

RESTRICTED

AERIAL OUTFITS AFA - AFR

AFA
AFR

SUMMARY OF DATA

All the above aerial outfits are erected on Shore Stations for H.F. communication.

AERIAL OUTFIT AFA

DESCRIPTION A H.F. receiving aerial for communications omni-directional. It consists of a horizontal, full wave cage dipole with two arms arranged at right angles. The aerial is directly connected via a matching unit to a coaxial cable.

FREQUENCY COVERAGE Is supplied in four outfits to cover 1.5 Mc/s to 24 Mc/s viz:-

Assembly W	1.5 Mc/s to 3 Mc/s
X	3 Mc/s to 6 Mc/s
Y	6 Mc/s to 12 Mc/s
Z	12 Mc/s to 24 Mc/s.

FEEDER Patt. 13809 70 ohm coaxial cable through Patt. W8318 Coupling Unit or Patt. 100388.

MASTS

Assemblies W and X	3 - 110 ft. timber lattice towers 1 - 70 ft. timber lattice tower.
Assemblies Y and Z	3 - 41 ft. masts 1 - 23 ft. mast.

HANDBOOK BR.1450

ESTABLISHMENT LIST E.815

INSTALLATION INFORMATION A.S.R.E. Drawing No. 31367 and 31367A.

AERIAL OUTFIT AFB

DESCRIPTION A horizontal dipole with reflector used for long distance directional reception. The aerial is used in conjunction with Aerial Outfit AFC with which it is similar in layout and dimensions. The receiver is coaxially fed, necessitating the use of a coupling matching unit.

FREQUENCY COVERAGE Spot frequencies between 5 and 20 Mc/s.

FEEDER 600 ohm transposed down feeder coupled to 70 ohm coaxial cable Patt. 13809.

COUPLING UNIT Patt. W8318 or R00388.

MASTS 80 - 180 ft. according to frequency.

HANDBOOK BR.1450

ESTABLISHMENT LIST E.867

INSTALLATION INFORMATION A.S.R.E. Drawing No. 41269.

AERIAL OUTFIT AFC

DESCRIPTION Horizontal dipole with reflector used for long distance directional transmission. Used in conjunction with Aerial Outfit AFB.

FREQUENCY COVERAGE Spot frequencies between 5 - 20 Mc/s.

FEEDER 600 ohm transmission line.

MASTS 80 - 180 ft. according to frequency.

REMARKS Suitable transmitters are CS3B, CS5B, SW8B, SW811 and TFS31.

HANDBOOK BR.1450

ESTABLISHMENT LIST E.868

INSTALLATION INFORMATION A.S.R.E. Drawing No. 41185

AERIAL OUTFIT AFD

DESCRIPTION Vertical half wave transmitting dipole 'Y' matched to 600 ohm transmission line used for broadcast.

FREQUENCY COVERAGE Spot frequencies between 5 - 20 Mc/s.

RATING 10 kW.

FEEDER 600 ohm transmission line.

MASTS 80 - 180 ft.

REMARKS Suitable transmitters CS3B, CS5B, SWB8, SWB11 and TFS31.

HANDBOOK BR.1450

ESTABLISHMENT LIST E.869

INSTALLATION INFORMATION A.S.R.E. Drawing No. 41219

AERIAL OUTFIT AFE

DESCRIPTION A vertical quarter wave length transmitting aerial used for broadcast.

FREQUENCY COVERAGE Spot frequencies between 2.3 - 4 Mc/s.

RATING 7 kW.

FEEDER 600 ohm transmission line.

COUPLING UNIT Patt. W9457.

MASTS 80 - 110 ft. according to frequency.

REMARKS This aerial is used at the lower end of the H.F. band where insufficient mast height would prohibit the use of a dipole. Suitable transmitters are CS3B, TFS31, SWB8, SWB11, Type 88 series.

HANDBOOK BR.1450

ESTABLISHMENT LIST E.625

INSTALLATION INFORMATION A.S.R.E. Drawing No. 31178.

AERIAL OUTFIT AFF

DESCRIPTION Quarter wavelength transmitting and receiving vertical aerial used for broadcast.

FREQUENCY COVERAGE Spot frequencies between 1.5 - 20 Mc/s.

RATING 500 W.

FEEDER 47 ohm coaxial cable Patt. 13837

COUPLING UNIT A.M. Ref. 10A/12142 Type 12.

MASTS 80 - 180 ft. according to frequency.

REMARKS Suitable transmitters are Type 88 Type 617 or Type 610 Series.

HANDBOOK BR.1450.

ESTABLISHMENT LIST E.611.

INSTALLATION INFORMATION A.S.R.E. Drawing No. 30163A.

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AERIAL OUTFIT AFG

DESCRIPTION quarter wavelength transmitting and receiving vertical aerial for ground to air communication or broadcast.

FREQUENCY COVERAGE Spot frequencies 3 - 20 Mc/s.

RATING 500 W.

FEEDER 47 ohm coaxial cable Patt. 13837

COUPLING UNIT A.M. Ref. 10A/12142 Type 12

MASTS 55 ft.

REMARKS Suitable transmitters are Type 88, Type 617 or Type 610 series.

HANDBOOK BR.1450

ESTABLISHMENT LIST E.661

INSTALLATION INFORMATION A.S.R.E. Drawing No. 31460

AERIAL OUTFIT AFH

DESCRIPTION End fed, half wavelength, vertical transmitting aerial for local ship shore communication.

FREQUENCY COVERAGE Spot frequencies between 1.5 - 4 Mc/s.

RATING 350 W.

FEEDER 70 ohm coaxial cable Patt. 13809 or 600 ohm transmission line.

COUPLING UNIT Patt. 58137

MASTS 180 - 350 ft. according to frequency.

REMARKS Suitable transmitters are Type 88 or Type 617.

HANDBOOK BR.1450

ESTABLISHMENT LIST E.816

INSTALLATION INFORMATION A.S.R.E. Drawing No. 41184

AERIAL OUTFIT AFJ

DESCRIPTION Two wire transmitting rhombic aerial used for long distance directional communication.

FREQUENCY COVERAGE 6.6 - 20 Mc/s.

RATING 10 kW.

FEEDER 600 ohm transmission line.

MASTS 110 ft.

REMARKS Suitable transmitters are CSB, CS5B, SWB8, SWB11 or TFS31.

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ESTABLISHMENT LIST E.612

INSTALLATION INFORMATION A.S.R.E. Drawing No. 26729

AERIAL OUTFIT AFK

DESCRIPTION A vertical, folded terminated transmitting dipole used for broadcast transmission.

FREQUENCY COVERAGE 3:1 frequency ratio in the H.F. band.

RATING 10 kW.

FEEDER 600 ohm transmission line.

MASTS 80 - 180 ft. according to frequency.

REMARKS Suitable transmitters are CS3B, CS5B, SWB8, SWB11 or TFS31.

HANDBOOK BR.1450.

ESTABLISHMENT LIST E.608.

INSTALLATION INFORMATION A.S.R.E. Drawing No. 31684.

AERIAL OUTFIT AFL

DESCRIPTION Horizontal receiving dipole used for point to point circuits.

FREQUENCY COVERAGE Spot frequencies between 5 and 20 Mc/s.

FEEDER 600 ohm transposed down feeder coupled 70 ohm coaxial cable Patt. 13809.

COUPLING UNIT Patt. W8318 or 100388.

MASTS 110 ft.

HANDBOOK BR.1450.

ESTABLISHMENT LIST E.693.

INSTALLATION INFORMATION A.S.R.E. Drawing No. 31699.

AERIAL OUTFIT AFM

DESCRIPTION Horizontal transmitting dipole used for point to point circuits.

FREQUENCY COVERAGE Spot frequencies between 5 - 20 Mc/s.

RATING 10 kW.

FEEDER 600 ohm transmission line.

MASTS 80 - 180 ft. according to frequency.

REMARKS Suitable transmitters are CS3B, CS5B, SWB8, SWB11 or TFS31.

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ESTABLISHMENT LIST E.871.

INSTALLATION INFORMATION A.S.R.E. Drawing No. 31703.

AERIAL OUTFIT AFN

DESCRIPTION Single wire receiving rhombic for long distance directional communication.

FREQUENCY COVERAGE 6.6 - 20 Mc/s.

FEEDER 70 ohm coaxial Patt. 13809.

COUPLING UNIT Patt. W8318 or 100388

MASTS 80 ft.

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ESTABLISHMENT LIST E.639.

INSTALLATION INFORMATION A.S.R.E. Drawing No. 30039.

AERIAL OUTFIT AFO

AFR

DESCRIPTION	Horizontal folded terminated receiving dipole used for reception over a wide frequency band.
FREQUENCY COVERAGE	3:1 frequency ratio in the H.F. band.
FEEDER	70 ohm coaxial cable Patt. 13809.
COUPLING UNIT	Patt. W8318 or 100488.
MASTS	80 - 180 ft. according to frequency.
HANDBOOK	BR.1450.
ESTABLISHMENT LIST	E.613.
INSTALLATION INFORMATION	A.S.R.E. Drawing No. 30406.

AERIAL OUTFIT AFP

DESCRIPTION	Four wire transmitting rhombic used for long distance directional communication.
FREQUENCY COVERAGE	6.6 - 20 Mc/s.
RATING	10 kW.
FEEDER	600 ohm transmission line.
MASTS	110 ft.
REMARKS	Suitable transmitters are CS5B, CS3B, SWB8, SWB11, TFS31 or DS13.
HANDBOOK	BR.1450.
ESTABLISHMENT LIST	E.726.
INSTALLATION INFORMATION	A.S.R.E. Drawing No. 31658.

AERIAL OUTFIT AFQ

DESCRIPTION	Single wire receiving rhombic for long distance directional communication.
FREQUENCY COVERAGE	6.6 - 20 Mc/s.
FEEDER	600 ohm transposed transmission line coupled to 70 ohm coaxial cable Patt. 13809.
COUPLING UNIT	Patt. W8318 or 100388.
MASTS	78 ft. Adastra.
HANDBOOK	BR. 1450.
ESTABLISHMENT LIST	E.870.
INSTALLATION INFORMATION	A.S.R.E. Drawing No. 41217.

AERIAL OUTFIT AFR

DESCRIPTION	Three wire transmitting rhombic for long distance directional communication. It presents a constant impedance over its frequency range.
FREQUENCY COVERAGE	Dependent on dimensions.
RATING	40 kW.
FEEDER	600 ohm transmission line.
MASTS	110 ft.
REMARKS	Suitable transmitters are SWB8, SWB11 and DS13.
HANDBOOK	BR.1450.
ESTABLISHMENT LIST	E.989.
INSTALLATION INFORMATION	A.S.R.E. Drawing No. 41408.