

**SECTION 5  
PERFORMANCE  
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**SECTION 5  
PERFORMANCE**

**GENERAL**

Information contained in Section 5 is approved by the Federal Aviation Administration.

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**

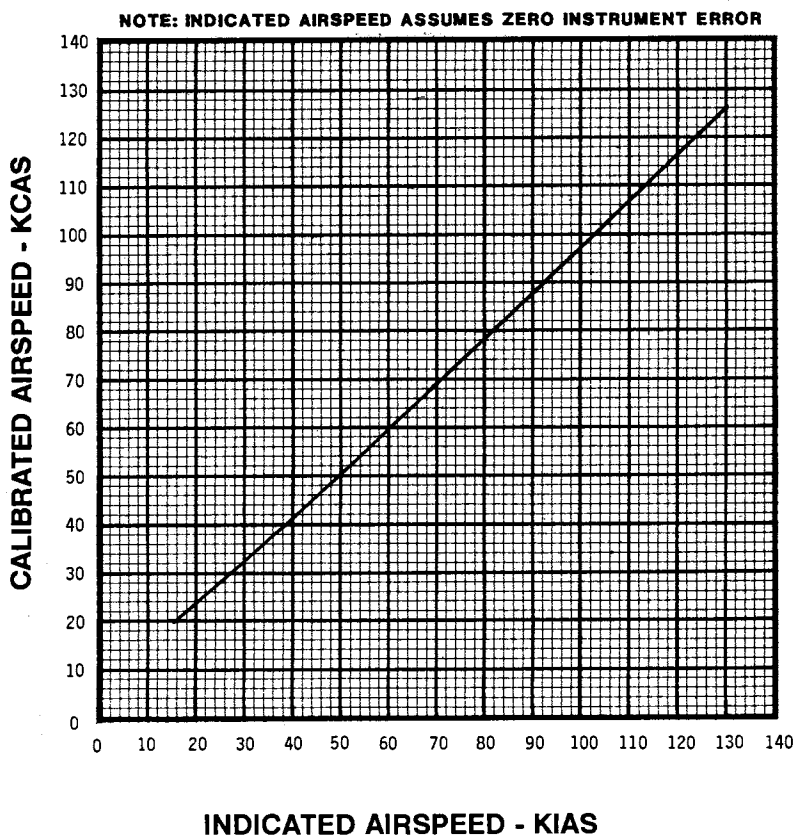
Performance data presented in this section was obtained under ideal conditions. Performance under other conditions may be substantially less.

**NOTE**

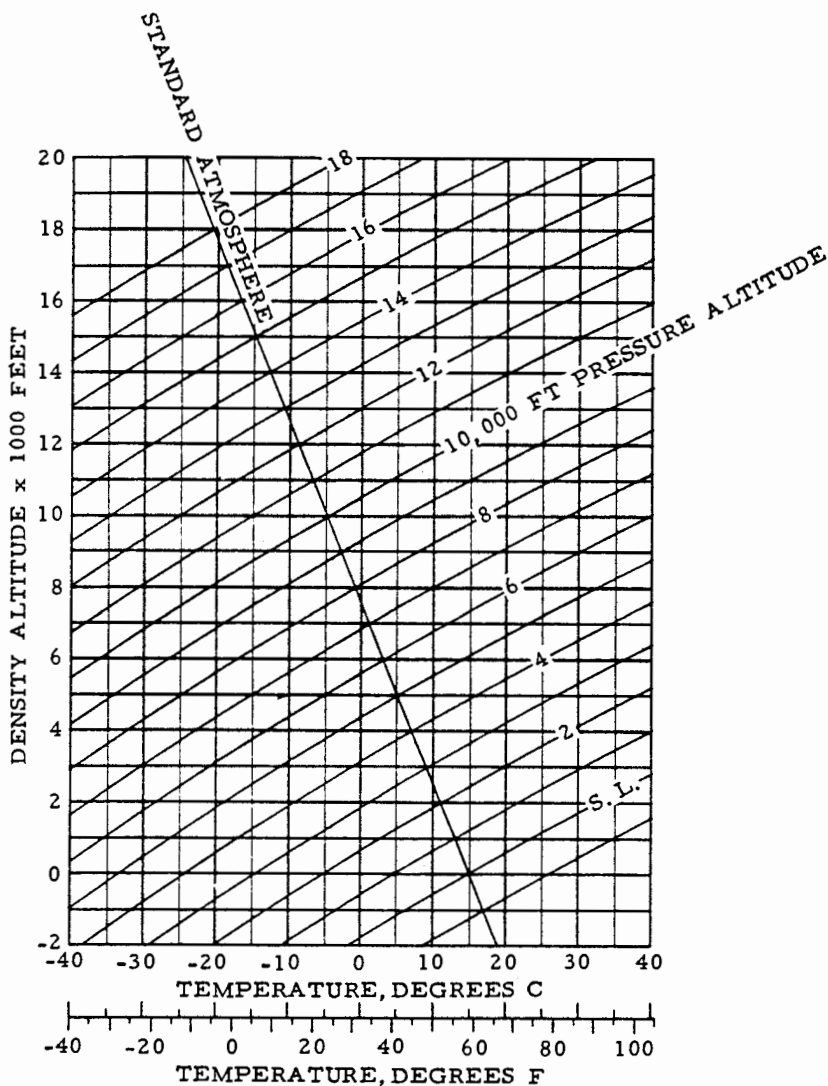
Hover performance data given is with carburetor heat off. Full carburetor heat reduces hover ceilings by up to 2400 feet.

**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.

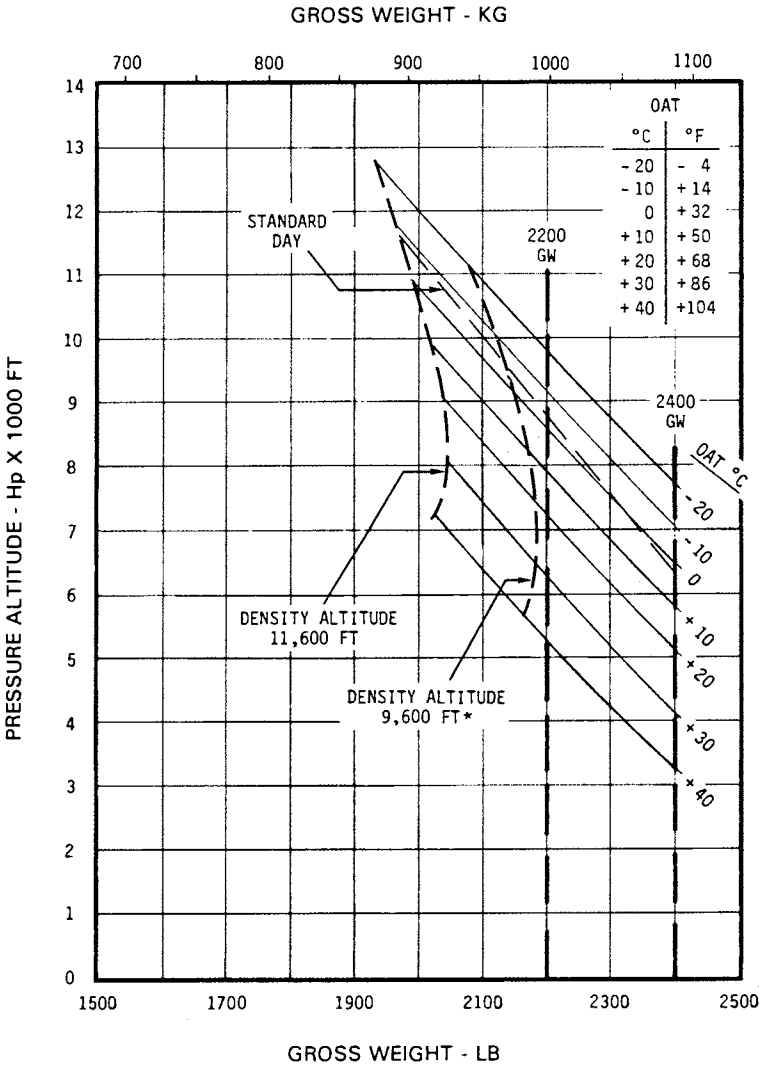


**AIRSPEED CALIBRATION CURVE**



DENSITY ALTITUDE CHART

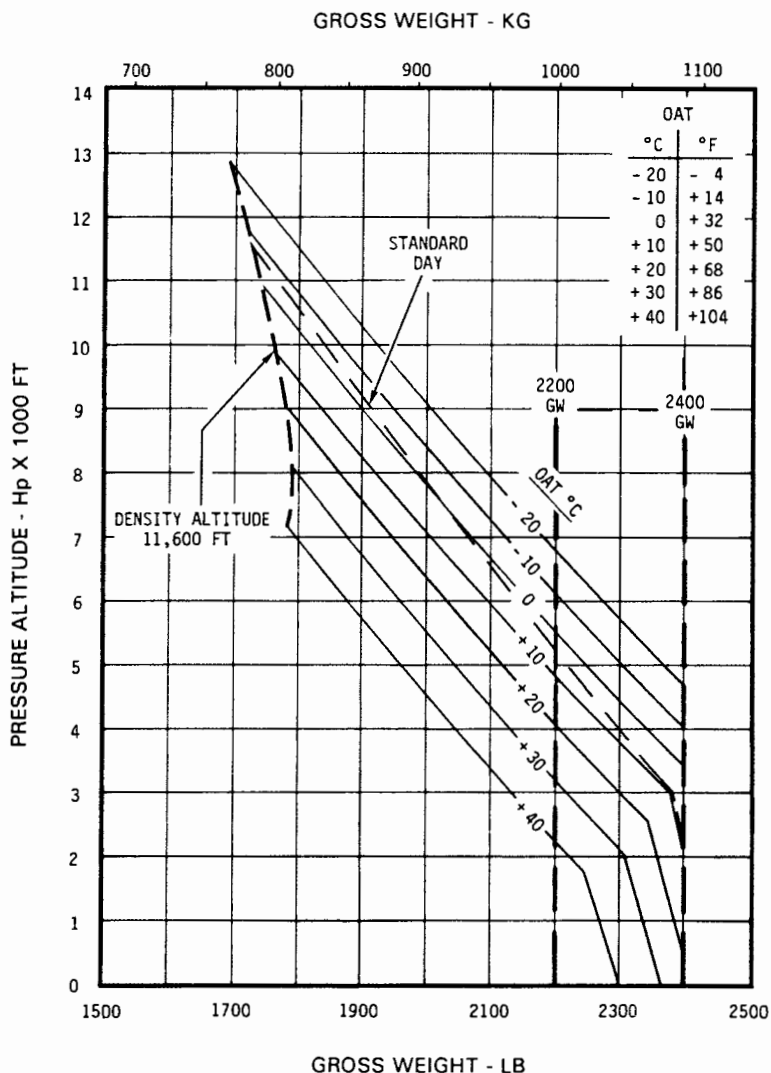
IN GROUND EFFECT AT 2 FOOT SKID HEIGHT  
FULL THROTTLE  
101-102% RPM  
ZERO WIND



**IGE HOVER CEILING VS. GROSS WEIGHT**

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

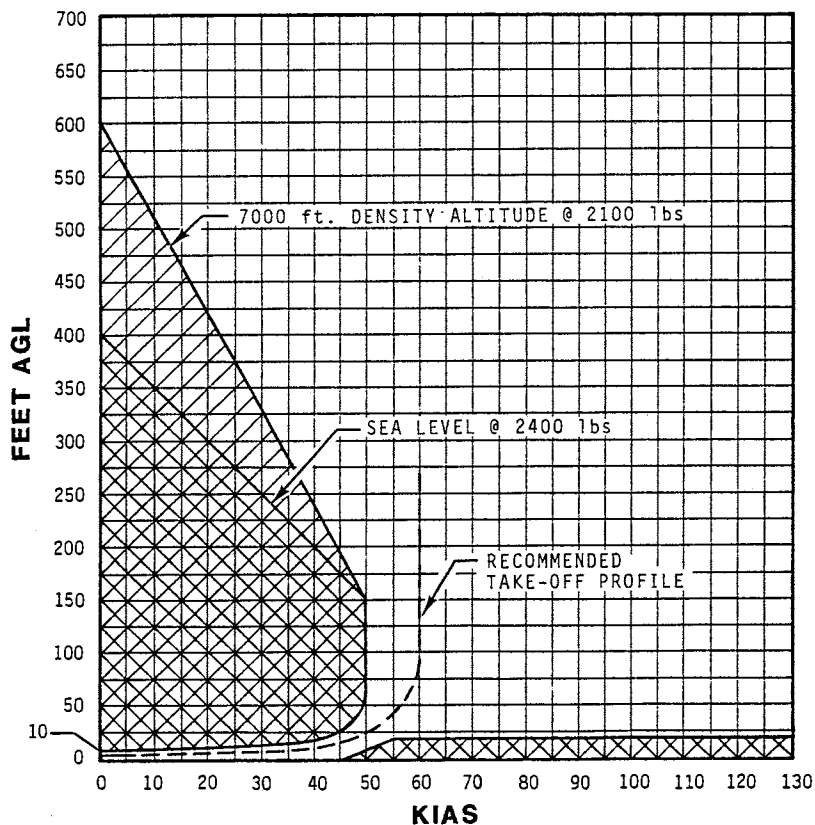
OUT OF GROUND EFFECT, ZERO WIND  
TAKEOFF POWER OR FULL THROTTLE  
101-102% RPM



**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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