

SECTION 5
PERFORMANCE
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**SECTION 5
PERFORMANCE**

GENERAL

IGE hover controllability has been substantiated in 17 knot wind from any direction up to 9800 feet (2990 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

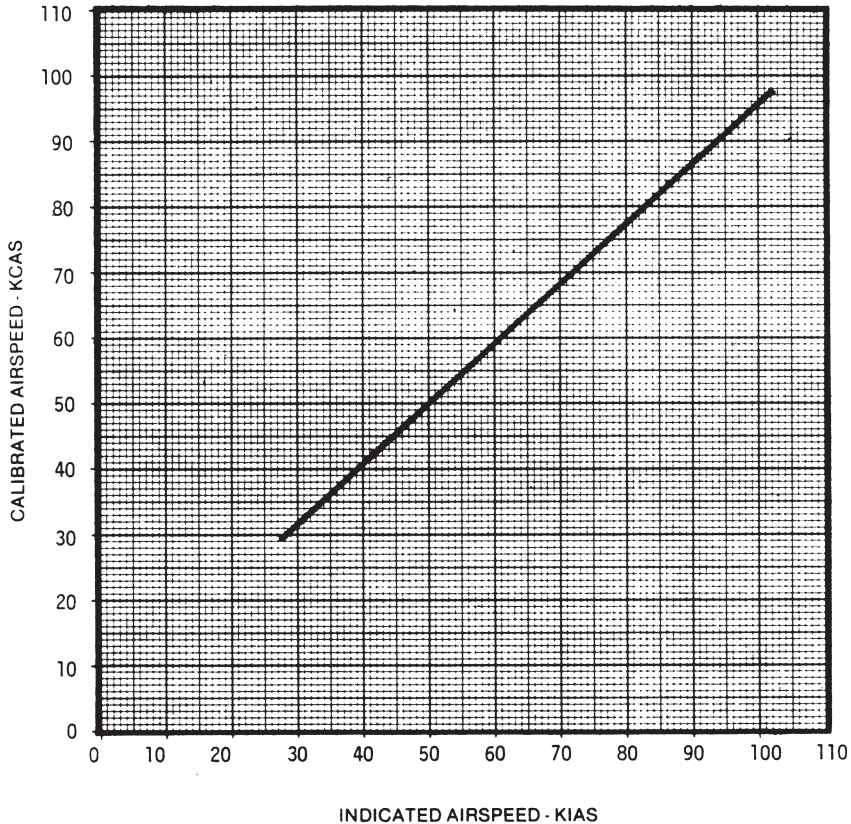
Hover performance data given is with carburetor heat off. Full carburetor heat reduces hover ceilings by up to 2000 feet (610 meters).

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

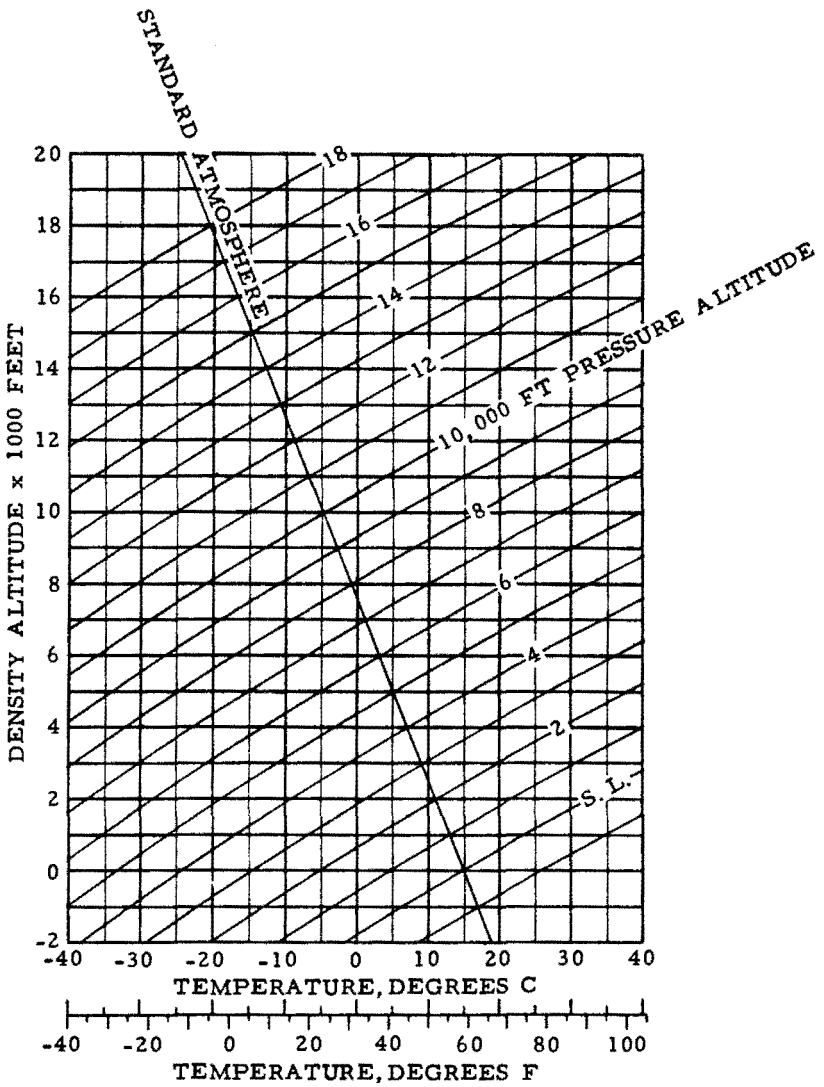
DEMONSTRATED OPERATING TEMPERATURE

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.

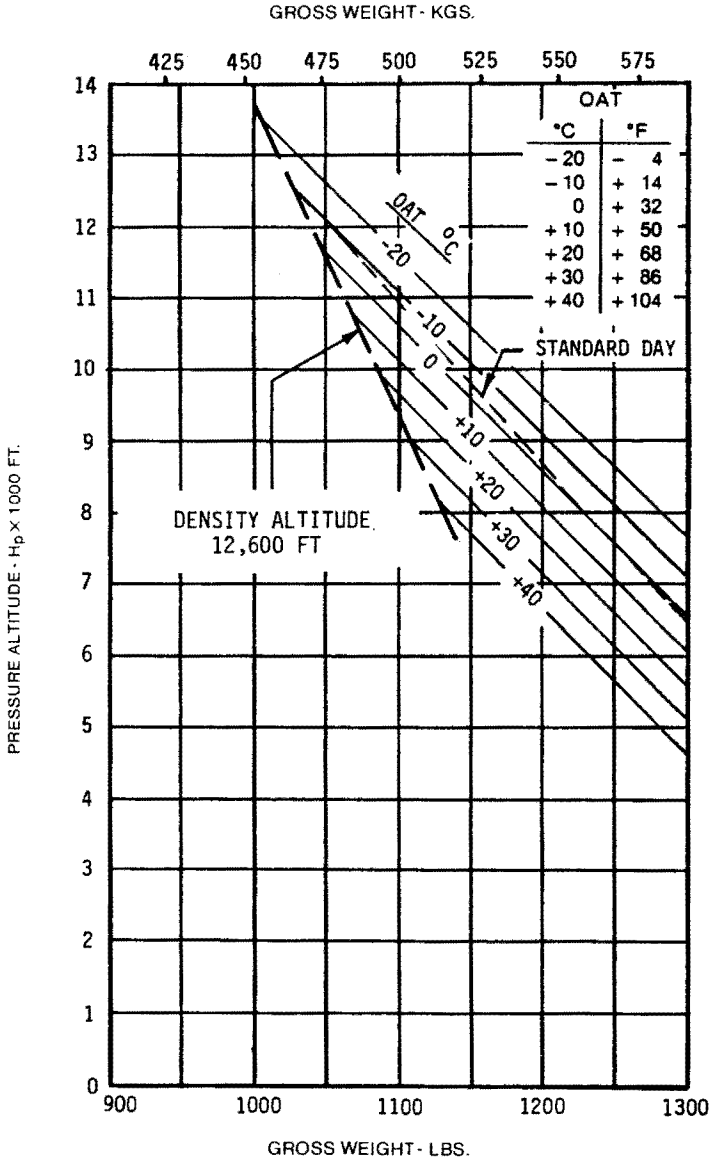


AIRSPEED CALIBRATION CURVE



DENSITY ALTITUDE CHART

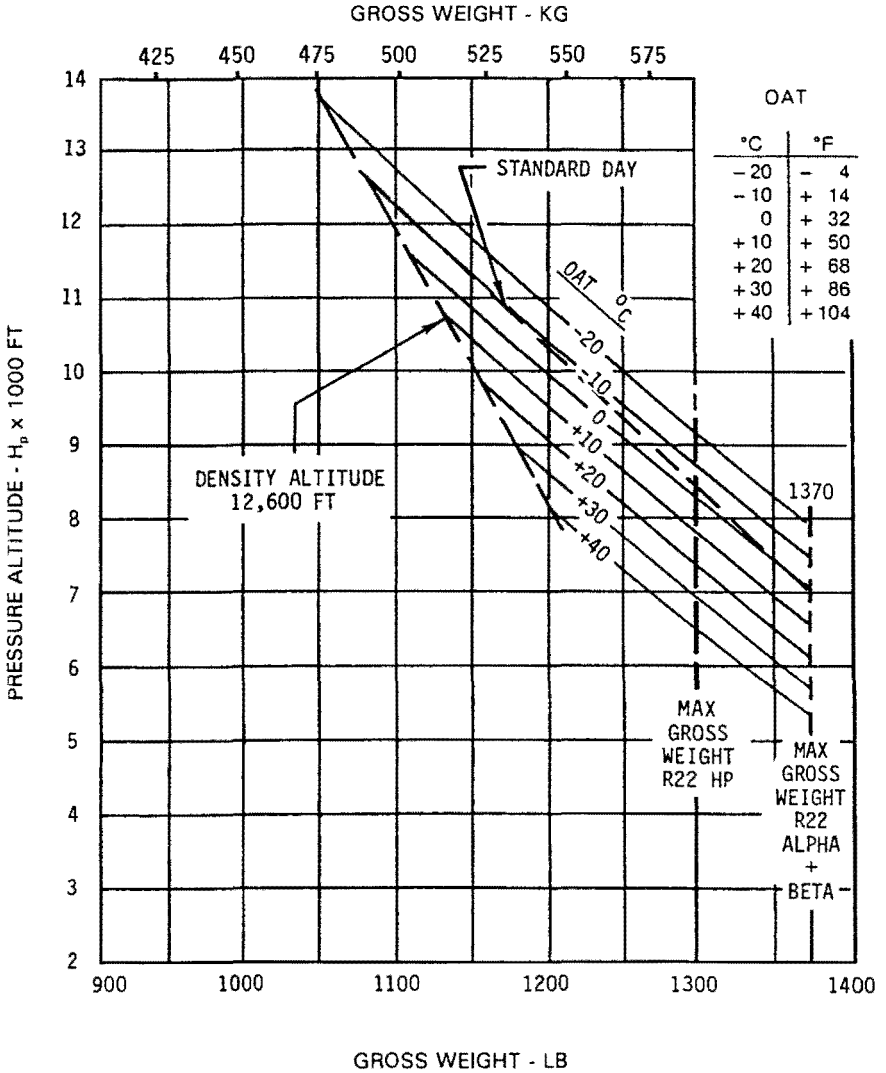
IN GROUND EFFECT AT 2 FOOT SKID CLEARANCE
FULL THROTTLE AND 104% RPM



R22 STANDARD
O-320-A2B OR A2C ENGINE

IGE HOVER CEILING VS. GROSS WEIGHT

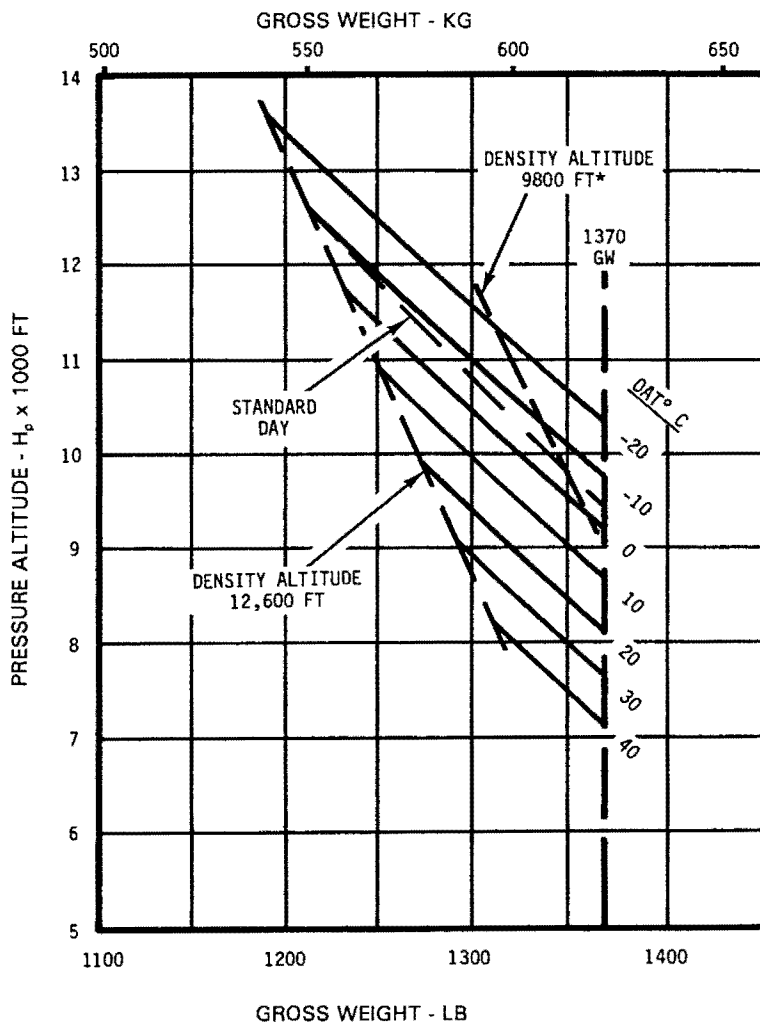
IN GROUND EFFECT AT 2 FOOT SKID CLEARANCE
FULL THROTTLE
104% RPM
ZERO WIND



**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

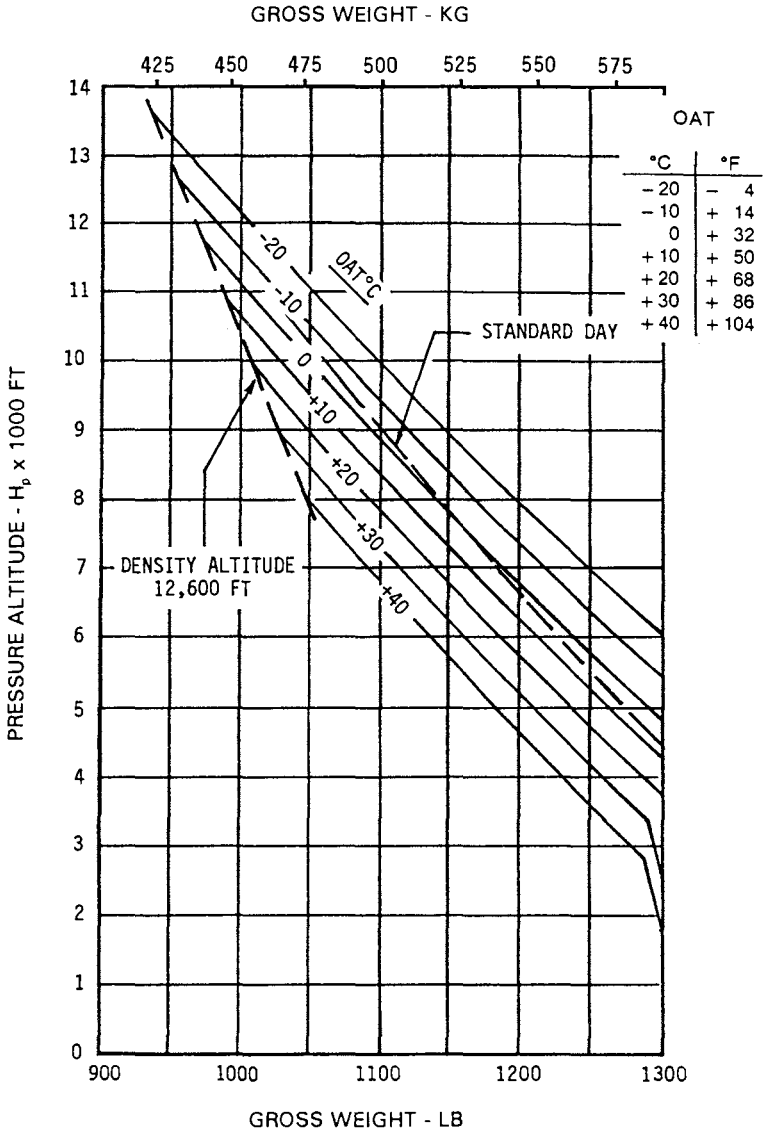


**R22 BETA II
O-360-J2A ENGINE**

IGE HOVER CEILING VS. GROSS WEIGHT

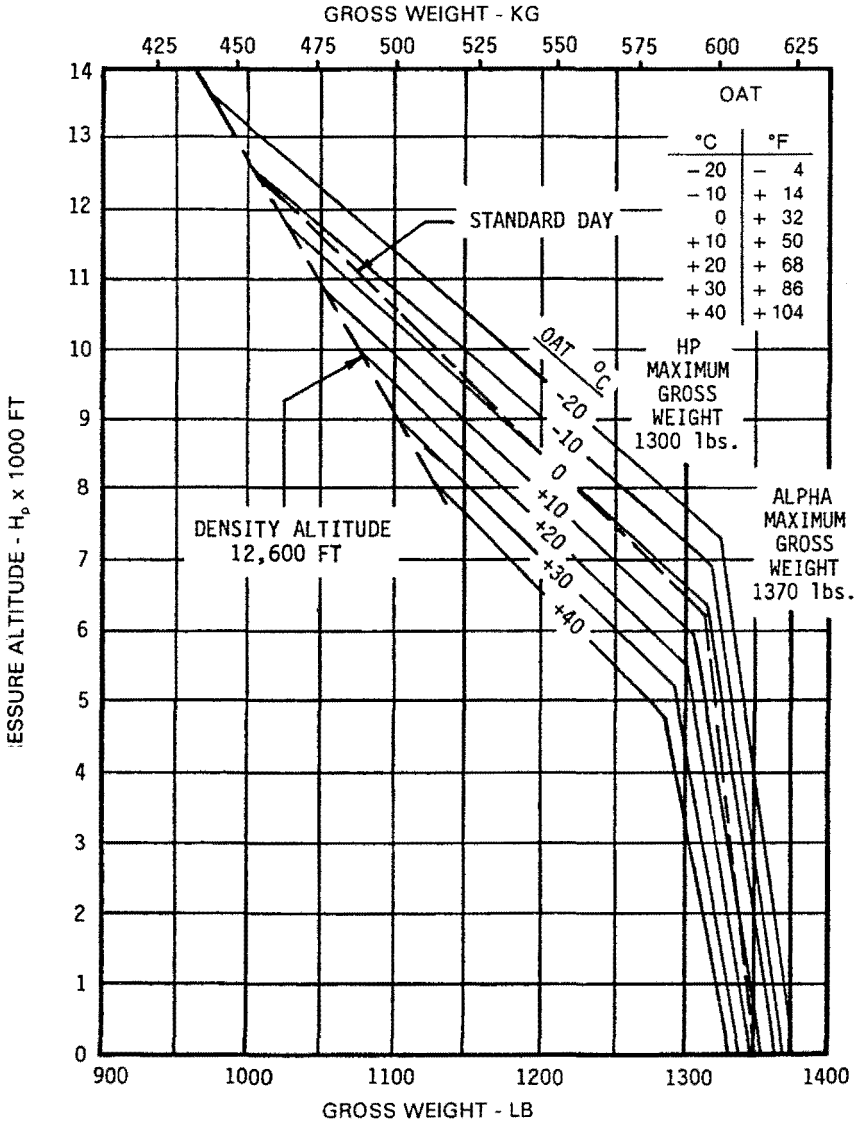
*Hover controllability with 17 knot wind substantiated up to 9800 feet density altitude.

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

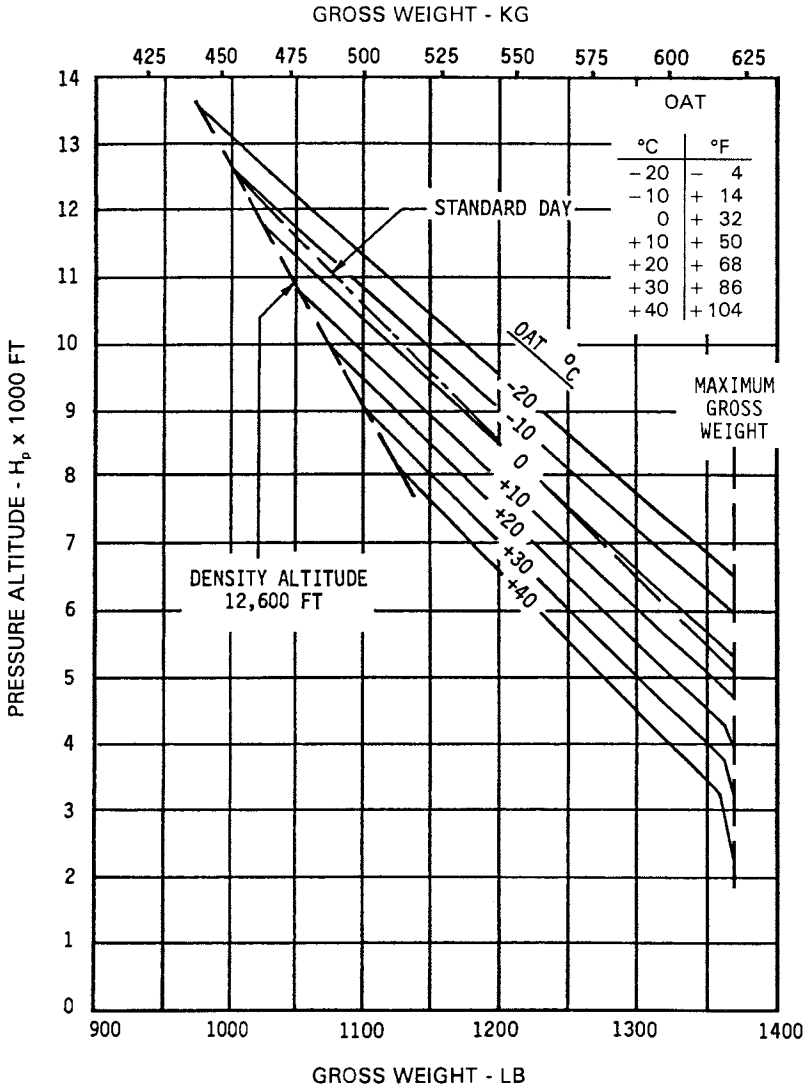
OUT OF GROUND EFFECT, ZERO WIND
LIMIT MANIFOLD PRESSURE TO CRITICAL ALTITUDE
FULL THROTTLE ABOVE CRITICAL ALTITUDE
104% RPM



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

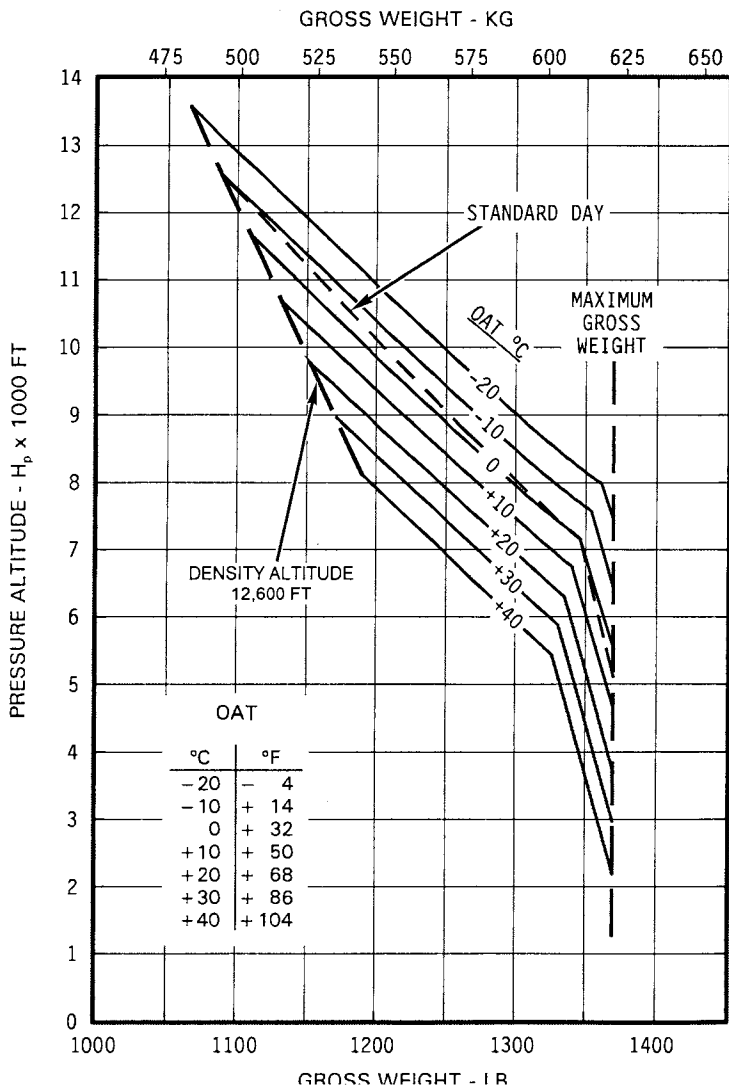
OGE HOVER CEILING VS. GROSS WEIGHT

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

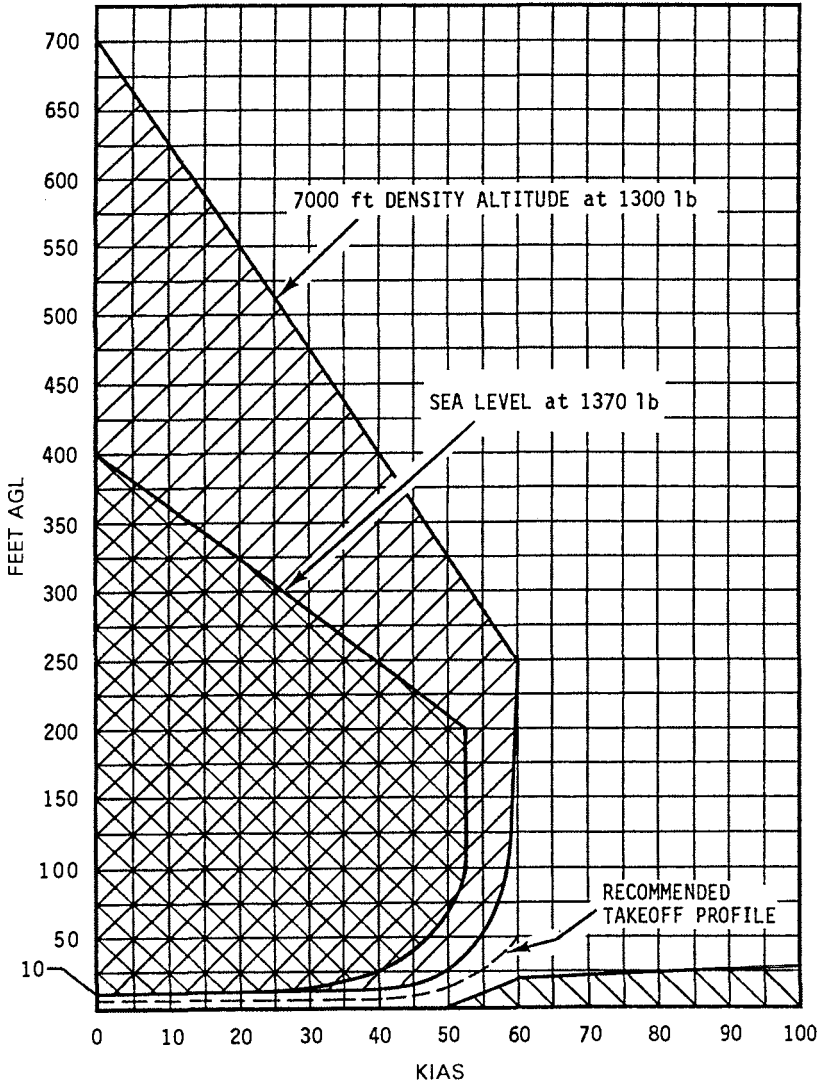


**R22 BETA II
O-360-J2A ENGINE**

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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