FAA
Aviation Safety

EMERGENCY AIRWORTHINESS DIRECTIVE

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DATE: October 12, 2017
AD #: 2017-21-51

Emergency Airworthiness Directive (AD) 2017-21-51 is sent to owners and operators of Engine Alliance (EA) Model GP7200 series turbofan engines.

Background

This emergency AD was prompted by an uncontained engine failure that occurred on an Engine Alliance (EA) GP7270 turbofan engine. The failed engine had 3,527 cycles since new, which is a relatively high cycle engine. The actions specified in this AD are intended to prevent failure of the fan hub, which could lead to an uncontained release of the fan hub, damage to the engine, and damage to the airplane.

Relevant Service Information

We reviewed EA Alert Service Bulletin (ASB) EAGP7-A72-383, Revision 1, dated October 12, 2017. The ASB describes procedures for visual inspections of the GP7200 series engine fan hubs for damage.

FAA's Determination

We are issuing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

AD Requirements

This AD requires a one-time visual inspection of the GP7200 series engine fan hub, with the compliance time based on the number of accumulated flight cycles, and removal of the fan hub if damage or defects are found that are outside of serviceable limits.

Interim Action

We consider this AD interim action. An investigation to determine the cause of the failure is on-going and we may consider additional rulemaking if final action is identified.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This

regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to engines, propellers, and associated appliances to the Manager, Engine and Propeller Standards Branch, Policy and Innovation Division.

Presentation of the Actual AD

We are issuing this AD under 49 U.S.C. Section 44701 according to the authority delegated to me by the Administrator.

2017-21-51 Engine Alliance: Product Identifier 2017-NE-37-AD.

(a) Effective Date

This Emergency AD is effective upon receipt.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Engine Alliance (EA) GP7270, GP7272, and GP7277 engines.

(d) Subject

Joint Aircraft System Component (JASC) Code 7230, Turbine Engine Compressor Section

(e) Unsafe Condition

This AD was prompted by failure of a fan hub. We are issuing this AD to prevent failure of the fan hub, which could lead to uncontained release of the fan hub, damage to the engine and damage to the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

(1) Perform a visual inspection of the fan hub, in accordance with the Accomplishment Instructions, paragraph 1.B., 1.C., and 1.D., of EA Alert Service Bulletin (ASB) EAGP-A72-383, Revision 1, dated October 12, 2017, at the times specified in paragraphs (g)(1)(i) through (iii) of this AD.

(i) For fan hubs with 3,500 cycles since new (CSN) or more, inspect within 2 weeks of the effective date of this AD.

(ii) For fan hubs with 2,000 CSN or greater and less than 3,500 CSN, inspect within 5 weeks of the effective date of this AD.

(iii) For fan hubs with less than 2,000 CSN, inspect within 8 weeks of the effective date of this AD.

(2) If defects or damage to the fan hub are found that are outside of serviceable limits, remove the hub from service and replace with a part that has been inspected and found airworthy in accordance with paragraph (g)(1) of this AD, prior to further flight. Serviceable limits are defined in the Accomplishment Instructions, Table 1 of EA ASB EAGP7-A72-383, Revision 1, dated October 12, 2017.

(h) Credit for Previous Actions

This paragraph provides credit for the actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD, using EA ASB EAGP7-A72-383, dated October 7, 2017.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, ECO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (j) of this AD. You may email your request to: ANE-AD-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(j) Related Information

(1) For further information about this AD, contact: David Bethka, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7129; fax: (781) 238-7199; email: david.bethka@faa.gov.

(2) EA ASB EAGP7-A72-383, Revision 1, dated October 12, 2017, pertains to the subject of this AD.

(3) For copies of the service information referenced in this AD, contact: Engine Alliance, 400 Main St., East Hartford, CT 06108, M/S 169-10, phone: 800-565-0140; email: help24@pw.utc.com; website: www.enginealliancepportal.com. You may view this referenced service information at the FAA, Engine and Propeller Standards Branch, 1200 District Avenue, Burlington, MA.

Issued in Burlington, Massachusetts, on October 12, 2017.

Robert J. Ganley,
Manager, Engine and Propeller Standards Branch,
Aircraft Certification Service.