NTSB to investigate apparent 727 fuel tank explosion

The National Transportation Safety Board said today it is sending a team of investigators to Bangalore, India, after the apparent explosion of a wing fuel tank on a Boeing 727.

Although the jet was on the ground and there were no passengers aboard, the incident raised fresh questions and concerns about a safety issue that has been at the forefront of the commercial aviation industry since the center fuel tank exploded on a TWA 747 shortly after it took off from Kennedy airport in New York on July 17, 1996. All 230 people on the jumbo jet died. "The tragic TWA 800 accident in 1996 highlighted the vulnerability of transport aircraft fuel tanks," NTSB Acting Chairman Mark Rosenker said in a statement about the 727 incident.

"A decade later, the issue remains a major concern of the safety board and is on our most wanted list of safety improvements. I am hopeful what is learned in this investigation may provide added impetus for a resolution of this problem without further delay."

The incident occurred May 4 and involved a Transmile Airlines 727-200. The plane was being repositioned on the ground when the fuel tank in the left wing apparently exploded, the NTSB said. No one was injured.

A Boeing spokeswoman said today that the airplane maker only learned about the incident last week and notified the Federal Aviation Administration and the safety board. Boeing has investigators en route to India to assist in the investigation, said spokeswoman Liz Verdier.

The 727 is one of Boeing's oldest jets and few are still carrying passengers in the United States. But there are many 727s in service overseas.

In 1999, the FAA ordered emergency inspections of U.S.-registered 727s because of concerns about a possible fuel-tank explosion.

Airlines were told to check aluminum tubes that carry electrical wires through the fuel tanks after mechanics found severe wearing of wires and holes in the tubing on two 727s. There were signs of electrical sparking around the holes. A similar FAA directive had been issued a year earlier for Boeing's 737 when the same kind of wiring problem was found on that plane. The FAA also ordered checks of 747s and 767s.

The danger of fuel-tank vapors exploding on commercial jetliners has been in the spotlight since TWA Flight 800. After the longest investigation in U.S. history, the NTSB ruled that a spark of unknown origin likely ignited fuel vapors in the center fuel tank of the 747.

Since then, there have been other fuel-tank explosions on commercial jetliners.

In 2001, a Thai Airways 737-400 exploded at the gate at the Bangkok airport. A similar explosion had destroyed a Philippine Airlines 737 on the ground in 1999.

The FAA issued a proposed rule last year that would require operators and manufacturers of transport-category aircraft to take steps to reduce the likelihood of fuel-tank vapors exploding. This would be accomplished by using a fuel inerting system. An inert gas would be pumped into fuel tanks as they empty. Boeing is designing its 787 Dreamliner for such a system should it be required.

But the industry has resisted this move because of the high costs.

Earlier this year, a study by a government-owned research group found that most efforts in this country to reduce the risk of a fuel-tank explosion on commercial jets since the TWA incident have been ineffective.

"Unsafe conditions remain," said the study by Sandia National Laboratories. It examined 18 fuel-tank safety directives for Boeing 737s and nine for Airbus A320 jets. Only two or three reduced the probability of an explosion, the report said.

While eliminating fuel-tank vapors remains one of the NTSB's "most wanted" safety improvements, cash-strapped airlines say the risks of such explosions are low and their costs to modify huge fleets of jets would be too great under the FAA's proposed rule.

It is not clear what the FAA will do next, but industry resistance could stall or kill implementation of the proposed rule.