

CHECKLIST

PIPER ARCHER III PA28-181 N183CF

THIS CHECKLIST IS DESIGNED TO PROVIDE STANDARDIZED METHODS OF CHECKS FOR PREFLIGHT, FLIGHT, AND POST FLIGHT CONTROL UNDER "NORMAL" CONDITIONS. AS CONDITIONS CHANGE, THE CHECKLIST AS APPLIED BY THE PILOT WILL NEED TO BE ADJUSTED. REFERENCE THE **PROCEDURES GUIDE** FOR FLIGHT CONTROL UNDER OTHER THAN NORMAL CONDITIONS.

Disclaimer: Cherokee Flyers Club does not explicitly or implicitly guarantee accuracy of any information on this page. Pilots may use this checklist as a quick reference, but must consult the airplane's official **Pilot's Operating Handbook (POH)** for any information used in actual operations of the airplane.

FLIGHT PREPARATION

Wx & TFRs - FSS (1-800-WX-BRIEF)	Check
Flight Plan Prepared & Filed	Check
Weight and Balance	Check
Runways, TO & Ldg Distances	Check

INTERIOR PREFLIGHT INSPECTION

Hobbs Time	Record
Inspections & Squawk Log	Check
Certificates and Documents	Check
POH (Airplane & GPS/Radios)	Check
Control Wheel Restraints	Remove
Pitot/Static System	Drain
Fuel Selector	Off/Right/Left
Alternate Static Source	Check
Parking Brake	Set
RADIO Switch	Off
Throttle	Idle
Mixture	Idle Cutoff
Circuit Breakers	Check
BATT Master Switch	On
ALT Switch	Off
Fuel Pump	On/Check Gauges/Off
Magneto Switches	Off
Landing Lights Switch	On
Navigation Lights Switch	On
Strobe Lights Switch	Strobe
Pitot Heat Switch	On
Exterior Lights	Check
Stall Warning Horn	Check
Pitot Mast	Warm
BATT Master Switch	Off
All Lighting Switches	Off
Pitot Heat Switch	Off
Trims	Neutral
Flaps	Extend

EXTERIOR PREFLIGHT INSPECTION

Right Flap and Aileron	Check
Right Wing Tip & Lights	Check
Right Wing Top & Lower Surface	Check
Right Wing Leading Edge	Check
Right Wing Tie-Down	Remove
Right Wing Fuel Tank Vent	Check
Right Wing Fuel Sump	Sample
Right Wing Fuel Quantity	Check
Right Wing Fuel Cap	Secured
Right Main Gear Assembly	Check
(Extension 4.5 ± .25 in.)	
Fresh Air Inlet	Check
Windshield	Check
Cowling	Secure
Oil	6-8 Quarts
Dipstick	Properly Seated
Exhaust	Check
Propeller / Spinner	Check
Engine Cooling Inlets	Check
Nose Wheel Strut and Tire	Check
(Extension 3.25 ± .25 in.)	
Air Filter Inlet	Check
Cowling	Secure
Fresh Air Inlet	Clear
Left Main Gear Assembly	Check
(Extension 4.5 ± .25 in.)	
Left Wing Fuel Sump	Sample
Engine Fuel Strainer	Drain / Sample
Left Wing Fuel Quantity	Check
Left Wing Fuel Filler Cap	Secured
Left Wing Fuel Tank Vent	Check
Left Wing Tie-Down	Remove
Pitot Mast – Ram Air & Drain	Check
Stall Warning Opening	Check
Left Wing Leading Edge	Check

Left Wing Tip & Lights	Check
Left Wing Top & Lower Surface	Check
Left Flap and Aileron	Check
Pitot Mast – Static Port	Check
Left Side Fuselage	Check
Antennas Above/Below Fuselage	Check
Empennage	Check
Stabilator and Trim Tab	Check
Tail Tie-Down	Remove
Rudder, Antennas, Fin Light	Check
ELT Cover & Antenna	Check
Right Side Fuselage	Check
External Power Connection Door	Check
Baggage Door	Locked

ADDING FUEL

Static Charge Ground	Connected
Fuel Added	A/R
Static Charge Ground	Disconnected
Right Wing Fuel Filler Cap	Secure/Lock
Left Wing Fuel Filler Cap	Secure/Lock

BEFORE ENGINE START

Preflight Inspection	Completed
Flaps	Retracted
Parking Brake	Set
Passengers	Loaded & Briefed
Seats / Belts / Harness	Adjust and Lock
Interior Lighting	A/R

ENGINE START – HOT or COLD

BATT Master Switch	On
ALT Switch	On
Fuel Pump	On
Magneto Switches	On
Navigation Lights Switch	A/R
Strobe Lights Switch	Fin
Throttle	1/4" Open
Mixture	Full Rich
Prime Switch	A/R
Propeller / Area	Clear
Starter	Engage
Throttle	1000 RPM
Oil Pressure	Check
Engine Instruments	Check
Fuel Pump	Off/Pressure Holds
Mixture	Lean

ENGINE START WHEN FLOODED

BATT Master Switch	On
ALT Switch	On
Fuel Pump	On
Magneto Switches	On
Navigation Lights Switch	A/R
Strobe Lights Switch	Fin
Throttle	Full Open
Mixture	Idle Cutoff
Propeller / Area	Clear
Starter	Engage
Mixture	Advance
Throttle	Retard
Throttle	1000 RPM
Oil Pressure	Check
Engine Instruments	Check
Fuel Pump	Off/Pressure Holds
Mixture	Lean

BEFORE TAXI CHECK

RADIO MASTER Switch	On
Intercom - Verify/Volume/Squelch	Set
COMM/Nav/GPS/Transponder	Check
Audio panel (Test, Crew/Pilot A/R, Monitoring off)	
Marker beacon (On A/R, sensitivity set A/R)	
Comm 1 (set to Tower and Departure)	
Comm 2 (set to ATIS, Clearance, Ground, or next ATIS)	
NAV 1 (set to VOR frequency, identified, CDI tested, then setup for in-flight use)	
NAV 2 (set to VOR frequency, identified, CDI tested, then setup for in-flight use)	
GPS (set to departure & destination, courses set or flight plan entered)	
Traffic (tested, setup A/R for use)	
G500 (setup A/R for navigation)	
Transponder (1200, set to Altitude)	
ATIS & Clearance	A/R
Altimeter	Set/Alt Verified
Transponder	A/R
Flight Instruments	Check

Magnetic Compass (full of fluid, no cracks or bubbles, swinging freely, indicating a known heading, deviation card is present)

Clock (working, set to the correct time, has a working sweep second hand)

Airspeed Indicator (both units reading zero)

Attitude Indicator (both units up & erect, aligned with the 90 degree indices, miniature airplane aligned with the horizon) (cage the standby unit 2-3 seconds)

Altimeter set (both units reading within 75' of field elevation for correct barometric pressure setting in Kollsman window)

Turn Coordinator (indicator centered on level ground)

Heading Indicator (aligned with the magnetic compass) (read compass first, then set HI)

Vertical Speed Indicator (reading zero)

TAXI CHECK

Taxi Area	Clear
Parking Brake	Release
Brakes & Steering	Check
Flight Instruments	Check

RUN-UP CHECK

Parking Brake	Set
Fuel Selector	Fullest Tank
Mixture	Rich
Throttle	2000 RPM
Magnetos*	Check Left / Right
*(MAX DROP 175 RPM... MAX DIFFERENCE 50 RPM)	
Carburetor Heat (VERIFY RPM DROP)	On
Oil Pressure	Check
Oil Temperature	Check
Fuel Pressure	Check
Annunciator Panel	Press to Test
Pitot Heat Switch*	On/Off
*(VERIFY AMP LOAD, PITOT ANNUNCIATOR LIGHT OFF/ON)	
ALT Switch*	Off/On
*(VERIFY AMP LOAD, PITOT ANNUNCIATOR LIGHT OFF/ON)	
Ammeter	Check
Throttle	Retard to Idle Quickly
(ENGINE DOES NOT STALL OR RUN ROUGHLY)	
Carburetor Heat (VERIFY RPM INCREASE)	Off
Throttle	1000 RPM
Mixture	Lean

BEFORE TAKEOFF CHECK

Attitude Indicators	Set
Altimeters	Set
Heading Indicator	Set
Comms/Navs/GPS	Set
Transponder	Set
Clearance/Limits/Bugs	Verified/Set
Flight Controls	Free and Correct
Trims	Set for Takeoff
Flaps	Set 10°25°
Seats	Adjusted & Locked in Position
Seat Backs	Erect
Seat Belts & Harnesses	Fastened
Takeoff Briefing (refer to Performance Calc.s):	
- Rotation Speed	_____
- Takeoff Distance	_____
- Available Runway	_____
- Emergency Procedures	Brief

MOORING

HOBBS Time	Record
Squawks	Record
Clear Cockpit of Debris	Check
Parking Break	Release
Flaps	Retracted
Control Wheel	Secure with Seat Belt
Left/Right Wing Tie-Downs	Secure
Tail Tie-Down	Secure
Cockpit Door	Secured and LOCKED
Cargo Door	Secured and LOCKED
Flight Plan (Call FSS)	Close

V-SPEEDS

V _R (Rotate to Climb)	60 KIAS
V _{SO} (Landing Config. Stall)	45 KIAS
V _{S1} (Min. Steady Flight Stall)	50 KIAS
V _X (Best Angle-of-Climb Speed)	64 KIAS
V _Y (Best Rate-of-Climb Speed)	76 KIAS
V _{FE} (Max. Flap Extended)	103 KIAS
V _A (Maneuvering Speed)	113 KIAS
V _{NO} (Max. Cruising Speed)	125 KIAS
V _{NE} (Never Exceed)	154 KIAS
Best Glide	76 KIAS
Steep Turns (Entry Speed)	96 KIAS
Maximum Crosswind Velocity	17 KIAS

AIRSPEEDS

Stall	
• 2550 lbs (0° Flaps)	50 KIAS
• 2550 lbs (40° Full Flaps)	45 KIAS
Maneuvering	
• 2550 lbs	113 KIAS
• 2300 lbs	106 KIAS
• 2100 lbs	101 KIAS
• 1900 lbs	96 KIAS
• 1721 lbs	91 KIAS
Never Exceed	154 KIAS
Power-Off Glide	
• 2550 lbs (0° Flaps)	76 KIAS
Traffic Pattern (10° Flaps)	97 KIAS
• 1900 RPM in Cool Temperatures	
• 2200 RPM in Warm Temperatures	

LINE-UP CHECK

Time-Off	Record
Approach Path & Runway	Clear
Fuel Pump	On
Landing Lights	On
Strobe Lights	Strobe
Pilot Window	Closed
Mixture	Rich
Transponder	Altitude
Door	Closed & Latched

NORMAL TAKEOFF

Heading Indicator	Aligned with Compass
Runway Assignment	Verified
Throttle	Full Power
Engine Gauges	Check/Green
Airspeed	Alive/Callouts
Rotate V _R	60 KIAS
Best Angle Climb V _X	64 KIAS
Best Rate Climb V _Y	76 KIAS

CLIMB CHECK

Flaps	Retracted
Cruise Climb (Enroute)	87 KIAS
Fuel Pump	Off
Landing Light	Off

CRUISE CHECK

Cruise Power	Set per Power Table
Mixture	Lean for Best RPM
Engine Instruments	Check

PRE-MANUEVER CHECK

Fuel Pump	On
Landing Lights	On
Mixture	Rich

POST-MANUEVER CHECK

Fuel Pump	Off
Landing Lights	Off
Mixture	Lean

DESCENT CHECK

Mixture	Adjust
Altimeter	Set
Seat Belts	Secure

APPROACH CHECK

Fuel Pump	On
Landing Light	On
Mixture	Adjust
Fuel Selector	Fullest Tank
Flight Instruments	Check / Set
Approach Briefing	Complete
Approach Speed	95/85/75 KIAS
Approach Flaps	10°25°40°
Seats	Adjusted and Locked in Position
Seat Belts & Harness	Secure

FINAL CHECK - GUMPS

Gas (Fuel Selector)	Fullest Tank
Undercarriage (Flaps)	Extended
Mixture	Rich
Power	Set
Speed (& Seatbelts)	Set

AFTER LANDING CHECK

Electric Fuel Pump	Off
Landing Lights	A/R
Navigation Lights	A/R
Strobe Lights	Fin
Pitot Heat	Off
Mixture	Lean
Carburetor Heat	Off
Flaps	Retracted

SHUTDOWN

Parking Brake	Set
Throttle	1000 RPM
RADIO Master Switch	Off
Magneto Switches (Both)	Off then On
Mixture	Idle Cutoff
BATT Master Switch	Off
ALT Switch	Off
Fuel Pump	Off
Magneto Switches	Off
Landing Lights Switch	Off
Navigation Lights Switch	Off
Strobe Lights Switch	Off
Both Overhead Light Dials	Off
(3) Instrument Panel Light Dials	Off
Air Vent Fan Switch	Off