

**BEFORE ENGINE START**

- Preflight check completed
- Fuel & oil caps, cowlings
- Rotorblades level
- METEO / NOTAM / DABS
- Mass & balance
- Cabin & baggage secured
- Passenger briefing
- Departure briefing

• Fuel shut-off valve	ON
• Circuit Breakers	IN
• Controls & Pedals	Full travel, free / Frictions ON
• Throttle	Full travel, free / Collective DOWN
• Governor	ON
• Mixture / Mixture guard	FULL RICH / Installed
• <i>Primer</i>	<i>DOWN and LOCKED</i>
• All switches & avionics	OFF / Check STROBE ON
• CLUTCH	DISENGAGED
• Rotor brake & map light	OFF

ENGINE START

• MASTER BATTERY	ON / OAT ↔ CAT
• Controls & Pedals	NEUTRAL
• Area (left & right) / HELI traffic	Clear / No arriving/departing traffic
• Throttle: Twist for priming	Cold 10x / warm 5x
• Throttle	CLOSED
• Ignition switch	START, then BOTH
• STARTER ON light	OUT
• Set idle RPM	55% / Check OIL PRESS > 25psi
• CLUTCH / ALTERNATOR	ON / ALT light OFF
• Blades turning	In less than 5 sec
• AVIONICS / Headsets / Radios	ON / FLARM ON
• CARB HEAT	FULL ON
• <i>HIGH RPM TEST button</i>	<i>Press / Check audio</i>
• Wait for CLUTCH light OUT	Verify CLUTCH CB IN
• Warm up	70-75% RPM
• Settings	FLARM, 2x ALT, GYRO, COM, NAV, TX

ENGINE RUNUP

• T's & P's, warnings & cautions	Green / No warnings & cautions
• 75% RPM / Magnetos check	Max RPM drop: 7% in 2 sec
• CARB HEAT check	CAT: drop/rise, RPM: rise/drop
• Sprag clutch check	Needles split / Idle OK, then 75%
• Doors / Seatbelts	CLOSED / ON
• Frictions	OFF
• Increase RPM manually	102-104%
• LOW RPM horn & light	Checked @ 97% RPM

SHUTDOWN

• Collective / Cyclic, Pedals	DOWN / NEUTRAL
• CARB HEAT	OFF (cold)
• Reduce RPM for cooling	75%
• Frictions	ON
• Landing light / NAV lights	OFF / Start timer 3:30
• After 3:30	Throttle CLOSED
• CLUTCH switch	DISENG. / Check CLUTCH light ON
• Wait 30 sec	Pull mixture CUTOFF / Guard ON
• Wait 1 min	Apply Rotor brake if required
• Radios & Avionics	121.500 checked / Off
• CLUTCH light	Check OUT
• All switches	OFF / STROBE remains ON



LIMIT MANIFOLD PRESSURE [IN. HG]								
PRESS ALT [FT]	MAXIMUM CONTINUOUS POWER MCP							THROTTLE FULL OPEN AT
	OAT [°C]							
	-20	-10	0	+10	+20	+30	+40	
SL	21.5	21.8	22.1	22.3	22.6	22.9	23.2	20.9
2000	21.1	21.4	21.6	21.9	22.2	22.5	22.8	
4000	20.7	21.0	21.2	21.5	21.8	22.0	22.3	
6000	20.3	20.6	20.8	21.1	21.3	21.6	21.9	
8000	19.9	20.2	20.4	20.7	20.9	FULL THROTTLE		
FOR MAX TAKEOFF PWR MTP (5 MIN), ADD 0.9								
MTP LIMITED BY FULL THROTTLE (MTP-MCP < 0.9)								

NEVER EXCEED SPEED [KIAS]								
PA [FT]	OAT [°C]							
	-20	-10	0	+10	+20	+30	+40	
	SL	102						
2000	102						99	96
4000	102			98	94	91	87	
6000	98	94	90	87	82	77		
8000	94	90	86	80	75	69	64	
10000	86	80	74	68	62	57		
12000	74	67	61	NO FLIGHT				
14000	61	NO FLIGHT						

BASED ON R22 II POH – SECTION 2 – LIMITATIONS – PLACARDS –
FAA APPROVED 13OCT2000

HOVER ALTITUDE OUT OF GROUND EFFECT
ZERO WIND, 104% RRPM
TAKE OFF POWER
OR
FULL THROTTLE

R22 II POH – SECTION 5 – PERFORMANCE –
FAA APPROVED 23FEB2004

