

Section 1

PILOTS' CONTROLS AND EQUIPMENT

CONTENTS

	Para.
Introduction	1
Entry and normal exit	2
Pilots' seats and harness	3
Fuel contents gauges	4
Instrument-flying practice screens	5
EMERGENCIES	
Canopy exit	8
Emergency exit and rescue	9
Fire extinguisher	10
First-aid outfit	11
Emergency lamps	12

ILLUSTRATIONS

	Fig.
Pilots' controls and equipment (1)	1
Pilots' controls and equipment (2)	2

INTRODUCTION

1. The illustrations, with their keys, show the arrangement of the pilots' controls and equipment. The text gives information not included in the keys.

ENTRY AND NORMAL EXIT

2. Both cockpits can be entered from either side via a walkway on the top surface of the flap and wing. Externally, the canopy is provided with two handles at the top, twisting of either handle unlocking the canopy and enabling it to be pushed rearwards. Internally, there are two levers connected to the external handles, so that opening or closing the canopy from inside is similar to that from outside. The release mechanism is connected to a spring-loaded plunger which engages holes in the centre canopy rail aft of the rear cockpit to provide four alternative locked positions: fully closed; partially open; approximately half open (uncovering the front cockpit); fully open (uncovering both cockpits).

PILOTS' SEATS AND HARNESS

3. Parachute-type metal seats are built into the fuselage structure and are not adjustable. The front cockpit is fitted with restraint harness, MRI GQ716 (Ref.No. 6F/1680-99-114-8099) and the rear cockpit, restraint harness MRI GQ729 (Ref.No. 6F/1680-99-114-8100).

FUEL CONTENTS GAUGES

4. There are no fuel contents gauges in the cockpits, but a gauge is fitted in the top of both fuel tanks - located one per wing, near the leading edge at the root. Each gauge has two sets of calibrations, one marked in white and the other in red. The white figures indicate tank contents when the aircraft is in the flying-position, and are visible from the cockpit. The red figures represent tank contents when the aircraft is on the ground, and are not visible from the cockpit.

INSTRUMENT-FLYING PRACTICE SCREENS

5. Amber screens are provided for the front cockpit only, and consist of one hinged central and two plain side screens for the windscreen, one sliding screen fitted to the interior of each front side panel of the canopy, and one screen fitted on the inside of the forward roof panel of the canopy. The windscreen amber panels are readily detachable and a bungee-closing stowage for these is provided on the starboard wall of the front cockpit.

6. The front cockpit can be screened, in flight if necessary, by sliding each canopy side screen forward until it contacts a narrow amber strip permanently secured to the front of the canopy, and fitting the windscreen panels. When fitting the windscreen panels, secure the side screens first, so that the reinforced edges abut the crash pylon and are held by the rotating catches on the pylon; the hinged central screen, when secured by the two rotating catches provided, will then hold the forward edges of the side screens in position.

7. A bag, with zip-fastener closure, is provided for the special goggles associated with this form of training, and is located above the stowage for the screens. The goggles are fitted with a flexible ventilation tube which plugs into a socket on the starboard wall of the front cockpit, immediately aft of the goggles stowage bag.

EMERGENCIESCANOPY EXIT

8. There is no means of jettisoning the canopy, but to enable it to be moved rapidly to the rearmost position in flight, the roof is fitted with a small door (Part 2, Sect.3, Chap.4) hinged at the rear. When the door is pivoted upwards into the slipstream it overcomes the suction of the canopy and facilitates normal opening. The door is held closed by a catch and is spring-loaded by two bungee cords, release being effected by pulling either of the yellow-and-black knobs located one in each cockpit roof, on the starboard side.

EMERGENCY EXIT AND RESCUE

9. To enable the crew to get clear or be released, in the event of the canopy being jammed in a crash, two "break-out" panels are fitted on the port side of the canopy, one per cockpit. For release, an internal and external lever are provided for each panel, all levers being painted in yellow-and-black stripes. The outside levers are marked EMERGENCY and a tell-tale single strand of 28 SWG copper wire is fitted to both inside and outside levers (AIL No.1/73 incorporated). Inside the canopy stencilled instructions near each lever read TURN AND PUSH OUT FOR CRASH LANDING EXIT; externally, the instructions read LIFT TURN AND PULL FOR EMERGENCY RESCUE.

Note ...

"Break-out" panels are not embodied on aircraft pre-Mod.H.4. For such aircraft it is necessary to break the canopy side panel(s) for escape or rescue.

FIRE EXTINGUISHER

10. A hand-operated fire extinguisher is mounted, in a quick-release bracket, on the starboard floor of the front cockpit.

FIRST-AID OUTFIT

11. A first-aid outfit, the stowage for which is clearly labelled, is mounted in the port wing near the root end; it is retained in position by a rip panel, a tag being provided to facilitate the quick removal of the panel.

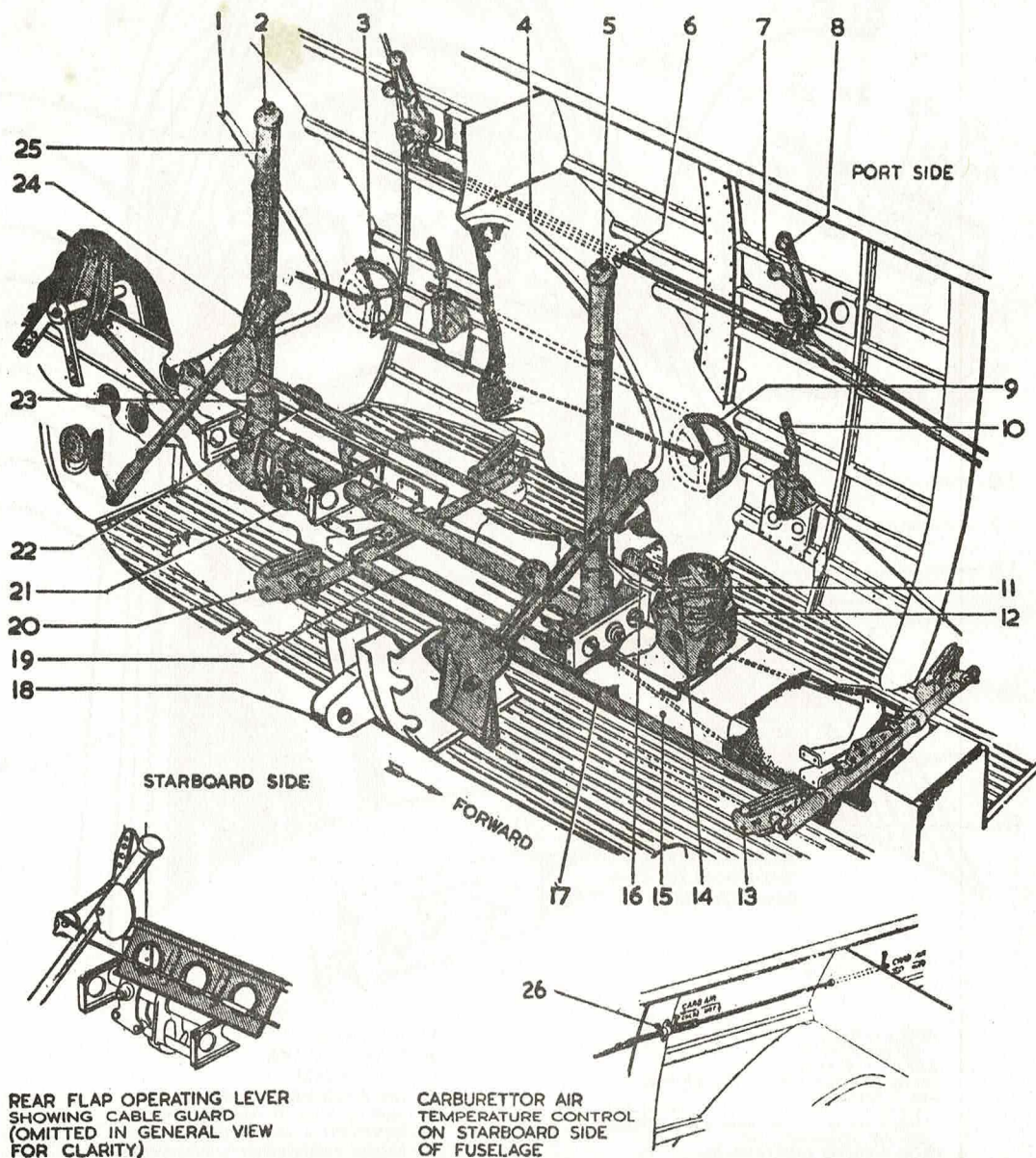
EMERGENCY LAMPS

12. A two-volt alkaline battery on the port rear side of the front

cockpit provides electrical power for two emergency lamps mounted one over each instrument panel. Both lamps have individual switches located as shown in fig.2.

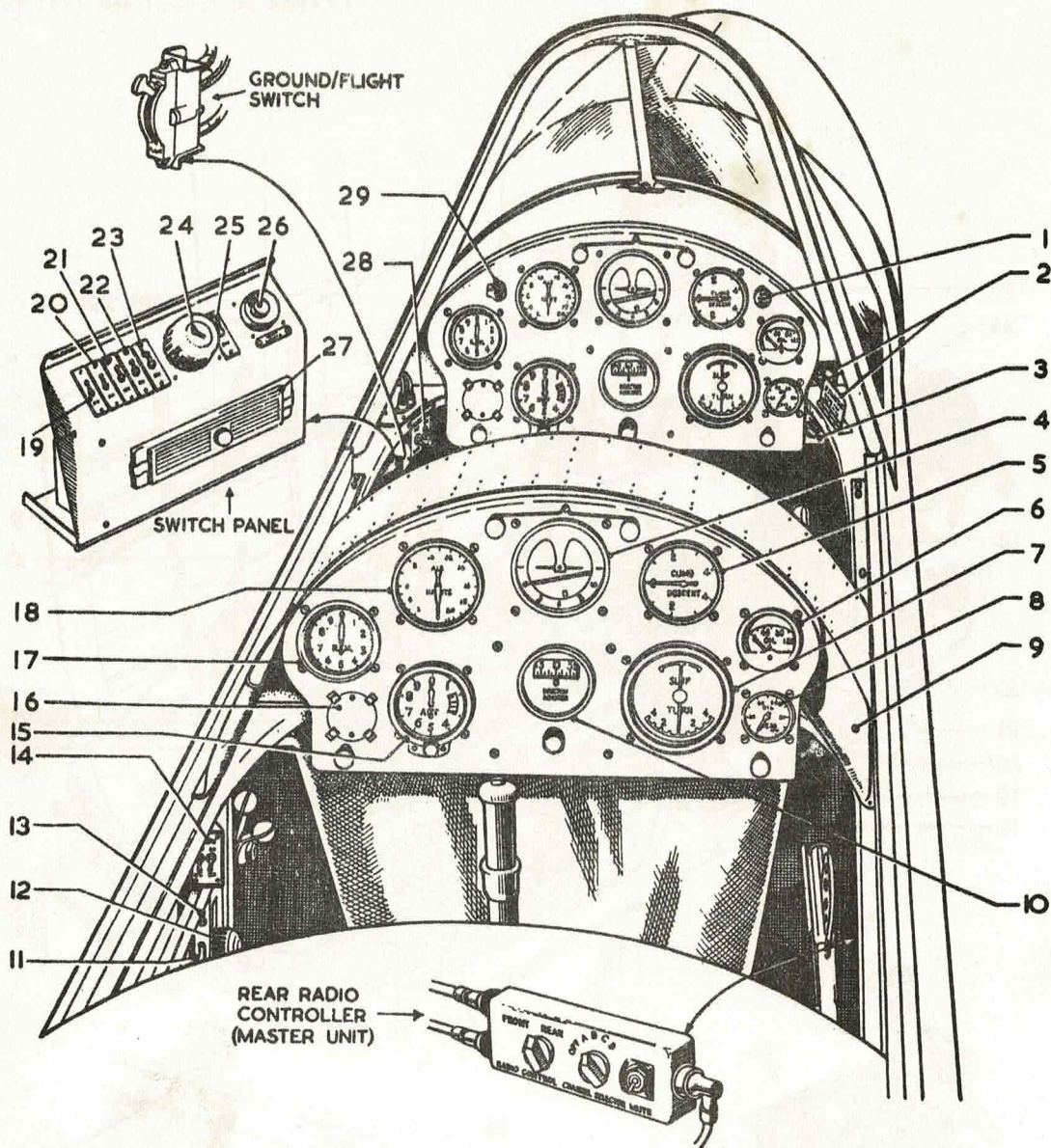
KEY TO FIG. 1 (PILOTS' CONTROLS AND EQUIPMENT (1))

1. REAR PILOT'S SEAT (Non-adjustable)
2. PRESS-TO-TRANSMIT SWITCH
3. REAR ELEVATOR TRIM HANDWHEEL
Operates in the natural sense
4. FRONT CONTROL COLUMN
5. PRESS-TO-TRANSMIT SWITCH
6. FRONT PILOT'S SEAT (Non-adjustable)
7. MIXTURE CONTROL LEVER
Closing of the throttle automatically moves the lever to RICH
8. THROTTLE CONTROL LEVER
Conventional
9. FRONT ELEVATOR TRIM HANDWHEEL
Operates with, and similarly to, item 3
10. BRAKE CONTROL HAND LEVER
Forward - OFF
Back - ON
For straight braking and, when half ON, for differential rudder braking (item 13)
Depress disc to engage ratchet
11. COMPASS LAMP SWITCH
12. COMPASS
13. FRONT RUDDER PEDALS
Also operates differential braking when brake lever (item 10) is half ON
14. COMPASS LAMP
15. CONTROLS SERVICING BOX
16. FRONT FUEL COCK CONTROL
Forward - ON FUEL
Back - FUEL OFF
17. RUDDER BAR INTERCONNECTING ROD
18. FUSELAGE-WING JOINT
19. ELEVATOR CONTROL INTERCONNECTING ROD
20. REAR RUDDER PEDALS
Refer to item 13
21. AILERON QUADRANT
22. REAR FUEL COCK CONTROL
Operates in the same sense as item 16
23. CONTROL COLUMN RELEASE PINS
24. FLAP OPERATING LEVER
Fully forward - UP
Mid-setting - 15 deg. flap
Fully back - DOWN, 30 deg. flap
Operating speeds marked in cockpit
25. REAR CONTROL COLUMN
26. CARBURETTOR AIR TEMPERATURE CONTROL
CARB-AIR
Forward - COLD
Back - HOT



- Note . . . (1) Where controls are duplicated, clear connections are shown and, in some cases, only one is annotated.
- (2) Certain components are shown and annotated in this drawing for reference to Servicing Sections in this publication.
- (3) Fig. 2 illustrates the instruments and the remainder of the controls.

Fig. 1. Pilots' controls and equipment (I)



- 1 VENTILATOR
AIR VENT—PUSH
- 2 CARTRIDGE STARTER
Attention is drawn to WARNING in Part 2,
Sect. 1, Chap. 3

STARTER. TO FIRE—HOLD DOWN FLAP
AND PULL RING. RELEASE RING GENTLY
BEFORE RELEASING FLAP

- 3 FRONT RADIO CONTROLLER
Type varies to suit radio installation

- 4 ARTIFICIAL HORIZON
- 5 RATE OF CLIMB INDICATOR

- 6 OIL THERMOMETER

- 7 TURN-AND-SLIP INDICATOR

- 8 OIL PRESSURE GAUGE

- 9 INSTRUMENT PANEL LIGHTING HOOD

- 10 DIRECTION INDICATOR

- 11 FRONT LIGHTING MASTER SWITCH

- 12 REAR COCKPIT LAMPS DIMMER SWITCH

- 13 REAR EMERGENCY LAMPS SWITCH

- 14 REAR IGNITION SWITCHES (2)

ON-OFF

Operates at OFF, independently of front cockpit

switches

- 15 ALTIMETER

- 16 WATCH HOLDER

- 17 TACHOMETER

- 18 AIR SPEED INDICATOR

- 19 PRESSURE HEAD HEATER SWITCH

- 20 GENERATOR TEST SWITCH

- 21 FRONT EMERGENCY LAMPS SWITCH

- 22 TAXIING LAMP SWITCH

- 23 NAVIGATION LAMP SWITCH

- 24 FRONT COCKPIT LAMPS DIMMER SWITCH

Turn to right—ON

- 25 DOWNWARD IDENTIFICATION LAMP SWITCH

- 26 DOWNWARD IDENTIFICATION LAMP

PUSH-SWITCH. To operate item 25 must be OFF

- 27 FUSE BOX

- 28 FRONT IGNITION SWITCHES (2)

ON-OFF

Operates at OFF, independently of rear cockpit

switches

- 29 GENERATOR WARNING LAMP

Fig. 2. Pilots' controls and equipment (2)

RESTRICTED

This file was downloaded
from the RTFM Library.

Link: www.scottbouch.com/rtfm

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

