

Visually check airplane for general condition during walk-around inspection.

In cold weather, remove even small accumulations of frost, ice or snow from wing, tail and control surfaces. Also make sure that control surfaces contain no internal accumulations of ice or debris. Prior to flight, check that pitot heat (if installed) is warm to touch within 30 seconds with battery and pitot heat switches on. If a night flight is planned, check operation of all lights and make sure a flashlight is available.

1 – Cabin

- Documents (AROW) – ON BOARD
- Hobbs & tach – RECORD
- Control wheel lock – REMOVE
- Ignition switch – OFF
- Avionics – OFF
- Master switch – ON
- Fuel quantity – CHECK
- Flaps – DOWN
- Lights & pitot heat – ON & CHECK
- Ammeter – verify NEGATIVE
- Master switch – OFF

2 - Empennage

- Baggage door – CHECK SECURE
- Tail tiedown – REMOVE
- Control surfaces – CHECK

3 – Right Wing Trailing Edge

- Aileron – CHECK MOVEMENT
- Flap – INSPECT
- Inspection covers – SECURE

4- Right Wing

- Wing tiedown – REMOVE
- Main tire – CHECK INFLATION
- Main gear – CHECK BRAKES & LINES
- Wing fuel sump – DRAIN & CHECK for color, sediment & water
- Fuel quantity – CHECK
- Fuel cap – SECURE

5 - Nose

- Oil – CHECK QUANTITY (6-8 qts)
- Oil dipstick – SECURE
- Engine fuel sump – CHECK QUALITY
- Prop & spinner – CHECK
- Engine air inlets - CLEAR
- Air filter – CHECK
- Nose strut & tire – CHECK
- Static source – CHECK CLEAR (but do not touch)

6 – Left Wing

- Wing fuel sump – DRAIN & CHECK
- Fuel quantity – CHECK
- Fuel cap – SECURE
- Main tire – CHECK INFLATION
- Main gear – CHECK BRAKES & LINES

7 – Left Wing Leading Edge

- Pitot cover – REMOVE
- Pitot tube – CLEAR OF DEBRIS
- Fuel tank vent – CHECK
- Stall warning – CHECK
- Wing tiedown - REMOVE

8 – Left Wing Trailing Edge

- Aileron – CHECK MOVEMENT
- Flap – INSPECT
- Inspection covers – SECURE

Operating Data

Engine – Lycoming O-320-E2D
 Horsepower – 150 HP at 2700 RPM
 Battery – 12 volt
 Alternator – 14 volt, 60 amps

Max demonstrated crosswind – 15 kts

Max weight – 2300 pounds

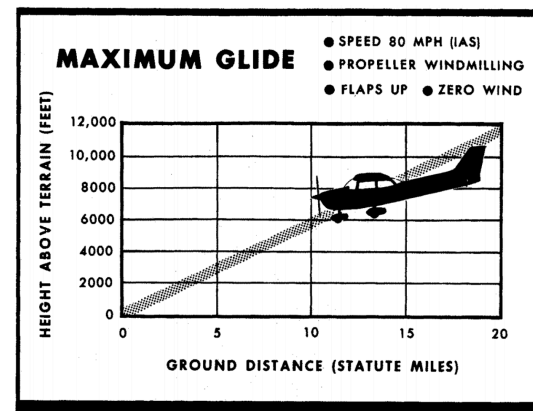
Max baggage weight – 120 pounds

Service ceiling – 13,100 feet

Tire pressure

Nose wheel – 31 PSI on 5.00-5, 4-ply tires

Main wheel – 29 PSI on 6.00-6, 4-ply tires



ENGINE FAILURE (after takeoff)

Airspeed – 75 MPH (65 KIAS) flaps up
70 MPH (60 KIAS) flaps down
Landing site – SELECT
Mixture – IDLE CUTOFF
Fuel selector – OFF
Ignition switch – OFF
Flaps – AS REQUIRED
Master switch – OFF

ENGINE FAILURE / LOSS OF POWER

Airspeed – 80 MPH (70 KIAS)
Landing site – SELECT & FLY TO
Mixture – RICH
Fuel selector – BOTH
Primer – IN & LOCKED
Carb heat – ON
Ignition – BOTH (if prop stops windmilling,
move ignition to START)
** If engine fails to start
Perform Forced Landing checklist

FORCED LANDING

Airspeed V_{BG} – 75 MPH (65 KIAS) flaps up
70 MPH (60 KIAS) flaps down
Mixture – IDLE CUTOFF
Fuel selector – OFF
Ignition switch – OFF
Flaps – AS REQUIRED
Radio call – “MAYDAY, MAYDAY”
Transponder – SQUAWK 7700
Master switch – OFF
Doors – UNLATCH PRIOR TO TOUCHDOWN
Touchdown – SLIGHTLY TAIL LOW
Brakes – APPLY AS NEEDED

ENGINE FIRE (in flight)

Mixture – IDLE CUTOFF
Fuel selector – OFF
Master & Ignition switches – OFF
Cabin heat & air – OFF
Airspeed – 120+ MPH (100+ KIAS)
** Once fire extinguished or landing imminent
Perform Forced Landing checklist

ENGINE FIRE (during start)

Continue cranking engine to attempt start
** If engine starts
Throttle – 1700 RPM for a few minutes, then
shut down and have maintenance inspect
** If engine fails to start
Throttle – FULL OPEN
Mixture – IDLE CUTOFF
Cranking – CONTINUE
Fire extinguisher – OBTAIN
Master switch – OFF
Ignition switch – OFF
Fuel selector – OFF
Fire - EXTINGUISH

ELECTRICAL FIRE

Master switch – OFF
Avionics & electrical switches – ALL OFF
Vents, cabin air & heat – CLOSED
Fire extinguisher – USE AS NEEDED

** If fire appears out
Master switch – ON
Circuit breakers – CHECK FOR FAULT, do not reset
Radios & electrical – ONE AT A TIME, with a delay
between, turn on necessary items to isolate source of fire
Vents, cabin air & heat – OPEN

LOW OIL PRESSURE

Oil temperature – MONITOR
** If oil temp is normal, land at nearest airport

** If oil temperature is rising, engine failure
may be imminent
Throttle – REDUCE
Landing site – SELECT

- Leave engine running at low power during the approach
- Use minimum power to reach touchdown spot

ELECTRICAL MALFUNCTION

(ammeter indicating insufficient or excessive charge)
Avionics switch – OFF
Alternator circuit breaker – CHECK IN
Master/Alt switch – OFF, then ON
Ammeter – CHECK INDICATION
Low-/over-voltage light – CHECK OUT

** If charge is normal on ammeter
Avionics switch – ON
Ammeter – CONTINUE TO MONITOR

** If ammeter shows insufficient rate of charge or
if low-voltage light illuminates again
Alternator switch – OFF
Avionics & electrical – ONLY ESSENTIALS
Land – AS SOON AS PRACTICAL

** If ammeter shows excessive rate of charge or
if over-voltage light illuminates again
Alternator switch – OFF
Alternator circuit breaker – PULL
Avionics & electrical – ONLY ESSENTIALS
Land – AS SOON AS POSSIBLE

- Be prepared for lost communications
- At night, conserve the battery for lights and flaps
during landing by reducing the electrical load

SPIN RECOVERY

Power – IDLE
Ailerons – NEUTRAL
Rudder – FULL OPPOSITE
Elevator – FORWARD TO BREAK STALL
** Once spin stops
Neutralize rudder & recover from dive