



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

**“PIPER NAVAJO PANTHER PA - 31”**

**“CC – PKK”**

**A.- Operations Limitations**

<b>1.- Speed (Kias)</b>	
Va	<b>155</b>
Vne	<b>230</b>
Vno	<b>180</b>
Vfe 15°	<b>158</b>
Vfe 25°	<b>140</b>
Vle	<b>152</b>
Vlo (Extension)	<b>152</b>
Vlo (Retraction)	<b>127</b>
Vmca	<b>78</b>
Vso	<b>70</b>
Vx	<b>85</b>
Vy	<b>100</b>
Vsse	<b>87</b>
Vxse	<b>93</b>
Vyse	<b>106</b>
V <sub>r</sub>	<b>83</b>
Vapp (flaps 40°)	<b>91</b>
Max. Cross Wind	<b>20</b>

<b>3.- Weight (Lbs)</b>	
Máximo TAKE-OFF	<b>6500</b>
Baggage FWD	<b>150</b>
Baggage AFT	<b>200</b>
Nacelle (ea/o)	<b>150</b>

<b>4.- Engine (Max. Continue Power)</b>	
<b>Engine operating Limits</b>	
Rate Horsepower (HP)	<b>350</b>
Rate Speed (RPM)	<b>2575</b>
Cyl. Heat Temperature F°	<b>475</b>
<b>Oil Temperature F°</b>	
Minimum (Red Line)	<b>120</b>
Maximum (Red Line)	<b>245</b>
<b>Oil Pressure (PSI)</b>	
Minimum (Red Line)	<b>25</b>
Maximum (Red Line)	<b>100</b>

<b>2.- Fuel (U.S. GAL)</b>	
Tipo a Utilizar	<b>100/130</b>
Capacidad Total	<b>246</b>
Capacidad Utilizable	<b>242</b>
<b>Presión Combustible (PSI)</b>	
Mínima	<b>34</b>
Máxima	<b>55</b>

<b>5.- Maneuver Limits (Normal Category)</b>	
MANEUVER	ENTRY SPEED
Spins	<b>No approved</b>

## **B.- Emergencies Procedures**

### **1.- ENGINE FAILURE DURING NORMAL TAKEOFF (83 KIAS or below)**

#### **a.- If Sufficient runway remains for a safe stop:**

Throttle : **CLOSE**  
Brakes : **AS REQUIRED**  
Stop Straight Ahead

#### **b.- If Insufficient runway remains for a safe stop:**

Throttle : **CLOSE**  
Mixture : **OFF**  
Master Switch : **OFF**  
Fuel Selector : **OFF**  
Magnetos Switches : **OFF**

Maintain directional control and maneuver to avoid obstacles.

### **2.- ENGINE FAILURE DURING NORMAL TAKEOFF (above 83 KIAS)**

Directional Control : **MANTAIN**  
Power (Oper. Engine) : **MAX. CONTINUOUS**  
Propeller Control (Inop. E.) : **FEATHER**  
Landing Gear : **UP**  
Bank : **5° INTO OP. E.**  
Airspeed : **ACCLERATE TO 88 Kias**  
Cowl Flaps (Inop. Eng.) : **CLOSE**  
Airspeed : **106 Kias AFTER OBSTACLES CLEARED**  
Engine Securing Procedures : **COMPLETE**

Land as soon as practical at the nearest suitable.

### **3.- ENGINE FAILURE DURING FLIGHT (ABOVE 78 KIAS)**

Inoperative engine	<b>: IDENTIFY</b>
Operative engine	<b>: ADJUST AS REQUIRED</b>
Airspeed	<b>: ABOVE 106 KIAS</b>

#### **Before securing inoperative engine:**

Fuel Flow	<b>: CHECK (IF DEFICIENT EM. FUEL PUMP ON)</b>
Fuel Quantity	<b>: CHECK</b>
Fuel Selector (inop. Eng.)	<b>: CHANGE</b>
Oil pressure and temperature	<b>: CHECK</b>
Magneto switches	<b>: CHECK</b>
Air Start	<b>: ATTEMP</b>

**If engine does not start, complete Engine Securing Procedure**

### **4.- ENGINE FEATHERING PROCEDURE**

Throttle	<b>: CLOSE</b>
Propeller (1000 RPM Min)	<b>: FEATHER</b>
Mixture	<b>: MIXTURE</b>
Cowl Flap	<b>: OFF</b>
Air Conditioner	<b>: OFF</b>

## 5.- ENGINE FIRE ON GROUND

Firewall Fuel Shutoff	: <b>OFF</b>
Emergency Fuel Pump	: <b>OFF</b>
Boost Pump CB	: <b>PULLED</b>
Brakes	: <b>AS REQUIRED</b>
Throttle (affect engine)	: <b>OPEN</b>
Radio	: <b>CALL FOR ASSISTANCE</b>
Mixture (if fire persists)	: <b>IDLE CUT OFF</b>
External fire extinguisher	: <b>USE</b>

If fire continues, shutdown both engines and evacuate.

If fire is on the ground, it may be possible to taxi away.

## 6.- ENGINE FIRE IN FLIGHT

Throttle	: <b>IDLE</b>
Mixture	: <b>OFF</b>
Firewall Fuel Shutoff	: <b>OFF</b>
Engine	: <b>COMPLETE SECURING PROCEDURES</b>

**If fire persists:**

Airspeed	: <b>INCREASE</b>
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Land at nearest suitable airport.