



DEPARTAMENTO “SEGURIDAD OPERACIONAL”
SUBDEPARTAMENTO “LICENCIAS”
SECCIÓN EVALUACIONES

“CESSNA C-414A”
“INVESTIGACIONES DE CHILE”

A.- Limitaciones de Operación

1.- Limitaciones (velocidades)

| | KIAS |
|----------------|------|
| Va | 145 |
| Vne | 237 |
| Vno | 203 |
| Vfe 15° | 177 |
| Vle | 177 |
| Vlo | 177 |
| Vmca 15° | 79 |
| Vs | 82 |
| Vso | 71 |
| Vx | 88 |
| Vy | 108 |
| Vsse | 98 |
| Vxse | 100 |
| Vyse | 108 |
| Vr | |
| Vapp Flaps 45° | 94 |
| Max Cross Wind | 19 |

2.- Combustible (U.S. GAL)

| | |
|------------------------------|---------|
| Tipo a Utilizar | 100/130 |
| Capacidad Total | 213.4 |
| Combustible Usable | 204.0 |
| Presión de Combustible (PSI) | |
| Mínima | |
| Máxima | |

3.- Pesos (LBS)

| | |
|--------------------|-------|
| Máximo TAKE-OFF | 6.750 |
| Máximo Baggaje FWD | |
| Máximo Baggaje AFT | |

4.- Motor (Potencia Máxima Continua)

| Limitaciones Operativas de Motor | |
|----------------------------------|-------|
| Razón HP o BHP | 310 |
| Máximas RPM | 2.700 |
| Cabin Pressurization (PSI) | |
| Máximas | 5.3 |
| Mínimas | 0 |
| Exh. Gas Temp. (°F) | |
| Cyl. Heat Temp. (°F) | 460 |
| Temperatura de aceite (°F) | |
| Máxima | 240 |
| Mínima | 75 |
| Presión de aceite (PSI) | |
| Máxima | 100 |
| Mínima | 10 |

5.- Límites de maniobras (Cat. Normal)

| MANIOBRA | MPH |
|-----------------|------------|
| Spin (Flaps UP) | PROHIBITED |
| Escarpados | 145 |

B.- Emergencies Procedures

1.- ENGINE SECURING PROCEDURE

| | |
|-----------|---------------------|
| Throttle | CLOSE |
| Mixture | IDLE CUT-OFF |
| Propeller | FEATHER |

2.- ENGINE FAILURE DURING TAKEOFF (Speed below 98 kias or Gear Down)

| | |
|-------------------------|--------------------------|
| Throttle | CLOSE IMMEDIATELY |
| Brake or Land and Brake | AS REQUIRED |

3.- ENGINE FAILURE DURING TAKEOFF (Speed above 98 kias with Gear Up or in Transit)

| | |
|---------------------|----------------------------------|
| Mixture | FULL RICH |
| Propellers | FULL FORWARD |
| Throttles | FULL FORWARD (38.0'' Hg.) |
| Landing Gear | CHECK UP |
| Inoperative Engine: | |
| Throttle | CLOSE |
| Mixture | IDLE CUT-OFF |
| Propeller | FEATHER |

4.- ENGINE FAILURE DURING FLIGHT (Speed above Vmca)

| | |
|--------------------|---------------------------|
| Inoperative Engine | DETERMINE |
| Operative Engine | ADJUST AS REQUIRED |

Before Securing Inoperative Engine:

| | |
|------------------------------|---|
| Fuel Flow | CHECK. If deficient, position auxiliary fuel pump to ON. |
| Fuel Selector | MAIN TANKS (Feel for detent) |
| Fuel Quantity | CHECK |
| Oil Pressure and Temperature | CHECK |
| Magneto Switches | CHECK ON |
| Mixture | ADJUST. Lean until manifold pressure begins to increase, then enrichen as power increases. |

5.- ENGINE INOPERATIVE GO-AROUND (Speed Above 98 Kias)

| | |
|------------------------|----------------------------------|
| Throttle | FULL FORWARD (38.0'' Hg.) |
| Wing Flaps | UP (If Extended) |
| Positive Rate of Climb | ESTABLISH |
| Landing Gear | UP |

6.- FIRE ON THE GROUND

| | |
|----------|---------------------------|
| Throttle | CLOSE |
| Brakes | AS REQUIRED |
| Mixture | IDLE CUT-OFF |
| Battery | OFF (use gang bar) |
| Magnetos | OFF (use gang bar) |

7.- INFLIGHT WING OR ENGINE FIRE

| | |
|--------------------------------|-----------------------------|
| Both Auxiliary Fuel Pumps | OFF |
| Operative Engine Fuel Selector | MAIN TANK (feel for detent) |
| Emergency Crossfeed Shutoff | OFF (Pull Up) |
| Appropriate Engine – Secure | |
| Throttle | CLOSE |
| Mixture | IDLE CUT-OFF |
| Propeller | FEATHER |
| Fuel Selector | OFF (feel for detent) |

8.- EMERGENCY DESCENT PROCEDURES

a.- PREFERRED PROCEDURE:

| | |
|---------------|------------------------------------|
| Throttle | IDLE |
| Propeller | FULL FORWARD |
| Mixture | ADJUST for smooth engine operation |
| Wing Flaps | UP |
| Landing Gear | UP |
| Moderate Bank | INITIATE |

b.- IN TURBULENT ATMOSPHERIC CONDITIONS

| | |
|---------------|------------------------------------|
| Throttle | IDLE |
| Propeller | FULL FORWARD |
| Mixture | ADJUST for smooth engine operation |
| Wing Flaps | DOWN 45° |
| Landing Gear | DOWN |
| Moderate Bank | INITIATE |

9.- AIR INLET OR FILTER ICING

| | |
|---------------------------|---|
| Alternate Air Control (s) | PULL OUT |
| Propeller (s) | INCREASE (2.550 RPM for normal cruise) |
| Mixture (s) | LEAN AS REQUIRED |

10.- CABIN OVERPRESSURE (over 5,3 PSI)

| | |
|-----------------------------|-------------|
| Pressurization Air Controls | PULL |
|-----------------------------|-------------|

11.- LOSS OF PRESSURIZATION ABOVE 10.000 FEET

| | |
|--------------------------------------|---|
| Without Supplementary Oxygen | EMERGENCY DESCENT TO 10.000 FEET |
| With supplementary Oxygen: | |
| Oxygen Knob | PULL ON |
| Assure each occupant is using oxygen | |

12.- PRESSURIZATION AIR CONTAMINATION

| | |
|--------------------------------|--|
| Pressurization Air Control (s) | PULL LH and/or RH as necessary |
|--------------------------------|--|

13.- SPINS

| | |
|----------------|--|
| Throttle | CLOSE IMMEDIATELY |
| Rudder | FULL RUDDER opposite the direction of rotation |
| Control Wheel | FORWARD BRISKLY , ½ turn after applying full rudder. Neutralize rudder after rotation stops |
| Inboard Engine | INCREASE POWER to slow rotation |
| Control Wheel | PULL after rotation has stopped to recover from resultant dive. Apply smooth steady control pressure. |