

**RESTRICTED**BR 333(1)  
Original**AERIAL OUTFIT ALE****ALE****SUMMARY OF DATA****PURPOSE**

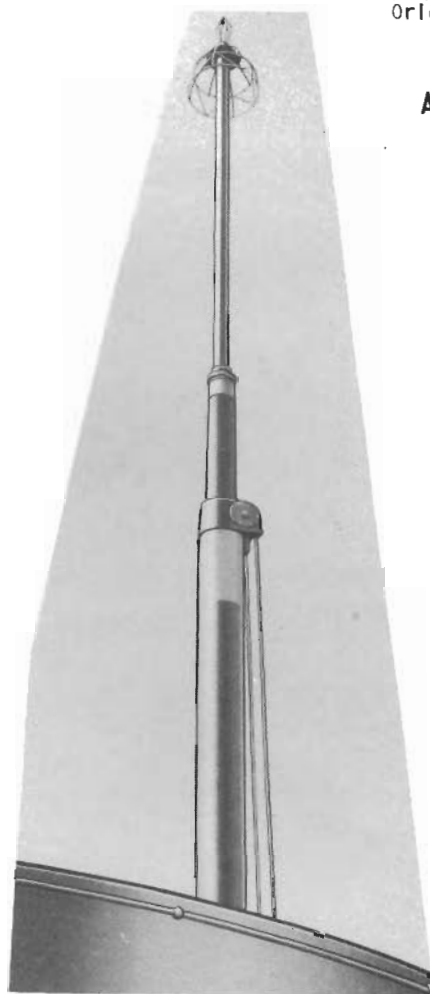
Retractable H.F. and V.H.F. transmitting and receiving aerial for submarines. Can be used with submarines either surfaced or at periscope depth. Suitable for simultaneous H.F. and V.H.F. operation.

**FREQUENCY RANGE**

H.F. 1.5 to 24 MHz  
V.H.F. 100 to 156 MHz

**BRIEF DESCRIPTION**

The aerial outfit consists of telescopic stainless steel tubes, two insulated sections of which comprise an H.F. and V.H.F. aerial respectively. The aerial mast is raised by means of a hydraulic ram. At periscope depth, with the mast fully raised, the top of the V.H.F. aerial is 20 ft above the surface of the sea. H.F. reception and transmission are only possible when the mast is fully raised, but V.H.F. operation is possible whether the mast is fully raised or not. Associated with the aerials are concentric air dielectric feeder systems. The V.H.F. aerial is mounted on top of the H.F. aerial, and is a conical monopole with a skirt-shaped counterpoise. An "isolator unit" is fitted in the W/T office.

**MAJOR UNITS****AERIAL OUTFIT ALE**

AP No.	Description	Weight
67000	V.H.F. Aerial	Total weight of moving parts (lifted out for maintenance) 2 tons 13 cwt.
67001	Aerial Counterpoise	
67152A or 61312A	Main Mast Assembly (including Junction Box AP 67078 and Feeder Connector, hinged AP 67002)	
67003	Connector, H.F., V.H.F. (Trunk)	35 lb
67004	Connector, V.H.F. (Travelling)	
67005	Isolator Unit	202 lb
67156	Guide channel and bearing support Assembly including vertical shaft	
61592	Connection, flexible, 20' with 2 plugs	
68667	Weight, tensioning for AP 61592 connection	

NOTE: Pattern 67152A is fitted in "T" Class Conversion Submarines and Pattern 61312A in "Porpoise" Class.

**HANDBOOK**

BR 2183(1)(2)

**ESTABLISHMENT LIST**

E 1014

**INSTALLATION SPECIFICATION**

B 727

**RESTRICTED**