NOTICE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

N 8900.91

National Policy

Effective Date:
8/20/09

Cancellation Date:
8/20/10

SUBJ: Separation of Engine-Fan Cowls During Flight

1. Purpose of This Notice. This notice provides guidance to aviation safety inspectors (ASI) responsible for air carriers operating Bombardier CL-600-2B19 and Airbus single-aisle A319-132s model airplanes, regarding the issue of engine-fan cowl separations and means of prevention. It is based on National Transportation Safety Board (NTSB) safety recommendations A-08-080 and A-08-081.

2. Audience. The primary audience for this notice is Flight Standards District Office (FSDO), ASIs. The secondary audience includes the Flight Standards branches and divisions in the regions and in headquarters.

3. Where You Can Find This Notice. Inspectors can access this notice through the Flight Standards Information Management System (FSIMS) at http://fsims.avs.faa.gov. Operators and the public can find this notice at http://fsims.faa.gov.

4. Background. On August 4, 2008, a Bombardier CL-600-2B19 lost part of its right engine upper fan cowl while in flight. The subsequent investigation by the NTSB revealed that the right engine upper fan cowl was not properly fastened following recent engine maintenance. In another similar event, which occurred on May 6, 2008, an Airbus A319-132 lost the left engine outboard fan cowl while on takeoff. The subsequent investigation revealed that the engine fan cowl latches were not properly fastened following recent engine maintenance.

5. Discussion. Records reviewed from Bombardier, Airbus, foreign investigations, and the Federal Aviation Administration (FAA) found that, since 1992, there have been 15 events with Airbus A319-132 model airplanes involving engine-fan cowl separations. Bombardier revealed 33 domestic and foreign cases of engine-fan cowl separations dating back to January 2001, including 6 cases in 2007. In addition, since 1992, 17 different airplane models have also had 26 incidents of engine-fan cowl separations. Despite the release of an FAA Airworthiness Directive (AD) for Airbus A319-132 model airplanes and numerous bulletins for Airbus A319-132 and Bombardier CL-600 model airplanes, engine-fan cowl separations continue to occur.

6. Solution. Beginning in June 1999, Airbus issued bulletins requiring the redesign of engine-fan cowl latches to improve detection of improperly latched cowls and to remind operators, flightcrews, and ground crews to ensure they latch both engine-fan cowls properly

after engine maintenance. In addition, in 2007, Bombardier studied the effectiveness of using a dual inspection signoff. After completing its study, Bombardier elected to revise its Aircraft Maintenance Manual (AMM) procedures to require a dual inspection signoff of the engine-fan cowls after maintenance activities. FAA and industry have found that operators who implemented dual inspection signoff procedures after experiencing engine-fan cowl separations, have had success in preventing subsequent accidents or incidents.

7. Present Situation. Although implementing a dual inspection signoff procedure has proven effective in preventing engine-fan cowl separations, some Airbus A319-132 and Bombardier CL-600-2B19 model airplane operators have chosen not to implement this procedure.

8. Action. Principal inspectors (PI) should recommend to their air carriers who operate Airbus A319-132 and Bombardier CL-600-2B19 model airplanes to develop a training program for maintenance personnel and flightcrews on inspection procedures to verify that the engine-fan cowls are latched. They should also recommend that those air carriers develop a procedure for maintenance personnel to inform flightcrews when engine-fan cowls are opened. The air carriers are to revise their maintenance programs to include dual inspection signoffs or Required Inspection Items (RII) signoff in the aircraft log. PIs should follow up with their respective carriers to determine that they accomplished the recommended actions.

9. Disposition. We will not incorporate the information in this notice into FSIMS before the notice expires. Direct questions concerning this notice to the Aircraft Maintenance Division, AFS-330, at (202) 385-6435.

ORIGINAL SIGNED by
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Director, Flight Standards Service