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ATTACHMENT 7

COPY OF NORMAL TAKEOFF PROCEDURES (1 PAGE)

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NORMAL TAKEOFF PROCEDURES

- Ensure that the FMA reads ALT, TAK OFF, TAK OFF.
- Conduct a takeoff briefing prior to application of takeoff power.
- Advance throttles to 1.4 EPR (MD-90: 1.2 EPR) or (throttles approximately vertical) and check EPR's approximately match. Acceleration time from idle to 1.4 EPR (MD-90: 1.2 EPR) can vary among engines because of differences in engine bleed configuration or fuel control acceleration schedules. Variations of up to three seconds are considered acceptable.
- PF calls for autothrottles.
- PNF places ATS Switch ON.
- Check that the autothrottles advance to the proper EPR. Both engines should accelerate equally from 1.4 EPR (MD-90: 1.2 EPR) to the target takeoff thrust. If the throttles clamp prior to takeoff EPR, advance them manually. Approximate N_1 crosscheck readings are:

	88	90
ALTERNATE POWER =	88%	78%
NORMAL POWER =	92%	82%
MAXIMUM POWER =	95%	85%

- Maintain runway centerline with rudder pedal steering.
- Nose wheel steering with the nose gear steering wheel should not be used above taxi speed (15 knots).
- Maintain positive nosewheel contact with slight forward pressure on the control column.
- The Captain will have his hand on the top portion of the throttles until V_1 since the decision to reject or continue the takeoff rests with him.
- If the F/O is making the takeoff, he may advance the throttles to the takeoff setting. After takeoff power is set, the Captain will take control of the throttles.

At V_R, commence a smooth, continuous rotation (approximately 3° per second) to attain a speed of V_2 + 10 knots minimum, limiting pitch to 20°. Slow or fast rotation will seriously degrade takeoff performance.