PA-28R TURBO ARROW III/IV

OPERATING DATA MANUAL

Just Flight™

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Operating Data Manual

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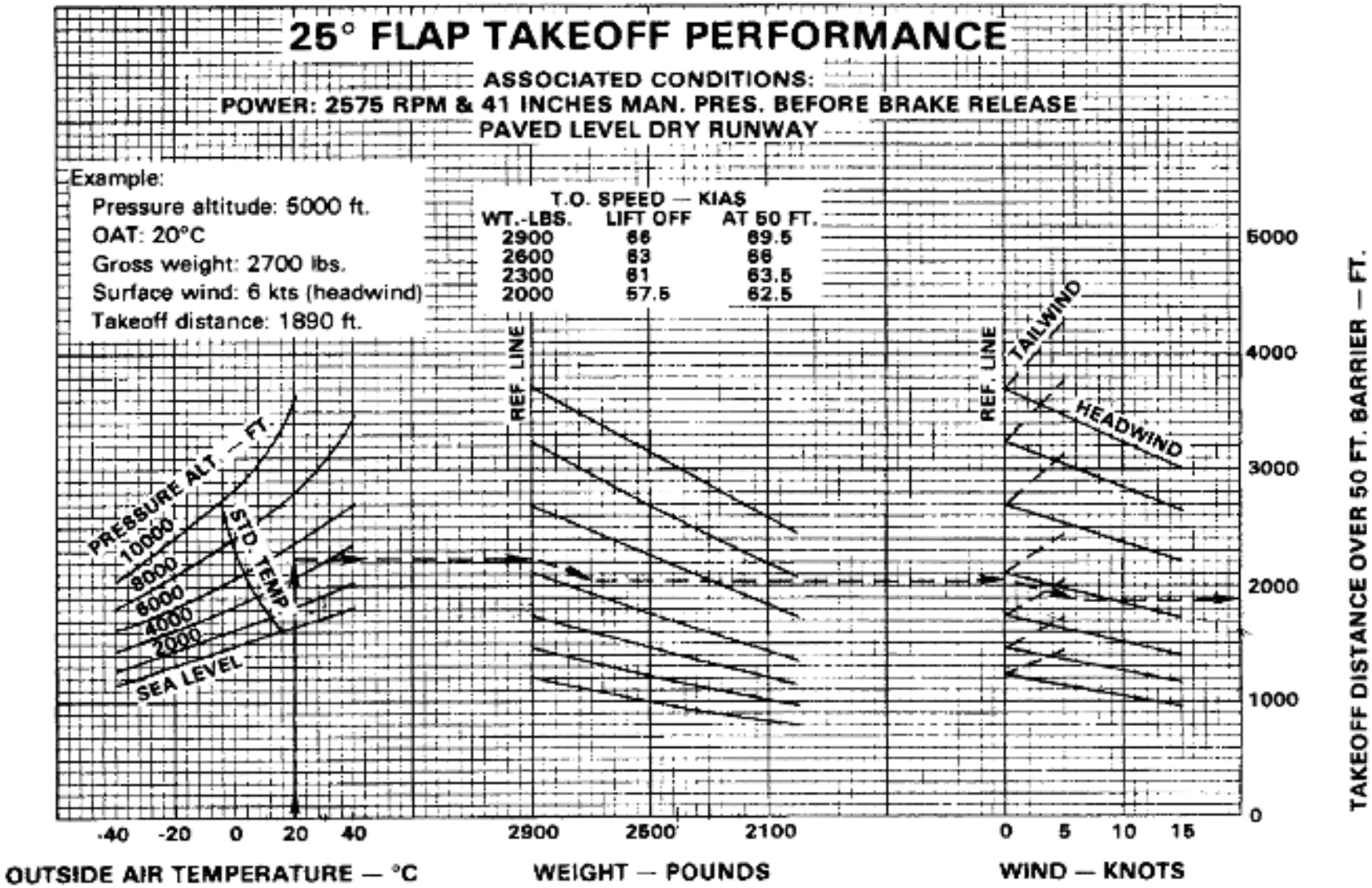
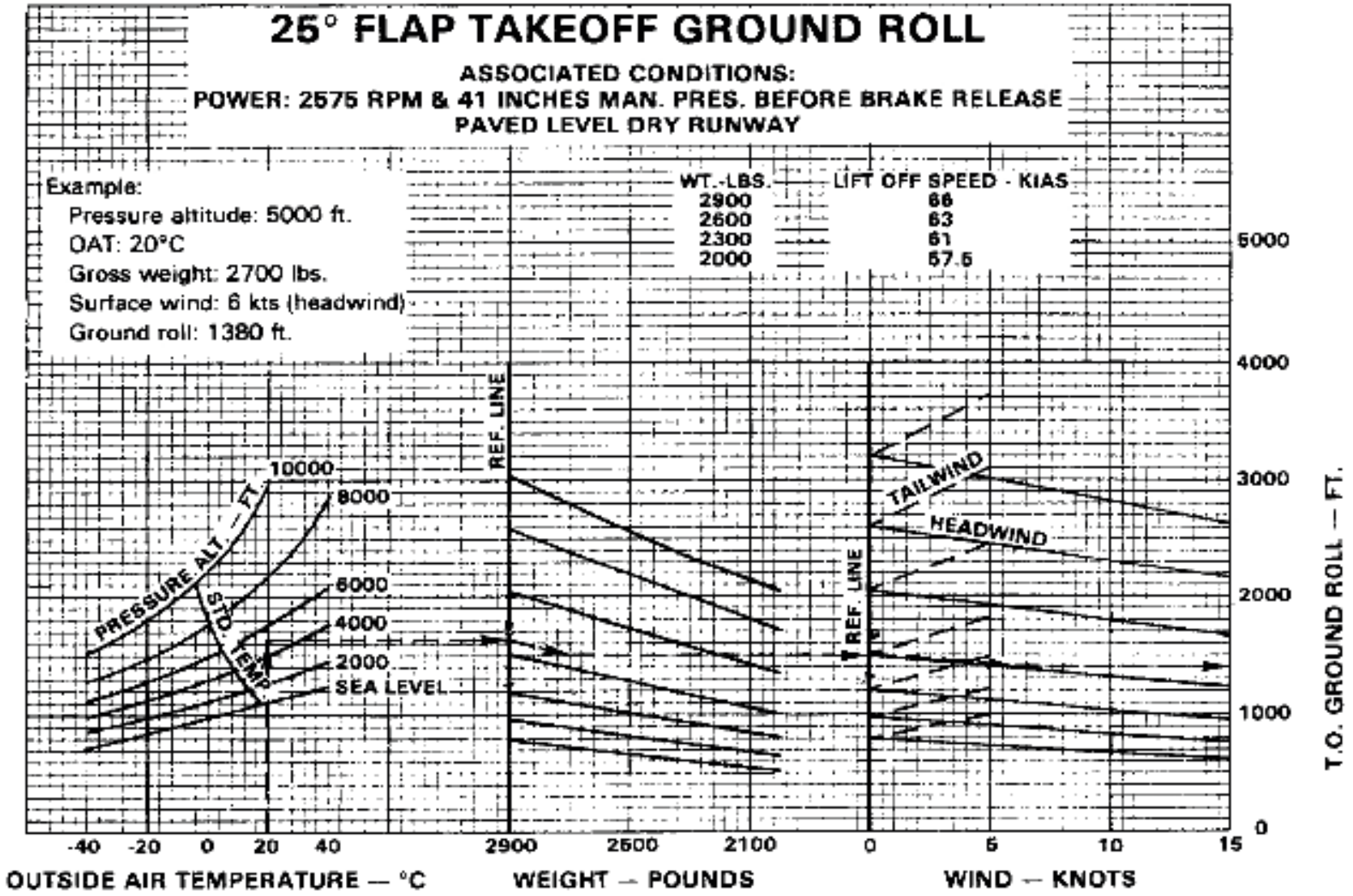
TAKE-OFF PERFORMANCE

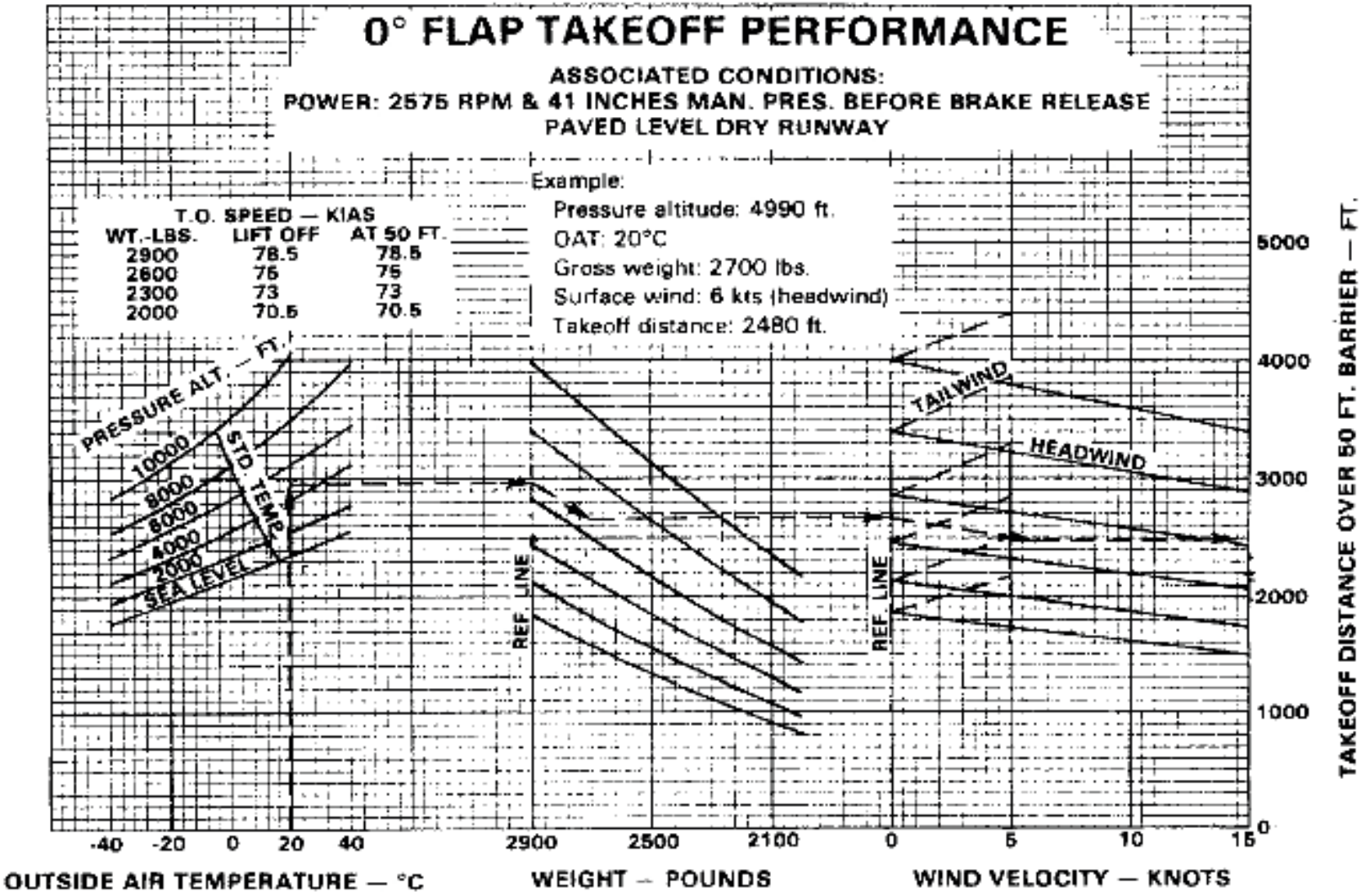
25° flap take-off performance



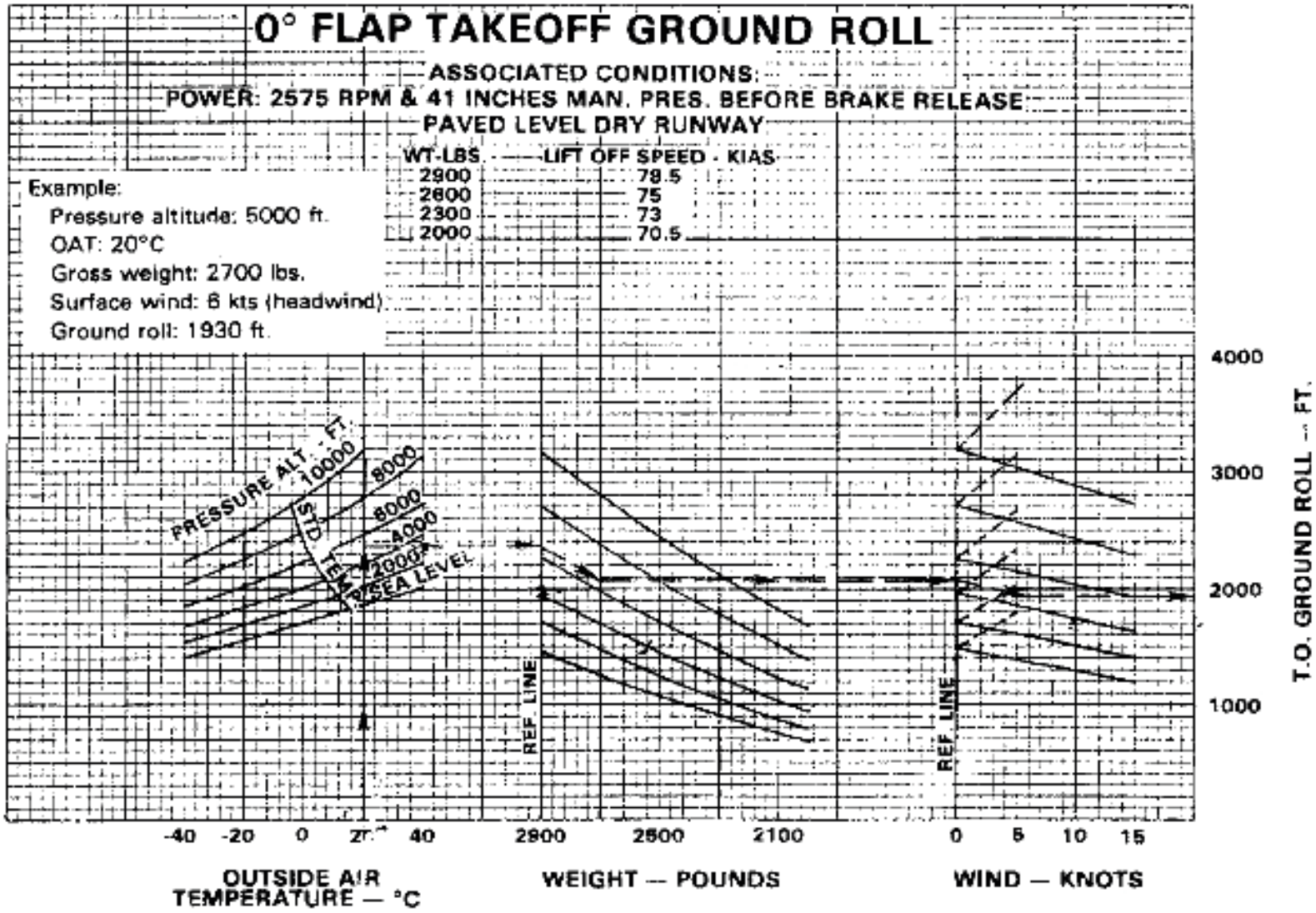
25° flap take-off ground roll



0° flap take-off performance

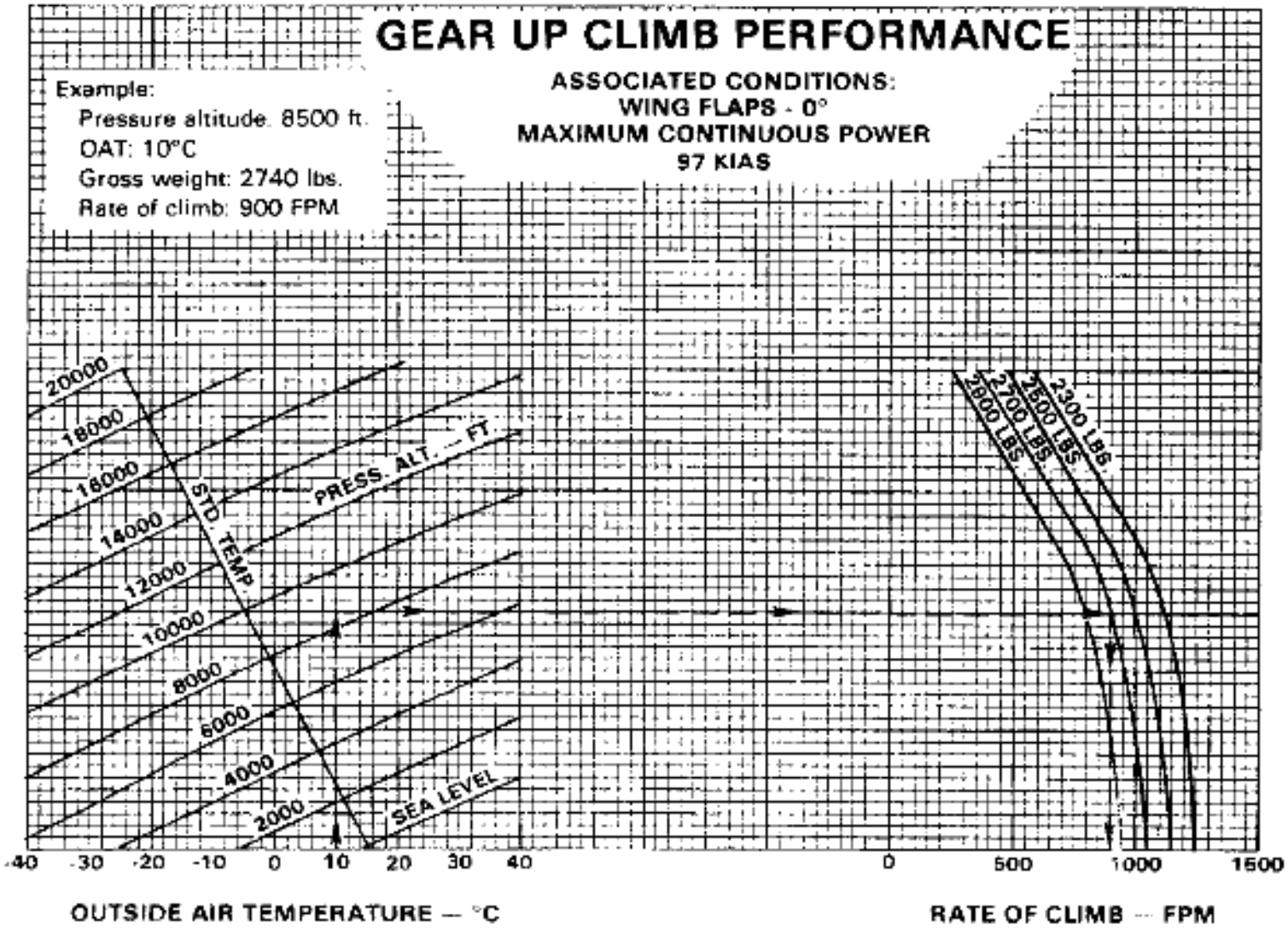


0° flap take-off ground roll

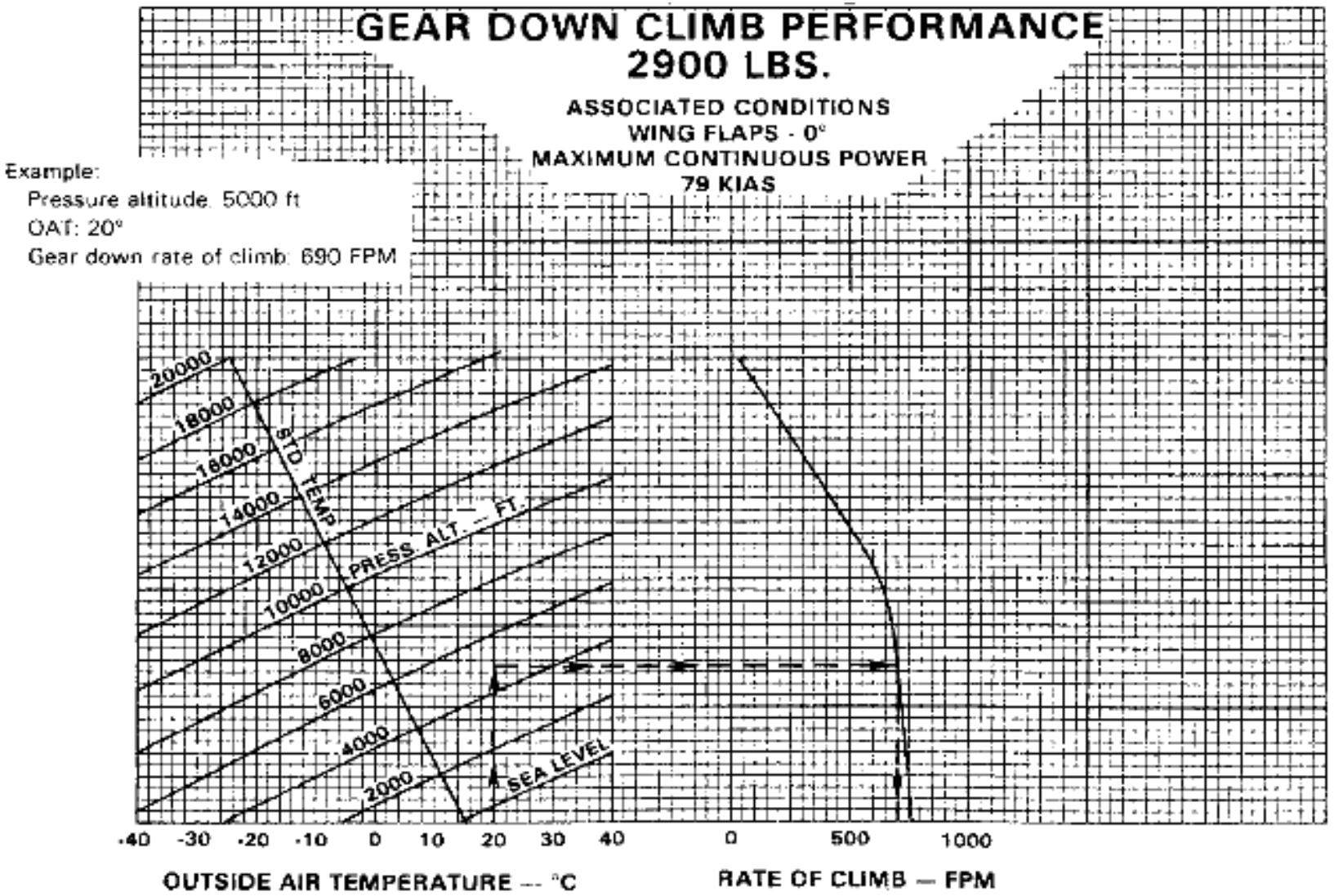


CLIMB PERFORMANCE

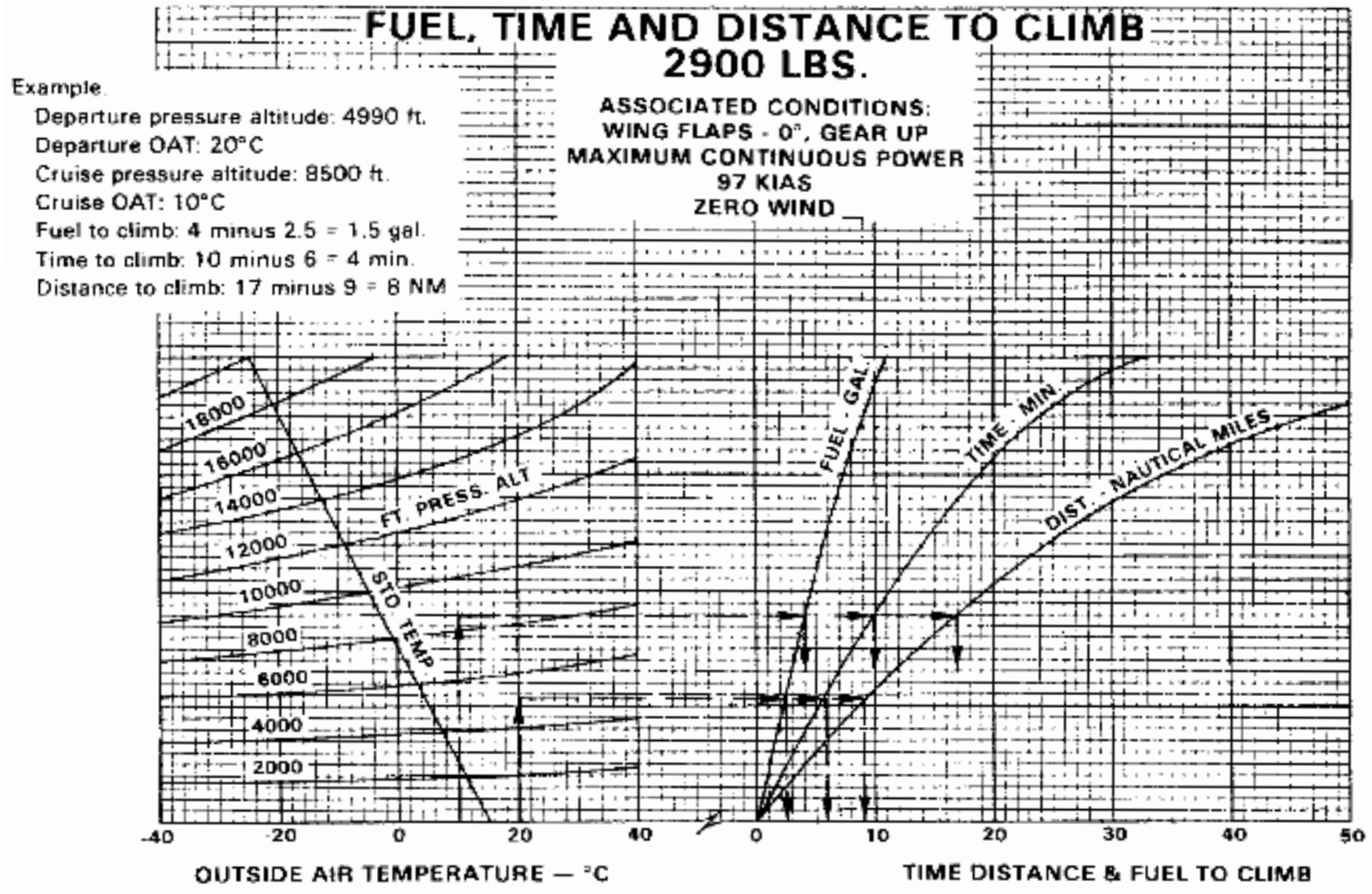
Gear up climb performance



Gear down climb performance



Fuel, time and distance to climb



LEVEL FLIGHT PERFORMANCE

Power setting table

PRESS. ALT. FEET	STD. ALT. TEMP. °C	55% POWER					65% POWER					75% POWER				
		RPM	2200	2300	2400	2500	2575	2200	2300	2400	2500	2575	2200	2300	2400	2500	2575
		MANIFOLD PRESSURE — INCHES MERCURY															
S.L.	15		29.0	27.7	26.8	26.0	25.0	32.8	31.1	30.0	29.2	28.2		34.8	33.8	32.8	31.5
2000	11		29.0	27.7	26.8	26.0	25.0	32.8	31.1	30.0	29.2	28.2		34.8	33.8	32.8	31.5
4000	7		29.0	27.7	26.8	26.0	25.0	32.8	31.1	30.0	29.2	28.2		34.8	33.8	32.8	31.5
6000	3		29.0	27.7	26.8	26.0	25.0	32.8	31.1	30.0	29.2	28.2		34.8	33.8	32.8	31.5
8000	-1		29.0	27.7	26.8	26.0	25.0	—	31.1	30.0	29.2	28.2		—	33.8	32.8	31.5
10000	-5		29.0	27.7	26.8	26.0	25.0	—	31.1	30.0	29.2	28.2		—	33.8	32.8	31.5
12000	-9		—	27.7	26.8	26.0	25.0	—	—	30.0	29.2	28.2		—	—	32.8	31.5
14000	-13		—	27.7	26.8	26.0	25.0	—	—	30.0	29.2	28.2		—	—	32.8	31.5
16000	-17		—	—	26.8	26.0	25.0	—	—	—	29.2	28.2		—	—	—	31.5
18000	-21		—	—	—	26.0	25.0	—	—	—	29.2	28.2		—	—	—	31.5
20000	-25		—	—	—	26.0	25.0	—	—	—	—	28.2		—	—	—	31.5

To maintain constant power, add approximately 1% for each 6°C above standard, subtract approximately 1% for each 6°C below standard.

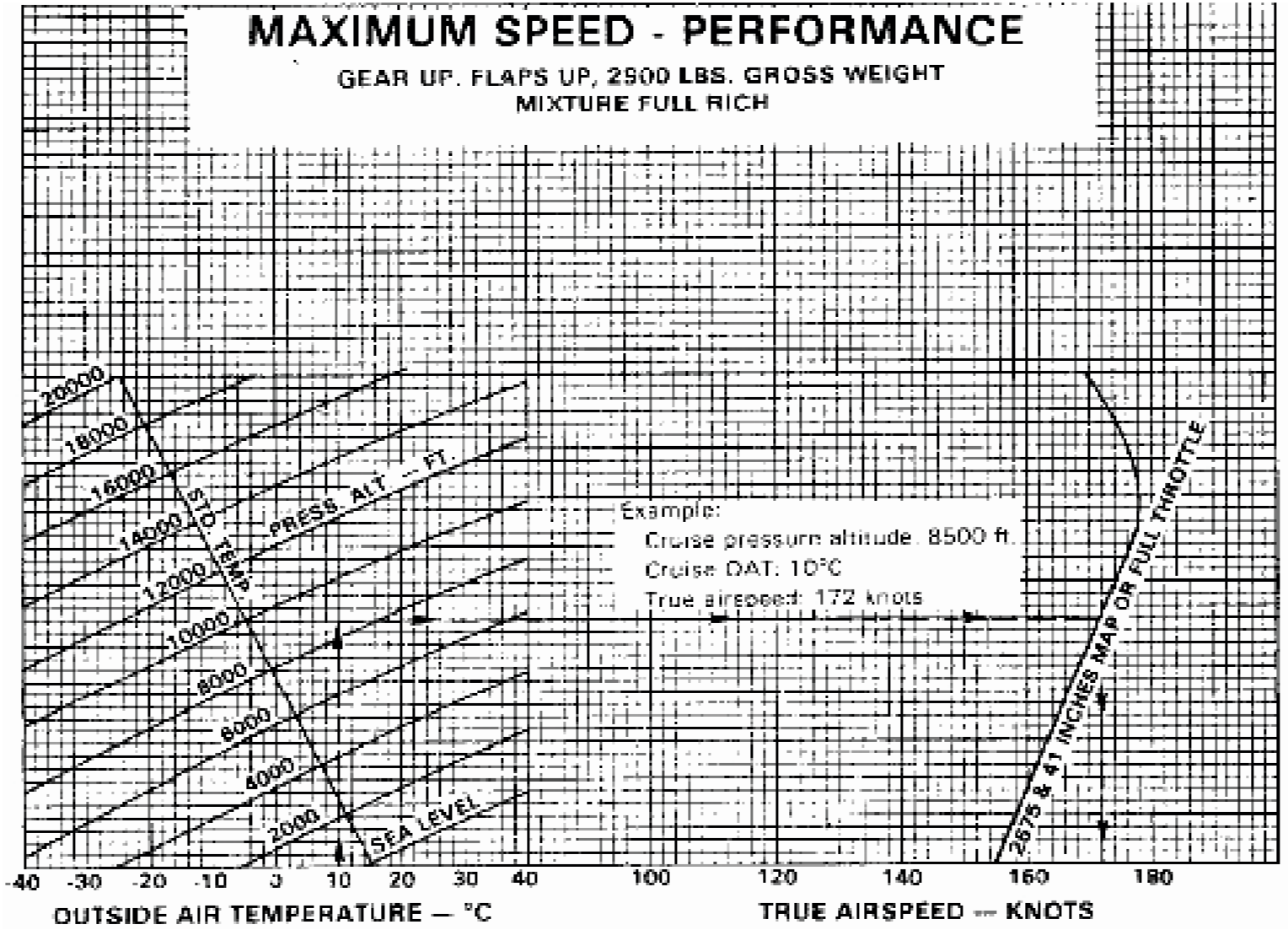
APPROXIMATE FUEL FLOW

CRUISE POWER

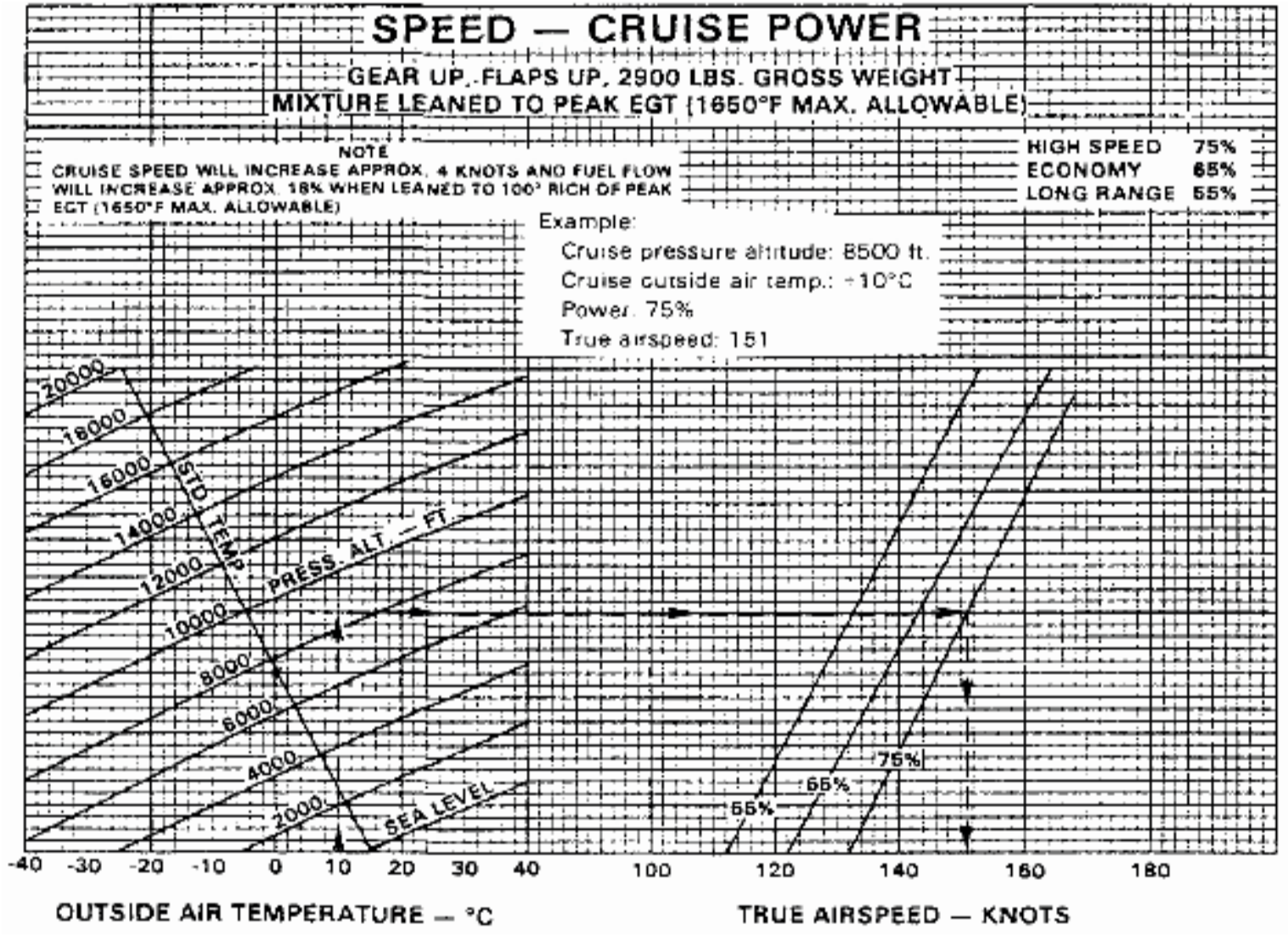
55% Power 9.2 GPH
65% Power 10.8 GPH
75% Power 12.0 GPH

NOTE: Fuel flow will vary with altitude; therefore, cruise fuel control must be accomplished by adjusting EGT (peak EGT for best economy and peak EGT plus 100°F rich for best power) rather than leaning to an indicated fuel flow.

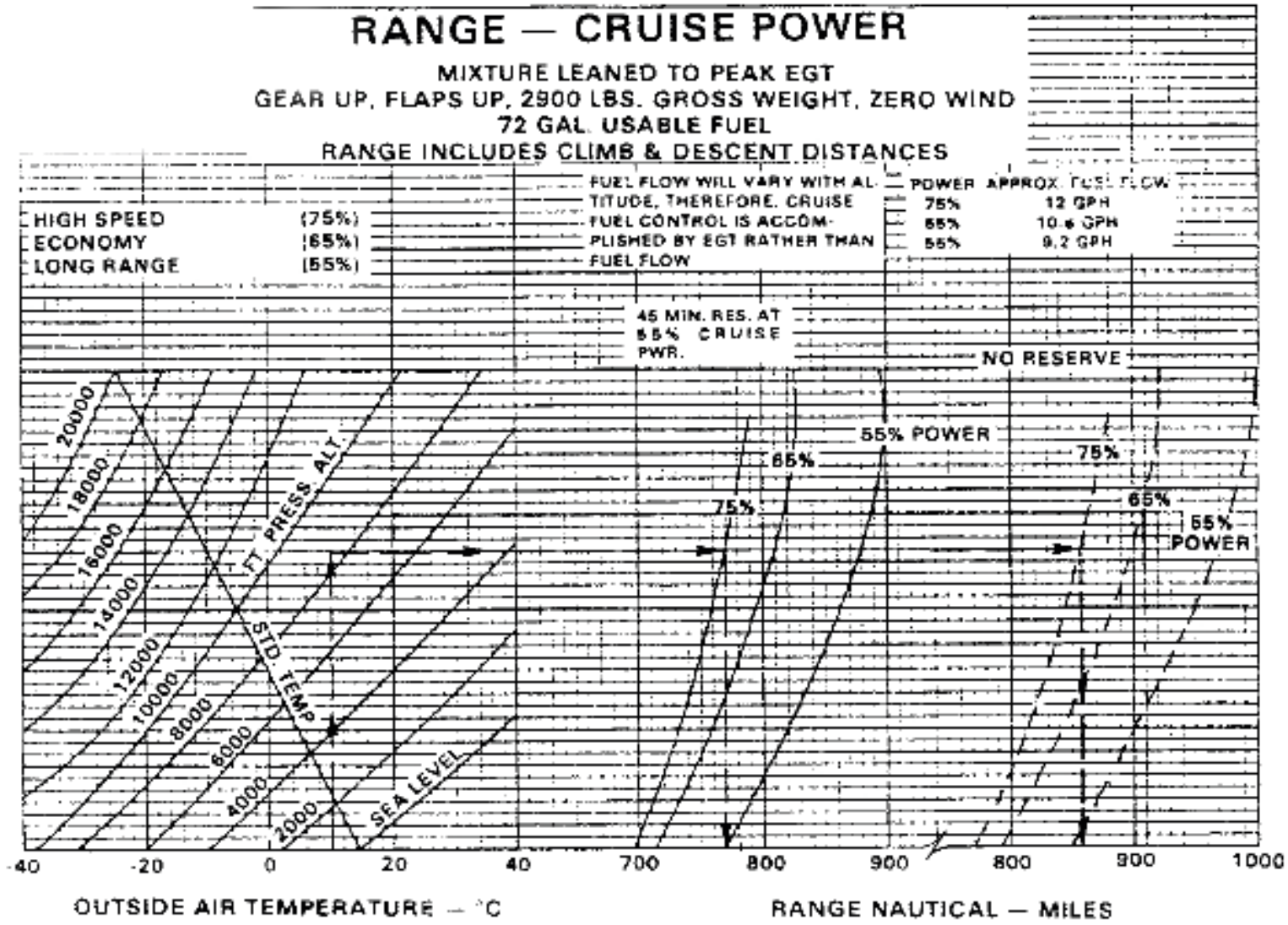
Maximum speed – performance



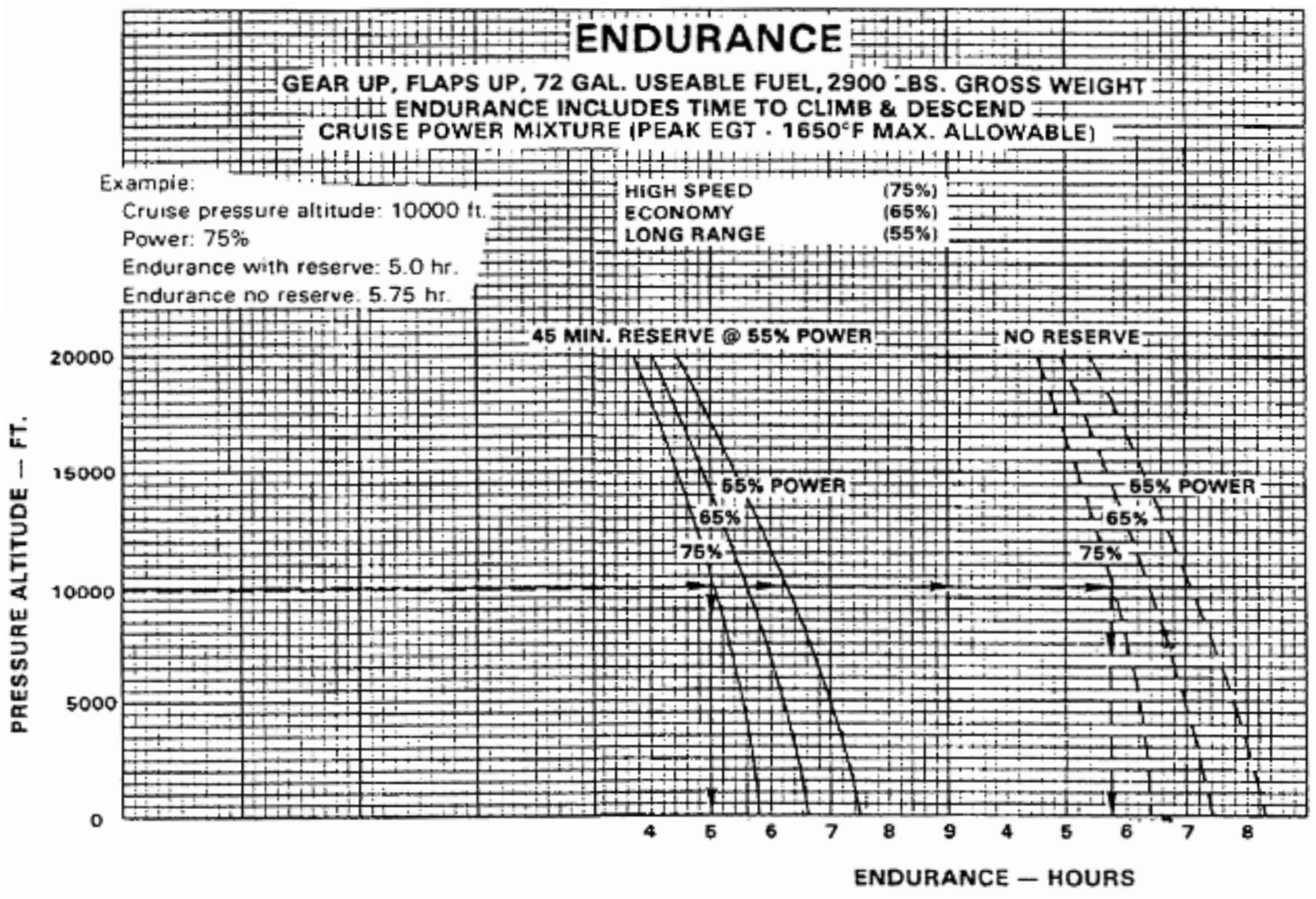
Speed – cruise power



Range – cruise power

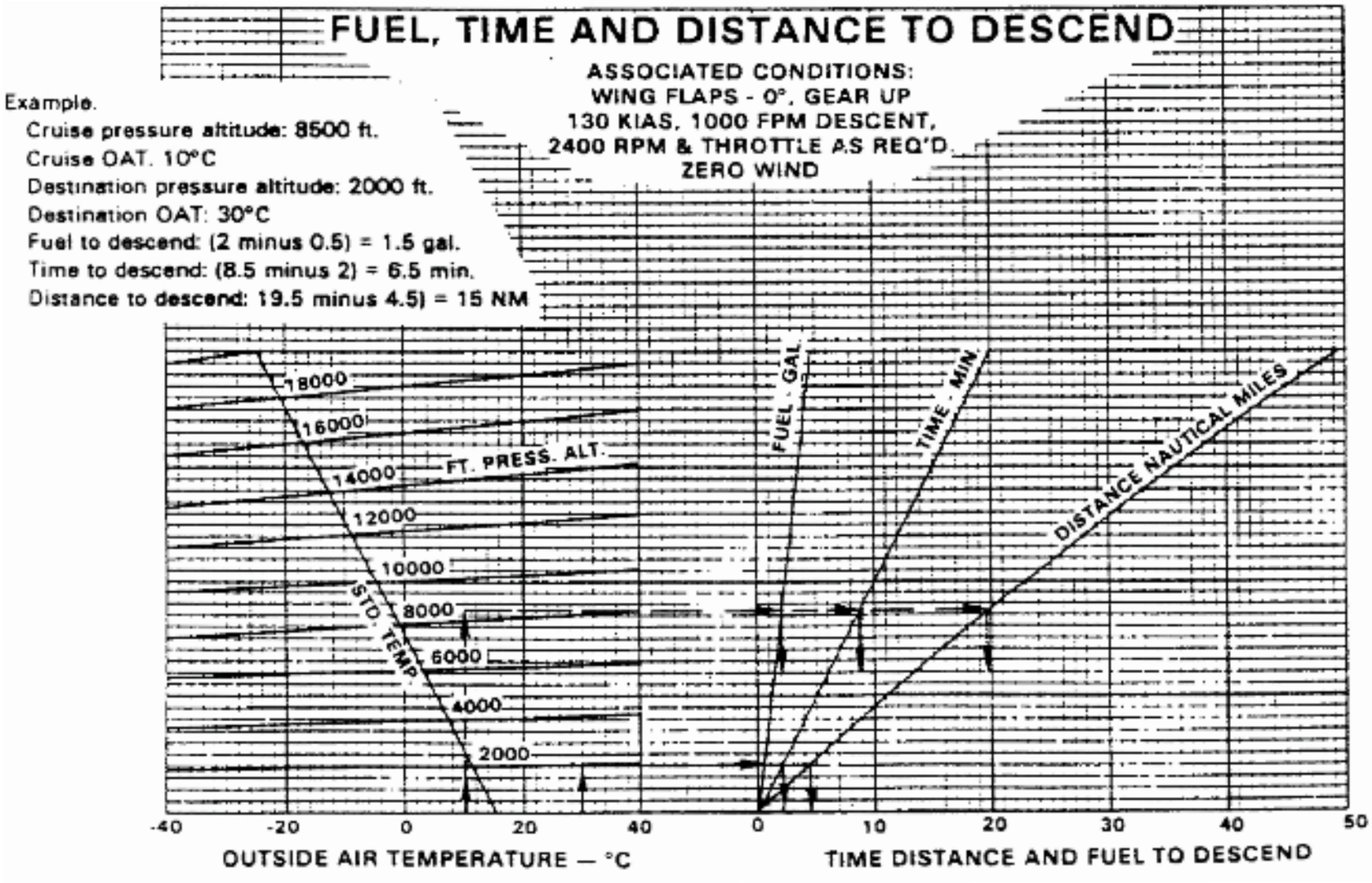


Endurance

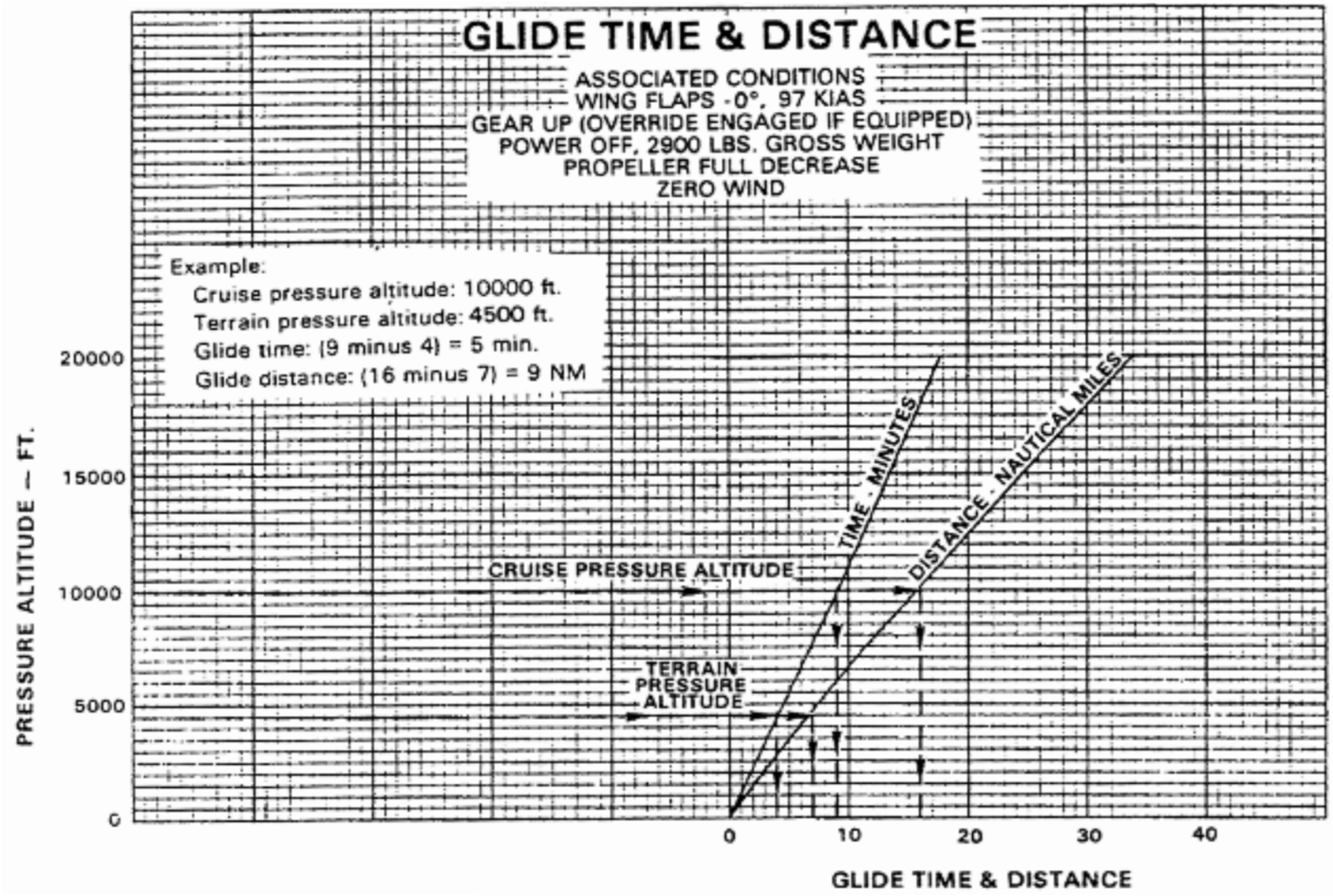

ENDURANCE
GEAR UP, FLAPS UP, 72 GAL. USEABLE FUEL, 2900 LBS. GROSS WEIGHT
ENDURANCE INCLUDES TIME TO CLIMB & DESCEND
CRUISE POWER MIXTURE (PEAK EGT - 1650°F MAX. ALLOWABLE)
Example:
Cruise pressure altitude: 10000 ft.
Power: 75%
Endurance with reserve: 5.0 hr.
Endurance no reserve: 5.75 hr.
HIGH SPEED (75%)
ECONOMY (65%)
LONG RANGE (55%)
45 MIN. RESERVE @ 55% POWER
NO RESERVE
55% POWER
65%
75%
55% POWER
65%
75%
PRESSURE ALTITUDE — FT.
20000
15000
10000
5000
0
4 5 6 7 8 9 4 5 6 7 8
ENDURANCE — HOURS

DESCENT PERFORMANCE

Fuel, time and distance to descend

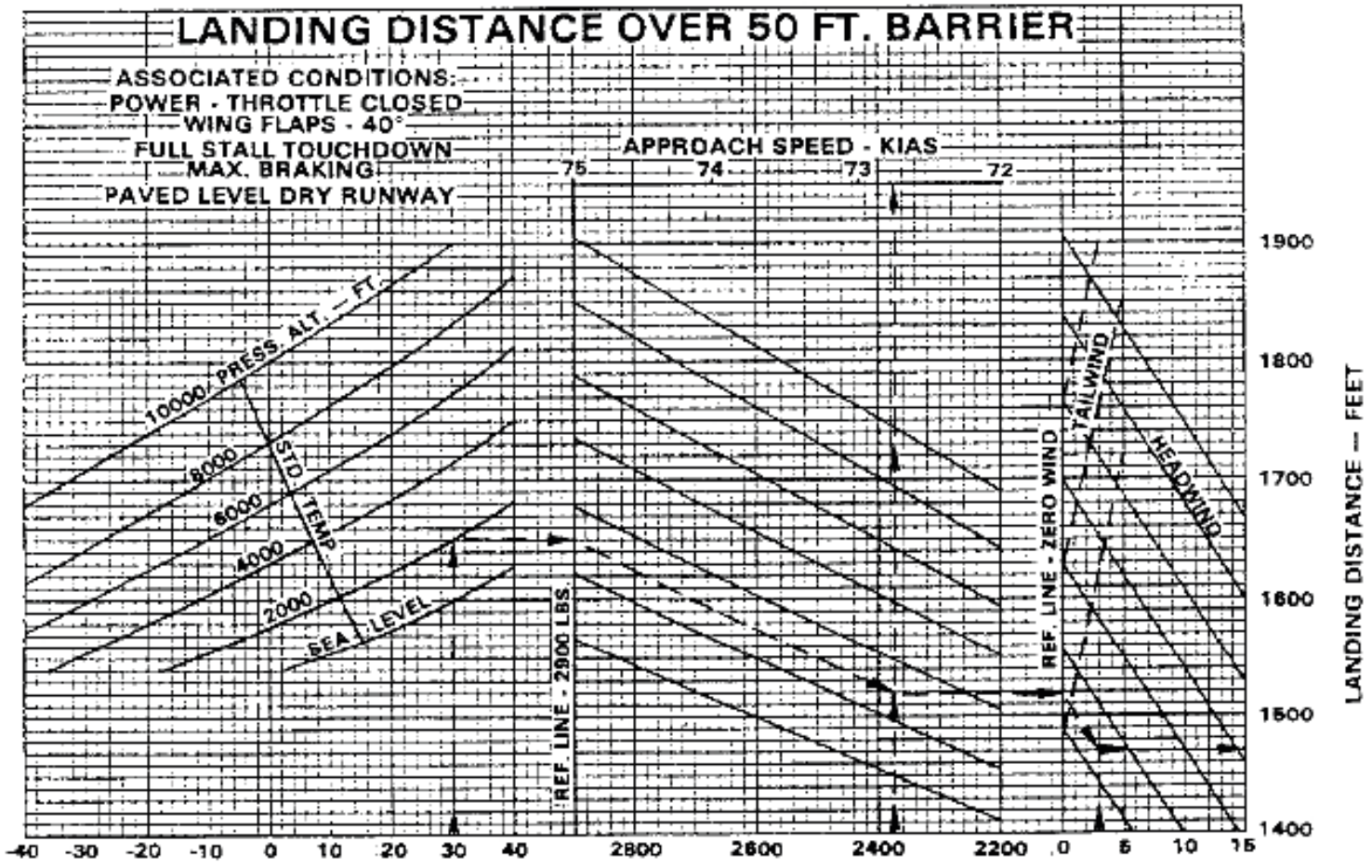


Glide time and distance



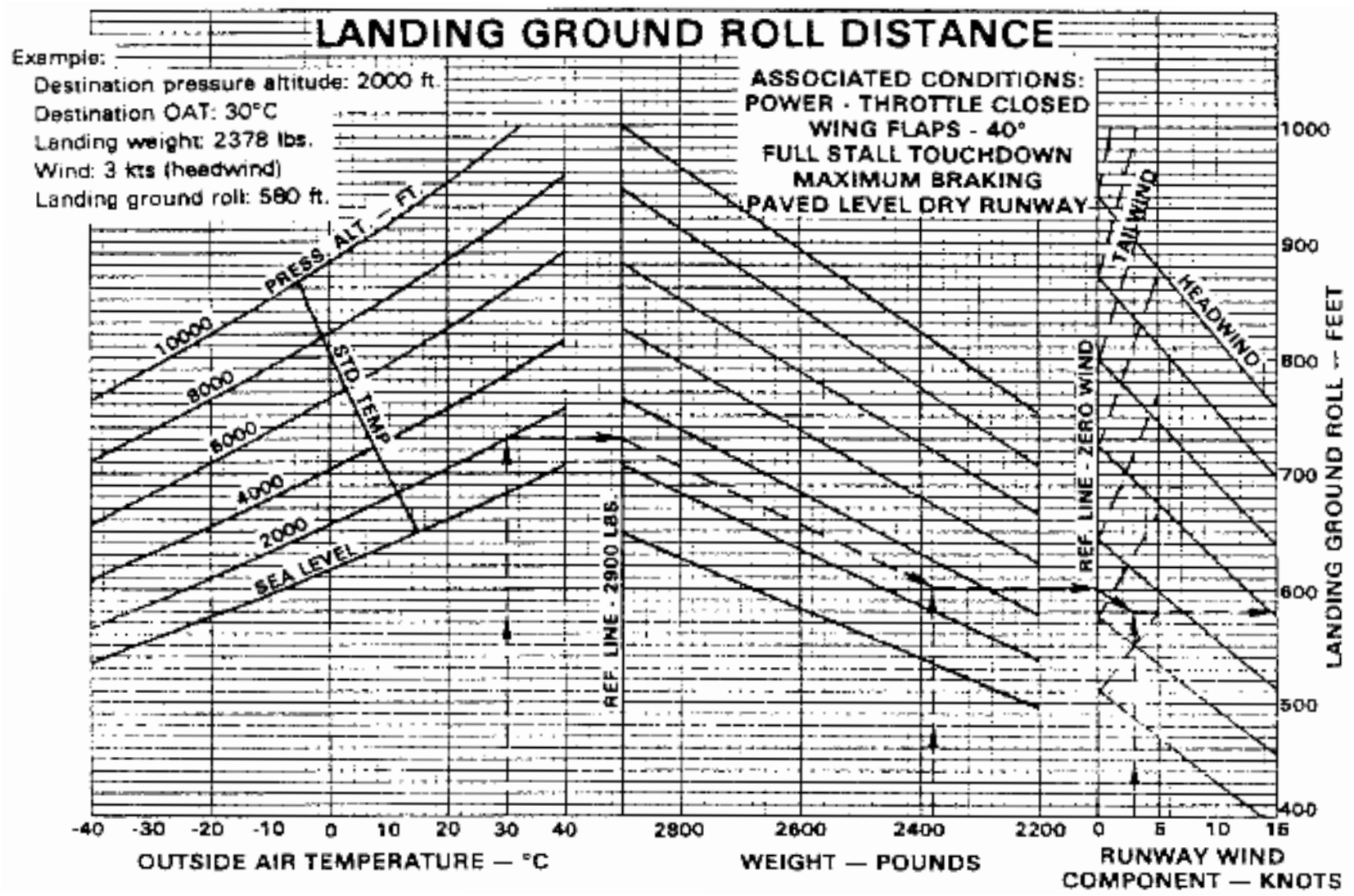
LANDING PERFORMANCE

Landing distance over 50ft barrier



Example:
Destination pressure altitude: 2000 ft.
Destination OAT: 30°C
Landing weight: 2378 lbs.; approach speed: 72.6 KIAS
Wind: 3 knots (headwind)
Landing distance: 1470 ft.

Landing ground roll distance



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