

INTERIOR

- Required Documents Check (Arrow)
- Flight Time Log Record Tach Time
- Maintenance Log Note Discrepancies
- Notices Log Review Notices
- Control Lock Remove
- Ignition Switch Off
- Master Switch On
- Fuel Quantity Indicators Check Quantity
- Stall Warning Horn Check
- Lights Int/Ext Off - Day Flight
Int/Ext - Check Night Flight
- Master Switch Off
- Fuel Tank Selector Both
- Cowl Flaps Cycle
- Fire Extinguisher Check
- Windows Check Cleanliness

EXTERIOR

- Left Strut & Brake Assembly Check
- Left Main Tire Check / 42 PSI
- Empennage Left & Antennas Top side Check
- Vertical Stabilizer Check
- Horizontal Stabilizer Check
- Left Elevator Check
- Rudder Check
- Tail Antennas & Lights Check
- Tail Tiedown Remove
- Right Elevator Check
- Trim Tab Secure / Maximum Play 1/4 In.
- Right Horizontal Stabilizer Check
- Vertical Stabilizer Check
- Empennage Right & Antennas Bottom Check
- Top Wing Surface & Antennas Check
- Right Strut & Brake Assembly Check
- Right Main Tire Check / 42 PSI
- Right Wheel Chock Remove
- Right Fuel Sump Sample (Minimum 2)
- Right Flap Check
- Right Aileron Check
- Right Wing Tip Check
- Leading Edge Check
- Right Wing Tiedown Remove
- Static Port & Air Vents Unrestricted
- Right Fuel Tank Check Quantity
- Fuel Filler Cap Secure

- Exhaust Stack No Cracks & Secure
- Engine Cowling Secure
- Spinner Secure
- Propeller Check For Nicks & Secure
- Engine Compartment No Foreign Material
- Carb Air Inlet Check For Restrictions
- Landings & Taxi Lights Check
- Nose Gear Strut Inflated / 2 Inches Minimum
- Nose Gear Strut Wipe Clean
- Nose Gear Scissor Secure
- Nose Gear Tire Check (49 PSI)
- Cowl Flaps Secure
- Oil Level Check 9 Minimum / 12 Maximum Quarts
- Oil Filler Cap Secure
- Engine Fuel Sump Drain 4 Seconds Minimum
- Alternator Belt Tension / Maximum Play 1/2 In.
- Static Ports & Air Vents Unrestricted
- Left Fuel Tank Check Quantity
- Fuel Filler Cap Secure
- Pitot Tube Remove Cover
- Fuel Tank Vent Unrestricted
- Left Wing Tiedown Remove
- Leading Edge Check
- Left Wing tip Check
- Left Aileron Check
- Left Flap Check
- Left Fuel Sump Sample (Minimum 2)
- Baggage Door Closed & Locked
- Left Wheel Chock Remove
- Maintenance Log Enter Discrepancies

BEFORE STARTING ENGINE

- Preflight Inspection Complete
 - Center Of Gravity Within Envelope
 - Density Altitude Computed As Required
 - Seats, Belts, Shoulder Harnesses Adjust and Lock
 - Fuel Selector Valve Both
 - Cowl Flaps Open
 - Circuit Breakers In
 - Brakes Test and Set
 - Master Switch On
 - Radios On
 - Radios Set Frequencies
 - ATIS Monitor If Available
 - Altimeter Set - Note altitude error if field elevation is different than ATIS
- Radios Off

ENGINE START

- Mixture Rich

- Propeller High RPM
- Throttle Open 1/4 Inch
- Carburetor Heat Cold
- Prime As Required (3 Strokes)
- Beacon Light On
- Propeller Area Clear!
- Start Maximum 10 Seconds
- Oil Pressure Check
- RPM 800 To 1000
- Mixture Lean Maximum

AFTER ENGINE START

- Radios On
- Transponder ALT
- Attitude Indicator Set
- Heading Indicator Set
- Airspeed Indicator Check
- Vertical Speed Indicator Check
- Flaps Up
- Lights, Strobes As Required
- Brakes Test After Start Of Rollout

TAXIING

- Lean Mixture
- Magnetic Compass, Turn and Bank Indicator, Heading Indicator Check Proper Movement

BEFORE TAKEOFF

- Cabin Doors & Windows Closed and Locked
- Brakes Set
- Flight Controls Free & Correct
- Flight Instruments Set
- Fuel Selector Both
- Cowl Flaps Open
- Elevator, Rudder Trim Set For Takeoff
- Mixture Rich
- Throttle 1700 RPM
- Magnetos Check - 150 RPM Drop Either Mag.
50 RPM Maximum Differential
- Carburetor Heat Check RPM Drop
- Propeller Cycle
- Engine Instruments & Ammeter Check
- Suction Gage Check
- Throttle 800 to 1000 RPM
- Flaps 0° To 20°
- Seats, Seat belts, Shoulder Harnesses Secure
- Landing Light, Nav Lights On - As Required
- Radios Set
- Transponder On ALT

NORMAL TAKEOFF

- Mixture Full Rich
- Flaps 0° To 20°
- Carburetor Heat Cold
- Power Full Throttle, 2600 RPM
- Rotate 50 KIAS
- Climb Speed 70 KIAS, Flaps 20°
80 KIAS, Flaps UP

SHORT FIELD TAKEOFF

- Flaps 20°
- Carburetor Heat Cold
- Brakes Apply
- Power Full Throttle, 2600 RPM
- Brakes Release
- Elevator Slightly Tail Low
- Climb Speed 57 KIAS Until Clear Of Obstacles
- Wing Flaps Retract Slowly After Reaching 70 KIAS

NORMAL CLIMB/ ENROUTE CLIMB

- Airspeed 90 KIAS
- Power 23 Inches HG & 2450 RPM
- Fuel Selector Both
- Mixture Lean (as required for power, temperature, smoothness)
- Cowl Flaps Open As Required

MAXIMUM PERFORMANCE CLIMB

- Airspeed 80 KIAS At Sea Level To
73 KIAS at 10,000 Feet
- Power Full Throttle, 2600 RPM
- Fuel Selector Both
- Mixture Full Rich Unless Engine Is Rough
- Cowl Flaps Full Open

CRUISE

- Power 65% - Refer to POH Section 5
- Cowl Flaps Closed
- Elevator And Rudder Trim Adjust
- Mixture Lean 75° Rich Of Peak

DESCENT

- Mixture Enrichen As Required
- Power As Desired
- Carburetor Heat As Required To
Prevent Carburetor Icing
- Fuel Selector Both,
- Cowl Flaps Closed
- Wing Flaps 0° to to 10° Below 140 KIAS;

10° To 40° Below 95 KIAS

BEFORE LANDING

- Seats, Seat belts, Shoulder Harnesses Secure
- Fuel Selector Valve Both
- Propeller High RPM
- Cowl Flaps Closed
- Carburetor Heat On (apply full heat before closing throttle)
- Mixture Rich
- Airspeed 70-80 KIAS (flaps up)
- Wing Flaps 0°-40° (below 95 KIAS)
- Airspeed 60-70 KIAS (flaps down)
- Elevator, Rudder Trim Adjust

NORMAL LANDING

- Touchdown Main Wheels First
- Landing Roll Lower Nose Wheel Gently
- Braking Minimum Required

SHORT FIELD LANDING

- Wing Flaps 40° Below 95 KIAS
- Airspeed Maintain 60 KIAS
- Carburetor heat Full - Before Closing Throttle
- Power Reduce To Idle After Clearing Obstacle
- Touchdown Main Gear First
- Brakes Apply Heavily
- Flaps Retract Immediately
- Elevator Full Nose Up
- Brakes Apply Heavily Without Skidding Tires

BALKED LANDING

- Power Full Throttle, 2600 RPM
- Carburetor Heat Cold
- Flaps Retract To 20 Degrees
- Climb Speed 70 KIAS
- Flaps Retract Slowly
- Cowl Flaps Open

AFTER LANDING

- Flaps Retract
- Cowl Flaps Open
- Carburetor Heat Cold
- Mixture Lean Maximum
- Transponder Off
- Non-Essential Radios Off

AIRPLANE SHUTDOWN

- Radio 121.5 MHZ (Monitor)
- Engine RPM Idle

- Magnetos Off Momentarily, Then Return To Both
- Mixture Idle Cutoff
- Ignition Off
- Beacon Light Off
- Master Switch Off
- Control Lock Install
- Flight Time Log Record Tach Time
- Maintenance Log Record Discrepancies

SECURING AIRPLANE

- Window Coverings Install
- Wheel Chocks Install If Available
- Pitot Tube Cover Install As Needed
- Tiedowns Secure
- Propeller Rotate To Horizontal
- Doors and Baggage Compartment Locked