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FAA knew of MD-80 wiring problem in 2003

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Airline safety regulators have known for years that MD-80 airliners could have a potentially serious electrical wiring problem like the one that led to the sudden grounding of American Airlines planes last week.

But a review of Federal Aviation Administration documents indicates that the agency was in no hurry to force airlines to make fixes.

The FAA had begun the process to issue an airworthiness directive ordering inspections and repairs of MD-80 wiring bundles, located near the plane's main landing gear, by June 2003, and may have started as early as 2001, according to agency documents.

The directive didn't take effect until September 2006, when airlines were given 18 months to comply.

Years earlier, before McDonnell Douglas, the manufacturer of the MD-80, merged with Boeing, it had issued service bulletins warning airlines of the potential problem. FAA documents refer to a November 2002 Boeing service-alert bulletin that "supersedes and cancels" earlier McDonnell Douglas service bulletins.

Despite the warnings, airlines have filed few reports of serious problems with the wiring over the years.

A *Star-Telegram* review of more than 24,000 MD-80 maintenance and incident reports filed by airlines with the FAA since 2000 shows only one case of chafed and burned wires in the wiring bundle in question. That occurred in August 2005 on a Delta Air Lines MD-88 while it taxied to the gate.

John Eakin, owner of Air Data Research in Helotes, did his own search of FAA records dating to the 1980s. He found five other incidents of burned, shorted or chafed electrical wiring connected to the auxiliary hydraulic pump on MD-80s or the much older DC-9 predecessors.

Eakin, who researches aircraft maintenance and safety records for lawyers and crash investigators, said there is nothing he can find in the data that suggests there was a problem that required drastic action by the FAA, such as the grounding of a fleet.

Even if there were discrepancies between the exact repair methods required by the FAA and the way they were performed by an airline such as American, Eakin said, they probably could have been fixed during regular maintenance without posing any danger.

"If I thought the airlines had screwed up, I'd be the first to criticize them," he said. "But in this case, I think it's an overreaction by the FAA."

Service bulletins and alerts

During the lifetime of an aircraft model, which can be 30 or more years, manufacturers notify airlines, repair centers and the FAA when a problem is discovered that needs corrective action.

That notification takes the form of a service bulletin. A more urgent notice is a service-alert bulletin. Lawyers say those bulletins, even without formal FAA action, carry something akin to the force of law.

"You've got to get that done," said New York aviation lawyer Brian Alexander, a former military pilot. "To ignore that is breach of the standard of care" expected of an airline or other aircraft operator.

After a service bulletin is issued, the FAA typically goes through the process of issuing a formal, legal airworthiness directive ordering airlines to take action. It's a rulemaking process that can take months. The agency typically issues dozens, even hundreds of these directives every year for all types of aircraft. Lynn Tierney, the FAA's assistant administrator for communications, said the agency may issue 200 airworthiness directives a year.

Tierney said it was American's decision to ground its planes until they could be brought into compliance with the FAA's exact safety requirements. The airline could have avoided doing so, Tierney said, by doing the modifications in the "18 months they were given to do the work."

That's not exactly how American officials see it.

In a conference with employees Thursday, Bob Reding, American's executive vice president of operations, said the airline worked with Boeing and the FAA in 2004 to design a way to address the problem with chafing and worn wires.

Boeing issued an updated service bulletin based on that work.

The FAA issued its order in September 2006 with the specific requirements contained in the Boeing service bulletin and gave airlines 18 months to comply.

American, however, was already implementing the maintenance work called for in the service bulletin on its entire MD-80 fleet and had completed the work before the March 5 deadline, airline spokesman John Hotard said.

Then in late March, after the FAA announced that it was taking action against Southwest Airlines for missing required inspections, the agency began audits of all airline inspection and maintenance records. When FAA inspectors looked at several American MD-80s, they found what Reding called minor differences between the way American had performed the work and the specific details of the airworthiness directive.

According to Hotard, there were minor differences between the way American interpreted the Boeing service bulletin and the exact FAA requirements, which in the past had never been a problem. American set out to correct those changes. Then Monday, a new FAA inspection called for some other changes including the replacement of parts American had used that were not approved by the FAA.

American officials then made the decision to ground the planes, fully expecting that the FAA would require them to do so anyway.

MD-80 groundings a 'mixed bag'

Given its apparent lack of urgent attention to the MD-80 wiring issue in the past, was the FAA right in forcing American to undertake immediate changes to its earlier repairs last week that caused the airline to ground 300 MD-80s and inconvenience thousands of travelers?

Jim Burnett, former chairman of the National Transportation Safety Board, said he was unwilling "to criticize the FAA for doing its job."

In his experience investigating accidents and making safety recommendations, Burnett said the FAA was too often "overly generous" in giving airlines time and leeway to comply with inspection, repair and upgrade orders.

"I've criticized them many times for not being proactive and for being too close to the airlines," Burnett said, "so I'm reluctant to criticize them for being too tough."

Alexander, the New York lawyer, called this week's fiasco "a mixed bag," with the FAA reacting to political pressure resulting from the revelation that Southwest had skipped inspections "to step up after years of lax oversight and American getting caught again cutting a corner."

"In the end," Alexander said, "if safety wins, we all win, so better to stand down the fleet and fix it even though the cost and disruption should and could have been avoided had American done what it should from the get-go and the FAA done its job monitoring the carriers before compliance time runs out."

Staff writers Jeff Claassen and Dave Montgomery contributed to this report.