

5.7 PERFORMANCE GRAPHS

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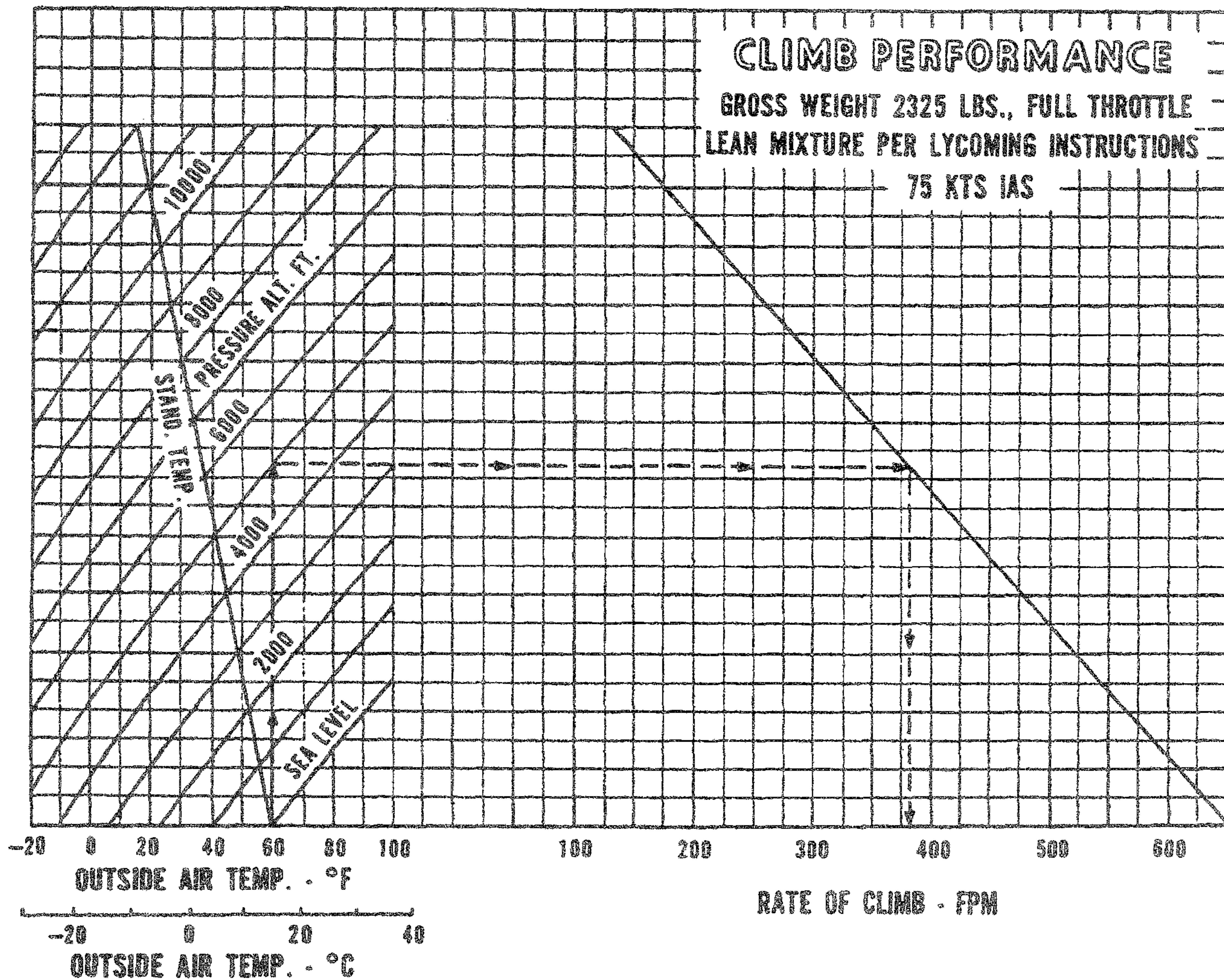
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Example:

Climb pressure altitude: 5000 ft.

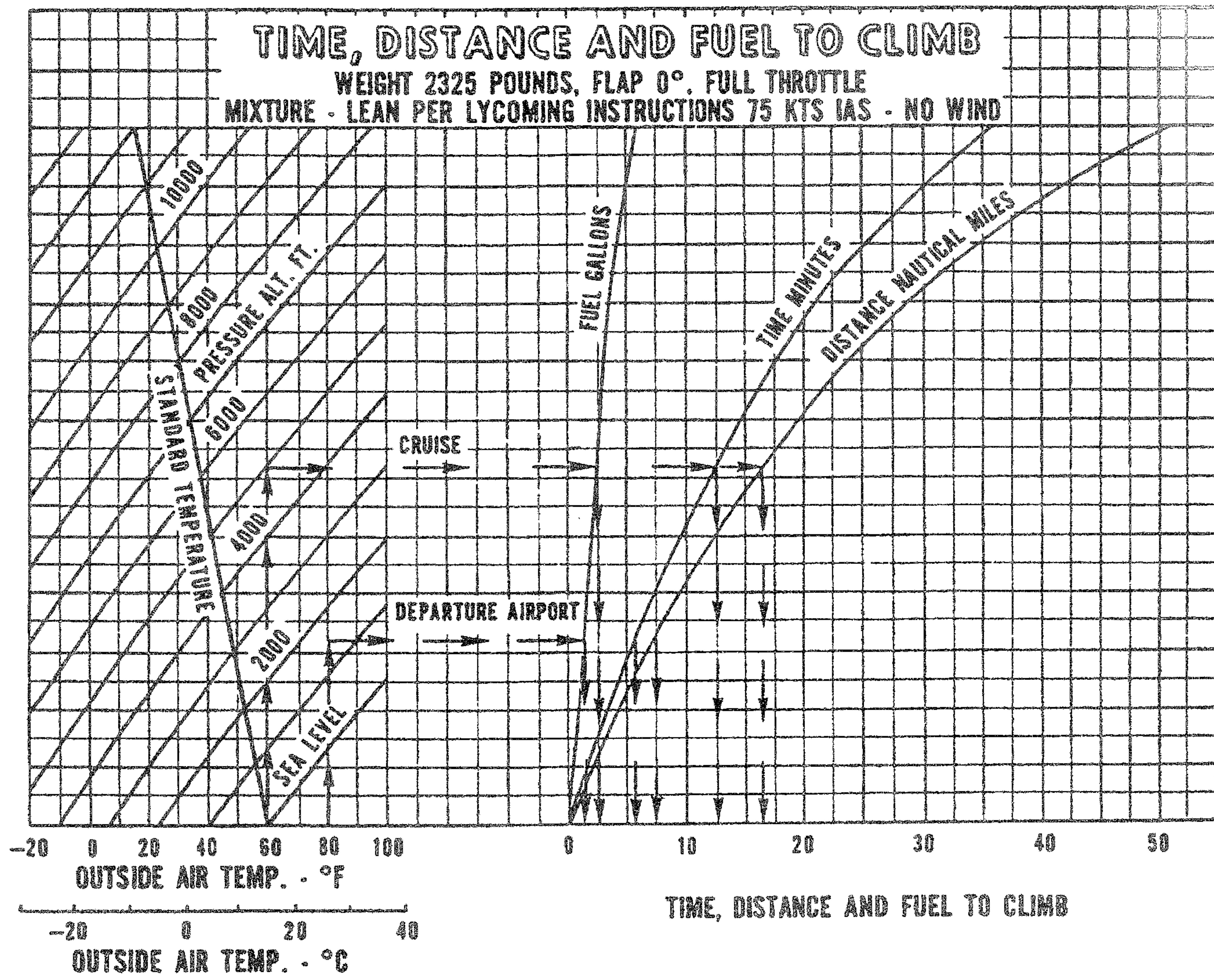
Climb OAT: 60°F

Rate of climb: 380 ft./min.

CLIMB PERFORMANCE

Figure 5-11

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Example:

Departure airport pressure altitude: 1500 ft.

Departure airport temperature: 80°F

Cruise pressure altitude: 5000 ft.

Cruise OAT: 60°F

Time to climb (12.5 min. minus 5.5 min.): 7 min.

Distance to climb (16.5 miles minus 7.5 miles): 9 nautical miles

Fuel to climb (2.5 gal. minus 1.5 gal.): 1 gal.

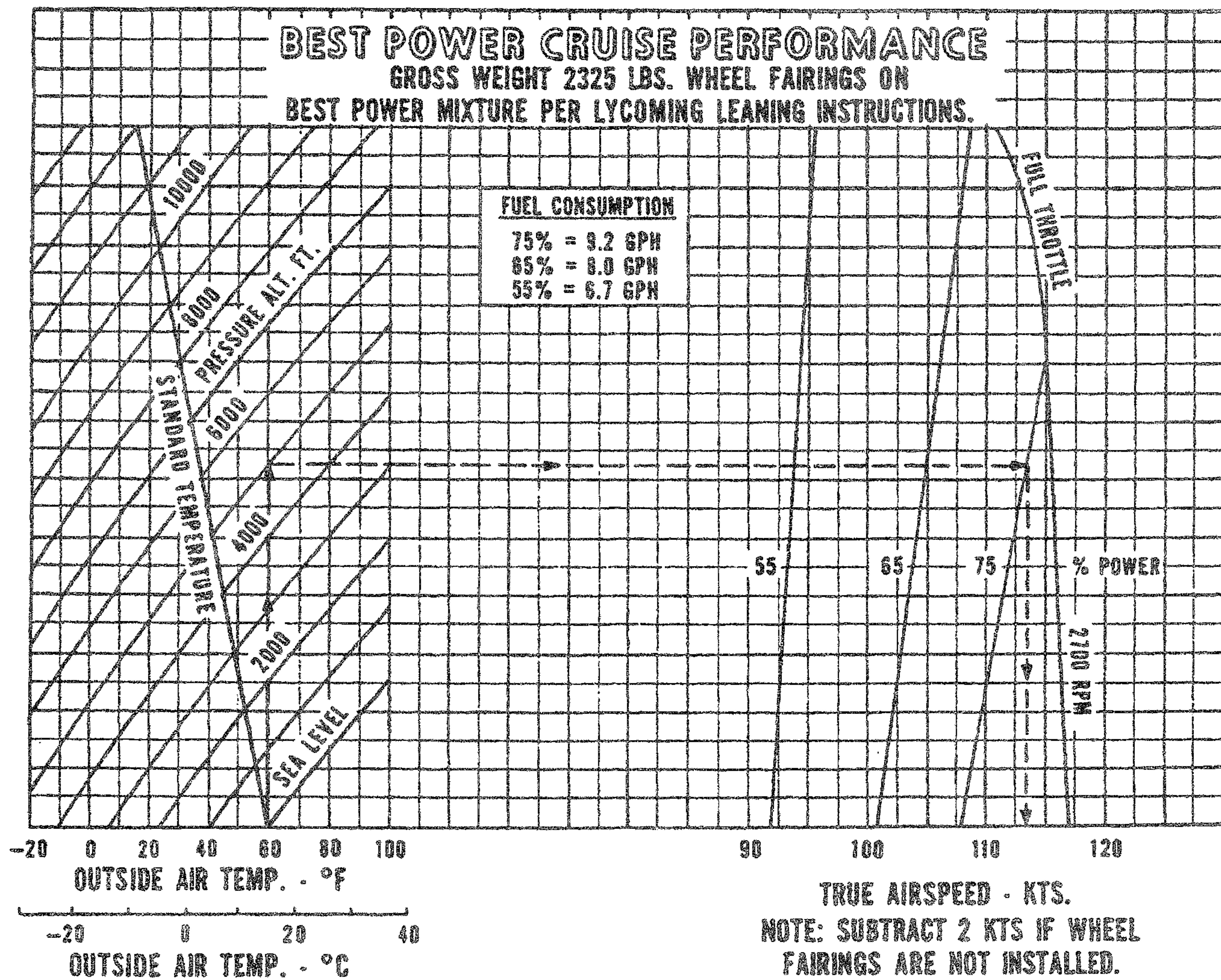
TIME, DISTANCE AND FUEL TO CLIMB

Figure 5-13

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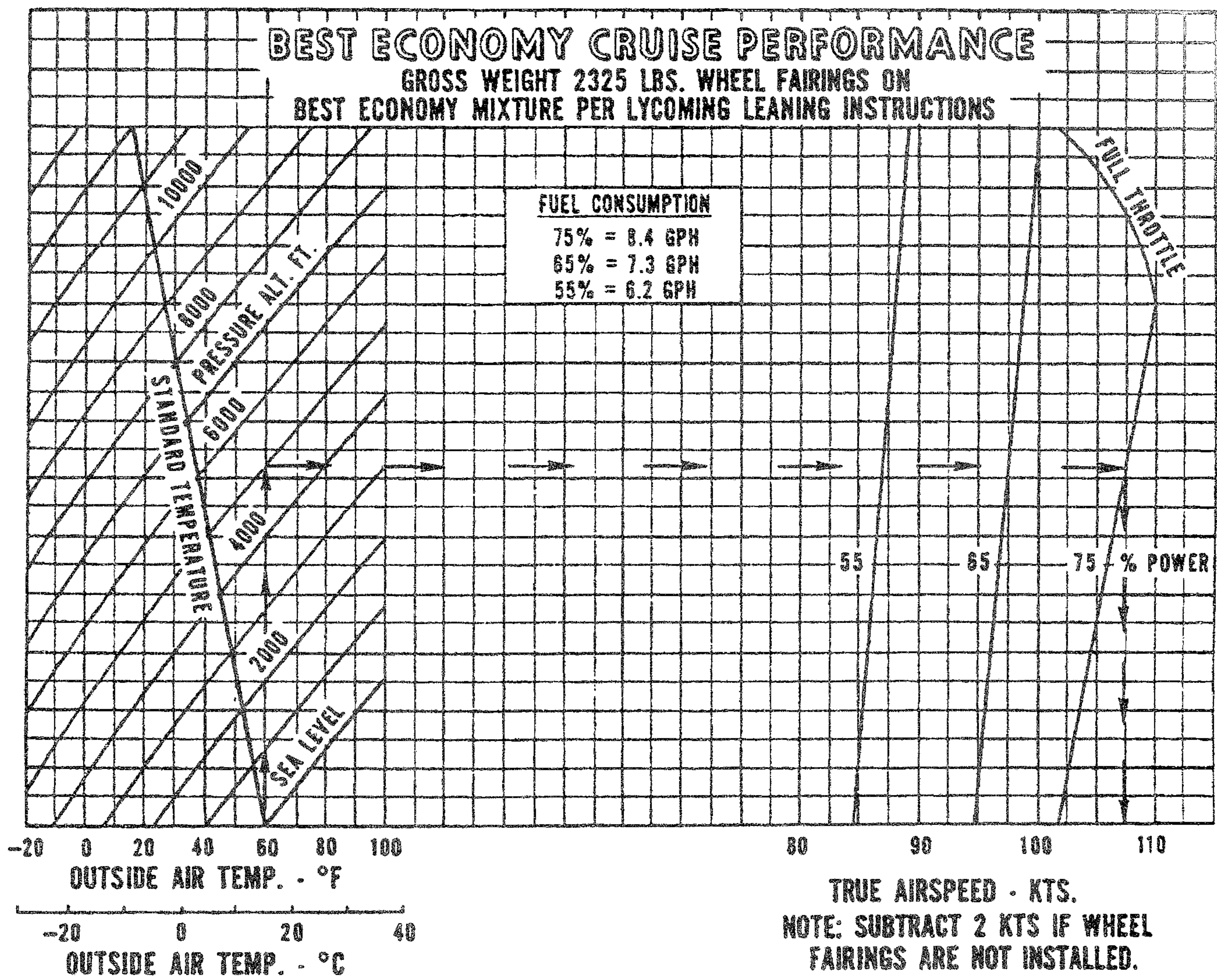
Example:

Cruise pressure altitude: 5000 ft.
Cruise OAT: 60°F
Cruise power: 75%, Best Power Mixture
Cruise speed: 113 KTS TAS

BEST POWER CRUISE PERFORMANCE

Figure 5-15

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Example:

Cruise pressure altitude: 5000 ft.
Cruise OAT: 60°F
Cruise power: 75%, Best Economy Mixture
Cruise speed: 107 KTS TAS

BEST ECONOMY CRUISE PERFORMANCE

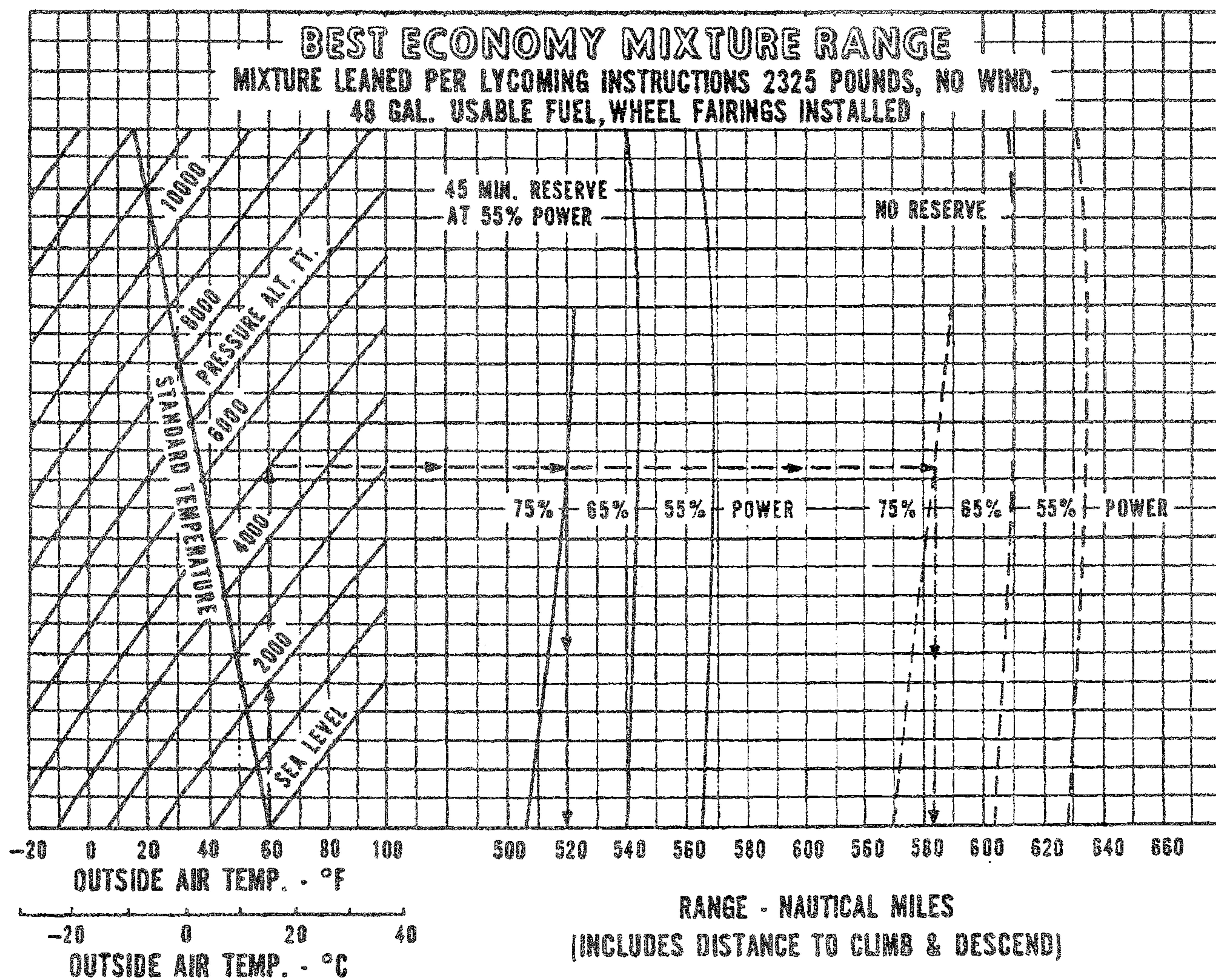
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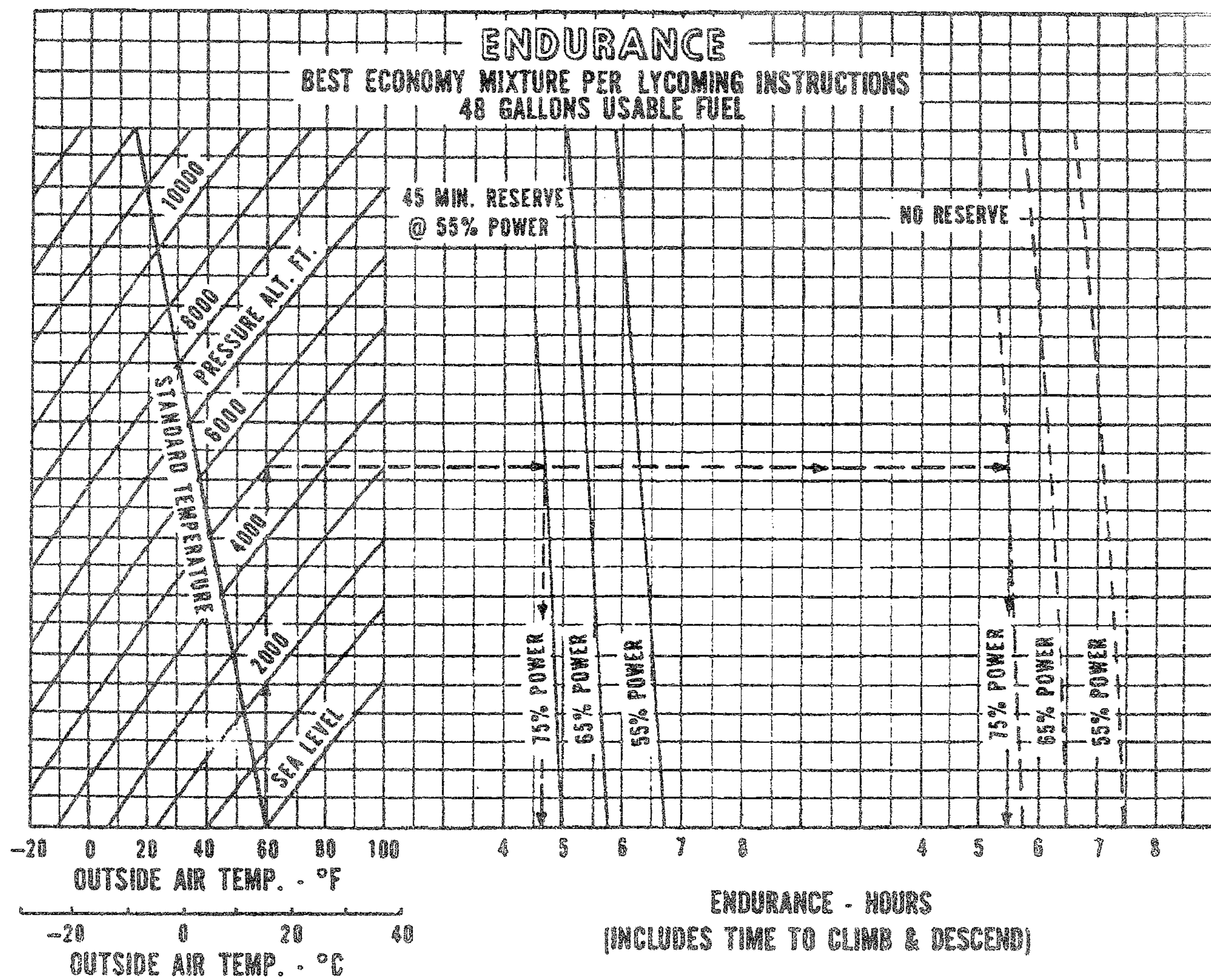
Example:

Cruise pressure altitude: 5000 ft.
Cruise OAT: 60°F
Cruise power: 75%, Best Economy Mixture
Range with 45 min. reserve at 55% power: 520 nautical miles
Range with no reserve: 583 nautical miles

BEST ECONOMY MIXTURE RANGE

Figure 5-19

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Example:

Cruise pressure altitude: 5000 ft.

Cruise OAT: 60°F

Cruise power: 75%, Best Economy Mixture

Endurance with 45 min. reserve at 55% power: 4.7 hrs.

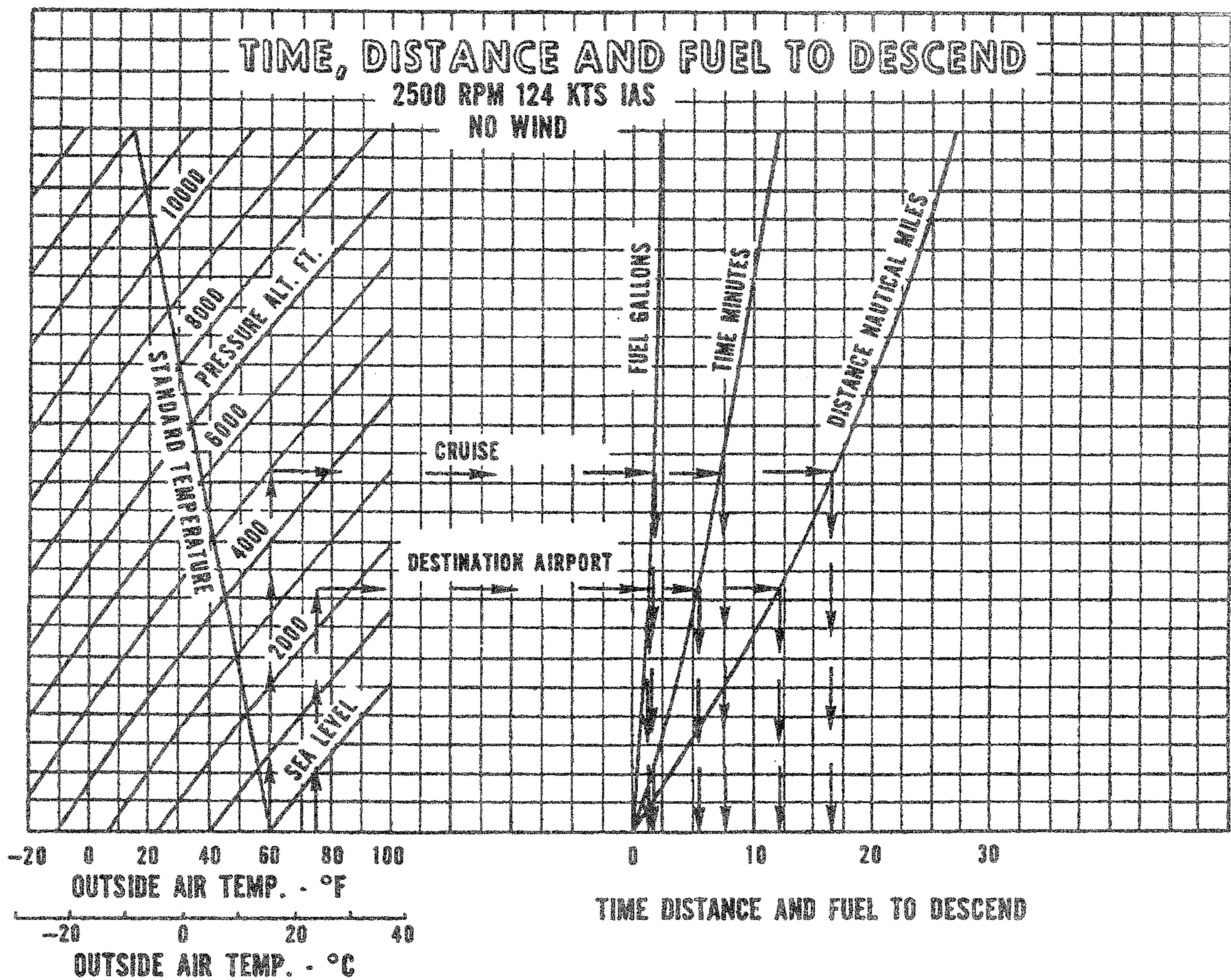
Endurance with no reserve: 5.5 hrs.

ENDURANCE

Figure 5-21

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Example:

Destination airport pressure altitude: 2500 ft.

Destination airport temperature: 75°F

Cruise pressure altitude: 5000 ft.

Cruise OAT: 60°F

Time to descend (7.5 min. minus 5.5 min.): 2 min.

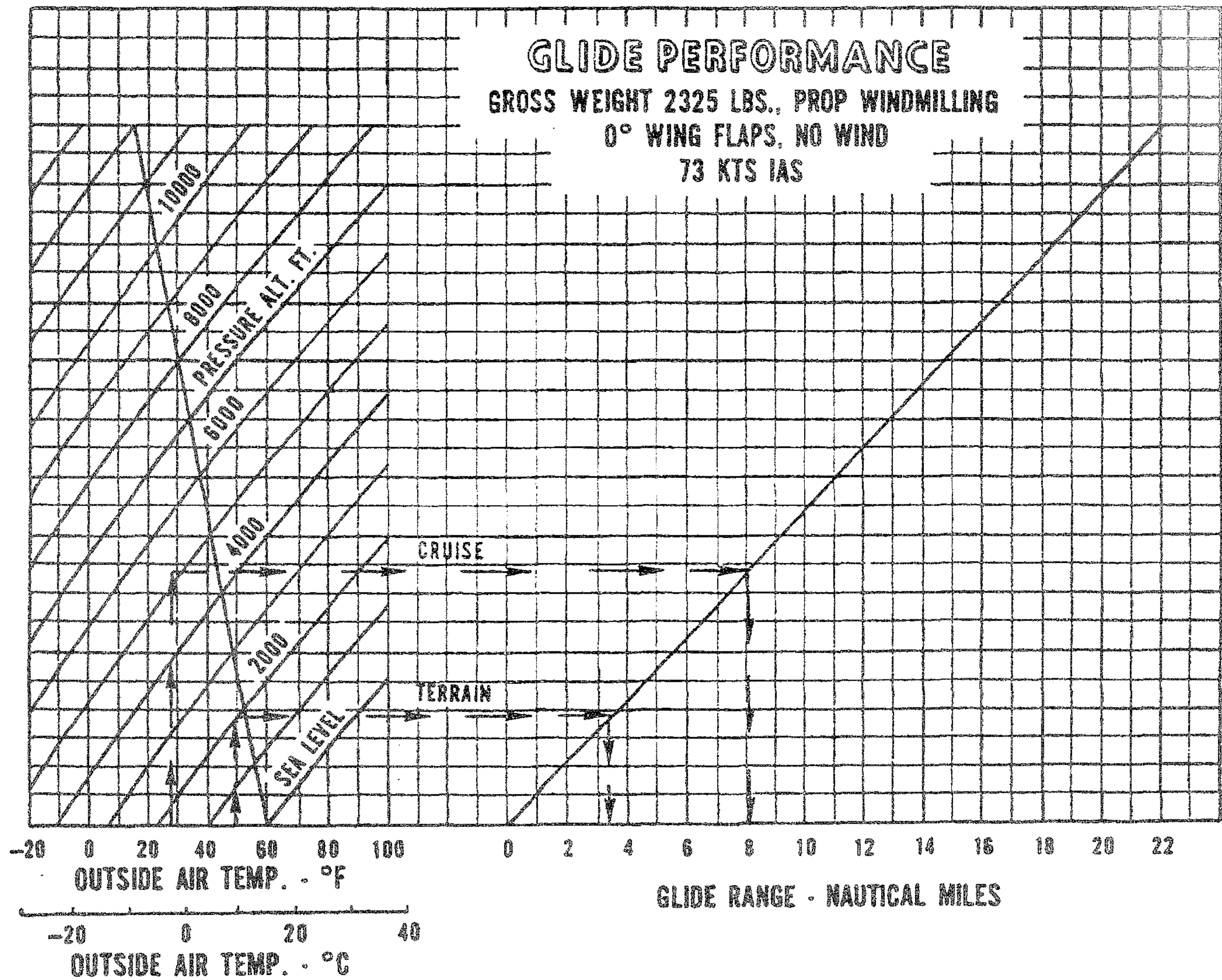
Distance to descend (17 miles minus 12 miles): 5 nautical miles

Fuel to descend (1.5 gal. minus 1 gal.): .5 gal.

TIME, DISTANCE AND FUEL TO DESCEND

Figure 5-23

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Example:

Cruise pressure altitude: 5000 ft.

Cruise OAT: 28°F

Terrain pressure altitude: 2000 ft.

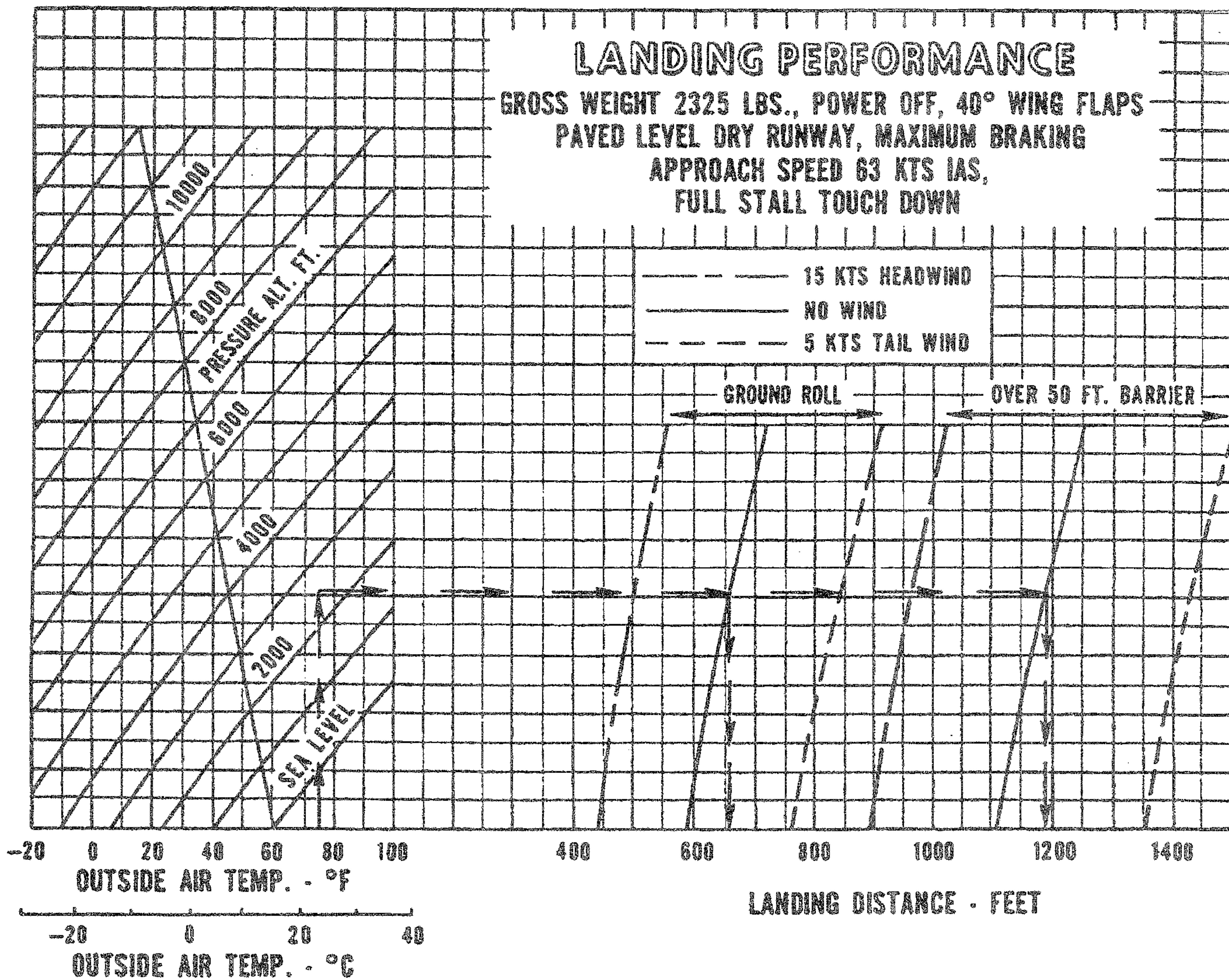
Temperature at terrain: 50°F

Glide distance (8 miles minus 3.5 miles): 4.5 nautical miles

GLIDE PERFORMANCE

Figure 5-25

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Example:

Destination airport pressure altitude: 2500 ft.
Destination airport temperature: 75°F
Destination airport wind: 0 KTS
Ground roll: 660 ft.
Distance over 50 ft. barrier: 1190 ft.

LANDING PERFORMANCE

Figure 5-27