

A.P. 1525A—P.N.

PILOT'S NOTES

FOR

ANSON I

TWO CHEETAH IX ENGINES



PROMULGATED BY ORDER OF THE AIR COUNCIL

W. K. Street



ANSON I

ANSON I PILOT'S NOTES

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PART I

DESCRIPTIVE

INTRODUCTION

1. The Anson I is a twin-engined aircraft used for air crew training and communication, and is fitted with two Cheetah IX engines and Fairey two-bladed fixed-pitch propellers. The normal crew is five.

MAIN SERVICES

2. *Fuel system.*—Two 35-gallon tanks are fitted in each wing outboard of the engine nacelle. (See Fuel system diagram Fig. 4). Each tank has a control cock, and these controls (35) are on a panel on the starboard side of the cockpit. The port and starboard fuel systems are separate and independent (each feeding its own engine-driven pump), but on most aircraft are connected by a cross-feed line and cock permitting the engine in one wing to be fed from the tanks in the opposite wing. Provision can be made on some aircraft for the installation of a long-range, 40-gallon tank in the navigator's compartment of the cabin, and this tank feeds through an ON-OFF cock into the cross-feed line, on the starboard side of the cross-feed cock.
3. *Oil system.*—Two oil tanks are fitted, one in each engine nacelle, each having an oil capacity of 7 gallons.
4. *Vacuum system.*—Vacuum pumps on each engine serve the instrument flying panel. One pump is used at a time and the change-over cock (2) is on the port window shelf.
5. *Electrical system.*—
 - (i) On early aircraft a 500-watt, 12-volt generator is mounted on the starboard engine, and feeds the following services through a 25-amp. hr., 12-volt accumulator:

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Navigation lights
Landing lamps
Identification lights
Interior and instrument lights
Fuel gauges
Pressure head heater
Windscreen wipers (if fitted)
Bomb release gear
Wireless installation
Gunsight and camera gun

When the Marconi radio installation (Mod. No. 512) is installed, a separate 500-watt generator, driven by the port engine and charging a 40-amp. hr. accumulator, is fitted and works independently of the general services supply. However, an emergency switch is fitted on the starboard side of the navigator's cabin to allow the generator on the starboard engine to supply the Marconi radio installation in an emergency. A ground socket is also supplied and allows for testing the Marconi radio only, from an outside supply.

- (ii) Later aircraft are fitted with two 750-watt, 12-volt generators, one on each engine, and supply all services, including the radio and the power-operated rear turret. The ground socket then becomes common to all services.

AIRCRAFT CONTROLS

6. *Trimming tabs.*—The elevator trimming tabs are controlled by a cranked handle (30) on the starboard side of the engine control pedestal and there is an indicator on the port side. The rudder trimming tab is operated from a small hand-wheel (41) under the roof on the port side of the cabin, and the setting is neutral when the ends of the chain, which passes around this hand-wheel, are level.
7. *Undercarriage control.*—The undercarriage is raised and lowered manually by operating the crank (47) in the pedestal beneath the pilot's seat, approximately 160 turns being necessary. When retracted, a small portion of each wheel is left protruding from the engine nacelle

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to minimise damage to the aircraft if landed in an emergency with the wheels retracted. In the event of such a landing the wheels brakes are still effective. A hand locking-lever on the port side of cockpit is pulled up to withdraw the down-locks before undercarriage is raised. The lever is pushed down before lowering undercarriage so that locks engage when wheels are down. When lowering or raising the undercarriage, winding must be continued until the control handle slips.

8. *Undercarriage indicators.*—

- (i) Twin green knobs (20) on the right side of the engine control box and normally hidden by spring-loaded covers, come into view when the undercarriage is fully extended.
 - (ii) A red warning lamp (9) on the pilot's instrument panel lights up if either undercarriage unit is not fully extended, and stays alight until the undercarriage is locked down.
9. *Undercarriage warning horn.*—An electrically-operated horn sounds when the undercarriage units are in any position other than the fully down and locked, and either of the throttle levers are pulled back to one third or less.
10. *Flaps control and indicators.*—The flaps can be raised or lowered hydraulically by a handpump (48) on the floor behind the pilot's seat. A control lever (24) with two positions marked FLAPS UP and FLAPS DOWN, is on the port side of the engine control pedestal and must be set in the appropriate position before operating the handpump. The maximum downward position of the flaps is 60° and the flaps position is shown by indicators (17) on the right side of the instrument panel. These indicators are controlled by a switch situated between them; a warning light, beside the indicators, lights up when the indicators are switched on, and serves as a reminder to the pilot that the indicators are on. Do not attempt to use an intermediate flap position for take-off, as the flaps are not interconnected and they may assume different angles.
11. *Wheel brakes.*—The wheel brakes are operated from an air bottle (which has to be inflated by external means as there is no engine-driven compressor) by a pawl and ratchet

PART I—DESCRIPTIVE

lever (29) mounted on the engine control pedestal. (On later aircraft there are two air bottles.) Movement of the rudder pedals with the hand brake on will give differential braking. A triple pressure gauge (28) on the dash shows the pressure.

12. *Pressure head heater.*—The switch (4) for the pressure head heater is either on the left-hand side of the main instrument panel near the upper edge or on the port window shelf.
13. *Locking of flying controls.*—
 - (i) The pilot's control column may be locked by a strut fitted between the bracket at the top of the pilot's seat back and the special clip on the control column. The strut is secured by two quick-release pins attached to the locking strut by short chains. When not in use, the strut is stowed on two brackets on the inner edge of the shelf on the port side of the cockpit and is held in its stowage by its quick-release pins.
 - (ii) The aileron handwheel may be locked by leather straps which pass inside the rim of the handwheel, and through rings secured to the cockpit floor, on each side of the control column.
 - (iii) The rudder pedals may be locked by a device consisting of a wood base and a shaped swivelling top-piece which can be clamped together. To lock the pedals, set them in their neutral position, fit the clamp to the bottom ends of the pedal levers and with the top piece bedding transversely on the levers, tighten the clamp.

ENGINE CONTROLS

14. *Throttle and mixture controls.*—
 - (i) Two throttle levers (23) are fitted in the engine control pedestal, the three markings being SHUT (back), OPEN, and EMERGENCY (fully forward). There are two settings of the boost control now in service. Originally the higher setting was only allowed with 90 or higher octane fuel but it is now permitted also with 87 octane fuel. When the

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engine has been set at the higher boost setting no extra power is obtained by using the EMERGENCY position, as full power is obtained with the throttle lever at the gate (OPEN). When the engine has been set at the lower boost setting, the EMERGENCY position is sealed by light wire and is intended only to be used in emergency. But since the higher limitations are now permitted with 87 octane fuel, this EMERGENCY position may now be used for take-off, if the engine has not yet been adjusted to the higher setting.

- (ii) The single mixture control lever (22) has three positions, WEAK (fully forward), normal (central position) and TAKE-OFF (fully back). The lever should be set to TAKE-OFF only for take-off and for emergency use. This enriches the mixture and also operates the boost over-riding device which raises the boost with the throttle at OPEN, and in the case of engines with the lower setting, gives maximum boost with the throttle at EMERGENCY. The WEAK position should be used for cruising when the boost is less than -1 lb./sq. in.
 - (iii) The throttles and mixture controls are inter-connected so that the mixture control will automatically return from the WEAK position to the normal (central) position when a boost pressure greater than that permitted for economical cruising is being used.
15. *Fuel cock controls.*—Four fuel cock control knobs (35) (one for each tank) are mounted on a panel on the star-board side of the pilot's cockpit. When the knobs are in the forward position the fuel control cocks are ON. The cross-feed cock (if fitted) is on the floor at the right of the pilot's seat, and when the long-range tank is fitted its ON-OFF cock is at the left of the navigator's table.
 16. *Fuel contents gauge.*—An electrical fuel-contents gauge (12) is fitted either on the pilot's instrument panel or beside the main fuel cocks, with a 4-way switch (13) beside it by which the contents of each tank can be ascertained. The long-range tank, when fitted, has a mechanical indicator mounted on it.

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17. *Fuel pressure gauges.*—The fuel pressure is indicated by a pressure gauge, mounted on the inboard side of the engine nacelle, forward of the fireproof bulkhead, where it can be seen from the pilot's cockpit.
18. *Fuel priming pumps and cocks.*—A cylinder priming pump together with a cock, is mounted on a panel aft of the fireproof bulkhead, on the port side of each engine nacelle. The priming cock must be turned to OFF after priming the engine.
19. *Ignition and starting switches.*—The four ignition switches (44) are in the roof of the cockpit and the starting magneto switches are on the panels on the port side of the nacelles, aft of the fireproof bulkheads. The starter magnetos are replaced (Mod. 472) by booster coils on later aircraft and the operating pushbuttons for these are on the extreme left-hand side of the main instrument panel.
20. *Hand starting.*—Two handles are supplied for coupling to the hand turning gear, and are stowed on the rear gunner's turret door when not in use.
21. *Slow-running cut-out control.*—This control (19) is operated by a pull-ring or a toggle at the right-hand bottom portion of the pilot's instrument panel.
22. *Oil dilution.*—The pushbuttons for operating the oil dilution valves are, on most aircraft, fitted on the respective engine bulkhead, but on later aircraft the buttons are in the pilot's cockpit.

OPERATIONAL EQUIPMENT

23. *Guns.*—The aircraft is equipped with one Browning gun with ring-and-bead gun sight, fixed on the port side of the nose and operated pneumatically by a pushbutton (27) on the pilot's control column and a Vickers G.O. gun mounted on a rotating turret, or two Browning guns in a power-operated turret in the rear end of the cabin.

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24. *Bombs.*—Provision is made for carrying and releasing the following alternative bomb loads:—

- (i) 2—100 lb, and 8—20 lb. bombs
- (ii) 2—100 lb, and 8—smoke floats or reconnaissance flares.

The 100 lb. bombs are carried in a compartment aft of the rear spar, and the 20 lb. bombs or smoke floats are carried in a compartment between the front and rear spars. In addition, provision is made on some aircraft for carrying two extra 100 lb. or 250 lb. bombs on the underside of the fuselage between the main spars.

25. *Bomb doors.*—The doors of the 100 lb. bomb compartments are automatically opened by the weight of the released bombs, and are automatically closed by springs when the bombs have passed through them.

The doors of the 20 lb. bomb compartments are controlled by the bomb-aimer by means of a crank handle (38) on the starboard side of the pilot's cockpit.

26. *Bomb release controls.*—The bomb aimer has controls allowing him to select and release each or all of the 100 lb. and 20 lb. bombs (or smoke floats).

A bomb release panel (34) is mounted on the starboard side of the pilot's cockpit and a fixed firing switch (6) on the instrument panel. This arrangement enables the pilot to select and release the 20 lb. bombs (or smoke floats) and to jettison these and the 100 lb. bombs if required.

An additional firing switch is provided at the rear end of the fuselage, on the port shelf, immediately aft of the wireless operator's seat. This firing switch can be used in conjunction with the selector switches in the pilot's cockpit.

PART II

HANDLING INSTRUCTIONS

27. MANAGEMENT OF FUEL SYSTEM

- (i) One tank only in each wing should be used at the same time, and when it is emptying its cock must be turned off and the cock of the other tank in the wing turned on simultaneously.
- (ii) If 40 gallon long-range tank is fitted, its contents should not be used for take-off, but as soon as possible after take-off by turning it on, opening the cross-feed cock and closing the wing-tank cocks. When it is empty its cock must be turned off before opening wing-tank cocks. Close the cross-feed cock.
- (iii) *Use of cross-feed cock.*—This cock should normally be kept closed, except when using long-range tank, as described in (ii), and when it is necessary to feed the engine in one wing from a tank in the opposite wing.

28. STARTING ENGINES AND WARMING UP

- (i) Check: Cross-feed cock (if fitted) OFF
Fuel gauges Check contents of tanks
Tank cocks One tank in each wing ON (preferably the fuller tank)
- (ii) Set engine controls as follows:—
Throttle $\frac{3}{4}$ -inch open
Mixture normal
- (iii) The ground crew will turn on the priming cock and operate the fuel priming pump until the suction and delivery pipes are full; this may be judged by a sudden increase in resistance.
- (iv) Leave the main magneto off; switch on starting magneto (or press booster-coil button) and have the engine cranked by hand. The ground crew works the priming pump

PART II—HANDLING INSTRUCTIONS

vigorously, and when a large number of strokes are required the engine should be turned at intervals. The engine should start after the following number of strokes

Air temperature °C.	+30	+20	+10	0-10
No. of strokes	1	2	3	6 14

- (v) When the engine fires, switch on main magnetos, and switch off starting magneto (or release booster-coil button). The ground crew will screw down the priming pump and turn off the priming cock.
- (vi) Open the engine up slowly to 1,000 r.p.m. and warm up at this speed.

29. TESTING ENGINES AND INSTALLATIONS

While warming up

- (i) Check temperatures and pressures, and test operation of flaps with handpump.

After warming up

- (ii) Move mixture control to TAKE-OFF, open up momentarily to the gate and check boost and r.p.m.
- (iii) Return mixture control to normal, and check that boost falls to $+1\frac{1}{2}$ lb./sq. in. (On some engines boost control may still be set to the old 87 octane rating; in this case boost should fall to $+\frac{1}{2}$ lb./sq. in.) Throttle back to 1,600 r.p.m. and test each magneto in turn. The drop should not exceed 80 r.p.m.

30. TAXYING

- (i) The rear gunner must move forward to the navigator's position for taxiing and take-off.
- (ii) *Check list before taxiing*

Door	..	..	..	closed
Undercarriage	..	..	..	green knobs showing on mechanical indicator.
Pressure head heater	..	..	..	ON.
- (iii) Steer as much as possible by use of the throttles so as to conserve the brake pressure.

PART II—HANDLING INSTRUCTIONS

31. CHECK LIST BEFORE TAKE-OFF

- | | | |
|-------------------|-------|---|
| T—Trimming tabs | .. | Elevator: Central |
| | | Rudder: Central |
| M—Mixture control | .. | TAKE-OFF |
| Fuel | .. .. | Check fuel cocks are on the fuller tank in each wing. |
| Flaps | .. .. | Up |

32. TAKE-OFF

- (i) There is a very slight tendency to swing to port. This is easily corrected and the aircraft can be kept straight by use of the throttles until rudder action is obtained.
- (ii) Before climbing, increase speed to 90 m.p.h. I.A.S. (78 knots), which gives a good margin above the safety speed of 75 m.p.h. I.A.S. (65 knots).
- (iii) At heavy loads, the undercarriage should be raised without delay, as this improves one-engine performance.
- (iv) Change mixture control into the normal (central) position.

33. CLIMBING

The speed for maximum rate of climb initially is 100 m.p.h. I.A.S. (87 knots).

34. GENERAL FLYING

- (i) *Change of trim*:—

Undercarriage down	Nose down
Flaps down	Nose up
- (ii) *Stability*.—The aircraft is stable.
- (iii) *Flying at low airspeeds*.—Flaps may be lowered 20° and speed reduced to 85 m.p.h. I.A.S. (74 knots) when flying in bad visibility.

35. STALLING

- (i) The stalling speeds at light load are

Flaps and undercarriage up	..	57 m.p.h. I.A.S. (50 knots)
Flaps and undercarriage down	..	48 m.p.h. I.A.S. (41 knots)
- (ii) If the pilot's A.S.I. is connected to the static vent (see para. 42) the stalling speed readings are as follows:—

Flaps and undercarriage up	..	66 m.p.h. I.A.S. (57 knots)
Flaps and undercarriage down	..	55 m.p.h. I.A.S. (48 knots)
- (iii) *Characteristics at the stall*.—With flaps and undercarriage up there is no warning of the stall, and a wing drops gently if the control column is held back. With flaps and under-

PART II—HANDLING INSTRUCTIONS

carriage down there is noticeable vibration, and the stall is straight, the nose dropping somewhat sharply.

36. DIVING

- (i) The aircraft may be dived without altering the trim, but as speed increases the aircraft becomes tail-heavy. R.p.m. should be watched so that the maximum r.p.m. is not exceeded.
- (ii) At maximum diving speed the rudder is effective but the ailerons stiffen up.

37. CHECK LIST BEFORE LANDING

- (i) Rear gunner must move forward to Navigator's position for landing.
- (ii) Reduce speed to 100 m.p.h. I.A.S. (87 knots), check brakes and carry out the drill of vital actions U. M. and flaps.

U—Undercarriage	..	DOWN.	Check by mechanical indicator, and that red light is out.
M—Mixture	..	..	TAKE-OFF
Flaps	..	..	Switch on flaps indicator and pump flaps fully down.
- (iii) Recommended approach speeds I.A.S. are:—

	Flaps		Flapless	
	m.p.h.	knots	m.p.h.	knots
Engine assisted	70	61	75	65
Glide	75	65	80	69

38. MISLANDING

- (i) The pilot must be prepared to hold the nose down when opening the throttles.
- (ii) At a safe height, raise the flaps in stages, by means of the flap selector only. It is not necessary to pump them up.

39. AFTER LANDING

- (i) Retract the flaps before taxiing, by pumping them up.
- (ii) Let the engines idle for a minute, then pull out the slow-running cut-out and hold until the engines stop.
- (iii) After engines have stopped, release the cut-out smartly to return it to the normal position; switch off ignition; turn off fuel, flaps indicator and pressure head heater.
- (iv) *Oil dilution in cold weather.*—See A.P. 2095. The oil dilution period is 3 minutes.

PART III

OPERATING DATA

40. ENGINE DATA, CHEETAH IX

- (i) *Fuel*.—87 octane or higher.
 (ii) *Oil*.—See A.P. 1464/C.37.
 (iii) *Engine limitations with 87 octane or higher fuel*.—

	R.P.M.	Boost lb./sq. in.	Temp. °C. Cylr.	Oil
MAX. TAKE-OFF TO 1,000 FEET	2,100	F.T.		
MAX. CLIMBING 1 HR. LIMIT	2,300	+1½	220	80
MAX. RICH CONTINUOUS	2,100	-½	220	80
MAX. WEAK CONTINUOUS	2,100	-1	180	80
MAX. ALL OUT 5 MINS. LIMIT	2,425	+1½	250	90
OIL PRESSURE:				
NORMAL			70 lb./sq. in.	
EMERGENCY (5 MINS.)			35 lb./sq. in.	
MINM. OIL TEMP. FOR TAKE-OFF			25° C.	

(iv) *Other limitations*.

Diving. Maximum boost +1½ lb./sq. in.
 Maximum r.p.m. 2,910
 2,425 r.p.m. may be exceeded only for 20 seconds,
 with throttle not less than one-third open.

(v) Fuel pressure 2-3 lb./sq. in.

41. FLYING LIMITATIONS

- (i) The aircraft is designed for duties as a reconnaissance and training aircraft. Spinning and aerobatics are not permitted, and care must be taken not to impose heavy loads with the elevator in recovery from dives, or by rapid turns at high speed.
- (ii) *Maximum Weights*
- | | |
|---------------------------------------|-----------|
| Take-off and straight flying | 9,900 lb. |
| All forms of flying and landing | 8,500 lb. |

PART III—OPERATING DATA

(iii) The aircraft is designed for the following speeds, I.A.S.:—

	<i>m.p.h.</i>	<i>Knots</i>
Diving	213	185
Undercarriage down	213	185
Flaps down	98	85

42. POSITION ERROR CORRECTION

(i) The corrections are as follows :

From ..	70	88	108	135 m.p.h. I.A.S.
To ..	88	108	135	170 m.p.h. I.A.S.
Add ..	7	5	3	1 m.p.h.

(ii) When the pilot's A.S.I. is connected to the static vent in the port side of the fuselage, the position error at speeds above 100 m.p.h. (87 knots) is never more than approximately 1 m.p.h. (or 1 knot) and may be neglected. At low speeds, the correction is greater, but handling speeds are not affected except at the stall. (*See para. 35.*)

43. RECOMMENDED OPERATING SPEEDS

(i) *For maximum rate of climb*

100 m.p.h. I.A.S. (87 knots) up to 5,000 ft. Above 5,000 ft. reduce speed by 2 m.p.h. (or 2 knots) per 1,000 ft.

(ii) *For maximum range*

The recommended speed for maximum range is approximately 120 m.p.h. I.A.S (104 knots).

PART IV

EMERGENCIES

44. **ENGINE FAILURE DURING TAKE-OFF**
If engine failure occurs before the undercarriage is raised, it may be impossible to climb away. At 8,500 lb. with undercarriage up, it is possible to climb slowly at 75 m.p.h. I.A.S. (65 knots) with starboard engine failed, but with port engine failed, it is only possible to maintain height. Any attempt to increase speed will result in loss of height, and a decrease in speed may result in loss of control.
45. **ENGINE FAILURE IN FLIGHT**
- (i) At 8,500 lb. it is possible to maintain height on one engine at 90 m.p.h. I.A.S. (78 knots) with the rudder trimmed so that no bank is necessary.
 - (ii) Lower undercarriage while there is still plenty of height in hand.
46. **EMERGENCY EQUIPMENT AND CONTROLS**
- (i) *Fire extinguishers.*—Two hand fire extinguishers are carried in the cabin, one in a bracket on the starboard side beside the main window frame, the other on the starboard side above the front spar. Two additional extinguishers can be fitted, one in the bomb-aimer's position and the other in the gun turret.
 - (ii) *Parachute and emergency exits.*—(a) Parachute exits can be made via the cabin door on the starboard side.
(b) Three crash exits are provided in the roof of the cabin, each covered by a transparent panel which may be quickly released by means of a rip cord hand loop. On later aircraft one of these exits is replaced by the astrodome, which may be opened inwards. These exits must not be used as parachute exits.

PART IV—EMERGENCIES

- (iii) *Dinghy*.—A type H dinghy is stowed in a valise on the floor of the wireless operator's compartment and is held against the starboard side of the cabin by two straps, each having a quick-release buckle. A No. 5 emergency dinghy pack is stowed immediately forward of the rear spar on the starboard side.
- (iv) *Signal pistol*.—A signal pistol is provided and is either stowed in a leather holster secured to the fuselage frame, just forward of and below the pilot's seat, or is mounted in a fixed bracket in the roof vertically above the front spar. Along the back of the pilot's seat eight spring clips (49) are secured to carry the signal pistol cartridges.
- (v) *Marine distress signals*.—A marine-distress signal is stowed in a compartment in the fin, behind the leading edge. Access to this compartment is provided by a rip cord hand loop which projects through a fabric strip doped on the port side of the fin. On the fabric above this compartment is stencilled "Distress signal stowage".
- (vi) *First-aid outfit*.—On the starboard side in the gun turret bay is stowed two first-aid outfits, which are accessible from both inside and outside the fuselage. A rip cord for emergency use is provided on the outside of the fuselage, where the fabric covering the stowage is stencilled "First Aid".
- (vii) *Crash axe*.—An axe is stowed on the forward face of the door in the cabin rear bulkhead leading to the air gunner's station.
- (viii) *Destruction of equipment*.—When IFF set is fitted, the pilot has control of the emergency switches (7) which are on the port shelf at the extreme forward end.

PART V

ILLUSTRATIONS

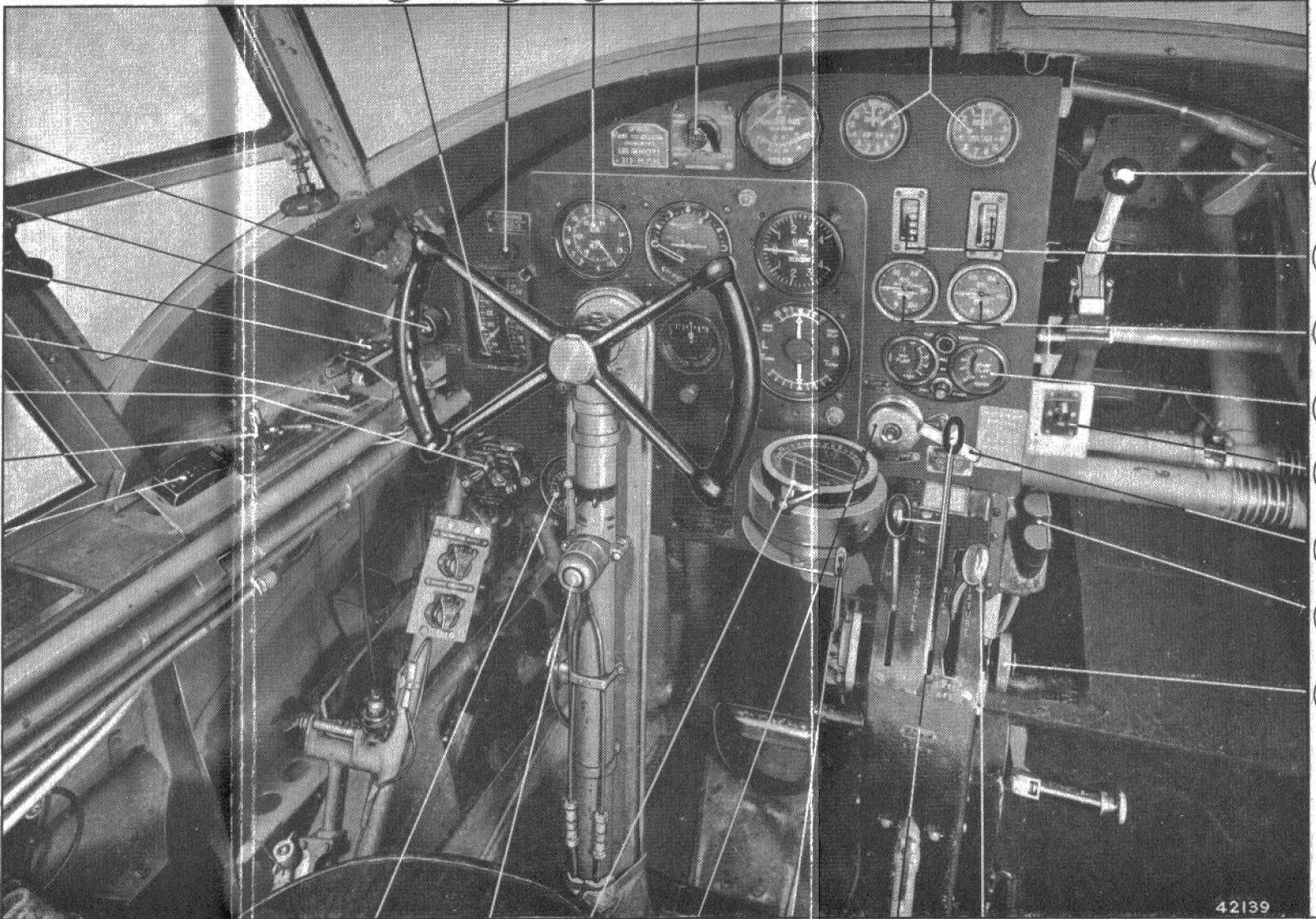
Fig. 1

INSTRUMENT PANEL AND PORT SIDE OF COCKPIT

1. Suction gauge.
2. Vacuum system change-over cock.
3. Identification lights switch-box.
4. Pressure head heater switch (above instrument flying panel on some aircraft).
5. IFF master switch.
6. Pilot's bomb firing switch.
7. IFF emergency switches.
8. Engine speed indicator (twin).
9. Undercarriage warning light.
10. Instrument flying panel.
11. Fuel contents gauge selector switch. } Beside fuel cock con-
12. Fuel contents gauge. } trols on some aircraft.
13. Boost gauges (two).
14. Landing lamps dipping control.
15. Oil pressure gauges (two).
16. Oil temperature gauges (two).
17. Flaps indicator.
18. Recognition lights switch.
19. Slow-running cut-out.
20. Undercarriage mechanical indicator.
21. Friction device for throttle and mixture levers.
22. Mixture lever.
23. Throttle levers (two).
24. Flaps control lever.
25. Landing lamps switch.
26. Compass.
27. Gun-firing push-button.
28. Brakes and supply pressure gauge.

(8) (9) (10) (11) (12) (13)

(7)
(6)
(5)
(4)
(3)
(2)
(1)



(14)
(15)
(16)
(17)
(18)
(19)
(20)
(21)

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FIG. 1

(28) (27) (26) (25) (24) (23) (22)
INSTRUMENT PANEL AND PORT-SIDE OF COCKPIT.

FIG. 1

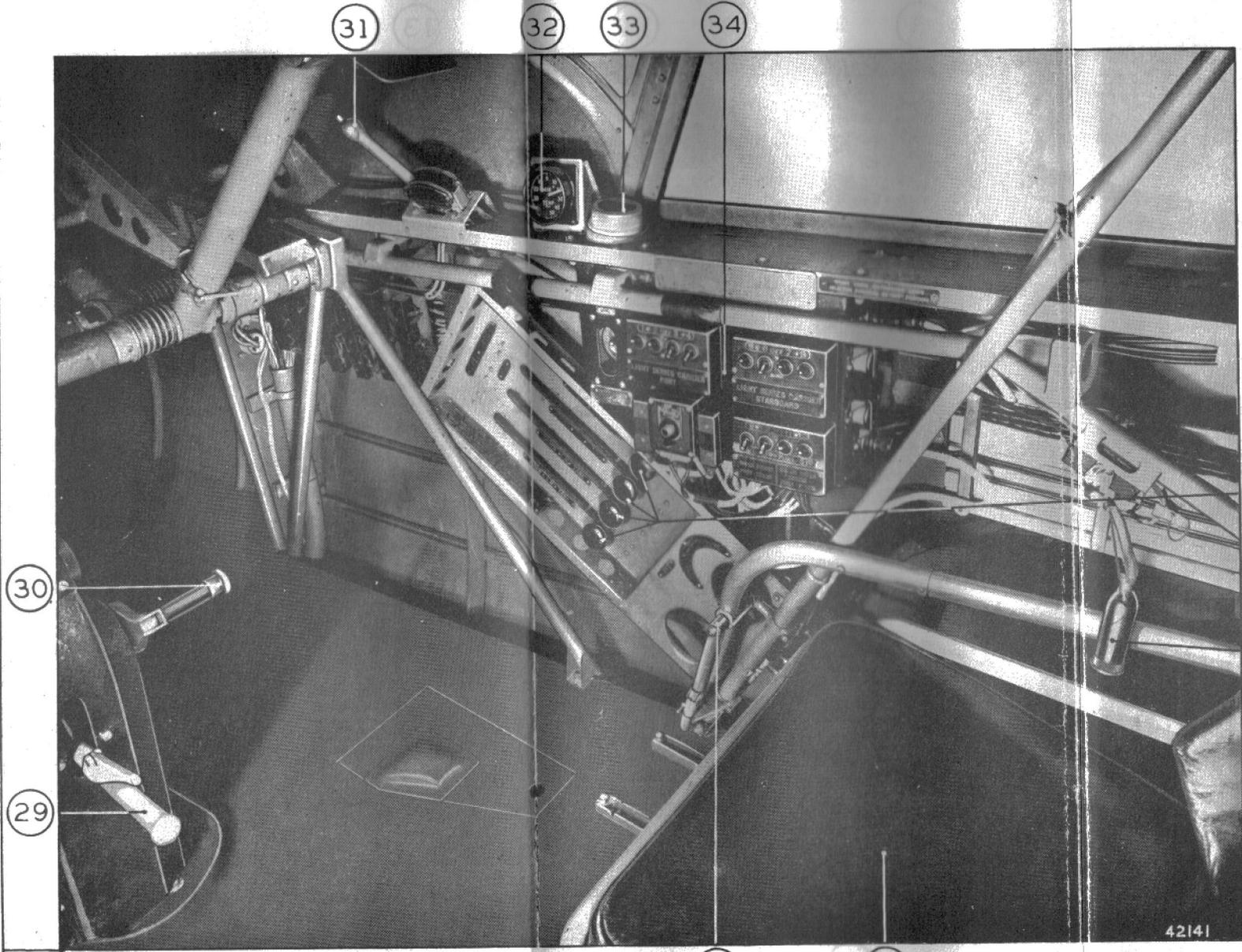


Fig. 2

COCKPIT — STARBOARD SIDE

- 29. Wheel brakes control.
- 30. Elevator trimming tabs control.
- 31. Bomb fuzing control lever.
- 32. Air temperature gauge.
- 33. Watch-holder.
- 34. Bomb control panel.
- 35. Fuel cock controls (four).
- 36. 2nd pilot's intercommunication socket.
- 37. 2nd pilot's seat.
- 38. Bomb door crank control.

FIG.
2

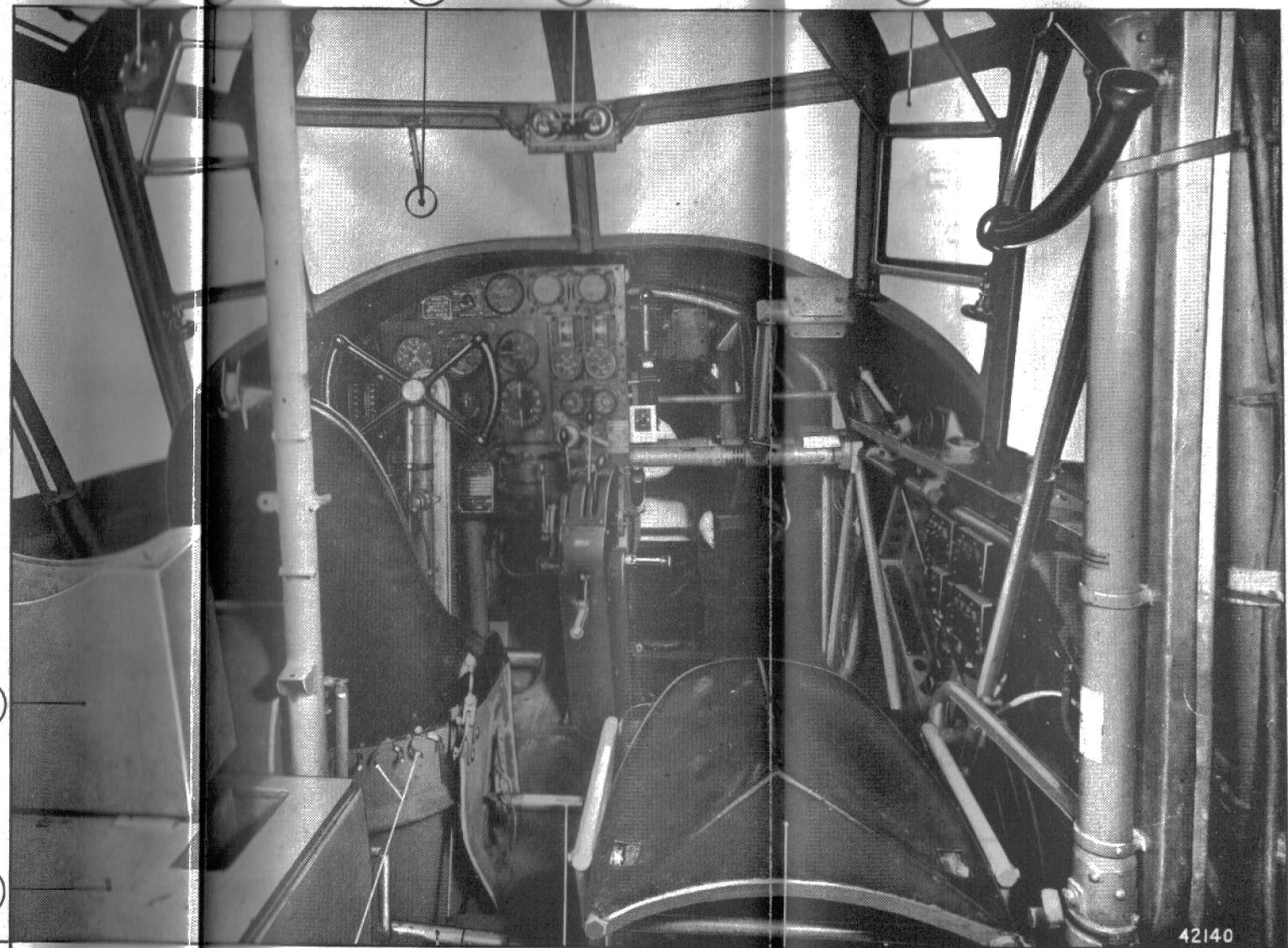
COCKPIT — STARBOARD SIDE

FIG.
2

Fig. 3

GENERAL VIEW OF CABIN

- 39. Navigator's table.
- 40. Stowage for computer, etc.
- 41. Rudder trimming tab control.
- 42. Port direct vision window.
- 43. Ring sight for Browning gun.
- 44. Main magneto switches.
- 45. Starboard direct vision window.
- 46. 2nd pilot's seat (folded).
- 47. Undercarriage control.
- 48. Flaps hydraulic hand-pump control.
- 49. Signal pistol cartridges stowage.



(40)

(39)

FIG. 3

(49) (48) (47) (46)

GENERAL VIEW OF CABIN.

FIG 3

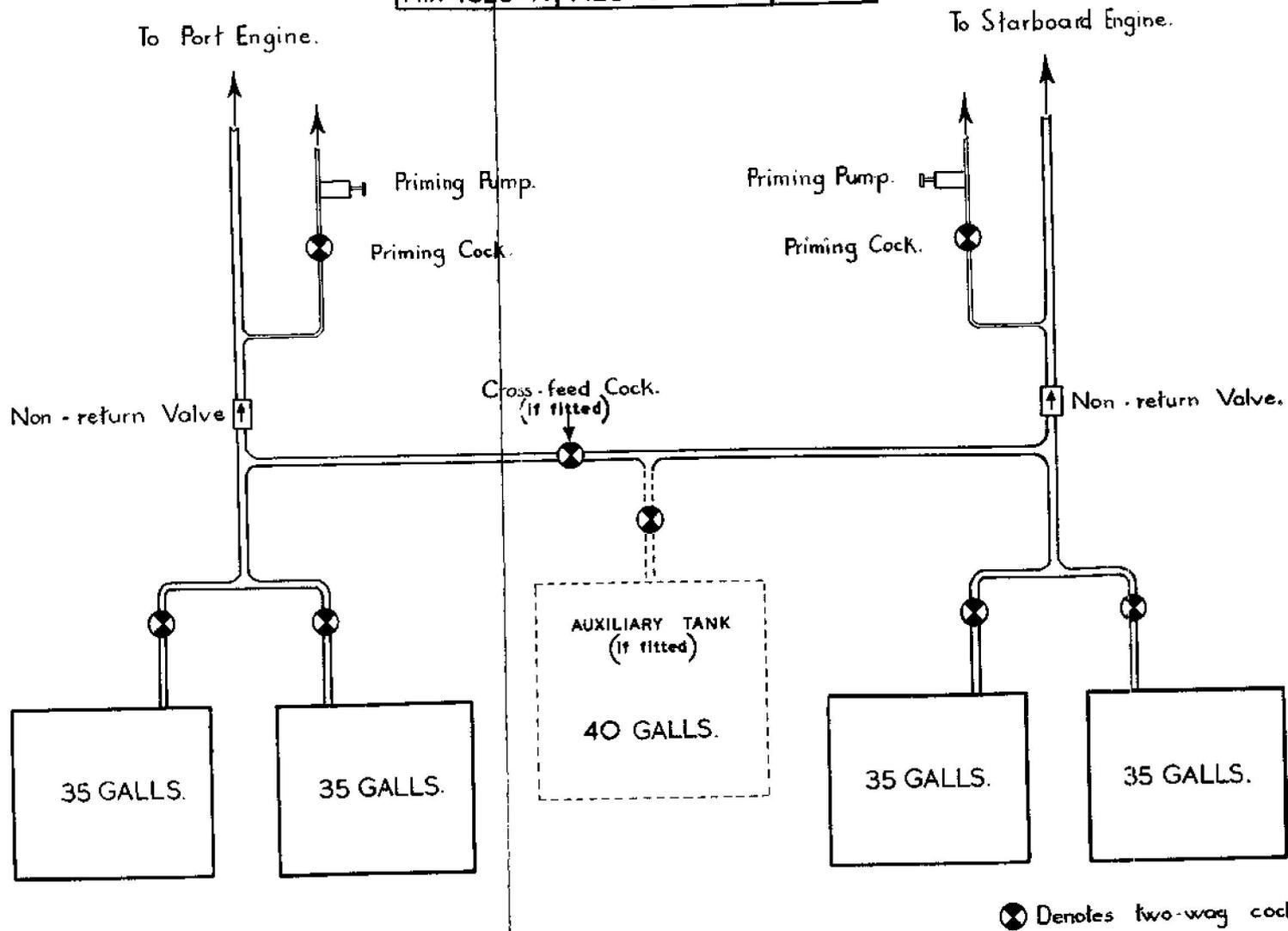


FIG. 4

SIMPLIFIED FUEL SYSTEM DIAGRAM

FIG. 4