x 30 x 50	434

UNCLASSIFIED

June 1961

ANTENNA COUPLER GROUP

Radio-Auxiliary

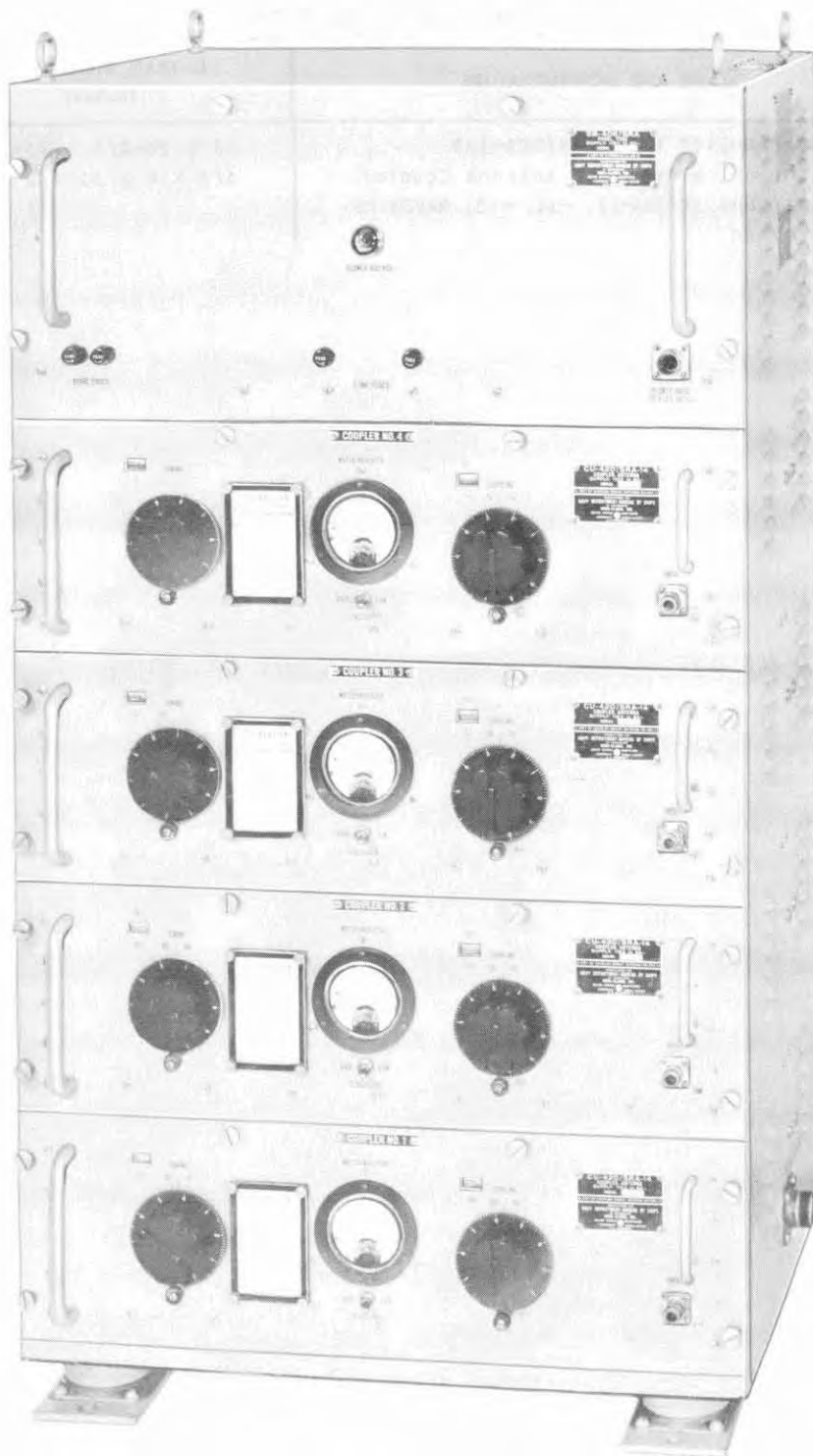
AN/SRA-13B

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Antenna Coupler Group AN/SRA-13B	20 x 26-1/4 x 46-1/2	309
1	Technical Manual for Antenna Coupler Groups AN/SRA-13, -14, -15, NAVSHIPS 92746	1/2 x 8 x 11-1/2	1/4

UNCLASSIFIED

ANTENNA COUPLER GROUP



Antenna Coupler Group AN/SRA-14

Radio-Auxiliary

AN/SRA-14

ANTENNA COUPLER GROUP

FUNCTIONAL DESCRIPTION

Antenna Coupler Group AN/SRA-14 is designed for shipboard use, and couples the output of four radio transmitters to a single broadband antenna. It matches the impedance of the broadband antenna to the 50-ohm impedance of the transmission line from the transmitter. Four identical antenna couplers, each designated Antenna Coupler CU-420/SRA-14; Fuse Panel SB-406/SRA and Electrical Equipment Cabinet CY-1670/SRA make up Antenna Coupler Group AN/SRA-14. The four antenna couplers operate in the frequency range of 4 to 12 mc.

No field changes in effect at time of preparation (16 February 1960).

RELATION TO OTHER EQUIPMENT

This equipment supersedes Antenna Multi-coupler CU-302/UR and is used with model TBM or other approved h-f transmitters. Antenna Coupler Group AN/SRA-13 and AN/SRA-15 have identical functions and characteristics, the only differences are the frequency range in which they operate and minor circuit changes.

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(4) Coaxial Line RG-10/U or RG-18/U (length as required); (4) Coaxial Line RG-10/U (1 to 2 ft); (1) Coaxial Line RG-18/U (length as required); (4) Adapter UG-982/U; (4) Connector UG-23/U; (4) Connector UG-941A/U; (4) Connector UG-27A/U; (1) Connector UG-154/U; (1) Power Line (length as required); (1) Primary Power Switch (6 amp toggle).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

POWER SUPPLY: 115 v, .60 cy, single ph.
FREQUENCY RANGE: 4 to 12 mc.
TUNING BAND: One band, continuously variable.
TYPE OF FREQUENCY CONTROL: Manual.

POWER HANDLING ABILITY: Simultaneous coupling of four 500 watt, 100 percent amplitude modulated, h-f transmitters.

INPUT IMPEDANCE: 50 ohms.

OUTPUT IMPEDANCE: 50 ohms.

EFFICIENCY: Not less than 68%.

VOLTAGE ISOLATION RATIO BETWEEN ADJACENT CHANNELS: 15 to 1.

ELECTRICAL CHARACTERISTICS OF ANTENNA: Broadband antenna with impedance characteristic such that VSWR does not exceed 3 to 1, related to 50 ohms, for the frequency range.

INSTALLATION: Shipboard.

FOR USE WITH TRANSMITTERS: Models TBM, TBK, TCK, AN/URT-2, 3, 4 and AN/SRT-14, 15, 16.

MANUFACTURER'S OR CONTRACTOR'S DATA

NEMS-CLARKE Inc., Silver Spring, Md.
Part/Dwg No. AC-13,051.
Contract NObsr-63422, dated 6 January 1953.
Contract NObsr-75292.
Contract NObsr-75797.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 92746: Technical Manual for ANTENNA COUPLER GROUP AN/SRA-13, AN/SRA-14, AN/SRA-15.

TYPE CLASSIFICATION (NAVY)
DESIGN COGNIZANCE USN, BUSHIPS
PROCUREMENT COGNIZANCE SPEC: SHIPS-C-3066
STOCK NO.
R.D.B. IDENT. NO.

August 1960

Radio-Auxiliary

ANTENNA COUPLER GROUP

AN/SRA-14

SHIPPING DATA

NUMBER OF BOXES	CONTENTS AND IDENTIFICATION	VOLUME (Cu.Ft.)	OVERALL DIMENSIONS (inches)	WEIGHT PACKED (lbs.)
1	Antenna Coupler Group AN/SRA-14	18.8	22 X 29 X 51	390

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Antenna Coupler Group AN/SRA-14 Includes:	20-1/2 X 26-1/4 X 46-3/4	176.5
4	Antenna Coupler CU-420/SRA-14	7-23/32 X 18-3/16 X 24-3/4	36.5
1	Fuse Panel SB-406/SRA	10-3/8 X 11-7/32 X 24-3/4	11.5
1	Electrical Equipment Cabinet CY-1670/SRA	20-1/2 X 26-1/4 X 46-3/4	122.5
2	Technical Manual NAVSHIPS 92746		

6 July 1962

Cog Service:

FSN: 5985-710-0099

ANTENNA COUPLER GROUP AN/SRA-14A

Functional Class:

USA

USN

USAF

TYPE CLASS:

MANUFACTURER'S NAME/CODE NUMBER: Granite State Machine Company.

(No Illustration Available)

FUNCTIONAL DESCRIPTION:

The AN/SRA-14A is designed for shipboard use. The coupler group is capable of coupling four transmitters into a single broadband antenna. The coupler group must be operated independently with a broadband antenna designed to produce a voltage standing wave ratio no greater than 3 to 1 over its frequency range at the output terminal of the coupler group. Each transmitter operating with a coupler group must be set to operate at channels spaced at least 10 per cent from any other frequency in the group. The principal function of this equipment is to provide an efficient means for operating, simultaneously, several transmitters, having output power up to 500 watts into a single broadband antenna.

No field changes in effect at time of preparation (29 November 1960).

TECHNICAL CHARACTERISTICS:

TYPE OF INSTALLATION: Shipboard.

METHOD OF COUPLING: Inductive-capacitive.

TYPE OF FREQUENCY CONTROL: Manual.

TUNING BAND

NUMBER OF BANDS: One band, continuously variable across the frequency range of each coupler group.

IMPEDANCE

INPUT IMPEDANCE: 50 ohms.

OUTPUT IMPEDANCE: 50 ohms.

VOLTAGE ISOLATION RATIO: Between adjacent channels for 10% frequency separation, 15 to 1 or greater.

OPERATING FREQUENCY RANGE: 4 to 12 mc.

OPERATING POWER RQMT: 115 vac, 60 cps, single ph.

RELATION TO OTHER EQUIPMENT:

The AN/SRA-14A is similar to the AN/SRA-13A and AN/SRA-15A except they operate in different frequency ranges.

The AN/SRA-14A is designed to be used with but not part of Radio Communications Equipment.

EQUIPMENT REQUIRED BUT NOT SUPPLIED:

(4) Coaxial Line RG-10/U or RG-18/U (length as required); (4) Coaxial Line RG-10 (1 to 2 ft); (1) Coaxial Line RG-18/U (length as required); (4) Adapter UG-982/U or equal; (4) Connector UG-23/U or equal; (4) Connector UG-941A/U or equal; (4) Connector UG-27A/U or equal; (1) Connector UG-154/U or UG-216/U; (1) Power Line (length as required); (1) Primary Power Switch (6 amp toggle switch).

AN/SRA-14A ANTENNA COUPLER GROUP

MAJOR COMPONENTS

QTY	ITEM	STOCK NUMBERS	DIMENSIONS (INCHES)	WEIGHT (LBS)
1	Antenna Coupler Group AN/SRA-14A		20-1/2 x 26-1/4 x 46-3/4	176-1/2
4	Coupler, Antenna CU-420/SRA-14		7-23/32 x 18-3/16 x 24-3/4	36-1/2 ea.
1	Panel, Fuse SB-406/SRA		10-3/8 x 11-7/32 x 24-3/4	11-1/2
1	Cabinet, Electrical Equipment CY-1670A/SRA		20-1/2 x 26-1/4 x 46-3/4	122-1/2
2	Technical Manual NAVSHIPS 92746		1/2 x 9 x 11-1/2	

REFERENCE DATA AND LITERATURE:

NAVSHIPS 92746: Technical Manual for Antenna Coupler Group AN/SRA-13, -13A, AN/SRA-14, -14A, and AN/SRA-15, -15A.

TUBE, CRYSTAL AND/OR SEMI-CONDUCTOR DATA:

TUBES: None used.

CRYSTALS: None used.

SEMI-CONDUCTORS: None used.

SHIPPING DATA

PKGS	VOLUME (CU FT)	WEIGHT (LBS)
1	18.8	390

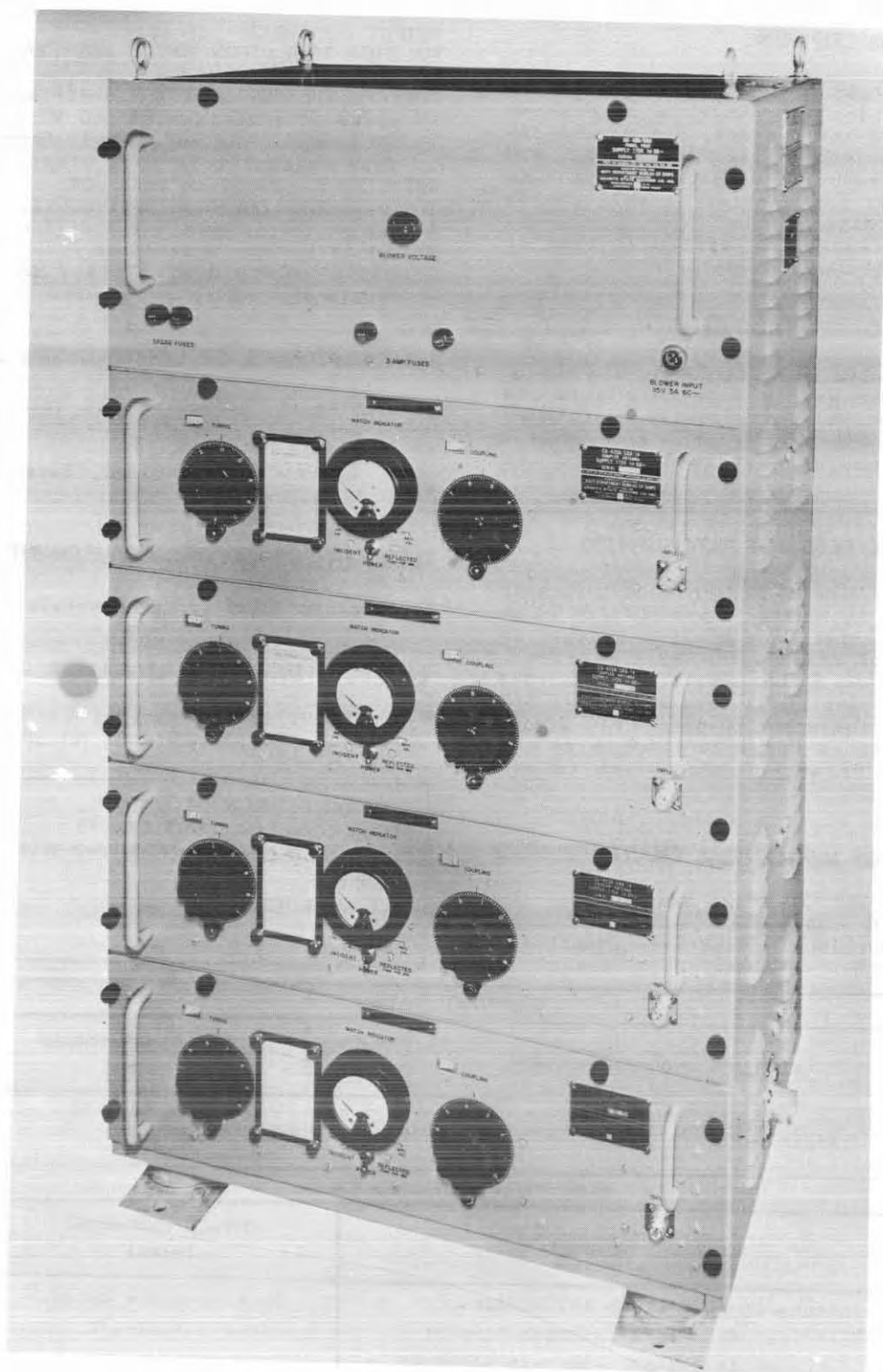
PROCUREMENT DATA

PROCURING SERVICE: DESIGN COG: USN, BuShips
SPEC &/OR DWG: SHIPS-C-2888

CONTRACTOR	LOCATION	CONTRACT OR ORDER NO.	APPROX. UNIT COST
Granite State Machine Co. Dwg no. 4-0-2	Manchester, New Hampshire	N0bsr-75524, 18 August 1958	

ANTENNA COUPLER GROUP

Radio-Auxiliary
AN/SRA-14B



Antenna Coupler Group AN/SRA-14B

June 1961

Radio-Auxiliary

AN/SRA-14B

ANTENNA COUPLER GROUP

FUNCTIONAL DESCRIPTION

The AN/SRA-14B is designed for shipboard use. It provides impedance match between transmitter(s) and antenna. The AN/SRA-14B has been redesigned so toggle switches and meters (with associated circuitry) provide incident power information as well as reflected power data.

No field changes in effect at time of preparation (11 January 1961).

RELATION TO OTHER EQUIPMENT

The AN/SRA-14B is electrically and physically interchangeable with AN/SRA-14 and AN/SRA-14A. Actual parts in the redesigned area of the AN/SRA-14B are not interchangeable with corresponding part in AN/SRA-14 and AN/SRA-14A.

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(4) Coaxial Line RG-10/U or RG-18/U (Length as required), (4) Coaxial Line RG-10/U (1 to 2 ft), (1) Coaxial Line RG-18/U (Length as required), (4) Adapter UG-982/U or equal, (4) Connector UG-23/U or equal, (4) Connector UG-941A/U or equal, (4) Connector UG-27A/U or equal, (1) Connector UG-154/U or UG-216/U, (1) Power Line as required (Length as required), (1) Primary Power Switch (6 amp toggle switch).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF FREQUENCY CONTROL: Manual.
TYPE OF TUNING: Variable.
METHOD OF COUPLING: Inductive-Capacitive.
INPUT IMPEDANCE: 50 ohms.

OUTPUT IMPEDANCE: 50 ohms.
VOLTAGE ISOLATION RATIO BETWEEN ADJACENT CHANNELS: 15 to 1.
POWER HANDLING ABILITY: Simultaneous coupling of a maximum of 500 W, r-f power, 100% amplitude modulated, from each of four transmitters to a single antenna.
EFFICIENCY: Not less than 68%.
TUNING BAND: One band continuously variable across the frequency range of 4 to 12 mc.
FREQUENCY RANGE: 4 to 12 mc.
OPERATING POWER RQMT: 115 v ac, 60 cps, single ph, 500 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Granite State Machine Co., Inc., Manchester, N.H.
Dwg No. 4-0-100.
Contract NObsr-81222, dated 16 March 1960.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes and/or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 92746: Technical Manual for the Antenna Coupler Groups AN/SRA-13, -14, -15.

TYPE CLASSIFICATION (NAVY)
DESIGN COGNIZANCE NAVY BUSHIPS
PROCUREMENT COGNIZANCE SHIPS-C-3413 AMEND 1
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	Antenna Coupler Group AN/SRA-14B	24.8	24 x 30 x 50	400

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Antenna Coupler Group AN/SRA-14B	20 x 26-1/4 x 46-1/2	290
1	Technical Manual for Antenna Coupler Groups AN/SRA-13, -14, -15 NAVSHIPS 92746	1/2 x 8 x 11-1/2	1/4

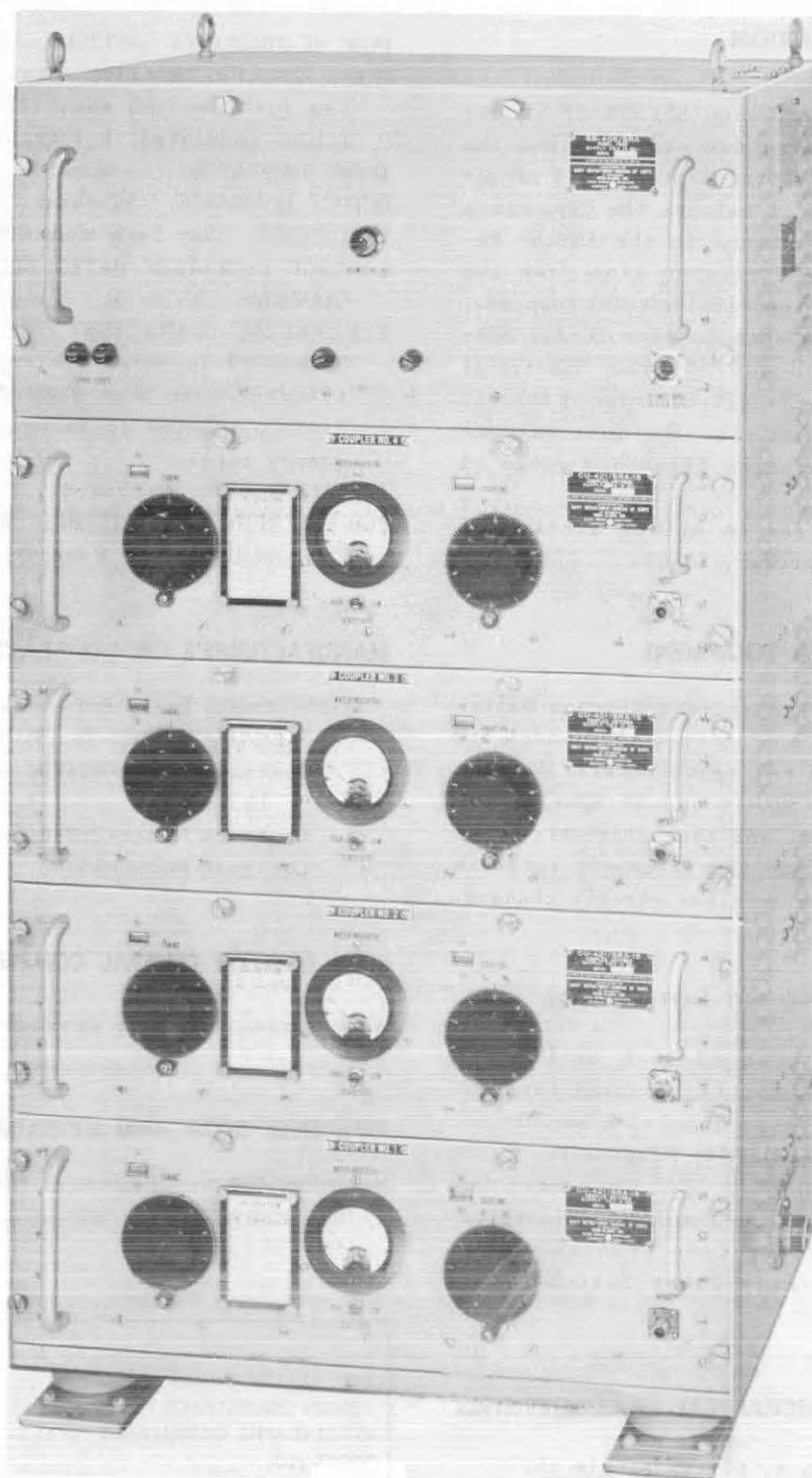
UNCLASSIFIED

August 1960

Radio-Auxiliary

AN/SRA-15

ANTENNA COUPLER GROUP



Antenna Coupler Group, AN/SRA-15

UNCLASSIFIED

1.2 AN/SRA-15: 1

FUNCTIONAL DESCRIPTION

Antenna Coupler Group AN/SRA-15 is designed for shipboard use, and couples the output of four radio transmitters to a single broadband antenna. It matches the impedance of the broadband antenna to the 50-ohm impedance of the transmission line from the transmitter. Four identical antenna couplers, each designated Antenna Coupler CU-421/SRA-15; Fuse Panel SB-406/SRA and Electrical Equipment Cabinet CY-1670/SRA make up Antenna Coupler Group AN/SRA-15. The four antenna couplers operate in the frequency range of 6 to 18 mc.

No field changes in effect at time of preparation (16 February 1960).

RELATION TO OTHER EQUIPMENT

This equipment supersedes Antenna Multi-coupler CU-303/UR and is used with model TBM or other approved h-f transmitters. Antenna Coupler Group AN/SRA-13 and AN/SRA-14 have identical functions and characteristics, the only differences are the frequency range in which they operate and minor circuit changes.

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(4) Coaxial Line RG-10/U or RG-18/U (length as required); (4) Coaxial Line RG-10/U (1 to 2 ft); (1) Coaxial Line RG-18/U (length as required); (4) Adapter UG-982/U; (4) Connector UG-23/U; (4) Connector UG-941A/U; (4) Connector UG-27A/U; (1) Connector UG-154/U; (1) Power Line (length as required); (1) Primary Power Switch (6 amp toggle).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

POWER SUPPLY: 115 v, 60 cy, single ph.
FREQUENCY RANGE: 6 to 18 mc.
TUNING BAND: One band, continuously variable.

TYPE OF FREQUENCY CONTROL: Manual.
POWER HANDLING ABILITY: Simultaneous coupling for four 500 watt, 100 percent amplitude modulated, h-f transmitters.
INPUT IMPEDANCE: 50 ohms.
OUTPUT IMPEDANCE: 50 ohms.
EFFICIENCY: Not less than 60%.
VOLTAGE ISOLATION RATIO BETWEEN ADJACENT CHANNELS: 15 to 1.
ELECTRICAL CHARACTERISTICS OF ANTENNA: Broadband antenna with impedance characteristic such that VSWR does not exceed 3 to 1, related to 50 ohms, for the frequency range.
INSTALLATION: Shipboard.
FOR USE WITH TRANSMITTERS: Models TBM, TBK, TCK, AN/URT-2, 3, 4 and AN/SRT-14, 15, 16.

MANUFACTURER'S OR CONTRACTOR'S DATA

NEMS-CLARKE Inc., Silver Springs, Md.
Part/Dwg No. AC-13,052.
Contract NObsr-63422, dated 6 January 1953.
Contract NObsr-75292.
Contract NObsr-75797.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 92746: Technical Manual for ANTENNA COUPLER GROUP AN/SRA-13, AN/SRA-14, AN/SRA-15.

TYPE CLASSIFICATION (NAVY)
DESIGN COGNIZANCE USN, BUSHIPS
PROCUREMENT COGNIZANCE SPEC: SHIPS-C-3066
STOCK NO.
R.D.B. IDENT. NO.