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A.P.101B-0402-1B  
A.L.216, July 80

**CANBERRA MOD.4868 (S.R.I.M.3479)**

**APPLICABLE TO A/C SERIAL Nos. WJ637 and WJ731 only**

**RESTRICTED**

## SUPPLEMENT TO A.P.101B-0402-1B

## Modification 4868 (Cover Mod. for S.R.I.M. 3479)

## INTRODUCTION

1. This Supplement covers the changes to the electrical, instrument, radio and radar installations associated with this Special Order Only modification and is applicable to two aircraft only, their serial numbers being WJ637 and WJ731.

2. When incorporated, both aircraft will differ from other Mk.2 aircraft in the manner outlined in the following text and illustrations. Where necessary, this information must be read in conjunction with the main chapters of this Topic. As an aid to servicing, circuit, routing and interconnection diagrams and cable assembly details are provided. These are contained under separate headings, each heading being associated with an individual system.

3. The following systems are removed:-

A.R.I.23023 radio compass  
A.R.I.18011 instrument landing system  
Air position indicator

The following additional systems are installed:-

A.R.I.5851 Green Satin  
A.R.I.23118 I.L.S./V.O.R. AD260  
G.P.I. Mk.4  
An additional inverter to supply A.R.I.5851

4. Other systems affected are as follows:-

Rudder trim  
Instrument power supplies  
Internal lighting  
D.C. power supplies  
Radio and radar power supplies  
Tip-tank and canopy jettison, oxygen warning  
GM4B compass  
Automatic height encoding  
A.R.I.18089 intercommunication  
A.R.I.23143 V/U.H.F. communications  
A.R.I.23134/3 I.F.F./S.S.R.1520  
A.R.I.18107/3 TACAN

5. The location of the main items of equipment are shown in fig.1 to 1H. The circuit identification scheme, fuse numbers, ratings and location and additional equipment details are listed in Tables 1, 2 and 3 respectively.

## LIST OF ILLUSTRATIONS

	Fig.
Location diagram .....	1
Location diagram - pilot's station .....	1A
Location diagram - pilot's station .....	1B
Location diagram - pilot's station .....	1C
Location diagram - 1st navigator's station .....	1D
Location diagram - electrical control panel (E.C.P.) .....	1E
Location diagram - 2nd navigator's station .....	1F
Location diagram - starboard equipment compartment .....	1G
Location diagram - upper equipment compartment .....	1H
Routeing diagram - rudder trim control .....	2
Circuit diagram - instrument power supplies .....	3
Routeing diagram - instrument power supplies .....	4-4A
Circuit diagram - internal lighting .....	5-5A
Routeing diagram - internal lighting .....	6-6A
Circuit diagram - D.C. power supplies .....	7
Routeing diagram - D.C. power supplies .....	8-8A
D.C. power supplies - distribution .....	9
Circuit diagram - radio and radar power supplies .....	10-10A-10B
Routeing diagram - radio and radar power supplies .....	11-11A
Routeing diagram - radio and radar power supplies - Green Satin (A.R.I.5851) .....	11B-11C
Routeing diagram - radio and radar power supplies - I.L.S./V.O.R. (A.R.I.23118) .....	11D
Routeing diagram - wing-tip fuel tank jettison .....	12
Routeing diagram - canopy and hatch jettison .....	12A
Circuit and routeing diagram - oxygen warning .....	13
Interconnection diagram - GM4B compass and A.M.U. .....	14
Interconnection diagram - automatic height encoding .....	14A
Interconnection diagram - intercommunication (A.R.I.18089) .....	15
Microphone isolation panel - internal wiring .....	15A
Radio junction box - internal wiring .....	15B
Interconnection diagram - V/U.H.F. communication system (A.R.I.23143) and stand-by U.H.F. (A.R.I.23159) .....	16
Interconnection diagram - I.L.S./V.O.R. (A.R.I.23118) .....	17
I.L.S./V.O.R. junction box - internal wiring .....	18-18A
Interconnection diagram - TACAN (A.R.I.18107/3) .....	19
Interconnection diagram - I.F.F./S.S.R.1520 (A.R.I.23134/3) .....	20
Interconnection diagram - Green Satin (A.R.I.5851) and G.P.I. Mk.4 .....	21

LIST OF TABLES

	<i>Table</i>
<i>Circuit identification scheme</i> .....	1
<i>Fuse numbers, ratings and location</i> .....	2
<i>Additional equipment details</i> .....	3
<i>Connector details - intercommunication</i> .....	4
<i>Connector details - V/U.H.F.</i> .....	5
<i>Connector details - I.L.S./V.O.R.</i> .....	6
<i>Connector details - TACAN</i> .....	7
<i>Connector details - I.F.F./S.S.R. 1520</i> .....	8
<i>Connector details - Green Satin</i> .....	9

TABLE 1

## Circuit Identification scheme

Ident.	Circuit	Ident.	Circuit	Ident.	Circuit
C5	Rudder trim control	M2	Inverter No.2	PP3	Pilot's console fuse panel supply
C6	Rudder trim indicator	M3	Inverter No.3	R3	Intercommunication
F3	GM4B compass	M5	Inverter No.5/No.6 control	R4	Intercommunication
F4	Turn and slip indicator	M7	Inverter No.2 control	R5	Intercommunication
F5	Turn and slip indicator	M8	Inverter No.3 control	RR1	V/U.H.F.
F6	Artificial horizon	M9	Inverter No.5/No.6 changeover	S1	Inverter No.4
F7	A.M.U.	M58	Inverter No.4	SR3	Green Satin
FF2	Automatic height encoding	M94	Inverter No.4	SY3	Green Satin
FF3	Automatic height encoding	M99	Inverter No.4	T2	Inverter No.2 output
FF4	Automatic height encoding	P1	Generator No.1	T3	Inverter No.3 output
FX4	Turn and slip indicator	P2	Generator No.2	TF1	Inverter No.5 output
IFF	I.F.F./S.S.R.	P3	Generator No.1	TF2	Inverter No.6 output
J1	Engine starting - No.1 engine	P4	Generator No.2	TF4	I.L.S./V.O.R.
J2	Engine starting - No.2 engine	P5	Generator No.1	TF5	I.F.F./S.S.R.
L5	Pilot's station red lamps	P6	Generator No.2	TAC	TACAN
L6	Pilot's station U/V lamps	P7	Generator No.1	V+	D.C. voltmeter
L7	Pilot's console and forward station lamps	P8	Generator No.2	W1	Generator No.1 failure warning lamp
L8	1st navigator's station panel lamps	P9	Battery positive	W2	Generator No.2 failure warning lamp
L9	Navigator's cockpit and chartboard lamps	P10	Main busbar	W5	Oxygen warning
LL2	Pilot's station emergency lamps	PF1	Generator field (No.1)	W6	Oxygen warning
LL4	Equipment bay lamps	PF2	Generator field (No.2)	X5	Canopy/snatch jettison
		PF3	Generator field (No.1)	X6	Hatch jettison
		PF4	Generator field (No.2)	Y7	Wing tip tank jettison

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TABLE 2

## Fuse numbers, ratings and location

The following fuses are applicable to post Mod.4868 aircraft, and this table should be used in conjunction with Table 2 of Sect.5, Chap.1, General Information. Also shown are those fuse positions which become spare.

Service	Fuse No.	Rating (amps)	Circuit Ref.	Location
Spare	3	-	-	M.E.P.
Spare	40	-	-	
I.L.S./V.O.R.	48	10	-	
I.L.S./V.O.R.	49	10	-	
Spare	50	-	-	
Spare	51	-	-	E.C.P.
Navigator's panel lighting	58	5	L8	
Spare	59	-	-	
No.4 inverter control	65	5	S1	
V./U.H.F. control unit	78	5	-	
Instrument d.c. supplies	80	10	M8	
I.L.S./V.O.R.	107	5	SR5	
G.P.I. Mk.4	119	5	-	No.1 distribution box 400 Hz fusebox
Green Satin	134	10	SR3	No.2 distribution box
Green Satin	135	10	SY3	
No.4 inverter interlock	141	5	M58	Starboard equipment compartment
No.4 inverter interlock	142	5	M94	
No.4 inverter interlock	143	5	M99	
Spare	157	-	-	
Spare	158	-	-	E.C.P.
I.F.F. control	159	5	-	
I.F.F./S.S.R. transponder	163	5	-	
I.F.F. aerial switch unit	164	5	-	

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TABLE 3

## Additional equipment details

Equipment	Type	Ref.No.	Number	Location	A.P. Reference
<b>Instrument power supplies</b>					
Inverter	100B	5UB/4935	2	Starboard equipment compartment	113D-0120-1
<b>Flight Instruments</b>					
Master indicator	E5	6B/4352094	1	Navigator's instrument panel Forward of navigator's panel	112B-0333-1
G.P.I. Mk.4	-	6B/541	1		112B-0805-1
Mounting tray	-	6B/655	1		
Backplate assembly	-	6B/2757	1		
G.P.I. amplifier	-	6B/633	1		
Screened junction box	-	5CZ/4105	1		
<b>Radio and radar power supplies</b>					
Inverter No.4	F45-10	5UB/7637	1	Upper equipment compartment	113D-0105-16
Torque switch	-	5CW/5907	1		113D series
<b>Green Satin</b>					
Transmitter receiver	TR3710	10D/5841-99-6196846	1	Rear equipment hatch	114E-0300-1
Tracking unit	100	10Q/5851-99-6196848	1		
Indicator, electrical	101	10Q/5851-99-6196847	1		
Aerial system	501A	10B/19515	1	Port inner wing	
Backplate (T/R)	-	10AR/1990	1	Rear equipment hatch	
Backplate (tracking unit)	-	10AR/1991	1		
Backplate (indicator)	-	10AR/1992	1	Navigator's instrument panel	
Shorting plug	957	10H/20199	1	Lower starboard rear fuselage	

Continued . . .

TABLE 3 Additional equipment details - continued

Equipment	Type	Ref.No.	Number	Location	A.P. Reference
Waveguide	Flexible	10B/1948567	1	Port inner wing	
Waveguide	ED9/9619/C	5826-99-9550792	1		
Waveguide	ED9/9621/C	5826-99-9550791	1		
Waveguide	ED9/9741/C	5826-99-9702343	1		
Waveguide	ED9/9743/C	5826-99-9550794	1		
Waveguide	ED9/9745/C	5826-99-9550793	1		
<b>I.L.S./V.O.R.</b>					
Interconnecting box (ILS/VOR 1)	M7A	10AD/5820-99- 6396737	1	Navigator's station	116B-0407-1
Interconnecting box (marker)	M8	10AD/4002	1		
Interconnecting box (VOR 2)	EJB21D	5821-99-948-5621	1	Navigator's station	116B-0404-1
Navigation unit	6402M	10D/9702194	2	Pilot's instrument panel	116B-0407-1
V.H.F. receiver	6401M	10D/9704803	2		
Glideslope receiver	6404ME	5826-99-970-4405	1		
Marker receiver	6403M	10D/9702193	1		
Control unit	7430M	10L/9702196	2		
Omni-bearing selector and indicator	RL7003-184B	10Q/9514214	1	Pilot's instrument panel	116B-0429-1
Radio-magnetic indicator	PW21.RNA. CP1	10Q/1054264	2	Pilot's/navigator's instrument panels	116B-0412-16
Localiser aerial	140-LRU-14A	10B/9507378	2	Fin	116B-0408-1
Balance unit	133-LRU-14A	10AD/1078789	1		
Marker aerial	T237	10B/16706	1	Starboard inner wing	
Glideslope aerial	T238	10B/16707	1	Starboard outer wing	
'T' adapter	-	5395-99-972-8894	1	Navigator's station	
I.L.S./V.O.R. junction box	-	-	1	Forward of navigator's station	
Rack, marker receiver	M35	10D/23593	1	Navigator's station	
Rack, nav. unit/ glideslope receiver	M36	10D/23594	1		
Mode indicator	-	5CZ/6800	1	Pilot's instrument panel	

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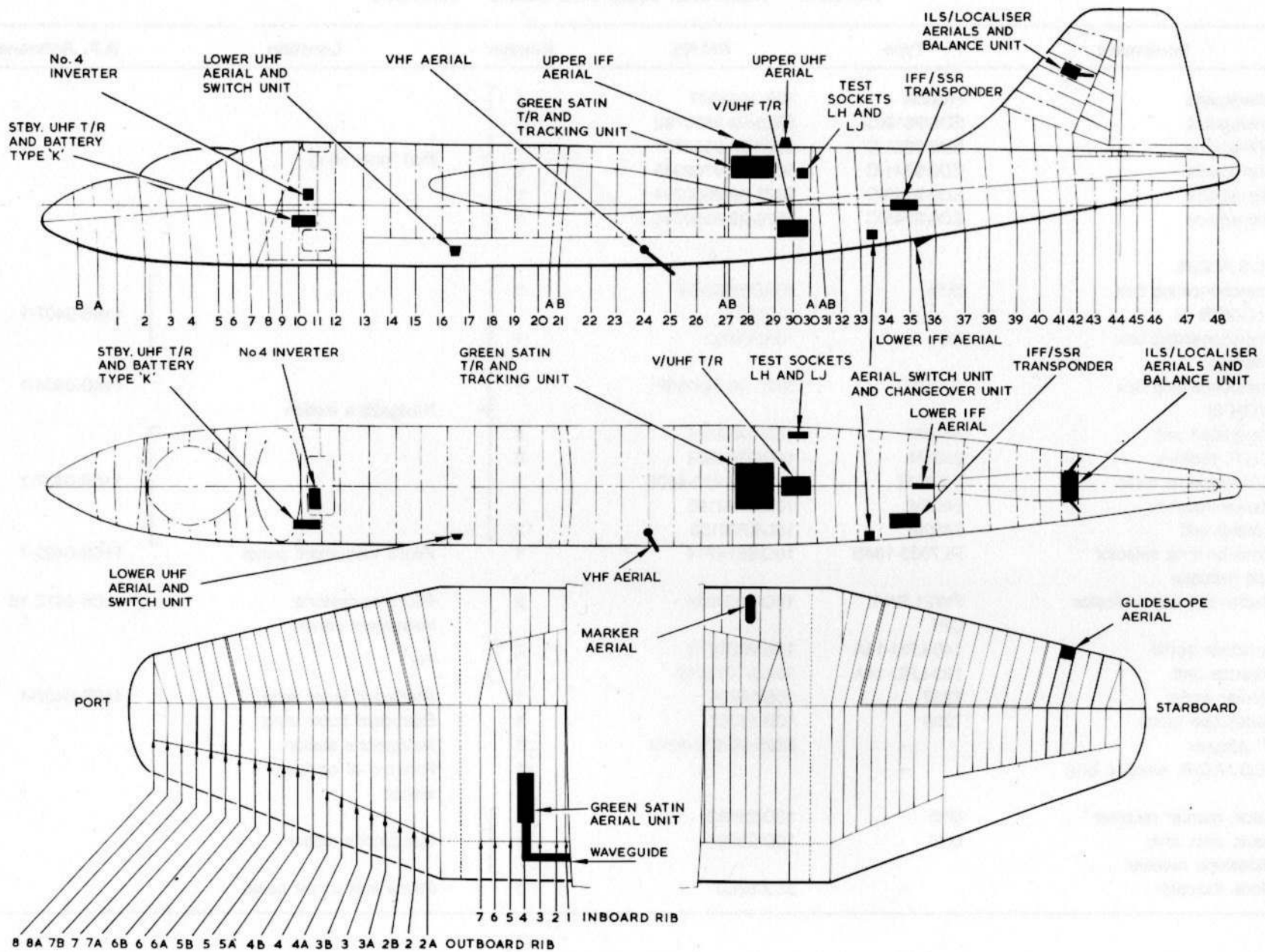


FIG. 1. LOCATION DIAGRAM

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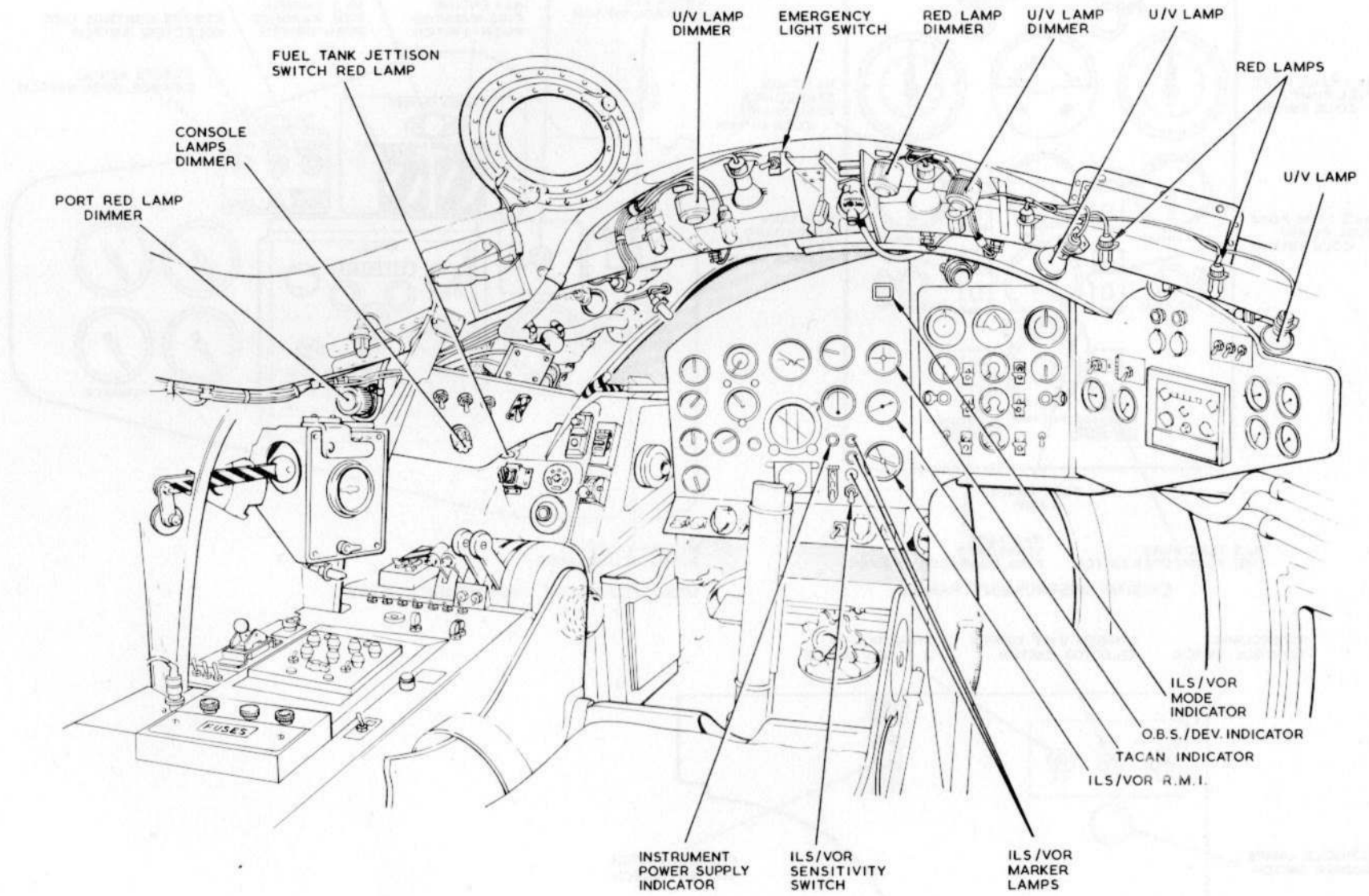


FIG. 1A. LOCATION DIAGRAM - PILOT'S STATION

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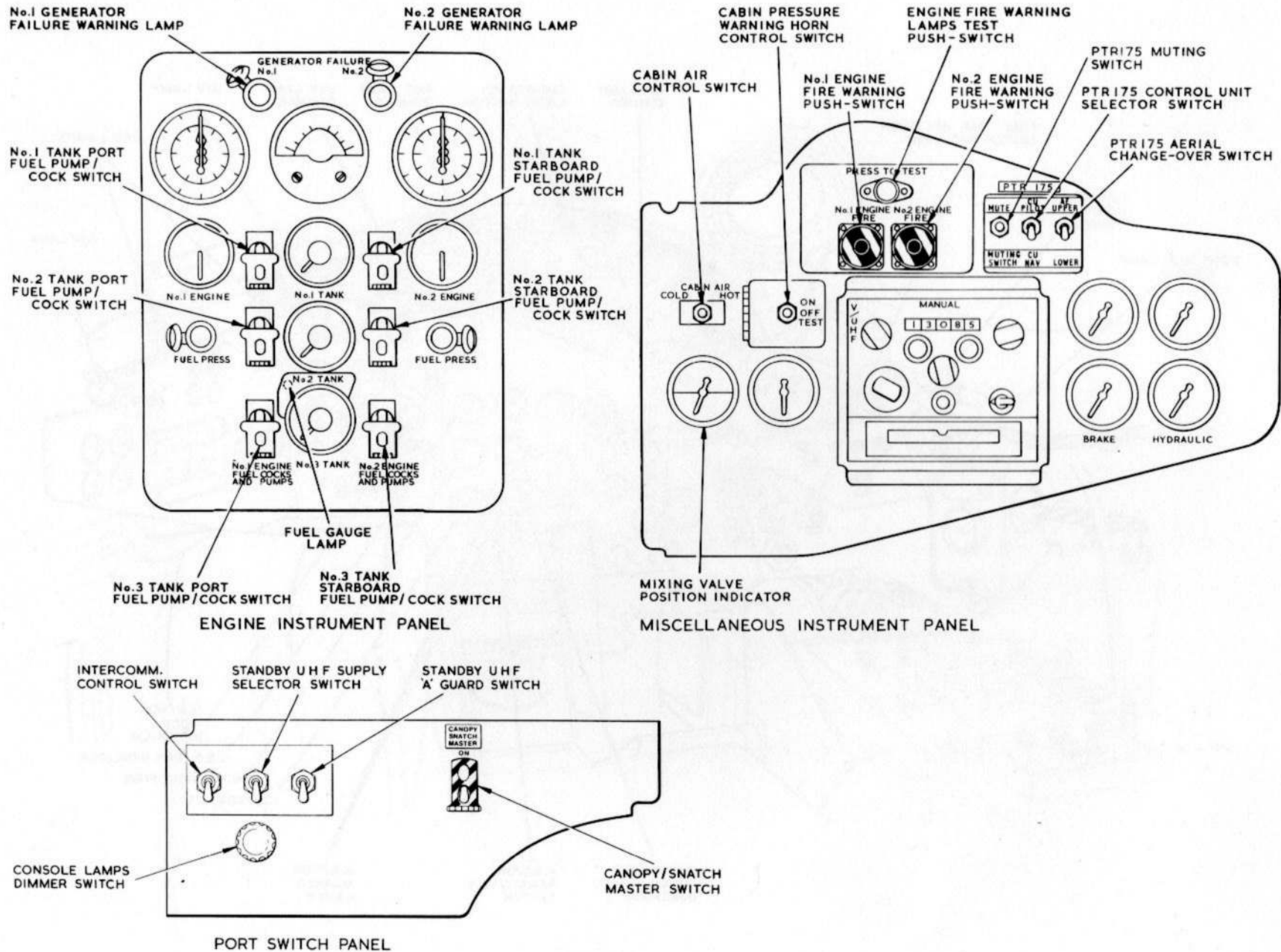


FIG. 1B. LOCATION DIAGRAM - PILOT'S STATION

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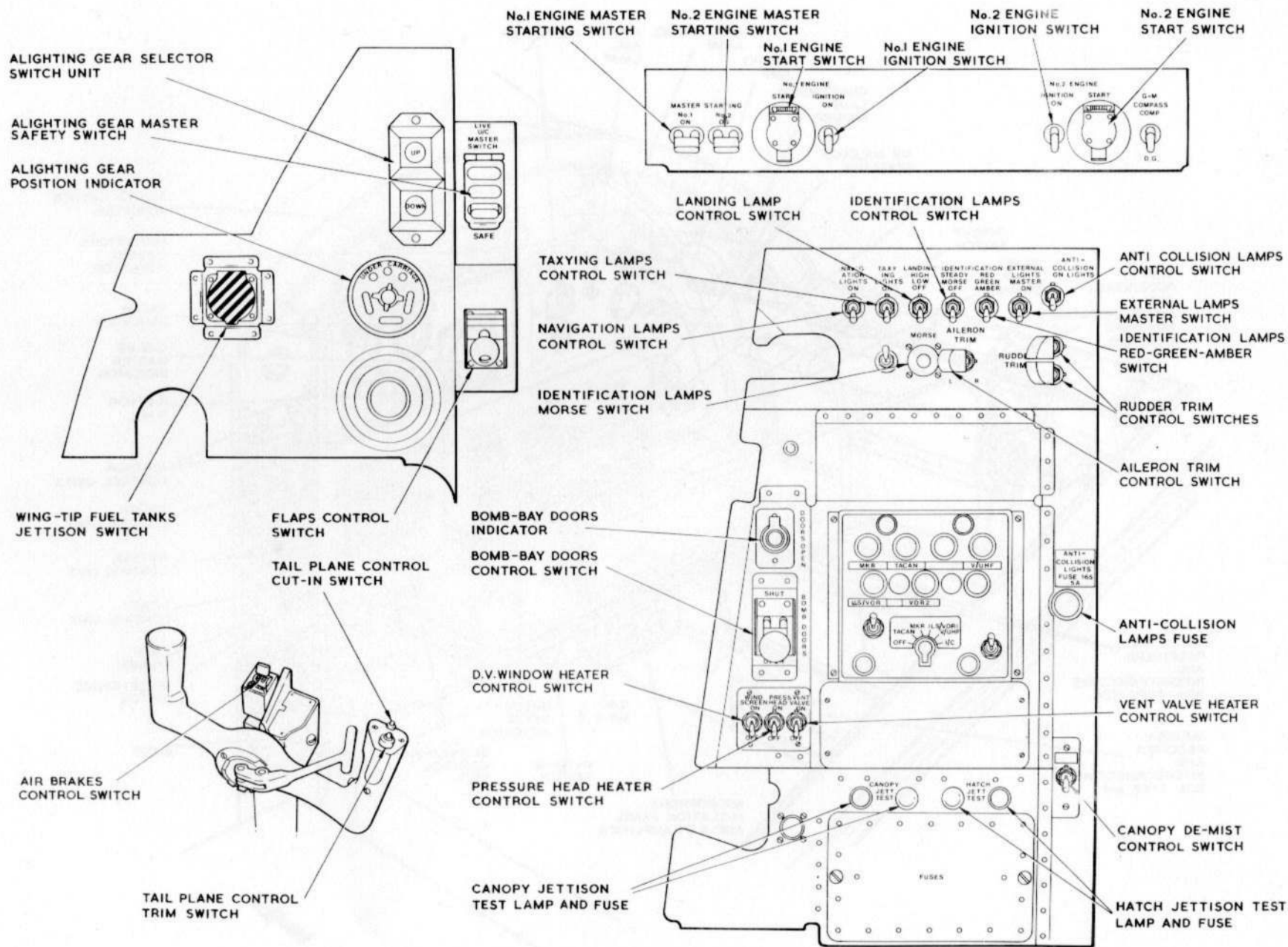


FIG. 1C. LOCATION DIAGRAM - PILOT'S STATION

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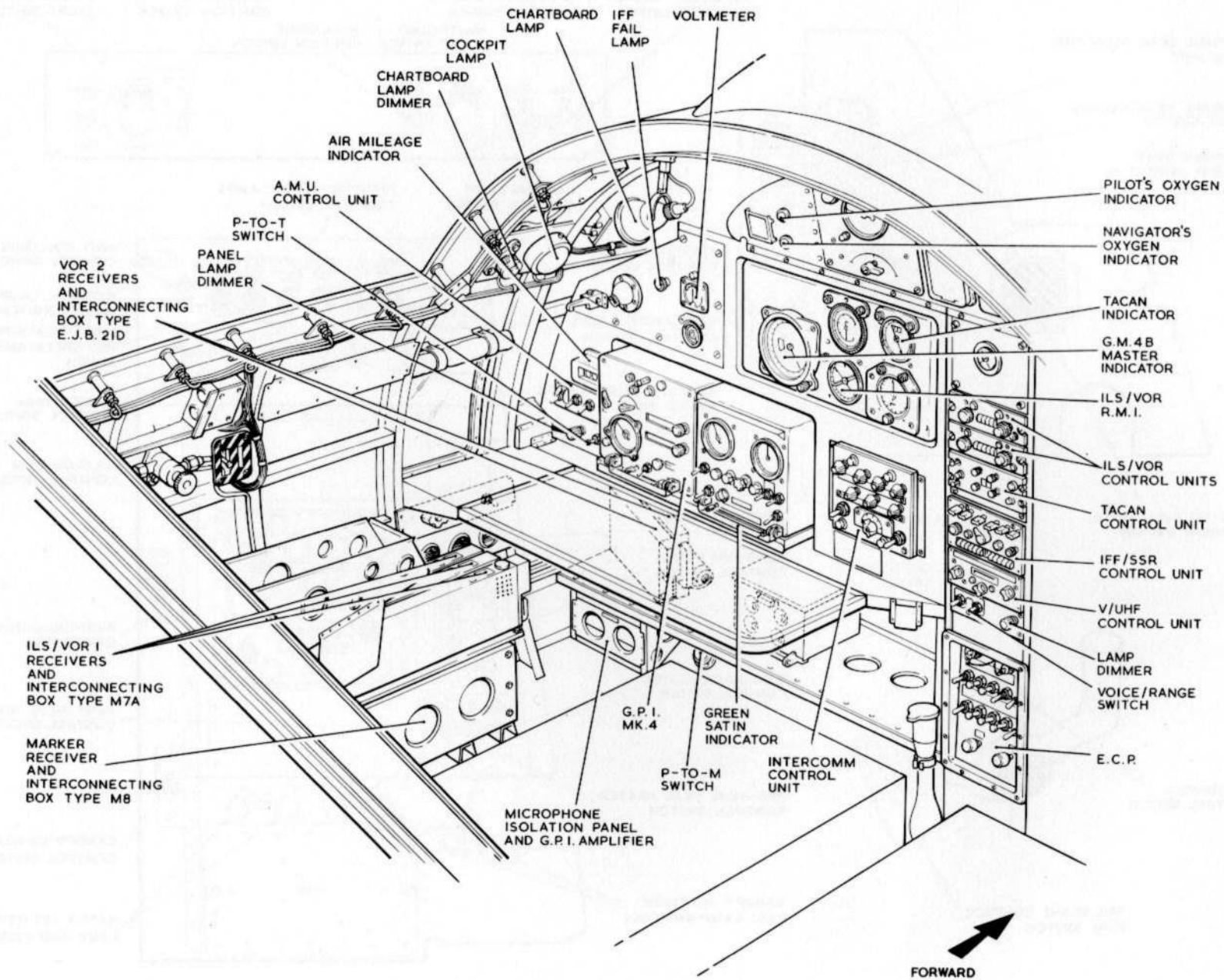


FIG. ID. LOCATION DIAGRAM - 1st. NAVIGATOR'S STATION

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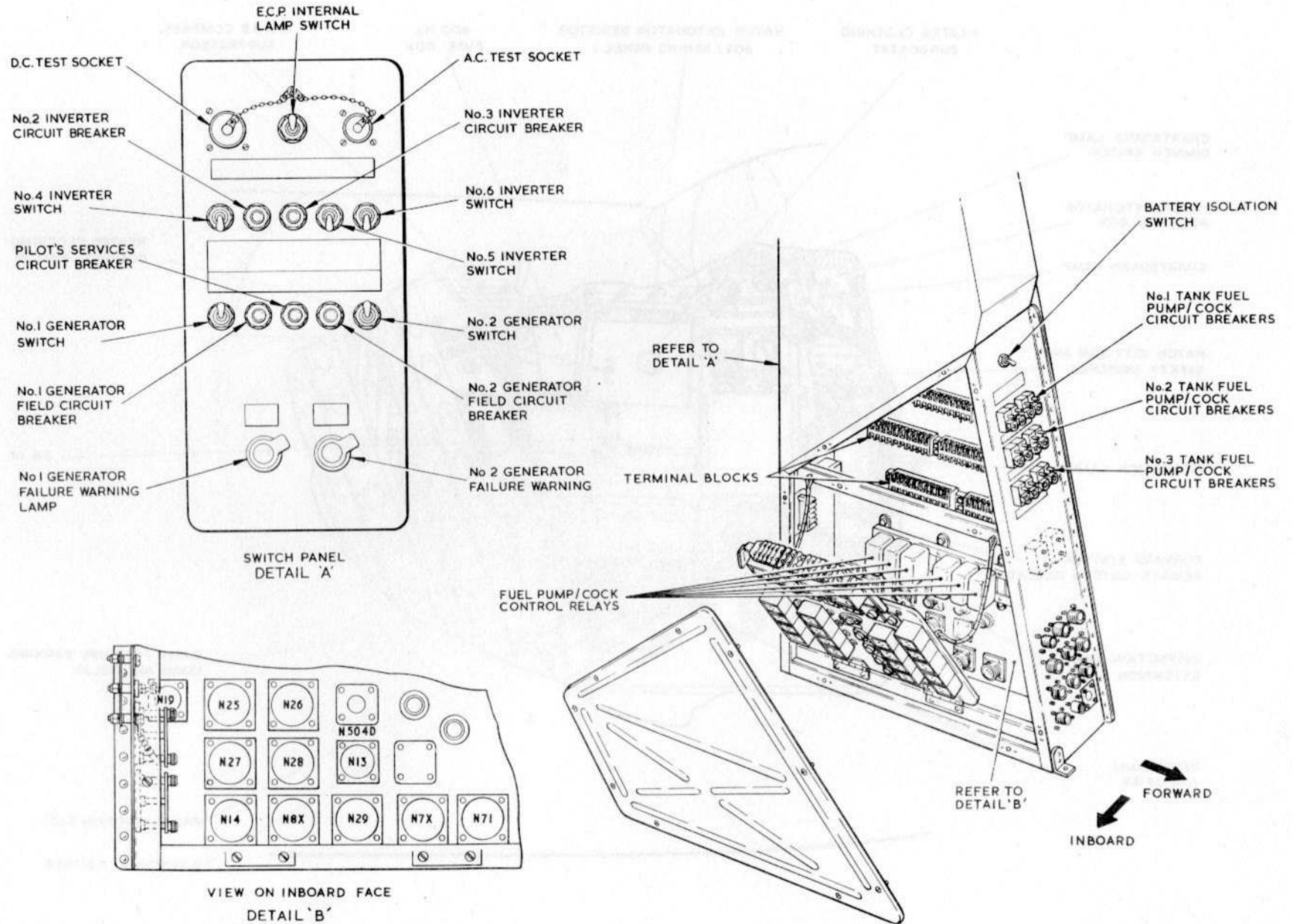


FIG. 1E. LOCATION DIAGRAM -ELECTRICAL CONTROL PANEL (E.C.P.)

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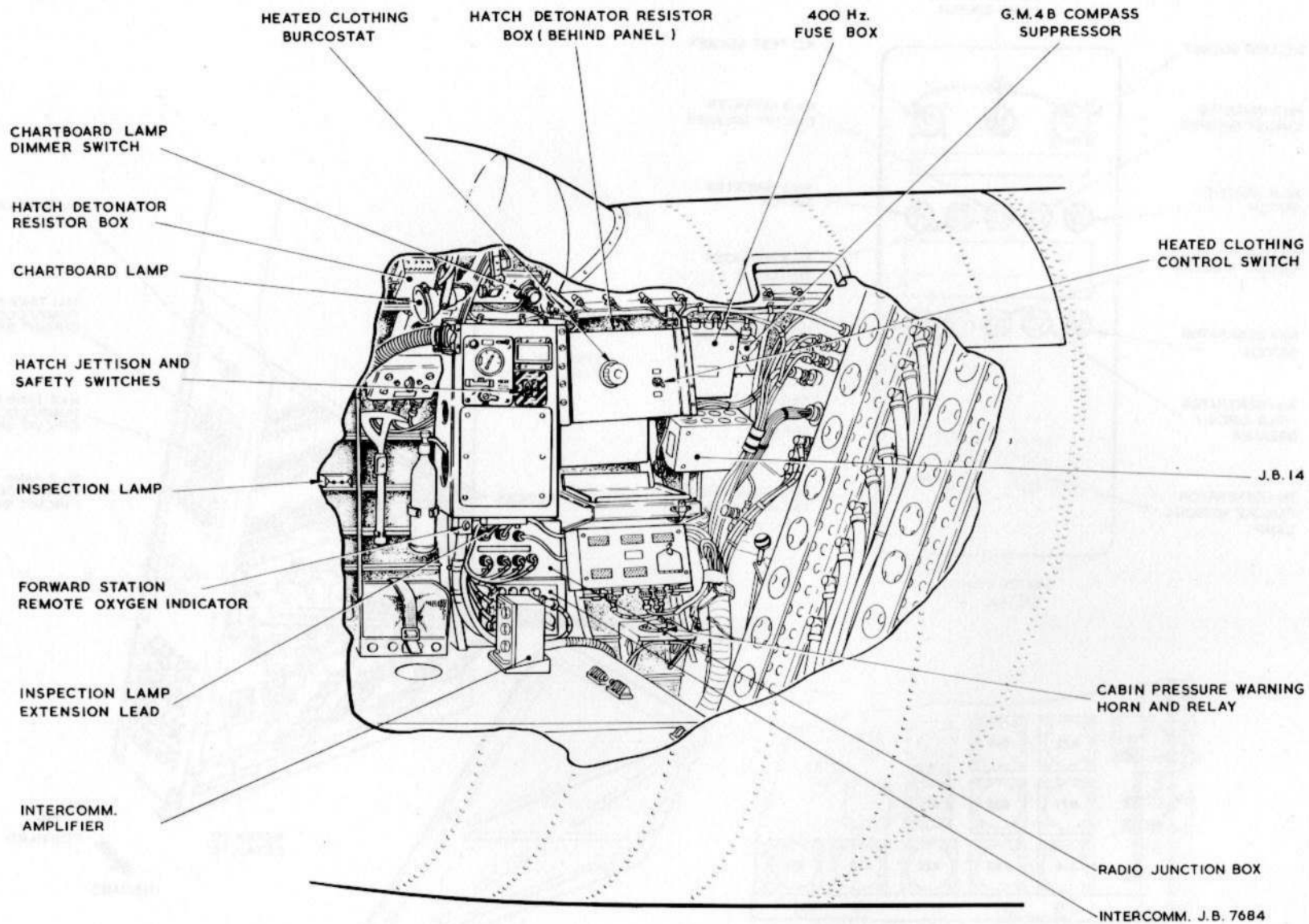


FIG. 1F. LOCATION DIAGRAM -2nd. NAVIGATOR'S STATION

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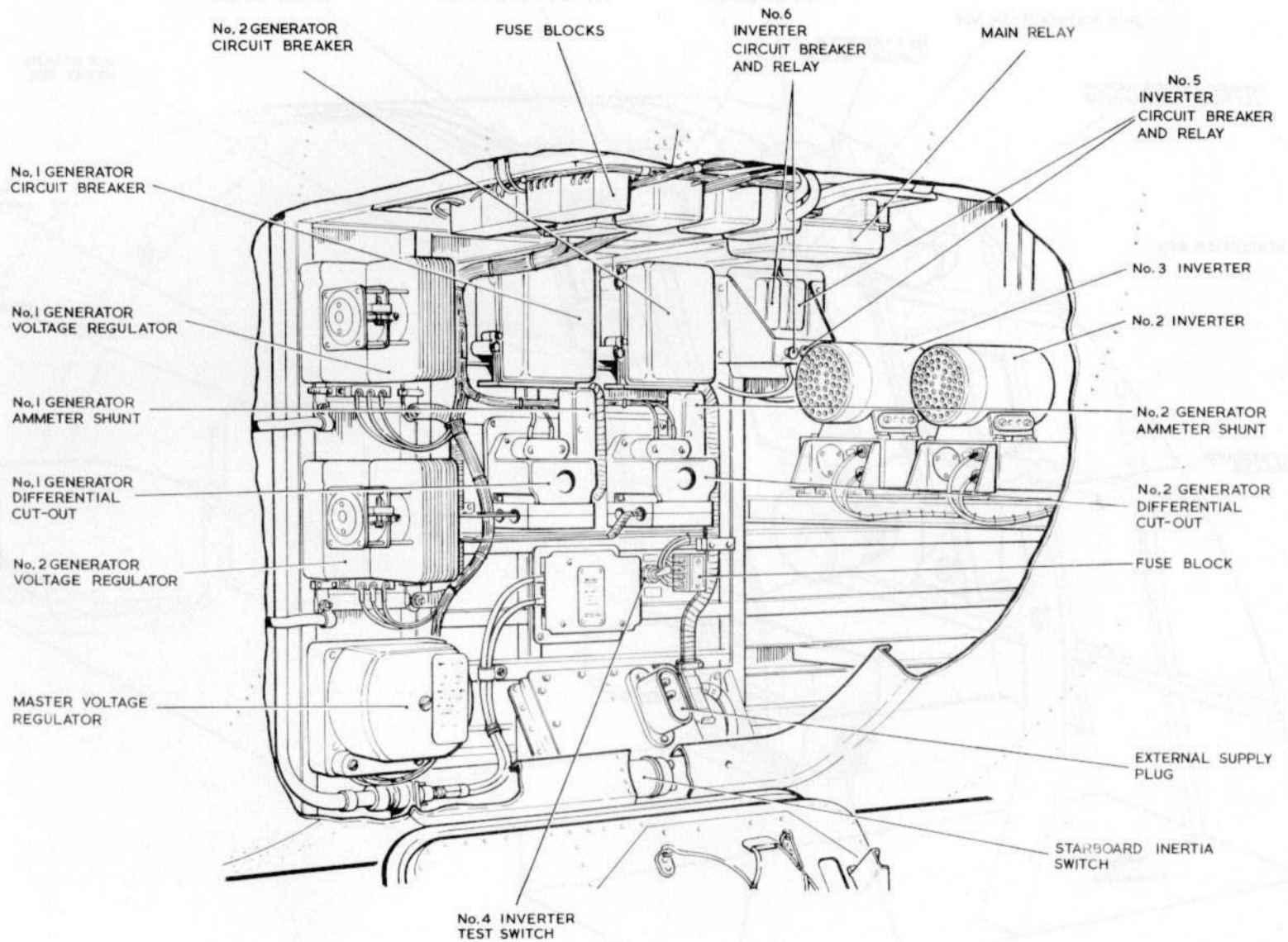


FIG. 1G. LOCATION DIAGRAM - STARBOARD EQUIPMENT COMPARTMENT

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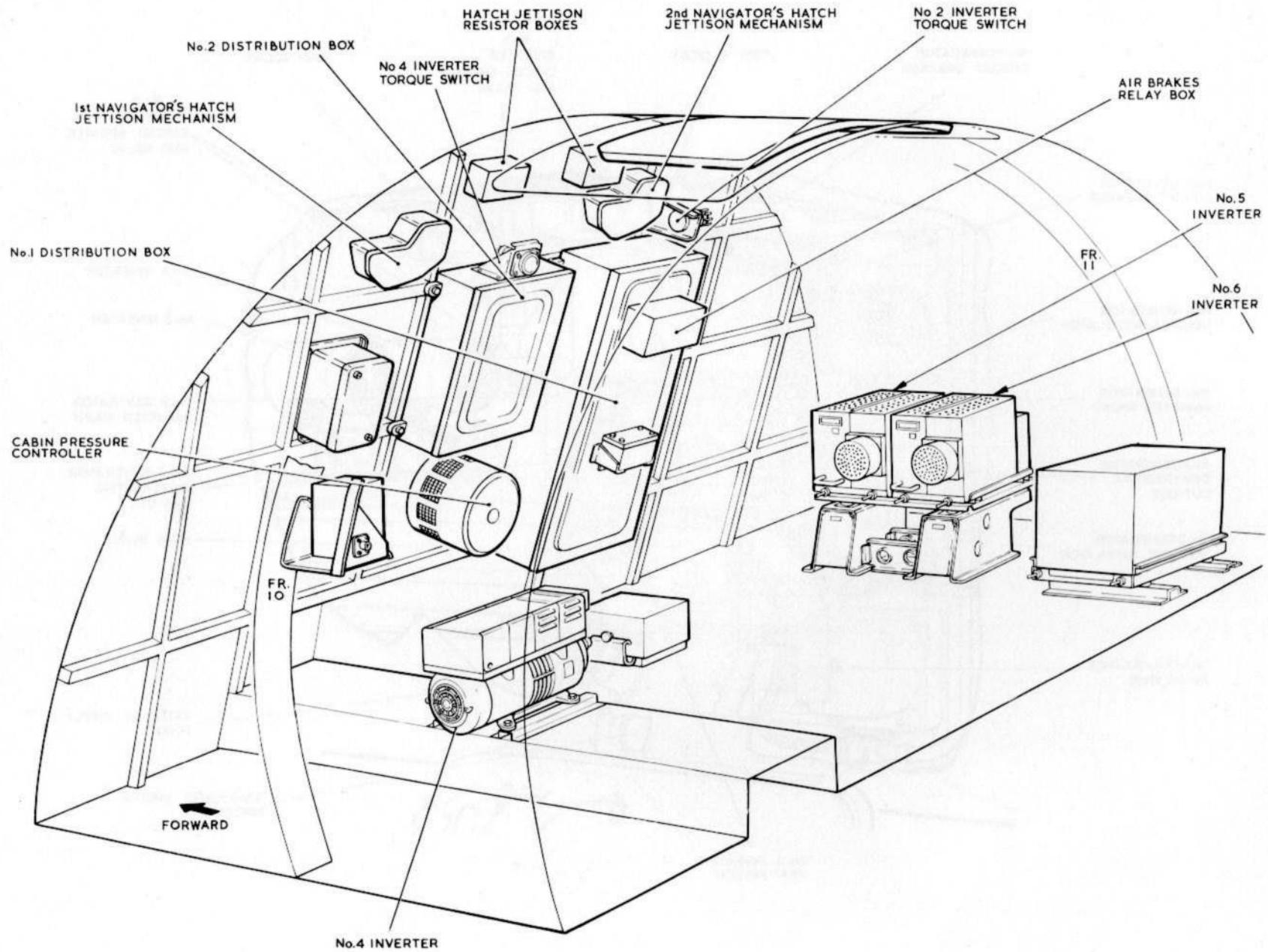


FIG. IH. LOCATION DIAGRAM - UPPER EQUIPMENT COMPARTMENT

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DESCRIPTION

RUDDER TRIM - MOD.4868

1. Fig.2 shows the alterations to the rudder trim circuit associated with the above modification. Operation of the circuit remains as described in Sect.5, Chap.1, Group C.

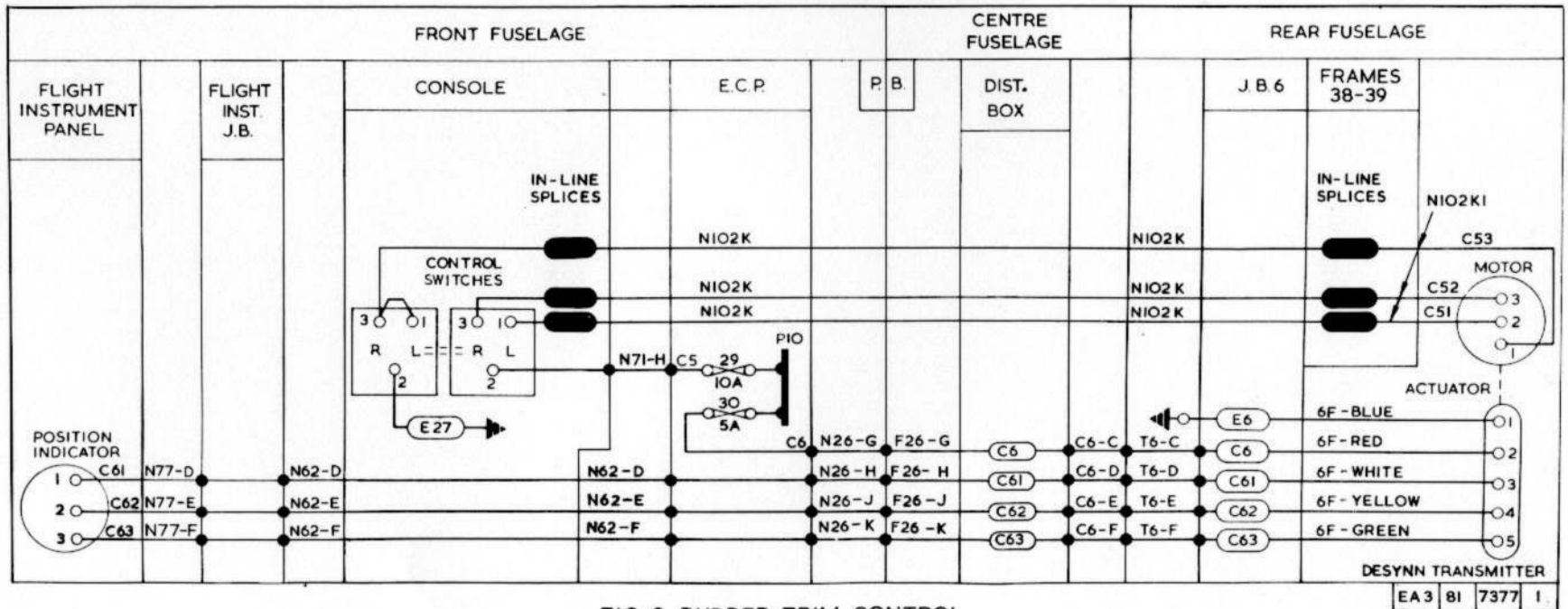


FIG. 2. RUDDER TRIM CONTROL

**INSTRUMENT POWER SUPPLIES - MOD.4868**

1. The following paragraphs describe the operation of the instrument power supplies associated with the above modification. The a.c. supplies are provided by two Type 100B inverters, called No.2 and No.3 which replace the original No.2 (Type 100B) and No.3 (Type RC8A) inverters installed in pre Mod. aircraft. Circuit and routing diagrams are provided in figs.3 and 4-4A.

**DESCRIPTION****A.C. supplies**

2. The 115 volt, 400 Hz, three-phase a.c. is supplied by No.2 and No.3 inverters, both of which, together with their associated torque switch, are mounted in the upper equipment compartment. No.2 inverter provides the normal instrument supplies and provision is made for No.3 inverter to automatically take over the load in the event of No.2 inverter failure.

**Magnetic indicator**

3. A magnetic indicator, labelled EMERGENCY INSTRUMENT SUPPLY ON and located on the flight instrument panel, indicates when No.3 inverter is supplying the load. The indicator shows black under normal conditions and white when No.3 inverter is on line.

**D.C. supplies**

4. The 28 volt d.c. instrument supplies are essentially as described in the main chapter except that fuse 120, in addition to supplying the GM4B compass amplifier, also supplies the GM4B master indicator. Additionally, fuse 119 supplies the G.P.I. Mk.4.

**OPERATION****No.2 and No.3 inverters**

5. With No.1 ENGINE MASTER STARTING SWITCH selected to ON, 28 volts d.c. from fuse 80 is applied via contacts of relay No.6 to energize the magnetic indicator and relay No.4, thus completing the 28 volt d.c. line, to start No.3 inverter via its circuit breaker. The output from No.3 inverter supplies the instrument busbars via the contacts of the de-energized relay No.7.

6. With the No.2 ENGINE MASTER STARTING SWITCH set to ON, a 28 volts d.c. supply from fuse 81 energizes relay No.1 via the contacts of relay No.6 and is applied to one contact of the torque switch. When relay No.1 contacts make, the 28 volts d.c. is supplied to No.2 inverter via its circuit breaker. When the a.c. output of No.2 inverter reaches approximately 98 volts, the d.c. contacts of the torque switch close to supply 28 volts d.c. from fuse 81 to energize relays No.6 and No.7.

7. Closing of relay No.7 contacts causes the a.c. load to be switched from No.3 inverter to No.2 inverter. At the same time, the contacts of relay No.6 change over, removing the supply to the magnetic indicator and relay No.4 operating coil. The magnetic indicator de-energizes to indicate normal instrument supplies are available and relay No.4 contacts remove the supply to No.3 inverter.

8. Contacts in relay No.6 provide a supply to energize relay No.2 and to maintain the energizing supply to relay No.1. Contacts in relay No.2 change over to maintain the 28 volts d.c. supply to the torque switch and to provide its own hold-on circuit. The 28 volts d.c. supply to the G.P.I. Mk.4 and GM4B compass is maintained via a different pair of contacts in relay No.6 in the energized position.

**No.2 inverter failure**

9. In the event of failure of No.2 inverter output, the torque switch de-energizes to remove the supply to the operating coils of relays No.6 and No.7. De-energizing No.6 relay removes the supply to relay No.1 operating coil whose contacts change over shutting down No.2 inverter. At the same time, the magnetic indicator is energized to show failure of the main a.c. instrument supplies. Relay No.2 remains energized to prevent No.2 inverter from being re-started. Other contacts in relay No.6 complete the energizing supply to re-energize relay No.4, re-starting No.3 inverter, whose output now supplies the load via contacts of relay No.7 in the de-energized position.

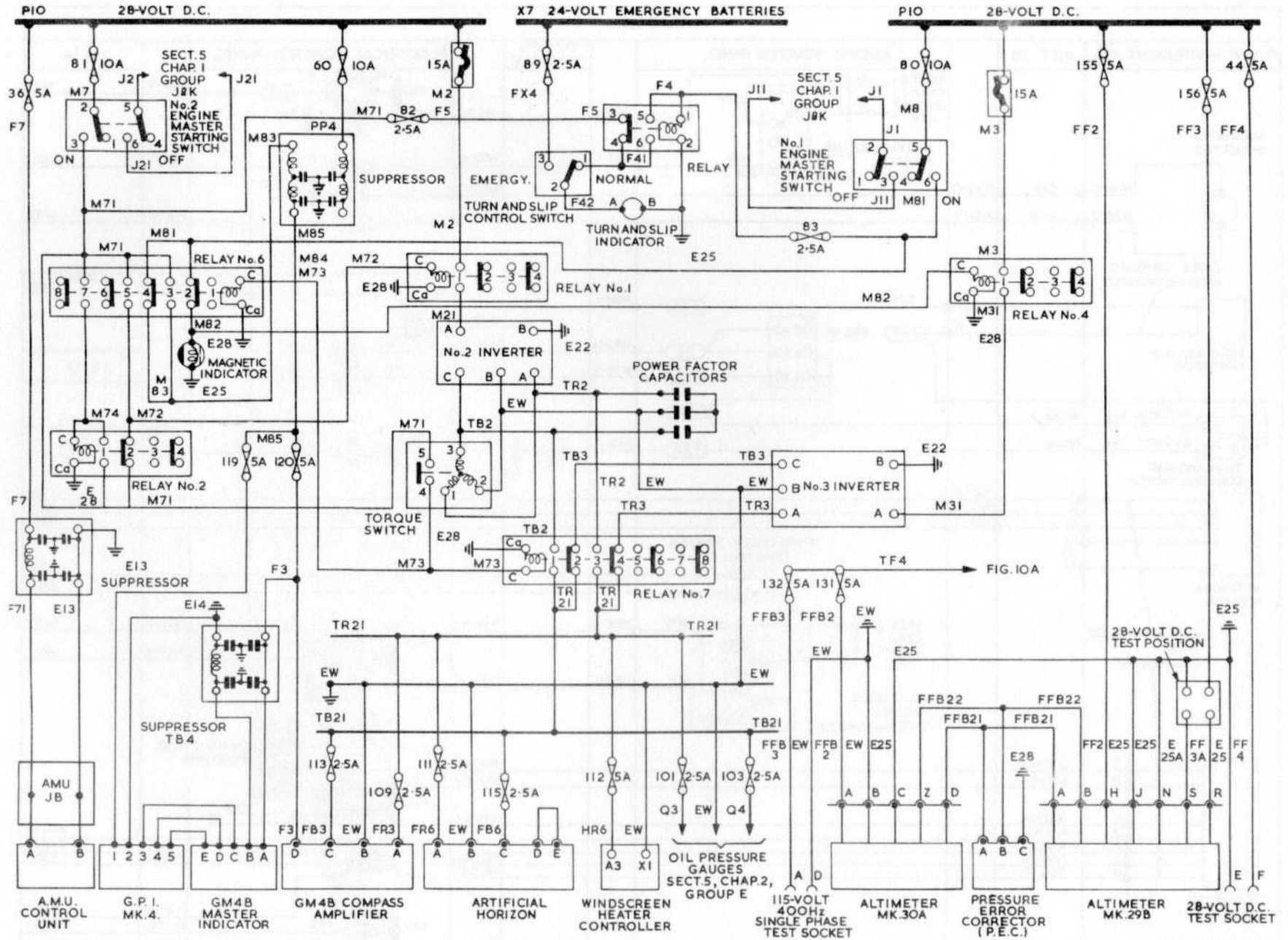


FIG. 3. INSTRUMENT POWER SUPPLIES

E A 3 | 8 1 | 7 3 5 9 | 1

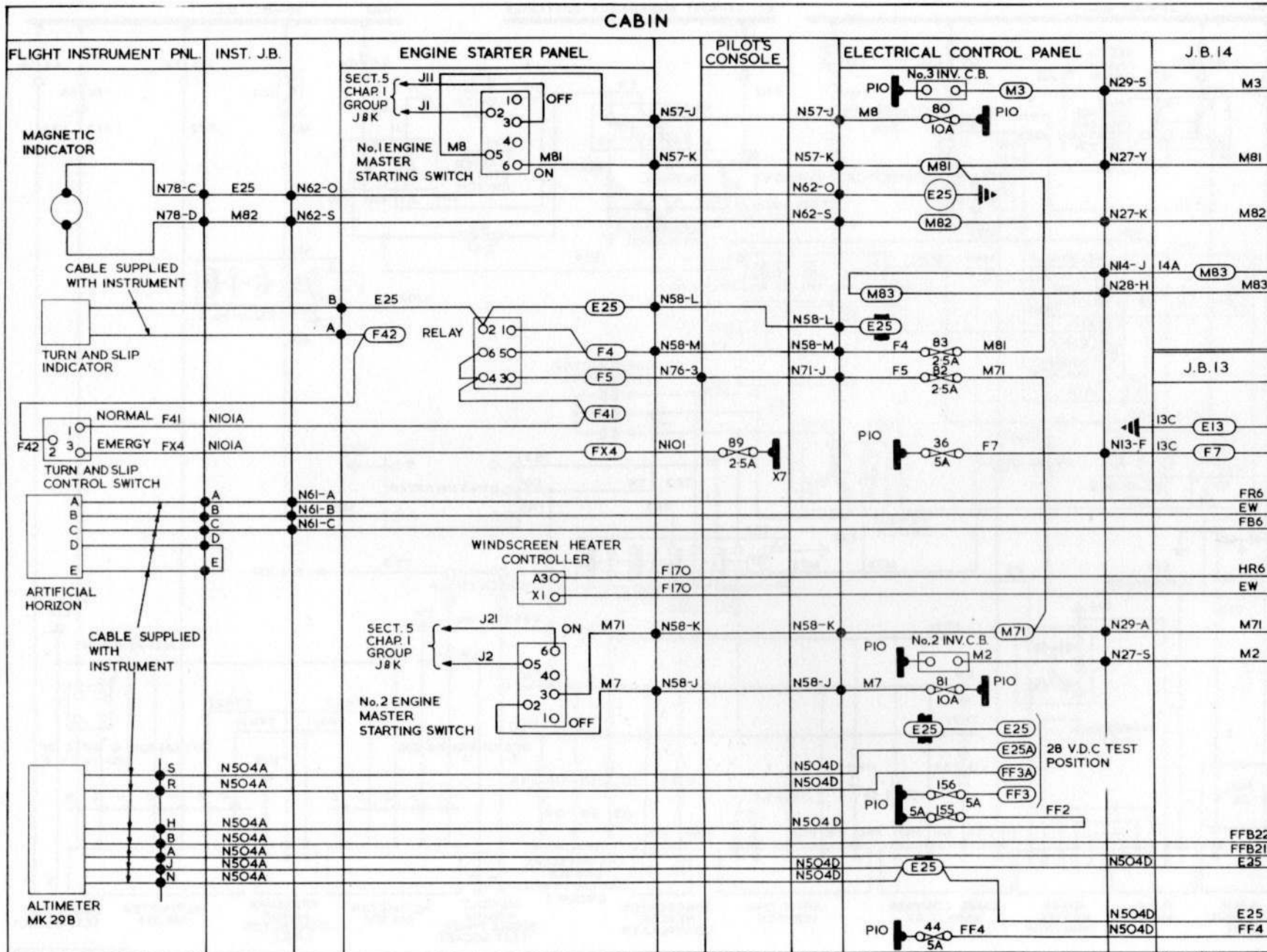


FIG. 4. INSTRUMENT POWER SUPPLIES

EA3 81 7361 1

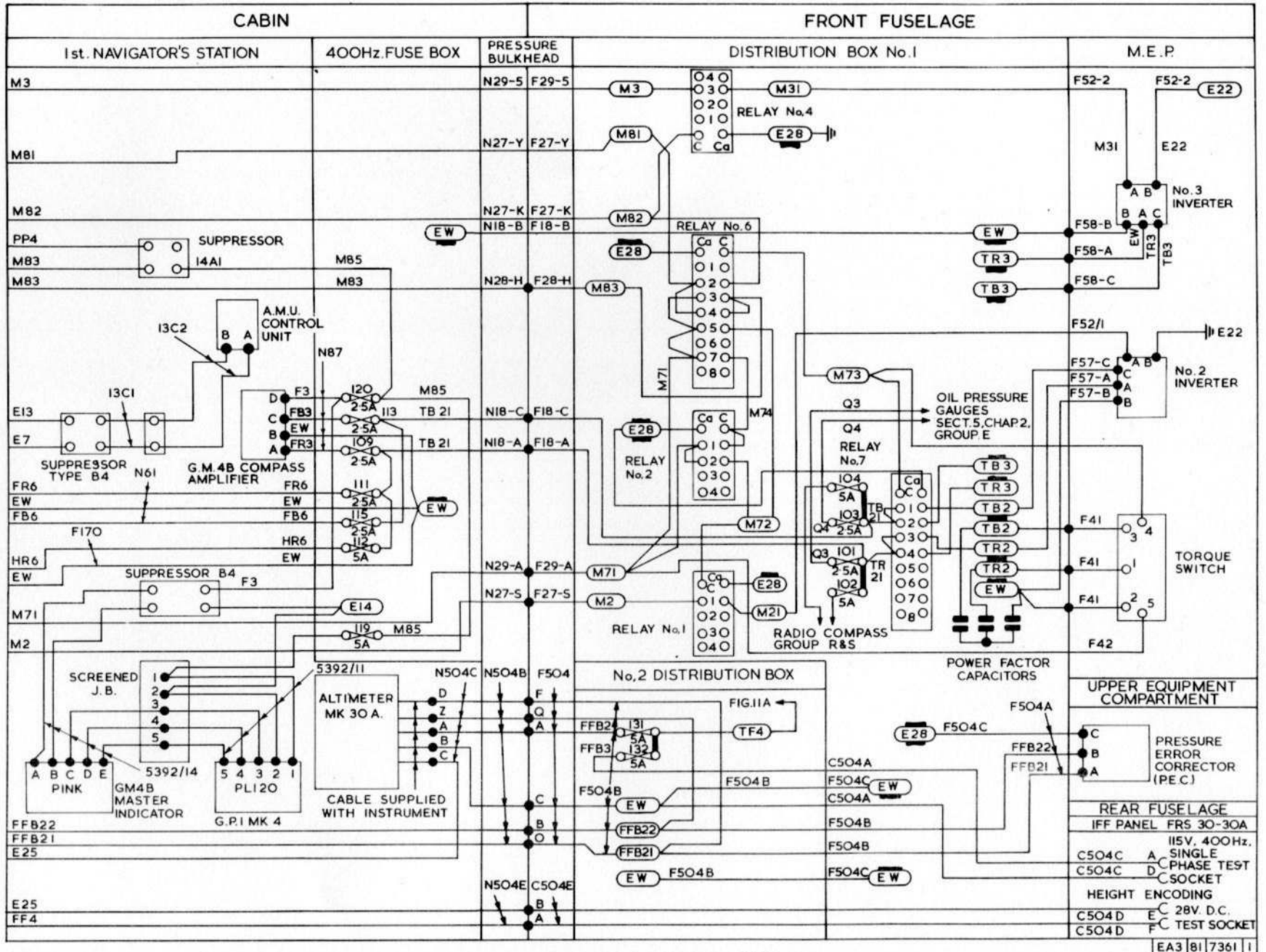


FIG. 4A. INSTRUMENT POWER SUPPLIES

## INTERNAL LIGHTING - MOD.4868

1. The following paragraphs describe the circuit changes associated with the above modification. Circuit and routeing diagrams are shown in fig.5-5A and 6-6A.

**Pilot's station lighting**

2. A single I.L.S./V.O.R. R.M.I. pillar lamp is provided and the relative bearing indicator bridge lamp has been deleted.

**Navigator's station lighting**

3. 28 volts d.c. for the navigator's instrument and control unit lighting is supplied from fuse 58. In addition, integral lighting for the I.L.S./V.O.R. control units is controlled by the panel lamps dimmer switch and the E.C.P. lamp, by a switch located on the E.C.P.

**Operation**

4. Operation of the system is otherwise as described in Sect.5, Chap.1, Group L.

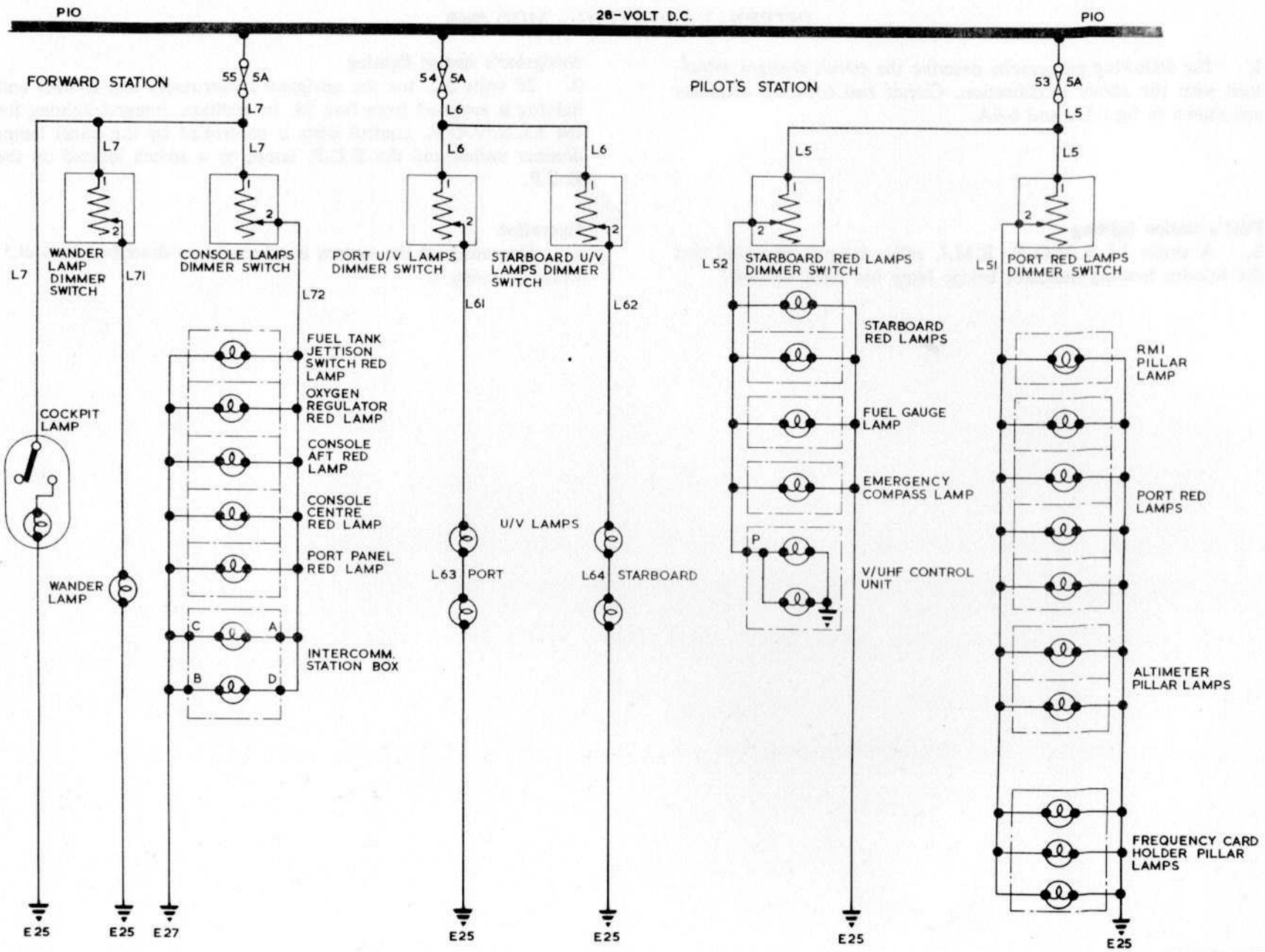


FIG. 5. INTERNAL LIGHTING

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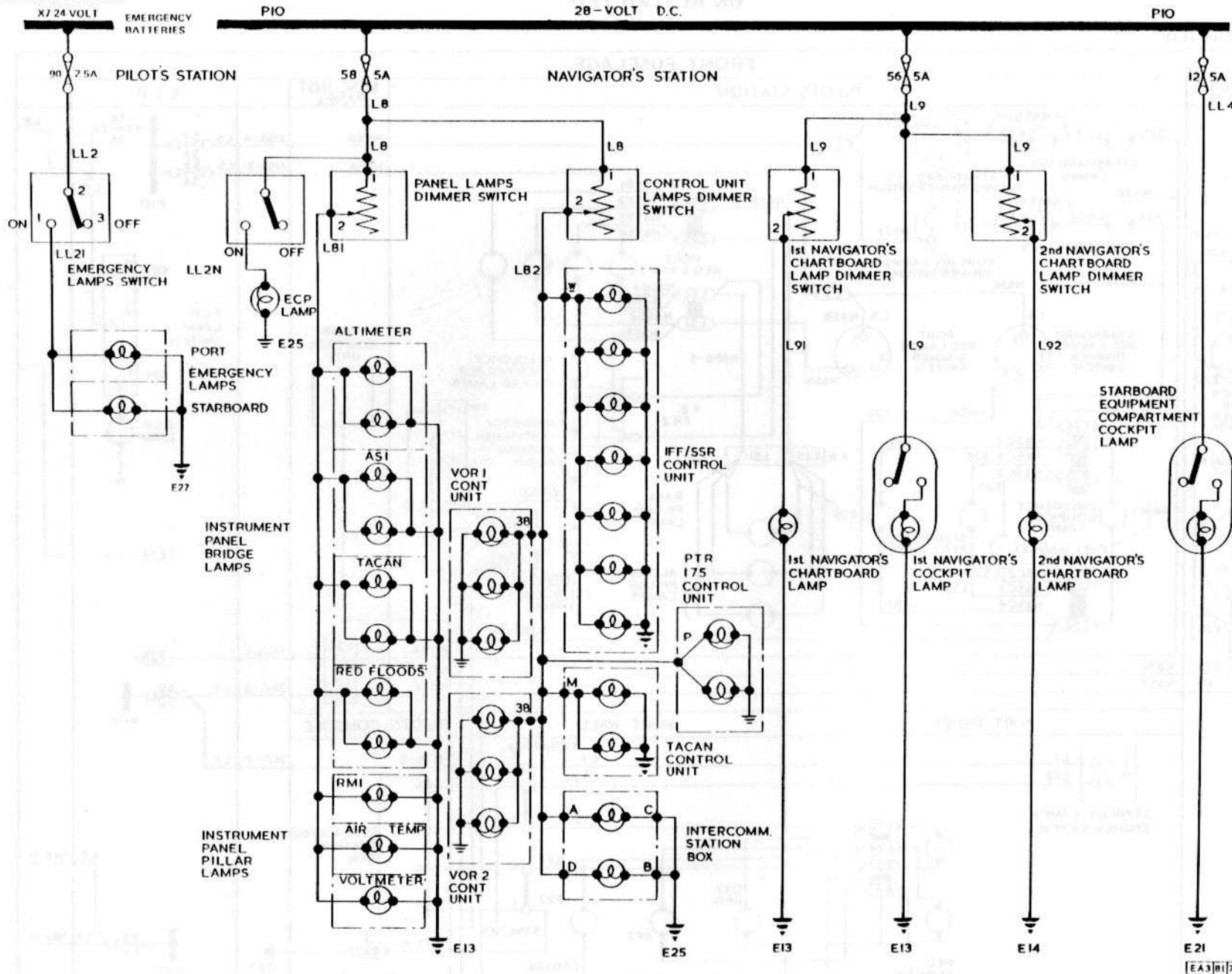


FIG. 5A. INTERNAL LIGHTING

◀SEM/CANBERRA/012R/STC INCORPORATED▶

[EA3]01[7367]

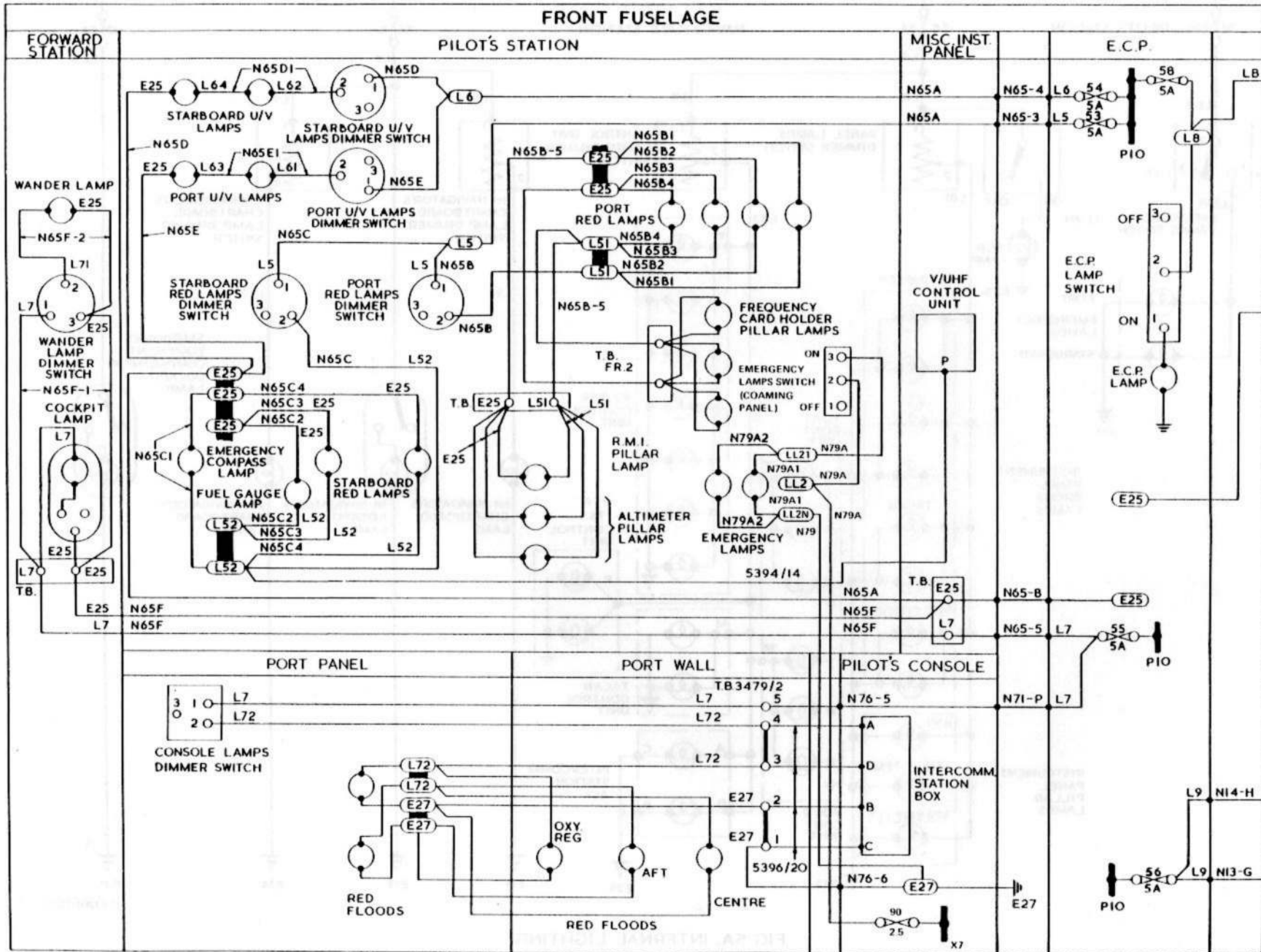


FIG. 6. INTERNAL LIGHTING.

◀SEM/CANBERRA/0128/STC INCORPORATED▶

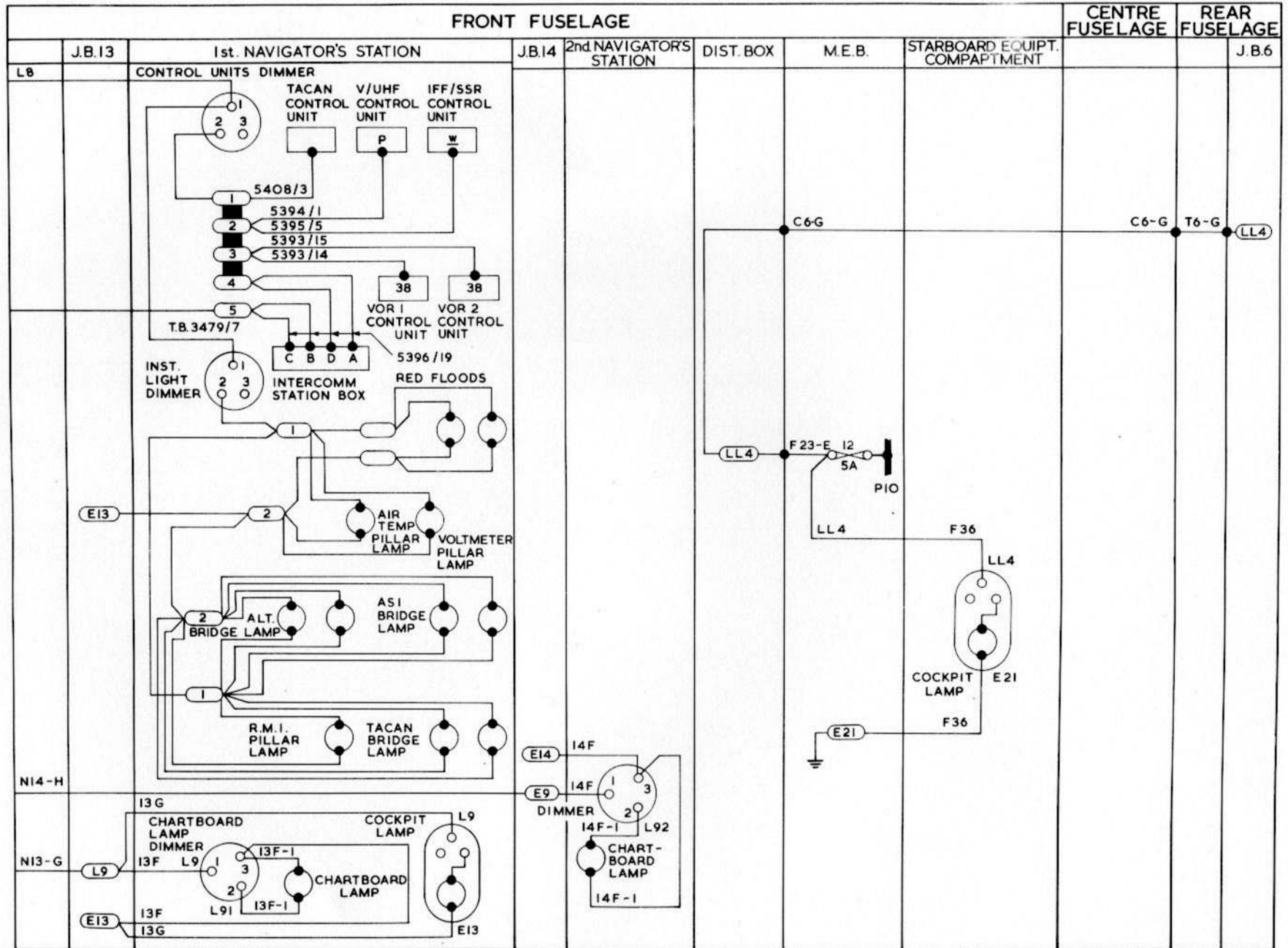


FIG. 6A. INTERNAL LIGHTING

EA3 81 7369 1

**D.C. POWER SUPPLIES - MOD.4868**

Fig.7, 8 and 9 illustrate the changes in the d.c. power supplies and distribution associated with the above modification. The d.c. volt meter is relocated on the navigator's instrument panel and terminal 8 of each Type D circuit breaker provides an energizing supply to relays No.3 and 4 in the No.4 inverter control circuit.

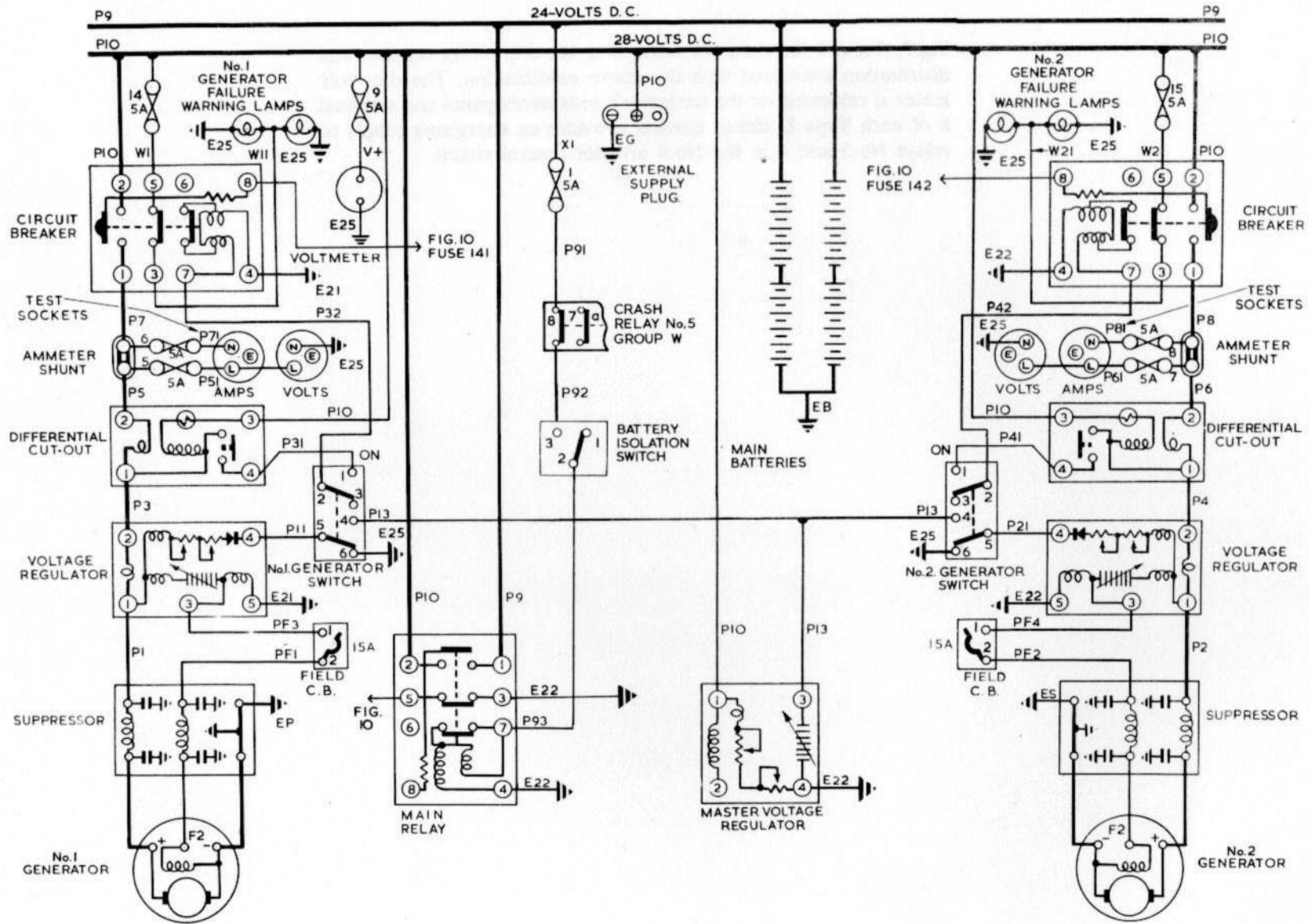


FIG. 7. D.C. POWER SUPPLIES

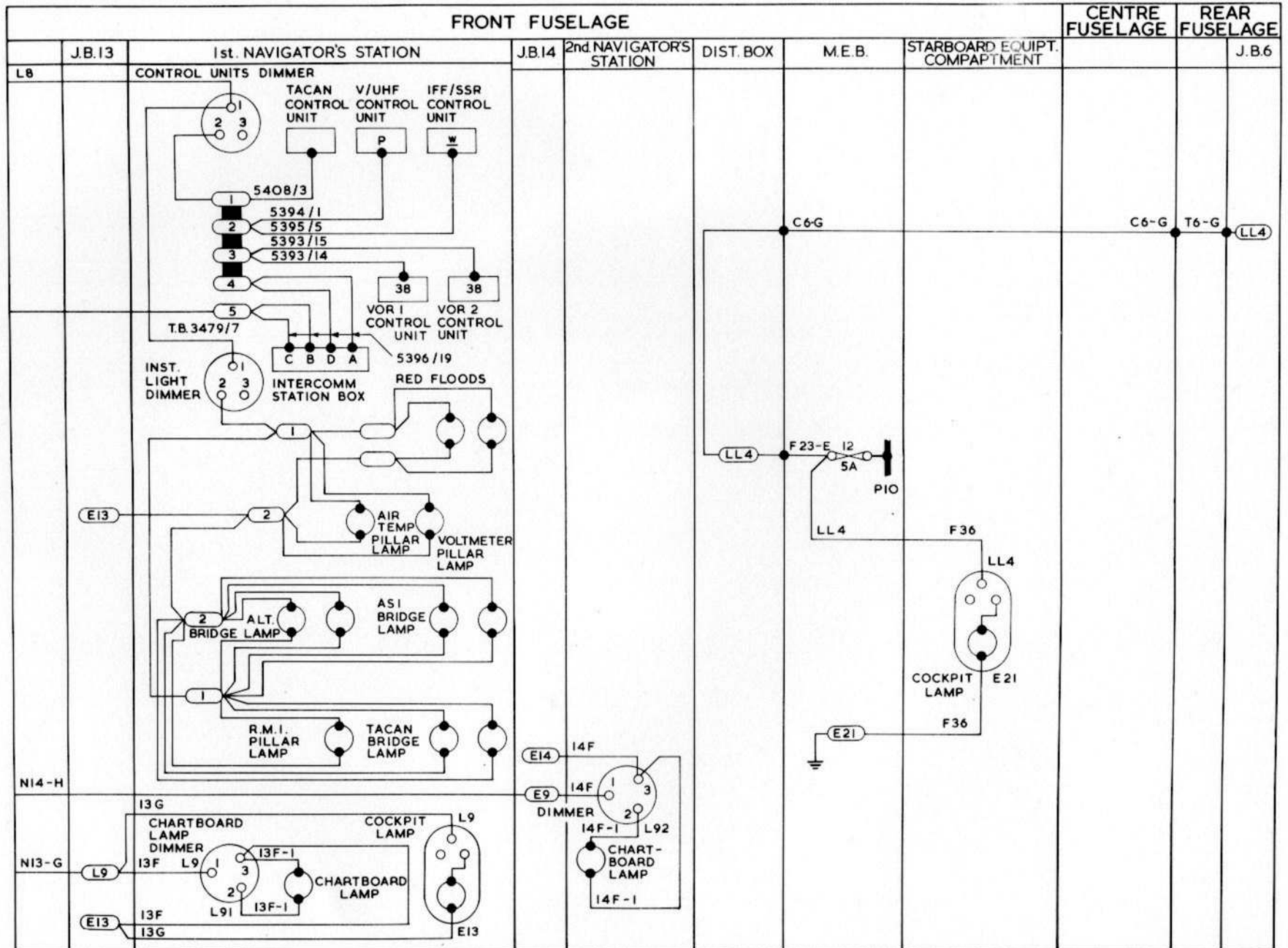


FIG. 6A. INTERNAL LIGHTING

EA3 81 7369 1

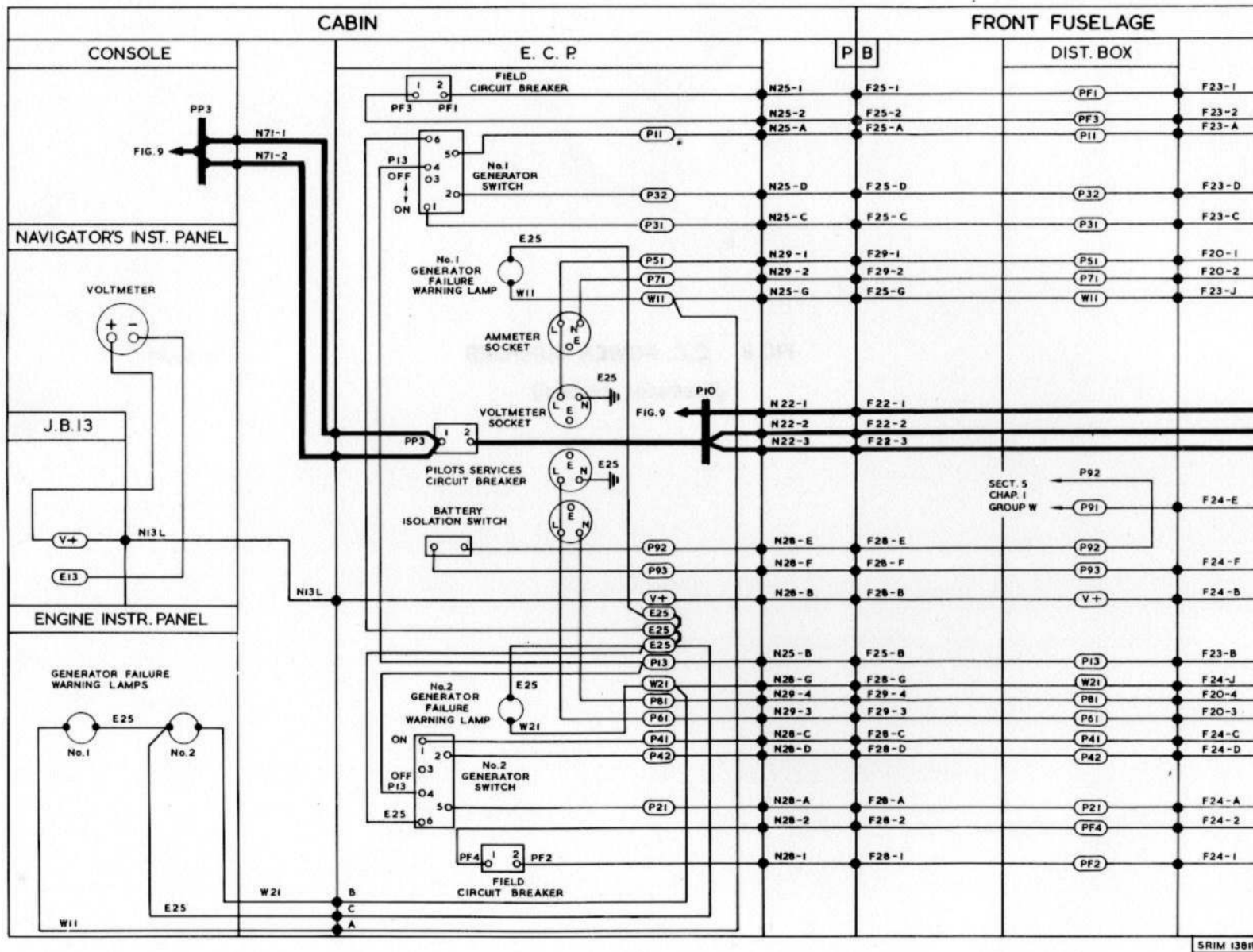


FIG. 8. D.C. POWER SUPPLIES

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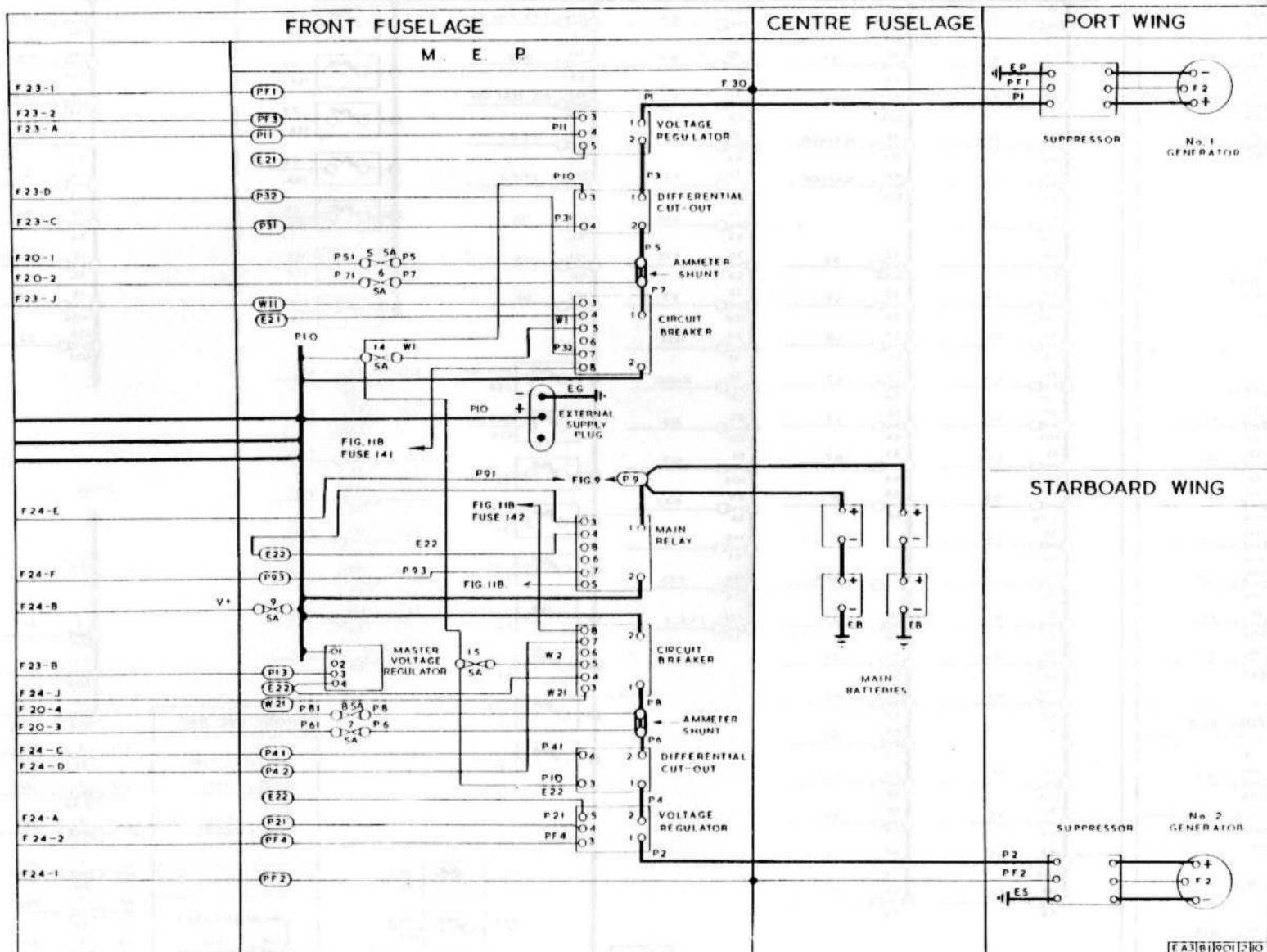


FIG. 8A. D.C. POWER SUPPLIES

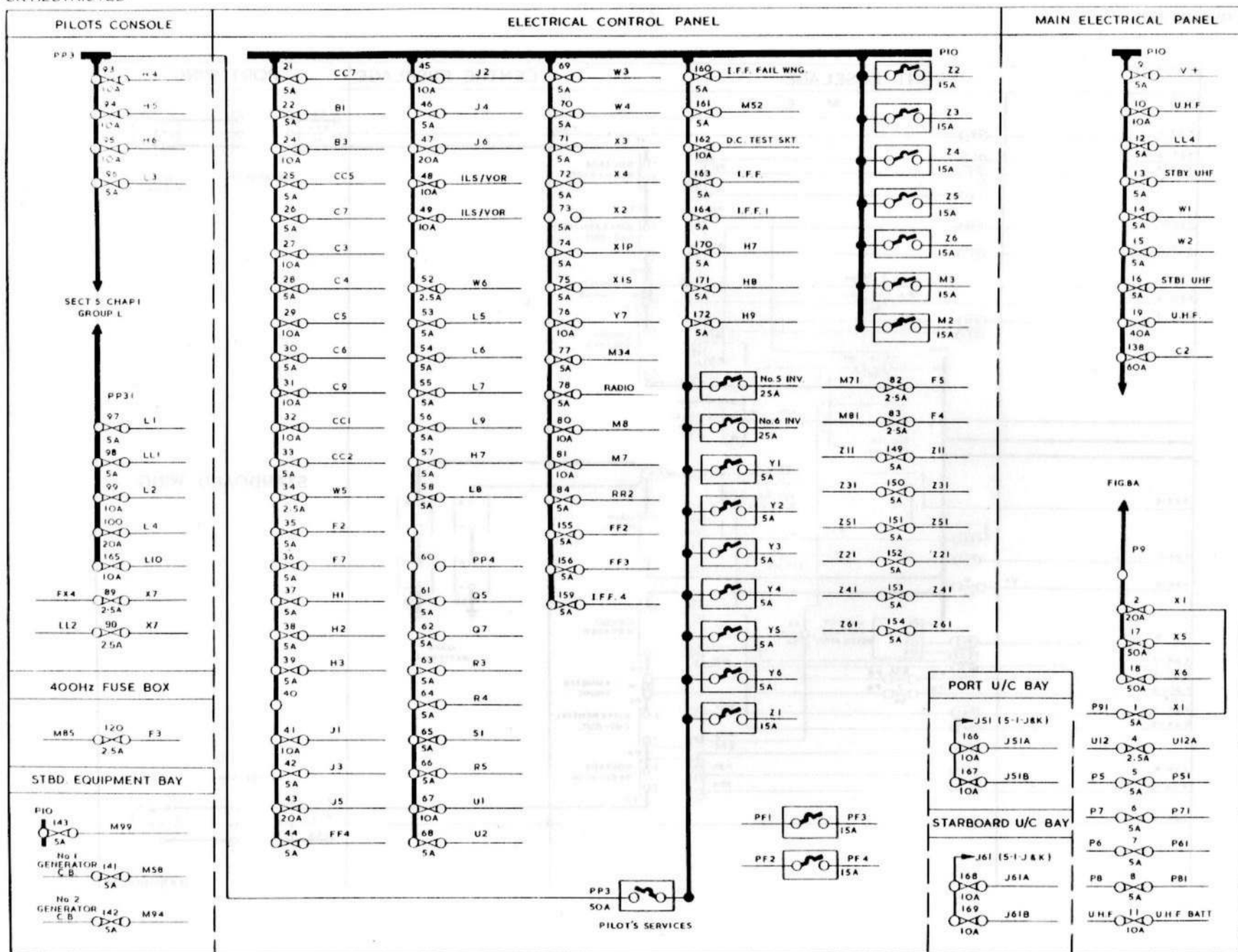


FIG. 9. D.C. POWER SUPPLIES - DISTRIBUTION

EA3 B1 7355 I

**RADIO AND RADAR POWER SUPPLIES - MOD.4868**

The following paragraphs describe the changes in the radio and radar power supplies associated with the above modification. 'A' and 'B' inverters become No.6 and No.5 respectively.

**LIST OF CONTENTS**

	<i>Para.</i>
<i>D.C. supplies</i> .....	1
<i>A.C. supplies</i> .....	2
<i>No.5 and No.6 inverters</i> .....	3
<i>No.5/No.6 inverter changeover</i> .....	5
<i>V/U.H.F. and stand-by U.H.F.</i> .....	6
<i>I.F.F./S.S.R. 1520</i> .....	7
<i>Altimeters (height encoding)</i> .....	8
<i>Intercommunication</i> .....	9
<i>I.L.S./V.O.R.</i> .....	10
<i>No.4 inverter/A.R.I.5851</i> .....	11
<i>Generator failure</i> .....	13
<i>No.4 inverter test switch</i> .....	14
<i>Test supply sockets</i> .....	15

**LIST OF ILLUSTRATIONS**

	<i>Fig.</i>
<i>Circuit diagram</i>	
<i>Radio and radar power supplies</i> .....	10-10A-10B
<i>Routeing diagram</i>	
<i>Radio and radar power supplies</i> .....	11-11A
<i>Radio and radar power supplies -</i> <i>Green Satin (A.R.I.5851)</i> .....	11B-11C
<i>Radio and radar power supplies -</i> <i>I.L.S./V.O.R. (A.R.I.23118)</i> .....	11D

## DESCRIPTION

**D.C. supplies**

1. The 28 volt d.c. supplies required by the various systems are drawn from busbar P10, described in Sect.5, Chap.1, Group P. A 24 volt stand-by battery provides emergency power for the stand-by U.H.F. transmitter-receiver.

**A.C. supplies**

2. The 115 volts, 400 Hz single-phase a.c. supplies are drawn from two Type 208 static inverters, designated No.5 and No.6 and located in the upper equipment compartment. Two 115/26 volt single-phase transformers, located in the E.C.P. provide the a.c. requirements of the ILS/VOR system. No.4 inverter, located in the upper equipment compartment, provides 115 volts, 400 Hz, three-phase a.c. for the A.R.I.5851.

**No.5 and No.6 inverters**

3. No.5 inverter, controlled by a switch on the E.C.P., provides 115 volts 400 Hz, single-phase a.c. for the TACAN installation. No.6 inverter, controlled by a switch also located on the E.C.P., provides 115 volts, 400 Hz, single-phase a.c. for the I.F.F./S.S.R.1520 and I.L.S./V.O.R. systems.

4. When the No.5 inverter switch is selected to ON, 28 volts d.c. from fuse 161 energizes relay A, contacts of which change over and connect No.5 inverter, via a circuit breaker to P10 busbar. The a.c. output is fed to the TACAN installation via contacts of the de-energized relay No.7 and fuses 105 and 106. No.6 inverter switch, labelled OFF-NORMAL-CHANGEOVER, energizes relay B when selected to NORMAL. Contacts of relay B supply 28 volts d.c. to No.6 inverter via its circuit breaker. Relay No.6 is energized directly from busbar P10 via fuse 159 when the

I.F.F./S.S.R. control unit function switch is set to any selection other than OFF. Contacts of this relay connect 28 volts d.c. and 115 volts a.c. to the aerial switch unit and transponder from fuses 164 and 136 respectively. The 115/26 volt transformers are supplied from No.6 inverter via fuse 107.

**No.5/No.6 inverter changeover**

5. Failure of either inverter will result in the loss of the associated systems. With the No.6 inverter switch selected to CHANGEOVER, 28 volts d.c. from fuse 161 energizes relay No.7, contacts of which change over to connect No.5 and No.6 inverter outputs to the I.L.S./V.O.R. and I.F.F./S.S.R. and the TACAN installations respectively. This facility enables the most desired systems to be operated in the event of failure of one of the inverters.

**V/U.H.F. and stand-by U.H.F.**

6. The V/UHF and stand-by U.H.F. power supplies are essentially as described in Sect.5, Chap.1, Group R & S, except for the re-coding and re-routeing of cable assemblies.

**I.F.F./S.S.R. 1520**

7. The I.F.F./S.S.R.1520 power supplies are essentially as described in Sect.5, Chap.1, Group R & S except for the re-coding and re-routeing of cable assemblies.

**Altimeters (height encoding)**

8. These altimeters (*Sect.5, Chap.1, Group D*) are normally supplied with 115 volts, 400 Hz, single-phase from No.6 inverter via fuse 131. 28 volt d.c. supplies are provided via fuses 155 and 156. In the event of failure of No.6 inverter, operation of the No.6 inverter switch to CHANGEOVER transfers the a.c. load to No.5 inverter.

**intercommunication**

9. Supplies of 28 volts d.c. are drawn from fuses 63, 64 and 66.

**I.L.S./V.O.R.**

10. Supplies of 26 volts, 400 Hz, single-phase for the I.L.S./V.O.R. installation are provided from two 115/26 volt transformers located in the E.C.P., which in turn are supplied from No.6 inverter via fuse 107 under normal conditions or No.5 inverter in the event of failure of the former. 28 volts d.c. is drawn from fuse 48.

**No.4 inverter/A.R.I.5851**

11. Power supplies of 115 volts, 400 Hz, three-phase a.c. for the A.R.I.5851 Green Satin installation are provided by a Type F45-10 inverter designated No.4. 28 volts d.c. from fuse 143 is applied to the No.4 inverter torque switch via the contacts of de-energized relay No.1. With both P3 d.c. generators on line, 28 volts d.c. from each d.c. supply Type D circuit breaker terminal 8 energizes No.3 and No.4 relays via fuses 142 and 141 respectively. The three-position inverter control switch, located on the E.C.P., controls the operation of the inverter. When selected to START, 28 volts d.c. from fuse 65 energizes relay No.2, contacts of which apply 28 volts d.c. to terminal 4 of the torque switch. Closing of relay No.2 contacts completes the earth return circuit from the inverter SW terminal via the contacts of relays No.3 and 4 to start the inverter, the output of which is fed via fuses 134 and 135 to the A.R.I.5851 installation busbars and to the a.c. terminals of the torque switch. Closing of the d.c. contacts within the torque switch applies 28 volts d.c. from fuse 143 via contacts of relay No.1 to provide a hold-on circuit for relay No.2. The inverter control switch can then be released.

12. To shut down the inverter, the control switch is selected to OFF, which applies 28 volts d.c. from fuse 65 to energize relay No.1 whose contacts change over to break the hold-on supply to No.2 relay, contacts of which open, to open circuit the earth return circuit to the inverter SW terminal.

**Generator failure**

13. Failure of either P3 d.c. generator causes relay No.3 and/or No.4 to de-energize, open circuiting the inverter earth return from terminal SW.

**No.4 inverter test switch**

14. To enable the inverter and A.R.I.5851 to be functionally tested with both E.C.U.'s shut down, a test switch, located in the starboard equipment compartment and labelled FLIGHT-TEST, connects the inverter SW terminal to earth via contacts of de-energized relays No.3 and No.4 and the battery isolation relay.

**Test supply sockets**

15. The radio/radar systems test equipment can be connected to 115 volt, 400 Hz, single-phase a.c. and 28 volt d.c. test supply sockets located on the aft face of the E.C.P. The a.c. test supply is drawn from No.5 or No.6 inverters via fuse 108 and is routed to the socket annotated TACAN TEST SKT whilst the d.c. supply is drawn from busbar P10 via fuse 162 and is routed to the socket annotated D.C. TEST SKT.

PIO 28V D.C.

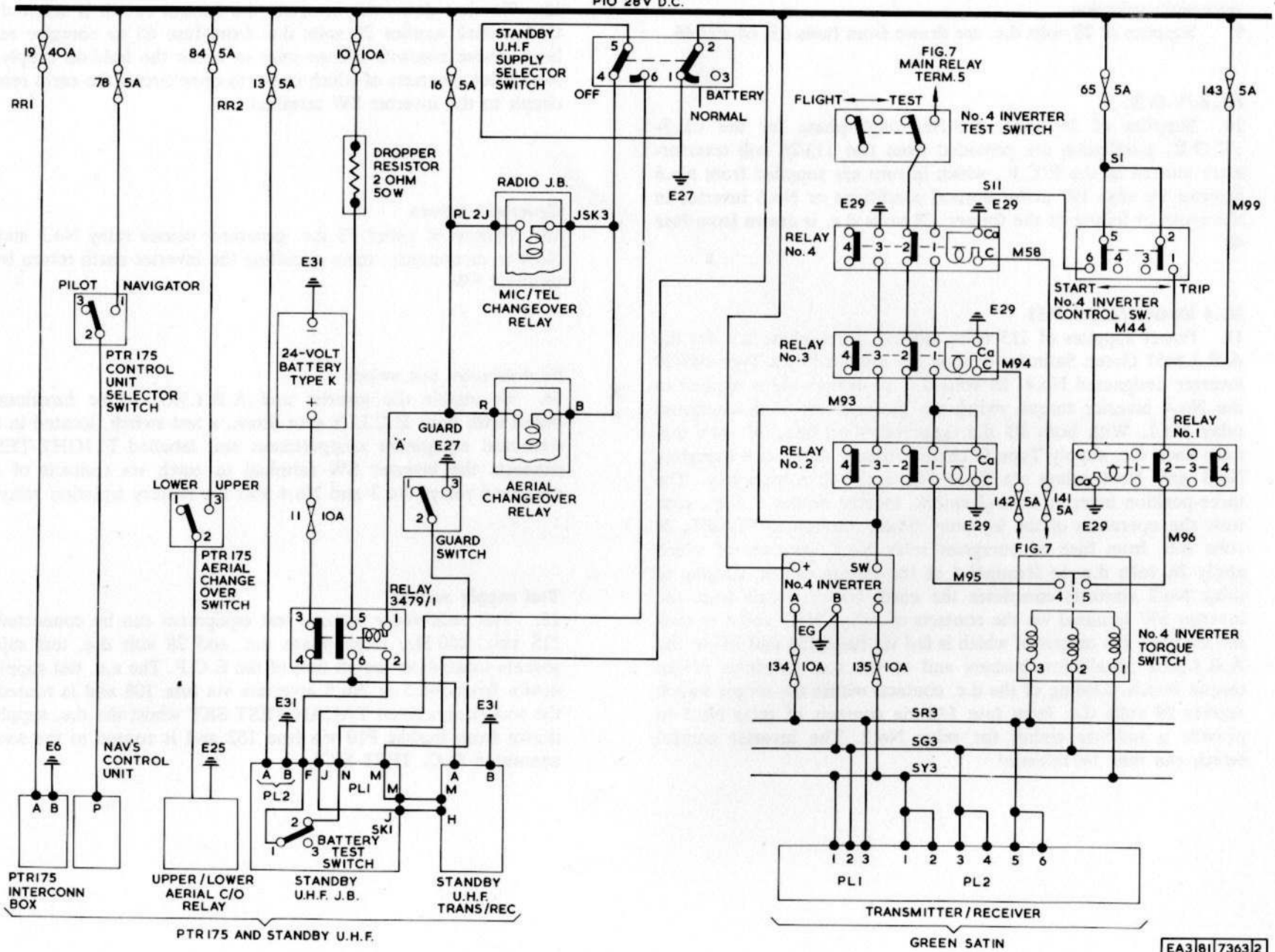


FIG.10. RADIO AND RADAR POWER SUPPLIES

EA38173632

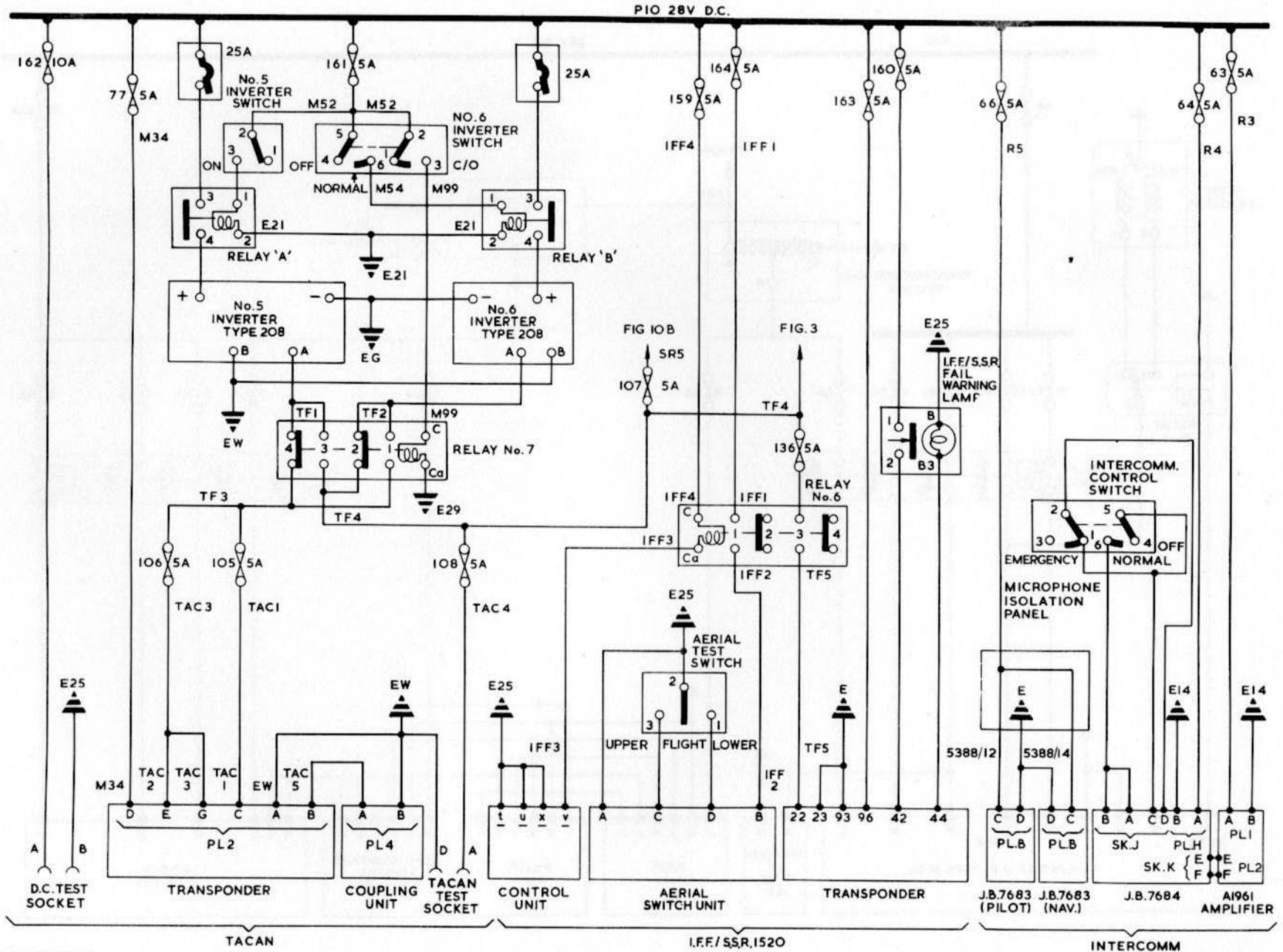


FIG. 10A. RADIO AND RADAR POWER SUPPLIES

EA 3	81	7363	1
EA 3	81	7363	2

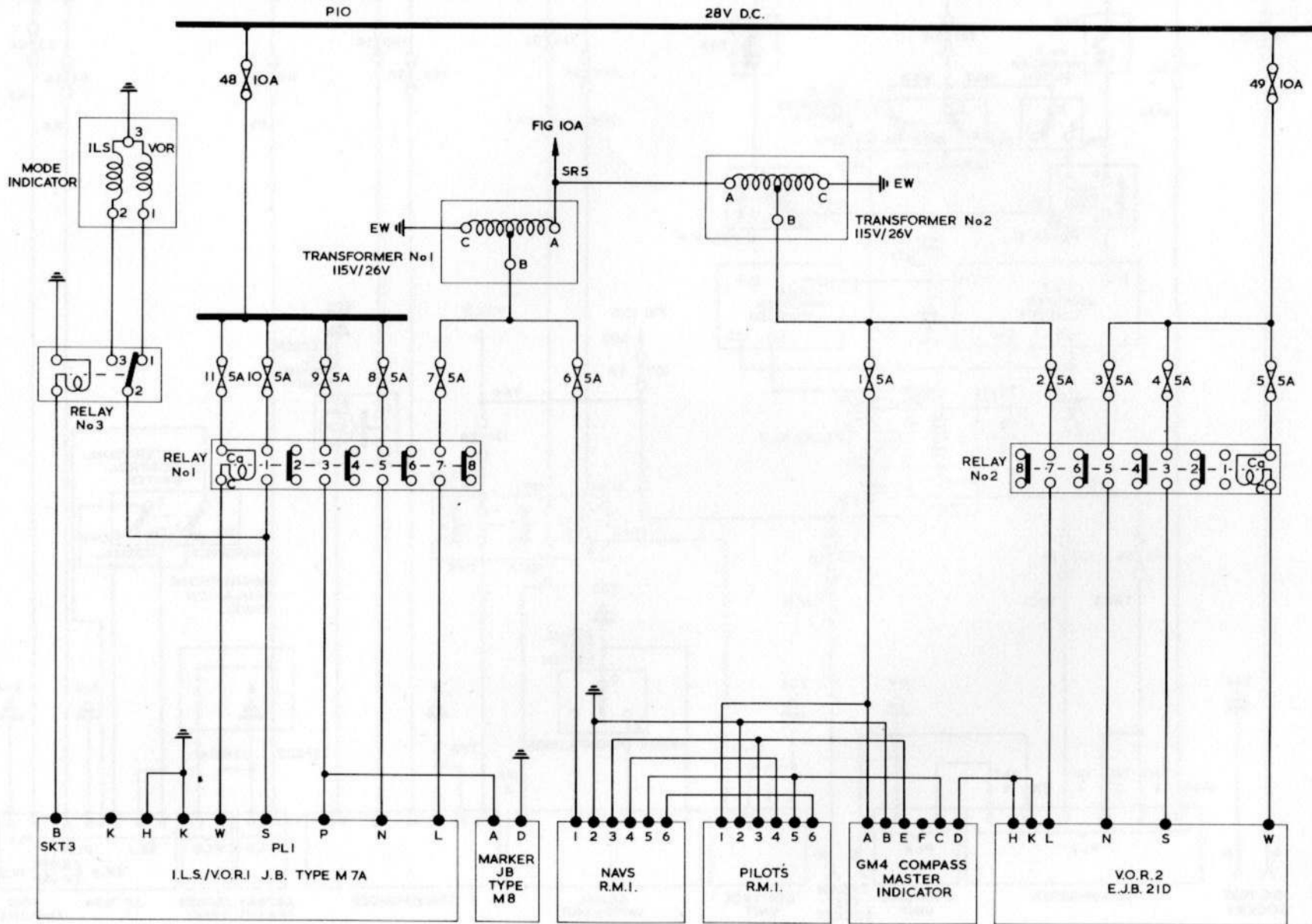


FIG. IOB RADIO AND RADAR POWER SUPPLIES

EA3 B1 7363 1 2

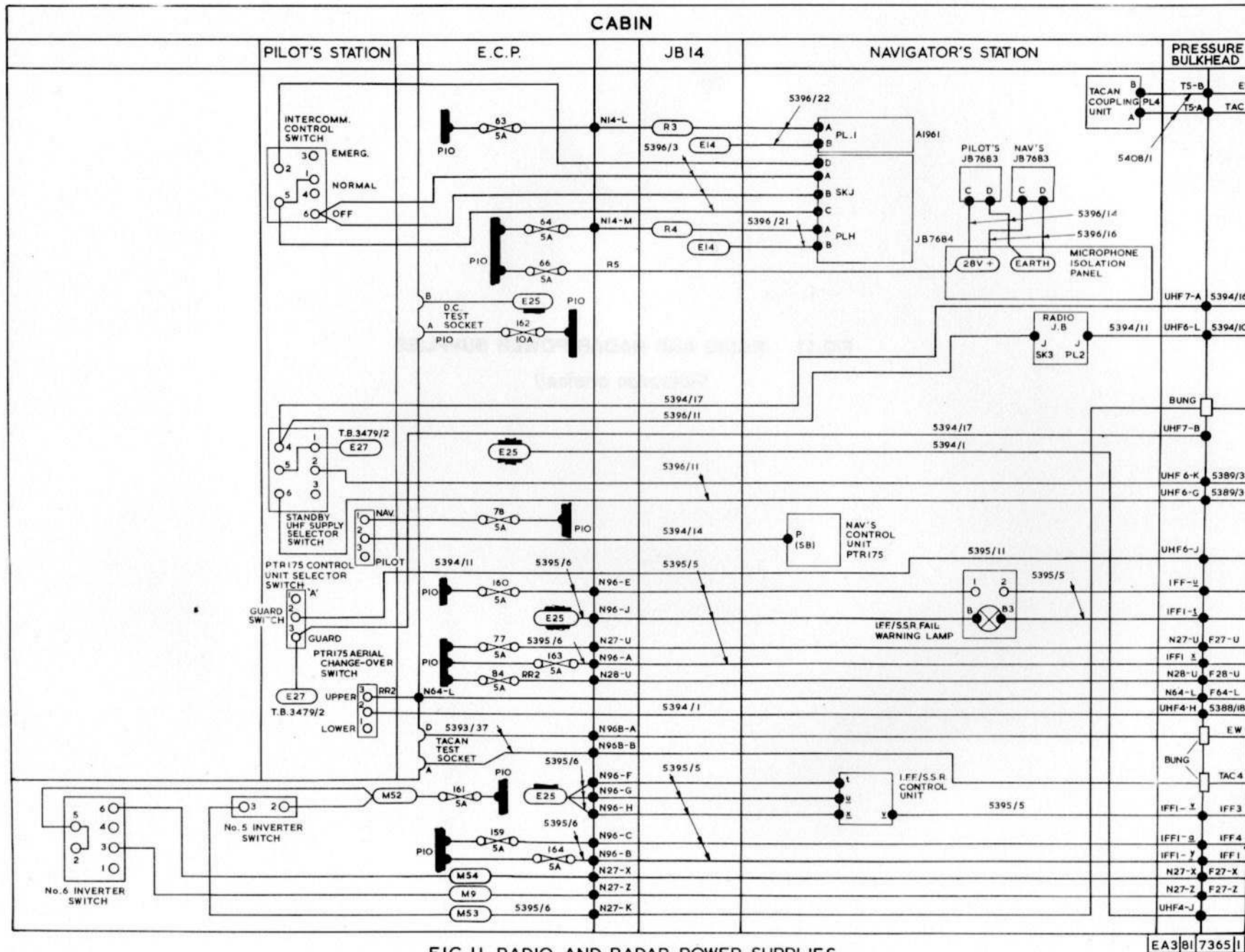


FIG. II. RADIO AND RADAR POWER SUPPLIES

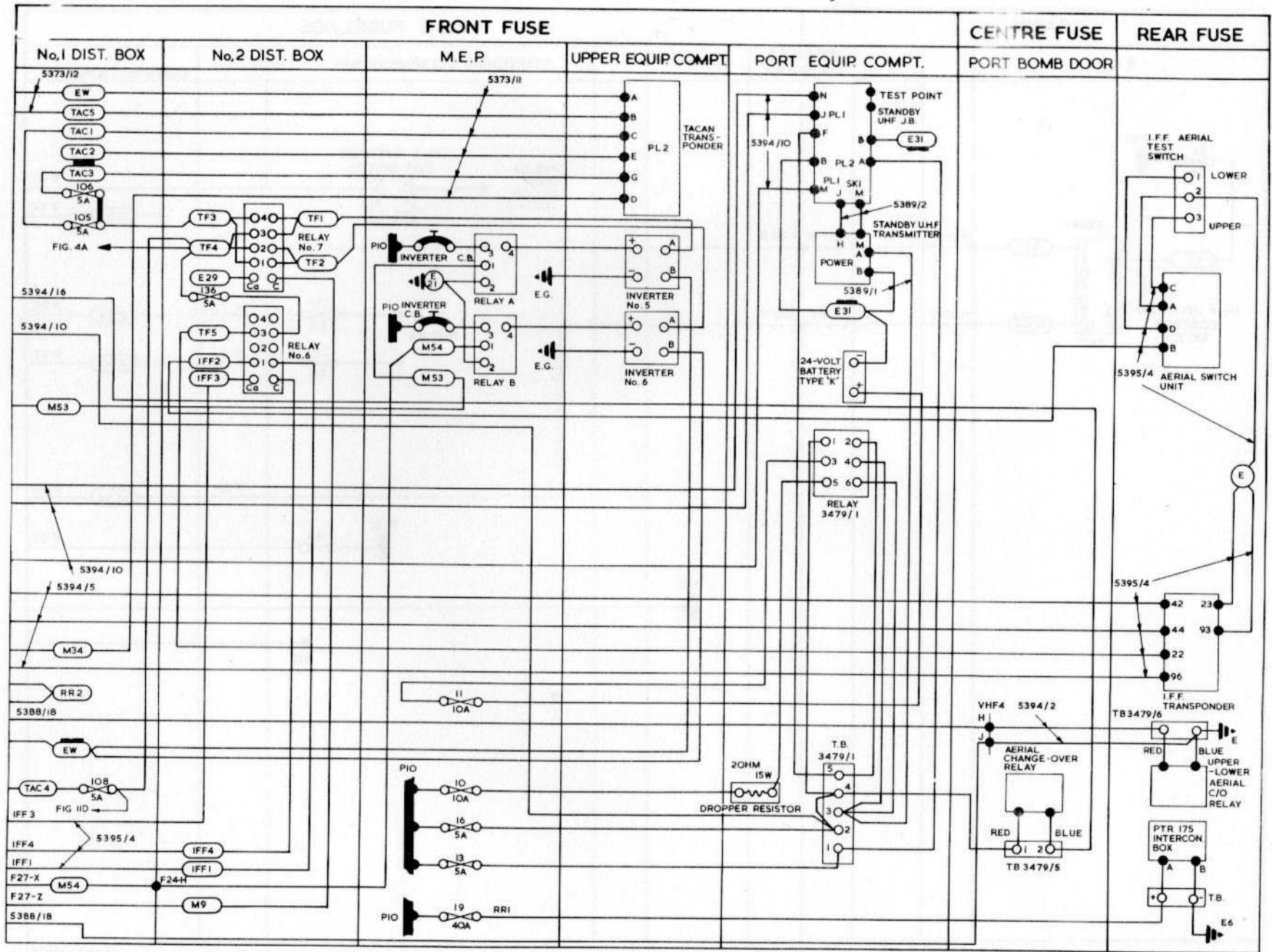


FIG. IIA. RADIO AND RADAR POWER SUPPLIES

RESTRICTED

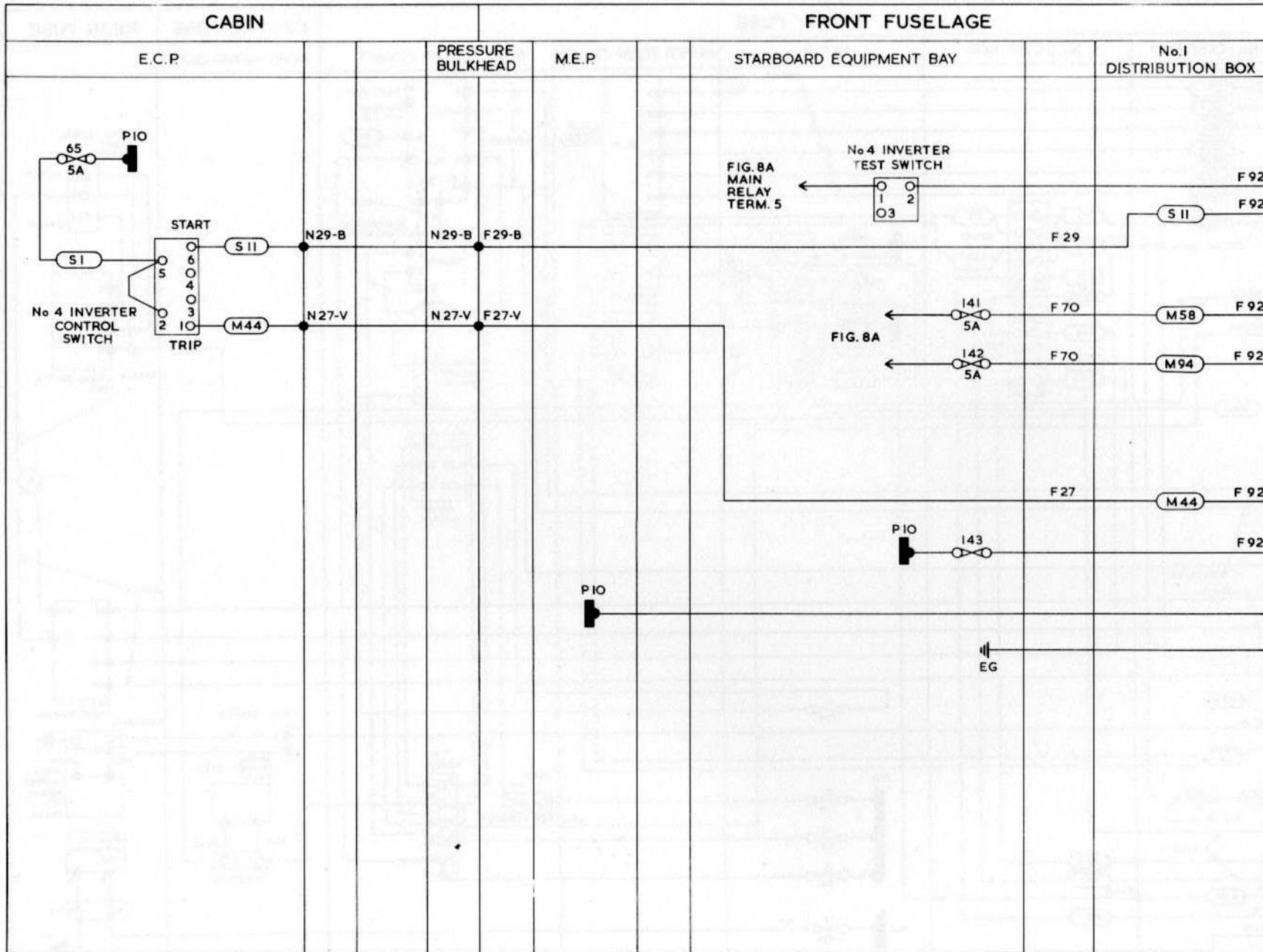
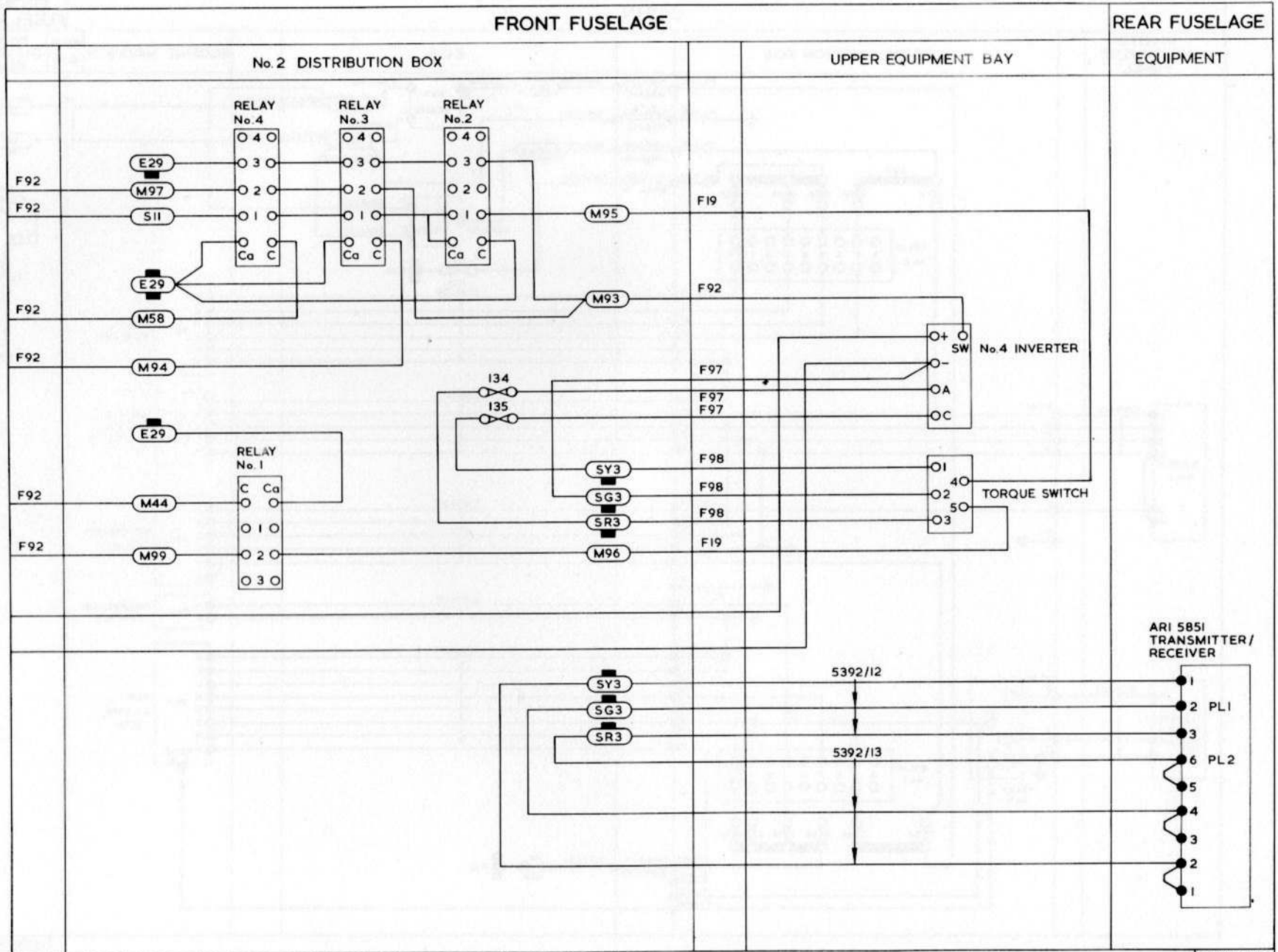


FIG. IIB. RADIO AND RADAR POWER SUPPLIES - GREEN SATIN (A.R.I. 5851)

EA3-81-7365-1

RESTRICTED



EA3-81-7365-1

FIG. IIC. RADIO AND RADAR POWER SUPPLIES - GREEN SATIN (A.R.I. 5851)

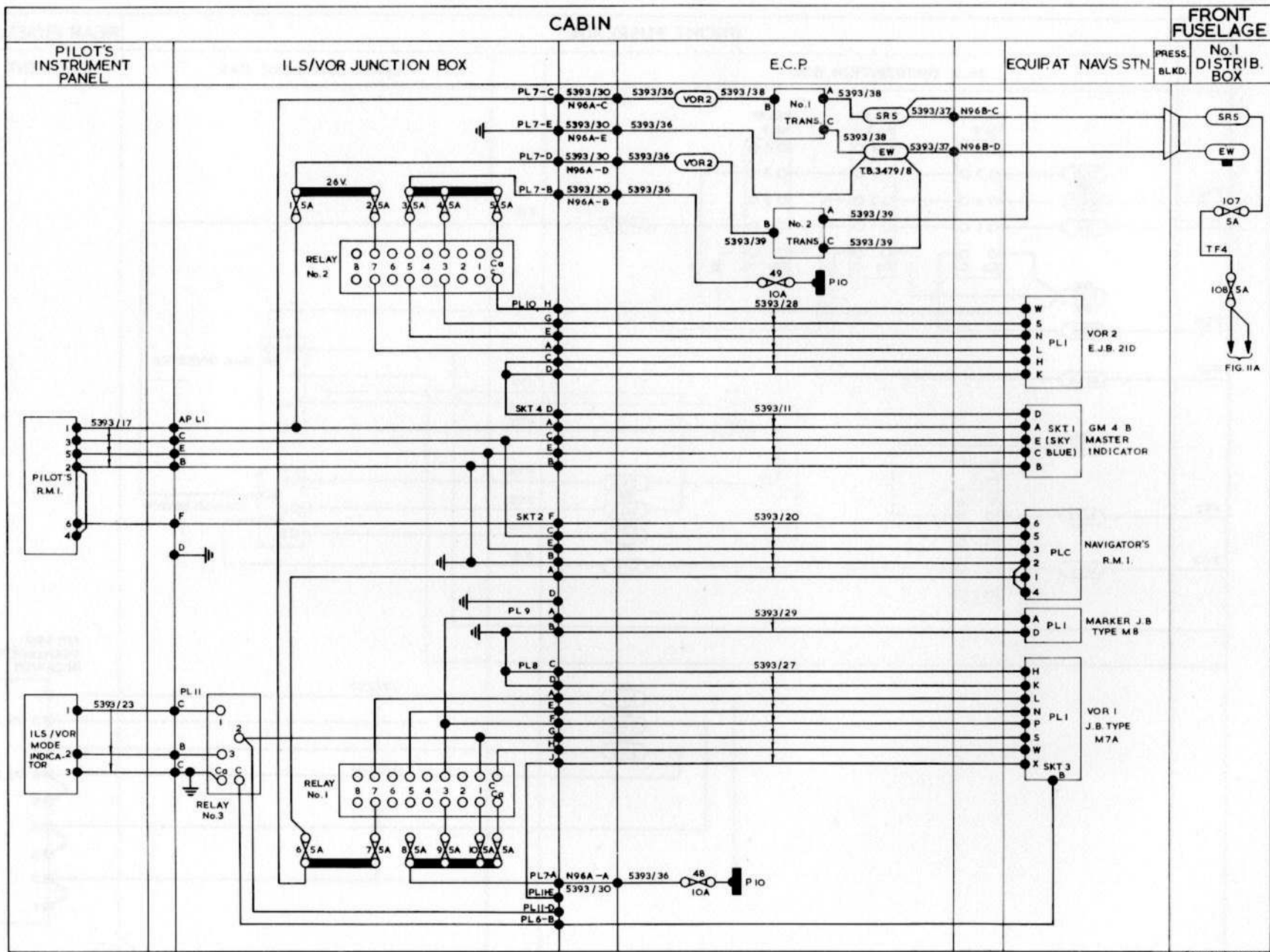


FIG. IID. RADIO AND RADAR POWER SUPPLIES - ILS./VOR (A.R.I. 23118)

## WARNING AND EMERGENCY - MOD.4868 AND MOD.5078

The following paragraphs describe the changes in the wing-tip fuel tank jettison and oxygen warning circuits associated with the above modifications.

**Wing-tip fuel tank jettison (fig.12)**

1. An additional plug and socket break is included in the d.c. supply from fuse 76 to the jettison switch. Operation of the circuit is unaffected.

**Canopy and hatch jettison (fig.12A)**

2. The pilot's canopy/snatch master switch is re-located on the port switch panel by the embodiment of Mod.5078. Operation of the system is unaffected.

**Oxygen warning indicators (fig.13)**

3. In addition to the pilot's and first navigator's oxygen warning indicators, two additional indicators are fitted to provide the pilot an indication of the first navigator's oxygen flow and vice-versa. Operation of the system is otherwise unaffected.

UK RESTRICTED

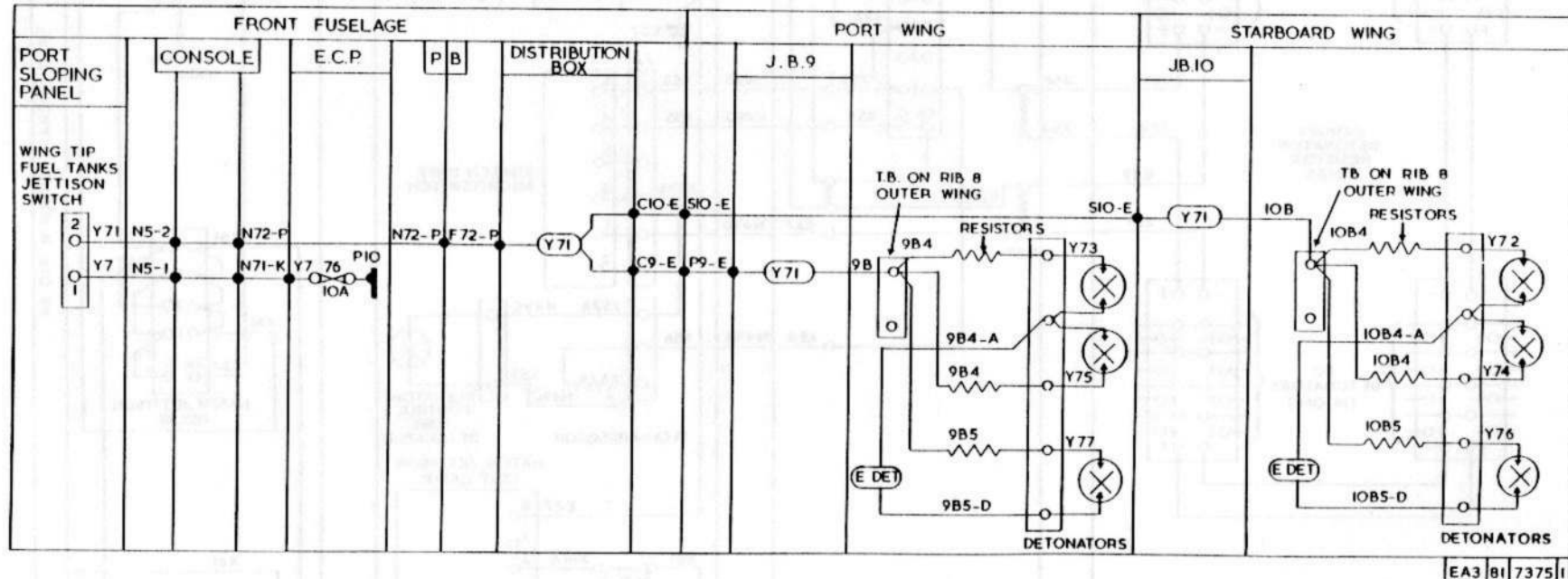
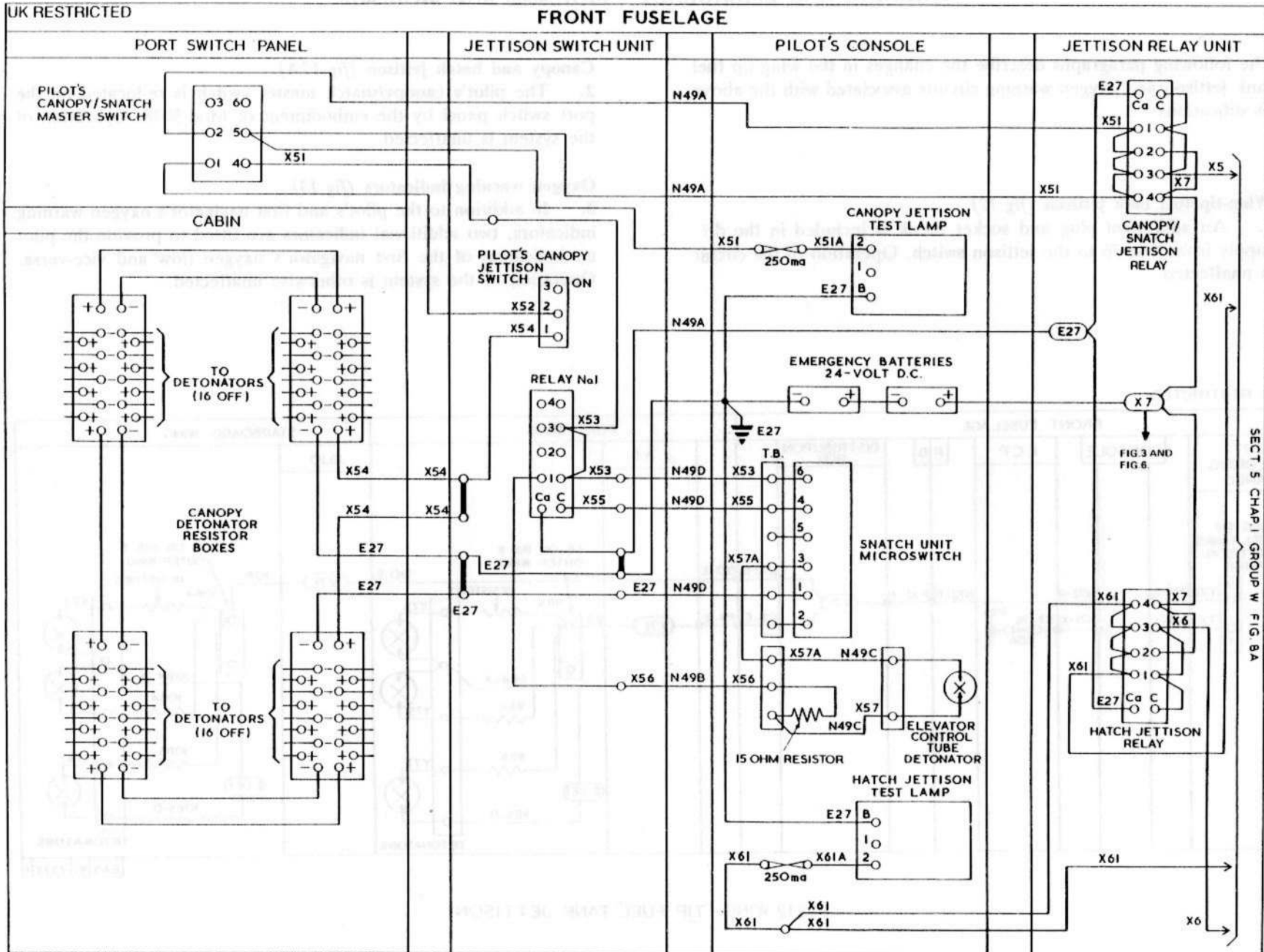


FIG.12. WING - TIP FUEL TANK JETTISON

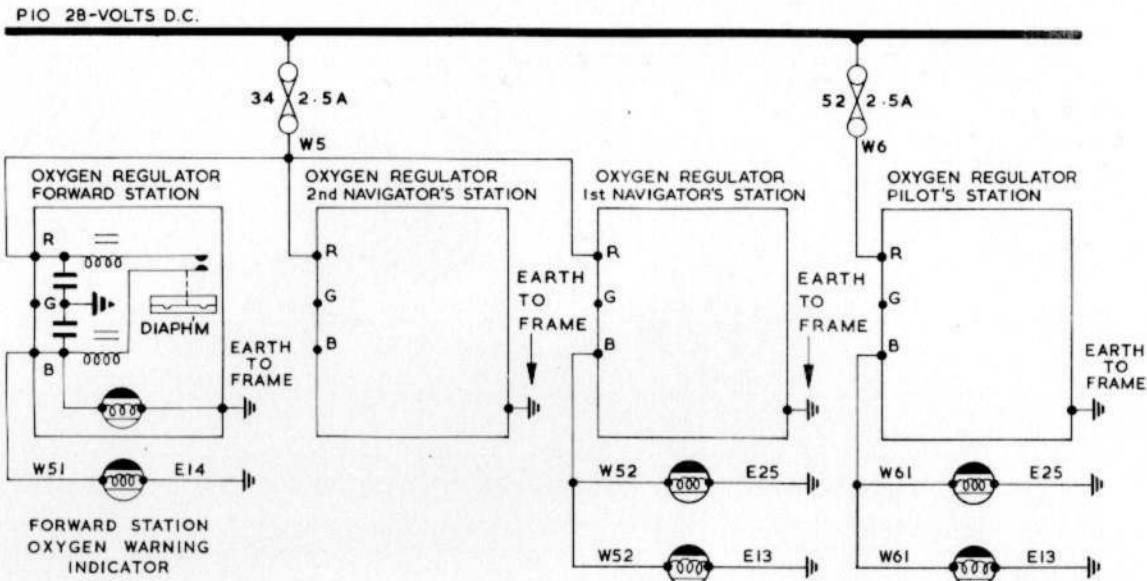


SECT. 5 CHAP. 1 GROUP W FIG. BA

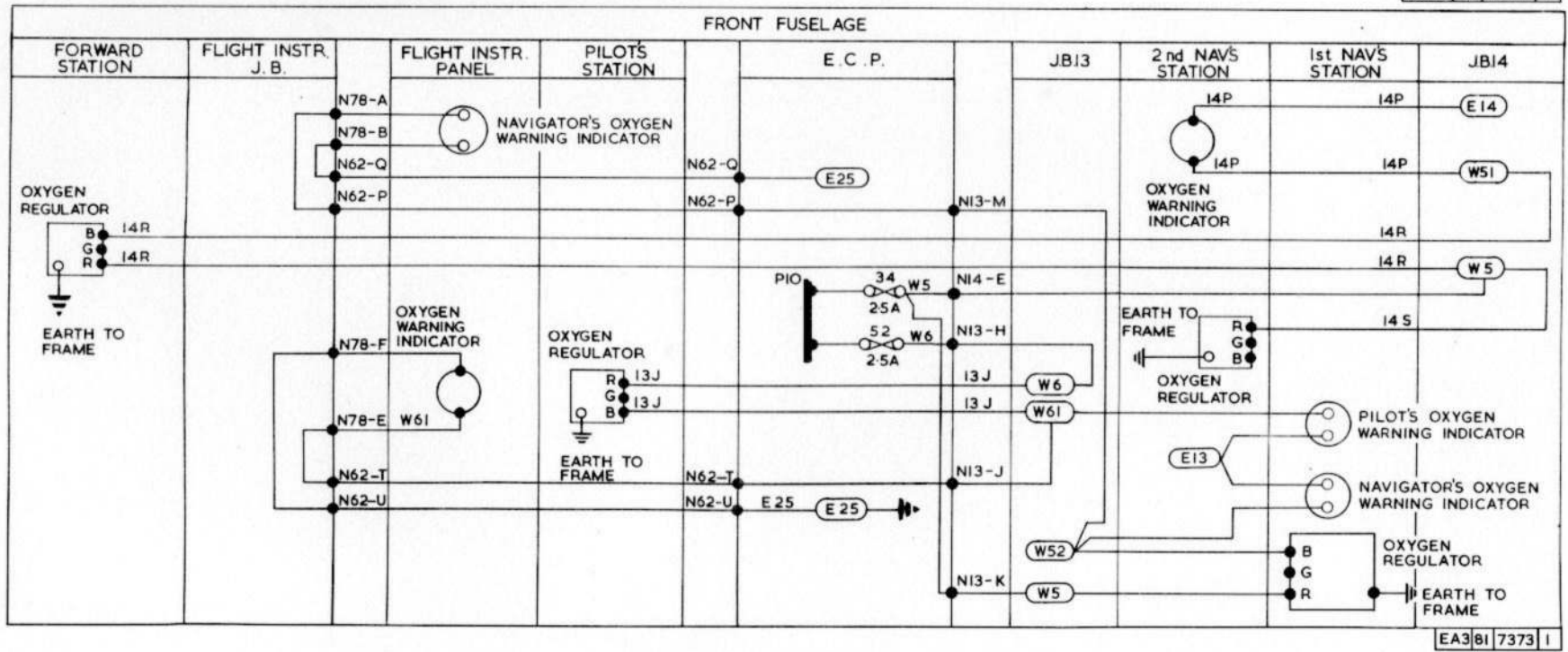
FIG.12A. CANOPY AND HATCH JETTISON

EA381643341

◀SEM/CANBERRA/0128/STC INCORPORATED▶



EA3 81 7371 1



EA3 81 7373 1

FIG. 13. OXYGEN WARNING

**FLIGHT INSTRUMENTS - MOD.4868**

The following paragraphs describe the changes in the flight instruments associated with the above modification.

**DESCRIPTION****GM4B master indicator (fig.14)**

1. A master indicator, Type E5 replaces the original indicator and provides heading information for the G.P.I. Mk.4 and A.R.I.23118.

**Automatic height encoding (fig.14A)**

2. The connector from the automatic height encoding altimeter to the I.F.F./S.S.R. installation has been recoded. Operation of the system is unaffected.

**Ground position indicator (G.P.I.) Mk.4 (fig.21)**

3. The G.P.I. Mk.4 and its mounting tray are located forward of the navigator's table. It is a mechanical computer which operates in conjunction with A.R.I.5851 and the GM4B compass. Changes in position in north/south and east/west, along or across track or latitude/longitude are computed from heading information

from the compass master indicator and ground speed/drift information from Green Satin (A.R.I.5851). Power supplies and heading information are routed to the G.P.I. via a screened junction box.

4. Electrical connections are made via its backplate assembly to five sockets, four of which are used in this installation.

**G.P.I. amplifier (fig.21)**

5. The G.P.I. amplifier, located below the navigator's table, adjacent to the microphone isolation panel, provides the power drive to the G.P.I. Mk.4 tracking servo motor.

**A.D.R.I.S. (fig.14)**

6. The air position indicator and repeater unit are not used in this installation. The air mileage unit operates in conjunction with the air mileage indicator only.

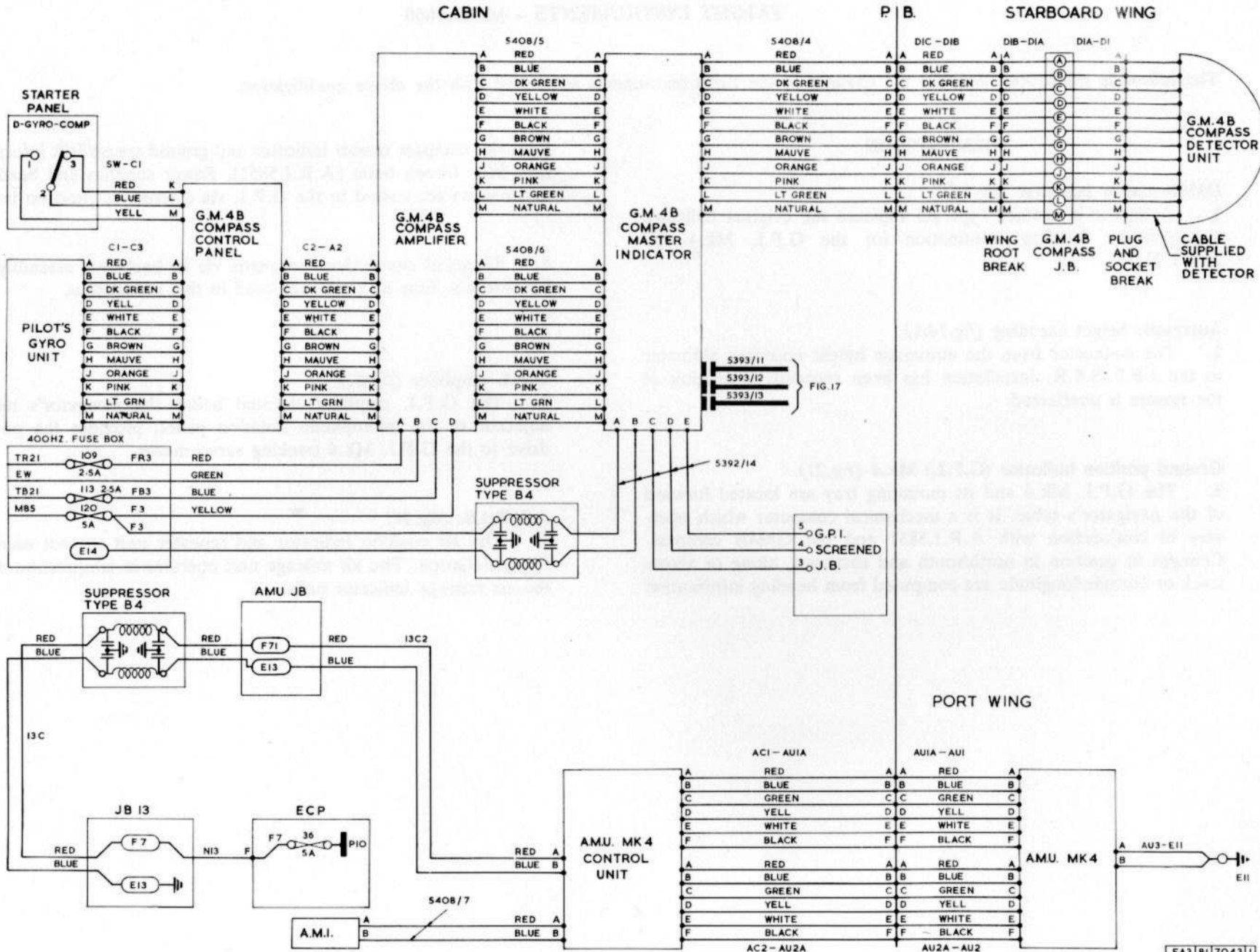


FIG. 14. G.M. 4B COMPASS AND A.M.U.

EA3 81 704311  
SRIM DRGCS 5408

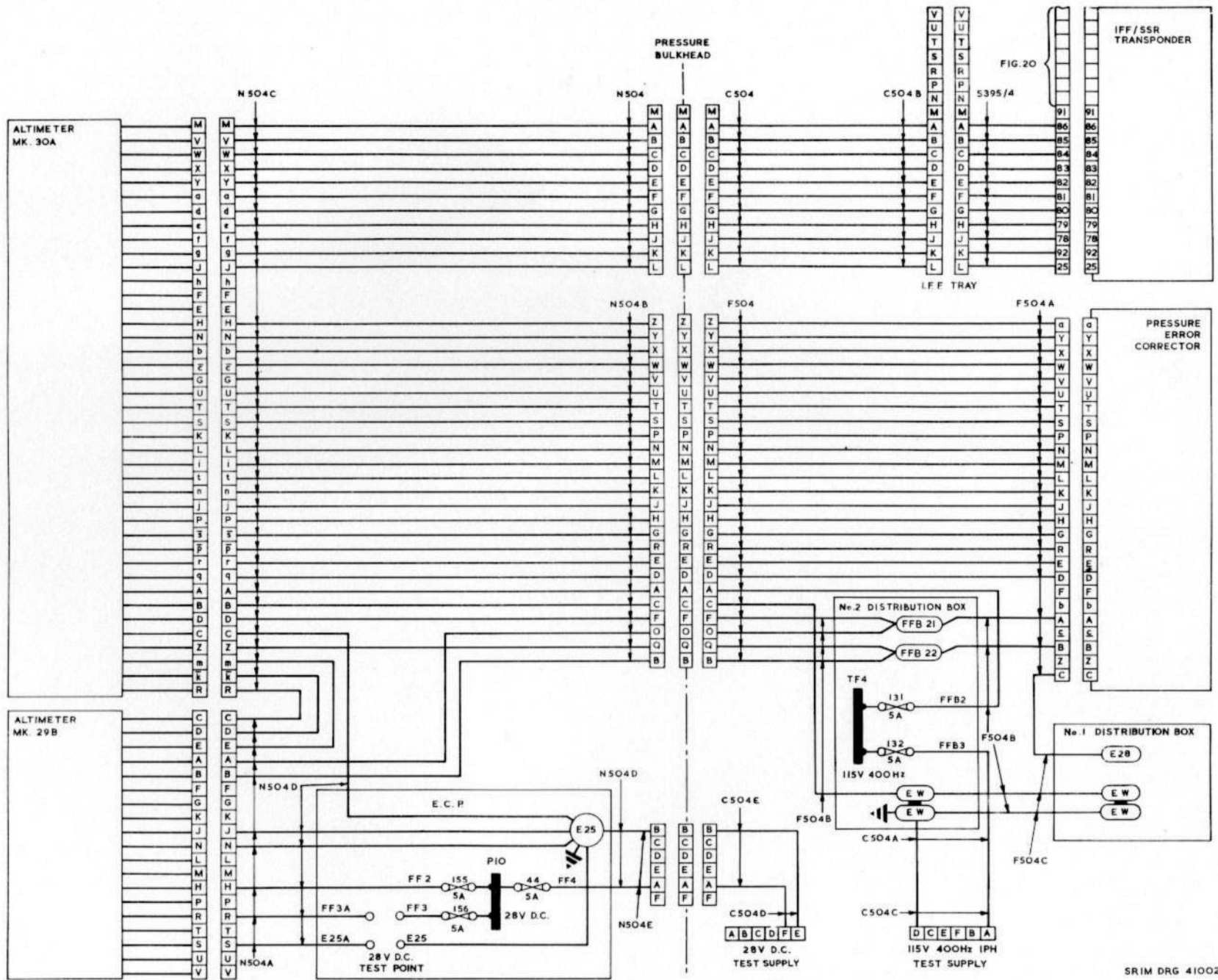


FIG.14A. INTERCONNECTION DIAGRAM — AUTOMATIC HEIGHT ENCODING

**INTERCOMMUNICATION (A.R.I.18089) - MOD.4868**

Figs.15, 15A and 15B illustrate the changes in the intercomm. system associated with the above modification. The microphone junction box no longer forms part of the system, connections between units being made using new connector assemblies. Table 4 provides connector details. Operation of the system is unaffected. The control unit SPEAK-LISTEN switch is now annotated:-

OFF  
TACAN  
MKR  
ILS/VOR 1  
V/UHF  
I/C

The LISTEN ONLY controls are annotated:-

MKR  
TACAN  
BLANK  
V/UHF  
ILS/VOR  
VOR2

These annotations reflect the replacement of the A.R.I.18011 (I.L.S.) installation with A.R.I.23118 (I.L.S./V.O.R.).

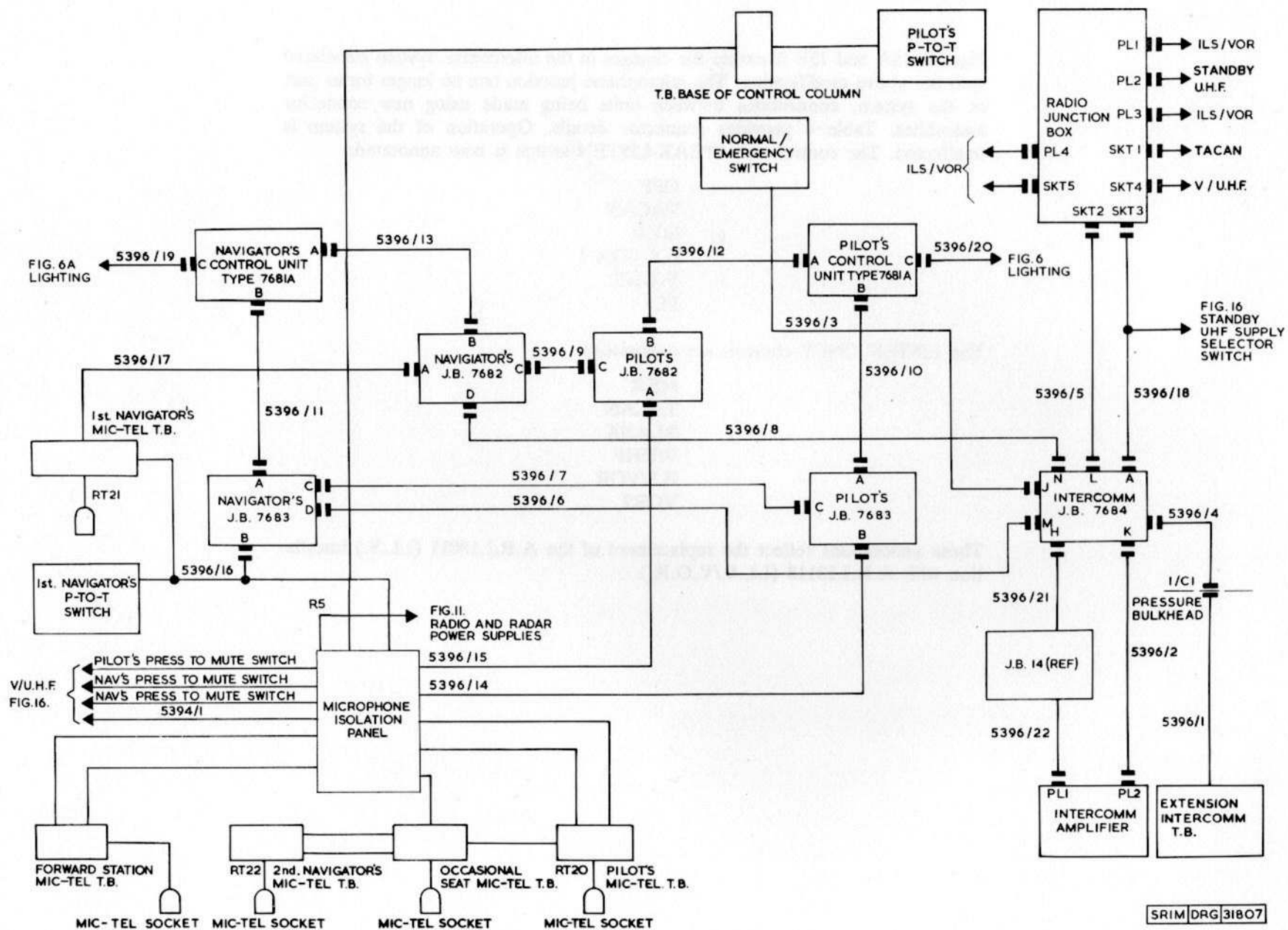
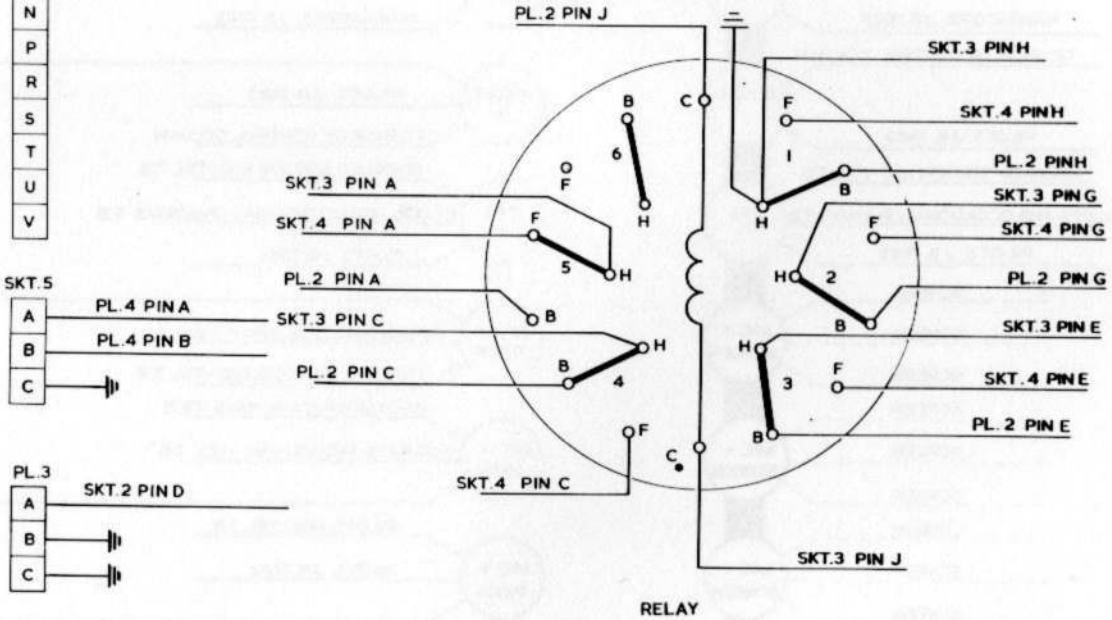
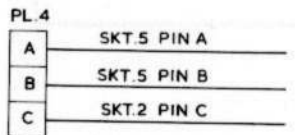
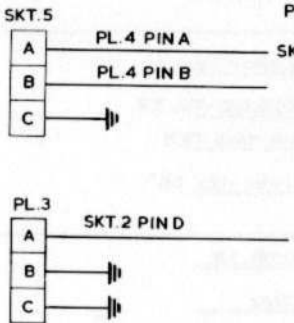
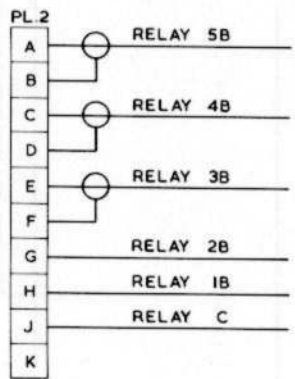
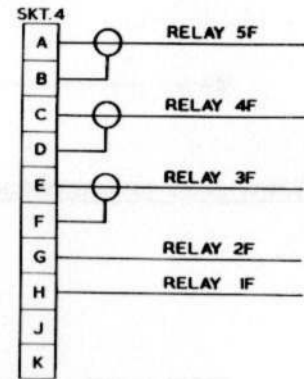
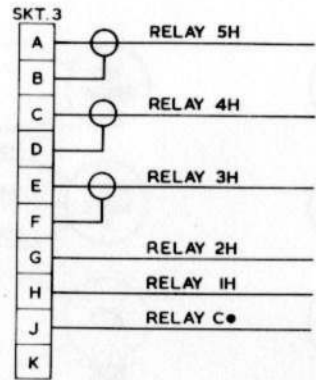
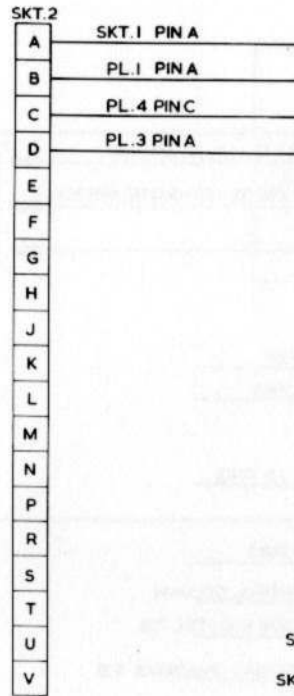
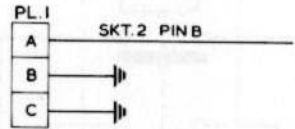
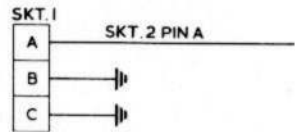


FIG. 15. INTERCONNECTION DIAGRAM - INTERCOMMUNICATION (A.R.I. 18089)

SRIM DRG 31807



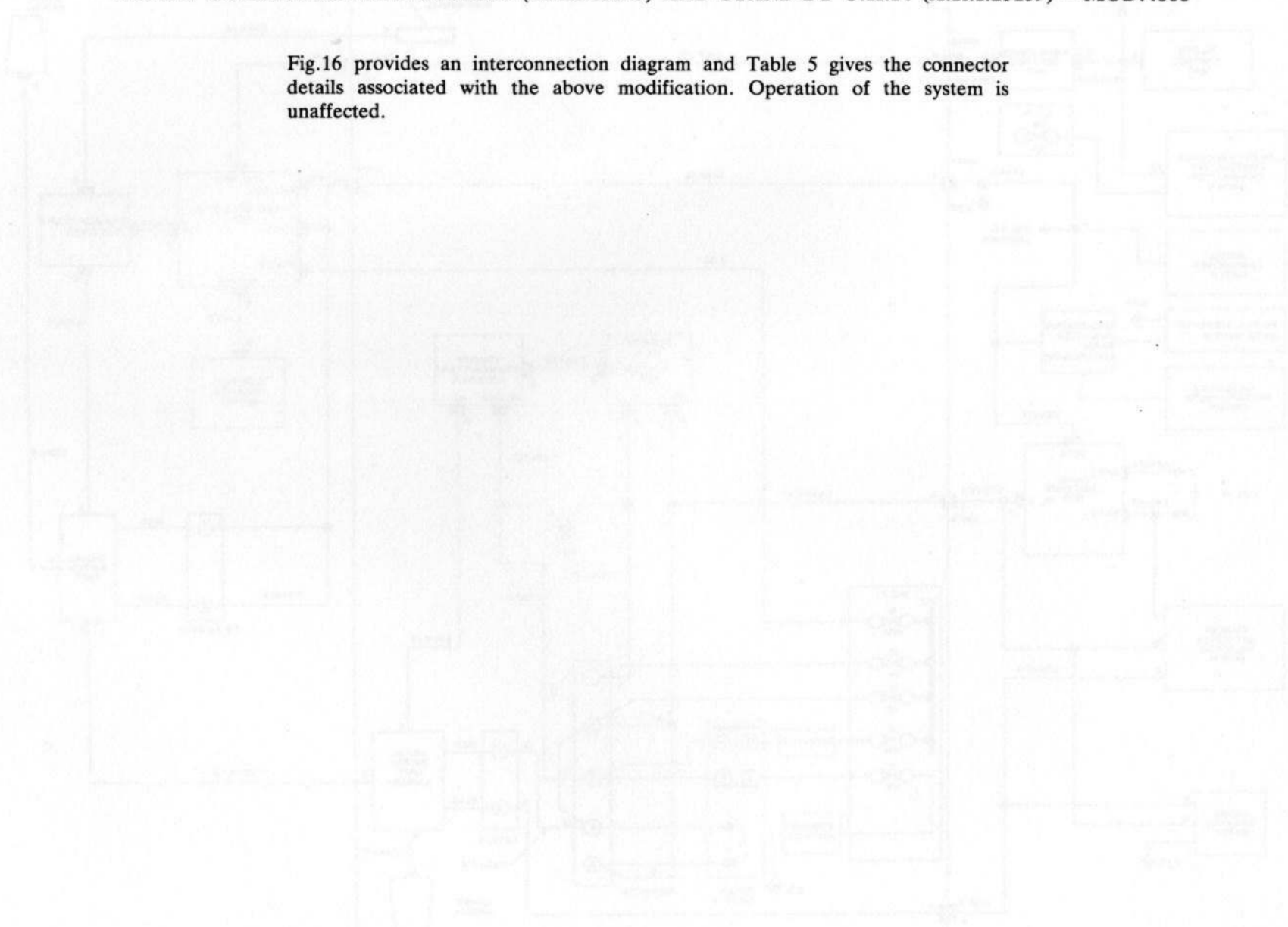


SRIM DWG 31770

FIG.15 B. RADIO JUNCTION BOX - INTERNAL WIRING

**V/U.H.F. COMMUNICATION SYSTEM (A.R.I.23143) AND STAND-BY U.H.F. (A.R.I.23159) - MOD.4868**

Fig.16 provides an interconnection diagram and Table 5 gives the connector details associated with the above modification. Operation of the system is unaffected.



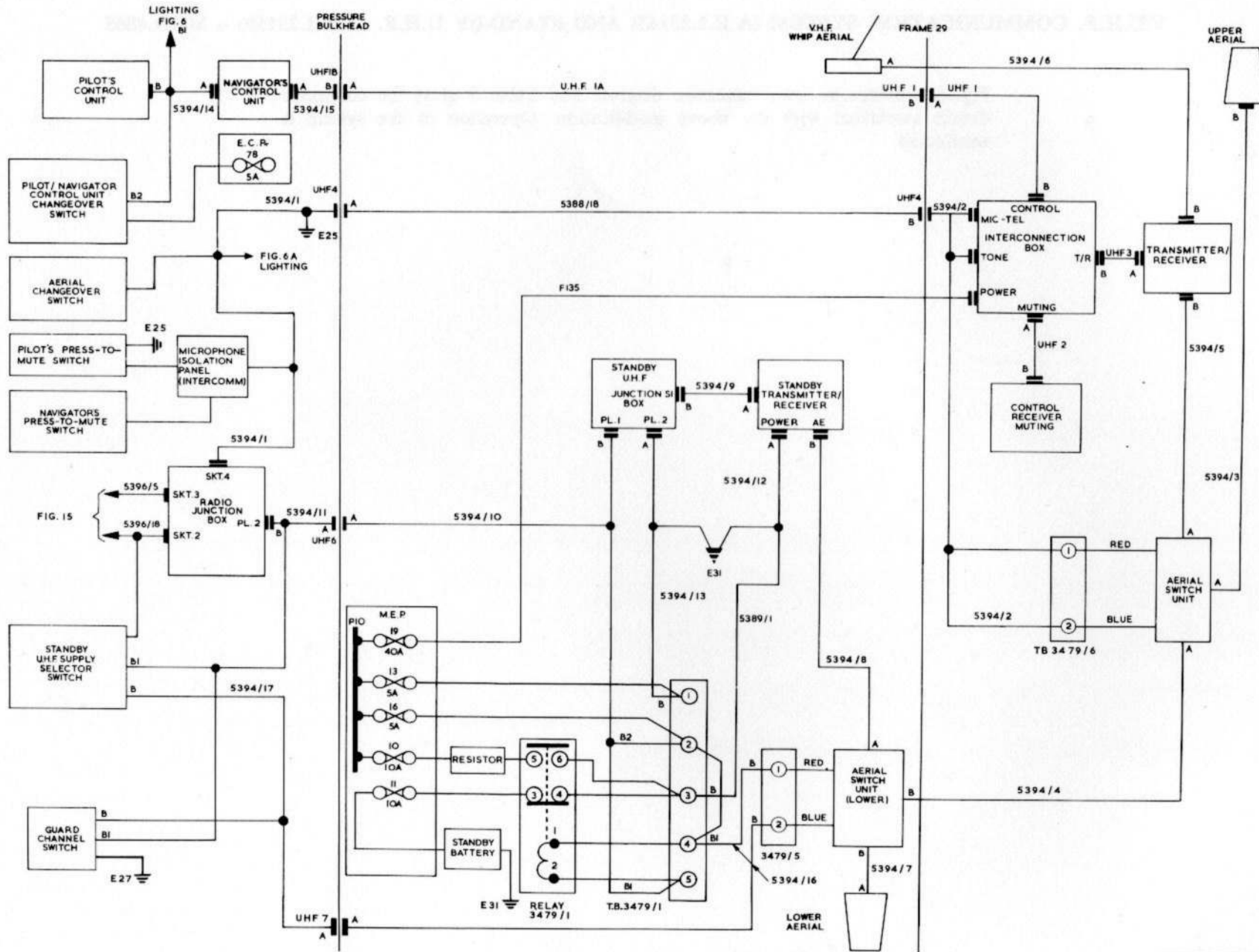


FIG. 16. INTERCONNECTION DIAGRAM-V/U.H.F. COMMUNICATION SYSTEM (A.R.I. 23143) AND STANDBY U.H.F. (A.R.I. 23159)

SRIMDRG 41087

TABLE 5

Connector details - V/U.H.F.

CONNECTOR 5394/1 (10HB/21625)

Termination A	Pin	Cable	Pin	Termination B
Pressure bulkhead (U.H.F. 4)	A	UNMS20	A	Radio J.B. SKT.4 B
		Braid	B	
	C	UNMS20	C	
		Braid	D	
		UNMS20	E	Microphone isolation panel
		Braid	F	
		UN20	G	T.B.3479/7 (lighting)
		UN20	H	
		UN20	P to M+	Aerial changeover switch
		UN20	E25	
	UN20		E.C.P.	

Braiding connected to shell at termination A

CONNECTOR 5394/2 (10HB/21626)

Termination A	Pin	Cable	Pin	Termination B
Frame 29 (U.H.F. 4)	A	UNMS20	A	Interconnection box (MIC-TEL) B
		UN20	B	
	C	UNMS20	C	
		UNMS20	D	
		UN20	E	Interconnection box (TONE)
		UN20	F	
		UN20	A	T.B.3479/6
		UN20	Term 1	
		UN20	Term 2	T.B.3479/6

CONNECTOR 5394/3 (10HB/21627)

Termination A	Pin	Cable	Pin	Termination B
Aerial switch unit	-	UR67	-	Upper aerial

CONNECTOR 5394/4 (10HB/21628)

Termination A	Pin	Cable	Pin	Termination B
Aerial switch unit	-	UR67	-	Aerial switch unit (lower)

CONNECTOR 5394/5 (10HB/21629)

Termination A	Pin	Cable	Pin	Termination B
Aerial switch unit	-	UR67	-	Transmitter/receiver

CONNECTOR 5394/6 (10HB/21630)

Termination A	Pin	Cable	Pin	Termination B
VHF whip aerial	-	UR67	-	Transmitter/receiver

CONNECTOR 5394/7 (10HB/21631)

Termination A	Pin	Cable	Pin	Termination B
Aerial switch unit (lower)	-	UR67	-	Lower aerial

continued . . .

TABLE 5 Connector details - V/U.H.F. - continued

CONNECTOR 5394/8 (10HB/21632)

Termination A	Pin	Cable	Pin	Termination B
Aerial switch unit (lower)	-	UR67	-	Stand-by transmitter/receiver (AE)

CONNECTOR 5394/9 (10HB/21633)

Termination A	Pin	Cable	Pin	Termination B
Stand-by transmitter/receiver	A	Not used	A	Stand-by U.H.F. junction box (S1)
	B	UN20 Braid	B	
	D	UNMS20	D	
	E	UN20	E	
	F	UN20	F	
	G	UNMS20 Braid	G	
	H	UN20	H	
	J	UNMS20 Braid	J	
	K	UNMS20	K	
	L	Braid	L	
	M	UN20	M	

Braiding connected to shell at termination A

CONNECTOR 5394/10 (10HB/21634)

Termination	Pin	Cable	Pin	Termination
Pressure bulkhead A (U.H.F. 6)	A	Not used	A	Stand-by U.H.F. J.B. (P1) B
	B	UN20 Braid	B	
	C	UNMS20	C	
	D	UN20	D	
	E	UNMS20	E	
	F	UNMS20 Braid	F	
	G	UN20	G	
	H	UNMS20 Braid	H	
	J	UN20	J	
	K	UN20	K	
	L	UN20	L	
T.B.3479/1 B1	Term 5	UN20	M	T.B.3479/1 B2
	Term 5	UN20	N	
Pressure bulkhead A	Term 5	UN20	F	T.B.3479/1 B2
	Term 2	UN20	F	

Braiding connected to shell at termination B

continued . . .

TABLE 5 Connector details - V/U.H.F. - continued

CONNECTOR 5394/11 (10HB/21653)

Termination A	Pin	Cable	Pin	Termination B	
Pressure bulkhead (U.H.F.6)	A	Not used		Radio J.B. B (PL2)	
	B	UN20	H		
	C	UNMS20 Braid	E F		
	D	UN20	G		
	F	UNMS20 Braid	C D		
	H	UNMS20 Braid	A B		
	L	UN20	J		
	G	UN20	Term 6		Stand-by U.H.F. Supply switch Guard channel switch B1
	K	UN20	Term 2		
	J	UN20	Term 2		

Braiding connected to shell at termination A

CONNECTOR 5394/12 (10HB/21636)

Termination A	Pin	Cable	Pin	Termination B
Stand-by transmitter/receiver (PWR)	A	Min. 2R Red	Term 3	T.B.3479/1
	B	Min. 2R Blue	E31	

CONNECTOR 5394/13 (10HB/21637)

Termination A	Pin	Cable	Pin	Termination B
Stand-by U.H.F. Junction box (P2)	A	UN20	Term 1	T.B.3479/1
	B	UN20	E31	

CONNECTOR 5394/14 (10HB/21638)

Termination	Pin	Cable	Pin	Termination
Lighting T.B. B1	L52	UN22	P	Pilot's control unit B
	A		A	
	B		B	
	C		C	
	D		D	
	E		E	
	F		F	
	H		H	
	J		J	
	K		K	
Navigator's control unit A	L	UN22	L	Pilot/navigator control unit changeover switch B2
	M		M	
	N		N	
	R		R	
	S		S	
	T		T	
	U		U	
	V		V	
	W		W	
	X		X	
Y	Y			
Z	Z			
a	a			
b	b			
c	c			
d	d			
f	f			
g	g			
h	h			
P		Term 2		

continued . . .

**RESTRICTED**

**TABLE 5 Connector details - V/U.H.F. - continued**

**CONNECTOR 5394/15 (10HB/21639)**

Termination A	Pin	Cable	Pin	Termination B	
	A	Equipment wire, Type 2	A	Pressure bulkhead (U.H.F.1B)	
	B				B
	C				C
	D				D
	E				E
	F				F
	H				H
	J				J
	K				K
	L				L
	M				M
	N				N
	P				P
	R				R
Navigator's control unit	S		S		
	T		T		
	U		U		
	V		V		
	W		W		
	X		X		
	Y		Y		
	Z		Z		
	a		a		
	b		b		
	c		c		
	d		d		
	f		f		
	g		g		
	h	Equipment wire, Type 2	h		
	i		i		

**CONNECTOR 5394/16 (10HB/21640)**

Termination A	Pin	Cable	Pin	Termination B
Pressure bulkhead (U.H.F.7)	A	UN20	Term 2	T.B.3479/5 B
	A			
T.B.3479/1 B1	Term 4	UN20	Term 1	

**CONNECTOR 5394/17 (10HB/21641)**

Termination A	Pin	Cable	Pin	Termination B
Pressure bulkhead (U.H.F.7)	A	UN20	Term 4	Stand-by U.H.F. supply switch Guard channel switch
	B	UN20	Term 3	

**CONNECTOR 5388/18 (10HB/21537)**

Termination A	Pin	Cable	Pin	Termination B
Pressure bulkhead (U.H.F.4)	A	Min.6	A	Frame 29 (U.H.F.4)
	B	Min.6	B	
	C	Min.6	C	
	D	Min.6	D	
	E	Min.6	E	
	F	Min.6	F	
	G	NYVIN22	G	
	H	NYVIN22	H	
	J	NYVIN22	J	

continued . . .

TABLE 5 Connector details - V/U.H.F. - continued

CONNECTOR U.H.F. 1 (EB6-82-229)					CONNECTOR U.H.F.1A (EA3-82-553)				
Termination A	Pin	Cable	Pin	Termination B	Termination A	Pin	Cable	Pin	Termination B
Frame 29 (U.H.F. 1)	A	Equipment wire 22	A	Interconnection box (CONTROL)	A	Equipment wire 22	A	A	Frame 29 (U.H.F. 1)
	B		B		B				
	C		C		C				
	D		D		D				
	E		E		E				
	F		F		F				
	H		H		H				
	J		J		J				
	K		K		K				
	L		L		L				
	M		M		M				
	N		N		N				
	P		P		P				
	R		R		R				
	S	S	S						
	T	T	T						
	U	U	U						
	V	V	V						
	W	W	W						
	X	X	X						
	Y	Y	Y						
	Z	Z	Z						
	a	a	a						
	b	b	b						
	c	c	c						
	d	d	d						
e	e	e							
f	f	f							
g	Equipment wire 22	g	g						
h		h	h						

TABLE 5 Connector details - V/U.H.F. - continued

CONNECTOR U.H.F.2 (EA3.82.231)

CONNECTOR U.H.F.3 (EA3.82.233) - continued

Termination A	Pin	Cable	Pin	Termination B
Interconnection box	A	Min.4D	A	Control receiver muting
	C		C	
	D	Min.4D	D	
	E		E	

Termination A	Pin	Cable	Pin	Termination B
Transmitter/receiver	a	Equipment wire 22	a	Interconnection box
	b		b	
	c		c	
	d		d	
	e		e	
	f		f	
	g		g	
	h		h	
	i		i	
	j		j	
	k		k	
	m		m	
	n		n	
	p		p	
	q		q	
	r		r	
	s		s	
t	t			
u	Equipment wire 22	u		
w	w			

CONNECTOR U.H.F.3 (EA3.82.233)

Termination A	Pin	Cable	Pin	Termination B
Transmitter/receiver	A	Q16	A	Interconnection box
	B	Q16	B	
	C	Q22	C	
	D	Q22	D	
	E	Q22	E	
	F	Q22	F	
	H	Q22	H	
	J	Q22	J	
	K	Q22	K	
	L	Q22	L	
	M	Q22M	M	
	N	Q22M	N	
	P	Q22	P	
	R	103/202/GY	R	
	S	103/202/GY	S	
	T	Q22	T	
	U	Q22	U	
V	Q22	V		
W	Q22	W		

**I.L.S./V.O.R. AD260 (A.R.I.23118) - MOD.4868, 5251 and 5263**

The following paragraphs provide a description of the I.L.S./V.O.R. system introduced by the above modifications.

**LIST OF CONTENTS**

	<i>Para.</i>
<i>Introduction</i> .....	1
<i>Control units, Type 7430M</i> .....	5
<i>Navigation units</i> .....	6
<i>V.H.F. receivers</i> .....	7
<i>Glideslope receiver</i> .....	8
<i>Radio-magnetic indicators (R.M.I.)</i> .....	9
<i>Omni-bearing selector and indicator (O.B.S./IND.)</i> .....	10
<i>Interconnecting box, Type M7A</i> .....	11
<i>Interconnecting box, Type E.J.B.21D</i> .....	12
<i>Interconnecting box, Type M8</i> .....	13
<i>I.L.S./V.O.R. junction box</i> .....	14
<i>Marker receiver, indicators and sensitivity switch</i> .....	17
<i>Aerials</i> .....	18
<i>Mode indicator</i> .....	21
<i>Voice/range switch</i> .....	22

**LIST OF TABLES**

	<i>Table</i>
<i>Connector details - I.L.S./V.O.R.</i> .....	6

**LIST OF ILLUSTRATIONS**

	<i>Fig.</i>
<i>Interconnection diagram - I.L.S./V.O.R. (A.R.I.23118)</i> .....	17
<i>I.L.S./V.O.R. junction box - internal wiring</i> .....	18-18A

### Introduction

1. The I.L.S installation provides navigation, I.L.S. guidance and position marker information derived from the following sources:-

- V.O.R. beacons
- I.L.S. installations
- G.M.4B compass master indicator

2. The main units within the system are as follows:-

- Control unit (2)
- Navigation unit (2)
- V.H.F. receiver (2)
- Glideslope receiver
- Marker receiver
- Radio-magnetic indicator (2)
- Omni-bearing selector and indicator (O.B.S./IND.)
- Interconnecting boxes (3)
- I.L.S./V.O.R. junction box
- Marker, glideslope and V.O.R./localizer aerials

3. The I.L.S./V.O.R. installation operates in the frequency range of 108 MHz to 135.95 MHz and the marker system at a fixed frequency of 75 MHz. Selection of the appropriate frequency determines whether I.L.S. or V.O.R. information is displayed.

4. Indications to the aircrew are provided in the following forms:-

- Audio signals via the intercomm. system
- Marker lights on the pilot's instrument panel
- Panel mounted instruments

### Control Units, Type 7430M

5. Two control units are provided to enable the navigator to select the required frequency for each channel and are located above the E.C.P. Each unit also contains an ON/OFF/VOLUME control. The upper and lower units control the I.L.S./V.O.R.1 and V.O.R.2 channels respectively.

### Navigation units

6. The I.L.S./V.O.R.1 and V.O.R.2 navigation units are located in their racks, to the left of the 1st navigator's seat and below the navigator's table respectively. Information from the G.M.4B compass and the localizer aerials is processed according to the mode selected to a form suitable for the two radio magnetic indicators and the O.B.S./IND. (VOR 1 only).

### V.H.F. receivers

7. The I.L.S./V.O.R.1 and V.O.R.2 receivers are located in their racks adjacent to their associated navigation units and detect signals from the V.O.R./localizer aerials. Tuning is carried out from the appropriate control unit (para.5). The input signals are processed into a form suitable for the navigation units and provide an audio output for the intercomm. system.

### Glideslope receiver

8. This receiver forms part of the I.L.S./V.O.R.1 channel and processes signals from the glideslope aerial into a form suitable to operate the O.B.S./IND. elevation pointers. It operates within the frequency range of 329.3 MHz to 335 MHz and is located in its rack adjacent to the I.L.S./V.O.R.1 channel navigation unit and V.H.F. receiver.

### Radio-magnetic indicators (R.M.I.)

9. Two indicators, one located on the pilot's instrument panel and the other on the navigator's instrument panel, provide a combined V.O.R.1/V.O.R.2 display. TO and FROM flags indicate whether the aircraft is flying towards, or away from the beacon.

### Omni-bearing selector and indicator (O.B.S./IND.)

10. Located on the pilot's instrument panel, this indicator combines the function of V.O.R.1 bearing selector and deviation indicator from information received from the V.O.R.1 navigation unit. Warning flags obscure the indications in the event of conditions making the indications unreliable.

**Interconnecting box, Type M7A**

11. This backplate type junction box provides a means of connecting the I.L.S./V.O.R.1 channel navigation unit and V.H.F. and glideslope receivers to their external circuits. A voice/range filter, R.M.I. card amplifier and a matching transformer for the audio output are incorporated. It is located at the rear of the I.L.S./V.O.R.1 channel units.

**Interconnecting box, Type E.J.B.21D**

12. This backplate type junction box provides a means of connecting the V.O.R.2 channel navigation unit and V.H.F. receiver to their external circuits.

**Interconnecting box, Type M8**

13. This backplate type junction box, provides a means of connecting the marker receiver to its external circuits and is located below the I.L.S./V.O.R.1 channel units.

**I.L.S./V.O.R. junction box**

14. This junction box facilitates interconnection system components and incorporates system fuses and power supply relays. It is located forward of the navigator's instrument panel.

15. No.1 and No.2 relays are energized when I.L.S./V.O.R.1 and V.O.R.2 channels respectively are selected to ON. Contacts of No.1 relay connects 26 volts, 400 Hz, single-phase a.c. from transformer No.1 in the E.C.P. and 28 volts d.c. from fuse 48 to the I.L.S./V.O.R.1 channel. Contacts of No.2 relay connects 26 volts, 400 Hz, single-phase a.c. from transformer No.2 in the E.C.P. and 28 volts d.c. from fuse 49 to the V.O.R.2 channel.

16. No.3 relay controls the operation of the pilot's I.L.S./V.O.R. mode indicator.

**Marker receiver, indicators and sensitivity switch**

17. The marker receiver operates at a fixed frequency of 75 MHz in conjunction with the marker aerial and indicators to provide the pilot an indication of the proximity of a marker beacon. The indicators, blue, amber and white, flash when the aircraft passes the outer, middle and inner markers respectively. The sensitivity switch, situated on the pilot's instrument panel adjacent to the indicators and annotated HIGH-MED-LOW, reduces the sensitivity of the system when nearing the beacon.

**Aerials**

18. Four aerials are provided for the I.L.S./V.O.R. installation. A Type 237 aerial, located in the starboard inner wing detects marker beacon signals for the marker receiver.

19. A Type 238 aerial, mounted in the starboard outer wing leading edge, receives glideslope signals for the I.L.S./V.O.R. channel.

20. Two Type 140-LRU-14A aerials, together with their associated balance unit, are mounted in the fin and receive V.O.R. and I.L.S. localiser information for the I.L.S./V.O.R.1 and V.O.R.2 channels.

**Mode indicator**

21. The mode indicator is located on the pilot's instrument panel and indicates whether I.L.S. or V.O.R. information is being displayed.

**Voice/range switch**

22. Located above the E.C.P., this switch enables the navigator to select I.L.S. identification or left/right deviation signals from the voice range filter in the interconnecting box, Type M7A.

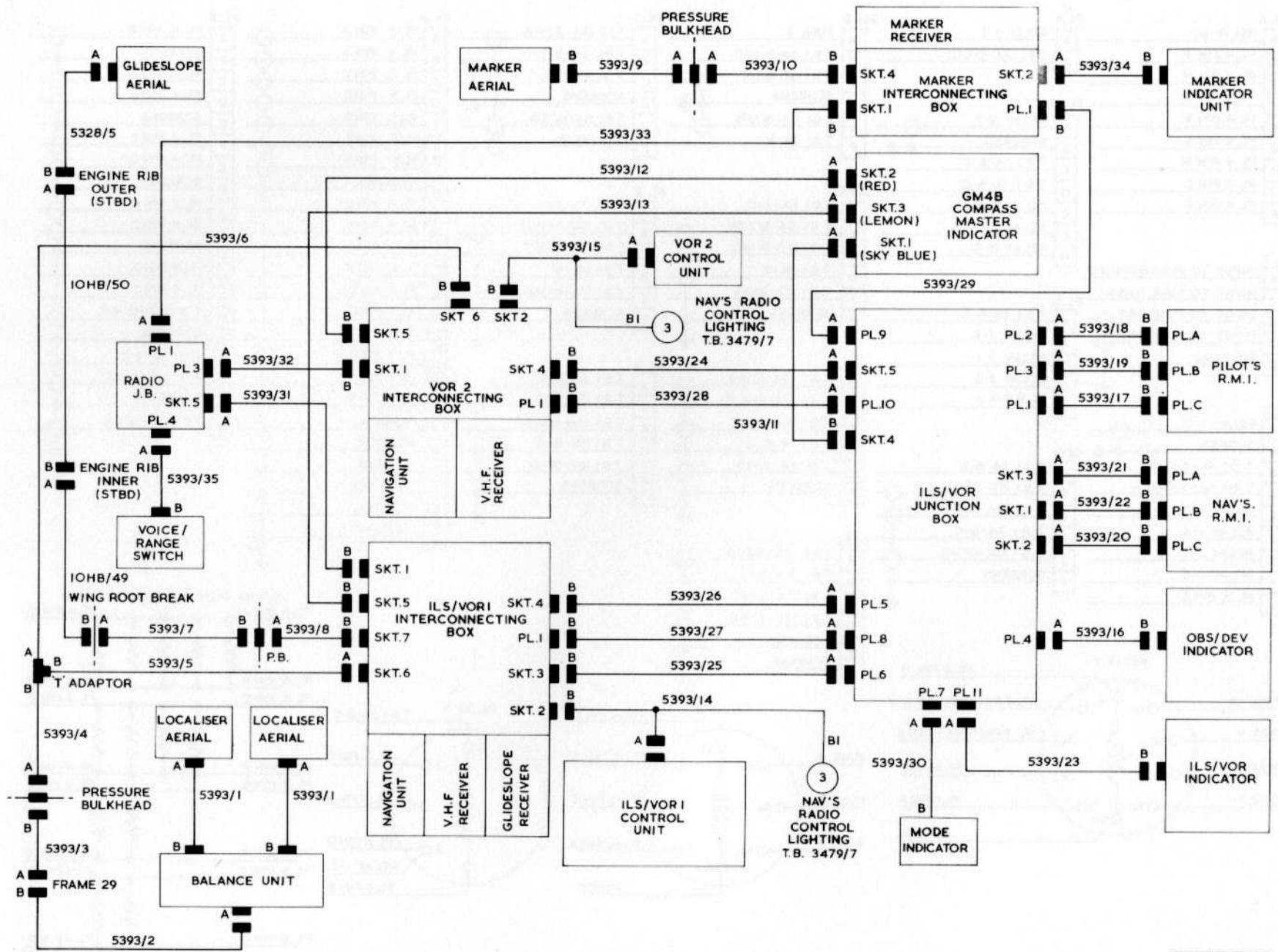


FIG.17. INTERCONNECTION DIAGRAM - I.L.S./V.O.R. (A.R.I. 23118)

SRIM DRG 4001

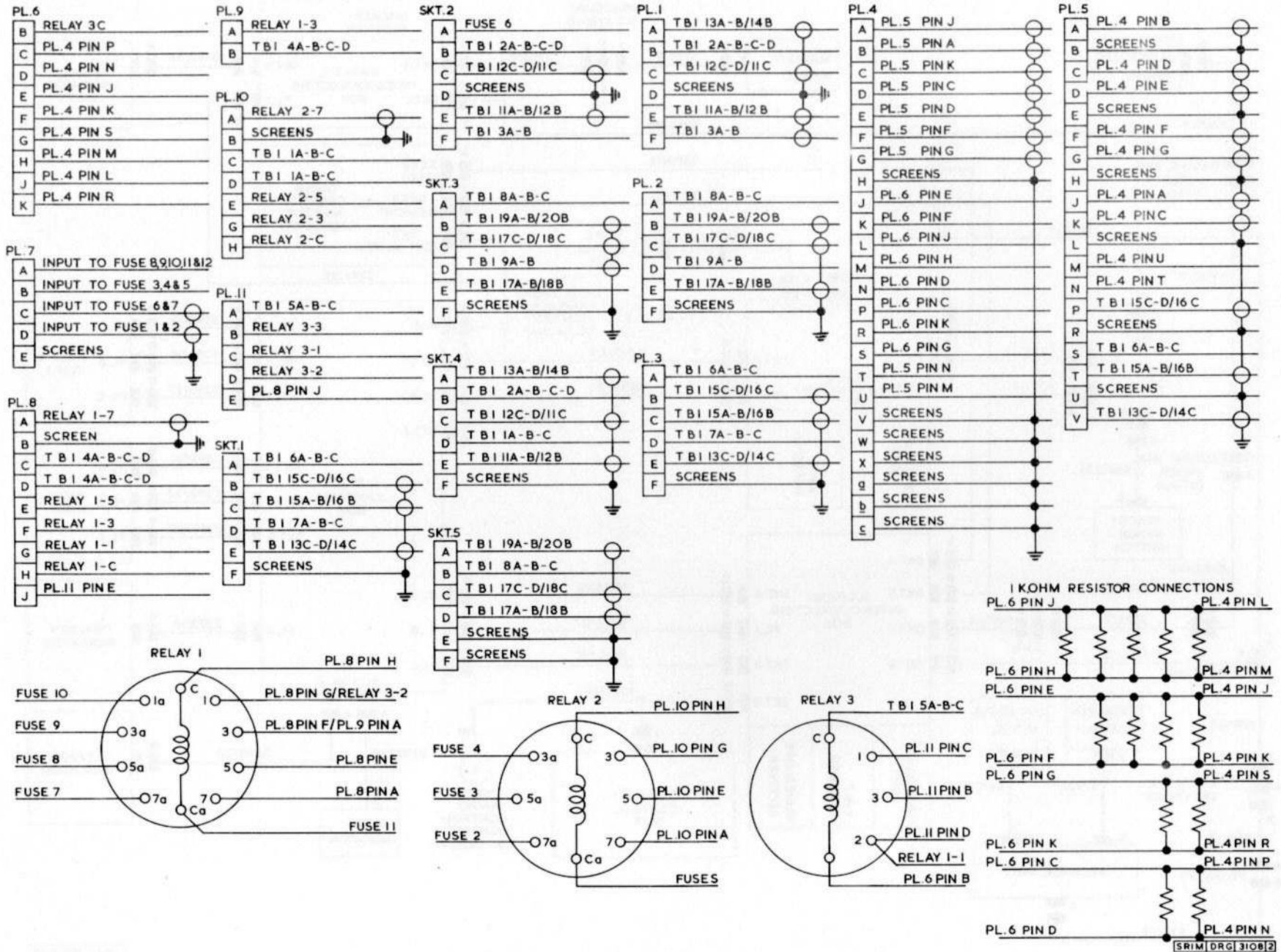


FIG.18. I.L.S./V.O.R. JUNCTION BOX-INTERNAL WIRING

T.B. I.

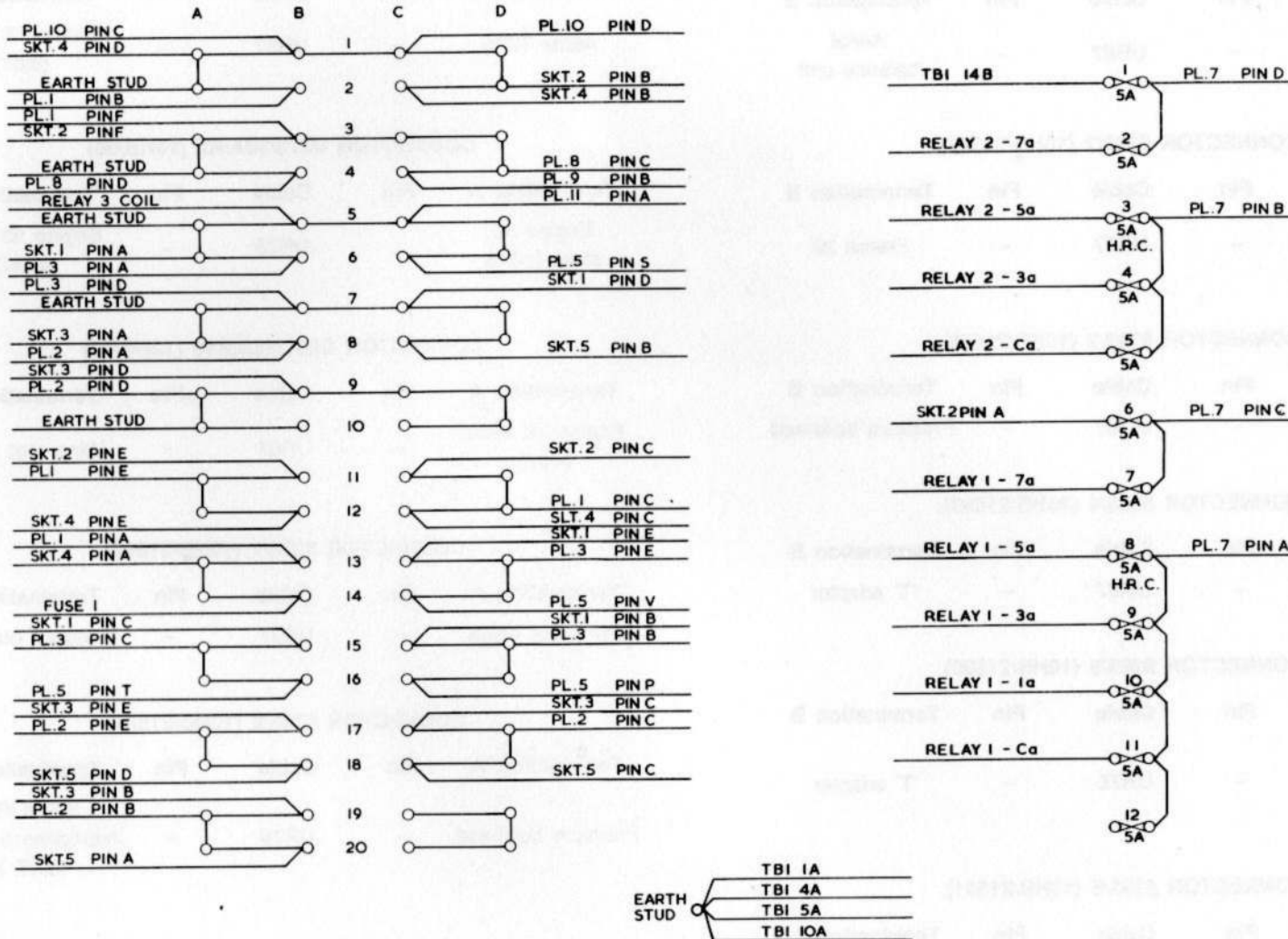


FIG.18A. I.L.S./V.O.R. JUNCTION BOX-INTERNAL WIRING

SRIM DRG 316082

TABLE 6

## Connector details - I.L.S./V.O.R.

## CONNECTOR 5393/1 (10HB/21586)

Termination A	Pin	Cable	Pin	Termination B
Aerial, type 140 LRU 14A	-	UR67	-	Aerial balance unit

## CONNECTOR 5393/2 (10HB/21587)

Termination A	Pin	Cable	Pin	Termination B
Aerial balance unit	-	UR67	-	Frame 29

## CONNECTOR 5393/3 (10HB/21588)

Termination A	Pin	Cable	Pin	Termination B
Frame 29	-	UR67	-	Pressure bulkhead

## CONNECTOR 5393/4 (10HB/21589)

Termination A	Pin	Cable	Pin	Termination B
Pressure bulkhead	-	UR67	-	'T' adapter

## CONNECTOR 5393/5 (10HB/21590)

Termination A	Pin	Cable	Pin	Termination B
ILS/VOR 1 interconnecting box (SKT 6)	-	UR76	-	'T' adapter

## CONNECTOR 5393/6 (10HB/21591)

Termination A	Pin	Cable	Pin	Termination B
'T' adapter	-	UR76	-	VOR 2 interconnecting box (SKT 6)

## CONNECTOR 5328/5 (10HB/20996)

Termination A	Pin	Cable	Pin	Termination B
Aerial T238	-	UR67	-	Engine rib outer (stbd)

## CONNECTOR D273/30A/R2 (10HB/50)

Termination A	Pin	Cable	Pin	Termination B
Engine rib inner (stbd)	-	UR73	-	Engine rib inner (stbd)

## CONNECTOR D267/30A/R10 (10HB/49)

Termination A	Pin	Cable	Pin	Termination B
Engine rib inner (stbd)	-	UR67	-	Wing root break

## CONNECTOR 5393/7 (10HB/21592)

Termination A	Pin	Cable	Pin	Termination B
Wing root break	-	UR67	-	Pressure bulkhead

## CONNECTOR 5393/8 (10HB/21593)

Termination A	Pin	Cable	Pin	Termination B
Pressure bulkhead	-	UR76	-	ILS/VOR 1 interconnecting box (SKT 7)

## CONNECTOR 5393/9 (10HB/21594)

Termination A	Pin	Cable	Pin	Termination B
Pressure bulkhead	-	UR67	-	Aerial T237

TABLE 6 Connector details - I.L.S./V.O.R. - continued

CONNECTOR 5393/10 (10HB/21595)

Termination A	Pin	Cable	Pin	Termination B
Pressure bulkhead	-	UR76	-	Marker interconnecting box (SKT 4)

CONNECTOR 5393/11 (10HB/21596)

Termination A	Pin	Cable	Pin	Termination B
GM4B compass master indicator (SKT 1)	A	UNMS20	A	ILS/VOR J.B. (SKT 4)
	B	UN20	B	
	C	UNMS20	E	
	D	UN20	D	
	E	UNMS20	C	
	-	Braids	F	

Braids connected to shell at termination A

CONNECTOR 5393/12 (10HB/21597)

Termination A	Pin	Cable	Pin	Termination B
GM4B compass master indicator (SKT 3)	A	UNMS20	J	VOR2 interconnecting box (SKT 5)
	B	UN20	L	
	C	UNMS20	E	
	D	UN20	K	
	E	UNMS20	D	
	F	-	-	

Braids connected to shells at both terminations

CONNECTOR 5393/13 (10HB/21598)

Termination	Pin	Cable	Pin	Termination
GM4B compass master indicator (SKT 3)	A	UNMS	J	ILS/VOR 1 interconnecting box (SKT 5)
	B	UN20	L	
	C	UNMS20	E	
	D	UN20	K	
	E	UNMS20	D	
	F	-	-	

Braids connected to shells at both terminations

CONNECTOR 5393/14 (10HB/21599)

Termination	Pin	Cable	Pin	Termination
ILS/VOR 1 Control Unit A	1	UN22	1	ILS/VOR1 interconnecting box (SKT 2) B
	2		2	
	3		3	
	4		4	
	5		5	
	6		6	
	7		7	
	8		8	
	10		10	
	11		11	
	12		12	
	14		14	
	15		15	
	27		27	
	28		28	
	29		29	
	33		33	
	34		34	
	35		35	
	36		36	
	37		37	
	39		39	
	41		41	
	42		42	
	43		43	
	44		44	
	47		47	
	48		48	
	49		49	
38	UN22	Term 3	T.B.3479/7 B1	

Braids connected to shells at both terminations

TABLE 6 Connector details - I.L.S./V.O.R. - continued

CONNECTOR 5393/15 (10HB/21600)

Termination	Pin	Cable	Pin	Termination
VOR 2 Control Unit A	1	UN22	1	VOR 2 interconnecting box (SKT 2) B
	2		2	
	4		4	
	5		5	
	6		6	
	7		7	
	8		8	
	10		10	
	12		12	
	14		14	
	15	15		
	39	39		
	43	43		
	44	44		
	47	47		
48	48			
49	49			
	38	UN22	Term 3	TB 3579/7 B1

Braiding connected to shells at both terminations

CONNECTOR 5393/16 (10HB/21601)

Termination	Pin	Cable	Pin	Termination
ILS/VOR J.B. A (PL 4)	A	UNMS22	A	OBS/DEV. Indicator B
	B	UNMS22	B	
	C	UNMS22	C	
	D	UNMS22	D	
	E	UNMS22	E	
	F	UNMS22	F	
	G	UNMS22	g	
	H	Braid	-	
	J	UN22	J	
	K	UN22	K	
	L	UN22	L	
	M	UN22	M	
	N	UN22	N	
	P	UN22	P	
	R	UN22	R	
S	UN22	S		
T	UN22	T		
U	UN22	U		
V	Braid	-		
W	Braid	-		
X	Braid	-		
a	Braid	-		
b	Braid	-		
c	Braid	-		

Braiding connected to shell at terminations

continued . . .

TABLE 6 Connector details - I.L.S./V.O.R. - continued

CONNECTOR 5393/17 (10HB/21602)

Termination	Pin	Cable	Pin	Termination
ILS/VOR J.B. A (PL 1)	A	UNMS20	1	Pilot's R.M.I. B (PL C)
	B	UN20	2	
	C	UNMS20	5	
	D	Braids	-	
	E	UNMS20	3	
	F	UN20	6	

Pins 2 and 4 linked at end B.  
Braiding at termination B connected to shell.

CONNECTOR 5393/20 (10HB/21605)

Termination	Pin	Cable	Pin	Termination
ILS/VOR J.B. A (SKT 2)	A	UNMS20	1	Navigator's R.M.I. B (PL C)
	B	UN20	2	
	C	UNMS20	5	
	D	Braids	-	
	E	UNMS20	3	
	F	UN20	6	

Pins 2 and 4 linked at end B.  
Braiding connected to shell at termination B.

CONNECTOR 5393/18 (10HB/21603)

Termination	Pin	Cable	Pin	Termination
ILS/VOR J.B. A (PL 2)	A	UN20	1	Pilot's R.M.I. B (PL A)
	B	UNMS20	2	
	C	UNMS20	3	
	D	UN20	4	
	E	UNMS20	5	
	F	Braids	-	

Braiding connected to shell at termination B

CONNECTOR 5393/21 (10HB/21606)

Termination	Pin	Cable	Pin	Termination
ILS/VOR J.B. A (SKT 3)	A	UN20	1	Navigator's R.M.I. B (PL A)
	B	UNMS20	2	
	C	UNMS20	3	
	D	UN20	4	
	E	UNMS20	5	
	F	Braids	-	

Braiding connected to shell at termination B

CONNECTOR 5393/19 (10HB/21604)

Termination	Pin	Cable	Pin	Termination
ILS/VOR J.B. A (PL 3)	A	UN20	1	Pilot's R.M.I. B (PL B)
	B	UNMS20	2	
	C	UNMS20	3	
	D	UN20	4	
	E	UNMS20	5	
	F	Braids	-	

Braiding connected to shell at termination B

CONNECTOR 5393/22 (10HB/21607)

Termination	Pin	Cable	Pin	Termination
ILS/VOR J.B. A (SKT 1)	A	UN20	1	Navigator's R.M.I. B (PL B)
	B	UNMS20	2	
	C	UNMS20	3	
	D	UN20	4	
	E	UNMS20	5	
	F	Braids	-	

Braiding connected to shell at termination B

**RESTRICTED**

**TABLE 6 Connector details - I.L.S./V.O.R. - continued**

**CONNECTOR 5393/23 (10HB/21608)**

Termination A	Pin	Cable	Pin	Termination B
ILS/VOR J.B. A (PL 11)	A		Term 3	ILS/VOR Indicator B
	B		Term 2	
	C		Term 1	
	D	Not used		
	E	Not used		
	F	Not used		

**CONNECTOR 5393/26 (10HB/21611)**

Termination A	Pin	Cable	Pin	Termination B
ILS/VOR J.B. (PL 5)	A	UNMS20	10	ILS/VOR 1 interconnecting box (SKT 4)
	B	Braids	-	
	C	UNMS20	13	
	D	UNMS20	14	
	E	Braids	-	
	F	UNMS20	15	
	G	UNMS20	16	
	H	Braids	-	
	J	UNMS20	17	
	K	UNMS20	18	
	L	Braids	-	
	M	UN20	19	
	N	UN20	20	
	P	UNMS20	21	
R	Braids	-		
S	UN20	25		
T	UNMS20	33		
U	Braids	-		
V	UNMS20	34		

**CONNECTOR 5393/24 (10HB/21609)**

Termination A	Pin	Cable	Pin	Termination B
ILS/VOR J.B. (SKT 5)	A	UNMS20	21	VOR 2 interconnecting box (SKT 4)
	B	UN20	25	
	C	UNMS20	33	
	D	UNMS20	34	
	E	Braids	-	
	F	Braids	-	

Braiding connected to shell at termination B

Braiding connected to shell at termination B

**CONNECTOR 5393/25 (10HB/21610)**

Termination A	Pin	Cable	Pin	Termination B
ILS/VOR J.B. (PL 6)	B	UN20	B	ILS/VOR 1 interconnecting box (SKT 3)
	C		C	
	D		D	
	E		E	
	F	F		
	G	L		
	H	H		
	J	J		
K	UN20	K		

**RESTRICTED**

continued . . .

TABLE 6 Connector details - I.L.S./V.O.R. - continued

## CONNECTOR 5393/27 (10HB/21612)

Termination	Pin	Cable	Pin	Termination
ILS/VOR J.B. A (PL 8)	A	UNMS20	L	ILS/VOR 1 interconnecting box (PL 1) B
	B	Braid	-	
	C	UN20	H	
	D	UN20	K	
	E	UN20	N	
	F	UN20	P	
	G	UN20	S	
	H	UN20	W	
	J	UN20	X	

Braiding connected to shell at termination B

## CONNECTOR 5393/28 (10HB/21613)

Termination	Pin	Cable	Pin	Termination
ILS/VOR J.B. A (PL 10)	A		L	VOR 2 interconnecting box (PL 1) B
	B		-	
	C		H	
	D		K	
	E		N	
	G		S	
	H		W	

Braiding connected to shell at termination B

## CONNECTOR 5393/29 (10HB/21614)

Termination	Pin	Cable	Pin	Termination
ILS/VOR J.B. A (PL 9)	A	UN20	A	Marker interconnecting box (PL 1) B
	B	UN20	D	

## CONNECTOR 5393/30 (10HB/21615)

Termination	Pin	Cable	Pin	Termination
ILS/VOR J.B. A (PL 7)	A	UN16	A	E.C.P. N96A B
	B	UNMS16	B	
	C	UN16	C	
	D	UNMS16	D	
	E	Braids	E	

## CONNECTOR 5393/31 (10HB/21616)

Termination	Pin	Cable	Pin	Termination
Radio J.B. A (SKT 5)	A	UN22	A	ILS/VOR 1 interconnecting box (SKT 1) B
	B	UN22	B	
	C	UN22	C	

## CONNECTOR 5393/32 (10HB/21617)

Termination	Pin	Cable	Pin	Termination
Radio J.B. A (PL 3)	A	UN22	A	VOR 2 interconnecting box (SKT 1) B
	B	Not used	B	
	C	UN22	C	

## CONNECTOR 5393/33 (10HB/21618)

Termination	Pin	Cable	Pin	Termination
Radio J.B. A (PL 1)	A	UN22	A	Marker interconnecting box (SKT 1) B
	B	Not used	B	
	C	UN22	C	

**RESTRICTED**

**TABLE 6 Connector details - I.L.S./V.O.R. - continued**

**CONNECTOR 5393/34 (10HB/21619)**

Termination	Pin	Cable	Pin	Termination
Marker interconnecting box (SKT2) A	A	UN22	A	Marker Indicator unit B
	B	UN22	B	
	C	UN22	C	
	D	UN22	D	
	E	UN22	E	
	F	UN22	F	
	H	UN22	H	
	J	UNMS22	J	
	K	UN22	K	
-	Braid	G		

Braiding connected to shell at termination A

**CONNECTION 5393/35 (10HB/21620)**

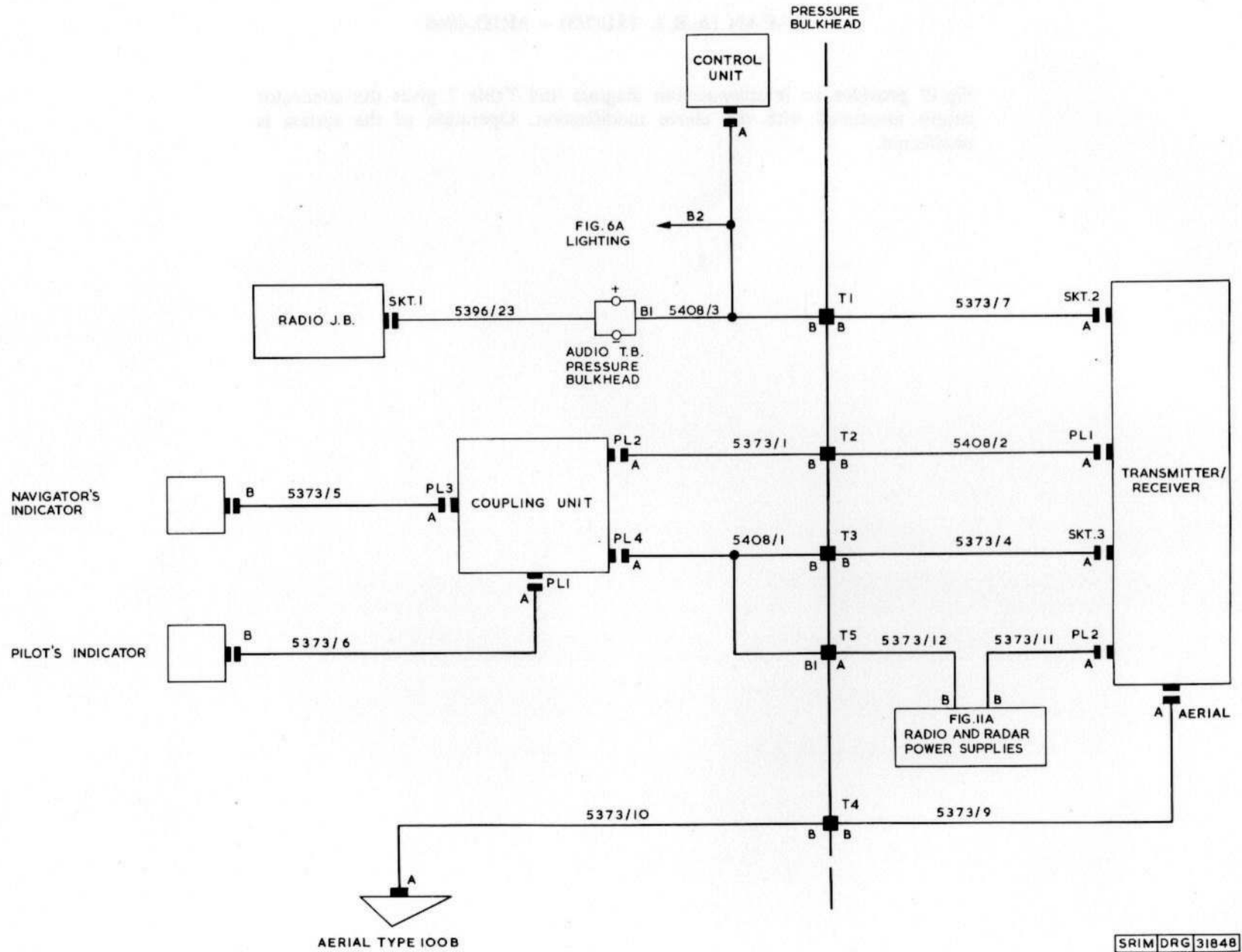
Termination	Pin	Cable	Pin	Termination
Radio J.B. A (PL4)	A	UN22	Term 1	ILS/VOR 1 Voice/Range switch B
	B	UN22	Term 2	
	C	UN22	Term 3	

TACAN (A.R.I. 18107/3) - MOD.4868

Fig.19 provides an interconnection diagram and Table 7 gives the connector details associated with the above modification. Operation of the system is unaffected.



RESTRICTED



SRIM DRG 31848

FIG. 19. INTERCONNECTION DIAGRAM — TACAN (A.R.I. 18107/3)

RESTRICTED

TABLE 7

Connector details - TACAN

CONNECTOR 5373/1 (10HB/21386)

Termination	Pin	Cable type	Cable colour	Pin	Termination	
Coupling unit (PL2) A	A	Min. 18J	Blue	D	Pressure bulkhead (T2) B	
	B		Violet	H		
	C		Brown	G		
	E		Black	J		
	G		Orange	O		
	H		Pink	N		
	J		Dk. Green	F		
	K		Red	E		
	L		- Linked	-		
	M		Red H.T.*	P		
	O		Lt. Green	M		
	S		Yellow H.T.*	Q		
	T		Black H.T.*	B		
	U		White	K		
	N		- Linked	-		
	R*		-	-		
	W		White H.T.*	A		
	Y		Blue H.T.*	S		
	Z	Brown H.T.*	C			
		Min. 18J				

\*Braiding connected to pin R at termination A

CONNECTOR 5373/4 (10HB/21389)

Termination	Pin	Cable type	Cable colour	Pin	Termination			
Transmitter/receiver (S3) A	A	Min. 18J	Yellow	L	Pressure bulkhead (T3) B			
	B		White H.T.*	A				
	C		Red	E				
	D		Yellow H.T.*	Q				
	J*		Black	J*				
	K		Red H.T.*	P				
	N		Violet	H				
	M		Black H.T.*	B				
	R		Green H.T.*	R				
	S		Blue H.T.*	S				
	T		White	K				
	U		Brown H.T.*	C				
			Min. 18J					

\*Braiding connected to pin J at both terminations

continued . . .

TABLE 7 Connector details - TACAN - *continued*

CONNECTOR 5373/5

Termination B	Pin	Cable	Pin	Termination A
Indicator 9547 (Navigator)	A	Min. 12C	A	Coupling unit (PL 3)
	B		B	
	C		C	
	D		N	
	E		E	
	F		O	
	G		G	
	H		H	
	J		J	
	K		K	
	L	Min. 12C	L	
	M		M	

*continued . . .*

TABLE 7 Connector details - TACAN - continued

CONNECTOR 5373/6 (10HB/2139)

Termination	Pin	Cable type	Cable colour	Pin	Termination
Indicator 9547 (Pilot) B	A	Min. 12C	White	A	Coupling unit (PL1) A
	B		Black	B	
	C		Yellow	C	
	D		Red	N	
	E		Blue	E	
	F		Brown	O	
	G		Grey	G	
	H		Lt. Green	H	
	J		Green	J	
	K		Violet	K	
	L		Pink	L	
	M		Orange	M	

CONNECTOR 5373/7 (10HB/21392)

Termination	Pin	Cable type	Cable colour	Pin	Termination
Transmitter/receiver (S2) A	A	UN20	-	A	Pressure bulkhead (T1) B
	B		-	C	
	C		-	G	
	D		-	H	
	E*		-	J	
	F		-	K	
	G		-	D	
	H		UNMS20	B	
	I		UN20	E	
	J		-	F	

\*Screening connected to pin E at termination A and clamped to H/D clamp at termination B.

CONNECTOR 5373/9 (10HB/21394)

Termination	Pin	Cable type	Cable colour	Pin	Termination
Transmitter/receiver (AE) A	-	UR67	-	-	Pressure bulkhead (T4) B

continued

TABLE 7 Connector details — TACAN — *continued*

CONNECTOR 5373/10 (10HB/21395)

Termination	Pin	Cable type	Cable colour	Pin	Termination
Aerial A	—	UR67	—	—	Pressure bulkhead (T4) B

CONNECTOR 5373/11 (10HB/21396)

Termination	Pin	Cable type	Cable colour	Pin	Termination
Transmitter/receiver (PL2) A	A	UN20	—	EW	No.1 distribution box (tails) B
	B		—	TAC 5	
	C		—	TAC 1	
	D		—	M 34	
	E		—	TAC 2	
	G	UN20	—	TAC 3	

CONNECTOR 5373/12 (10HB/21397)

Termination	Pin	Cable type	Cable colour	Pin	Termination
Pressure bulkhead (T5) A	A	UN20	—	TAC 5	No.1 distribution box (tails) B
	B	UN20	—	EW	

*continued . . .*

TABLE 7 Connector details - TACAN - *continued*

CONNECTOR 5396/23 (10HB/21770)	
Termination A	Termination B
Radio J.B. S1	Audio T.B. Pressure bulkhead
Pin	Pin
A	TEL+
B	TEL-
Cable	
UN20	
UN20	

CONNECTOR 5408/1 (10HB/21676)	
Termination A	Termination
Coupling unit (PL4)	Pressure bulkhead (T5) B
Pin	Pin
A	A
B	B
G	E
H	L
J	K
K	M
L	P
M	C
N	B
O	A
U	R
W	Q
Y	J
Z	S
Cable	Colour
UN20	—
UN20	—
Min.18J	Red
	Yellow
	White
	Violet
	Red HT*
	Brown HT*
	Black HT*
	White HT*
	Green HT*
	Yellow HT*
	Black*
Min.18J	Blue HT*

\* Braiding connected to pin B at termination A

*continued . . .*

TABLE 7 Connector details — TACAN — *continued*

CONNECTOR 5408/2 (10HB/21677)

Termination	Pin	Cable	Colour	Pin	Termination
Transmitter/receiver A	B	Min.18J	White	K	Pressure bulkhead (T2) B
	C		Blue HT*	S	
	D		Lt. Green	M	
	E		Brown HT*	C	
	F		Black HT*	B	
	G		White HT*	A	
	H		Dk. Green	F	
	J		Orange	O	
	K		Violet	H	
	L		Brown	G	
	M		Black	J	
	P		Pink	N	
	R		Red HT*	P	
	S		Red	E	
T	Yellow HT*	Q			
U	Min.18J	Blue	D		

\*Braiding connected to pin B at termination A

CONNECTOR 5408/3 (10HB/21678)

Termination	Pin	Cable	Pin	Termination
Control unit A	A	UN20	A	Pressure bulkhead (T1) B
	B	UNMS20	B	
	C	UN20	C	
	D	UN20	D	
	E	UN20	E	
	F	UN20	F	
	G	UN20	G	
	H	UN20	H	
	J	UN20	J	
	K	UN20	K	
	N	UNMS20	+	
	M	Braid	-	
		UN20	Term 1	

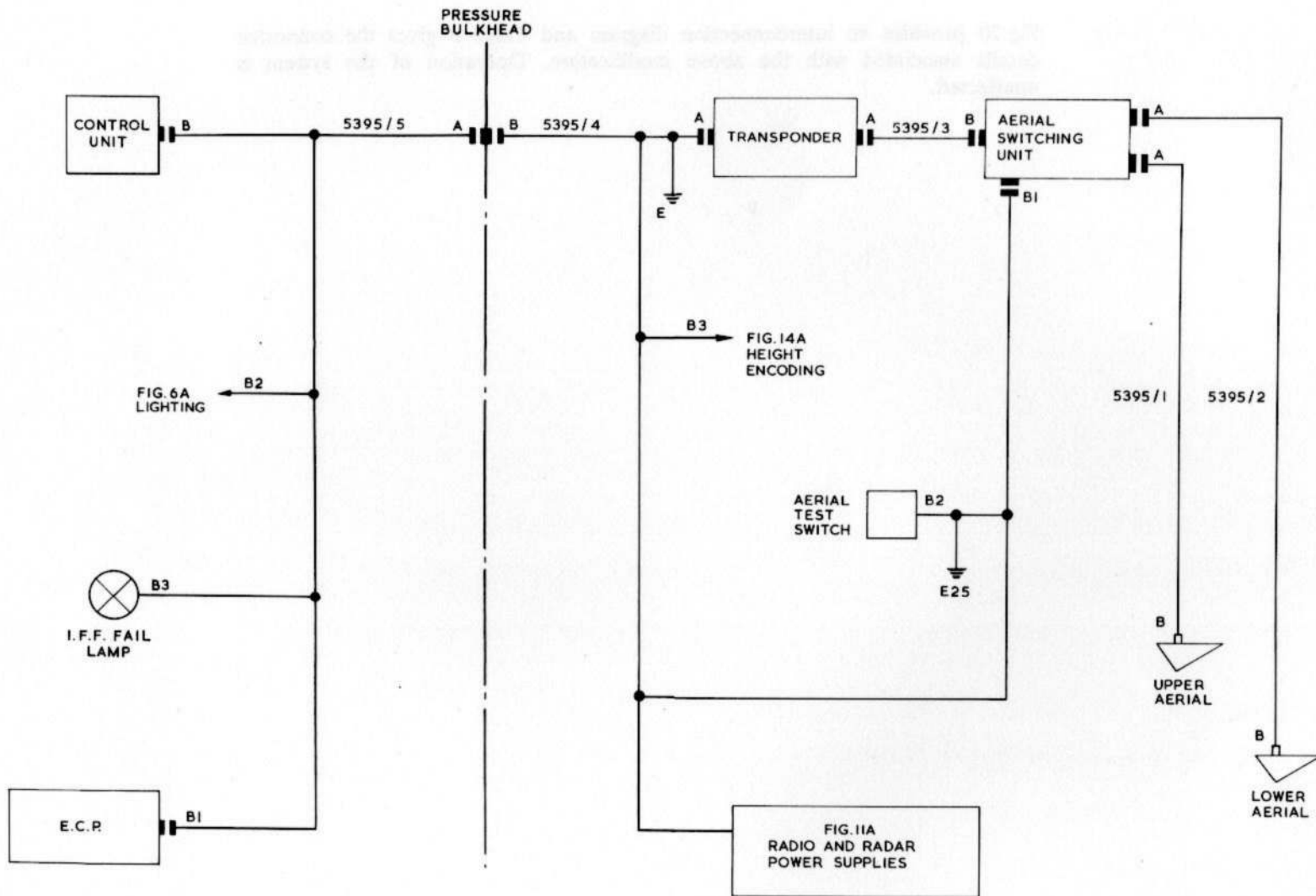
Audio T.B., pressure  
bulkhead B1  
T.B.3479/7 B2

Braiding connected to pin J at termination A

**I.F.F./S.S.R. 1520 (A.R.I. 23134/3 — MOD.4868)**

Fig.20 provides an interconnection diagram and Table 8 gives the connector details associated with the above modification. Operation of the system is unaffected.





SRIM DRG 41002

FIG. 20. INTERCONNECTION DIAGRAM - I.F.F./S.S.R. 1520 (A.R.I. 23134/3)



TABLE 8 Connector details - I.F.F./S.S.R. - continued

CONNECTOR 5395/4 - continued				CONNECTOR 5395/5 (10HB/21646)					
Termination	Pin	Cable	Pin	Termination	Termination	Pin	Cable	Pin	Termination
Pressure bulkhead B	v	Minyvin 22	IFF3	No.2 distribution box B4	Pressure bulkhead A	A	Minyvin 22	A	Control unit B
	a		IFF4			B		B	
	y		IFF1			C		C	
	x		96			D		D	
	p		57	E		E			
	q		70	F		F			
	r		71	G		G			
	s		24	H		H			
	t		44	J		J			
	u		42	K		K			
	J		78	L		L			
	H		79	M		M			
	G		80	N		N			
F	81	P	P						
E	82	R	R						
D	83	S	S						
C	84	T	T						
B	85	U	U						
A	86	V	V						
K	92	W	W						
L	25	X	X						
M	91	Y	Y						
-	93	Z	Z						
-	23	b	b						
Earth	-	22	-	c	c				
No.2 distribution box B4	TF5	-	E25	d	d				
Aerial switching unit B1	A	Minyvin 22	IFF2	No.2 distribution box B4	e	e			
	B		3	Aerial test switch B2	f	f			
	C		1		g	g			
	D				h	h			
				i	i				

continued . . .

TABLE 8 Connector details - I.F.F./S.S.R. - continued

CONNECTOR 5395/5 - continued

Termination	Pin	Cable	Pin	Termination	
Pressure bulkhead A	j	Minyvin 22	j	Control unit B	
	k		k		
	m		m		
	n		n		
	p		p		
	q		q		
	r		r		
	s		s		
	v		v		
	t		B3		B3
	u		2		
	x		A		
y	B				
a	C	E.C.P. B1			
Control unit 16929 B	t		F		
	u		G		
	x		H		
	w		2	Lighting T.B. 3479/7 B2	
Fail lamp B3	I	Minyvin 22	E	E.C.P. B1	
	B		J		

**GREEN SATIN (A.R.I.5851) - MOD.4868**

The following paragraphs describe the Green Satin radar installation introduced by the above modification.

**LIST OF CONTENTS**

	<i>Para.</i>
<i>General</i> .....	1
<i>Transmitter-receiver</i> .....	2
<i>Tracking unit</i> .....	4
<i>Indicator, electrical</i> .....	6
<i>Aerial system</i> .....	7
<i>Test sockets LH and LJ</i> .....	8
<i>Screened junction box</i> .....	9
<i>Waveguide assembly</i> .....	10

**LIST OF TABLES**

	<i>Table</i>
<i>Connector details - Green Satin</i> .....	9

**LIST OF ILLUSTRATIONS**

	<i>Fig.</i>
<i>Interconnection diagram - Green Satin (A.R.I.5851) and G.P.I. MK.4</i> .....	21

**General**

1. The Green Satin radar measures ground speed and drift and operates in conjunction with the G.M.4B compass and G.P.I. MK.4.

**Transmitter-receiver**

2. The transmitter-receiver and its associated tray and backplate assembly are located on the bomb bay step in the rear equipment hatch. Its function is to generate radio frequency power and to detect and amplify signals returned from the ground. Electrical connections between the unit and a mounting tray are made via a backplate assembly to which external electrical connections are made. Two blower motors, which are part of the backplate assembly, provide cooling air.

3. A pressurizing valve, together with a dessicator cartridge, are made accessible through the front of the transmitter-receiver plinth.

**Tracking unit**

4. The tracking unit and its associated mounting tray and backplate assembly are located adjacent to the transmitter-receiver. Its function is to compute signals corresponding to ground speed, drift angle and distance flown.

5. Electrical connections to the unit are made via the backplate assembly. A pressurizing valve and dessicator cartridge are made accessible through the front of the tracking unit plinth.

**Indicator, electrical**

6. The indicator is located forward of the navigator's table. All A.R.I.5851 displays and controls are mounted on the front.

**Aerial system**

7. The aerial system is located in the port wing mid-way between the port E.C.U. and the fuselage. Electrical connections are made via a plug mounted on the aerial mounting plate.

**Test sockets LH and LJ**

8. Two test sockets, located on the starboard lower fuselage between frames 30 and 34, enable first line checks to be carried out. A shorting plug, affixed to socket LJ by a retaining chain, must always be inserted during normal operation of the system.

**Screened junction box**

9. Power supplies and heading information for the G.P.I. MK.4 are routed via a screened junction box located forward of the navigator's station.

**Waveguide assembly**

10. The waveguide assembly consists of one flexible and five rigid sections and connects the transmitter-receiver power output to the aerial system.

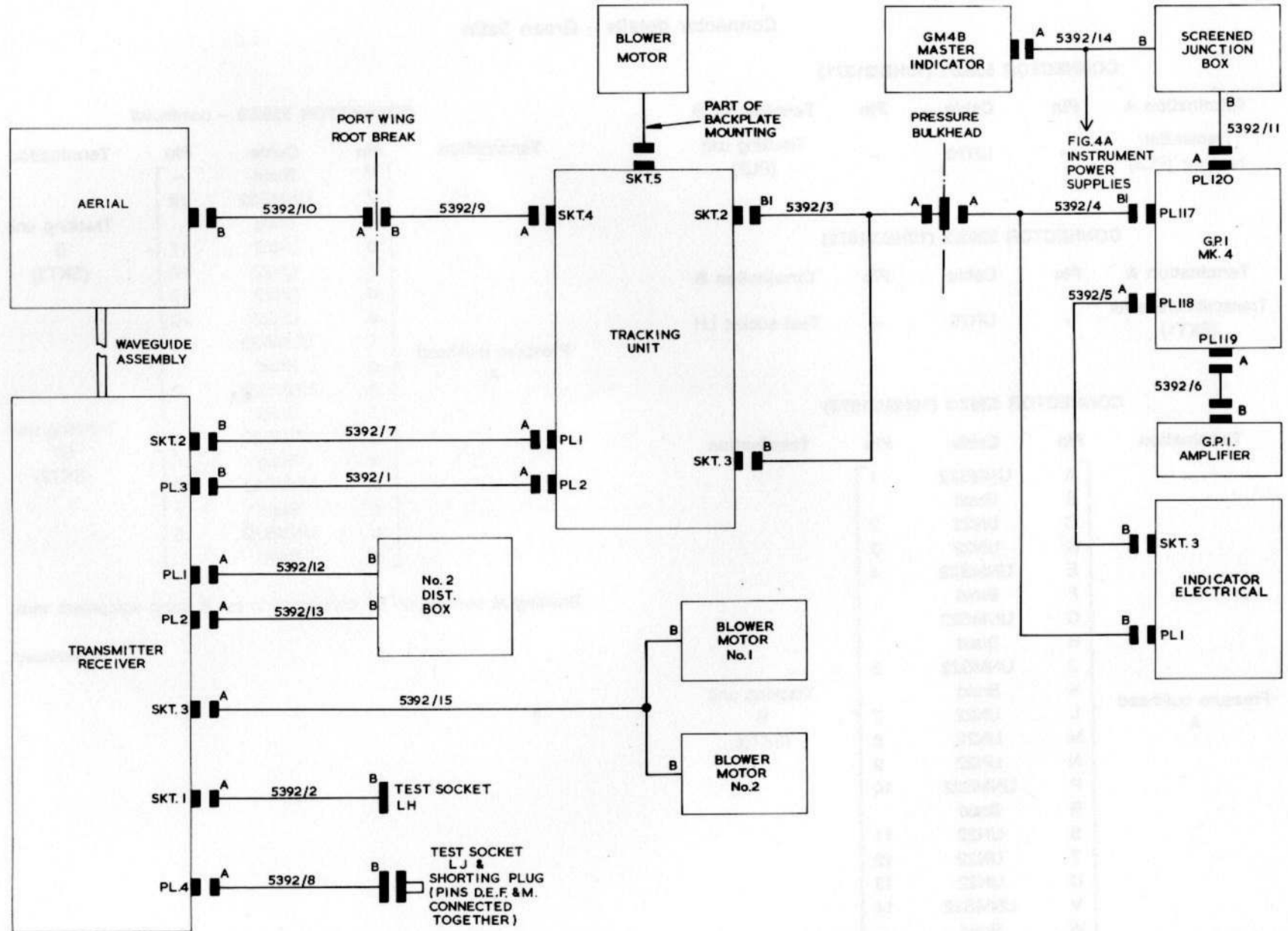


FIG. 21. INTERCONNECTION DIAGRAM - GREEN SATIN (A.R.I. 5851) AND G.P.I. MK. 4

SRIM/DRG/4063

TABLE 9

Connector details - Green Satin

CONNECTOR 5392/1 (10HB/21571)

Termination A	Pin	Cable	Pin	Termination B
Transmitter/receiver (PL3)	-	UR70	-	Tracking unit (PL2)

CONNECTOR 5392/2 (10HB/21572)

Termination A	Pin	Cable	Pin	Termination B
Transmitter/receiver (SKT1)	-	UR70	-	Test socket LH

CONNECTOR 5392/3 (10HB/21573)

Termination	Pin	Cable	Pin	Termination
Pressure bulkhead A	A	UNMS22	1	Tracking unit B (SKT3)
	B	Braid		
	C	UN22	2	
	D	UN22	3	
	E	UNMS22	4	
	F	Braid		
	G	UNMS22		
	H	Braid		
	J	UNMS22	6	
	K	Braid		
	L	UN22	7	
	M	UN22	8	
	N	UN22	9	
	P	UNMS22	10	
	R	Braid		
S	UN22	11		
T	UN22	12		
U	UN22	13		
V	UNMS22	14		
W	Braid			
X	UNMS22	15		

Braiding at termination B connected to pin 11 using equipment wire.

CONNECTOR 5392/3 - continued

Termination	Pin	Cable	Pin	Termination
Pressure bulkhead A	Y	Braid	-	Tracking unit B (SKT3)
	Z	UNMS22	16	
	a	Braid		
	b	UN22	17	
	c	UN22	18	
	d	UN22	19	
	e	UN22	20	
	f	UNMS22	1	
	g	Braid		
	h	UNMS22	2	
	i	Braid		
	j	UNMS22	3	
	k	Braid		
	m	UNMS22	4	
	n	Braid		
p	UNMS22	5		
q	Braid			

Braiding at termination B1 connected to pin 6 using equipment wire.

continued . . .

TABLE 9 Connector details - Green Satin - continued

CONNECTOR 5392/4 (10HB/21574)

Termination	Pin	Cable	Pin	Termination
	A	UNMS22	1	
	B	Braid		
	C	UN22	2	
	D	UN22	3	
	E	UNMS22	4	
	F	Braid		
	G	UNMS22	5	
	H	Braid		
	J	UNMS22	6	
	K	Braid	-	
	L	UN22	7	
	M	UN22	8	
	N	UN22	9	
	P	UNMS22	10	Indicator electrical (PL1) B
Pressure bulkhead A	R	Braid		
	S	UN22	11	
	T	UN22	12	
	U	UN22	13	
	V	UNMS22	14	
	W	Braid		
	X	UNMS22	15	
	Y	Braid		
Z	UNMS22	16		
a	Braid			
b	UN22	17		
c	UN22	18		
d	UN22	19		
e	UN22	20		
f	UNMS22	1		G.P.I. MK.4 B1 (PL117)
g	Braid			
h	UNMS22	2		

CONNECTOR 5392/4 - continued

Termination	Pin	Cable	Pin	Termination
Pressure bulkhead A	i	Braid		
	j	UNMS22	3	Indicator electrical B (PL1)
	k	Braid		
	m	UNMS22	4	
	n	Braid		
	p	UNMS22	5	
	q	Braid		

Braiding at termination B connected to pin 11 using equipment wire, Type 2.  
Braiding at termination B1 connected to pin 6 using equipment wire, Type 2.

CONNECTOR 5392/5 (10HB/21575)

Termination	Pin	Cable	Pin	Termination
G.P.I. MK.4 A (PL118)	1	Not used	1	
	2	Braid	2	
	3	UN22	3	Indicator electrical B (SKT3)
	4	UNMS22	4	
	5	UNMS22	5	
	6	UNMS22	6	
	7	UN22	7	
	8	UN22	8	

CONNECTOR 5392/6 (10HB/21576)

Termination	Pin	Cable	Pin	Termination
G.P.I. MK.4 A (PL119)	1	UNMS18	A	G.P.I. Amplifier B
	2	UNMS18	B	
	3	UN22	C	
	4	UN22	D	
	5	UN22	E	
	6	UN22	F	

Braiding at termination A connected to pin 3  
Braiding at termination B connected to pin C

continued . . .

TABLE 9 Connector details - Green Satin - continued

CONNECTOR 5392/7 (10HB/21577)

Termination	Pin	Cable	Pin	Termination
Tracking unit A (PL1)	1	UNMS22	1	Transmitter/receiver B (SKT2)
	2	Braids	2	
	3	UN22	3	
	4	UNMS22	4	
	5	UN22	5	
	6	UN22	6	
	7	UN22	7	
	8	UN22	8	

CONNECTOR 5392/9 (10HB/21579)

Termination	Pin	Cable	Pin	Termination
Tracking unit A (SKT4)	1	UN22	A	Port wing root break B
	2	UN22	B	
	3	UN22	C	
	4	UN22	D	
	5	UN22	E	
	6	UN22	F	
	7	UN22	G	
	8	UN22	H	
	9	UN22	J	
	10	UNMS22	K	
	-	Braid	L	
	11	UNMS22	M	
	-	Braid	N	
	12	UNMS22	P	
	-	Braid	R	
	13	UN22	S	
	14	UNMS22	T	
	-	Braid	U	
	15	UNMS22	V	
	-	Braid	W	
16	UNMS22	X		
-	Braid	Y		
17	UN22	Z		
18	UNMS22	a		
-	Braid	b		
19	UNMS22	c		
-	Braid	d		
20	UNMS22	e		

Braiding at both ends connected to pin 2 using equipment wire, Type 2.

CONNECTOR 5392/8 (10HB/21578)

Termination	Pin	Cable	Pin	Termination
Transmitter/receiver A (PL4)	1	UR70	A	Test socket LJ B
	2	UR70	B	
	3	UR70	C	
	4	UN22	D	
	5	UN22	E	
	6	UN22	F	
	7	UN22	G	
	8	UN22	H	
	9	UN22	J	
	10	UN22	K	
	11	UN22	L	
	12	Braids	M	

At termination A, screens connected to adapter, pin 12 connected to shell.  
At termination B, Pin M connected to shell.

continued . . .

**TABLE 9 Connector details - Green Satin - continued**

**CONNECTOR 5392/9 - continued**

Termination	Pin	Cable	Pin	Termination
Tracking unit A (SKT4)	-	Braid	f	Port wing root break B
	21	UN22	g	
	22	UNMS22	h	
	-	Braid	i	
	23	UNMS22	j	
	-	Braid	k	
	24	UNMS22	m	
	-	Braid	n	
	25	UN22	p	

Braiding connected to pin 9 at termination A using equipment wire, Type 2.

Braiding at termination B connected with equipment wire, Type 2.

**CONNECTOR 5392/10 (10HB/21580)**

Termination	Pin	Cable	Pin	Termination
Port wing root break A	A	UN22	A	Aerial, Type 501A B
	B	UN22	B	
	C	UN22	C	
	D	UN22	D	
	E	UN22	E	
	F	UN22	F	
	G	UN22	G	
	H	UN22	H	
	J	UN22	J	
	K	UNMS22	K	
	L	Braid	-	
	M	UNMS22	L	
	N	Braid	-	

**CONNECTOR 5392/10 - continued**

Termination	Pin	Cable	Pin	Termination
Port wing root break A	P	UNMS22	M	Aerial, Type 501A B
	R	Braid	N	
	S	UN22	O	
	T	UNMS22	P	
	U	Braid	Q	
	V	UNMS22	R	
	W	Braid	S	
	X	UNMS22	T	
	Y	Braid	U	
	Z	UN22	V	
	a	UNMS22	W	
	b	Braid	X	
	c	UNMS22	Y	
	d	Braid	Z	
	e	UNMS22	-	
	f	Braid	-	
	g	UN22	-	
	h	UNMS22	-	
	i	Braid	-	
	j	UNMS22	-	
k	Braid	-		
m	UNMS22	-		
n	Braid	-		
p	UN22	-		

Braiding at termination A connected as indicated using equipment wire, Type 2.

Braiding at termination B connected to pin J and socket shell.

continued . . .

TABLE 9 Connector details - Green Satin - continued

CONNECTOR 5392/11 (10HB/21581)

Termination	Pin	Cable	Pin	Termination
G.P.I. MK.4 A (PL120)	1	UNMS20	1	Screened J.B. B
	2	UNMS20	2	
	3	UNMS20	3	
	4	UNMS20	4	
	5	UNMS	5	
	6	Braids	-	
	7	-	-	
	8	-	-	

Braiding at termination A connected to pin 6 and shell

CONNECTOR 5392/12 (10HB/21582)

Termination	Pin	Cable	Pin	Termination
Transmitter/receiver A (PL1)	1	UNMS16	Term SY3	No.2 Distribution box B
	2	UNMS16	Term SG3	
	3	UNMS16	Term SR3	
	4	-	-	

Braiding connected to shell at termination A

CONNECTOR 5392/13 (10HB/21583)

Termination	Pin	Cable	Pin	Termination
Transmitter/receiver A (PL2)	1	UNMS16	Term SY3	No.2 Distribution box B
	2	Link to Pin 1	-	
	3	UNMS16	Term SG3	
	4	Link to Pin 3	-	
	5	UNMS16	Term SR3	
	6	Link to Pin 5	-	
	7	-	-	
	8	-	-	

Braiding connected to shell at termination A

CONNECTOR 5392/14 (10HB/21584)

Termination	Pin	Cable	Pin	Termination
G.M.4B Master Indicator A	A	UNMS22	+ve	Suppressor T.B.4 B
	B	UNMS22	-ve	
	C	UNMS22	3	Screened J.B. B1
	D	UNMS22	4	
	E	UNMS22	5	
	F	-	-	

CONNECTOR 5392/15 (10HB/21585)

Termination	Pin	Cable	Pin	Termination
Transmitter/receiver A (SKT3)	1	Min.3C Red	Red	Blower motors No.1 and 2 B
	2	Min.3C Blue	White	
	3	Min.3C Green	Blue	
	4	-	-	

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