



NOTE: This is a Flight School Guide Only
Check the aircraft POH for specific details

C172S (**G1000**) Checklists

PREFLIGHT INSPECTION

CABIN

1. Pitot Tube Cover -- REMOVE/CHECK
2. Pilot's Operating Handbook -- AVAILABLE IN THE AIRPLANE
3. Garmin G1000 Cockpit Reference Guide -- ACCESSIBLE
4. Airplane Weight and Balance -- CHECKED
5. Parking Brake -- SET AS APPROPRIATE
6. Control Wheel Lock -- REMOVE
7. Ignition Switch -- OFF
8. Avionics Master Switch (BUS 1 and BUS 2) -- OFF
9. Master Switch -- ON
10. Primary Flight Display (PFD) - CHECK (Verify PFD is ON)
11. FUEL QTY (L and R) - CHECK
12. LOW FUEL L and LOW FUEL R Annunciators - CHECK (Verify annunciators are not shown on PFD)

13. OIL PRESSURE Annunciator - CHECK (Verify annunciator is shown)
14. LOW VACUUM Annunciator - CHECK (Verify annunciator is shown)
15. AVIONICS Switch (BUS 1) - ON
16. Forward Avionics Fan - CHECK (Verify fan is heard)
17. AVIONICS Switch (BUS 1) - OFF
18. AVIONICS Switch (BUS 2) - ON
19. Aft Avionics Fan - CHECK (Verify fan is heard)
20. AVIONICS Switch (BUS 2) - OFF
21. Static Pressure Alternate Source Valve -- TEST/OFF
22. Fuel Selector Valve -- BOTH
23. Fuel Shutoff Valve -- ON (Push Full In)
24. Flaps -- EXTEND
25. Pitot Heat -- ON/CHECK
26. Exterior Lights -- CHECK
27. Pitot Heat -- OFF
28. Exterior Lights -- OFF
29. LOW VOLTS Annunciator - CHECK (Verify annunciator is shown)
30. Master Switch -- OFF
31. Elevator Trim -- SET for takeoff
32. Baggage Door -- CHECK
33. Autopilot Static Source Opening -- CHECK
34. Fire Extinguisher -- CHECK

EMPENAGE

1. Autopilot Static Source - CHECK
2. Tail Tie-Down -- DISCONNECT
3. Control Surfaces -- CHECK
4. Trim Tab -- CHECK
5. Antennas -- CHECK

RIGHT WING

1. Fuel Tank Sump Quick Drain Valves (5) -- DRAIN/CHECK
2. Aileron -- CHECK
3. Flap -- CHECK
4. Wing Tie-Down -- DISCONNECT
5. Main Wheel Tire -- CHECK INFLATION/CONDITION
6. Fuel Quantity -- CHECK VISUALLY
7. Fuel Filler Cap -- CHECK VENT/SECURE CAP

NOSE

1. Fuel Quick Drain Valves (3) -- DRAIN/CHECK
2. Engine Oil Dipstick/Filler Cap -- CHECK/SECURE
(ADD OIL WHEN LEVEL AT 5 QTS)
3. Engine Cooling Air Inlets -- CLEAR
4. Propeller and Spinner -- CHECK
5. Air Filter -- CHECK
6. Nose Wheel Strut and Tire -- CHECK
7. Static Source Opening -- CHECK

LEFT WING

1. Fuel Quantity -- CHECK VISUALLY
2. Fuel Filler Cap -- CHECK VENT/SECURE CAP
3. Fuel Tank Sump Quick Drain Valves (5) -- DRAIN/CHECK
4. Main Wheel Tire -- CHECK
5. Fuel Tank Vent Opening -- CHECK
6. Stall Warning Opening -- CHECK
7. Wing Tie-Down -- DISCONNECT
8. Landing/Taxi Light(s) -- CHECK
9. Aileron-- CHECK
10. Flap -- CHECK

BEFORE STARTING ENGINE

1. Preflight Inspection -- COMPLETE
2. Passenger Briefing -- COMPLETE (S.A.F.E.T.Y.)
3. Seats and Seat Belts -- ADJUST and LOCK
4. Brakes -- TEST and SET
5. Circuit Breakers -- CHECK IN
6. Electrical Equipment -- OFF
7. Avionics Master Switch BUS 1 & 2 -- OFF
8. Fuel Selector Valve -- BOTH
9. Fuel Shutoff Valve -- ON

STARTING ENGINE

1. Throttle -- OPEN 1/4 INCH
2. Mixture -- IDLE CUTOFF
3. STBY BATT Switch - TEST - (Hold for 10 seconds, verify that green TEST lamp does not go off)
4. STBY BATT Switch - ARM (Verify that PFD comes on)
5. Engine Indicating System - CHECK PARAMETERS (Verify no red X's through ENGINE page indicators)
6. BUS E Volts - CHECK (Verify 24 VOLTS minimum shown)
7. M BUS Volts - CHECK (Verify 1.5 VOLTS or less shown)
8. BATT S Amps - CHECK (Verify discharge shown (negative))
9. STBY BATT Annunciator - CHECK (Verify annunciator is shown)
10. Propeller Area -- CLEAR
11. Master Switch (ALT and BAT) - ON
12. Flashing Beacon -- ON

NOTE: IF ENGINE IS WARM, OMIT STEPS 13-15

13. FUEL PUMP Switch -- ON
14. Mixture -- SET to FULL RICH. Wait until fuel flow is indicated (usually 3 to 5 seconds), then set to IDLE CUTOFF (full aft) position.
15. FUEL PUMP Switch -- OFF
16. MAGNETOS Switch -- START (release when engine starts)
17. Mixture Control -- ADVANCE SMOOTHLY
18. Oil Pressure -- CHECK (green arc within 30 sec)
19. AMPS (M BATT and BATT S) -- CHECK charge (positive)
20. LOW VOLTS Annunciator -- CHECK (Verify annunciator not shown)
21. Lights -- ON as required
22. AVIONICS Switch (BUS 1 and BUS 2) -- ON
23. Flaps -- RETRACT

BEFORE TAKEOFF

1. Brakes -- SET/HELD
2. Passenger Seat Backs -- MOST UPRIGHT POSITION
3. Seats and Seat Belts -- CHECK SECURE
4. Cabin Doors -- CLOSED and LOCKED
5. Flight Controls -- FREE and CORRECT
6. Flight Instruments (PFD) -- CHECK and SET (no red X's)
7. Altimeters (PFD, Standby Alt, KAP 140 Autopilot) -- SET
8. G1000 ALT SEL -- SET (if desired)
9. KAP 140 Altitude Preselect -- SET (if desired)
10. Standby Flight Instruments -- CHECK
11. Fuel Quantity -- CHECK (verify level is correct)
12. Mixture Control -- RICHEN
13. Fuel Selector Valve -- RECHECK BOTH
14. Manual Electric Trim -- CHECK OPERATION
15. Throttle -- 1800 RPM

16. Mixture -- SET FOR ALTITUDE
17. Magnetos -- CHECK (RPM drop should not exceed 150 RPM on either magneto or 50 RPM differential between magnetos)
18. VAC Indicator -- CHECK
19. Engine Instruments -- CHECK
20. Ammeters and Voltmeters -- CHECK
21. Annunciators -- CHECK (Verify none shown)
22. Throttle -- CHECK IDLE
23. Throttle -- 1000 RPM
24. Throttle Friction Lock -- ADJUST
25. Lights -- AS DESIRED FOR TAKEOFF
26. Radios (COM/NAV) -- SET
27. FMS/GPS Flight Plan -- AS DESIRED
28. XPDR -- SET
29. CDI Softkey -- SELECT NAV source
30. Autopilot -- OFF
31. Elevator Trim -- SET for takeoff
32. Wing Flaps -- SET for takeoff (0°-10°)
33. Cabin Windows - CLOSED and LOCKED
34. Lights -- AS REQUIRED
35. Brakes -- RELEASE

TAKEOFF

NORMAL TAKEOFF

1. Wing Flaps -- 0°-10°
2. Throttle -- FULL OPEN
3. Mixture -- SET FOR ALTITUDE
4. Elevator Control -- LIFT NOSE WHEEL (at 55 KIAS)
5. Climb Speed -- 70-80 KIAS
6. Wing Flaps -- RETRACT WHEN SAFE

SHORT FIELD TAKEOFF

1. Wing Flaps -- 10°
2. Brakes -- APPLY
3. Throttle -- FULL OPEN
4. Mixture -- SET FOR ALTITUDE
5. Brakes -- RELEASE
6. Elevator Control-- SLIGHTLY TAIL LOW
7. Climb Speed -- 56 KIAS (until all obstacles are cleared)
8. Wing Flaps -- RETRACT slowly after reaching 60 KIAS

ENROUTE CLIMB

1. Airspeed -- 70-85 KIAS
2. Throttle -- FULL OPEN
3. Mixture -- SET FOR ALTITUDE

CRUISE

1. Power -- 2100-2700 RPM (No more than 75% power)
2. Elevator Trim -- ADJUST
3. Mixture -- LEAN
4. FMS/GPS -- REVIEW and BRIEF OBS/SUSP softkey op for holding

DESCENT

1. Power -- AS DESIRED
2. Mixture -- ADJUST for smooth operation
3. Altimeters PFD, Standby Altimeter, KAP 140 -- SET
4. G1000 ALT SEL -- SET
5. KAP 140 Altitude Preselect -- SET
6. CDI Softkey -- SELECT NAV source

7. FMS/GPS -- REVIEW and BRIEF OBS/SUSP softkey operation for holding pattern
8. FUEL SELECTOR Valve -- BOTH
9. Wing Flaps -- AS DESIRED (0° - 10° below 110 KIAS, 10° - 30° below 85 KIAS)

BEFORE LANDING

1. Pilot and Passenger Seat Backs -- MOST UPRIGHT POSITION
2. Seats and Seat Belts -- SECURED and LOCKED
3. Fuel Selector Valve -- BOTH
4. Mixture -- SET FOR ALTITUDE
5. Landing/Taxi Lights -- ON
6. Autopilot (if installed) -- OFF

NORMAL LANDING

1. Airspeed -- 65-75 KIAS (flaps UP)
2. Wing Flaps -- AS DESIRED
3. Airspeed -- 60-70 KIAS (flaps DOWN)
4. Elevator Trim Control -- ADJUST
5. Touchdown -- MAIN WHEELS FIRST
6. Landing Roll -- LOWER NOSE WHEEL GENTLY
7. Braking -- MINIMUM REQUIRED

SHORT FIELD LANDING

1. Airspeed -- 65-75 KIAS (flaps UP)
2. Wing Flaps -- FULL DOWN (30°)
3. Airspeed -- 61 KIAS (until flare)
4. Elevator Trim Control -- ADJUST
5. Power -- REDUCE to idle after clearing obstacle
6. Touchdown -- MAIN WHEELS FIRST

7. Flaps -- RETRACT FULLY
8. Brakes -- APPLY HEAVILY

BALKED LANDING

1. Throttle -- FULL OPEN
2. Wing Flaps -- RETRACT TO 20°
3. Climb Speed -- 60 KIAS
4. Wing Flaps -- 10° (until obstacles are cleared)
5. Wing Flaps -- RETRACT (after reaching a safe altitude and 65 KIAS)

AFTER LANDING

1. Wing Flaps -- UP
2. Mixture -- LEAN FOR TAXI

SECURING AIRPLANE / SHUTDOWN

1. Throttle -- 1000 RPM
2. Electrical Equipment -- OFF
3. Transponder - 1200
4. Avionics BUS 1 and BUS 2 -- OFF
5. Mixture -- IDLE CUTOFF (pulled full out)
6. MAGNETOS Switch -- OFF
7. Master Switch (ALT and BAT) -- OFF
8. STBT BATT Switch -- OFF (after recording tach time)
9. Control Lock/Pitot Tube Cover -- INSTALL