

NORMAL PROCEDURES PA 44-180 SEMINOLE CRM38

PREFLIGHT CHECKLIST

COCKPIT

AIRCRAFT DOCUMENTS..... AROW
AVIONICS MASTER SWITCH..... OFF
PARKING BRAKE..... SET
LANDING GEAR SWITCH..... DOWN
ELECTRICAL SWITCHES..... OFF
MAGNETO SWITCHES..... OFF
MIXTURE CONTROLS..... IDLE CUT-OFF
COWL FLAPS..... OPEN
MASTER SWITCH..... ON
GEAR POSITION LIGHTS..... 3 GREEN
FUEL QUANTITY GAUGES..... CHECK
ANNUNCIATOR PANEL..... CHECK
PITOT HEAT SWITCH..... ON
INTERIOR/EXTERIOR LIGHTS..... ON & CHECK
PITOT/STATIC HEAD..... CHECK - WARM
MASTER SWITCH..... OFF
FLIGHT CONTROLS..... CHECK
FLAPS..... EXTEND
STABILATOR TRIM..... NEUTRAL
RUDDER TRIM..... NEUTRAL
FUEL SELECTORS..... ON
STATIC SYSTEM..... DRAIN
ALTERNATE STATIC SOURCE..... NORMAL
EMERGENCY EXIT..... CHECK
WINDOWS..... CHECK, CLEAN
BAGGAGE..... SECURE
BAGGAGE DOOR..... CLOSED

RIGHT WING

FUEL SUMP DRAINS..... DRAIN
SURFACE CONDITION..... CLEAR OF ICE, FROST & SNOW
FLAP AND HINGES..... CHECK
AILERON, HINGES & FREEDOM OF MOVEMENT..... CHECK
STATIC WICKS..... CHECK
WING TIP AND LIGHTS..... CHECK
SCUPPER DRAIN..... CLEAR
FUEL TANK VENT..... CLEAR
TIE DOWN..... REMOVE
NACELLE FUEL FILLER CAP..... CHECK & SECURE
ENGINE OIL & CAP..... CHECK & SECURE
PROPELLER & SPINNER..... CHECK
AIR INLETS..... CLEAR
COWL FLAP AREA..... CHECK
MAIN GEAR STRUT..... PROPER INFLATION (2.60±0.25 IN)
BRAKE, BLOCK & DISC..... CHECK
CHOCK..... REMOVE

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NOSE SECTION

GENERAL CONDITION..... CHECK
WINDSHIELD..... CLEAN
BATTERY VENTS..... CLEAR
LANDING LIGHTS..... CHECK
HEATER AIR INLET..... CLEAR
CHOCK..... REMOVE
NOSE GEAR STRUT..... PROPER INFLATION (2.70±0.28 IN)
NOSE WHEEL TIRE..... CHECK

LEFT WING

SURFACE CONDITION..... CLEAR OF ICE, FROST & SNOW
MAIN GEAR STRUT..... PROPER INFLATION (2.60±0.25 IN)
MAIN WHEEL TIRE..... CHECK
BRAKE, BLOCK & DISC..... CHECK
CHOCK..... REMOVE
COWL FLAP AREA..... CHECK
NACELLE FUEL FILLER CAP..... CHECK & SECURE
ENGINE OIL & CAP..... CHECK & SECURE
PROPELLER & SPINNER..... CHECK
AIR INLETS..... CLEAR
SCUPPER DRAIN..... CLEAR
FUEL TANK VENT..... CLEAR
TIE DOWN..... REMOVE
STALL WARNING VANES..... CHECK
PITOT/STATIC HEAD..... CLEAR
WING TIP LIGHTS..... CHECK
AILERON, HINGES & FREEDOM OF MOVEMENT..... CHECK
FLAP AND HINGES..... CHECK
STATIC WICKS..... CHECK

FUSELAGE (LEFT SIDE)

EMERGENCY EXIT..... CHECK
ANTENNAS..... CHECK
FRESH AIR INLET..... CLEAR

EMPENNAGE

SURFACE CONDITION..... CLEAR OF ICE, FROST & SNOW
STABILATOR, TRIM TAB & FREEDOM OF MOVEMENT..... CHECK
RUDDER, TRIM TAB & FREEDOM OF MOVEMENT..... CHECK
POSITION LIGHT..... CHECK
STATIC WICKS..... CHECK
TIE DOWN..... REMOVE

FUSELAGE (RIGHT SIDE)

BAGGAGE DOOR..... SECURED AND LOCKED

WALK AROUND AIRCRAFT

NOTE GENERAL CONDITION

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BEFORE ENGINE START THROUGH ENGINE SHUTDOWN – CHECKLIST WILL BE *VERBALIZED*

BEFORE ENGINE START

HOBBS / TAC 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

ENGINE START – COLD

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

NORMAL PROCEDURES PA 44-180 SEMINOLE CRM38

BEFORE ENGINE START THROUGH ENGINE SHUTDOWN – CHECKLIST WILL BE *VERBALIZED*

ENGINE START – HOT

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

ENGINE START – COLD WEATHER (BELOW 10°F)

SEE POH FOR START PROCEDURE

ENGINE START – FLOODED

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

NORMAL PROCEDURES PA 44-180 SEMINOLE CRM38

**BEFORE ENGINE START THROUGH ENGINE SHUTDOWN –
CHECKLIST WILL BE VERBALIZED**

PRE-TAXI

AVIONICS.....	ON, TEST
AWOS/ATIS.....	CHECK
ALTIMETER/HSI.....	SET
TRANSPONDER.....	LOCAL CODE & ALT
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

GOVERNER CHECK..... CHECK
MAGNETOSCHECK

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

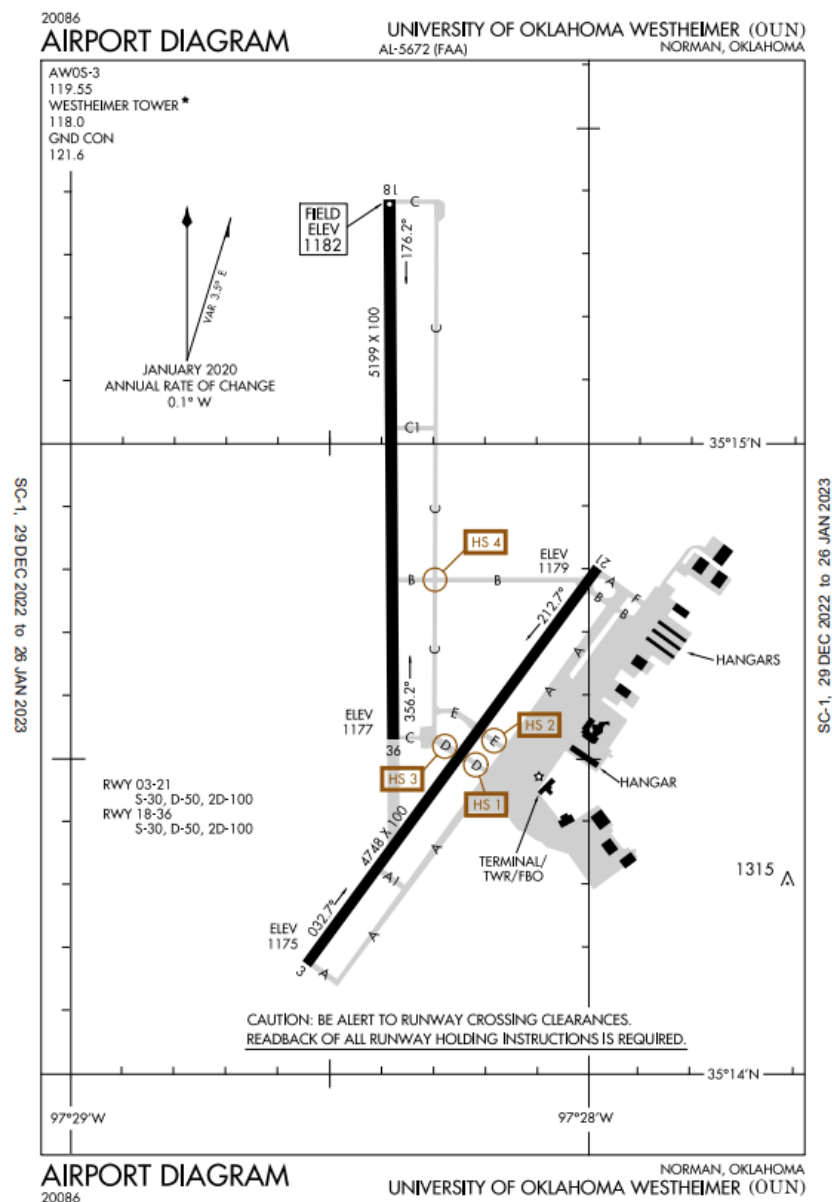
THROTTLES (500-600 RPM) IDLE CHECK

THROTTLES 1000 RPM

FLIGHT INSTRUMENTS CHECK & SET

CABIN DOOR LATCHED

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**BEFORE ENGINE START THROUGH ENGINE SHUTDOWN –
CHECKLIST WILL BE *VERBALIZED***

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
LANDING/REC LIGHTS..... ON
TRANSPONDER..... SQUAWK ALT
MIXTURES RICH
AUTO PILOT OFF
COWL FLAPS OPEN
CABIN DOOR..... LATCHED
TAKE-OFF TIME..... RECORD

**** RESET HEADING INDICATOR AFTER TAXIING ONTO RUNWAY****

V SPEEDS $V_r - 75$ $V_x - 82$ $V_y - 88$ $V_{yse} - 88$

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NORMAL PROCEDURES PA 44-180 SEMINOLE CRM38

BEFORE ENGINE START THROUGH ENGINE SHUTDOWN – CHECKLIST WILL BE *VERBALIZED*

CLIMB (BETWEEN 500 AND 1500 AGL)

POWER/PROPSET
GEARUP
TRIM.....SET
COWL FLAPS OPEN
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
MIXTUREAS REQUIRED

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

AWOS/ATIS CHECK
ALTIMETER.....SET
COWL FLAPS..... CLOSED
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)

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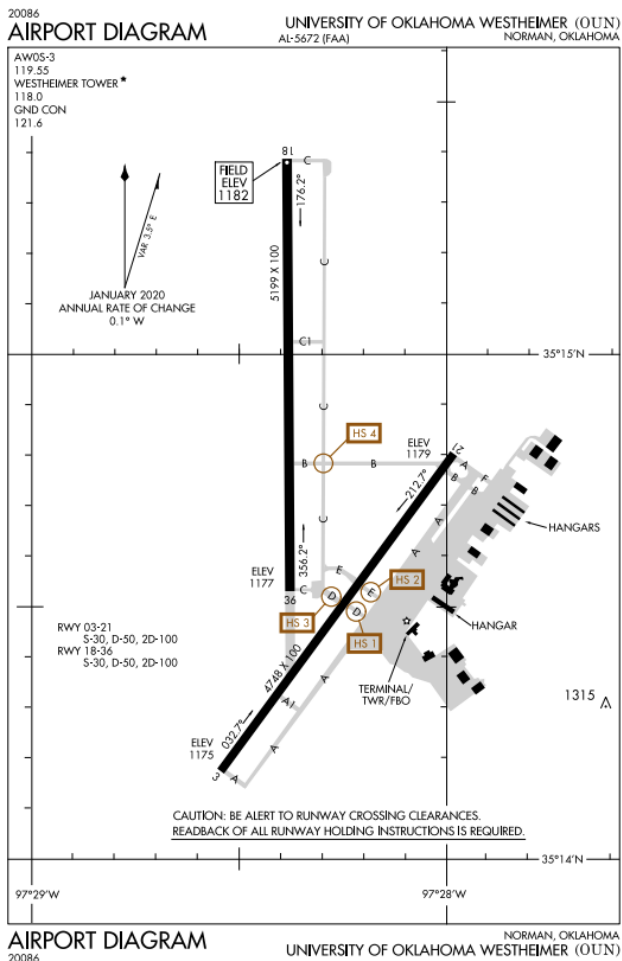


NORMAL PROCEDURES PA 44-180 SEMINOLE CRM38

BEFORE ENGINE START THROUGH ENGINE SHUTDOWN – CHECKLIST WILL BE *VERBALIZED*

AFTER LANDING

FLAPS.....UP
FUEL PUMPS.....OFF
COWL FLAPS.....OPEN
LANDING/REC LIGHTS.....AS REQUIRED
TRANSPONDER.....LOCAL CODE & ALT
HEATER – FOR TURNOFFFOLLOW PROC



NORMAL PROCEDURES PA 44-180 SEMINOLE CRM38

BEFORE ENGINE START THROUGH ENGINE SHUTDOWN – CHECKLIST WILL BE *VERBALIZED*

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
PARKING BRAKE.....RELEASED
HOBBS TIME.....RECORD

POST-FLIGHT

- PUT SUN VISOR IN WINDOW (IN SUMMER)
- CLOSE VENT IN WINDOW
- GATHER PERSONAL BELONGINGS – No Trash left
- PLACE YELLOW PLACARD -- IF MX REQUIRED
- SECURE COCKPIT DOOR
- LOOK IN ENGINE COMPARTMENT FOR ANY LEAKS
- WALK AROUND AIRCRAFT – LOOK AT CONDITION STRAP DOWN (3 STRAP POINTS) OR CHOCK (IF NO STRAP AREA AVAILABLE CROSS-COUNTRY)

IF NECESSARY

- CLOSE FLIGHT PLAN
- TURN IN KEY TO DISPATCH OR NIGHT DROP BOX
- FILL OUT ANY SAFETY REPORTS ONLINE
- ENTER SQUAWKS ON FSP FOR ANY MAINTENANCE DISCREPANCY
- FILL OUT SYLLABUS TICKET WITH APPLICABLE INFO/HOBBS, LOCAL TIME, ETC.
- TURN IN FUEL CARD (IF USED) – IF AFTER HOURS DROP FUEL CARD IN ‘NIGHT DROP BOX’
- FILL OUT YOUR “PERSONAL LOGBOOK WITH FLIGHT TIME/DETAILS”

EMERGENCY PROCEDURES PA 44-180 SEMINOLE CRM38

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..... PROP FEATHER

ENGINE SECURE

MIXTURE (DEAD ENGINE)..... IDLE/CUT OFF
FUEL PUMPS (DEAD ENGINE)..... OFF
MAGNETOS (DEAD ENGINE)..... OFF
COWL FLAPS (DEAD ENGINE)..... CLOSED
FUEL SELECTOR (DEAD ENGINE)..... OFF
ALTERNATOR (DEAD ENGINE)..... OFF
CARBURETOR HEAT (DEAD ENGINE)..... OFF
ELECTRIC 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

FUEL PUMP..... OFF
COWL FLAP..... CLOSED

EMERGENCY PROCEDURES PA 44-180 SEMINOLE CRM38

ENGINE ROUGHNESS

NOTE: PARTIAL CARBURETOR HEAT MAY BE WORSE THAN NO HEAT AT ALL, SINCE IT MAY MELT PART OF THE ICE WHICH WILL REFREEZE IN THE INTAKE SYSTEM. THEREFORE, WHEN USING CARBURETOR HEAT ALWAYS USE FULL HEAT; AND, WHEN ICE IS REMOVED, RETURN THE CONTROL TO THE FULL COLD POSITION.

CARBURETOR HEAT..... ON
IF ROUGHNESS CONTINUES AFTER ONE MINUTE:

CARBURETOR HEAT..... OFF
MIXTURE..... ADJUST FOR MAX SMOOTHNESS
ELECTRIC FUEL PUMP..... ON
ENGINE GAUGES..... CHECK
MAGNETO SWITCHES..... CHECK

IF OPERATION IS SATISFACTORY ON EITHER MAGNETO, CONTINUE ON THAT MAGNETO AT REDUCED POWER AND FULL RICH MIXTURE TO FIRST AIRPORT.

ENGINE OVERHEAT

COWL FLAPS..... OPEN
MIXTURE..... ENRICH
POWER..... REDUCE
AIRSPEED..... INCREASE (IF ALTITUDE PERMITS)

LOSS OF OIL PRESSURE

OIL PRESSURE GAUGE..... VERIFY LOSS & ENGINE AFFECTED
ENGINE..... SECURE PER ENGINE SECURING PROCEDURE

MANUAL EXTENSION OF LANDING GEAR

CHECK FOLLOWING BEFORE EXTENDING GEAR MANUALLY:

NAVIGATION LIGHTS (DAYTIME)..... OFF
DAY/NIGHT DIMMER SWITCH (DAYTIME)..... DAY
CIRCUIT BREAKERS..... CHECK
MASTER SWITCH..... ON
ALTERNATORS..... CHECK

TO EXTEND, PROCEED AS FOLLOWS

AIRSPEED..... REDUCE (100 KIAS MAX)
GEAR SELECTOR..... GEAR DOWN LOCKED POSITION
EMERG GEAR EXTEND KNOB..... PULL
INDICATOR LIGHTS..... 3 GREEN

LEAVE EMERGENCY GEAR EXTENSION KNOB OUT

EMERGENCY PROCEDURES PA 44-180 SEMINOLE CRM38

TO CLOSE DOOR IN FLIGHT

AIRSPEED..... SLOW TO 82 KIAS
CABIN VENTS CLOSE
STORM WINDOW..... OPEN
IF TOP LATCH IS OPEN..... LATCH
IF SIDE LATCH IS OPEN PULL ON ARMREST WHILE MOVING
LATCH HANDLE TO LATCHED POSITION
IF BOTH LATCHES ARE OPENLATCH SIDE LATCH
THEN LATCH TOP LATCH

PROPELLER OVERSPEED

THROTTLE (AFFECTED ENGINE).....RETARD
OIL PRESSURE (AFFECTED ENGINE) CHECK
PROP CONTROL (AFFECTED ENGINE).....FULL
DECREASE RPM THEN SET IF ANY CONTROL AVIALABLE
AIRSPEED.....REDUCE
THROTTLE (AFFECTED ENGINE).....AS REQUIRED
TO REMAIN BELOW 2700 RPM

COMMON FREQUENCIES

Max Westheimer (KOUN)

AWOS.....119.55
Ground121.60
Tower118.00
LOC IPHY111.10
LOC IBWM111.95
OU Traffic123.30
Cruise Aviation122.95
McAlester Radio122.4

David Jay Perry (1K4)

CTAF122.7

Chickasha (CHK)

AWOS.....118.175
CTAF123.00

Shawnee (SNL)

AWOS.....118.275
CTAF122.70

Will Rogers (KOKC)

ATIS125.85
Clearance Delivery 124.35
Ground121.90
Tower119.35
IRW114.10

Okla. City Approach Control

South Flow.....120.45
North Flow.....133.60

Transponder Codes

7500 Hijack
7600 Lost Comm.
7700 Emergency

Contact Numbers

Aviation Department
405-325-7231
Mobile Phone
405-919-6319
OU Police Department
405-325-1717