

Figure 1.—Exterior view—J2F-6 airplane.

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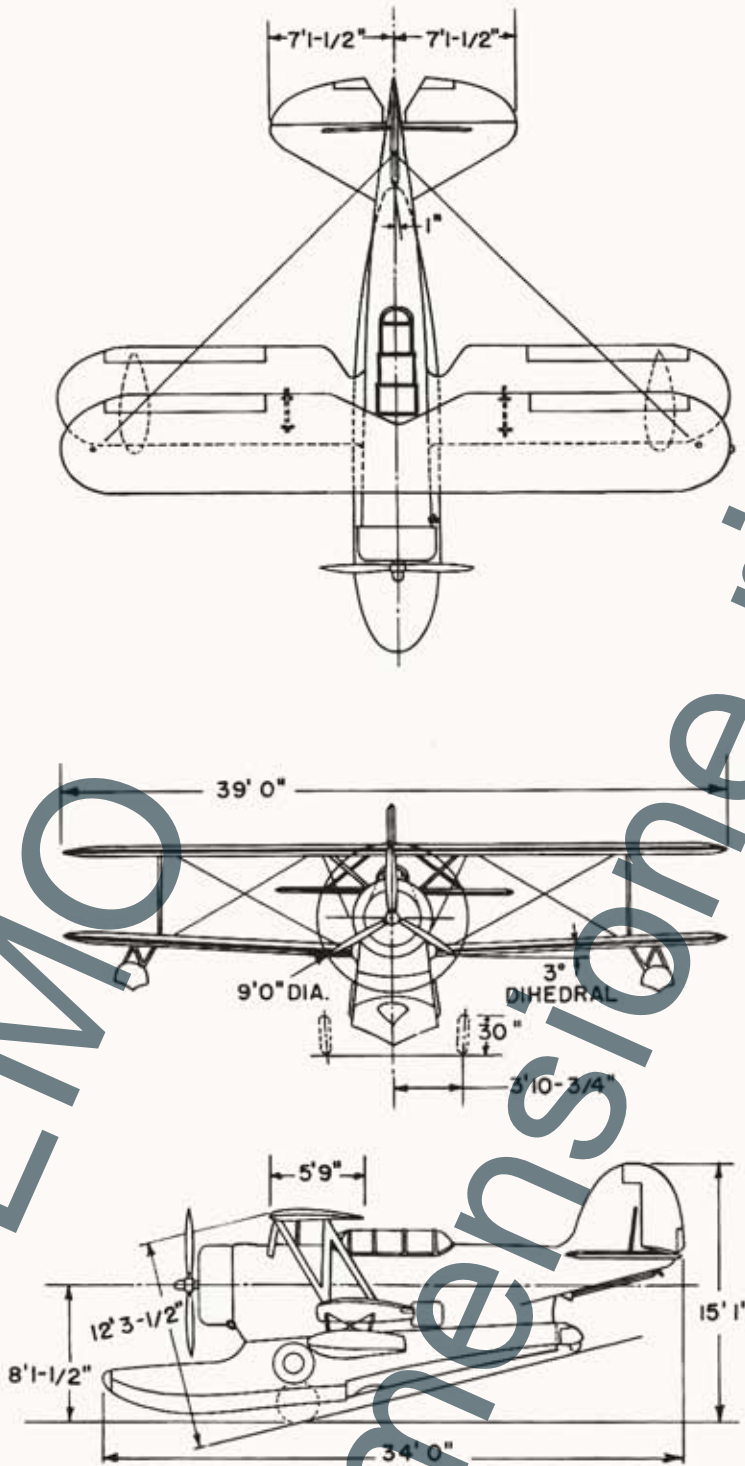


Figure 2.—General arrangement.





## SECTION 1 COCKPIT ARRANGEMENT AND CONTROLS

The arrangement of the controls and instruments in the pilot's and gunner's cockpits is shown in accompanying illustrations. In general, the name and direction of operation is indicated by a name plate adjacent to each control knob or handle.

### 1. FLYING CONTROLS.

*a. AILERON, ELEVATOR AND RUDDER.*—Standard stick and foot pedals in both cockpits.

*b. TRIM TAB CONTROLS.*—*Aileron tab*—Permanently fastened to the inboard end of the trailing edge of right upper aileron and is adjustable by hand bending only when airplane is on the ground. *Elevator tab*—Hand crank to the left of the pilots' seat. Indicator on unit shows position of the tab. *Rudder tab*—Handwheel on pilot's left hand shelf. Position of tab is indicated on wheel face.

*c. RUDDER PEDAL ADJUSTMENT.*—Toe levers on pilot's pedals. Adjustable to three positions in flight.

*d. LANDING GEAR AND TAIL WHEEL RETRACTING CONTROLS.*—Handcrank on right side of pilot's cockpit. Clockwise rotation raises the landing gear and tail wheel. Ratchet release controlled by small lever just aft of the hand crank.

*e. WARNING INDICATORS.*—Two arrow pointers on the pilot's right hand shelf, just forward of the landing gear handcrank, indicate the position of the main wheels when operating the landing gear mechanism

*f. TAIL WHEEL CASTER LOCK CONTROL.*—Lever with knob on pilot's left hand shelf. Locked position of knob is aft. Locked for take-off and landing, and unlocked for taxiing.

*g. WATER RUDDER CONTROL.*—Control knob on pilot's auxiliary instrument panel. Pull out to engage and push in to disengage the water rudders.

### 2. POWER PLANT CONTROLS.

*a. CARBURETOR AIR CONTROL.*—Push-pull knob on bulkhead to right of pilot's auxiliary instrument panel.

#### NOTE

Carburetor air shall be left on DIRECT at all times unless icing conditions or severe rains are encountered, when control shall be placed in full ALTERNATE position. The ALTERNATE position shall also be used for water landings. Never use an intermediate position of the control.

*b. FUEL TANK SELECTOR.*—Standard dial and handle, below pilot's left hand shelf. Three positions: MAIN, AUXILIARY, and OFF.

*c. AUXILIARY TANK DUMP VALVE.*—Below pilot's left hand shelf adjacent to tank selector valve control.

*d. IGNITION SWITCH.*—On the left hand side of the pilot's main instrument panel.

*e. ELECTRIC AUXILIARY FUEL PUMP.*—Rheostat control located on pilot's auxiliary instrument panel.

## Index to Figure 3—Pilot's Cockpit

1. Compass
2. Airspeed indicator
3. Turn and bank indicator
4. Directional gyro
5. Ignition switch
6. Altimeter
7. Gyro horizon
8. Camera light
9. Clock
10. Primer switch
11. Starter switch
12. Chart board
13. Manifold pressure gage
14. Cylinder temperature gage
15. Water rudder control
16. Fuel gage
17. Fuel pump rheostat
18. Tachometer
19. Engine gage unit
20. Free air temperature gage
21. Arresting hook control
22. Spot light
23. Carburetor air control
24. Oxygen regulator
25. Spot light
26. Bomb release
27. Pyrotechnic pistol holder
28. Mixture control
29. Throttle
30. Supercharger control
31. Auxiliary tank dump valve control
32. Fuel tank selector
33. Propeller governor control
34. Elevator tab control
35. Rudder tab control
36. Tail wheel lock control
37. Landing gear indicator
38. Fluorescent spot light (left & right)
39. Receiver tuning control
40. Microphone
41. Landing gear control crank
42. Transmitter control unit
43. Homing adapter unit
44. Main distribution panel
45. Receiver control unit (alternate position)
46. Flare release handles
47. Cockpit enclosure control
48. Main switch panel
49. Oxygen bottle
50. Coil frequency chart

**Note**

All radio equipment shown in Figure 3 is installed in J2F-6 Airplanes No. 36935 to 37034, inclusive, 32637 to 32739, inclusive, and 32741 to 32786, inclusive.

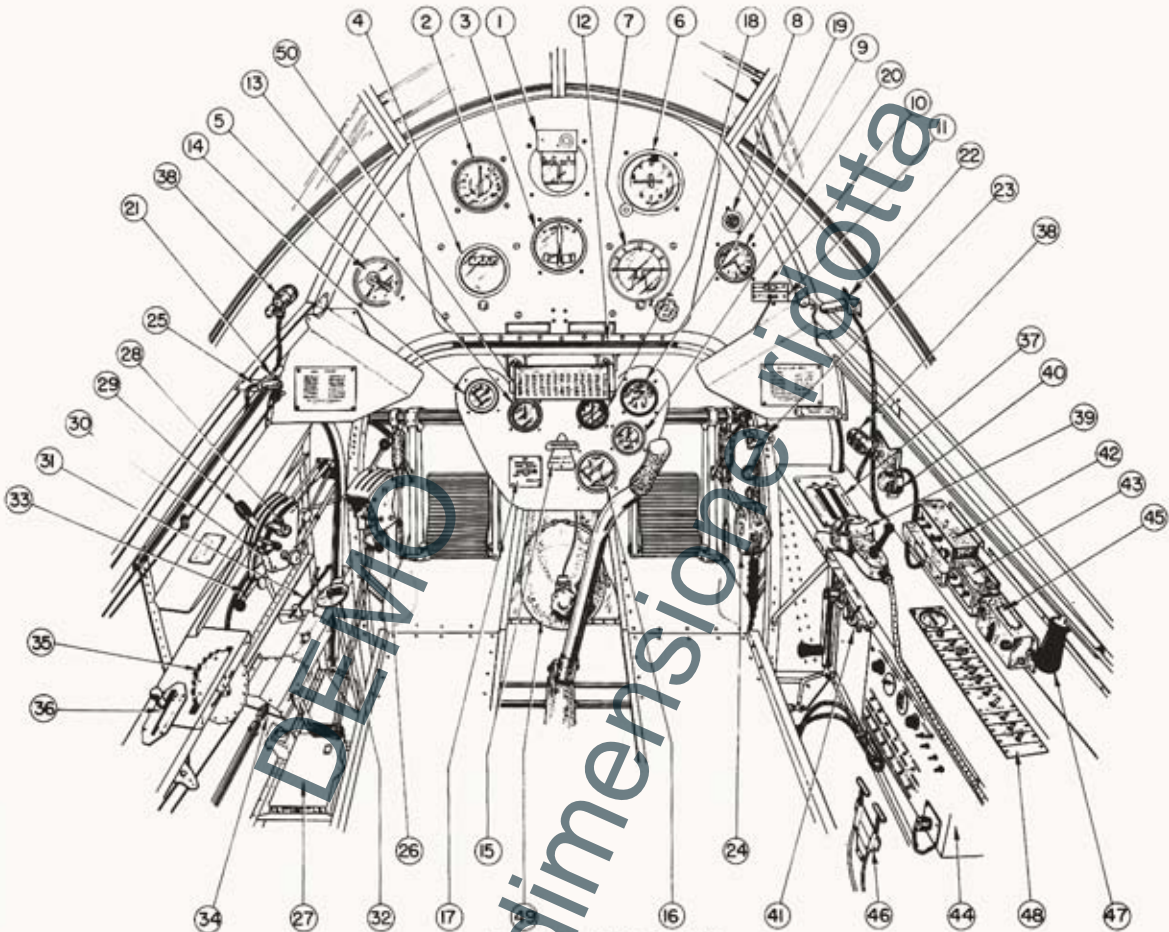


Figure 3—Pilot's cockpit.



## Index to Figure 3A

### Pilot's and Photographer's Radio Equipment

1. Control Unit	C26/ARC-5
2. Control Unit	C43/ARC-5
3. Control Unit	C35/ARR-2
4. Control Unit	C30/ARC-6
5. Destruction Switch Box	C44370
6. Pilot's Control Box (I.C.S.)	RL-9
7. Microphone and Holder	NAF213264
8. Control Box (A.D.F.)	BC-434-F
9. ABK Control Unit	.....
10. Junction Box	NAF68969-1
11. Beam Filter	NAF68304-14
12. Photographer's Control Box (I.C.S.)	RL-9
13. Radio Impact Switch	.....
14. Inverter	.....
15. Radio Junction Box (ADF)	C44684
16. Radio Junction Box	C44691
17. Modulator	MD-7/ARC-5

#### NOTE

The above radio equipment is installed in J2F-6 Air-planes Serial No. 32740 and 33535 to 33614 inclusive.

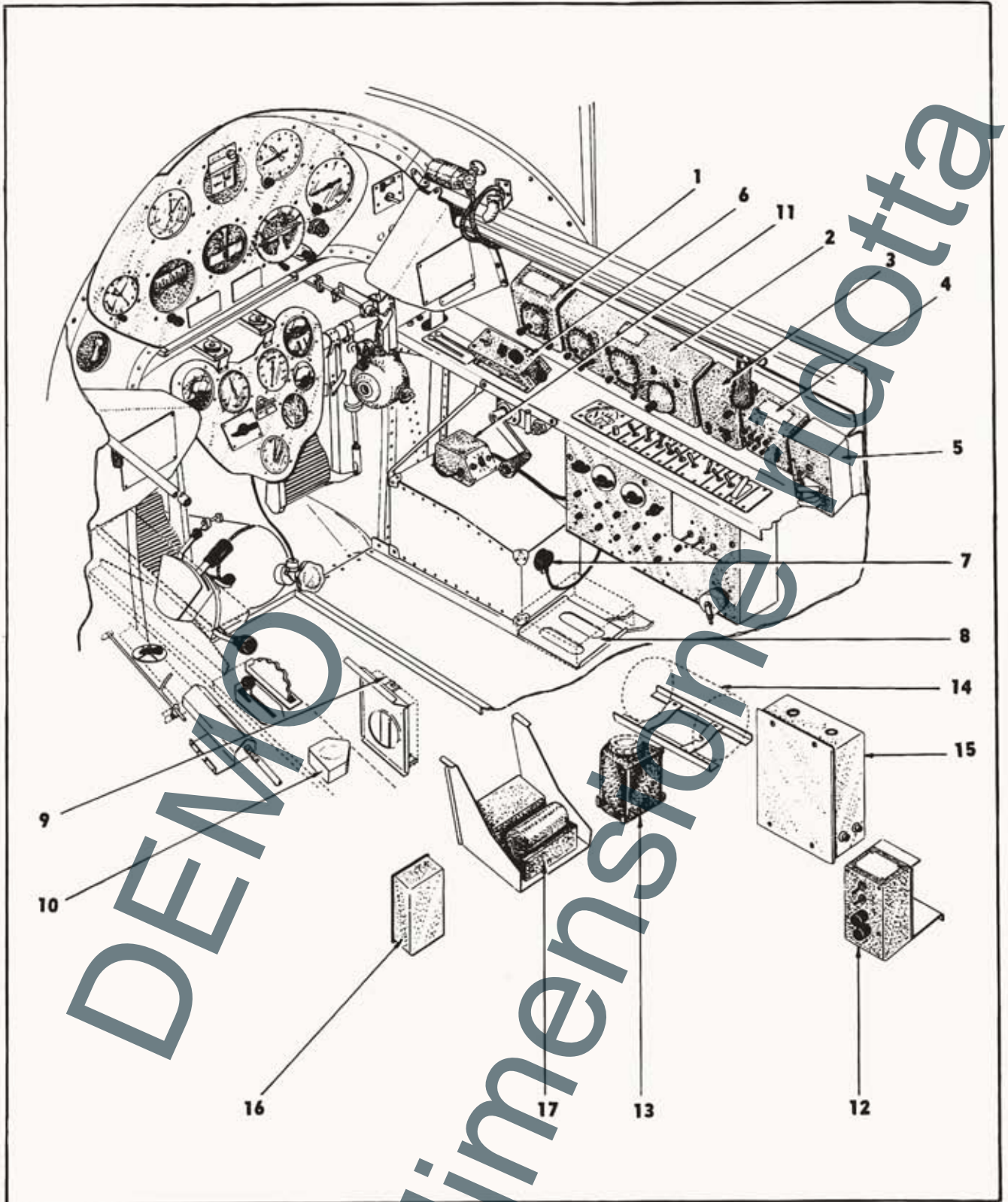


Figure 3A—Pilot's and Photographer's Radio Equipment



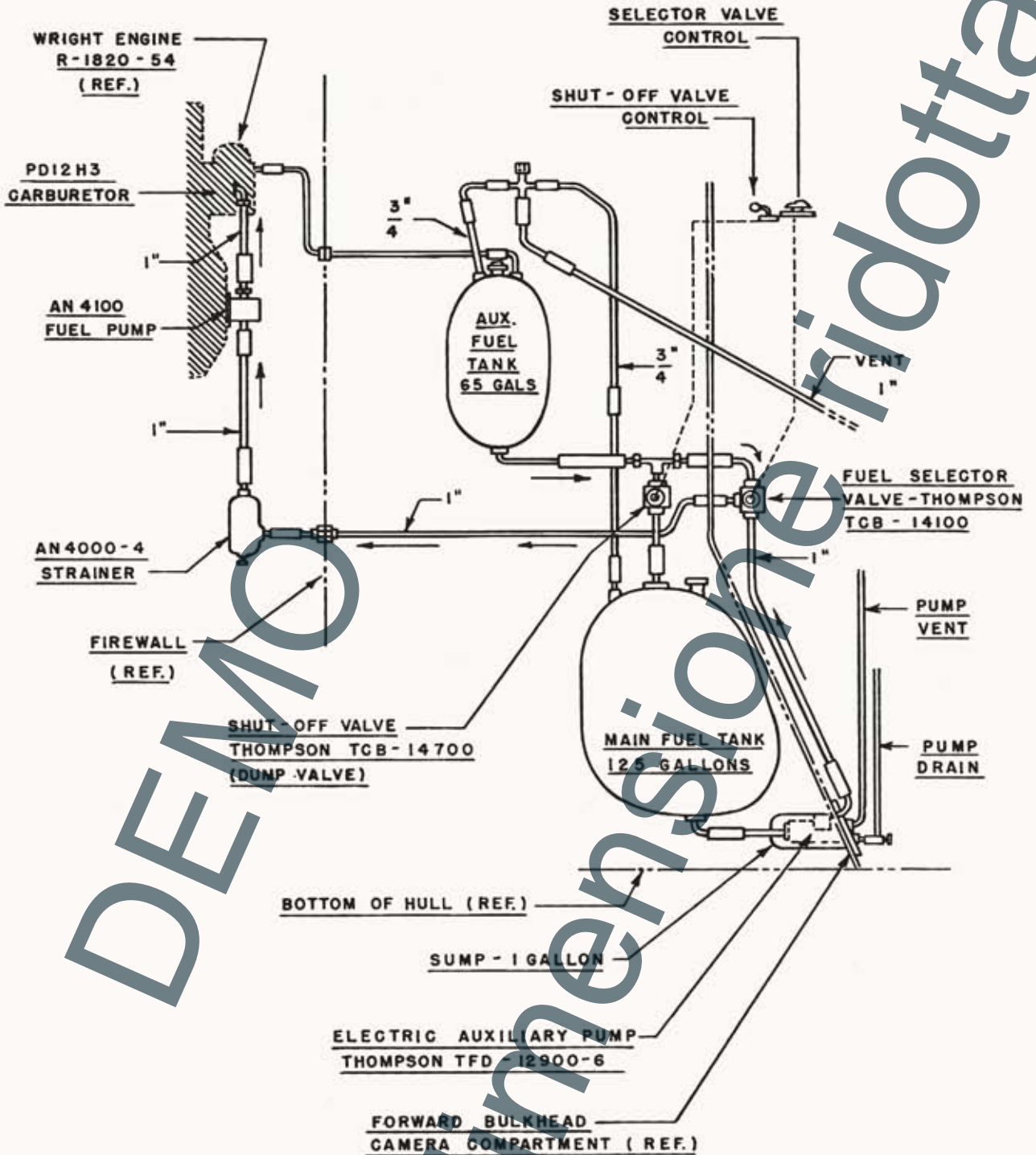


Figure 5.—Fuel system diagram.

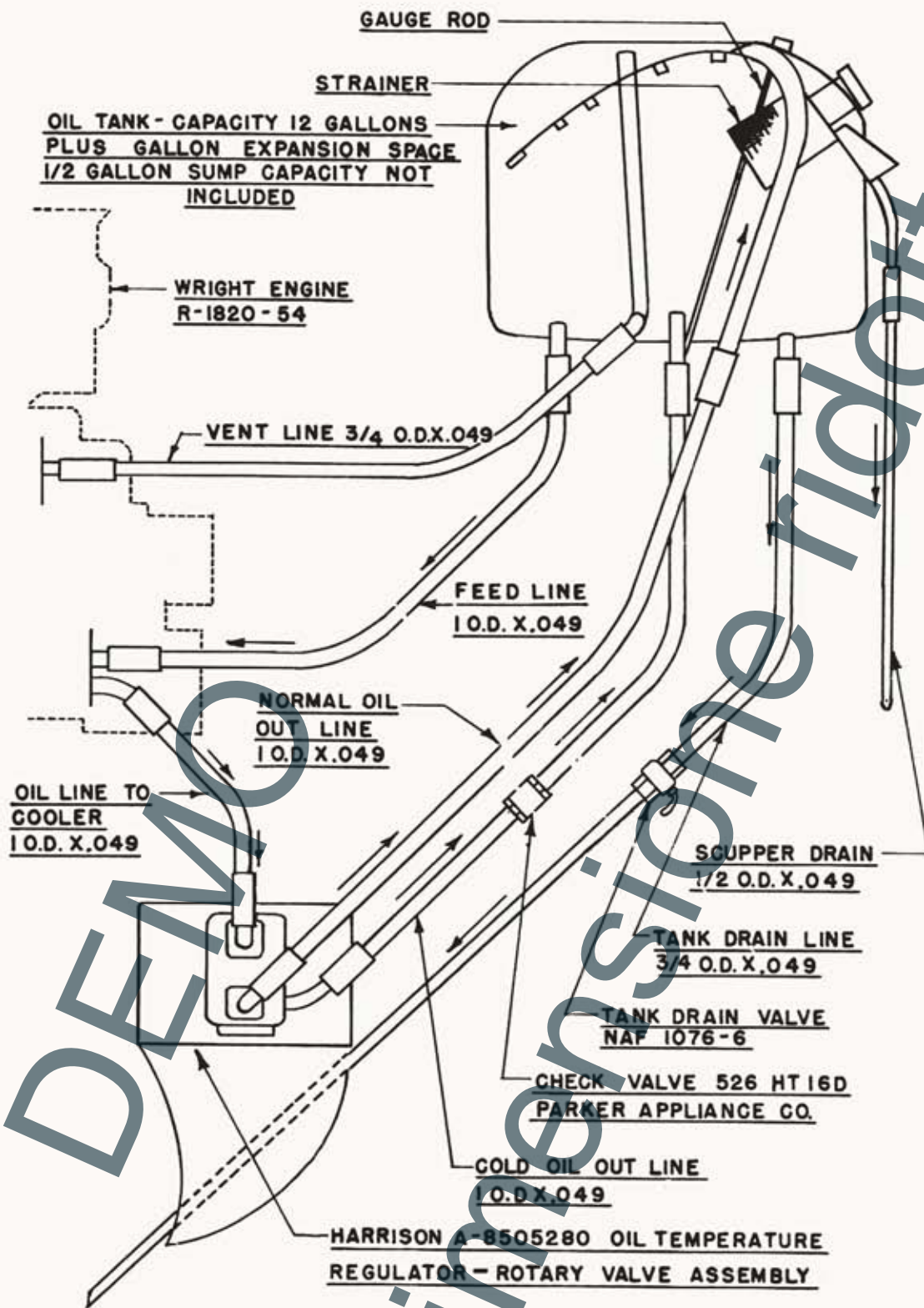


Figure 6.—Oil system diagram.



4. CHECK-OFF LISTS.

GROUND TAKE-OFF

Cabin hood .....	locked open
Fuel valve .....	MAIN
Carburetor air .....	DIRECT
Supercharger .....	LOW blower
Propeller .....	INCREASE RPM (low pitch)
Mixture control .....	AUTO RICH
Electric auxiliary fuel pump .....	ON
Tabs .....	set as required
Water rudder .....	disengaged
Tail wheel .....	LOCKED
Dump valve .....	full OPEN (AFT position)
Lap belt .....	fasten
Shoulder harness .....	tighten and lock

WATER TAKE-OFF

Complete "TAKE-OFF" check list above except "Wheels-up". For best take-off allow airplane to fly itself off the water.

FLIGHT (CRUISING) 70% POWER

Propeller .....	1870 RPM
Landing gear .....	UP
Oil pressure .....	65-75 PSI
Fuel pressure .....	14-16 PSI
Cylinder head pressure .....	205° C. (401° F.) max.
Manifold pressure .....	30" at 5000 ft. altitude
Supercharger .....	LOW blower
Mixture control .....	AUTO LEAN
Tabs .....	set as required
Carburetor air .....	DIRECT
Oil temperature .....	74°-88° C. (165°-190° F.)

GROUND LANDING

Cabin hood .....	locked open
Fuel valve .....	MAIN
Carburetor air .....	DIRECT
Supercharger .....	LOW blower
Propeller .....	1900 RPM
Mixture control .....	AUTO RICH
Electric auxiliary fuel pump .....	ON
Tabs .....	set as required
Water rudder .....	disengaged
Landing gear .....	DOWN
Tail wheel .....	LOCKED
Lap belt .....	fasten
Shoulder harness .....	tighten and lock

WATER LANDING

Complete "LANDING" check-off above "Wheels-up (Landing gear and tail wheel), and "Carburetor air".....ALTERNATE.



4. CHECK-OFF LISTS.

TAKE-OFF

Cabin hood .....	locked open
Fuel valve .....	MAIN
Carburetor air .....	DIRECT
Supercharger.. .....	LOW blower
Propeller .....	INCREASE RPM (low pitch)
Mixture control .....	AUTO RICH
Electric auxiliary fuel pump .....	ON
Tabs .....	set as required
Water rudder .....	disengaged
Tail wheel .....	LOCKED
Dump valve .....	full OPEN (AFT position)

FLIGHT (CRUISING) 70% POWER

Propeller .....	1870 RPM
Landing gear .....	UP
Oil pressure .....	65-75 PSI
Fuel pressure .....	16-18 PSI
Cylinder head temperature .....	205° C. (401° F.) max.
Manifold pressure .....	30" at 5000 ft altitude
Supercharger .....	LOW blower
Mixture control .....	AUTO LEAN
Tabs .....	set as required
Carburetor air .....	DIRECT
Oil temperature .....	74°-88° C. (165°-190° F.)

LANDING

Cabin hood .....	locked open
Fuel valve .....	MAIN
Carburetor air .....	DIRECT
Supercharger.. .....	LOW blower
Propeller .....	1900 RPM
Mixture control .....	AUTO RICH
Electric auxiliary fuel pump .....	ON
Tabs .....	set as required
Water rudder .....	disengaged
Landing gear .....	DOWN
Tail wheel .....	LOCKED

WATER TAKE OFF

Complete "TAKE-OFF" check list above except "Wheels-up". For best take-off allow airplane to fly itself off the water.

WATER LANDING

Complete "LANDING" check-off above except "Wheels-up (Landing gear and tail wheel), and "Carburetor air.....ALTERNATE.