

AERIAL OUTFIT ADN(1)

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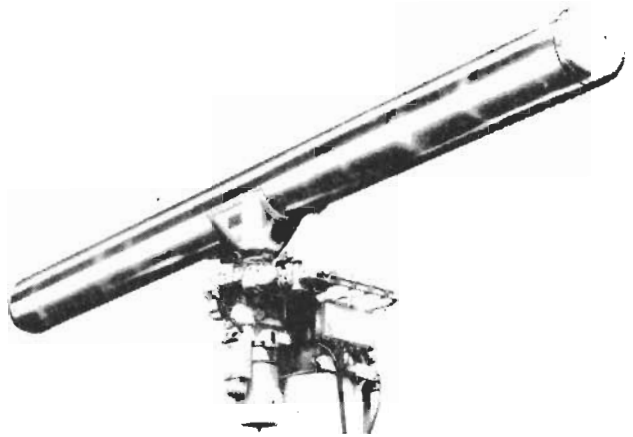
SUMMARY OF DATA

PURPOSE

For use with Type 992P and 992Q in association with GW systems.

BRIEF DESCRIPTION

The Aerial comprises a linear slotted array enclosed in a cylindrical plastic radome and the pedestal on which it is mounted is stabilised in the pitch and roll planes. The servo amplifier control equipment and the amplidyne generator are located in the radar office and the machinery space, respectively. Coarse and fine magflip transmissions provide accurate bearing information to the weapons system. These transmissions are corrected for the beam squint associated with linear slotted arrays. Compass correction is provided externally by the ship's Azimuth Retransmission Unit (RTU).



The Aerial Speeds are 15 or 30 rev/min. The normal speed is 15 rev/min. At this speed, synchronisation with Aerial Outfit AKE is provided. The 30 rev/min facility is used exceptionally for navigational purposes. A ship's head marker is provided at both speeds.

Facilities are provided for hand training of the aerial and stowing in line with the ship's head. Waveguides, rotating joints and aerial are pressurised at 2.1 kg/cm² (30 lb/in²)

CHARACTERISTICS

- Beamwidth : 1.2 deg horizontal
30 deg vertical
- Beam Elevation : 15 deg
- Gain : Approx. 29.5 dB
- Operating Frequency : 2944 - 3052 MHz
- Polarisation : Vertical

MAJOR UNITS

- 5985-AP 186592 Aerial with guard
- 5985-AP 186579 Pedestal, Aerial
- 5985-AP 186637 Waveguide Assembly
- 5840-AP 172854 Cabinet Aerial Control
- 5840-AP 173203 Drawer Aerial Indicator
- 5840-99-418-0990 Drawer Aerial Control
- 5840-AP 173205 Drawer Squint Correction
- 5840-AP 173208 Drawer Servo Amplifier
- 6115-AP 204079 AC/DC/DC/DC Motor Generator Amplidyne Module Control

PHYSICAL DATA

- Aerial length 640 cm (21 ft)
 - Turning Circle 655 cm (21.5 ft)
 - Height of pedestal with Aerial 198 cm (6.5 ft)
 - Weight of pedestal 478 kg (1054 lb)
 - Weight of Aerial 174.6 kg (385 lb)
 - Control Cabinet

Height	Width	Depth
142 cm	65 cm	66 cm
(56 in.)	(25.5 in.)	(26 in.)
- Weight of Control Cabinet (Excluding Drawers) 227 kg (500 lb) approx.

POWER REQUIREMENTS

- 440 V 60 Hz 3 phase — 3½ kVA for amplidyne generators.
- 220 V dc — 1 amp for aerial motor fields.
- 115 V 400 Hz single phase — 6 amp for servo amplifiers and magflips.
- 60 V 60 Hz single phase — 1 amp for amplidyne generator demagnetising circuits.
- 24 V dc — 2 amp for control gear.

HANDBOOK

BR 2524(1), (2), (3).

ESTABLISHMENT LIST

E1439

INSTALLATION SPECIFICATION

B 960 Vol 3 Parts 1 and 2
and Addenda A and B.