SEMINOLE PA-44-180

This checklist is for quick reference only. Refer to POH for Complete Procedures

PREFLIGHT

LANDING GEAR HANDLE	DOWN
CERT/DOC (ARROW)	ON BOARD
Mx LOG	CHECK
HOBBS & TACH	RECORD
PARKING BRAKE	AS REQ'D
ALL ELECTRICAL	OFF
MASTER SWITCH	ON
FUEL QTYs	CHECK
FUEL SELECTORS	ON
ANNUNCIATORS	PRESS TO TEST
ELT & Circuit Breakers	ARMED / IN
COWL FLAPS	AS REQ'D
ALT STATIC AIR	CLOSED
FLAPS	FULL DOWN
P&R Trim	NEUTRAL & ON
MASTER SWITCH	OFF
ESCAPE WINDOW	SECURE
EXTERIOR	USE POH

BEFORE START

BRAKES	SET
CHOCKS	REMOVED
PAX BRIEF	CONDUCT
SEATS/BELTS	UP & SECURE
DOORS	AS REQ'D

ENGINE START LEFT/RIGHT DAY?

MASTER SWITCH	ON
STROBES	ON
LDG GEAR lights	3 GREEN
ALTERNATOR SWITCHES	ON
THROTTLES	1/4 inch OPEN
PROP LEVERS	FULL FWD
MIXTURE LEVERS	FULL FWD
ELEC FUEL PUMP	ON & CHECK
PRIMER	5-7 sec
AREA	CLEAR
MAGNETO SWITCHES	ON
STARTER	ENGAGE
THROTTLE	1000 RPM max
OIL PRESS	CHECK
AMMETER	Positive
GYRO VACUUM	CHECK
AVIONICS MASTER SWITCH	ON

REPEAT FOR OPPOSITE ENGINE

HOT START

THROTTLES	1/2 inch OPEN
STARTER	ENGAGE
THROTTLE	1000 RPM max

FLOOD START

MIXTURE LEVER	IDLE/CUTOFF
THROTTLE	OPEN
STARTER	ENGAGE
THROTTLE	QUICKLY IDLE
MIXTURE LEVER	QUICKLY RICH

EXTERNAL POWER START - 12V!

MASTER SWITCH	OFF
ALL ELECTRICAL	OFF
EXTERNAL POWER 12V	INSERT

Proceed with Normal Left Engine Start

PRE-TAXI

MIXTURE LEVERS	LEAN
FUEL SELECTORS	XFEED
ELEC FUEL PUMPS	OFF
FUEL PRESSURE	Monitor
EXTERNAL LIGHTS	AS REQ'D
FLAPS	UP
TRANSPONDER	1200 & ALT
RADIOS MFD/FPL/ALT/NAV	SET
STBY INSTRUMENTS	CHECK
ALTIMETERS	SET BOTH

TAXI

BRAKES	SET
FLIGHT INST	CHECK
TRIM	TEST / SET

GROUND RUNUP

BRAKES	SET
FUEL SELECTORS	ON
ENG INST/ANNUN/VAC	CHECK
PROP LEVERS	FULL FWD
THROTTLES	1500 RPM
PROP LEVERS	FTHR CK 500 MAX
THROTTLES	2000 RPM
MAG CHECK	MAX DROP 175 & Δ 50
PROP LEVERS	CYCLE 3 TIMES
RPM↓ MAP↑ OIL PR↓	
CARB HEAT	CYCLE
ALTERNATORS	CYCLE TEST
ENG INST/ANNUN/VAC	CHECK
THROTTLES	IDLE Slam Check
THROTTLES	1000 RPM

BEFORE TAKEOFF

RADIOS MFD/FPL/ALT/NAV	SET
FUEL SELECTORS	ON
MAGNETO SWITCHES	ON
COWL FLAPS	AS REQ'D
CARB HEAT	OFF
PROP LEVERS	FULL FWD
CIRCUIT BREAKERS	IN
FLAPS	AS REQ'D
PITOT HT	AS REQ'D
ANNUNCIATORS	CHECK
SEATS/BELTS	UP & SECURE
CONTROLS	FREE & CORRECT
DEPARTURE BRIEF	CONDUCT
ELEC FUEL PUMPS	ON & Check FP
MIXTURE LEVERS	FULL FWD
PARKING BRAKE	OFF
DOORS/WINDOW	LOCKED
EXT LIGHTS	ALL ON

TAKEOFF

POWER	2700 RPM FULL THROTTLE
ENGINE INST	CHECK
ROTATE	75 KIAS
LANDING GEAR	UP
INITIAL CLIMB at V_Y	88 KIAS

VR 75 (70 short)	VLR 109 VFE 111
VX 82 Flaps Up &S	VLE = VLO 140

VMC 56 | VY/VYSE 88

AFTER TAKEOFF

LANDING GEAR	UP with PRC
FLAPS	UP at 300 FT
POWER	2500/FULL THROTTLE
CRUISE CLIMB	105 KIAS
COWL FLAPS	AS REQ'D
MIXTURES	AS REQ'D
FUEL PRESS & CHT	MONITOR

CRUISE

POWER	2300/MAP AS REQ'D
MIXTURES	AS REQ'D
ELEC FUEL PUMPS	OFF
FUEL PRESS & CHT	MONITOR

DESCENT

APR BRIEF	CONDUCT
ATIS	Altimeters SET
POWER	AS REQ'D
MIXTURES	AS REQ'D
FUEL SELECTORS	ON
SEATS/BELTS	UP & SECURE
EXT LIGHTS	ALL ON

LANDING

FUEL SELECTORS	ON
ELEC FUEL PUMPS	ON
LDG GEAR…/	<140Kts DOWN
FLAPS	<111Kts
MIXTURES	AS REQ'D
PROP LEVERS	FULL FWD
COWL FLAPS	AS REQ'D
LDG GEAR	3 GREEN

AFTER LANDING

FLAPS	UP
COWL FLAPS	AS REQ'D
MIXTURE LEVERS	LEAN
EXT LIGHTS	AS REQ'D
ELEC FUEL PUMPS	OFF
TRANSPONDER	GND & 1200
PITOT HT	OFF
HEATER	FAN 2" then OFF
TRIM	NEUTRAL

SHUTDOWN

PARKING BRAKE	AS REQ'D
FLAPS	Check UP
AVIONICS MASTER	OFF
ALTERNATOR SWITCHES	OFF
MAGNETOS	GROUND CHECK
THROTTLES	1200 RPM for 10 sec
MIXTURE	CUTOFF
THROTTLES	IDLE
MAGNETOS	OFF
EXT LIGHTS	OFF
MASTER SWITCH	OFF
HOBBS	RECORD
PARKING BRAKE	RELEASE
COWL FLAPS	CLOSE
LDG GEAR	CHOCK
STALL SENSOR	COVER
PITOT TUBE	COVER

REVISED 61.17.2022

EMERGENCY PROCEDURES*

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ENGINE FAILURE

* MAINTAIN DIRECTONAL CONTROL & VYSE 88 KIAS	
* ATTITUDE AS REQUIRED TO MAINTAIN > VMC 56 KIAS	
* PROPS	FULL FWD
* THROTTLES	FULL FWD
* MIXTURES	FULL FWD
* LANDING GEAR	UP
* FLAPS	UP
* IDENTIFY DEAD ENGINE	DEAD FOOT = DEAD ENGINE
* VERIFY DEAD ENGINE	SLOWLY RETARD THROTTLE
* TS ALTITUDE PERMITTING - ELEC FUEL PUMPS ON / XFEED?	
* FEATHER DEAD ENGINE	PROP LEVER TO FEATHER
* ZERO SLIDE SLIP… BANK 2-3° TO GOOD ENG, BALL 1/2 OUT	
* GOOD ENGINE	REDUCE POWER AS ABLE
TRIM	ONLY IF REQUIRED
SECURE DEAD ENGINE:	
THROTTLE LEVER	IDLE
PROP LEVER	FEATHER
MAGNETOS	BOTH OFF
FUEL SELECTOR	OFF
ELEC FUEL PUMP	OFF
ALTERNATOR	OFF
OPERATING ENGINE	REDUCE as able RPM↓ MP↓ Mix↓
ELEC FUEL PUMP	OFF
ELECTRICAL LOAD	MONITOR
FUEL BALANCE	MONITOR / XFEED IF REQUIRED

INFLIGHT RESTART

GOOD ENGINE	POWER AS REQUIRED
FUEL QUANTITY	CHECK
FUEL SELECTOR	ON/XFEED IF REQUIRED
ALTERNATOR	OFF
MAGNETOS	BOTH ON
THROTTLE	OPEN 1/4 INCH
MIXTURE	FULL RICH
ELEC FUEL PUMP	ON
PROP LEVER	FULL FWD
Starter assist may be needed if not windmilling after 10 seconds	
THROTTLE	15" MAP UNTIL CHT > 200°F
ALTERNATOR	ON
MIXTURE	AS REQUIRED

KIAS V-SPEEDS

VR	Rotate	75(70 short)
V_{MC}	SE Min Control	56
V_X	Best Angle of Climb	82
V_Y & V_{YSE}	Best Rate/SE Best Rate	88 (clean)
V_{NO}	Max Normal Ops	129
V_{LE}	Max Landing Gear Extension	140
V_{LO}	Max Landing Gear Retract	109
V_{FE}	Max Flaps Extention	111
VNO	Max Structural Cruise	169
V_{SO}	Stall Full Flaps	55
V_{S1} (1.3)	Stall Flaps Up	57
V_{NE}	Never Exceed	202
VA	Manuevering	135-112

Enroute Climb	105
Max Demonstrated Crosswind	17 knots
Recommended Approach	90
Recommended Final	88 (V_{YSE})

ENGINE FIRE IN FLIGHT

CABIN HEAT AND DEFROST	OFF
AFFECTED ENGINE FUEL SELECTOR	OFF
AFFECTED ENGINE MAGNETOS	OFF
AFFECTED ENGINE THROTTLE	OFF
AFFECTED ENGINE PROP LEVER	FEATHER
AFFECTED ENGINE ELEC FUEL PUMP	OFF
AFFECTED ENGINE ALTERNATOR SWITCH	OFF
CABIN VENTILATION	OPEN
LAND	ASAP

EMERGENCY DESCENT

THROTTLES	FULL IDLE
FLAPS	UP
LANDING GEAR	DOWN at 140 MAX
MAX DESCENT SPEED V_{LE}	140 KIAS

DUAL ALTERNATOR FAILURE

VERIFY FAILURE	CHECK AMMETERS
Electrical Load	REDUCE TO MINIMUM
ALTERNATOR SWITCHES	OFF
ALTERNATOR CBs	CHECK/RESET AS REQD
ALTERNATOR SWITCHES	ON - ONE AT A TIME
If only one Alternator resets:	
OPERATING ALTERNATOR SW	ON
FAILED ALTERNATOR SW	OFF
Electrical Load	LESS THAN 60 AMPS
AMMETER	MONITOR

MANUAL LDG GEAR EXTENSION

Check Nav lights, dimmers, CB, Master Switch positions

AIRSPEED	100 KIAS MAXIMUM
GEAR SELECTOR	DOWN POSITION
EMER GEAR EXTEND KNOB	PULL
GEAR INDICATOR LIGHTS	3 GREEN
LEAVE EMER EXTEND KNOB OUT	

INFLIGHT SHUTDOWN Training ONLY

THROTTLE	IDLE
MIXTURE	IDLE/CUTOFF
PROP LEVER	FEATHER
MAGNETO SWITCHES	OFF
ELEC FUEL PUMP	OFF

RECORD WHICH ENGINE WAS SECURED

KLAF FREQUENCIES

ATIS	127.75
TOWER	119.60
GROUND	121.90
FSS	122.35
GRISSOM APR	123.85
PURDUE AV & UNICOM	122.95

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