

After Takeoff

Out of 1,000' AGL

Climb at 90 KIAS After Passing Through 500' AGL

CRUISE CLIMB 90 KIAS
 THROTTLE FULL
 FLAPS UP CHECK

Cruise

THROTTLE SET
 2300 RPM for local; 75% for XC.

ENGINE INSTRUMENTS CHECK
 FUEL SELECTOR PROPER TANK
 FUEL PUMP OFF / CHECK PRESSURE
 LANDING LIGHT ON (for local training) / OFF (for XC cruise)
 MIXTURE LEAN AS REQ

In-Range / Descent

For Cross-Country

ATIS/AWOS CHECK
 APPROACH BRIEFING COMPLETE
 ALTIMETER SET
 AIRPORT DIAGRAM (keep available) CHECK
 CARB HEAT AS REQ
 SEAT BELTS FASTENED
 MIXTURE SLIGHTLY ENRICH

Approach

Approx. 15 NM from Airport

ATIS/AWOS CHECK
 APPROACH BRIEFING COMPLETE
 ALTIMETER SET
 AIRPORT DIAGRAM (keep available) CHECK
 FUEL PUMP ON
 FUEL SELECTOR PROPER TANK
 MIXTURE SLIGHTLY ENRICH
 PARKING BRAKE OFF
 LANDING LIGHT ON

WHEN DIRECT TO IAF OR VECTORED

FLIGHT & NAV INSTRUMENTS SET / IDENT
 GPS **CDI** (as req. for approach) VLOC OR GPS
 AIRSPEED 90 KIAS

Before Landing Checklist

Never Switch Fuel Tanks Below Pattern Altitude

POWER AS REQUIRED
 FLAPS (V_{FE} 102 KIAS) 25°
 MIXTURE FWD
 FUEL PUMP ON

Go Around / Missed Approach

THROTTLE FULL FWD
 PITCH UP FOR CLIMB (76 KIAS)
 FLAPS UP (0°)
 FLY ASSIGNED OR PUBLISHED HEADING & ALTITUDE

After Landing

Stopped

FLAPS UP
 TRIM CENTER
 CARB HEAT OFF
 MIXTURE LEAN FOR RPM RISE
 STROBE LIGHT ON/DOWN
 LANDING LIGHT AS REQ
 FUEL PUMP OFF
 TAXI CLEARANCE OBTAIN / BRIEF

Shutdown Terminate

TRANSPONDER 1200
 AVIONICS MASTER OFF
 FRESH AIR FAN OFF
 THROTTLE 1000 RPM
 MIXTURE CUTOFF
 MAGNETOS OFF
 LIGHT SWITCHES OFF
 BATTERY MASTER OFF

G5 will begin to count down. DO NOT press any button on the instrument.

WINDOW CLOSE
 BLOCK-IN & MX REPORT SUBMITTED & CONF. REC'D
 FLIGHT CONTROLS SECURE
 SUNSCREENS INSTALL
 G5 (IF EQUIPPED) COUNTING DOWN
 TIEDOWN / CHOCK SECURE
 WALKAROUND COMPLETE



PIPER ARCHER

Normal Checklist

Revised 2020-11-19

Preflight Inspection

BLOCK-OUT SUBMITTED & CONF. REC'D
 WEATHER CHECK
 EQUIPMENT REQUIRED CHECK
 WEIGHT & BALANCE CHECK
 FUEL QTY (full, unless limited by W&B) AS REQ
 OIL QTY (6-8 qts., 6 qts. min.) CHECK
 PERFORMANCE FIGURES COMPUTE

INTERIOR

Do Not Step on Flaps or Lean on Door

FIRE EXTINGUISHER CHECK
 AIRCRAFT DOCUMENTS CHECK
 POH/AFM CHECK
 FUEL SELECTOR PROPER TANK
 TRIM ELEV & RUDDER SET
 FLAPS FULL DOWN (40°)
 CARB HEAT OFF
 MIXTURE CUTOFF
 THROTTLE CLOSED
 MAGNETOS & ALL SWITCHES OFF
 PITOT/STATIC DRAIN / CHECK
 BATTERY MASTER ON
 LIGHTS (as req.) CHECK
 FUEL GAUGES QTY CHECK
 ANNUNCIATOR PANEL CHECK
 PITOT HEAT (if IFR) CHECK
 STALL WARNING HORN TEST
 BATTERY MASTER OFF
 FLIGHT CONTROLS CHECK
 POSITION AILERON FULL LEFT DEFLECTION

Provides for visual inspection without manually moving aileron.

EXTERIOR

TOW BAR STOWED & SECURE
 BAGGAGE DOOR SECURE
 RIGHT WING CONDITION (rear, tip, & front) CHECK
 Do not touch aileron. Control position allows for visual inspection without manually moving aileron.

FUEL QTY INSPECT VISUALLY
 FUEL TANK VENT CLEAR
 FUEL TANK SUMP DRAIN
 Check for water, sediment, proper color.
 WING TIE DOWN REMOVE

Continued...

Preflight Inspection (Continued)

MAIN GEAR STRUT (approx. 4.5") & TIRE.....CHECK
 BRAKE BLOCK & DISCCHECK
 FRESH AIR INLET CLEAR
 NOSE COWLING CONDITION.....CHECK
 PROPELLER & SPINNER.....CHECK
 AIR INLETSCHECK
 NOSE GEAR STRUT (approx. 3.25") & TIRE.....CHECK
 OIL QTY (6 qts. min.).....CHECK
 DIPSTICK & OIL FILLER CAP SECURE
 FUEL STRAINER.....DRAIN
 LEFT WING CONDITION (rear, tip, & front).....CHECK

Do not touch aileron. Control position allows for visual inspection without manually moving aileron.

PITOT/STATIC MASTCHECK
 FRESH AIR INLETCHECK
 FUEL TANK SUMPDRAIN

Check for water, sediment, proper color.

FUEL TANK VENT CLEAR
 FUEL QTYINSPECT VISUALLY
 MAIN GEAR STRUT (approx. 4.5") & TIRE.....CHECK
 BRAKE BLOCK & DISCCHECK
 WING TIE DOWN REMOVE
 ANTENNAS.....CHECK
 EMPENNAGE.....CHECK
 STABILATOR & TRIM TABCHECK
 AFT TIE DOWN REMOVE
 GENERAL WALKAROUND.....CHECK
 FLAPS RETRACT (0°)

Before Starting Engine

PREFLIGHT INSPECTION..... COMPLETE
 WT&BAL, DOCS, PERFORMANCECHECK
 CELL PHONE AIRPLANE MODE
 PASSENGER BRIEF COMPLETE

Door, Emergency Exit, Seats & Seat belts,
 Fire Extinguisher, No Smoking, PIC Authority

SEATS & SEAT BELTS LOCKED / FASTENED
 AVIONICS MASTER..... OFF
 FRESH AIR FAN OFF
 ALTERNATE STATIC SOURCE..... OFF/FWD
 CIRCUIT BREAKERS.....CHECK
 SWITCHES OFF
 CARB HEAT OFF
 MIXTURE RICH/FULL FWD
 THROTTLE..... CLOSED
 BATTERY MASTERON
 ALTERNATORON
 FIN STROBE ON/UP
 NAV LIGHTS (night only).....AS REQ
 FUEL PUMPON / CHECK PRESSURE
 MAGNETOSON

Engine Start

COLD ENGINE.....PRIME 3-4 STROKES
 THROTTLE.....THREE FULL STROKES
 THROTTLE 1/4" OPEN
 BRAKES..... HOLD
 PROP AREA..... CLEAR
 START (8 seconds max) ENGAGE




WHEN ENGINE STARTS

THROTTLE..... 1000 RPM
 OIL PRESSURECHECK
 FUEL SELECTOR..... SWITCH TANKS

Confirm both tanks work.

FUEL PUMP OFF
 FUEL PRESSURE.....CHECK
 MIXTURE LEAN FOR RPM RISE
 THROTTLE..... 1000 RPM

After Start

AVIONICS MASTER.....ON
 FRESH AIR FAN/HEATER/DEFROST AS REQ
 HEADSETSON
 ANNUNCIATOR PANELTEST
 ALTERNATOR OUTPUTCHECK
 GPS DATABASE "OK?" (press) 
 COMS SET 
 ALTIMETERS SET
 CLEARANCE (if IFR) OBTAIN
 GPS ENTER WPT/FPL/APR AS REQ
 GPS  (as req. for departure) VLOC OR GPS
 NAVS SET / COURSE SET
 FLIGHT INSTRUMENTS (TC/AI/HSI/VSI)CHECK
 TRANSPONDER..... SET CODE / ALT MODE

Taxi

Do Not Ride Brakes

AIRPORT DIAGRAM AVAILABLE
 TAXI CLEARANCE OBTAIN / BRIEF
 TAXI AREA (left & right) CLEAR
 BRAKES.....CHECK
 FLIGHT INSTRUMENTS (TC/AI/HSI/VSI)CHECK

Check in turns.

STERILE COCKPIT NO NON-ESSENTIAL CONVERSATION

Run Up

Do Not Use Parking Brake

BRAKES HOLD
 FUEL PUMP ON
 FUEL GAUGES / QTYCHECK
 FUEL SELECTOR..... VERIFY PROPER TANK
 MIXTURE FULL FWD
 THROTTLE..... 2000 RPM
 MAGNETOS (175 max drop, max diff. 50 RPM) CHECK
 CARB HEAT (approx. 75 RPM drop) CHECK
 ENGINE INSTRUMENTSCHECK
 AMMETERCHECK
 FUEL PUMP OFF
 FUEL PRESSURE.....CHECK
 ANNUNCIATOR PANELCHECK
 THROTTLE..... 1000 RPM
 MIXTURE LEAN FOR RPM RISE
 G5 (IF EQUIPPED)..... FULL BATTERY
 FLIGHT CONTROLSCHECK

IN THE EVENT OF AN ENGINE FAILURE OR ABNORMALITY PRIOR TO ROTATION

THROTTLE..... IMMEDIATELY CLOSED
 BRAKE AS REQ
 STOP STRAIGHT AHEAD

IF NOT ENOUGH RUNWAY REMAINS TO STOP

MIXTURE IDLE CUTOFF
 FUEL SELECTOR ROTATE TO OFF
 MAGNETOS OFF
 BATTERY MASTER OFF
 AVOID OBSTACLES

ENGINE FAILURE AFTER ROTATION WITH SUFFICIENT RUNWAY REMAINING FOR A COMPLETE STOP

THROTTLE..... IMMEDIATELY CLOSED
 LAND STRAIGHT AHEAD
 BRAKE AS REQ



ENGINE FAILURE AFTER ROTATION WITH NO RUNWAY REMAINING

AIR SPEED PITCH FOR BEST GLIDE (76 KIAS)
 FUEL SELECTOR ROTATE OFF
 MIXTURE IDLE CUTOFF
 MAGNETOS OFF
 FLAPS ADJUST
 BATTERY MASTER OFF
 LAND AT LOWEST POSSIBLE AIRSPEED, STRAIGHT AHEAD, & AVOID OBSTACLES

Pre-Takeoff Brief

Before Takeoff

PRE-TAKEOFF BRIEF..... COMPLETE

FLIGHT INSTRUMENTSCHECK
 FUEL PUMP ON
 TRIM..... ONE, TWO, SET
 FLAPS AS REQ
 CARB HEAT OFF
 GPS  to WPT/PROC for APR/FPL to activate) SET
 GPS  (as req. for departure) VLOC OR GPS
 HSI / COURSE..... SET
 DEPARTURE BRIEF
 | Initial Altitude & Heading Bugs
 | Brief Departure Procedure COMPLETE
 MIXTURE FULL FWD (OR SET FOR ALTITUDE)
 ENGINE INSTRUMENTSCHECK
 SEAT BELTS & SHOULDER HARNESS..... FASTENED

FINAL ITEMS WHEN #1 FOR TAKEOFF

DOOR & WINDOW SECURE
 LANDING LIGHT ON
 STROBE LIGHT..... ON/UP
 TRANSPONDER..... ALT

Electrical Failures

ALT Annunciator Illuminated

AMMETER.....CHECK TO VERIFY INOP ALTERNATOR
IF AMMETER READS ZERO

ALTERNATOROFF
 ELECTRICAL LOADSREDUCE TO MINIMUM
 ALT CIRCUIT BREAKER..... CHECK / RESET IF NECESSARY
 ALTERNATOR ON

IF POWER NOT RESTORED

ALTERNATOR OFF
 Anticipate electrical failure.

DECLARE EMERGENCY, EXIT IMC, LAND AS SOON AS POSSIBLE

Electrical Overload

Alternator 20 AMPs Above Known Electrical Load

ALTERNATOR ON
 BATTERY MASTEROFF

IF ALTERNATOR LOADS ARE REDUCED

ELECTRICAL LOAD.....REDUCE TO MINIMUM
 LAND AS SOON AS PRACTICAL

IF ALTERNATOR LOADS ARE NOT REDUCED

ALTERNATOROFF
 BATTERY MASTER AS REQ

Anticipate electrical failure.

DECLARE EMERGENCY, EXIT IMC, LAND AS SOON AS POSSIBLE

Electrical Failure

STANDBY INSTRUMENTS.....USE
 DECLARE EMERGENCY, EXIT IMC, LAND AS SOON AS POSSIBLE

AHRS Failure

G5.....USE
 PFD HSI..... VERIFY AGAINST MAG COMPASS
 APPROACH.....ACCOMPLISH
 Visual, ILS, GPS, LOC, VOR approaches available.

PFD Failure

STANDBY INSTRUMENTS.....USE
 G430 NAV 1 PAGESELECT (HOLD CLR FOR 3 SECS)
 G430 CDI.....USE FOR NAVIGATION
 APPROACH.....ACCOMPLISH
 Visual, GPS approaches available.

ADC Failure

STANDBY AIRSPEED INDICATOR.....USE
 STANDBY ALTIMETER.....USE
 APPROACH.....ACCOMPLISH
 Visual, ILS, GPS, LOC, VOR approaches available.

Pattern Work

Touch & Go's Prohibited Except With Instructor

Before Landing Checklist

Never Switch Fuel Tanks Below Pattern Altitude

POWER.....AS REQUIRED
 FLAPS (V_{FE} 102 KIAS) 25°
 MIXTURE FWD
 FUEL PUMP ON

Go Around / Missed Approach

THROTTLE..... FULL FWD
 PITCH..... UP FOR CLIMB (76 KIAS)
 FLAPSUP (0°)
 FLY ASSIGNED OR PUBLISHED HEADING & ALTITUDE

Touch & Go

MAINTAIN CENTERLINE
 FLAPS UP
 CARB HEAT.....OFF
 THROTTLE.....FULL

Standardized Speeds

90 KIASDOWNWIND, FLAPS 0°
 70-80 KIASFLAPS 25° - 1500 RPM
 70 KIASTURNING BASE, FLAPS 25°
 SHORT FINAL UNTIL
 66 KIAS10-20' ABOVE RUNWAY

WHEN LANDING ASSURED

SOFT FIELD.....66 KIAS - FLAPS 40°
 SHORT FIELD66 KIAS - FLAPS 40°

After Landing (Stopped)

FLAPSUP
 TRIM.....CENTER
 CARB HEAT OFF
 MIXTURELEAN FOR RPM RISE
 STROBE LIGHT.....ON/DOWN
 LANDING LIGHTAS REQ
 FUEL PUMP OFF
 TAXI CLEARANCE.....OBTAIN / BRIEF

Before Takeoff

PRE-TAKEOFF BRIEF..... COMPLETE
 FLIGHT CONTROLS.....CHECK
 FLIGHT INSTRUMENTS.....CHECK
 FUEL PUMPON
 TRIM.....ONE, TWO, SET
 FLAPSAS REQ
 CARB HEAT OFF
 GPS (⊕) to WPT/PROC for APR/FPL to activate) SET
 GPS (CDI).....(as req. for departure) VLOC OR GPS
 HSI / COURSE..... SET
 DEPARTURE BRIEF
 Initial Altitude & Heading Bugs
 Brief Departure Procedure..... COMPLETE
 MIXTURE..... FULL FWD (OR SET FOR ALTITUDE)
 ENGINE INSTRUMENTSCHECK
 SEAT BELTS & SHOULDER HARNESS..... FASTENED

FINAL ITEMS WHEN #1 FOR TAKEOFF

DOOR & WINDOW SECURE
 LANDING LIGHTON
 STROBE LIGHT.....ON/UP
 TRANSPONDER..... ALT



PIPER ARCHER

Emergency & Abnormal Checklist

Revised 2020-11-9

Engine Failure During Takeoff Roll

THROTTLE..... IDLE
 BRAKESAPPLY
 MIXTURE IDLE CUTOFF
 MAGNETOS OFF
 BATTERY MASTER OFF

Engine Failure After Takeoff

MAINTAIN AIRCRAFT CONTROL
 AIRSPEED BEST GLIDE 76 KIAS
 INSUFFICIENT ALTITUDE
 PERFORM POWER-OFF LANDING

IF TIME & ALTITUDE ALLOWS

FUEL SELECTOR.....CHECK SELECTED TANK
 FUEL PUMP CHECK ON
 MIXTURECHECK RICH
 CARB HEATON

If power is not restored, prepare for Power-Off Landing.

Power-Off Landing

Emergency Landing Without Power

AIRSPEED BEST GLIDE 76 KIAS
 LANDING AREA.....SELECT / INSPECT

WHEN COMMITTED TO LANDING

FLAPSAS DESIRED
 THROTTLE..... CLOSE
 MIXTURE IDLE CUTOFF
 MAGNETOS OFF
 BATTERY MASTER OFF
 ALTERNATOR OFF
 FUEL SELECTOR..... OFF
 SEAT BELTS & SHOULDER HARNESS..... TIGHTENED
 TOUCH DOWNLOWEST POSSIBLE AIRSPEED

Spin Recovery

RUDDER FULL OPPOSITE OF SPIN
ELEVATOR FULL FWD

While Simultaneously

AILERONS NEUTRAL
THROTTLE IDLE

WHEN ROTATION STOPS

RUDDER NEUTRAL
ELEVATOR AS REQ TO SMOOTHLY REGAIN
LEVEL FLIGHT ATTITUDE

Loss of Fuel Pressure

FUEL PUMP ON
FUEL SELECTOR CHECK ON FULL TANK

Loss of Oil Pressure

LAND AS SOON AS POSSIBLE
PREPARE FOR POWER OFF-LANDING PROCEDURE

High Oil Temperature

LAND AS SOON AS POSSIBLE
PREPARE FOR POWER OFF-LANDING PROCEDURE

Open Door

AIRSPPEED SLOW TO 87 KIAS
CABIN VENTS CLOSE
STORM WINDOW OPEN
LOWER LATCH OPEN PULL ON ARMREST / LATCH
UPPER LATCH OPEN LATCH

Cleaning Fouled Spark Plugs

(CAUTION: Hold brakes securely and remain vigilant for aircraft movement;
only perform runup on surface free from gravel/dirt.)

THROTTLE 2000 RPM
MIXTURE LEAN FOR SLIGHT RPM DROP
MAINTAIN FOR 60 SECONDS
MIXTURE FULL FWD
PERFORM MAGNETO CHECK

Note:

While performing the above checklist, do not allow oil temperature to reach redline and be vigilant of oil pressure.

Carburetor Icing

CARB HEAT ON FULL
MIXTURE ADJUST FOR MAXIMUM SMOOTHNESS

Engine Running Roughly

MAINTAIN AIRCRAFT CONTROL
CARB HEAT ON

IF ROUGHNESS CONTINUES AFTER 1 MINUTE

CARB HEAT OFF
MIXTURE ADJUST FOR MAXIMUM SMOOTHNESS
FUEL PUMP ON
FUEL SELECTOR SWITCH TANKS / CHECK PRESSURE
ENGINE INSTRUMENTS CHECK
MAGNETOS CHECK LEFT / CHECK RIGHT

If operation is satisfactory on either magneto, continue on that magneto at reduced power and full RICH mixture to first airport.

PREPARE FOR POWER-OFF LANDING PROCEDURE

Engine Power Loss In-Flight

IF AT LOW ALTITUDE (BELOW 3000' AGL)

AIRSPPEED MAINTAIN 76 KIAS MINIMUM

IF ALTITUDE PERMITS (ABOVE 3000' AGL)

FUEL SELECTOR SWITCH TO TANK CONTAINING FUEL
FUEL PUMP ON
MIXTURE RICH
CARB HEAT ON
ENGINE INSTRUMENTS
..... CHECK FOR INDICATION OF CAUSE OF POWER LOSS

If no fuel pressure is indicated, check fuel selector position to be sure it is on a tank containing fuel. If power is not restored prepare for a Power-Off Landing.

Power-Off Landing

AIRSPPEED BEST GLIDE 76 KIAS
LANDING AREA SELECT / INSPECT

WHEN COMMITTED TO LANDING

FLAPS AS DESIRED
THROTTLE CLOSE
MIXTURE IDLE CUTOFF
MAGNETOS OFF
BATTERY MASTER OFF
ALTERNATOR OFF
FUEL SELECTOR OFF
SEAT BELTS & SHOULDER HARNESS TIGHTENED
TOUCH DOWN LOWEST POSSIBLE AIRSPEED

Fires

Engine Fire During Start

STARTER CRANK ENGINE
MIXTURE IDLE CUTOFF
THROTTLE OPEN
FUEL PUMP OFF
FUEL SELECTOR OFF
ABANDON IF FIRE CONTINUES

Electrical Fire In-Flight

(Smoke in Cabin)

BATTERY MASTER OFF
ALTERNATOR OFF
VENTS OPEN
CABIN HEAT OFF
STORM WINDOW OPEN IF REQ
LAND AS SOON AS POSSIBLE

Engine Fire In-Flight

FUEL SELECTOR OFF
THROTTLE CLOSED
MIXTURE IDLE CUTOFF
FUEL PUMP OFF
HEATER & DEFROSTER OFF
AIRSPEED BEST GLIDE 76 KIAS
PREPARE FOR POWER-OFF LANDING PROCEDURE