

Preflight Cabin

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|------------------------------------|--------------------|
| 1. Pitot/AoA Cover | Remove |
| 2. AROW (+Supplements) | Check |
| 3. Parking Brake | Set if Not Chocked |
| 4. Control Wheel Lock | Remove |
| 5. Fuel Selector Valve | Both |
| 6. Fuel Shutoff Valve | On (Full In) |
| 7. Elevator Trim | SET for Takeoff |
| 8. Alternate Static & Air Source | Off |
| 9. Magneto & EIS Switches | Off |
| 10. Avionics Master Switch | Off |
| 11. EFIS 2 and Auto Pilot Switches | Off |
| 12. Master Switch | On |
| 13. Fuel Quantity | Adjust/Accept |
| 14. Hobbs/Tach Time | Record |
| 15. Avionics Master Switch | On |
| 16. Avionics Cooling Fan | Check/Off |
| 17. Avionics Master Switch | Off |
| 18. Flaps | Extend |
| 19. Pitot Heat, Lights | On/Check/Off |
| 20. Master Switch | Off |
| 21. Baggage Door | Secure |

Preflight Tail/Empennage

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|---------------------|------------------------------|
| 1. Tail Tie-Down | Disconnect |
| 2. Control Surfaces | Check Freedom and Security |
| 3. Trim Tab | Check Security |
| 4. Antennas | Check Security and Condition |

Preflight Right Wing

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|--------------------------|----------------|
| 1. Aileron | Check |
| 2. Flap | Check |
| 3. Wing Tie-Down | Disconnect |
| 4. Main Wheel Tire/Brake | Check |
| 5. Fuel Quantity | Check Visually |
| 6. Fuel Drain Valves (5) | Drain/Check |
| 7. Fuel Filler Cap | Secure |

Preflight Nose

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|-------------------------------------|----------------------------------|
| 1. Fuel Strainer/Reservoir/Selector | (3)Drain/Check |
| 2. Engine Oil Dipstick | Check Level and Secure |
| | *5 qt min |
| | *Fill to 6+ for extended flights |
| | *DO NOT OVERTIGHTEN |
| 3. Engine Cooling Air Inlets | Clear |
| 4. Propeller & Spinner | Check |
| 5. Engine Cowling Security | Check |
| 6. Alternator Belt | Check |
| 7. Air Filter | Check |
| 8. Nose Wheel Strut and Tire | Check |
| 9. Static Source Opening | Check |

Preflight Left Wing

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|--------------------------|----------------|
| 1. Aileron | Check |
| 2. Flap | Check |
| 3. Wing Tie-Down | Disconnect |
| 4. Main Wheel Tire/Brake | Check |
| 5. Fuel Quantity | Check Visually |
| 6. Fuel Drain Valves (5) | Drain/Check |
| 7. Fuel Filler Cap | Secure |
| 8. Fuel Tank Vent | Check |
| 9. Stall Warning Opening | Check |
| 10. Pitot/AoA Tubes | Check |

Before Starting Engine

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|------------------------------------|----------------------|
| 1. Preflight Inspection | Complete |
| 2. Passenger Brief | Complete |
| | S- Seats/Seatbelts |
| | A- Air vents |
| | F- Fire Extinguisher |
| | E- Exit Doors |
| | T- Traffic |
| | Y- Your Questions |
| 3. Seats/Seatbelts | Adjust and Lock |
| 4. Brakes | Test & Set |
| 5. Circuit Breakers | Check In |
| 6. Electrical Equipment, Autopilot | Off |

Caution

The Avionics Master switch, EFIS 2 and Auto Pilot switches must be off during engine start to prevent possible damage to avionics.

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|---------------------------------------|--------------|
| 7. Avionics Master, EFIS 2, AutoPilot | Off |
| 8. Fuel Selector Valve | Both |
| 9. Fuel Shutoff Valve | On (Full In) |

Starting Engine

NOTE

If engine is warm, omit priming

PRIMING PROCEDURE

NOTE: MAX PRIME 1-2 SECONDS

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|---------------------|---|
| 1. Throttle Control | Open 1/4 Inch |
| 2. Mixture Control | Idle Cut Off |
| 3. Master Switch | On |
| 4. Flashing Beacon | On |
| 5. Fuel Pump | On |
| 6. Mixture | Full to obtain 3-5 GPH fuel flow, then Idle Cut Off |
| 7. Fuel Pump | Off |

STARTING ENGINE

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|-------------------|--|
| 8. Master Switch | On |
| 9. Propeller Area | Clear |
| 10. Throttle | Open 1/8" |
| 11. Magneto & EIS | On |
| 12. Start Button | Push |
| 13. Mixture | Full lean until engine fires, then smoothly to Full Rich |

NOTE:

If the engine floods, Mixture idle cut off, open throttle 1/2 to full, and crank engine. When the engine fires, advance mixture to full rich & retard throttle promptly.

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|-----------------------------|----------------------|
| 14. Oil Pressure/Amps/Volts | Check |
| 15. Throttle | 1000 RPM |
| 16. Mixture | Lean for Max RPM |
| 17. Throttle | 800-1000 RPM |
| 18. Nav Lights | OFF except for Night |
| 19. Avionics Master Switch | On |

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|----------------------------------|---------|
| 20. EFIS 2 & Auto Pilot Switches | On |
| 21. Radios | On |
| 22. Flaps | Retract |

Before Taxi

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|----------------------------------|----------------------|
| 1. Heat / Vents / Defrost | As Needed |
| 2. Radios/Nav aids/GPS | Checked / Set |
| 3. ATIS | Set BARO/ALT/HDG Bug |
| 4. Autopilot (Upper left on PFD) | Off |
| 5. Transponder | Verify ALT/SQK |
| 6. Caution/Warning | No Annunciations |

Taxi

- | | |
|-----------------------------|--------------------------------|
| 1. Brakes | Release and Test |
| 2. Throttle | Adjust for Min Brake Use |
| 3. Check Flight Instruments | PFD / HDG / ATTITUDE / COMPASS |
| 4. Flight Controls | Position for Wind |

NOTE:

This checklist is a guide to coordinate Pilot Operating Handbook and STC data applicable to this particular aircraft only. The applicable Pilot Operating Handbook and STC installations remain the official documentation for this aircraft. The pilot in command is responsible for complying with all items in the Pilot Operating Handbook and applicable STCs

Before Takeoff - Run-Up

1. Parking Brake	Set
2. Seats	Secure
3. Seat Backs	Most Upright Position
4. Seat Belts	Secure
5. Cabin Doors	Closed and Locked
6. Flight Controls	Free & Correct
7. Flight Instruments	Check & Set
8. Fuel Quantity	Check
9. Mixture	Full Rich
10. Fuel Selector Valve	Both
11. Throttle	1800 RPM
1. Mixture: Lean for Max RPM	
2. EIS Switch Off (150 max drop)	
3. Mag Switch Off (40 max drop)	
4. Engine Instruments	Check
5. Amps/Volts	Check
12. Annunciators	Check
13. Throttle	Check Idle
14. Throttle	800-1000 RPM
15. Mixture	Lean as Needed
16. Throttle Friction Lock	Adjust
17. Skyview CDI	Select Nav Source
18. Autopilot (Upper left on PFD)	Off
19. Elevator Trim	Set for Takeoff
20. Land/Taxi/Bcn/Strobe	On
Nav Lights Night Only	
21. Transponder	Verify ALT/SQK
	No Annunciations
22. Parking Brake	Release

Before Takeoff- Hold Short Line

1. Frequency	TWR/CTAF
2. Flaps	Set for Takeoff (0-10°)
3. Takeoff	Brief
Runway/Takeoff Type/Speeds/HDG/ALT	
Lose Engine	
Runway	IDLE, EXIT RWY
Airborne Rwy Remaining	LAND
Below 1000 AGL	PUSH 70kts, Land Straight +/-30°
Above 1000 AGL	PUSH 70kts, Consider Return to Airport
4. Mixture	Rich

Normal Takeoff

1. Flaps	0-10°
2. Runway Heading	Verify
3. Throttle	Full Open
4. Rotate (Vr)	55 KIAS
5. Vy	74 KIAS

SHORT FIELD

1. FLAPS	10°
2. Use all Available Runway	
3. Hold Brakes/Full Power/Check RPM	
4. Release Brakes	
5. Vr	51 KIAS
6. Vx	56 KIAS
7. Obstacle Cleared	73 KIAS/Flaps UP

SOFT FIELD

1. FLAPS	10°
2. Full Aft/No Brakes	
3. Remain in Ground Effect	
4. Begin Climb	Vx 62 KIAS
5. Obstacle Cleared	74 KIAS/Flaps UP

Enroute Climb

1. Airspeed	75 - 85 KIAS
2. Throttle	Full Open
3. Mixture	Full Rich below 3000'
4. Engine Instruments	Check
5. Transponder	Verify ALT/SQK

Cruise

1. Power	As Needed
2. Elevator Trim	Adjust
3. Mixture	Lean as Needed
4. Lights	As Needed

Before Descent

1. Weather (ATIS)	Obtain
2. Altimeters	Set
3. Approach	Brief
4. VOR/GPS Setup	As Needed
5. FMS/GPS CDI	Select
6. Fuel Selector Valve	Both
7. Mixture	Adjust

Before Landing

1. Seat Backs	Most Upright Position
1. Seats & Seat Belts	Secure & Lock
2. Fuel Selector Valve	Both
3. Mixture Control	Richen
4. Landing & Taxi Lights	On
5. Autopilot	Off

Normal Landing

1. Airspeed	65 - 75 KIAS
2. Wing Flaps	As Needed
	0° - 10° below 110 KIAS
	20° -30° below 85 KIAS

SHORT FIELD

1. Flaps 30°	
2. Airspeed (@MTOGW)	61 KIAS
3. Aerodynamic Braking	Flaps UP
	Yoke Aft
	Apply Brakes

SOFT FIELD

1. Flaps 20-30°	
2. Hold Nosewheel Off	
3. MINIMUM to NO Braking	

Balked Landing

1. Throttle	Full Open
2. Wing Flaps	Retract to 20°
3. Climb Speed	60 KIAS
4. Wing Flaps	Retract Slowly

After Landing (Clear of Runway)

1. Aircraft	Clear of Runway
	Full Stop
2. Throttle	1000 RPM
3. Mixture	Lean for Max RPM
4. Throttle	Adjust for Min Brake Use
5. Wing Flaps	Up
6. Lights	As Needed
7. Transponder	ALT/1200
8. Pitot Heat	Off
9. Taxi Clearance	Brief

Securing Aircraft

1. Parking Brake	As Needed
2. Electric Equipment / Lights	Off
3. EFIS 2 & Auto Pilot Switch	Off
4. Avionics Master Switch	Off
5. Throttle	Idle
6. Mixture	Idle Cut Off
7. EIS & Magneto	Off
8. Master Switch	Off
9. Control Wheel Lock	Install
10. Fuel Selector	Left or Right
11. Sun Shields	Install
12. Aircraft	Locked if away from Home
13. Flight Plan	Closed

V Speeds and Specs

➤ X-Wind (Max Demo'd)	15 Knots
➤ Best Glide Speed	68 KIAS (flaps up)
➤ Short Field Takeoff (flaps 10)	56KIAS
➤ Vx (Sea Level)	62 KIAS
➤ Vy (Sea Level)	74 KIAS
➤ Vso Stall w/ Flaps	40 KIAS
➤ Vs1 Stall w/o Flaps	48 KIAS
➤ Va (2550lbs)	105 KIAS
➤ Va (2200 Lbs)	98 KIAS
➤ Va(1900 Lbs)	90 KIAS
➤ Vno Max Structural Cruise	129 KIAS
➤ Vne Never Exceed	163 KIAS

Aircraft Information

➤ Gross Takeoff Weight	2550 lbs
➤ Engine	Lycoming IO-360-L2A
➤ Max Power	180 BHP
➤ Max Engine Speed	2700 RPM
➤ Fuel Type	100LL (Blue)
➤ Fuel Capacity	53 Gal Usable
➤ Oil Capacity	8 Qts (Minimum 5)
➤ Electrical	24 - 28 Volt / 60 Amp
➤ Tire Pressure	Nose-45/ Main-38 PSI
➤ BEW 1680 Arm 39.65 Moment 66643	

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