



**DEPARTAMENTO “SEGURIDAD OPERACIONAL”  
SUBDEPARTAMENTO “LICENCIAS”  
SECCIÓN EVALUACIONES**

**“PIPER CHEYENNE II”**

**“PA-31”**

**A.- Operations Limitations**

1.- Speed (Kias)	
Va	177
Vne	242
Vmo	242
Vfe 15°	181
Vle/Vlo (Extension)	153
Vlo (Retraction)	139
Vmca	91
Vs	86
Vso	75
Vx	96
Vy	121
Vsse	113
Vxse	104
Vyse	113
V <sub>1</sub>	91
Vapp (flaps 40°)	98

2.- Fuel (U.S. GAL)	
Tipo a Utilizar	JET-A
Capacidad Total	374
Capacidad Utilizable	366
Presión Combustible (PSI)	
Mínima	5
Máxima	50

3.- Weight (Lbs)	
Máximo TAKE-OFF	9.000
Baggage FWD	300
Baggage AFT	200

4.- Start					
30	Seconds	On	1	Minute	Off
30	Seconds	On	1	Minute	Off
30	Seconds	On	30	Minutes	Cooling

5.- C.G.		
PESOS	FWD	RWD
7.170 or less	126.0	138.0
8.500	129.6	138.0
9.000 (max flight)	131.9	138.0
9.050 (max Ramp)	132.1	138.0

## **B.- Emergencies Procedures**

### **1.- ENGINE SECURING PROCEDURE**

Power Lever	<b>IDLE</b>
Prop Control	<b>FEATHER</b>
Condition Lever	<b>STOP</b>
Generator	<b>OFF</b>

### **2.- ENGINE FIRE OR DAMAGE**

#### **a.- In Flight:**

Firewall Shutoff	<b>PULL</b>
Condition Lever	<b>STOP</b>
Prop Control	<b>FEATHER</b>
Generator	<b>OFF</b>

#### **b.- On Ground:**

Firewall Shutoff (Af. Eng.)	<b>PULL</b>
Condition Lever	<b>STOP</b>

### 3.- ENGINE FAILURE DURING TAKEOFF

#### a.- BEFORE ROTATION (Below 91 Kias)

Power Levers	IDLE
Brakes	AS REQUIRED

If Aircraft Departs Runway:

Condition Lever	STOP
Battery Master/Gen Trip Switches	OFF
Firewall Shutoffs	OFF

#### b.- AFTER ROTATION (After 91 Kias)

Power Lever	VERIFY MCP
Landing Gear	RETRACT
Inoperative Engine	FEATHER & STOP

### 4.- ENGINE FAILURE DURING FLIGHT

#### a.- If Quick-Start Desired:

Power Lever	IDLE
Prop Control	DO NOT FEATHER
Condition Lever	STOP
Generator	OFF

#### b.- If Quick-Start Unsuccessful or Not Desired:

Condition Lever	STOP
Engine Securing Procedure	ACCOMPLISH

## 5.- ENGINE FLAMEOUT (2<sup>ND</sup> ENGINE)

Power Lever	IDLE
Prop Control	DO NOT FEATHER
Condition Lever	STOP

## 6.- PROPELLER UNDERSPEED

Power Lever	REDUCE TORQUE
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## 7.- ENGINE POWER RUNAWAY

### a.- If Flight:

Power Lever (Affected Engine)	IDLE
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### b.- If Power Continues Above Limits:

Condition Lever	STOP
Prop Control	FEATHER
Generator	OFF

### c.- On Ground:

Condition Levers	BOTH STOP
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## 8.- HIGH OIL TEMPERATURE

Oil Cooler Door	OPEN
Power (if necessary)	REDUCE

## **9.- LOW OIL PRESSURE**

### **a.- Less Than 40 PSI-Oil Pressure Annunciator ON:**

Power (below 40 PSI)	<b>IDLE</b>
Engine Securing Procedure	<b>ACCOMPLISH</b>

## **10.- SINGLE ENGINE GO-AROUND**

Directional Control	<b>ANTICIPATE</b>
Power Lever	<b>MCP 620 SHP AS REQUIRED</b>
Flaps (If More Than 15°)	<b>APPROACH</b>
Landing Gear	<b>UP</b>

## **11.- BATTERY OVERTEMPERATURE**

Electrical Load	<b>CHECK</b>
Battery Master	<b>OFF</b>

## **12.- SINGLE GENERATOR FAILURE**

Electrical Load	<b>CHECK/REDUCE</b>
Inoperative Generator	<b>OFF</b>
Non-Essential Bus	<b>AS REQUIRED</b>

**13.- DUAL GENERATOR FAILURE**

Electrical Load	REDUCE TO MIN
Generator Switches	OFF
Non-Essential Bus	OFF

**14.- ELECTRICAL FIRE**

Battery Master & Gen Switches	OFF
Reference for Flight	PNEUMATIC TURN& SLIP
Lighting (If Required)	FLASHLIGHT OR DOME
Oxygen	AS REQUIRED

**15.- AUTOPILOT HARDOVER**

Flight Control	MANUALLY OVERPOWER
AP Disc/Trim Interrupt Switch	DEPRESS & HOLD

**16.- ELECTRIC TRIM RUNAWAY**

AP Disc/Trim Interrupt Switch	DEPRESS & HOLD
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**a.- IF Trim does not stop immediately:**

AP FD/Avionics Master Switch	OFF
Manual Trim	RETRIM AS REQUIRED

**17.- PRESSURIZATION SYSTEM MALFUNCTION**

**a.- Differential Pressure Above 5.7 PSI or Continual Cabin Fluctuation @ 5.5 PSI:**

Press Controller	SET TO HIGHER ALT
Oxygen (if required)	ON – DON MASKS
Cabin Pressure (if required)	DUMP

**b.- Rapid Increase in Differential Pressure:**

Oxygen (if required)	ON – DON MASKS
Cabin Pressure (if required)	DUMP

**18.- SMOKE OR FUMES IN THE CABIN**

**a.- Determine Source if Possible Engines As Source:**

Oxygen	AS REQUIRED
Cabin Altitude	SELECT HIGHER
Dump Switch (if required)	DUMP

**b.- Cabin Originated:**

Cabin Pressure	DUMP
Oxygen	ON – DON MASKS
Cabin Air Handle	OUTSIDE AIR

**19.- EMERGENCY DESCENT**

**a.- Gear And Flaps Retracted:**

Power Lever	IDLE
Prop Control	FORWARD
Aircraft Attitude	BANK
Airspeed	V <sub>mo</sub> /REDLINE

**b.- Gear And Flaps Extended:**

Power Lever	IDLE
Prop Control	FORWARD
Aircraft Attitude	BANK
Flaps (Below 181 Kias)	APPROACH
Landing Gear (Below 153 Kias)	EXTEND
Flaps (Below 148 Kias)	FULL
Airspeed	148 KIAS MAX.

**20.- RED LIGHT ILLUMINATED AFTER TAKEOFF**

Airspeed	REDUCE TO 130 KIAS MAX.
LG handle Position	VERIFY