

SECTION 5  
PERFORMANCE  
CONTENTS

	Page
General . . . . .	5-1
Demonstrated Operating Temperature . . . . .	5-1
Airspeed Calibration . . . . .	5-2
Density Altitude Chart . . . . .	5-3
IGE Hover Ceiling Vs Gross Weight	
R22 Standard . . . . .	5-4
R22 HP, Alpha, and Beta . . . . .	5-5
R22 Beta II . . . . .	5-6
OGE Hover Ceiling Vs Gross Weight	
R22 Standard . . . . .	5-7
R22 HP and Alpha . . . . .	5-8
R22 Beta . . . . .	5-9
R22 Beta II . . . . .	5-10
Height-Velocity Diagram . . . . .	5-11

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**SECTION 5**  
**PERFORMANCE**

**GENERAL**

The 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 9,800 feet density altitude. Refer to IGE hover performance data for allowable gross weight.

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

**CAUTION**

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

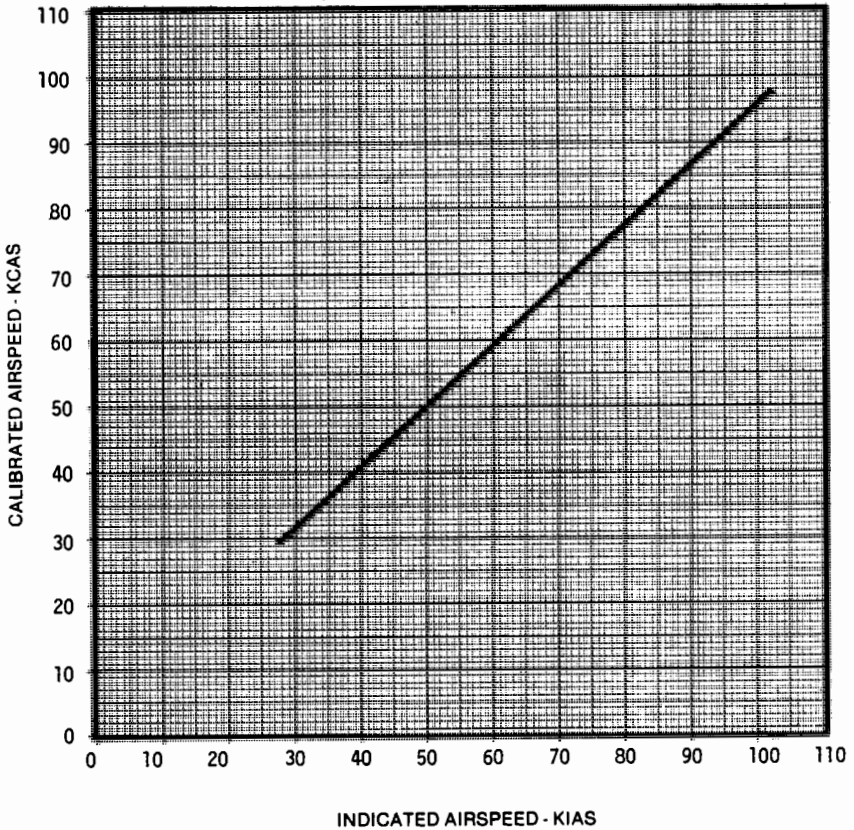
**NOTE**

Hover performance data given is with carburetor heat off. Full carburetor heat reduces hover ceilings by up to 2000 feet.

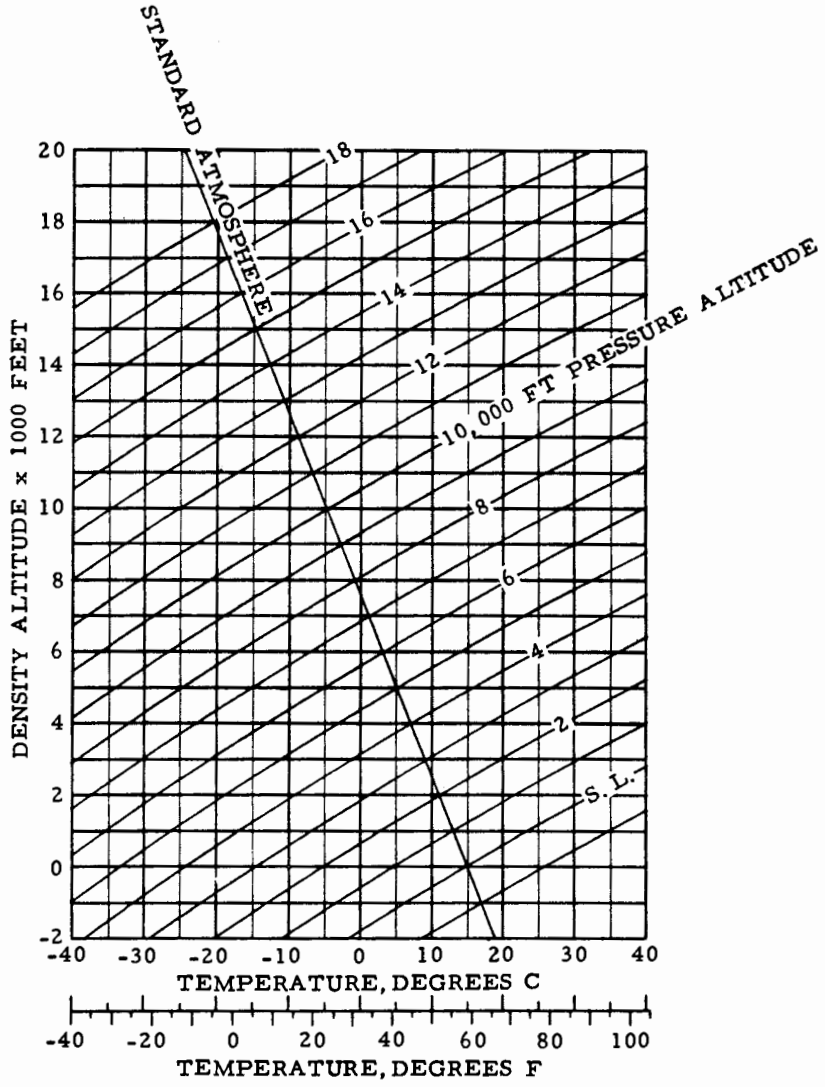
**DEMONSTRATED OPERATING TEMPERATURE**

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.

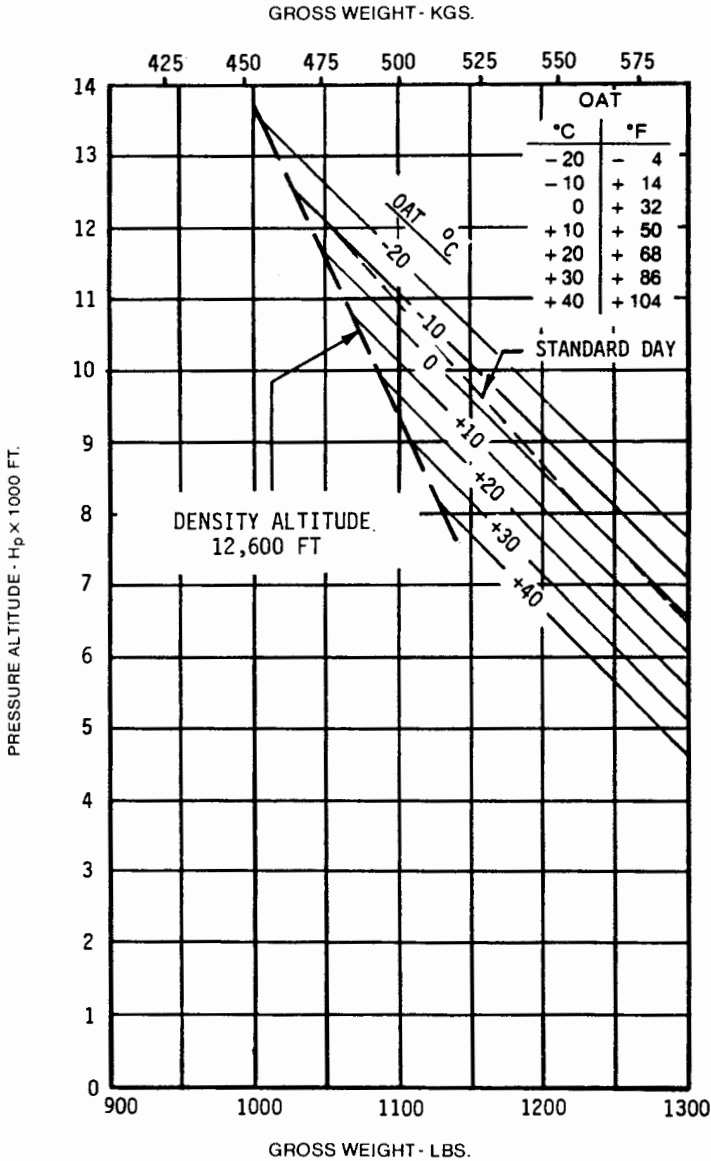


**AIRSPEED CALIBRATION CURVE**



DENSITY ALTITUDE CHART

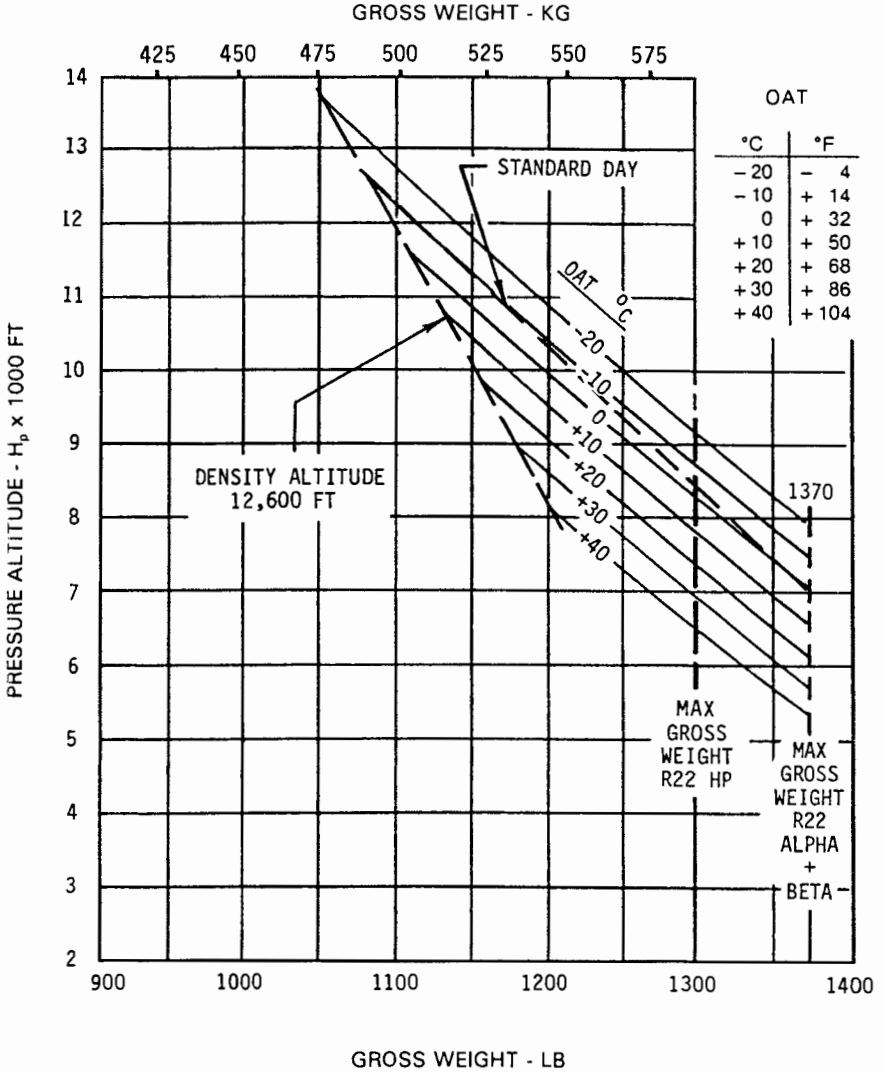
IN GROUND EFFECT AT 2 FOOT SKID CLEARANCE  
FULL THROTTLE AND 104% RPM



**R22 STANDARD**  
O-320-A2B OR A2C ENGINE

**IGE HOVER CEILING VS. GROSS WEIGHT**

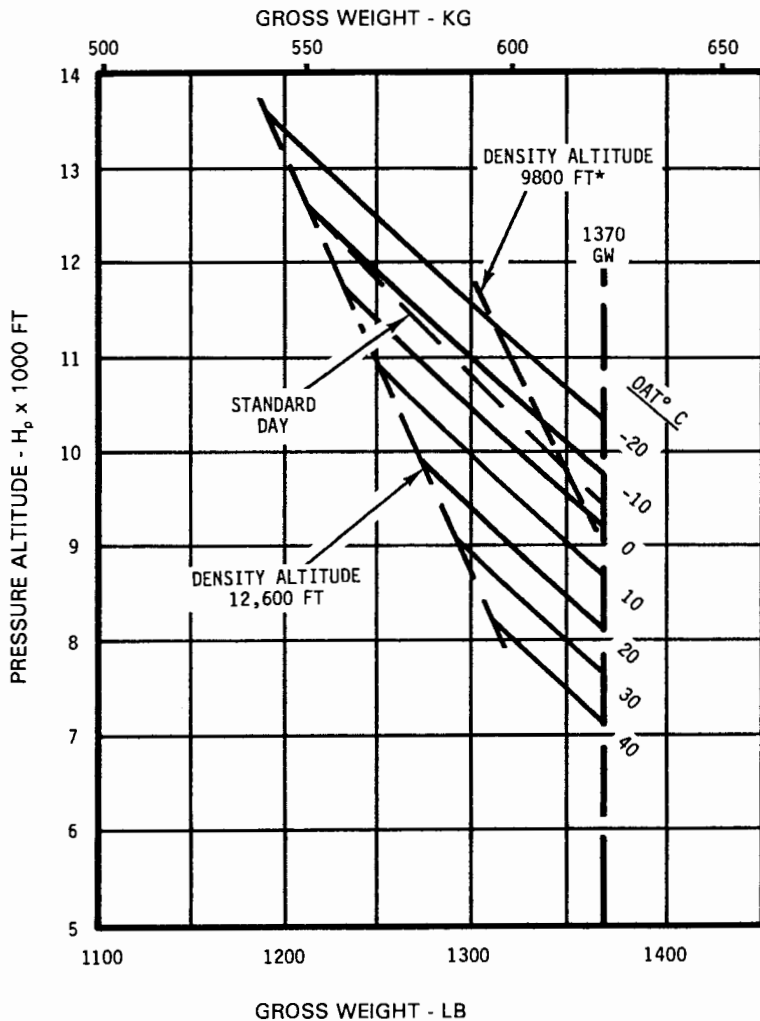
IN GROUND EFFECT AT 2 FOOT SKID CLEARANCE  
FULL THROTTLE  
104% RPM  
ZERO WIND



**R22 HP, ALPHA, & BETA  
O-320-B2C ENGINE**

**IGE HOVER CEILING VS. GROSS WEIGHT**

IN GROUND EFFECT AT 2 FOOT SKID CLEARANCE  
FULL THROTTLE  
103-104% RPM  
ZERO WIND



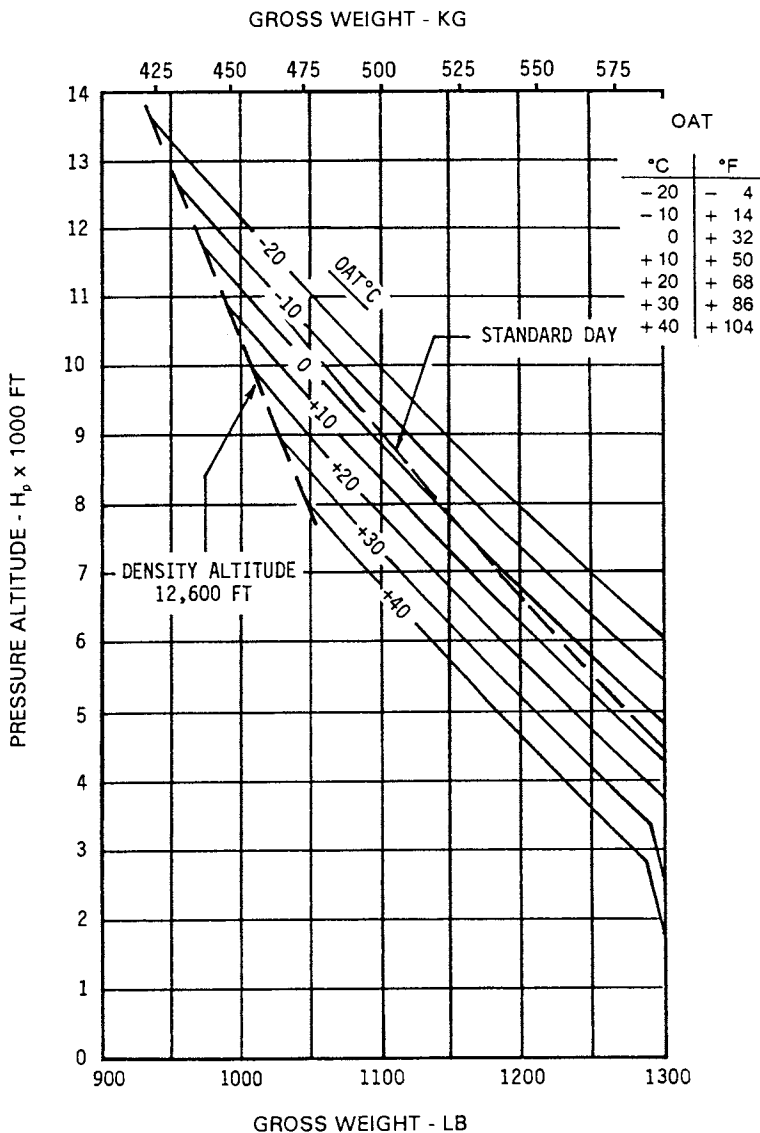
**R22 BETA II  
O-360-J2A ENGINE**

**IGE HOVER CEILING VS. GROSS WEIGHT**

\*Hover controllability with 17 knot wind substantiated up to 9800 feet density altitude.

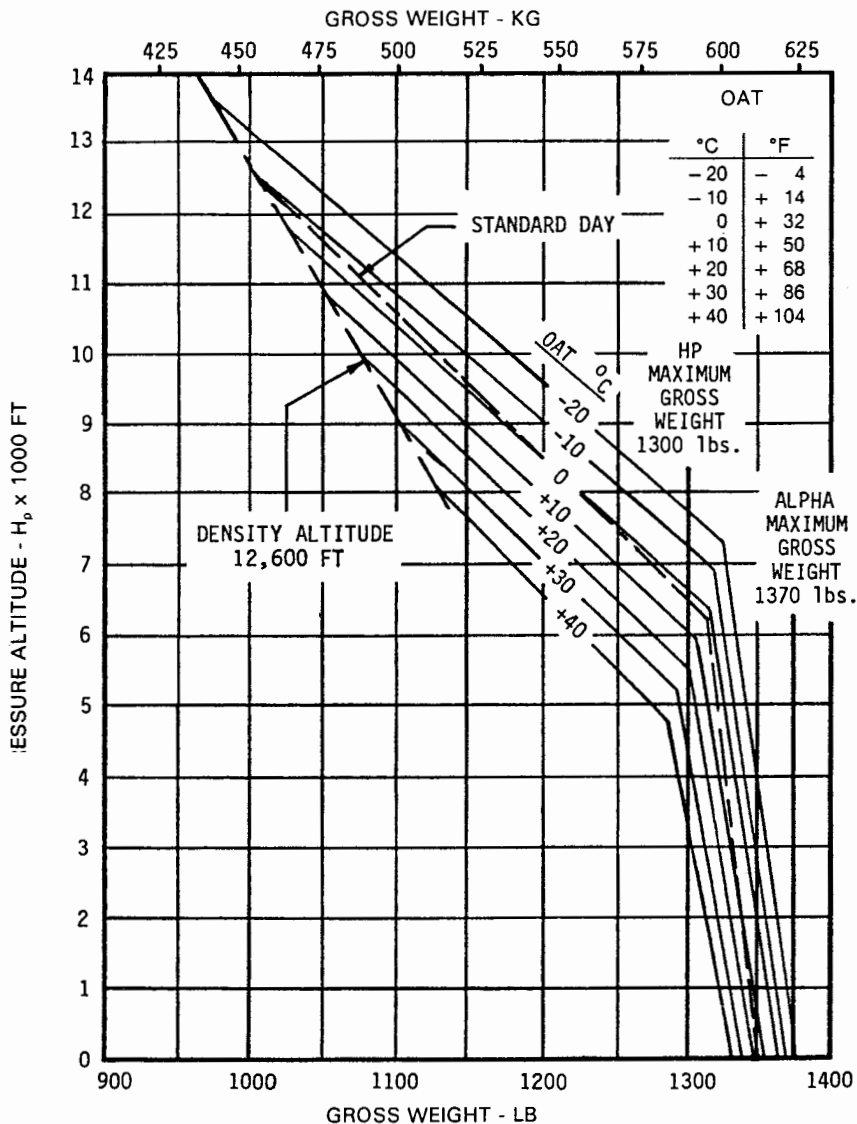


OUT OF GROUND EFFECT, ZERO WIND  
LIMIT MANIFOLD PRESSURE TO CRITICAL ALTITUDE  
FULL THROTTLE ABOVE CRITICAL ALTITUDE  
104% RPM



**R22 STANDARD**  
**O-320-A2B OR A2C ENGINE**  
**OGE HOVER CEILING VS. GROSS WEIGHT**

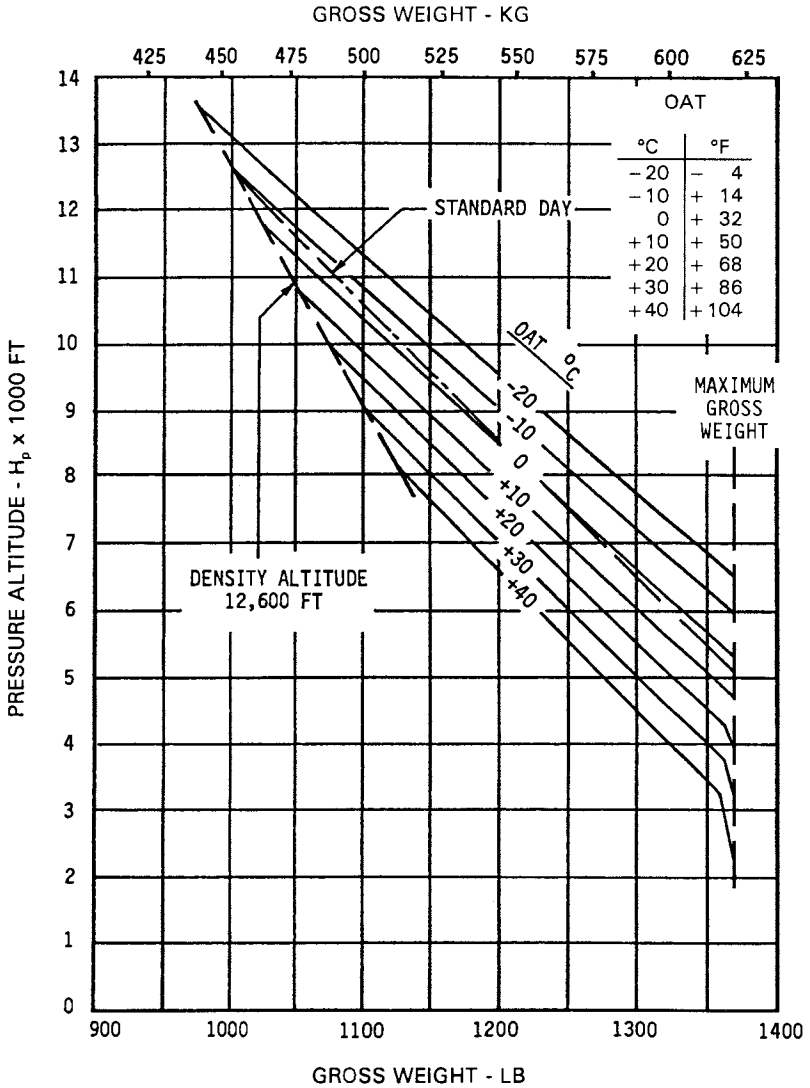
OUT OF GROUND EFFECT, ZERO WIND  
LIMIT MANIFOLD PRESSURE TO CRITICAL ALTITUDE  
FULL THROTTLE ABOVE CRITICAL ALTITUDE  
104% RPM



**R22 HP & ALPHA  
O-320-B2C ENGINE**

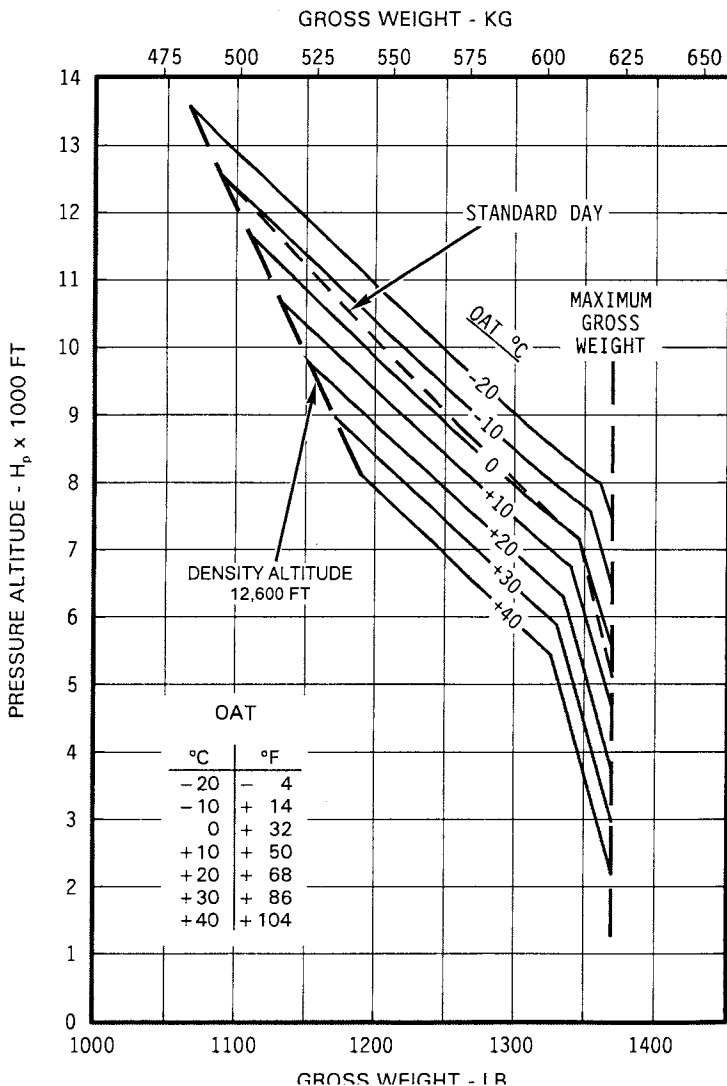
**OGE HOVER CEILING VS. GROSS WEIGHT**

OUT OF GROUND EFFECT, ZERO WIND  
TAKEOFF POWER OR FULL THROTTLE  
104% RPM



**R22 BETA**  
**O-320-B2C ENGINE**  
**OGE HOVER CEILING VS. GROSS WEIGHT**

OUT OF GROUND EFFECT, ZERO WIND  
TAKEOFF POWER OR FULL THROTTLE  
104% RPM

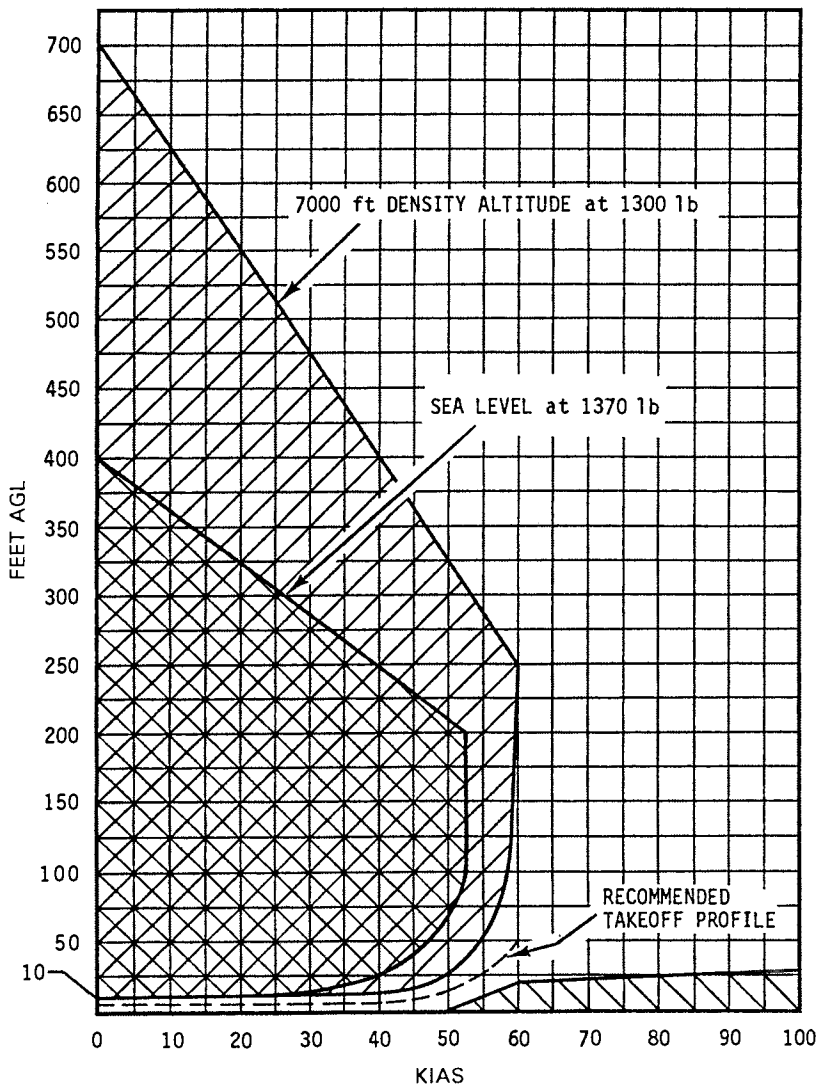


**R22 BETA II  
O-360-J2A ENGINE**

**OGE HOVER CEILING VS. GROSS WEIGHT**

DEMONSTRATED CONDITIONS:  
SMOOTH HARD SURFACE  
WIND CALM  
103-104% RPM

AVOID OPERATION IN SHADED AREAS



HEIGHT - VELOCITY DIAGRAM

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