Group 1 INTERIOR LIGHTING

LIST OF CONTENTS

LIST OF ILLUSTRATIONS

◀LIST OF APPENDICES

A List of Appendices appears at the end of the group.▶

Warning . . .

Voltages in excess of 100 *volts a.c. or d.c. can be dangerous under certain circumstances. Personnel should therefore, ensure that the electrical system is electrically safe before any servicing is attempted. When it is essential that tests or adjustments are to be made with the electrical power switches on the greatest care must be exercised.*

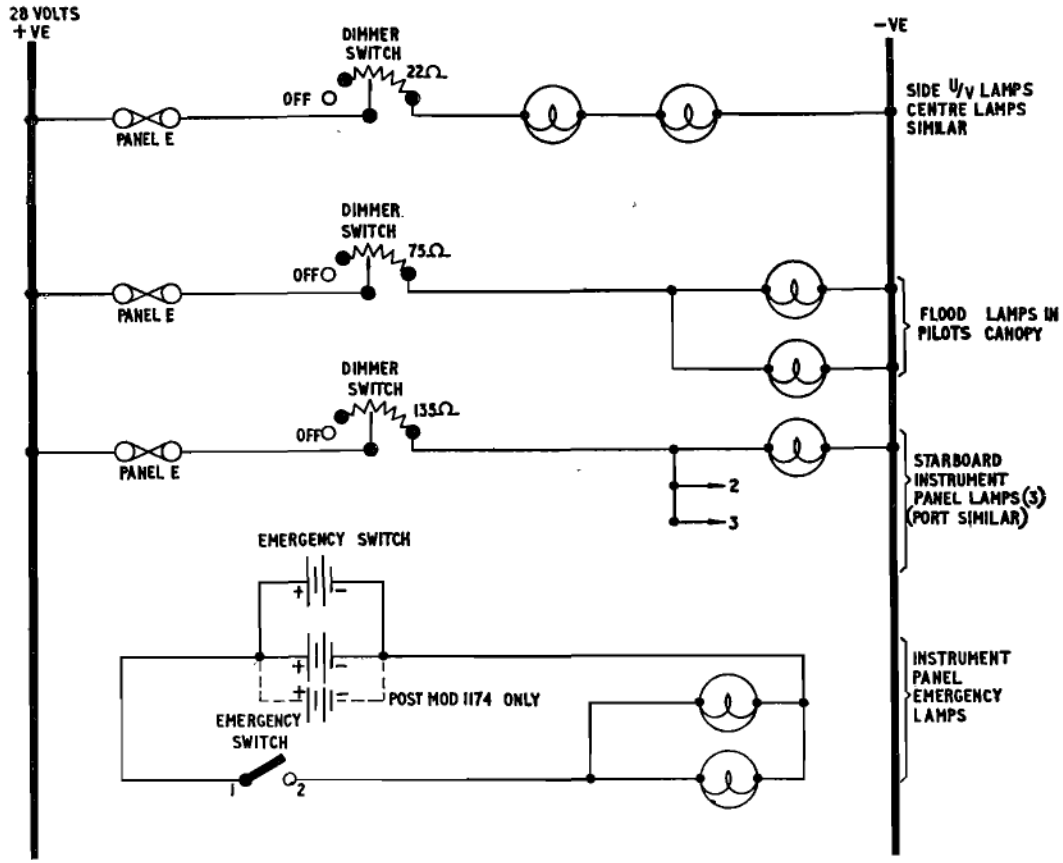


Fig. 1. Instrument panel lighting (pre. Mod. 1749 or 2071)

Introduction

1. Information on the lay-out and interpretation of the schematic wiring diagrams can be obtained from the General Information group contained immediately after Section 5 marker card. Also to be found in the General Information Group are all the general modifications applicable to all aircraft.

COCKPIT PANEL LIGHTING (Pre-Mod. 1749 or 2071)

Pilots' instrument panel lighting (*fig.* 1)

2. Normal illumination of the pilots' instrument panel is achieved by six local cowled red lamps, Type C, mounted beneath the top half of the panel, three lamps to port and three to starboard, and by two red floodlamps, Type B, mounted on each side of the pilots' canopy. The three circuits are each controlled by dimmer switches mounted on the port and starboard sides of the pilots' fuel panel.

3. The six local lamps are fitted with 24V, 2·8w filaments. The three lamps in each circuit are connected in parallel, each circuit being supplied from the port fuse panel E, via a single fuse.

4. The two floodlamps are fitted with 28v, 15w filaments and are connected in parallel and fed from the port fuse panel E, via a single fuse. The wiring to these lamps is taken through a plug and socket connection on the coaming round the rear of the pilots' hood joint, to provide a break connection when the hood is jettisoned (This plug and socket also carries the supply to the pilots' cabin lamp).

5. Ultra-violet lamps are mounted one above each coaming panel and two on a removable mounting, which, when in use, is plugged into the centre of the top instrument panel. All the lamps have 12v, 7w filaments. The lamps on the coaming panels are connected in series and controlled by a dimmer switch mounted above the fuel panel. The centre lamps are in series and controlled by a dimmer switch mounted above the fuel panel. Both circuits are fed from fuses on panel E.

6. Emergency illumination is provided by two cowled clear lamps, Type C, mounted below the top half of the instrument panel. They are the second lamp from each end of the panel. The lamps are fitted with 2·4v, 0·75w filaments and are connected across an independent supply provided by two (three post Mod. 1174) alkaline batteries, connected in parallel, and fitted in the port console. A switch is provided on the port coaming panel and is fitted with a luminised spot to facilitate its location in the event of failure of the normal lighting.

Console lighting (*fig.* 2)

7. The lighting systems for the two consoles are similar, each consisting of three cowled red lamps, Type C (two cowled lamps, Type C, and one lamp Ref. EL.42865 post Mod. 1174) (three lamps Ref. E.L. 42865 post Mod. 2467), two of which are mounted on the rear face of the pilots' handwheel control box and the third at the forward end of the console. These lamps are fitted with 24v, 2·8w filaments and are connected in parallel across a supply obtained from

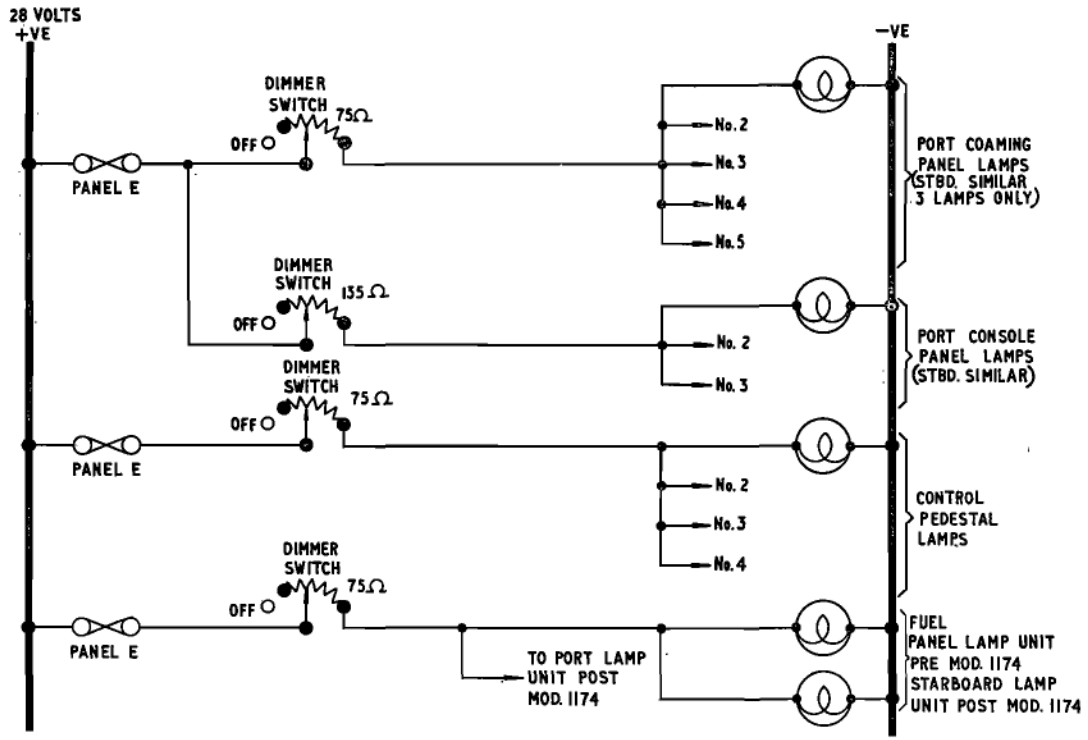


Fig. 2. Consoles and coaming panel lighting (pre-Mod. 1749 or 2071)

a single fuse on the port fuse panel E. The port and starboard circuits are each controlled by a dimmer switch mounted on the fuel panel supports.

Lighting of coaming panels and quarter panels *(fig. 2)*

8. The systems to port and starboard are similar. Mounted behind the port coaming panel are four, and behind the starboard panel two, cowled red lamps, type C. An extra lamp (Ref. EL.42865-starboard, Type C—port, post Mod. 1174) in front of the rear end of each panel illuminates the respective quarter panel. These lamps are fitted with 24v, 2·8w filaments. The five lamps to port are connected in parallel and fed from a single fuse on the port fuse panel E. An extra emergency lamp, with a 2·4v, 0·75w filament, is fitted by Mod. 1174 on the port coaming panel and is fed from the alkaline batteries via the emergency lamp switch. The three lamps to starboard are connected in parallel and are fed from a single fuse on panel E. Each circuit is controlled by dimmer switch mounted at the forward end of the respective coaming panel. On 'K' type aircraft an extra lamp, Type C, is mounted behind the starboard coaming panel to illuminate the air-to-air refuelling switch engravings, and is connected in parallel with the existing coaming panel lamps.

Pilot's fuel panel lighting *(fig. 2)*

9. This panel is illuminated by two cowled red lamps, Type C, combined as a single unit and mounted on an adjustable pedestal attached to the centre of the panel. Post Mod. 1174, there are two such sets of lamps, one on each panel. The lamps are fitted with 24v, 2·8w filaments and are connected in parallel across a supply from a single fuse on the port fuse panel E. The circuit is controlled by a dimmer switch mounted on the fuel panel.

Control pedestal lighting *(fig. 2)*

10. There are four red lamps, Type C, to illuminate the control pedestal panel, one mounted at the top rear of the panel to illuminate the V.H.F. controllers and three mounted under a shield round the trimming switch in the middle of the panel. The lamps are fitted with 24v, 2·8w filaments and are connected in parallel across a supply from a single fuse on the port fuse panel E. The circuit is controlled by a dimmer switch on the fuel panel.

COCKPIT PANEL LIGHTING

(Post Mod. 1749 or 2071)

Pilots' instrument panel normal lighting *(fig. 3)*

11. Normal illumination of the pilots' instrument panel is achieved by six local cowled red lamps, Type C, mounted beneath the top half of the panel, three lamps (Nos. 1, 3 and 4) to port and three (Nos. 5, 6 and 8) to starboard, and by two red floodlamps mounted one on each side of the pilots' canopy. Each group of lamps is controlled by a dimmer switch. 135 ohm dimmer switches are used for the local lamps and a 75 ohm dimmer switch is used for the floodlamps; all the dimmer switches are mounted on the fuel panel side support struts. The port lamps dimmer also controls the accelerometer lamps.

Note . . .

Post Mod. 2744 the dimmer switches are removed from the fuel panel outer support brackets and are mounted on their respective fuel panels.

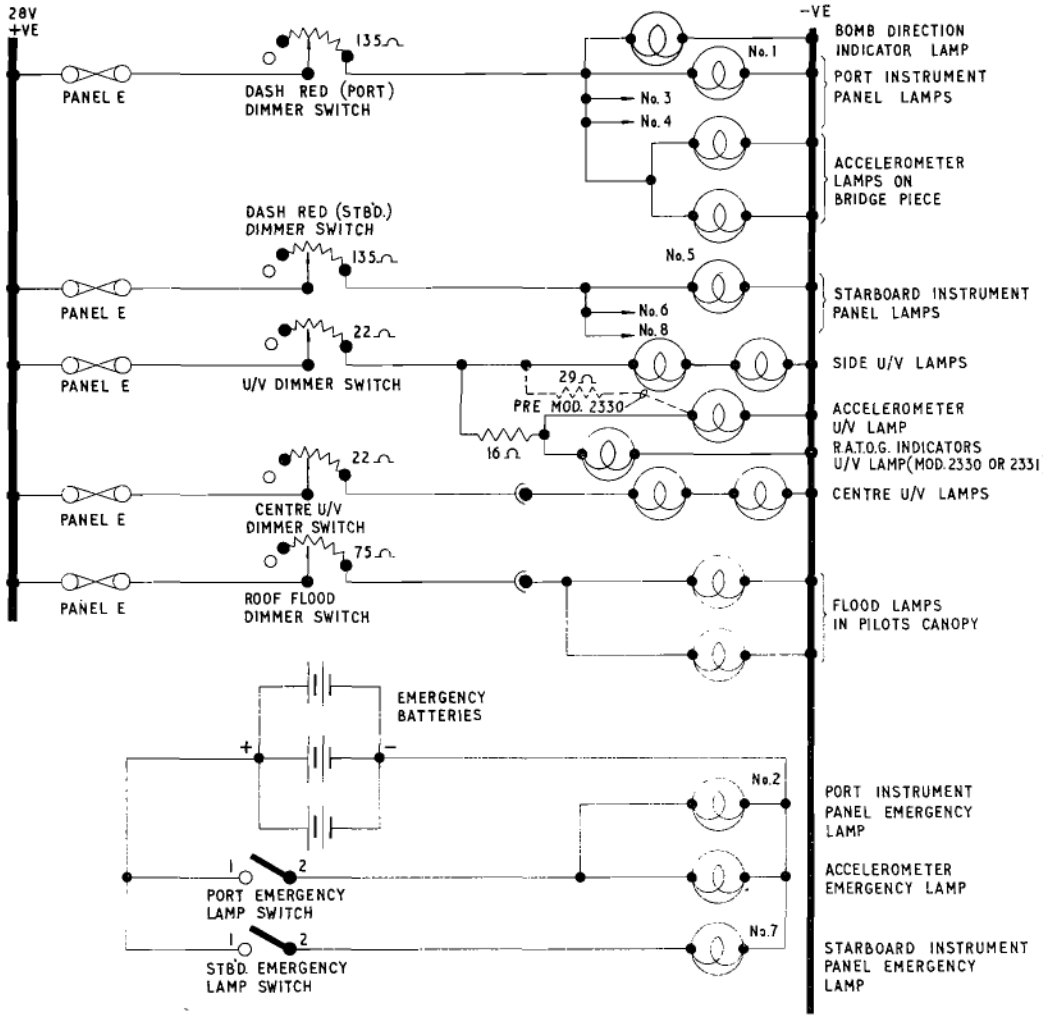


Fig. 3. Instrument panel lighting (post Mod. 1749 or 2071)

12. The six local lamps are fitted with 24v, 2·8w filaments. The three lamps in each circuit are connected in parallel, each circuit being supplied from a fuse on panel E.

13. The two floodlamps are fitted with 28v, 12w filaments and are connected in parallel and fed from a fuse on panel E. The wiring to these lamps is taken through a plug and socket connection, on the coaming round the rear of the pilots' canopy joint, to provide a break joint when the canopy is removed or jettisoned (this plug and socket also carries the supply to the pilots' cabin lamp).

Note . . .

Each floodlamp has a small hole in its casing to provide a general illumination of the pilots' fuel panel.

Accelerometer lighting (*fig.* 3)

14. Illumination of the accelerometer is achieved by mounting a pillar lamp bridge, Type D, above the instrument. Two 'P' filaments fitted to the lamp are connected in parallel with the port instrument panel lamps and are controlled by the same dimmer switch.

Bomb direction indicator lamp (Mod. 2467) (*fig.* 3)

15. Mod. 2467 introduces a pillar lamp,

mounted on the pilots' port instrument panel to illuminate the bomb direction indicator. The filament is connected in parallel with the accelerometer lamps filaments and the port instrument panel lamps filaments and is controlled by the same dimmer switch.

Emergency lighting (*fig.* 3)

16. Emergency lighting is provided by three cowled clear lamps, Type C. Two of the lamps (Nos. 2 and 7), mounted below the top half of the instrument panel (the second lamp from each end) are for the blind flying panels and the third lamp above the forward end of the port coaming panel is for the machmeter. They are fitted with 2·4v, 0·75w filaments and are connected across an independent supply provided by three alkaline batteries, connected in parallel, fitted at the rear of the port console. The lamps are switched separately by the relative switch, one on each coaming panel. The port switch also controls the accelerometer emergency lamp.

Ultra-violet lighting (*fig.* 3)

17. Ultra violet lamps are mounted one above each coaming panel, one on the port side of the top instrument panel for the accelerometer and two on a removable mounting which, when in use, is plugged into the centre of the top instrument panel. All the lamps have 12v, 7w filaments with the exception of the accelerometer lamp which has a 12v, 6w filament. The two lamps on the coaming panels are connected in series; the resultant circuit is connected in parallel with the accelerometer lamp and R.A.T.O.G. pressure indicators lamp (post Mod. 2330 or 2331) on the starboard side of the top instrument panel in series with a 29 ohm (pre-Mod. 2330 or 2331) or 16 ohm (post Mod.) resistance in the port console, and is controlled by a dimmer switch on the fuel panel. The centre lamps are in series and controlled by a dimmer switch mounted on the fuel panel. Both circuits are fed from fuses on panel E. The centre lamps are

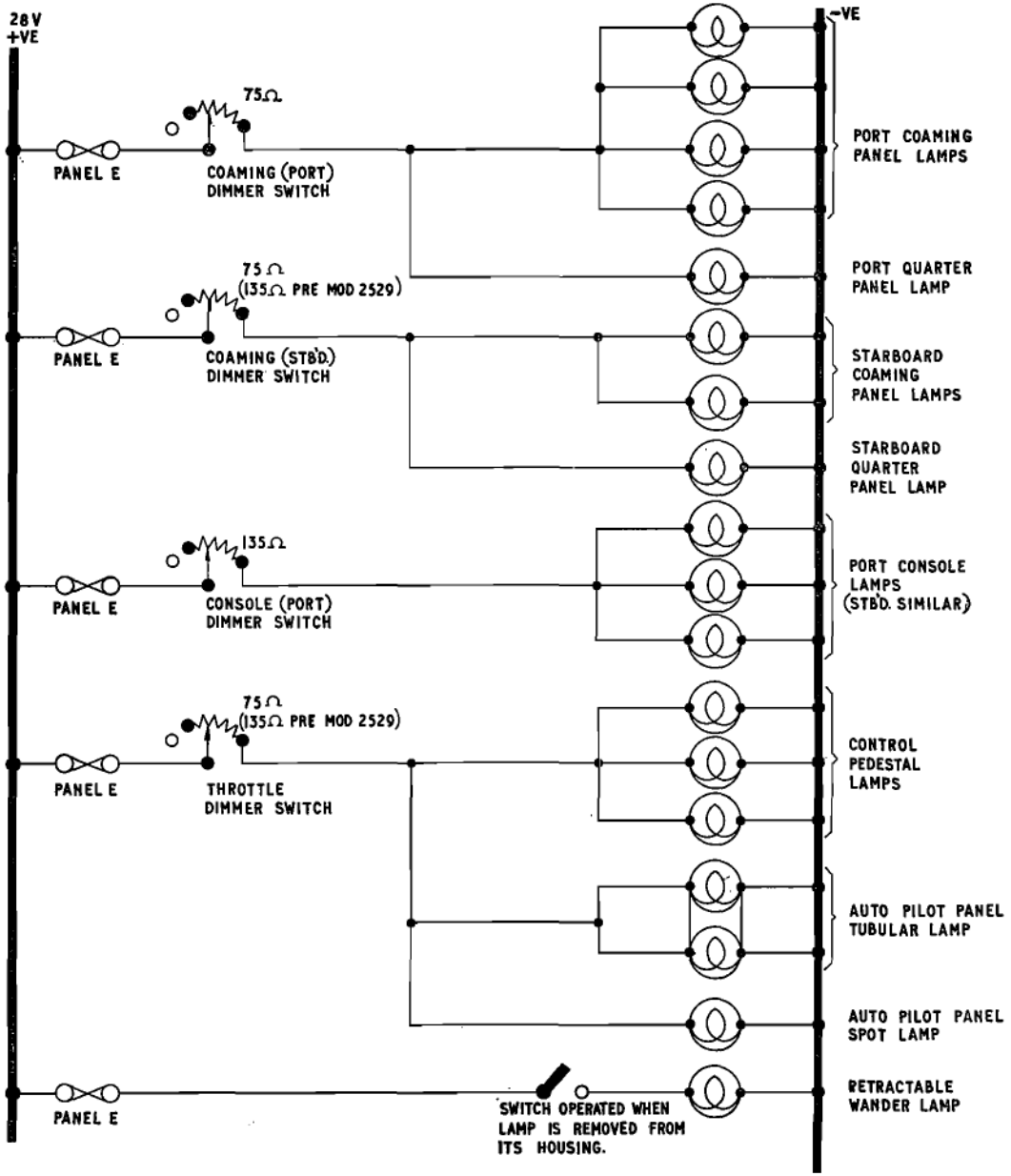


Fig. 4. Consoles and coaming panel lighting (post Mod. 1749 or 2071)

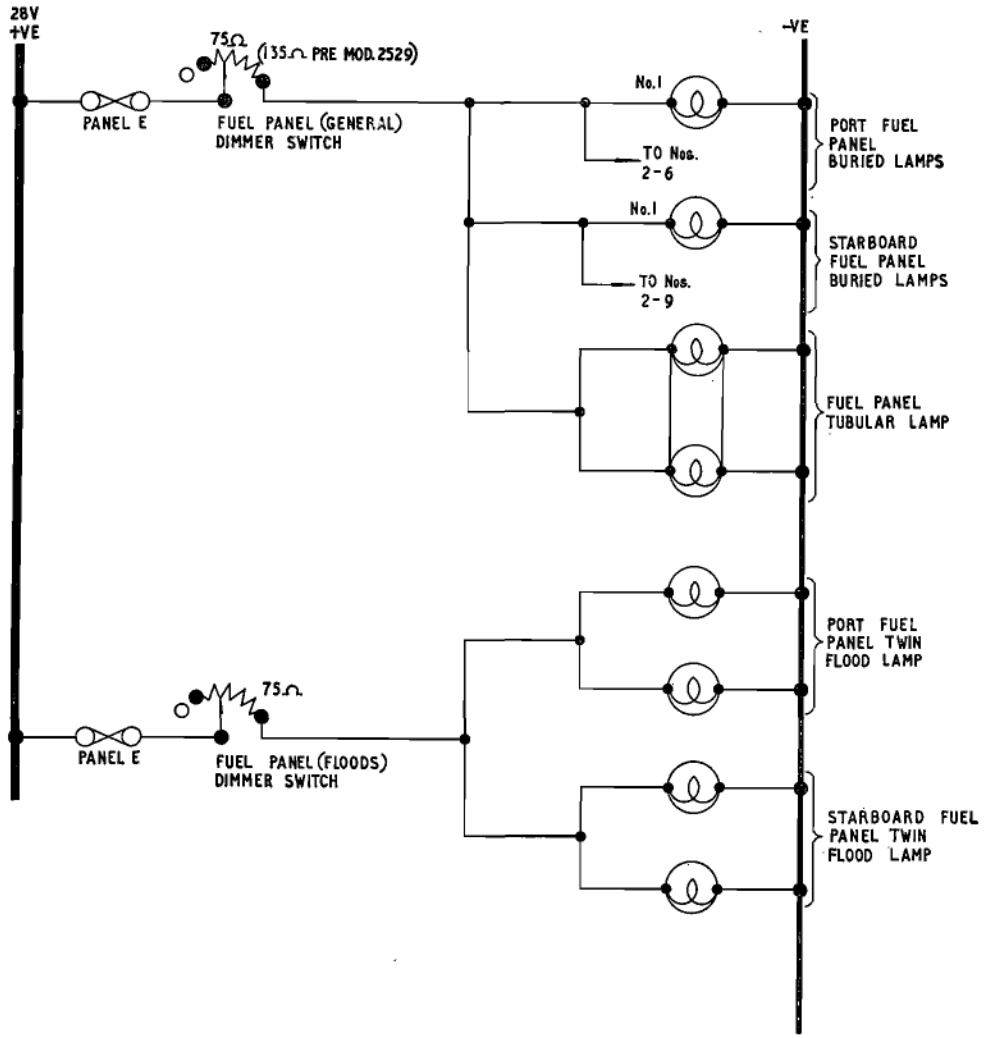


Fig. 5. Fuel panel lighting (post Mod. 1749 or 2071)

stowed in a mounting, provided just aft of the starboard coaming panel.

Note . . .

Post Mod. 2330 *or* 2331 *the following dimmer switches are mounted on a separate panel above the pilots' fuel panel:*

Instrument panel centre U/V lamps.

Instrument panel side U/V lamps.

Console lighting (*fig.* 4)

18. The lighting systems for the two consoles are similar, each consisting of two cowled red lamps, Type C, and one lamp Ref. EL42865 (post Mod. 2467 all three lamps are E.L.42865). Two of these are mounted on the rear face of the pilots' handwheel control box and the third on the elevator control guard at the forward end of the console. The lamps are fitted with 24v, 2·8w filaments and are connected in parallel across a supply from a fuse on panel E. The port and starboard circuits are each controlled by a dimmer switch on the fuel panel support brackets.

Note . . .

Post Mod. 2744, *the dimmer switches are removed from the fuel panel support brackets and are mounted on extension panels under the respective fuel panels.*

Lighting of coaming and quarter panels (*fig.* 4)

19. The systems to port and starboard are similar, mounted behind the port coaming panel are four, and behind the starboard panel two, red lamps, Type C. An extra lamp (Ref. EL.42865—starboard, Type C—port) mounted at the rear end of each panel illuminates the relative quarter panel. The lamps are fitted with 28v, 2·8w filaments. The five lamps to port are connected in parallel across a supply from a fuse on panel E; the three lamps to starboard are connected in parallel and are fed from a fuse on panel E. Each circuit is controlled by a dimmer switch mounted at the forward end of the respective coaming panel.

Control pedestal lighting (*fig.* 4)

20. There are four red lamps, Type C, and two 'P' lamps in a tubular lampholder to illuminate the control pedestal panel. Three of the lamps are mounted under a shield round the trimming switch in the middle of the panel and the fourth is mounted above the rear of the panel to illuminate the V.H.F. controllers, the cowl for this lamp also has a small hole to provide pin-point illumination of the auto-pilot trim indicator. The tubular lamp is mounted just forward of the auto pilot panel to provide general illumination for the auto-pilot controls. The type C lamps are fitted with 24v, 2·8w filaments and the tubular lamp is fitted with 'P' type filaments (Ref. No. 5 L/9959118). All are connected in parallel across a supply from a fuse on panel E. The circuit is controlled by a dimmer switch on the fuel panel starboard support.

Note . . .

Post Mod. 2744 *the dimmer switch is mounted on an extension panel under the starboard fuel panel.*

21. A retractable wander lamp is mounted to the starboard side of the aft end of the pedestal. The lamp can be withdrawn from its housing and used as required. To retract the lamp, a button on the housing is depressed; the cable will then be wound in by spring pressure. When the lamp is withdrawn from its housing a switch operates to connect a supply from a fuse on panel E, to the lamp. When the lamp is replaced in its housing the switch operates and breaks the supply to the lamp.

Pilots' fuel panel lighting (*fig.* 5)

22. Apart from the general illumination provided by the roof flood lamps (*para.* 12), this panel is illuminated by 15 buried lamps (edge lighting) two twin lamps on adjustable pedestals and by a tubular lamp for the lower half of the panel. Use is made of the buried lamps to fix the engraved 'kobex' outer panel to the main panel. The buried lamps and tubular lamp are fitted with 'P' type filaments (Ref. No. 5L/9959118) which are connected in parallel and supplied from a fuse on panel E via a dimmer switch on the fuel panel. The twin lamps are fitted with 24v. 2·8w filaments, all being connected in parallel and supplied from a fuse on panel E via a dimmer switch on the fuel panel.

Note . . .

Post Mod. 2330 *or* 2331 *there are* 16 *concealed lamps and the following dimmer switches are mounted on a separate panel above the pilots' fuel panels:*

Fuel panel concealed lamps.
Fuel panel twin lamps.

Post Mod. 2296 *there are two further concealed lamps mounted on the lower port fuel panel.*

Compass lamp—pre-Mod. 2791 (*fig.* 6)

23. The magnetic compass above the pilots' instrument panel is illuminated by an instrument lamp, fitted with a 24-volt filament and supplied from a single fuse on the port fuse panel E. The circuit is controlled by a dimmer switch mounted on the pilots' fuel panel.

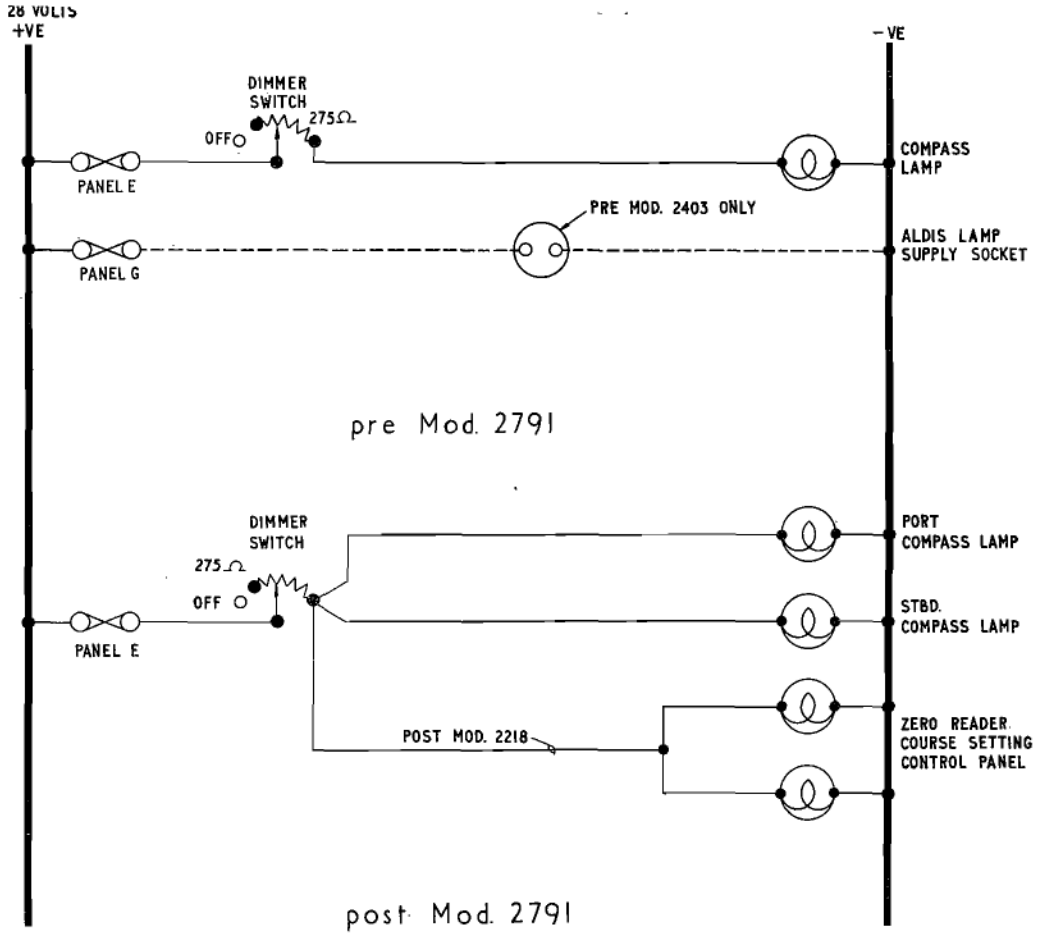


Fig. 6 Compass and aldis lamp supply

Note . . .

Post Mod. 2330 *or* 2331 *the compass lamp dimmer switch is mounted on a separate panel above the pilots' fuel panels.*

Compass lamps—post Mod. 2791 (*fig.* 6)

24. Mod. 2791 deletes the centrally positioned magnetic compass and introduces two small magnetic compasses Type E2B, one under each fuel panel. Each compass has built-in lighting and is supplied with a length of cable for the filament. The two compass lamps are connected in parallel and are controlled by the original compass dimmer switch. The circuit is supplied from a fuse on panel E.

Zero reader course setting control panel lamps—post Mod. 2218 (*fig.* 6)

25. The course setting control panel for the zero reader is fitted where the magnetic compass pre-Mod. 2791 was mounted under the fuel panels. The panel has two built-in filaments and is supplied with suitable cable. The filaments are connected in parallel and controlled by the compass dimmer switch.

CREW COMPARTMENT LIGHTING

Aldis lamp supply—pre-Mod. 2403 only (*fig.* 6)

26. A 2-amp., 2-pin socket is mounted on the plotting table at the W/T operator's position on the radio crate and is fed from a single fuse on panel G, to provide a supply for the aldis lamp when required; there is no switch in this circuit.

Periscopic sextant supply (*fig.* 6)

27. A 2-amp. 2-pin socket is mounted at the top of the radio crate at the 1st navigator's position and is fed from a single fuse on panel G, to provide a supply for the sextant or periscope when required. There is no switch in the circuit.

Chartboard lamp (sextant station) Mod. 2825 (*fig.* 6*A*)

28. A chartboard lamp, Type C, is provided by Modification 2825 for use at the periscopic sextant station. The two-pin plug has been removed from the chartboard lamp and the two leads reconnected to the sextant two-pin plug (in parallel with the sextant leads) so that when plugged into the socket at the top of the radio crate (*para.* 27) a supply is available to both sextant and chartboard lamp. The lamp is complete with its own dimmer switch.

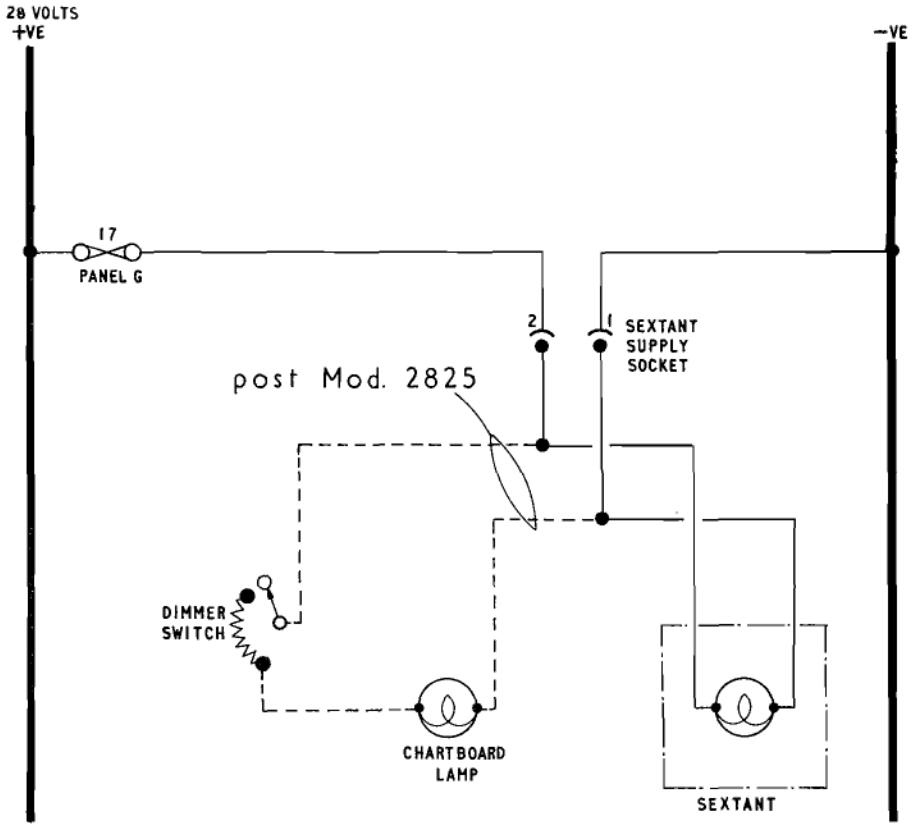


Fig. 6A. Sextant and chartboard lamp

High intensity cockpit lamps—Mod. 1965 (*fig.* 6*B*)

29. Certain of the alternative stores (*Chap.* 3) that the aircraft may carry produce an intensely bright flash when detonated. If the aircraft is not provided with suitable windscreen shutters (Mod. 2744), this flash may be so bright that the pilots cannot see their essential instruments. Mod. 1965 introduces high intensity lamps trained on the artificial horizon instruments so that these instruments will be seen during the flash even though other instruments may not.

30. Four lamps, fitted with 12 watt filaments, are provided and are mounted on adjustable brackets in cowled pairs on the rear windscreen rear pillars. All four lamps are connected in parallel and are controlled by either one of two switches, one on the radio crate (starboard side) and the other on the control pedestal. The pilots' switch has BRIGHT, DIM and OFF positions and is fed from panel D. When selected BRIGHT the lamps are at full voltage; when selected DIM, a 57 ohm resistance is introduced in the circuit in series with each lamp; the resistances are mounted on the quarter panels. The switch on the radio crate fed from panel G has two positions only, OFF and BRIGHT, and post Mod. 2198 is fitted with a guard. The navigator's switch on the radio crate overrides the pilots' switch so that whatever is selected by the pilot, selecting the navigator's switch to BRIGHT will connect the lamps to full voltage to give full brilliance.

Note . . .

The pilots' switch (*Ref. No.* 5CW/5515) *has the end of its toggle diamond shaped so that the switch can be located by touch either at night or during the flash period following the explosion of the store.*

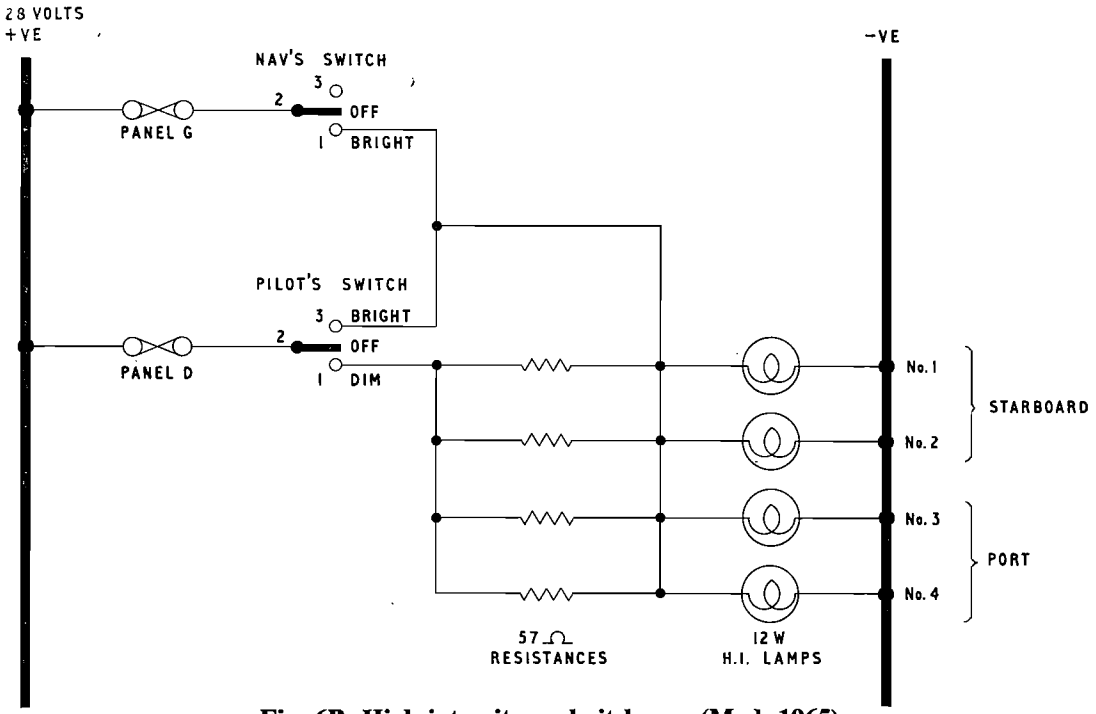


Fig. 6B. High intensity cockpit lamps (Mod. 1965)

Crew lamps (*fig.* 7)

31. There are two main cabin lamps, one on the cabin roof fitted with a 12w filament, which is controlled by a switch on the rear face of the port console, and the other in the pilot's canopy, fitted with a 6w filament which is controlled by a switch on the port coaming panel. The wiring to the latter lamp is taken via a plug and socket on the hood coaming, providing a break connection when the hood is removed or jettisoned (this plug and socket also carries the wiring to the instrument panel floodlamps). Both lamps are supplied from a single fuse on the port fuse panel E.

Bomb aimer's lamps (*fig.* 7)

32. In addition to the above lighting, there is a floodlamp — consisting of a slotted tubular fitting with a lamp at each end — mounted to the rear of the bomb aimer's panel (at the bomb aimer's visual position). This lamp is fitted with two 2·8w filaments and controlled by a dimmer switch on the panel. Also there is a 2-pin socket provided on the panel for a clip on type angle-poise lamp. This lamp is fitted with a 6w filament and is controlled by a dimmer switch on the panel. The supply is from a single common fuse on the port fuse panel E.

Bomb sight lamps—post Mod. 1648 (*fig.* 7)

33. The bomb sight controllers are illuminated by two cowled floodlights Type C, combined as a single unit on an adjustable pedestal attached to the port floor beam. The lamps are fitted with 24v, 2·8w filaments and are connected in parallel across a supply from a single fuse on the port fuse panel E. The circuit is controlled by a dimmer switch mounted adjacent to the pedestal.

Radio crate lamps (*fig.* 7)

34. There are three radio crate floodlamps consisting of slotted tubular fittings with a lamp at each end. There are four angle-poise lamps fitted to the crate, one to port, two in the centre and one to starboard. There are three "stalk" lamps mounted on the crate at the 2nd Navigator's position to illuminate the bomb controller.

35. The port and starboard angle-poise lamps have separate dimmer switches on the crate and are supplied in parallel with the centre floodlamp with its dimmer switch from a single fuse on panel G.

36. The port and starboard floodlamps each have dimmer switches on the crate and are supplied in parallel with the two centre angle-poise lamps, having a common dimmer switch, from a single fuse on panel G.

37. The stalk lamps have a common dimmer switch on the crate and are supplied from a fuse on panel G.

38. Modification 2825 introduces selective amber or white lighting to the radio crate floodlamps. The lamps are white normally and to obtain amber lighting, amber shades are clipped over the tubular fittings.

N.B.S. Calculator lamp (*fig.* 7)

39. There is an angle-poise lamp mounted together with its dimmer switch on the rear face of the starboard console to illuminate the calculators behind the 2nd pilots' seat. The circuit is supplied from a fuse on panel D.

Radio compass lamp—Mod. 1500 (*fig.* 7)

40. The radio compass was introduced by Mod. 1500 and a single, cowled lamp, Type C, was added, together with a dimmer switch to illuminate the controls. The

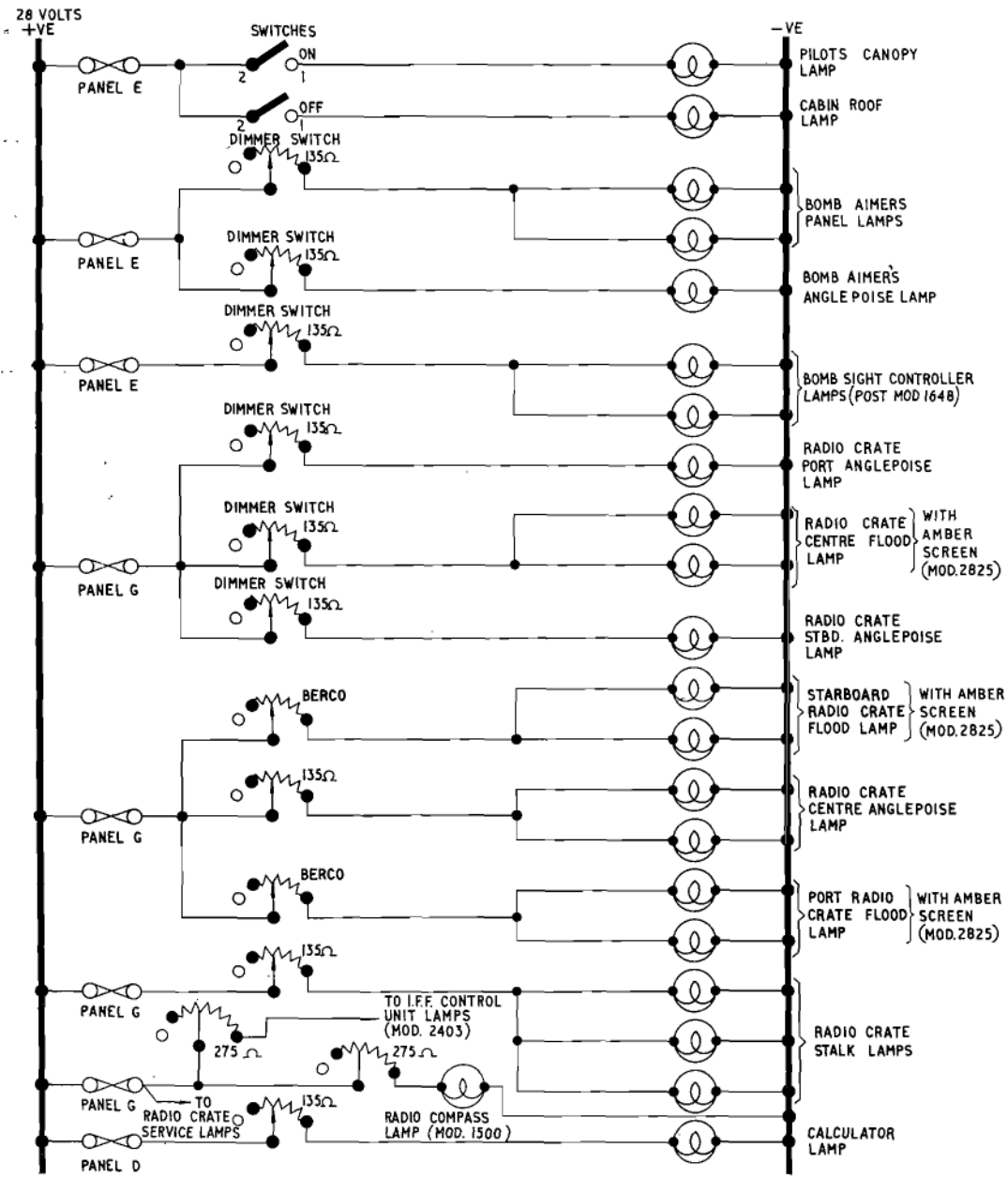


Fig. 7. Crew Lamps

lamp is fitted with a 24-volt, 2·8 watt filament and is supplied from the fuse on panel G that also supplies the servicing lamps on the radio crate. Post Mod. 2403, the wiring to the dimmer switch is slightly altered in so much as a 2-way connector block is added to tap off a supply to the I.F.F. control units lighting.

I.F.F. Control unit lighting—Mod. 2403 (*fig.* 7)

41. The A.R.I. 5848-D-2-P-7 and A.R.I. 5848-D-3-P-7 have control units and coder control units with internal lighting. The supply to the filaments is controlled by a dimmer switch mounted on the table top of the radio crate on the port side. The supply is obtained from the same fuse on panel G that supplies the radio compass lighting and the radio crate service lamps.

Servicing lamps (*fig.* 8)

42. There are fifteen servicing lamps; four in the roof of the front fuselage, above the nosewheel bay; two in the starboard (hydraulics) service bay, fed via the starboard wing root panel K; six along the roof of the rear fuselage, of these three are for the power controls and feel units, fed from the rear spar panel V, and three for the rudder and elevator power control and the tailplane incidence controls fed from panel W; the remaining three lamps are fitted, one behind the radio crate and two fixed to the underside of the plotting table. All the lamps can be locally switched and are fitted with 16w filaments. All except the radio crate lamps are supplied from a single fuse on the port fuse panel E via a switch on the rear of the port console. An indicator lamp is provided above the switch and shows red when the switch is ON. The lamps under the plotting table are supplied permanently from a single fuse on panel G, whilst that behind the radio crate is fed from another fuse on panel G; all are switched locally at the lamp holders.

43. Mod. 2030 changes the filaments fitted to the twelve service lamps in the main fuselage from Ref. No. 5L/9953202 to 28-volt, 18-watt (Ref. No. 5L/9953278).

44. Mod. 1281 introduces an inspection lamp socket adjacent to the port forward lamp in the compartment above the nose-wheel bay. This socket is supplied in parallel with the adjacent lamp. Mod. 1228 introduces eight servicing lamps and an inspection lamp socket, in the bomb bay. These are supplied from the external supply, when it is plugged in, via a circuit-breaker on the port rear window chute. Mod. 2195 introduces two 2-way terminal blocks, one on the starboard and the other on the port side of the forward end of the bomb bay roof. These terminal blocks facilitate the removal of the two forward bomb bay lamps when the bomb bay tank is to be fitted.

45. With the cancellation of wing nacelles, the nacelle servicing lamps are no longer required, but the wiring to the wing/stalk junction box remains in the aircraft and a routing diagram is supplied for reference only.

46. Mod. 994 introduces a servicing lamp in the nose scanner bay together with an inspection socket and local switch. The circuit is supplied in parallel with the other servicing lamps, there is, however, an additional switch in the supply to the lamp. Both this switch and the main servicing lamps switch have to be at ON before this lamp will light. The lamp is fitted with filament Ref. No. 5L/9953202 pre-Mod. 2030 or filament 28-volt, 18-watt (Ref. No. 5L/9953278) post Mod. 2030.

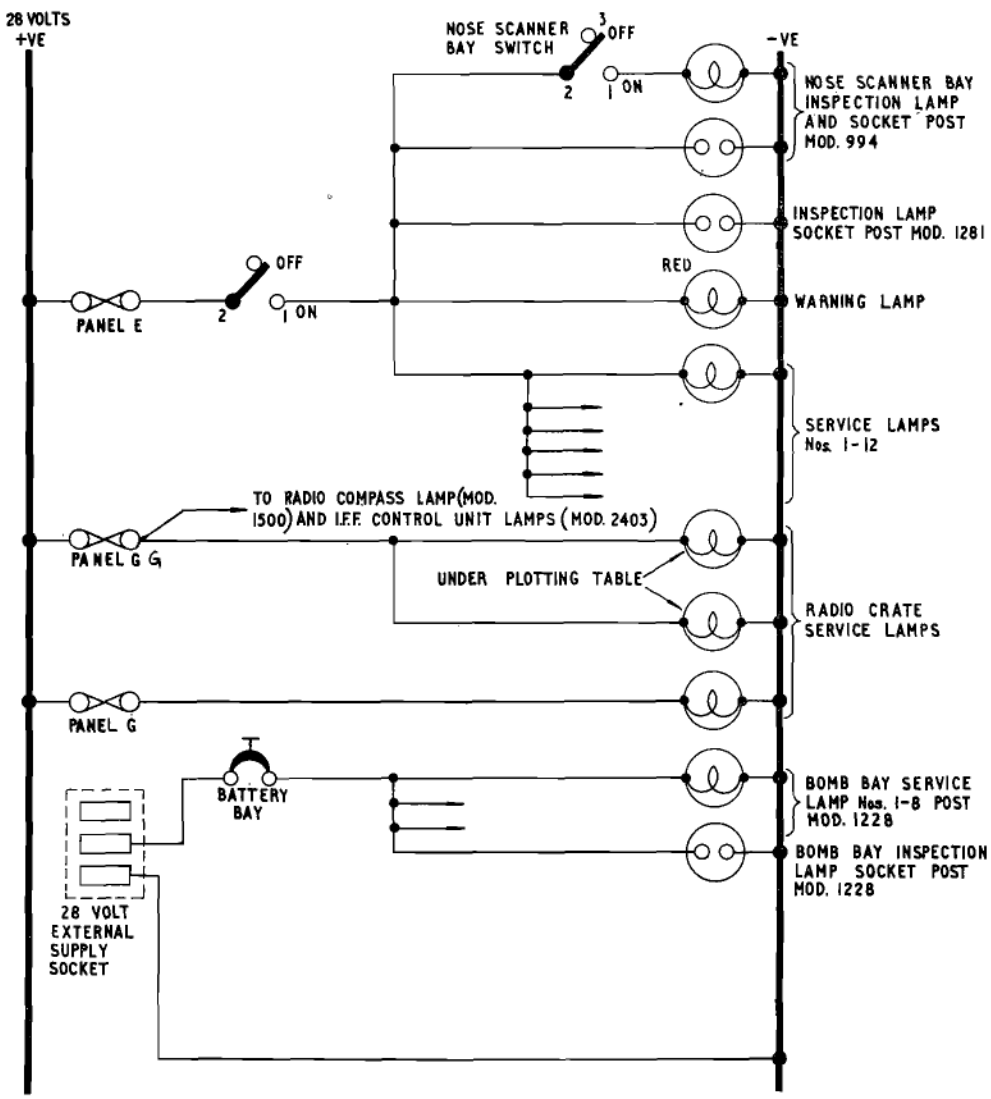


Fig. 8. Service lamps

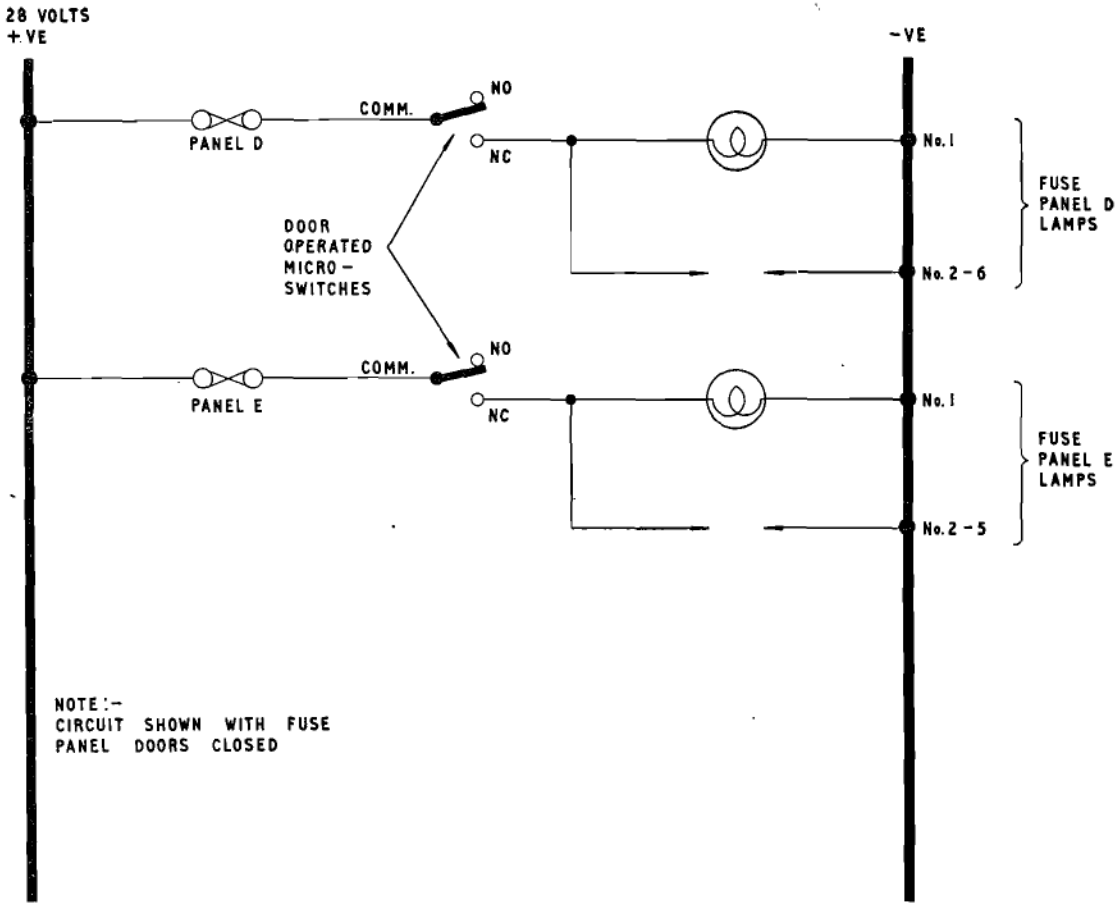


Fig. 8A. Fuse panels D and E lighting (Mod. 2083)

Fuse panels D and E lighting—Mod. 2083 (*fig.* 8*A*)

47. Six lamps connected in parallel and mounted inside the starboard fuse panel D are provided to illuminate the fuse blocks when the panel door is opened. Similarly, five lamps are provided to illuminate the port fuse panel E. Each lamp is fitted with a 24-volt, 2·8 watt filament. The supply to each set of lamps is from a fuse on the relative fuse panel and is controlled by a micro-switch operated by the fuse panel door. The micro-switches are adjusted so that the lamps go out when the door is closed.

SERVICING

Introduction

48. The General Information group, contained in Book 2 immediately after Section 5 marker card, gives a detailed description of the general tests to be applied to all aircraft circuits and the procedure to be adopted when servicing special circuits.

General test for lighting

49. Check each lighting circuit in turn as follows:

(1) Check the circuit fuse.

(2) Connect the 28-volt external supply.

(3) Switch on the circuit using the relative dimmer switch.

(4) Check that all the circuit filaments are working. Replace any faulty filaments.

(5) Check the dimmer switch over its full range of movement.

(6) Switch off.

After completing tests for all circuits, disconnect the external supply.

Aldis lamp and sextant supply

50. (1) Check the circuit fuses and connect up the 28-volt external supply.

(2) With 28-volt test lamp check across the 'line' pin to the earth pin of each socket, the lamp should come on in each case.

Note . . .

The Aldis lamp supply socket is removed by Mod. 2403.

Focusing of cockpit lighting

51. (1) Black out the entire cabin on the outside of the aircraft.

(2) Operate each lighting circuit separately.

(3) Make sure the lights illuminate their respective instruments and panels and that there is no reflection from the windscreens or surrounding aircraft structure.

High intensity cockpit lamps—Mod. 1965

52. (1) Check the circuit fuses and connect the 28-volt external supply.

(2) Select the navigator's switch on the radio crate to BRIGHT and then OFF. Check that all four lamps come on and then go off.

(3) Select the pilot's switch on the control pedestal to DIM, check that all the lamps shine dimly.

(4) Select the pilot's switch to BRIGHT and check that all the lamps shine with the full brilliance.

(5) Check that each pair of lamps is directed at the relevant artificial horizon instrument, adjust if necessary.

(6) Select the pilots' switch to OFF and disconnect the external supply.

Note. . .

It is important that the lamp filaments and the switches are fully serviceable prior to an aircraft leaving on a sortie requiring the possible use of these lamps. If there is the slightest doubt as to the serviceability of any item, that item should be replaced. The reflectors should always be kept clean and bright.

Fuse panels D and E lighting—Mod. 2083

53. (1) Check the circuit fuses and connect the 28-volt external supply.

(2) Open the fuse panel doors and check that the relative lamps come on. Check that the lamps go out when the doors are closed; adjust the micro-switches if necessary.

(3) Remove the external supply.

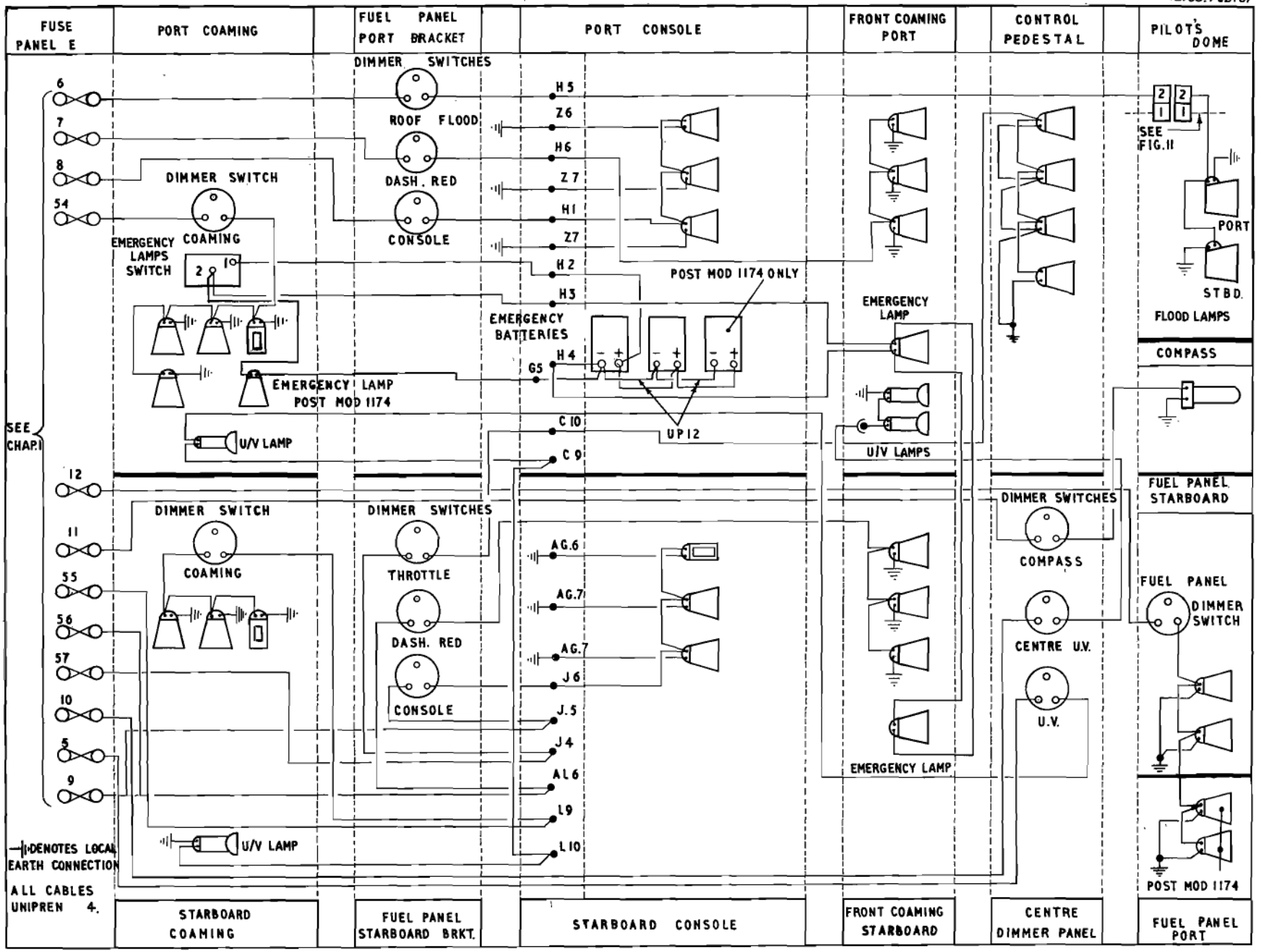


Fig. 9. Cockpit panel lamps. (pre Mod 1749 or 2071)

RESTRICTED

75836 SHT.138-A
67436 SHT.138-M

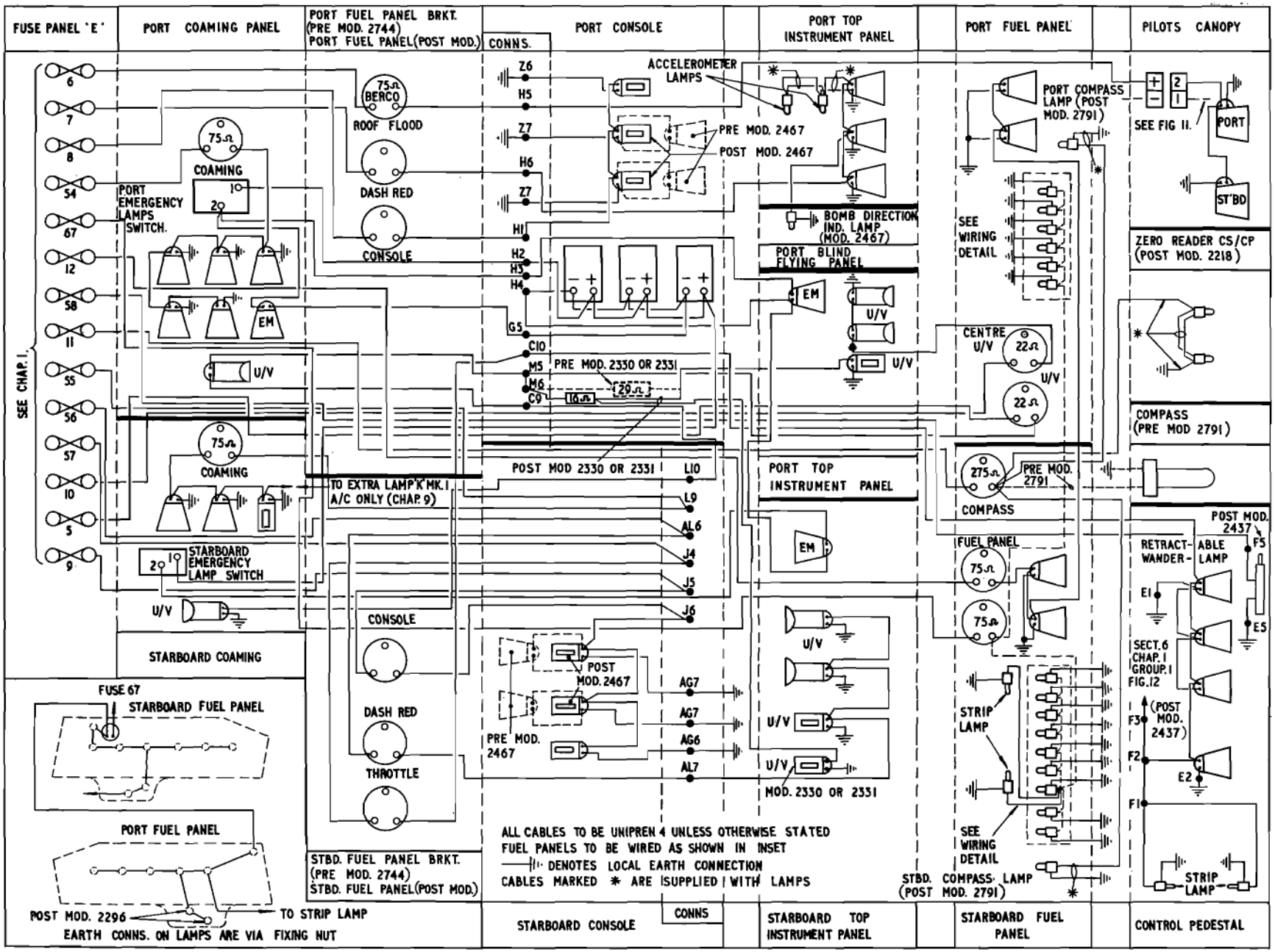


Fig. 10. Cockpit panel lamps (post Mod 1749 or 2071)

RESTRICTED

67436 SHT 138-AB
75836 SHT 138-P

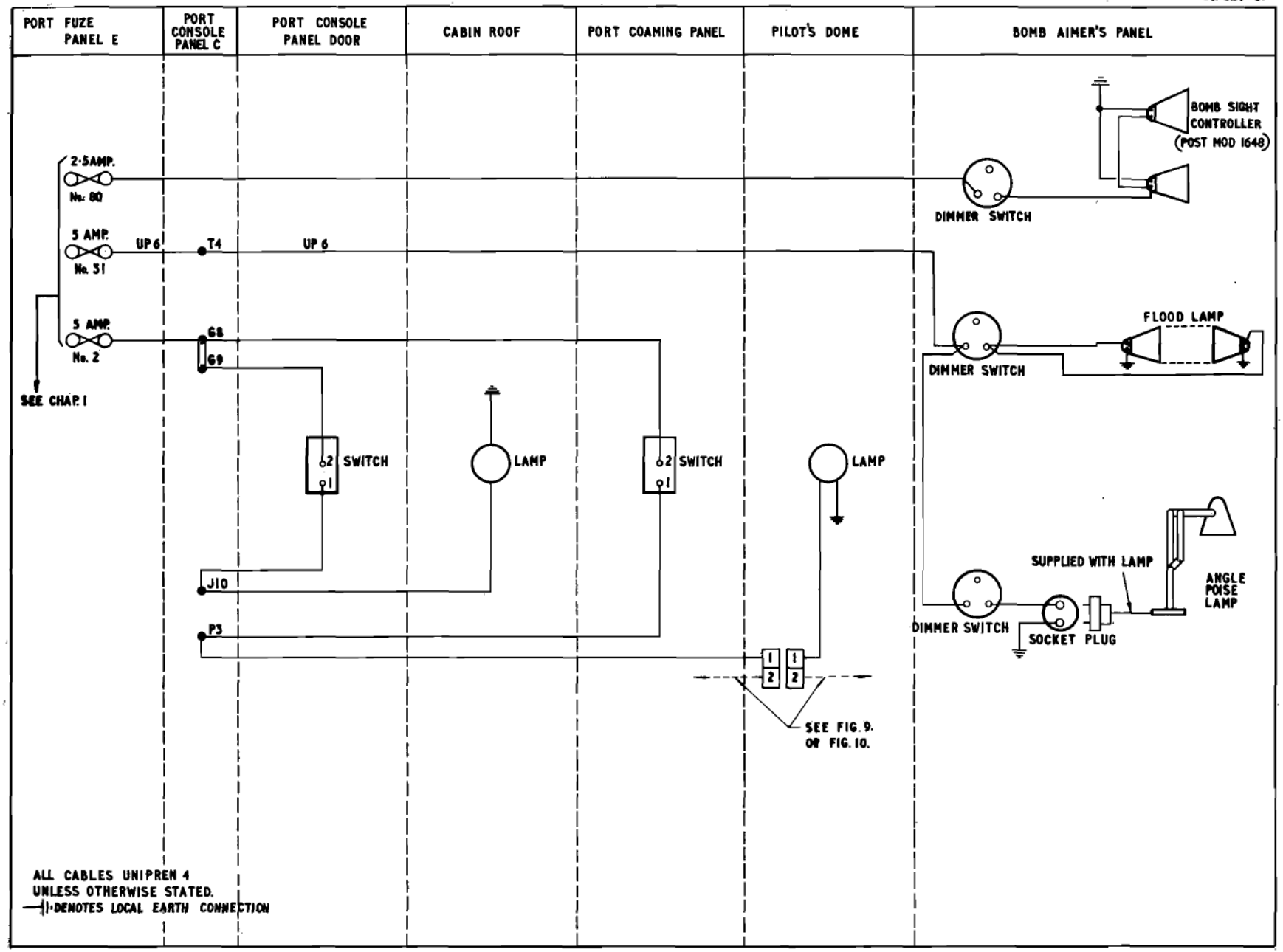


Fig. 11. Crew cabin lamps

RESTRICTED

70656 SHT. 439-C 75836 SHT. 170-B 67436 SHT. 170-D
75836 SHT. 137-B 67436 SHT. 137-F

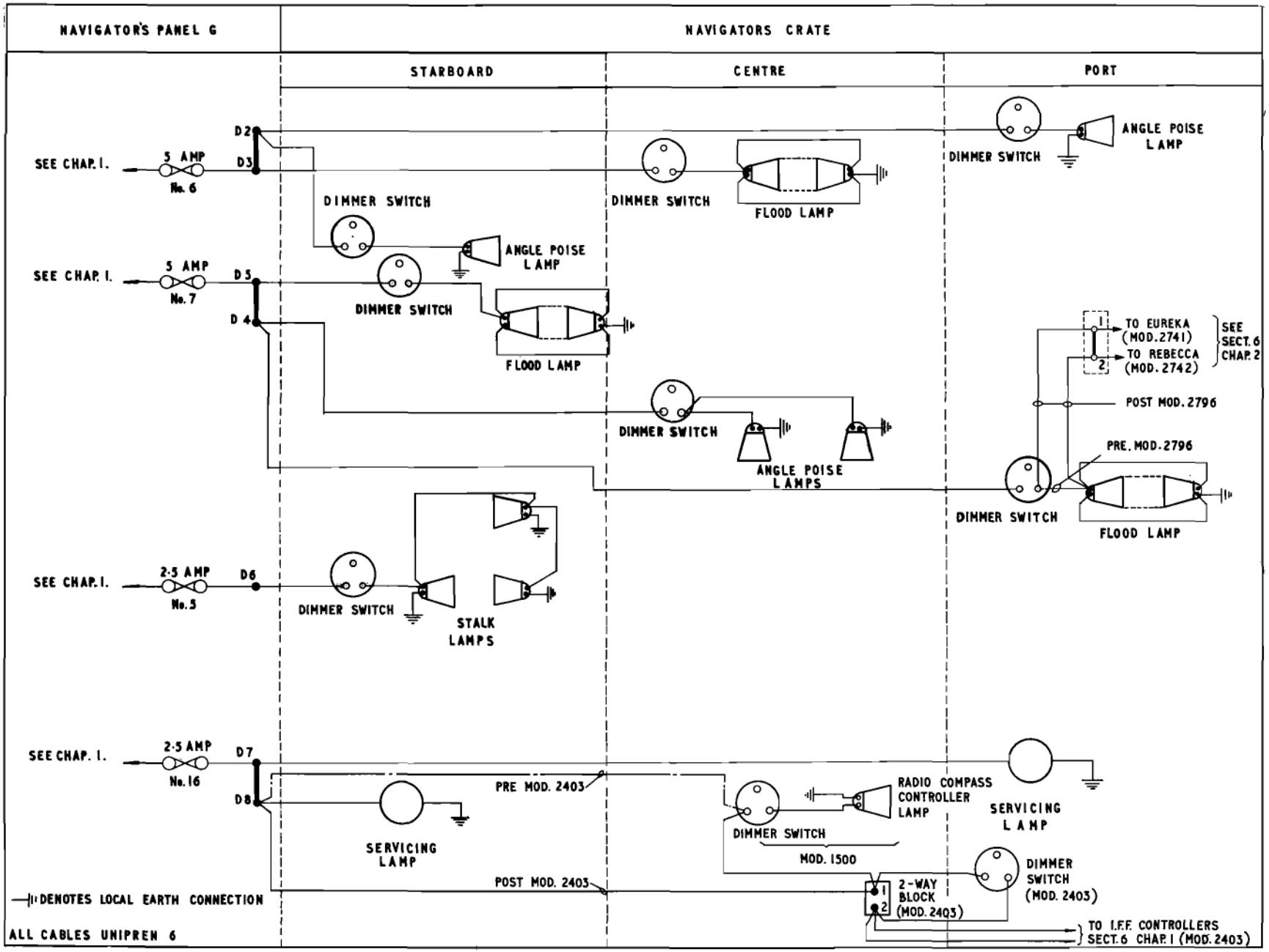


Fig. 12. Radio crate lamps

RESTRICTED

70653 SHT. 51-B 75836 SHT. 403-C
67436 SHT. 403-F

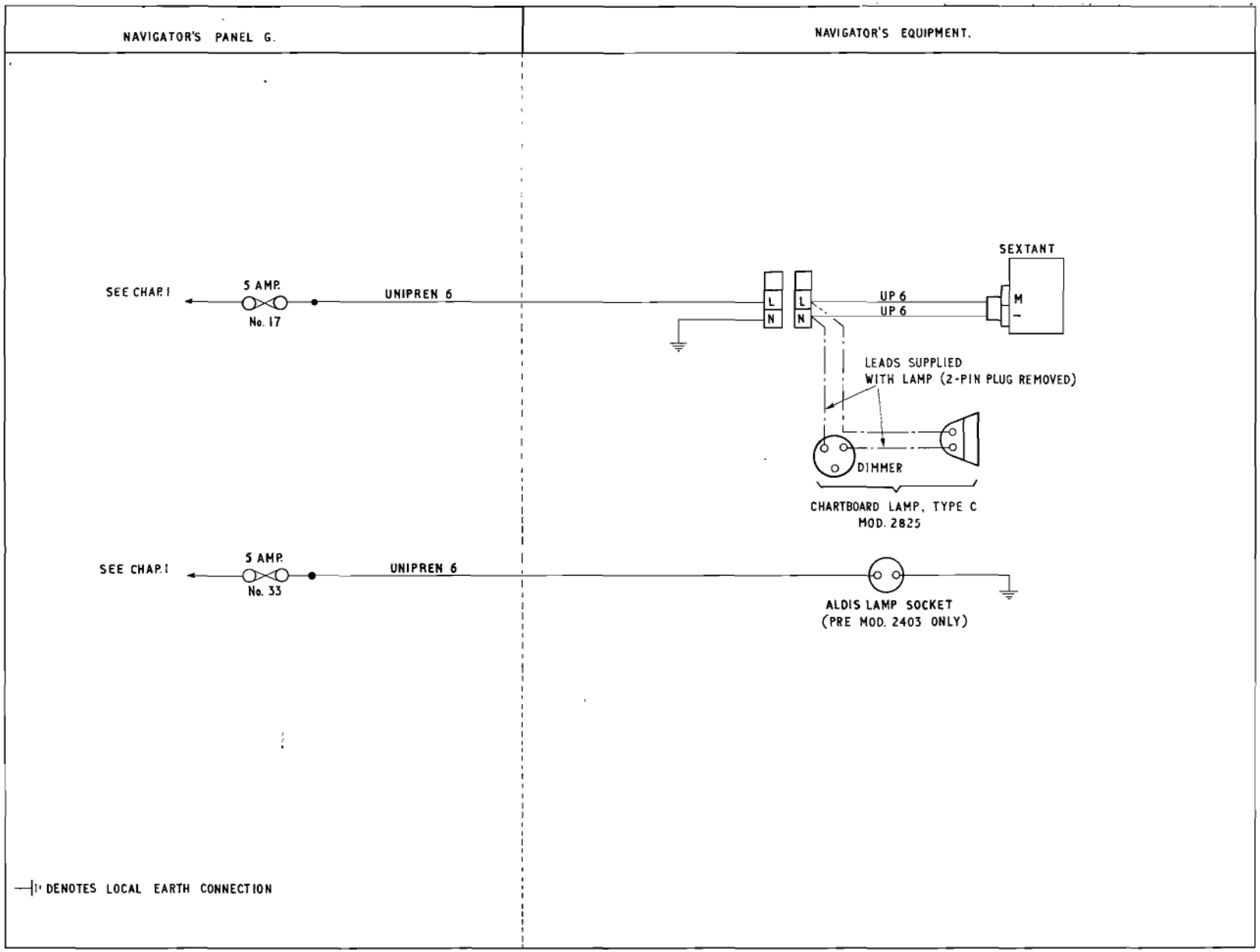


Fig. 13. Aldis lamp and sextant supply

RESTRICTED

(A.L.47.Apr.60.)

75836 SHT. 152-C 67436 SHT 152-F
75836 SHT. 153-B 67436 SHT 153-A

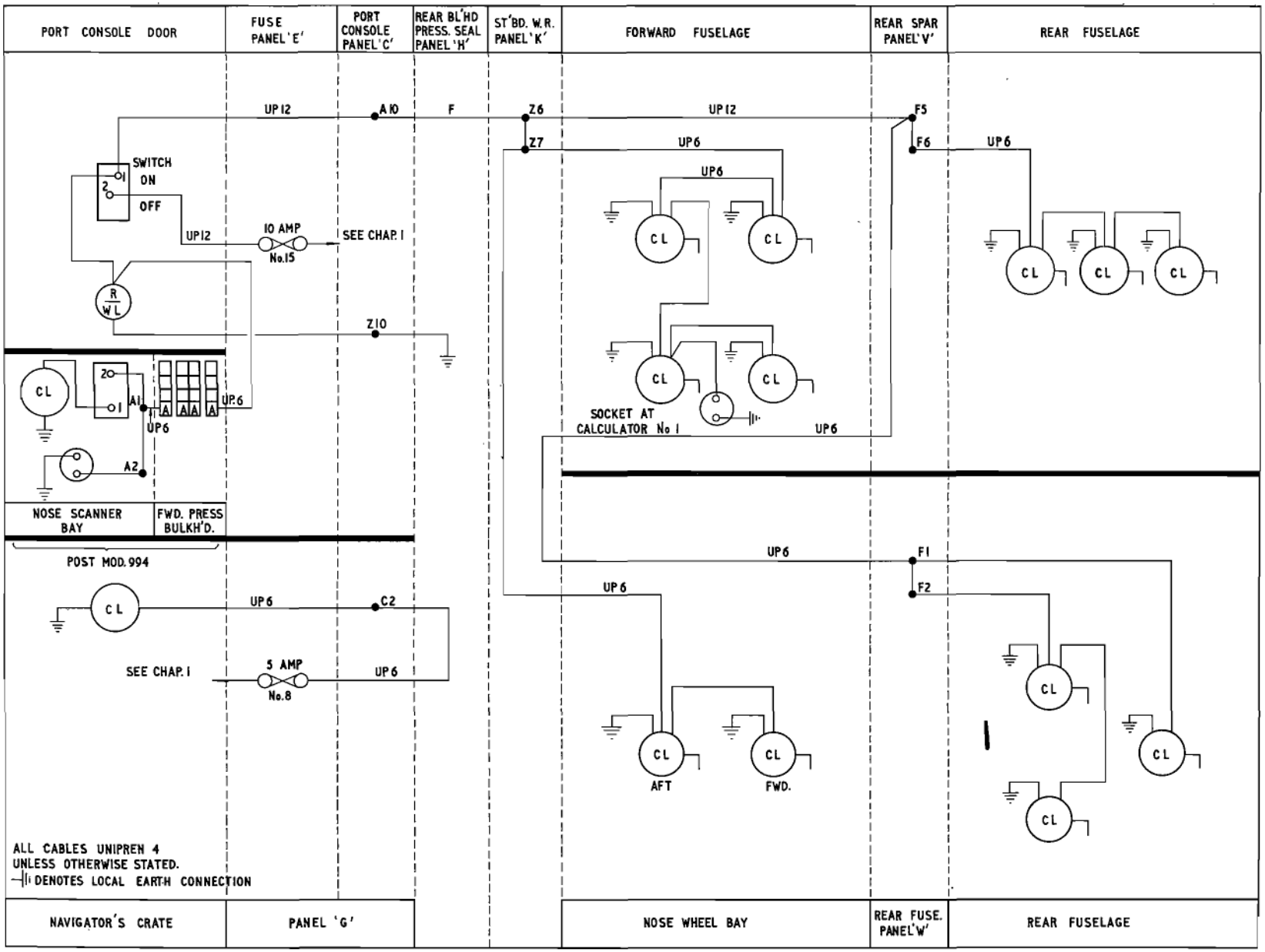


Fig. 14. Servicing lamps
RESTRICTED.

75836 SHT. 429-C 70636 SHT. 429-D
75836 SHT. 173-D 67436 SHT. 173-M

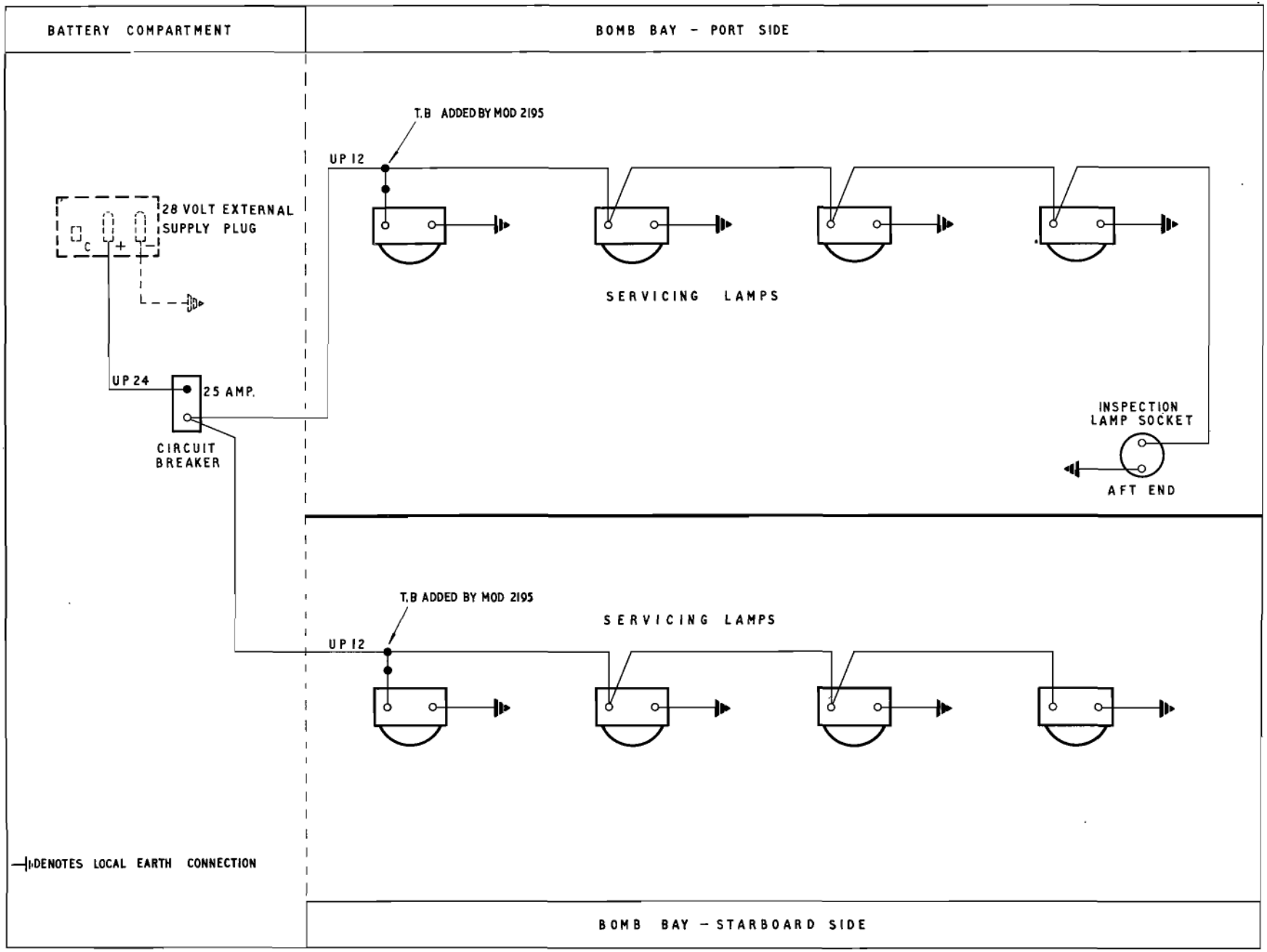


Fig. 15. Bomb bay servicing lamps.

(A.L.47, Apr. 60.)

RESTRICTED

67436 SHT. 417-E

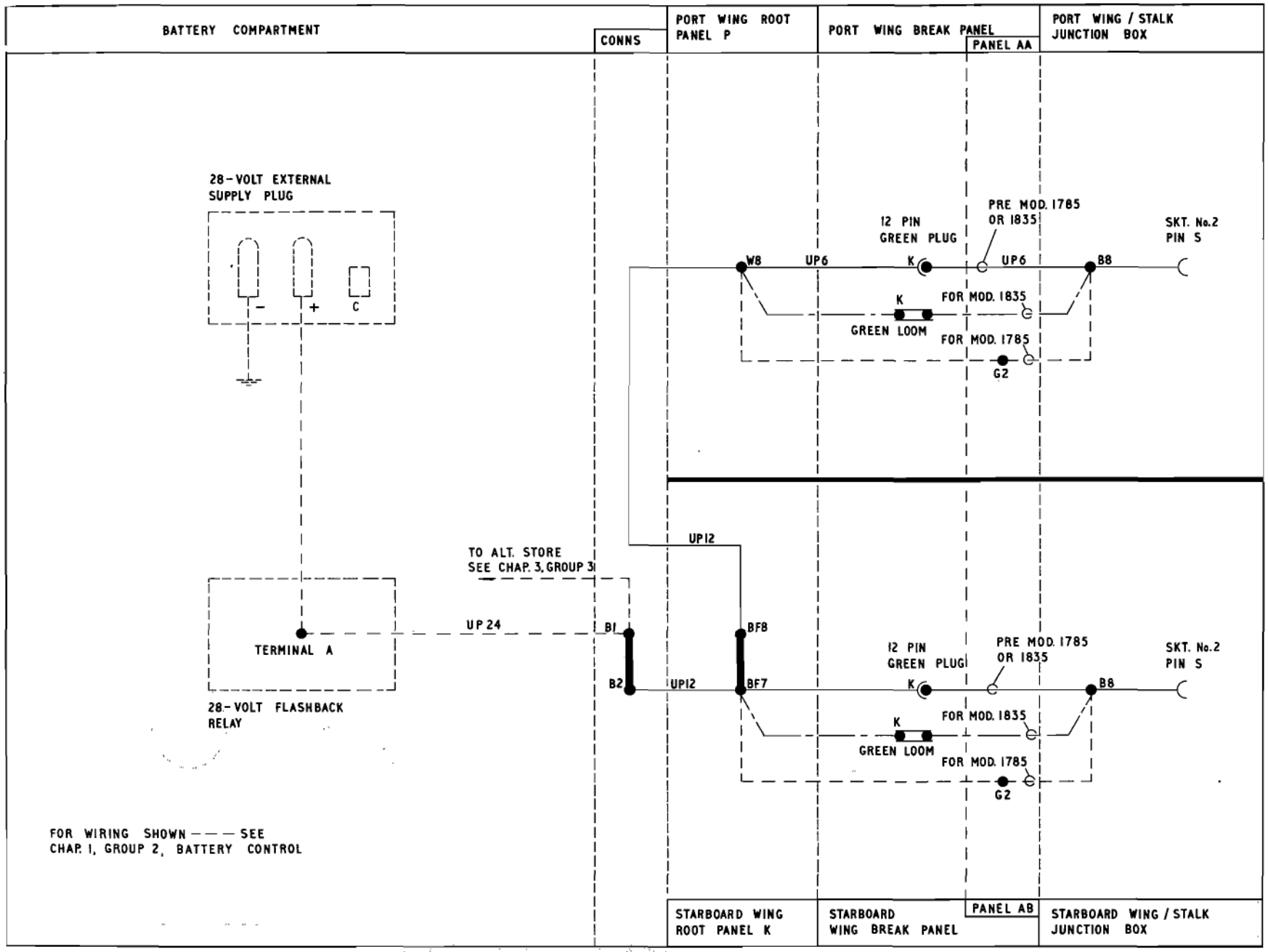


Fig 16. Wing nacelle servicing lamps wiring (pre Mod. 2672)

75836 SHT.428-D 70636 SHT.418-D 67479 SHT. 861-B
67436 SHT.418-F 67479 SHT. 867-A

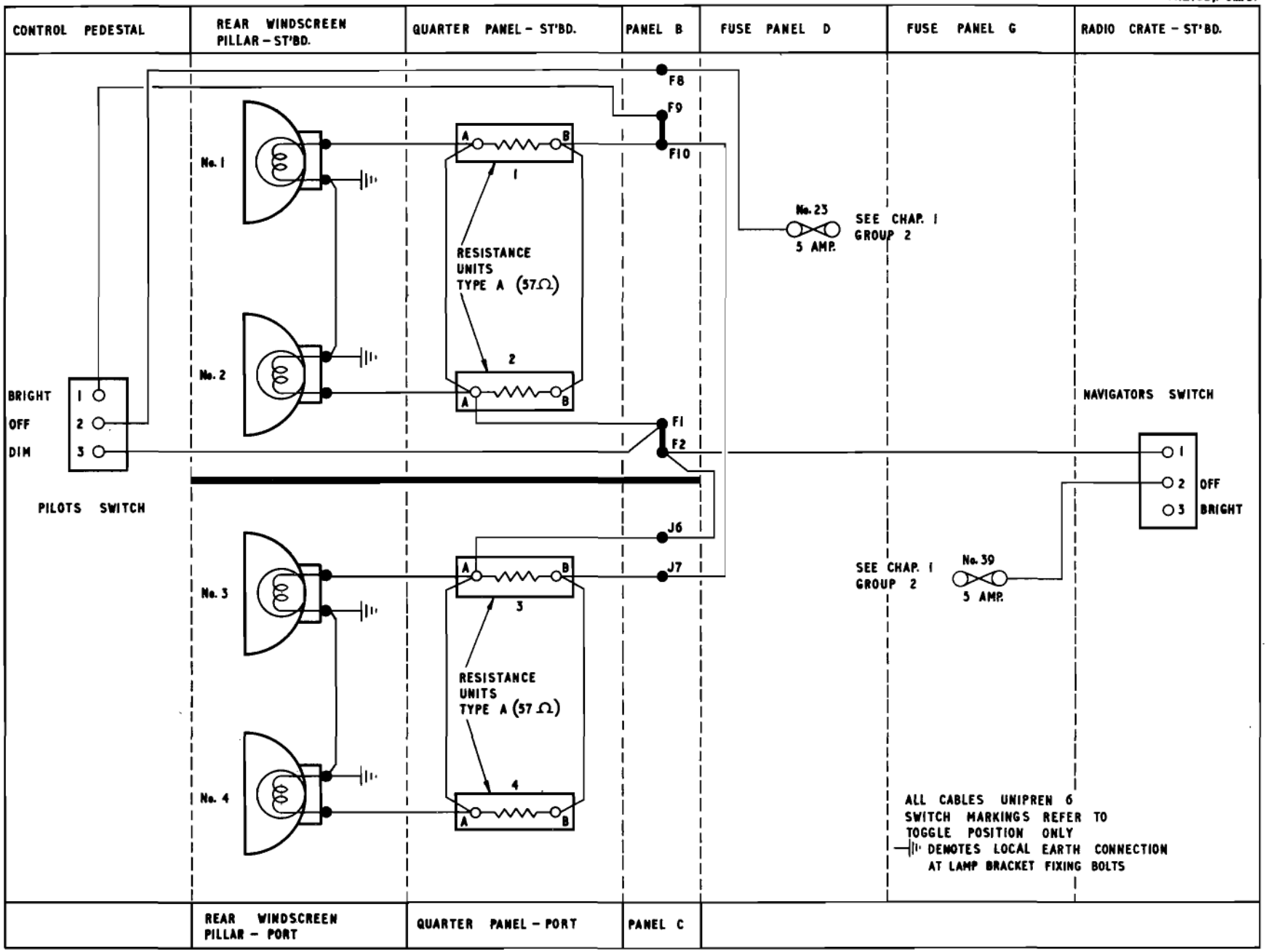


Fig. 17 High intensity cockpit lamps (Mod. 1965)

RESTRICTED

67436 SHT. 453-E
75836 SHT. 453-E

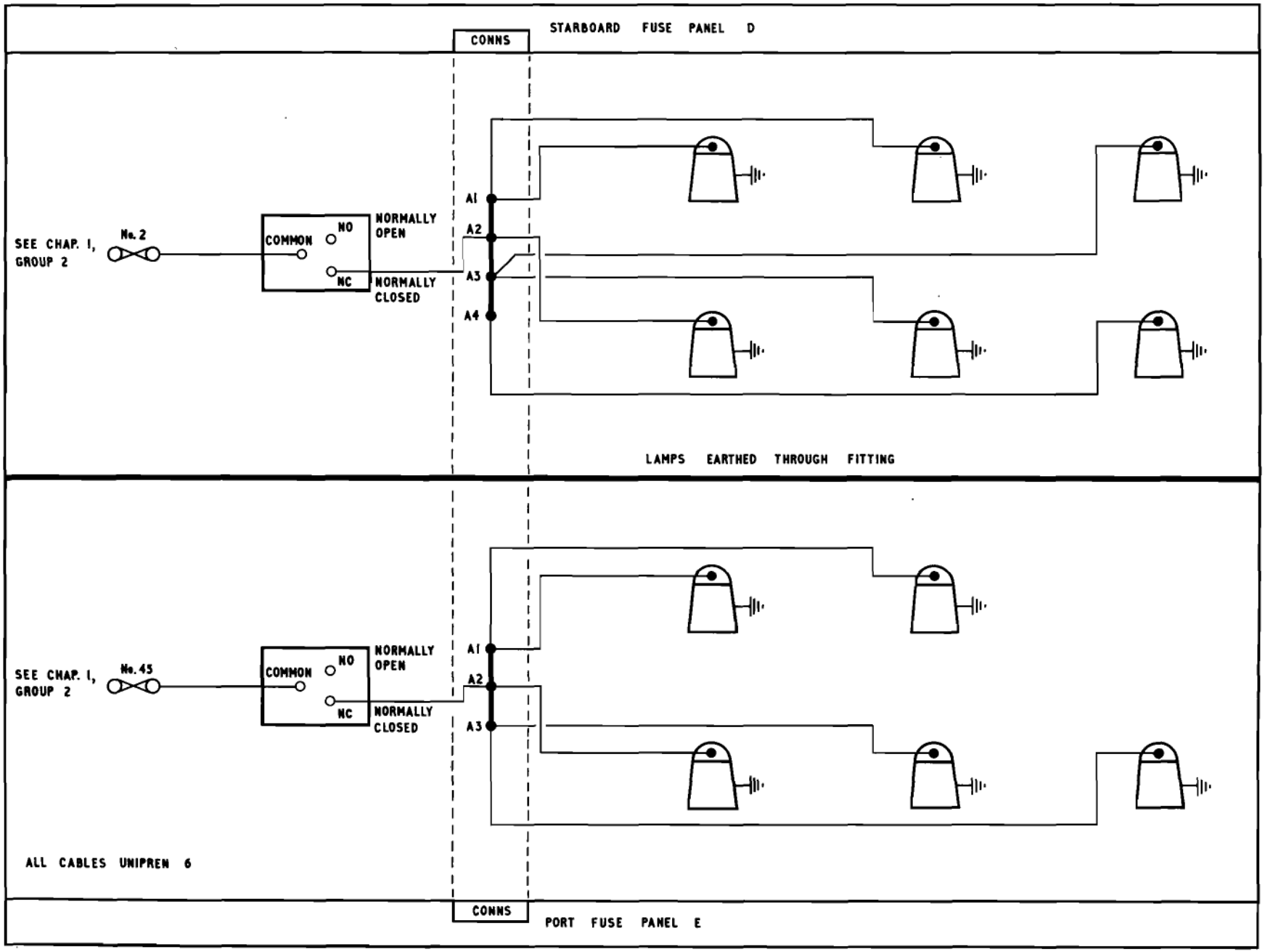


Fig. 18 Fuse panels D and E lighting (Mod 2083)

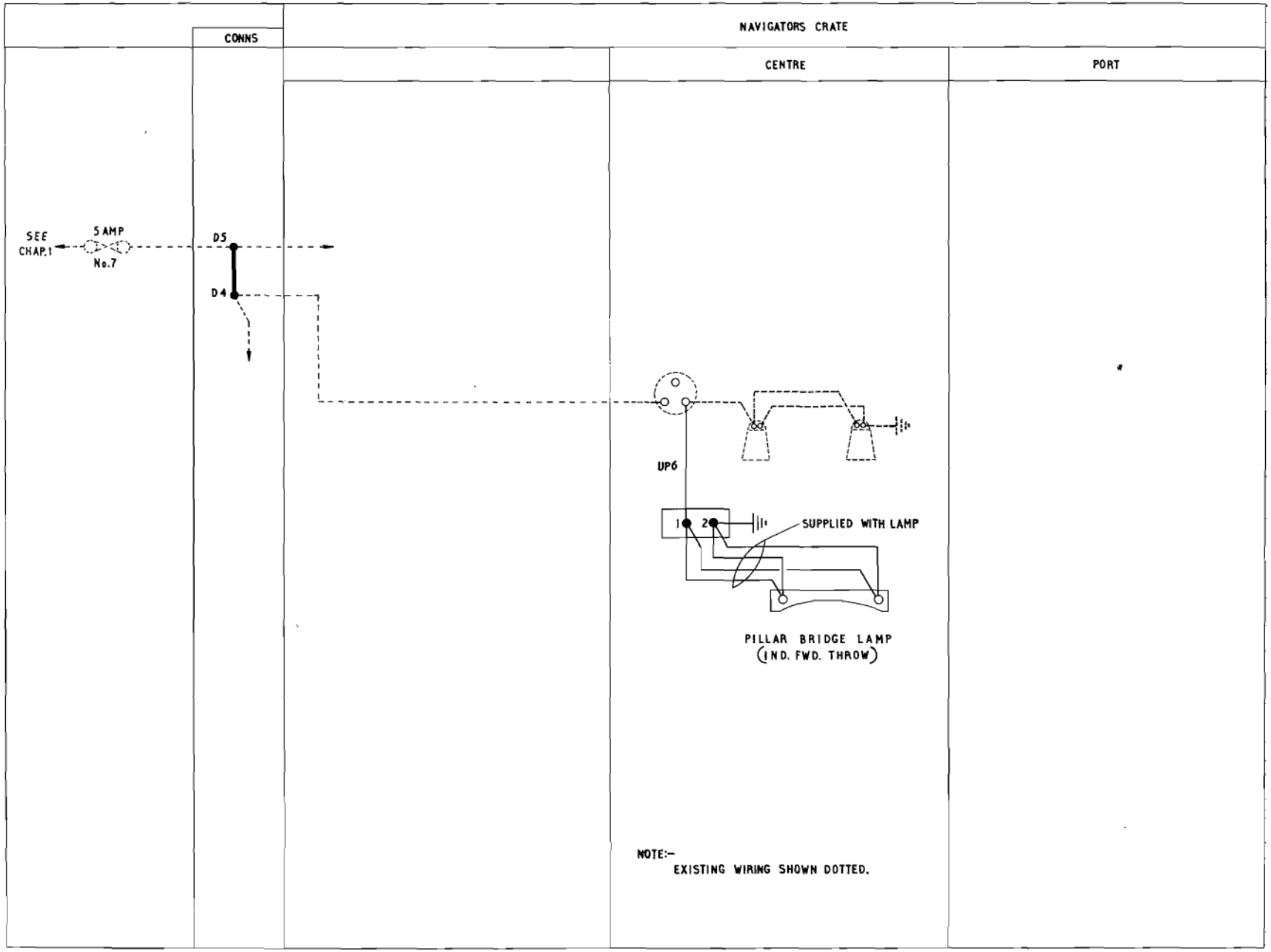
RESTRICTED

LIST OF APPENDICES

Appendix 1

RADIO CRATE LAMPS (post Mod. 2748)

1. In addition to the lamps described in Group 1 para. 34, a bridge lamp is mounted above the forward throw indicator (Chap. 7, Group 2, App.1) on the radio crate. The lamp is controlled by the centre anglepoise lamp dimmer switch, as shown on the routeing chart in this appendix. The position of the lamp is shown in the Group 8 location diagrams.



67436 SHT.403-H
75836 SHT.403-E

Fig. 1. Alteration to Fig. 12 in Group 1

Appendix 2

CREW ESCAPE EMERGENCY LIGHTING (MOD. 2876)

1. This Appendix describes the emergency lighting for crew escape, introduced by Mod. 2876. Schematic and routeing diagrams are included in this Appendix (*fig.* 1 *and* 2) and the position of equipment is shown in the Group 8 location diagrams. An associated warning sign system introduced by Mod. 2828 is described in Group 7, App. 1.

2. Four modified U/V lamps (Ref. 5CX/2454) mounted in the cabin roof are connected in parallel and controlled by two EMERG. LIGHTING switches, fitted to the forward edge of the radio crate table, or the ABANDON AIRCRAFT switch (Group 7, App. 1). The lamps have been modified by the removal of the Woods glass and bezel.

3. A 24-volt supply is provided by the two 12-volt accumulators introduced by Mod. 2828.

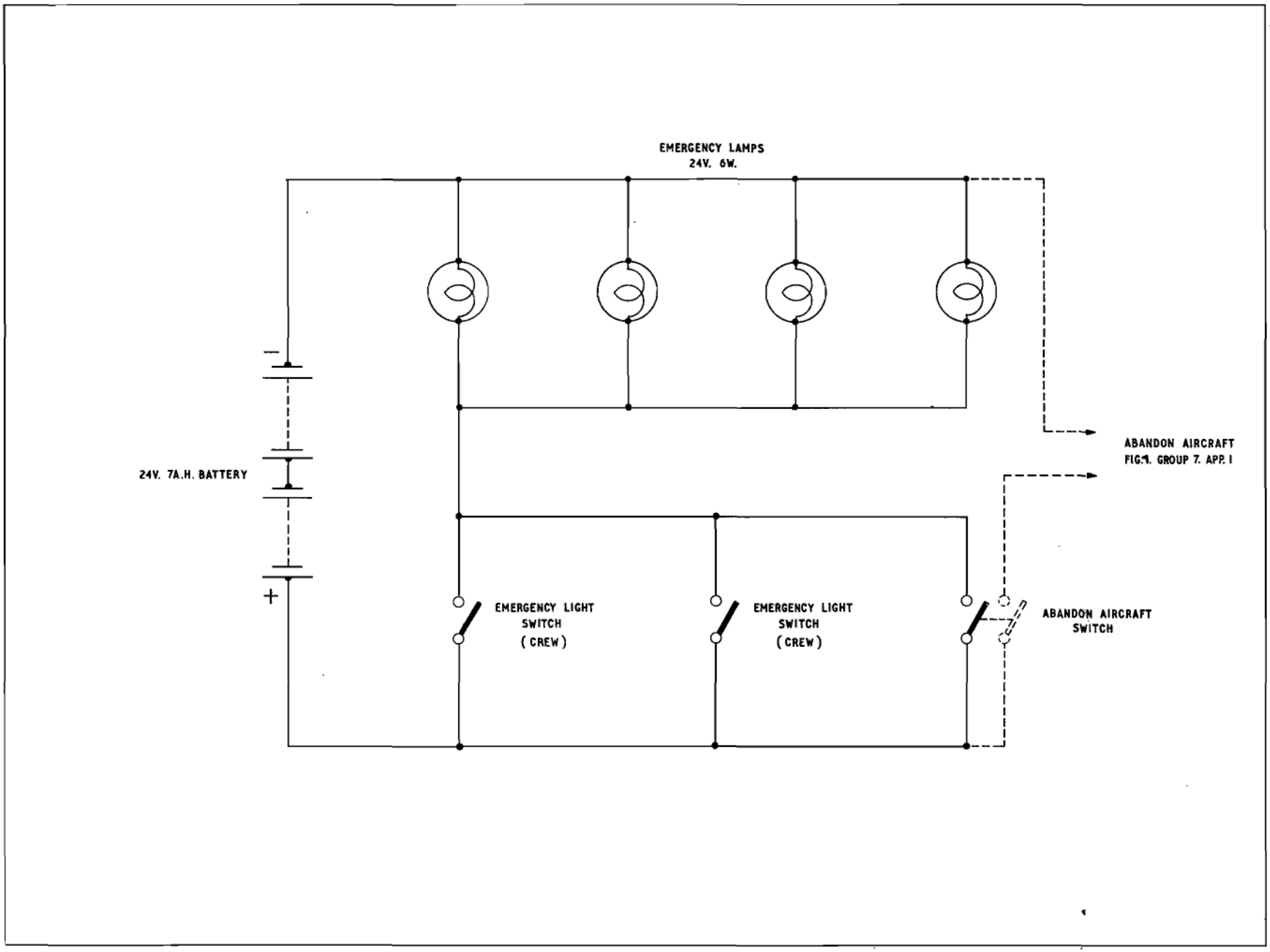


Fig. 1. Crew escape emergency lighting

Dd.2146. 281513. 4/63. J.L.Ltd.

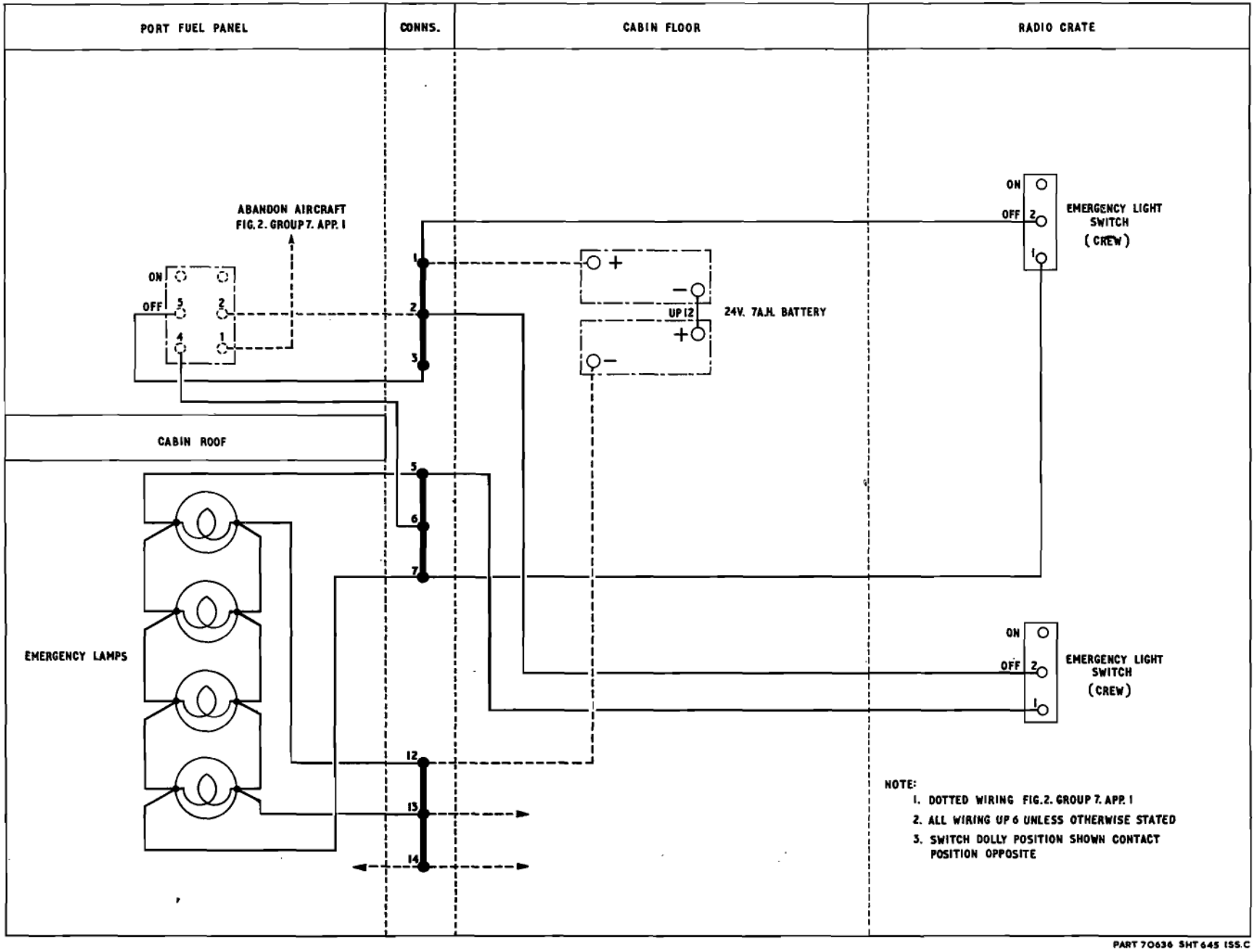


Fig. 2. Crew escape emergency lighting

RESTRICTED

Appendix 3

T.A.C.A.N. INDICATOR LIGHTING (Mod. 3165 or 3166)

Introduction

1. A Type C bridge lamp is utilized to illuminate the T.A.C.A.N. indicator (Mod. 3165 or 3166). The indicator is mounted on the port top dash panel at the 1st pilots position. A schematic diagram of the lamp connections is included in this appendix and the installation is illustrated in fig. 5, Group 8.

Circuit operation

2. The bridge lamp is connected in parallel with the first port dash red light, and lights when the port dash red dimmer switch is switched ON.

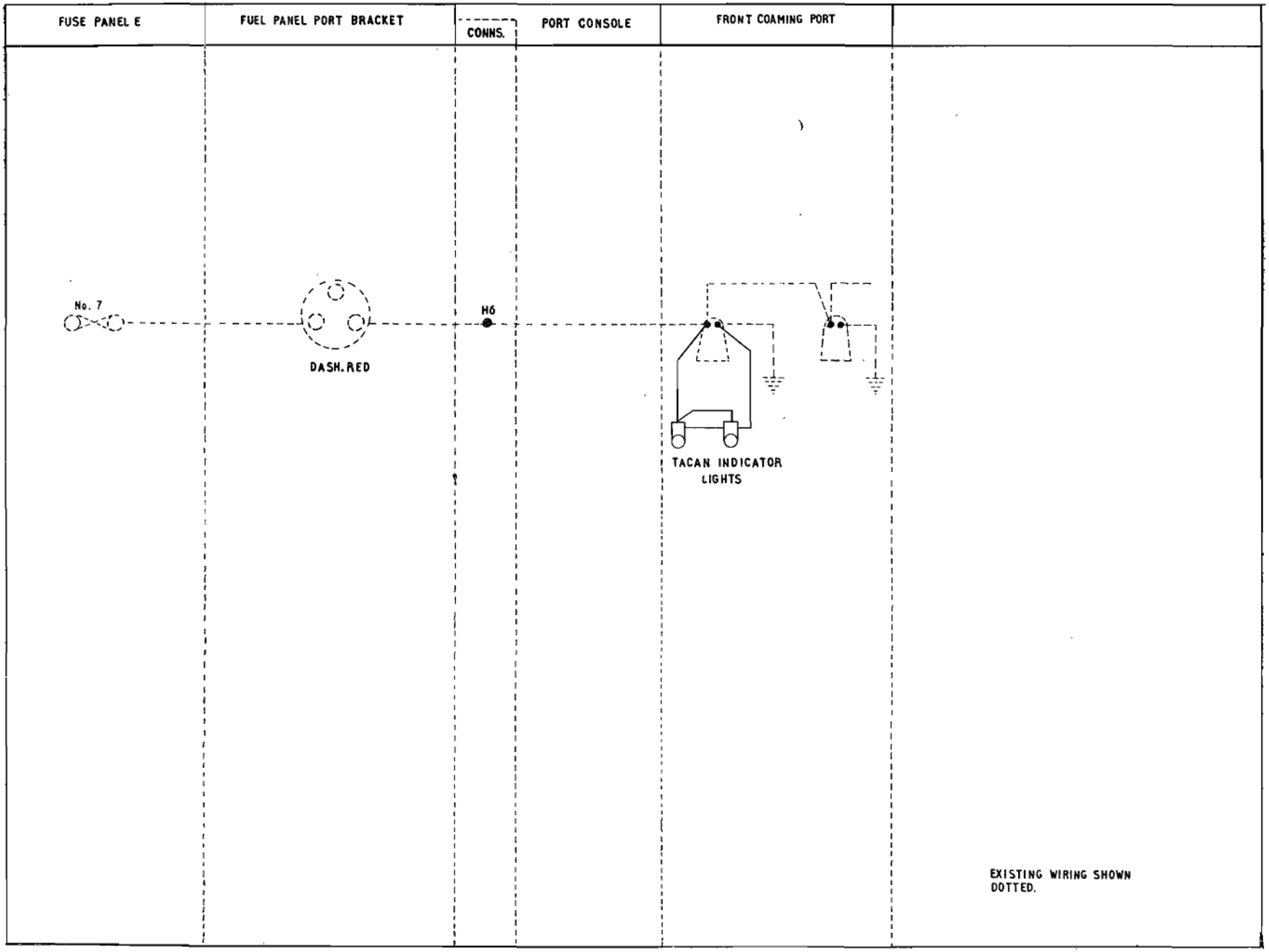


Fig. 1. Alterations to Figs. 9 and 10 (Mod. 3165, 3166)

Appendix 4

T.A.C.A.N. CONTROL UNIT DIAL LIGHTS (Mod. 3165 or 3166)

Introduction

1. T.A.C.A.N. control unit Type 7750, (Mod. 3165 or 3166) has two lamps mounted behind the dials. Fig. 1 of this appendix shows the connections to those lamps.

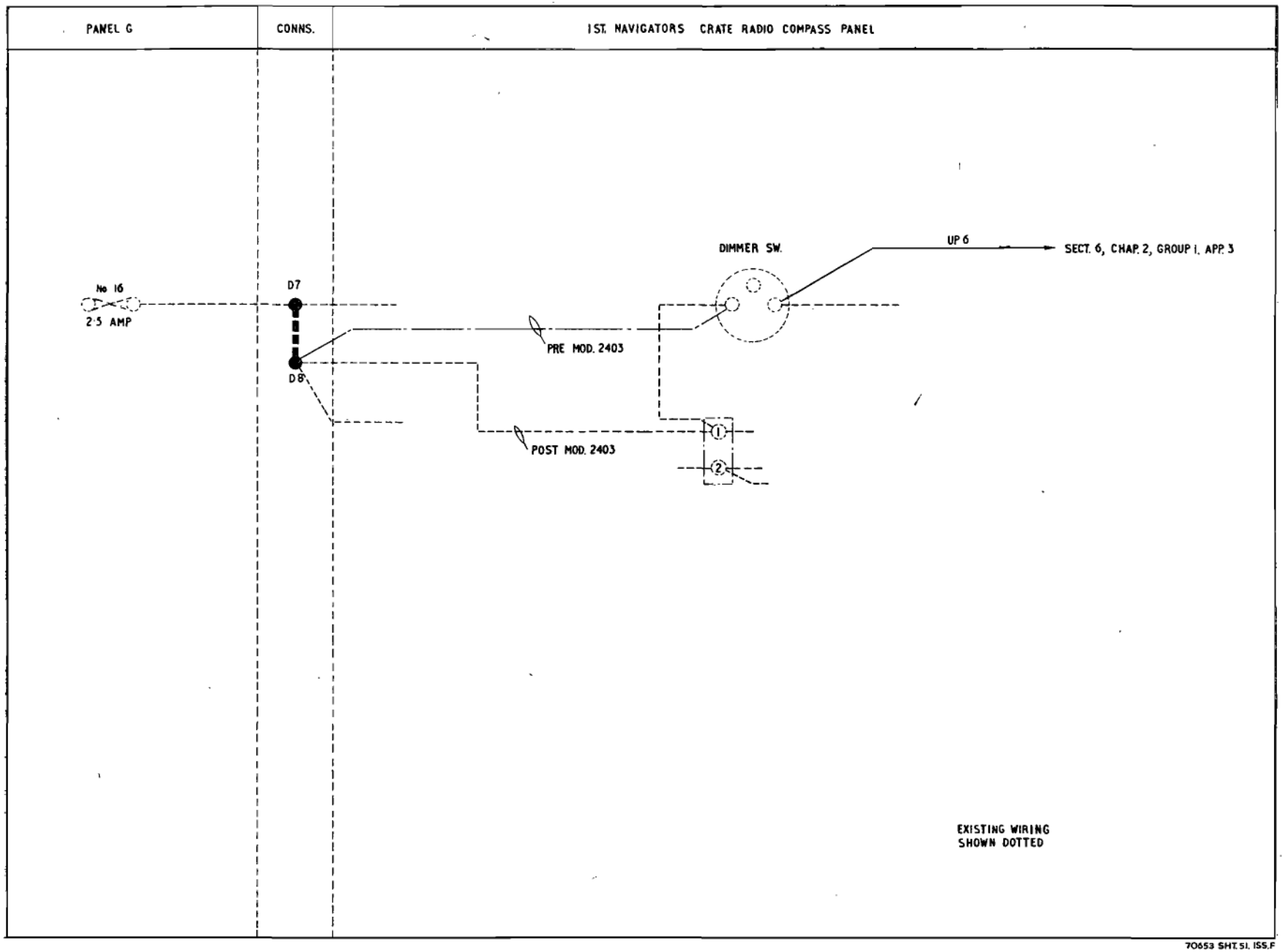


Fig. 1. Alterations to Fig. 12. (post Mod. 3165, 3166)