

## BEFORE ENGINE START

– Preflight check completed	• Fuel shut-off valve	ON, guard installed
– OAT < 4°C: Fuel additive	• Circuit Breakers	IN
– Rotorblades level	• Controls & Pedals	Full travel, free / Frictions ON
– METEO / NOTAM / DABS	• Collective	DOWN
– Mass & balance	• CABIN HEAT, ENG A/ICE, PITOT HEAT	OFF
– Cabin & baggage secured	• HYD	ON
– Passenger briefing	• All switches & avionics	OFF / Check STROBE ON
– Departure briefing	• Rotor brake & map light	OFF

## ENGINE START

• MASTER BATTERY / Voltage	ON / Voltage minimum 24.5V
• AVIONICS / Radios	ON / FLARM ON
• IGNITER (Key)	ENABLE
• Area (left & right) / HELI traffic	CLEAR / No arriving/departing traffic
• Controls & Pedals	NEUTRAL
• <b>FUEL CUTOFF</b>	<b>Pull OFF</b>
• <b>Throttle</b>	<b>CLOSED</b>
• START button	Press and release
• N1	15%, increasing
• MGT	Below 150°C
• OIL PRESS	Increasing
• Main rotor	Rotating
• FUEL CUTOFF	PUSH IN
• MGT rise within 3 seconds	Monitor / Observe limitations
• N1	Stable at 65% to 67%
• FUEL CUTOFF guard	Install / Start time 1 min
• Ground power (if used)	Disconnect
• GENERator	ON
• Headsets	ON
• Settings	FLARM, COM, NAV, TX, QNH, Gyros

## ENGINE RUNUP

• Annunciator panel TEST	All lights ON / Dualtacho checked
• ENG A/ICE check	Annunciator light ON
• All Doors / Seatbelts	CLOSED, aft doors unlocked / ON
• Frictions	OFF
• HYD	Checked / ON
• Lift collective slightly	LOW RPM horn checked
• Warm-up time	Verify at least 1 min idle
• Throttle	Slowly to full OPEN (TQ 25%-50%)
• N2/R	98-99% (beep as required)
• Annunciator lights	OUT
• Engine gauges	Normal operating range

## SHUTDOWN

• Collective / Cyclic, Pedals	DOWN / NEUTRAL
• Throttle Closed	N1 80%→70% in min. 2 sec
• Frictions	ON
• Landing light / NAV lights	OFF / Start timer 2:00
• After 2:00 idle	Throttle CLOSED
• FUEL CUTOFF	Pull OFF / Monitor MGT
• Sprag clutch check	Verify N2/R needles split
• Wait 1 min	Apply rotor brake if required
• Radios & Avionics	121.500 checked / OFF
• All switches	OFF / STROBE remains ON

### POWER-ON V<sub>ne</sub> - KIAS

PRESS ALT-FT	OAT-°C									
	-40	-30	-20	-10	0	10	20	30	40	50
SL	129									127
2000	124		130					126	122	
4000	119	127			129	125	121	117	114	
6000	114	122		125	121	117	113	108		
8000	109	117	121	116	112	107	102	97		
10000	105	112	112	106	101	96	91	86		
12000	100	106	101	95	90					
14000	96	95	89							
16000	90									

**BELOW 2200 LB (998 KG) TOGW, ADD 10 KIAS**

### AUTOROTATION V<sub>ne</sub> - KIAS

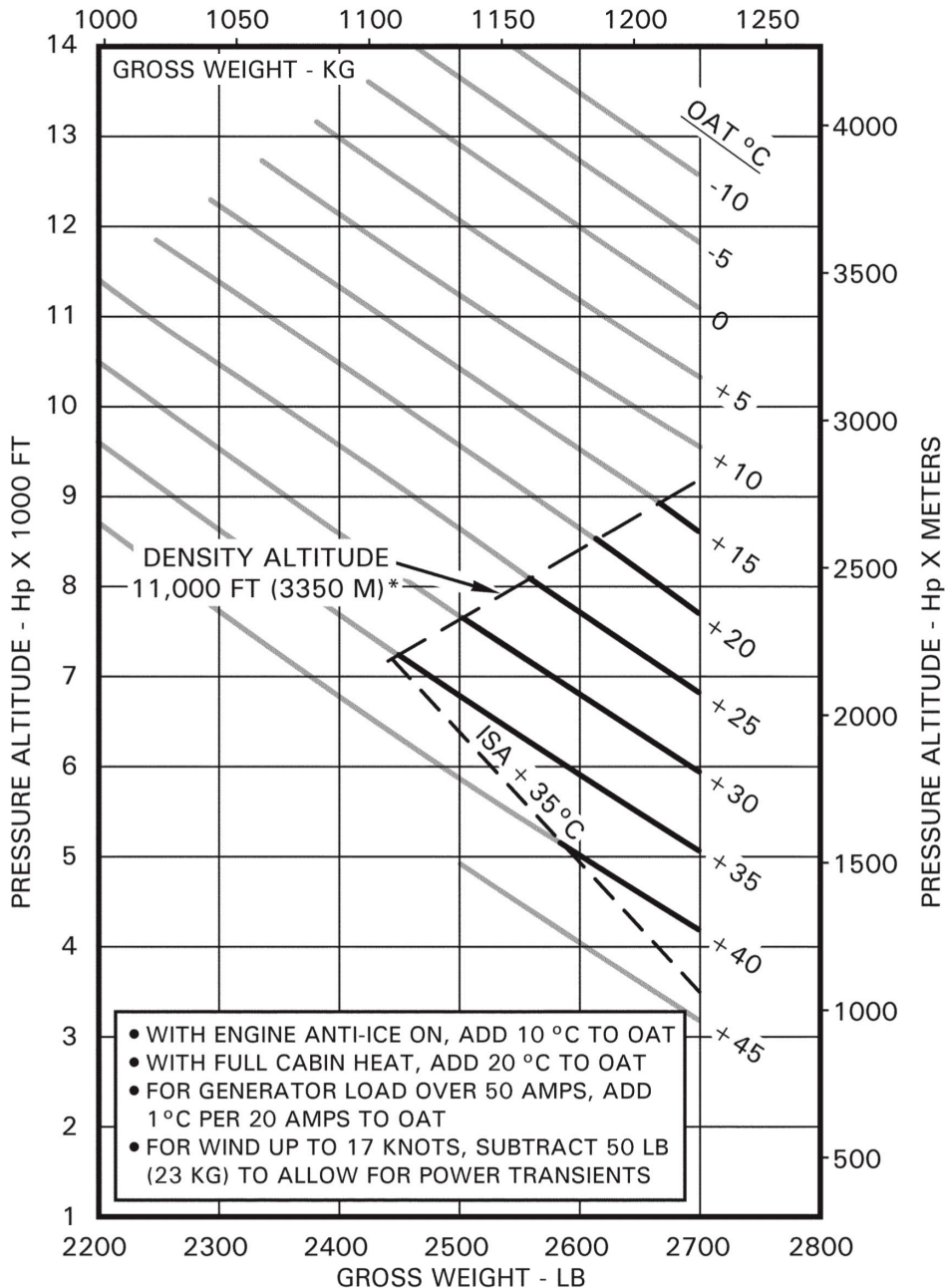
PRESS ALT-FT	OAT-°C									
	-40	-30	-20	-10	0	10	20	30	40	50
6000										
8000			100				99	94	89	
10000				98	93	88	83	78		
12000		98	93	87	82					
14000	93	87	81							
16000	82									

**NO FLIGHT**

R66 POH – SECTION 2 – LIMITATIONS – PLACARDS – FAA APPROVED 19OCT2016

**NOTE: 65 KIAS MAXIMUM ABOVE 83% TORQUE**

### OUT OF GROUND EFFECT, ZERO WIND, MGT 5-MINUTE LIMIT ENGINE ANTI-ICE AND CABIN HEAT OFF, 50 AMP GENERATOR LOAD



\*Hover performance substantiated up to 11,000 feet (3350 meters) density altitude. Data beyond ISA +35°C and above 11,000 feet density altitude is presented only to determine performance with engine anti-ice, cabin heat, and/or generator loads over 50 amps.

R66 POH – SECTION 5 – PERFORMANCE – FAA APPROVED 17MAR2021