Passenger Briefing

- Position and use of ELT, first aid kit & axe if applicable
- Seat and seat belt operation
- Canopy close & release operation
- Use of radio & headset, push to talk microphone
- Request assistance with lookout
- Keep clear of controls
- Warn of propeller danger – always exit to read of wing
- Advise lifejacket use if applicable

Prior to engine start

- Preflight inspection complete
- Passenger brief complete
- Towed to start position – clear of stones
- Secure all loose articles
- Seats adjusted and locked
- Seat belts and shoulder harnesses on, secure & tight
- Brakes – test toe pressure & park

Starting Engine

Start Check 1 : Top to Middle

- Canopy at least half closed
- Compass not leaking, compass card valid
- Instrument panel lights – dim
- Lights off except strobe
- Fuse holders secure
- Radio & transponder off
- Turn Coordinator – red flag showing

Start Check 2 : Right to Middle

- Cabin air and cabin heat all off/closed
- Circuit breakers all in
- Brakes parked

Start Check 3 : Top to Middle

- Fuel shut-off valve in
- Carburettor heat off
- Battery switch on – check charge light on and ammeter shows discharge
- Turn Coordinator – no red flag
- Fuel pump on – check pressure
- Flaps up & verify visually
- Mixture – full & free movement, set full rich
- Throttle – full & free movement
    - cold engine – pump 4-5 times set 10mm open
    - warm engine – pump once set closed
- Magnetos on – BOTH
- Check all clear – engage starter until engine fires

After Start Check

- Throttle – set 1200 RPM
- Oil pressure – check rising within 30seconds
- Alternator switch – ON. Ammeter in green range, charge light OFF
- Fuel pump OFF, check pressure
- Magnetos dead-cut check:
    - LEFT RIGHT & return to BOTH
- Radio ON
    - check 121.5 for ELT activation
    - set to 118.0 for NZNE
    - call “North Shore Base TZ-, radio check”
- Transponder set to standby, set discreet code for aircraft or alocated VFR cross country code. Use 1200 for aerodrome area, 1400 for outside aerodrome area.

Taxi Check

- Commence taxi, close throttle & check brakes
- Radio call “North Shore traffic TZ- taxiing holding position runway ...”
- Taxi at a slow speed (fast walk)
- Do not use power against brakes

Run-Up Checks

- Check engine running at least 4 minutes
- Park into wind, nose wheel straight, set brakes
- Check oil pressure, oil temperature, and ammeter – all in green range
- Increase RPM to 1800, ensure brakes holding
- Check Ts & Ps:
  - oil pressure
  - oil temperature
  - ammeter
- Check carb heat produces RPM drop
  - min 20 max 200
- Check magnetos produce RPM drop
  - BOTH – LEFT – BOTH – RIGHT – BOTH
  - maximum 175 drop per mag, 50 differential
- Smoothly close throttle and check idle RPM
  - 600-650 RPM
- Set RPM to 1200
- Taxi into holding position

Pre Take-Off Checks (DVA's : Direct and Vital Actions)
TMP FF IHC TR

- **T**rim set for take-off
- **M**ixture rich, carb heat cold
- **P**ropeller pitch – fixed for R2120U
- **F**uel shut off ON, pump ON, check pressure
  check contents sufficient for flight
- **F**laps 10˚ selected & check visually
- **I**nstruments correct & set, left to right
  ASI to Radio, TC to Transponder, Suction to cabin heat
  Magnetos BOTH, Battery, Alternator
- **H**atches and Harnesses secure, secure loose articles
- **C**ontrols – full & free movement
- **T**ake-off brief
  - **Engine failure on runway** : close throttle, keep straight, brake to a stop
  - **Engine failure after take-off** : lower the nose, carb heat ON, fuel pump ON, glide attitude & TRIM, select landing field into wind, flap as required, FMI, Mayday call, full flap, secure aircraft, secure engine, master OFF
- **T**raffic – all clear on runway & final approach

Radio Call : lining up

Line-up Checks
RTLWDR

- **R**unway clear, tyres to tyres
- **T**ransponder – ALT
- **L**ights on : Landing/Nav lights
- **W**indsock check, aileron into wind
- **D**I aligned with compass & runway direction
- **R**adio call "North Shore Traffic TZ- rolling runway ..."

After Takeoff Checks (clear of obstacles, 200’ AGL)

- Fuel pump off
- Check airspeed >=65 knots, flaps UP
- Check T’s & P’s
- Set normal climb attitude – 75 knots
- Check climbing out straight