

## NORMAL PROCEDURES

## PA-28-181 PIPER PILOT

### PREFLIGHT CHECKLIST

#### COCKPIT

TIE DOWN, PITOT COVER & CHOCK ..... REMOVE  
 AIRCRAFT DOCUMENTS ..... AROW  
 PARKING BRAKE ..... SET  
 ALL INSTRUMENT PANEL SWITCHES ..... OFF  
 MIXTURE ..... IDLE CUT-OFF  
 LEFT/RIGHT MAGS ..... OFF  
 BATTERY MASTER ..... ON  
 PANEL LIGHTING ..... VERIFY OPERATION  
 PITOT HEAT ..... ON  
 P HEAT OFF CAS MESSAGE ..... EXTINGUISHED  
 EXTERIOR LIGHTING ..... ON & VERIFY OPERATIONS  
 STALL WARNING TONE ..... CHECK  
 PITOT/STATIC HEAD ..... CHECK – WARM

#### **\*CAUTION\***

PITOT HEAD CAN BE VERY HOT  
 DO NOT OPERATE LONGER THAN 3 MIN  
 SEE POH FOR FULL CAUTION MESSAGE

FUEL ..... CHECK QUANTITY &  
 IMBALANCE  
 ALL LIGHTING ..... OFF  
 PITOT HEAT ..... OFF  
 P HEAT OFF CAS MESSAGE ..... ILLUMINATED  
 BATTERY MASTER ..... OFF  
 FLAPS ..... EXTEND  
 PRIMARY FLIGHT CONTROLS ..... PROPER OPERATION  
 STABILATOR AND RUDDER TRIM ..... NEUTRAL  
 ALTERNATE STATIC ..... CHECK  
 PITOT & STATIC SYSTEMS ..... DRAIN  
 WINDOWS ..... CHECK, CLEAN  
 BAGGAGE ..... SECURE

#### RIGHT WING

SURFACE CONDITION ..... CLEAR OF ICE/FROST/SNOW  
 FLAP AND HINGES ..... NO DAMAGE OR INTERFERENCE  
 AILERON AND HINGES ..... NO DAMAGE OR INTERFERENCE  
 STATIC WICKS (3) ..... CHECK SECURE  
 WING TIP AND LIGHTS ..... CHECK  
 FUEL TANK SUMP ..... DRAIN, CHECK FOR WATER,  
 SEDIMENT, AND PROPER FUEL  
 FUEL TANK ..... CHECK SUPPLY, SECURE CAP  
 FUEL TANK VENT ..... CLEAR  
 MAIN GEAR STRUT ..... PROPER INFLATION (4.5 ± .25IN.)  
 TIRE ..... CHECK  
 BRAKE BLOCK AND DISCS ..... CHECK  
 FRESH AIR INLET ..... CLEAR

## NORMAL PROCEDURES

## PA-28-181 PIPER PILOT

### NOSE SECTION

GENERAL CONDITION ..... CHECK  
 VENT FAN INLET ..... CLEAR  
 COWLING ..... SECURE  
 WINDSHIELD ..... CLEAN  
 OIL ..... CHECK LEVEL  
 DIPSTICK ..... PROPERLY SEATED & SECURED  
 OIL FILLER DOOR ..... SECURE  
 PROPELLER AND SPINNER ..... CHECK  
 AIR INLETS (4) ..... CLEAR  
 NOSE CHOCK ..... REMOVE  
 NOSE GEAR STRUT ..... PROPER INFLATION (3.25 ± .25 IN.)  
 NOSE TIRE ..... CHECK  
 FUEL STRAINER ..... DRAIN

### LEFT WING

SURFACE CONDITION ..... CLEAR OF ICE/FROST/SNOW  
 FRESH AIR INLET ..... CLEAR  
 MAIN GEAR STRUT ..... PROPER INFLATION (4.5 ± .25 IN.)  
 TIRE ..... CHECK  
 BRAKE BLOCK AND DISC ..... CHECK  
 FUEL TANK SUMP ..... DRAIN, CHECK FOR WATER,  
 SEDIMENT, AND PROPER FUEL  
 FUEL TANK ..... CHECK SUPPLY, SECURE CAP  
 FUEL TANK VENT ..... CLEAR  
 PITOT/STATIC HEAD ..... CLEAR  
 OAT PROBE ..... CHECK  
 WING TIP AND LIGHTS ..... CHECK  
 AILERON AND HINGES ..... NO DAMAGE OR INTERFERENCE  
 FLAP AND HINGES ..... NO DAMAGE OR INTERFERENCE  
 STATIC WICKS (3) ..... CHECK SECURE

### FUSELAGE

ANTENNAS ..... CHECK  
 EMPENNAGE ..... CLEAR OF ICE/FROST/SNOW  
 STABILATOR AND TRIM TAB ..... NO DAMAGE OR INTERFERENCE  
 RUDDER ..... NO DAMAGE OR INTERFERENCE  
 STATIC WICKS (3) ..... CHECK SECURE  
 ELT PLATE ..... SECURE  
 EXTERNAL POWER DOOR ..... SECURE

### WALK AROUND AIRCRAFT

NOTE GENERAL CONDITION

**NORMAL PROCEDURES PA-28-181 PIPER PILOT**  
**BEFORE ENGINE START THROUGH ENGINE SHUTDOWN –**  
**CHECKLIST WILL BE VERBALIZED**

**BEFORE ENGINE START**

MX TIME ..... CHECK TIME REMAINING  
 VS TIME ON CHECKLIST COVER  
 BILLING TIME/HOBBS TIME ..... RECORD  
 FLAPS ..... RETRACT  
 CABIN DOOR ..... CLOSED AND SECURE  
 SEATS ..... ADJUSTED AND LOCKED IN POSITION  
 SEATBELTS AND HARNESSSES ..... FASTEN AND SECURE  
 PARKING BRAKE ..... SET  
 PASSENGER BRIEF ..... COMPLETE

**ENGINE START**

CIRCUIT BREAKERS ..... IN  
 ALT. AIR ..... CLOSE  
 ALTERNATE STATIC SOURCE ..... OFF  
 FUEL SELECTOR ..... CYCLE, FULLEST TANK  
 MASTER ..... ON  
 ALTERNATOR ..... ON  
 DATABASES ..... VERIFY CURRENCY  
 AUTOPILOT ..... VERIFY PREFLIGHT  
 SELF-TEST COMPLETED  
 LEFT/RIGHT MAG SWITCHES ..... ON  
 ANTI-COLLISION LIGHTS ..... ON  
 THROTTLE ..... OPEN 1/2 INCH  
 FUEL PUMP ..... ON  
 MIXTURE .....  
**COLD START** ..... GPH STABILIZE THEN IDLE CUT-OFF  
**HOT START** ..... IDLE CUT-OFF  
 AREA ..... CLEAR  
 STARTER ..... ENGAGE  
 MIXTURE ..... ADVANCE  
 THROTTLE ..... 1000 RPM  
 OIL PRESSURE ..... CHECK

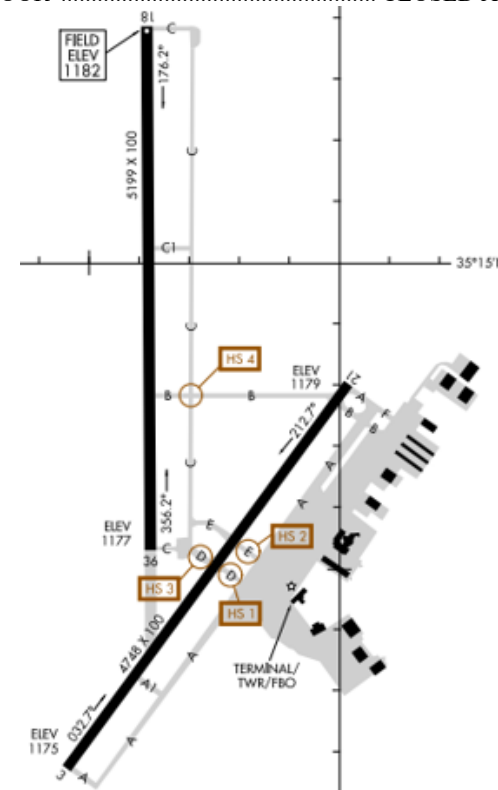
**PRE-TAXI**

CAS MESSAGE (G3X) ..... CONSIDER ANY ILLUMINATED  
 PFD ANNUNCIATIONS ..... NO RED X'S  
 FUEL CALC TAB (ENG PAGE) ..... ENTER FUEL QUANTITY  
 SYSTEM MESSAGES ..... CONSIDER  
 LIGHTS ..... AS REQUIRED  
 VENTILATION, HEATER, AND DEFROSTER ..... AS DESIRED  
 COM/NAV RADIOS & AVIONICS ..... CHECK & SET  
 STANDBY FLIGHT INSTRUMENT ... VERIFY ON WITH NO RED-X'S  
 OR FAILURE ANNUNCIATIONS  
 AWOS/ATIS ..... CHECK  
 ALTIMETER ..... SET, VERIFY BOTH  
 TRANSPONDER ..... LOCAL CODE & ALT  
 PARKING BRAKE ..... RELEASE  
 BRAKES ..... TEST

**NORMAL PROCEDURES PA-28-181 PIPER PILOT**  
**BEFORE ENGINE START THROUGH ENGINE SHUTDOWN – CHECKLIST**  
**WILL BE VERBALIZED**

**ENGINE RUN-UP (GROUND CHECK)**

PARKING BRAKE ..... SET  
 THROTTLE ..... 2000 RPM  
 LEFT/RIGHT MAG CHECK ..... CHECK L & R  
 (MAX DROP 175 & MAX DIFF 50 RPM)  
 OIL TEMPERATURE ..... CHECK  
 OIL PRESSURE ..... CHECK  
 VOLTS INDICATION ..... CHECK BUS (28 ±1 VOLT)  
 ALT AMPS INDICATION ..... CHECK NORMAL  
 ALT. AIR ..... CHECK FOR RPM DROP  
 FUEL PUMP ..... OFF, VERIFY ENGINE OPERATION  
 THROTTLE ..... IDLE CHECK, 1000 RPM  
 FLIGHT CONTROLS ..... FREE & CORRECT  
 ELECTRIC TRIM ..... TEST  
 AUTOPILOT ..... ENGAGE  
 VERIFY AP CAN BE OVERPOWERED  
 A/P DISC BUTTON ..... PRESS, VERIFY AP DISENGAGES  
 AND AUDIO ALERT  
 TRIM ..... NEUTRAL  
 FLIGHT INSTRUMENT ..... CHECK  
 CABIN DOOR ..... CLOSED AND SECURE



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

**BEFORE TAKE-OFF**

TYPE OF TAKEOFF ..... DETERMINE  
 AIRSPEEDS: ROTATION, CLIMB OUT,  
 AND BEST GLIDE ..... BRIEF  
 PRE-TAKEOFF BRIEFING..... COMPLETE  
 FLAPS ..... SET  
 FUEL PUMP ..... ON  
 PFD/ STANDBY FLIGHT INSTRUMENTS..... NO RED X'S  
 CAS/SYSTEM MESSAGES ..... CONSIDER ANY ILLUMINATED  
 ENGINE INDICATIONS ..... CHECK  
 ANTI-COLLISION LIGHTS..... ON  
 LANDING LIGHTS ..... ON  
 ALT. AIR ..... CLOSE  
 MIXTURE ..... RICH  
 BELTS/HARNESS ..... FASTENED & CHECK  
 STABILATOR/RUDDER TRIM ..... SET  
 CABIN DOOR..... LATCHED  
 TAKE-OFF TIME ..... RECORD

V<sub>S0</sub> – 45 KIAS

V<sub>S1</sub> – 50 KIAS

V<sub>R</sub> – 60 KIAS

V<sub>X</sub> – 64 KIAS

V<sub>Y</sub> – 76 KIAS

Best Glide – 76 KIAS

Cruise Climb – 87 KIAS

V<sub>FE</sub> – 102 KIAS

V<sub>O</sub> – 113 KIAS

V<sub>NO</sub> – 125 KIAS

V<sub>NE</sub> – 154 KIAS

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

**CLIMB (BETWEEN 500 AND 1500 AGL)**

POWER ..... SET  
 TRIM ..... SET  
 FUEL PUMP ..... OFF  
 LANDING LIGHTS ..... OFF

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

POWER ..... SET  
 TRIM ..... SET  
 MIXTURE ..... AS REQUIRED  
 TRUE AIR SPEED (X/C FLTS) ..... VERIFY

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

COM/NAV RADIOS & AVIONICS ..... CHECK & SET  
 AWOS/ATIS ..... CHECK  
 ALTIMETER ..... SET, VERIFY BOTH  
 SEATBELTS ..... FASTEN AND SECURE  
 MIXTURE ..... RICH  
 FUEL PUMP ..... ON  
 FUEL SELECTOR ..... FULLEST TANK  
 LANDING LIGHTS ..... ON

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

TYPE LANDING ..... DETERMINE  
 FLAPS ..... SET (102 KIAS MAX.)  
 ALT. AIR ..... AS REQUIRED  
 AUTOPILOT ..... DISCONNECT (ABOVE 200AGL)  
 INITIAL APPROACH SPEED ..... 75-95 KIAS  
 FINAL APPROACH SPEED ..... 66 KIAS

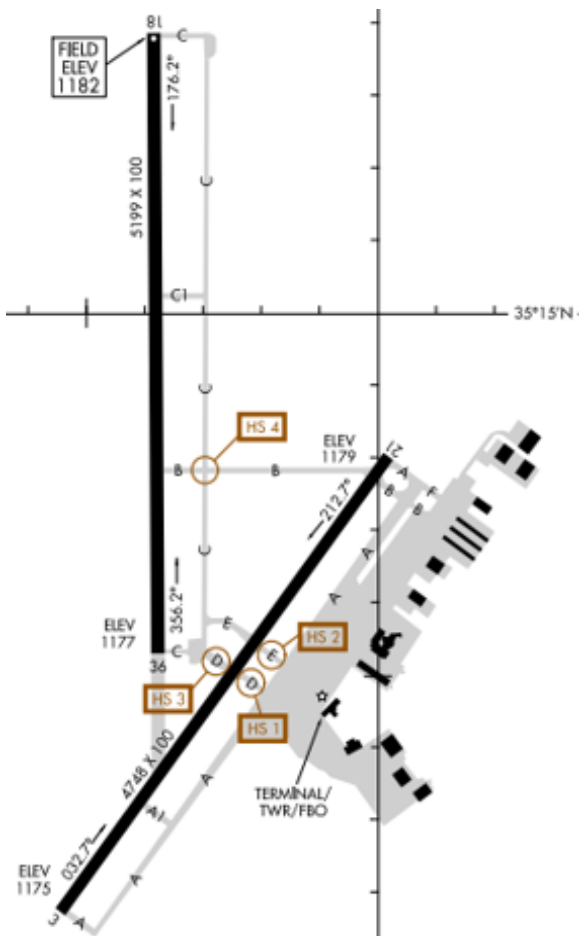
**GO-AROUND**

MIXTURE ..... FULL RICH  
 THROTTLE ..... FULL OPEN  
 CONTROL WHEEL ..... BACK PRESSURE TO OBTAIN  
 POSITIVE CLIMB ATTITUDE  
 FLAPS ..... RETRACT INCREMENTALLY

# **NORMAL PROCEDURES PA-28-181 PIPER PILOT** **BEFORE ENGINE START THROUGH ENGINE SHUTDOWN –** **CHECKLIST WILL BE *VERBALIZED***

## **AFTER LANDING (AFTER CLEARING RUNWAY)**

FLAPS ..... RETRACT  
FUEL PUMP ..... OFF  
LANDING LIGHTS ..... AS REQUIRED  
TRANSPONDER ..... LOCAL CODE & ALT



# **NORMAL PROCEDURES PA-28-181 PIPER PILOT** **BEFORE ENGINE START THROUGH ENGINE SHUTDOWN – CHECKLIST** **WILL BE *VERBALIZED***

## **ENGINE SHUTDOWN**

PARKING BRAKE ..... RELEASED  
FLAPS ..... VERIFY RETRACTED  
FUEL PUMP ..... VERIFY OFF  
ELECTRICAL SWITCHES ..... OFF  
ALTERNATOR ..... OFF  
THROTTLE ..... IDLE  
MIXTURE ..... IDLE CUT-OFF  
LEFT/RIGHT MAG SWITCHES ..... OFF  
INTERIOR LIGHTS ..... OFF  
EXTERIOR LIGHTS ..... OFF  
BATTERY MASTER ..... OFF  
BILLING/MX TIME ..... RECORD

## **POST-FLIGHT**

- PUT SUN VISOR IN WINDOW (IN SUMMER)
- GATHER PERSONAL BELONGINGS – NO TRASH LEFT
- PLACE YELLOW PLACARD -- IF MX REQUIRED
- SECURE COCKPIT DOOR (TOP LATCH IF RAINING SOON)
- LOCK AIRCRAFT DOOR
- 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 AIRCRAFT KEY TO DISPATCH OR NIGHT MX
- FILL OUT ANY SAFETY REPORTS ONLINE
- REPORT SQUAWKS OR ANY DISCREPANCY TO DISPATCH OR NIGHT MX
- TURN IN FUEL CARD WITH RECEIPT (IF USED)
- FILL OUT YOUR “PERSONAL LOGBOOK WITH FLIGHT TIME/DETAILS”

## **ABNORMAL PROCEDURES**

HARD LANDING (TAXI TO MX AND INFORM AVIATION STAFF)  
UNCONTROLLED DEPARTURE FROM PAVEMENT (RUNWAY OR TAXIWAY)

- DO NOT ATTEMPT TO TAXI BACK ONTO PAVEMENT
- RUN ENGINE SHUTDOWN CHECKLIST
- CONTROLLED FIELD: NOTIFY TOWER AND ADVISE AIRCRAFT MUST BE TOWED
- UNCONTROLLED FIELD: CALL OU MOBILE PHONE AND INSTRUCTOR

## **SYMPTOMS OF VAPOR LOCK**

- FLUCTUATION OF IDLE SPEED AND FUEL FLOW
- POOR ENGINE RESPONSE TO THROTTLE MOVEMENT
- ENGINE WILL NOT OPERATE WHEN THROTTLE IS CLOSED
- HIGH RPM DROP (GREATER THAN 175 RPM) DURING MAG CHECK

## **CORRECTIVE ACTION FOR VAPOR LOCK**

- ADVANCE THROTTLE TO ~2000 RPM FOR 1-2 MIN OR UNTIL SMOOTH ENGINE OPERATIONS
- RETARD THROTTLE TO IDLE AND CHECK FOR SMOOTH OPERATION
- DURING TAXI, LEAN MIXTURE AND OPERATE AT A HIGH POWER SETTING (MAX 1200 RPM) AS PRACTICAL
- PRIOR TO TAKEOFF SET MIXTURE TO FULL RICH
- VERIFY SMOOTH ENGINE OPERATION DURING TAKEOFF ROLL

## EMERGENCY PROCEDURES PA-28-181 PIPER PILOT

### ENGINE FIRE DURING START

STARTER..... CONTINUE TO CRANK ENGINE  
MIXTURE.....IDLE CUT-OFF  
THROTTLE.....OPEN  
FUEL PUMP .....OFF  
FUEL SELECTOR .....OFF

### IF FIRE CONTINUES

EVACUATE AIRCRAFT  
USE FIRE EXTINGUISHER IF AVAILABLE

### ENGINE FIRE IN FLIGHT

FUEL SELECTOR .....OFF  
THROTTLE.....CLOSED  
MIXTURE.....IDLE CUT-OFF  
FUEL PUMP .....OFF  
HEAT/DEFROSTER.....OFF  
DEFROSTER.....OFF  
VENTS .....OPEN

### IF FIRE CONTINUES

AIRSPEED .....INCREASE IN ATTEMPT TO BLOW OUT FIRE  
ENGINE .....SECURE

### ENGINE SECURE IN FLIGHT

FUEL SELECTOR .....OFF  
FUEL PUMP .....OFF  
LEFT/RIGHT MAGS .....OFF  
THROTTLE.....CLOSED  
MIXTURE.....IDLE CUT-OFF  
SEAT BELTS .....TIGHTEN  
DOOR .....UNLATCH  
ELT .....ON  
\*PREPARE FOR EMERGENCY LANDING (66 KNOTS SHORT FINAL)

### AFTER TOUCHDOWN

MASTER/ALTERNATOR.....OFF

### ELECTRICAL FIRE

MASTER.....OFF  
ALTERNATOR.....OFF  
VENTS .....OPEN  
HEAT/DEFROSTER.....OFF  
FIRE.....EXTINGUISH  
EMERGENCY DESCENT (IF NEEDED).....TO A SAFE ALTITUDE  
\*LAND ASAP

## EMERGENCY PROCEDURES PA-28-181 PIPER PILOT

### ENGINE ROUGHNESS

ALT. AIR ..... OPEN  
IF ROUGHNESS CONTINUES AFTER 1 MIN  
MIXTURE..... ADJUST FOR MAX SMOOTHNESS  
ALT. AIR .....CLOSE  
FUEL PUMP .....ON  
FUEL SELECTOR..... SWITCH TANKS  
ENGINE INDICATORS .....CHECK  
LEFT/RIGHT MAGS.....INDIVIDUALLY  
SELECT OFF AND ON

\*LAND ASAP

### ENGINE FAILURE/PARTIAL POWER LOSS

PITCH (BEST GLIDE) ..... 76 KTS  
TRIM ..... 76 KTS  
FIELD.....SELECT SUITABLE  
FUEL SELECTOR..... SWITCH TANKS  
LEFT/RIGHT MAGS..... OFF THEN ON  
ONE AT A TIME  
FUEL PUMP .....ON  
THROTTLE .....ADJUST  
MIXTURE ..... RICH  
ALT. AIR ..... OPEN

### IF POWER RESTORED

ALT. AIR .....CLOSE  
FUEL PUMP ..... OFF

### IF POWER NOT RESTORED

TRANSPONDER ..... 7700  
RADIO ..... 121.5

### RADIO FAILURE

AUDIO PANEL ..... VERIFY RADIO SELECTION  
MIC JACK .....CHECK  
VOLUME..... TEST  
CIRCUIT BREAKERS ..... IN  
FREQUENCY .....CHECK  
AUDIO CONTROL C.B. .... PULL  
TRANSPONDER ..... 7600

\*FOLLOW LOST COMM PROCEDURES

### OPEN DOOR

SLOW AIRPLANE TO 87 KIAS  
CABIN VENTS.....CLOSE  
IF UPPER LATCH IS OPEN..... LATCH  
IF SIDE LATCH IS OPEN..... PULL ON ARMREST  
WHILE CLOSING LATCH  
IF BOTH .....CLOSE SIDE, THEN TOP LATCH

## EMERGENCY PROCEDURES PA-28-181 PIPER PILOT

### ALTERNATOR FAILURE

VERIFY FAILURE ..... CHECK ALT AMPS INDICATION  
ALTERNATOR ..... OFF  
ALT CIRCUIT BREAKER ..... RESET IF TRIPPED  
ALT FIELD CIRCUIT BREAKER ..... RESET  
ALTERNATOR ..... ON

#### IF POWER NOT RESTORED

ALTERNATOR ..... OFF  
ELECTRICAL LOAD ..... SHED

**\*LAND AS SOON AS POSSIBLE\***

### COMPLETE ELECTRICAL FAILURE

STANDBY INSTRUMENT ..... VERIFY OPERATIONAL  
AIRCRAFT CONTROL ..... USE STANDBY INSTRUMENT  
AIRSPEED ..... DO NOT EXCEED 110 KIAS  
AFTER ENGINE SHUTDOWN  
STANDBY INSTRUMENT ..... OFF (PRESS AND HOLD  
PWR BUTTON FOR 5 SECONDS)

### PFD FAILURE

STANDBY INSTRUMENTS ..... VERIFY OPERATIONAL  
AIRCRAFT CONTROL ..... USE STANDBY INSTRUMENTS  
AIRSPEED ..... DO NOT EXCEED 110 KIAS  
COM 1 (EXTERNAL COM) ..... TUNE AS NECESSARY  
NAVIGATION ..... USE G5 DISPLAY  
WITH GPS1 (EXTERNAL GPS)  
OR NAV 2 (VOR/LOC/ILS) SOURCE INFO

#### EXIT AND AVOID IFR CONDITIONS AS SOON AS PRACTICAL.

**\*Warning\*** All aural alerts, except stall warning, become inoperative when the PFD fails. Maintain additional airspeed awareness during low and high speed flight.

## EMERGENCY PROCEDURES PA-28-181 PIPER PILOT

### CYLINDER HEAD TEMPERATURE

ENGINE PAGE ..... SELECT  
CYLINDER HEAD TEMPERATURES ..... MONITOR  
THROTTLE ..... CONSIDER REDUCING  
MIXTURE ..... CONSIDER ENRICHENING  
AIRSPEED ..... CONSIDER INCREASING

#### IF CYLINDER HEAD TEMPERATURE CONTINUES TO RISE

THROTTLE ..... MINIMUM REQUIRED  
MIXTURE ..... RICH  
AIRSPEED ..... INCREASE IF PRACTICAL  
CYLINDER HEAD TEMPERATURES ..... MONITOR

#### IF CYLINDER HEAD TEMPERATURE REMAINS IN WARNING RANGE

**\*LAND AS SOON AS POSSIBLE\***

**\*PREPARE FOR POWER OFF LANDING\***

### OIL PRESSURE

#### LOW OIL PRESSURE

THROTTLE ..... MINIMUM REQUIRED  
IF HIGH OIL TEMP ..... LAND AS SOON AS POSSIBLE  
IF NORMAL OIL TEMP ..... LAND AS SOON AS PRACTICAL

#### HIGH OIL PRESSURE

THROTTLE ..... MINIMUM REQUIRED  
LAND AS SOON AS PRACTICAL

### OIL TEMPERATURE

THROTTLE ..... MINIMUM REQUIRED  
MIXTURE ..... FULL RICH  
AIRSPEED ..... INCREASE IF PRACTICAL  
LAND AS SOON AS POSSIBLE

#### SEE POH FOR OTHER EMERGENCIES OR ABNORMALITIES LISTED

- LOSS OF FUEL FLOW
- FUEL QUANTITY LOW
- ADAHRS FAILURE
- ADAHRS DEGRADED MODES
- ERRONEOUS OR LOSS OF ENGINE AND FUEL DISPLAYS
- LOSS OF NAVIGATION DATA
- AUTOPILOT OR ESP MALFUNCTIONS
- AUTOMATIC AUTOPILOT DISCONNECT
- ELECTRIC PITCH TRIM FAILURE
- ELECTRIC PITCH TRIM RUNAWAY
- ESP ACTIVATION
- AUTOPILOT OVERSPEED RECOVERY
- AUTOPILOT UNDERSPEED RECOVERY
- AUTOPILOT OUT-OF-TRIM
- ABNORMAL FLIGHT DIRECTOR MODE TRANSITIONS
- AUTOPILOT PREFLIGHT TEST FAILURE
- AUTOPILOT – LOSS OF NAVIGATION INFORMATION
- AUTOPILOT – LOSS OF AIRSPEED/ALTITUDE INFORMATION
- AUTOPILOT – LOSS OF GPS INFORMATION
- PITOT HEAT FAILURE
- STARTER ENGAGED
- SPIN RECOVERY

## EMERGENCY PROCEDURES PA-28-181 PIPER PILOT

### Warning Messages – Red

CAS Event	CAS Message	Checklist Page	Cause
<b>CAS Warnings with Text Messages</b>			
Alternator Amperage Exceedance	<b>ALT AMPS</b>	N/A	Alternator amperage is in the warning range.
Alternator Failure	<b>ALTR FAIL</b>	3-22	Alternator is turned ON and has failed, as determined by voltage regulator.
Cylinder Head Temperature Exceedance	<b>CHT TEMP</b>	3-19	Cylinder Head Temperature greater than 500°F.
Oil Pressure Exceedance	<b>OIL PRESS</b>	3-17	Oil Pressure less than 25 PSI or greater than 115 PSI.
Oil Temperature Exceedance	<b>OIL TEMP</b>	3-18	Oil Temperature greater than 245°F.
Propeller Overspeed	<b>RPM</b>	N/A	Propeller RPM greater than 2700 RPM.
Starter Engaged	<b>START ENGAGE</b>	3-48	Engine starter engaged.

### Caution Messages - Amber

CAS Event	CAS Message	Checklist Page	Cause
<b>CAS Cautions with Text Messages</b>			
ADC Failure	<b>ADC FAIL</b>	3-28	The GSU 25 Air Data Computer has failed. Air data from the G5 is being displayed on the G3X Touch.
	<b>ADC REVERT</b>		
AHRS Failure	<b>AHRS FAIL</b>	3-28	The GSU 25 AHRS has failed. Attitude information from the G5 is being displayed on the G3X Touch.
	<b>AHRS REVERT</b>		
Altitude Miscompare	<b>ALT MISCOMP</b>	N/A	Conflicting altitude information between the G3X Touch and G5 displays.
Attitude Miscompare	<b>ATT MISCOMP</b>	N/A	Conflicting attitude information between the G3X Touch and G5 displays.
Cylinder Head Temperature	<b>CHT TEMP</b>	3-19	Cylinder Head Temperature between 490°F and 499°F.
EIS Failure	<b>EIS FAIL</b>	3-31	The Garmin Engine Airframe Interface Unit has failed.
Airspeed Miscompare	<b>IAS MISCOMP</b>	N/A	Conflicting airspeed information between the G3X Touch and G5 displays.
Pitot Heat Failure	<b>P HEAT FAIL</b>	3-47	Pitot heat is selected ON and is inoperative.
Pitot Heat OFF	<b>P HEAT OFF</b>	N/A	Pitot heat is selected OFF.

## EMERGENCY PROCEDURES PA-28-181 PIPER PILOT

### Advisory Messages – White

CAS Event	CAS Message	Checklist Page	Cause
<b>CAS Advisories with Text Messages</b>			
Air Data Computer Failure	<b>ALT NO COMP</b>	3-28	The GSU 25 Air Data Computer has failed.
AHRS Failure	<b>ATT NO COMP</b>	3-28	The GSU 25 AHRS has failed.
Air Data Computer Failure	<b>IAS NO COMP</b>	3-28	The GSU 25 Air Data Computer has failed.

### SYMPTOMS OF VAPOR LOCK

- FLUCTUATION OF IDLE SPEED AND FUEL FLOW
- POOR ENGINE RESPONSE TO THROTTLE MOVEMENT
- ENGINE WILL NOT OPERATE WHEN THROTTLE IS CLOSED
- HIGH RPM DROP (GREATER THAN 175 RPM) DURING MAG CHECK

### CORRECTIVE ACTION FOR VAPOR LOCK

- ADVANCE THROTTLE TO ~2000 RPM FOR 1-2 MIN OR UNTIL SMOOTH ENGINE OPERATIONS
- RETARD THROTTLE TO IDLE AND CHECK FOR SMOOTH OPERATION
- DURING TAXI, LEAN MIXTURE AND OPERATE AT A HIGH POWER SETTING (MAX 1200 RPM) AS PRACTICAL
- PRIOR TO TAKEOFF SET MIXTURE TO FULL RICH
- VERIFY SMOOTH ENGINE OPERATION DURING TAKEOFF ROLL

## COMMON FREQUENCIES

### Max Westheimer (KOUN)

AWOS ..... 119.55  
Ground..... 121.60  
Tower ..... 118.00  
LOC IPHY..... 111.10  
LOC IBWM..... 111.95  
OU Traffic ..... 123.30  
Cruise Aviation .... 122.95  
McAlester Radio .... 122.4

### David Jay Perry (1K4)

CTAF..... 122.7

### Chickasha (KCHK)

AWOS ..... 118.175  
CTAF..... 123.00

### Shawnee (KSNL)

AWOS ..... 118.275  
CTAF..... 122.70

### Will Rogers (KOKC)

ATIS ..... 125.85  
Clearance Delivery 124.35  
Ground..... 121.90  
Tower ..... 119.35  
IRW ..... 114.10

### 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



## Training Checkpoints

- 1 = Amber
- 2 = Good Life (170K) 18 DME off the IRW 203 radial
- 3 = East Chickasha (watch for active parachute jumping area\*)
- 4 = Alexx
- 5 = West Dibble – 19 DME off the IRW 220 Radial
- 6 = North Dibble
- 7 = South Dibble
- 8 = Cole
- 9 = Lindsay
- 10 = Woody Chapel
- 11 = Washington
- 12 = Purcell\* Always check NOTAM for possible sUAS activity up to 5,000 MSL
- 13 = Pink
- 14 = Oil Silo
- 15 = Wanette
- 16 = East Lake Thunderbird
- 17 = South Hickory Hills
- 18 = McCaslin
- 19 = Wayne
- 20 = Lexington \* Always check Lexington NOTAM (possible sUAS activity)
- 21 = Thunder Valley

