



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

Office of the Administrator

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

JUN 04 2014

Mr. Jonas Bäckstrand
The Swedish Accident Investigation Authority (SHK)
P.O. BOX 12538
SE-102 29 Stockholm
Sweden

Dear Mr. Bäckstrand:

This is a final response to Safety Recommendation RL 2012: 21 R3 issued on December 28, 2012. The Swedish Accident Investigation Authority, *Statens haverikommission* (SHK), issued this recommendation following the investigation into the sudden engine failure and subsequent runway excursion of an A300-600 on January 16, 2010. The aircraft, operating as Iran Air flight 762 from Stockholm, Sweden, to Tehran, Iran, experienced a left engine failure approximately 10 seconds after commencing its takeoff roll. The sudden loss of engine power combined with a slippery runway surface resulted in a runway excursion. Safety Recommendation RL 2012: 21 R3 was received by the Federal Aviation Administration (FAA) Office of Accident Investigation and Prevention on February 11, 2013, and assigned control number 13.014.

13.014. Review and revise processes and permissions issued for the Dabber TIG Weld repair method regarding concerned parts in engines that have FAA type certification.

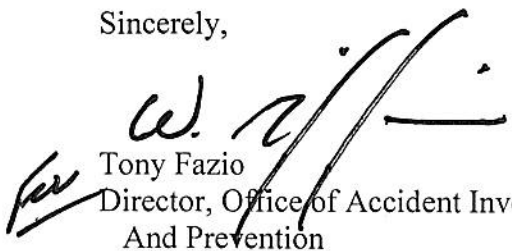
FAA Comment. The FAA's Engine Certification Office (ECO) reviewed the Dabber TIG Weld repair method with General Electric (GE), the manufacturer of the GE CF6-80C2 engines on the accident aircraft. The ECO found that a significant number of GE CF6-80C2 diffuser aft air seals in service have had this repair performed. Furthermore, three of the six failed seals referenced in the SHK accident report, including the seal that failed in the accident, were repaired by one shop. As a result, GE reviewed the repair process with this shop, which, like most engine repair shops, incorporates the manufacturer's processes in its own shop processes. GE's review found that the repair process was acceptable but noted variations in the process used by this shop. Although these variations remain within the limits of an acceptable repair, GE worked with the shop to reduce variations in order to ensure a high level of quality in its repaired seals.

In addition, in March 2012, GE increased the repairable limits for removal and reapplication of aluminum oxide coating to rebuild seal tooth height in lieu of the weld repair of the seal tooth heights. This change will help reduce the number of seals requiring the Dabber TIG Weld repair. GE is also developing an eddy current inspection (ECI) of the seal that is to be performed after the repair. The ECI will inspect for variation in the welds and validate the integrity of the repaired seal teeth.

In the course of its investigation, the ECO found that the Dabber TIG Weld repair remains acceptable. Furthermore, GE's corrective actions incorporated into the suspect repair and additional seal teeth coating changes are satisfactory. The planned additional ECIs will further increase the robustness of the seal repair. The ECO will continue to monitor the GE CF6 fleet to ensure the repair remains effective. As a result, the FAA believes that it has effectively responded to the intent of Safety Recommendation 13.014, and it has been classified as closed.

If you have any questions regarding this safety recommendation, please contact Chris Pedersen, AVP-420, at (202) 267-9055.

Sincerely,


Tony Fazio
Director, Office of Accident Investigation
And Prevention