

RESTRICTEDBR 333(1)
Original**COMMON AERIAL OUTFITS EAW(1), (2) AND (3)
(ICS 1)****EAW(1)(2)(3)****SUMMARY OF DATA****PURPOSE**

Common Aerial Outfits of the EAW Series enable a number of the transmitters in an Integrated Communication System to work into any one of a number of aeriels provided to cover the frequency range 2-24 MHz.

BRIEF DESCRIPTION

For each aerial of an Outfit the aerial impedance is matched (where matching is necessary) by an r.f. transformer to the nominal 50 ohms of the system, such that a V.S.W.R. of better than 0.33 to 1 is obtained over the frequency band for that aerial. The feed to the transformer (or aerial) is taken from an aerial busbar to which a number of transmitters may be connected simultaneously, each through a tunable filter and switchable transformer in a filter drawer. The tunable filter prevents the degradation of the output of one transmitter due to the connection of other transmitters and with the switchable transformer improves the matching to achieve a V.S.W.R. of better than 0.85 to 1. The cables between the busbars and the r.f. transformers or aerial feedpoints are duplicated for emergency use.

AERIALS

The ship's superstructure may be used to provide aeriels equivalent to the folded monopole or sleeve type; alternatively, biconical aeriels (Aerial Outfit AGG) or Aerial Outfit AWF(M) may be fitted.

MAJOR UNITS

NSN or other Ref. No.	DESCRIPTION	PHYSICAL DATA				QUANTITY FITTED			
		HEIGHT	WIDTH	DEPTH	WEIGHT	EAW (1) A	EAW (1) B	EAW (2)	EAW (2)
5820-99-418-1219 (A.P.164500)	<u>Cabinet HF Filter</u>	1 ft 3 in	2 ft	2 ft 3 in	455 lb	4	4	4	1
5820-99-418-1220 (A.P.164501)	Filter Drawer 2-6 MHz				84 lb	8	9	8	-
5820-99-418-1309 (A.P.164788)									
5820-99-418-1413 (A.P.164663)	Filter Drawer 3-11 MHz				84 lb	8	5	8	6
5820-99-418-1310 (A.P.164789)									
5820-99-418-1221 (A.P.164503)	Filter Drawer 8-24 MHz				84 lb	8	9	8	3
5820-99-418-1400 (A.P.164646)	<u>Cabinet Power and Dummy Load</u>	5 ft 3 in	2 ft	2 ft 3 in	320 lb	1	1	1	1
5820-99-418-1856 (A.P.164205)	Drawer Power Supply				8 lb	2	2	2	2
5820-99-916-4683	Cooler Air				74 lb	1	1	1	1
5985-99-918-6524	Dummy Load Assembly				68 lb	1	1	1	1

HANDBOOKS

BR2420(2)

ESTABLISHMENT LIST

E1306

INSTALLATION SPECIFICATION

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