



Brief of Accident (Continued)

DCA06MA009  
File No. 22717

12/08/2005

Chicago, IL

Aircraft Reg No. N471WN

Time (Local): 19:15 CST

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Occurrence #1: OVERRUN  
Phase of Operation: LANDING - ROLL

Findings

1. (C) THRUST REVERSER - INADEQUATE
  2. (C) PROCEDURES/DIRECTIVES - NOT FOLLOWED - FLIGHTCREW
  3. (C) LACK OF FAMILIARITY WITH AIRCRAFT - FLIGHTCREW
  4. (F) PROCEDURE INADEQUATE
  5. (F) CONDITION(S)/STEP(S) INSUFFICIENTLY DEFINED - COMPANY/OPERATOR MANAGEMENT
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Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT  
Phase of Operation: LANDING - ROLL

Findings

6. OBJECT - FENCE
7. OBJECT - VEHICLE

Findings Legend: (C) = Cause, (F) = Factor

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The National Transportation Safety Board determines the probable cause(s) of this accident as follows.

The pilots' failure to use available reverse thrust in a timely manner to safely slow or stop the airplane after landing, which resulted in a runway overrun. This failure occurred because the pilots' first experience and lack of familiarity with the airplane's autobrake system distracted them from thrust reverser usage during the challenging landing.

Contributing to the accident were Southwest Airline's 1) failure to provide its pilots with clear and consistent guidance and training regarding company policies and procedures related to arrival landing distance calculations; 2) programming and design of its onboard performance computer, which did not present inherent assumptions in the program critical to pilot decision making; 3) plan to implement new autobrake procedures without a familiarization period; and 4) failure to include a margin of safety in the arrival assessment to account for operational uncertainties. Also contributing to the accident was the pilots' failure to divert to another airport given reports that included poor braking action and a tailwind component greater than 5 knots. Contributing to the severity of the accident was the absence of an engineering materials arresting system, which was needed because of the limited runway safety area beyond the departure end of runway 31C.