

CESSNA 170 N3813V CUSTOM CHECKLISTS

PREFLIGHT:

1. Control lock -- REMOVE.
2. Flaps -- 40°.
3. Windscreen -- CHECK CLEAN.
4. Fuel gauges -- NOTE LEVELS.
5. Headsets / Devices -- SET UP.
6. AROW docs -- ON BOARD.
7. Hobbs Time -- RECORD; CHECK SQUAWKS & MX.
8. Ignition switch -- OFF.
9. Master switch -- ON.
10. Turn coordinator -- LISTEN FOR NORMAL SPIN-UP.
11. Beacon / Lights -- CHECK AS APPROPRIATE.
12. Stall warning horn -- CHECK.
13. Master switch -- OFF.
14. Fuel cup, dipstick, oil rag -- GRAB.

Tail:

15. Fuselage left side-- CHECK.
16. Horizontal & vertical stabilizers -- CHECK.
17. Tail tie-down -- DISCONNECT.
18. Elevator -- CHECK.
19. Trim Tab -- CHECK.
20. Rudder -- CHECK.
21. Symmetry of aircraft -- CHECK.
22. Fuselage right side -- CHECK.

Right Wing:

23. Right flap & pushrod -- CHECK.
24. Right aileron & pushrod -- CHECK.
25. Wing tip -- CHECK.
26. Leading edge -- CHECK.
27. Wing tie-down -- DISCONNECT.
28. Wing strut -- CHECK.
29. Tire -- CHECK TREAD & INFLATION.
30. Wheel -- CHECK WHEEL LUGS & AXLE NUT.
31. Brake -- CHECK PAD THICKNESS & BRAKE LINES.
32. Fuel sump -- CHECK SAMPLE.
33. Right fuel tank level -- CHECK AGREES WITH GAUGE.
34. Upper wing surface -- CHECK.
35. Fuel cap -- SECURE.
36. Tire -- CHECK TREAD & INFLATION.
37. Wheel Lugs -- CHECK.

Nose:

38. Gascolator -- CHECK SAMPLE.
39. Oleo strut & shimmy damper -- CHECK.
40. Carburetor air filter -- CHECK.
41. Engine air inlets -- CHECK.
42. Propeller & spinner -- CHECK.
43. Crankshaft bearing end play -- CHECK.
44. Cowling -- CHECK.
45. Oil level -- CHECK. (Add 1 qt. @ 5.5 qts.)
46. Engine mounts -- CHECK.
47. Loose wires & hoses -- CHECK.
48. Exhaust leaks & major oil leaks -- CHECK.
49. Oil dipstick, filler cap, & access door -- SECURE.
50. Static port -- CHECK.

Left Wing:

51. Left fuel tank level -- CHECK AGREES WITH GAUGE.
52. Upper wing surface -- CHECK.
53. Fuel cap -- SECURE.
54. Fuel sump -- DRAIN SAMPLE.
55. Tire -- CHECK TREAD & INFLATION.
56. Wheel -- CHECK WHEEL LUGS & AXLE NUT.
57. Brake -- CHECK PAD THICKNESS & BRAKE LINES.
58. Wing tie-down -- DISCONNECT.
59. Wing strut -- CHECK.
60. Pitot tube -- CHECK.
61. Fuel vent tube -- CHECK.
62. Leading edge -- CHECK.
63. Wing tip -- CHECK.
64. Left aileron & pushrod -- CHECK.
65. Left flap & pushrod -- CHECK.

Big Picture:

66. Check prop blast, tie-downs, chocks, fuel caps, access doors, tow bar, etc.

PASSENGER BRIEFING:

1. **Seats:** seat locks, seat belts
2. **Air:** smoking, vents, windows, heater
3. **Fire:** extinguisher briefing, fuel valve, master switch
4. **Emergency:** egress, ELT, radio
5. **Talking:** ask first before touching, intercom / PTT operation, volume
6. **Your questions:** notify if uncomfortable

STARTING ENGINE:

1. Seats -- ADJUSTED & LOCKED.
2. Seat belts -- FASTENED.
3. Fuel selector -- BOTH.
4. Flaps -- 0°.
5. Flight controls -- FREE & CORRECT.
6. Circuit breakers -- CHECK.
7. Beacon -- ON.
8. Landing light & nav lights -- OFF.
9. Avionics switch -- OFF.
10. Master switch -- ON.
11. Alternator switch -- ON.
12. Carb heat -- OFF.
13. Mixture -- RICH.
14. Throttle -- OPEN 1/4 inch.
15. Prime -- 0 - 3 SHOTS.
16. Primer -- IN & LOCKED.
17. Prop area -- "CLEAR".
18. Ignition switch -- BOTH.
19. Starter handle -- PULL. (max 10 seconds)
20. Throttle -- SET TO 800 - 1000 RPM.
21. Oil pressure -- CHECK. (shut down if no pressure within 30 sec)
22. Mixture -- LEAN FOR TAXI
23. Avionics switch -- ON
24. Attitude indicator -- PRESS KNOB
25. (if night flight) Cockpit lights, nav lights, landing light -- ON.
26. Brakes -- TEST.

BEFORE TAKEOFF (CIGAR check):

1. Flight controls -- QUICK CHECK.
2. Doors & windows -- CLOSED & LATCHED.
3. Loose items -- SECURED.
4. Flight instruments -- CHECK & SET.
5. Comm radios -- SET.
6. Navigation equipment -- SET.
7. Transponder -- "ALT", SET SQUAWK.
8. Fuel selector -- BOTH.
9. Primer -- IN & LOCKED.
10. Mixture -- BEST POWER. (lean if density altitude > 5000')
11. Trim -- SET TO TAKE-OFF.
12. Flaps -- 0°. (20° if soft field)
13. Brakes -- HOLD.
14. Throttle -- SET TO 1600 RPM.
15. Magnetos -- CHECK (75 RPM max drop).
16. Carb heat -- ON, CHECK DROP.

17. Oil pressure -- CHECK.
18. Oil temperature -- CHECK.
19. Ammeter -- CHECK.
20. Fuel gauges -- CHECK.
21. Fuel pressure -- CHECK.
22. Throttle -- IDLE CHECK.
23. Carb heat -- OFF.
24. (if night flight) Landing light, nav lights -- ON.

TAKEOFF:

1. Throttle -- 2 SECONDS TO FULL POWER.
2. Oil pressure -- CHECK.
3. Rotate -- 40 MPH.
4. Elevator -- HOLD CLIMB ATTITUDE (56 mph Vx, 75 mph Vy)
5. Flaps -- 0°. (when obstacles cleared)

LANDING:

1. (if night flight) Landing light, nav lights -- ON.
2. Carb heat -- ON.
3. Mixture -- BEST POWER. (lean if density altitude > 5000')
4. Fuel selector -- BOTH.
5. Seat belts -- TIGHTEN.
6. Airspeed -- 70 MPH. (60 MPH short/soft, 75 MPH if no flaps)

GO-AROUND:

1. Throttle -- SMOOTHLY OPEN TO FULL POWER.
2. Carb heat -- OFF.
3. Elevator -- PUSH TO MAINTAIN LEVEL ATTITUDE.
4. Flaps -- GRADUALLY RETRACT, MAINTAIN 56 MPH.

AFTER LANDING:

1. Flaps -- 0°.
2. Carb heat -- OFF.
3. Trim -- SET TO TAKEOFF.

SHUTTING DOWN ENGINE:

1. Avionics switch -- OFF.
2. Cockpit lights, nav lights, landing light -- OFF.
3. Ignition switch -- CHECK GROUNDING.
4. Mixture -- IDLE CUT-OFF.
5. Propeller rotation -- CHECK STOPPED.
6. Ignition switch -- OFF (key placed on dash).
7. Master switch -- OFF.

EMERGENCY (C-170 N3813V)

INFLIGHT FIRE:

1. Nature of fire -- DETERMINE ENGINE / ELECTRICAL.
2. Master switch -- OFF.
3. Ignition switch -- OFF.
4. Mixture -- IDLE CUT-OFF.
5. Fuel selector -- OFF.
6. Ignition switch -- OFF.
7. Carb heat -- ON.
8. Throttle -- FULL OPEN.
9. Cabin heat -- OFF.
10. Cabin air vents -- OPEN. (keep windows closed)
11. Airspeed -- DIVE INTO YELLOW ARC TO EXTINGUISH FLAMES.

EMERGENCY DESCENT:

1. Power -- IDLE / OFF.
2. Airspeed -- 90 MPH.
3. Flaps -- 30°.
4. Best field -- STEEP 45° SPIRAL OVER.
5. Emergency Landing Checklist -- EXECUTE (SEE BOTTOM)

ENGINE FAILURE IN FLIGHT:

1. Airspeed -- 70 MPH.
2. Best field -- TURN TOWARD, CONSIDERING WIND.
3. Carb heat -- ON.
4. Fuel Selector -- TRY BOTH, L, R.
5. Mixture -- TRY FULL RICH, PARTIAL LEAN.
6. Ignition switch -- TRY BOTH, L, R.
7. Throttle -- TRY PUMPING REPEATEDLY.
8. (if time) Communications -- 7700, 121.5.
9. Emergency Landing Checklist -- EXECUTE (SEE BOTTOM)

EMERGENCY LANDING:

1. Airspeed -- 70 MPH, Flaps -- 0°.
2. Approach direction -- UPHILL / INTO HEADWIND
3. Seat belts -- TIGHTEN.
4. Doors -- OPEN.
5. Forward padding -- PREPARE.
6. **(when field is assured)** Airspeed -- 60 MPH, Flaps -- 30°.
7. Fuel selector -- OFF.
8. Mixture -- IDLE CUT-OFF.
9. Master switch -- OFF.
10. Ignition switch -- OFF.

V-SPEEDS @ 2200 lbs. (Cessna 170 MGW)

V _{SO} :	55 MPH
V _{S1} :	59 MPH
V _X :	56 MPH (increases by 1 mph per 2,000'
D.A.)	
V _Y :	75 MPH (decreases by 1 mph per 2,000'
D.A.)	
V _{BG} :	70 MPH
V _{REF} :	70 MPH (75 MPH flaps up)
V _A :	110 MPH (decreases with lower weight)
V _{FE} :	90 MPH
V _{NO} :	140 MPH
V _{NE} :	160 MPH

FUEL PLANNING:

Total fuel capacity: 37.5 gal (25.0 right, 12.5 left)
Total usable fuel: 33.0 gal (22.0 right, 11.0 left)
Total usable fuel minus ½ hour reserve: 28.3 gal
Fuel consumption @ 75% Cruise: 9.4 gph
Max airtime with full tanks: (28.3÷9.4) 3.0 hrs