AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/CT7/12 and issues the following AD under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

General Electric Turbine Engines - CT7 Series

AD/CT7/12 Stage 2 Turbine Aft Cooling Plate 6/2007 Amdt 1

Applicability: General Electric Company (GE) CT7-5A2/-5A3/-7A/-7A1/-9B/-9B1/-9B2/-9C/-9C3/-9D/-9D2 turboprop engines with stage 2 turbine aft cooling plates, part number (P/N) 6064T07P01, 6064T07P02, 6064T07P05, or 6068T36P01 installed.

Note 1: These engines are installed on, but not limited to, Construcciones Aeronauticas, SA CN-235 series and SAAB Aircraft AB SF340 series airplanes.

Requirement: **Onetime Eddy Current Inspection (ECI)**

1. Perform a onetime ECI of the stage 2 turbine aft cooling plates P/N 6064T07P01, 6064T07P02, 6064T07P05, or 6068T36P01, that are listed by serial number in Section 4, Appendix A, of GE Alert Service Bulletin (ASB) No. CT7-TP S/B 72-A0464, Revision 4, dated 12 December 2005, and that will be returned to service. Use 3.B.(1) through 3.B.(3) of GE ASB No. CT7-TP S/B 72-A0464, Revision 4 or later FAA approved revisions to perform the inspection.

2. For stage 2 turbine aft cooling plates that do not pass the Return to Service Criteria, do either of the following:

   a. Replace the stage 2 turbine aft cooling plate with a new cooling plate that has a serial number that is not listed in Section 4, Appendix A, of GE ASB No. CT7-TP S/B 72-A0464, Revision 4, or

   b. Replace the stage 2 turbine aft cooling plate with a cooling plate that meets the acceptance criteria of 3.B.(1) through 3.B.(3) of GE ASB No. CT7-TP S/B 72-A0464, Revision 4.

3. After the effective date of this AD, do not install any stage 2 turbine aft cooling plates with serial numbers identified in Section 4, Appendix A, without inspecting the cooling plate as specified in 3.B.(1) through 3.B.(3) of GE ASB No. CT7-TP S/B 72- A0464 Revision 4.

General Electric Turbine Engines - CT7 Series

AD/CT7/12 Amdt 1 (continued)

Previous Credit

Eddy current inspections of the stage 2 turbine aft cooling plate boltholes done before the effective date of this AD that use GE ASB No. CT7-TP S/B 72-A0464, dated 25 February 2003; or Revision 1, dated 12 March 2003; or Revision 2, dated 9 May 2003; or Revision 3, dated 23 July 2004, comply with the requirements specified in this AD.

Definition of Engine or Hot Section Module Shop Visit

For the purposes of this AD, an engine or hot section module shop visit is defined as the introduction of the engine or hot section module into a shop that includes separating major case flanges.

Note: FAA AD 2007-08-01 Amdt 39-15018 dated 2 April 2007 refers. This AD supersedes FAA AD 2005-18-01.

Compliance:

1. At the next engine or hot section module shop visit, but before accumulating an additional 6,000 cycles-in-service after the effective date of the AD, unless already done.

2. From the effective date of this AD.

3. From the effective date of this AD.

This Amendment becomes effective on 7 June 2007.

Background: This AD results from reports of six stage 2 turbine aft cooling plates found cracked during inspection. The actions specified in this AD are intended to prevent stage 2 aft cooling plate separation, resulting in uncontained engine failure and damage to the aeroplane.

This amendment results from the manufacturer expanding the list of affected engine models and identifying the affected stage 2 turbine aft cooling plates by serial number.

The original issue of this AD became effective on 22 December 2005.

David Punshon
Delegate of the Civil Aviation Safety Authority

24 April 2007