

UNCLASSIFIED

ANTENNA for AN/SPS-35

FREQUENCY: SHF band, 5500 - 5600 mc.

TYPE: Cut paraboloidal reflector.

DESCRIPTION: The antenna, transmitter, and receiver of Radar Set AN/SPS-35 are an integral unit. The antenna consists of a cut paraboloidal reflector probably fed by a flared waveguide horn feed. The assembly is 52 inches high with a 52-inch swing circle. The total weight of the unit is 140 pounds.

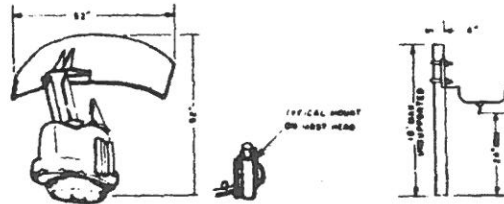
INSTALLATION: Shipboard, small vessels.

ASSOCIATED EQUIPMENT: Radar Sets AN/CPS-35 and AN/SPN-21. Equipment function - search, surface (navigation).

MISCELLANEOUS: Antenna-Receiver-Transmitter AS-923/SPS-35 is apparently another unit used with Radar Set AN/SPS-35.

REFERENCE:

U. S. Navy Bureau of Ships, Antenna Data Sheets, Shipboard Antenna Details, Chapter 5, NAVSHIPS 900121(A), (Jan. 1, 1959). CONFIDENTIAL.



Antenna for AN/SPS-35

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ANTENNA GROUP AN/SRA-3

MAJOR COMPONENTS: Antenna AT-252/SR and Antenna Coupler CU-226/SR.

FREQUENCY: HF and VHF bands, 20-50 mc.

TYPE: Whip.

DESCRIPTION: AT-252/SR is a whip antenna used for receiving or transmitting. It is not separable or collapsible, but it may be cut to various lengths for use at particular frequencies. The antenna has an input impedance of 50 ohms and is fed by RG-8/U or RG-10/U coaxial cable. The antenna is mounted by means of holes through a circular base plate and is supported and insulated by a glazed ceramic bowl attached to the baseplate. The maximum diameter of the whip is about 1 inch. The antenna weighs 25 pounds.

TUNING/MATCHING DEVICES: The antenna length may be cut for a particular range of frequencies as follows: 20 - 28 mc ... 125 inches; 27 - 40 mc ... 89 inches; 39 - 50 mc ... 58 inches.

INSTALLATION: Shipboard.

ASSOCIATED EQUIPMENT: RF Monitor AN/URM-50. Equipment function - probably test. Radio Sets SCR-300, SCR-508, SCR-510, SCR-608, SCR-610, and SCR-628. Equipment function - communications.

MISCELLANEOUS: AT-252/SR is also a part of Antenna Group AN/SRA-17(XG-1).

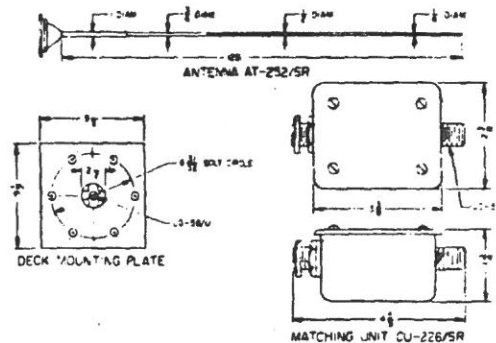
COGNIZANT AGENCY: U. S. Navy.

MANUFACTURERS: White Tuning Corporation, Navy contract W08ar-52582; Engineering and Research Corporation; National Company, Incorporated.

STOCK NUMBERS: AN/SRA-3 ... Federal Stock Number N 5985-254-7185; AT-252/SR ... Federal Stock Number N 5985-254-7184, and U. S. Navy N 16-A-54463-5150.

REFERENCES:

- 1) U. S. Navy Bureau of Ships, Antenna Data Sheets, Shipboard Antenna Details, Chapter 5, NAVSHIPS 900121(A), (Jan. 1, 1959) CONFIDENTIAL.
- 2) R. Fulper, Jr., et al., The Communication Antenna System on the USS Northampton (ECLC-1), Rpt. No. 4641. Washington, D.C.: Naval Research Laboratory, (Feb. 10, 1956). ASTIA Rpt. No AD 88101. CONFIDENTIAL.
- 3) U. S. Department of Defense Nomenclature Card.



AN/SRA-3