

**DOCKET NO.: SA-519
EXHIBIT NO. 2II**

**NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.**

**OPERATIONAL FACTORS GROUP CHAIRMAN'S FACTUAL REPORT
ATTACHMENT 34: BOEING MD-80 WET RUNWAY REVERSE THRUST
GUIDANCE**

**American Airlines flight 1420
Little Rock, Arkansas
June 1, 1999**

DCA99MA060

Attachment 34

to Operational Factors Group Chairman's Factual Report

DCA99MA060

Boeing MD-80 Wet Runway Reverse Thrust Guidance

MD-80

FLIGHT CREW OPERATING MANUAL

LANDING ROLL EXPANDED PROCEDURES

Throttles -

PF move throttles to idle.

Spoiler Operation -

When main gear is on runway, PNF observe spoiler lever moves aft to EXT position.

NOTES

For auto deployment of inboard (ground) spoilers, throttles must be at idle. If throttles are above idle at touchdown, outboard and inboard flight spoilers may deploy and retract and the ABS will disarm.

If spoiler lever does not move aft or does not remain at EXT position, PNF call "No spoilers," PF move lever aft to full extend position and up to latched position.

Reverse Thrust -

After main gear contact, and after nose lowering has commenced, thrust reversers may be deployed to reverse idle detent. Upon nosewheel touchdown, normal reversing techniques and limits should be used.

WARNING

After reverse thrust is initiated, a full stop landing must be made.

NOTE

Lower thrust reverser buckets may contact runway if pitch attitude is in excess of 8 degrees.

When nose gear is firmly on runway, apply sufficient down elevator after nose gear contact to increase weight on the nosewheel for improved steering effectiveness. (An excessive amount of down elevator will unload the main gear and reduce braking efficiency.) Apply reverse thrust to idle reverse thrust detent. After reverse thrust is verified, observe the following limitations:

- On a dry runway, reverse thrust of no more than 1.6 EPR should be used, except in an emergency.
- On wet or contaminated runways and without Intermediate Reverse Thrust Detent installed, reverse thrust of no more than 1.3 EPR should be used, except in an emergency.

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