

Cross Country Aircraft Prep and Spares for Extended Cross Country Operations

Keep in phone/computer for reference.

This is a pilot reminder of preflight aircraft preparation for an extended off station operation.

Extended cross country planning begins with an aircraft inspection:

Reference annual inspection checklist: CFC Annual Condition Inspection and Functional Check Flight (FCF) Test Checklist.

General: Review log books and ensure time until next inspection will not fall during the planned cross country hours or calendar inspections. It is best to perform an annual condition inspection or a 25 hour inspection prior to an extended cross country.

Week prior to departure:

Review aircraft logs and perform a 25 hour check.

Review tool kit and spares.

Review phone stored engine and airframe manuals for currency.

Review Cross Country Planning Aid

Fly a pilot proficiency flight to practice stalls, emergency patterns, and perform an FCF flight test to ensure all systems are operating.

Post flight inspection to check for runs, drips and tire wear.

Day prior to departure:

Recheck tires, fuel, oil and coolant.

Secure tool kits and tie downs. Bring extra oil and coolant.

Aircraft storage particular to N12AY and CFC built aircraft:

One quart of oil under pilots seat. Pint containers are normally all that is needed. Sport +4 is scarce.

One quart of coolant under pax seat. Pint is normally all that is needed. Easy to get.

Tool bag in pax side gear frame. 10 pound kit in yellow bag.

If tie downs are in question:

Two each tie down ropes or ratchet straps under pax outboard seat.

Two each screw type tie downs if needed under pilots outboard seat.

External plug in for battery, 1 inch poly fuel line for fuel nozzle, ¼ inch fuel line to clear sight gauge.

Baggage bay net.

Tool kit inventory:

Combination Wrenches US and Metric. 5/8, 9/16, ½, 3/8, 11/32, 5/16, ¼, 8,9,10,12,14,19

Allen wrenches US/Metric especially 4 (for carbs)

Torx bit, Three screw drivers, side cutters, needle nose, pliers, Pin Puller.

Jewelers screw drivers. Close quarter ratchet screw driver.

Sockets ¼ and 3/8 inch set with plug socket.

Spark plug gapper

Spares:

Two fuel filters, Two spark plugs, zip ties, spare screw kit of known screws on pants and airframe.

25 Hour inspection Mini:

Clean Aircraft if dirty.

General Fuselage and Engine

- Remove cowl.
- Inspect propeller for nicks and electrical brushes
- Inspect for leaks.
- Run engine and perform mag check.
- Oil Change and filter.
- Inspect coolant and overflow bottle is ½ full.
- Battery fully charged.
- Open wheel pants and inspect brake for leaks, pad wear, disk, tire for wear and inflation, wheel pant for cracks/damage, bearings not rotating and not leaking. Check park brake if installed and reservoir level.
- Check shimmy dampener on nose clean and moves OK, nose wheel bearings secure not rotating.
- Tailplane security and pins.
- Rudder hinges and horn.
- Belly fuel tank inspection plates open and check for leaks.
- Fuel filters clean or replace.

Wing Group:

- Pitot and static tips secure (carry a spare tip or have a fix).
- Flaps and aileron hinges and attachment area for cracks.
- Fairings secure over flap hinges.
- Wing tip lights secure and operating.

Prep for flight:

- Button up aircraft, secure pants and cowl.
- Engine start and warm up.
- Taxi test, check com/nav and instrumentation, engine runup and prop cycle.
- Takeoff, climb, air work.
- Pattern entry, normal, no flap, min roll landing.

Flight Test to be collected at a minimum should include:

Static runup propeller and engine conditions.

Engine ground cooling time and temps at takeoff.

Record takeoff roll

Takeoff and climbout engine data

Time to Climb data

Cruise temps and conditions

Approach to stall feel and warning.

Stall and slow flight handling in both landing and clean configuration.

Propeller and engine performance during full power climb during simulated go around.

Pattern handling at normal downwind, final turn and landing approach at altitude to determine control feel and safety margins.

Descent and approach to landing.

Landing characteristics.

Roll out and braking conditions.

Post flight check for runs drips errors.

- Pull cowl top
- Check for leaks
- Check tires
- Post flight rest of aircraft.