

**SECTION 5
PERFORMANCE**

5.1 GENERAL

All of the required (FAA regulations) and complementary performance information applicable to the Cherokee Turbo Arrow III is provided by this section.

Performance information associated with those optional systems and equipment which require handbook supplements is provided by Section 9 (Supplements).

5.3 INTRODUCTION TO PERFORMANCE AND FLIGHT PLANNING

The performance information presented in this section is based on measured Flight Test Data corrected to I.C.A.O. standard day conditions and analytically expanded for the various parameters of weight, altitude, temperature, etc.

The performance charts are unfactored and do not make any allowance for varying degrees of pilot proficiency or mechanical deterioration of the aircraft. This performance, however, can be duplicated by following the stated procedures in a properly maintained airplane.

Effects of conditions not considered on the charts must be evaluated by the pilot, such as the effect of soft or grass runway surface on takeoff and landing performance, or the effect of winds aloft on cruise and range performance. Endurance can be grossly affected by improper leaning procedures, and inflight fuel flow and quantity checks are recommended.

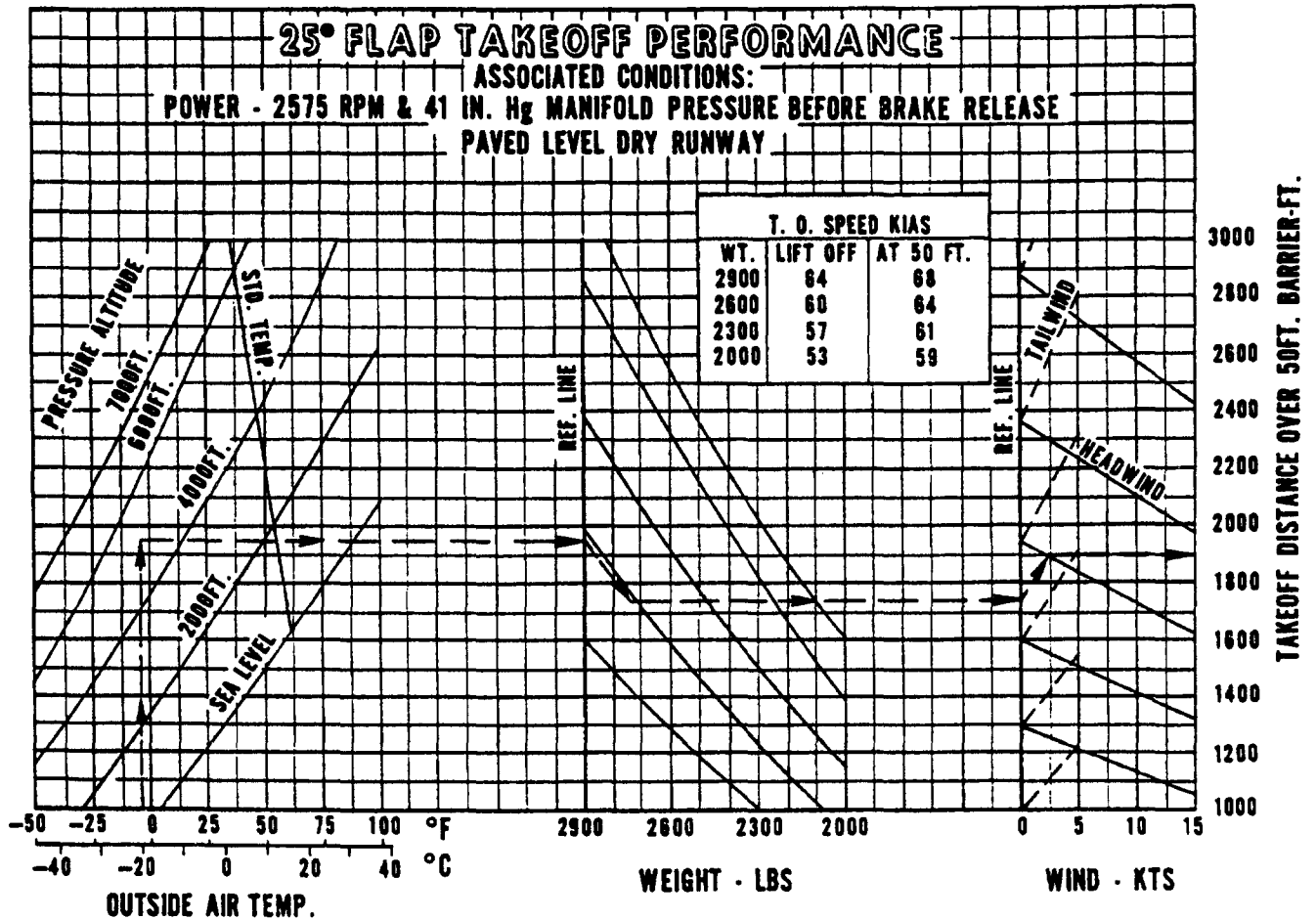
REMEMBER! To get chart performance, follow the chart procedures.

The information provided by paragraph 5.5 (Flight Planning Example) outlines a detailed flight plan using the performance charts in this section. Each chart includes its own example to show how it is used.

WARNING

Performance information derived by extrapolation beyond the limits shown on the charts should not be used for flight planning purposes.

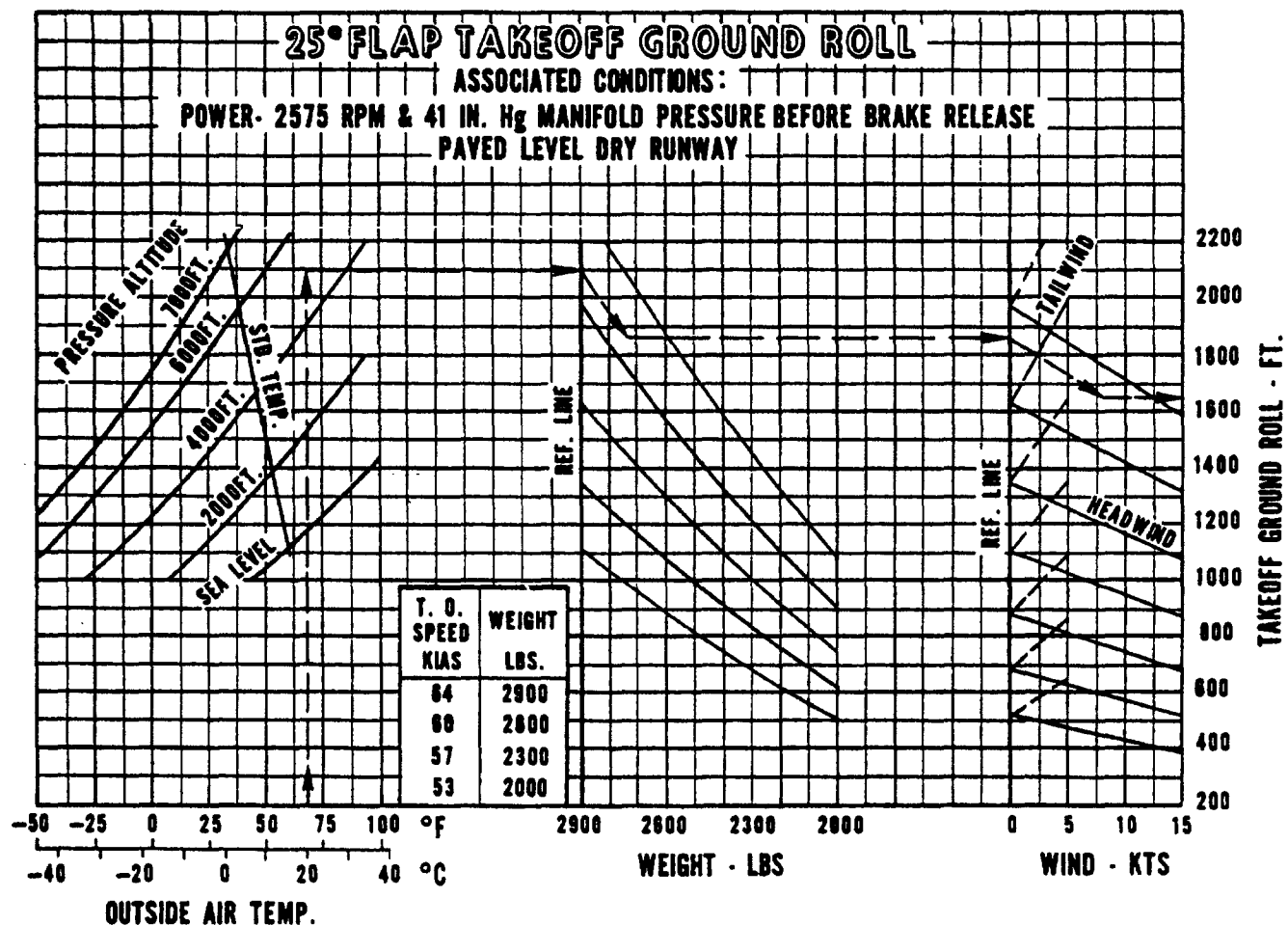
PA-28R-201T



25° FLAP TAKEOFF PERFORMANCE

Figure 5-5

PA-28R-201T



Example:

Pressure altitude: 5000 ft.

OAT: 20°C

Gross weight: 2740 lbs.

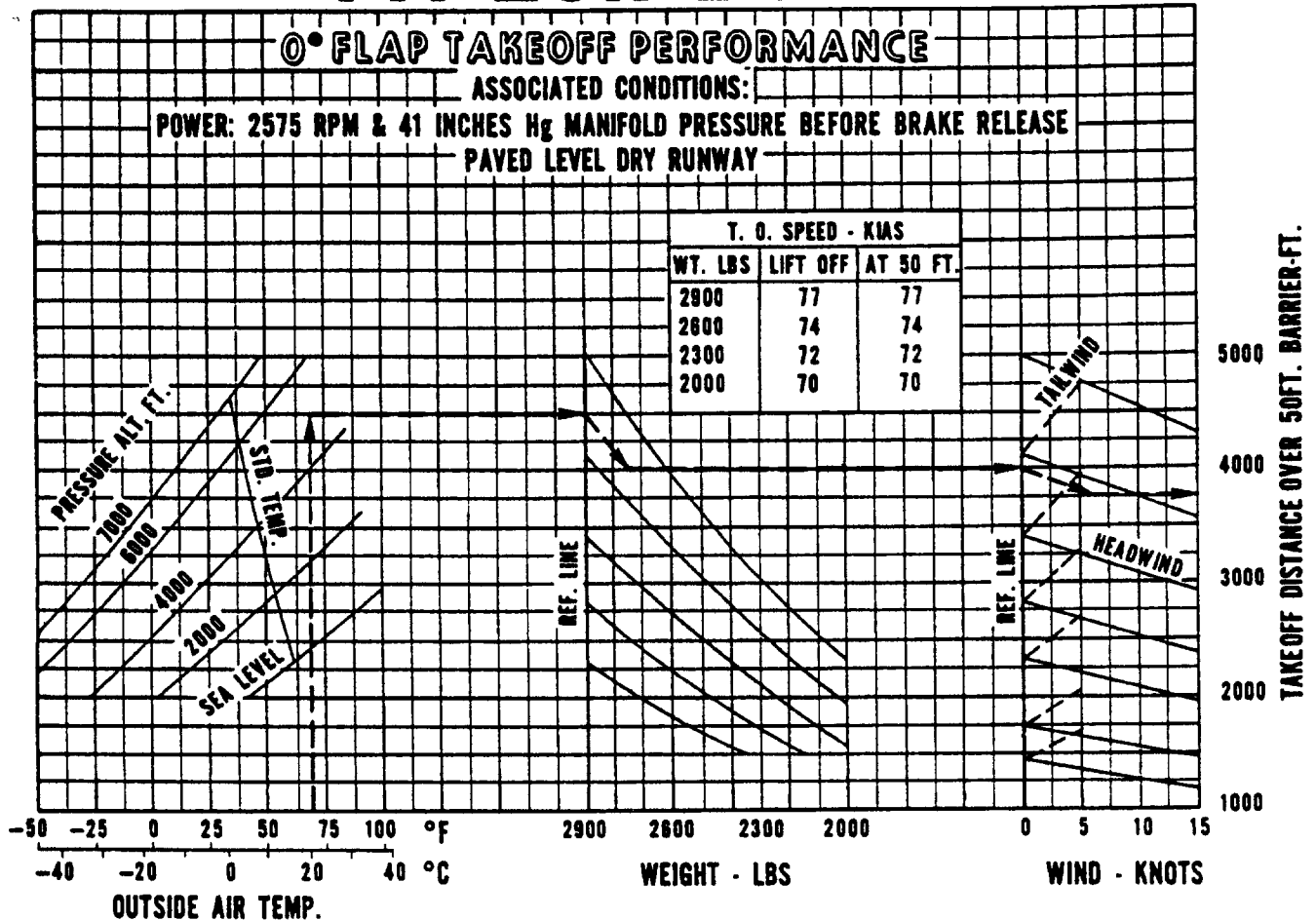
Wind: 8 knots (headwind)

Takeoff ground roll: 1650 ft.

25° FLAP TAKEOFF GROUND ROLL

Figure 5-7

PA-28R-201T



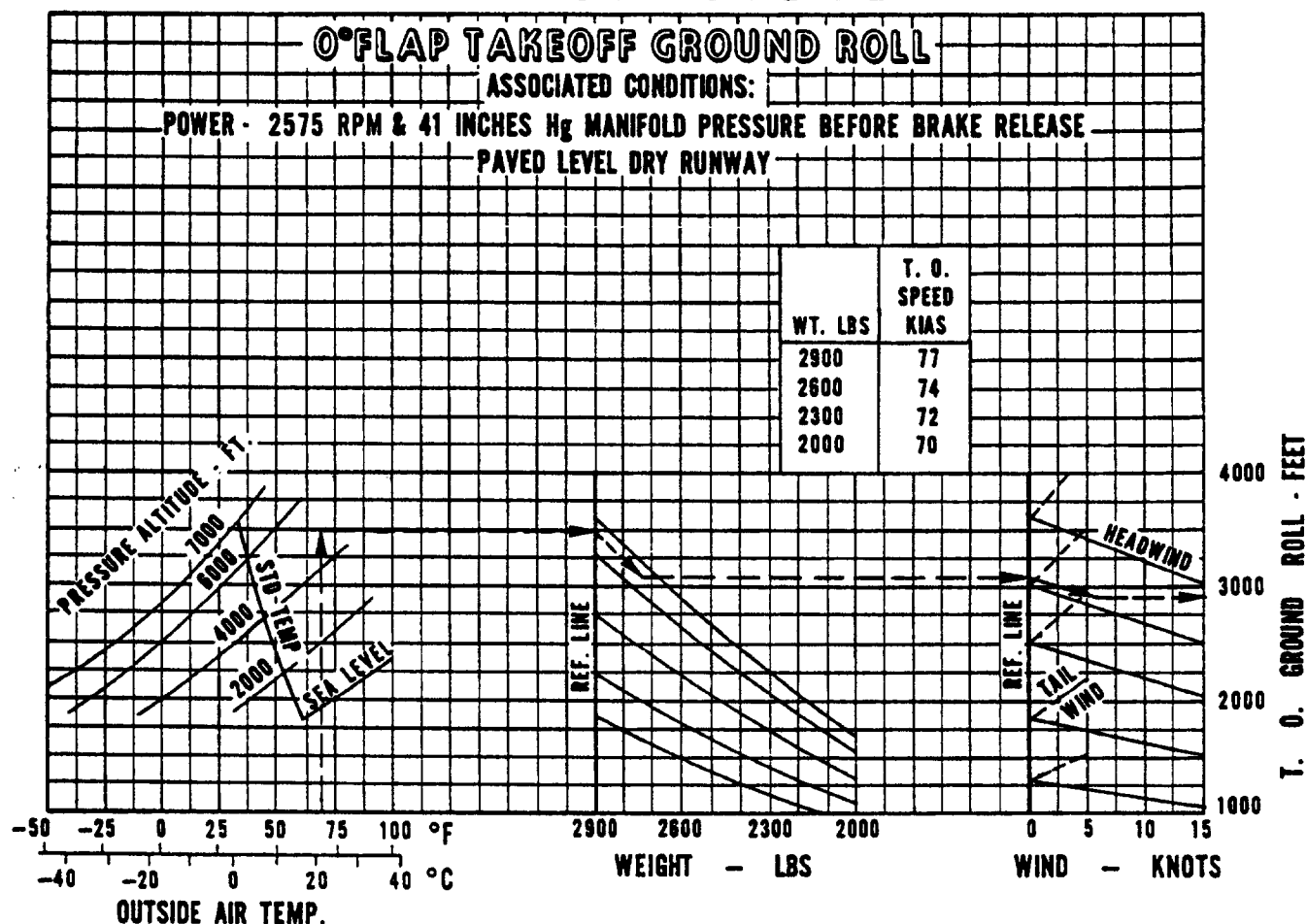
Example:

Pressure altitude: 4990 ft.
OAT: 20°C
Gross weight: 2740 lbs.
Surface wind: 6 knots (headwind)
Takeoff distance: 3750 ft.

0° FLAP TAKEOFF PERFORMANCE

Figure 5-9

PA-28R-201T



Example:

Pressure altitude: 5000 ft.

OAT: 20°C

Gross weight: 2740 lbs.

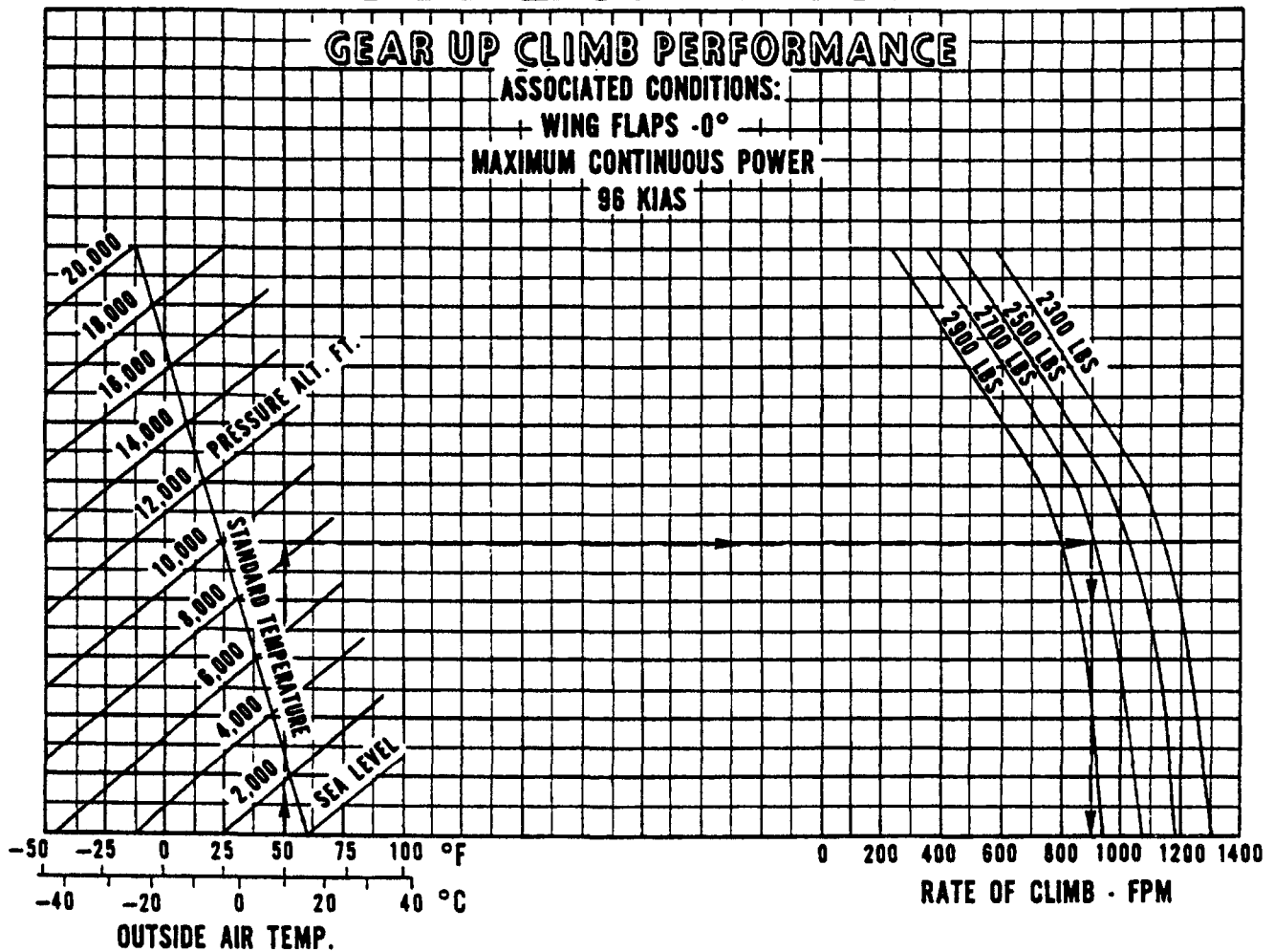
Wind: 6 knots (headwind)

Takeoff ground roll: 2900 ft.

0° FLAP TAKEOFF GROUND ROLL

Figure 5-11

PA-28R-201T



Example:

Pressure altitude: 8500 ft.

OAT: 10°C

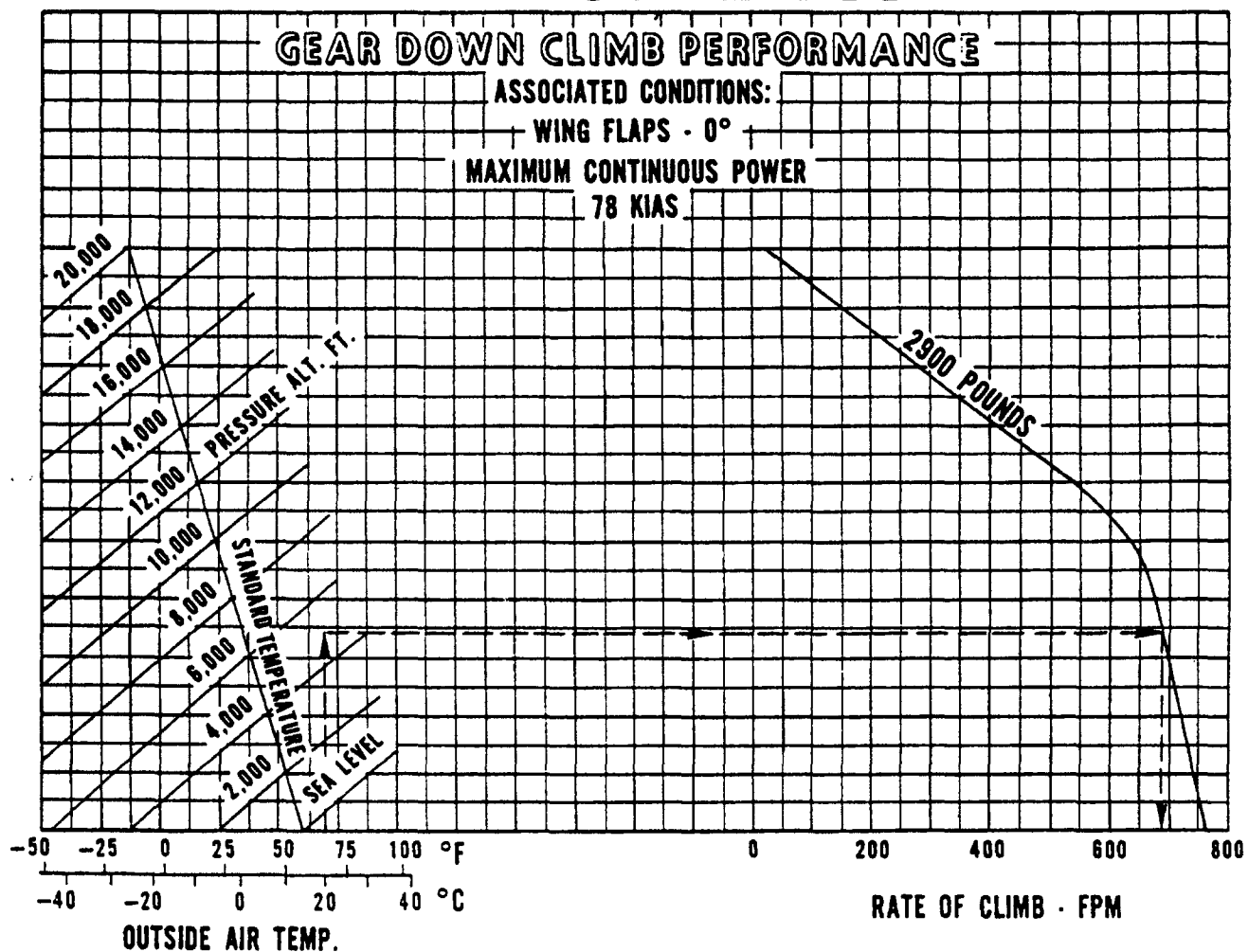
Gross weight: 2740 lbs.

Rate of climb: 900 FPM

GEAR UP CLIMB PERFORMANCE

Figure 5-13

PA-28R-201T



Example:

Pressure altitude: 5000 ft.

OAT: 20°C

Gross weight: 2740 lbs.

Gear down rate of climb: 690 FPM

GEAR DOWN CLIMB PERFORMANCE

Figure 5-15