PA 44-180 SEMINOLE – NORMAL PROCEDURES

BEFORE ENGINE START THROUGH ENGINE SHUTDOWN – CHECKLIST WILL BE VERBALIZED

BEFORE ENGINE START

HOBBS TIME – CHECK TIME REMAINING
HOBBS TIME – RECORD
PARKING BRAKE – SET
PASSENGER BRIEF – COMPLETE
SEATBELTS – FASTEN AND SECURE
GEAR SELECTOR – DOWN
THROTTLE – IDLE
PROPELLER CONTROLS – FULL
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 WFD
MIXTURES – FULL RICH
*ELECTRIC FUEL PUMP – ON
*PRIMER – 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 WFD
MIXTURE – IDLE
*ELECTRIC FUEL PUMP – OFF
*PROPELLER AREA – CLEAR
*MAGNETO SWITCH – OFF
*STARTER – ENGAGE
*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 – CHECK
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 WFD
MIXTURE – RICH
THROTTLES – 1500 RPM
PROPELLERS – FEATHER CHECK
THROTTLES – MAX DROP 500 RPM
PROPELLERS – 2000 RPM

MAGNETOS – MAX DROP 175 RPM/MAX DIFF 50 RPM
CARBURETOR HEAT – CHECK
VACUUM – *

ENGINE INSTRUMENTS – CHECK
ALTERNATORS – CHECK AMPS L & R
LEFT ALTERNATOR – CHECK LOAD
RIGHT AMPMETER – CHECK
LEFT ALTERNATOR – OFF
RIGHT ALTERNATOR – OFF
LEFT AMPMETER – CHECK LOAD
RIGHT ALTERNATOR – OFF
PITOT HEAT – CHECK
FUEL PUMPS – CHECK
FUEL PRESSURE – CHECK
ANNUNCIATOR PANEL – CHECK OFF
THROTTLES (500-600 RPM) – IDLE
IDLE HEAT – OFF
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
NAV LIGHTS – ON
ANTI-COLLISION LIGHTS – ON
LANDING/REC LIGHTS – ON
TRANSPONDER – SQUAWK ALT
MIXTURES – AS REQUIRED
AUTO PILOT – OFF

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

CLIMB (BEETWEEN 500 AND 1500 AGL)

POWER/PROP – SET
GEAR – UP
TRIM – SET
AWOS/ATIS – 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 – OFF
TRIM – SET
COWL FLAPS – CLOSED

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

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

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
ALTERNATORS – OFF
BATTERY MASTER – OFF
VENT WINDOW – CLOSED
HOBBES TIME – RECORD

POST-FLIGHT

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

SEMINOLE CHECKLIST 6/10/2010
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 ........................................................................ON
MAGNETOS ........................................................................OFF (DEAD ENGINE)
COWL FLAPS ......................................................................CLOSED (DEAD ENGINE)
FUEL SELECTOR ................................................................OFF (DEAD ENGINE)
ALTERNATOR ......................................................................OFF (DEAD ENGINE)
CARBURETOR HEAT ...........................................................OFF (DEAD ENGINE)
ELECTRICAL 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