



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2013-0195; Directorate Identifier 2013-NE-08-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; General Electric Company Turbofan Engines**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for all General Electric Company (GE) model GEnx-2B67 and GEnx-2B67B turbofan engines with booster anti-ice (BAI) air duct, part number (P/N) 2469M32G01, and support bracket, P/N 2469M46G01, installed. This proposed AD was prompted by reports of cracks in the BAI air duct. This proposed AD would require initial and repetitive visual inspections of the BAI air duct, removal from service of the BAI air duct if it fails inspection and, as a mandatory terminating action, the installation of new BAI air duct support brackets. We are proposing this AD to prevent failure of the BAI air duct, resulting in an in-flight shutdown of one or more engines, loss of thrust control, and damage to the aircraft.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact General Electric, One Neumann Way, MD Y-75, Cincinnati, OH; phone: 513-552-2913; email: [geae.aoc@ge.com](mailto:geae.aoc@ge.com); and website: [www.GE.com](http://www.GE.com). You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Jason Yang, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7747; fax: 781-238-7199; email: [Jason.Yang@faa.gov](mailto:Jason.Yang@faa.gov).

#### **SUPPLEMENTARY INFORMATION:**

##### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2013-0195; Directorate Identifier 2013-NE-08-AD” at the

beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

### **Discussion**

We propose to adopt a new AD for all GE model GENx-2B67 and GENx-2B67B turbofan engines with BAI air duct, P/N 2469M32G01, and support bracket, P/N 2469M46G01, installed. This proposed AD was prompted by 11 reports of cracks in the BAI air duct, P/N 2469M32G01, caused by resonant vibration of the BAI valve system. Engineering analysis determined that the single support bracket is not sufficient to prevent the vibration and cracking in the BAI air duct, and that additional support brackets are needed. This proposed AD would require initial visual inspection of the BAI air duct before it reaches 400 cycles since new (CSN), and repetitive visual inspections every 100 cycles thereafter. If the BAI air duct fails inspection, the proposed AD would require removal of the BAI air duct from service. As a mandatory terminating action, the proposed AD would also require installation of new BAI air duct support brackets at the next removal of the BAI air duct, and replacement of the BAI air duct with a duct eligible for installation. This condition, if not corrected, could result in failure of the BAI air duct, resulting in an in-flight shutdown of one or more engines, loss of thrust control, and damage to the aircraft.

### **Relevant Service Information**

We reviewed GE Service Bulletin (SB) No. GENx-2B S/B 75-0006, dated July 23, 2012, and GE SB No. GENx-2B S/B 75-0008, Revision 1, dated February 4, 2013. GE SB No. GENx-2B S/B 75-0006 describes procedures for inspecting and, if necessary, removing and replacing the BAI air duct. GE SB No. GENx-2B S/B 75-0008, Revision 1, describes procedures for installing new BAI air duct support brackets, and inspection and possible replacement of BAI air ducts.

### **FAA's Determination**

We are proposing 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.

### **Proposed AD Requirements**

This proposed AD would require initial and repetitive visual inspections of the BAI air duct, replacement of the BAI air duct if it fails inspection and, as mandatory terminating action, installation of new BAI air duct support brackets.

### **Costs of Compliance**

We estimate that this proposed AD affects 16 engines installed on airplanes of U.S. registry. We also estimate that it would take about 4 hours per engine to comply with this proposed AD. The average labor rate is \$85 per hour. Required parts would cost about \$11,000 per engine. Based on these figures, we estimate the cost of the proposed AD to U.S. operators to be \$181,440.

### **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.

### **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

## **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**General Electric Company:** Docket No. FAA-2013-0195; Directorate Identifier 2013-NE-08-AD.

#### **(a) Comments Due Date**

We must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to all General Electric Company (GE) model GENx-2B67 and GENx-2B67B turbofan engines with booster anti-ice (BAI) air duct, part number (P/N) 2469M32G01, and support bracket, P/N 2469M46G01, installed.

#### **(d) Unsafe Condition**

This AD was prompted by reports of cracks in the BAI air duct, P/N 2469M32G01. We are issuing this AD to prevent failure of the BAI air duct, resulting in an in-flight shutdown of one or more engines, loss of thrust control, and damage to the aircraft.

#### **(e) Compliance**

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

**(f) Inspection of BAI Air Duct**

(1) Perform an initial visual inspection of the BAI air duct, P/N 2469M32G01, for cracks prior to accumulating 400 cycles since new (CSN).

(2) Thereafter, repeat the visual inspection within every 100 cycles since last inspection.

(3) If cracks in the BAI air duct are found during any inspection required by this AD, remove the BAI air duct from service.

**(g) Mandatory Terminating Action**

As mandatory terminating action to the repetitive inspection requirement of this AD, at the next removal of BAI air duct, P/N 2469M32G01, or if the BAI air duct is found cracked, after the effective date of this AD, do the following:

(1) Install new BAI air duct support brackets, P/Ns 2550M03G01, 2548M66G01, 2548M67P01, 2550M18G01, and 2550M17P01.

(2) Replace the BAI air duct with one that is eligible for installation.

**(h) Definitions**

For the purpose of this AD, a BAI air duct that is eligible for installation is one that has accumulated 25 CSN or fewer.

**(i) Alternative Methods of Compliance (AMOCs)**

The Manager, Engine Certification Office, FAA, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

**(j) Related Information**

(1) For more information about this AD, contact Jason Yang, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7747; fax: 781-238-7199; email: Jason.Yang@faa.gov.

(2) Refer to GE Service Bulletin (SB) No. GENx-2B S/B 75-0006, dated July 23, 2012, and GE SB No. GENx-2B S/B 75-0008, Revision 1, dated February 4, 2013, for guidance on inspecting and, if necessary, removing and replacing the BAI air duct, as well as procedures for installation of new BAI air duct support brackets.

(3) For service information identified in this proposed AD, contact General Electric, One Neumann Way, MD Y-75, Cincinnati, OH; phone: 513-552-2913; email: [geae.aoc@ge.com](mailto:geae.aoc@ge.com); and website: [www.GE.com](http://www.GE.com). You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Issued in Burlington, Massachusetts, on April 4, 2013.

Robert J. Ganley,  
Acting Assistant Manager, Engine & Propeller Directorate,  
Aircraft Certification Service.

[FR Doc. 2013-08447 Filed 04/10/2013 at 8:45 am; Publication Date: 04/11/2013]