

Chapter 1

PILOT'S CONTROLS AND EQUIPMENT

(Completely revised)

LIST OF CONTENTS

| | Para. |
|---------------------|-------|
| Introduction | 1 |
| Emergency controls | |
| General | 2 |

| | Para. |
|------------------------------|-------|
| Cabin sliding hood | |
| Operation from inside | 3 |

| | Para. |
|--------------------------------------|-------|
| Operation from outside | 4 |
| Operation by external control | 5 |

LIST OF ILLUSTRATIONS

| | Fig. |
|--|------|
| Flying controls and instruments | 1 |

| | Fig. |
|--|------|
| Engine controls and instruments | 2 |

| | Fig. |
|---|------|
| Armament, navigation, signalling, radio and miscellaneous | 3 |

WARNING

An aircrew ejection seat is fitted to this aircraft. Before attempting to enter the cabin, therefore, ensure that the instructions given in the **LETHAL WARNING Marker Card**, 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 operations 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.4347K, 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.

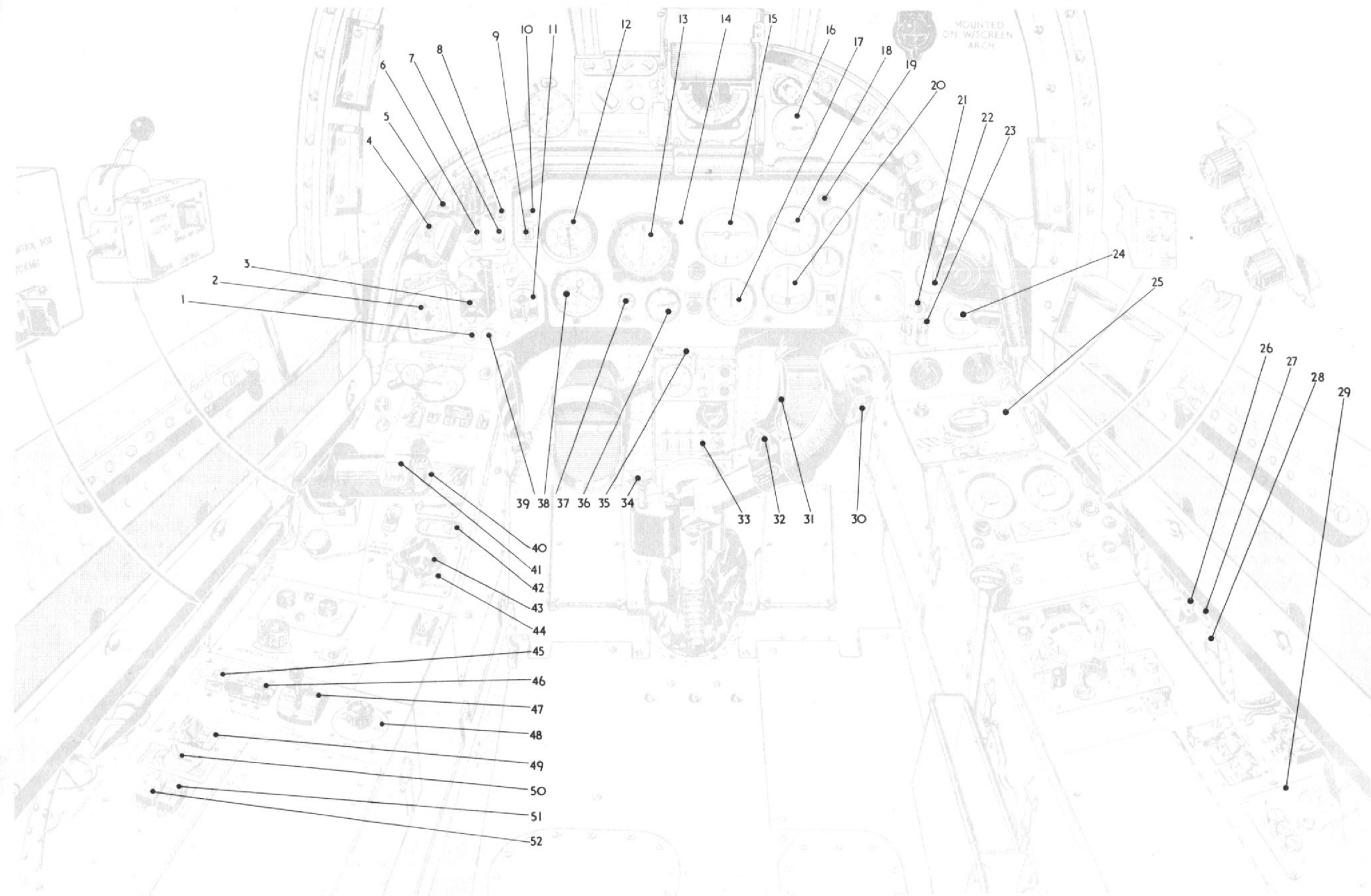


Fig. 1 Flying controls and instruments

KEY TO FIG.1 FLYING CONTROLS AND INSTRUMENTS

- 1 UNDERCARRIAGE WARNING LAMP
Lights when throttle is approx. 1/3rd. open and the undercarriage is not locked down.
- 2 UNDERCARRIAGE INDICATOR
Light sequences:-
GREEN Undercarriage locked down
RED Undercarriage in process of retraction or extension
ALL OFF Undercarriage locked up
- 3 UNDERCARRIAGE CONTROLS
Interlocking push buttons. Top for UP. Bottom for DOWN.
Note - Clockwise rotation of outer ring of UP button overrides the safety lock.
- 4 TAIL PARACHUTE SWITCH
- 5 PARACHUTE STREAM LAMPS
- 6 AILERON GEARING SWITCH
- 7 AILERON POWER CONTROL SWITCH
- 8 AILERON POWER CONTROL INDICATOR
Indicates power off.
- 9 ELEVATOR POWER CONTROL SWITCH
- 10 ELEVATOR POWER CONTROL INDICATOR
Indicates power off.
- 11 FLAP CONTROL
- 12 AIRSPEED INDICATOR
- 13 GYRO COMPASS
- 14 STICK CENTRING WHITE SPOT
- 15 ARTIFICIAL HORIZON
- 16 ACCELEROMETER
- 17 MACHMETER
- 18 VERTICAL SPEED INDICATOR (RATE-OF-CLIMB)
- 19 OXYGEN FLOW INDICATOR
- 20 TURN AND SLIP INDICATOR
- 21 CABIN PRESSURE WARNING LAMP
- 22 CABIN ALTIMETER
- 23 HYDRAULIC PRESSURE AUDIO WARNING SWITCH
Use to cut out audio warning.
- 24 OXYGEN CONTENTS GAUGE
- 25 OXYGEN DEMAND REGULATOR
- 26 ANTI-G SUIT CONTROL
- 27 ANTI-G PRESSURE GAUGE
- 28 TEST BUTTON ON ANTI-G SUIT VALVE
Depress to test installation.
- 29 COMPASS CONTROL UNIT
Ground use only. Light indicates installation inoperative.
- 30 TAIL PLANE INCIDENCE CONTROL SWITCH
- 31 HYDRAULIC BRAKE CONTROL
- 32 BRAKE PARKING LOCK
For temporary parking.
- 33 PRESSURE HEAD HEATER SWITCH
- 34 AILERON SPRING FEEL UNIT
- 35 RUDDER BAR CONTROL
For adjustment of rudder bar
- 36 TAIL PLANE POSITION INDICATOR
- 37 FLAP POSITION INDICATOR
- 38 ALTIMETER
- 39 AIR BRAKE INDICATOR
Indicates air brake out.
- 40 AIR BRAKE CONTROL
- 41 TAIL PLANE FOLLOW-UP SWITCH
- 42 AILERON AND RUDDER TAB POSITION INDICATORS
- 43 AILERON AND RUDDER TRIM TAB CONTROL SWITCH
Operation in natural sense i.e. the aircraft responds to the attitude of the silhouette on the switch knob.
- 44 TRIM SWITCH GUARD
Engage when flying with the ailerons in power.
- 45 FLOOD AIR FLOW SWITCH
- 46 CABIN PRESSURE SWITCHES
- 47 CABIN TEMPERATURE CONTROL
- 48 CABIN TEMPERATURE SELECTOR
- 49 CABIN PRESSURE WARNING TEST SWITCH
Ground use only.
- 50 INVERTER SELECTOR SWITCH
- 51 TAIL TRIM MAIN CIRCUIT BREAKER
- 52 HOOD MOTOR CIRCUIT BREAKER

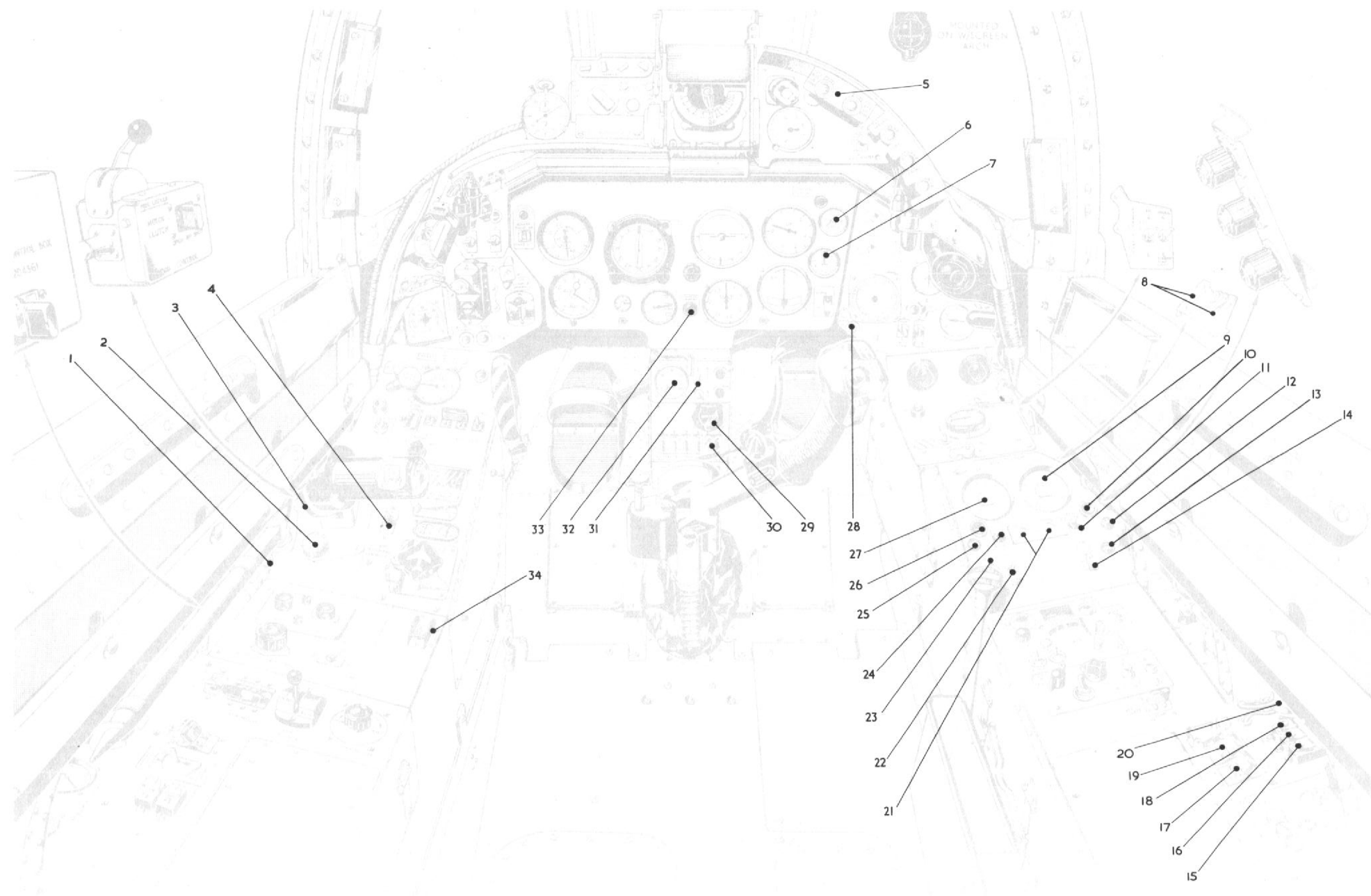


Fig. 2 Engine controls and instruments

WARNING

When the aircraft is ready for take-off a check must always be made to ensure that the black line on the hood rail lock indicators, which are located one on each side of the cabin and marked **LOCKED**, line up with the spot in the centre 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 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

KEY TO FIG.2**ENGINE CONTROLS AND INSTRUMENTS**

- | | |
|--|---|
| 1 LOW PRESSURE FUEL COCK CONTROL Moved forward from OFF to ON. | 18 CIRCUIT BREAKER - BOOSTER PUMP - PORT |
| 2 THROTTLE DAMPER | 19 FIRE WARNING TEST SWITCH |
| 3 THROTTLE Aft for idling, forward for full throttle. Movement of the throttle also opens and closes the high pressure fuel cock. | 20 AMMETER TEST SOCKET Used for test prior to flight. |
| 4 JET PIPE TEMPERATURE CONTROLLER | 21 OUTBOARD DROP TANKS EMPTY INDICATORS |
| 5 FUEL LOW LEVEL WARNING LAMPS | 22 TANK SELECTOR SWITCH - PORT TANKS |
| 6 EXHAUST GAS THERMOMETER | 23 FUEL COCK POSITION MAGNETIC INDICATOR - PORT TANKS |
| 7 TACHOMETER | 24 FUEL PUMP SWITCH - PORT TANKS |
| 8 ENGINE ANTI-ICING SWITCH AND INDICATOR | 25 FUEL TRANSFER MAGNETIC INDICATOR - PORT TANKS |
| 9 FUEL GAUGE-STARBOARD TANKS | 26 FUEL PUMP, WARNING LAMP - PORT TANKS |
| 10 FUEL PUMP, WARNING LAMP - STARBOARD TANKS | 27 FUEL GAUGE - PORT TANKS |
| 11 FUEL PUMP SWITCH - STARBOARD TANKS | 28 FUEL LOW PRESSURE WARNING INDICATOR |
| 12 FUEL TRANSFER - MAGNETIC INDICATOR - STARBOARD | 29 STARTER PUSH SWITCH Actuates engine starting cycle. |
| 13 FUEL COCK POSITION MAGNETIC INDICATOR - STARBOARD TANKS | 30 ENGINE MASTER SWITCH Controls flight instruments, tank pumps, fuel pressure and emergency fuel pumps. |
| 14 TANK SELECTOR SWITCH - STARBOARD TANKS | 31 IGNITION SWITCH When off, isolates igniter units. |
| 15 CIRCUIT BREAKER, ENGINE STARTER | 32 OIL PRESSURE GAUGE |
| 16 CIRCUIT BREAKER, BOOSTER PUMP - STARBOARD | 33 INVERTER CHANGE-OVER MAGNETIC INDICATOR |
| 17 TANK PUMPS TEST SWITCH Used for test prior to flight. | 34 RELIGHT SWITCH Press with ignition switch (item 1) ON for relight. |

RESTRICTED

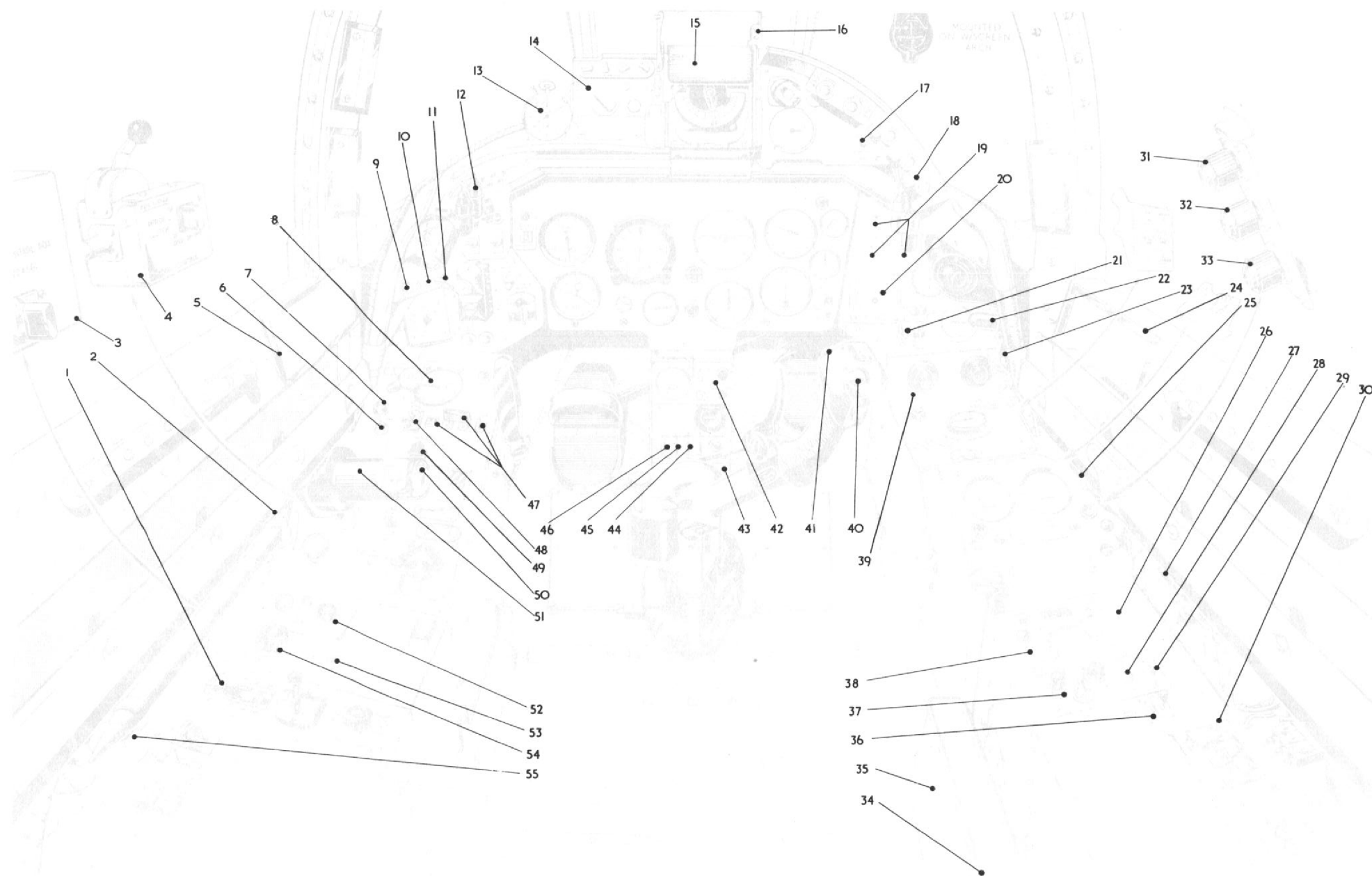


Fig. 3 Armament, navigation, signalling, radio and miscellaneous

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, re-connect the cabin switch to the plug on the shelf and return the external switch socket to its stowage.

KEY TO FIG.3

ARMAMENT NAVIGATION, SIGNALLING, RADIO AND MISCELLANEOUS

- 1 FLOOD AIR FLOW SWITCH
- 2 HOOD RAIL LOCK INDICATORS - PORT & STARBOARD
- 3 AIR BRAKE RELAY BOX & TEST SWITCH
- 4 HOOD CONTROL AND CLUTCH LEVER
When the clutch lever is in the FREE position it declutches the motor, and the hood control switch is moved automatically to the OFF position.
- 5 RADIO CARD HOLDER
- 6 TELEBRIEFING PUSH SWITCH
- 7 TELEBRIEFING LAMP
- 8 TRIPLE PRESSURE GAUGE
Brake and main hydraulic system pressure.
- 9 AERIAL CHANGE-OVER SWITCH
- 10 U.H.F. SELECTOR SWITCH
- 11 VOICE RECORDER SWITCH
- 12 RED INSTRUMENT LAMPS - PORT & STARBOARD
- 13 STOP WATCH
- 14 U.H.F. CONTROL UNIT
- 15 GYRO GUN SIGHT
- 16 RADAR LAMPS (NOT USED)
- 17 GYRO GUN SIGHT SWITCH
- 18 CAMERA EXPOSURE WARNING LAMPS
- 19 CAMERA FOOTAGE INDICATORS
- 20 RADIO COMPASS
- 21 G.90 CAMERA APERTURE SELECTOR SWITCH
- 22 RED INSTRUMENT LAMPS - STARBOARD
- 23 ULTRA VIOLET INSTRUMENT LAMPS - PORT & STARBOARD
- 24 SUB MINIATURE RADIO COMPASS CARD HOLDER
- 25 FORWARD RED SHELF LAMPS - PORT & STARBOARD
- 26 U.H.F./MIX SWITCH
- 27 AFT RED SHELF LAMPS - PORT & STARBOARD

- 28 I.F.F. I/P SWITCH
- 29 I.F.F. MASTER SWITCH
- 30 BUTT TEST SWITCH
- 31 ULTRA VIOLET INSTRUMENT LAMPS - DIMMER SWITCH
- 32 RED INSTRUMENT LAMPS - DIMMER SWITCH
- 33 RED SHELF LAMPS - DIMMER SWITCH
- 34 GYRO GUN SIGHT RECORDER STOWAGE
- 35 MAP AND NOTECASE STOWAGE
- 36 NAVIGATION LAMPS SWITCH
- 37 I.F.F. CONTROL UNIT
- 38 RADIO COMPASS CONTROLLER
- 39 I.F.F. CODER CONTROL
- 40 G.90 CAMERA GUN PUSH SWITCH
- 41 GUN FIRING TRIGGER
- 42 GENERATOR WARNING LAMPS
- 43 GYRO GUN SIGHT CIRCUIT BREAKER
- 44 G.90 CAMERA MASTER SWITCH
- 45 F.95 CAMERA HEATER SWITCH
- 46 BATTERY MASTER SWITCH
On for flight, switch off to isolate all electrical services except fire extinguisher.
- 47 F.95 CAMERA CONTROL SWITCHES (OFF, 4 F.P.S. & 8 F.P.S.)
- 48 F.95 CAMERA OR G.90 CAMERA SELECTOR SWITCH
- 49 F.95 IRIS SELECTOR SWITCH
- 50 PRESS TO TRANSMIT SWITCH
- 51 GYRO GUN SIGHT RANGE CONTROL
- 52 G.G.S. SELECTOR DIMMER
- 53 U.H.F. TONE SWITCH
- 54 U.H.F. CONTROLLER'S LAMP DIMMER
- 55 BRAKE ACCUMULATOR PRESSURE GAUGE



This file was downloaded
from the RTFM Library.

Link: www.scottbouch.com/rtfm

Please see site for usage terms,
and more aircraft documents.