Preflight Cabin

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

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

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

1.	Fuel Strainer/Reservoir/Selector	(3)Drain/Check
2.	Engine Oil Dipstick *5 qt min *Fill to 6+ for extended flights *DO NOT OVERTIGHTEN	Check Level and Secure
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

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

1.	Preflight Inspection	Complete
2.	Passenger Brief S- Seats/Seatbelts A- Air vents F- Fire Extinguisher E- Exit Doors T- Traffic Y- Your Questions	Complete
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.

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

1.	Master Switch	On
2.	Throttle Control	Open 1/4 Inch
3.	Mixture Control	Idle Cut Off
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

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 ½ to full, and crank engine. When the engine fires, advance mixture to full rich & retard throttle promptly.

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

Before Taxi

1.	Heat / Vents / Defrost	As Needed
2.	Radios/Navaids/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. Alternate Air Pull On — RPM Drop
    5. Engine Instruments — Check
    6. 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
   0º - 10º below 110 KIAS
   20º -30º 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

N9560S