

N55804 ARROW Checklist -MPH

Preflight

Cabin:

1. Covers, Plugs - Remove
2. Documents - ARROW
3. Hobbs and Tach - Note
4. Weight and Balance – Check
5. Parking Brake – Set
6. Control Lock – Remove
7. Ignition – Off
8. Avionics – Off
9. Gear – Down
10. Master – On
11. Gear Override-Off
12. Fuel Quantity – Check
13. Flaps – Lower
14. All Exterior Lights – Check
15. Pitot Heat –Check [amp drain]
16. Master – Off
17. Fuel Selector – Proper Tank

Right Wing:

1. Flap, Aileron – Check
2. Wing Surfaces – Check
3. Leading Edge - Check
4. Tie Down, Chocks – Remove
5. Tire – 27psi
6. Strut 2” visible - Check
7. Brakes, Gear - Check
8. Fuel Tank Sump – Drain
9. Fuel Level - Check Visually
10. Fuel Cap – Secure

Nose:

1. Gas, Oil leaks – Check
2. Oil Level – Check 6-8qts
3. Cowling - Secure
4. Prop and Spinner – Check
5. Alternator Belt - Check
6. Air Inlets and Filters – Check
7. Tire – 30 psi
8. Strut 2 ¾ “ visible - Check
9. Linkage, Gear – Check
10. Static Port – Check
11. Fuel Strainer – Drain, Switch Tanks, Drain

12. Gear Mast – Check
13. Pitot Mast - Check

Left Wing:

1. Flap, Aileron – Check
2. Control Surfaces - Check
3. Leading Edge - Check
4. Tie Down – Remove
5. Tire – 27psi
6. Strut 2” visible - Check
7. Brakes, Gear – Check
8. Fuel Tank Sump – Drain
9. Fuel Level - Check Visually
10. Fuel Cap – Secure
11. Pitot, Fuel Vent – Check
12. Stall Warning – Check

Tail:

1. Left Side Fuselage – Check
2. Elevator, Rudder, Trim-Check
3. Tie Down – Remove
4. Antennas – Check

Empennage:

1. Baggage Door – Check
2. Antennas – Check
3. Right Side Fuselage – Check

Startup:

1. Preflight Inspection – Done
2. Flaps – UP
3. Seat, Seat Belts - Secure
4. Passenger Brief – Complete
5. Circuit Breakers – Check
6. Beacon– On
7. Nav Lights – As req
8. Charts, ForeFlight – Current
9. Avionics – Off
10. Auto Pilot – Off
11. Alt Induction Air – Off
12. Brakes – Hold
13. Fuel Selector– Proper Tank
14. Master – On
15. Throttle –1/2” Open
16. Prop – Full Forward
17. Fuel Pump - On

18. Mixture – Rich to Prime
19. Mixture – Idle cutoff
20. Prop Area– “CLEAR!”
21. Ignition – Start
22. Mixture - Rich
23. Throttle – 1000rpm
24. Oil Pressure – Check
25. Ammeter – Check
26. Mixture - Taxi
27. Fuel Pump – Off
28. JPI-Audo. monitor
29. Avionics – On
30. Radio, Comm 1 set and Check – “Radio Check”
31. Comm 2 set 121.5 – monitor
32. Transponder – ALT
33. Circuit Breakers – Check
34. Flight Instruments – Set

Taxi:

1. Parking Brake – Release
2. Taxi/Landing/Nav Lights – On
3. Brakes – Check
4. Mixture – Lean as req.

RunUp:

1. Parking Brake - Set
2. Seats, Doors – Secure
3. Throttle – 1000rpm
4. Flight Controls–Free, Correct
5. Elevator Trim – Set for T/O
6. Rudder Trim - Neutral
7. Flight Instruments - Set
8. Fuel Selector – Proper Tank
9. **Mixture – Rich**
10. **Prop – Full Forward**
11. **Fuel Pump – Check, Off**
12. **Throttle - 2000**
13. **Engine Instruments- Check**
14. **Ammeter – Check**
15. **Alt Air - Check**
16. **Mag check – Drop less 175, 50 diff**
17. **Prop-Cycle 1-3x, not ↓1500**
18. **Fuel Selector –Proper Tank**
19. **Fuel pump – On**

20. **Mixture - Rich**
21. **Prop – Full forward**
22. **Throttle – 1000rpm**
23. **Alt Air - Check**
24. Flaps – Up, or 25 Short Field
25. Doors, window-latch, Seal
26. Seats & Belts – Secure
27. Auto Pilot – Off
28. Oil Temp, Pressure – Check
29. Anti-Collision/Strobes – On
30. Comms/Nav/CDI/XPDR– set
31. Radio – Intentions

Normal Takeoff:

1. Nose Wheel - Straight
2. Engine Instruments – Check
3. Mixture - Rich
4. Throttle – Full
5. Rotate – 75 Mph
6. Gear up – ↓ 100 Mph

Enroute Climb:

1. Airspeed – 110 Mph
2. Throttle/Prop –25”x2500rpm
3. Mixture – Full (adjust over 3000’)

Cruise:

1. Throttle/Prop –23/23
2. Trim – Adjust
3. Mixture – Lean as req
4. Fuel Pump - Off

Before Landing:

1. **G**–Fuel Pump on, Proper tank
2. **U** – Gear down and Locked
3. **M** – Mixture Rich
4. **P** – Prop Full Forward
5. **S** – Seat & Belts Secure
6. Auto Pilot – Off
7. Landing, Taxi Lights - On
8. Flaps 10° (below 125 Mph)
7. Flaps Full - 90mph, or as req

Balked Landing-Go Around:

1. Throttle/Prop – Full
2. Flaps retract to 25°
3. Climb – 85 Mph
4. Gear up, Flaps up slowly

After Landing:

1. Flaps – Up
2. Door Seal – Deflate
3. Fuel Pump – Off
4. Mixture – Taxi
5. Prop – Full Forward
6. Throttle – 1000
7. Transponder – As req.
8. Lights – As req

Shutdown:

1. 121.5 – Monitor
2. Avionics – Off
3. Lights, except Beacon – Off
4. Mag – Ground Check
5. Mixture – Cutoff
6. Throttle – Idle
7. Prop – Full Forward
1. Ignition – Off, Key Out
2. Master – Off
11. Hobbs & Tach - Record
12. Control Lock – Install
13. Tie Downs – Secure
14. Covers, Plugs, Chocks -Install

V Speeds:

Vr - Rotate	75 Mph
Vy - Best Rate of Climb	100 Mph
Vx - Best Angle of Climb	85 Mph
Va – Maneuvering	130 Mph
Vfe – Max Flap Ext	125 Mph
Vno – Max Cruise	170 Mph
Vne – Never Exceed	210 Mph
Vlo – Max gear down	150 Mph
Vs – Stall (clean)	71 Mph
Vso – Stall (full flaps)	64 Mph
Cruise Climb	110 Mph
Best Glide	105 Mph
Final Approach (full flaps)	90 Mph

Short Field T/O;

Flaps 25 (2nd notch) - 65mph
When clear –85mph then 100mph

EMERGENCY PROCEDURES ---

ENGINE FAILURE - T/O ROLL:

1. **Throttle – OFF**
2. **Brakes – Apply**
3. Flaps – Retract
4. Mixture – Cut Off
5. Ignition – Off
6. Master – Off

ENGINE FAILURE AFTER T/O:

1. **Airspeed –85 mph(Flaps up)**
 2. Fuel Selector – Switch tanks
 3. Fuel Pump – Check On
 4. Mixture – Check Rich
 5. Alt Air – On
 6. Attempt RESTART
- If NO Restart**
7. Emergency Gear Lever –As req
 8. Select Landing Straight Ahead
 9. Fuel Selector – Off
 10. Ignition – Off
 11. Mixture - Cutoff
 12. Master - Off
 13. Seat Belts & Harness - Tight

ENGINE FAILURE DURING FLIGHT:

1. **Airspeed – 110 Mph**
 2. **Fuel Selector– Switch Tank**
 3. **Fuel Pump - ON**
 4. **Mixture – Rich**
 5. **Alternate Air – On**
 6. Engine Gauges - Check
 7. Ignition – **Restart**
- If Restarted**
8. Alt Air - Off
 9. Fuel Pump - Off

EMERG LANDING, NO POWER:

1. Airspeed – 105 Mph
2. Emerg Gear Lever –As req
3. Prop – Full Aft
4. Landing site – Identify
5. Mixture – Off,
6. Fuel Selector – Off

5. Ignition – Off
6. Flaps – A/R (recommend Full)
7. Seats Belts & Harness - Tight
8. Doors – Unlatched before land
9. Airspeed – 90 Mph
10. Touchdown – Slightly Tail Low
11. Brake Heavily

EMERG LANDING W/POWER:

1. Airspeed – 110 Mph
2. Landing Site – Identify
3. **G.U.M.P.S.**
4. Doors –Unlatched before land
5. Airspeed – 90 Mph
6. Touchdown –Slightly Tail Low
7. Mixture – Cutoff
8. Ignition - Off
9. Brake – Apply Heavily

ENGINE FIRE DURING STARTUP:

1. **Starter – Crank until fire out**
2. **Mixture – Cutoff**
3. **Throttle - Full**
4. **Fuel Pump - Off**
5. **Fuel Selector - OFF**
7. **Ignition - Off**
9. Fire Extinguisher - Apply

ENGINE FIRE IN FLIGHT:

1. **Fuel Selector – Off**
2. **Throttle - Idle**
3. **Mixture – Off**
4. **Fuel Pump - Off**
5. Cabin Vents - Open
6. Cabin Heat/Air – Off
7. Emerg Descent -125 mph
8. Emerg Landing – Execute

ELECTRICAL FIRE IN FLIGHT:

1. **Vents–Closed, Heat/Def- Off**
2. **Fire Extinguisher – Apply**
3. **Vents – Open when fire out**
4. Avionics - Off
5. All Elect (except Ignition) –Off
6. Circuit Brks –Check –no reset

7. Master –On
8. Avionics – On incrementally
9. Land - ASAP

CABIN FIRE:

1. **Master – Off**
2. **Vents – Close**
3. **Cabin Heat/Air – Off**
4. **Fire Extinguisher – Apply**
5. If Fire Out – Vents Open
6. Land – ASAP

WING FIRE:

1. **Land/Taxi/Nav / Pitot-Off**
2. Side Slip – Away from Flames
3. Land – ASAP

LOSS OF FUEL PRESSURE:

1. Fuel Pump – On
2. Mixture - Rich
2. Fuel Selector – Fullest tank

ALTERNATOR FAILURE:

1. Electrical Load – Reduce
2. Alt Circuit Breaker – Check
3. Alt Switch – Off, then On
4. If n/g – Alt Switch – Off
5. Land – ASAP

ENGINE ROUGHNESS:

1. Mixture–Adjust for smoothness
2. Fuel Pump – On
3. Fuel Tank – Switch
4. Engine Gauges – Check
5. Ignition – “L” then “R” then both
6. Land – ASAP

SPIN RECOVERY:

- P** – Power Idle
A – Ailerons Neutral
R – Rudder Opposite spin
E – Elevator full forward