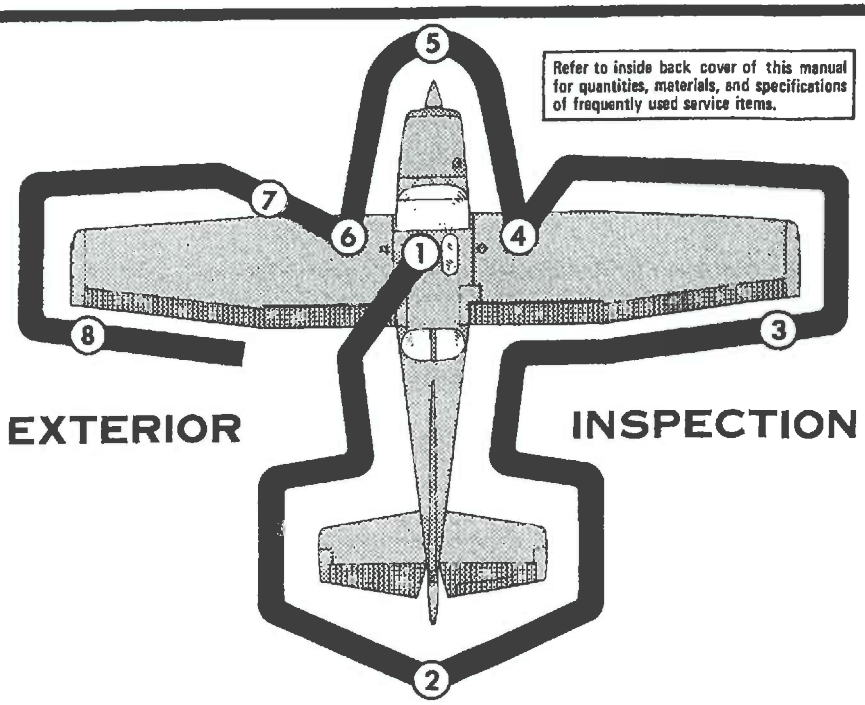
Section I

OPERATING CHECKLIST

One of the first steps in obtaining the utmost performance, service, and flying enjoyment from your Cessna is to familiarize yourself with your aircraft's equipment, systems, and controls. This can best be done by reviewing this equipment while sitting in the aircraft. Those items whose function and operation are not obvious are covered in Section II.

Section I lists, in Pilot's Checklist form, the steps necessary to operate your aircraft efficiently and safely. It is not a checklist in its true form as it is considerably longer, but it does cover briefly all of the points that you should know for a typical flight. A more convenient plastic enclosed checklist, stowed in the map compartment, is available for quickly checking that all important procedures have been performed. Since vigilance for other traffic is so important in crowded terminal areas, it is important that preoccupation with checklists be avoided in flight. Procedures should be carefully memorized and performed from memory. Then the checklist should be quickly scanned to ensure that nothing has been missed.

The flight and operational characteristics of your aircraft are normal in all respects. There are no "unconventional" characteristics or operations that need to be mastered. All controls respond in the normal way within the entire range of operation. All airspeeds mentioned in Sections I, II and III are indicated airspeeds. Corresponding calibrated airspeed may be obtained from the Airspeed Correction Table in Section VI.



Note

Visually check aircraft for general condition during walk-around inspection. In cold weather, remove even small accumulations of frost, ice or snow from wing, tail and control surfaces. Also, make sure that control surfaces contain no internal accumulations of ice or debris. If night flight is planned, check operation of all lights, and make sure a flashlight is available.

(1)
a. Remove control wheel lock.
b. Check ignition switch OFF.
c. Turn on master switch and check fuel quantity indicators; then turn off master switch.
d. Check fuel selector valve handle on BOTH.
e. Check baggage door for security. Lock with key if children are to occupy child's seat.

Figure

(2)
a. Remove rudder gust lock, if installed.
b. Disconnect tail tie-down.
c. Check control surfaces for freedom of movement and security.

(3)
a. Check aileron for freedom of movement and security.

(4)
a. Disconnect wing tie-down.
b. Check main wheel tire for proper inflation.
c. Before first flight of the day and after each refueling, use sampler cup and drain small quantity of fuel from fuel tank sump quick-drain valve to check for water, sediment, and proper fuel grade.
d. Visually check fuel quantity; then check fuel filler cap secure.

(5)
a. Check oil level. Do not operate with less than six quarts. Fill to eight quarts for extended flights.
b. Before first flight of the day and after each refueling, pull out strainer drain knob for about four seconds to clear fuel strainer of possible water and sediment. Check strainer drain closed. If water is observed, the fuel system may contain additional water, and further draining of the system at the strainer, fuel tank sumps, and fuel selector valve drain plug will be necessary.
c. Check propeller and spinner for nicks and security.
d. Check landing light(s) for condition and cleanliness.
e. Check carburetor air filter for restrictions by dust or other foreign matter.
f. Check nose wheel strut and tire for proper inflation.
g. Disconnect tie-down rope.
h. Inspect flight instrument static source opening on side of fuselage for stoppage (left side only).

(6)
a. Check main wheel tire for proper inflation.
b. Before first flight of the day and after each refueling, use sampler cup and drain small quantity of fuel from fuel tank sump quick-drain valve to check for water, sediment, and proper fuel grade.
c. Visually check fuel quantity, then check fuel filler cap secure.

(7)
a. Remove pitot tube cover, if installed, and check pitot tube opening for stoppage.
b. Check fuel tank vent opening for stoppage.
c. Check stall warning vent opening for stoppage.
d. Disconnect wing tie-down.

(8)
a. Check aileron for freedom of movement and security.

1-1.

BEFORE STARTING ENGINE.

(1) Exterior Preflight -- COMPLETE.
(2) Seats, Belts, Shoulder Harnesses -- ADJUST and LOCK.
(3) Fuel Selector Valve -- BOTH.
(4) Radios, Autopilot, Electrical Equipment -- OFF.
(5) Brakes -- TEST and SET.

STARTING ENGINE.

(1) Mixture -- RICH.
(2) Carburetor Heat -- COLD.
(3) Master Switch -- ON.
(4) Prime -- AS REQUIRED (2 to 6 strokes; none if engine is warm).
(5) Throttle -- OPEN 1/8 INCH.
(6) Propeller Area -- CLEAR.
(7) Ignition Switch -- START (release when engine starts).
(8) Oil Pressure -- CHECK.

BEFORE TAKE-OFF.

(1) Parking Brake -- SET.
(2) Cabin Doors and Window -- CLOSED and LOCKED.
(3) Flight Controls -- FREE and CORRECT.
(4) Elevator Trim -- TAKE-OFF.
(5) Fuel Selector Valve -- BOTH.
(6) Mixture -- RICH (below 3000 ft.).
(7) Throttle -- 1700 RPM.
    a. Magnetos -- CHECK (RPM drop should not exceed 125 RPM on either magneto or 50 RPM differential between magnetos).
    b. Carburetor Heat -- CHECK (for RPM drop).
    c. Engine Instruments and Ammeter -- CHECK.
    d. Suction Gage -- CHECK.
(8) Flight Instruments and Radios -- SET.
(9) Optional Autopilot -- OFF.
(10) Throttle Friction Lock -- ADJUST.
(11) Wing Flaps -- UP.

TAKE-OFF.

NORMAL TAKE-OFF.

(1) Wing Flaps -- UP.
(2) Carburetor Heat -- COLD.
(3) Throttle -- FULL.
(4) Elevator Control -- LIFT NOSE WHEEL (at 60 MPH).
(5) Climb Speed -- 75 to 85 MPH.

MAXIMUM PERFORMANCE TAKE-OFF.

(1) Wing Flaps -- UP.
(2) Carburetor Heat -- COLD.
(3) Brakes -- APPLY.
(4) Throttle -- FULL.
(5) Brakes -- RELEASE.
(6) Airplane Attitude -- SLIGHTLY TAIL LOW.
(7) Climb Speed -- 68 MPH (until all obstacles are cleared).

ENROUTE CLIMB.

(1) Airspeed -- 80 to 90 MPH.

NOTE

If a maximum performance climb is necessary, use speeds shown in the Maximum Rate-Of-Climb Data chart in Section VI.

(2) Throttle -- FULL.
(3) Mixture -- FULL RICH (mixture may be leaned above 3000 feet).

CRUISE.

(1) Power -- 2200 to 2700 RPM (no more than 75%).
(2) Elevator Trim -- ADJUST.
(3) Mixture -- LEAN.

LET-DOWN.

(1) Mixture -- RICH.
(2) Power -- AS DESIRED.
(3) Carburetor Heat -- AS REQUIRED (to prevent carburetor icing).

BEFORE LANDING.

(1) Fuel Selector Valve -- BOTH.
(2) Mixture -- RICH.
(3) Carburetor Heat -- ON (apply full heat before closing throttle).
(4) Airspeed -- 70 - 80 MPH (flaps UP).
(5) Wing Flaps -- AS DESIRED.
(6) Airspeed -- 65 - 75 MPH (flaps DOWN).

BALKED LANDING.

(1) Throttle -- FULL.
(2) Carburetor Heat -- COLD.
(3) Wing Flaps -- 20°.
(4) Airspeed -- 65 MPH.
(5) Wing Flaps -- RETRACT (slowly).

NORMAL LANDING.

(1) Touchdown -- MAIN WHEELS FIRST.
(2) Landing Roll -- LOWER NOSE WHEEL GENTLY.
(3) Braking -- MINIMUM REQUIRED.

AFTER LANDING.

(1) Wing Flaps -- UP.
(2) Carburetor Heat -- COLD.

SECURING AIRCRAFT.

(1) Parking Brake -- SET.
(2) Radios, Electrical Equipment, Autopilot -- OFF.
(3) Mixture -- IDLE CUT-OFF (pulled full out).
(4) Ignition Switch -- OFF.
(5) Master Switch -- OFF.
(6) Control Lock -- INSTALL.

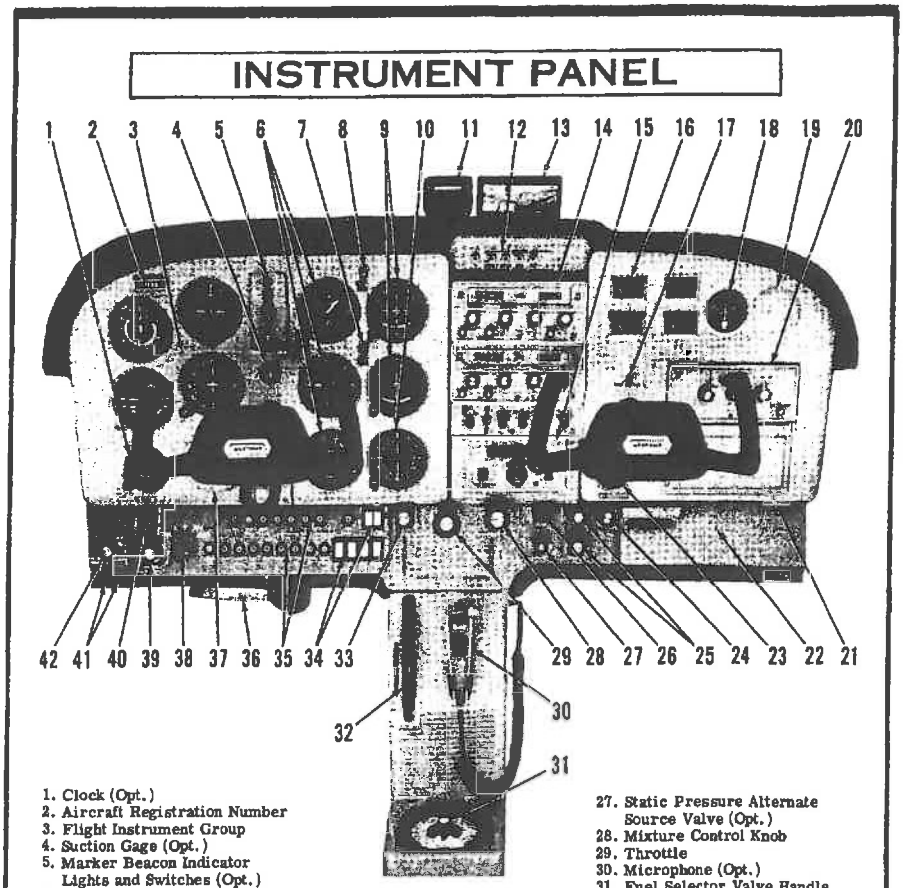

INSTRUMENT PANEL
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
42 41 40 39 38 37 36 35 34 33
29 28 27 26 25 24 23 22 21
30
32
31
1. Clock (Opt.)
2. Aircraft Registration Number
3. Flight Instrument Group
4. Suction Gage (Opt.)
5. Marker Beacon Indicator Lights and Switches (Opt.)
6. Altimeter, Vertical Speed Indicator (Opt.) and Tachometer
7. No. 2 LOC Reversed Indicator Light (Opt.)
8. No. 1 LOC Reversed Indicator Light (Opt.)
9. Omni Course Indicators (Opt.)
10. ADF Bearing Indicator (Opt.)
11. Magnetic Compass
12. Radio Selector Switches (Opt.)
13. Rear View Mirror (Opt.)
14. Radios and Transponder (Opt.)
15. Autopilot Control Unit (Opt.)
16. Fuel and Oil Gages
17. Over-Voltage Warning Light
18. Ammeter
19. Optional Instrument Space
20. ADF (Opt.)
21. Optional Radio Space
22. Map Compartment
23. Wing Flap Position Indicator
24. Cigar Lighter
25. Cabin Air/Heat Control Knobs
26. Wing Flap Switch
27. Static Pressure Alternate Source Valve (Opt.)
28. Mixture Control Knob
29. Throttle
30. Microphone (Opt.)
31. Fuel Selector Valve Handle
32. Elevator Trim Control Wheel
33. Carburetor Heat Control Knob
34. Electrical Switches
35. Circuit Breakers
36. Parking Brake Handle
37. Optional Instrument Space
38. Ignition Switch
39. Instrument and Radio Dial Light Rheostats
40. Master Switch
41. Auxiliary Mike and Phone Jacks (Opt.)
42. Primer

Figure 2-1.