

**EMERGENCIES NOTE:
NOT ALL EPS HERE; CHECK POH**

ENGINE FIRE DURING START

Starter.....CONTINUE CRANKING
Mixture.....FULL LEAN/CUTOFF
Throttle.....OPEN
Fuel Pump.....OFF
Fuel Selector.....OFF
Master & Mags.....OFF

EVACUATE / FIRE EXTINGUISHER

**ENGINE POWER LOSS DURING
TAKEOFF IF CANNOT ABORT**

MAINTAIN AIRCRAFT CONTROL
Maintain Safe Airspeed 76 KIAS
Fuel Selector.....OFF
Mixture.....FULL LEAN/CUTOFF
Flaps.....AS REQUIRED
Master & Mags.....OFF

UNLATCH DOOR PROTECT BODY

**POWER LOSS IN FLIGHT WITH
SUFFICIENT ALTITUDE**

Trim Best Glide Speed 76 KIAS
PICK LANDING SITE, NOTE WIND
Fuel Selector.....SWITCH TANKS
Fuel Pump.....ON
Mixture.....FULL RICH
Alt Air.....OPEN
Magnetos...Turn OFF then ON one at a time
Engine Gauges Check for Cause of Loss
If power restored
Alt Air.....CLOSE
Fuel Pump.....OFF

If power not restored, prepare for

POWER OFF LANDING

Trim Best Glide Speed 76 KIAS
Air ConditionerOFF
PICK LANDING SITE, NOTE WIND
Declare emergency..... SQUAWK 7700
ELT ON
Short Final..... 66 KIAS
Flaps.....FULL FLAPS
Seat Belt/Harness..... TIGHT
Mixture.....FULL LEAN/CUTOFF
Fuel Selector.....OFF
Master & Mags.....OFF

UNLATCH DOOR PROTECT BODY

ELECTRICAL FIRE IN FLIGHT

EMERG BATT Switch..... VERIFY ARM
Master/ALT, Cabin Heat/Def..... OFF
Vents OPEN
Land As Soon As Possible/Practicable

ENGINE FIRE IN FLIGHT

Mixture.....FULL LEAN/CUTOFF
Throttle..... IDLE/CLOSED
Fuel Selector, Fuel Pump..... OFF
Cabin Heat/Defroster..... OFF

INITIATE EMERGENCY DESCENT

FlapsFULL (40°)
Airspeed 102 KIAS (top of white arc)
Bank..... 30-45°

**RECOVER AS APPROPRIATE FOR
POWER-OFF LANDING**

ENGINE ROUGHNESS

Alt Air..... ON
If still rough after ONE minute:
Mixture.....ADJUST to SMOOTHNESS
Alt Air..... OFF
Fuel Pump..... ON
Fuel Selector.....SWITCH TANKS
Engine GaugesCHECK
Magnetos Individually select OFF and ON
Land As Soon As Practicable, Prepare for
Power-Off Landing.

LOSS OF FUEL PRESSURE

Fuel Pump..... ON
Fuel Selector.....SWITCH TANKS

LOSS OIL PRESS/HIGH OIL TEMP

Land As Soon As Possible
Prepare for Power Off Landing

ELECTRICAL FAILURES

EMERG BATT Switch..... Verify ARM
Standby Flight Inst..... Verify OPERATIONAL
Aircraft control Use PFD & Standby Inst
Batt & ALT Switch..... OFF
Reduce Electric Loads.....CHECK CBs
Land As Soon As Practicable

BED FREQUENCIES & PHONE #

ATIS..... 124.6
GROUND..... 121.7
TOWER 118.5
BOS APP (inc. clearance w/tower clsd) 124.4
CLEARANCE..... 121.85
ILS 111.15
VOT 110.0
Aero Club OPS 781-225-5849
Aero Club MX 781-225-5851
Tower 781-862-1592

AIRSPEEDS

V_{NE} 154 KIAS
V_{NO} 125 KIAS
V_A (2550#/1917#) 113/98 KIAS
V_{FE} 102 KIAS
V_S 50 KIAS
V_{SO} 45 KIAS
V_Y 76 KIAS
V_X flaps 25°/0° 60/64 KIAS
V_R 60 KIAS
Climb Enroute 87 KIAS
Best Glide (2550#) 76 KIAS

SPECS

Usable Fuel Tabs/Full 34 G/48 G
Oil 8 QTs max; 6 QTs recommended
Tire Pressure 18 PSI Nose; 24 PSI Main
Taxi Fuel 1.0 Gallon
Max Demonstrated X-Wind 17 KTS
Cruise 3,000'@75% 2560 RPM/122 KTS
Cruise GPH@75% (leaned) 11.0 GPH

LIGHT SIGNALS IN FLIGHT

Steady Green Cleared to Land
Flashing Green Return for Landing
Steady Red Yield & Continue Circling
Flashing Red Unsafe - Do Not Land
Red/Green Alt Use Extreme Caution

LIGHT SIGNALS ON GROUND

Steady Green Cleared to Take Off
Flashing Green Cleared to Taxi
Steady Red Stop
Flashing Red Taxi Clear of Runway in Use
Flashing White Taxi to Starting Point
Red/Green Alt Use Extreme Caution

ALT AIRPORTS / 0 WIND

Bedford to Lawrence KBED – KLWM
042°/17 NM ATIS: 126.75 Tower: 119.25
Bedford to Nashua KBED – KASH
348°/21 NM ATIS: 125.1 Tower: 133.2
Bedford to Norwood KBED – KOWD
179°/18 NM ATIS: 119.95 Tower: 126.0
Caution: Needham Antennas 1,500' MSL
Bedford to Fitchburg KBED – KFIT
300°/21 NM
ASOS: 135.75 PCL: 123.0 CTAF: 122.7

HANSCOM AERO CLUB PA-28-181 PIPER ARCHER III CHECKLIST 09/2025

SAFETY CK PREFLIGHT INTERIOR

Magnetos.....Left/Right Switches OFF
Mixture.....FULL LEAN/CUTOFF
Throttle.....CLOSED
Hobbs & Tach.....RECORD
Flight Controls.....RELEASE
Avionics/Radio Master, Electrical Switches... OFF
Master Switch (Prop Clear).....ON
Fuel Gauges.....CHECK
Exterior Lights & Pitot Heat.....ON & CHECK
Pitot Heat Off CAS Message.....Extinguished
Stall horn.....CHECK
Exterior Lights & Pitot Heat.....OFF
Pitot Heat.....OFF – Confirm CAS message
Master Switch.....OFF
Flaps.....EXTEND
Flight Controls & Trim.....CHECK
Pitot & Static Drains.....CHECK
Windows.....CLEAN
Documents (AROW).....CHECK

PREFLIGHT-EXTERIOR

Flight controls.....CHECK & CLEAR
Tie down/chocks.....REMOVE
Fuel Quantity/Quality.....CHECK
Tire pressure.....18 PSI Nose, 24 PSI Mains
Gear & Brakes.....CHECK
Engine/Oil/Belt/Propeller.....CHECK
Inlets/Pitot Static.....CLEAR
Antennas.....CHECK
Baggage Area.....SECURE
Baggage Door.....LATCHED
Final Walk Around.....CHECK

BEFORE ENGINE START

Flaps.....RETRACT
Passenger Brief (& Rally Point)... COMPLETE
Seat & Seat Belts/Harness.....SECURE
Fuel Selector.....LOWER TANK
Circuit Breakers.....CHECK
Alt Air, Alt Static.....OFF
Emerg Batt.....ARM, verify $\geq 23.3V$, OFF
Brakes.....SET & HOLD

NORMAL ENGINE START

Throttle..... $\frac{1}{2}$ " OPEN
Master & Alt Switches.....ON
Magnetos switches.....Right/Left ON
Fuel Pump.....ON
Fin Strobe.....ON
For cold engine only (oil temp < 140°F):
Mixture.....RICH, Prime 3-5 secs, CUT OFF
CAS/PFD messages.....CHECK
Propeller Area.....CLEAR
Starter.....ENGAGE
Mixture (when engine starts).....ADVANCE
If engine does not start within 10 sec, verify
mags on, prime and repeat procedure .
Throttle.....800-1200 RPM
Oil Pressure.....CHECK
Fuel Pump.....OFF
Mixture.....AS REQUIRED

PRE TAXI / TAXI

Avionics / Emerg Batt.....ON / ARM
ATIS/AWOS.....CHECK
MFD.....DB Current, Weights
Fuel on Board.....Enter manually
CAS/PFD/System messages.....CHECK
Taxi Light/Lights.....ON/AS REQUIRED
TAWS/TRAFFIC/Annunciator.....TEST
Altimeter/Radios/XPDR.....SET
Flight Instruments.....SET & CHECK
Auto Pilot.....Preflight Self-Test, Disconnect
Standby Flight Instruments.....Verify
Brakes.....CHECK
Steering.....CHECK

ENGINE RUNUP

Brakes.....SET & HOLD
Mixture.....RICH
Fuel Selector.....OTHER TANK
Throttle.....2,000 RPM
Mags (drop 175, diff 50, ≤ 10 sec).....CHECK
Oil Temp & Pressure.....IN LIMITS
Load Meter.....CHARGING, $28V \pm 1V$
Alt Air.....CHECK RPM DROP – then OFF
Throttle (min 500 RPM).....RETARD
Throttle.....1,000 RPM
Was Emerg Voltage < 23.3V? .. Re-check per POH

BEFORE TAKEOFF

Master/Alt.....Verify ON
Fuel Pump & Landing Light.....ON
Magnetos L&R.....Verify ON
CAS/PFD/System messages.....CHECK
Pitot Heat.....AS REQUIRED
Flight Instruments.....CHECK
Trim (Elev + Rudder).....CHECK
Flight Controls/Flaps.....CHECK
Seat & Seat Belts/Harness.....SECURE
Door & Window.....LATCHED
Air Conditioner.....OFF
Takeoff Briefing.....COMPLETE

TAKEOFF

Mixture.....FULL RICH
Throttle.....FULL
Power/Engine gauges/Airspeed ind...CHECK
Rotate (0° Flaps).....60 KIAS
Rotate Short Field (25° Flaps).....55 KIAS

CLIMB

Flaps.....Retract at safe speed
Airspeed cruise climb.....87 KIAS
Engine Gauges.....CHECK
Fuel Pump.....OFF at Safe Alt

CRUISE

Throttle.....AS REQUIRED
Mixture.....AS REQUIRED
Fuel.....PROPER TANK
Engine Gauges.....CHECK

DESCENT – NORMAL*

ATIS/AWOS.....CHECK
Altimeter/Radios/Flight Instruments.....SET
Throttle & Airspeed.....2,000 RPM/108 KIAS
Mixture.....RICH
* Settings differ from Piper's checklist

DESCENT – POWER OFF

ATIS/AWOS.....CHECK
Altimeter/Radios/Flight Instruments.....SET
Throttle & Airspeed.....Closed/As required
Mixture.....RICH
Throttle.....Verify every 30 seconds

APPROACH & LANDING

COM/NAV.....CHECK & SET
Altimeter/Standby Altimeter.....SET
Seat & Seat Belts/Harness.....SECURE
Armrests.....STOWED
Fuel Pump & Landing Light.....ON
Fuel.....PROPER TANK
Flaps.....AS REQUIRED (102 KIAS Max)
Alt Air.....AS REQUIRED
Mixture.....RICH
Air Conditioner.....OFF
Brakes.....Parking brake OFF, check brakes
Autopilot.....Disconnect at or above 200'
Trim to airspeed.....75 KIAS
Final approach (flaps 40°).....66 KIAS

AFTER LANDING

Flaps.....RETRACT
Fuel Pump, Pitot Heat.....OFF
Lights.....AS REQUIRED
Mixture.....LEAN
Trim.....NEUTRAL

SHUTDOWN & SECURING

ELT.....Confirm OFF, Monitor 121.5
Avionics/Emerg Batt.....OFF
Air Conditioner.....OFF
Throttle.....IDLE
Mixture.....FULL LEAN/CUTOFF
Magnetos switches.....Right/Left OFF
Master & Alt Switches.....OFF
Lights/Electric Switches.....OFF
Standby instruments.....Verify Shutdown
Flight Controls.....SECURE
Hobbs & Tach.....RECORD
Tie Downs.....SECURE
Door & Window.....SECURE
Post Flight Walkaround.....COMPLETE

WARNING:

Improper leaning procedures will greatly reduce endurance

Below 5,000' MSL, only lean mixture if certain power $\leq 75\%$ (RPM $\leq 2,500$).
Best economy: Peak EGT or engine roughness, best power: 100°F richer.