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

**OPERATIONAL FACTORS GROUP CHAIRMAN'S FACTUAL REPORT
ATTACHMENT 44: AA LOW LEVEL WINDSHEAR ALERT SYSTEMS
INFORMATION**

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

DCA99MA060

Attachment 44

to Operational Factors Group Chairman's Factual Report

DCA99MA060

AA Low Level Windshear Alert Systems Information



7. WINDSHEAR

7.1 General

- A. Because unexpected changes in wind speed and direction can be hazardous to aircraft at low altitudes on approach to and departing from airports, it is essential that all such encounters be reported by the most expeditious means to the Tower, AA Operations and the Dispatch Office. These reports will provide a means to immediately relay the windshear condition to other arriving or departing aircraft, and/or consider alternate operations to other aircraft.
1. Reports should be given in a clear, concise and understandable manner. Do not report windshear in positive or negative terminology. Examples of proper concise reporting might be:
 - a) "Abrupt loss of 20 knots encountered at 400 feet."
 - b) "Gradual gain of 25 knots between 700 and 400 feet followed by loss of 40 knots between 400 feet and surface."
 - c) "Abrupt windshear at 300 feet, max thrust required."
 - d) Dispatchers will notify other flights, whenever pilots report conditions described above.

7.2 LLWAS - Low Level Windshear Alert Systems

- A. An array of between 6 and 24 wind sensors that alerts the control tower when a windshear between sensors greater than a predetermined level has been exceeded. Wind readouts are displayed to the tower controller and an advisory will be transmitted to the pilots of arriving and departing aircraft as long as the windshear condition persists. The following terminology will be used by the controller:
"American (flight #) wind two one zero at one two, north boundary wind three four zero at three zero."
- B. These wind reports are advisory only. The reported surface winds, as presently obtained from the centerfield instrumentation, are controlling for our Flight Operations.
- C. Airports that have a LLWAS installed are indicated by a note on the Flight Manual Part II airport diagram page.

