COMMON AERIAL OUTFITS EAA, EAB, EAC, EAD, EAE and EAF

SUMMARY OF DATA

PURPOSE

Common Aerial Outfits EAA - EAF are used for Common Aerial Working (C.A.W.) whereby the number of V.H.F. Transmitters 8C for Type 87M between a minimum of two and maximum of eight, can work into a single aerial. Similarly between two and eight Receivers P1O4 for Receiver Outfit CDU may be fed from a single aerial.

Common Aerial Outfit EAA - Enables two Transmitters 8C to work into a single aerial.

Common Aerial Cutfit EAB - Enables three or four Transmitters &C to work into a single aerial.

Common Aerial Cutfit EAC - Enables five to eight Transmitters &C to work into a single aerial.

Common Aerial Outfit EAD - Enables two Receiver Outfits CDU to be fed from a single aerial.

Common Aerial Outfit EAE - Enables three or four Receiver Outfits to be fed from a single aerial.

Common Aerial Cutfit EAF - Enables five to eight Receiver Outfits CDU to be fed from a single aerial.

MAJOR UNITS

Common Aerial Outfit EAA

Patt, No.	Description	No.
65772	Mount for tuning units (resonator) Design 4	1
65853	Box, junction, with 3 sockets A.M. Ref. 10H/185	1
65768	Commector, flexible, 11½ in. long with plug A.M. Ref. 10H/181, Type 158, and plug A.M. Ref. 10H/182, Type 159	2
6550 8	Tuning Unit, resonator Design 5	2
-	Plug A.M. Ref. 10H/181 Type 158	3

Common Aerial Outfit EAB

Patt. No.	Description	No.
658511	Mount for tuning units (resonator) Design 6	1
6 5852	Box, junction, with 5 sockets A.M. Ref. 10H/185	1
65768	Connector, flexible, 11½ in. long with plug A.M. Ref. 10H/181, Type 158, and plug A.M. Ref. 10H/182 Type 159	4
65508	Tuning Unit, resonator Design 5	4
-	Plug A.M. Ref. 10H/181 Type 158	5

Common Aerial Outfit EAC

Patt. No.	Description	No.
65770	Mount for tuning units (resonator) Design 2	1
55773	Box, junction, with 9 sockets A.M. Ref. 108/125	1
65768	Connector, flexible, 11½ in. long with plug A.M. Ref. 10H/181, Type 158, and plug A.M. Ref. 10H/182, Type 159	8
65508	Tuning Unit, resonator Design 5	8
65774	Plug A.M. Ref. 10H/183 with rmt special Plug A.H. Ref. 10H/181 Type 158	1

Common Aerial Outfit EAD

Patt. No.	Description	No.
65771	Mount for tuning units (resonator) Design 3	1
65853	Box, junction, with 3 sockets A.M. Ref. 10H/185	1
65768	Connector, flexible, 111 in. long, with plug	2
	A.M. Ref. 10H/181, Type 158, and plug	
	A.M. Ref. 10H/182, Type 159	
53293	Tuning Unit, resonator Design 3	1
65767	Tuning Unit, resonator Design 6	1
_	Plug A.M. Ref. 10H/181 Type 158	1

Common Aerial Outfit EAE

Patt. No.	Description	No.
65850	Mount for tuning units (resonator) Design 5	1
65852	Box, junction, with 5 sockets A.M. Ref. 10H/185	1
65768	Connector, flexible, 111 in. long with plug	4
	A.M. Ref. 10H/181, Type 158, and plug A.M. Ref. 10H/182, Type 159	
53293	Tuning Unit, resonator Design 3	2
65767	Tuning Unit, resonator Design 6	2
	Plug A.M. Ref. 10H/181 Type 158	2

Common Aerial Outfit EAF

Patt. No.	Description	No.
65769	Mount for tuning units (resonator) Design 1	1
65773	Box, junction, with 9 sockets A.M. Ref. 10H/185	1
65768	Connector, flexible, $11\frac{1}{2}$ in. long with plug A.M. Ref. 10H/181, Type 158, and plug	8
F=007	A.M. Ref. 10H/182, Type 159	E USICEVI
53293	Tuning Unit, resonator Design 3	4
65767	Tuning Unit, resonator Design 6	4
65774	Plug A.M. Ref. 10H/183 with nut special	2

PRINCIPLE OF OPERATION

In general terms, the transmitters or receivers are fed to or from their respective common aerial through a resonator tuning unit, a single resonator for each transmitter, and a double resonator for each receiver. Each resonator is tuned to the frequency of its associated transmitter or receiver. The resonators feed via a multi-way junction box to a common transmitting or receiving aerial.

AFRIAL

The existing Aerial Outfits which may be used with Common Aerial Working are:-

Aerial Cutfits APH, ARU, ANC and ANZ.

REMARKS

The advantages of C.A.W. are that it economises in V.H.F. aerial, and allows transmitters or receivers to be connected to a well-sited aerial which would not otherwise be available for all of them.

This more than compensates for the slight loss in signal strength at the ends of the frequency band inherent in the system. C.A.W. imposes no further restrictions on channel spacing than are not applicable to Single Aerial Working.

HANDBOOK	B.R. 1399
ESTABLISHMENT LIST	E.951
INSTALLATION SPECIFICATION	в.644