

CHAPTER 6

A.R.I.18105

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Introduction

1. The A.R.I.18105, Pre. and Post Mod.2024 and removed by Mod.2304, provides both visual and aural warning of

illumination by lock follow radar. The equipment will respond to signals of appropriate character arriving from any direction, and will discriminate between I and

E/F band radar equipments. Provision is made for the A.E.O. and Second Pilot to select a monitor or alarm input to their inter-comm. circuits from the aural warning.

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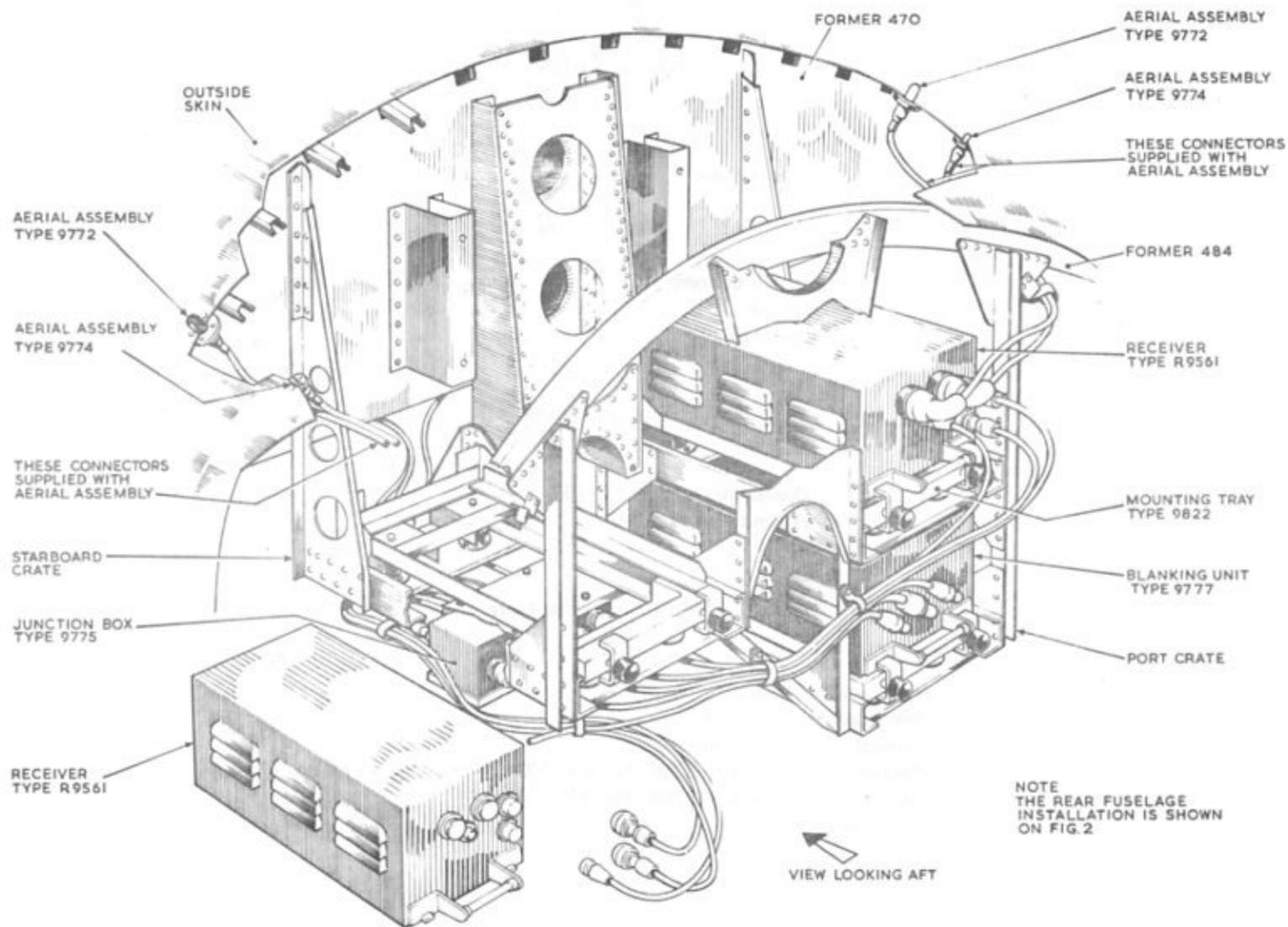


Fig.1 Nose installation

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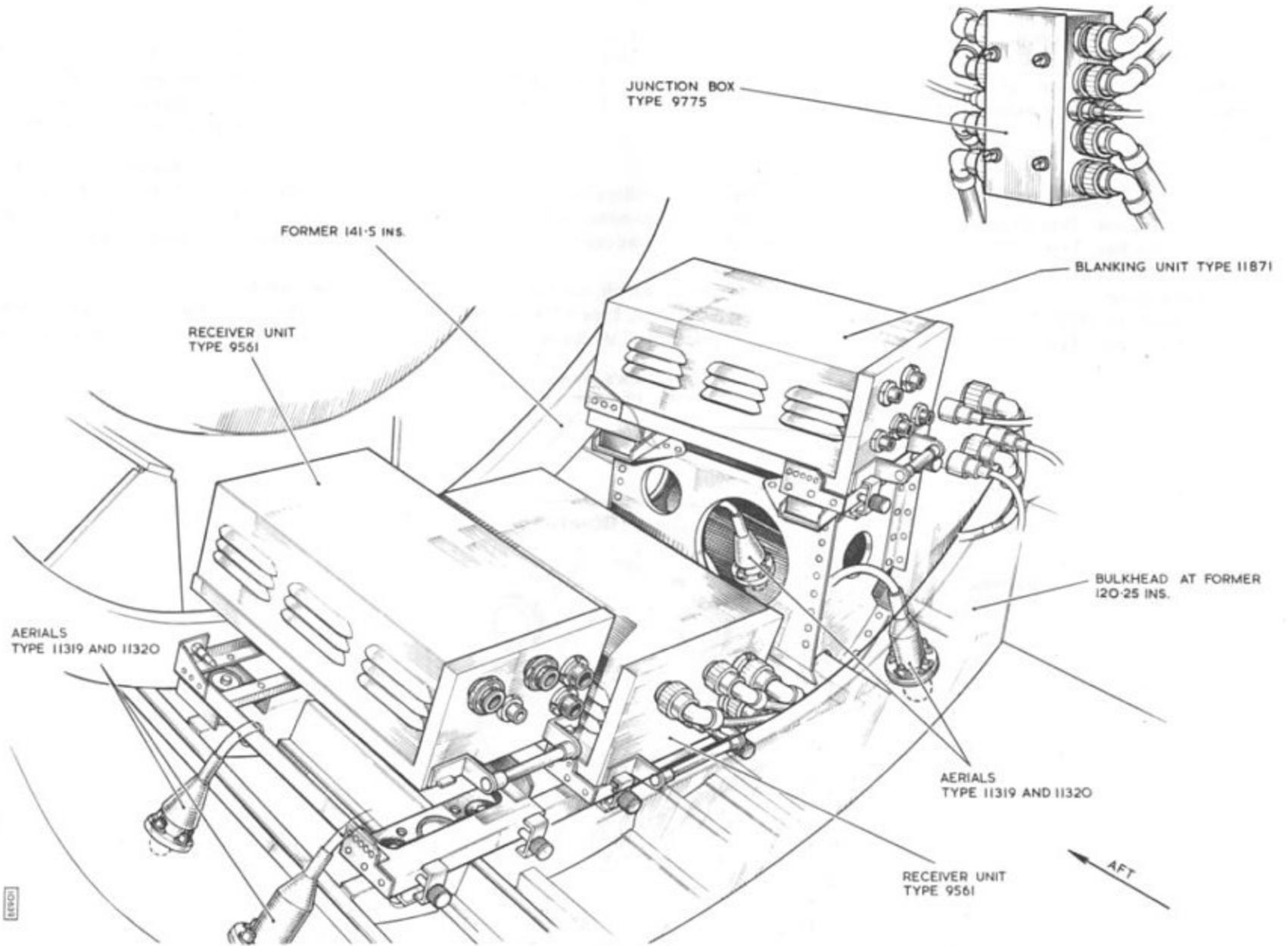


Fig.2 Rear fuselage installation

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DESCRIPTION

DETAILS OF UNITS

2. The following items of equipment comprise the A.R.I. and are located as shown in fig.1 to 3.

Nose group
Receivers - Type 9561 (2)
Blanking unit - Type 9771
Junction box - Type 9775

Cabin group
Control unit - Type 9562
Junction box - Type 9775

Rear fuselage group
Receivers - Type 9561 (2)
Blanking unit - Type 11871
Junction box - Type 9775

Aerials

3. The A.R.I. employs four I band and four E/F band aerials mounted in pairs, each pair consists of one E/F and one I.

4. Two pairs of aerials, one E/F band, Type 9772 and one I band, Type 9774 are mounted on the upper surface of the nose structure.

Two more pairs of aerials, one E/F band, Type 11319 and one I band, Type 11320 are located on the rear fuselage, just forward of the tail cone ring. Each aerial projects through the skin surface and the projection length is critical.

5. A connection is made to the radar head of the A.R.I.5919 (Pre.Mod.2017) or A.R.I.5952 (Post Mod.2017). Refer to Sect.9, Chap.3 and 8 of this publication.

Power supplies

6. Details of the power supplies will be found in Sect.6, Chap.22 of this publication.

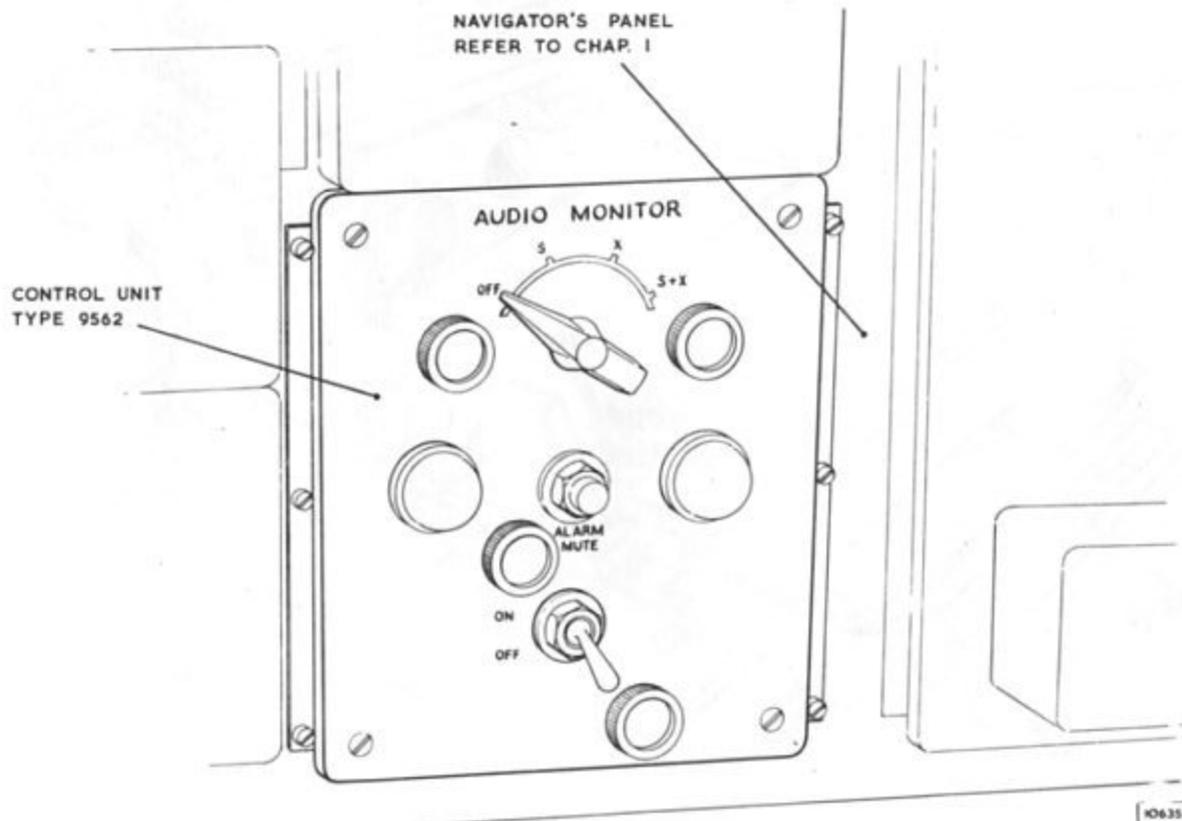


Fig. 3 Navigation station - control unit

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TABLE 1

Connectors for A.R.I.18105 - Pre. and Post Mod.2024

Part No.	Cable form	Connecting
2/T4510	Uniradio 70	Port receiver (nose) to Junction box (nose)
4/T4510	Miniature 6D	Port receiver (nose) to Junction box (nose)
5/T4510 *	Miniature 6D	Control unit to junction box (navigator)
2/T6692 +	Miniature 6D	Control unit to junction box (navigator)
6/T4510	Miniature 6C	Control unit to junction box (navigator)
3/T6692 +	Miniature 6C	Control unit to junction box (navigator)
7/T4510	Uniradio 70	Starboard receiver (nose) to junction box (nose)
9/T4510	Miniature 6D	Starboard receiver (nose) to junction box (nose)
10/T4510	Miniature 6D	Plug 884 to junction box (navigator)
11/T4510	Miniature 6D	Plug 884 to junction box (navigator)
12/T4510	Uniradio 70	Starboard receiver (tail) to junction box (tail)
14/T4510	Miniature 6D	Starboard receiver (tail) to junction box (tail)
16/T4510	Uniradio 70	Blanking unit (nose) to junction box (nose)
17/T4510	Uniradio 70	Port receiver (tail) to junction box (tail)
19/T4510	Miniature 6D	Port receiver (tail) to junction box (tail)
20/T4510	Miniature 6C	Plug 885 to junction box (nose)
22/T4510	Uniradio 70	Plug 886 to junction box (nose)
23/T4510	Uniradio 70	Plug 886 to junction box (navigator)
24/T4510	Uniradio 70	Plug 883 to junction box (navigator)
25/T4510	Uniradio 70	Plug 883 to plug 905
26/T4510	Miniature 6D	Plug 190 to junction box (navigator)
27/T4510	Miniature 6D	Plug 190 to plug 904
30/T4510 *	Uniradio 70	Control unit to T.B.1042
5/T6692 +	Uniradio 70	Control unit to T.B.1042
31/T4510 *	Uniradio 70	Modulator to blanking unit (nose)
3/T5510 +	Uniradio 70	Tee piece (nose) to modulator, plug 604
32/T4510	Miniature 6D	Plug 904 to junction box (tail)
33/T4510	Uniradio 70	Plug 905 to junction box (tail)
34/T4510	Miniature 6C	Plug 906 to junction box (tail)
35/T4510	Uniradio 70	Blanking unit (tail) to junction box (tail)
36/T4510	Miniature 6D	Blanking unit (tail) to junction box (tail)
38/T4510 *	Uniradio 70	Blanking unit (tail) and scanner (A.R.I.5919)
34/T5510 +	Uniradio 70	Tee piece (rear) and scanner (A.R.I.5952-E)
39/T4510	Uniradio 70	Blanking unit (tail) to plug 913
40/T4510	Uniradio 70	Plug 913 to plug 930

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TABLE 1 (Cont'd)

Connectors for A.R.I.18105 - Pre. and Post Mod.2024

Part No.	Cable form	Connecting
41/T4510	Miniature 6C	Plug 99 to plug 906
43/T4510	Miniature 6C	Plug 99 to junction box (navigator)
44/T4510	Miniature 6C	Plug 885 to junction box (navigator)
45/T4510	Miniature 6C	Starboard receiver (nose) to junction box (nose)
46/T4510	Miniature 6C	Port receiver (nose) to junction box (nose)
47/T4510	Miniature 6C	Port receiver (tail) to junction box (tail)
48/T4510	Miniature 6C	Starboard receiver (tail) to junction box (tail)
49/T4510	Miniature 6C	Blanking unit (nose) to junction box (nose)
50/T4510	Miniature 6C	Blanking unit (tail) to junction box (tail)
51/T4510 *	Miniature 6C	
4/T6692 +	Miniature 6C	Control unit to junction box (navigator)
FR508/T3434 *	Unipren 6-4 cores	
FR869/T3434 +	Nyvin 20-4 cores	Control unit to relay 630
FR568/T3434 *	Miniature 4D	
FR868/T3434 +	Miniature 4D	Control unit to T.B.1045
FR696/T3434	Miniature 2D	Monitor/alarm switch (pilot) to I/C. J.B.
FR697/T3434	Uniprenmet 6	Monitor/alarm switch (pilot) to T.B.1045
FR698/T3434	Miniature 2D	Monitor/alarm switch (A.E.O.) to I/C. J.B. (A.E.O.)
FR699/T3434	Uniprenmet 6	Monitor/alarm switch (A.E.O.) to T.B.1045
FR700/T3434	Miniature 2D	Panel 54P to T.B.1045
FR673/T3434	Unipren 6-2 cores	Control unit dimmer switches to T.B.1042
FR678/T3434	Unipren 6-2 cores	Control unit dimmer switches
FR847/T3434	Nyvin 20-2 cores	Junction box (navigator) to relay 631 and earth

* Pre. Mod.2024

+ Post Mod.2024

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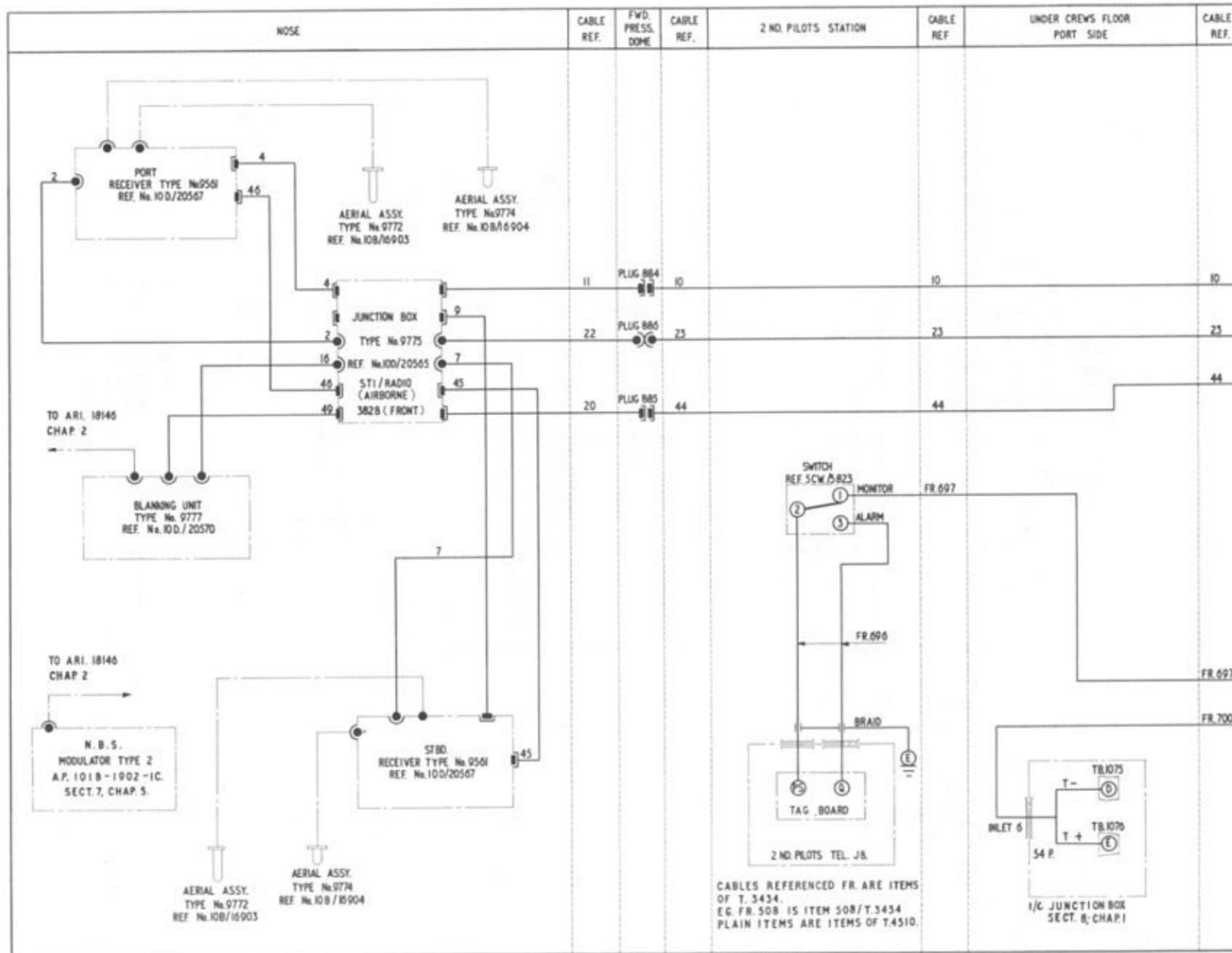


Fig. 5 (I) Routing chart for A.R.I.18105-Post Mod 2024, Pre Mod. 2304

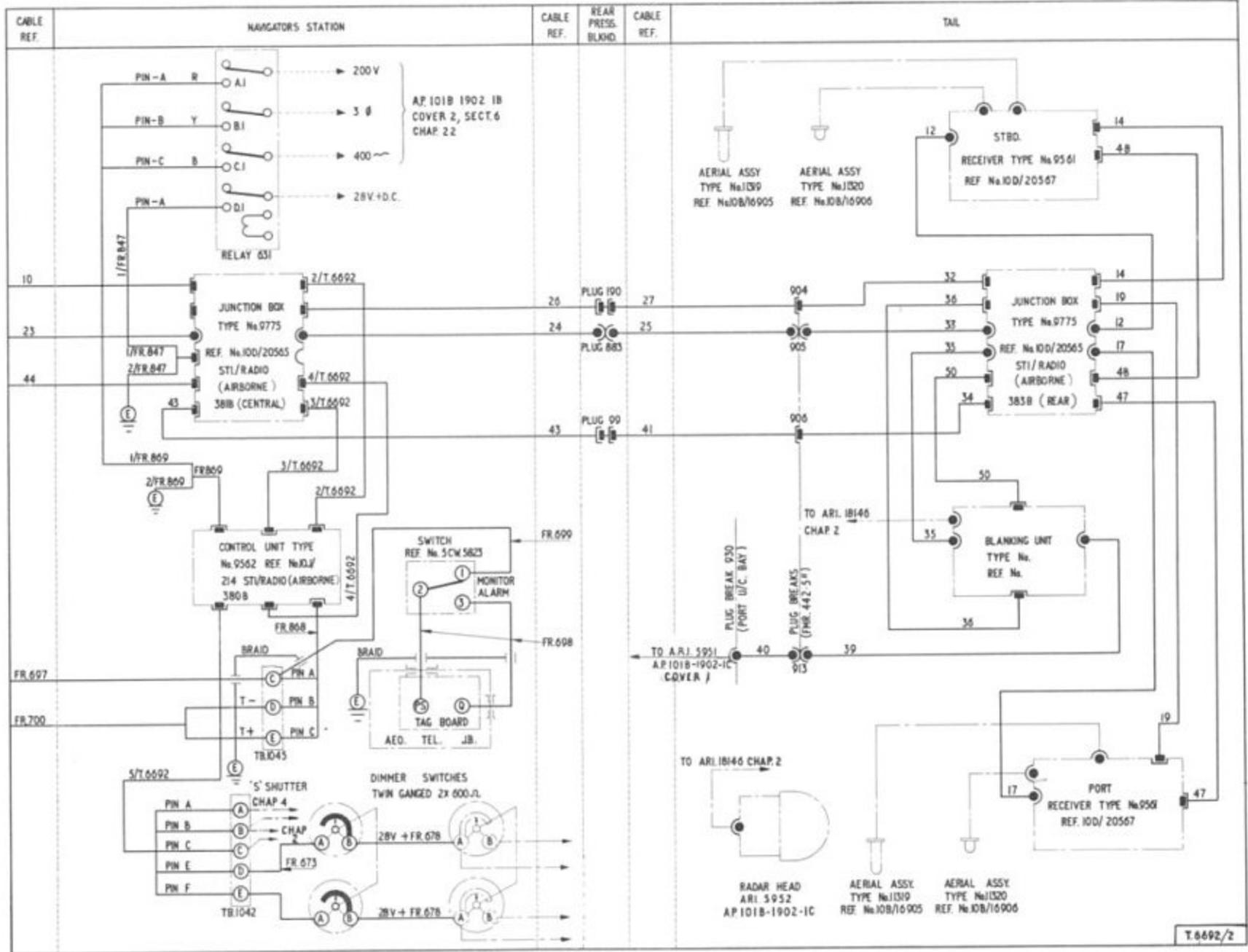


Fig. 5(2) Routing chart for A.R.I. 18105 Post Mod 2024, Pre Mod 2304



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