#### RESTRICTED

BR 333(1) Original

#### AERIAL OUTFITS AWA/AWC/AWF/AWJ/AWL

SUMMARY OF DATA



# **PURPOSE**

Aerial Outfits AWA-AWL are whip aerials used for both transmission and reception and with suitable switching devices can be used for both purposes. Lightweight rods have been designed for use with Outfits AWA, AWC, AWF and AWL, and when these rods are fitted the outfit names become AWA(M), AWC(M), AWF(M), AWL(M).

## **AERIAL OUTFITS AWA & AWA(M)**

#### **BRIEF DESCRIPTION**

Aerial Outfit AWA is a permanent receiving aerial fitted on all ships larger than coastal craft. It operates with maximum efficiency in the HF and MF bands and can be used with reasonable efficiency down to 100 kHz in the LF band. The actual aerial consists of five tapered steel rods screwed together to form a length of 30 ft. A matching unit, containing filter circuits, is incorporated to match the impedance of the aerial to that of its associated feeder. A remote control switch fitted in the receiving office selects any of the frequency ranges covered by the matching unit. When fitted with lightweight rods, it becomes Outfit AWA(M).

#### **MAJOR UNITS**

Pattern No.	Descript	ion	Weight	
57877A	Rod, aerial, whip type (30 ft) 9 m		54 Kg (120 lb)	+
58155A/B	Insulating base Desig	gn 1	2.11 Kg (25.5 lb)	+
59763A	Matching Unit Desig	n 7 complete with housing	29 Kg (65 lb)	
58159	Remote Control Uni	it for Matching Unit	2 Kg (5 lb)	
61828 to 61831 inclusive	Rod, aerial, whip ty	pe, Designs 21, 22, 23 and 24	4 Kg (31.5 lb)	t
61834	Base for lightweight	rods	11 Kg (25 lb) (approx).	
+	With AWA only	t With AWA(M) only		

# **AERIAL OUTFITS AWC & AWC(M)**

# BRIEF DESCRIPTION

Aerial Outfit AWC is a permanent hinged transmitting aerial capable of 90 degree movement abouts its hinge, and is primarily intended for all round propagation in aircraft Carriers. It operates in the HF band with maximum efficiency around 7 MHz. It has been designed for use with 400 watt output transmitters. The aerial consists of four steel tubes screwed together to form a length of 35 ft. With lightweight rods it becomes AWC(M).

# MAJOR UNITS

Pattern No.	Description	Weight	
59236	Rod, aerial, whip type (35 ft) long	38 Kg (84 lb)	+
59844	Pedestal and Trunnion Unit	61 Kg (135 lb)	
61828 to 61832 inclusive	Rod, aerials whip type, Designs 21, 22, 23, 24 and 25	2 Kg (46.5 lb)	t

+ With AWC only

t With AWC(M) only

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## AERIAL OUTFITS AWF & AWF(M)

#### **BRIEF DESCRIPTION**

Aerial Outfit AWF is a permanent fixed transmitting aerial fitted in cruisers and above. It operates in the HF band with maximum efficiency in the region of 7 MHz and is used with 400 watts output transmitters. The aerial rod consists of four tapered steel rods screwed together to form a length of 35 ft. With lightweight rods it becomes AWF(M).

#### MAJOR UNITS

Pattern No.	Description	Weight	
59236	Rod, aerial, whip type 10.5 m (35 ft.) long	38 Kg (84 lb)	+
65630/A	Pedestal Unit	61 Kg (135 lb)	
61828 to 61832 inclusive	Rod, aerial, whip type, Designs 21, 22, 23 24 and 25	21 Kg (46.5 lb)	†

+ With AWF only

† With AWF(M) only

#### **AERIAL OUTFIT AWJ**

#### **BRIEF DESCRIPTION**

This is an emergency HF aerial for transmission and reception for use in submarines when surfaced only. It is a hand erected, telescopic whip aerial (AP 68631) consisting of five sections of monel metal tubes fitted together by screwed sleeves and split collects, with the tubes so graded in size as to enable them all to be contained in the largest size tube when the aerial is in the retracted position. The extended length is 25 ft 6 in. and the retracted or storage length is 6 ft 8 in. The aerial is intended for mounting on the bridge of the submarine close to the navigating position.

The aerial is mounted on a deck tube chosen to suit the particular requirements of each installation. The lower part of the whip aerial is enclosed by a protective cage.

#### **MAJOR UNITS**

Pattern No.	Description	Weight
68631	Rod, aerial, telescopic, whip type, 7.5 m(25.5 ft) long	39 Kg (87 lb) Complete but excluding deck tube and inner
68634	Gland watertight for 1.2 cm (5 in.) dia. deck tube.	cable.

## **AERIAL OUTFITS AWL & AWL(M)**

#### **BRIEF DESCRIPTION**

Aerial Outfit AWL is similar to AWC except that the raising and lowering of the whip aerial is done hydraulically. With lightweight rods it becomes AWL(M).

#### **HANDBOOK**

BR 1625

#### **ESTABLISHMENT LISTS**

E829 (AWA) E899 (AWC) E955 (AWF) E1041 (AWJ) E899 (AWL)

# **INSTALLATION SPECIFICATIONS**

B614 (AWA) B676 (AWC) (B654 (AWF) B725 (AWJ) B676 (AWL)