

AERIAL OUTFITS AWA - AWN

SUMMARY OF DATA

PURPOSE

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

AWN is an entirely lightweight whip aerial outfit, for use primarily with the C.A.W. system for receivers.

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 H.F. and M.F. bands and can be used with reasonable efficiency down to 100 kc/s in the L.F. 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.	Description	Weight:	
57877A	Red, aerial, whip type 30 ft	120 lb	×
58155A/B	Insulating base Design 1	25½ lb	×
59763A	Matching Unit Design 7 complete with housing	65 lb	
58159	Remote Control Unit for Matching Unit	5 lb	
61828 to 61831 inclusive	Rod, aerial, whip type, Designs 21, 22, 23 and 24	31½ lb	†
61834	Base for lightweight rods	25 lb (approx.)	

× With AWA only

† 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 about its hinge, and is primarily intended for all round propagation in Aircraft Carriers. It operates in the H.F. band with maximum efficiency around 7 Mc/s. 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	Red, aerial, whip type 35 ft. long	84 lb	×
59844	Pedestal and Trunnion Unit	135 lb	
61828 to 61832 inclusive	Red, aeriels, whip type, Designs 21, 22, 23, 24 and 25	46½ lb	†

× With AWC only

† With AWC(M) only

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 H.F. band with maximum efficiency in the region of 7 Mc/s 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 35 ft. long	84 lb	≡
65630	Pedestal Unit	135 lb	
61828 to 61832 inclusive	Rod, aerial, whip type, Designs 21, 22, 23, 24 and 25	46½ lb	≠

≡ With AWF only

≠ With AWF(M) only

AERIAL OUTFITS AWG & AWH

BRIEF DESCRIPTION

Aerial Outfits AWG and AWH are transmitting and receiving aeriels. Aerial Outfit AWG is used mainly with transportable sets (e.g. Type 612ET) and Aerial Outfit AWH is used on coastal craft. AWH is also used as an emergency aerial in lieu of a wire aerial in ships fitted with Trunk Outfit TK or TL. The two outfits are similar except for length of aerial rod, AWG is 36 ft. long (9, 4-ft steel tubes) AWH is 24 ft long (6, 4-ft steel tubes). They operate in the H.F. band for transmission and in the L.F. M.F. and H.F. bands for reception. The aeriels were designed for use with a 40 watt output transmitter.

MAJOR UNITS

Pattern No.	Description	Weight
68601 to 68609	Aerial Rods (for AWG))	33½ lb
68601 to 68606	Aerial Rods (for AWH))	
66065	Base for Aerial Rod)	
66236	Support Insulating)	
66062	Bag for Aerial Rods)	

AERIAL OUTFIT AWJ

BRIEF DESCRIPTION

This is an emergency H.F. aerial for transmission and reception for use in submarines when surfaced only. It is a hand erected, telescopic whip aerial (A.P.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, 25-ft 6-in. long.	87 lb complete but excluding deck tube and inner cable.
68634	Gland watertight for 5 inch dia. deck tube.	

RESTRICTED

AWA
AWM

AERIAL OUTFITS AWA - AWM

SUMMARY OF DATA

PURPOSE

Aerial Outfits AWA - AWM are whip aeriels used for both transmission and reception and with suitable switching devices can be used for both purposes. Aerial Outfit AWM is used for reception only.

AERIAL OUTFIT AWA

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 H.F. and M.F. bands and can be used with reasonable efficiency down to 100 kc/s in the L.F. 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.

MAJOR UNITS

Pattern No.	Description	Weight
57877	Whip type aerial rod 30 ft.	120 lb
58155A	Insulating base Design 1	
59763	Matching Unit Design 7 complete with housing.	65 lb
58159	Remote Control Unit for Matching Unit	5 lb

AERIAL OUTFIT AWC

BRIEF DESCRIPTION

Aerial Outfit AWC is a permanent hinged transmitting aerial capable of 90 degree movement about its hinge, and is primarily intended for all round propagation in Aircraft Carriers. It operates in the H.F. band with maximum efficiency around 7 Mc/s. 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.

MAJOR UNITS

Pattern No.	Description	Weight
59236	Whip aerial rod 35 ft long	84 lb
59844	Pedestal Unit	135 lb

AERIAL OUTFIT AWF

BRIEF DESCRIPTION

Aerial Outfit AWF is a permanent fixed transmitting aerial fitted in cruisers and above. It operates in the H.F. band with maximum efficiency in the region of 7 Mc/s 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.

MAJOR UNITS

Pattern No.	Description	Weight
59236	Whip Aerial Rod 35 ft long	84 lb
65630	Pedestal Unit	135 lb

BRIEF DESCRIPTION

AERIAL OUTFITS AWG AND AWH

Aerial Outfits AWG and AWH are transmitting and receiving aeriels. Aerial Outfit AWG is used mainly with transportable sets (e.g. Type 612ET) and Aerial Outfit AWH is used on coastal craft. The two outfits are similar except for length of aerial rod, AWG is 36 ft long (9, 4-ft steel tubes) AWH is 24 ft long (6, 4-ft steel tubes). They operate in the H.F. band for transmission and in the L.F. M.F. and H.F. bands for reception. The aeriels were designed for use with a 40 watt output transmitter.

MAJOR UNITS

Pattern No.	Description	Weight
68601 to 68609	Aerial Rods (for AWG))	33½ lb
68601 to 68606	Aerial Rods (for AWH))	
66065	Base for Aerial Rod)	
66236	Support Insulating)	
66062	Bag for Aerial Rods)	

BRIEF DESCRIPTION

AERIAL OUTFIT AWJ

This is an emergency H.F. aerial for transmission and reception for use in submarines when surfaced only. It is a hand erected, telescopic whip aerial (A.P.68631) consisting of five sections of monel metal tubes fitted together by screwed sleeves and split collets, with the tubes so graduated 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 five telescopic sections are 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, 25-ft 6-in. long.	87 lb. complete but excluding deck tube and inner cable.

AERIAL OUTFIT AWL

Aerial Outfit AWL is similar to AWC except that the raising and lowering of the whip aerial is done hydraulically.

BRIEF DESCRIPTION

AERIAL OUTFIT AWM

This outfit is similar to AWH but is a fixed 24-ft 6-in. whip aerial designed for use in small coastal craft. It is for wireless reception only being used principally with Navigational Aid Receivers in craft where the standard wire aerial can not be fitted. Unlike AWH, no A.P.66062 bag is provided.

It is assembled in six sections together with base insulator support and clamp, insulator plug, socket and 20 ft to 35 ft of coaxial cable.

MAJOR UNITS

Pattern No.	Description	Weight
66065	Base, insulating Design 2	12 lb 8 oz.
66236	Support, insulating, complete with clamps.	10 lb
66237	Base for aerial rod, complete with clamps	2 lb 4 oz.
68601 to 68606	Rods, aerial, whip type each 4 - 2 in. long, Designs 11, 12, 13, 14, 15, 16 respectively.	7 lb

RESTRICTED

AERIAL OUTFIT AWK

BRIEF DESCRIPTION

This is a 12 ft long, stainless steel whip aerial, for use in mobile Radio Van 45. It is composed of three rods, of which two are also used in Aerial Outfits AWG and AWH.

MAJOR UNITS

Pattern No.	Description
68608	Rod, aerial, whip type, Des. 18
68609	Rod, aerial, whip type, Des. 19
68615	Rod, aerial, whip type, Des. 20
5290	Insulator, glass, cup shaped
W7579	Conductor, central
ZA14172	Base, rubber No. 10 Mk. 2

AERIAL OUTFITS AWL & AWL(M)

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).

AERIAL OUTFIT AWM

BRIEF DESCRIPTION

This outfit is similar to AWH but is a fixed 24-ft 6-in. whip aerial designed for use in small coastal craft. It is for wireless reception only being used principally with Navigational Aid Receivers in craft where the standard wire aerial can not be fitted. Unlike AWH no A.P.66062 bag is provided.

It is assembled in six sections together with base insulator support and clamp, insulator plug, socket and 20 ft to 35 ft of coaxial cable.

MAJOR UNITS

Pattern No.	Description	Weight
66065	Base, insulating Design 2	12 lb 8 oz.
66236	Support, insulating, complete with clamps	10 lb
66237	Base for aerial rod, complete with clamps	2 lb 4 oz.
68601 to 68606	Rods, aerial, whip type each 4 - 2 in. long, Designs 11, 12, 13, 14, 15, 16 respectively	7 lb

AERIAL OUTFIT AWN

DESCRIPTION

This is an entirely lightweight, monopole, Whip Aerial Outfit, designed primarily for use with the new C.A.W. system for receivers. Four tubes, when assembled together, form a 30 ft Whip Aerial of 2½" outside diameter at base and tapering to 1" diameter at the top. Each tube is of different diameter and so designed that it either rejects or fits a tube of the next diameter. Unified screw threads are used.

MAJOR UNITS

Pattern No.	Description	Weight
61828 to 61831 Inclusive	Four aerial rods Design 21, 22, 23, 24	31½ lb
61835	Base, insulating, Des. 3 for whip aerial (includes two A.P.61836 insulators)	50 lb
61836	Insulator, Porcelain	
61838	Cover, Protecting, for A.P.61835 Base (anti-icing)	11 lb

HANDBOOK

B.R.1625

ESTABLISHMENT LISTS

E829(AWA) E899(ANC) E955(AWF) E960(ANG/H) E1041(AWJ) E1016(ANK) E1050(AWN)
E1050(AWM) E1104(AWN)

INSTALLATION SPECIFICATIONS

B614(AWA) B676(ANC) B654(AWF) B667(ANG/H) B725(AWJ) B765(AWM) -(AWN)