Go-Around (Manual or Auto Flight Engaged)
2 or 3 Engines Operating

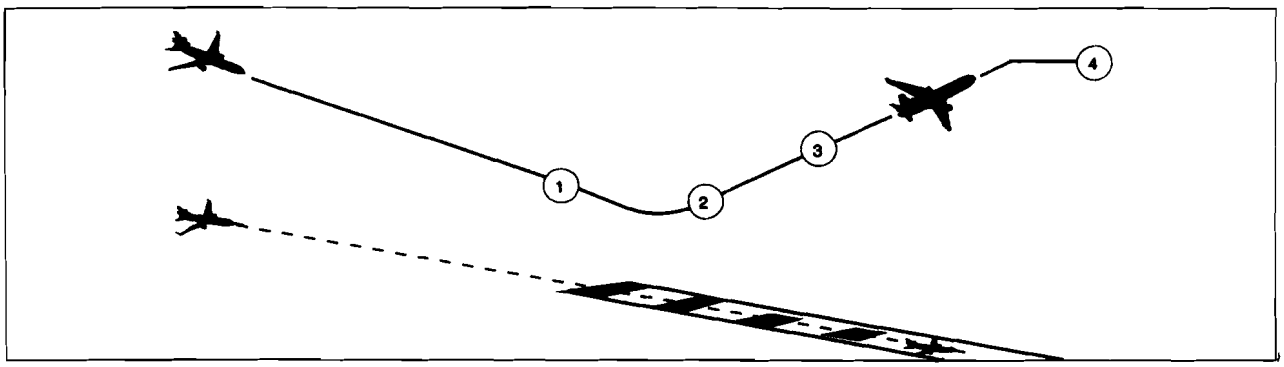

Figure 12

LANDING

Autothrottles should be used for all landings and will begin to retard after passing 50′ AGL. An attitude adjustment should be initiated between 30′ and 40′ (approximately 2°). Do not trim stabilizer beyond this point. Aircraft should touch down in touchdown zone. This technique will result in a touchdown slightly below V_{REF}. Do not hold aircraft off in an attempt to achieve a smooth landing. This could result in a long touchdown, unusually heavy braking, a higher pitch attitude, and reduced tail clearance.

CAUTION: THE AFT FUSELAGE WILL CONTACT THE RUNWAY AT APPROXIMATELY 10° OF PITCH ATTITUDE WITH STRUTS COMPRESSED.

NOTE: Below 10′ with the aircraft in landing attitude (sink rate approximately 2-4′ per second), the basic technique is to maintain attitude by applying the required control wheel pressures.

TOUCHDOWN

After touchdown, monitor ground spoiler deployment and be prepared to counter any pitch-up tendency as spoilers extend. Smoothly fly nosewheel to the runway, and if auto ground spoilers do not fully deploy upon nose wheel touchdown, Captain will manually deploy the spoilers. Pitch-up tendency is more pronounced at aft CG. Use of auto brakes will help counter any pitch-up tendency. LSAS will assist the pilot in avoiding nose pitch-up after touchdown, and in lowering the nose to the runway.

NOTE: Ground spoiler deployment causes a nose up pitching moment. This effect is most noticeable at aft centers off gravity. It is important to resist any pitch up tendency with forward pressure on the control column and smoothly lower the nosewheel to the runway. The LSAS, on aircraft with FCC 908 will assist the pilot in the nose lowering task.

NOTE: Pilots must be aware that if the number 2 engine throttle is not at idle at main gear wheel spinup, it is possible that immediately after AGS deployment the ground spoilers will retract. If this occurs, ground spoilers must be manually extended.

ROLLOUT

As the nose wheel is lowered to the runway, deploy thrust reversers on all three engines simultaneously. A momentary pause will be encountered at interlock stop on engines 1 and 3, and then reverse thrust may be selected to desired level. Engine 2 will provide only idle reverse thrust until nose wheel strut compression. For a normal landing, at 80 KIAS, smoothly move reverse levers to achieve reverse idle by 60 KIAS. Move reverse levers to forward idle position by turnoff speed.

WARNING: AFTER REVERSE THRUST IS INITIATED, A FULL STOP LANDING MUST BE MADE.

NOTE: Maximum reverse thrust may be selected without delay and may occur prior to nose wheel touchdown. However, there should be no effort to delay lowering the nose wheel to the runway. Aerodynamic braking is ineffective and not a recommended deceleration technique. It also increases the likelihood of a tailstrike.

REVERSE THRUST OPERATION

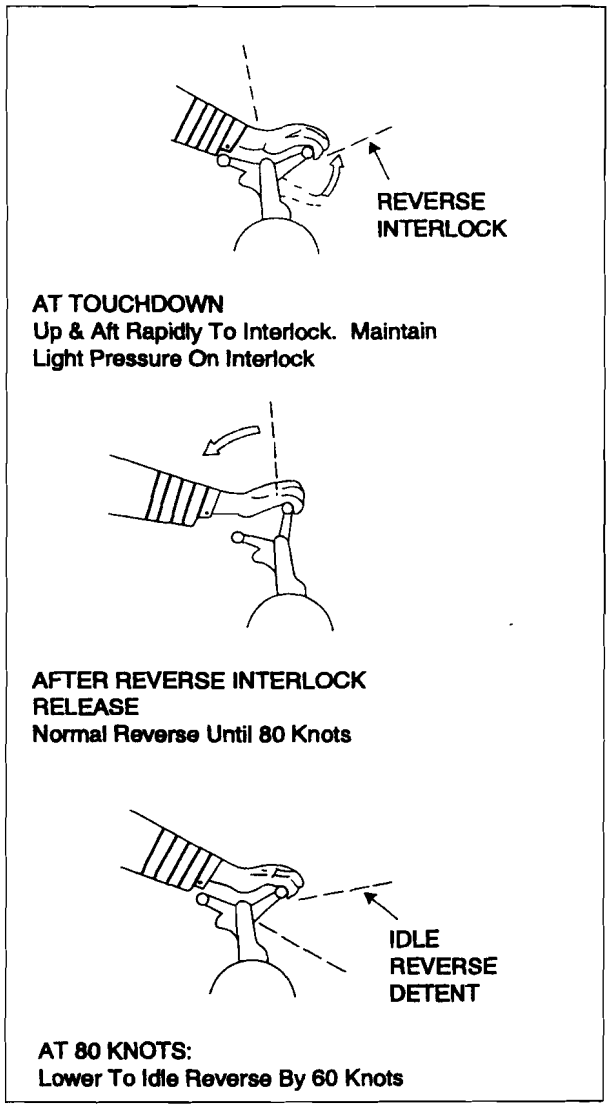

Figure 13

CROSSWIND LANDING

Maintain the aircraft on the extended runway centerline as in all visual approaches. Maintain centerline track by correcting into the wind. At approximately 100', remove the drift angle correction by applying downwind rudder. Depending on the amount of drift angle and the rate of removal, a varying cross aileron pressure will be required to maintain a wing level attitude. Stronger crosswind conditions will probably require holding the upwind wing slightly down to maintain zero drift. In this case, touchdown is made on the upwind wheels. Do not allow the upwind wing to rise as the drift angle is removed. To avoid striking the wing engine do not bank over 6°.

In strong crosswinds, performing the forward slip to remove the drift angle increases both drag and sink rate. Adjust power accordingly to counter higher sink rate.

Do not attempt a smooth landing. Rudder/nose wheel steering should be adequate. On unusually slippery runways, if the aircraft is permitted to weathervane into the wind, use of reverse thrust could accelerate a skid toward the downwind side of the runway. If so, reduce thrust to regain directional control.

BOUNCED LANDING RECOVERY

With the automatic ground spoiler actuation upon main wheel spin up, a bounced landing is a rare occurrence. If a bounced landing should occur, do not push forward on the yoke, as this will cause still another bounce to occur. Pushing forward on the yoke will cause an increase in sink rate, and possibly damage the nose gear. The safest procedure, generally speaking, is to re-establish a normal landing attitude (approx. 6-7°) and add thrust as necessary to control the rate of descent. If only a shallow bounce should occur, thrust may not be needed.

Do not increase the pitch attitude higher than normal as this will increase the danger of a high sink rate and/or a tail strike occurring, with the possibility of entering the stall regime. As the aircraft touches down a second time use the normal landing procedure as it pertains to the spoiler extension, reverse thrust, and brake usage.

If the bounce or bounces use excessive runway and insufficient runway exists for stopping, a go-around may become necessary. In this event, apply max thrust and use the normal Missed Approach Procedure. Depending on where the missed approach is initiated, a second touchdown may occur.

WARNING: IF REVERSE THRUST IS INITIATED, A FULL STOP LANDING MUST BE MADE.

TAIL STRIKE AWARENESS

TAKEOFF

The recommended rotation technique is a 2.5° per second rotation to an initial pitch attitude of approximately 15°. The Pilot Flying (PF) should then transition to the Flight Director pitch bar for guidance. The Flight Director pitch bar is not usable until approximately five seconds after nose gear strut extension. A two step rotation is not appropriate. Two step or segmented rotations will significantly impact takeoff performance (i.e., required