

Civil Air Patrol

Cessna 172P (Air Plains 180HP)

CVD: 13 Jul 30 May 22 (GPS)

Preflight Cabin

1. AIF.....Review for Airworthiness
2. POH.....Available to Pilot
3. GPS Cockpit Ref Guide..... Available to Pilot
4. Documents..... AROW in airplane
5. Parking Brake Set
6. Hobbs & Tach Record
7. Fire Extinguisher Charged & Secure
8. Control/Avionics Lock Remove
9. Ignition Switch Off
10. Avionics Power Switch Off
11. Master Switch (ALT and BAT)...On

Warning

When turning on the master switch, using an external power source, or pulling the propeller through by hand, treat the propeller as if the ignition 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 propeller to rotate.

12. Wing Flaps..... 30°
13. Fuel Quantity (L&R)..... Check
14. Low Vac Warning Light...Check On
15. Avionics Power Switch.....On
16. Check Avionics Fan.....for Audible Noise
17. Avionics Power Switch.....Off
18. Pitot Heat...Remove Cover & Check
19. Lights Check
20. Master Switch (Alt & BAT).....Off
21. Static Pressure Alternate Source Valve (if installed) Off
22. Fuel Selector Valve Both

Preflight Empennage

1. Baggage Door Check Secured
2. Rudder Gust Lock Remove
3. Tail Tie-Down Disconnect
4. Control Surfaces Check

Preflight Right Wing trailing edge

1. Right Flap Check
2. Right Aileron Check

Preflight Right Wing

1. Right Wingtip & Light..... Check
2. Wing Tie Down Disconnect
3. Right Main Wheel Tire & Brake Check
4. Right Wheel Chock..... Remove
5. Right Fuel Sump Drain
6. Right Fuel Quantity . Visually Check
7. Fuel Filler Cap Secure, vent unobstructed

Nose

1. Engine Oil Dipstick/Filler Cap..... Check oil level (5-8 Quarts) and secure.
2. Fuel Strainer Drain Knob.... Pullout to Drain
3. Alternator Belt.....Check Condition
4. Prop & Spinner..... Check
5. Engine Cooling Air Inlets.....Clear
6. Landing Lights (if in nose).....Check
7. Carburetor Air Filter..... Check
8. Nose Wheel, Strut & Tire Check
9. Towbar & Chocks.....Removed and Stowed
10. Nose Tie-Down Disconnect
11. Static Source Check (Left side)
12. Windscreen.....Check/Clean

Preflight Left Wing

1. Left Main Wheel Tire & Brake Check
2. Left Wheel Chock.....Remove
3. Left Fuel Sump Drain
4. Left Fuel Quantity Visually Check
5. Fuel Filler Cap Secure

Preflight Left Wing Leading Edge

1. Pitot Tube Cover Confirm Removed
2. Left Fuel Vent..... Check Clear

3. Stall Warning Check clear, then check warning horn by applying suction through a clean handkerchief over the vent hole.
4. Wing Tie-Down Disconnect
5. Landing & Left Wingtip & Lights Check

Preflight Left Wing Trailing Edge

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

Before Starting Engine

1. Preflight Inspection Complete

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
2. Passenger Brief Complete
 3. Sterile Cockpit.....Comply
 4. Seats / Belts / Shoulder Harness Adjust and Lock
 5. Brakes.....Test and Set
 6. Avionics Power Switch Off

Caution

The avionics power switch must be OFF during engine start to prevent possible damage to avionics.

7. Electrical Equipment..... Off
8. Circuit Breakers Check In
9. Autopilot (If Installed).....Off
10. Fuel Selector Valve..... Both

Starting Engine

1. Prime .. As Required (2 to 6 strokes; none if engine is warm)
2. Carburetor Heat.....Cold
3. Throttle Open 1/8 Inch

4. Mixture Rich
5. Flashing Beacon & Nav Lights ... On
6. Propeller Area Clear
7. Master Switch On
8. Ignition Switch..... Start
9. Throttle.....800 to 1000 RPM
10. Oil Pressure Check
11. Starter Check Disengaged
12. Avionics Power Switch..... On
13. Radios On
14. PFD/MFD/GPS..... On (if installed)
15. Taxi Lights As Required
16. Flaps Up
17. ATIS / AWOS Copy
18. Altimeter (PFD & STDBY)..... Set (Verify Within 75' of Field Elevation)
19. PFD/MFD & GPS...Check LRUs (if installed)
20. ClnC Del/Gnd Control Contact
21. Transponder.... Code/Flight ID/ALT

Taxi

1. Brakes..... Test
2. Heat / Vents / Defrost .. As Required
3. Attitude Indicator.....Verify Proper Operation
4. Turn CoordinatorVerify Proper Operation
5. H.I. & Compass.....Verify Proper Operation

Before Takeoff - Run-Up

1. Parking Brake Set
2. Seats / Belts / Shoulder Harness Check Secure
3. Cabin Doors & Windows.....Closed and Locked
4. Flight Controls..... Free & Correct
5. Flight Instruments & H.I. Check
6. PFD/MFD/GPS Set (if installed)
7. Fuel Quantity Check
8. Mixture Rich
9. Fuel Selector Valve .. Recheck Both
10. Elevator & Rudder Trim Set for Takeoff
11. Throttle 1700 RPM
12. Magnetos.....Max Drop 125 RPM & Max 50 RPM differential
13. Carb Heat..... Check for RPM Drop
14. Suction Gauge Check
15. Engine Inst & Ammeter Check
16. Throttle Idle Check, then 800 to 1000 RPM
17. Throttle Friction Lock Adjust

18. Strobe Lights/Pulse Lights
(If installed)As Desired
19. Radios.....Set
20. Transponder Code/ALT
21. Autopilot (If Installed).....Off
22. Flaps set for Takeoff..... 0°-10°
23. Primer In & Locked
24. Carb Heat Cold
25. Takeoff Briefing Complete
26. Doors & Windows Latched
27. Lights Set
28. Time..... Record
29. Parking Brake Release

Takeoff

1. Flaps 0°-10°
2. Carb Heat..... Cold
3. Throttle Full Open
4. Mixture Full Rich or Max Power
5. Engine Instruments In Green
6. Rotate..... 55 KIAS
7. Climb Speed..... 75 to 85 KIAS
 - Short Field T.O.10° Flaps / 57 KIAS Until Clear
 - Soft Field T.O..... 10° Flaps / Ground Effect ASAP
8. Wing Flaps..Retract (above 70 KIAS)

Enroute Climb

1. Airspeed 75 - 85 KIAS Normal
- Note: If a maximum performance climb is necessary, use speeds shown in the Rate of Climb chart in POH Section 5.
2. Throttle Full Open
 3. Fuel Selector Valve Both
 4. Mixture Full Rich or Max RPM
 5. Engine Instruments Check

Cruise

1. Power . 2100-2700 RPM (no more than 75% is recommended)
2. Elevator & Rudder Trim Adjust
3. Mixture Lean
4. Engine Instruments / Fuel Check
5. Heading Indicator.....Check
6. Lights.....As Required
7. Flight Plan Activate as Required

Descent

1. Heading Indicator.....Check
2. AltimeterSet
3. Fuel Selector ValveBoth
4. Lights..... As Required
5. Engine InstrumentsCheck
6. Mixture.....Adjust for Smooth Operation (full rich for idle power)
7. Carb Heat... Full Heat as Required

Before Landing

1. Seat, Seat Belts, Shoulder Harness Secure
2. Fuel Selector Valve Both
3. Mixture..... Rich
4. Carb Heat.... On (Apply Full Heat Before Closing Throttle)
5. Autopilot (If installed).....Off
6. Airspeed ...65-75 KIAS (Flaps Up)
7. Wing Flaps . As Desired (Below 85 KIAS)(Maximum Flap Travel is 30°)
8. Airspeed60-70 KIAS (Flaps Dn)
9. Trim Adjust
- 10.Touchdown..... Main Wheel First
11. Landing Roll .. Lower Nose Wheel Gently
12. Braking Minimum required

Short Field Landing

1. Airspeed ...65-75 KIAS (Flaps Up)
2. Wing Flaps ... 30° (below 85 KIAS)
3. Airspeed ...Maintain 62 KIAS (Until Flare)
4. Trim Adjust
5. Power.....Reduce to idle after clearing obstacle
6. Touchdown..... Main Wheels First
7. Brakes Apply Heavily
8. Wing Flaps Retract

Balked Landing

1. Throttle Full Open
2. Carb Heat.....Cold
3. Wing Flaps20° (Immediately)
4. Climb Speed.....60 KIAS
5. Wing Flaps ... 10° (Until Obstacles are Cleared)
6. Wing Flaps....Retract (After reaching a safe altitude and 65 KIAS)

After Landing (Clear of Runway)

1. Wing Flaps..... Up
2. Carb Heat Cold
3. Lights As Required
4. MixtureLean
5. Pitot Heat..... Off

Securing Aircraft

1. Parking Brake Set
2. Transponder 1200/Flight ID
3. ELT (121.5)... Confirm Not Activated
4. Throttle Idle
5. Avionics Power & Switches Off
6. Magnetos..... Check for Ground
7. Mixture Idle Cut Off
8. Sterile Cockpit.....Terminate
9. Ignition Switch.....Off
10. Master Switch (ALT & BAT).... Off
11. Control/Avionics Lock Install
12. Parking Brake Off
13. Fuel Selector Valve.. Left or Right
14. Pitot Tube Cover..Install when cool.
15. Hobbs & Tach Record
16. Aircraft..... Secured & Locked
17. Flight Plan Closed

V Speeds and Specs

- X-Wind (Max Demo'd) 15 Knots
- Vr Rotation Speed55 KIAS
- Vx Best Angle Climb.....62 KIAS
- Vy Best Rate Climb 73 KIAS
- Vso Stall w/ Flaps40 KIAS
- Vs1 Stall w/o Flaps.....50 KIAS
- Best Glide (2550 Lbs).....68 KIAS
- Va Max Abrupt Ctrl (2550 Lbs)..105 KIAS
- Va Max Abrupt Ctrl (2150 Lbs).. 95 KIAS
- Va Max Abrupt Ctrl (1750 Lbs)... 85 KIAS
- Vno Max Structural Cruise ..127 KIAS
- Vne Never Exceed158 KIAS
- Vfe 10°-Full Flaps.....85 KIAS
- Max Window Open Speed.158 KIAS

V Speeds and Specs are based on sea level. Consult the Air Plains Services, Corp. FAA Approved Airplane Flight Manual Supplement for V speed and Specs for operations above sea level.

General...

- EMERGENCY..... 121.50
- Unicom..... 122.70-122.80-122.95 123.00-123.05
- Multicom 122.90
- Flight Service..... 122.20 (Most Common) 122.10-122.60-123.60
- Air to Air 122.75-122.85-123.45

Transponder Codes

- 1200 VFR
- 7500HIJACK
- 7600 LOST COMMS
- 7700 EMERGENCY

Aircraft Information

- Gross Weight Capacity 2550 (Takeoff) 2550 (Landing)
- Engine..... Lycoming O-360-A4M
- Max Power 180 BHP
- Max Engine Speed 2700 RPM
- Max Continuous2700 RPM
- Fuel Type..... 100LL (Blue)
- Fuel Capacity (Standard)...40 Gal Usable
- Fuel Capacity (Long Range)..50 Gal Usable
- Fuel Capacity (Integral)...62 Gal Usable
- Oil TypeAviation Grade
- Oil Capacity 8 Qts (Minimum 5)
- Electrical24 - 28 Volt / 60 Amp
- Tire Pressure: Nose-45 PSI / Main-38 PSI

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.