



Aircraft Checklist

danielwiese.com

POH/AFM takes priority over this checklist.

PIPER ARCHER II (KNOTS)

G5S

NORMAL OPERATIONS EMERGENCY PROCEDURES (REVERSE)

Updated October 9th, 2022

RUNWAY ENTRY

Time for Lights, Camera, Action, Traffic

Timer START
Lights LANDING & ANTI-COL. ON
Transponder VERIFY CODE/ALT
Mixture RICH
Electric Fuel Pump ON
Carb Heat COLD
Traffic VERIFY RWY/APCH CLEAR
Runway Number CONFIRM
Heading/Compass MATCHES RWY

NORMAL TAKEOFF

Flaps UP
Throttle FULL
Engine Instruments "GREEN"
Engine RPM AT LEAST "2300 RPM"
Airspeed "ALIVE"
Rotate 60 KIAS "ROTATE"
Climb 80 KIAS

SHORT FIELD TAKEOFF

Flaps 25° (SECOND NOTCH)
Brakes HOLD
Throttle FULL
Engine Instruments "GREEN"
Engine RPM AT LEAST "2300 RPM"
Brakes RELEASE
Airspeed "ALIVE"
Rotate 50 KIAS "ROTATE"
Pitch 15°
Climb 65 KIAS
Obstacle CLEARED
Flaps UP
Climb 80 KIAS

SOFT FIELD TAKEOFF

Flaps 25° (SECOND NOTCH)
Brakes NONE
Control Wheel FULL AFT
Throttle SLOWLY ADVANCE FULL
Engine Instruments "GREEN"
Engine RPM AT LEAST "2300 RPM"
Airspeed "ALIVE"
Main Gear LIFT OFF
Pitch NOSE OVER
Ground Effect MAINTAIN TO 75 KIAS
Flaps UP
Climb 80 KIAS

AFTER TAKEOFF (400' AGL)

Airspeed 80 KIAS
Flaps UP
Engine Instruments GREEN
Electric Fuel Pump OFF
Fuel Pressure CHECK
Landing Light AS REQ'D

CRUISE

Throttle 2300-2500 RPM
Trim AS REQUIRED
Engine Instruments CHECK
Mixture LEAN AS REQUIRED
EGT 50°F/30°C Rich of Peak

SWITCH FUEL TANKS

Electric Fuel Pump ON
Fuel Selector SWITCH
Fuel Flow CHECK (10 SEC)
Electric Fuel Pump OFF
Fuel Flow CHECK

DESCENT / APPROACH

ATIS/AWOS CHECK
Altimeters SET
Top G5, Standby
Clearance OBTAIN
Radios/GPS TUNE/IDENT
Approach Briefing COMPLETE
Fuel Selector FULLEST TANK
Lights AS REQUIRED
Mixture SLIGHTLY ENRICH

PRE-LANDING

Fuel Selector FULLEST TANK
Mixture RICH
Electric Fuel Pump ON
Lights AS REQUIRED
Flaps AS REQUIRED
Seatbelts FASTENED

NORMAL LANDING

Flaps 40° (FULL)
Airspeed 70 KIAS
Touch Down MAIN WHEELS FIRST
Brakes MINIMUM REQUIRED

SHORT FIELD LANDING

Flaps 40° (FULL)
Airspeed 65 KIAS
Touch Down MAIN WHEELS FIRST
Flaps UP
Brakes MAXIMUM
Control Wheel FULL AFT

SOFT FIELD LANDING

Flaps 40° (FULL)
Airspeed 70 KIAS
Touch Down NOSE HIGH WITH PWR
Brakes NONE
Control Wheel FULL AFT

AFTER LANDING

Flaps UP
Mixture LEAN HALFWAY
Elevator Trim SET NEUTRAL
Electric Fuel Pump OFF
Lights AS REQUIRED
Radios CONTACT GND / CALL CLR
Flight Plan CLOSE IF REQ'D

SHUTDOWN / SECURE

Brakes AS REQUIRED
Avionics Master OFF
Mixture IDLE CUTOFF
Wait for engine to shut off
Magnetos OFF / REMOVE KEY
Master Switch OFF
Control Wheel Lock LATCH BELT
Aircraft TIE DOWN
Aircraft Log COMPLETE
Cowl Plugs/Covers INSTALLED
Windshield CLEAN AS REQ'D
Chocks AS REQ'D

SPEEDS

V_R 60 KIAS
V_X 64 KIAS
V_Y 76 KIAS
V_{FE} 102 KIAS
V_A (2550 lb) 113 KIAS
V_S 55 KIAS
V_{SO} 49 KIAS
V_{NO} 125 KIAS
V_{NE} 154 KIAS
Pattern 105 MPH
Abeam Numbers 90 KIAS
Base 80 KIAS
Final 70 KIAS
V_G 76 KIAS
Glide distance 1.6 NM / 1000 FT.

FREQUENCIES

Potomac Approach

Potomac (SFRA West) 127.325
Potomac 128.525

KHEF (Manassas)

ATIS 125.175
Tower 133.1
Ground 121.8

KHWY (Warrenton)

AWOS 120.35
CTAF 122.70

KCJR (Culpeper)

AWOS 119.32
CTAF 123.07

CSN (Casanova VORTAC)

CSN 116.30

ENGINE FIRE DURING START

Cranking CONTINUE

If Engine StartsThrottle 1700 RPM FOR 20 SEC
Engine SHUTDOWN AND INSPECT**If Engine Fails To Start**Throttle FULL OPEN
Mixture IDLE CUTOFF
Cranking CONTINUE
Electric Fuel Pump OFF
Fuel Selector OFF
Engine MASTER AND IGNITION OFF
Fire Extinguisher OBTAIN
Aircraft EVACUATE
Fire EXTINGUISH
Damage INSPECT**ENGINE FAILURE PRIOR TO TAKEOFF**Throttle IDLE
Brakes APPLY
Flaps RETRACT
Mixture IDLE CUTOFF
Ignition Switch OFF
Radio Call IF ABLE
Master Switch OFF**ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF**Airspeed Flaps Up 76 KIAS
Landing Site SELECT
Mixture IDLE CUTOFF
Electric Fuel Pump OFF
Fuel Selector OFF
Ignition Switch OFF
Flaps AS REQUIRED
Radio Call IF ABLE
Master Switch OFF
Door UNLATCH**ENGINE FIRE IN FLIGHT**Mixture IDLE CUTOFF
Fuel Selector OFF
Master Switch OFF
Throttle CLOSED
Electric Fuel Pump OFF
Cabin Heat and Air OFF
Airspeed INCREASE UNTIL FIRE OUT
Forced Landing EXECUTE**ELECTRICAL FIRE IN FLIGHT**Master Switch OFF
All Other Switches OFF
Vents/Cabin Air/Heat OPEN
Vents/Cabin Air/Heat OFF
Fire Extinguisher ACTIVATE
Cabin VENTILATE
Master Switch ON
Circuit Breakers CHECK
Avionics Master ON
Electrical Equip ON ONE AT A TIME**ENGINE FAILURE DURING FLIGHT****A. AIRSPEED**
3 turns nose-up trim, 76 KIAS**B. BEST PLACE TO LAND****C. CHECKLIST**Carb Heat ON
Electric Fuel Pump ON
Fuel Selector FULLEST TANK
Mixture RICH
Throttle FULL
Mags L/R/BOTH
Primer IN AND LOCKED**D. DECLARE**Mayday ON 121.5
Squawk 7700**E. PREPARE TO EXIT**Mixture IDLE CUTOFF
Electric Fuel Pump OFF
Fuel Selector OFF
Mags OFF
Flaps AS REQUIRED
Passenger Brief COMPLETE
Master Switch OFF WHEN ABLE
Door UNLATCH**CABIN FIRE**Master Switch OFF
Air Vents and Windows OPEN
Fire Extinguisher ACTIVATE
Cabin VENTILATE
Land AS SOON AS POSSIBLE**WING FIRE**Nav Lights OFF
Pitot Heat OFF
Strobe Lights OFF*Side slip to keep flames away from the fuel tank and land as soon as possible. Only use flaps as required for final approach and touchdown***AMMETER DISCHARGE**Avionics Master OFF
Alternator Switch OFF
Alt Circuit Breaker CHECK & RESET
Master Switch ON
Ammeter CHECK*If ammeter continues to discharge terminate flight as soon as possible.***ELECTRICAL OVERLOAD**Alternator Switch ON
Battery Switch OFF
Unneeded Elec Fuel Pump OFF*If alternator loads not reduced:*Alternator OFF
Battery Switch AS REQUIRED
Land AS SOON AS PRACTICAL**LIGHT SIGNALS (FLIGHT)**Cleared to Land STEADY GREEN
Return to Land FLASHING GREEN
Give way and Circle STEADY RED
Do not land FLASHING RED
General Warning, Exercise Caution
..... ALTERNATING RED AND GREEN**POWER SETTINGS***Power settings to be used as a guide only*Climb FULL POWER
Cruise 2300-2500 RPM
Descent 2100 RPM
Precision Approach 1800 RPM
Non-Precision Approach 1500 RPM
Pattern 2200 RPM
Abeam Numbers 1500 RPM*Yellow highlighted items are immediate action items that should be committed to memory.***PIVOTAL ALTITUDE**

Groundspeed		Approximate Pivotal Altitude
Knots	MPH	
87	100	670
91	105	735
96	110	810
100	115	885
104	120	960
109	125	1050
113	130	1130



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PREFLIGHT CHECKLIST

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COCKPIT SAFETY CHECK

Magnetos OFF, KEY OUT
Mixture IDLE CUTOFF
Throttle CLOSED

PREFLIGHT PREPARATION

Weather CHECK
Inspections/ADs/Squawks CHECK
Flight Plan FILED
Weight and Balance COMPUTE
Fuel Quantity CHECK / CALL

Master MUST Be Off During Fueling

Aircraft Cover REMOVE
Cowl Plugs REMOVE
Pitot/Static Blade Cover REMOVE
Chocks REMOVE
Engine Preheat BELOW 0 °C/32 °F
Wings CHECK FOR ICE/FROST

CABIN

Keys PLACE ON DASH
Documents S.P.A.(R).J.R.O.W.
Supplements CHECK
Placards CHECK
Airworthiness Cert VISIBLE
Radio Station Lic INT'L FLIGHT
Registration VALID
P.O.H/A.F.M. CHECK
W&B Info IN BINDER
Hobbs Meter RECORD
Fire Extinguisher GREEN/SECURE
Control Wheel Lock UNLATCH BELT
Ignition Switch OFF
Mixture IDLE CUTOFF
Throttle CLOSED
Carburetor heat COLD
Avionics Master Switch OFF
Alternate Static Source CHECK IN
Fuel Selector FULLEST TANK
Elevator Trim SET NEUTRAL
Master Switch ON
Top G5 VERIFY ON
Fuel Quantity CHECK
Pitot Heat CHECK AS REQ'D
Exterior Lights CHECK AS REQ'D
Stall Warning TEST
Master Switch OFF
Flaps FULL

RIGHT WING

Step INSPECT
Flaps INSPECT
Rod INSPECT
Right Aileron INSPECT
Hinges BOLTS SECURE
Weights INSPECT
Static Wicks INSPECT
Wing Tip/Nav Lights INSPECT
Leading Edge INSPECT
Wing Tie Down REMOVE
Fuel Vent CHECK UNBLOCKED
Main Gear/Tire/Brakes INSPECT
Cabin Vents and Inlets INSPECT
Door Hinge Bolts INSPECT

NOSE AND COWLING

Windshield CLEAN
Oil Level CHECK
*Cold: ≥ 6 Qts, Warm: ≥ 5 1/2 Qts
≤ 10 hrs to mx: ≥ 5 Qts
Do Not Over Tighten Oil Cap*
Oil Access Door SECURE
Engine Cowling CHECK LATCHES
No Consecutive Fasteners Missing
Prop/Spinner INSPECT
No Cracks, No Screws Missing
Cowling Inlets CHECK
Alternator Belt CHECK TENSION
Air Filter CHECK
Exhaust CHECK FOR CRACKS
Nose Gear/Tire/Strut INSPECT
Landing Light CHECK

LEFT WING

Cabin Vents and Inlets INSPECT
Leading Edge INSPECT
Main Gear/Tire/Brakes INSPECT
Fuel Vent CHECK UNBLOCKED
Wing Tie Down REMOVE
Pitot Blade CHECK UNBLOCKED
Stall Tab CHECK MOVEMENT
Wing Tip/Nav Lights INSPECT
Right Aileron INSPECT
Hinges BOLTS SECURE
Weights INSPECT
Static Wicks INSPECT
Flaps INSPECT
Rod INSPECT

EMPENNAGE

Skin and Rivets INSPECT
Stabilator/Anti-Servo Tab INSPECT
Hinge/Cables in Tail Cone INSPECT
Vertical Stabilizer INSPECT
Rudder INSPECT
Hinges SECURE
Tail Tie Down REMOVE
Antennas INSPECT
Underside INSPECT
Baggage Door LOCKED

FINAL CHECK

Fuel Sumps DRAIN
Left Wing (1) DRAIN
Right Wing (1) DRAIN
Nose (1) PULL & DRAIN
Fuel Quantity VISUAL CHECK
Fuel Caps SECURE
Last 360° Walk Around COMPLETE
Chocks CONFIRM REMOVED
Tie Downs CONFIRM REMOVED
Cowl Plugs CONFIRM REMOVED
Pitot Cover CONFIRM REMOVED
Preflight COMPLETE

PERSONAL CHECKLIST

PAVE to perceive hazards

Pilot CHECK
• Experience/recency CHECK
• Physical condition SEE IMSAFE
Aircraft CHECK
• Fuel reserves CHECK
• Performance CHECK
• Equipment CHECK
EnVironment CHECK
• Weather CHECK
External Pressures CHECK

IMSAFE to check pilot phys. condition

Injury CHECK
Medication CHECK
Stress CHECK
Alcohol CHECK
Fatigue CHECK
Emotion CHECK

<div>PASSENGER BRIEF</div> <div>S – Seatbelts USAGE Fastened during taxi, takeoff, landing. Recommended always.</div> <div>A – Air vents USAGE Sick? Loosen clothing, use air, look at point on horizon. Location of sick sacks.</div> <div>F – Fire extinguisher USAGE P – Pull pin A – Aim at base of fire S – Squeeze S – Sweep</div> <div>E – Exits LOCATION/USAGE</div> <div>T – Traffic EXPLAIN Clock Position / Who's looking</div> <div>Y – Yak (Sterile Cockpit) No extraneous conversation under cruise or 10,000' MSL (whichever is lower)</div> <div>Y – Yoke 3 way positive exchange of flight controls. Stay clear of active flight controls.</div> <div>Y – Any questions?</div>	<div>TAXI</div> <div>Taxi Area CLEAR</div> <div>Brakes CHECK Check for dip in Attitude Indicator</div> <div>Controls POSITION FOR WIND</div> <div>Flight Instruments CHECK IN TURNS</div> <div>ENGINE RUNUP</div> <div>Aircraft POSITION INTO WIND</div> <div>Parking Brake SET</div> <div>Seats and Seat Belts SECURE</div> <div>Cabin Door CLOSED AND LOCKED</div> <div>Flight Controls FREE & CORRECT</div> <div>Flight Instruments CHECK</div> <div>Standby Flight Instruments CHECK</div> <div>Fuel Quantity CHECK</div> <div>Fuel Selector FULLEST TANK</div> <div>Elevator Trim SET NEUTRAL</div> <div>Mixture ENRICH</div> <div>Throttle 2000 RPM</div> <div>Magnetos R, B, L, B Drop less than 175 and 50 between mags</div> <div>Carb Heat CHECK RPM DROP</div> <div>Engine Instruments GREEN</div> <div>Ammeter ZERO OR POSITIVE</div> <div>Annunciator Panel TEST</div> <div>Throttle CHECK IDLE</div> <div>Throttle 900 RPM</div> <div>Mixture LEAN HALFWAY</div> <div>Throttle Friction Lock ADJUST</div> <div>Radios SET</div> <div>GPS Flight Plan VERIFY</div> <div>2nd Radio 121.5</div> <div>XPDR VERIFY CODE/ALT</div> <div>CDI Softkey SELECT NAV SOURCE</div> <div>Wing Flaps SET</div> <div>Cabin Windows CLOSED & LOCKED</div> <div>Parking Brake RELEASE</div>	<div>RUNWAY ENTRY</div> <div>Time for Lights, Camera, Action, Traffic</div> <div>Timer START</div> <div>Lights LANDING & ANTI-COL. ON</div> <div>Transponder VERIFY CODE/ALT</div> <div>Mixture RICH</div> <div>Electric Fuel Pump ON</div> <div>Carb Heat COLD</div> <div>Traffic VERIFY RWY/APCH CLEAR</div> <div>Runway Number CONFIRM</div> <div>Heading/Compass MATCHES RWY</div> <div>NORMAL TAKEOFF</div> <div>Flaps UP</div> <div>Throttle FULL</div> <div>Engine Instruments "GREEN"</div> <div>Engine RPM AT LEAST "2300 RPM"</div> <div>Airspeed "ALIVE"</div> <div>Rotate 60 KIAS "ROTATE"</div> <div>Climb 80 KIAS</div> <div>SHORT FIELD TAKEOFF</div> <div>Flaps 25° (SECOND NOTCH)</div> <div>Brakes HOLD</div> <div>Throttle FULL</div> <div>Engine Instruments "GREEN"</div> <div>Engine RPM AT LEAST "2300 RPM"</div> <div>Brakes RELEASE</div> <div>Airspeed "ALIVE"</div> <div>Rotate 50 KIAS "ROTATE"</div> <div>Pitch 15°</div> <div>Climb 65 KIAS</div> <div>Obstacle CLEARED</div> <div>Flaps UP</div> <div>Climb 80 KIAS</div> <div>SOFT FIELD TAKEOFF</div> <div>Flaps 25° (SECOND NOTCH)</div> <div>Brakes NONE</div> <div>Control Wheel FULL AFT</div> <div>Throttle SLOWLY ADVANCE FULL</div> <div>Engine Instruments "GREEN"</div> <div>Engine RPM AT LEAST "2300 RPM"</div> <div>Airspeed "ALIVE"</div> <div>Main Gear LIFT OFF</div> <div>Pitch NOSE OVER</div> <div>Ground Effect MAINTAIN TO 75 KIAS</div> <div>Flaps UP</div> <div>Climb 80 KIAS</div>
<div>BEFORE START</div> <div>Preflight COMPLETE</div> <div>Passenger Briefing COMPLETE</div> <div>Seats and Belts ADJUSTED/LOCKED</div> <div>Fuel Selector Valve FULLEST TANK</div> <div>Avionics Master Switch OFF</div> <div>Brakes TEST AND SET</div> <div>Circuit Breakers CHECK IN</div> <div>Anticollision Lights ON</div> <div>Nav Lights ON AT NIGHT/IFR</div> <div>ENGINE START</div> <div>Master Switch ON</div> <div>Electric Fuel Pump ON</div> <div>Mixture RICH</div> <div>Carb Heat COLD</div> <div>Prime Engine for Cold Start or as req'd</div> <div>Primer PRIME (5-8 STROKES)</div> <div>Primer IN & LOCKED</div> <div>Throttle 1/4" Use halfway open for hot start</div> <div>Prop Area CLEAR</div> <div>Ignition Switch ENGAGE Do NOT Crank for > 10 secs. Allow 20 secs between start attempts!</div> <div>Throttle 900 RPM</div> <div>Oil Pressure CHECK</div> <div>Electric Fuel Pump OFF</div> <div>Mixture LEAN HALFWAY</div> <div>AFTER START</div> <div>Flaps UP</div> <div>Avionics Master Switch ON</div> <div>GPS Database CHECK DATES</div> <div>Radios TUNE, GET ATIS/AWOS</div> <div>Altimeters SET Top G5, Standby</div> <div>Heading Indicator BUG WIND</div> <div>Clearance OBTAIN</div> <div>Transponder SET/ALT</div> <div>G5 Alt Sel SET</div> <div>GPS Flight Plan SET</div>	<div>TAKEOFF BRIEF</div> <div>Conditions Weather (Wind, Ceilings, Etc.)</div> <div>Hazards Weather, Terrain, Wildlife, Traffic, etc.</div> <div>Runway Number (L/R), Length</div> <div>Return/Emergency Procedures<ul style="list-style-type: none">• Before Rotation• After Rotation w/ Sufficient Rwy• Below 1000' AGL• Above 1000' AGL• Establish PIC in emergency</div> <div>Takeoff (Brief)<ul style="list-style-type: none">• Normal, Short, Soft?• From Runway• Wind speed and direction• Speeds: rotate, initial/enroute climb</div> <div>Departure (Brief)</div>	