

Civil Air Patrol

Cessna-182T Nav III – N574CA

Preflight Cabin

1. **AIF Front Cover.....Inspect for Airworthiness**
2. POH Accessible to Pilot.
3. Garmin G1000™ Cockpit Reference Guide Accessible to Pilot.
4. Weight & Balance Checked.
5. Parking Brake Set.
6. Control Wheel Lock Remove.

WARNING

When the master switch is on, using an external power source, or manually rotating the propeller, treat the propeller as if the magnetos switch were on. Do not stand, nor allow anyone else to stand, within the arc of the propeller since a loose or broken wire, or a component malfunction could cause the engine to start.

7. MAGNETOS Switch.....Off.
8. AVN Switch (BUS 1&2)Off.
9. Beacon.....On.
10. MASTER Switch (ALT &BAT) ..On.
11. Flaps..... as Required.
12. Primary Flt DisplayVerify On.
13. Check FUEL QTY (L&R) Hobbs & Tach Check.
14. LOW FUEL L & R AnnunciatorsVerify Off.
15. Fuel Selector.....Both. Reset fuel totalizer
16. OIL PRESS Annunciator Verify On.
17. LOW VOLTS AnnunciatorOn.
18. LOW VACUUM Annunciator....On.
19. AVIONICS Switch (BUS 1)On.
20. Forward Avionics Fan..... Check Audibly for Operation.
21. AVIONICS Switch (BUS 1)Off.
22. AVIONICS Switch (BUS 2)On.
23. Aft Avionics Fan..... Check Audibly for Operation.

24. Check MFD for correct AIC type and Jeppesen expiration dates then press enter.
25. AVIONICS Switch (BUS 2) Off.
26. PITOT HEAT Switch..... On/Check.
27. Stall Warning System Check.
28. PITOT HEAT Switch..... Off.
29. LIGHTS, Nav, Strobes, Landing, Taxi, Pulse.....Check
30. MASTER Switch (ALT & BAT). Off.
31. Trim ControlsTakeoff position.
32. FUEL SELECTOR Valve Both.
33. ALT STATIC AIR Valve Off.
34. Fire Extinguisher..... Verify green.

Preflight Empennage

1. Baggage Compartment Door UnlockedCHECK latched
2. Rudder Gust LockRemove.
3. Tail Tie-DownDisconnect.
4. Control SurfacesCheck.
5. Trim Tab..... Check for security.
6. Antennas Check.

Preflight Right Wing trailing edge

1. Aileron Check.
2. Flap Check.

Preflight Right Wing

1. Wing Tie Down.....Disconnect.
2. Wing Tank Vent Opening..... Check.
3. Main Wheel Tire Check...42psi.
4. Fuel Tank Quick Drain Valves.Drain
5 Drains per wing
5. Fuel Quantity Check Visually.
6. Fuel Filler CapSecure and Vent Unobstructed.

Nose

1. Static Source Opening Check.
2. Fuel Strainer Quick Drain.....Drain.
- 3 Belly drains**
3. Engine Oil Dipstick ... Check oil level and secure. (4 qt min., 9 qt for extended flights) **Operate between 7 & 8 qts**
4. Engine Cooling Outlets.....Clear.
5. Propeller & Spinner Check.
6. Air Filter Check.
7. Nose wheel Strut and Tire.... Check.
8. Pressure.....49psi.

9. Static Source Opening Check.

Preflight Left Wing

1. Wing Tie-down.....Disconnect.
2. Pitot Tube Cover .. Remove. Check for blockage.
3. Left Fuel QuantityVisually Check.
4. Fuel Filler Cap Secure & Vent unobstructed.
5. Fuel Tank Quick Drain Valves.Drain.
5 Drains per wing
6. Main Wheel Tire ... Check.....42psi.

Preflight Left Wing Leading Edge

1. Fuel Tank Vent Opening ..Check for blockage.
2. Stall Warning OpeningCheck for blockage.
3. Landing/Taxi light(s) Check.

Preflight Left Wing Trailing Edge

1. Left Aileron Check.
2. Left Flap Check.

PASSENGER BRIEF

1. Seat Belts / Shoulder Harness
2. Personal Electronic Devices off
3. Air Vents / Comfort
4. Fire Extinguisher Location / Operation
5. Emergency Procedures & Exits

MISSION BRIEF

1. Mission Objective
2. Destination, WX, Route, Alt, ETE
3. NOTAMS
4. Crew Coordination & CRM
5. Sterile Cockpit Procedures
6. Cockpit Layout
7. Intercom & Radio Usage
8. Seats, Seatbelts, Doors
9. Emergency Action & Equipment

Before Starting Engine

1. Preflight Inspection.....Complete.
2. Passenger Brief.....Complete.
3. Seats / Belts / Shoulder Harness Adjust and lock, check initial reel (front & rear).
4. Brakes Test & Set.
5. Circuit Breakers.....Check In.
6. Electrical Equipment..... Off.

7. Avionics Switch (Bus 1&2)Off

8. Cowl Flaps..... Open.

Starting Engine (Using Battery)

1. Beacon Light SwitchOn
2. Throttle Control..... Open ¼ Inch.
3. Propeller Control.....High RPM.
4. Mixture ControlIdle Cut Off.
5. Stby Batt Switch..... Test (Hold for 10 seconds, verify that green test lamp does not go out), then ARM (verify that PFD comes on).
6. Engine Indicating SystemCheck parameters, (verify no red X's through ENGINE page indicators).
7. Bus E VoltsVerify 24 volts min.
8. M Bus Volts..... Verify 0 volts.
9. Batt S Amps Verify Discharge (neg).
10. Stby Batt Annunciator Verify On.
11. Propeller Area Clear.
12. Master Switch (Alt and Bat)..... On.
Note

If engine is warm, omit priming procedure of steps 13, 14 and 15 below.

13. Fuel Pump Switch On.
14. Mixture Control..... Advance to Full Rich, wait until fuel flow indication is stable, then return to idle cut off position.
15. Fuel Pump Switch Off
16. Magnetos SwitchStart.
17. Mixture Control..Advance to full rich when engine starts.

Note

If the engine floods, place the mixture control in the Idle Cut Off position, open the throttle control ½ to full, and engage the starter motor (Start). When the engine starts, advance the mixture control to the Full Rich position and retard the throttle control promptly.

18. Oil PressureCheck.
19. Amps (M Batt & S Batt).....Check charge (positive).
20. Low Volts Annunciator ... Verify Off.
21. Nav Lights Switch..... On as req.
22. Avionics Switch (Bus1&2) On.
23. MFD.....Press ENT
24. ATIS / AWOS.....Copy
25. Flaps UP

Taxi

1. Mixture Control.....Lean as required.
2. Brakes.....Test.
3. Heat / Vents / Defrost..As Required.
4. Attitude Indicator Verify Proper Ops.
5. Turn Coordinator..... Verify Ops.
6. H.I. & Compass.. Verify Proper Ops.
7. Fuel Selector Valve Both.

Before Takeoff - Run-Up

1. Parking Brake Set.
2. Passenger Seat Backs...Most upright position.
3. Seats and Seat Belts..Check Secure.
4. Cabin DoorsClosed and Locked.
5. Flight Controls..... Free & Correct.
6. Flight Instruments..Check no red Xs.
7. Altimeter:
 - PFD (Baro)..... Set.
 - Standby Altimeter..... Set.
8. G1000 Alt Sel..... Set.
9. Standby Flight Instruments .. Check.
10. Fuel Quantity Check.

Note

Flight is not recommended when both fuel quantity indicators are in the yellow arc range..

11. Fuel Selector Valve..Recheck Both.
12. Manual Electric Trim (MET) Check.
13. Autopilot.....ENGAGE
14. Flight Controls.....Verify AP can be overpowered both Pitch\Roll
15. AP Trim DISC Button....PRESS (verify autopilot disengages and aural alert is heard).
16. Flight Director (FD).....OFF
17. Elevator & Rudder Trim..... Set for Take Off.
18. **Mixture control Rich**
Throttle Control1800 RPM.

- Magnetos Switch. Check (RPM drop 175 or 50 differential between magnetos.)
- Prop Control..Cycle from high to low RPM, return to high RPM (full in).
- VAC Indicators Check.

- Engine Indicators Check.
 - Ammeters & Voltmeters..Check.
19. Annunciators..... Check none illuminated.
 20. Throttle Control..... Check Idle.
 21. Throttle Control.1000 RPM or less.
 22. Throttle Friction Lock..... Adjust.
 23. Com Frequency(s)..... Set.
 24. Nav Frequency(s) Set.
 25. FMS/GPS Flight Plan...As Desired.

Check GPS 2 avail. on Aux page,3

26. XPDR..... Set.
 27. CDI Softkey..... Select NAV source.
- Caution (See Full Caution in POH)**
The G1000 HSI does not provide a warning "Flags". The missing D-Bar is considered to be the warning flag.

WARNING
(See Full Warning in POH)
Interruption of NAV signal to the autopilot will cause autopilot to revert to ROL mode with NO warning chime or PFD

28. CABIN POWER12V Switch....OFF
29. Wing Flaps..0°-20° (10° preferred).
30. Cowl FlapsOpen.
31. Cabin Windows.. Closed & Locked.
32. Strobe Lights Switch....as required
33. Brakes Release.

Takeoff

1. Flaps0°-20° (10° preferred).
2. Throttle ControlFull.
3. Propeller Control 2400 RPM.
4. Mixture Control.....Full Rich, above 5000 ft. alt., lean for max. RPM.
5. Rotate..... 50-60 KIAS.
6. Normal Climb Speed 80 KIAS.
 - Short Field T.O..... 20° Flaps / 58 KIAS Until Clear.
 - Soft Field T.O. 20° Flaps / Ground Effect ASAP.
7. Wing Flaps Retract at safe altitude.

Normal Climb

1. Airspeed 85-95 KIAS.

2. Throttle23 Inches or Full (If less than 23 in. Hg.).
3. Propeller Control..... 2400 RPM.
4. Mixture.....15 GPH or Full Rich (If less than 15 GPH).
5. Fuel SelectorBoth.
6. Cowl Flaps..... Open as required.

Cruise

1. Power . 15-23 In. & 2000-2400 RPM (no more than 80%).
2. Elevator & Rudder Trim..... Adjust.
3. Mixture..... Lean.
4. Cowl Flaps.... Closed or as required.
5. FMS/GPS..Review & Brief.

Descent

1. PowerAs Desired.
2. Mixture.....Enrich as required.
3. Cowl Flaps.....Closed.
4. Altimeters:
 - PDF (Baro)Set.
 - Standby AltimeterSet.
5. G1000 Alt SelSet..
6. CDI Soft key ...Select NAV source.
7. FMS/GPS Review & Brief.

See Caution in Before Takeoff Run-up.

8. Fuel Selector valveBoth.
9. Wing Flaps.....As Desired.

Before Landing

1. Pilot and Passenger Seat Backs ... Most Upright Position.
2. Seats & Seat Belts..Secured & Lock.
3. Fuel SelectorBoth.
4. Mixture ControlRich.
5. Propeller Control.....High RPM.
6. Landing & Taxi Light Switches On.
7. Autopilot..... Off.

Normal Landing

1. Airspeed ...70-80 KIAS (Flaps Up).
2. Wing Flaps As Desired.
3. Airspeed . 60-70 KIAS (Full Flaps).
4. Trim Adjust.
5. TouchdownMain Wheel First.
6. Landing Roll.... Lower Nose wheel.
7. Braking As Required.

Balked Landing

1. Power .. Full Throttle & 2400 RPM.

2. Wing Flaps.....Retract to 20°.
3. Climb Speed55 KIAS.
4. Flaps.....Retract Slowly (above 70 KIAS).
5. Cowl Flaps..... Open.

After Landing (Clear of Runway)

1. Wing Flaps..... Up.
2. Cowl Flaps Open.
3. LightsAs Required.
4. Transponder ..GND/STBY & 1200.
5. MixtureLean.
6. Pitot Heat Off.

Securing Aircraft

1. Parking Brake Set.
2. Throttle Control Idle.
3. Electrical Equipment..... Off.
4. Avionics Switch (Bus 1&2)..... Off.
5. Mixture Idle Cut Off.
6. Magneto & Master Switch..... Off.
7. Stby Batt Switch..... Off.
8. Control Lock Install.
9. Parking Brake Off.
10. Cowl Flaps Closed.
11. Fuel Selector Left or Right.
12. Aircraft..... Secured & Locked.
13. Flight Plan Closed.

This checklist is a guide to coordinate Pilot Operating Handbook and STC data applicable to this particular aircraft only. The applicable Pilot Operating Handbook and STC installations remain the official documentation for this aircraft.

The pilot in command is responsible for complying with all items in the Pilot Operating Handbook and applicable STCs.

I certify this checklist has been reviewed for accuracy.

Michael J Mueller, 2 February 2010

Wisconsin Wing Director of Maintenance
Date