**ArCHER II N6004H**

**checklist** (8/24)

**PRE FLIGHT CABIN**

1. Write-ups – **Review / Verify**
2. Tach & Hobbs – **Record**
3. VOR Test – **Within 30 Days (IFR)**
4. Required Documents – **On Board**
5. Parking Brake – **As Req.**
6. All Switches – **Off**
7. Autopilot Master – **Off**
8. Magnetos – **Off / Key Out**
9. Mixture – **Idle Cutoff**
10. Tail Beacon – **On**
11. Battery Master – **On**
12. Avionics Master – **On/Check Fan/Off**
13. Fuel Gauges – **Check Quantity**
14. Pitot Heater – **Check if Required (IFR)**
15. Interior Lights – **Check if Required (night)**
16. Exterior Lights – **Check**
17. Stall Warning – **Check**
18. Ext Lights/Pitot Heat – **Off (Beacon ON)**
19. Battery Master – **Off**
20. Fuel Selector – **Check Off then Least Full**
21. Flight Controls – **Free and Correct**
22. Trim – **Neutral**
23. Windows – **Check Clean**
24. Flaps – **Extend**
25. Tow Bar and Baggage – **Stow & Secure**
26. Baggage Door – **Close & Latch**

**PRE FLIGHT RIGHT WING**

1. Surfaces – **Check**
2. Flap and Hinges – **Check**
3. Aileron and Hinges – **Check**
4. Wingtip and Lights– **Check**
5. Tie Down / Chocks – **Remove & Stow**
6. Strut / Tire / Brake – **Check**
7. Fuel Quantity – **Check Visually**
8. Fuel Cap – **Secure**
9. Fuel Sump – **Drain**
10. Fresh Air Inlet– **Check**

**PRE FLIGHT NOSE**

1. Cowling – **Secure**
2. Engine Oil – **Check (Min 6 qts.)**
3. Dipstick & Filler Cap – **Seated**
4. Propeller / Spinner – **Check**
5. Cowling/Intakes – **Check**
6. Alternator Belt – **Check**
7. Fuel Sump – **Drain**
8. Strut and Tire – **Check**
9. Chocks – **Remove**

**PRE FLIGHT LEFT WING**

1. Surfaces – **Check**
2. Fresh Air Inlet– **Check**
3. Fuel Quantity – **Check Visually**
4. Fuel Cap – **Secure**
5. Fuel Sump – **Drain**
6. Strut / Tire / Brake – **Check**
7. Tie Down / Chocks – **Remove & Stow**
8. Wingtip and Lights– **Check**
9. Aileron and Hinges – **Check**
10. Flap and Hinges – **Check**

**PRE FLIGHT FUSELAGE**

1. Antennas – **Check**
2. Empennage – **Check**
3. Stabilator & Trim Tab – **Check**
4. Rudder – **Check**
5. ELT – **Check Plastic Screws**
6. Tie Down – **Remove**

**PRE FLIGHT FINAL INSPECTION**

1. 360° walk-around of Aircraft – **Check**
2. Tie Down / Chocks – **Remove & Stow**

**PASSENGER BRIEFING**

1. Seatbelts, Shoulder Harness
2. Door Operation
3. Emergency Exit & Emergency Brace Positions
4. Fire Extinguisher User
5. Eating, Drinking, Smoking, Conversation, Control Interference
6. Collision Avoidance Assistance
7. Physiological Considerations
8. Supplemental Information

**BEFORE STARTING ENGINE**

1. Preflight Inspection – **Complete**
2. Passenger/Pilot Briefing – **Complete**
3. Seats & Seatbelts – **Adjust & Lock**
4. Flaps – **Retract**
5. Pitch Trim– **Neutral**
6. Rudder Trim– **Neutral**
7. Circuit Breakers – **In**
8. Carburetor Heat – **Off (Cold)**
9. Fuel Selector – **Least Full (L/R)**
10. Electrical Equipment – **Off (Beacon ON)**
11. Radio Master – **Off**
12. Autopilot – **Off**
13. ELT – **Armed**
14. Clock – **Check Correct Time**

**STARTING ENGINE**

1. Brakes – **Set**
2. Propeller – **Visually Clear**
3. Rotating Beacon – **On**
4. Master Switch – **On**
5. Panel Lights – **On (As Req.)**
6. Fuel Pump– **On, Check Pressure**
7. Mixture – **Full Rich**
8. Throttle – **Cycle, then Open ½ inch**
9. Oil Temp – **Check Cold or Hot**
10. Prime – **Strokes (Cold 4-6 / Hot 1-2)**
11. Primer – **Locked**
12. Propeller – **Verbally “CLEAR!”**
13. Start Time– **Recorded**
14. Magnetos – **Start then Both**
	1. Throttle – **1000 RPM**
	2. Oil Pressure – **Check**
	3. Alternator– **On**
	4. Annunciator Panel– **No Warnings**
	5. Fuel Selector – **Change Tank**
	6. Ammeter – **Charge Indicated**
	7. Mixture – **Lean 1 inch**

**PRE TAXI**

1. Fuel Pump – **Off, Check Pressure**
2. Annunciator Panel – **Test, All Lamps On**
3. Avionics Master – **On**
4. Garmin GTN650
	1. Database – **Check**
	2. Fuel Quantity – **Set (As Req.)**
	3. Nav Head Test – **Complete**
5. Autopilot Master – **On (As Req.)**
6. Navigation Lights – **On (As Req.)**
7. ATIS / ASOS / AWOS – **Obtained**
8. Flight Instruments – **Set and Check**
	1. Altimeter – **Set, 75ft. Max**
	2. VSI – **Zero Noted**
	3. Heading Indicator – **Set**
9. Clearance – **Obtain, Read Back**
10. Transponder – **Code Set, Alt Mode**
11. Landing Light – **As Req.**
12. Taxi Area – **Clear**

**TAXI**

1. Brakes – **Test (L/R/BOTH)**
2. Flight Controls – **Wind Correction Set**
3. Instrument Check – **IFR / VFR Check**
	1. Airspeed – **Zero**
	2. Attitude Indicator – **Erect & Stable**
	3. Heading Indicator – **Turning**
	4. Turn Coordinator – **Proper Yaw, Opposite Ball**
	5. Compass – **Check Fluid, Turning**

**ENGINE RUNUP**

1. Brakes – **Set**
2. Mixture – **Rich (As Req.)**
3. Flight Controls – **Free & Correct**
4. Elevator Electric Trim – **Test**
5. Elevator / Rudder Trim – **Set for Takeoff**
6. Throttle – **2000 RPM**
7. Engine Gauges – **Check**
8. Vacuum – **4.8 to 5.2 inHg**
9. Magnetos – **Check** – **175/50**
10. Ammeter – **Check Charge**
11. Carb Heat – **On and Check**
12. Throttle Idle – **Check (575-675 RPM)**
13. Carb Heat – **Off**
14. Throttle – **1000 RPM**
15. Throttle Friction – **Set**
16. COM / NAV – **Set**
17. Flaps – **Set for Takeoff (0°-25°)**
18. Fuel Pump– **On**
19. Parking Brake – **Check** **Off**

**BEFORE TAKEOFF**

1. Windows and Doors – **Closed & Latched**
2. Fuel Selector – **Verify Fullest Tank**
3. Engine Instruments – **Check**
4. Carb Heat – **Verify Off**
	1. Transponder – **Verify Code Set**
	2. Strobes / Landing Light – **On**
	3. Departure Briefing – **Complete**
		1. Runway – **Confirm Direction**
		2. Crosswinds **– Confirm Direction**
		3. Emergency Plan – **Verbal Review**
	4. Takeoff Time – **Recorded**

**NORMAL TAKEOFF**

1. Runway Heading – **Verify with DG**
2. Rudder Pedals – **Feet Off Brakes**
3. Throttle – **Full Power**
4. Engine Gauges – **Check**
5. Tachometer – **Confirm Full Power**
6. Airspeed Indicator – **Confirm Alive**
7. Airspeeds –
	* 1. **Vr** 52-65 kts
		2. **Vx** 64 kts
		3. **Vy** 76 kts

**CRUISE CLIMB**

1. Airspeed – **87 KIAS**
2. Flaps – **Retract (As Req.)**
3. Fuel Pump – **Off**
4. Landing Light – **Off (If Desired)**

**CRUISE**

* 1. Lights – **As Req.**
	2. Throttle – **2000-2450 RPM (As Req.)**
	3. Mixture – **Lean (75° Rich of EGT Peak)**
	4. Heading Indicator – **Align with Compass**
	5. Engine Instruments – **Check**
	6. Fuel Selector – **Manage Fuel Load**

**DESCENT / APPROACH**

1. ATIS / ASOS / AWOS – **Obtained**
2. Altimeter – **Set**
3. Pre-Landing Brief – **Complete**
4. Comm / Nav – **Set**
5. Mixture – **Enrich (As Req.)**
6. Fuel Selector – **Fullest Tank**
7. Landing Light – **On**

**BEFORE LANDING**

1. Autopilot – **Disengage**
2. Trim – **As Req.**
3. Carb Heat – **As Req.**
4. Mixture – **Full Rich (As Req.)**
5. Fuel Pump– **On**
6. Seatbelts and Harnesses – **On**
7. Flaps – **As Required**
8. Carb Heat – **On (As Req.)**
9. Landing Speed
	1. Full Flaps – **60-70kts**
	2. No Flaps– **75kts**

**AFTER LANDING**  (Clear of Runway)

1. Flaps – **Retract**
2. Carb Heat – **Off (Cold)**
3. Pitot Heat – **Off**
4. Landing/Taxi Light – **As Req.**
5. Strobe Lights – **Off**
6. Fuel Pump – **Off**
7. Mixture – **Lean 1”**

**SHUTDOWN**

1. Transponder – **VFR (1200)**
2. Throttle – **1000 RPM**
3. Autopilot Master – **Off**
4. Avionics Master – **Off**
5. Electrical Switches – **Off (Beacon ON)**
6. Alternator Master – **Off**

|  |
| --- |
| Crosswind Max Demonstrated – 17 |
| Vr – 52-65 |
| Vx – 64 |
| Vy – 76 |
| Vso – 49 |
| Vs – 54 |
| Best Glide – 76 |
| Cruise Climb – 87 |
| Va – 1635 / 2550 lbs – 89 / 113 |
| Vno – 125 |
| Vne – 154 |
| Vfe – 102 |

1. Mixture – **Idle Cutoff**
2. MAGS – **Off and Key Removed**
3. Battery Master – **Off**
4. Magnetos – **Off, Remove Key**
5. Elevator Trim – **Neutral**
6. Tach / MX Squawks – **Record**
7. Oil Change – **Notify if Due Soon**
8. Chocks / Tie Downs – **As Req.**
9. Flight Plan – **CLOSED!**

**KCMI Frequencies**

ATIS – **124.85** Clearance – **128.75**

Ground – **121.8** Tower – **120.4**

Approach/Departure – **121.35** (North/East)

Approach/Departure – **132.85** (South/West)

CMI VOR – **115.75   **