PERFORMANCE - GENERAL

REGULATORY COMPLIANCE

Information in this section is presented for the purpose of compliance with the appropriate performance criteria and certification requirements of FAR 25.

STANDARD PERFORMANCE CONDITIONS

All performance in this manual is based on flight test data and the following conditions:

1. Thrust ratings include the installation, bleed air and accessory losses.
2. Full temperature accountability within the operational limits for which the airplane is certified.

NOTE

Should ambient air temperature (OAT) or altitude be below the lowest temperature or altitude shown on the performance charts, use the performance at the lowest value shown.

3. Wing flap positions as follows:

		FLAP HANDLE POSITION	FLAP DEFLECTION
a.	Takeoff	UP AND T.O. & APPR	0° AND 15°
b.	Enroute	UP	0°
c.	Approach	T.O. & APPR.	15°
d.	Landing	LAND	40°

4. All takeoff and landing performance is based on a paved, dry runway.
5. The takeoff and landing performance was obtained using the following procedures and conditions:

SINGLE ENGINE TAKEOFF - ACCELERATE GO

a. The power was set static to the setting corresponding to Figure 4-7, and then the brakes were released.
b. The pilot recognized engine failure at V_1.
c. The airplane continued to accelerate to V_R at which time positive rotation to +7.5 degrees nose up pitch attitude was made, transitioning to airspeed as V_2 was reached and maintaining V_2 to 35 feet.

NOTE

After rotation, a slight pull may be required to achieve V_2.

d. The landing gear was retracted when a positive climb rate was established at or above 35 feet AGL.
e. V_2 was maintained from the 35-foot point above the runway to 400 feet AGL.

(Continued Next Page)

STANDARD PERFORMANCE CONDITIONS (Continued)

f. The airplane was then accelerated to V_2 +10 KIAS at which time the flaps were retracted and the acceleration continued to V_{ENR}. The climb was then continued to 1500 feet AGL. Takeoff thrust was maintained to 1500 feet or five minutes and then reduced to maximum continuous enroute climb thrust setting.
g. The brake antiskid system was on during all tests.

SINGLE ENGINE TAKEOFF - ACCELERATE STOP

a. The power was set static to the setting corresponding to Figure 4-7, and then the brakes were released.
b. The pilot recognized the necessity to stop because of engine failure or other reasons just prior to V_1.
c. Maximum pilot braking effort was started at V_1 and continued until the airplane came to a stop.
d. Both throttles were brought to idle immediately after brake application.
e. Directional control was maintained through the rudder pedals and differential braking as required.
f. The brake antiskid system was on during all tests.
g. Speed brakes were not used.

MULTIENGINE TAKEOFF

a. The power was set static to the setting corresponding to Figure 4-7, and then the brakes were released.
b. Positive rotation to +7.5 degrees was made at V_R to achieve V_2 +10 by 35 feet AGL.
c. The landing gear was retracted when a positive climb rate was established.

LANDING

a. Landing preceded by a steady approach down to the 50-foot height point with airspeed at V_{REF} in landing configuration (landing flaps and gear down).
b. Thrust setting during approach was selected to control the rate of descent to approximately 800 to 1000 feet per minute.
c. Idle thrust was established at the 50-foot height point and throttles remained in that setting until the airplane had stopped.
d. Rotation to a three-point attitude after touchdown was accomplished at a normal rate.
e. Maximum pilot braking effort was initiated immediately on nose wheel contact and continued throughout the landing roll.
f. The antiskid system was on during all tests.
g. Speed brakes were not used.

CONDITIONS	
Wing flaps	Land
Engines	Two engines operating
Landing gear	Extended
Antiskid system	Operative