

## **BEFORE STARTING ENGINE:**

Seats, seat belts and shoulder harness - Adjust and lock

- (1) Fuel selector valve on BOTH
- (2) Brakes - Test and set
- (3) Radios and electrical equipment - OFF

## **STARTING ENGINE:**

Mixture - RICH (Pushed all the way - IN)

- (1) Carburetor heat - COLD (Pushed all the way - IN)
- (2) Primer – 4-6 strokes required (None if engine is warm)
- (3) Throttle - Open 1/8" and adjust throttle friction lock
- (4) Propeller area - CLEAR
- (5) Master switch - ON
- (6) Ignition switch - START
- (7) Oil pressure - Check for green
- (8) Avionics: (Turn BUS breaker ON)
  - a. Transponder – Automatic (should squawk 1200 VFR).
  - b. All radios - ON
  - c. Beacons - ON
  - d. Fuse panel - Check
- (9) Flaps - UP
- (10) Test Brakes when movement begins

## **BEFORE TAKE-OFF:**

Flight controls - Check

- (1) Fuel selector valve - BOTH
- (2) Elevator trim control wheel - in TAKE-OFF position
- (3) Throttle - 1700 rpm
- (4) Engine instruments and ammeter - Check
- (5) Suction gauge - 4.6 to 5.4 inches of mercury
- (6) Magnetos - Check (RPM drop should not exceed 125 RPM on either magneto, or 50 RPM differential between magnetos)
- (7) Carburetor heat - Check for slight RPM reduction
- (8) Throttle - 1000 RPM
- (9) Flight instruments and radios - SET Transponder - ALT encode – code 1200 for VFR not in controlled airspace. Note: Garmin 327 transponder is automatic start when powered on.
- (10) Autopilot or wing leveler - OFF
- (11) Cabin doors and windows - Closed and locked

## **NORMAL TAKE-OFF:**

- (1) Flaps - 0
- (2) Power - Full throttle
- (3) Elevator control - Lift nose wheel at 60 MPH
- (4) Climb speed - 80 MPH (Vy)

## **BEFORE LANDING:**

### **C-GUMPF:**

- C - Carburetor on HOT (pulled all the way OUT)
- G - Gas valve on BOTH
- U - Undercarriage: lower landing gear
- M - Mixture: on RICH (pushed all the way IN)
- P - Power: throttle on 1600 RPM
- F - Flaps: 10

## **SHUTDOWN CHECKLIST:**

- (1) All Electrical OFF - Strobes, Nav. Lights, etc.
- (2) AVIONICS Bus OFF.
- (3) MIXTURE to full LEAN position.
- (4) BATTERY OFF.
- (5) MAGNETOS OFF.
- (6) Wheel Lock.
- (7) Tie Down.

## **EMERGENCY CHECKLIST:**

- (1) **FLY THE AIRPLANE -- BEST GLIDE SPEED 80 MPH.**
- (2) Locate a landing area (into the wind, if possible). Land it like it was a normal landing at New River. Left hand pattern preferred.
- (3) Emergency Frequency 121.5 MHz or ATC. Transponder 7700 (real emergency only).
- (4) Try to figure out why the engine quit (if you have time) - check fuel - change tanks - electrical fuel pump, etc.
- (5) Before touch-down pilot and passengers should crack door and hold open with a coat, etc.