DOCKET NO.: SA-519
EXHIBIT NO. 2HH

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

OPERATIONAL FACTORS GROUP CHAIRMAN'S FACTUAL REPORT
ATTACHMENT 33: AA LANDING GUIDANCE FOR SPOILER LEVER

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

DCA99MA060

Attachment 33

to Operational Factors Group Chairman's Factual Report

DCA99MA060

AA Landing Guidance for Spoiler Lever

Landing

Pilot-Flying	Pilot-Not-Flying
Spoiler Lever ..... CHECK FULL AFT If Spoiler Lever does not move back to full aft (EXT) position, the Captain, regardless of which pilot is making the landing, will manually deploy spoilers.	
Reverse Levers ..... AS REQUIRED *The pilot making the landing* will normally operate the Reverse Levers. If either engine fails to enter reverse, i.e., Reverse Lever does not move into reverse range, use caution in applying reverse on remaining engine. If either blue ENG REVERSE THRUST Light does not illuminate, *the pilot not making the landing* will call out – *"Left or right engine not in reverse."* *The pilot not making the landing* will also call out airspeed of *" '100 knots,' '80 knots,' and '60 knots.' "*	
Auto Brakes ..... AS REQUIRED *The pilot not making the landing* will call out – *"Auto brakes off"* if ABS DISARM Light or the AUTO BRAKE FAIL Light illuminates during landing roll. If using Auto Brakes on a dry runway, normally revert to manual braking at a safe speed below 100 knots, depending on deceleration rate and runway remaining. If runway is wet or slippery, continue auto braking until reaching taxi speed. Release auto braking by gently applying manual braking.	

NOTES

1. **Flight Controls**
   The pilot-not-flying will guard the flight controls on all landings.
2. **Auto Spoiler Operation**
   Throttles must be at idle for automatic deployment of ground spoilers.
3. **Reversing**
   Reversing should be initiated as soon as practicable since reversing is more effective at higher speeds.
   When nose gear is firmly on the runway, move Reverse Levers to reverse idle then apply reverse thrust symmetrically to 1.6 EPR unless safety dictates more thrust.

CAUTION

Moving the Reverse Levers to reverse idle prior to the nose gear being firmly on the runway may cause the reverse buckets to contact the ground.

At 80 knots, start reducing reverse thrust so as to be out of reverse by 60 knots (unless a longer reverse cycle is needed to assure safe stopping).

(1)