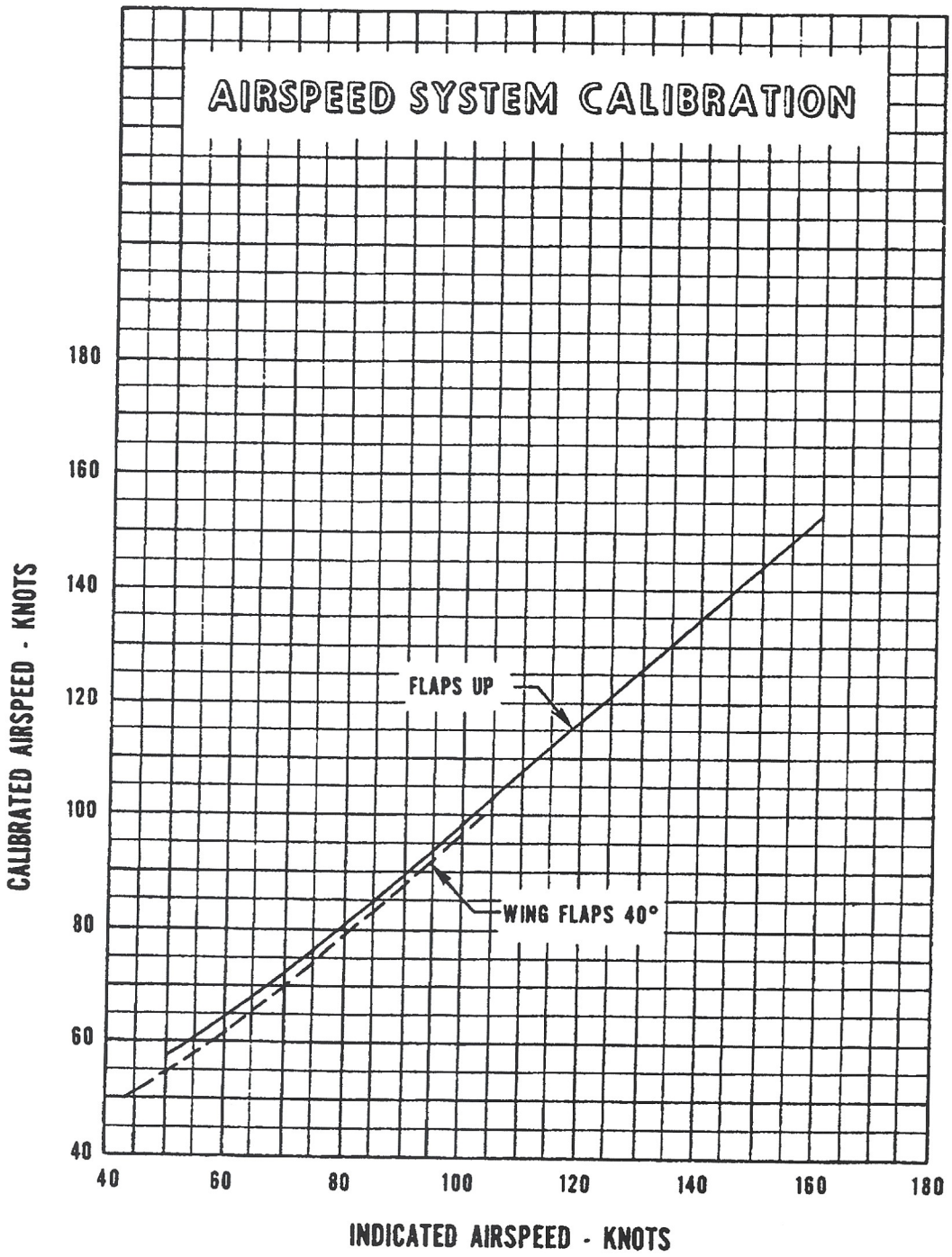
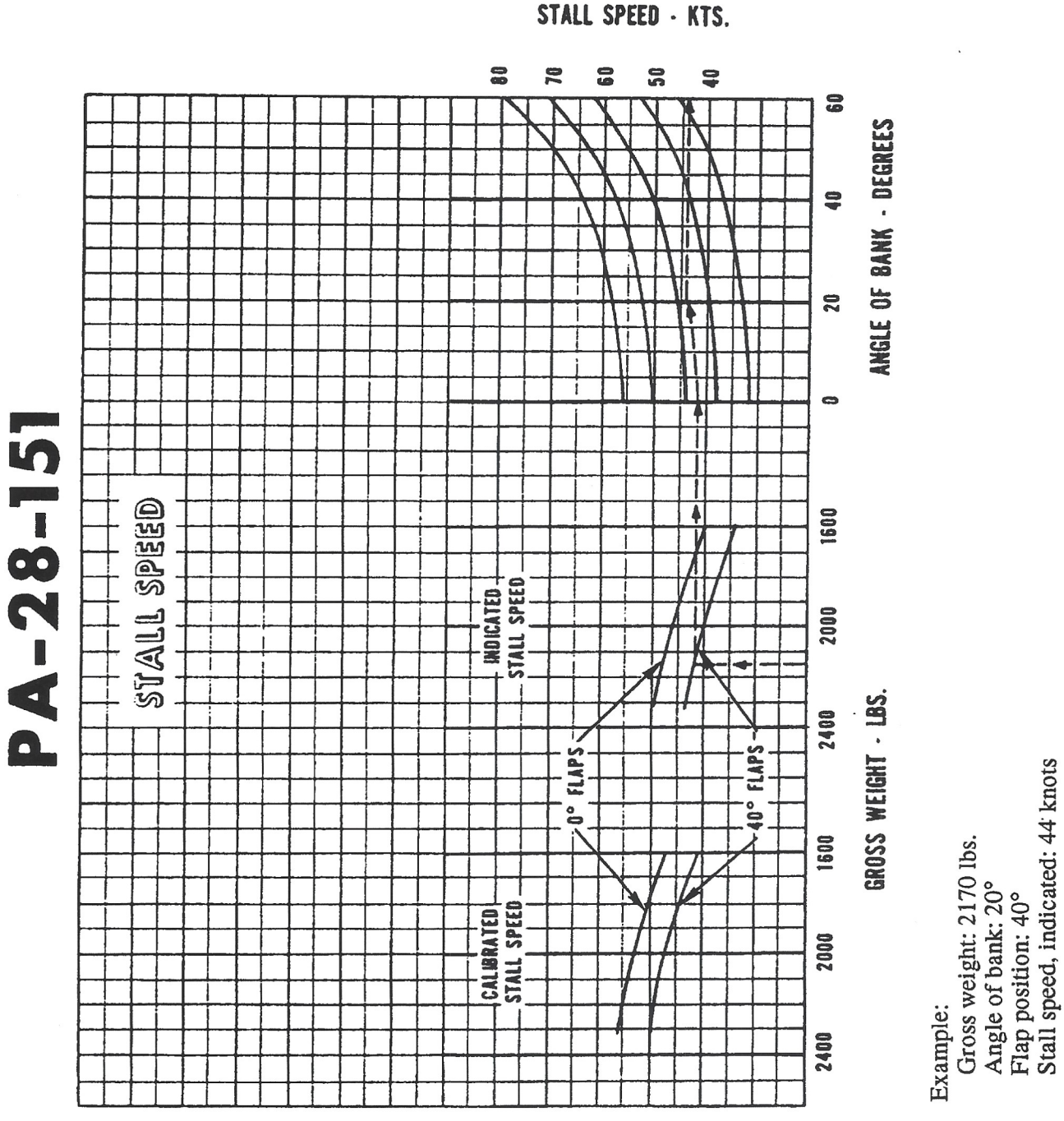
PA-28-151



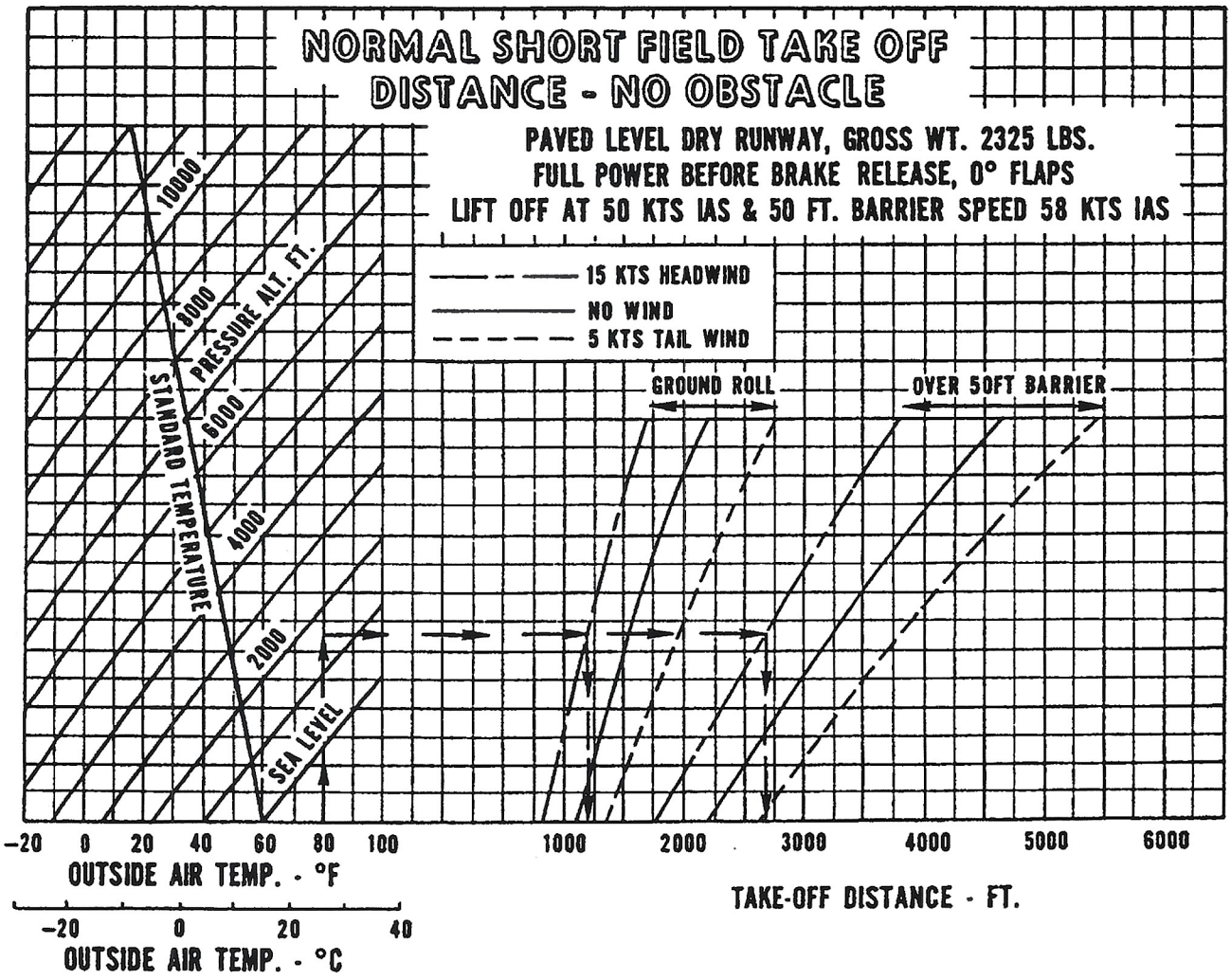
AIRSPEED SYSTEM CALIBRATION

Figure 5-1



STALL SPEED
Figure 5-3

PA-28-151

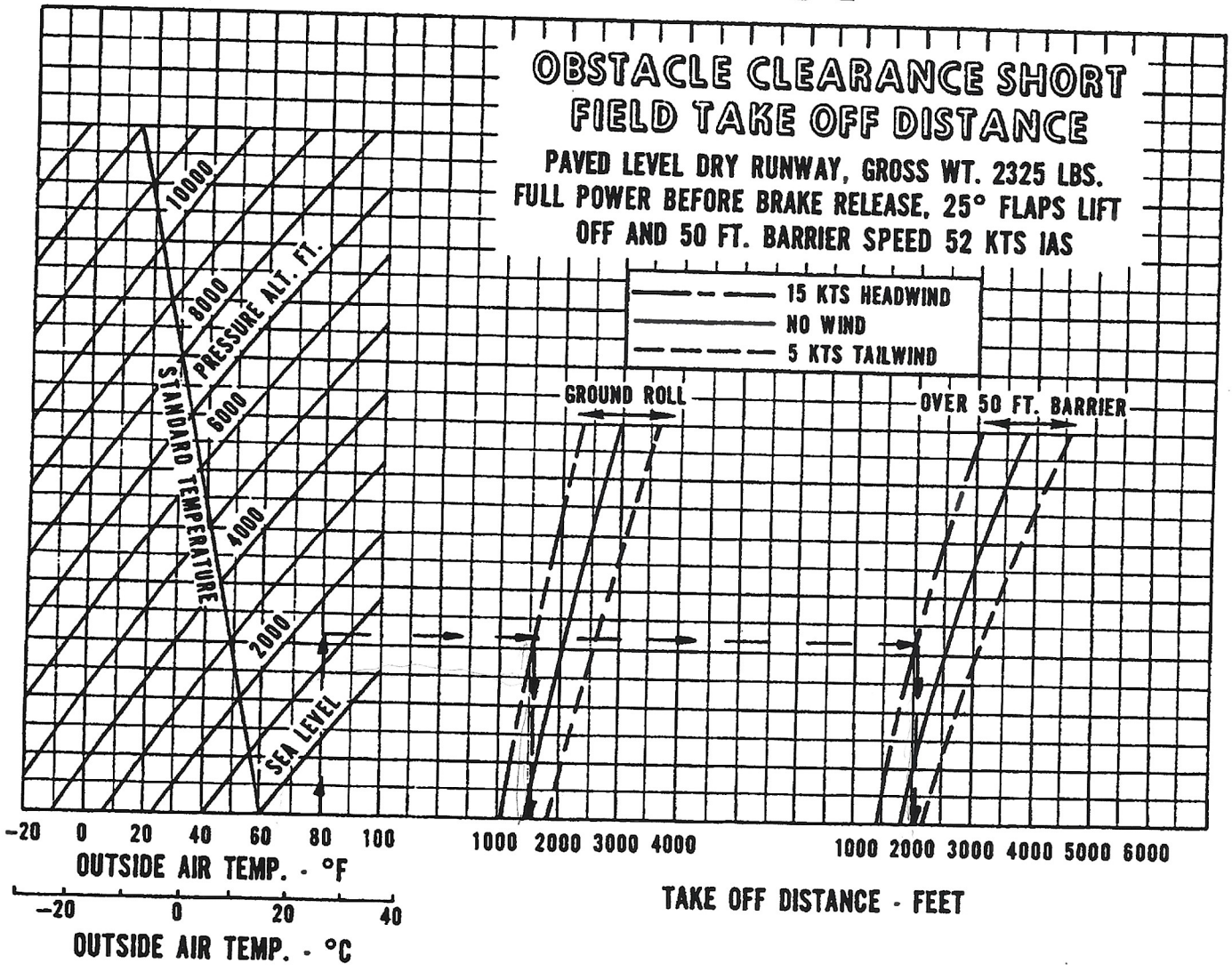


Example:
Departure airport pressure altitude: 1500 ft.
Departure airport temperature: 80°F
Wind: 15 KTS headwind
Ground roll: 1200 ft.
Distance over 50 ft. barrier: 2650 ft.

NORMAL SHORT FIELD TAKEOFF DISTANCE - NO OBSTACLE

Figure 5-5

PA-28-151



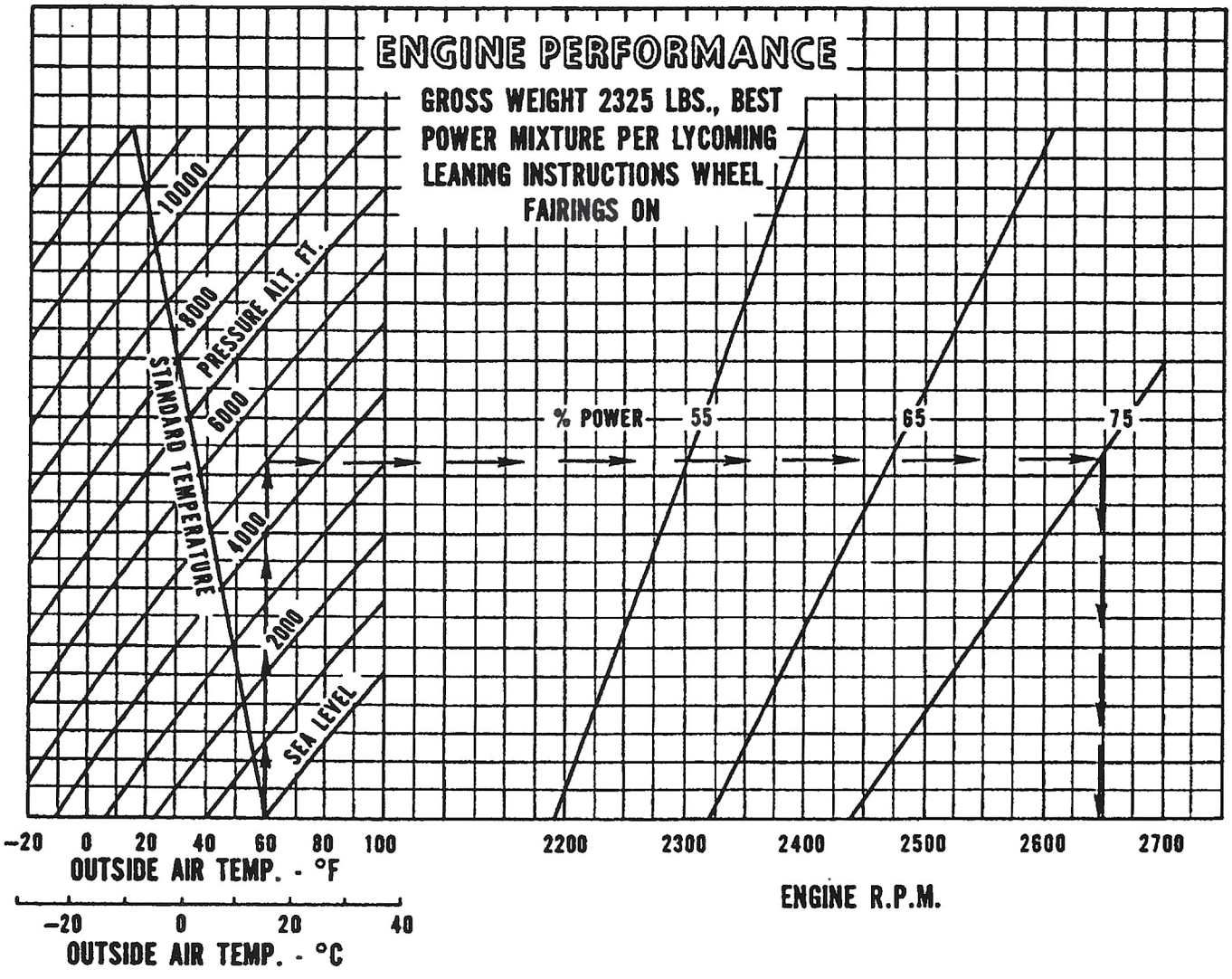
Example:

Departure airport pressure altitude: 1500 ft.
Departure airport temperature: 80°F
Wind: 15 KTS headwind
Ground roll: 1600 ft.
Distance over 50 ft. barrier: 2100 ft.

OBSTACLE CLEARANCE SHORT FIELD TAKEOFF DISTANCE

Figure 5-7

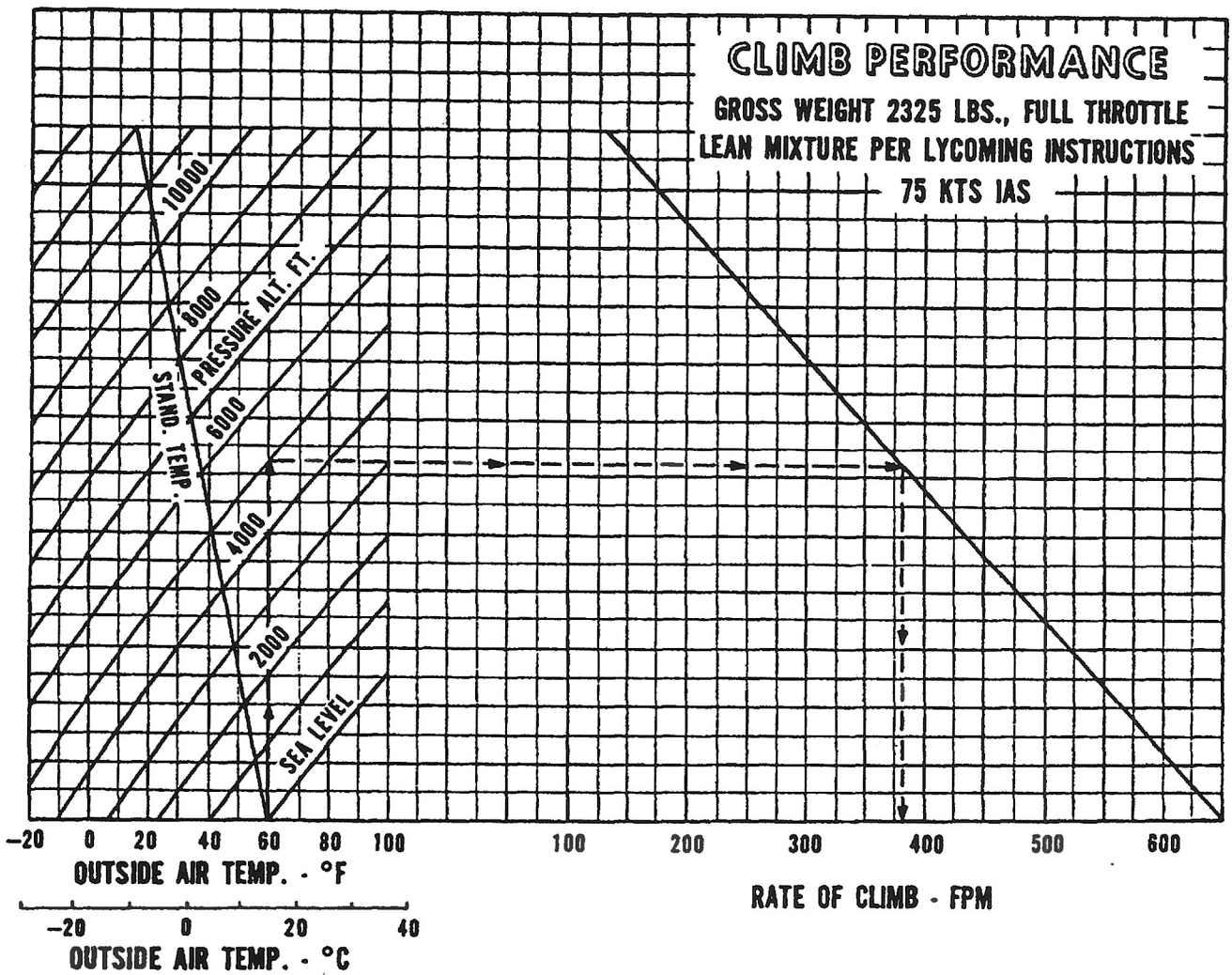
PA-28-151



Example:
Cruise pressure altitude: 5000 ft.
Cruise OAT: 60°F
Cruise power: 75%
Engine RPM: 2645

ENGINE PERFORMANCE
Figure 5-9

PA-28-151

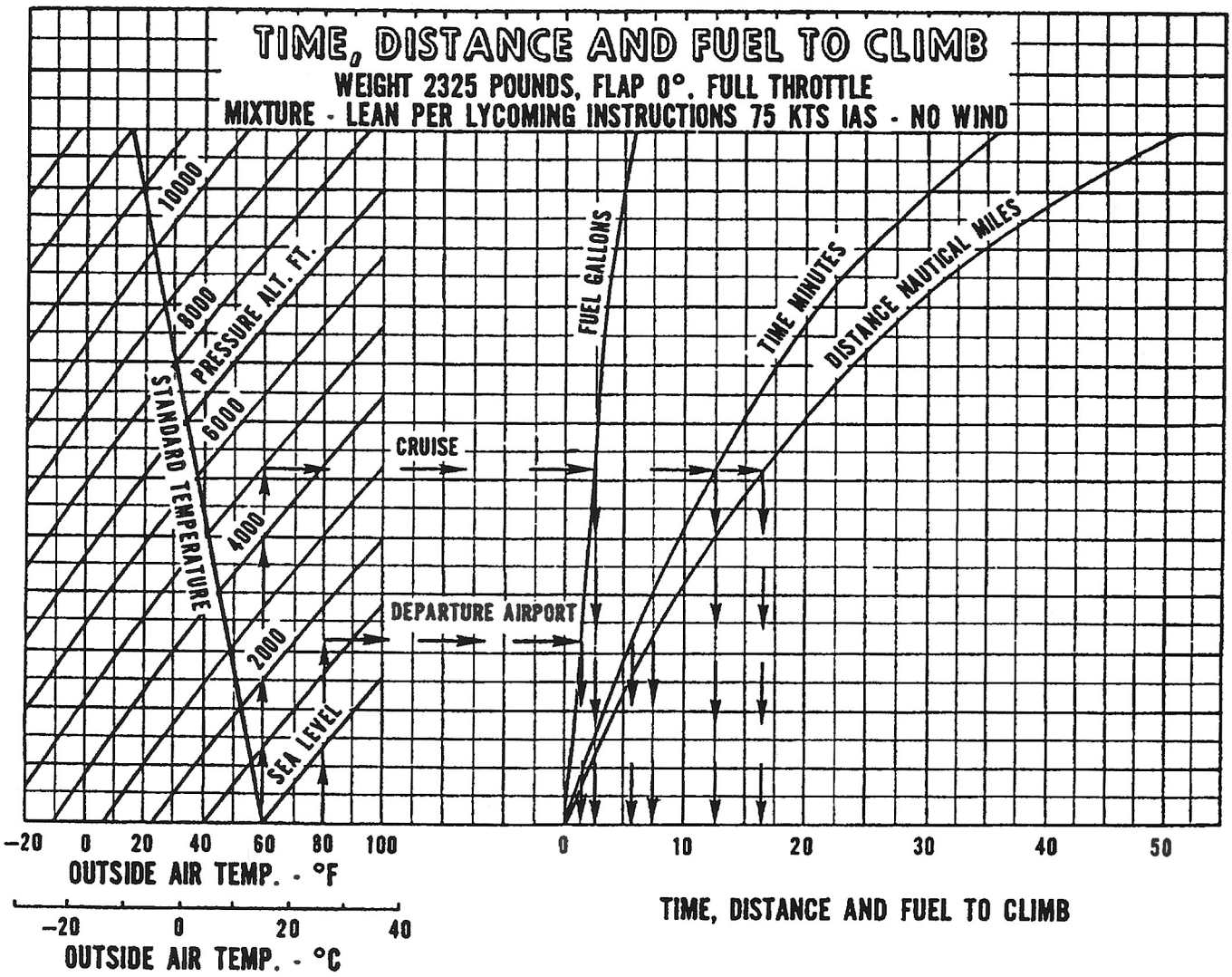


Example:
Climb pressure altitude: 5000 ft.
Climb OAT: 60°F
Rate of climb: 380 ft./min.

CLIMB PERFORMANCE

Figure 5-11

PA-28-151



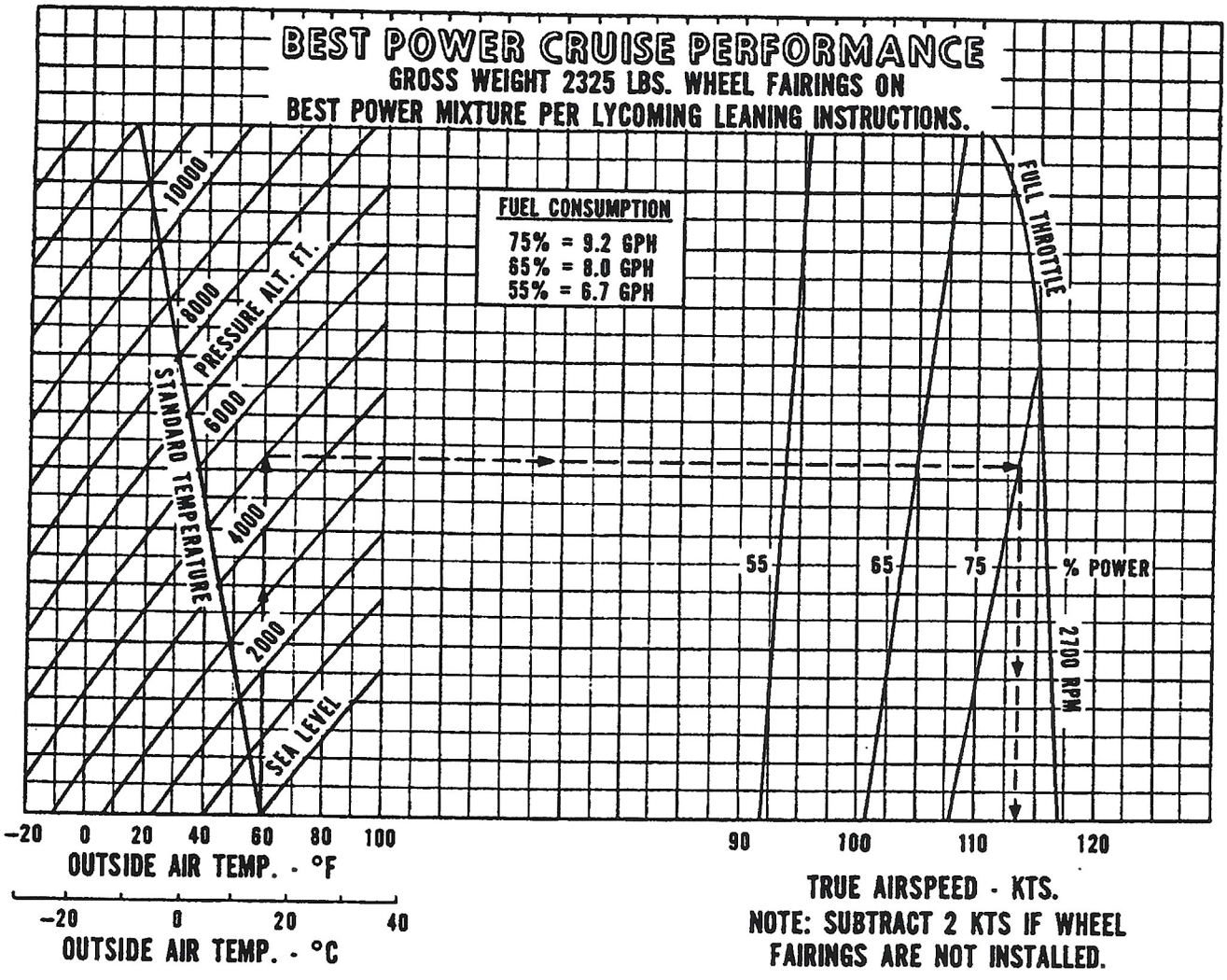
Example:

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

PA-28-151

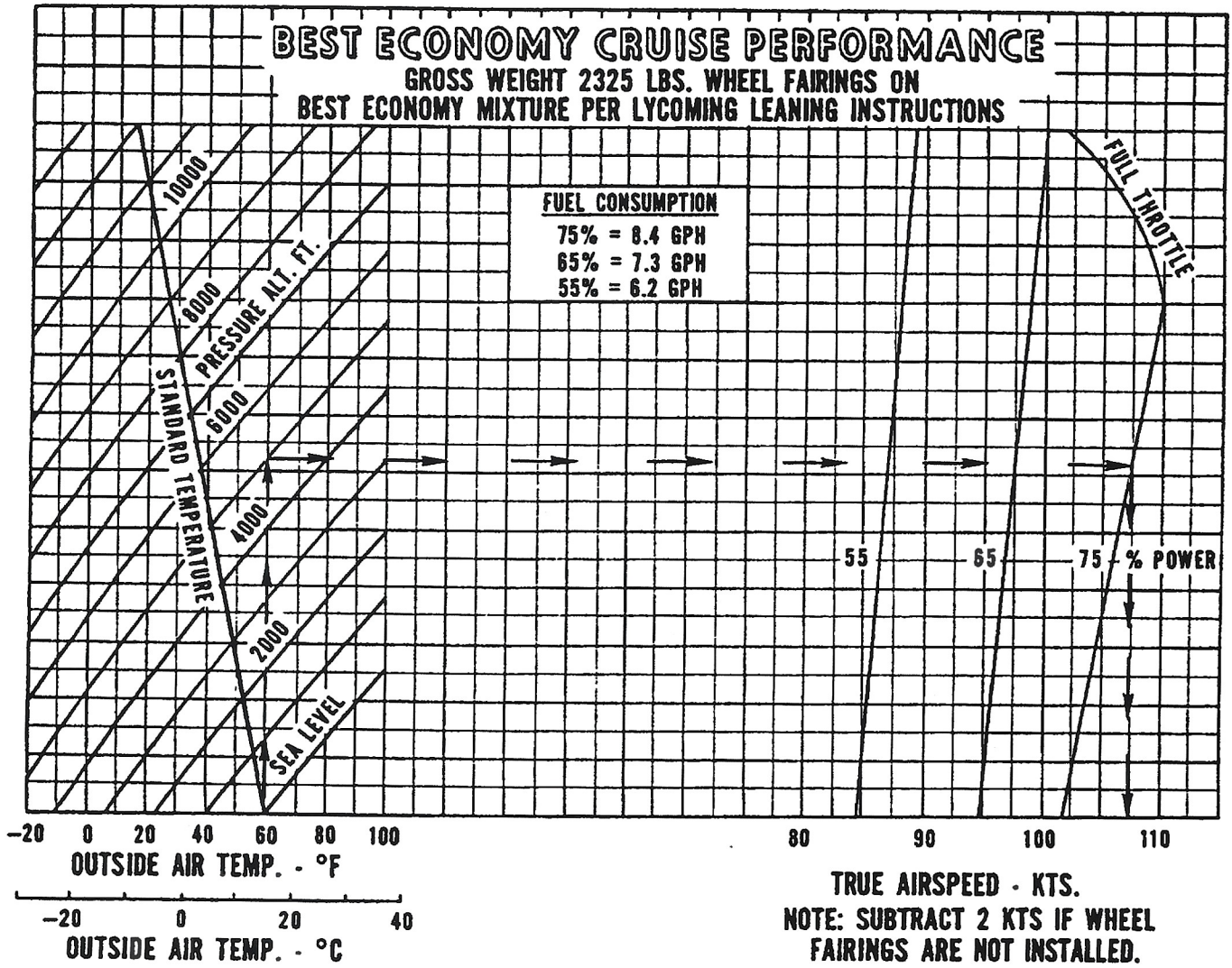


Example:
Cruise pressure altitude: 5000 ft.
Cruise OAT: 60°F
Cruise power: 75%, Best Power Mixture
Cruise speed: 113 KTS TAS

BEST POWER CRUISE PERFORMANCE

Figure 5-15

PA-28-151

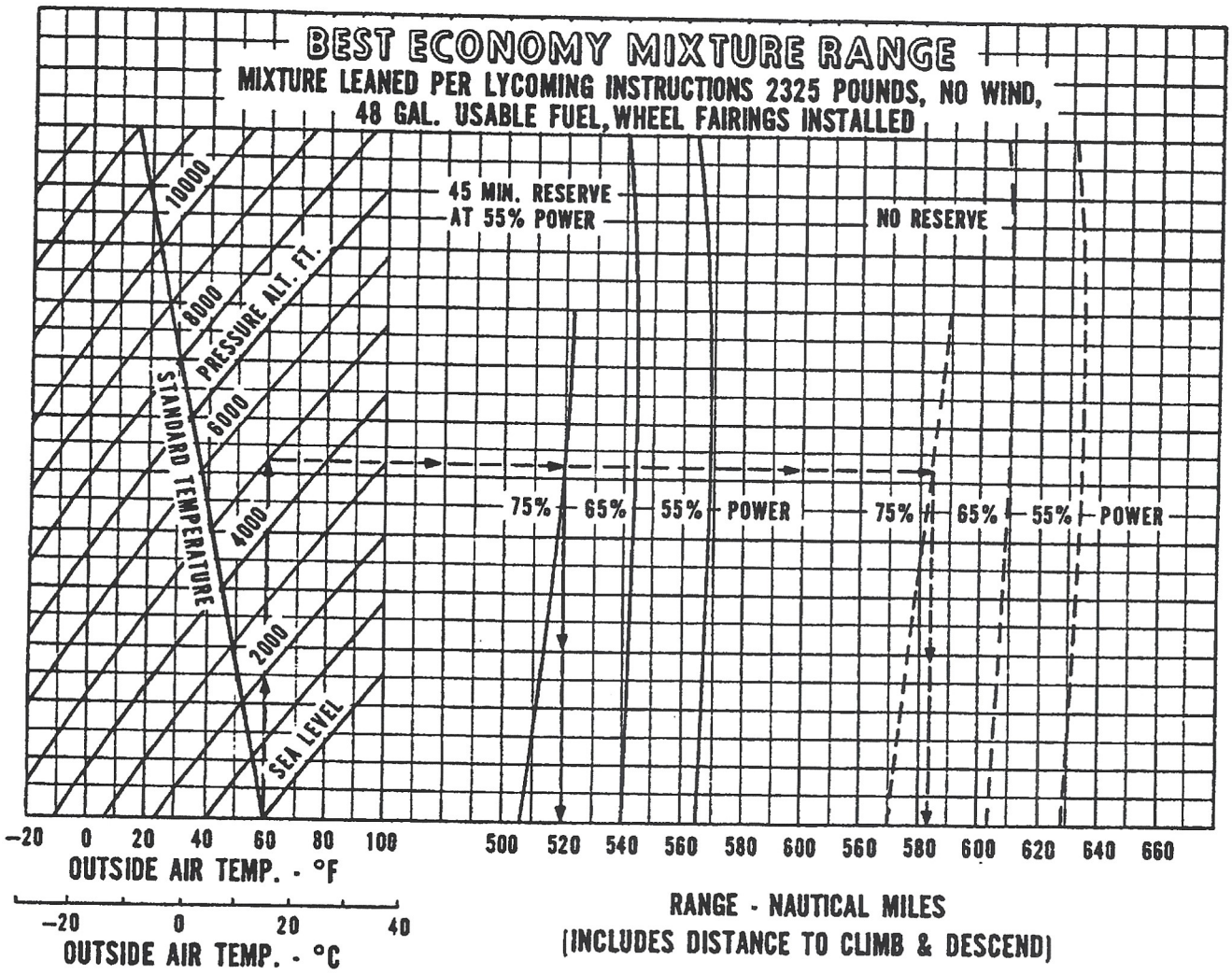


Example:
Cruise pressure altitude: 5000 ft.
Cruise OAT: 60°F
Cruise power: 75%, Best Economy Mixture
Cruise speed: 107 KTS TAS

BEST ECONOMY CRUISE PERFORMANCE

Figure 5-17

PA-28-151

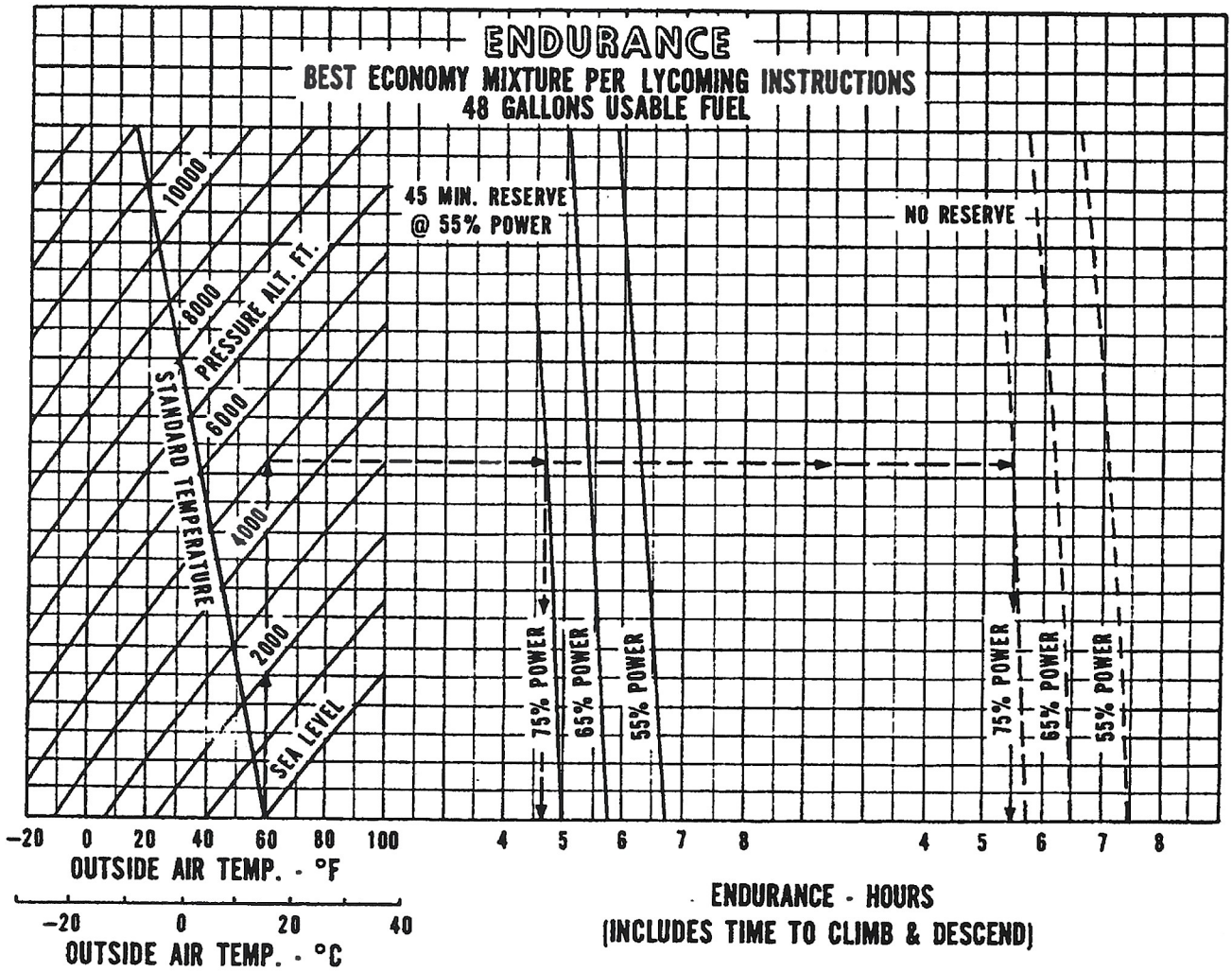


Example:
Cruise pressure altitude: 5000 ft.
Cruise OAT: 60°F
Cruise power: 75%, Best Economy Mixture
Range with 45 min. reserve at 55% power: 520 nautical miles
Range with no reserve: 583 nautical miles

BEST ECONOMY MIXTURE RANGE

Figure 5-19

PA-28-151



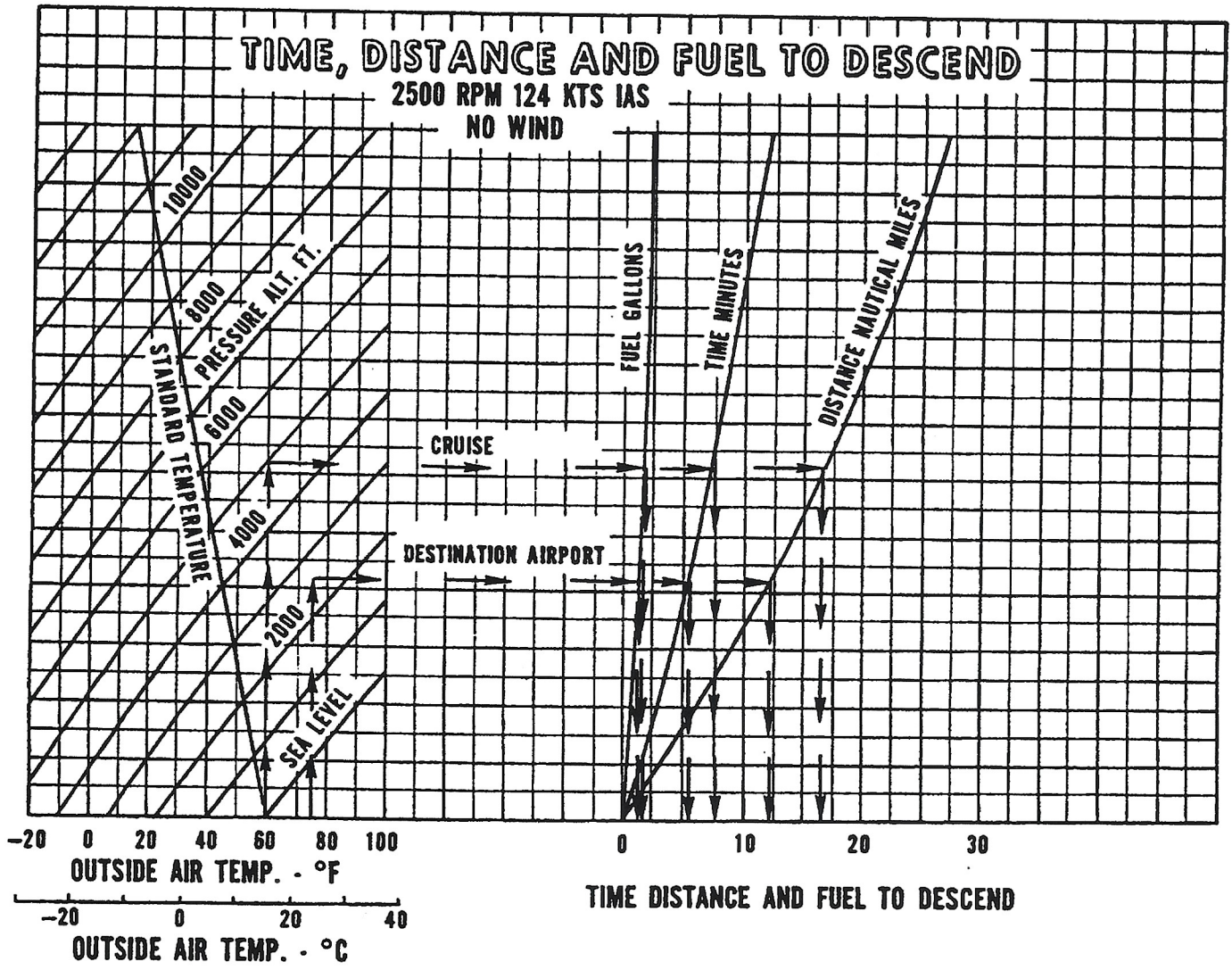
Example:

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

PA-28-151



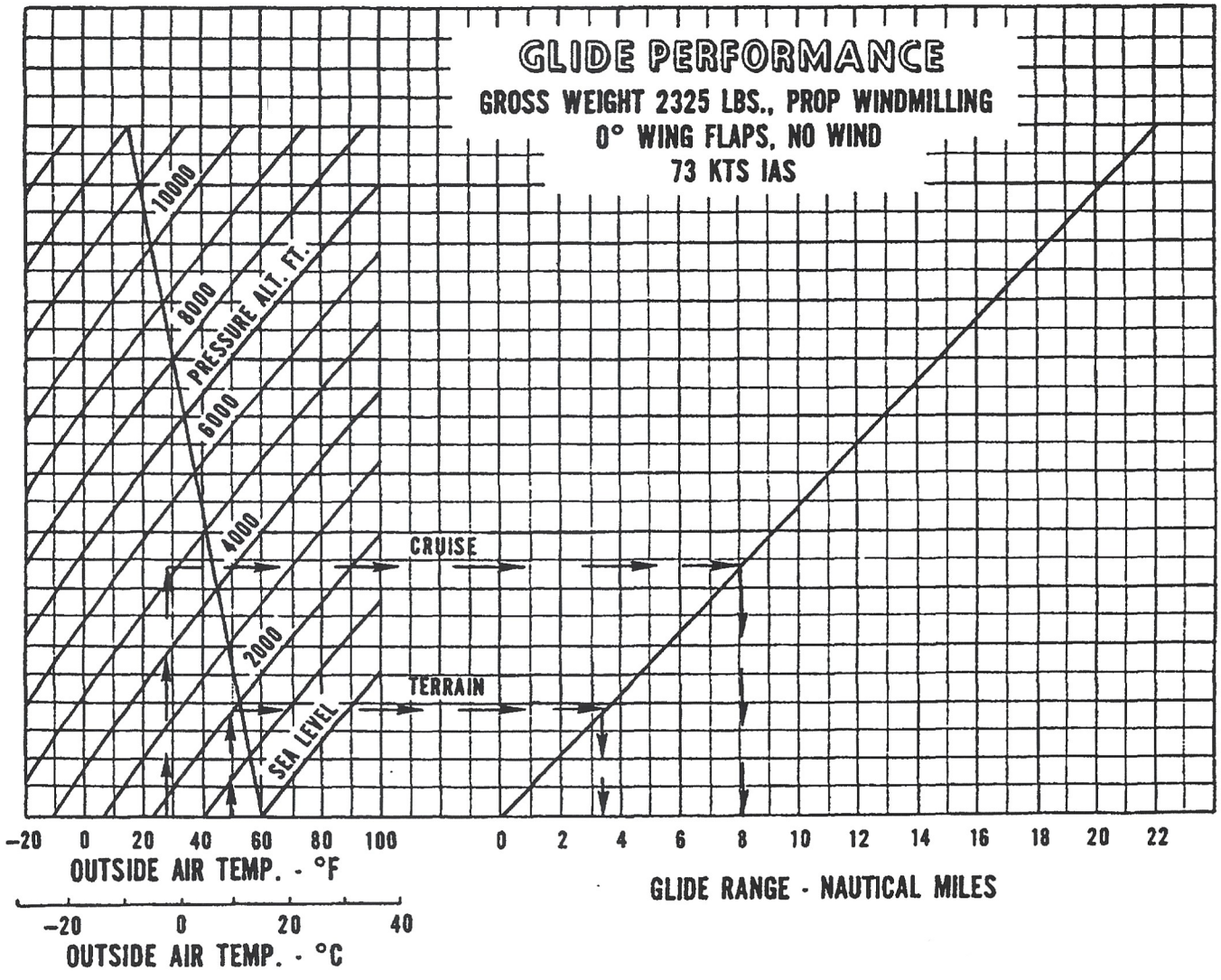
Example:

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

PA-28-151

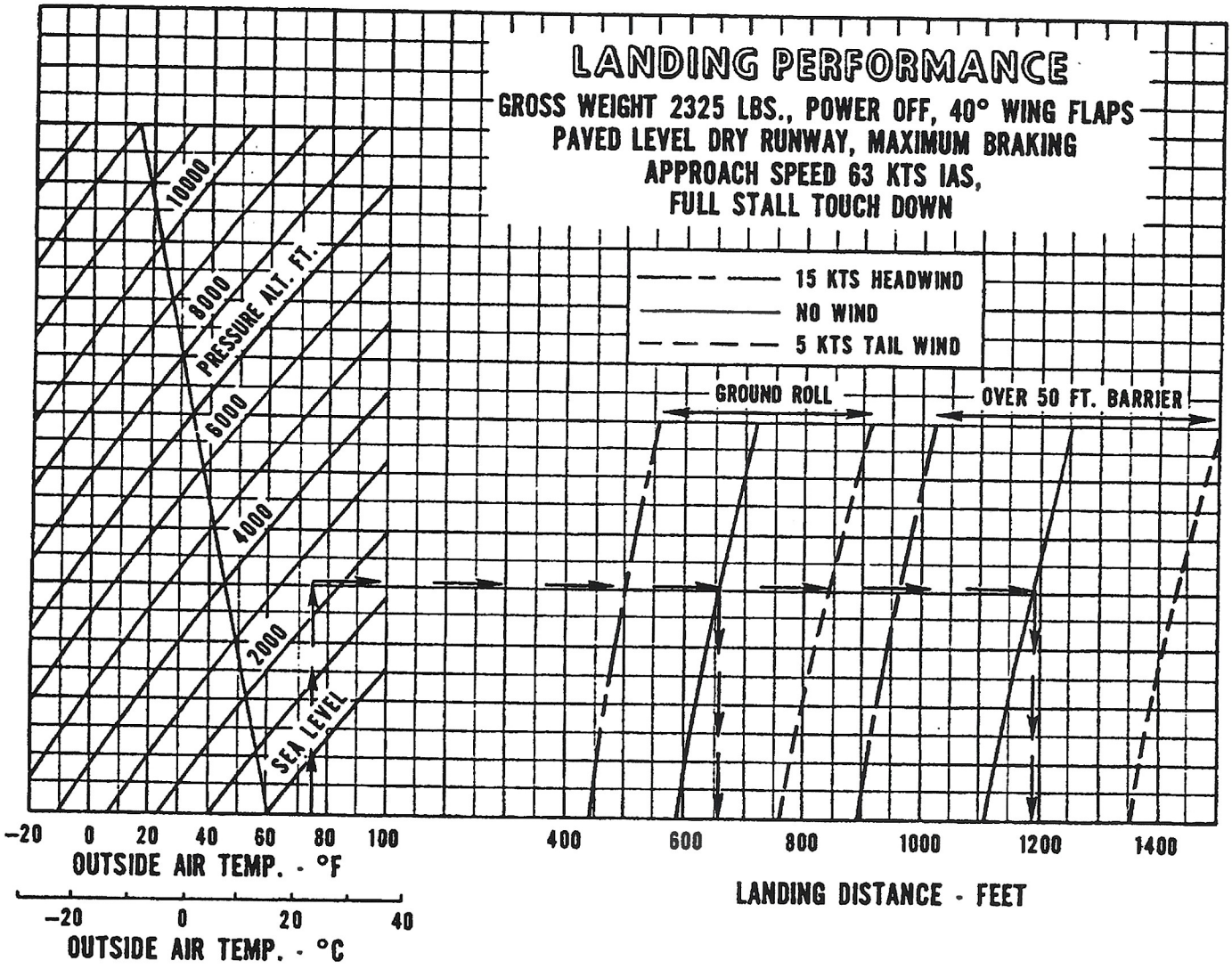


Example:
Cruise pressure altitude: 5000 ft.
Cruise OAT: 28°F
Terrain pressure altitude: 2000 ft.
Temperature at terrain: 50°F
Glide distance (8 miles minus 3.5 miles): 4.5 nautical miles

GLIDE PERFORMANCE

Figure 5-25

PA-28-151



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