HOVER
UH-1H-II WITH T53-L-703 ENGINE
LEVEL SURFACE & CALM WIND
324 ROTOR / 6600 ENGINE RPM

EXAMPLE

WANTED

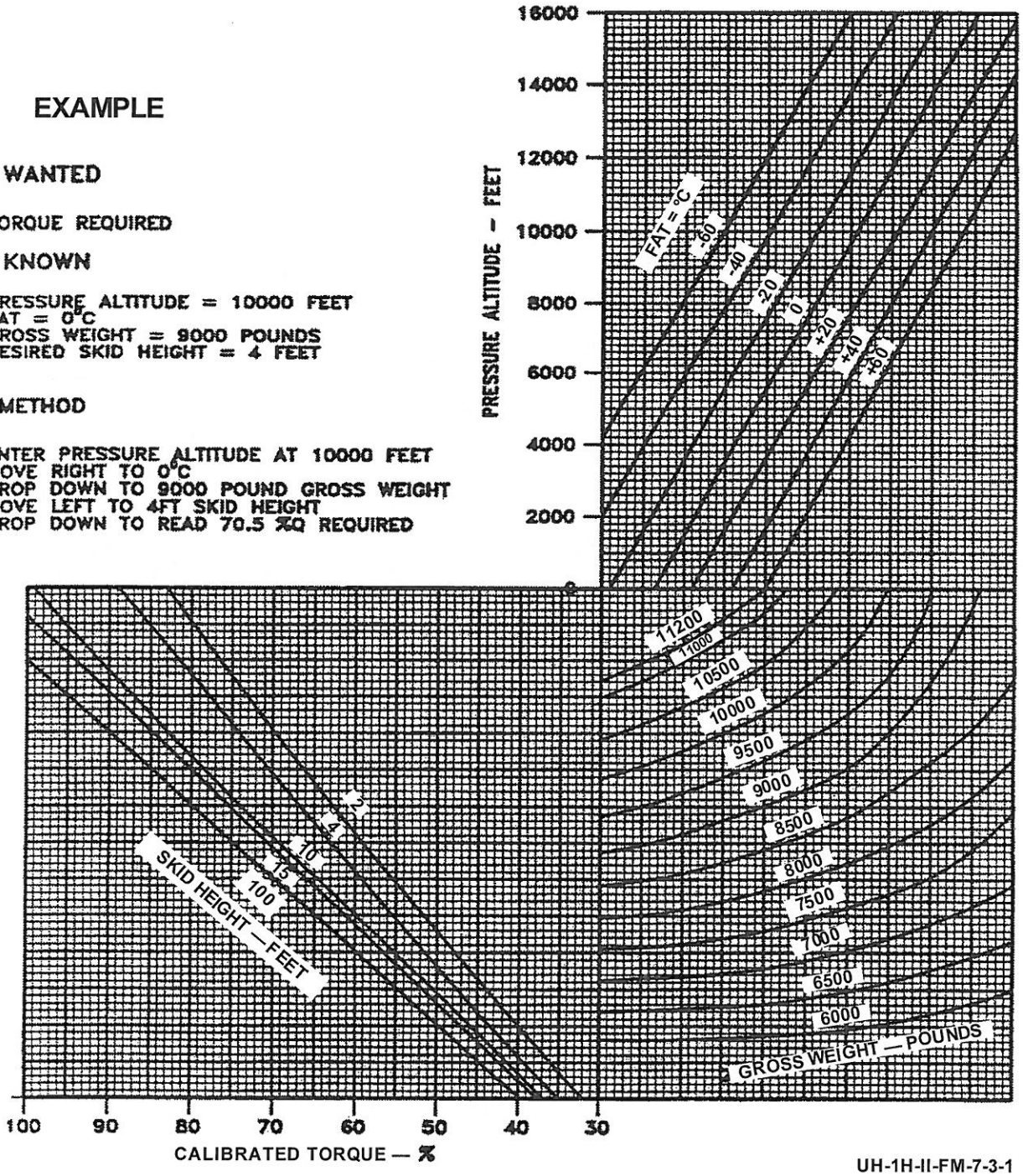
TORQUE REQUIRED

KNOWN

PRESSURE ALTITUDE = 10000 FEET
FAT = 0°C
GROSS WEIGHT = 9000 POUNDS
DESIRED SKID HEIGHT = 4 FEET

METHOD

ENTER PRESSURE ALTITUDE AT 10000 FEET
MOVE RIGHT TO 0°C
DROP DOWN TO 9000 POUND GROSS WEIGHT
MOVE LEFT TO 4FT SKID HEIGHT
DROP DOWN TO READ 70.5 %Q REQUIRED



UH-1H-II-FM-7-3-1

Figure 7-3. Hover torque required (Sheet 1 of 2)

IGE HOVER CEILING
MAXIMUM TORQUE AVAILABLE (5 MINUTE OPERATION)
4 FT SKID HEIGHT

MODEL: UH-1H-II
ENGINE T53-L-703
324 ROTOR RPM / 6600 ENGINE RPM

PARTICLE SEPARATOR
HEATER OFF
GENERATOR LOAD 100%

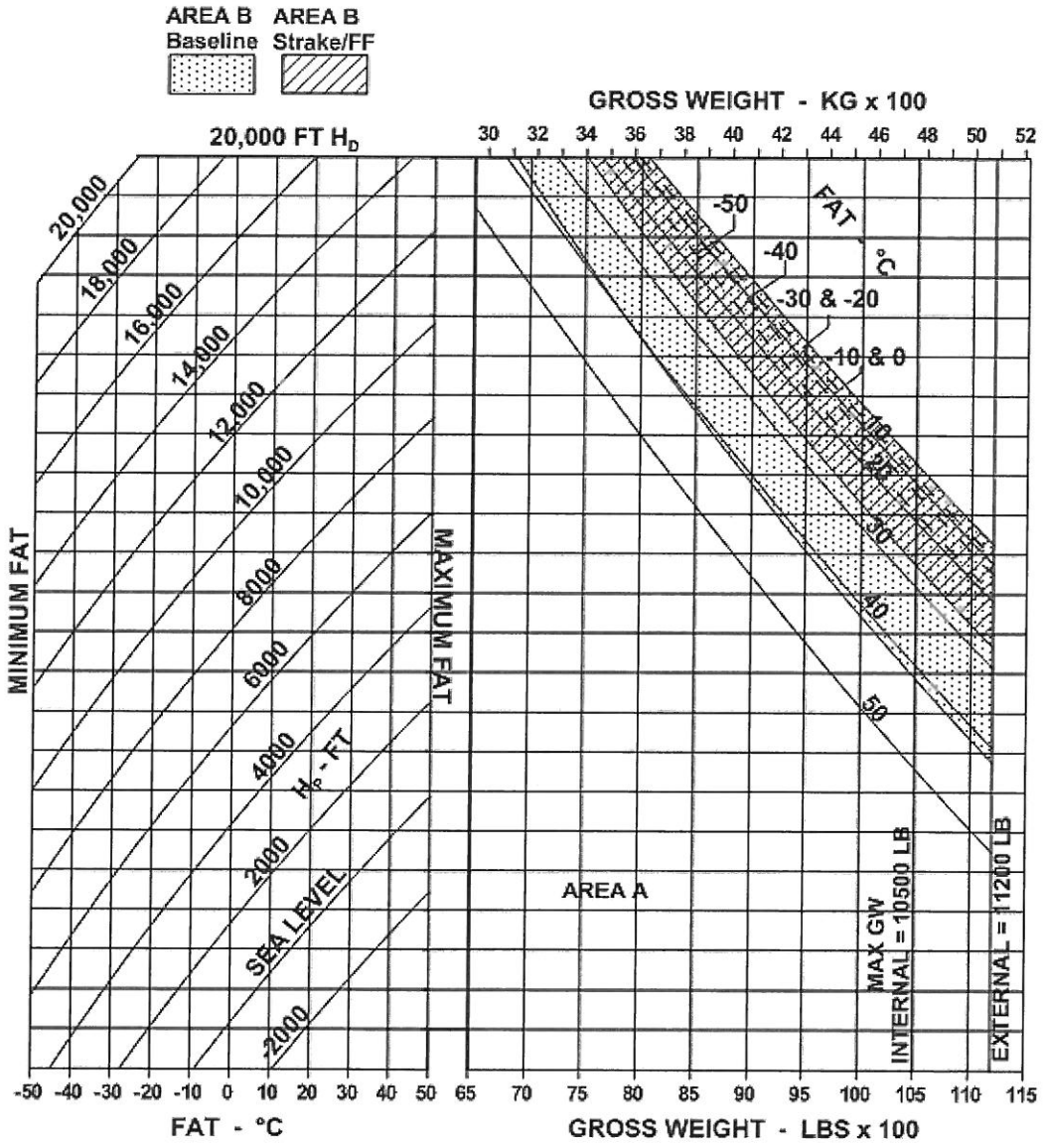


Figure 7-6. IGE Hover Ceiling, 5 Minute Operation, Particle Separator, Heater OFF (Sheet 1 of 4)

IGE HOVER CEILING
MAXIMUM TORQUE AVAILABLE (5 MINUTE OPERATION)
4 FT SKID HEIGHT

MODEL: UH-1H-II
ENGINE T53-L-703
324 ROTOR RPM / 6600 ENGINE RPM

PARTICLE SEPARATOR
HEATER ON
GENERATOR LOAD 100%

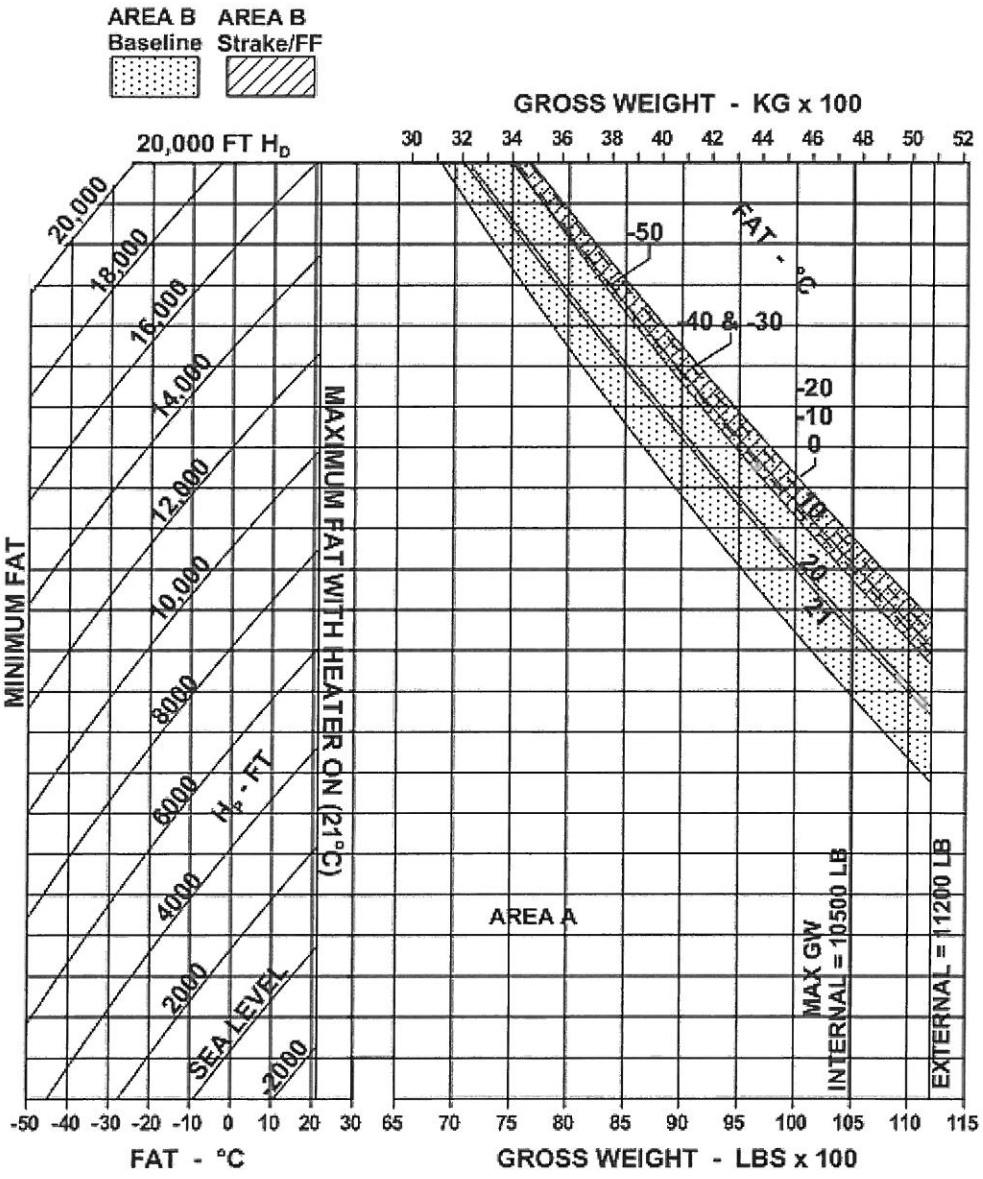


Figure 7-6. IGE Hover Ceiling, 5 Minute Operation, Particle Separator, Heater ON (Sheet 2 of 4)

IGE HOVER CEILING
MAXIMUM CONTINUOUS TORQUE AVAILABLE (CONTINUOUS OPERATION)
4 FT SKID HEIGHT

MODEL: UH-1H-II
ENGINE T53-L-703
324 ROTOR RPM / 6600 ENGINE RPM

PARTICLE SEPARATOR
HEATER OFF
GENERATOR LOAD 100%

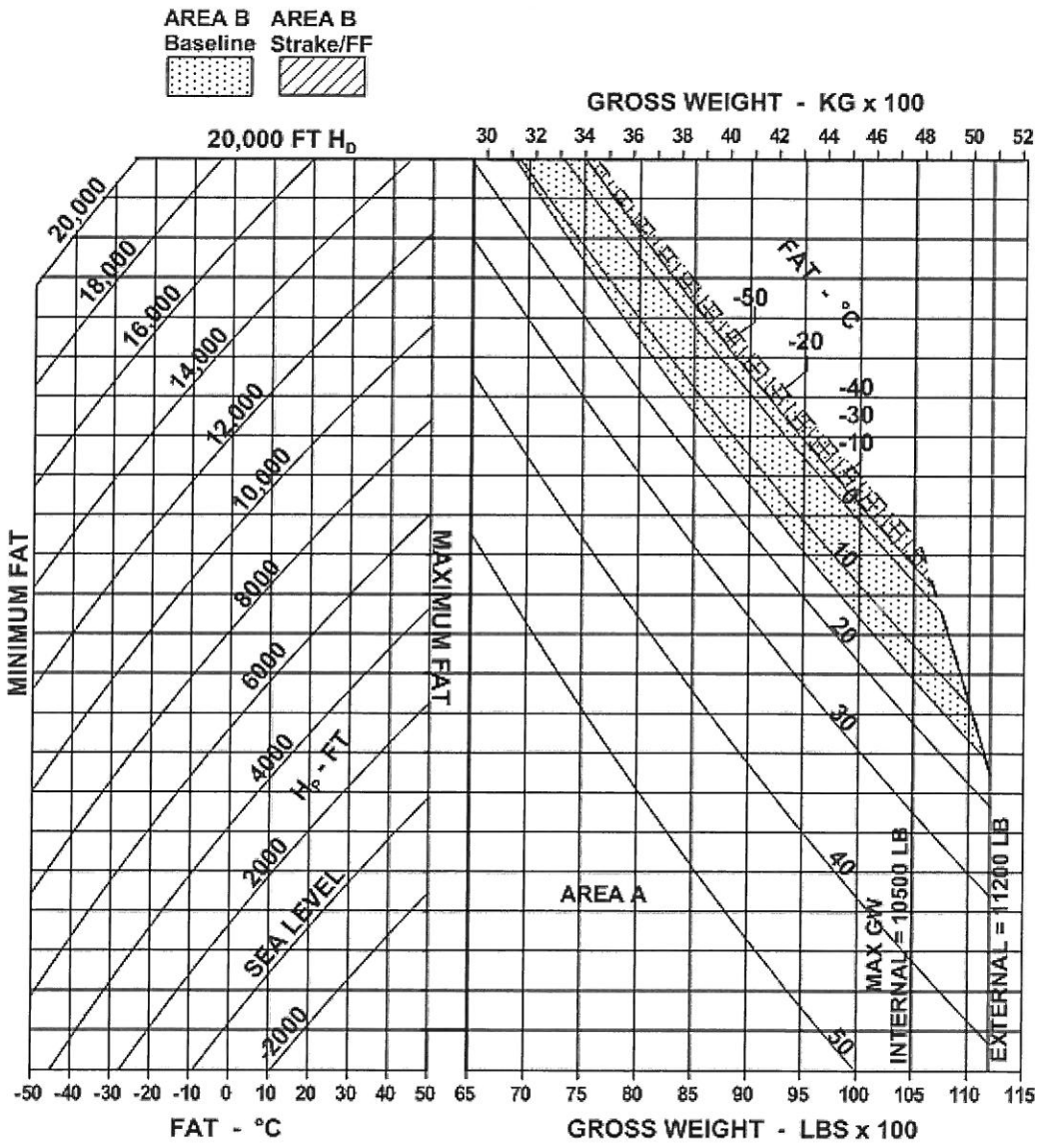


Figure 7-6. IGE Hover Ceiling, Continuous Operation, Particle Separator, Heater OFF (Sheet 3 of 4)

IGE HOVER CEILING
MAXIMUM CONTINUOUS TORQUE AVAILABLE (CONTINUOUS OPERATION)
4 FT SKID HEIGHT

MODEL: UH-1H-II
ENGINE T53-L-703
324 ROTOR RPM / 6600 ENGINE RPM

PARTICLE SEPARATOR
HEATER ON
GENERATOR LOAD 100%

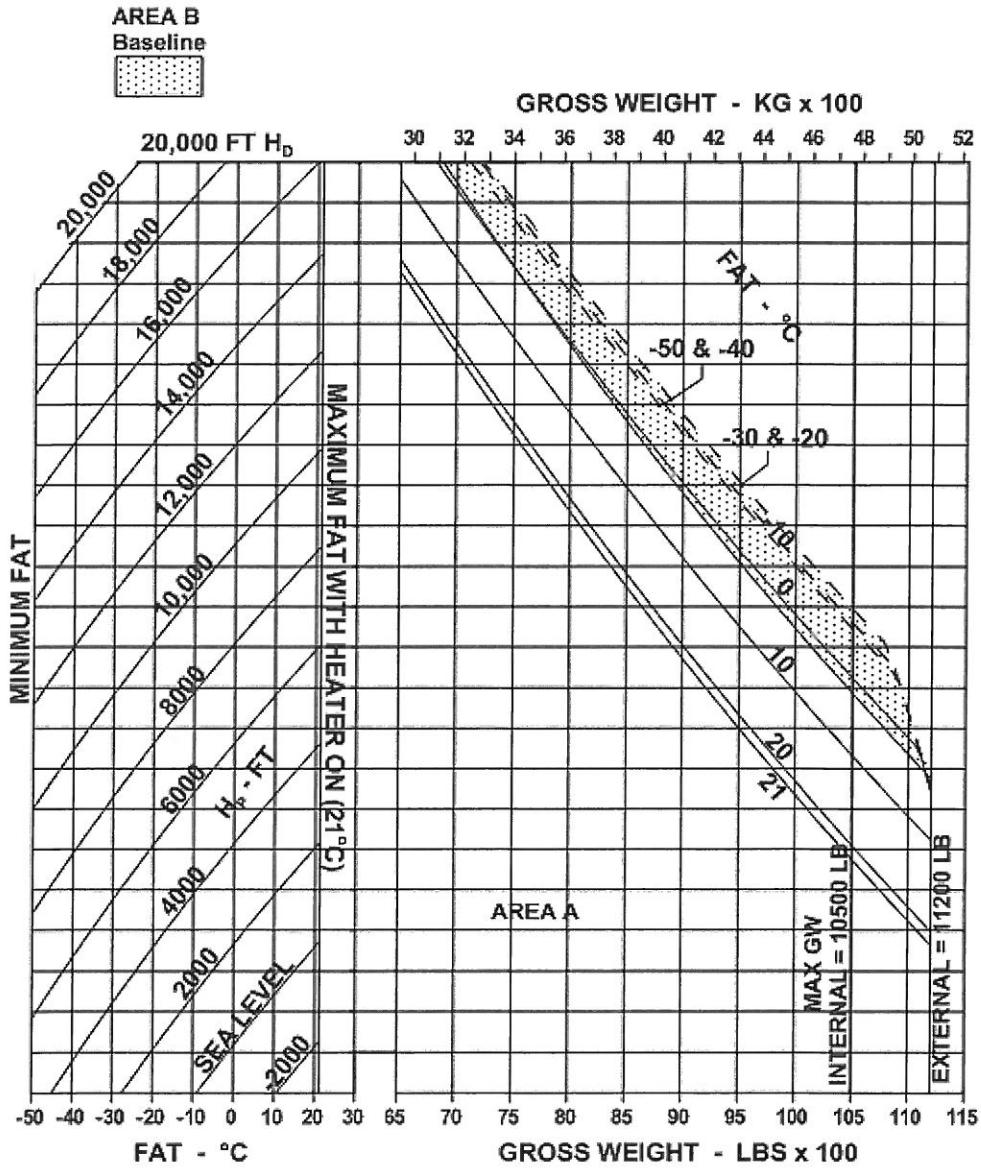


Figure 7-6. IGE Hover Ceiling, Continuous Operation, Particle Separator, Heater ON (Sheet 4 of 4)

OGE HOVER CEILING
MAXIMUM TORQUE AVAILABLE (5 MINUTE OPERATION)
60 FT SKID HEIGHT

MODEL: UH-1H-II
ENGINE T53-L-703
324 ROTOR RPM / 6600 ENGINE RPM

PARTICLE SEPARATOR
HEATER OFF
GENERATOR LOAD 100%

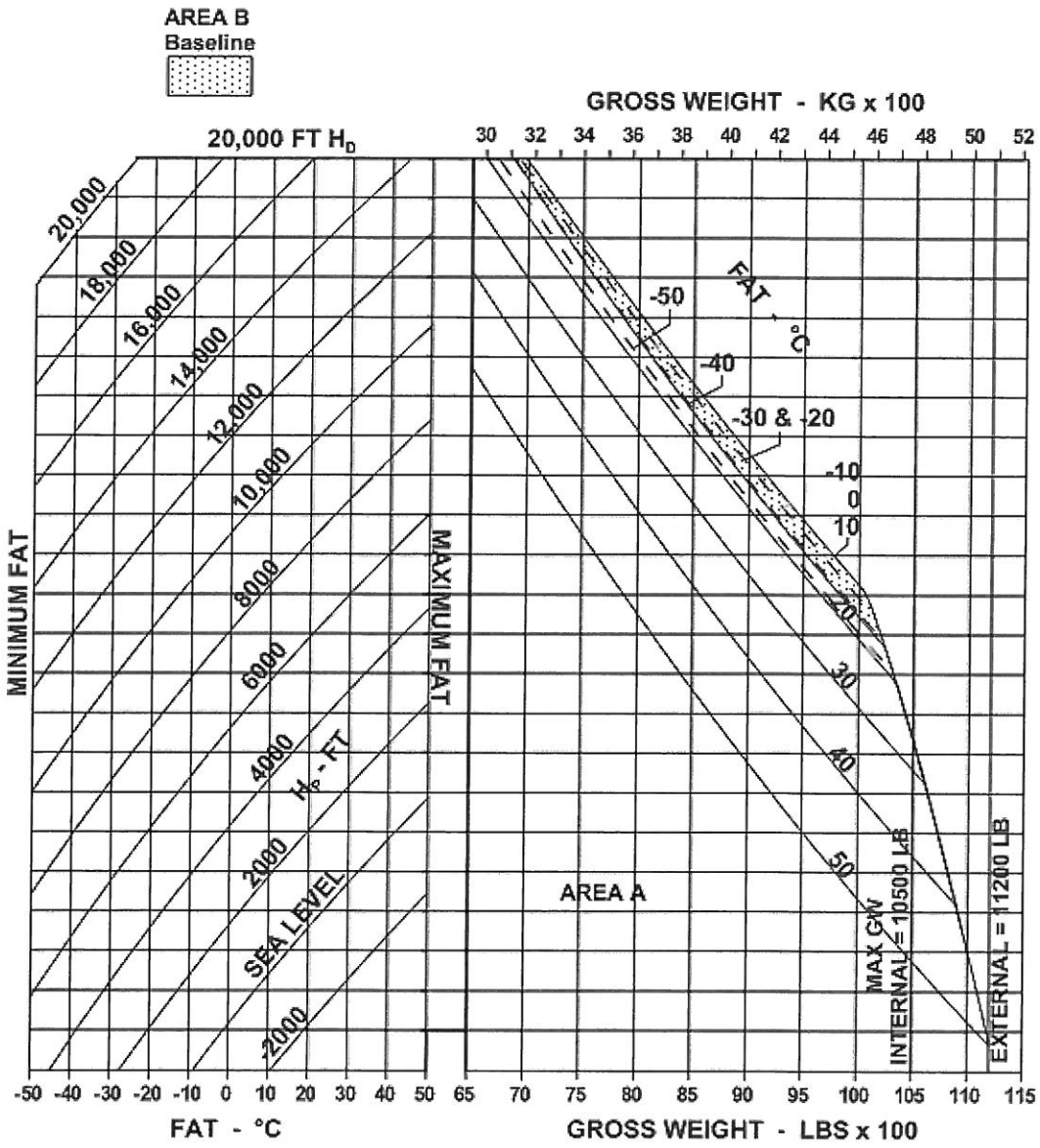


Figure 7-7. OGE Hover Ceiling, 5 Minute Operation, Particle Separator, Heater OFF (Sheet 1 of 4)

OGE HOVER CEILING
MAXIMUM TORQUE AVAILABLE (5 MINUTE OPERATION)
60 FT SKID HEIGHT

MODEL: UH-1H-II
ENGINE T53-L-703
324 ROTOR RPM / 6600 ENGINE RPM

PARTICLE SEPARATOR
HEATER ON
GENERATOR LOAD 100%

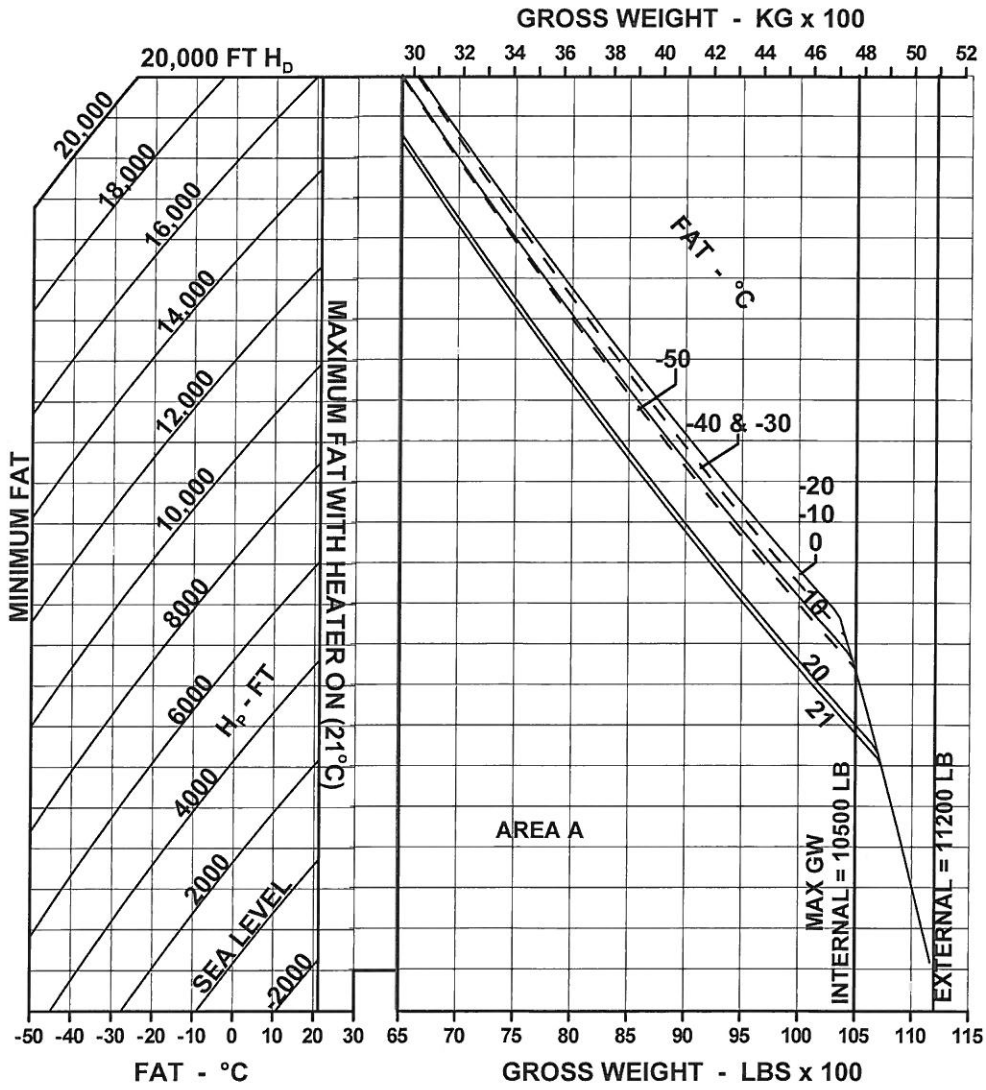


Figure 7-7. OGE Hover Ceiling, 5 Minute Operation, Particle Separator, Heater ON (Sheet 2 of 4)

OGE HOVER CEILING
MAXIMUM CONTINUOUS TORQUE AVAILABLE (CONTINUOUS OPERATION)
60 FT SKID HEIGHT

MODEL: UH-1H-II
ENGINE T53-L-703
324 ROTOR RPM / 6600 ENGINE RPM

PARTICLE SEPARATOR
HEATER OFF
GENERATOR LOAD 100%

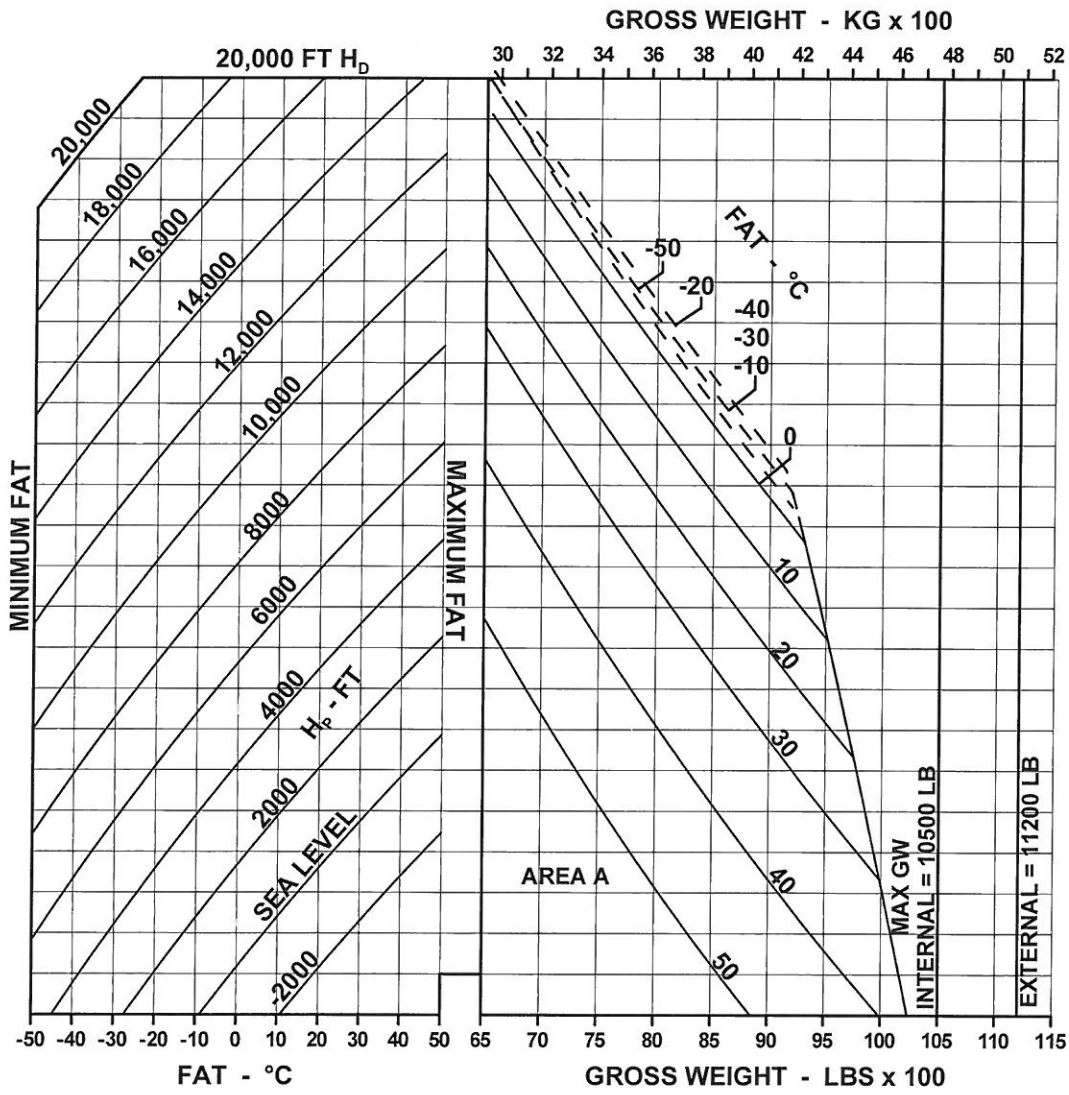


Figure 7-7. OGE Hover Ceiling, Continuous Operation, Particle Separator, Heater OFF (Sheet 3 of 4)

OGE HOVER CEILING
MAXIMUM CONTINUOUS TORQUE AVAILABLE (CONTINUOUS OPERATION)
60 FT SKID HEIGHT

MODEL: UH-1H-II
ENGINE T53-L-703
324 ROTOR RPM / 6600 ENGINE RPM

PARTICLE SEPARATOR
HEATER ON
GENERATOR LOAD 100%

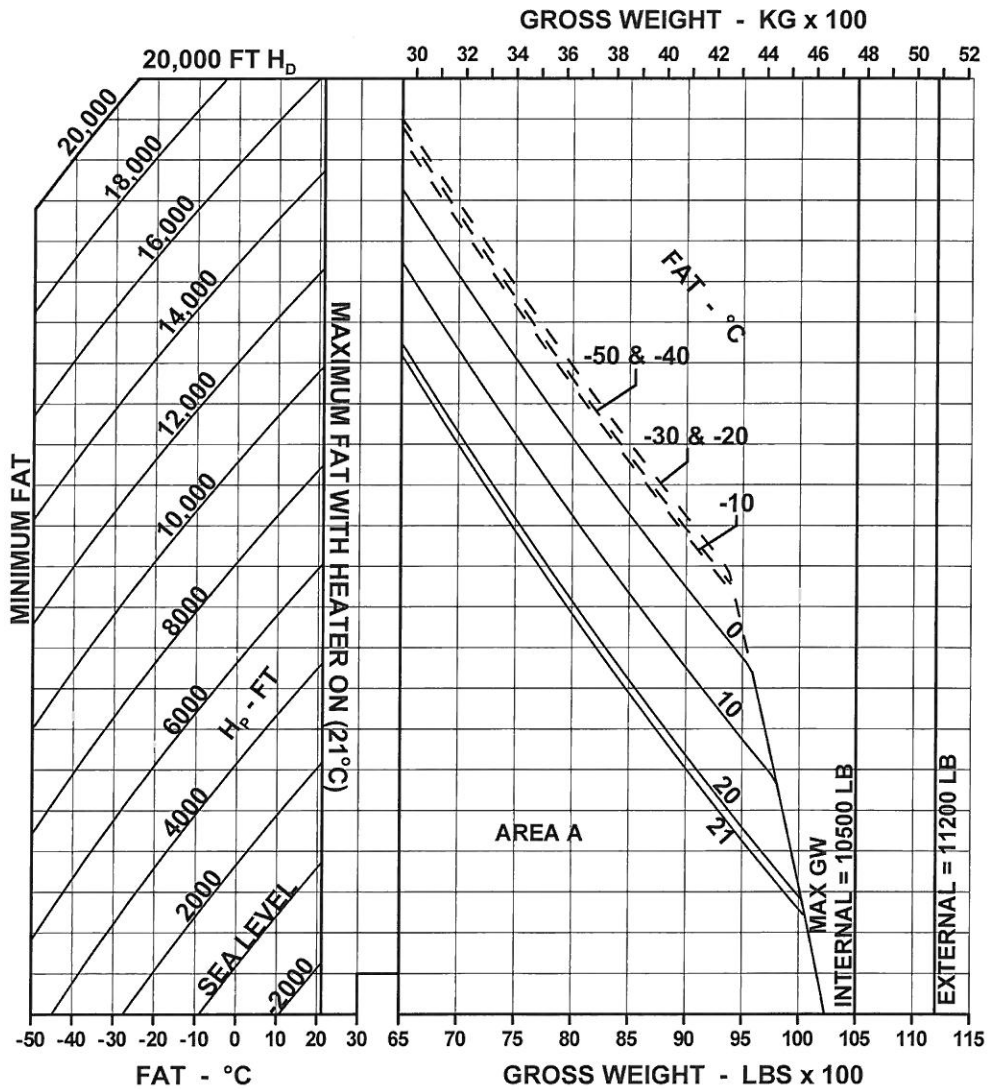


Figure 7-7. OGE Hover Ceiling, Continuous Operation, Particle Separator, Heater ON (Sheet 4 of 4)

AIRSPEED OPERATING LIMITS
UH-1H-II WITH T53-L-703 ENGINE
LEVEL FLIGHT

EXAMPLE

WANTED

INDICATED AIRSPEED AND DENSITY ALTITUDE

KNOWN

GROSS WEIGHT = 9500 LB

PRESSURE ALTITUDE = 7500 FEET

FAT = 4°C

METHOD

ENTER PRESSURE ALTITUDE HERE

MOVE RIGHT TO FAT

MOVE DOWN TO GW = 9500 LB

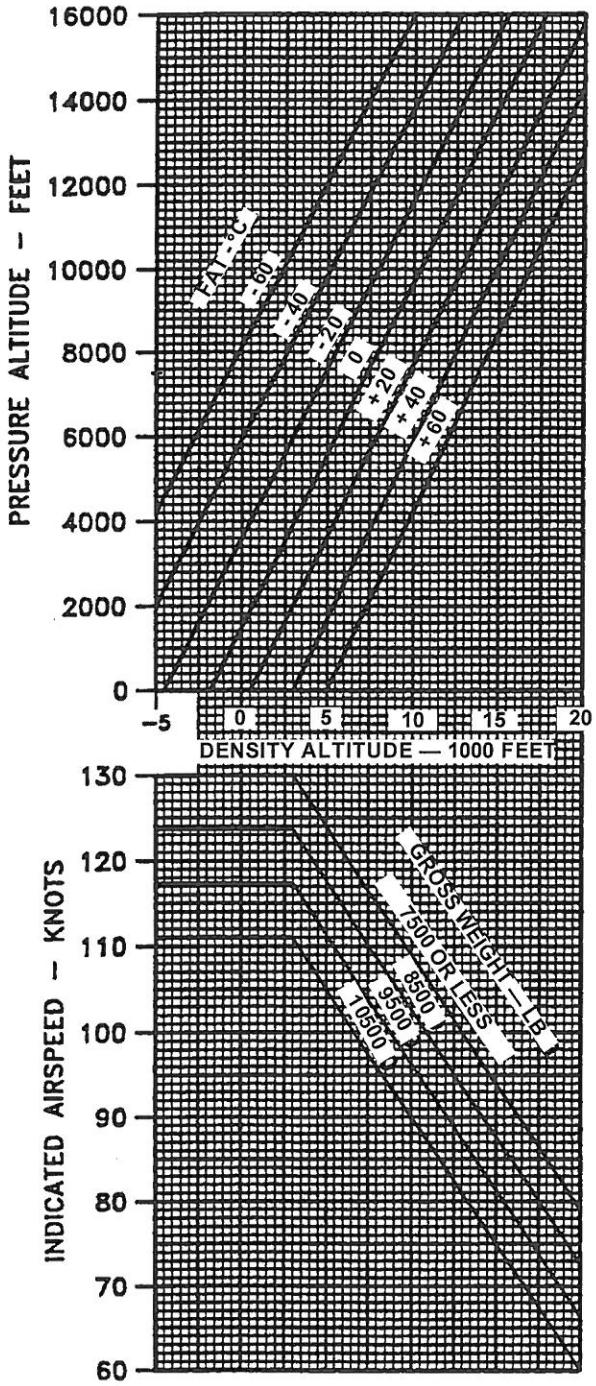
MOVE LEFT TO READ INDICATED AIRSPEED = 102 KNOTS

RE-ENTER PRESSURE ALTITUDE

MOVE RIGHT TO FAT

MOVE DOWN TO READ DENSITY ALTITUDE = 8000 FEET

DATA BASIS: FLIGHT TEST



UH-1H-II-FM-7-24

Figure 7-24. Airspeed operating limits