



DEPARTAMENTO “SEGURIDAD OPERACIONAL”
SUBDEPARTAMENTO “LICENCIAS”
SECCIÓN EVALUACIONES

PIPER PA - 38 - 112 “TOMAHAWK”

A.- Limitaciones de Operación

1.- Limitaciones (velocidades)		
Va 1.670 lbs	103	KIAS
Va 1.277 lbs	90	KIAS
Vne	138	KIAS
Vno	110	KIAS
Vfe	89	KIAS
Vs	48-52	KIAS
Vso	47-49	KIAS
Vx	61	KIAS
Vy	70	KIAS
Vr	53	KIAS
Vel. Planeo	70	KIAS
Landing final		
Approach Sp	62	KIAS
X-Cross	15	KIAS

3.- Pesos	
Max. Weight	1.670 lbs.
Max. Baggage	100 lbs.

4.- Motor	
Engine operating limits	
Max. Horsepower	112 HP
Max. RPM	2.600
Max. Oil Temperature	245 °F
Static RPM	
Not above	2.350
Not below	2.200-2.250
Oil Pressure	
Minimum (red line)	15 ó 25 PSI
Maximum (red line)	100 PSI

2.- Combustible		
Tipo a utilizar	100/130	
Capacidad total	32	gal.
Comb. Utilizable	30	gal.
Fuel Pressure		
Min. (red line)	0,5	PSI
Max. (red line)	8	PSI

5.- Maneuver Limits (Utility Category)	
MANEUVER	ENTRY SPEED
Spins (flaps Up)	Stall
Steep Turns	100 KIAS
Lazy Eights	100 KIAS
Chandelles	100 KIAS

B.- Emergencies Procedures

1.- ENGINE POWER LOSS DURING TAKEOFF (Not Airborne)

a) Sufficient runway remaining:

Throttle	Close immediately
Brakes	Apply as required
Stop	Straight ahead

b) Insufficient runway remaining:

Throttle	Close immediately
Brakes	Apply as required
Mixture	Idle CUT-OFF
Fuel selector	OFF
Master switch	OFF
Magnetos	OFF
Maintain	Directional control and maneuver to avoid obstacles.

2.- ENGINE POWER LOSS DURING TAKEOFF (if Airborne)

a) Sufficient runway remaining:

Airspeed	Maintain above stall
Directional control	Maintain
Land	Straight ahead

b) Insufficient runway remaining:

Airspeed	Maintain above stall
Throttle	Close
Mixture	Idle CUT-OFF
Fuel selector	OFF
Master switch	OFF
Magnetos	OFF
Flaps	As situation requires
Directional Control	Maintain – Make only shallow turns to avoid obstacles.

c) If sufficient altitude has been gained to attempt a restart:

Airspeed	Maintain above stall
Fuel selector	Switch to other tank containing fuel
Electric fuel pump	ON
Mixture	RICH
Carburetor	ON
If power is not regained proceed with	Power OFF Landing

3.- ENGINE POWER LOSS IN FLIGHT

Fuel selector	Switch to other tank containing fuel
Electric fuel pump	ON
Mixture	RICH
Carburetor heat	ON
Engine Gauge	Check for indication of cause of power loss
Primer	Locked

If no fuel pressure is indicated check that fuel selector is on tank containing fuel.

If power has not been restored:

Ignition switch	L then R, then back to BOTH
Throttle and Mixture	Try different settings

When power is restored:

Carburetor heat	OFF
Electric fuel pump	OFF

If power cannot be restored:

Trim for best (70 KIAS) and prepare for Power OFF landing

4.- FIRE

a) Engine fire during start:

Starter	Crack engine
Mixture	Idle CUT-OFF
Throttle	Open
Electric fuel pump	OFF
Fuel selector	OFF
Abandon airplane	If Fire continues

b) Fire in flight:

Source of fire	Check
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Engine fire:

Fuel selector	OFF
Throttle	Close
Mixture	Idle CUT-OFF
Electric fuel pump	OFF
Cabin heat	OFF
Defroster	OFF
Prepare for	Power OFF landing