FREDA Checks (every 15 minutes)

- ▷ FUEL: Correct tank, sufficient fuel
- ▷ RADIO: Frequency. Contact with ATC ?
- ▷ ENGINE: Carb Heat On, check Ts & Ps, Carb Heat Off
- ▷ DIRECTION: Check heading & Altitude
- ▷ AIRFRAME: Trim. Check QNH set

Emergencies (121.5 MHz)

Engine failure

- ▷ Trim for glide 65 knots.
- ▷ Change to other fuel tank
- ▷ Check Mags on, Mixture control pushed in.
- ▷ Pick a field.
- ▷ Fuel selector to OFF, Mag switch off.
- ▷ Radio call if you have time.
- ▷ Airspeed 65 knots. Better too fast than too slow
- ▷ Aim for centre of field. Better to run off end of field slowly than undershoot fast.
- ▷ Use brakes hard.

Engine Fire

- ▷ Fuel selector to OFF.
- ▷ Land as soon as possible
- ▷ Sideslip may help keep smoke away from cockpit

Radio failure

- ▷ Check correct frequency set. Check volume.
- ▷ Check connector to battery (behind seat) There is also a fuse at this location, but not intended for changing in flight.
- ▷ If radio can receive but others cannot hear your transmissions, likely cause is radio battery voltage is low (needs recharging). Radio display will flash when voltage low.

G-AWOF

Piper Vagabond PA17 on a LAA Permit to Fly

Checklists

Draft Copy

Operating Speeds

Climb	65 knots
Cruise	90 knots
Best glide	65 knots
Final approach	60 knots
Stall	40 knots
VNE (do not exceed)	109 knots
Max in turbulent air	85 knots

Before first flight of the day:

- ▷ Turn fuel selector in cockpit to Main Tank.
- ▷ Check Fuel at drain tap under cowling.

Before every flight:

- ▷ Walk Round: No damage or distortion of fabric covering (no “wrinkles”).
- ▷ Control surfaces secure.
- ▷ Tyre creep marks aligned.
- ▷ Tail surfaces rigid. Bracing wires tight.
- ▷ Tailwheel secure
- ▷ Pitot tube clear (located under port wing)
- ▷ Propellor undamaged
- ▷ Air Filter secure. Exhaust outlet secure.
- ▷ Open the top cowling on passenger side, check engine oil level. Ideally at 4 Qts mark.
- ▷ Check fuel in wing tank using fuel dipstick.
- ▷ Both fuel cap vents clear, and facing forward.

Cockpit

- ▷ No loose objects in cockpit.
  Fire Extinguisher behind seat secure.
  First Aid kit in luggage bag behind seat.
- ▷ Instruments undamaged
- ▷ Fuel sufficient for flight (allow 20L per hour)
  Main Tank holds 12 US Gals (45L)
  Wing Tank holds 18 US Gals (60L)
- ▷ Sort out Headsets, charts, etc at this stage.
- ▷ Radio Check (to ensure battery is OK)

Prepare to start engine

- ▷ Fuel selector switched to Main Tank.
- ▷ Mixture full rich (pressed in)
- ▷ Aircraft held secure
  (eg. Chocks, or person standing at tail.)
- ▷ Prime engine by pumping throttle approx 5 times. (fuel may just start to drip from under carb) (If engine is HOT do not prime).
- ▷ Throttle Closed (pulled out), friction tight.
- ▷ Mag Switch OFF, place key on top of instrument panel, visible from outside.

ANY TIME YOU TOUCH THE PROPELLOR, ASSUME THE ENGINE WILL START -- so be cautious, but not timid

- ▷ Turn engine over 4 blades (to suck fuel into cylinders).

Start Engine

- ▷ **Double check the following**:
  Throttle closed (pulled OUT). Friction tight.
  Aircraft secure (chocks/assistant in place)
- ▷ Mag Switch to both.
- ▷ Check area around prop is clear
- ▷ Swing prop to start engine -- assume it will start EVERY TIME YOU MOVE the propellor.

  If it doesn’t start within half a dozen swings, maybe needs further priming.. After doing this, always follow the START ENGINE checks.

After engine start

- ▷ Check oil pressure rising within 30 seconds
- ▷ Set idle at 800 rpm for first minute, then can set to normal idle of 1200 rpm.
- ▷ Radio ON. Intercom ON.
  Oil Temp Gauge ON

- ▷

Taxy

Keep stick back (unless strong wind from rear, in which case have stick forward). Taxy slowly.
Use CARB HEAT frequently while taxying.

Pre-Take Off

- ▷ Passenger briefed. Check door and seatbelts.
- ▷ Instruments. Compass reading OK, Altimeter.
- ▷ Fuel selector to Main Tank
- ▷ Set engine to 2000 rpm. Check Ts & Ps
- ▷ Mags check, Expect 75 rpm drop on each.
- ▷ Carb Heat check. Expect 200 rpm drop.
- ▷ Check idle 500 rpm.
- ▷ CONTROLS full and free movement.
- ▷ Trim Tab set neutral (observe tailplane)
- ▷ Reset engine to 1200 rpm

Ready for Departure

- ▷ Carb Heat check, then set Carb Heat OFF
- ▷ Full throttle power check, at least 2400 rpm

Take Off

- ▷ Use full throttle. Expect 2500 rpm
- ▷ Should be off the ground at 55 knots. If not then pull stick back anyway as the trim tab is probably set wrong.

Cruise

- ▷ ASI in the green, RPM in the green
- ▷ Altimeter has QNH set
- ▷ Elevator trim for level flight
- ▷ Fuel selector to AUX (Wing) Tank if required.

Downwind to land

- ▷ Fuel selector to Main Tank
- ▷ Carb Heat ON
- ▷ Check seat belts, door secure.
- ▷ Altimeter set to QFE
- ▷ Airspeed 70 knots (approx)
- ▷ Carb Heat OFF

Approach & Landing

- ▷ Kick rudder left and right to remind you that this is not a Cessna and you do need to use the rudder!!! Feet off the brakes.
- ▷ Airspeed 65 to 60 knots.
- ▷ Sideslip to lose height if required. (Left wing down)
- ▷ Use rudder to ensure a/c touches down straight and keep it straight until walking pace.

Switching off

- ▷ Throttle closed.
- ▷ Pull Mixture control out to stop engine.
- ▷ Switch Mags OFF.
- ▷ Fuel selector to OFF
- ▷ Radio OFF, Intercom OFF.