

**NATIONAL TRANSPORTATION SAFETY BOARD**

Office of Aviation Safety

Washington, D.C. 20594

September 11, 2008

**Addendum 1 to Group Chairmen's Factual Report**

**OPERATIONAL FACTORS / HUMAN PERFORMANCE**

**DCA07MA310**

**A. ACCIDENT**

Operator: American Airlines  
Location: Lambert - Saint Louis International Airport (STL), Saint Louis, Missouri  
Date: September 28, 2007  
Time: 1313 central daylight time  
Airplane: MD-82<sup>1</sup>, Registration Number: N454AA, Serial # 49559

**Additional Information that was provided after the completion of the Factual Report:**

Change to procedure:

American revised the procedure for L or R START VALVE OPEN Light. This revision was issued to pilots as a DC-9 Operating Manual Bulletin<sup>2</sup>, Number DC-9-24, dated August 15, 2008.

The revised procedure designated the first three items on the checklist as red box<sup>3</sup> items. These items were to be committed to memory and were immediate action items to be performed prior to performance of the associated checklist.

American Airlines has requested approval from the FAA to change the procedure for a start valve open light from an Abnormal procedure to an Emergency procedure which would be included in the red tabbed Emergency procedures section of the DC-9 Operating Manual – QRH.

Safety Alert for Operators

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<sup>1</sup> MD-80 is the FAA type designation used for the accident airplane. MD-82 is a version of the MD-80.

<sup>2</sup> See Attachment 9 – Revised L or R Start Valve Open Light On / Annunciation Procedure

<sup>3</sup> The American Airlines DC-9 Operating Manual - QRH, EMER / ABNORM PREFACE 1 page, Conventions, stated “Some emergency situations require immediate corrective action steps. These few steps are contained in a red box and should be committed to memory and accomplished without reference to the Quick Reference Handbook.”

Post-accident, the Federal aviation Administration (FAA) issued a Safety Alert for Operators (SAFO) # 08018<sup>4</sup> dated August 5, 2008. This SAFO described characteristics of the fire handle on DC-9, MD-80, and MD-90 airplanes. The SAFO described the event and how the opening of the pneumatic crossfeed valve allowed the fire handle to retract and fuel to be introduced back into a fire damaged engine area. The SAFO recommended that Directors of Safety, Directors of Operations, and Training Managers of the DC-9, MD-80, and MD-90 airplanes review their training materials and determine if their pilots were being effectively trained on “the design and interrelationship of the systems affected by the fire handle”. The SAFO also recommended adding “a note at the end of the Engine Fire / Damage / Separation Checklist, and Engine Failure / Inflight Shutdown Checklist, cautioning that “The pneumatic cross-feed is mechanically connected to the fire handle. Opening the pneumatic cross-feed will retract the fire handle and potentially re-introduce fuel to a fire.” Additionally, flightcrews should obtain proficiency in pneumatic cross-feed operation during simulator training, including the need for airfoil anti-ice during engine-out training”.

Submitted by

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Operations Group Chairman

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<sup>4</sup> See Attachment 10 – SAFO – Fire Handle Characteristics, DC-9, MD-80, and MD-90 Airplanes