



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

BELL 407 (B407)

A.- LIMITACIONES DE OPERACIÓN

1.- VELOCIDADES	
Vne Sea Level to 3000 feet	140
Vne Torque 93,5% to 100%	100
Vne with any door removed	100
Vne for steady autorotation	100
Max. crosswind hover	35
Max. Sideward and rearward	35

2.- ALTITUDE MAX. FEET	20.000
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3.- SLOPE LANDING	
	%
Side slopes	10
Nose up slopes	10
Nose down slopes	5

4.- PLANTA DE PODER		
Productora de Gas (NG)		RPM
Continuos Operation		63 to 105
Max Continuos Operation		105
Transient, 10 seconds		105.1
Turbina de Poder (NP)		
Avoid Continuos Operations		68.4
Minimum		99%
Continuos Operation		99 to 100
Max Transient, 15 seconds		102,1

5.- LIM. FRENO DE ROTOR	
Rpm del rotor bajan de	40%

6.- PRESIÓN DE ACEITE		PSI
Minimum below 79% NG		50
Minimum below 79 to 94% NG		90
Minimum above 94% NG		115
Máximo		130
Máximo cold starts only		200

7.- TEMP. DE ACEITE		°C
Continuos Operation		0 to 107
Maximum		107

8.- TRANSMISION	
Presión de Aceite	PSI
Minimum	30
Continuos Operation	40 to 70
Maximum	70

Temperatura de Aceite		°C
Continuos Operation		15 a 110
Maximum		110

9.- ROTOR	
Con Poder	%
Continuos Operation	99 to 100
Maximum continuos	100
Sin Poder	%
Minimum	85
Continuos Operation	85 to 107
Maximum	107

B.- EMERGENCIES PROCEDURES

1. ENGINE FAILURE - HOVERING

Maintain **HEADING AND ATTITUDE CONTROL**

Collective **ADJUST TO CONTROL NR AND RATE OF DESCENT**

Increase **PRIOR TO GROUND CONTACT TO CUSHION LANDING LAND**

Shut down **HELICOPTER**

2. ENGINE FAILURE-INFLIGHT

Maintain **HEADING AND ATTITUDE CONTROL**

Collective **ADJUST AS REQUIRED TO MAINTAIN 85 TO 107 NR**

Ciclyc **ADJUST TO OBTAIN DESIRED AUTOROTATIVE AIRSPEED. ATTEMPT ENGINE RESTART IF AMPLE ALTITUDE REMAINS**

Fuel Valve Switch **OFF**

At low altitude:

 Throttle **CLOSED**

 Flare **TO LOSE AIRSPEED**

Apply **COLLECTIVE AS FLARE EFFECT DECREASES TO FURTHER REDUCE FORWARD SPEED AND CUSHION LANDING**

Upon	GROUND CONTACT, COLLECTIVE SHALL BE REDUCE SMOOTHLY WHILE MAINTAINING CYCLIC IN NEUTRAL OR CENTERED POSITION
Completed	HELICOPTER SHUTDOWN

3. ENGINE FIRE ON GROUND

Throttle	CLOSED
Fuel Valve	OFF
Gen Switch	OFF
Batt Switch	OFF
Rotor Brake (if installed)	ENGAGE EXIT HELICOPTER

4. ENGINE FIRE DURING FLIGHT

Inflight	IMMEDIATELY ENTER AUTOROTATION
Throttle	CLOSED
Fuel Valve Switch	OFF
If time permits, Fuel Boost/XFR	
Circuit breaker switches	OFF
Execute	AUTOROTATIVE DESCENT AND LANDING
Batt Switch	OFF

5. COMPLETE LOSS OF TAIL ROTOR THRUST

HOVERING

**CLOSE THROTTLE AND PERFORM A
HOVERING AUTOROTATION LANDING.**

**A SLIGHT ROTATION CAN BE EXPECTED ON
TOUCHDOWN.**

IN-FLIGHT

**REDUCE THROTTLE TO IDLE, IMMEDIATELY
ENTER AUTOROTATION, AND MAINTAIN A
MINIMUM AIRSPEED OF 55 KIAS.**

DURING DESCENT.