

HANSCOM AERO CLUB PA-28R-201 PIPER ARROW III EMERGENCY PROCEDURES / OTHER INFO 5/2025

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
If rough terrain.....GEAR UP
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.....79 KIAS
PICK LANDING SITE, NOTE WIND
Fuel Selector.....SWITCH TANKS
Fuel Pump.....ON
Mixture.....FULL RICH
Engine Gauges.....Check for Cause of Loss
Alt Air.....OPEN
Magnetos.....CHECK BOTH/L/R
If power restored

Alt Air.....CLOSED
Fuel Pump.....OFF
If power not restored, prepare for

POWER OFF LANDING

Trim Best Glide Speed.....79 KIAS
PICK LANDING SITE, NOTE WIND
Declare emergency.....SQUAWK 7700
ELT.....ON
Short Final.....72 KIAS
Flaps.....FULL FLAPS
Seat Belt/Harness.....TIGHT
Gear.....UP or DOWN by terrain
Mixture.....FULL LEAN/CUTOFF
Fuel Selector.....OFF
Master & Mags.....OFF

UNLATCH DOOR PROTECT BODY

ELECTRICAL FIRE IN FLIGHT

Master Switch, Cabin Heat.....OFF
Vents.....OPEN
Land As Soon As Possible/Practicable

Add/subtract 0.16" MP for every 10°F
above/below standard temperature.

Lower fuel flow value is for economy cruise
(peak EGT), higher value for power cruise
(100°F rich of peak EGT).

ENGINE FIRE IN FLIGHT

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

INITIATE EMERGENCY DESCENT

Gear.....EXTEND below 129 KIAS
Airspeed.....103 KIAS (top of white arc)
Flaps.....FULL (40°)
Bank.....30-45°

RECOVER AS APPROPRIATE FOR POWER-OFF LANDING

ENGINE ROUGHNESS

Mixture.....ADJUST to SMOOTHNESS
Alt Air.....OPEN
Fuel Pump.....ON
Fuel Selector.....SWITCH TANKS
Engine Gauges.....CHECK
Magnetos.....L, R, THEN BOTH
Land As Soon As Practicable

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

Annunciator Light.....CHECK GAUGE/LIGHT
ALT Switch.....OFF
Reduce Electric Loads.....CHECK CBs
Land As Soon As Practicable

EMER GEAR EXTENSION

Master switch.....Check ON
Circuit breaker.....Check
Panel lights.....OFF (in daytime)
Gear indicator bulbs.....Check
If landing gear is not down & locked:
Airspeed.....Below 87 KIAS
Landing gear selector.....DOWN
Emergency gear lever.....DOWN
Fishtail as needed

AIRSPEEDS

V_{NE}.....183 KIAS
V_{NO}.....146 KIAS
V_A (2750#/1865#).....118/96 KIAS
V_{FE}.....103 KIAS
V_{LE} retract/extend gear.....107/129 KIAS
V_S.....60 KIAS
V_{SO}.....55 KIAS
V_Y gear up/down, flaps up.....90/78 KIAS
V_X gear up/down, flaps up.....78/72 KIAS
V_R.....65-75 KIAS
Climb Enroute.....104 KIAS
Best Glide (2750#).....79 KIAS

SPECS

Usable Fuel Tabs/Full.....50 G/72 G
Oil.....8QTs max; 6 QTs recommended
Tire Pressure.....27 PSI Nose; 30 PSI Mains
Taxi Fuel.....1.0 Gallon
Max Demonstrated X-Wind.....17 KTS
Cruise 3,000'@75%.....2400 RPM/135 KTS
Cruise GPH@75% (leaned).....10.2-11.6 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

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

POWER SETTING TABLE

Press Alt Temp		55% HP 8-9.1 GPH		65% HP 9.2-10.4 GPH		75% HP 10.2-11.6 GPH	
(Feet)	(F)	2100	2400	2100	2400	2400	(Feet)
SL	59	22.9"	20.4"	25.9"	22.9"	25.5"	SL
1,000'	55	22.7"	20.2"	25.6"	22.7"	25.2"	1,000'
2,000'	52	22.4"	20.0"	25.4"	22.5"	25.0"	2,000'
3,000'	48	22.2"	19.8"	25.1"	22.2"	24.7"	3,000'
4,000'	45	21.9"	19.5"	24.8"	22.0"	24.4"	4,000'
5,000'	41	21.7"	19.3"	FT	21.7"	—	5,000'
6,000'	38	21.4"	19.1"	—	21.5"	—	6,000'
7,000'	34	21.2"	18.9"	—	21.3"	—	7,000'
8,000'	31	21.0"	18.7"	—	21.0"	—	8,000'
9,000'	27	FT	18.5"	—	FT	—	9,000'
10,000'	23	—	18.3"	—	—	—	10,000'

HANSCOM AERO CLUB PA-28R-201 PIPER ARROW III CHECKLIST 5/2025**SAFETY CK PREFLIGHT INTERIOR**

Magnetos.....OFF/KEYS OUT
 Mixture.....FULL LEAN/CUTOFF
 Throttle.....CLOSED
 Gear Selector.....DOWN
 Hobbs & Tach.....RECORD
 Documents (AROW).....CHECK
 Flight Controls.....RELEASE
 Avionics/Radio Master.....OFF
 Electrical Switches.....OFF
 Master Switch (Prop Clear).....ON
 Gear Lights.....ON
 Fuel Gauges.....CHECK
 Annunciator panel.....TEST
 Exterior Lights & Pitot Heat.....ON & CHECK
 Stall horn.....CHECK
 Exterior Lights & Pitot Heat.....OFF
 Master Switch.....OFF
 Ignition Switch.....OFF
 Pitot & Static Drains.....CHECK
 Flight Controls & Trim.....CHECK
 Windows.....CLEAN
 Flaps.....EXTEND

PREFLIGHT-EXTERIOR

Flight controls.....CHECK & CLEAR
 Tie down/chocks.....REMOVE
 Fuel Quantity/Quality.....CHECK
 Retractable Gears & Brakes.....CHECK
 Tire pressure.....27 PSI Nose, 30 PSI Mains
 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
 Circuit Breakers.....CHECK
 Strobes/Anti-Collision Lights.....ON
 Alt Air.....CLOSED
 Propeller.....HIGH RPM
 Fuel Selector.....LOWER TANK
 Brakes.....SET & HOLD

ENGINE START (COLD)

Throttle.....½" OPEN
 Master & Alt Switches.....ON
 Fuel Pump.....ON
 Mixture.... Prime/RICH - then LEAN/CUTOFF
 Propeller Area.....CLEAR
 Starter.....ENGAGE
 Mixture.....FULL RICH
 Throttle.....ADJUST
 Oil Pressure.....CHECK

FOR ENGINE START (FLOODED) CK SEE POH**ENGINE START (HOT)**

Throttle & Mixture.....½" & LEAN/CUTOFF
 Master & Alt Switches.....ON
 Fuel Pump.....ON
 Propeller Area.....CLEAR
 Starter.....ENGAGE
 Mixture.....ADVANCE
 Throttle.....ADJUST
 Oil Pressure.....CHECK

PRE TAXI / TAXI

Fuel Pump.....OFF
 Mixture.....AS REQUIRED
 Avionics / Radio Master.....ON
 ATIS/AWOS.....CHECK
 Altimeter/Radios/XPDR.....SET
 Flight Instruments.....SET & CHECK
 Taxi Light/Lights.....ON/AS REQUIRED
 Prop.....HIGH RPM
 Brakes & Steering.....CHECK

ENGINE RUNUP

Parking Brake.....SET
 Fuel Selector.....OTHER TANK
 Mixture.....RICH
 Propeller.....HIGH RPM
 Throttle.....2000 RPM
 Vacuum (4.9 – 5.1").....CHECK
 Mags (drop 175, diff 50).....CHECK
 Oil Temp & Pressure.....IN LIMITS
 Fuel Pressure.....IN LIMITS
 Annunciator Panel.....TEST
 Load Meter.....CHARGING
 Propeller.....Cycle 3 times, then HIGH RPM
 Alt Air.....CHECK then CLOSED
 Throttle (min 500 RPM).....RETARD
 Throttle.....1000 RPM

BEFORE TAKEOFF

Master Switch.....Verify ON
 Flight Instruments.....CHECK
 Fuel Selector.....Proper Tank
 Fuel Pump & Landing Light.....ON
 Engine Gauges.....CHECK
 Pitot Heat.....AS REQUIRED
 Trim (Elev + Rudder).....CHECK
 Flight Controls/Flaps.....CHECK & SET
 Seat & Seat Belts/Harness.....SECURE
 Door & Window.....LATCHED
 Takeoff Briefing.....COMPLETE

TAKEOFF

Mixture & Propeller.....RICH/HIGH RPM
 Throttle.....FULL
 Power.....CHECK
 Engine Gauges.....CHECK
 Airspeed Indicator.....CHECK
 Rotate (0° Flaps).....65-75 KIAS
 Take-off speed under normal cond.....70 KIAS
 Rotate Short Field (25° Flaps).....55-60 KIAS

CLIMB

Flaps.....Retract at safe speed
 Gear.....Retract clear of runway
 Airspeed cruise climb.....104 KIAS
 Engine Gauges.....CHECK
 Fuel Pump.....OFF at safe alt
 Throttle/Prop/fuel flow.....25"/2500/12GPH

CRUISE

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

DESCENT APPROACH & LANDING

Power.....AS REQUIRED
 Mixture.....RICH
 ATIS/AWOS.....CHECK
 Altimeter/Radios.....SET
 Flight Instruments.....SET
 Seat & Seat Belts/Harness.....SECURE
 Fuel Pump.....ON
 Fuel.....PROPER TANK
 Gear.....DOWN & 3 greens (129 KIAS)
 Flaps.....AS REQUIRED
 Propeller.....HIGH RPM
 Landing.....75 KIAS

AFTER LANDING

Flaps.....RETRACT
 Fuel Pump & Pitot Heat.....OFF
 Mixture.....LEAN
 Trim.....NEUTRAL

SHUTDOWN & SECURING

Avionics/Radio Master.....OFF
 Throttle.....IDLE
 Magnetos.....CHECK FOR GROUND
 ELT.....CONFIRM OFF
 Mixture.....FULL LEAN/CUTOFF
 Magnetos.....OFF, KEY OUT
 Master & Alt Switches.....OFF
 Lights/Electric Switches.....OFF
 Flight Controls.....SECURE
 Hobbs & Tach.....RECORD
 Doors & Windows, Tie Downs.....SECURE
 Post Flight Walkaround.....COMPLETE

BED FREQUENCIES

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

WARNING: Improper leaning procedures will greatly reduce endurance