

LANDING (Continued)

SHORT FIELD LANDING

For short field landings, make a power approach at 78 KIAS with the propeller control lever at MAX (full forward) and with full flaps. After all approach obstacles are cleared, reduce power to idle. Maintain 78 KIAS approach speed by lowering the nose of the airplane. Touchdown should be made with the power lever at IDLE, and on the main wheels first. Immediately after touchdown, lower the nose gear, reposition the power lever against the spring in the BETA range, and apply heavy braking as required.

For maximum brake effectiveness after all three wheels are on the ground, hold full nose up elevator and apply maximum possible brake pressure without sliding the tires.

The landing performance in Section 5 is based on the above procedure. A reduction in ground roll of approximately 10% will result from the use of reverse thrust (power lever full aft to provide increased power from the gas generator and a reverse thrust propeller blade angle).

CAUTION

TO MINIMIZE PROPELLER BLADE EROSION OR POSSIBLE PROPELLER BLADE DAMAGE, REVERSE THRUST SHOULD BE USED ONLY WHEN NECESSARY TO SHORTEN THE GROUND ROLL. BRINGING THE PROPELLER OUT OF REVERSE BEFORE DECELERATING THROUGH APPROXIMATELY 25 KNOTS WILL MINIMIZE PROPELLER EROSION.

CROSSWIND LANDING

For crosswind approaches, either the wing-low, crab or combination method may be used. A flap setting between 10° and 30° is recommended. Use a minimum flap setting for the field length. After touchdown, lower the nose wheel and maintain control. A straight course is maintained with the steerable nose wheel, ailerons, and occasional braking if necessary.

(Continued Next Page)

LANDING (Continued)

BALKED LANDING

In a balked landing (go-around) climb, the wing flap setting should be reduced to 20° after takeoff power is applied. After all obstacles are cleared and a safe altitude and airspeed are obtained, the wing flaps should be retracted.

AFTER SHUTDOWN

If dusty conditions exist or if the last flight of the day has been completed, install engine inlet covers to protect the engine from debris. The covers may be installed after the engine has cooled down (ITT indicator showing "off scale" temperature). Secure the propeller to prevent windmilling since no oil pressure is available for engine lubrication when the engine is not running.

COLD WEATHER OPERATION

Special consideration should be given to the operation of the airplane fuel system during the winter season or prior to any flight in cold temperatures. Proper preflight draining of the fuel system is especially important and will eliminate any free water accumulation. The use of an additive is required for Anti-ice protection. Refer to Section 8 for information on the proper use of additives.

Cold weather often causes conditions which require special care prior to flight. Operating the elevator and aileron trim tabs through their full travel in both directions will assure smooth operation by reducing any stiffness in these systems caused by the cold weather effects on system lubrication. Even small accumulations of frost, ice, snow or slush must be removed, particularly from wing, tail and all control surfaces to assure satisfactory flight performance and handling. Also, control surfaces must be free of any internal accumulations of ice or snow.

The use of an external pre-heater reduces wear and abuse to the engine and the electrical system. Pre-heat will lower the viscosity of the oil trapped in the oil cooler, prior to starting in extremely cold temperatures.

(Continued Next Page)

INTRODUCTION

Section 4 provides checklist and amplified procedures for the conduct of normal operation. Normal procedures associated with optional systems can be found in Section 9.

WARNING

THERE IS NO SUBSTITUTE FOR PROPER AND COMPLETE PREFLIGHT PLANNING HABITS AND THEIR CONTINUAL REVIEW IN MINIMIZING EMERGENCIES. BE THOROUGHLY KNOWLEDGEABLE OF HAZARDS AND CONDITIONS WHICH REPRESENT POTENTIAL DANGERS, AND BE AWARE OF THE CAPABILITIES AND LIMITATIONS OF THE AIRPLANE.

SPEEDS FOR NORMAL OPERATION

Unless otherwise noted, the following speeds are based on a maximum weight of 8750 pounds for takeoff and 8500 pounds for landing and may be used for any lesser weight. However, to achieve the performance specified in Section 5 for takeoff distance, climb performance, and landing distance, the speed appropriate to the particular weight must be used.

Takeoff:

Normal Climb Out	85-95 KIAS
Short Field Takeoff, Flaps 20°, Speed at 50 Feet	83 KIAS
Type II, Type III or Type IV Anti-ice Fluid Takeoff (Flaps 0°):	
8750 Lbs Without Cargo Pod	83 KIAS
8550 Lbs With Cargo Pod	83 KIAS

Enroute Climb, Flaps Up:

Cruise Climb	110-120 KIAS
Best Rate of Climb, Sea Level to 10,000 Feet	104 KIAS
Best Rate of Climb, 20,000 Feet	87 KIAS
Best Angle of Climb, Sea Level to 20,000 Feet	72 KIAS

Landing Approach:

Normal Approach, Flaps Up	100-115 KIAS
Normal Approach, Flaps 30°	75-85 KIAS
Short Field Approach, Flaps 30°	78 KIAS

(Continued Next Page)

SPEEDS FOR NORMAL OPERATION (Continued)

Balked Landing:

Takeoff Power, Flaps 20° 80 KIAS

Maximum Recommended Turbulent Air Penetration Speed:

8750 Lbs 148 KIAS

7500 Lbs 137 KIAS

6250 Lbs 125 KIAS

5000 Lbs 112 KIAS

Maximum Demonstrated Crosswind Velocity:

Takeoff or Landing 20 KNOTS