

PA 44-180 SEMINOLE – NORMAL PROCEDURES

BEFORE ENGINE START THROUGH ENGINE SHUTDOWN – CHECKLIST WILL BE VERBALIZED

BEFORE ENGINE START

HOBBS CHECK TIME REMAINING
 HOBBS TIME RECORD
 PARKING BRAKE SET
 PASSENGER BRIEF COMPLETE
 SEATBELTS FASTEN AND SECURE
 GEAR SELECTOR DOWN
 THROTTLES IDLE
 PROPELLER CONTROLS FULL FWD
 MIXTURE IDLE
 CARBURETOR CONTROLS OFF
 COWL FLAPS OPEN
 FUEL SELECTORS ON
 RADIO MASTER OFF
 ELECTRICAL SWITCHES OFF
 HEATER SWITCH OFF
 CIRCUIT BREAKERS IN

COLD START

ALTERNATORS ON
 BATTERY MASTER ON
 ANTI-COLLISION LIGHTS ON
 GEAR LIGHTS 3 GREEN
 THROTTLES OPEN ¼ INCH
 PROPELLER CONTROLS FULL FWD
 MIXTURES FULL RICH
 *ELECTRIC FUEL PUMP ON
 *PRIMER AS REQUIRED
 *PROPELLER AREA CLEAR
 *MAGNETO SWITCH ON
 *STARTER ENGAGE
 *THROTTLE 1000 RPM
 *OIL PRESSURE CHECK
 FUEL PRESSURE CHECK

REPEAT START (*) FOR SECOND ENGINE

ALTERNATORS CHECK AMPS

HOT START

ALTERNATORS ON
 BATTERY MASTER ON
 ANTI-COLLISION LIGHTS ON
 GEAR LIGHTS 3 GREEN
 THROTTLES OPEN ½ INCH
 PROPELLER CONTROLS FULL FWD
 MIXTURES FULL RICH
 *ELECTRIC FUEL PUMP ON
 *PROPELLER AREA CLEAR
 *MAGNETO SWITCH ON
 *STARTER ENGAGE
 *THROTTLE 1000 RPM
 *OIL PRESSURE CHECK
 FUEL PRESSURE CHECK

REPEAT START (*) FOR SECOND ENGINE

ALTERNATORS CHECK AMPS

COLD WEATHER START (BELOW 10°F)

SEE POH FOR START PROCEDURE

FLOODED START

ALTERNATORS ON
 BATTERY MASTER ON
 ANTI-COLLISION LIGHTS ON
 GEAR LIGHTS 3 GREEN
 THROTTLES OPEN FULL
 PROPELLER CONTROLS FULL FWD
 MIXTURE IDLE
 *ELECTRIC FUEL PUMP OFF
 * PROPELLER AREA CLEAR

*MAGNETO SWITCH ON
 *STARTER ENGAGE
 *MIXTURE ADVANCE
 *THROTTLE 1000 RPM
 *OIL PRESSURE CHECK
 *FUEL PRESSURE CHECK

REPEAT START (*) FOR SECOND ENGINE

ALTERNATORS CHECK AMPS

ENGINE START – EXTERNAL POWER SOURCE

SEE POH FOR START PROCEDURE

PRE-TAXI

AVIONICS ON, TEST
 AWOS/ATIS CHECK
 ALTIMETER/DG SET
 TRANSPONDER 1200 & STBY
 FUEL SELECTORS CROSSFEED
 BRAKES TEST

ENGINE RUN-UP

PARKING BRAKE SET
 FUEL SELECTORS ON
 FLIGHT CONTROLS FREE & CORRECT
 AUTO PILOT ON & TEST
 ELECTRIC TRIM TEST & SET
 PROPELLER CONTROLS FULL FWD
 MIXTURE RICH
 THROTTLES 1500 RPM
 PROPELLERS FEATHER CHECK

*MAX DROP 500 RPM

THROTTLES 2000 RPM
 PROPELLERS EXERCISE

*MAX DROP 300 RPM

MAGNETOS CHECK

*MAX DROP 175 RPM/MAX DIFF 50 RPM

CARBURETOR HEAT CHECK
 VACUUM CHECK

*4.8 – 5.2 IN. Hg

ENGINE INSTRUMENTS CHECK
 ALTERNATORS CHECK AMPS L & R
 LEFT ALTERNATOR OFF
 RIGHT AMMETER CHECK LOAD
 LEFT ALTERNATOR ON
 RIGHT ALTERNATOR OFF
 LEFT AMMETER CHECK LOAD
 RIGHT ALTERNATOR ON
 PITOT HEAT CHECK
 FUEL PUMPS OFF
 FUEL PRESSURE CHECK
 ANNUNCIATOR PANEL CHECK OFF
 THROTTLES (500-600 RPM) IDLE CHECK
 THROTTLES 1000 RPM
 FLIGHT INSTRUMENTS CHECK & SET
 CABIN DOOR LATCHED

BEFORE TAKE-OFF

TYPE OF TAKEOFF DETERMINE
 FLAPS RETRACTED
 AIRSPEEDS: ROTATION, CLIMB OUT,
 AND BEST GLIDE CALCULATE (GUST SPREAD)
 PRE-TAKEOFF BRIEFING COMPLETE
 FUEL PUMPS ON
 ANTI-COLLISION LIGHTS ON
 LANDIN/REC LIGHTS ON
 TRANSPONDER SQUAWK ALT
 MIXTURES AS REQUIRED
 AUTO PILOT OFF

COWL FLAPS OPEN
 CABIN DOOR LATCHED
 TAKE-OFF TIME RECORD
**** RESET HEADING INDICATOR AFTER TAXIING ONTO RUNWAY****
 V SPEEDS Vr – 75 Vx – 82 Vy – 88 Vyse – 88

CLIMB (BETWEEN 500 AND 1500 AGL)

POWER/PROP SET
 GEAR UP
 TRIM SET
 COWL FLAPS AS REQUIRED
 FUEL PUMPS OFF
 FUEL PRESSURE CHECK
 LANDING/REC LIGHTS OFF
 HEADING INDICATOR CHECK

CRUISE (AT TOP OF CLIMB FOR X/C AND LCL FLIGHTS)

POWER/PROP SET
 TRIM SET
 COWL FLAPS CLOSED
 HEADING INDICATOR CHECK

IN-RANGE (X/C – BEFORE TOP OF DESCENT; LCL – BEFORE TURNING TO OUN)

AWOS/ATIS CHECK
 ALTIMETER SET
 COWL FLAPS AS REQUIRED
 MIXTURE RICH
 FUEL PUMPS ON
 FUEL PRESSURE CHECK
 FUEL SELECTORS ON
 LANDING/REC LIGHTS ON
 SEATBELTS FASTEN AND SECURE

BEFORE LANDING (BEFORE PATTERN ENTRY AND BEFORE MIDFIELD DOWNWIND EACH SUBSEQUENT APPROACH)

APPROACH SPEED ON FINAL CALCULATE
 FLAP SETTING ON FINAL DETERMINE
 LANDING GEAR DOWN/LOCKED (TOUCH 3 GREEN)
 NACELLE MIRROR VERIFY
MEMORY
 PROPELLER (PRIOR TO BASE OR FAF) FULL INCREASE
 AUTO PILOT OFF
 LANDING GEAR ON FINAL DOWN/LOCKED (TOUCH 3 GREEN)

AFTER LANDING

FLAPS UP
 FUEL PUMPS OFF
 COWL FLAPS OPEN
 LANDING/REC LIGHTS AS REQUIRED
 TRANSPONDER 1200 & STBY
 HEATER – FOR TURNOFF FOLLOW PROC

ENGINE SHUTDOWN

THROTTLES 1000 RPM
 HEATER (IF ON) FAN 2 MIN THEN OFF
 AVIONICS MASTER OFF
 NAV, PANEL, AND OVERHEAD LIGHTS OFF
 ELECTRICAL SWITCHES OFF
 MIXTURES OFF
 MAGNETOS OFF
 ALTERNATORS OFF
 BATTERY MASTER OFF
 VENT WINDOW CLOSED
 HOBBS TIME RECORD

POST-FLIGHT

CABIN DOOR SECURED
 AIRCRAFT TIED DOWN OR CHOCKED
 WALK AROUND AIRCRAFT NOTE GENERAL CONDITION

PA 44-180 SEMINOLE – EMERGENCY PROCEDURES

ENGINE FAILURE

CONTROL Vyse – 88 kts
CRAM MIXTURE, PROP, THROTTLE – FWD
CLEAN GEAR & FLAPS – UP
IDENTIFY LEFT OR RIGHT ENGINE
VERIFY LEFT OR RIGHT ENGINE
TROUBLESHOOT IF SAFE AND TIME PERMITS
FEATHER DEAD ENGINE
SECURE DEAD ENGINE

ENGINE TROUBLESHOOT

MIXTURE ADJUST
FUEL PUMP ON
FUEL SELECTOR CROSSFEED
MAGNETOS CYCLE LEFT/RIGHT/BOTH
CARBURETOR HEAT ON
THROTTLE ½ TRAVEL

IN ENGINE FAILS TO START PROP FEATHER

ENGINE SECURE

MIXTURE IDLE/CUT OFF (DEAD ENGINE)
FUEL PUMPS OFF (DEAD ENGINE)
MAGNETOS OFF (DEAD ENGINE)
COWL FLAPS CLOSED (DEAD ENGINE)
FUEL SELECTOR OFF (DEAD ENGINE)
ALTERNATOR OFF (DEAD ENGINE)
CARBURETOR HEAT OFF (DEAD ENGINE)
ELECTIRCAL LOAD MINIMIZE

ENGINE RESTART

ALTERNATOR ON
FUEL SELECTOR ON
ELECTRIC FUEL PUMP ON
THROTTLE OPEN ½ INCH
MIXTURE RICH
MAGNETOS ON
PROP FWD TO CRUISE

*IF PROP NOT WINDMILLING WITHIN 5/7 SECONDS – ENGAGE STARTER

THROTTLE REDUCE UNTIL ENGINE IS WARM

*IF ENGINE FAILS TO START – PRIME FOR 3 SECONDS