Japan Transport Safety Board

The response from the FAA to the safety recommendation

The Japan Transport Safety Board received the response from the Federal Aviation Administration (FAA) of the United States of America to the safety recommendation issued June 29, 2012 as attached regarding an serious incident of JA002D (McDonnell Douglas MD-90-30) operated by Japan Airlines International at an altitude of about 5,500ft, about 11km west of Sendai Airport, Japan on Aug. 15, 2010

JTSB safety recommendation to the FAA

In view of the result of this serious incident investigation, the JTSB recommends that the FAA urge the engine manufacturer to take the following measures:

In the serious incident, it is highly probable that the fatigue crack originating from the outer diameter of the No.4 Bearing Scavenge Tube progressed into the fracture, whereas the Tube is covered with the heat shield, making it impossible to have a direct inspection of the relevant spot during a regular maintenance work. Therefore, it is recommended that the manufacturer review the Tube design and overhaul inspection method thereof in order to prevent the recurrence of similar cases.

U.S. Department
of Transportation
**Federal Aviation
Administration**

Office of the Administrator

800 Independence Ave., S.W.
Washington, D.C. 20591

JUN 2 6 2013

Norihiro Goto
Chairman
Japan Transport Safety Board
2-1-2, Kasumigaseki, Chiyoda-ku
Tokyo 100-8918
Japan

Dear Chairman Goto:

This is in response to a safety recommendation issued by the Japan Transport Safety Board (JTSB) to the Federal Aviation Administration (FAA) on June 29, 2012. The JTSB issued this recommendation as a result of an incident that occurred on August 15, 2010, when a McDonnell Douglas MD-90-30 aircraft, registration marks JA002D, operated by Japan Airlines International Co., Ltd. took off from Sendai Airport for Fukuoka Airport. The airplane was powered by International Aero Engines (IAE) V2500-D5 series engines. While climbing, it declared a state of emergency upon the activation of the right engine fire warning alarm at about 5,500 feet. The right engine was shut down while the fire-extinguishing system was activated; consequently the aircraft returned to Sendai Airport. Heat damage inside the cowling of the right engine was confirmed after landing. This recommendation was assigned FAA control number 12.142.

12.142. It is recommended that the FAA urge the manufacturer to review the Tube design and overhaul inspection method thereof in order to prevent the recurrence of similar cases.

FAA Comment. The Engine Certification Office agrees with the recommendation that IAE review the design and inspection requirements. We reviewed the data related to the tube fracture and determined that an airworthiness directive (AD) was warranted to mandate the replacement of the internal tube with a new tube when exposed. The AD also mandates inspection of the external tube for proper alignment and replacement if the alignment is not correct. We issued a notice of proposed rulemaking on December 28, 2012, and Final Rule AD 2013-07-10 on March 3, 2013, titled, International Aero Engines AG Turbofan Engines. The AD may be found at the following Web address:

http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAD.nsf/0/343510065821034D86257B4E004CAC64?OpenDocument&Highlight=2013-07-10

In addition, the manufacturer stated that it is in the process of redesigning the internal tube to make it more robust. The installation of the new tube design will remove those engines from applicability of the AD.

The FAA effectively addressed the intent of this safety recommendation and classified it as closed-acceptable action. If you have any questions, or need additional information regarding this safety recommendation, please contact (Name and Phone Number)

Sincerely,

(Original signed)

(Name)
Director, Office of Accident Investigation
And Prevention