

Chapter 5

CANBERRA P.R. Mk. 9

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Introduction

1. The Canberra P.R.9 aircraft carries a crew consisting of pilot and navigator. Both occupy ejection seats and, although these seats differ in certain constructional details, they operate fundamentally on the same principle. The aircrew equipment assemblies used by the two members of the crew are almost identical; therefore the instructions in this chapter can be regarded as applying to both and any differences will be noted as appropriate.

2. The pilot's cockpit canopy is jettisoned automatically on pulling either of the firing handles on the pilot's ejection seat; alternatively the canopy can be jettisoned independently by means of the snatch handle on the port coaming. The navigator ejects through the frangible hatch fitted in the roof of the compartment.

3. The principal item of the A.E.A. is the ejection seat, to which the other equipment may be regarded as ancillary. This chapter gives a

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general description of the complete assembly in relation to the seat, the method of equipping the seat before use, the strapping-in procedure and how to leave the seat after landing.

DESCRIPTION

Composition of the assembly

4. The aircrew equipment assembly consists of the following items :-

Ejection seat (Pilot)	Mk. 3CS
Ejection seat (Navigator)	Mk. 4QS
Parachute assembly (incorporating combined harness) Pilot	Back Type Mk. 33 (Early aircraft may be equipped with Mk. 23 assemblies)
Parachute assembly (incorporating combined harness) Navigator	Back Type Mk. 28
Personal survival pack	Type R (Mod.SR332 to be embodied) c/w cushion, Ref. 27C/2428
Emergency oxygen set	Mk. 8 (mounted on ejection seat)
Flying clothing	Refer to Appendix 1

The Mk. 3CS and Mk. 4QS ejection seats

5. The Mk. 3CS and Mk. 4QS ejection seats are both ejected from the aircraft by a cartridge-operated gun at a speed of 80 ft./sec. During ejection the seat slides on a guide rail attached to the airframe structure.

Firing handles

6. Two firing handles are fitted to each seat. The main handle, which has an integral face screen, projects from the front of the drogue container; the alternative firing handle is located at the front of the seat pan and is for use when the occupant is unable to reach the main handle - e.g. when subjected to high G forces. On the Mk. 4QS seat the alternative firing handle is not set back into the seat pan as it is on the Mk. 3CS seat.

7. Both firing handles of the Mk. 3CS (pilot's) ejection seat are connected to the canopy jettison mechanism, to the control column snatch unit and to the elevator break strut so that, when either of

the handles is pulled, the cockpit canopy is jettisoned and the control column snatched forward; an independent canopy jettison handle is provided. There is a delay of one second after pulling either of the handles before the seat is ejected. THE PILOT CANNOT EJECT THROUGH THE COCKPIT CANOPY.

8. There is no connection to a canopy jettison mechanism on the Mk. 4QS (navigator's) ejection seat and the use of either of the firing handles operates the ejection seat immediately without any delay. Ejection is through a frangible hatch in the roof of the nose compartment. The frangible hatch is attached at the rear by reaction hinges which come apart when the hatch has been opened to a predetermined angle. It is held closed by shoot bolts at the sides, operated by a lever close to the forward starboard corner of the hatch. The front edge of the hatch is fitted with slotted links (through which retaining pins pass) so that when the side bolts are freed, the hatch may open slightly to an angle at which the hinges remain secure. The retaining pins may be withdrawn by a second handle, to jettison or free the hatch entirely. The opening features of the hatch are useful for servicing purposes and may sometimes be found helpful in assisting the navigator to strap in; but owing to uncertainties about the hatch behaviour in the air or in a crash landing, it is not recommended that the hatch be jettisoned in flight. Emergency escape must be by ejecting through the hatch IN THE FULLY CLOSED POSITION ONLY.

Personal equipment connector

9. The personal equipment connector (referred to as the P.E.C.) is fitted to the right-hand side panel of the seat pan. It enables the main oxygen, emergency oxygen, air-ventilated suit and Mic/tel leads to be connected or disconnected in one action. It is also linked to the leg restraint cords (para. 12) so that the legs are released when the P.E.C. is disconnected. The connector comprises three components :-

- (1) *Aircraft component.* Connected to the cockpit structure by a telescopic static rod, and to the personal supply systems in the aircraft.
- (2) *Seat component.* Bolted to the seat pan, and connected to the emergency oxygen (para. 21). This component has an

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operating linkage from the main barostatic time-release unit and another linkage to the leg restraint cords.

- (3) *Personal component.* Attached to the flying clothing.

10. As the seat ascends the guide rail during ejection, the aircraft component of the P.E.C. is detached from the seat component when the static rod becomes fully extended, thus severing and sealing off the connections between the seat and the aircraft. At the same time, the emergency oxygen supply is turned on automatically. Later, when the harness is released from the seat, the personal component is also automatically detached from the seat component.

11. A full description of the P.E.C. will be found in Sect. 1, Chap. 5. The type of P.E.C. fitted is the 'full pressure-suit' variant. This has three gas passages vertically through the three components, as in the 'Fighter' type. The foremost passage is not used at present; the central passage is for the air ventilated suit supply and the rear passage for oxygen (the anti-g suit is connected into the oxygen line between the P.E.C. and the jerkin.)

Leg restraint system

12. Leg restraint cords are provided to ensure that the legs are drawn back and held close to the seat pan during and after ejection. The cords pass through snubbing units below the front of the seat pan and are then attached to the aircraft floor with shear rivets. The snubbing units allow the cords to pass freely downwards through the unit, but prevent the cords passing upwards except when released by the spring-loaded toggle at the front of each unit. An interconnection between the taper plug assemblies on the front of the seat pan and the P.E.C. releases the leg restraint cords as the personal component of the P.E.C. is disconnected.

Armrests and seat raising gear

13. The Mk. 3CS (pilot's) seat has adjustable armrests controlled by a lever on each armrest. The seat pan is adjustable for height by means of the handle on the right-hand side of the seat. The plunger on the end of the handle must be

depressed before the height can be adjusted.

14. The seat raising gear on the Mk. 4QS seat is operated by an electric actuator controlled from a switch on the right-hand side of the seat pan. Instructions limiting the number of actuations which may be performed within a specified time (owing to the danger of overheating) are stated on a warning plate on the seat. This should not restrict normal use but should be kept in mind if repeated seat movement is involved during testing.

Combined harness

15. Provision is made on the seats for attachment of the combined harness of the parachute assembly. The harness is attached at three points, one on each side, at the back of the seat pan, and one centrally just below shoulder level (the side attachments on the Mk. 4QS seat differ slightly in position from those on the Mk. 3CS seat to accommodate the straps on the Mk. 28 parachute assembly harness used by the navigator). These three anchorages are released automatically, in the normal ejection sequence, by the operation of a barostatic time-release unit. To permit the occupant to release himself from the seat should the automatic devices fail to operate, a manual separation lever is provided at the rear left hand side of the seat pan. This lever disconnects the personal component of the P.E.C., the leg restraint cords and the parachute restraining straps simultaneously. The manual separation lever is held in a gate to reduce the risk of accidental operation and requires pressing inwards (on the Mk. 3CS seat) or outwards (on the Mk. 4QS seat) against a spring, before it can be released.

16. The upper anchorage of the harness embodies the 'go-forward' spring roller mechanism which permits the occupant to lean forward when required. This is controlled by a spring-loaded lever situated at the forward end of the left-hand side of the seat pan. If the lever is pushed towards the front and is held in that position, the spring roller mechanism is unlocked permitting the occupant to lean forward. Release of the lever re-locks the mechanism and prevents any further forward movement of the body. On leaning back the slack is taken up automatically by the spring roller mechanism.

Automatic equipment

17. Fully automatic facilities are provided to withdraw the parachute canopy and separate the occupant from the seat after ejection. The automatic equipment includes a drogue gun and drogues and a barostatic time-release unit. The drogue gun is operated by a static rod which initiates a time delay of $\frac{1}{2}$ sec. and then fires out a heavy bullet to open the drogue container and extract the drogues, which develop and stabilize the seat. The barostatic time-release unit is also initiated by another static rod. If the altitude is lower than 10,000 ft. or the deceleration of the seat is below a value corresponding to a safe parachute opening speed, the time-delay mechanism operates for $1\frac{1}{4}$ sec. After this delay the barostat plunger is pressed down by a strong spring and (a) releases the drogues from the container so that they transfer the pull to the apex of the parachute (to which they are attached), (b) releases the rear anchorage of the face screen and the parachute pack restraining straps, (c) releases the harness from the seat, (d) operates the P.E.C. and (e) releases the leg restraint cords.

18. In the event of malfunctioning of these automatic arrangements, the parachute harness waist belt is provided with two D-handles and the seat has a manual separation lever to release the harness. The first D-handle (nearer the quick-release fitting) disconnects the apex of the personal parachute from the automatic devices. When pulled, it exposes the second D-handle which may then be used to deploy the parachute. In the event of failure to eject, the same procedure inside the cockpit may enable a manual bale-out to be made in favourable circumstances.

Personal survival pack, Type R

19. The personal survival pack is housed in the seat pan and serves as a cushion. It is attached to the lower harness straps by two quick-release couplings at the sides, and to the life jacket or jerkin by the lowering line, stowed in the left-hand side flap on the pack. The harness attachments are connected when the safety equipment is installed in the seat, and the lowering line by the occupant when strapping in. The lowering line, being attached to the clothing, enables the pack side attachments to be released from the harness during a parachute descent so that the pack falls and hangs 15 ft. below the body. On alighting this enables the harness to be dis-

carded immediately without loss of the pack and, during the descent, damps out oscillation.

20. A thin cushion is provided with the Type R pack to cover the underleg straps of the harness both in normal use and during parachute development; it is attached to the harness by press studs.

Emergency oxygen

21. The emergency oxygen cylinder is mounted on the starboard beam of each seat. The supply is turned on automatically, during ejection, by a static line. This static line is led into a conduit attached to the aircraft structure and emerges at the other end as a yellow/black striped knob on a lever at the right-hand side of the seat. Manual operation of this lever turns on the emergency oxygen supply. The emergency oxygen is fed to the rear end of the seat component of the P.E.C. (para. 9) through the inward relief and excess pressure valve (RV/51). This valve allows excess of oxygen, during the early stages of discharge from the cylinder, to spill out to atmosphere and also permits inward inhalation of supplementary air when the supply of oxygen has dropped below demand. To prevent dilution of oxygen under normal conditions, however, and to ensure recognition if a 'no-flow' failure of the main oxygen regulator should occur, the inward relief element is fairly heavily spring-loaded so that breathing through it demands a noticeable effort. The excess pressure relief element is barometrically controlled to give pressure breathing above 40,000 ft., but is only very lightly spring-loaded below this altitude. A full description of the valve will be found in Sect. 1, Chap. 6.

22. When the emergency oxygen is turned on automatically during ejection, it feeds oxygen through the seat component of the P.E.C. until automatic separation from the seat occurs at a height (approx. 10,000 ft.) where an oxygen supply is no longer needed. The emergency oxygen set provides a steady flow of oxygen, but the rate of flow diminishes gradually as the pressure in the cylinder falls. The initial flow is more than is needed for breathing, but the surplus is not sufficient to inflate the high altitude pressurized garments with the rapidity necessary in an emergency. The emergency oxygen set can maintain the garments at the correct pressure for inflation but cannot supply

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the initial flow required to inflate them. Garment inflation (on loss of cabin pressure) is provided from the aircraft main oxygen system which has the necessary flow characteristics. This is an important factor in high altitude escape drills (see Pilot's Notes); without it ejection may take place with an inadequate oxygen supply.

23. Information concerning the Mk. 3CS and Mk. 4QS ejection seats will be found in A.P.4288 Series, the parachute assemblies are dealt with in A.P.1182A, Vol. 1 and the personal survival pack in A.P.1182C, Vol. 1; information concerning flying clothing will be found in App. 1 of this chapter, together with information on dressing and testing.

Sequence of events during ejection

24. The following is the normal sequence of events after the firing handle has been pulled. The pilot's cockpit canopy is jettisoned and the control column snatched forward immediately the firing handle is pulled. One second later the seat is ejected. The navigator's seat ejects through the frangible hatch without any delay. As either seat ascends the guide rail, the following sequence then occurs:—

- (1) The leg restraint cords tighten until the rivets shear in the dead-eyes securing the cords to the floor.
- (2) The time-delay mechanism for the drogue gun is actuated, the gun being fired after ½ second.
- (3) The time-delay mechanism for the barostatic time-release unit is tripped. The delay is variable, depending upon aircraft height and speed at the time of ejection.
- (4) The aircraft component of the personal equipment connector is separated from the seat component, disconnecting the oxygen and A.V.S. hoses and the Mic/Tel lead between the aircraft and the seat.
- (5) The emergency oxygen supply is turned on.

- (6) After ½ second the drogue gun fires and the two drogues stabilize the seat. If the ejection occurs at high altitude the seat will eventually fall nearly vertical with the occupant restrained by his combined harness from falling forwards. At low altitudes there may not be time for the seat to attain the near vertical position. During this phase the occupant will be breathing emergency oxygen from the cylinder carried on the seat.
- (7) After an appropriate delay the occupant is released from the seat and his parachute canopy opens automatically. At the same time the personal component of the P.E.C. is released from the seat component, detaching the personal services from the seat and enabling ambient air to be inhaled. At moderate aircraft speeds and heights, the delay is 1¼ seconds after ejection. At high altitude the 1¼ second delay does not start until the seat has descended below 10,000 ft. At high speeds, at 10,000 ft. or below, delay does not start until the seat has decelerated to a safe speed for the parachute canopy to deploy.

EQUIPPING THE SEATS

Connections to the aircraft

25. When the seat is installed in the aircraft and is properly equipped, the following items are connected to the aircraft:—

- (1) *Port side of seat:—*
 - (a) Static rod to drogue gun.
- (2) *Starboard side of seat:—*
 - (a) Static rod to barostatic time-release unit.
 - (b) Static line from emergency oxygen cylinder operating head.
 - (c) The aircraft component of the P.E.C. is locked to the underside of the seat component. (The aircraft component has a static rod to the aircraft

structure and an oxygen supply hose, an A.V.S. supply hose and a Mic/Tel lead from the appropriate systems; normally, these will already be connected).

(3) *Underneath the seat*:-

(a) Leg restraint cords (Mk. 4QS seat).

(4) *Front of seat*:-

(a) Leg restraint cords (Mk. 3CS seat).

Equipping the seats

26. The following procedure is to be used when installing the equipment in the seats; refer to fig. 1 to 8 for detail as necessary:-

- (1) Ensure that the seat has been made safe for servicing in accordance with current instructions.
- (2) Fit the emergency oxygen cylinder into its clamping brackets on the seat beam, ensuring that the loop of the supply tube at the top of the cylinder faces forward (pilot's seat) or outboard (navigator's seat) respectively.
- (3) Pass the emergency oxygen supply tube downwards between the inward relief and excess pressure valve and the seat pan, and connect it to the underside of the valve. Arrange the tube to form an easy sweep and then insert it into the clips on the side of the seat pan. Wire-lock the tube connector to the valve mounting bracket utilising the holes provided.
- (4) Connect the emergency oxygen cylinder operating cable nipple to the anchor section of the static line and engage the end fitting of the cable housing in the anchor socket (fig. 2).

Note . . .

Operations (2), (3) and (4) are more conveniently done before the Mk. 3CS ejection seat is installed in the aircraft (the emergency oxygen set on the Mk. 4QS seat may, however, be installed with the seat in situ).

- (5) Connect the anchor hook to the static line-cum-manual operating cable.
- (6) Ensure that the manual override lever is in the locked position.
- (7) Place the parachute assembly in the seat pan with the horseshoe pack uppermost, and its top end to the front of the seat.
- (8) Take up the outer shoulder straps of the main harness, ensuring they are not twisted. These are attached at the top to a metal D-shackle. Pass through the arch of the parachute pack, from front to rear.
- (9) Remove the two parachute restraining straps. These are stowed in the buckles on each side of the drogue container together with the headrest pad.
- (10) Operate the 'go-forward' lever and pull out the webbing strap from under the parachute support bracket. This strap must be held or it will spring back.
- (11) Pass the strap up through the D-shackle from inside to outside, with Mk. 23 and Mk. 33 back type parachute assemblies (pilot). With the Mk. 28 assembly (navigator), pass it down from outside to inside (reverse direction).
- (12) Each parachute restraining strap has a metal D-ring at one end. Hook these over the lug on the end of the webbing strap (fig. 3).
- (13) Still holding the webbing strap (threaded through the harness D-shackle) and the two restraining straps (hooked over lug), press down the operating lever on the starboard side of the seat. This lever is immediately below the harness release plunger on the barostatic time-release unit and withdraws the harness locking plunger. (The services of an assistant will be required here).
- (14) Insert the end lug of the webbing strap in the hole under the parachute support bracket, release the lever and the plunger will lock in the eye of the lug.

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Check for security by pulling on the webbing strap, then allow it to wind back.

- (15) Lift the horseshoe pack into position on the support bracket and hold it there. Place the headrest cushion centrally on top of the pack.
- (16) Draw the unattached ends of the parachute restraining straps forwards through the arch and then upwards in front of the pack, towards the buckles on each side of the drogue container. Ensure the straps are not twisted.
- (17) Pass the port strap through the loop in the parachute withdrawal line.
- (18) Pass the end of the strap through the drogue container buckle from the outside inwards.
- (19) Take the starboard parachute retaining strap and assemble to the starboard buckle similarly. (There is no parachute withdrawal line to pass the strap through on this side).
- (20) Pass the ends of the parachute retaining straps through the buckles on each side of the headrest cushion so that the strap ends emerge on the outside of the buckle (fig. 3).
- (21) Work the straps back and forth in the self-locking buckles on the headrest cushion until the parachute pack and cushion are strapped tightly to the seat structure.
- (22) Connect the parachute withdrawal line to the link line by the screw coupling, ensuring:—
 - (a) That the link line (to the securing pin) passes between the port headrest retaining strap and the side of the drogue container.
 - (b) That the port lifting line (between the securing pin and the drogue shackle)

has been passed UNDER the drogue extraction line (between the drogue gun and the drogue flap securing pin).

- (23) Insert the main attachment lugs on the harness lap straps into the lower locks at the back of the seat pan (fig. 5); they will clip into place. Check, by pulling in several directions, that they are secure.
- (24) Insert the sticker strap lugs into the clips on the inside face of the seat pan (applicable only if a Mk. 23 parachute assembly is installed; for Mk. 33 parachute assembly, defer until operation 28).
- (25) Lift the combined harness and hold in the stowed position by pushing the lugs on the harness shoulder straps between the headrest restraining straps and the side of the drogue box.

Note . . .

This operation is for stowage purposes only, to keep the harness straps suspended out of the way until the seat is ready for occupation.

- (26) Clear the seat pan. Place the survival pack in position, lowering line to port (for pilot's seat, Mk. 3CS, it is essential that a pack with Mod. SR/332 is used). Ensure that the transverse seat strap of the harness crosses OVER THE TOP of the pack, at the back.
- (27) Connect the side quick-release couplings of the survival pack to the combined harness.
- (28) Insert the sticker strap lugs into the clips on the inside face at each side of the seat pan (Mk. 33 assembly), bringing the straps up on the inboard side of the survival pack couplings and then over the couplings and down into the clips. Check that the personal survival pack couplings are still connected.
- (29) Place the cushion on top of the survival

pack, and use the press studs to fasten it to the harness seat strap. Tuck the rear corners well into the back of the seat. Arrange the harness leg loops and lap straps ready for occupation; pass the leg loops through the slot near the centre of the cushion (fig. 7).

- (30) Carefully examine the two D-handles on the left waistbelt of the parachute harness. The second handle (furthest from the quick-release fitting) has a cover flap which will be released by operation of the first handle. With earlier type harnesses there may be a similar cover flap over the first D-handle; this is provided solely to avoid accidental operation during transit and installation and must be removed to leave the handle unobstructed.
- (31) EXTEND THE LAP AND SHOULDER STRAPS fully (to be repeated before EVERY subsequent flight).
- (32) Remove and retain the safety pin from the emergency oxygen cylinder operating head.
- (33) Return the seat to the safe for parking condition in accordance with current instructions.

STRAPPING-IN PROCEDURE

27. The strapping-in procedure is as follows; refer to figs. 8, 9 and 10 for detail, as necessary:-

- (1) Ensure that the seat has been made safe for parking in accordance with current instructions.
- (2) Remove the dust cover from the seat component of the personal equipment connector and fit it into the stowage on the right-hand side of the seat (if this has not already been done).
- (3) Sit in the seat.
- (4) Press the front end of the personal component (attached to clothing) of the P.E.C. into the front end of the seat component in an inclined attitude.

Press down with a hinging motion until it clips into place. Test by inserting one or two fingers under the handle and attempting to lift it.

- (5) Thread the leg restraint cords through the quick-release couplings on the garters as follows. The cord from the starboard snubbing unit (under the seat pan) is threaded through the garter coupling of the left leg and the end-fitting of the cord is then plugged into the starboard taper socket (on the front of the seat pan).

Note . . .

- (1) *If there is insufficient length of cord, pull forward on the ring in the front of the snubbing unit to release more cord.*
- (2) *Unless the personal component of the P.E.C. is mating correctly with the seat component, the plug will not lock in its socket.*
- (6) Similarly thread the port cord through the right garter and back to the port taper socket, thus crossing the cords. It does not matter which loop is in front, but do not interlace them (fig. 9).
- (7) Pull back any excess of restraint cord through the snubbing units, leaving enough slack for full rudder operation.
- (8) Adjust the height of the seat until a satisfactory position for flying is obtained, ideally with the head positioned centrally against the head-rest cushion. Stretch the arms upwards towards the firing handle to ensure there is no restriction to firing handle access by the flying clothing.
- (9) Connect the survival pack lowering line on the left side to the quick-release coupling on the life jacket or pressure jerkin. The line should lie across the left thigh (fig. 11).
- (10) Bring the harness waistbelt across the body. Adjust the quick-release fitting so that it lies centrally with the waistbelt close to the body (draw up

the leg loops of the Mk. 23 harness between the legs and pass the lap straps through the loops).

- (11) Connect the lugs on the lap straps to the quick-release fitting (the hoses to the P.E.C. pass under the right lap strap). The back pad should be drawn up by a ground crew member and the lumbar cushion adjusted to suit. Sit well back in the seat. Any slack in the hoses to the P.E.C. should lie below the right lap strap to allow adequate body movement without straining the hoses.
- (12) Tighten the lap straps. When tightening harness straps in general, pull on the running end with one hand, and push the standing end towards the buckle with the other hand, to relieve the tension on the buckle. After the first tightening, move the body about inside the harness and then re-tighten, repeating this process until the harness is really tight. It is most important that the lap straps are tight since they provide the principal restraint under all stress conditions.
- (13) For the Mks. 28 and 33 harnesses, bring the leg loops up between the legs and thread the left one through the metal eye on the left lap strap. Repeat on the right side. If twisted correctly the crutch loops will lie flat on the inside of the thighs.
- (14) Remove the ends of the shoulder straps from the stowed position. Arrange them under the life jacket or jerkin stole. For the Mks. 28 and 33 harnesses, thread the end fittings through the leg loops. Then connect them to the quick-release fitting.

Note . . .

- (1) *The Mks. 28 and 33 harness leg loops are to engage on the metal end fittings, not on the webbing above them, so that they will*

disengage freely on operating the quick-release fitting.

- (2) *To facilitate this engagement it is normally essential that the shoulder straps are fully extended.*
 - (15) Fit the safety clip between the disc knob and body of the quick-release fitting.
 - (16) Thin subjects will need to tuck the left crutch loop carefully behind the first D-handle on the waistbelt (Mks. 28 and 33 harnesses only).
 - (17) Take up the slack in the blue inner (underneath) shoulder straps of the harness, and then take up the slack in the brown outer (top) shoulder straps. Move the body into the harness as described in operation (12), but do not overtighten the shoulder straps to cause the back to arch, as this is a bad attitude for ejection.
 - (18) Tightening of the shoulder straps will ruck the portion of the lift-webs lying between the inner and outer straps. The assistance of a member of the ground crew should be obtained to pull back the lift webs through the metal runners at the shoulders and then stow the excess length neatly (by lengthening the loops in the lift webs) behind the back.
 - (19) Put on the flying and protective helmets (if this has not already been done) and fasten the chin straps. Fit the oxygen mask.
- Note . . .
- If the chin straps are not fastened, the helmet may be wrenched off during ejection. At high altitudes, this would mean the loss of vital oxygen supply.*
- (20) Connect the Mic/Tel lead and oxygen mask tube. In the low altitude role (pressure jerkin not being worn) connect the mask tube spring clip to

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the D-ring on the life jacket stole cover.

- (21) Reach upwards and check that the main firing handle is within reach; DO NOT PULL.
- (22) Conduct pre-flight oxygen checks (see Pilot's Notes).
- (23) Ensure that a ground crew assistant removes the safety pins from the main and alternative firing handles and places them in their stowage.

EMERGENCIES

28. For drills and procedures to be taken in emergencies refer to Pilot's Notes, A.P.4326J-P.N.

LEAVING THE AIRCRAFT AFTER LANDING

29. (1) Remove the firing handle safety pins from their stowage and fit them to the

main and alternative firing handles (assistance should be obtained, whenever possible, from a member of the ground crew when fitting the pin of the main firing handle).

- (2) Disconnect the personal component of the P.E.C. by pulling upwards on the handle (this will also free the leg restraint cords).
- (3) Remove the spring clip from the combined harness quick-release fitting and undo the harness. Return the quick-release fitting to the locked position.
- (4) Disconnect the survival pack lowering line from the life jacket or jerkin.
- (5) Vacate the seat.
- (6) Fit the dust cover to the P.E.C.

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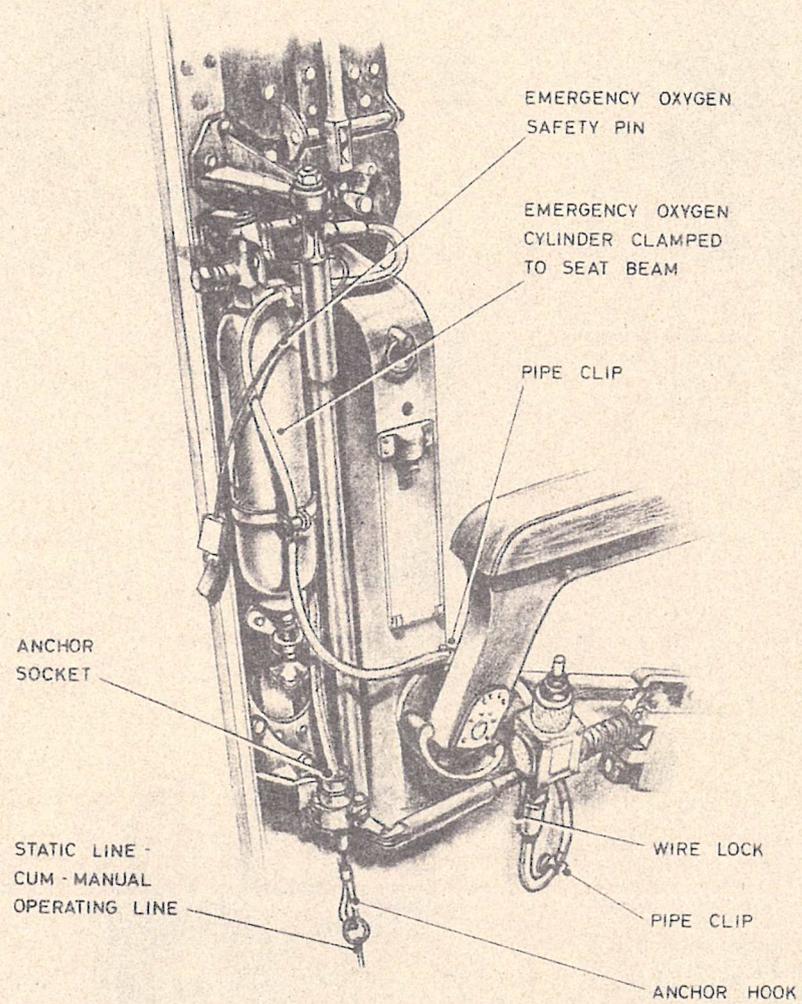


Fig. 1. Arrangement of emergency oxygen supply

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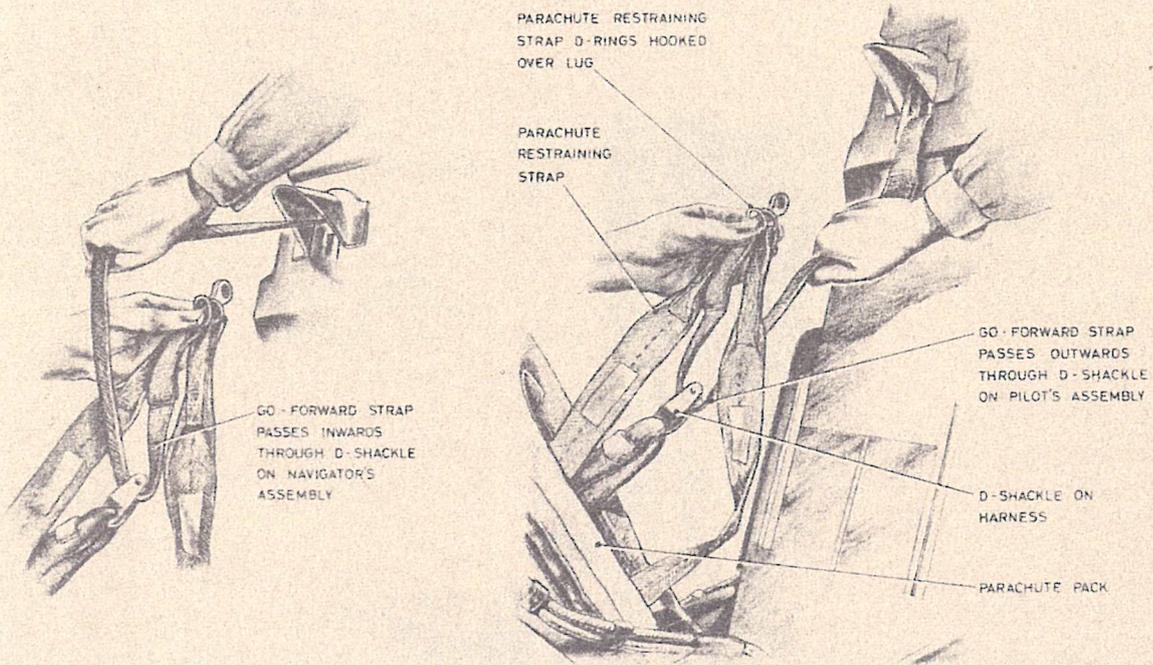


Fig. 2. Installing the parachute assembly: stage 1

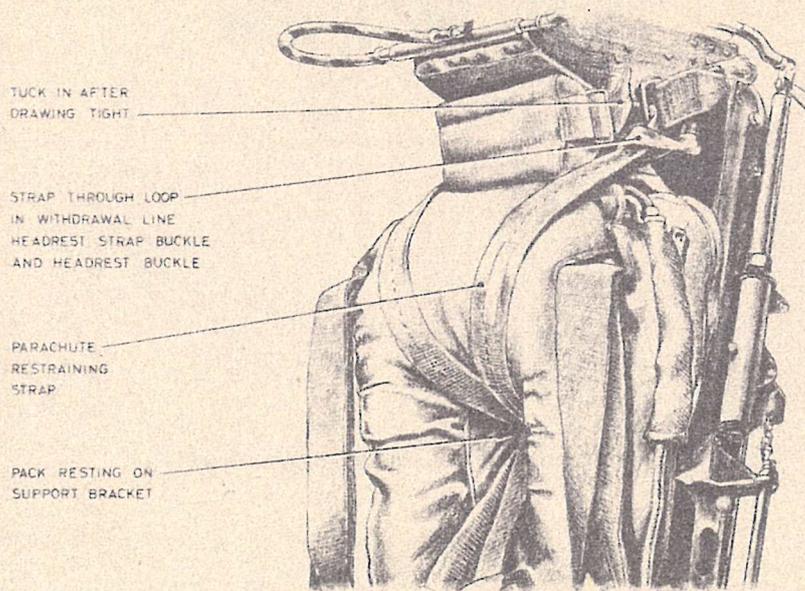


Fig. 3. Installing the parachute assembly: stage 2

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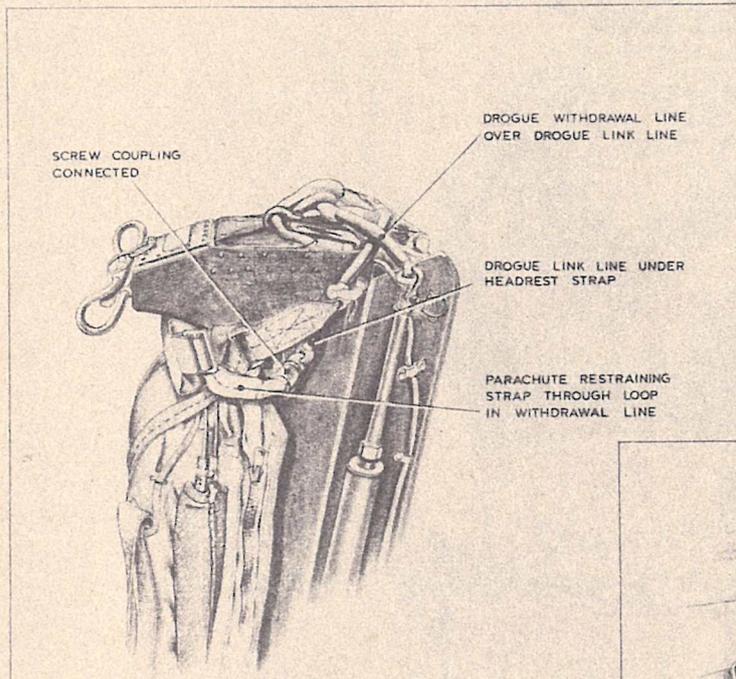


Fig. 4. Installing the parachute assembly: stage 3

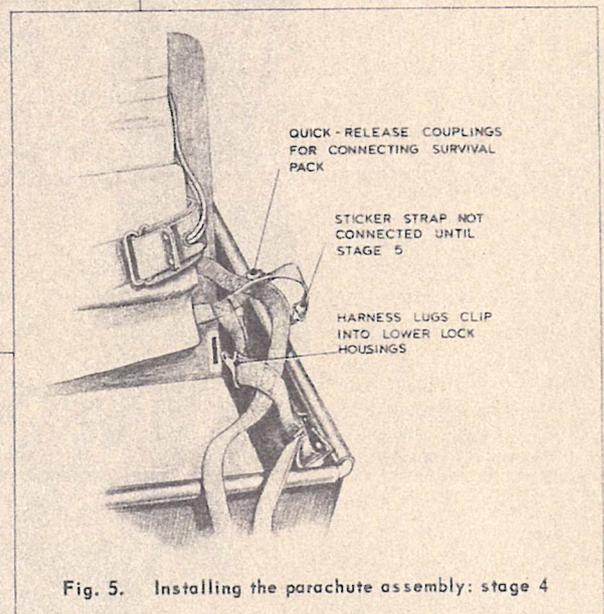


Fig. 5. Installing the parachute assembly: stage 4

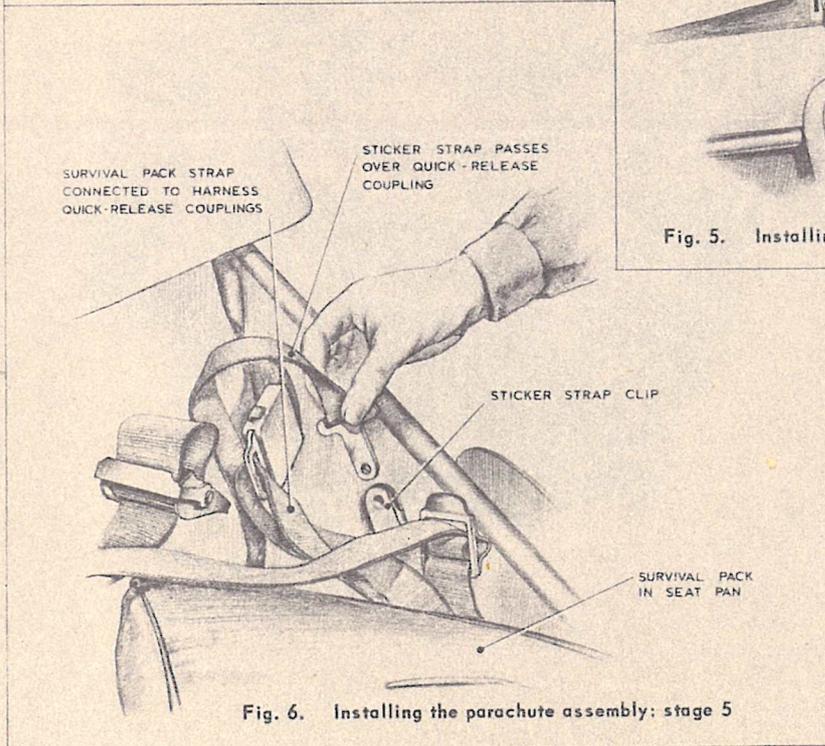


Fig. 6. Installing the parachute assembly: stage 5

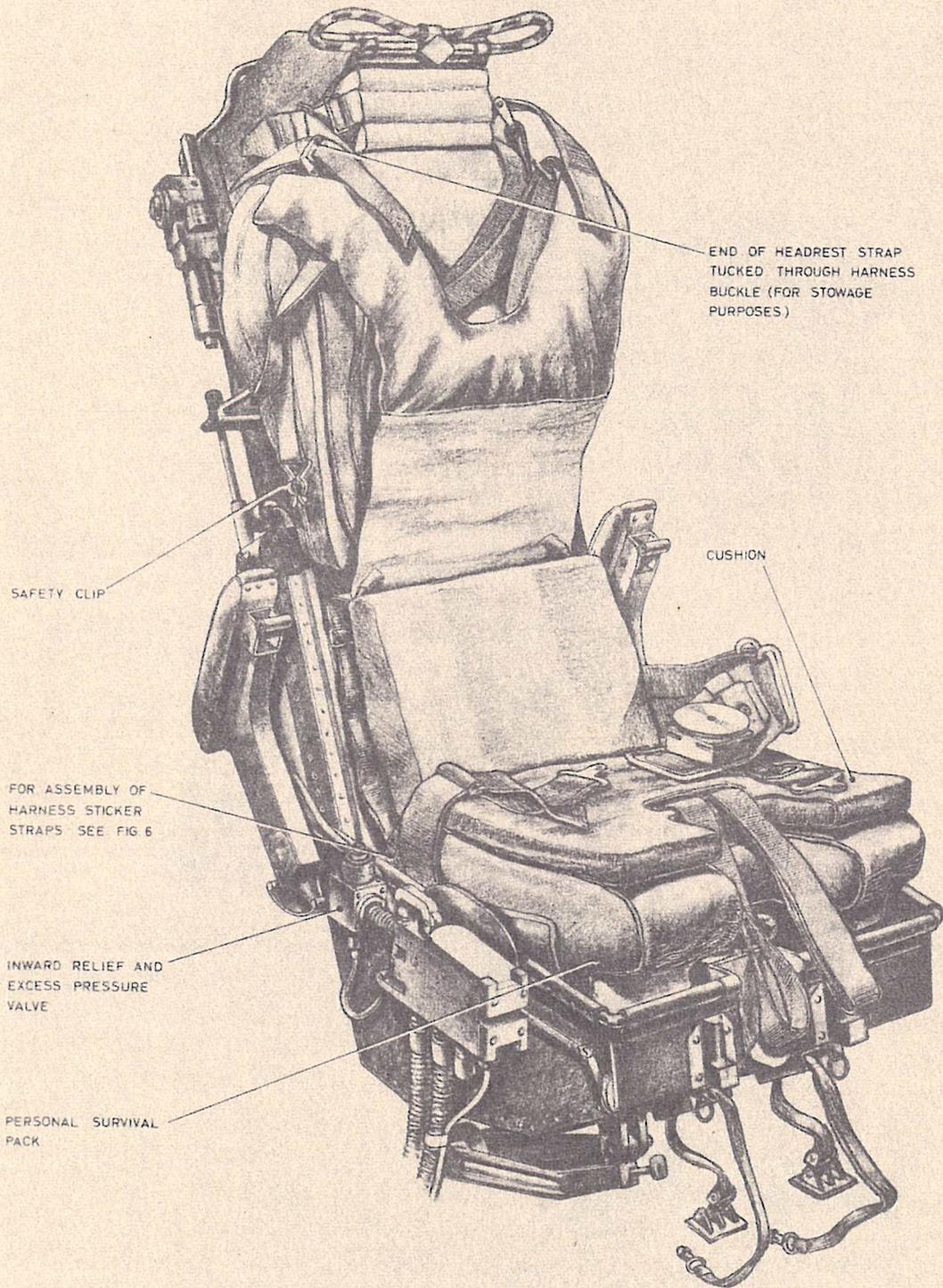


Fig. 7. The seat equipped (1)

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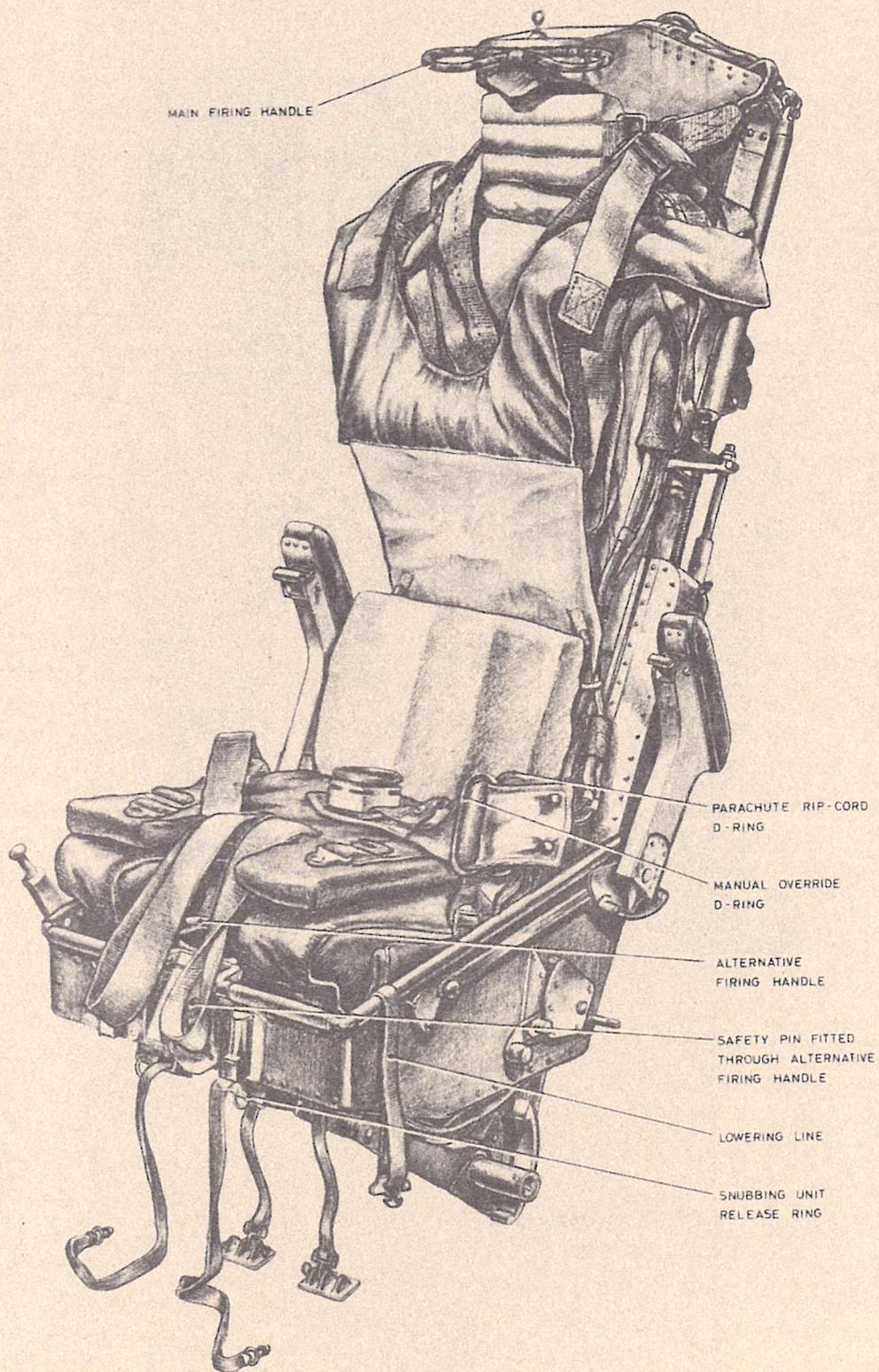


Fig. 8. The seat equipped (2)

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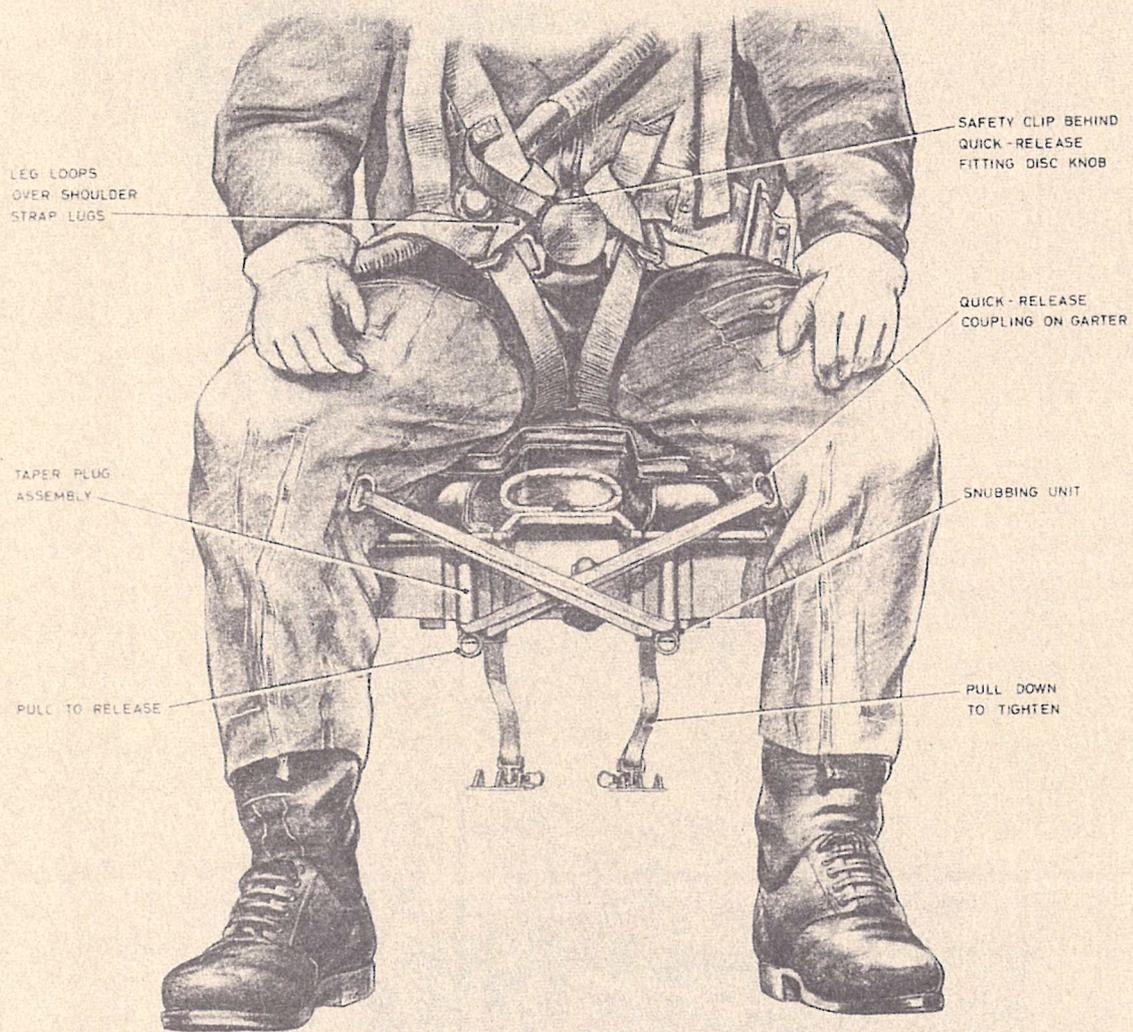


Fig. 9. Assembling the leg restraint cords and harness

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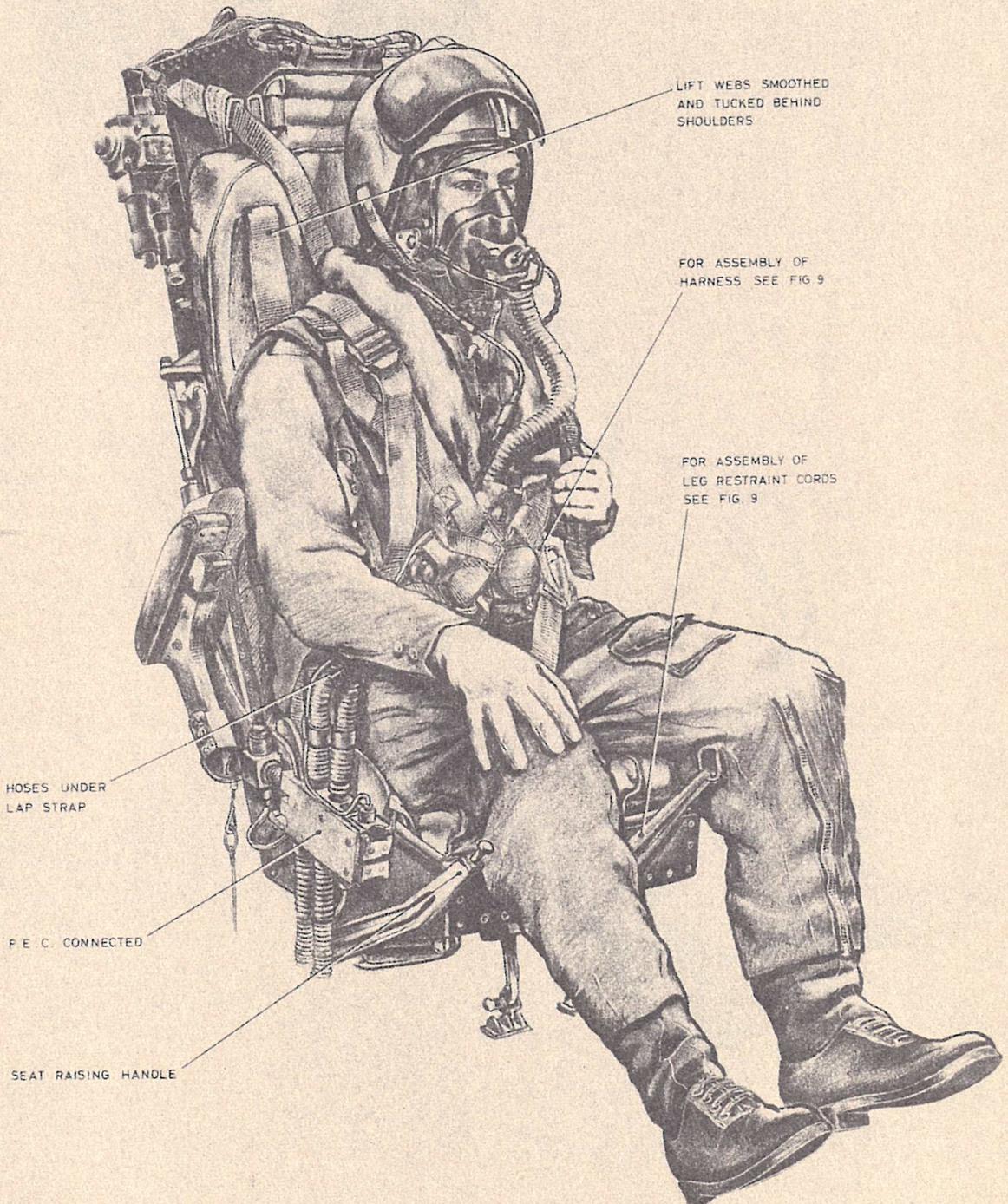


Fig. 10. The seat occupied (1)

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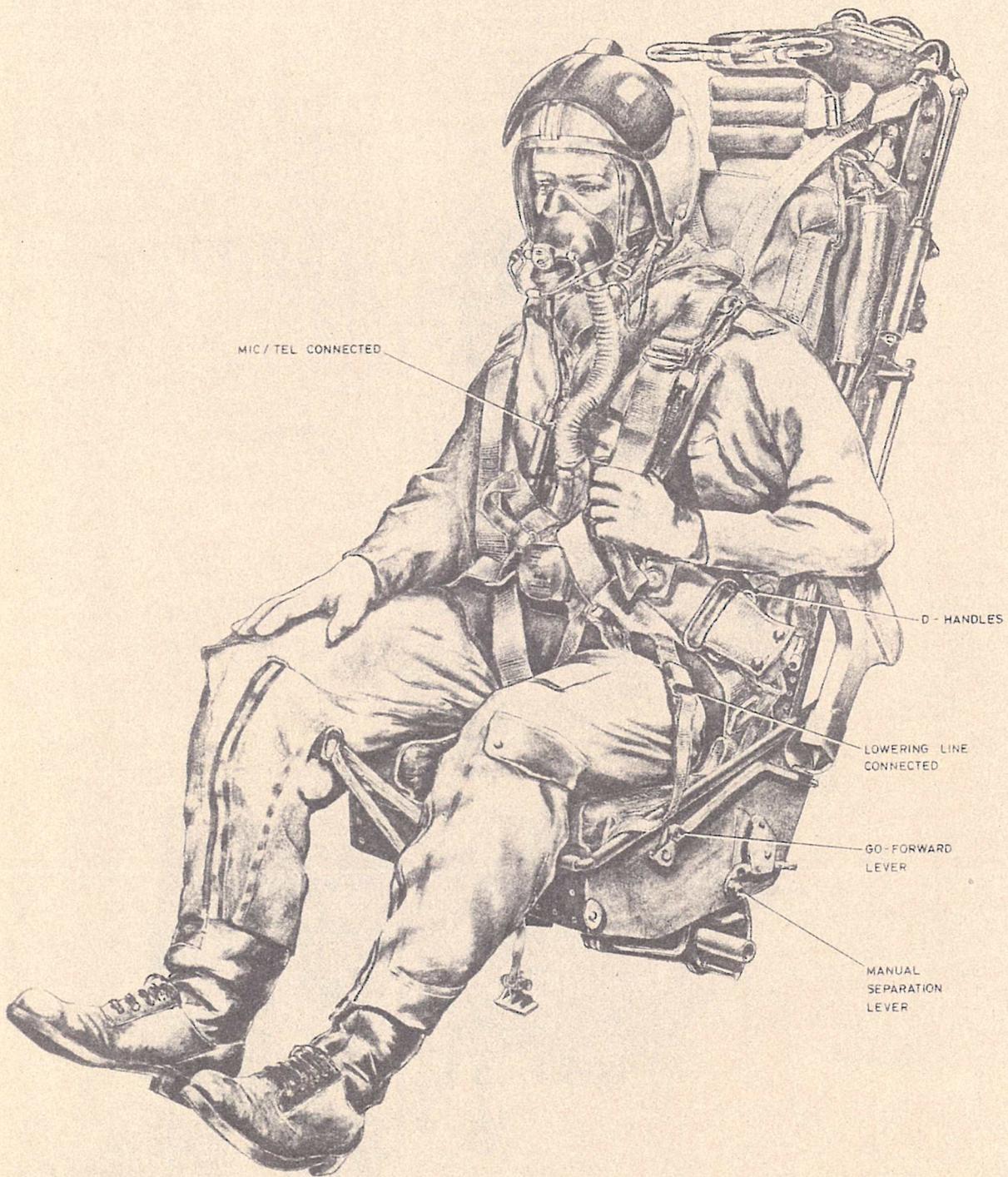


Fig. 11. The seat occupied (2)

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