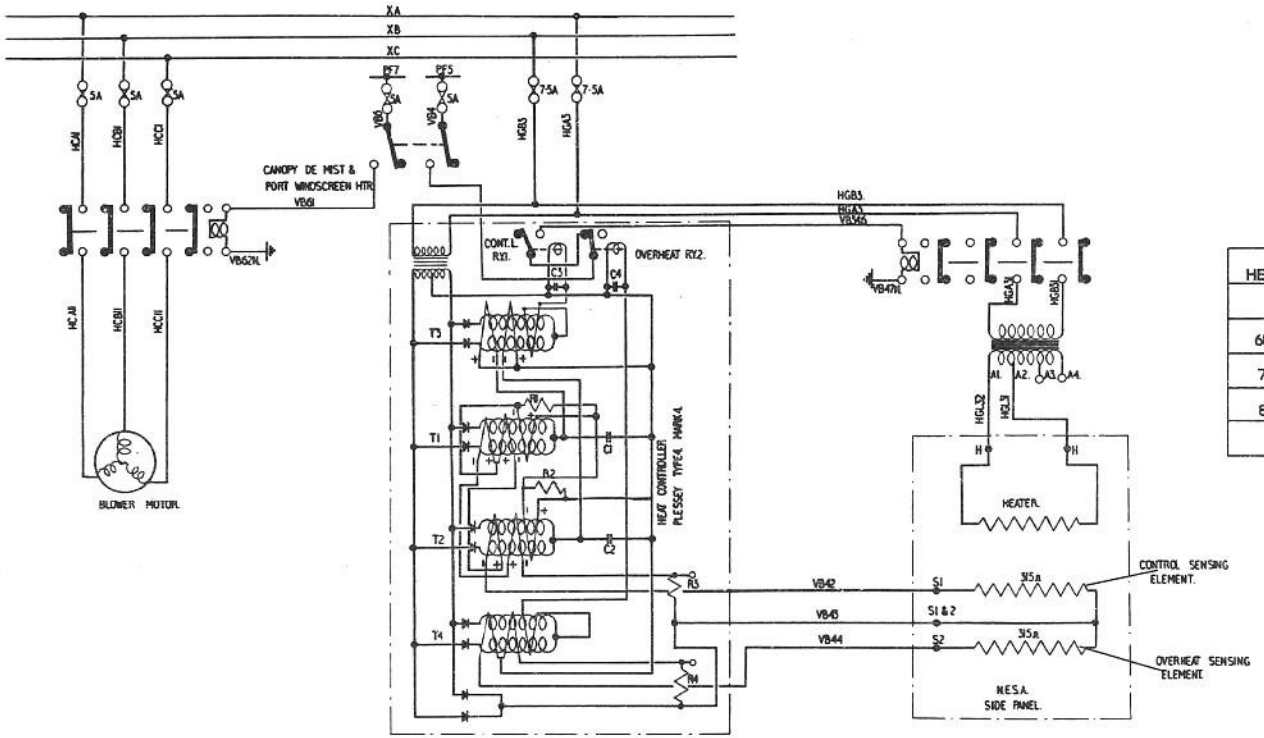
SECTION 6 - MISCELLANEOUS SERVICES

CHAPTER 1 - WINDSCREEN HEATING

PORT WINDSCREEN PANEL

CENTRE WINDSCREEN PANEL

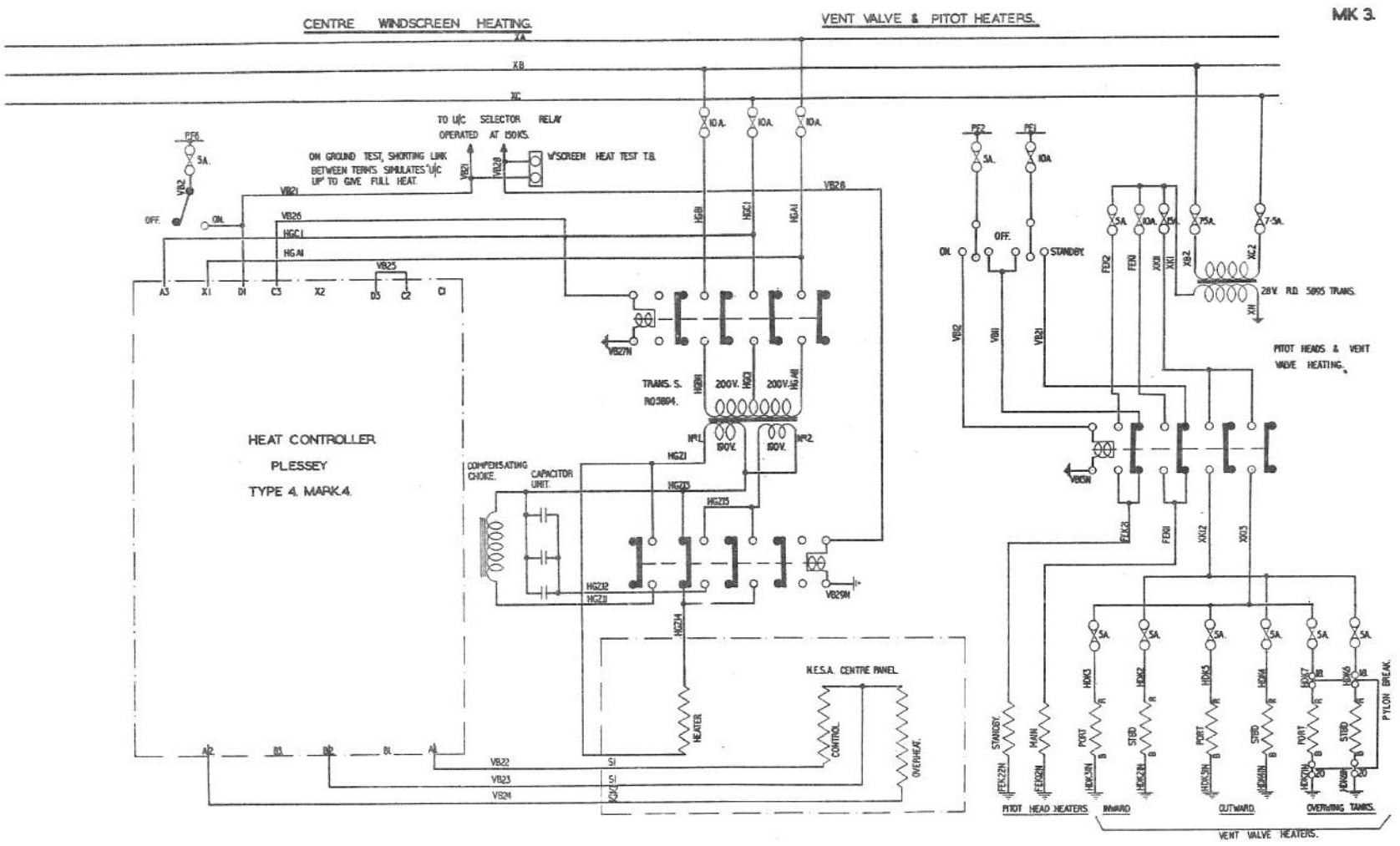
MK. 3.



HEATER RES.	VOLTS.	TRANS. CONNS.
68 – 76Ω	265.	A1 & A2.
76 – 84Ω	275.	A1 & A3.
84 – 92Ω	290.	A1 & A4.
TRANSFORMER R.D 7093.		

PORT WINDSCREEN HEATING

MK 3.


CENTRE WINDSCREEN HEATING.
VENT VALVE & PITOT HEATERS.
XA
XB
XC
TO U/C SELECTOR RELAY OPERATED AT 150KS.
ON GROUND TEST, SHORTING LINK BETWEEN TERMS SIMULATES U/C UP TO GIVE FULL HEAT.
W'SCREEN HEAT TEST T.B.
10A.
5A.
OFF.
ON.
HEAT CONTROLLER
PLESSEY
TYPE 4. MARK 4.
TRANS. S. NO3894.
200V.
150V.
COMPENSATING CHOKE.
CAPACITOR UNIT.
HEATER
CONTROL
OVERHEAT.
M.E.S.A. CENTRE PANEL
STANDBY
MAIN
PORT
STBD
PITOT HEAD HEATERS
INWARD
OUTWARD
OVERWING TANKS.
PYLON BREAK.
VENT VALVE HEATERS.
PITOT HEADS & VENT VALVE HEATING.
28V. R.D. 5895 TRANS.

PORT WINDSCREEN PANEL.

General Description.

1. The Port windscreen panel is electrically heated by an inter-laminar element supplied from the A.C. system via a single phase step down transformer. The heating circuit is primarily controlled by a switch mounted on the cockpit console. The switch is labelled "Windscreen Side". The temperature of the windscreen panel is regulated automatically by a Plessey Mk.4 Type 4 control unit which receives temperature signals from a sense element, also fitted between the panel laminations, the control unit and heater supply transformer are installed in the forward equipment bay.

Temperature Control.

2. The control circuit consists of a resistance network, a three stage magnetic amplifier in auto-bias and a control relay. If the resistance of the sensing element rises above the predetermined value the current through the series chain of resistor R3, control coil C2 of transducter T2 and control coil C1 of transducter T1 increases, this suppresses the output of T2 and assists that of T1. The increased current flow from T1 is then fed to control coil C1 of the output transducter T3 this provides a reverse polarity input signal and the output of T3 decreases until the control relay RA1 becomes de-energised, switching off power to the windscreen contactor. When the screen cools, the controller detects the fall in sensing element resistance, re-energising the control relay and applying power to the screen contactor. Should the control sensing element become damaged, the characteristics of the control circuit are arranged to energise the contactor and thus switch on power to the screen continuously, the temperature of the screen will obviously rise above the normal level but will be prevented from reaching a dangerous level by the overheat protection which operates in the same manner as the normal control but at a higher temperature.

CENTRE WINDSCREEN PANEL.

3. Heating of the centre windscreen panel is primarily controlled by a switch, labelled "Windscreen Front" situated on the starboard console. The switch is adjacent to that which controls the heater for the port windscreen panel. Automatic temperature regulation is effected by a Plessey Mk.4 Type 4 control unit. The A.C. Supply circuit to the heating element includes two single-phase transformers from which the appropriate voltages for 'half' and 'full' heat are derived. To obviate the risk of damaging the panel by over-rapid heating, the control circuit is so arranged that full voltage cannot be applied to the heating element when the aircraft is on the ground.

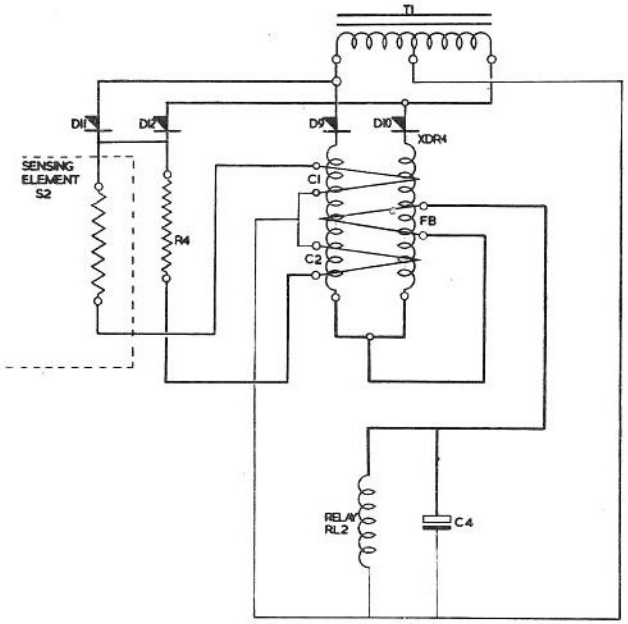
Heater supply.

4. Two single-phase, 200/190 volt transformers supply the inter-laminar element which heats the Nesa panel. The 200-volt supplies to their primary windings are connected via a relay which is controlled automatically by the temperature control unit. The relay is fitted in the a.c. fuse and relay box. The secondary windings of the transformers are connected in series to provide output voltages of 190 volts and 380 volts for 'half' and 'full' heating. Connection between the transformers and the heating element is made via a Type S4 relay, which is controlled by the 150 knot pitot pressure switch and relay, associated with the alighting gear circuit and armament supply circuit. When the Type S4 relay is de-energised, the heating element is connected to the output of one transformer only, i.e. to the 190 volt supply, at airspeeds above 150 knots, the relay is energised and closed and the combined output voltage of both transformers is applied to the element. Closure of the relay also connects a capacitor and a choke across the respective transformer secondary windings. With these components in circuit, the single-phase loading on the trans-

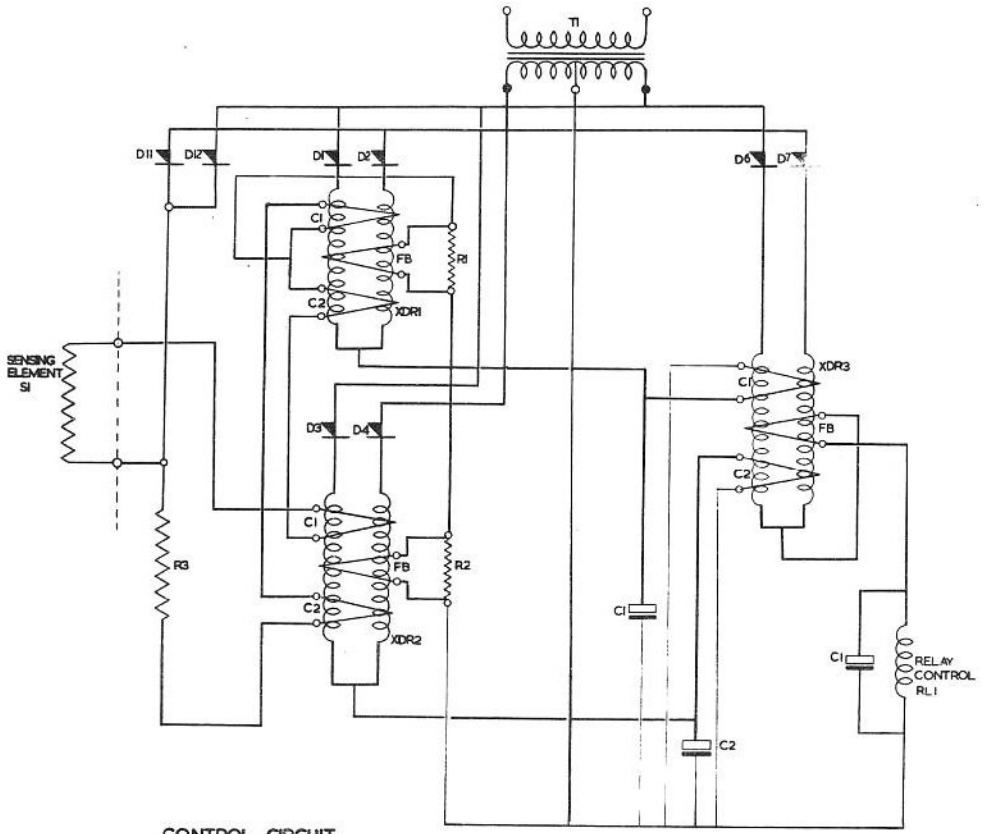
formers is reflected as a 3-phase load across the 200-volt system. The Type S4 relay and the transformers are installed in the transformer and relay box, situated forward of the instrument flying panel, whilst the compensating choke and capacitor are mounted at the forward end of the starboard console.

WINDSCREEN, VENT VALVE, PITOT HEATERS, DE-MISTER BLOWER EQUIPMENT LOCATION.

Plessey Type 4, Mark 4 (side)	-	Forward Equipment Bay
" " " " " (centre)	-	" " "
3 Transformers	-	" " "
Choke Unit	-	" " "
Condenser Unit	-	" " "
Relay No.13	-	" Relay Panel
Windscreen Side Control Switch	-	Starboard Leg Panel
" Centre " "	-	" " "
Demister Blower	-	Forward Spine
Relay No.82	-	A.C.Fuse & Relay Box
Relay No.86	-	" " " " "
Relay No.83	-	" " " " "
Pitot Head Heater Main	-	Nose Wheel Bay
" " " Standby	-	Radar Strut (Top)
On/Off/Standby Switch	-	Starboard Leg Panel
200/28 Transformer	-	Main Equipment Bay
Relay No.80	-	A.C. Fuse & Relay Box

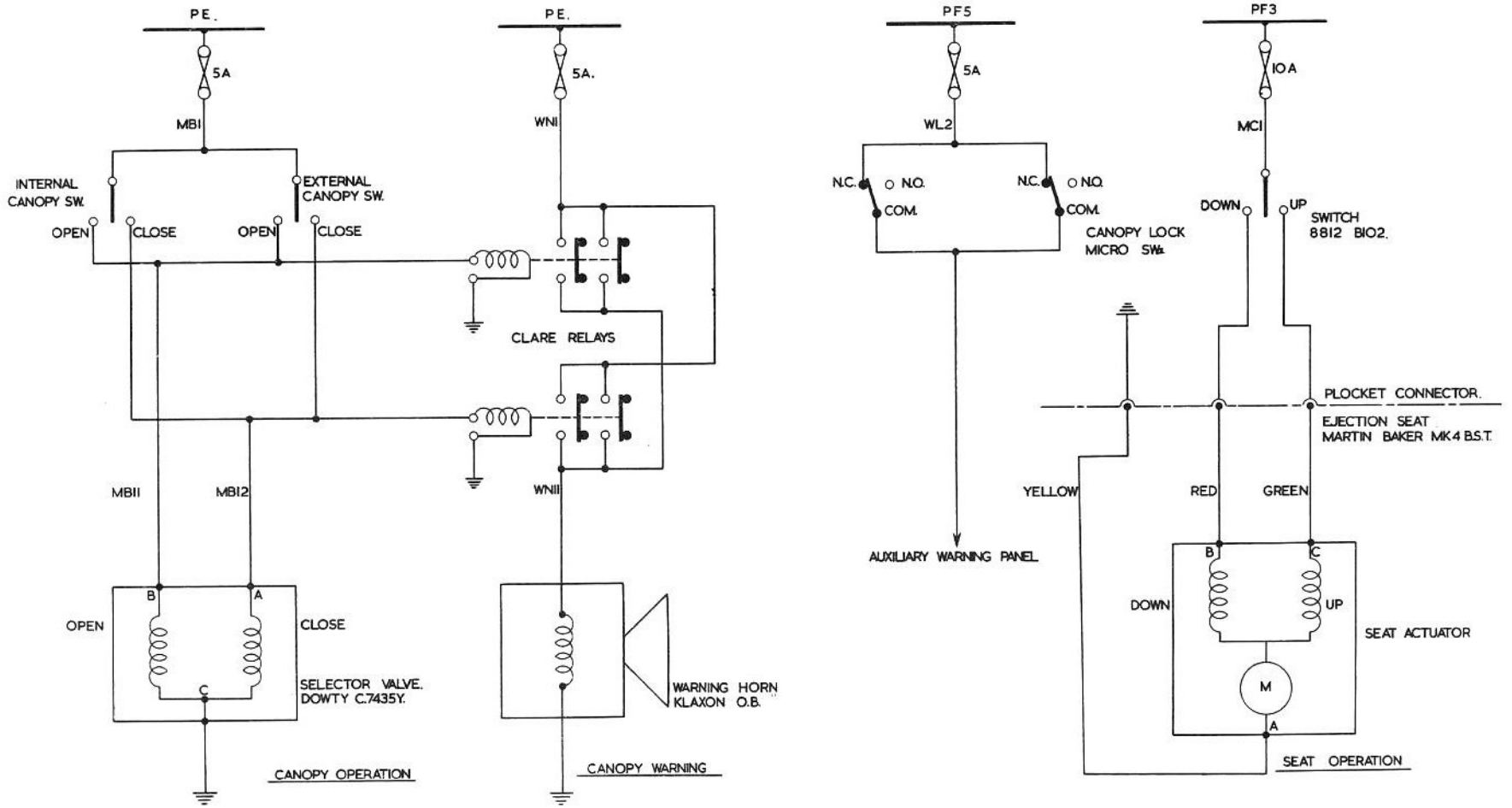


OVERHEAT CIRCUIT



CONTROL CIRCUIT

THE PLESSEY WINDSCREEN DE-ICING CONTROLLER TYPE 4 MK.4


P.E.
5A
MB1
INTERNAL CANOPY SW.
EXTERNAL CANOPY SW.
OPEN
CLOSE
OPEN
CLOSE
P.E.
5A.
WN1
CLARE RELAYS
MB11
MB12
WN11
B
A
C
OPEN
CLOSE
SELECTOR VALVE. DOWTY C.7435Y.
WARNING HORN KLAXON O.B.
CANOPY OPERATION
CANOPY WARNING
PF5
5A
WL2
N.C.
N.O.
COM.
N.C.
N.O.
COM.
CANOPY LOCK MICRO SWs.
AUXILIARY WARNING PANEL
PF3
10A
MC1
DOWN
UP
SWITCH 8812 BIO2.
PLOCKET CONNECTOR.
EJECTION SEAT MARTIN BAKER MK.4 B.S.T.
YELLOW
RED
GREEN
B
C
DOWN
UP
SEAT ACTUATOR
M
A
SEAT OPERATION

ELECTRICAL FUNCTIONING TESTS - WINDSCREEN HEATERS

N.E.S.A. CENTRAL PANEL

NOTE:

Before carrying out the next three tests obtain the assistance of the hydraulics section.

TEST EQUIPMENT REQUIRED

Two Decade boxes of at least 400 ohms. internal resistance. A.C. voltmeter having a range of at least 0-400V.

PROCEDURE

1. Measure resistance of sensing Elements using a high impedence instrument to avoid self heating of the elements. These should be 305-315 ohms at 20°C.

2. Disconnect all window leads in windscreen heating T.B. i.e. VB22, VB23, VB24, HGZ1 and HGZ14.

3. Connect the decade boxes in place of sensing elements one between VB22 and VB23 (No.1 Decade Box) and the other between VB23 and VB24 (No.2 Decade Box) set each decade box to 300 ohms.

4. Connect the 0-400V voltmeter to HGZ1 and HGZ14 connect A.C. and D.C. supplies to aircraft, then switch on windscreen front control switch. Voltmeter should read 190 volts approximately.

5. Slowly increase the resistance of No.1 decade box and note the value when voltmeter falls to zero. This should occur between 361 and 364 ohms.

6. Slowly decrease the setting of decade resistance until the voltmeter again reads 190 volts. This should occur within 4 ohms of the value obtained in Test 5.

7. Reduce value of No.1 decade box to 300 ohms. increase the resistance of No.2 decade box until voltmeter reading falls to zero. This should occur between 379 and 394 ohms.

8. Reduce the resistance of No.2 Decade Box until the voltmeter again reads 190 volts. Note the value of resistance this should be within 24 ohms. of the value obtained in Test 7.

9. Ensure that all the Undercarriage Ground Locks are in position. Remove the fuse from the Undercarriage Selector Circuit (fuse 21 in Forward Fuse Box). Ensure that the Air Brakes are clear from ground equipment and personnel then exhaust the Hydraulic System by selecting the Air Brakes 'Out'. Repeat at least five time and ensure that the system is exhausted.

10. Operate the Undercarriage Selector Switch to the "UP" position using the twist-override. The Voltmeter should now read 350 volts approx. Select Undercarriage 'DOWN' and reset the override on the Selector, with an approved re-setting tool, the voltmeter should read 190 Volts.

11. Replace the Undercarriage Selector fuse and remove the ground locks.

12. Switch off Control Switch. Remove the Decade Boxes. Reconnect all leads previously disconnected. The Voltmeter should now be in parallel with the Heater. Stick a thermometer on the windscreen at the centre of the heated area.

13. Switch on control switch and check that Controller automatically switches power on and off windscreen temperature at approx. 50°C, during the first few cycles windscreen temps. may arise above 50°C but should never exceed 60°C.

14. Remove voltmeter and thermometer.

ELECTRICAL FUNCTIONING TESTS - WINDSCREEN HEATERS

N.E.S.A. QUARTER PANEL

TEST EQUIPMENT

Two decade boxes of at least 400 ohms internal resistance. A.C. Voltmeter 0-400V.

PROCEDURE

1. Measure resistance of sensing elements using a high impedance instrument. To avoid self heating of the elements. This should be 305-315 ohms. at 20°C.

2. Measure resistance of heater element and ensure that it is connected to correct tapping on transformer as follows:-

68 - 76 Ohms. connect to tapping a 2
76 - 84 Ohms. connect to tapping a 3
84 - 92 Ohms. connect to tapping a 4

a 1 is common for all three connections.

3. Disconnect all window leads from windscreen heating T.B. i.e. VB, 42, VB.43, VB.44, HGL.31 and HGL.32.

4. Connect voltmeter to leads HGL.31 and HGL.32. Connect the two decade boxes in place of sensing elements. One between VB.42 and VB.43 (No.1 decade box) and the other between VB.43 and VB.44 (No.2 decade box). Each decade box is to be set to 400 ohms.

5. Switch on A.C. and D.C. power to aircraft. Switch on side panel ON/OFF switch. There should be no reading on the voltmeter.

6. Reduce the value of resistance on both decade boxes to 300 ohms. With an input of 200V the voltmeter should read as follows:-

(276 - 292) volts if transformer tapping a_2 is used.
(293 - 309) volts if transformer tapping a_3 is used.
(306 - 322) volts if transformer tapping a_4 is used.

7. Increase resistance of No.1 decade box slowly until the voltmeter reading falls to zero. This should occur between 337 and 340 ohms.

8. Decrease resistance of No.1 decade box until voltage is again indicated on the voltmeter. This should occur within 4 ohms of the value obtained in test 7.

9. Reduce value of No.1 decade box to 300 ohms.

10. Increase the resistance of No.2 decade box slowly until the voltmeter reading falls to zero. This should occur between 354 and 379 ohms.

11. Decrease the resistance of No.2 decade box until the voltage is again shown on the voltmeter. This should occur within 24 ohms. of the value obtained in test 10.

12. Switch off A.C. and D.C. power. Remove decade boxes and reconnect window leads to VB.42, VB.43, VB.44, HGL.31 and HGL.32. The voltmeter should now be in parallel with the heater and sensing elements connected to circuit in normal manner.

13. Switch on A.C. and D.C. Power. With an input of 200V voltmeter should read:-

(253 - 267) volts if transformer tapping a_2 is used.
(268 - 282) volts if transformer tapping a_3 is used.
(282 - 298) volts if transformer tapping a_4 is used.

14. When operating temperature is reached power to the heater should be switched on and off by the controller.

15. Remove voltmeter and A.C. and D.C. supplies from aircraft.

CHAPTER 2 - AIR CONDITIONING.

COCKPIT AIR CONDITIONING

General Description

1. Hot air supplied from the engine compressors and utilised for heating the cockpit, is ducted via a common pipe-line to a two way valve, where it passes to the cockpit direct or via a pre-cooler. The air is apportioned to these two paths according to the intermediate setting of the valve. Movement of the valve to obtain the required cockpit temperature is affected by an electrically operated actuator. The associated circuit provides for both manual and automatic temperature control. A switch fitted on the Starboard console combines a manual control switch and temperature control rheostat which are operated by a single control knob attached to a common spindle.

Manual Control

2. When operating the control switch in the manual sector, its action is similar to that of a 3 position spring-loaded rotary switch, the central (off) position is labelled "fixed", and two remaining positions are labelled "warm" and "cool" respectively. Selecting either of the latter positions connects a supply direct to the relevant winding of the actuator which controls the two-way Hot Air Valve; thus, by appropriate movement of the switch, the cockpit temperature may be adjusted to the required value. When the switch is released, it returns to the central (fixed) position.

Automatic Position

3. Operation - turning the knob of the switch unit into the "Auto" sector over-rides the spring-loading and connects a supply to the automatic temperature control circuit. The unit then functions as a rheostat and is used for selecting the appropriate temperature level, subsequent temperature control being affected automatically. Under these conditions, the actuator of the two-way Hot Air Valve is controlled by two relays which are incorporated in a magnetic amplifier unit installed in the forward spine.

Air Shut-Off Valve.

4. An actuator-operated shut-off valve is included in the Hot Air supply line for the purpose of isolating the system when necessary, the actuator is controlled by a switch mounted on the starboard console.

MAIN EQUIPMENT BAY TEMPERATURE CONTROL

General

5. The equipment in the M.E.B. is air conditioned by a mixture of hot and cold air from the main air system the temperature is controlled at 12°C by a hot air valve driven by a rotary actuator which is controlled by a transistorised amplifier working in conjunction with a ductstat (Temperature sensitive resistance).

6. If the normal temperature control fails and the hot air valve remained open the temperature of the air could be dangerously high. So therefore we introduce an over temperature control, which would turn "OFF" the hot air supply should the temperature reach 35°C. This Over Temperature Control consists of a flamestat (temperature sensitive switch), and a solenoid operated stop valve.

Description of Control Circuit

7. The circuit basically consists of a double A.C. bridge, a two channel transistorised amplifier with P.N.P.type transistors, each channel consists of a four stage amplifier a discriminator and a relay. The contacts of the relays are controlling the rotary actuator which drives the hot air valve. The double A.C. bridge has three limbs termed A,B and C, limb C consists of a ducstat,a follow up resistor and a static resistance, limbs A and B consist of static resistances. The bridge network has an A.C. input of 15 volts, when the bridge is balanced the output signal between points C and B or C and A are insufficient to cause either channel to operate. The bridge is balanced when the ductstat temperature is 12°C.

Circuit Operation

8. If the temperature of the air increases the ducstat will sense this change and its resistance increases,

this increase in resistances will unbalance the double A.C. bridge which will result in a signal being developed between points C and A, and C and B. Points A and B are connected to the first stage A.C. amplifier in both channels A and B respectively, point C is connected to a common base line, of both channels, the base line has a +ve potential.

9. The signals will be amplified and applied to the discriminators, which discriminate between a hot and cold signal, being a hot signal relay RLY1 will energise, this connects a supply to the close coil of the rotary actuator which will drive the hot air valve in the close direction, the follow up resistor which actuated by the valve movement will, increase in resistance until the bridge becomes balanced. The follow up resistance acts as negative feedback, preventing the control circuit from overcorrecting the original rise in temperature.

10. A similar procedure would take place if the temperature of the air fell below 12°C, but in this case relay RLY2 would energise.

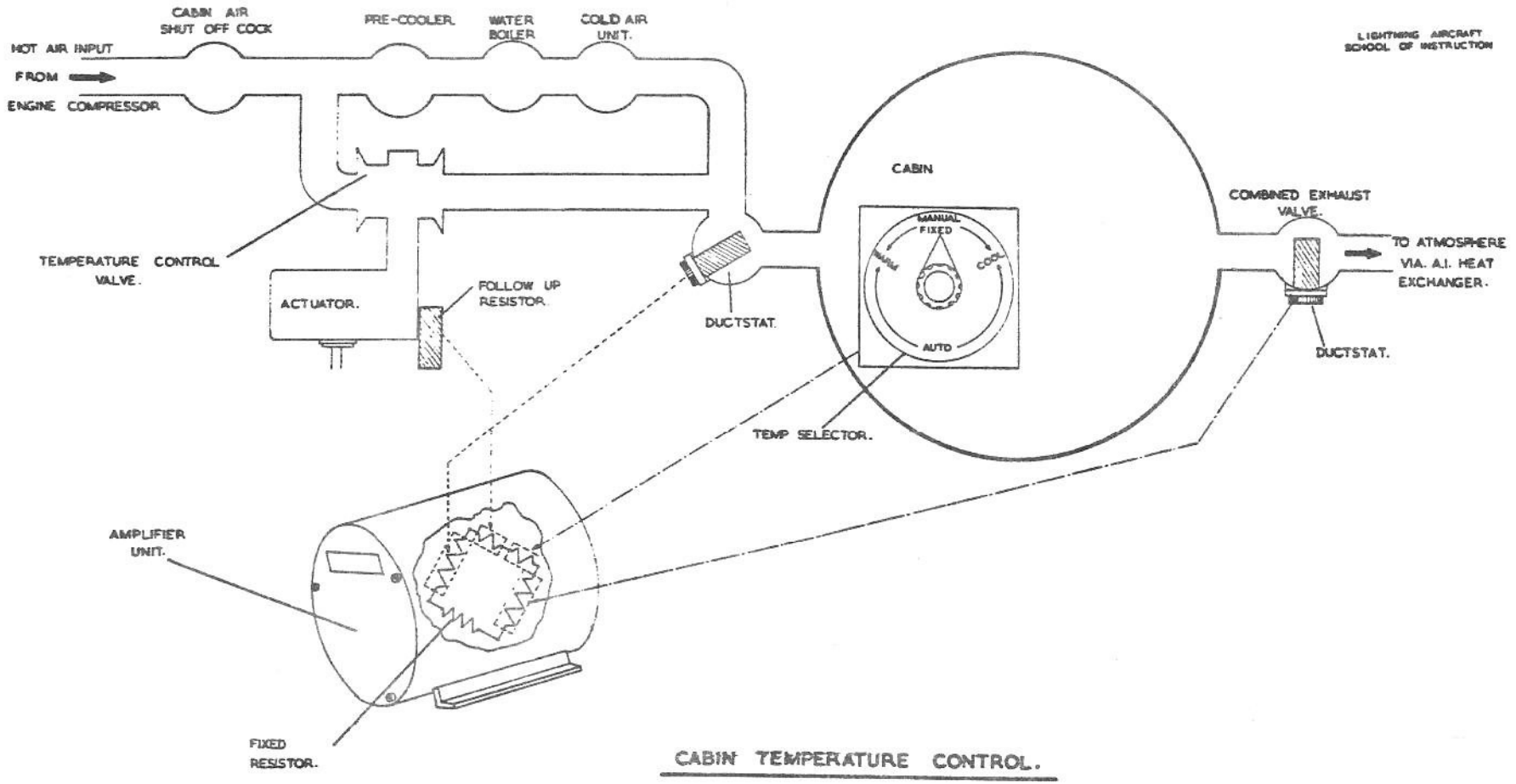
PORT EQUIPMENT BAY TEMPERATURE CONTROL

General

11. Equipment in the P.E.B. is cooled by ram air, but due to skin friction at a high Mach number the temperature of this air could be dangerously high, to prevent the equipment (the "Localiser marker receiver" and the "Glide path marker receiver") from being damaged a control system is fitted to shut off the ram air should the temperature rise above 75°C.

Operation

12. If the temperature of ram air does exceed 75°C a flamestat (temperature sensitive switch) will sense this and alter the electrical supply to a rotary actuator which will close a valve in the ram air supply line. When the temperature falls to 65°C the flamestat will operate and feed a supply to the rotary actuator which will open the valve.



CABIN TEMPERATURE CONTROL.

GENERAL DESCRIPTION.

1. Hot air supplied from the engine compressors and utilised for heating the cockpit, is ducted via a common pipe-line to a two way valve, where it passes to the cockpit direct or via a pre-cooler. The air is apportioned to these two paths according to the intermediate setting of the valve. Movement of the valve to obtain the required cockpit temperature is affected by an electrically operated actuator. The associated circuit provides for both manual and automatic temperature control. A switch fitted on the Starboard console combines a manual control switch and temperature control rheostat which are operated by a single control knob attached to a common spindle.

MANUAL CONTROL.

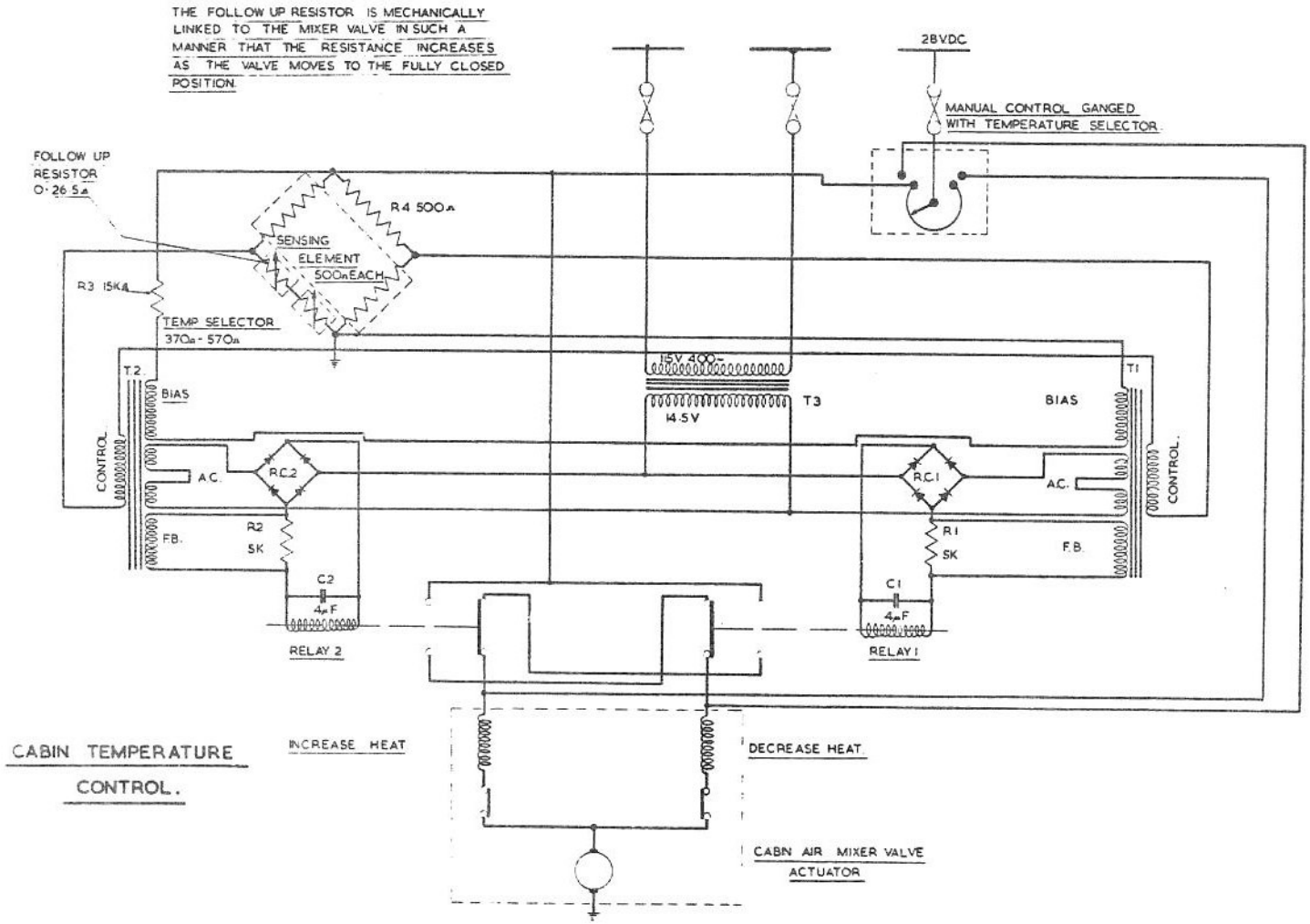
2. When operating the control switch in the manual sector, its action is similar to that of a 3 position spring-loaded rotary switch, the central (off) position is labelled "fixed", and two remaining positions are labelled "warm" and "cool" respectively. Selecting either of the latter positions connects a supply direct to the relevant winding of the actuator which controls the two-way Hot Air Valve; thus, by appropriate movement of the switch, the cockpit temperature may be adjusted to the required value. When the switch is released, it returns to the central (fixed) position.

AUTOMATIC POSITION.

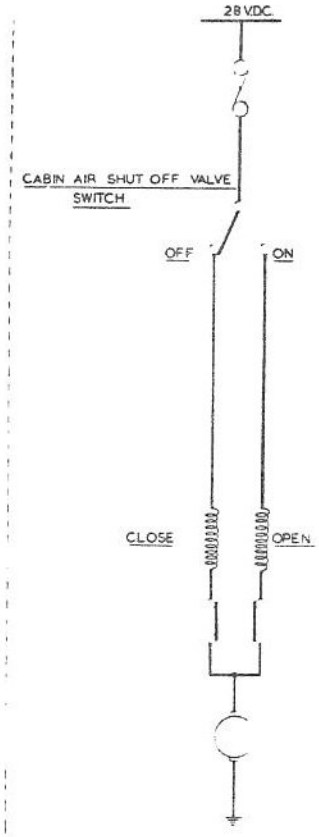
3. Operation - turning the knob of the switch unit into the "Auto" sector over-rides the spring-loading and connects a supply to the automatic temperature control circuit. The unit then functions as a rheostat and is used for selecting the appropriate temperature level, subsequent temperature control being affected automatically. Under these conditions, the actuator of the two-way Hot Air Valve is controlled by two relays which are incorporated in a magnetic amplifier unit installed in the forward spine.

AIR SHUT-OFF VALVE.

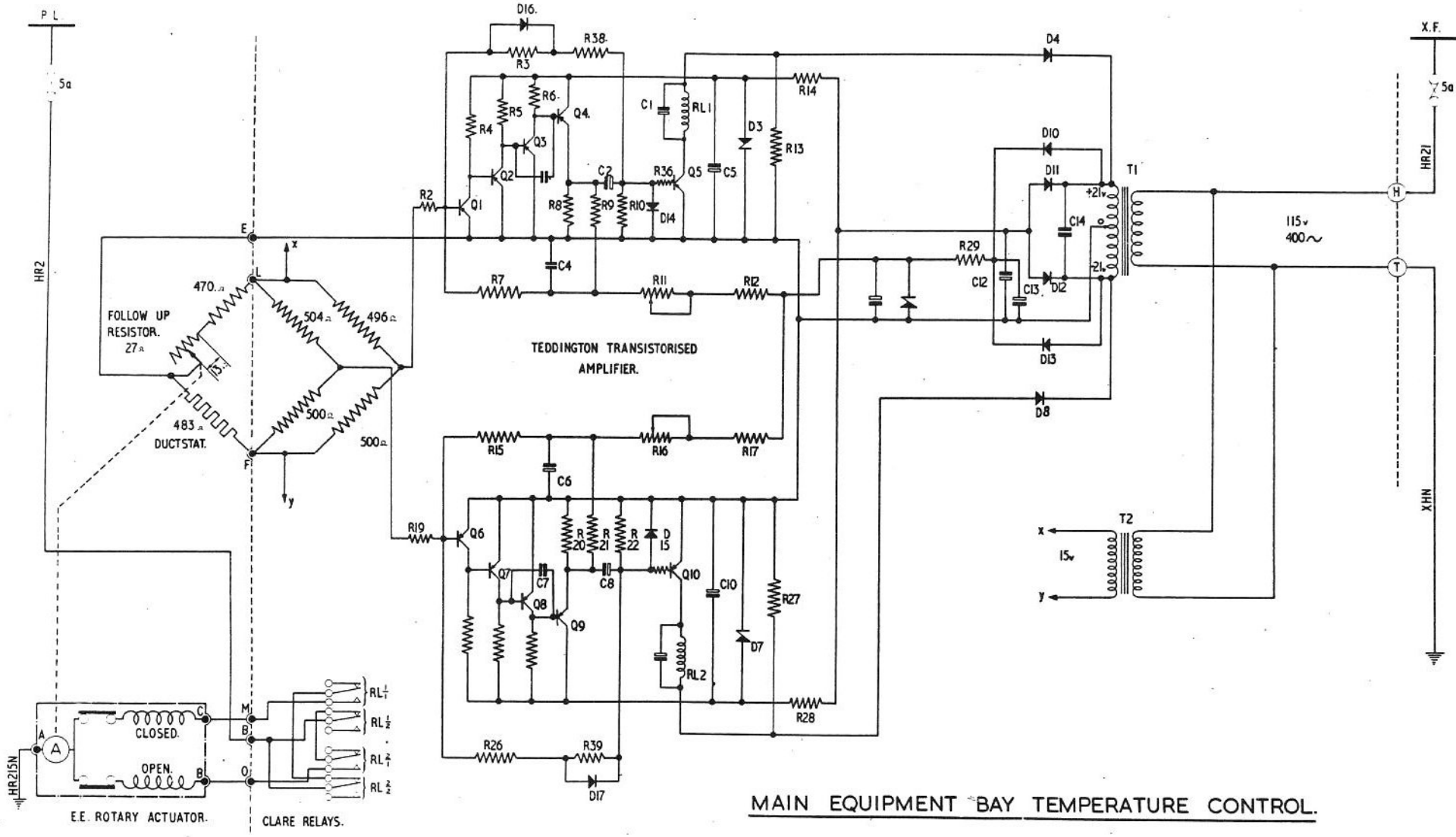
4. An actuator-operated shut-off valve is included in the Hot Air supply line for the purpose of isolating the system when necessary, the actuator is controlled by a switch mounted on the starboard console.



CABIN TEMPERATURE CONTROL.



CABIN AIR SHUT-OFF VALVE.

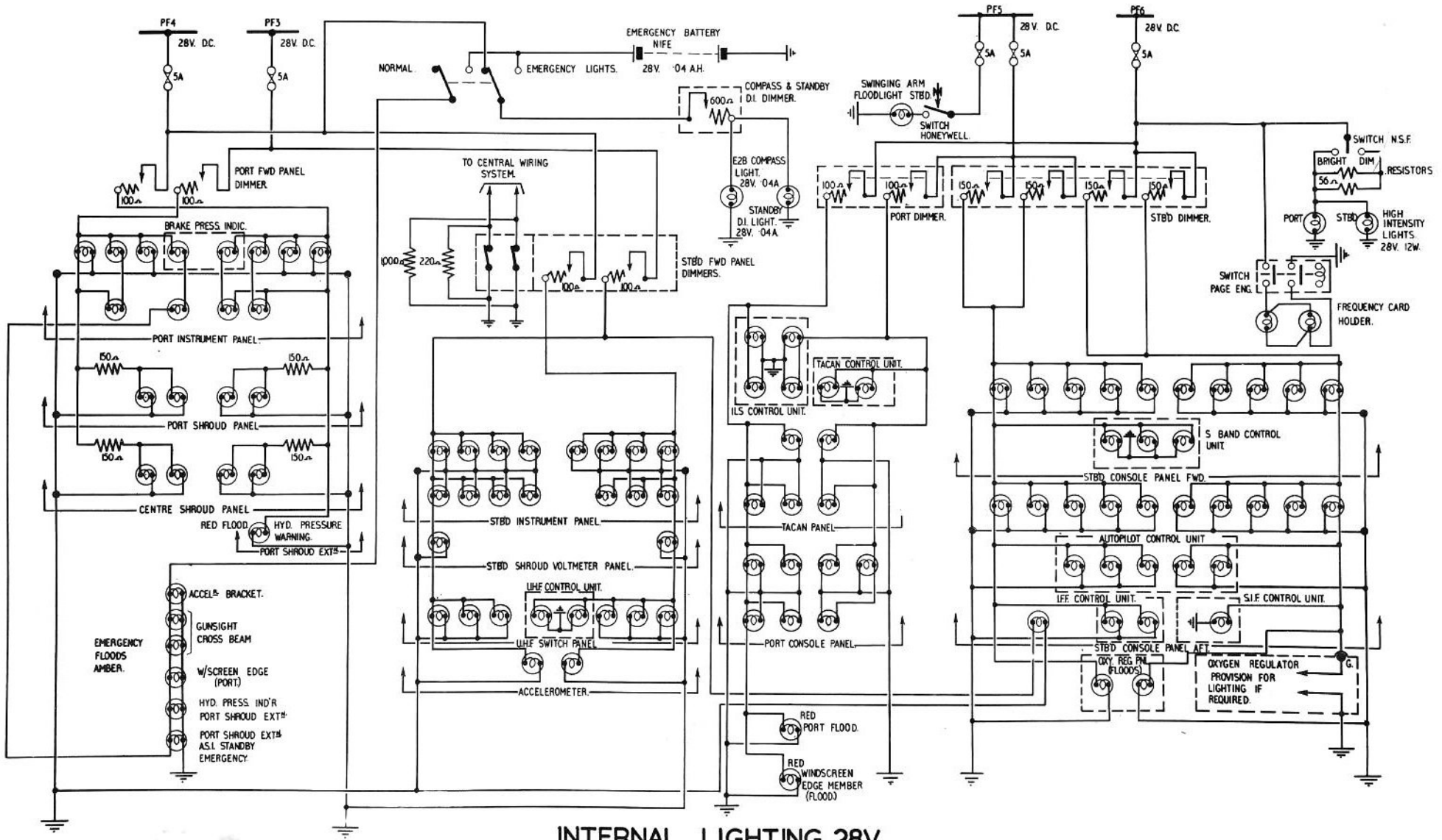


MAIN EQUIPMENT BAY TEMPERATURE CONTROL.

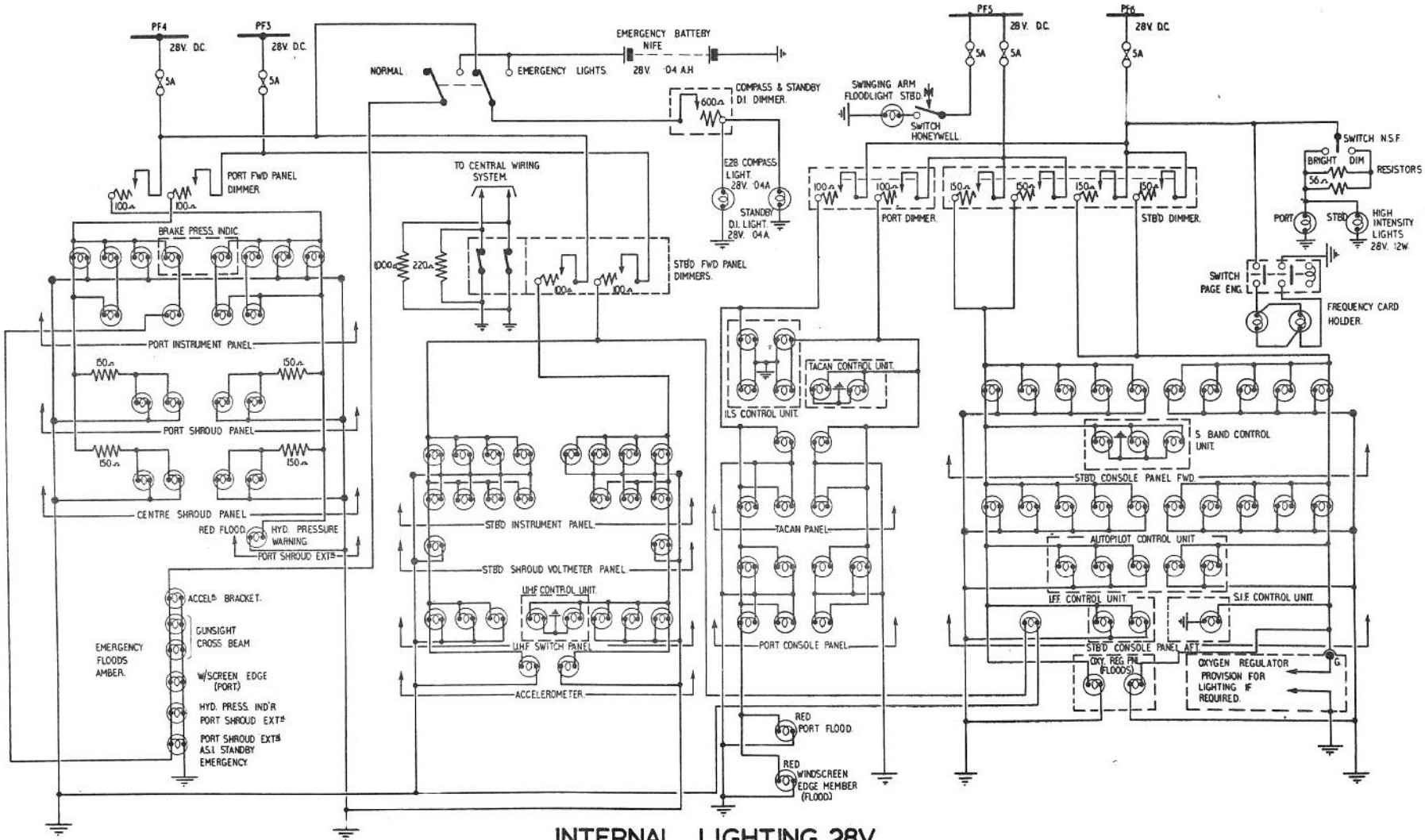
CHAPTER 4 - COCKPIT, AND EXTERNAL LIGHTING

COCKPIT LIGHTING

EXTERNAL LIGHTING

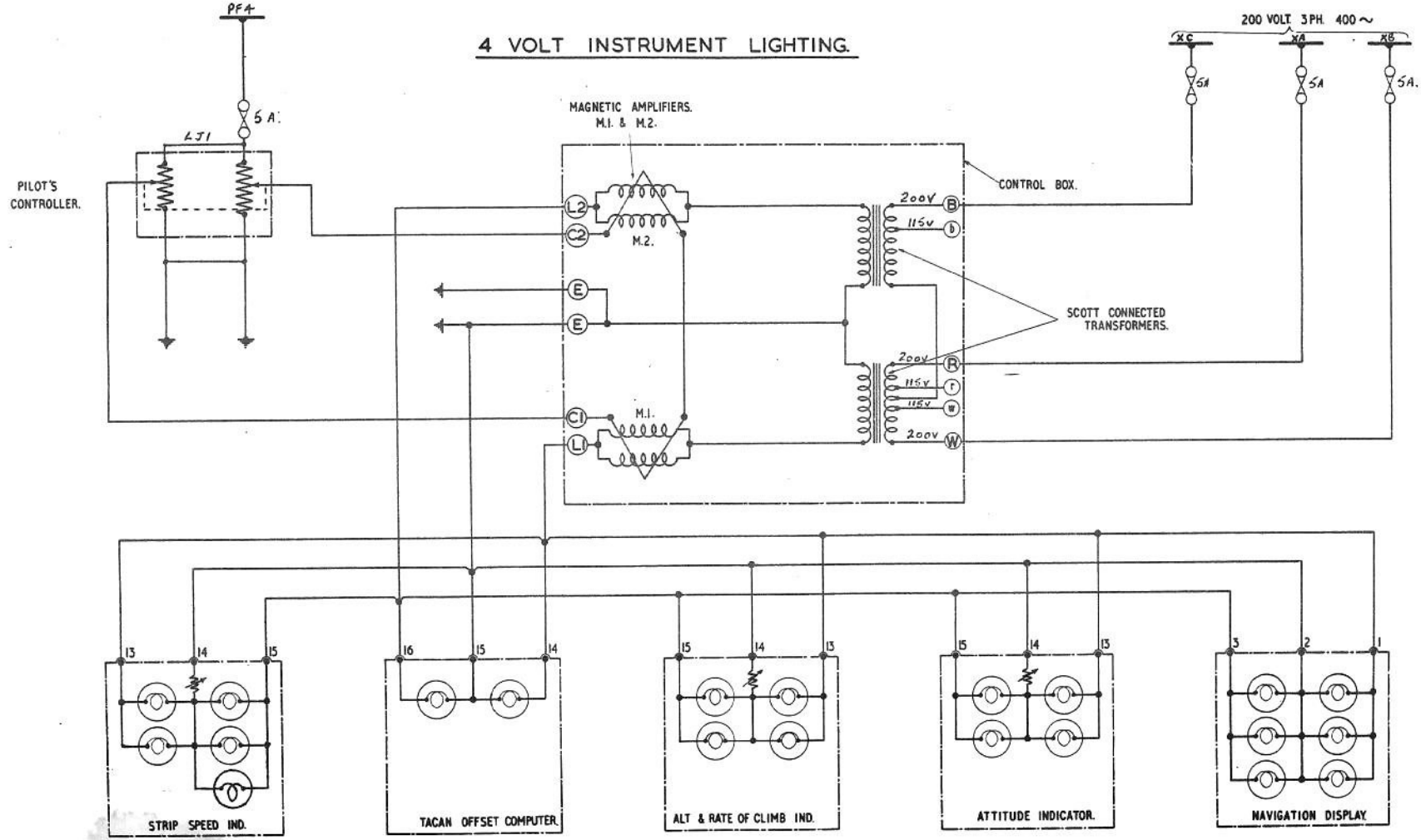


INTERNAL LIGHTING 28V.



INTERNAL LIGHTING 28V.

4 VOLT INSTRUMENT LIGHTING.



GENERAL

1. The lighting system is described in two parts 'Cockpit' and 'External' lighting. The former covers all cockpit lighting services which include general flood lighting, panel lighting, emergency and high intensity circuits. The latter part consists of navigation, anti-collision, and taxying lamps. All lighting is supplied from the aircraft d.c. system except the 4-volt instrument lighting which is fed, via a transformer, from the a.c. supply.

COCKPIT LIGHTING

CONTROLS

2. All lighting is controlled by a group of dimmer switches located on the starboard console forward panel. The emergency lighting and high intensity lighting is controlled by two switches mounted on the port top panels.

PANELS

3. Apart from the general cockpit flood lighting, each of the instrument panels and console panels are lit by pillars lamps mounted as single units or as bridged pairs, according to the requirements of the associated panel. The circuits are so arranged that each bank of lamps receives its supply from a different fuse group, so that in the event of a fuse failure on one circuit, the lighting of the instruments will be maintained from the other. The multi-bank rotary dimmer switches on the starboard console are labelled 'Side Panel', 'Port', and 'Stb'd. respectively and reference to the circuit diagrams will show the banks of lamps controlled by each individual switch. It will be noted that the 'Side Panel' dimmer also controls a switch bank and two fixed resistances in the attention lamp circuit, (See central warning system) so that as the cockpit lighting is switched ON and brought up to brightness, the attention lamp and the lamp in the concel button on the central warning panel will be dimmed.

4-VOLT INSTRUMENT LIGHTING

4. Lighting of the indicator units used in the flight display system (i.e. navigation display, attitude and rate of climb, Tacan off-set computor, and the speed display unit) is achieved by lamps mounted inside each instrument. These lamps, 4-volt, 1 watt, are fed initially from XA, XB, XC of the A.C. system, to a lighting control unit in the starboard console, where the 200-volt, 3 phase, 400 c/s supply is transformed and passed through magnetic amplifiers, to give twin outputs of 3.5 volts. Both of these outputs are capable of being varied by a rotary dimmer switch labelled centre, located along with the other dimmed switches on the starboard console.

EMERGENCY LIGHTING

5. In the event of a failure of the normal cockpit lighting, the instrument panels and the controls may be lit by four amber flood lamps, and a pillar lamp on the port instrument panel. The flood lamps are distributed around the cockpit to illuminate essential instruments and controls. The supply to these lamps is from the emergency battery, which is a 24-volt, 4 a.h. alkaline battery fitted in the main equipment compartment. The supply is controlled by a two-pole switch, labelled EMGY. LIGHTS, fitted on the port top panel. One pole of the switch operates in conjunction with a dimmer switch in the E2B compass and stand by D.I. circuits.

"PLASTECK" PANEL LIGHTING

6. A number of console panels utilize the

"Plasteck" system of lighting. This method employs a laminated face plate with engraved captions according to the panels requirements. The centre lamination is of clear plastic and illuminated from within, the light being transmitted throughout it and emitted via the engraving and circular discs around each lamp on the face of the unit. By day, or when not lit, the captions show a translucent white.

E2B COMPASS AND STAND-BY D.I. LIGHTING

7. The integral of both the compass and the stand-by D.I. are normally supplied from the D.C. distribution system, but they may also receive a supply from the emergency lighting circuit. A rotary dimmer switch labelled COMPASS AND STANDBY D.I. is fitted alongside the other dimmer switches at the forward end of the starboard console.

HIGH-INTENSITY LIGHTING

8. Two high-intensity flood lamps attached to the windscreen arch, port and stb'd, are beamed on to the essential flight instruments. They are controlled by a three-position switch labelled DIM-OFF-BRIGHT, which is fitted on the port top panel. The switch operates in conjunction with two 57 ohm resistors, and if the pilot's vision should be temporarily impaired by the flash of an explosion, the lamps may be used to intensify the illumination of the essential instruments.

EXTERNAL LIGHTING

NAVIGATION AND ANTI-COLLISION LIGHTING

9. These two circuits are controlled by a double-pole, three position switch labelled NAV. LTS, - ALL ON, TIPS, located on the aft switch panel of the starboard console. The navigation lamps are positioned in the leading edge of each wing tip, and also on each side of the fuselage tail section. The anti-collision lamps are located adjacent to the wing tip navigation lamps and also in the spine portion of the upper engine hatch. A type 'A' flasher unit, fitted on the aft pressure bulkhead, operates in the anti-collision lamp circuit. Placing the control switch to ALL ON, brings into circuit both the navigation and the anti-collision lamp circuits.

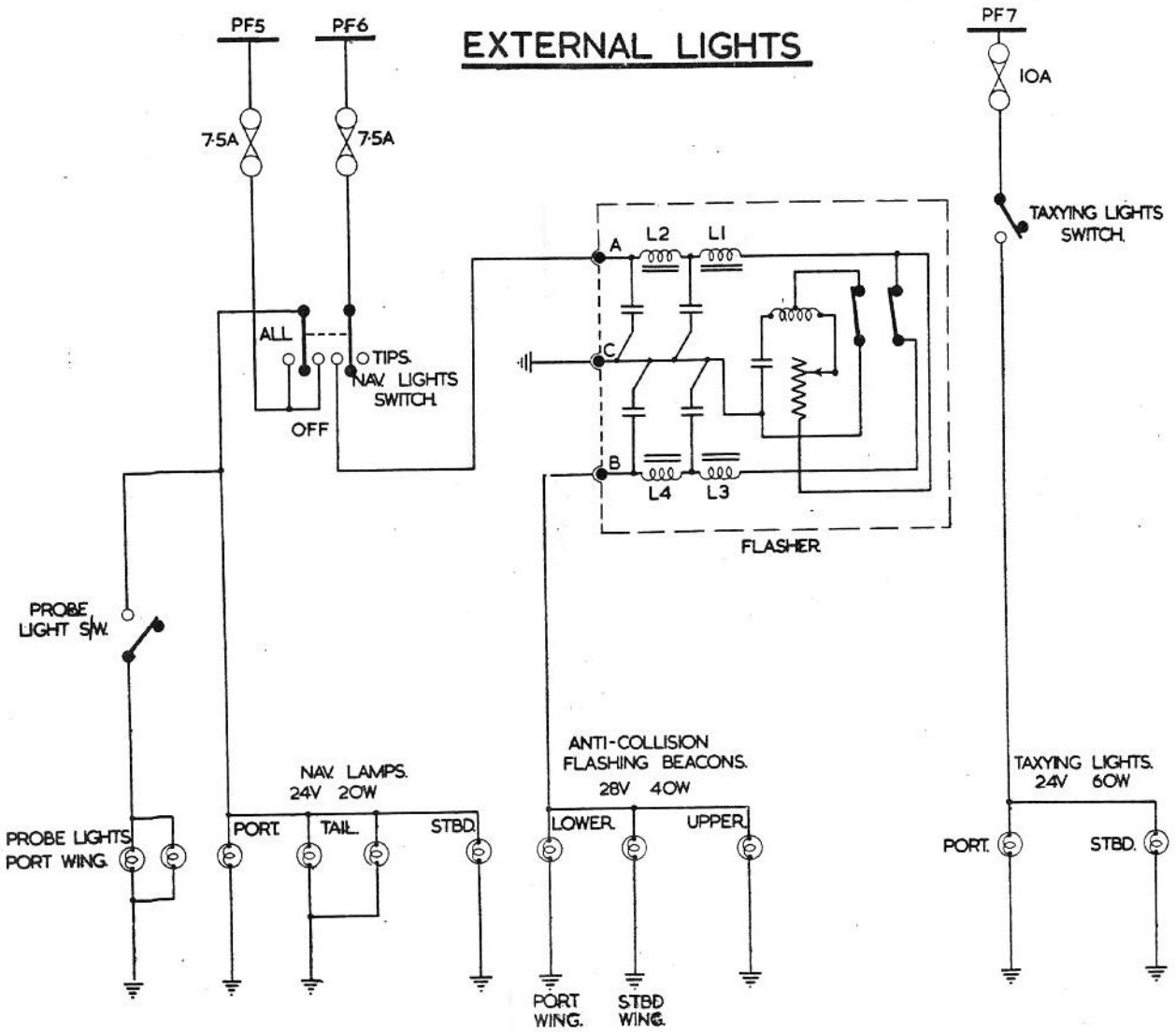
PROBE LIGHTS

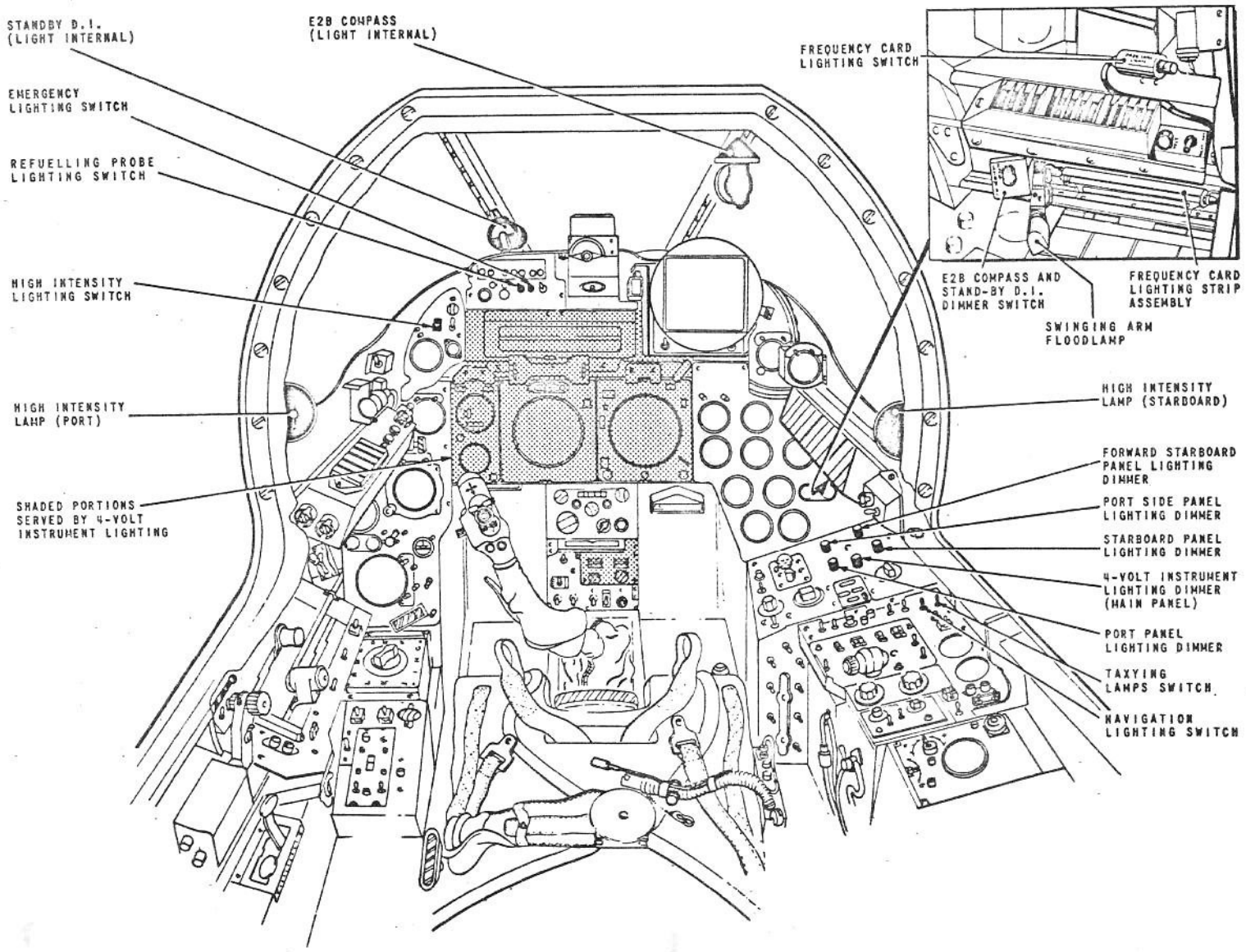
10. The probe lights consist of two 40 w lamp which are fitted to the aircraft when the flight re-fuelling probe is fitted and they connect into J.B.7. The lamps are controlled by a switch which is fitted on the centre shroud panel.

TAXYING LAMPS

11. Two type 'A' taxying lamps, fitted on the fixed fairing of each main wheel undercarriage leg, are controlled by a switch labelled Taxi ON-OFF, located on the starboard console adjacent to the navigation lights switch.

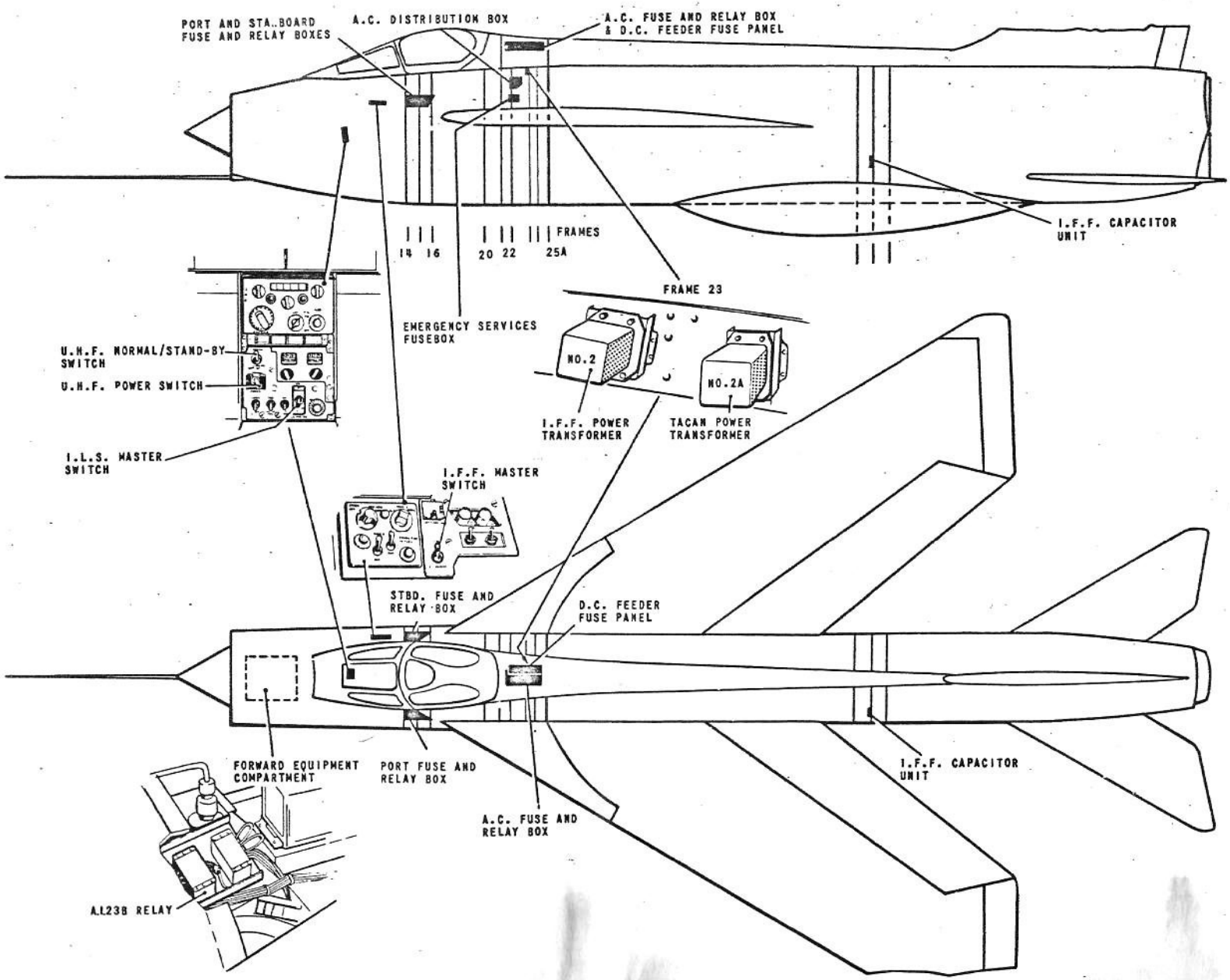
EXTERNAL LIGHTS





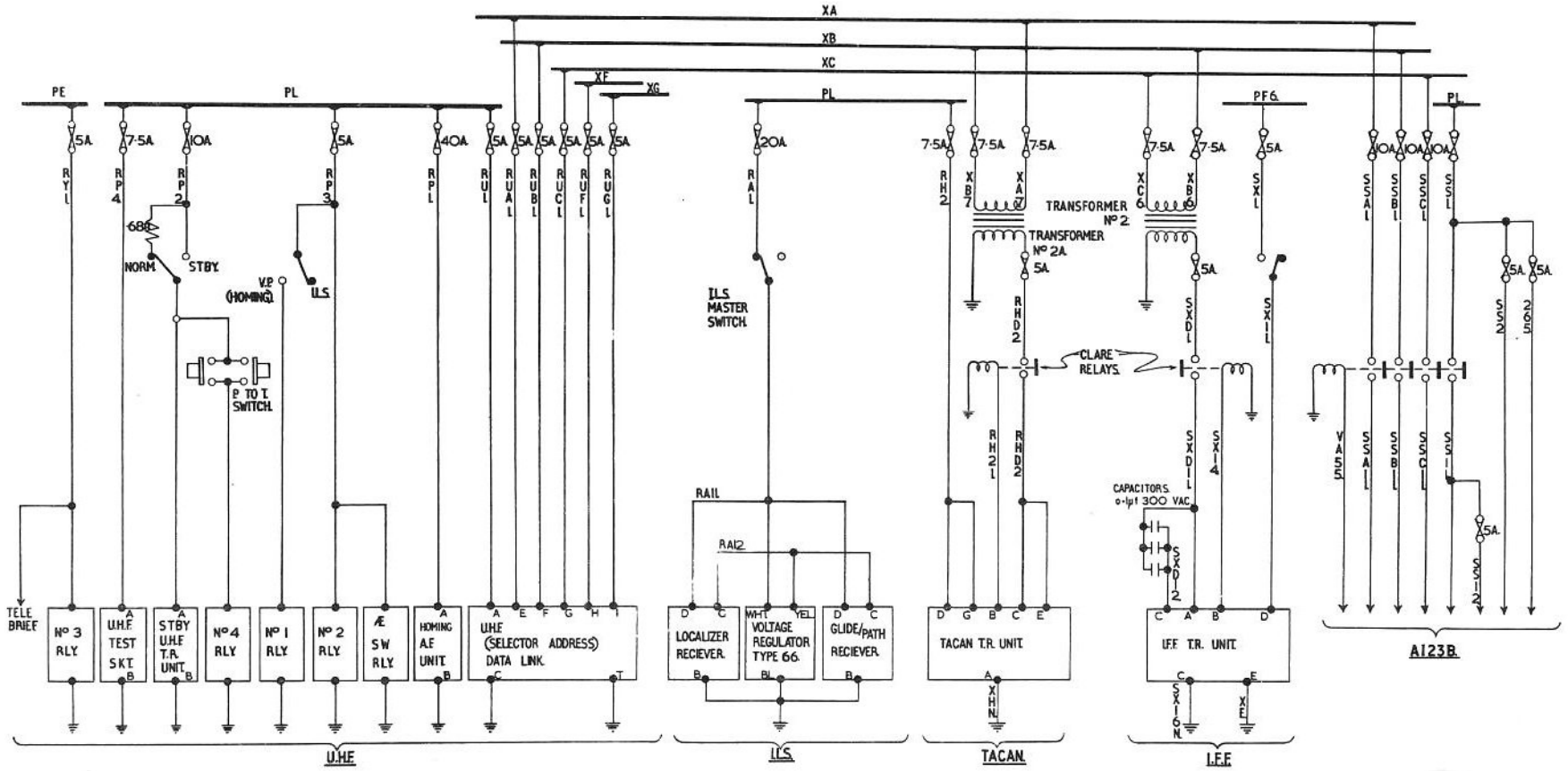
LIGHTING DETAILS

RESTRICTED



WIRELESS AND RADAR POWER SUPPLY DETAILS

RESTRICTED


XA
XB
XC
XF
XG
PE
PL
PL
PL
PF6
5A.
7·5A.
10A.
20A.
40A.
RYL
RP4
RP2
RP3
RPL
RUL
RUAL
RUBL
RUCL
RUFL
RUGL
RAL
RH2
XB7
XA7
XC6
XB6
SXL
SSAL
SSBL
SSCL
SSL
SSN2
SSN1
68Ω
NORM.
STBY.
V.P. (HOMING)
ILS
P TO I SWITCH.
ILS MASTER SWITCH.
TRANSFORMER Nº 2.
TRANSFORMER Nº 2A.
5A.
RH21
RH22
CLARE RELAYS.
SXDL
SXIL
SXI4
CAPACITORS o·1μf 300 VAC.
SXD2
VA55
TELE BRIEF
Nº 3 RLY.
U.H.F. TEST SKT.
STBY U.H.F. T.R. UNIT.
Nº 4 RLY.
Nº 1 RLY.
Nº 2 RLY.
Æ SW RLY.
HOMING A.F. UNIT.
U.H.F. (SELECTOR ADDRESS) DATA LINK.
RAIL
RAI2
LOCALIZER RECIEVER.
VOLTAGE REGULATOR TYPE 66.
GLIDE/PATH RECIEVER.
TACAN T.R. UNIT.
U.F.F. T.R. UNIT.
XHN.
SXION.
XE.
A123B.
U.H.F.
ILS.
TACAN.
I.F.F.