LANDING GEAR LIMIT SPEEDS

The maximum speed for extending or retracting the landing gear is 280 KIAS or 0.60 Mach, whichever is less.

The maximum speed while the landing gear is extended is 304 KIAS or 0.60 Mach, whichever is less.

TAXI LIMIT SPEEDS

The maximum allowable taxi speed for ground turning versus turn radius is shown in figure 5-5 and corresponds to the speeds which produce 80 percent of the design side load factor.

TIRES AND BRAKES LIMITATIONS

TIRE LIMIT SPEED

The design limit tire speed is established at 196 knots true ground speed. The equivalent KCAS is shown in figure 5-6 for a range of altitudes and temperatures. Although emergency procedures will allow speeds in excess of this limit, repetitious operation above this limit will decrease tire life and may cause tire failure. It is not likely that tire tread will be thrown below 217 knots true ground speed. Above 260 knots true ground speed, tire tread is likely to be thrown.

Use of Chart (Figure 5-6)

Enter chart at OAT, proceed horizontally to applicable altitude line, then vertically downward, to read tire limit speed.

BRAKE ENERGY LIMITATIONS

Brake energy limits are shown in figure 5-6A (aircraft No. 1) or figure 5-6B (aircraft No. 2). Brake energy limits with slats, flaps, and speed brakes extended are shown in figure 5-6A, sheet 1, or figure 5-6B, sheet 1 (as applicable). These figures graphically depict the amount of brake energy absorbed during a stop. The figures also explain the crew action to be taken if extreme braking has been applied. Brake energy limits with flaps and slats retracted and speed brakes extended are shown in figure 5-6A, sheet 2, or figure 5-6B, sheet 2 (as applicable).

Use of Chart (Figures 5-6A and 5-6B)

Enter chart (figure 5-6A, sheet 1) at gross weight (A), project vertically to applicable airspeed when brakes are applied (B), then project horizontally to point (C). Again enter chart at outside air temperature (D), project horizontally left to pressure altitude (E), then project vertically. From point (C) and using guidelines, intersect temperature and pressure altitude projection to determine point (F). Project horizontally to point (G) and, using guidelines, intersect middle of estimated braking technique (H). Project horizontally to (I), then to (J), and read brake energy absorbed. Also, from point (J), project downward to (K) and read average peak brake probe temperature. System indications and actions to be taken for the various kinetic energy zones are outlined in the text at the right side of the chart.

MANEUVER LIMITATIONS

Limit intentional yawing maneuvers to 1 G flight conditions. Limit roll and directional control displacements for intentional maneuvers to 75 percent of full throw.

In an emergency unsymmetrical thrust condition caused by engine(s) inoperative, use of full control displacement, if required, is permitted for steady-state maneuvers.

PROHIBITED MANEUVERS

The following maneuvers are prohibited:

- Spins
- Stalls
- Steep dives
- Maneuvers resulting in excessive accelerations