

**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 / HYD switches	ON
• All switches & avionics	OFF / Check STROBE ON
• CLUTCH	DISENGAGED
• Rotor brake & map light	OFF

**ENGINE START**

• MASTER BATTERY	ON
• Controls & Pedals	NEUTRAL
• Area (left & right) / HELI traffic	CLEAR / No arriving/departing traffic
• <b>Throttle</b>	<b>CLOSED</b>
• Mixture	RICH
• Ignition switch: PRIME	Cold 10s / warm 5s, then BOTH
• Mixture	CUTOFF
• STARTER button	PRESS (until engine is running)
• Engine firing	Mixture slowly to RICH
• Mixture guard	Installed
• 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
• Annunciator panel TEST	All lights ON, EMU light steady
• HIGH RPM TEST button	Press / Check Audio
• Wait for CLUTCH light OUT	Verify CLUTCH CB IN
• Warm up	65% 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
• Sprag clutch check	Needles split / Idle OK, then 75%
• All Doors / Seatbelts	CLOSED, aft doors unlocked / ON
• Frictions	OFF
• HYD	Checked / ON
• Increase RPM manually	101-102%
• LOW RPM horn & light	Checked @ 97% RPM

**SHUTDOWN**

• Collective / Cyclic, Pedals	DOWN / NEUTRAL
• Reduce RPM for cooling	65%
• 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
• 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]								
	-30	-20	-10	0	+10	+20	+30	+40	
SL	21.5	21.8	22.1	22.4	22.6	22.9	23.1	23.3	24.7
2000	20.9	21.2	21.5	21.8	22.1	22.3	22.5	22.8	23.7
4000	20.4	20.7	21.0	21.3	21.5	21.8	22.0	22.2	22.8
5000	20.2	20.5	20.8	21.1	21.3	21.6	21.8	22.0	23.7
6000	19.9	20.2	20.5	20.8	21.0	21.3	21.5	21.7	22.8
8000	19.5	19.8	20.1	20.3	20.6	20.8	21.0		21.1
10000	19.1	19.4	19.6	19.9	<b>MCP LIMITED</b>				20.0
12000	<b>BY FULL THROTTLE</b>								
FOR MAX TAKEOFF PWR MTP (5 MIN), ADD 2.8									
<b>MTP LIMITED BY FULL THROTTLE (MTP-MCP &lt; 2.8)</b>									

BASED ON R44 II POH - SECTION 2 - LIMITATIONS - PLACARDS -  
FAA APPROVED 03OCT2002

NEVER EXCEED SPEED [KIAS]										
PRESS ALT [FT]	2200 LBS TOGW & BELOW								THROTTLE FULL OPEN AT	
	OAT [°C]									
	-30	-20	-10	0	+10	+20	+30	+40		
SL										
2000	130							127	123	
4000					126	122	118	114		
5000				126	122	117	113	108		
6000			126	122	117	113	108	103		
8000	126	122	117	112	107	101	96	91		
10000	117	112	106	101	95	90	85			
12000	107	101	95	89	<b>NO FLIGHT</b>					
14000	95	89	<b>NO FLIGHT</b>							
<b>OVER 2200 LBS GW, SUBTRACT 10 KIAS</b>										
<b>FOR AUTOROTATION, SUBTRACT 30 KIAS</b>										

**HOVER ALTITUDE OUT OF GROUND EFFECT**  
  
ZERO WIND  
TAKE OFF POWER OR FULL THROTTLE

R44 II POH - SECTION 5 - PERFORMANCE -  
FAA APPROVED 03OCT2002

