# SECTION 5

## PERFORMANCE

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SECTION 5

PERFORMANCE

GENERAL

Hover controllability has been substantiated in 17 knot wind from any direction up to 9600 feet density altitude. Refer to IGE hover performance data for allowable gross weight.

Indicated airspeed (KIAS) shown on graphs assumes zero instrument error.

CAUTION

Performance data presented in this section was obtained under ideal conditions. Performance under other conditions may be substantially less.

NOTE

Hover performance data given is with carburetor heat off. Full carburetor heat reduces hover ceilings by up to 2400 feet.

DEMONSTRATED OPERATING TEMPERATURE

Satisfactory engine cooling has been demonstrated to an outside air temperature of 38°C (100°F) at sea level or 23°C (41°F) above ISA at altitude.
NOTE: INDICATED AIRSPEED ASSUMES ZERO INSTRUMENT ERROR

Airspeed Calibration Curve

Indicated Airspeed - KIAS

Calibrated Airspeed - KCAS
IGE HOVER CEILING VS GROSS WEIGHT

* Hover controllability with 17 knot (31 km/h) wind substantiated up to 9600 feet (2930 meters) density altitude.
OUT OF GROUND EFFECT
TAKEOFF POWER OR FULL THROTTLE
ZERO WIND

GROSS WEIGHT - KG

OAT
°C | °F
-30 | -22
-20 | -4
-10 | -14
0 | 32
+10 | 50
+20 | 68
+30 | 86
+40 | 104

STANDARD DAY

PRESSURE ALTITUDE - H, X 1000 FT

DENSITY ALTITUDE
11,600 FT (3540 M)

PRESSURE ALTITUDE - H, METERS

GROSS WEIGHT - LB

OGE HOVER CEILING VS GROSS WEIGHT
DEMONSTRATED CONDITIONS:
SMOOTH HARD SURFACE
WIND CALM

AVOID OPERATION IN CROSS-HATCHED AREAS

HEIGHT-VELOCITY DIAGRAM
NOISE CHARACTERISTICS

The following noise level complies with 14 CFR Part 36, Appendix J and ICAO Annex 16, Chapter 11 noise requirements and was obtained from FAA-approved data from actual noise tests.

Model: R44
Engine: Lycoming O-540-F1B5
Gross Weight: 2200 lbs (998 kg)
$V_h$: 107 KTAS

The flyover sound exposure level (SEL) is 78.2 dB(A). This noise level meets the requirements for a Stage 3 helicopter as defined in 14 CFR Part 36.

NOTE

No determination has been made by the Federal Aviation Administration that the noise level of this aircraft is or should be acceptable or unacceptable for operation at, into, or out of any airport.