

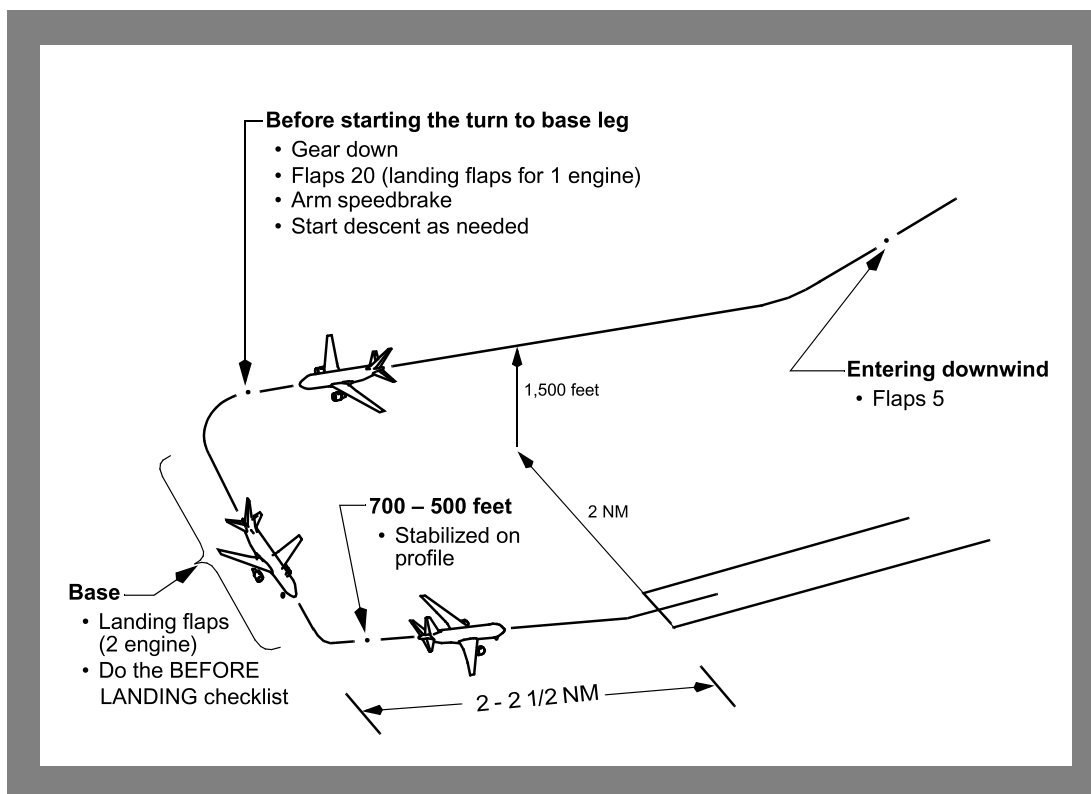
DCA22LA126

OPERATIONAL FACTORS/HUMAN PERFORMANCE

Attachment 6: FedEx Express Flight Crew Training Manual [Excerpt]

Visual Traffic Pattern

Visual Traffic Pattern Profile



Visual Approach - General

The recommended landing approach path is approximately $2\frac{1}{2}^\circ$ to 3° . Once the final approach is established, the airplane configuration remains fixed and only small adjustments to the glide path, approach speed, and trim are necessary. This results in the same approach profile under all conditions.

Thrust

Engine thrust and elevators are the primary means to control attitude and rate of descent. Adjust thrust slowly using small increments. Sudden large thrust changes make airplane control more difficult and are indicative of an unstable approach. No large changes should be necessary except when performing a go-around. Large thrust changes are not required when extending landing gear or flaps on downwind and base leg. A thrust increase may be required when stabilizing on speed on final approach.

Downwind and Base Leg

Fly at an altitude of 1,500 feet above the runway elevation and enter downwind with flaps 5 at flaps 5 maneuver speed. Maintain a track parallel to the landing runway approximately 2 NM abeam.

Before starting the turn to base leg, extend the landing gear, select flaps 20, arm the speedbrake and slow to flaps 20 maneuver speed or approach speed plus wind additive if landing at flaps 20. If the approach pattern must be extended, delay lowering gear and selecting flaps 20 until approaching the normal visual approach profile. Turning base leg, adjust thrust as required while descending at approximately 600-700 fpm.

Extend landing flaps before turning final. Allow the speed to decrease to the proper final approach speed and trim the airplane. Do the BEFORE LANDING checklist. When established in the landing configuration, maneuvering to final approach may be accomplished at final approach speed (V_{REF} plus wind additive).

Final Approach

Roll out of the turn to final on the extended runway centerline and maintain the appropriate approach speed. An altitude of approximately 300 feet AFE for each NM from the runway provides a normal approach profile. Attempt to keep thrust changes small to avoid large trim changes. With the airplane in trim and at target airspeed, pitch attitude should be approximately the normal approach body attitude. At speeds above approach speed, pitch attitude is less. At speeds below approach speed, pitch attitude is higher. Slower speed reduces aft body clearance at touchdown. Stabilize the airplane on the selected approach airspeed with an approximate rate of descent between 700 and 900 feet per minute on the desired glide path, in trim. Stabilize on the profile by 500 feet above touchdown.

ⓘ **Note:** Descent rates greater than 1,000 fpm should be avoided.

With one engine inoperative, the rudder trim may be centered before landing. This allows most of the rudder pedal pressure to be removed when the thrust of the operating engine is retarded to idle at touchdown.

Full rudder authority and rudder pedal steering capability are not affected by rudder trim. If touchdown occurs with the rudder still trimmed for the approach, be prepared for the higher rudder pedal forces required to track the centerline on rollout.

Touch and Go Landings

ⓘ **Note:** Touch and Go Landings are only authorized for Flight Test and those crewmembers who have been specifically trained to accomplish them.