

Chapter 3

EMERGENCY CONTROLS, EQUIPMENT AND EXIT

LIST OF CONTENTS

	<i>Para.</i>		<i>Para.</i>		<i>Para.</i>
<i>General</i>	1	<i>Hydraulic system</i>	5	<i>Emergency exit</i>	9
<i>Fuel system</i>	2	<i>Power-operated ailerons</i>	6	<i>Ejection seat</i>	10
<i>Relighting the engine in flight</i>	3	<i>Alighting gear</i>	7	<i>Access to cabin</i>	11
<i>Fire protection</i>	4	<i>Emergency crash equipment</i>	8		

ILLUSTRATION

	<i>Fig.</i>
<i>Emergency controls and equipment</i> ...	1

General

1. This chapter describes the emergency controls and equipment in the cabin and indicates the method of operation wherever this is not obvious. As indicated in the following paragraphs, the emergency controls associated with the main systems are fully covered in their appropriate Sections of this volume. The location of the controls and equipment is shown on fig. 1.

Fuel system (*Sect. 4, Chap. 2*)

2. The high-pressure fuel cock is used as an emergency fuel shut-off in the case of engine failure. In the event of fire, the low-pressure fuel cock should also be closed. Additional equipment relating to the fuel system are the pressure warning lamp, the drop tank jettison switches, the drop tank jettison levers, and the fuel pump emergency switch.

Relighting the engine in flight

3. A relight switch is incorporated in the handle of the high-pressure fuel cock lever. The procedure to be adopted is detailed in A.P.4320A, Vol. 1.

Fire protection (*Sect. 4, Chap. 5*)

4. The fire warning lamp indicates when the temperature in the vicinity of any of the flame switches rises above 300 deg. C. The fire extinguisher system does not operate automatically and the switch on the junction box on the starboard cabin wall must be depressed to discharge the contents of the bottles. A spring-loaded panel is fitted in the port front upper cowling panel, to give access to the engine bay for ground fire fighting. The flame switches are of the re-setting type and, should a fire be extinguished, the warning lamp will cease to indicate. When in flight, the possibility of the indicator lamp being extinguished through the fire warning circuit being rendered inoperative by fire must be borne in mind.

Hydraulic system (*Sect. 3, Chap. 6*)

5. In the event of failure of the engine or the engine-driven pump, there will be sufficient hydraulic power stored in No. 1 accumulator for the one-way operation of the alighting gear and flaps. In addition, the hand pump will operate the alighting gear and flaps at a reduced rate. The hand pump

will not charge the accumulators, nor operate the dive brakes or ailerons, except by the use of a by-pass valve for ground operation only.

Power-operated ailerons (*Sect. 3, Chap. 4*)

6. In the event of hydraulic failure, the ailerons can be operated manually. A hydraulic pressure switch operates a warning lamp on the port instrument panel, and a flow indicator sounds an audio warning note in the pilot's headphones if the pump fails. The warning note may be cut off by a switch on the junction box on the cabin starboard wall. The pressure switch also completes the electrical circuit to a trim tab actuator in the port main plane. The actuator is operated by a switch on the engine control box. A circuit breaker on the port cabin wall allows the electric trim circuit to be isolated if the actuator fails to function properly.

Alighting gear (*Sect. 3, Chap. 5*)

7. The procedure for operating the alighting gear in the event of failure of the engine-driven hydraulic pump is described in para. 5. In addition, an alighting gear warning lamp

and an emergency retraction switch are fitted. The warning lamp is provided as a reminder should the alighting gear be in the retracted position when the throttle is less than a quarter open. The emergency retraction switch should be used for such emergencies as over-shooting when the pilot wishes to select alighting gear UP whilst the main wheels are still on the ground.

Emergency crash equipment

8. A crowbar is stowed on spring clips on the front face of bulkhead No. 2 on the left hand side of the seat. The crowbar must be wire-locked in position.

Emergency exit

9. The canopy can be jettisoned from inside the cabin by pulling inwards the jettison lever on the cabin starboard wall. The canopy must be jettisoned before the ejection seat is used.

Ejection seat

10. The seat is ejected from the aircraft by the firing of a cartridge-operated gun mounted in the seat guide rail. The gun is fired by pulling a horizontal handle, coloured red, positioned immediately above the head rest. The aircraft radio, oxygen and anti-'G' services disengage at the quick-release

points automatically on ejection. A safety pin, with warning disc attached, safeguards the firing handle against accidental withdrawal when the aircraft is on the ground, and when not fitted is placed in the stowage located on the port side of the seat.

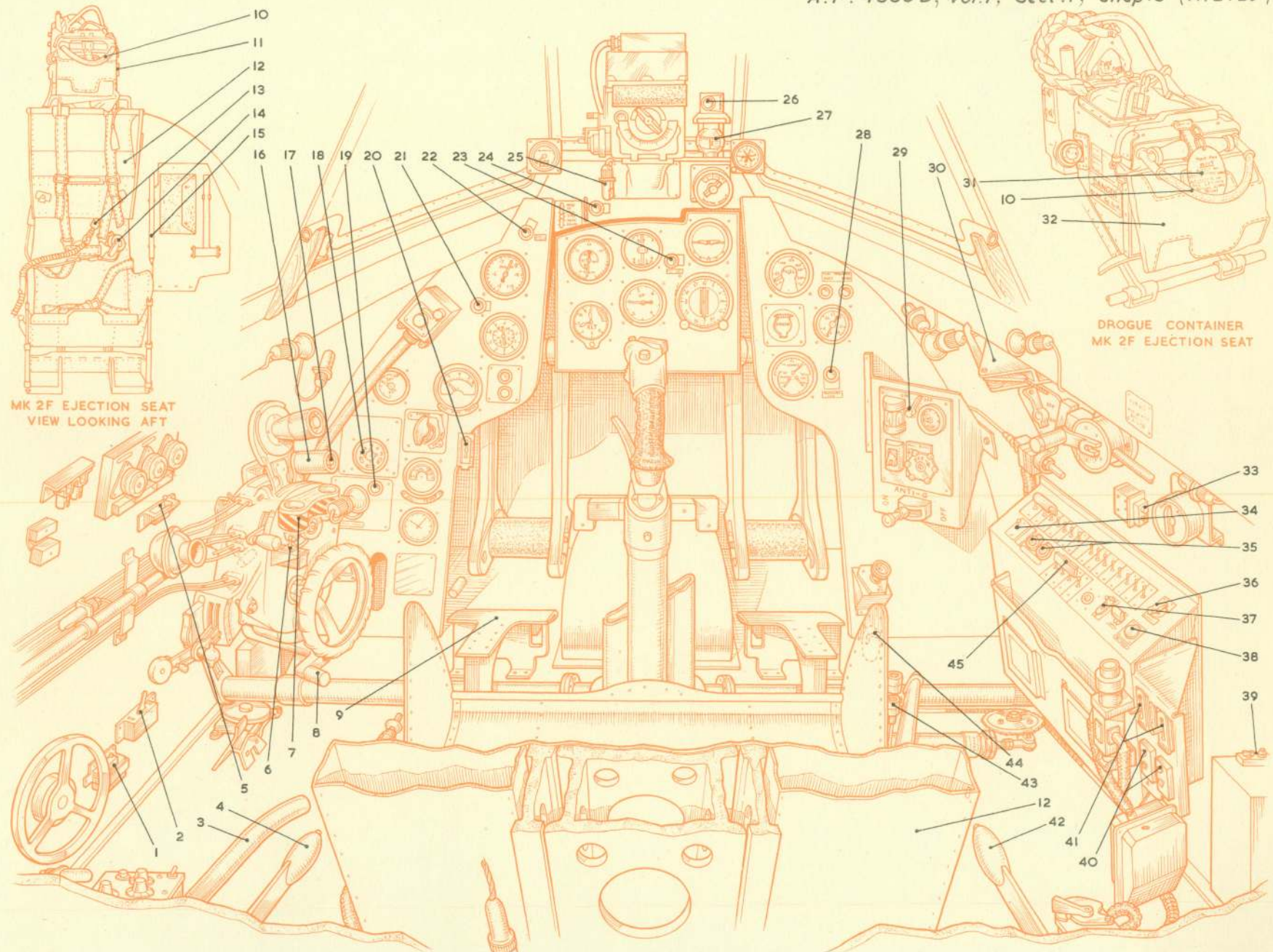
Access to the cabin

11. Normal access to the cabin is by depressing the button on the starboard fuselage wall below the canopy and sliding the canopy back. The canopy may also be jettisoned in an emergency by opening the starboard ammunition bay door and pulling the red painted jettison cable.

Key to Fig. 1 (Emergency controls and equipment)

- | | | |
|--|---|---|
| 1 PORT AILERON TRIM CIRCUIT BREAKER | 16 HIGH-PRESSURE FUEL COCK
Set to SHUT in event of engine fire | 30 CANOPY JETTISON LEVER
Pull inwards to operate
For external jettison, pull jettison cable in starboard ammunition bay |
| 2 ALIGHTING GEAR EMERGENCY RETRACTION SWITCH
Overrides solenoid lock plunger in the alighting gear selector lever | 17 RELIGHT IN FLIGHT PRESS SWITCH | 31 EJECTION SEAT SAFETY PIN AND DISC |
| 3 HYDRAULIC HAND PUMP | 18 ALIGHTING GEAR POSITION INDICATOR | 32 EJECTION SEAT HEADREST |
| 4 BOMB AND PYLON TANK MECHANICAL JETTISON HANDLE | 19 POWERED AILERONS HYDRAULIC FAILURE WARNING LAMP
Also indicates when ailerons selected to MANUAL | 33 REBECCA MK. 7 CIRCUIT BREAKER |
| 5 EMERGENCY FLOODLAMP SWITCH | 20 FUEL PUMP ISOLATING SWITCH
Isolates one fuel pump from servo-mechanism.
Switch ON for take-off only
For details of operation see
◀A.P.4320A & C, Vol. 1▶ | 34 ◀BATTERY▶ ISOLATING SWITCH |
| 6 AILERON ELECTRICAL TRIM SWITCH | 21 FUEL PRESSURE WARNING LAMP | 35 GENERATOR FAILURE WARNING LAMPS |
| 7 DROP TANK JETTISON SWITCHES | 22 PORT AILERON TRIM INDICATOR LAMP | 36 LANDING LAMP SWITCH |
| 8 LOW-PRESSURE FUEL COCK LEVER
Set to OFF in event of engine fire | 23 INVERTER FAILURE WARNING LAMP
G.4F compass and artificial horizon | 37 AUDIO WARNING CUT-OUT SWITCH
Powered ailerons |
| 9 FOOTREST
Slide feet back before ejection | 24 ALIGHTING GEAR WARNING LAMP | 38 ENGINE FIRE EXTINGUISHER PRESS SWITCH |
| 10 EJECTION SEAT HANDLE
Pull forward to operate | 25 EMERGENCY FLOODLAMP
Operated by 2v. alkaline battery | 39 G.4F COMPASS AND ARTIFICIAL HORIZON CIRCUIT BREAKER |
| 11 STOWAGE FOR EJECTION SEAT SAFETY PIN | 26 FIRE WARNING LAMP | 40 GENERATOR FIELD CIRCUIT BREAKERS |
| 12 EJECTION SEAT | 27 STANDBY COMPASS TYPE E.2A | 41 GENERATOR CUT-OUT SWITCHES |
| 13 MAIN OXYGEN SUPPLY DISCONNECTION SOCKET | 28 CABIN PRESSURE WARNING LAMP | 42 WING-TIP TANK MECHANICAL JETTISON HANDLE |
| 14 HARNESS RELEASE | 29 EMERGENCY OXYGEN VALVE LEVER | 43 EMERGENCY OXYGEN SUPPLY
Static cable connection |
| 15 CROWBAR | | 44 PARACHUTE CONTAINER RELEASE |
| | | 45 V.H.F. SWITCH—NORMAL AND STANDBY, AND V.H.F. TEST SWITCH |

RESTRICTED



MK 2F EJECTION SEAT
VIEW LOOKING AFT

DROGUE CONTAINER
MK 2F EJECTION SEAT

Fig. 1 Emergency controls and equipment

RESTRICTED

(A.L. 29, Nov. 56)



This file was downloaded from the RTFM Library.

Link: www.scottbouch.com/rtfm

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

