Pre-flight Inspection

Cabin
- Control Lock - Remove
- AROW
- Hobbs/Tach
- Fire Extinguisher
- Parking Brake – Set
- Flight Controls - Correct
  - Stabilator and Rudder Trim Tabs - ✓
  - Ignition, Avionics Master, Fan - Off
  - Battery Master Switch (ALTERNATOR OFF) - On
  - Fuel Gauges - ✓
  - Lights and Pitot Heat ✓ Then Off
  - Master Switch - Off
  - Flaps - Full Down

Electrical System:
- 14V Direct Current
- 12V Battery
- 60A Alternator

Flaps: 1st-10°  2nd-25°  3rd-40°

Tire Pressure: 24 PSI (Main), 30 PSI (Nose)

Ground Static RPM: 2100-2200 RPM

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Emergency Contact:
- CAA Office 678-686-9086
- Capt. Rohan Bhatia 404-775-8299

Disclaimer:

This entire checklist (all 13 official pages) may contain errors or omissions. All procedures and data should be verified against official sources before use. You (the user) assume all risk and liability that may result from the use of this checklist. If you cannot accept these terms, do not use this checklist. The Centennial Aviation Club, LLC. (also doing business as Centennial Aviation Academy) assumes no liability arising from your use of this checklist.

Ver: 1.0 Rev: 10/2014

1976 Piper PA-28-151 Warrior
N6919J Operational Checklist

- Remove all traces of snow, ice and frost from aircraft
- Park aircraft in level attitude for accurate fuel sampling

Engine: Lycoming O-360-A4M -180HP Conversion
Oil: 8 qts. total (6 qts. minimum)
  - Avg Oil Burn Rate: 1 qt every 8 TACH Hours
  - Aeroshell 100+ (summer) Aeroshell 80+ (winter)
Fuel: 100LL, 100/130
  - Standard Tank: 50 Gallons Total (25/side)
  - 48 Useable
  - Useable at Tabs: 34 Gallons (17/side)
MTOW/MLW: 2325 LBS (Normal) 1950 (Utility)

Electrical System: 14V Direct Current
- 12V Battery
- 60A Alternator

Flaps: 1st-10°  2nd-25°  3rd-40°

Tire Pressure: 24 PSI (Main), 30 PSI (Nose)

Ground Static RPM: 2100-2200 RPM
Starting Engine

Field Start
Mixture – Full Rich
Fuel Pump – On
Cold Start
Mixture – Full Rich
Primer- 3 to 6x as qrd.
Throttle: Pump 1 to 3x then ¼ in. forward
Fuel Pump – On
Cold Start
Mixture – Full Rich
Primer- 3 to 6x as qrd.
Throttle: Pump 1 to 3x then ¼ in. forward
Fuel Pump – On
Hot Start
Mixture – Full Rich
Throttle ½ in. forward
Fuel Pump – On
Flooded Start
Mixture – Full Lean
Throttle - Full In
Fuel Pump - Off

If engine does not start within 5-10 secs, prime & repeat start procedure with a 20 sec delay. After 3x, wait 2 mins.

Oil Pressure (30 secs. normal, 1 min cold temp)
Alternator - On (Check Output)
Fuel Pump - Off (Press)
Avionics Master - On
Mixture - Lean For Taxi
Landing Lights - On
Nav Lights (Night Only) - On
Altimeter and Heading -
Transponder - ALT

Engine Fire During Start

Starter - Continue cranking
Mixture - Idle/ Cut-off
Throttle - Full Open
Fuel Pump - On
Fuel Selector - On

If Engine Starts, run for a few mins then shut down

Run-up

Doors and Windows - Locked
Flight Controls - Free
Stabilator and Rudder Trim - Set
Fuel Selector - Switch Tanks (Fullest Tank)
Mixture - Rich
Throttle (check throttle friction lock) - 2000 RPM
Suction (5.0" ± 0.1" Hg)
Oil Temp (75 - 245 degrees F)
Oil Pressure (60-90 psi)
Fuel Pressure (0.5-8 psi)
Fuel Gauges
Magneto* (175 RPM Max Drop, 50 RPM’s Max diff.)

-Do not run on single mag for more than 10 seconds-
Ammeter - About 20 Amps
Annunciator Panel - Press to
Carb Heat - Cycle
Throttle - Idle
Carb Heat - Cycle
Throttle - 1000 RPM
Attitude, Altimeter, Heading, VSI

---Continue with Take-off Checklist---

*** Magneto Malfunction Checklist ***

-No RPM drop-
Flight termination and inspection advised

-Excessive mag drop-
Power up to 2300 rpm and lean mixture until slight power loss, then enrichen slightly. Wait 30 secs – enrichen mixture then recheck mags at 2000 RPM.

Final Items
All Tie-downs and Chocks - Remove
Final General Overview
Passenger Briefing

---Passenger Briefing---

Seatbelts / harness / headset
Airsickness / comfort/ air vents
Fire safety
Escape routes/ door and window operation
Survival Gear
Traffic

---Nose---

Windshield
Engine Oil (Min 6 Qts.)
Cowling Latches
Prop and Spinner
Alternator Belt
Air Filter
Strut (3.75 in), Nose Wheel (30 psi)
Fuel Sump (2x - with selector on each tank)
Cowling Latches

---Left Wing---

Air Inlet
Strut (4.5 in), Tire (24 psi) and Brake
Fuel Vent
Pilot Tube, Drain, and Static Port
Fuel Sump
Fuel Level
Stall Warning Device
Leading Edge
Lights, Wing Tip, Aileron, Flap

---Empennage---

Stabilator
Vert: Stab & Rudder
Antennas & Lights
Baggage Door

---Flight Controls---

Baggage Door
Final Items
All Tie-downs and Chocks - Remove
Final General Overview
Passenger Briefing
Take-off

Fuel Selector - Fullest Tank
Flaps (0 Normal, 25 Deg. for Short and Soft) - Set
Mixture - Rich
Carb Heat - Off
Fuel Pump - On (✓ Press)
Landing and Strobe Lights - On
Transponder - ALT
Parking Brake - Off
Crew Briefing – a/c config, wx, terrain, emergency, IFR
** If Flaps 25 Are Used Vx Of 57 kts**

Climb / 1,000 agl

Flaps - Up
Airspeed - 87 kts
Fuel Pump - Off (Check Pressure)

Cruise

Throttle - Less than 2400 rpm
Mixture - Slowly Lean
Fuel Pump - Off (On only when switching tanks)
Engine Gauges / Flight Instruments
Lights - As Rqd
Heading Indicator

Pre-Maneuver

Fuel Pump - On (✓ Press)
Mixture - Slowly Rich / As Rqd
Clearing Turns (Emergency – Traffic - 1,500+ agl)

Approach and Landing

Seat Belts and Seats - Secure and Upright
Heading Indicator
Fuel Selector
Mixture - Rich / As Rqd
Fuel Pump - On (✓ Press)
Landing Lights and Strobes - On
Flaps - Down as Required
Landing Airspeed - 65 kts Flaps down, 70 kts Flaps up
Crew Briefing - procedure, terrain, go around
*In strong winds, use minimum flaps for field length*

After Landing

Flaps - Up
Carb Heat - Off
Fuel Pump - Off (✓ Press)
Strobes - Off
Mixture - Lean For Taxi

Shut Down

Throttle
Fuel Pump
Nav/ Landing/ Panel Light
Avionics Master
Mixture
Ignition
Master Switch
Control Lock, Pitot Cover & Sunshades - Replace
Close Flight Plan if required

V-Speeds

*All Speeds in KIAS*

| Vr  | (Rotation Speed) | 60 |
| Vx  | (Best Angle)     | 66 |
| Vx25| (Best)           | 75 |
| Vg  | (Maneuvering Speed) | 107 |
| Vs  | (Stall – No Flaps) | 56 |
| Vso | (Stall – Full Flaps) | 50 |
| Vle | (Max Flaps Extended) | 100 |
| Vno | (Max Normal Operating) | 121 |
| Vne | (Never Exceed)   | 153 |
| Vglide | (Best Glide) | 69 |

Maximum Demonstrated Crosswind | 17 |

Transponder

Emergency: 7700    Lost Coms: 7600     Hijack: 7500

Light Gun Signals

<table>
<thead>
<tr>
<th>Color and Type of Signal</th>
<th>Movement of Vehicles, Equipment, and Personnel</th>
<th>Aircraft on the Ground</th>
<th>Aircraft in Flight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steady Green</td>
<td>Cleared to cross, proceed, or go</td>
<td>Cleared for takeoff</td>
<td>Cleared to land</td>
</tr>
<tr>
<td>Flashing Green</td>
<td>Not applicable</td>
<td>Cleared for taxi</td>
<td>Return for landing (to be followed by steady green at the proper time)</td>
</tr>
<tr>
<td>Steady Red</td>
<td>STOP</td>
<td>STOP</td>
<td>Give way to other aircraft and continue circling</td>
</tr>
<tr>
<td>Flashing Red</td>
<td>Clear the taxi/airway</td>
<td>Taxi clear of the runway in use</td>
<td>Airport unsafe, do not land</td>
</tr>
<tr>
<td>Flashing White</td>
<td>Return to starting point on airport</td>
<td>Return to starting point on airport</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Alternating Red and Green</td>
<td>Exercise Extreme Caution!!!</td>
<td>Exercise Extreme Caution!!!</td>
<td>Exercise Extreme Caution!!!</td>
</tr>
</tbody>
</table>
Emergency Procedures

Engine Running Rough

- Engine Gauges - On
  - Carb Heat - On
  - Mixture - Enrich
- Fuel Pump - On (Check Pressure)
  - Primer - Locked
  - Fuel Selector - Switch Tanks
  - Individual Mags - On

If operation on a single mag. is satisfactory- use that mag., reduce power, en-richen mixture and land.

Engine Failure / Air Restart

- A - Airspeed 75 kts
- B - Best Place to Land
- C - Checklist
  - Fuel Pump - On (Pressure)
  - Fuel Selector - Switch Tank
  - Mixture - Rich
  - Carb Heat - On
  - Primer - In and Locked
  - Ignition - Both / Start if prop stopped
  - If no start - Switch to single MAG and try restart
- D - Declare - 121.5 / Current Freq / Squawk 7700

Engine Gauges - On
- Carb Heat - On
  - If roughness continues after one minute
- Carb Heat - Off
- Mixture - Enrich or Lean for smooth operation

Fuel Pump - On (Check Pressure)
- Primer - Locked
- Fuel Selector - Switch Tanks
- Individual Mags - On

If operation on a single mag. is satisfactory- use that mag., reduce power, en-richen mixture and land.

Engine Gauges - On
- Carb Heat - On
  - If roughness continues after one minute
- Carb Heat - Off
- Mixture - Enrich or Lean for smooth operation

Fuel Pump - On (Check Pressure)
- Primer - Locked
- Fuel Selector - Switch Tanks
- Individual Mags - On

If operation on a single mag. is satisfactory- use that mag., reduce power, en-richen mixture and land.

Emergency Procedures

Off Airport Landing

- Seat Belts and Seats - Secure and Upright
- Master Switch - Off before impact
- Cabin Doors - Un latch / Slightly Open
- When Field is Made - 65 kts
- Land - Tail Low at Lowest Possible Airspeed

If In Water

- Approach
  - High Winds, Large Waves - UPWIND
  - Light Winds, Large Waves - PARALLEL TO WAVES

Impact WILL BE HARSH!!

PROTECT HEAD AND FACE

Electrical Overload

- If more than 20 amps above known electrical load:
  - Avionics Master - Off
  - Alternator Master Switch - Off
  - Battery Master Switch - On

Compass errors up to 25 degrees may occur with alternator disabled.

Low Voltage / Alternator Failure

- Avionics Master - Off
  - Alternator Circuit Breaker - Check In
  - Master Switch (Both Battery and Alternator) - Recycle
  - Avionics Master - On

If Low Voltage Light illuminates again, turn alternator / all nonessential electrical equip off

Emergency Procedures

Blocked Static Pressure

- Pitot Static Drain Valves - Press and Check
- Pitot/Static Heat - On
- Alternate Static Switch - On

If no change and if needed, break VSI window

WARNING

- Keep window, heater & outside vents closed
- Expect erroneous instrument indications

In-Flight Icing

- Pitot Heat - On
- Altitude - Change for higher OAT and less moisture
- Throttle - Adjust to prevent buildup
- Carb Heat - On as Required
- Mixture (if Carb Heat is Used) - Lean for Max RPM
- Cabin Heat / Defrosters - On
- Flaps - Up
- Airspeed - 80-90 kts min
- Landing (longest runway) ASAP
- Flaps - Keep up for landing
- Flare - Flat as possible

MISSED APPROACH IS NOT RECOMENDED

IF ICE BUILD-UP IS EXTREMELY RAPID, IT IS ADVISABLE TO LAND ANYWHERE SUITABLE

IF ICE ACCUMULATION IS 1/4 INCH OR MORE, EXPECT A LARGE INCREASE IN STALL SPEED
Emergency Procedures

**Engine Fire**
- Fuel Selector
- Throttle
- Mixture
- Fuel Pump
- Master Switch
- Cabin Heat/Air
- Airspeed (To Extinguish Flame) ... 100+ KTS

**Electrical Fire**
- Master Switch
- Avionics Master
- Vents/ Cabin Heat/ Air
- Fire Extinguisher - Activate

*When fire has been extinguished:*
- Vents/ Cabin Heat/ Air - Open

**Wing Fire**
- All external lights - Off
- Pitot Heat - Off

*Perform sideslip to keep flames away from fuel tanks and cabin*
- Flaps - Only as required

**Cabin Fire**
- Master Switch - Off
- Vents/ Cabin Heat/ Air - Closed
- Fire Extinguisher - Activate

*When fire has been extinguished:*
- Vents/ Cabin Heat/ Air - Open