



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

**“CESSNA C-172M”**

**“CLUB AÉREO DE RANCAGUA”**

**A.- Limitaciones de Operación**

1.- Limitaciones (Velocidades)

	MPH
Va	112
Vne	182
Vno	145
Vfe	100
Vs	57
Vso	49
Vx	68
Vy	80
Vr	60
Vapp (Flap DN)	65-75
Vplaneo	80
Max Cross Wind	15

2.- Combustible (U.S. GAL)

Tipo a Utilizar	100/130
Capacidad Total	42
Capacidad Usable	38

3.- Pesos (LBS)

Máximo TAKE-OFF	2.300
Máximo Equipaje	120

4.- Motor (Potencia Máxima Continua)

Limitaciones Operativas de Motor	
Razón HP o BHP	150
Máximas RPM	2.700
RPM estáticas	
Máximas	2.370
Mínimas	2.270
Temperatura de aceite (°F)	
Máxima	245
Mínima	100
Presión de aceite (PSI)	
Máxima	100
Mínima	25

5.- Limites de maniobras (Cat. Normal)

MANIOBRA	MPH
Spin (Flaps UP)	SLOW DECELERATION
Escarpados	112
Ocho Flojo	120
Chandela	120

## B.- Emergencies Procedures

### 1.- ENGINE FAILURE DURING TAKEOFF RUN

Throttle	IDLE
Brakes	APPLY
Wing Flaps	RETRACT
Mixture	IDLE CUT-OFF
Ignition Switch	OFF
Master Switch	OFF

### 2. - ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF

Airspeed	75 MPH (FLAPS UP) 70 MPH (FLAPS DN)
Mixture	IDLE CUT-OFF
Fuel Selector Valve	OFF
Ignition Switch	OFF
Wing Flaps	AS REQUIRED
Master Switch	OFF

### 3. - ENGINE FAILURE DURING FLIGHT

Airspeed	80 MPH
Carburetor Heat	ON
Fuel Selector Valve	BOTH
Mixture	RICH
Ignition Switch	BOTH (or START if propeller is stopped)
Primer	IN and LOCKED

#### 4. - FIRE DURING START ON GROUND

Cranking	<b>CONTINUE</b> , to get a start, which would suck the flames and accumulated fuel through the carburetor and into the engine.
If engine starts:	
Power	<b>1700</b> RPM for a few minutes.
Engine	<b>SHUTDOWN</b> and inspect for damage.
If engine fails to start:	
Throttle	<b>FULL OPEN</b>
Mixture	<b>IDLE CUT-OFF</b>
Cranking	<b>CONTINUE</b>
Fire Extinguisher	<b>OBTAIN</b> (have ground attendants obtain if not installed)
Engine	<b>SECURE</b>
a. Master switch	<b>OFF</b>
b. Ignition switch	<b>OFF</b>
c. Fuel selector valve	<b>OFF</b>
Fire	<b>EXTINGUISH</b> using fire extinguisher, wool blanket or dirt.
Fire Damage	<b>INSPECT</b> repair damage or replace damaged components or wiring before conducting another flight.

## 5. - ENGINE FIRE IN FLIGHT

Mixture	<b>IDLE CUT-OFF</b>
Fuel Selector Valve	<b>OFF</b>
Master Switch	<b>OFF</b>
Cabin Heat and Air	<b>OFF</b> (except overhead vent)
Airspeed	<b>120 MPH</b> (if fire is not extinguished, increase glide speed to find an airspeed which will provide an incombustible mixture).
Forced Landing	<b>EXECUTE</b> (as described in Emergency Landing without Engine Power).