

AERIAL OUTFITS AMM AND AMN

AMM, AMN

SUMMARY OF DATA

PURPOSE

Aerial Outfits AMM and AMN are used with an interrogator (eg Radar Type 1010) in an IFF secondary radar system.

BRIEF DESCRIPTION

The Aerial Outfit AMM is a separate unit from the primary radar aerial and is rotated by its own dc motor mounted in the Aerial Pedestal. Rotation of the AMM can be synchronised with the primary aerial rotation by means of a servo controlled link in the Aerial Control Assembly. The Aerial Outfit AMN is mounted on and rotates with the primary radar aerial which can be switched by pulses from the Pulse Generator, to radiate a cardioidal pattern for side lobe suppression (SLS) control.

CHARACTERISTICS

Transmission 1030 MHz \pm 8 MHz

Reception 1090 MHz \pm 8 MHz

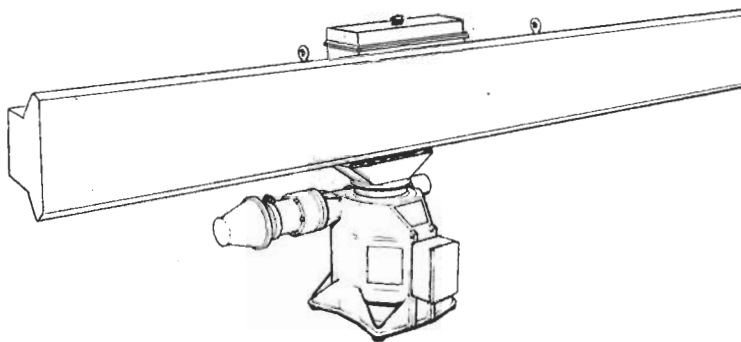
Interrogation Pattern

Horizontal Beam width 7° at -3 dB

Vertical Beam width 60° at -3 dB

SLS Control Pattern

Horizontal, Cardioid Pattern. Effective beam width 7° outside this angle, control beam shape exceeds interrogate beam shape by at least 5 dB. The minima coincides with main lobe, is not less than 2° beam angle, and is at least -25 dB main lobe power. Vertical Beam width 60° at -3 dB.



MAJOR UNITS

<u>NSN</u>	<u>Description</u>
5840-99-524-2107	Antenna
5840-99-524-2099	Antenna Pedestal
5840-99-524-2079	Antenna Control
5840-99-524-3381	Pulse Generator

PHYSICAL DATA

	<u>Height</u>	<u>Width</u>	<u>Depth</u>	<u>Weight</u>
Antenna	50.1 cm (19.75 in.)	304.8 cm (120 in.)	40.64 cm (16 in.)	68.03 Kg (150 lb)
Antenna Pedestal	57.51 cm (22.5 in.)	98.4 cm (38.75 in.)	55.9 cm (22 in.)	163.3 Kg (360 lb)
Antenna Control	44.272 cm (17.43 in.)	44.221 cm (17.41 in.)	60.96 cm (24 in.)	54.4 Kg (120 lb)
Pulse Generator	22.2 cm (8.75 in.)	44.4 cm (17.5 in.)	17.8 cm (7 in.)	12.7 Kg (28 lb)

POWER REQUIREMENTS

115 V 60 Hz single phase 4.6 kVa	Aerial Control
115 V 400 Hz single phase	Synchro
115 V 60 Hz single phase, 200 W	Pulse Generator

HANDBOOK

BR 4213

ESTABLISHMENT LIST

S 1696

INSTALLATION SPECIFICATION

B 1181