Model 747–8 airplanes. Should Boeing apply at a later date for a change to the type certificate to include another model incorporating the same novel or unusual design features, the special conditions would apply to that model as well.

Conclusion

This action affects only certain novel or unusual design features of the Boeing Model 747–8 airplane. It is not a rule of general applicability.

List of Subjects in 14 CFR Part 25

Aircraft, Aviation safety, Reporting and recordkeeping requirements.

The authority citation for these special conditions is as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701, 44702, 44704.

The Special Conditions

Accordingly, pursuant to the authority delegated to me by the Administrator, the following special conditions are issued as part of the type certification basis for the Boeing Model 747–8 airplane.

The design must prevent all inadvertent or malicious changes to, and all adverse impacts upon, all systems, networks, hardware, software, and data in the Aircraft Control Domain and in the Airline Information Domain from all points within the Passenger Information and Entertainment Domain.

Issued in Renton, Washington, on March 9, 2011.

Ali Bahrami, Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2011–6323 Filed 3–17–11; 8:45 am]
BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 25

[Docket No. NM437; Special Conditions No. 25–422–SC]

Special Conditions: Gulfstream Model GVI Airplane; Electronic Flight Control System Mode Annunciation.

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final special conditions.

SUMMARY: These special conditions are issued for the Gulfstream GVI airplane. This airplane will have novel or unusual design features when compared to the state of technology envisioned in the applicable safety standards for transport category airplanes. These design features include an electronic flight control system. The applicable airworthiness regulations do not contain adequate or appropriate safety standards for these design features. These special conditions contain the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that established by the existing airworthiness standards.

DATES: Effective Date: April 18, 2011.


SUPPLEMENTARY INFORMATION:

Background

On March 29, 2005, Gulfstream Aerospace Corporation (hereafter referred to as “Gulfstream”) applied for an FAA type certificate for its new Gulfstream Model GVI passenger airplane. Gulfstream later applied for, and was granted, an extension of time for the type certificate, which changed the effective application date to September 28, 2006. The Gulfstream Model GVI airplane will be an all-new, two-engine jet transport airplane with an executive cabin interior. The maximum takeoff weight will be 99,600 pounds, with a maximum passenger count of 19 passengers.

Type Certification Basis

Under provisions of Title 14 Code of Federal Regulations (14 CFR) 21.17, Gulfstream must show that the Gulfstream Model GVI airplane (hereafter referred to as “the GVI”) meets the applicable provisions of 14 CFR part 25, as amended by Amendments 25–1 through 25–119, 25–122 and 25–124. If the Administrator finds that the applicable airworthiness regulations (i.e., 14 CFR part 25) do not contain adequate or appropriate safety standards for the GVI because of a novel or unusual design feature, special conditions are prescribed under the provisions of § 21.16.

Special conditions are initially applicable to the model for which they are issued. Should the type certificate for that model be amended later to include any other model that incorporates the same novel or unusual design features, the special conditions would also apply to the other model under the provisions of § 21.101.

In complying with the applicable airworthiness regulations and special conditions, the GVI must comply with the fuel vent and exhaust emission requirements of 14 CFR part 34 and the noise certification requirements of 14 CFR part 36. The FAA must also issue a finding of regulatory adequacy pursuant to section 611 of Public Law 92–574, the “Noise Control Act of 1972.”

The FAA issues special conditions, as defined in 14 CFR 11.19, in accordance with § 11.38, and they become part of the type certification basis under § 21.17(a)(2).

Novel or Unusual Design Features

The GVI will have a fly-by-wire electronic flight control system. This system provides an electronic interface between the pilot’s flight controls and the flight control surfaces for both normal and failure states, and it generates the actual surface commands that provide for stability augmentation and control about all three airplane axes. Because electronic flight control system technology has outpaced existing regulations (primarily §§ 25.671 and 25.672), a special condition is needed to ensure appropriate mode recognition by the flight crew for events which significantly change the operating mode of the electronic flight control system.

Discussion of Comments

Notice of proposed special conditions No. 25–10–02–SC for Gulfstream GVI airplanes was published in the Federal Register on December 13, 2010 (75 FR 77569). Only one comment was received.

Clarification of Conditions That Should Be Annunciated

The commenter, Gulfstream, requested that the special conditions be revised to clarify the conditions in which the mode annunciation should occur. Gulfstream suggested that additional annunciation should not be required when transitioning from one normal operation mode to another in response to flight crew actions, such as extending flaps or landing gear.

We do not agree with the commenter’s recommendation. The current verbiage clearly states that the mode annunciation is only required when “normal handling or operational characteristics” of the airplane are significantly changed or degraded. In the scenario that Gulfstream refers to, there would be no change to the “normal handling or operational characteristics.” Therefore, no annunciation would be required. No changes were made as a result of this comment and the special conditions are adopted as proposed.
Applicability

As discussed above, these special conditions are applicable to the GVI. Should Gulfstream apply at a later date for a change to the type certificate to include another model on the same novel or unusual design feature, the special conditions would apply to that model as well.

Conclusion

This action affects only certain novel or unusual design features on one airplane model. It is not a rule of general applicability.

List of Subjects in 14 CFR Part 25

Aircraft, Aviation safety, Reporting and recordkeeping requirements.

The authority citation for these special conditions is as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701, 44702, 44704.

The Special Conditions

Accordingly, pursuant to the authority delegated to me by the Administrator, the following special conditions are issued as part of the type certification basis for Gulfstream GVI airplanes.

If the design of the flight control system has multiple modes of operation, a means must be provided to indicate to the flight crew any mode that significantly changes or degrades the normal handling or operational characteristics of the airplane.

Issued in Renton, Washington, on March 9, 2011.

Ali Bahrami,
Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2011–6333 Filed 3–17–11; 8:45 am]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives; General Electric Company CF6–45 and CF6–50 Series Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are superseding an existing airworthiness directive (AD) for General Electric Company (GE) CF6–45 and CF6–50 series turbofan engines. That AD currently requires replacing certain forward and aft centerbodies of the long fixed core exhaust nozzle (LFCEN) assembly. This AD adds certain new forward and aft centerbody part numbers (P/Ns) to the list requiring replacement. This AD was prompted by the discovery of more LFCEN forward and aft centerbody P/Ns that require replacement. We are issuing this AD to prevent the forward and aft centerbody of the LFCEN assembly from separating from the engine, causing damage to the engine, and damage to the airplane.

DATES: This AD is effective April 22, 2011.

ADDRESSES: For service information identified in this AD, contact GE–Aviation M/O D/E B205, One Neumann Way, Cincinnati, OH 45215, telephone 513–552–3272; e-mail: geae.aoc@ge.com. You may review copies of the referenced 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 AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800–647–5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue, SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT:

Tomasz Rakowski, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate; phone: 781–238–7735; fax: 781–238–7199; e-mail: tomasz.rakowski@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede airworthiness directive (AD) 2009–04–17, Amendment 39–15823 (74 FR 8735, February 26, 2009). That AD applies to the specified products. The NPRM published in the Federal Register on January 4, 2011 (76 FR 2902). That NPRM proposed to add forward centerbody P/Ns 9076M28G05, G06, and G08, P/Ns 9076M82G01 and G03, and aft centerbody P/Ns 9076M46G02 and G04 to the P/Ns in AD 2009–04–17 that are required to be removed from service.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comment received on the proposal and the FAA’s response to the comment.

Request

One commenter, Boeing Commercial Airplanes, pointed out that the McDonnell Douglas airplanes affected by the proposed AD should be listed out as DC–10–15, DC–10–30, DC–10–30F, KC–10, KDC–10, and MD–10–30F. The commenter stated that the proposed AD only listed these airplanes as a series.

We agree. We revised this AD as requested, except we listed KC–10 as KC–10A as it appears in the Type Certificate Data Sheet.

Conclusion

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting the AD with the change described previously.

Costs of Compliance

We estimate that this AD will affect 363 GE CF6–45 and CF6–50 series turbofan engines installed on airplanes of U.S. registry. We also estimate that it will take about 44 work hours per engine to perform the actions required by this AD, and that the average labor rate is $85 per work-hour. Required parts will cost about $11,000 per engine. Based on these figures, we estimate that the total cost of this AD to U.S. operators to be $5,645,420.

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