

RESTRICTEDBR 333(1)
Original**AERIAL OUTFIT ALN****ALN****SUMMARY OF DATA****PURPOSE**

Retractable HF and UHF transmitting and receiving aerial for use in submarines can be used when the submarine is surfaced or at periscope depth. Suitable for simultaneous HF and UHF operation.

FREQUENCY RANGE

HF 2-25 MHz

UHF 225-399.9 MHz

BRIEF DESCRIPTION

The aerial outfit consists of telescopic stainless steel tubes, the upper portion of the top tube forms the HF radiating element; the UHF aerial is mounted on top of the assembly. The aerial mast is raised by means of a hydraulic ram. At periscope depth, with the mast fully raised, the UHF aerial is 20 ft above the surface of the sea. HF transmission and reception are possible only when the mast is fully raised, but, UHF operation is possible with the mast in any position. Associated with the aerials are feeder systems consisting of flexible coaxial uni-radio cable. Alternative UHF aerials are fitted, the type of aerial being dependent upon the class of submarine. An r.f. isolator unit is fitted within the tube assembly.

MAJOR UNITS

Admiralty Pattern Number	Unit	Fitted in Conventional/ Nuclear Submarines
AP 186568	Mast Assembly ALN(1)	Conventional
AP 186569	Mast Assembly ALN(2)	Conventional
AP 186570	Mast Assembly ALN(3)	Nuclear
5985-99-520-9327	Antenna	Conventional
5985-99-520-9327	Antenna	Nuclear
AP 181148	Cable Assembly UHF	Both
AP 186591	Cable Assembly HF	Conventional
AP 186590	Cable Assembly HF	Both
AP 186585	Box Deck head connecting	Both
AP 186596	Plug Assembly HF Crosshead	Both
AP 186580	Isolator Unit RF	Both

WEIGHT

Total weight of the moving parts (lifted out for maintenance) 2 tons 13 cwt approx.

HANDBOOK

BR 2416

ESTABLISHMENT LIST

E 1407

INSTALLATION SPECIFICATION

B 952

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