

CHAPTER 1
PILOTS CONTROLS AND EQUIPMENT

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WARNING

An aircr^{ew} ejection seat is fitted to this aircraft.
Before attempting to enter the cabin, therefore,
ensure that the instructions given in the Ejection
Seat Warning, following the Introduction at the
beginning of this volume, have been carried out.
In the interests of safety, this is very important.

Introduction

1. This chapter gives the location of the cabin controls and instruments used by the pilot, the items being grouped as indicated in the illustrations. It will be found that certain items are not referenced as they are regarded as standard features of all cabins. Where the operation of a control or any feature of an instrument is not obvious, the necessary information is given in the key to the illustration. For more detailed information of the operation of certain controls and the manner in which they are to be used, reference should be made to A.P.4347F, Pilot's Notes.

Emergency controls

General

2. The function and operation of the emergency controls and instruments indicated in the illustrations are described in detail in Sect.1, Chap.3 of this volume.

Cabin sliding hood

Operation from inside

3. The cabin sliding hood is normally operated by an electric actuator, but provision is made for manual operation if desired. The actuator is controlled by a three-position switch marked OPEN, OFF and SHUT, which is contained in a combined hood and clutch control box mounted on the port side of the cabin above the throttle lever. The clutch lever moves in a gate marked FREE and LOCKED. When in the FREE position, the actuator clutch is disengaged by a Bowden cable interconnection and the hood control switch is moved to the OFF position by a mechanical linkage within the control box. With the actuator de-clutched, the hood may be moved in the required direction by the handgrips, and as the control switch

is in the OFF position, the actuator cannot be operated under no-load conditions.

WARNING ...

When the aircraft is ready for take-off, a check must always be made to ensure that the hood rail lock indicators, which are located two on each side of the cabin and marked LOCKED, are pointing to the centres of the lock pins, thus indicating that the hood rail locks are correctly set to lock the rails and hood to the airframe.

Operation from outside

4. Before leaving the cabin, the actuator clutch should be left in the FREE position, thus leaving the hood free to slide. The hood may then be pushed open or closed from the outside as desired. For details of the emergency operation of the hood, reference should be made to Sect.1, Chap.3 of this volume.

NOTE...

The cabin hood must NOT be opened or closed by pushing on the transparent plastic.

Operation by external control switch

5. A three-position, centre-off switch located at the bottom of the forward face of the first fuselage frame inside the fuselage nose piece, necessitating removal of the nose piece for access, is used for external operation of the hood during cabin pressurization checks. This switch is normally OFF and disconnected from the aircraft's electrical system. To use the switch, it is first necessary to disconnect the cabin control from the plug and socket break on the cabin port shelf, remove the external control switch socket from its stowage above the shelf and connect it to the plug on the shelf. The actuator clutch should then be placed in the LOCKED position and the fuselage nose

piece removed, as described in Sect.3, Chap.1 to gain access to the external switch.

WARNING....

Before using the switch, ensure that the

hood is clear, and after use, reconnect the cabin switch to the plug on the shelf and return the external switch socket to its stowage.

FLYING CONTROL AND INSTRUMENTS

1. UNDERCARRIAGE INDICATOR	23. OXYGEN DEMAND REGULATOR
Light sequence:-	COMPASS CONTROL UNIT <small>Ground use only.</small> Light indicates installation inoperative
GREEN Undercarriage locked down	TEST BUTTON ON ANTI-G SUIT VALVE
RED Undercarriage in process of retraction or extension.	Depress to test installation
2. UNDERCARRIAGE WARNING LIGHT	24. ANTI-G PRESSURE GAUGE
Light when throttle is approx. 1/3 open and undercarriage not locked down.	25. ANTI-G SUIT CONTROL
3. UNDERCARRIAGE CONTROL	26. TAIL PLANE INCIDENCE CONTROL (NORMAL)
Interlocking push-switches. Top for UP bottom for DOWN. Note - Clockwise rotation of outer wing of UP button overrides safety lock.	Nose up to increase tailplane incidence and down to decrease.
4. FLAP CONTROL	27. HYDRAULIC BRAKE CONTROL
5. AILERON POWER ASSISTANCE INDICATOR	28. BRAKE PARKING LOCK
Indicates power off	For temporary parking
6. ELEVATOR POWER ASSISTANCE INDICATOR	29. PRESSURE HEAD HEATER SWITCH
Indicates power off	30. RUDDER BAR CONTROL
7. AILERON POWER ASSISTANCE SWITCH	For adjustment of rudder bar.
Use to disengage power.	31. GYRO COMPASS
8. ELEVATOR POWER ASSISTANCE SWITCH	32. ALTIMETER
9. MACH METER	33. FLAP POSITION INDICATOR
10. TAIL PLANE POSITION INDICATOR	34. AIR BRAKE INDICATOR
11. ACCELEROMETER	Indicates brake out
12. AIRSPEED INDICATOR	35. TAIL PLANE STANDBY CONTROL
13. ARTIFICIAL HORIZON	36. AIRBRAKE CONTROL
14. RATE OF CLIMB	37. AILERON AND RUDDER TAB POSITION INDICATORS
15. TRIM AND SLIP INDICATOR	38. AILERON AND RUDDER TRIM TAB CONTROL SWITCH
16. STANDBY COMPASS	Operation in natural sense i.e. the aircraft responds to the altitude of the silhouette on the switch knob.
17. WINDSCREEN DE-ICING PUMP SWITCH (DELETED by Mod. 581)	39. TRIM SWITCH LOCK
18. CLOCK.	Engage when flying with ailerons power operated.
19. ^{Hydraulic} CABIN PRESSURE AUDIO WARNING SWITCH <small>Use to cut out</small> ^{Audio warning}	40. CABIN TEMPERATURE SELECTOR
20. CABIN PRESSURE WARNING LIGHT	41. CABIN TEMPERATURE CONTROL
21. CABIN ALTIMETER	42. CABIN PRESSURE SWITCH
22. H.P. OXYGEN CONTENTS GAUGE	43. CABIN PRESSURE WARNING TEST
	44. TAIL PLANE MOTOR CIRCUIT BREAKER
	45.
	46.

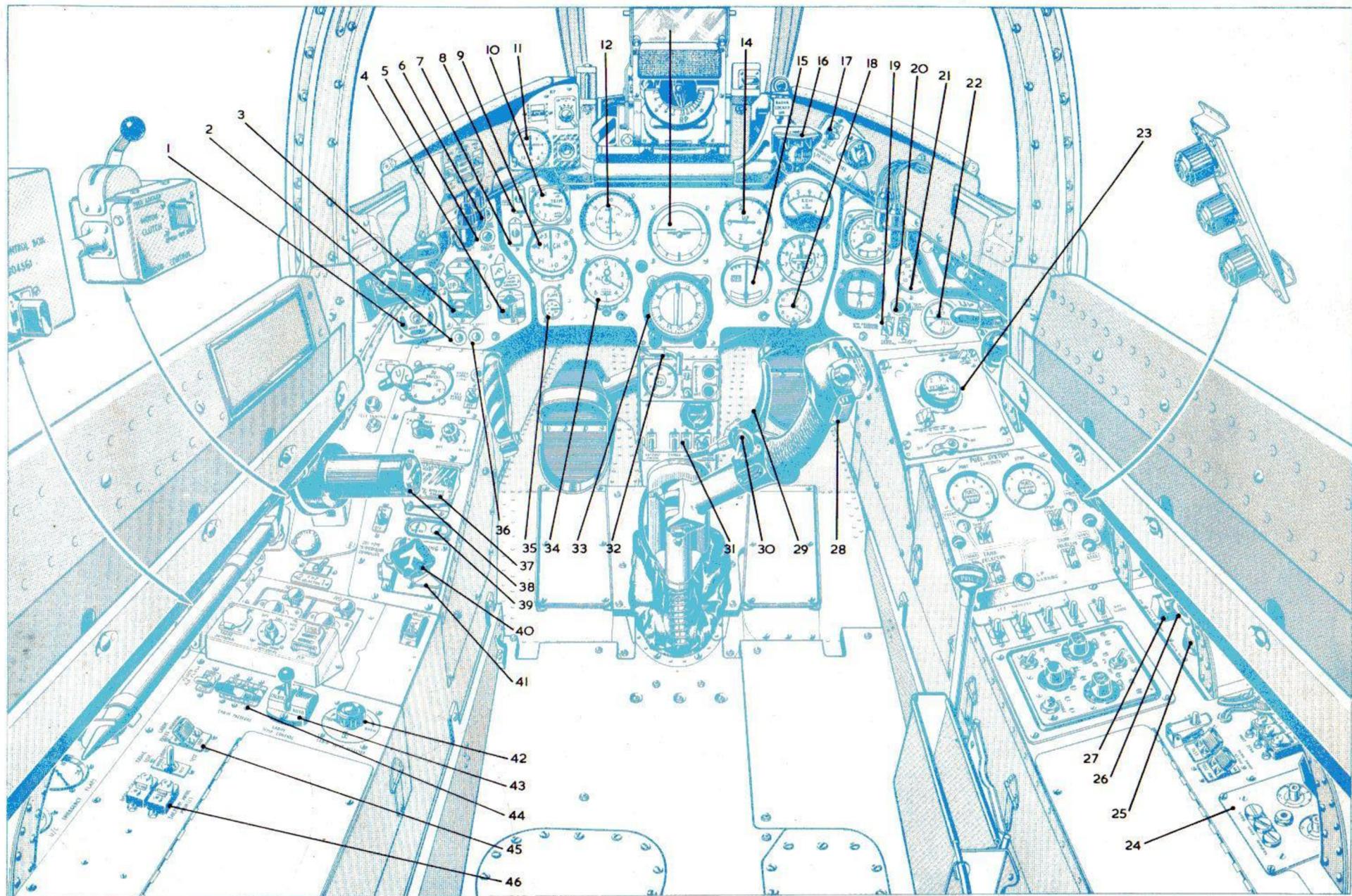


FIG. 1 FLYING CONTROLS AND INSTRUMENTS

ENGINE CONTROLS AND INSTRUMENTS

1. LOWER PRESSURE FUEL COCK CONTROL
Moved forward from OFF to ON
2. RELIGHT SWITCH
Press with ignition switch (Item 7) on for relight.
3. THROTTLE DAMPER
4. THROTTLE
Aft for idling, forward for full throttle.
5. JET PIPE TEMPERATURE CONTROLLER
6. OIL PRESSURE GAUGE
7. IGNITION SWITCH
When off, isolates igniter units.
8. ENGINE MASTER SWITCH
Controls flight instruments, tank pumps, fuel pressure and emergency fuel pump circuits.
9. STARTER PUSH SWITCH
Actuates engine starting cycle.
10. EXHAUST GAS THERMOMETER
11. TACHOMETER
12. ENGINE ANT-ICING SWITCH AND INDICATOR
13. FUEL GAUGE - STARBOARD TANKS
14. FUEL PUMP MAGNETIC INDICATOR - STARBOARD TANKS
15. FUEL PUMP SWITCH - STARBOARD TANKS
16. FUEL TRANSFER MAGNETIC INDICATOR - STARBOARD
17. FUEL COCK POSITION MAGNETIC INDICATOR - STARBOARD TANKS.
18. TANK SELECTOR SWITCH - STARBOARD TANKS.
19. FUEL GAUGE - PORT TANKS
20. FUEL PUMP MAGNETIC INDICATOR - PORT TANKS
21. FUEL TRANSFER MAGNETIC INDICATOR - PORT TANKS
22. FUEL PUMP SWITCH - PORT TANKS
23. FUEL COCK POSITION MAGNETIC INDICATOR - PORT TANKS.
24. TANK SELECTOR SWITCH - PORT TANKS
25. FUEL PRESSURE WARNING INDICATOR
26. AMMETER TEST SOCKET
Used for test prior to flight.
27. FIRE WARNING TEST SWITCH
28. CIRCUIT BREAKER, BOOSTER PUMP - PORT
29. TANK PUMPS TEST SWITCH
Used for test prior to flight.
30. CIRCUIT BREAKER, BOOSTER PUMP - STARBOARD
31. CIRCUIT BREAKER, STARTER

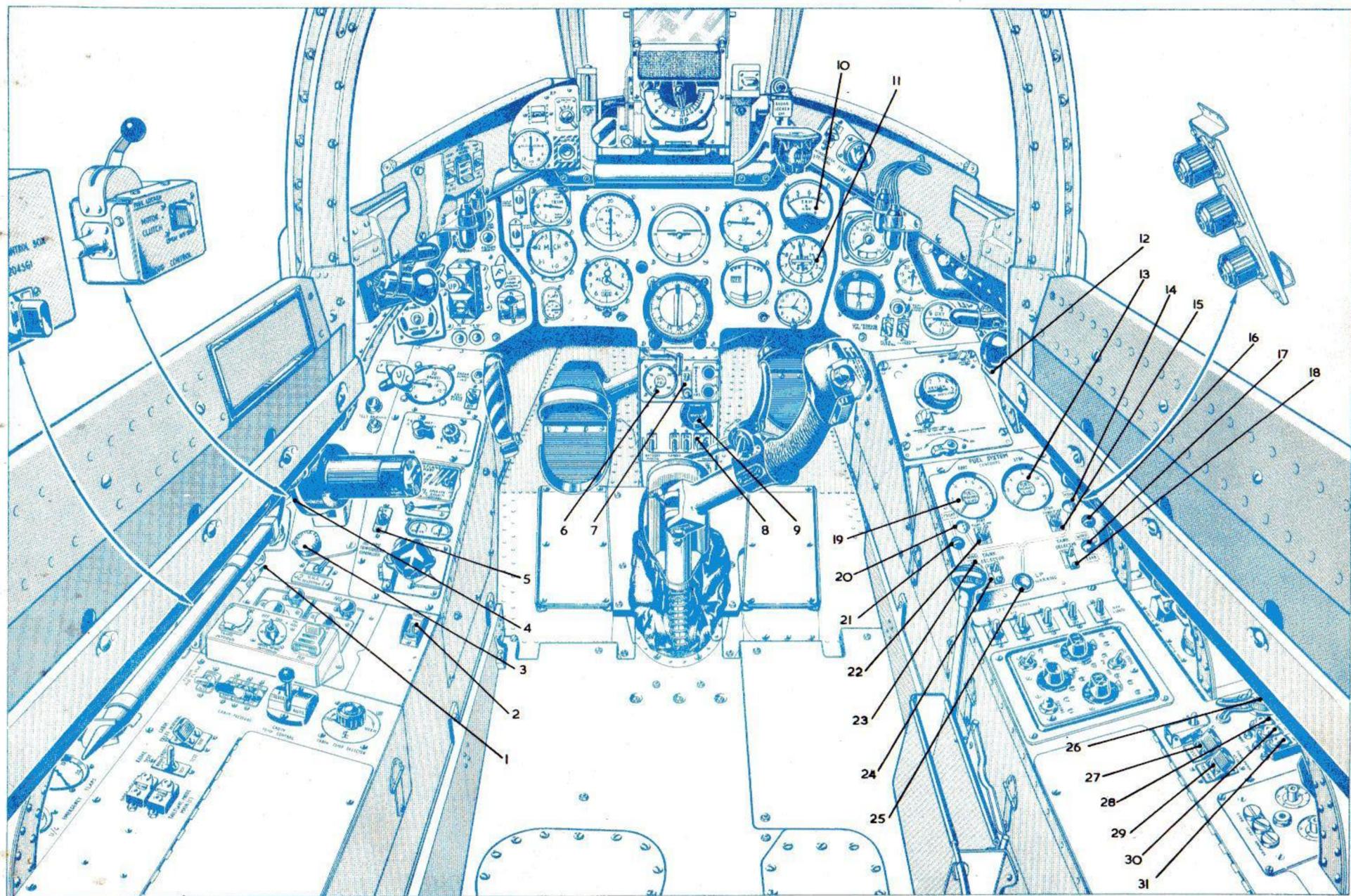
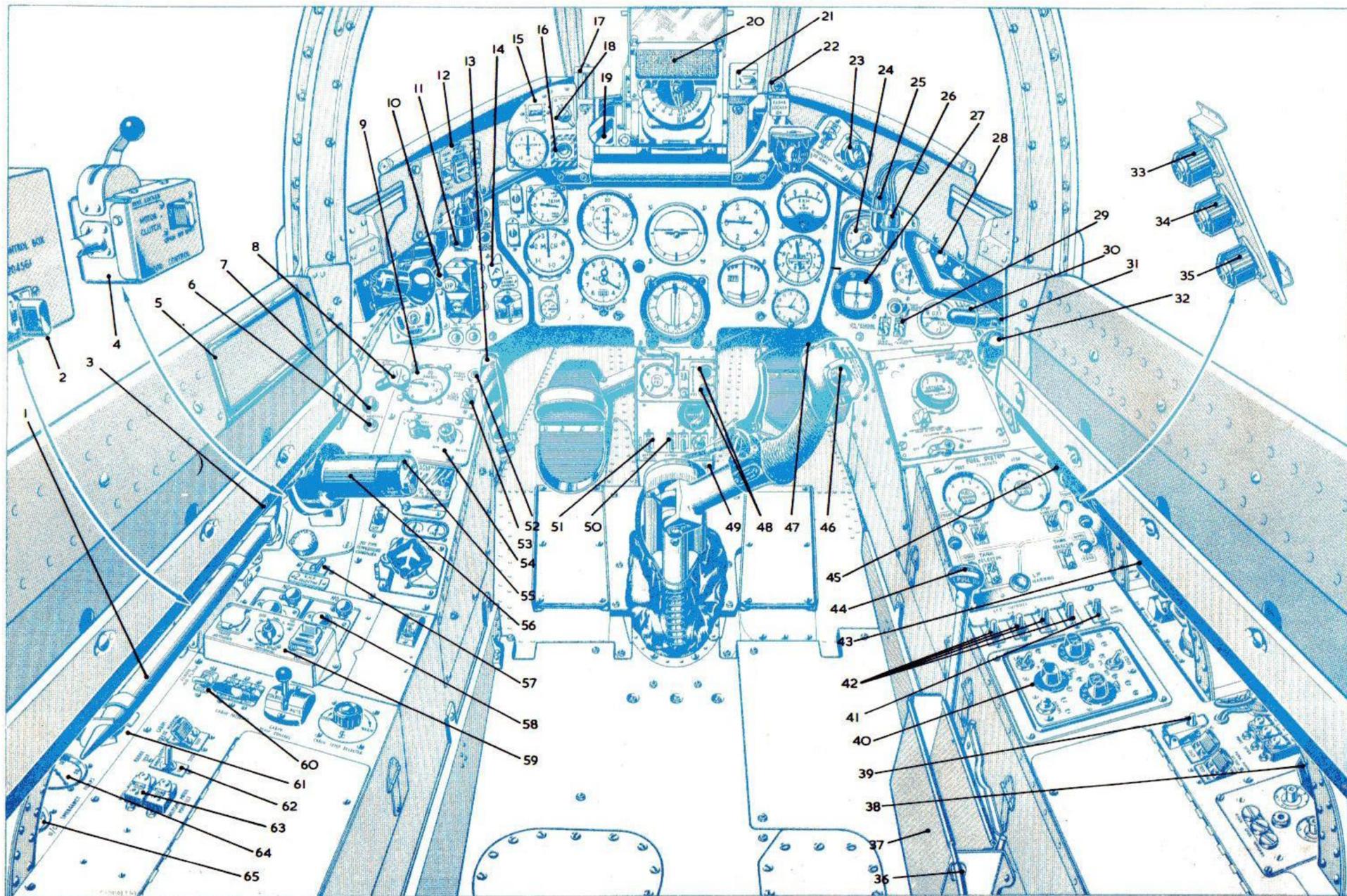


FIG. 2 ENGINE CONTROLS AND INSTRUMENTS



ARMAMENT, NAVIGATION SIGNALLING, RADIO AND MISCELLANEOUS

1. CROWBAR
2. AIRBRAKE RELAY BOX AND TEST SWITCH
3. HOOD RAIL LOCK INDICATORS, PORT AND STARBOARD
4. HOOD CONTROL AND CLUTCH LEVER

When clutch lever is in FREE position to to de-clutch motor, hood control switch is moved to the OFF position automatically.
5. MULTI-CHANNEL CARD HOLDER
6. TELE-BRIEFING PUSH SWITCH
7. TELE-BRIEFING LIGHT
8. EMERGENCY UNDERCARRIAGE CONTROL

Grasp the control between the fingers, press the centre button with thumb and pull control to operate.
9. TRIPLE PRESSURE GAUGE

Brake and main hydraulic system pressure.
10. TARGET REJECTION SWITCH
11. HYDRAULIC FAILURE WARNING LIGHT
12. A.R.I. 18085 CONTROL SWITCHES
13. HOOD JETTISON CONTROL

Refer to Sect.1, Chap.3.
14. EMERGENCY FLAPS CONTROL

Grasp the control between the fingers, press the centre button with thumb and pull control to operate.
15. RP. RIPPLE SWITCH
16. CLEAR A/C PUSH SWITCH
17. RETRACTABLE GYRO GUN SIGHT MOUNTING
18. RP. SELECTOR SWITCH
19. EMERGENCY GYRO GUN SIGHT MANUAL RETRACTION CONTROL.
20. GYRO GUN SIGHT
21. GYRO GUN SIGHT AND MOUNTING CONTROL SWITCH
22. RADAR LOCKED ON INDICATOR LIGHT
23. FIRE WARNING LIGHT AND EXTINGUISHER PUSH SWITCH

Pull knob to test bulb before take-off.
Light indicates when temperature in engine bay and accessories bay exceeds 300 ± 30 deg.C.
Pushing the knob will operate the fire

extinguisher. The flame switches are of the re-setting type and indicate temporary surges of excessive heat, thus, flickering of the light in flight and during engine run on the ground may occur. Refer to Sect.4, Chap.5.

24. D.M.E. INDICATOR
25. RED INSTRUMENT LIGHTS, Port and Starboard
26. RED INSTRUMENT STANDBY LIGHTS, Port and Starboard.
27. A.R.I. 18085 INDICATOR
28. SPARE BULB HOLDER
29. CAMERA EXPOSURE SWITCH
30. RED INSTRUMENT LIGHTS, Port and Starboard
31. RED STANDBY LIGHT SWITCH.
32. ULTRA VIOLET INSTRUMENT LIGHTS, Port and Starboard.
33. ULTRA VIOLET INSTRUMENT LIGHTS, DIMMER SWITCH
34. RED INSTRUMENT LIGHTS, DIMMER SWITCH
35. RED SHELF LIGHTS, DIMMER SWITCH
36. GYRO GUN SIGHT RECORDER STOWAGE
37. MAP AND NOTECASE
38. EMERGENCY COCKPIT LIGHTS ACCUMULATOR
39. BUTT TEST SWITCH
40. D.M.E. CONTROL UNIT
41. NAVIGATION LIGHTS SWITCH
42. I.F.F. SWITCHES
43. AFT RED SHELF LIGHTS - Port and Starboard
44. EMERGENCY OXYGEN RELEASE
45. FORWARD RED SHELF LIGHTS - Port and Starboard
46. CAMERA GUN PUSH SWITCH
47. GUN FIRING TRIGGER
48. GENERATOR WARNING LIGHTS
49. GYRO GUN SIGHT CIRCUIT BREAKER
50. CAMERA MASTER SWITCH
51. BATTERY MASTER SWITCH

On for flight, switch off to isolate all electrical services except fire extinguisher.

KEY TO FIG.3.

ARMAMENT, NAVIGATION SIGNALLING, RADIO AND MISCELLANEOUS - Contd.

52. RADAR SUPPLY INDICATOR	59. BOMB/RP CONTROL PANEL
53. GYRO GUN SIGHT MANUAL/AUTOMATIC SWITCH	60. FLOOD AIR FLOW SWITCH
54. GYRO GUN SIGHT CONTROL UNIT	61. BRAKE ACCUMULATOR PRESSURE GAUGE
55. PRESS TO TRANSMIT SWITCH	62. RADAR TEST SWITCH
56. GYRO GUN SIGHT RANGE CONTROL	63. HOOD CIRCUIT BREAK
57. V.H.F. SELECTOR SWITCH	64. EMERGENCY AIR GAUGE- FLAPS
58. V.H.F. RADIO CONTROL UNITS	65. EMERGENCY AIR GAUGE - UNDERCARRIAGE



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