

**SECTION 5
PERFORMANCE
CONTENTS**

	Page
General	5-1
Demonstrated Operating Temperature	5-1
Airspeed Calibration Curve	5-2
Density Altitude Chart	5-3
IGE Hover Ceiling Vs. Gross Weight	5-4
OGE Hover Ceiling Vs. Gross Weight	5-5
Height-Velocity Diagram	5-6
Noise Characteristics	5-7

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**SECTION 5
PERFORMANCE**

GENERAL

IGE hover controllability has been substantiated in 17 knot wind from any direction up to 9600 feet (2930 meters) density altitude. Refer to hover performance charts for allowable gross weight.

CAUTION

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

NOTE

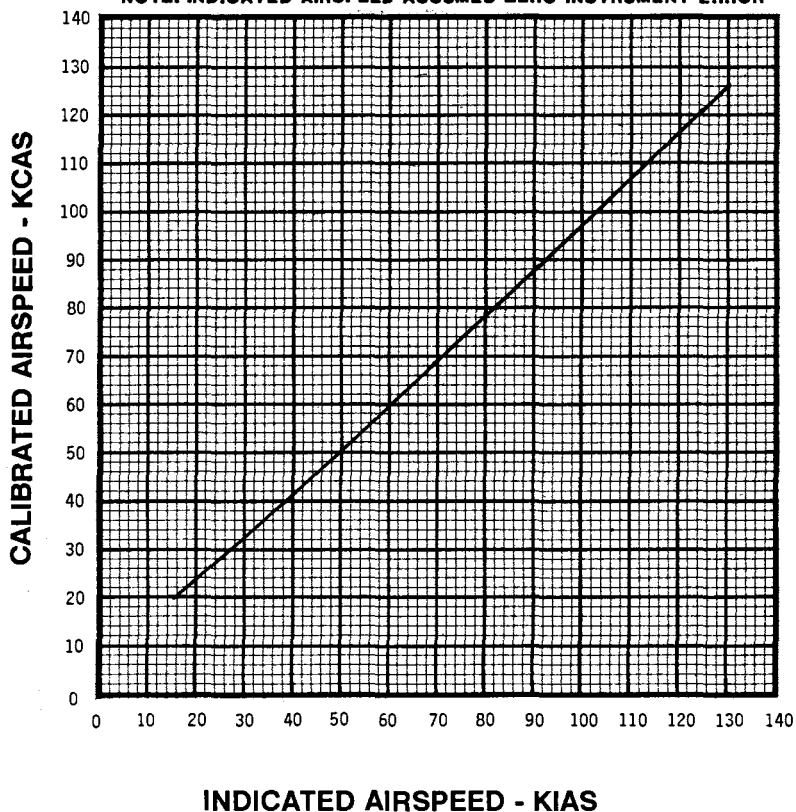
Hover performance data given is with carburetor heat off. Full carburetor heat reduces hover ceilings by up to 2400 feet (730 meters).

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

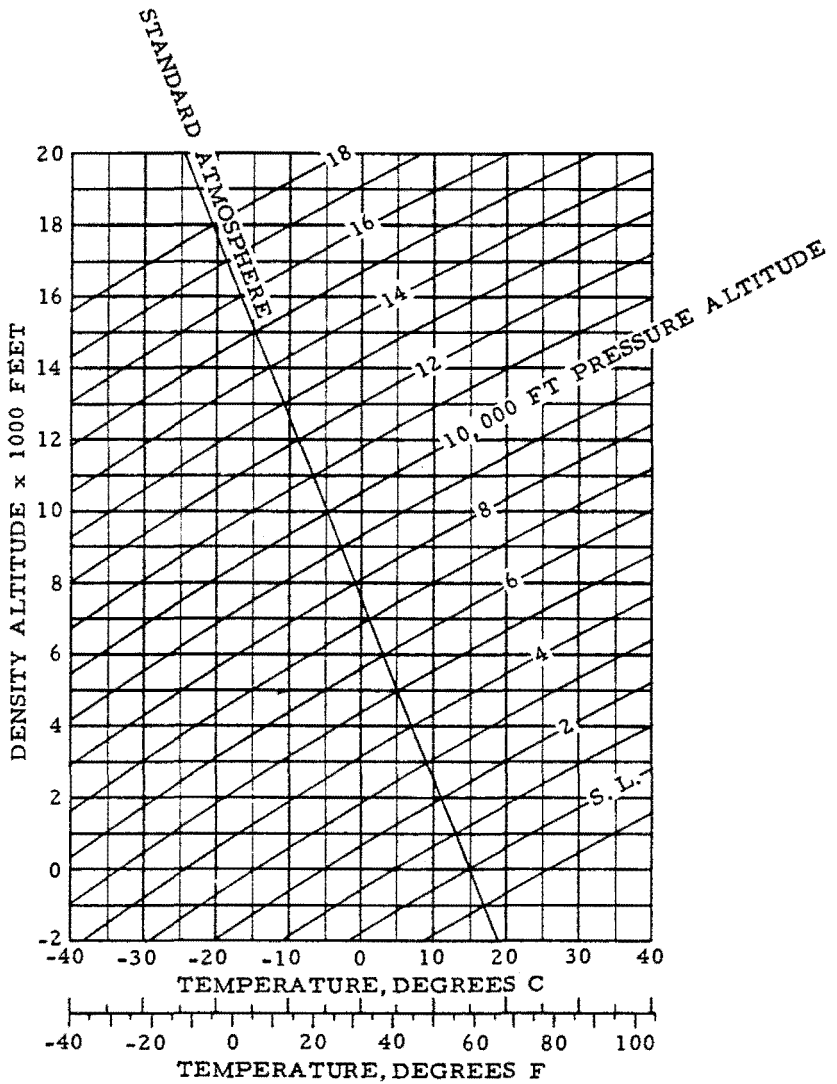
DEMONSTRATED OPERATING TEMPERATURE

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

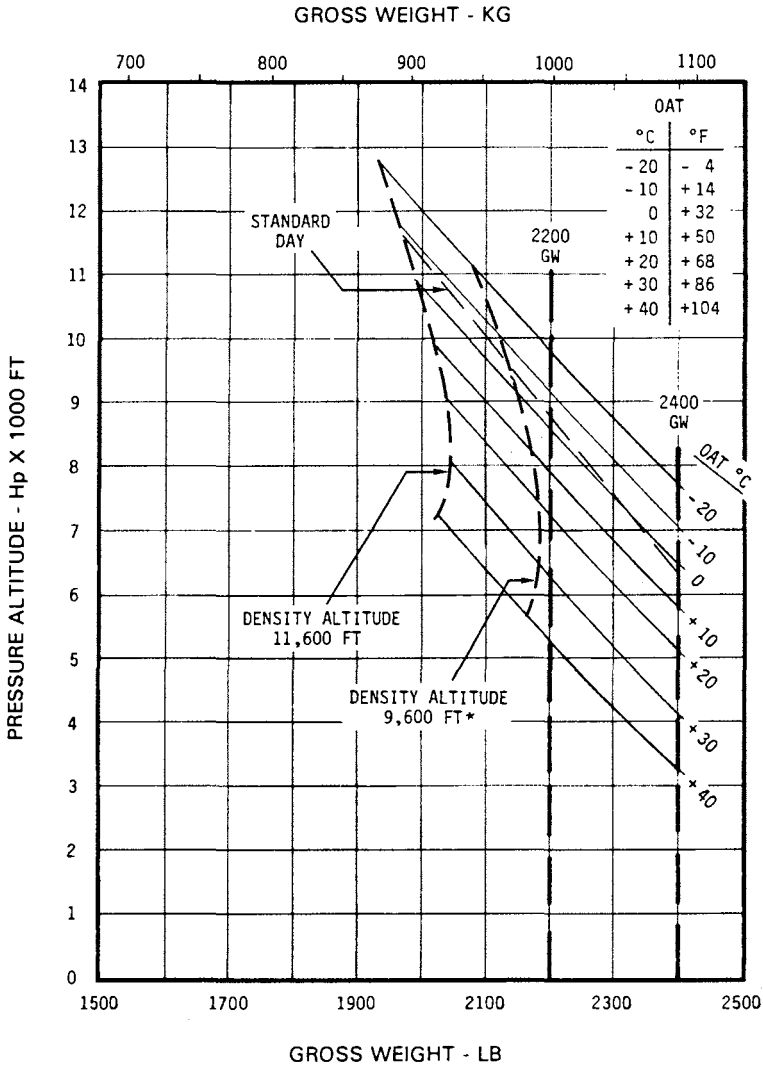


AIRSPEED CALIBRATION CURVE



DENSITY ALTITUDE CHART

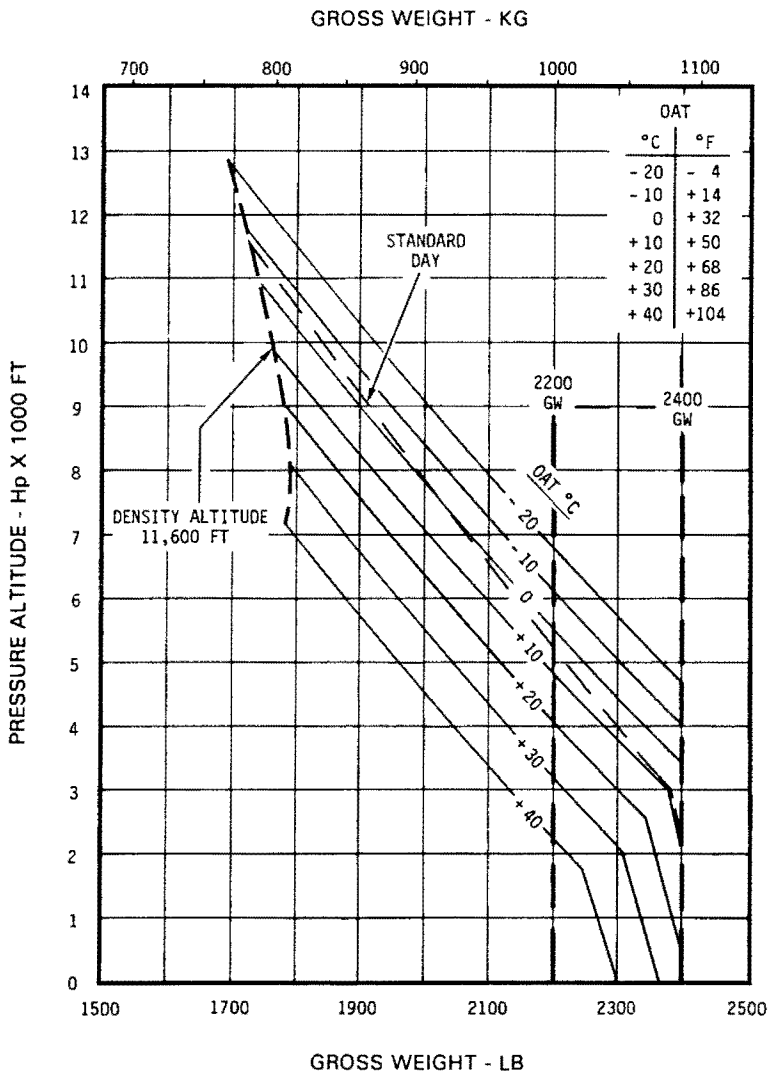
IN GROUND EFFECT AT 2 FOOT SKID HEIGHT
FULL THROTTLE
101-102% RPM
ZERO WIND



IGE HOVER CEILING VS. GROSS WEIGHT

*Hover controllability with 17 knot wind substantiated up to 9600 feet density altitude.

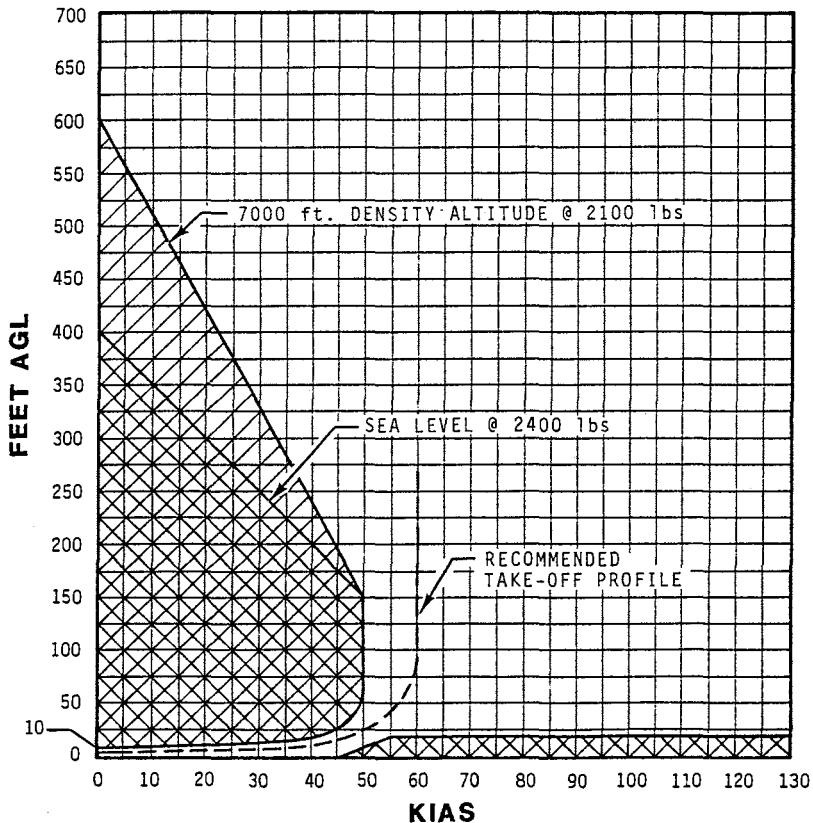
OUT OF GROUND EFFECT, ZERO WIND
TAKEOFF POWER OR FULL THROTTLE
101-102% RPM



OGE HOVER CEILING VS. GROSS WEIGHT

DEMONSTRATED CONDITIONS:
SMOOTH HARD SURFACE
WIND CALM
GOVERNOR ON

AVOID OPERATION IN SHADED AREAS



HEIGHT - VELOCITY DIAGRAM

NOISE CHARACTERISTICS

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

Model:	R44
Engine:	Lycoming O-540-F1B5
Gross Weight:	2400 lb (1089 kg)
V _h :	108 KTAS

The flyover sound exposure level (SEL) is 81.9 db(A) with P/N C169-3 (small) muffler installed or 78.9 db(A) with P/N C169-36 (large) muffler installed.

These noise levels meet 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 levels of this aircraft are or should be acceptable or unacceptable for operation at, into, or out of any airport.

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