

FAA PROVIDED

Supplement 8

Figure 4

CARSON HELICOPTERS, INC.
PERKASIE, PA 18944

RFMS #8
S61L,N

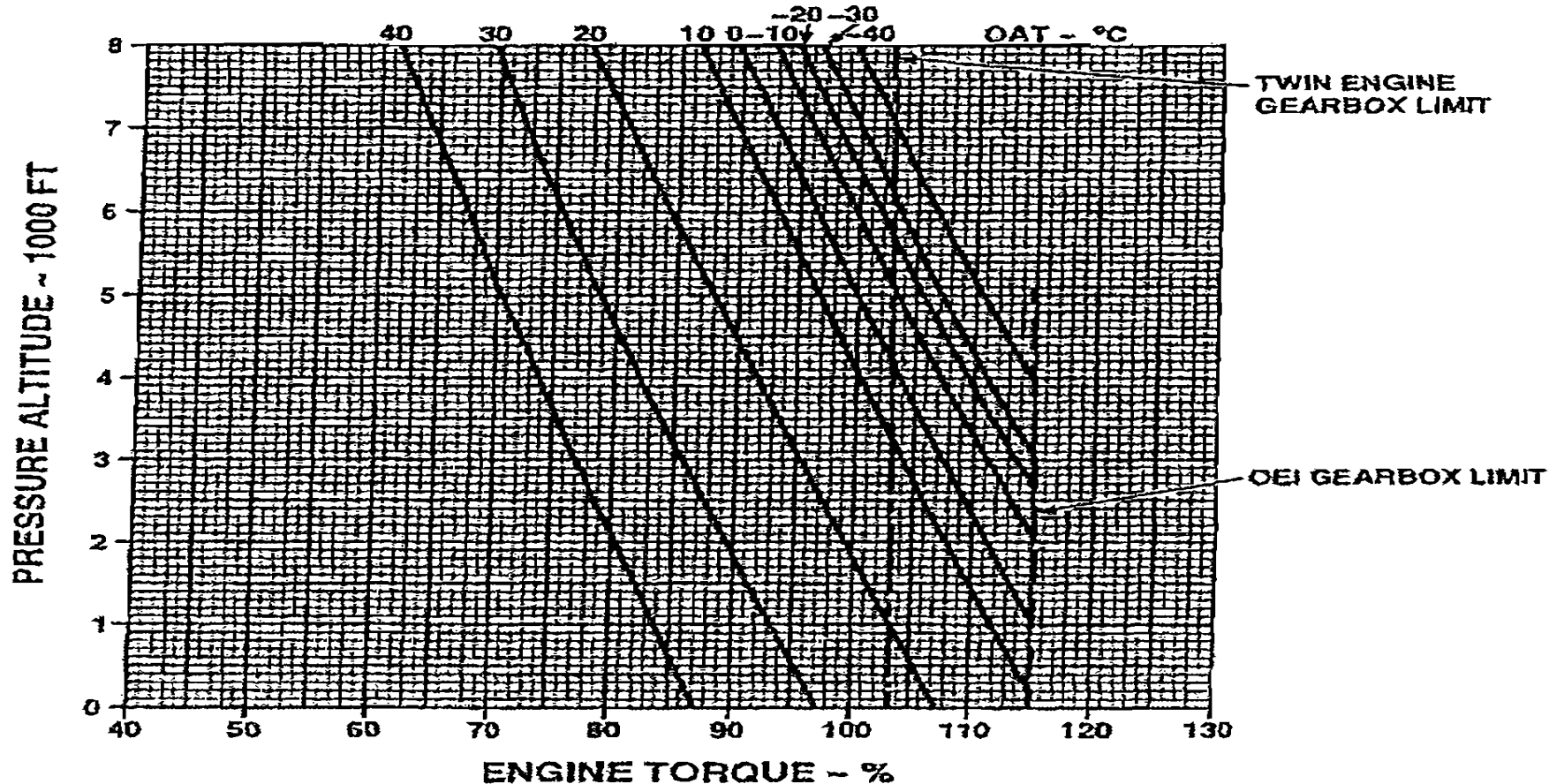
POWER AVAILABLE TAKEOFF POWER (5 MIN TWIN, 30 MIN OEI)

CT58-140-1, -2 ENGINE(S)

103% NR

SPECIFICATION POWER

ENGINE ANTI-ICE SYSTEMS OFF



CARSON HELICOPTERS, INC.

PERKASIE, PA 18944

RFMS #8

S61L,N

POWER AVAILABLE

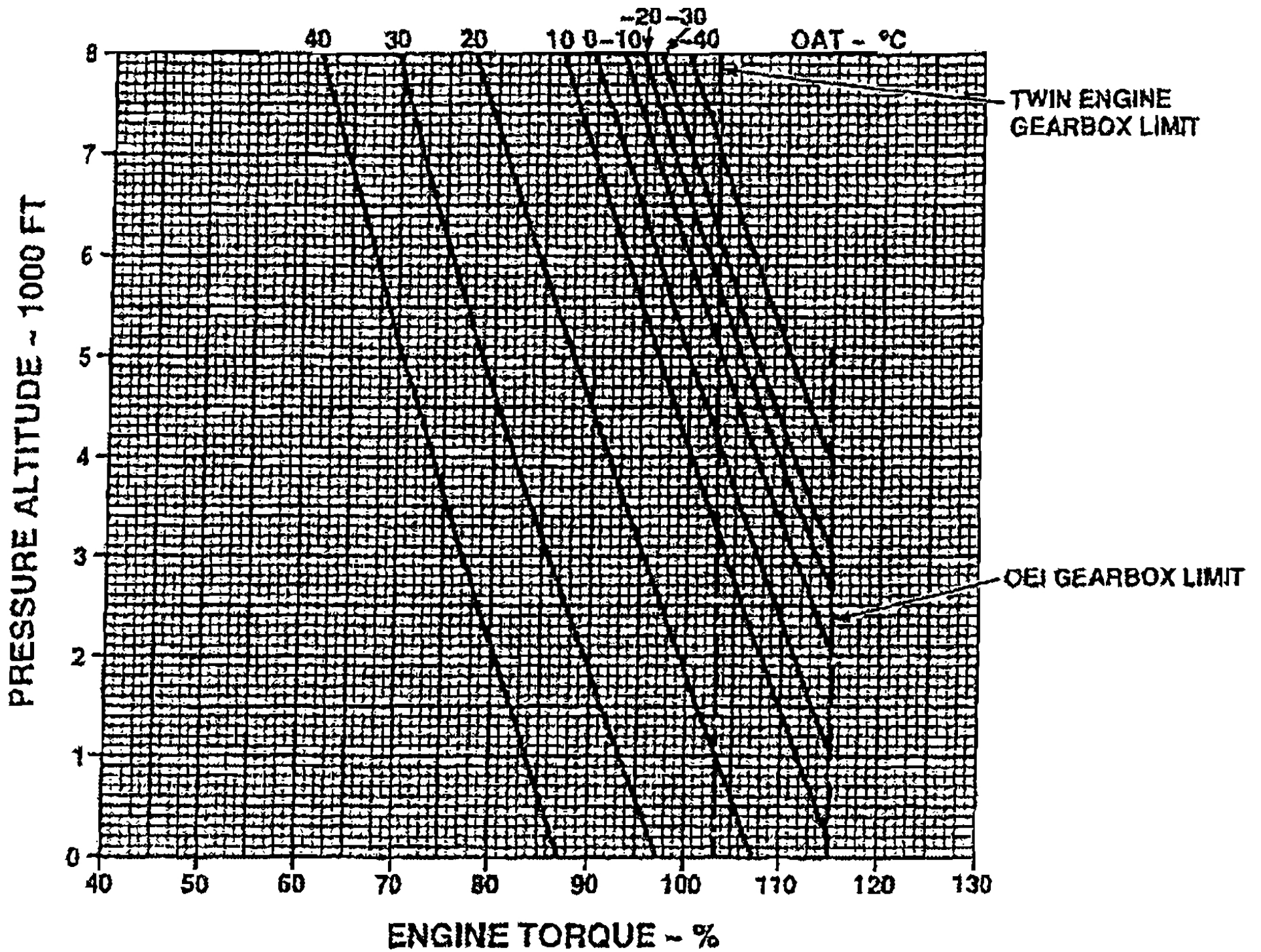
TAKEOFF POWER (5 MIN TWIN, 30 MIN OEI)

CT58-140-1, -2 ENGINE(S)

103% NR

SPECIFICATION POWER

ENGINE ANTI-ICE SYSTEMS OFF



CHSI PROVIDED

Supplement 8

Figure 4

CARSON HELICOPTERS, INC.
PERKASIE, PA 18944

RFMS #8
S61L,N

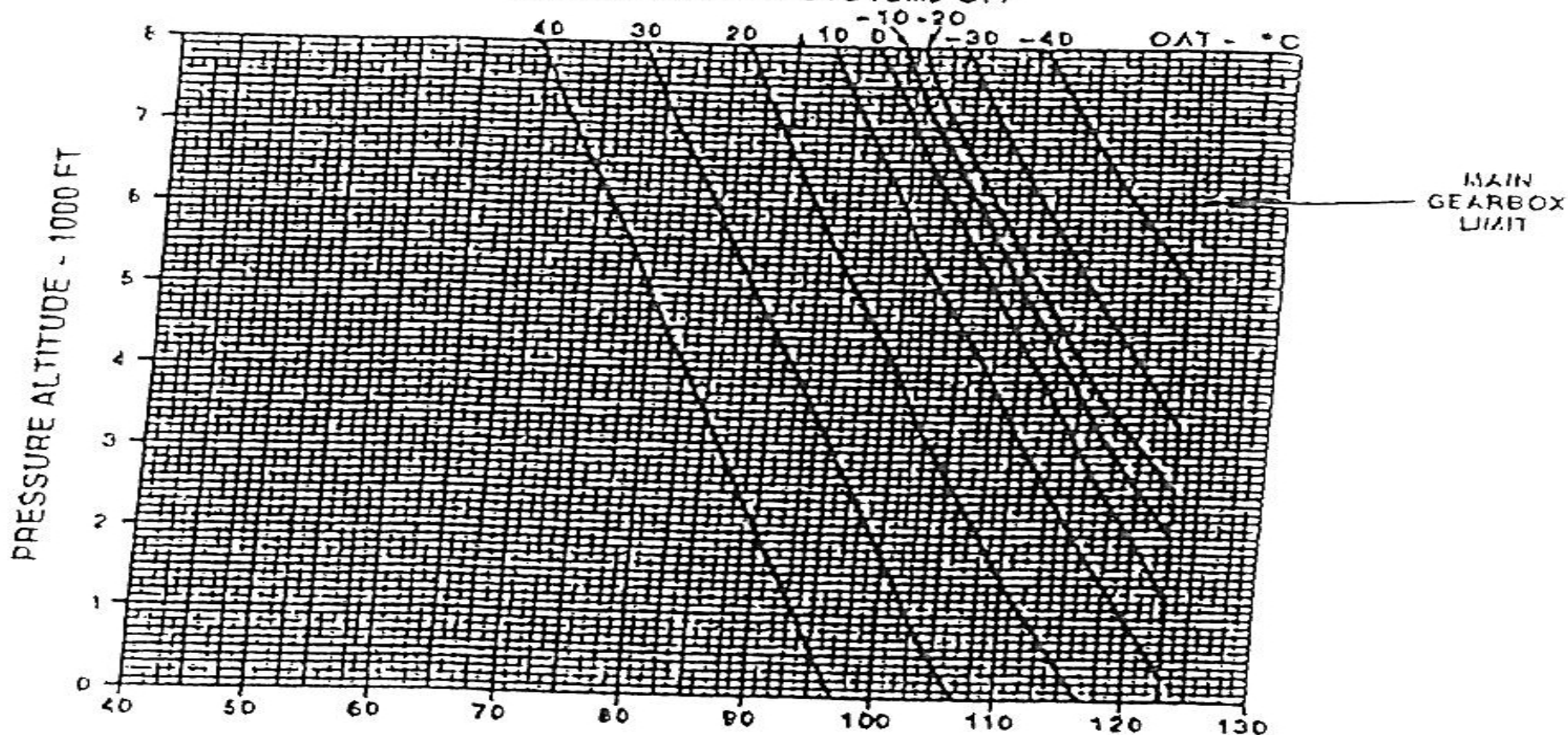
POWER AVAILABLE
TAKEOFF POWER (5 MIN TWIN, 30 MIN OEI)

CT58-140-1, -2 ENGINE(S)

103% NR

SPECIFICATION POWER

ENGINE ANTI-ICE SYSTEMS OFF



CARSON HELICOPTERS, INC.
PERKASIE, PA 18944

RFMS #8

S61LN

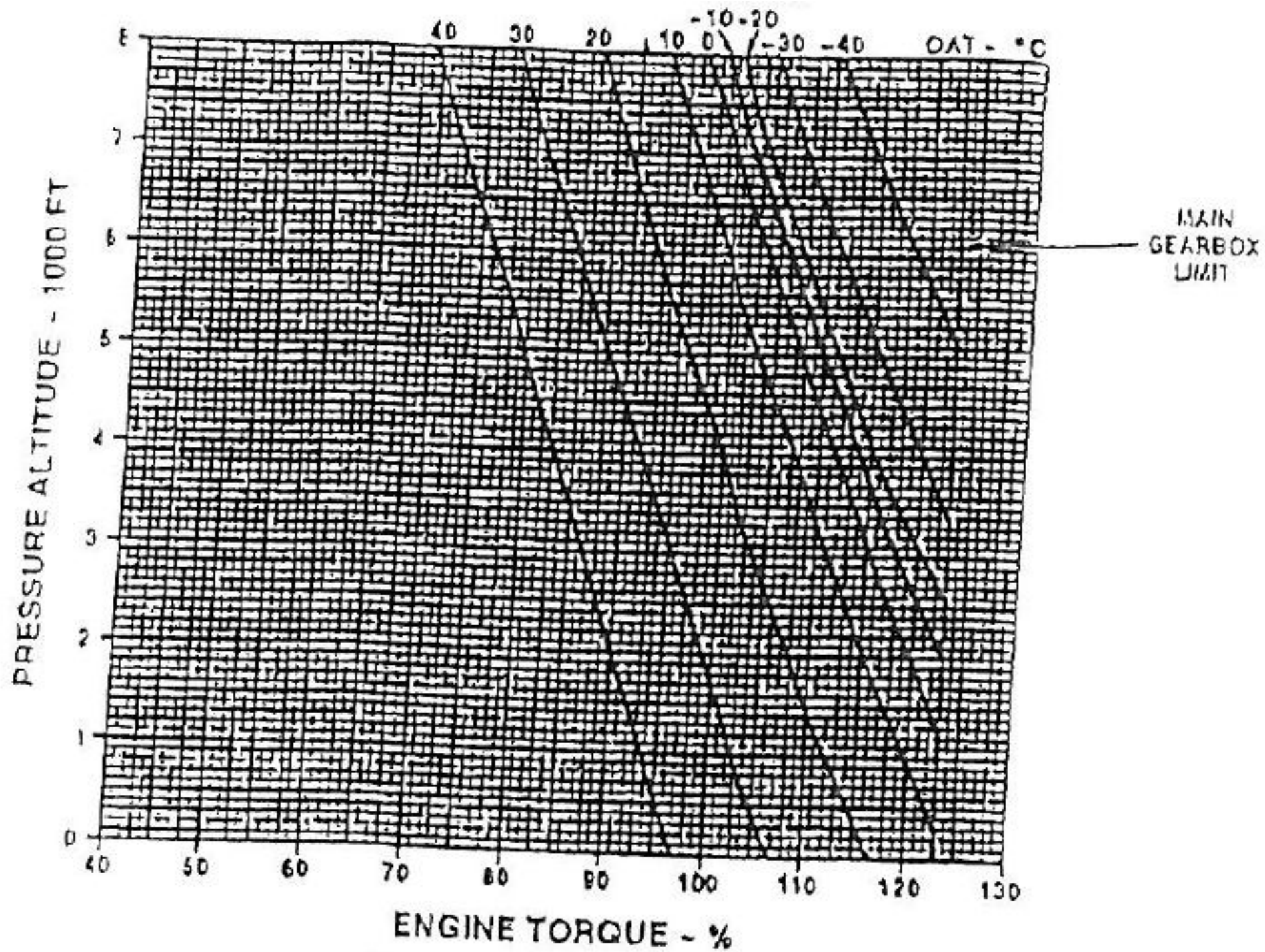
POWER AVAILABLE
TAKEOFF POWER (5 MIN TWIN, 30 MIN OEI)

CT58-140-1, -2 ENGINE(S)

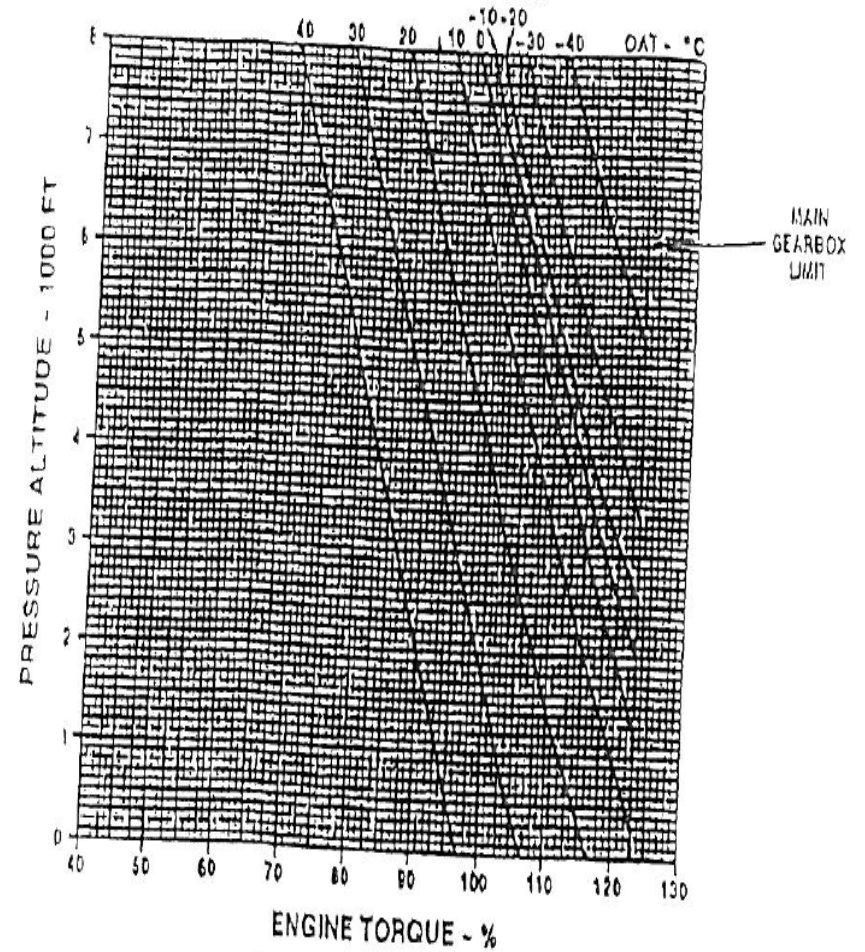
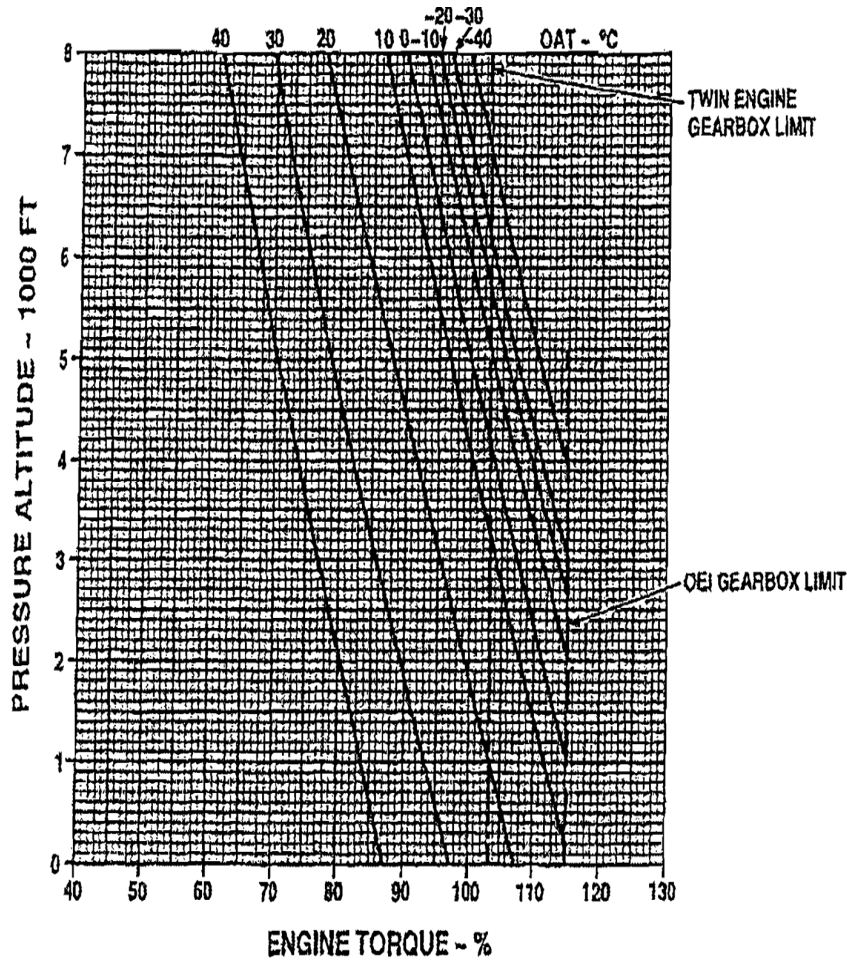
103% NR

SPECIFICATION POWER

ENGINE ANTI-ICE SYSTEMS OFF



COMPARISON FAA & CHSI



FAA PROVIDED

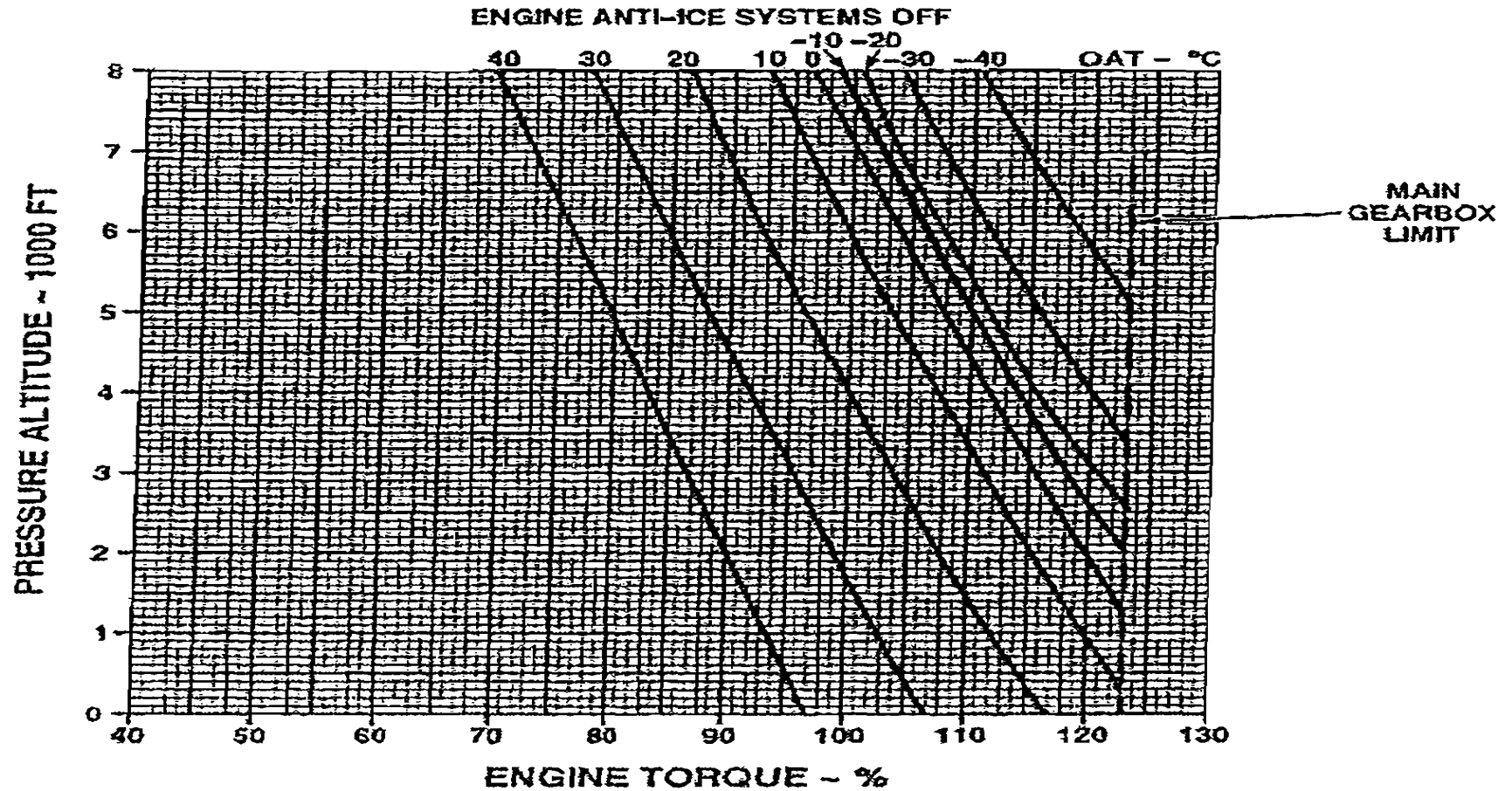
Supplement 8

Figure 1

CARSON HELICOPTERS, INC.
PERKASIE, PA 18944
RFMS #8
S6TLN

POWER AVAILABLE 2 1/2 MINUTE POWER

CT58-140-1 ENGINE
100% NR
SPECIFICATION POWER



CARSON HELICOPTERS, INC.

PERKASIE, PA 18944

RFMS #8

S61LN

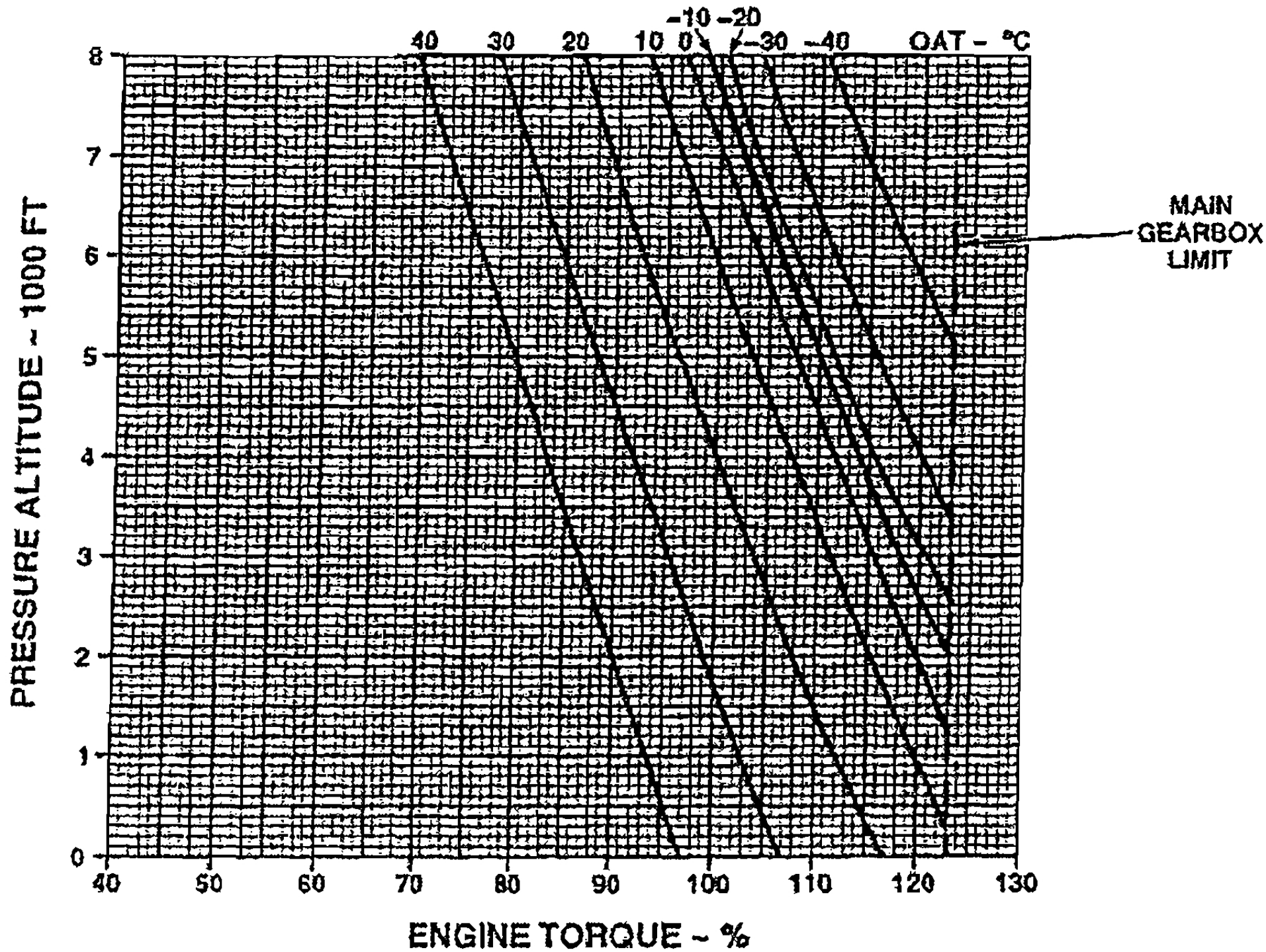
**POWER AVAILABLE
2 1/2 MINUTE POWER**

CT58-140-1 ENGINE

100% NR

SPECIFICATION POWER

ENGINE ANTI-ICE SYSTEMS OFF



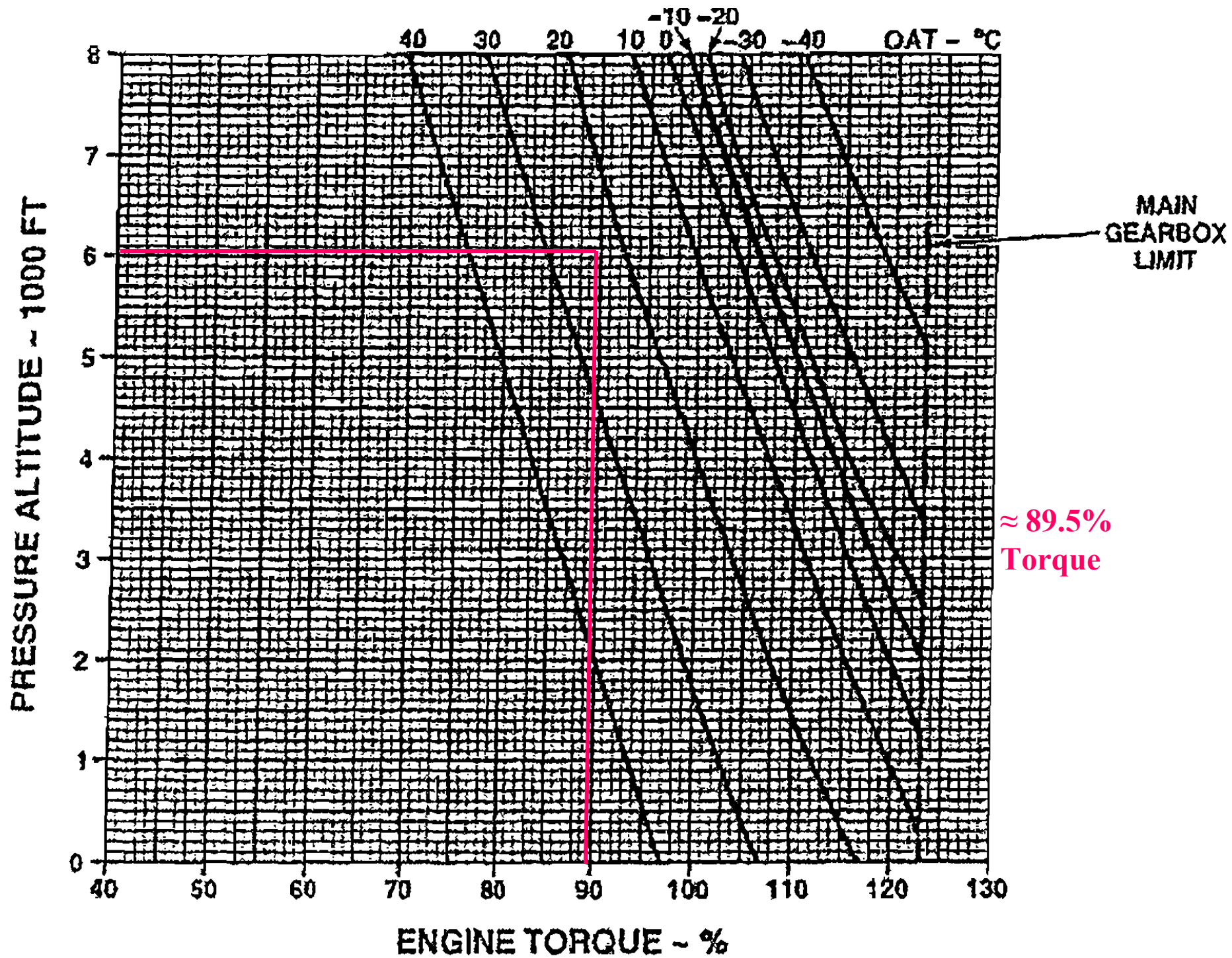
CHSI PROVIDED

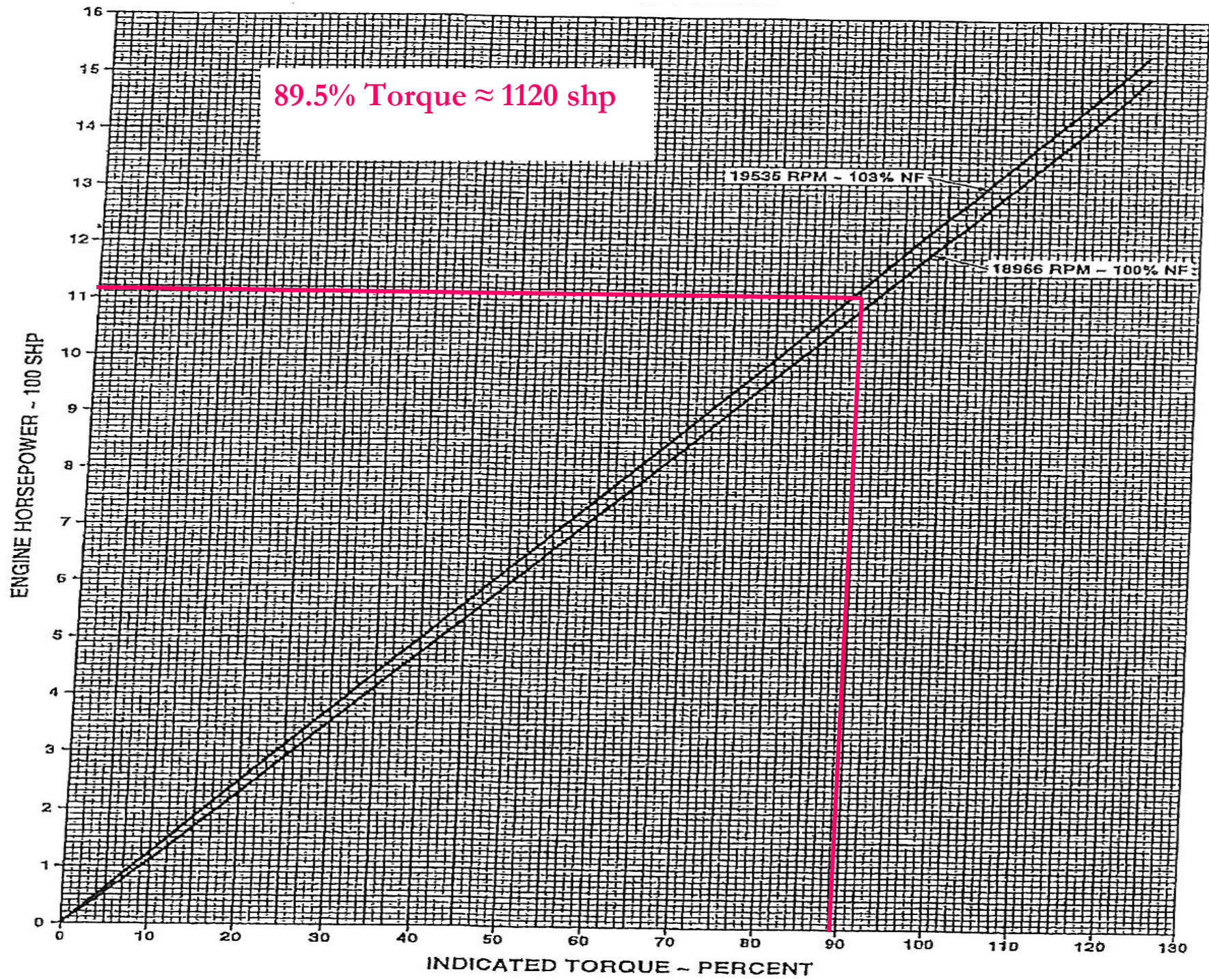
Supplement 8

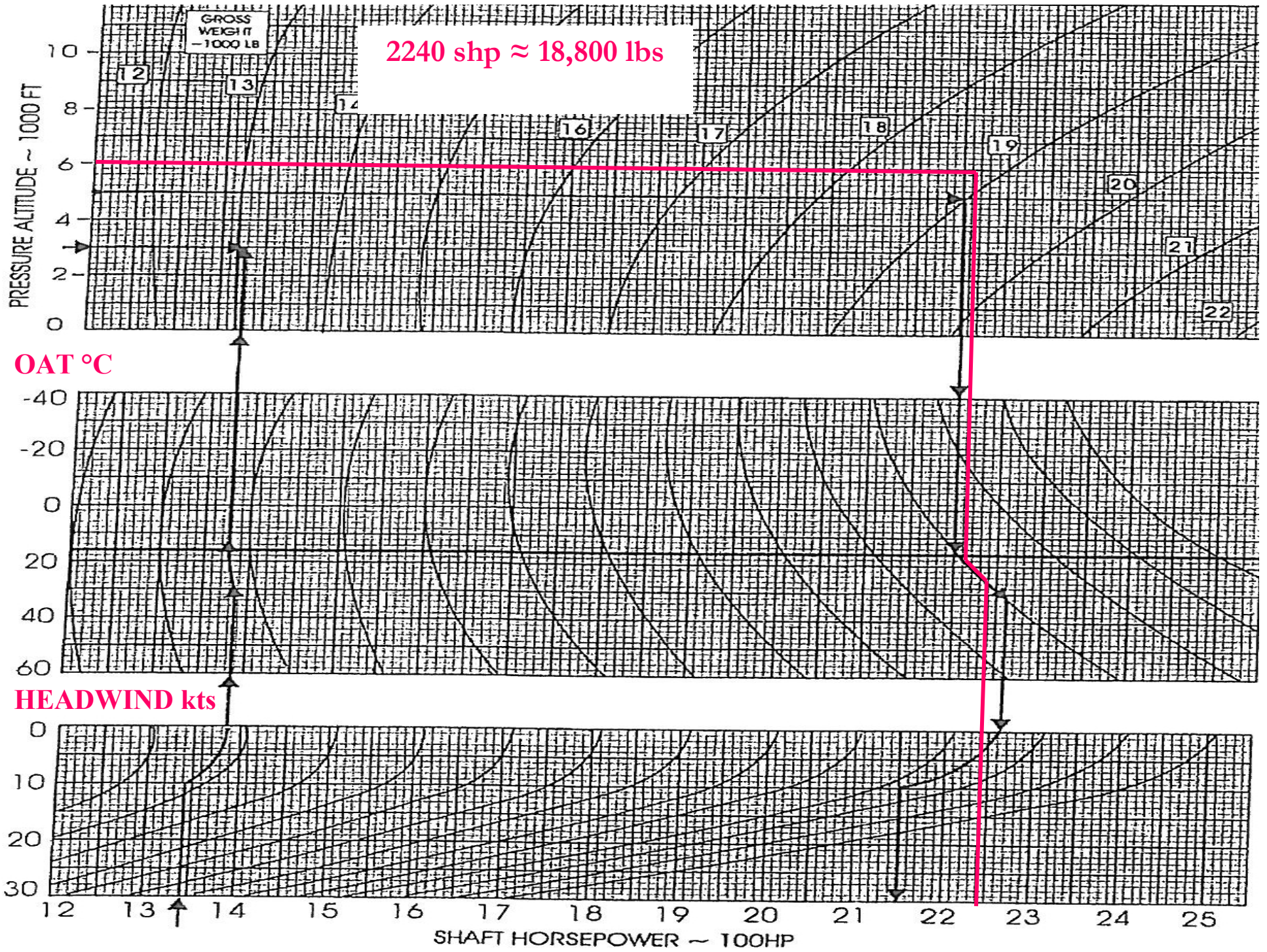
Pressure Altitude: 6,106 feet

Temperature: 23 °C

(actual conditions)





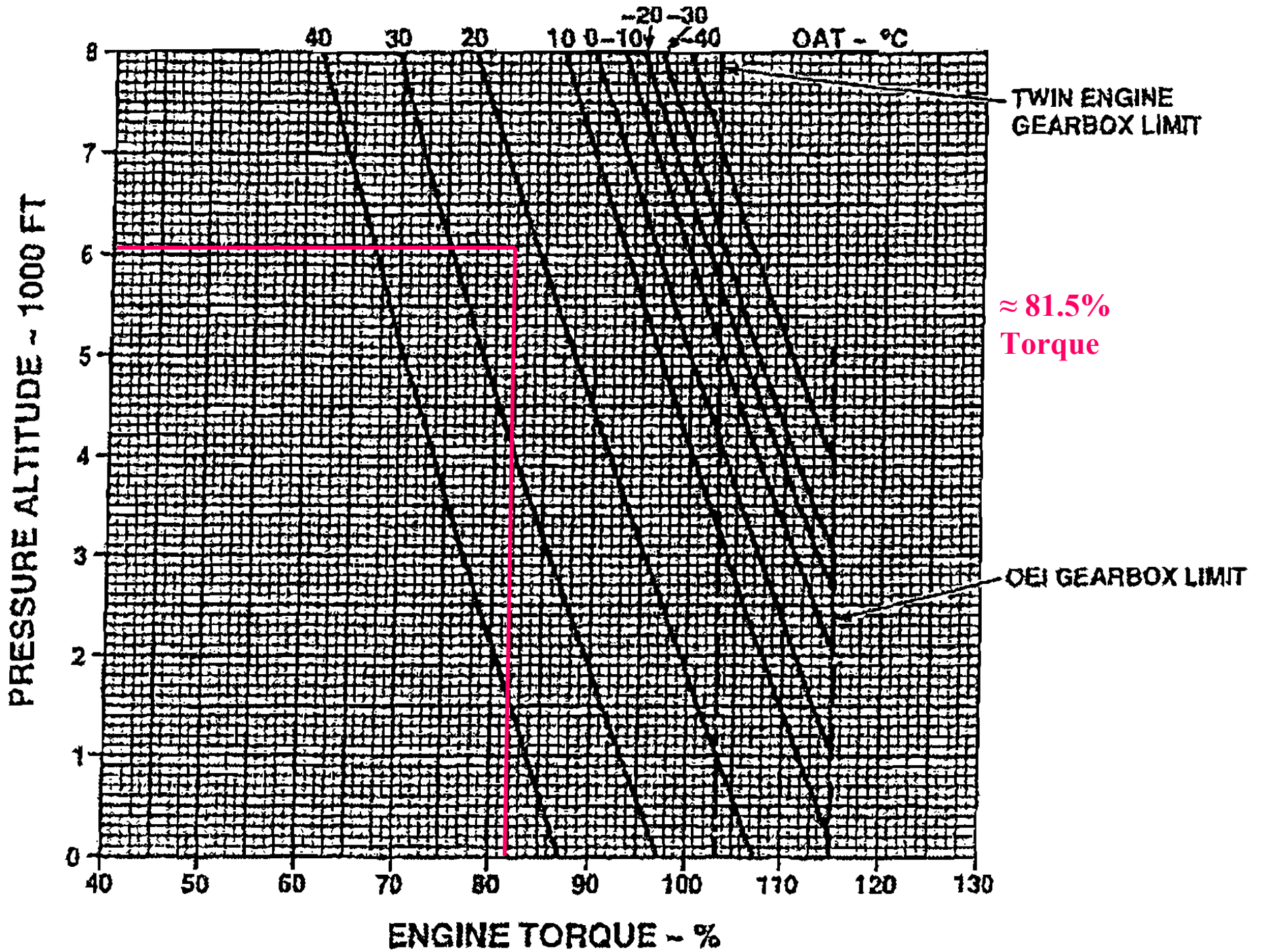


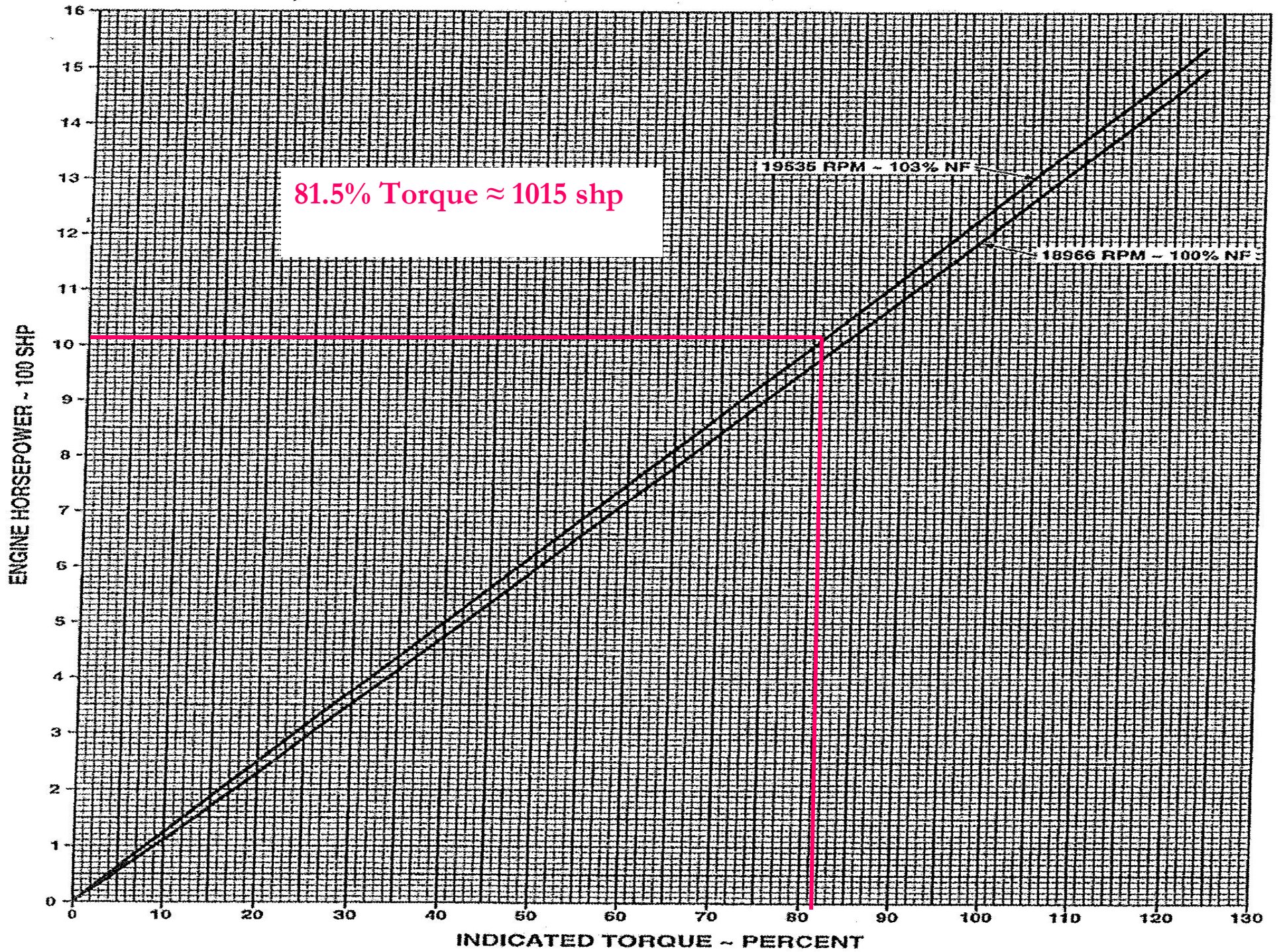
FAA PROVIDED

Supplement 8

Pressure Altitude: 6,106 feet

Temperature: 23 °C





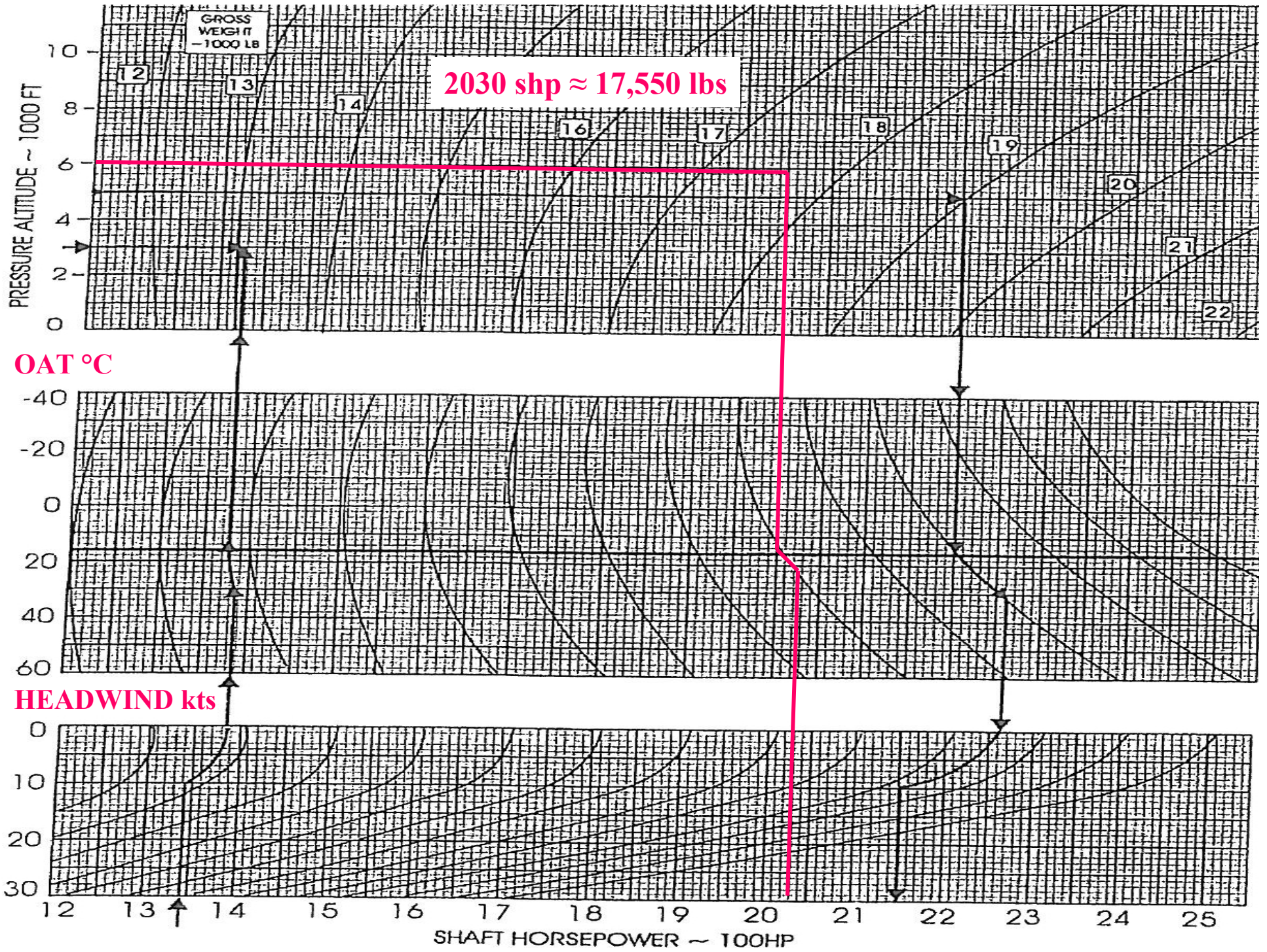
81.5% Torque \approx 1015 shp

19535 RPM ~ 103% NF

18966 RPM ~ 100% NF

ENGINE HORSEPOWER ~ 100 SHP

INDICATED TORQUE ~ PERCENT



ACTUAL CONDITIONS

Pressure Altitude	6106 ft
OAT	23 °C
Empty Weight	13,851
PIC, Copilot, Checkpilot	440
Fuel	2,158
Operating Weight	16,449
Estimated Gross Weight	19,014

Performance Reference		Carson HOGE	FAA HOGE
1	Computed Max Gross Weight (obtained from RFMS 8; Fig. 4, 5, 7)	18,800	17,550
2	Max Gross Weight Limitation (obtained from RFMS 7; Fig.7-1-2)	19,025	19,025
3	Selected Weight (lowest of 1 or 2)	18,800	17,550
4	Operating Weight (see above)	16,449	16,449
5	Allowable Payload (3 subtracted by 4)	2,351	1,101
6	Actual Payload (obtained from manifest including checkpilot)	2,565	2,565

Maximum Gross Weight Margin	-214	-1,464
-----------------------------	------	--------

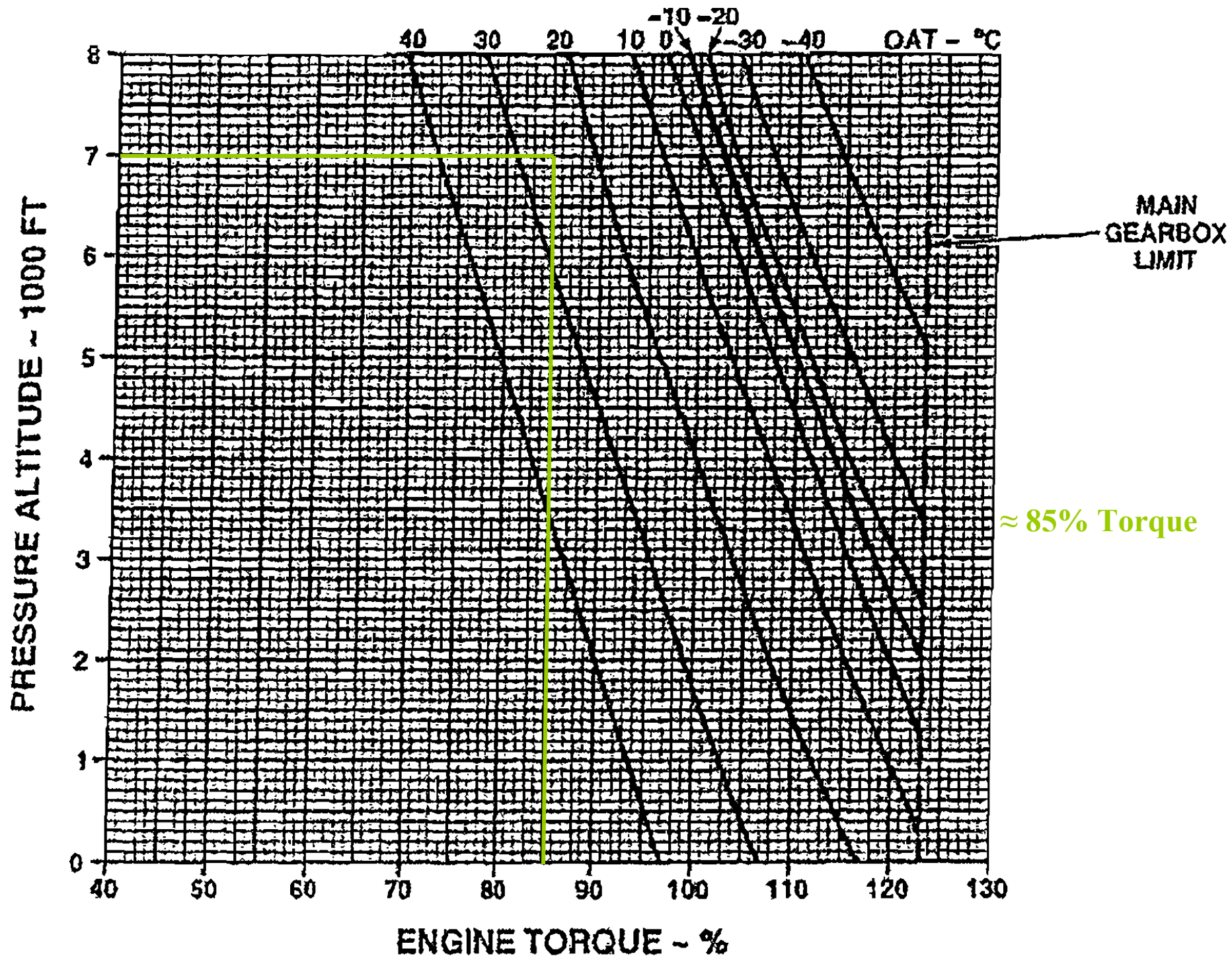
CHSI PROVIDED

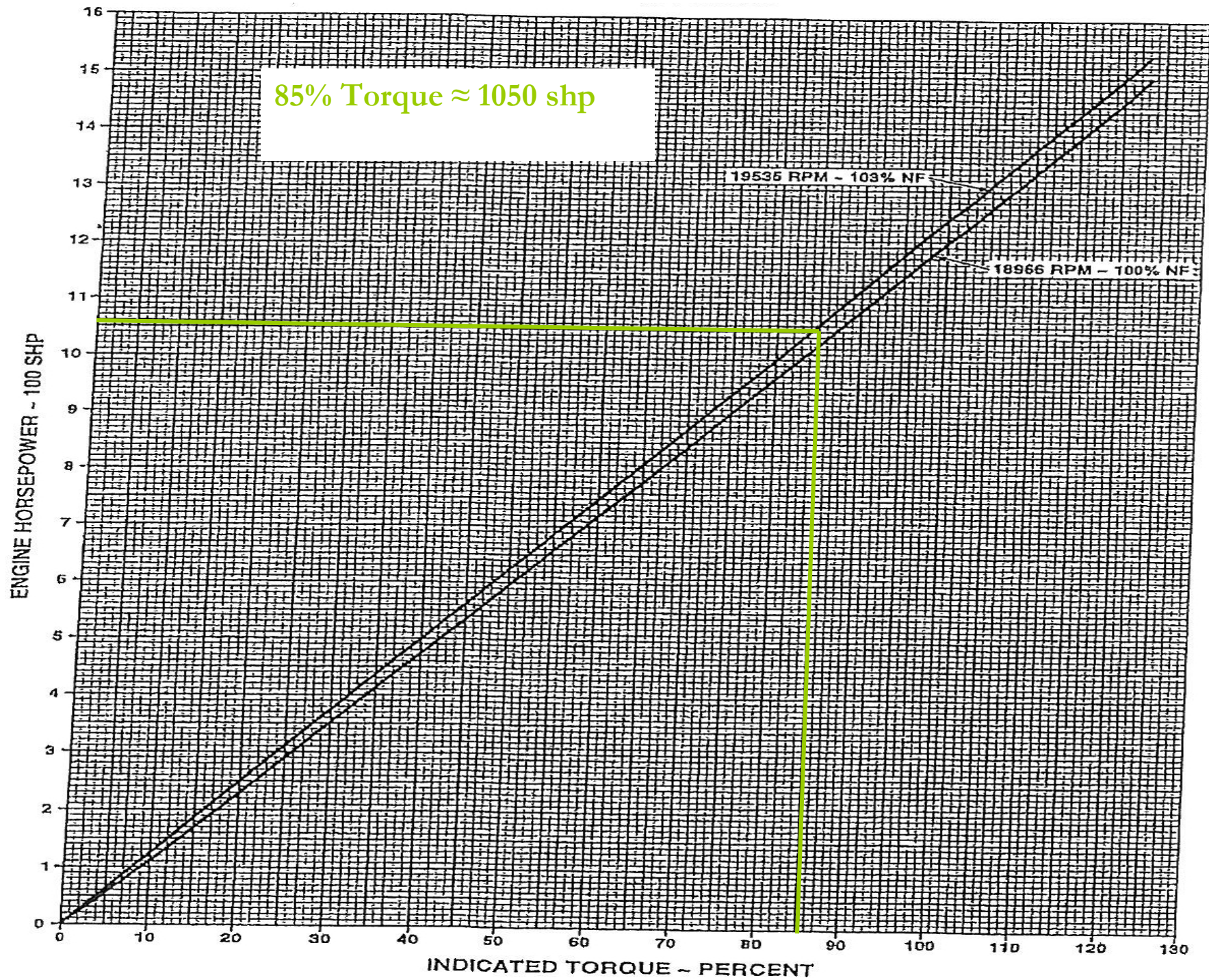
Supplement 8

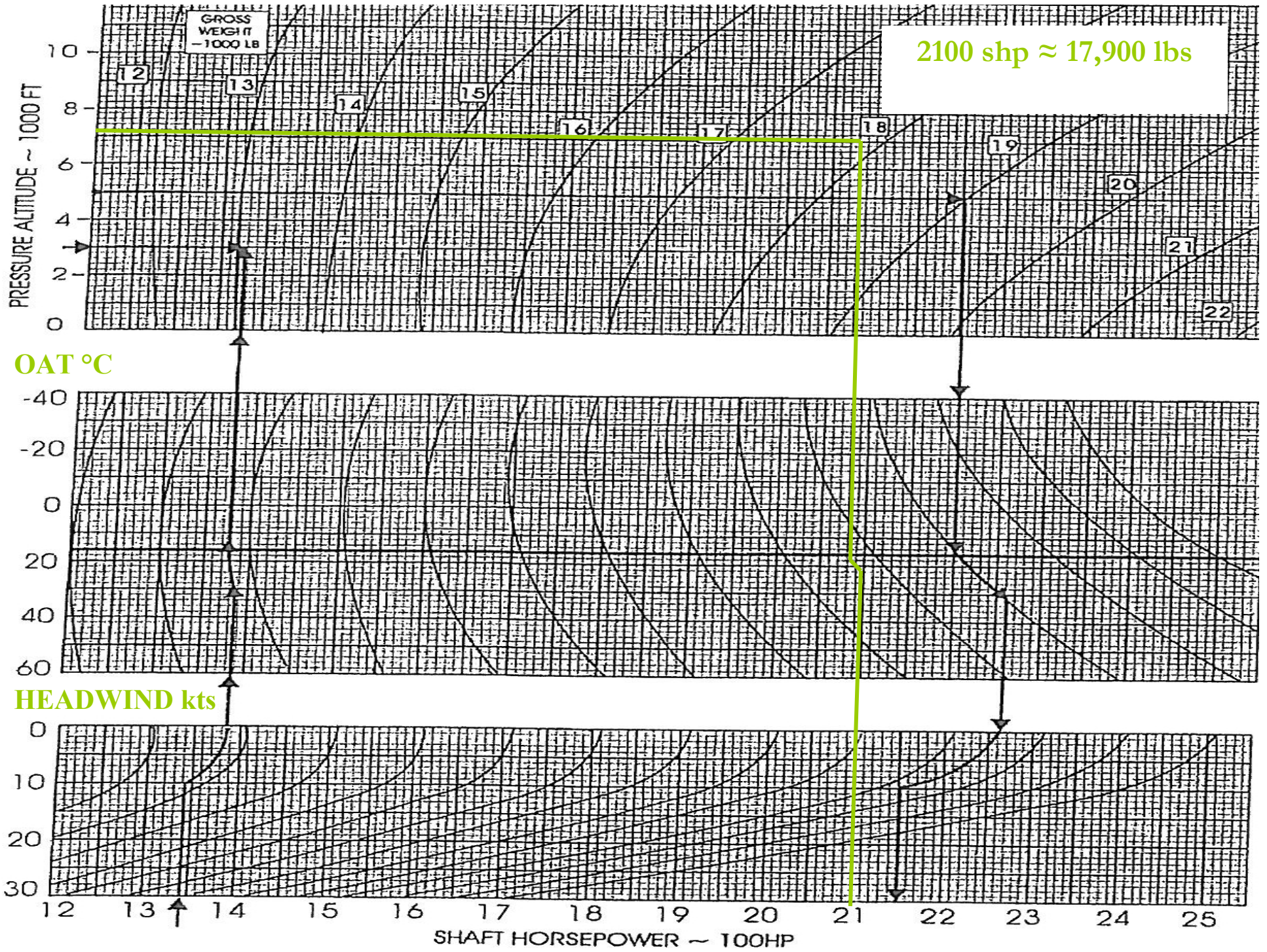
Pressure Altitude: 7,000 feet

Temperature: 25 °C

(predicted conditions)







2100 shp ≈ 17,900 lbs

GROSS WEIGHT
- 1000 LB

PRESSURE ALTITUDE ~ 1000 FT

OAT °C

HEADWIND kts

SHAFT HORSEPOWER ~ 100HP

12

13

14

15

16

17

18

19

20

21

22

-40

-20

0

20

40

60

0

10

20

30

12

13

14

15

16

17

18

19

20

21

22

23

24

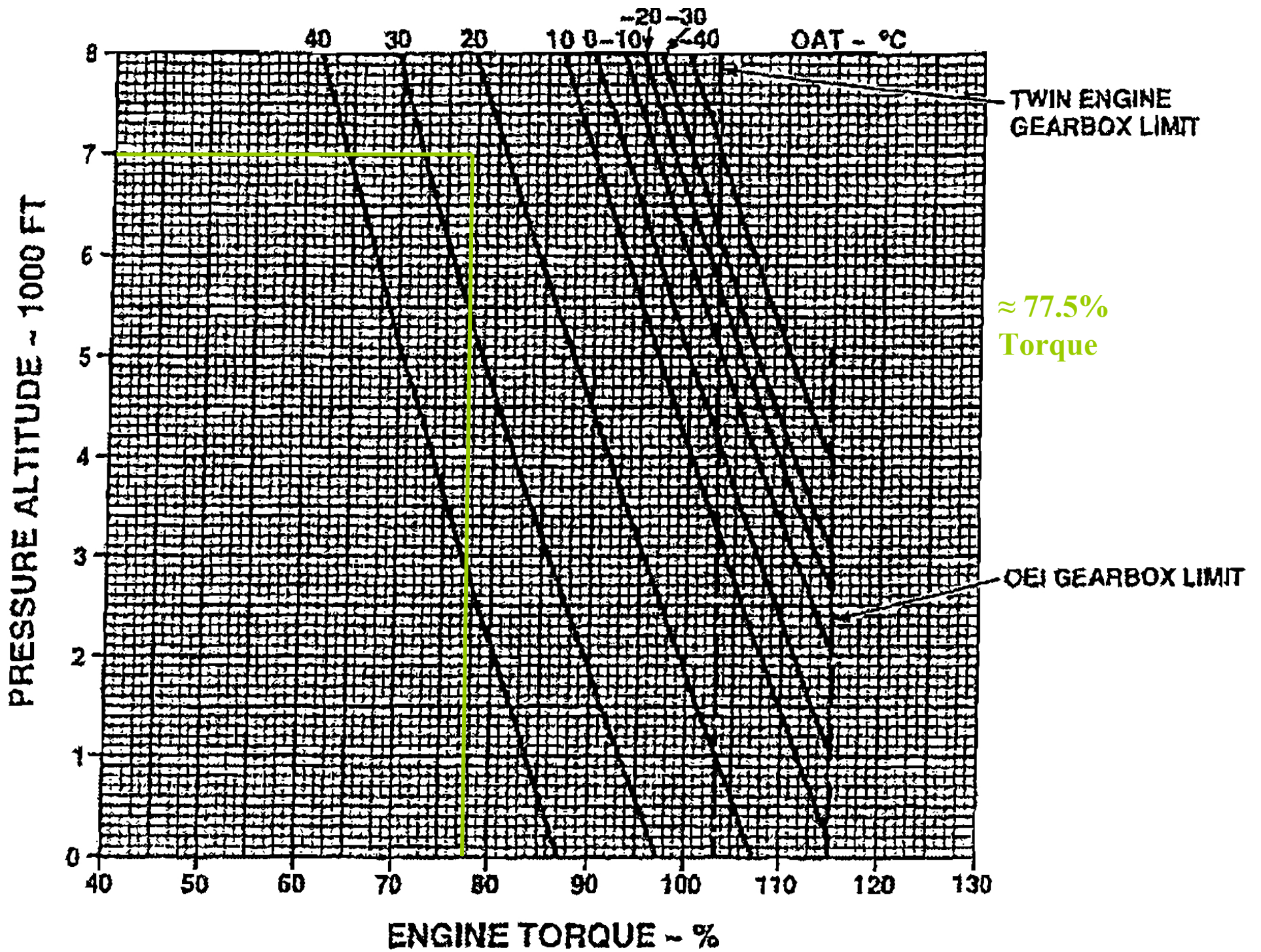
25

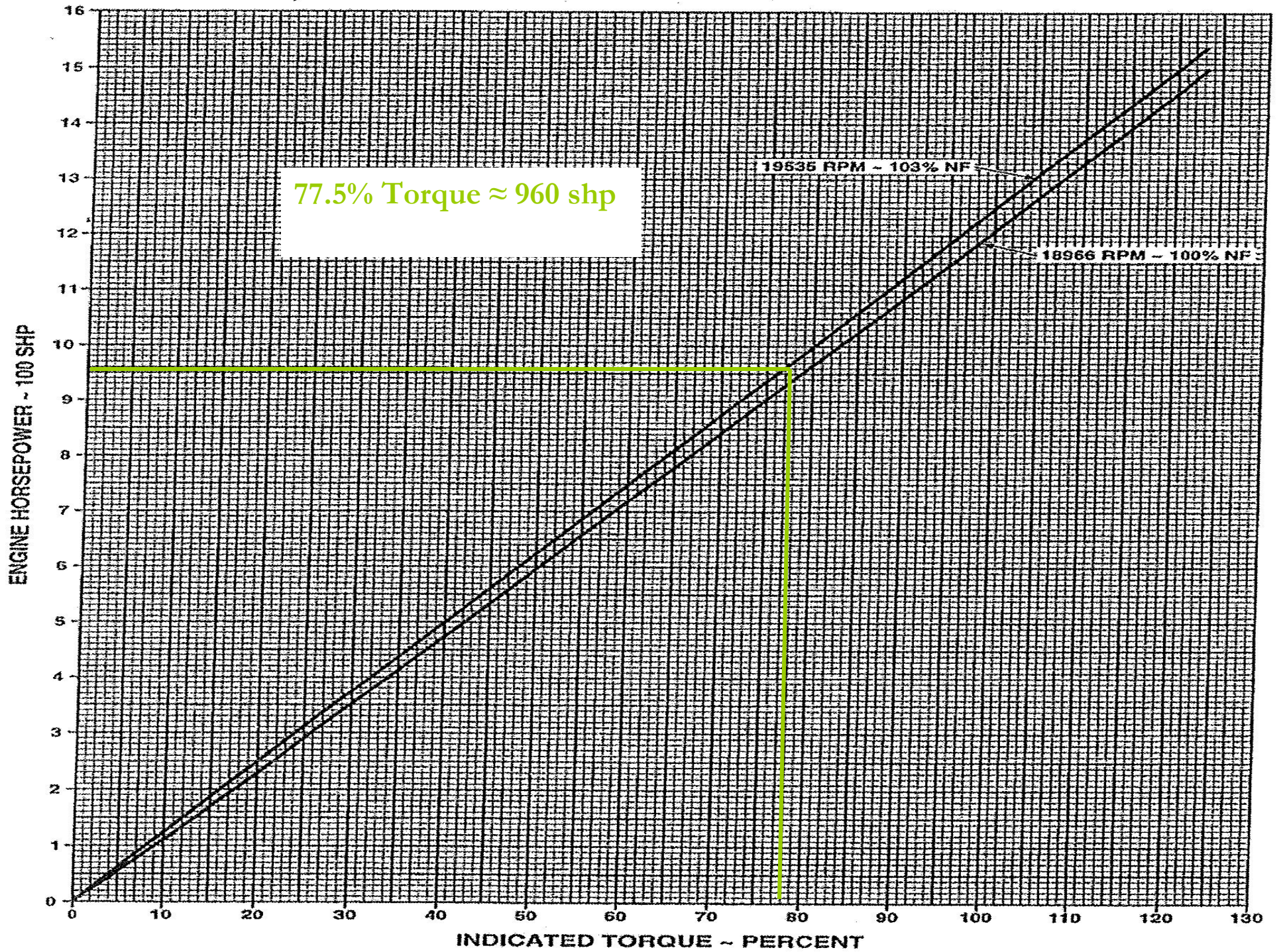
FAA PROVIDED

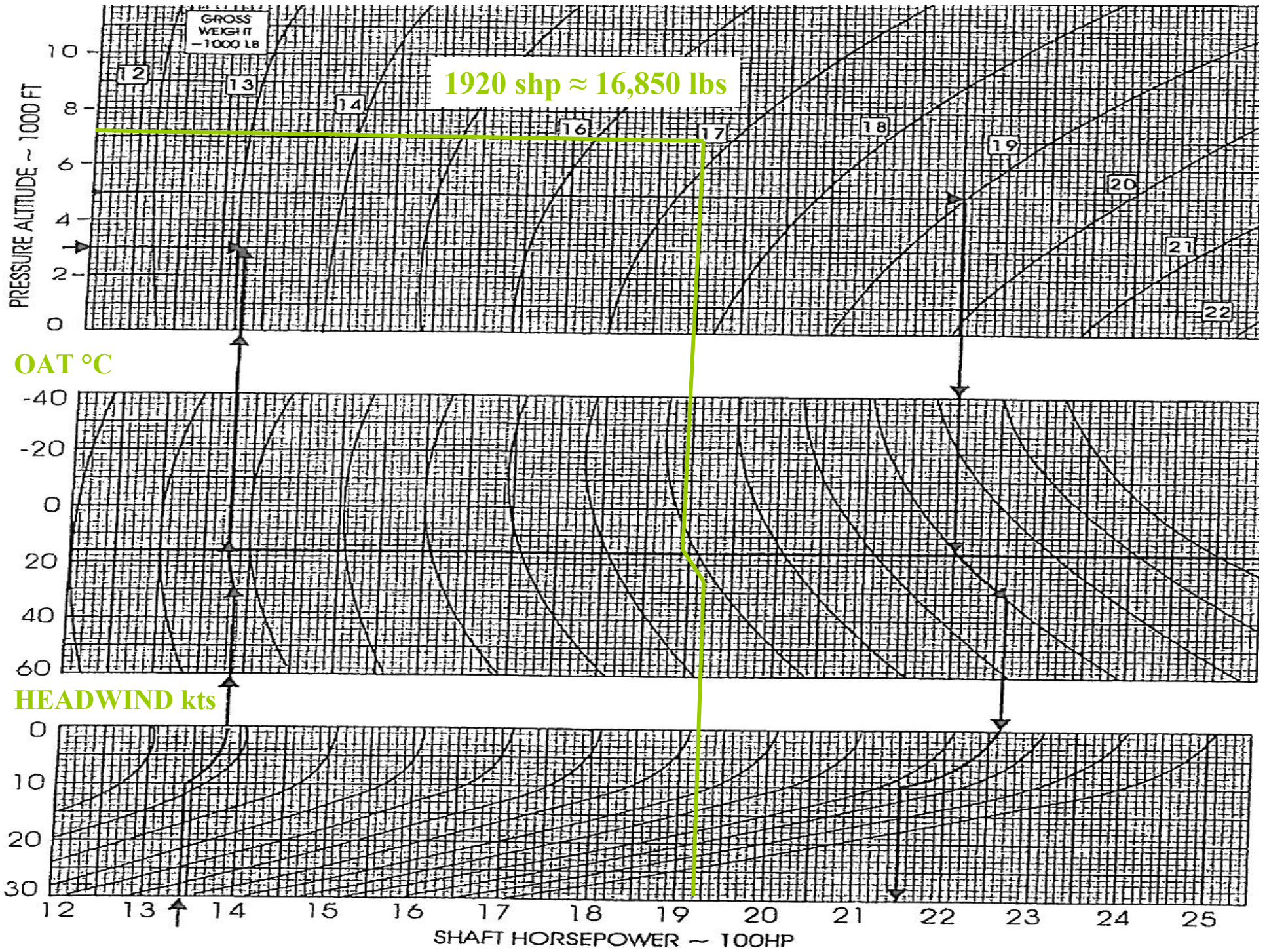
Supplement 8

Pressure Altitude: 7,000 feet

Temperature: 25 °C







1920 shp ≈ 16,850 lbs

OAT °C

HEADWIND kts

SHAFT HORSEPOWER ~ 100HP

PREDICTED CONDITIONS

Pressure Altitude	7000 ft
OAT	25 °C
Empty Weight	13,851
Crew (pilot and co-pilot)	440
Fuel	1,995
Operating Weight	16,286

Performance Reference	Carson HOGE	FAA HOGE
1 Computed Maximum Gross Weight (obtained from RFMS 8; Fig. 4, 5, 7)	17,900	16,850
2 Gross Weight Limitation (obtained from RFMS 7; Fig.7-1-2)	18,400	18,400
3 Selected Weight (lowest of 1 or 2)	17,900	16,850
4 Operating Weight (see above)	16,286	16,286
5 Allowable Payload (3 subtracted by 4)	1,614	564
6 PIC Calculated Payload (calculated payload including checkpilot)	2,497	2,497

Maximum Gross Weight Margin	-883	-1,933
-----------------------------	------	--------

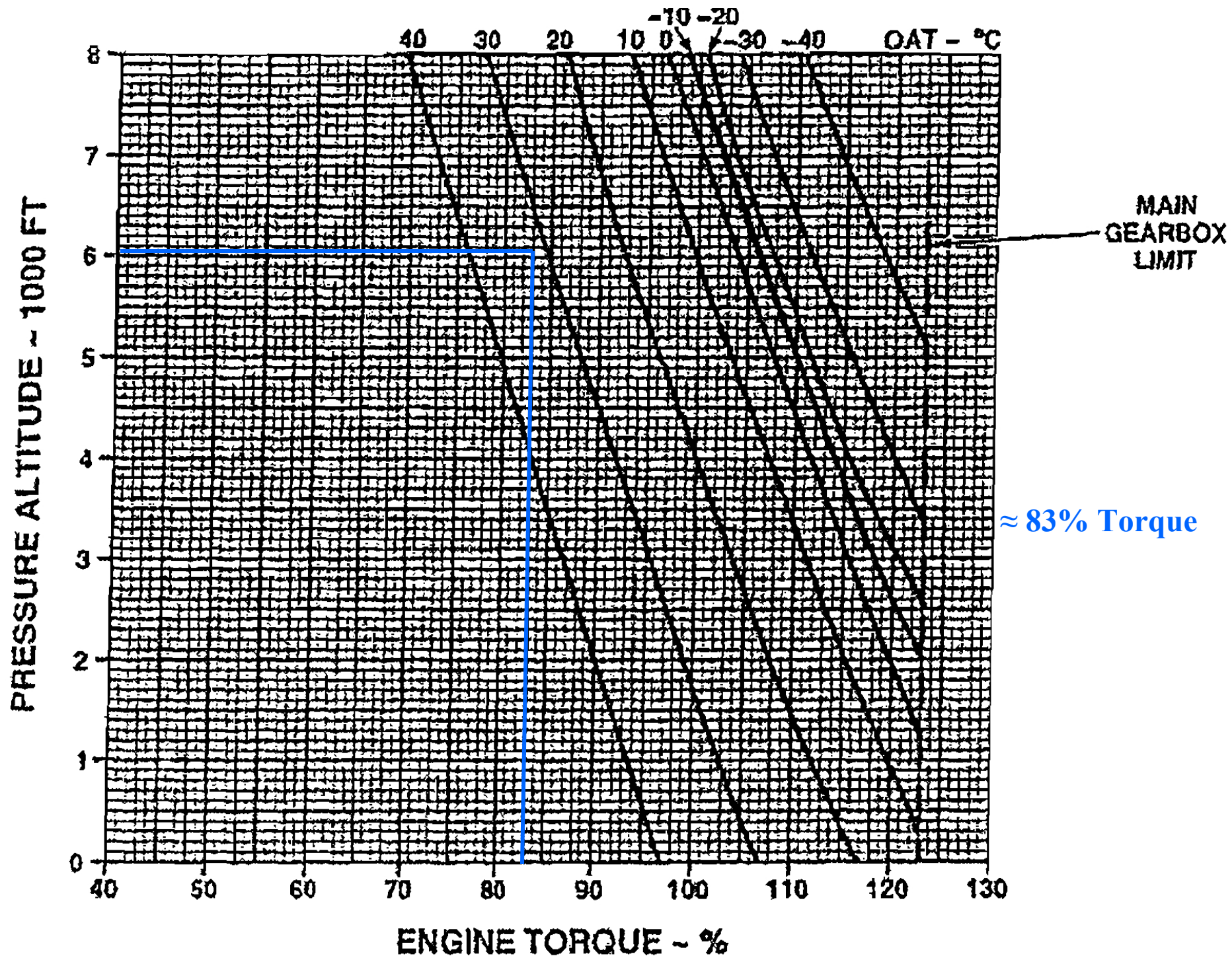
CHSI PROVIDED

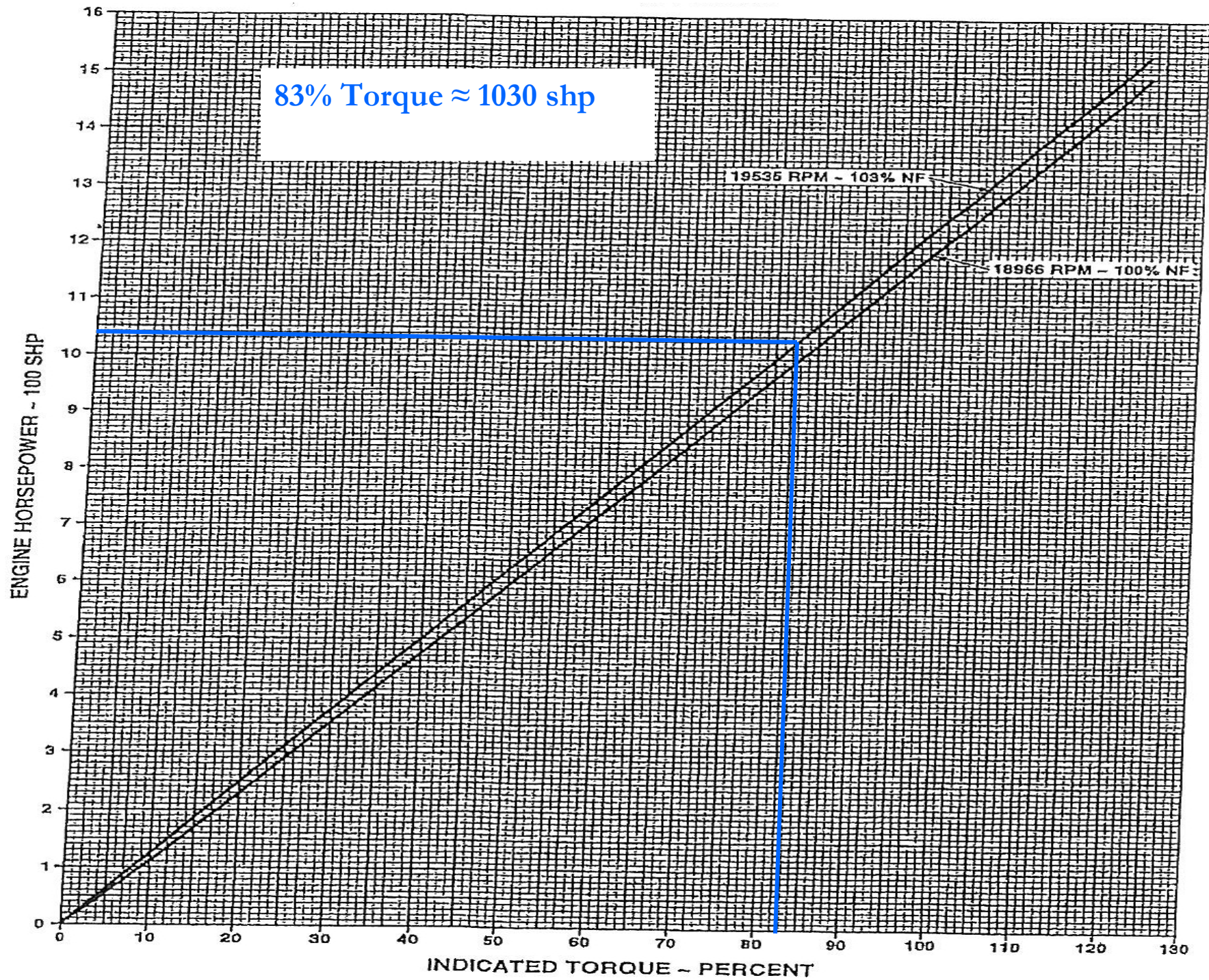
Supplement 8

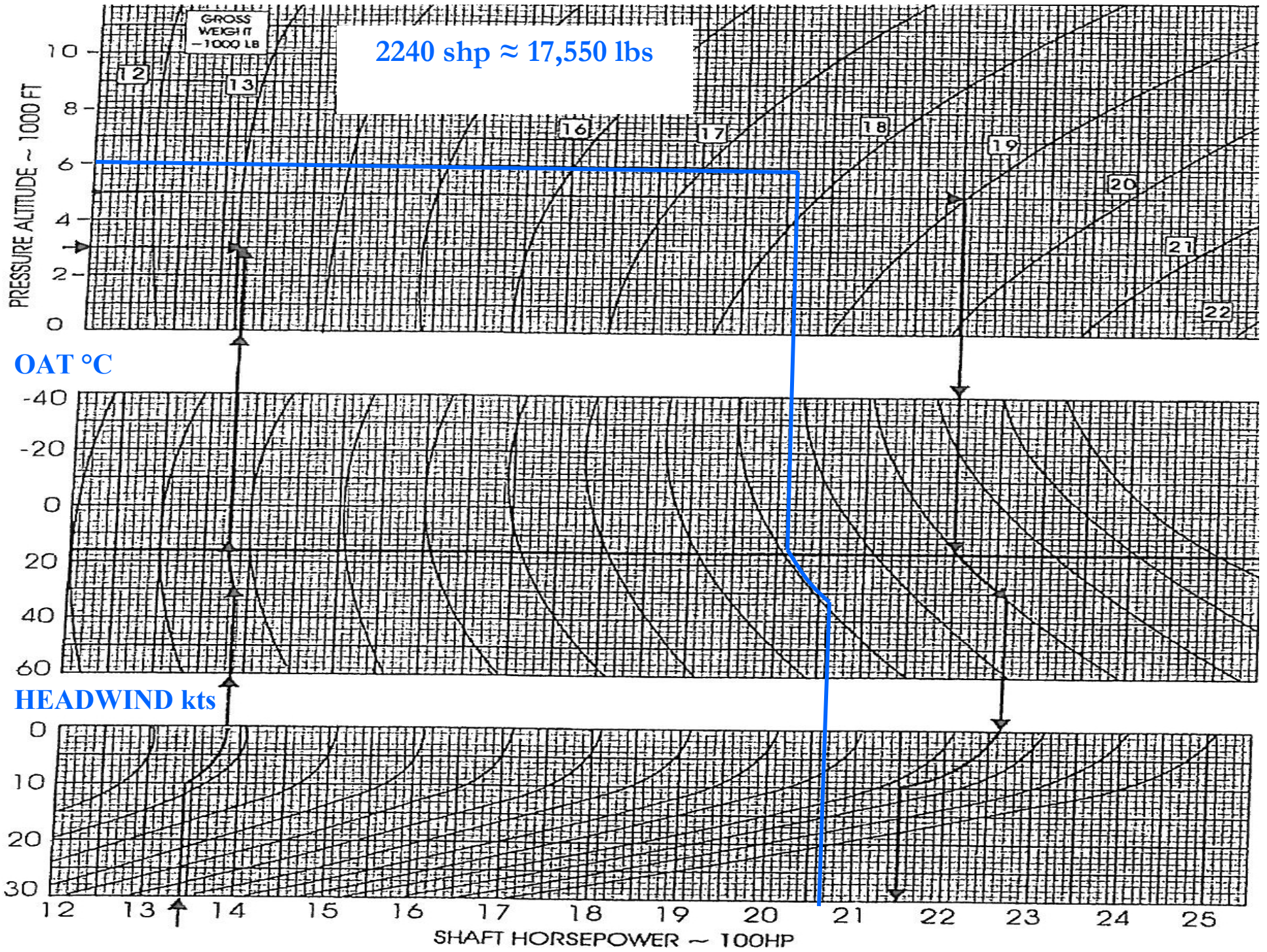
Pressure Altitude: 6,000 feet

Temperature: 32 °C

(predicted conditions)





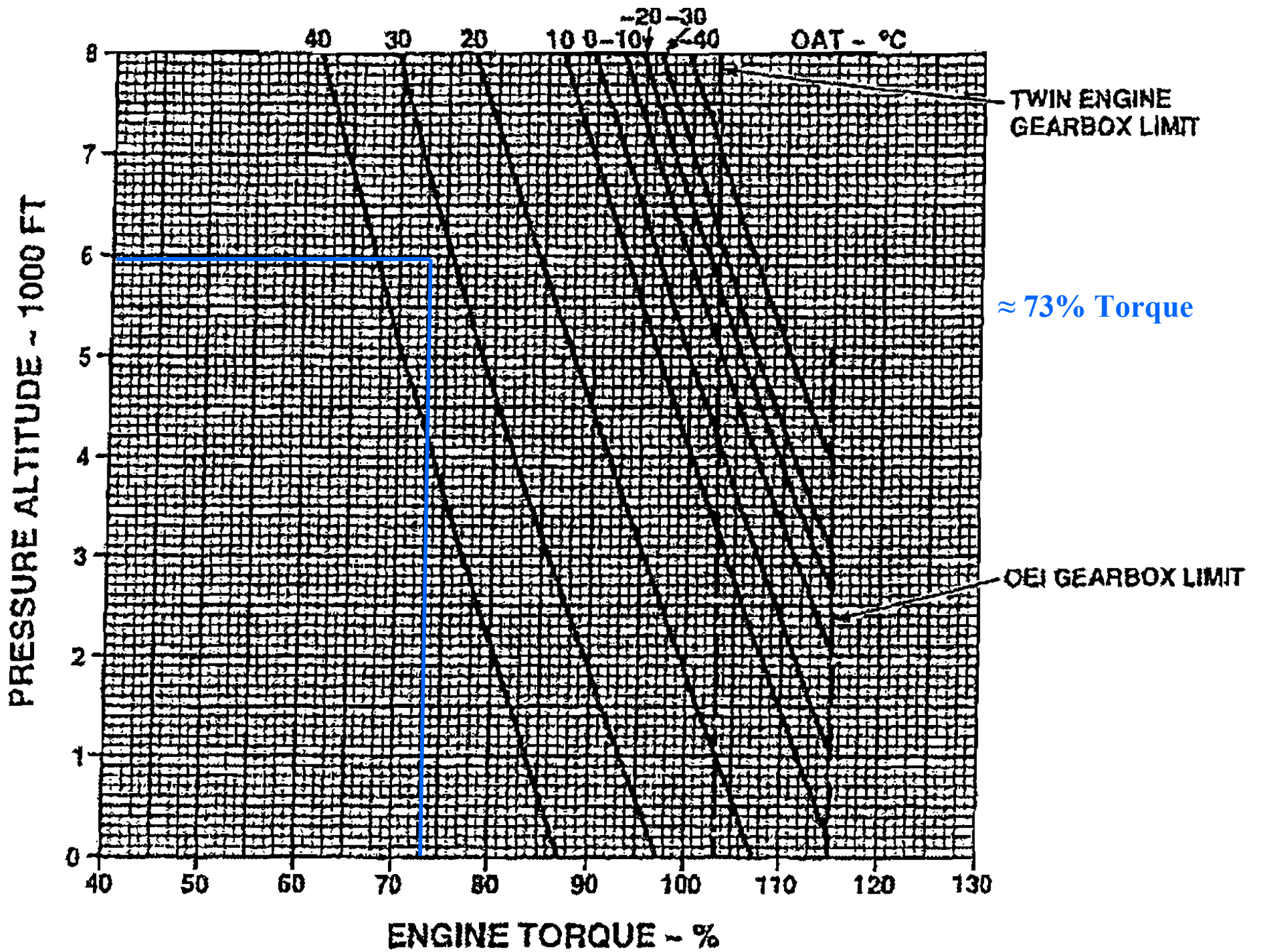


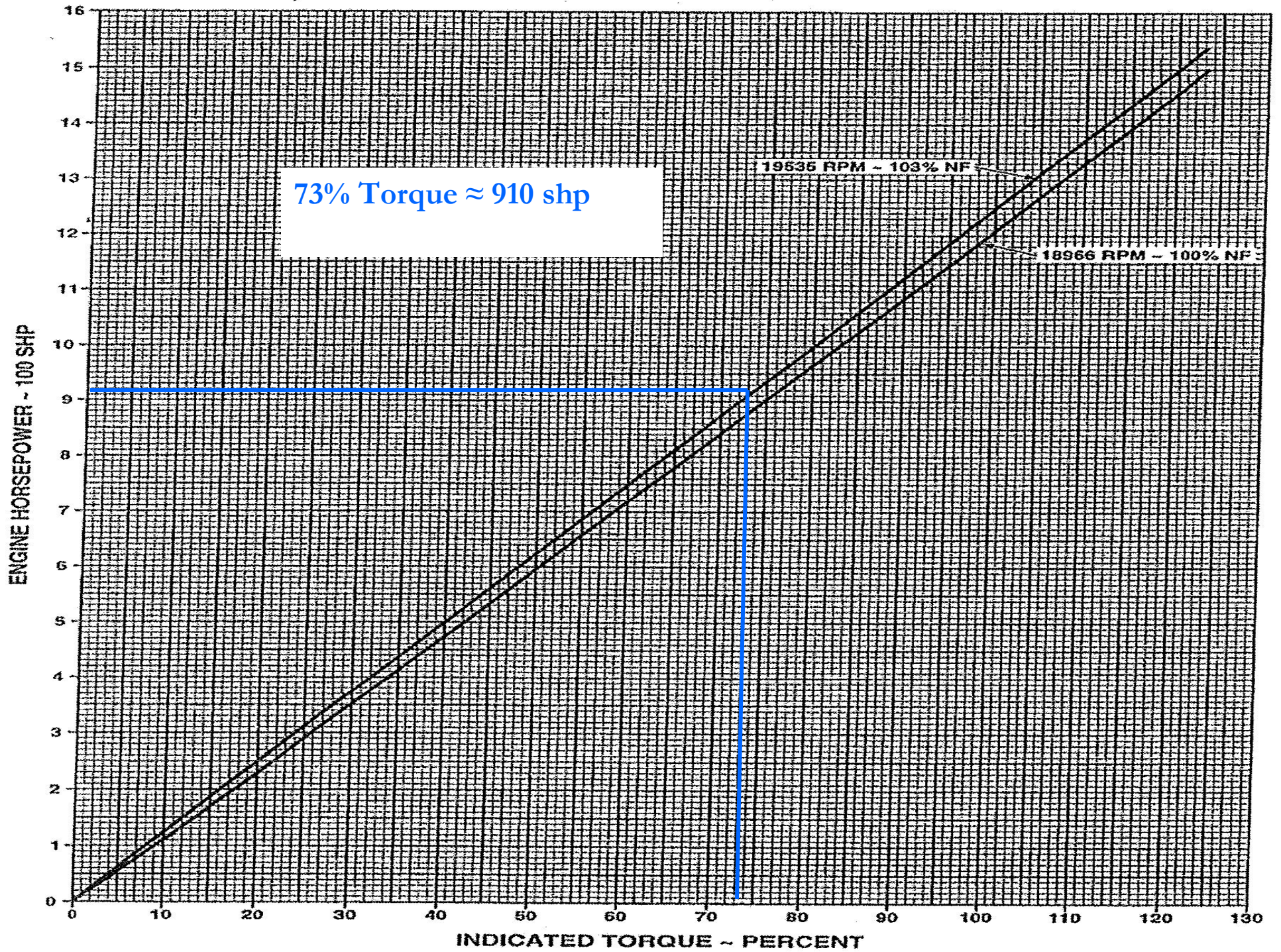
FAA PROVIDED

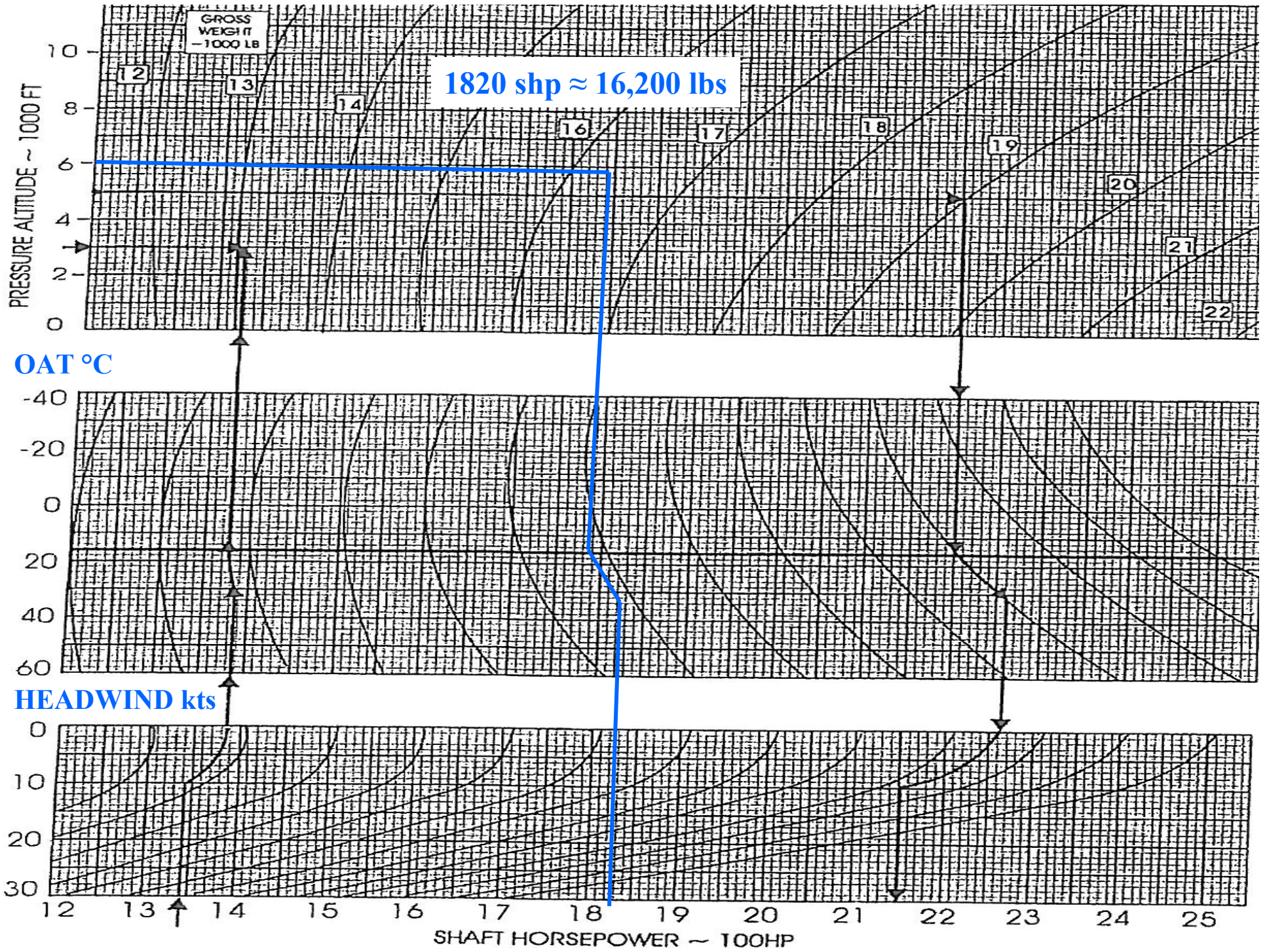
Supplement 8

Pressure Altitude: 6,000 feet

Temperature: 32 °C







GROSS WEIGHT - 1000 LB

1820 shp ≈ 16,200 lbs

PRESSURE ALTITUDE ~ 1000 FT

OAT °C

HEADWIND kts

SHAFT HORSEPOWER ~ 100HP

PREDICTED CONDITIONS

Pressure Altitude	6000 ft
OAT	32 °C
Empty Weight	13,851
Crew (pilot and co-pilot)	440
Fuel	2,400
Operating Weight	16,691

Performance Reference	Carson HOGE	FAA HOGE
1 Computed Maximum Gross Weight (obtained from RFMS 8; Fig. 4, 5, 7)	18,400	16,200
# Gross Weight Limitation (obtained from RFMS 7; Fig.7-1-2)	17,800	17,800
# Selected Weight (lowest of 3 or 4)	17,800	16,200
# Operating Weight (see above)	16,691	16,691
# Allowable Payload (5 subtracted by 6)	1,109	-491
# PIC Calculated Payload (calculated payload including checkpilot)	2,552	2,552

Maximum Gross Weight Margin	-1,443	-3,043
-----------------------------	--------	--------

FAA PROVIDED

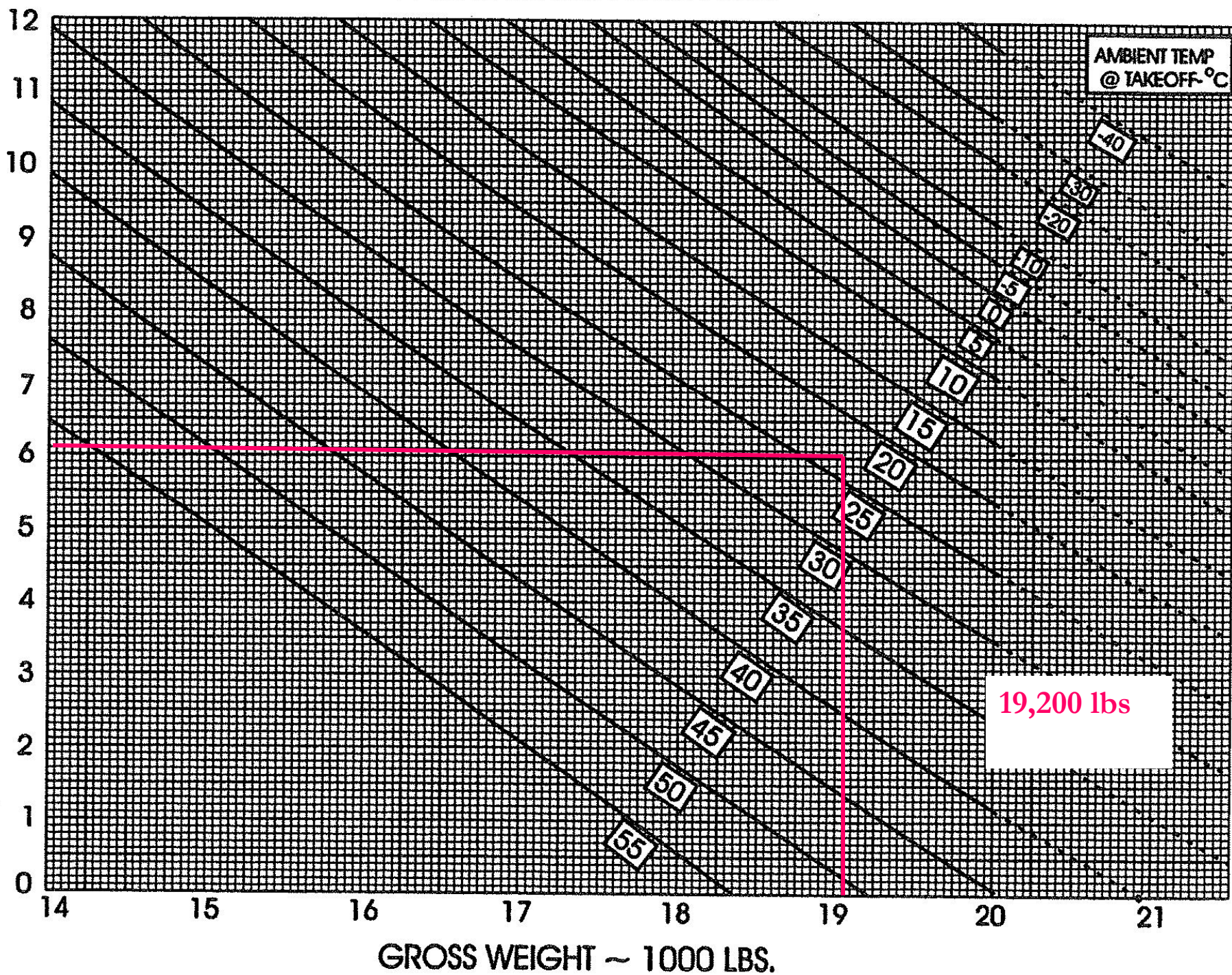
Supplement 7

Pressure Altitude: 6,106 feet

Temperature: 23 °C

(actual conditions)

PRESSURE ALTITUDE ~ 1000 FT.



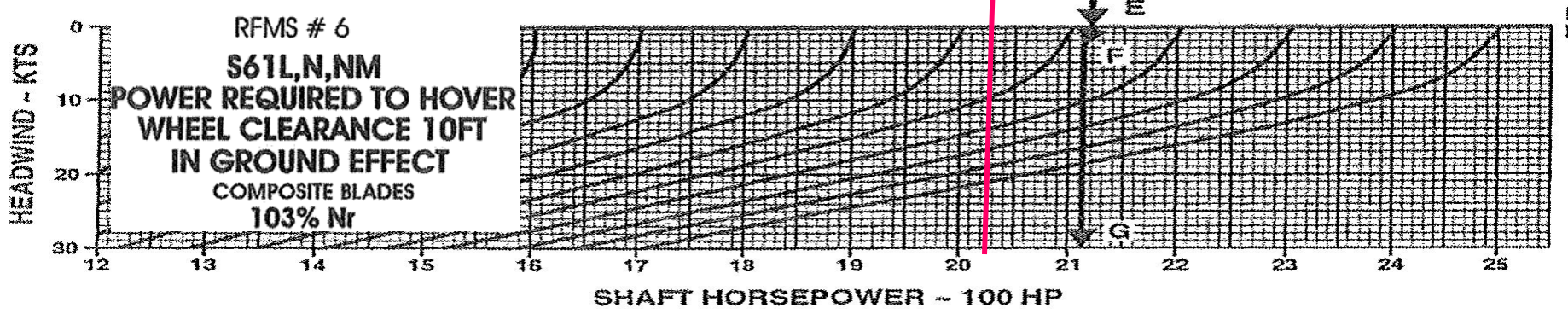
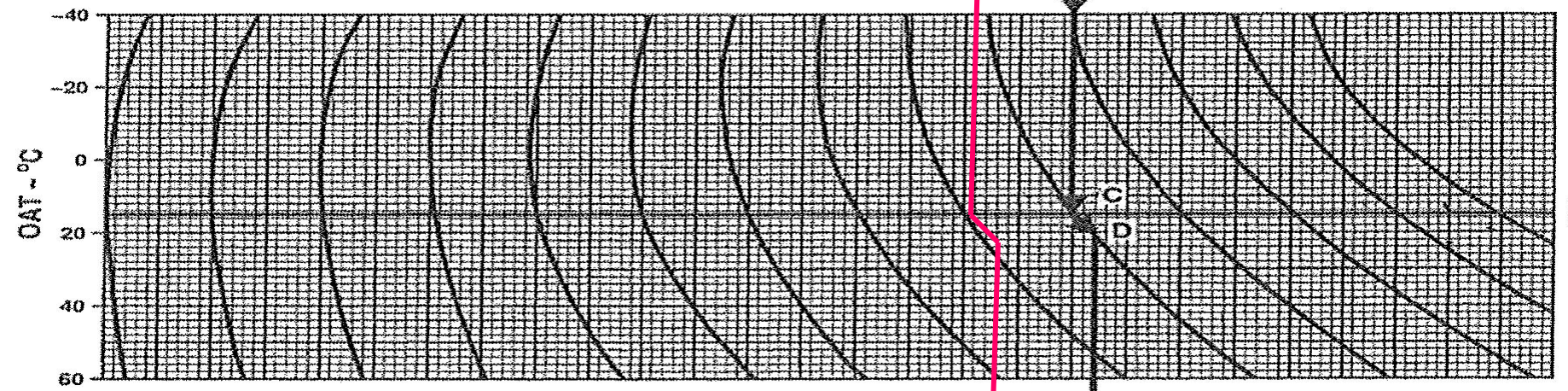
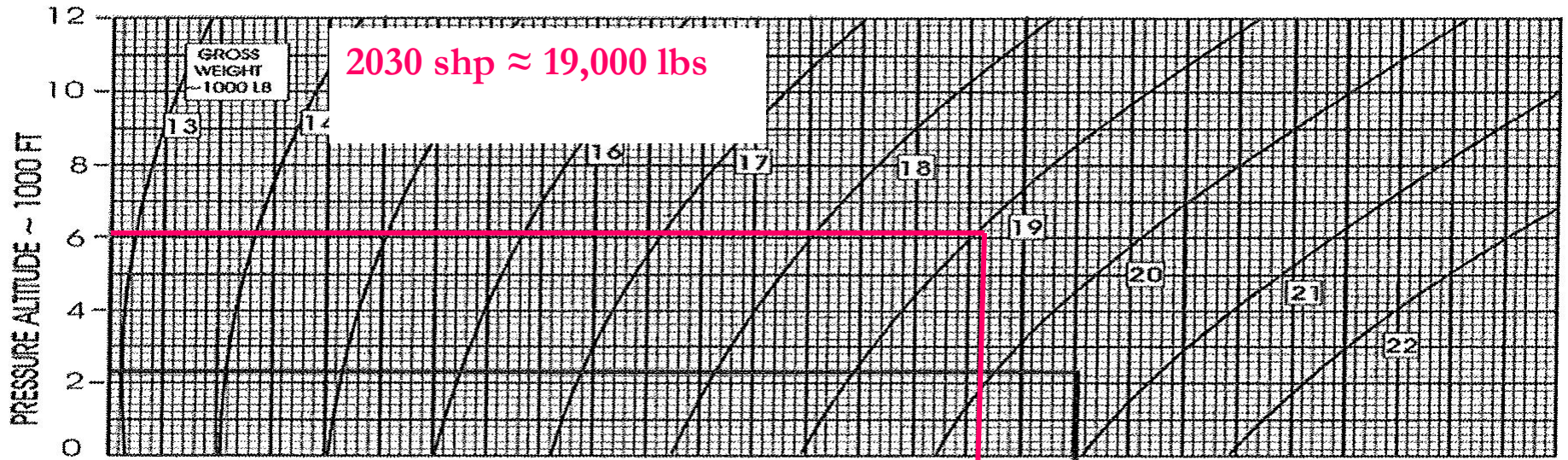
FAA PROVIDED

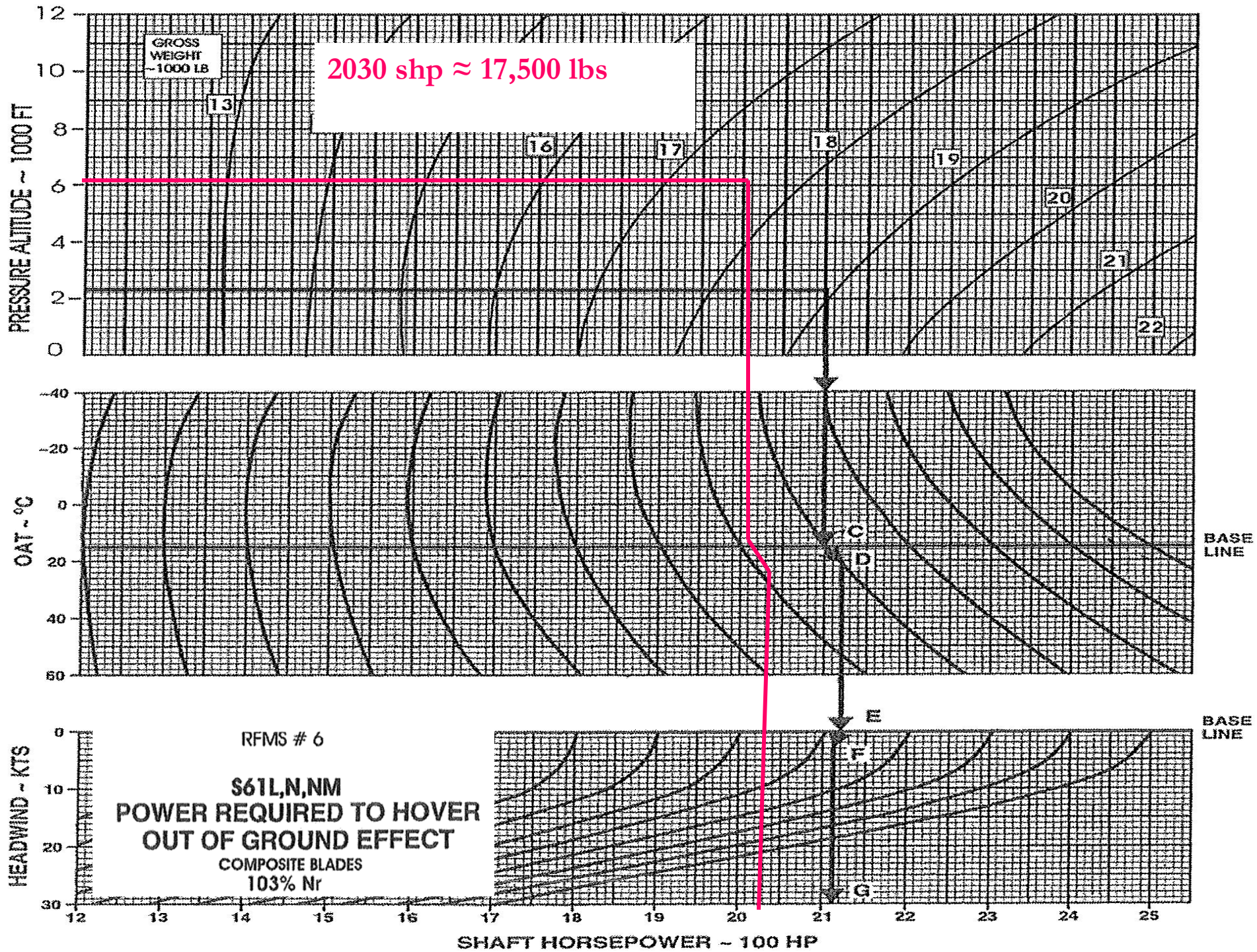
Supplement 6

Pressure Altitude: 6,106 feet

Temperature: 23 °C

(actual conditions)



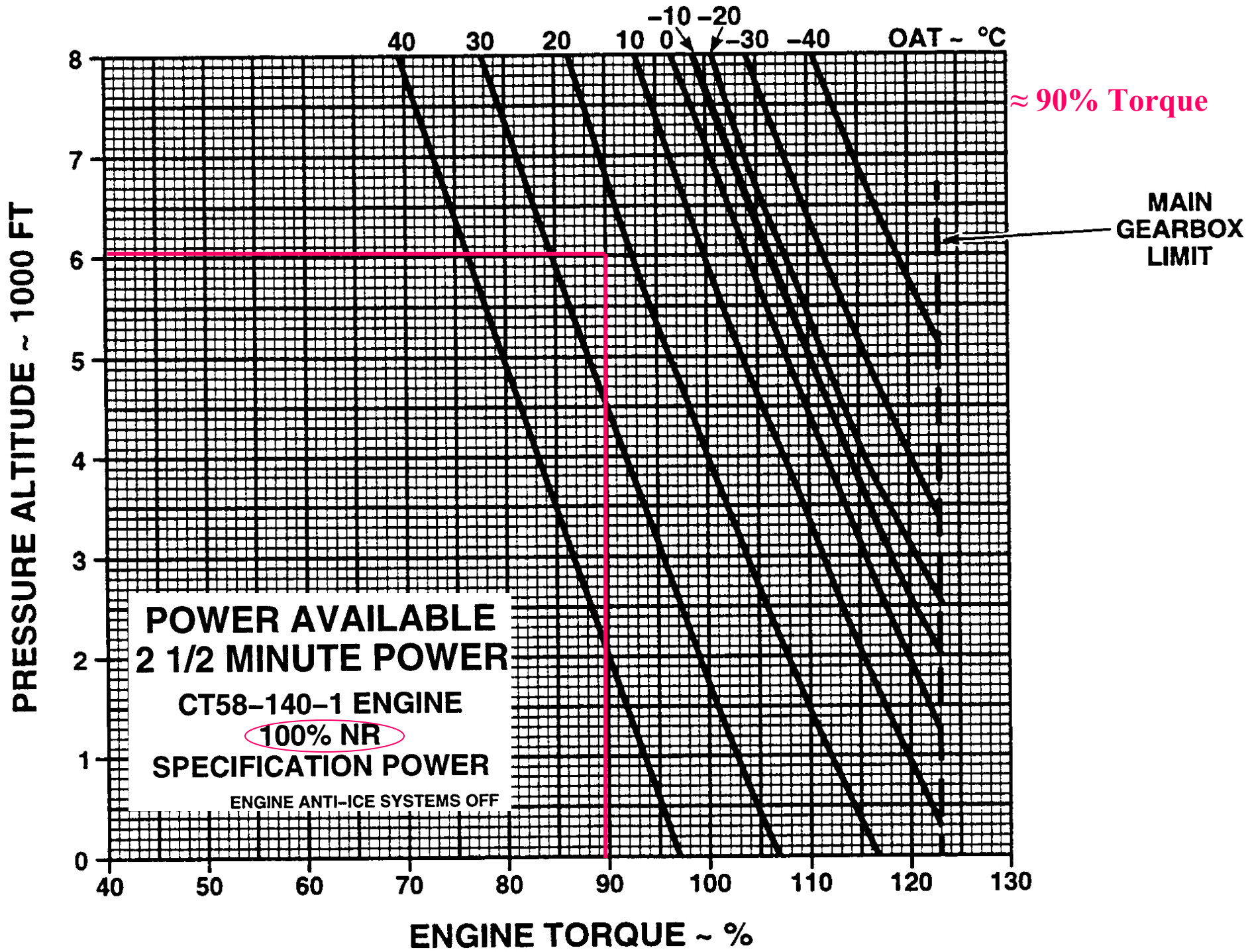


SIKORSKY ORIGINAL CHARTS

Pressure Altitude: 6,106 feet

Temperature: 23 °C

(actual conditions)



**POWER AVAILABLE
2 1/2 MINUTE POWER
CT58-140-1 ENGINE
100% NR
SPECIFICATION POWER
ENGINE ANTI-ICE SYSTEMS OFF**

~ 90% Torque

MAIN GEARBOX LIMIT

PRESSURE ALTITUDE ~ 1000 FT

ENGINE TORQUE ~ %

OAT - °C

40 30 20 10 0 -10 -20 -30 -40

