

PASSENGER BRIEFING

- potty break
- avoid propellers
- seatbelt
- door operation
- watch for airplanes
- don't touch controls
- ask questions
- be patient
- don't panic
- tell me if you're queasy

COCKPIT

- AROW docs check on board
- Tach & Hobbs record
- Control lock remove
- Fuel selector BOTH
- Lower fuel sumps drain
- Fire extinguisher charged?
- Gear lever DOWN
- Prop clear
- Master ON
- Gear light check green
- Flaps FULL
- Fuel gauges true
- Exterior lights ON
- Pitot heat ON

OUTSIDE

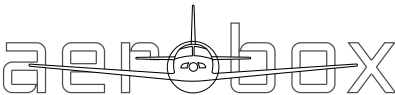
- Pitot heat check
- Stall warning check
- Lights check
- Master OFF

COCKPIT

- Pitot heat OFF
- Exterior lights OFF
- Master OFF

EXTERIOR

- Left sump.....sump
- Left empennage.....inspect
- Control surfaces.....free & correct
- Tail tie-down.....remove
- Right empennage.....inspect
- Wing top surface.....inspect
- Rgt flap & aileron ... free & correct
- Rgt fuel vent clear
- Rgt tip & leading edge.....inspect
- Rgt tie-down.....remove
- Rgt sump sump
- Rgt tank fuel quantity.....verify
- Rgt chock remove
- Rgt tire & brake inspect
- Oil 6-8qt, fill @5.5
- Oil cap installed
- Filter sump sump
- Front tire inspect
- Cowl, prop, spinner inspect
- Hub, governor oil leaks
- Alternator belt inspect
- Air intakes clear
- Left static port clear
- Left tank fuel quantity check
- Pitot tube clear
- Left wing tie-down remove
- Stall warning port check clear
- Left leading edge & tip inspect
- Left fuel vent clear
- Left aileron & flap .. free & correct
- Left wheel & brake inspect
- Left chock remove
- Baggage door.....locked
- Final check looks like airplane



STARTING ENGINE

Seat track & back locked
 Circuit breakers IN
 Avionics OFF
 Cowl flaps OPEN
 Beacon ON
 Clock time RECORD
 Prop full INCREASE
 Throttle FULL
 Brakes ON
 Prop CLEAR
 Master ON
 Fuel pump ON to flow
 Throttle SLIGHT
 Mixture RICH to prime, LEAN
 Mags START
 Mixture richen to taxi
 Oil pressure check
 Lights as required
 Alternator ON

FIRE

Crank continue
 if start 1700 RPM for minutes
 no start throttle open
 mixture, master, mags, fuel OFF

PRE-TAXI

Seat belts secure
 Heat/vent/defrost as required
 Flaps RETRACT
 Avionics ON
 ATIS record
 Transponder VFR
 Altimeter set
 Taxi light as required
 Brakes test
 Taxi clearance obtain
 AI, TC, Compass ... test during taxi

RUN-UP

Brakes.....set
 Doors.....closed & latched
 Fuel selector.....both
 Flight controls.....free & correct
 AI, Altimeter, DG.....set
 Mixture.....rich or lean > 3000'
 Throttle.....1800 RPM
 Mags.....max drop 125, diff 50?
 Prop MP +, RPM -, Oil Pres -
 Ammeter charging
 Voltmeter 13.6+
 Fuel flow off peg
 Oil pressure green
 Oil temp off peg
 Throttle.....idle, then 1000 PRM
 Throttle friction lock.....adjust
 Mixture brutal LEAN

PRE-TAKEOFF

Cowl flaps OPEN
 Flaps 10°
 Prop full INCREASE
 Mixture best power
 (rich below some altitude?)
 HSI to compass (obsolete for 275?)
 Doors closed
 Transponder alt + squawk
 Landing light ON
 Strobes as required
 Brakes release

TAKEOFF

Throttle FULL
 RPM check 2700
 MP ?
 Oil pressure ?
 Rotate 56 kt (64 mph)
 V_Y 82 kt (94 mph)
 Gear UP
 Flaps UP



CLIMB

Airpeed 90-100kt
 Throttle 25" MP
 Prop 2500 RPM
 Mixture 13 GPH
 Cowl Flaps as needed
 Taxi & Landing lights OFF
 Flight plan Open

CRUISE

Throttle wide open
 Prop 2500 RPM
 Mixture 10 GPH, EGT peak
 CHT < 380°F
 Cowl Flaps CLOSE

DESCENT

Throttle MP as required
 Mixture enrich
 Fuel BOTH
 Cowl Flaps CLOSE

APPROACH

Brief.....
 ATIS Altimeter
 Approach Avionics
 Altitude Airspeed
 V_{FE} 130kt (150)
 V_{LE} 122kt (140)
 Instrument approach ... 90kt, 20MP
 Glideslope intercept
 gear DOWN, flaps 10°
 Enter pattern 85kt
 Final 65kt (75)
 Mixture best power
 Fuel BOTH
 Landing light ON
 Seat belts ON
 Prop INCREASE

LANDING

Gear DOWN
 Flaps 30° or as required
 Prop FULL
 Speed 65kt

GUMPFS**GO-AROUND**

Power FULL
 Flaps 10°
 Climb positive rate
 Gear UP
 Flaps UP
 Cowl Flaps OPEN

AFTER LANDING

Flaps UP
 Cowl Flaps OPEN
 Strobes OFF
 Landing light OFF
 Taxi light as required
 Pitot heat OFF
 Trim TAKEOFF
 Transponder STANDBY
 Mixture brutal LEAN

SHUTDOWN

Tach, Hobbs record
 Fuel levels record
 Clock time.....record
 Transponder VFR
 Radio master OFF
 Lights OFF
 Mixture OFF
 Mags OFF
 Master switch both OFF
 Noise cancelation OFF



SECURING

- Avionics OFF
- Mixture LEAN
- Fuel RIGHT
- Interior lights OFF
- Windshield reflector INSTALL
- Control lock INSTALL
- Vents CLOSED
- Pitot cover INSTALL
- Fuel vent covers INSTALL
- Chocks INSTALL
- Canopy cover INSTALL

SAME DAY CHECKLIST

- Control lock remove
- Oil 6qt, fill at 5.5
- If fueled sump three places
- Fuel check levels, caps

SPEEDS

- V_A maneuvering 113kt (130)
- V_G best glide:
 - 2800 lb 74kt (85)
 - 2400 lb 70kt (80)
 - 2000 lb 65kt (75)
- S₀ stall gear + full flaps . . 52kt (60)
- S₁ stall clean 61kt (70)
- V_{FE} 10° 130kt (150)
- V_{FE} 30° 96kt (110)

WEIGHT

- Max gross 2800

SHORT FIELD TAKEOFF

- Flaps 10°
- Brakes apply
- Throttle FULL
- Mixture best power
- Rotation 52kt (60)
- V_x to clear obstacles..... 61kt (70)

SHORT FIELD LANDING

- Flaps 30°
- Approach 61kt (70)

