

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2000-NM-238-AD; Amendment 39-12390; AD 2001-16-21]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 767-200 Series Airplanes Modified by Supplemental Type Certificate SA4998NM

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to all Boeing Model 767-200 series airplanes modified by supplemental type certificate SA4998NM, that requires modification of the in-flight entertainment (IFE) system to connect it to a different power source. This action is necessary to prevent the inability of the flight crew to remove power from the IFE system when necessary. Inability to remove power from the IFE system during a non-normal or emergency situation could result in inability to control smoke or fumes in the airplane flight deck or cabin. This action is intended to address the identified unsafe condition.

DATES: Effective September 21, 2001.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of September 21, 2001.

ADDRESSES: The service information referenced in this AD may be obtained from Flight Structures, Inc., 4407 172nd Street NE, Arlington, Washington 98223. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Louis Natsiopoulos, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1279; fax (425) 227-1181.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to all Boeing Model 767-200 series airplanes modified by supplemental type certificate (STC) SA4998NM was published in the Federal Register on March 2, 2001 (66 FR 13201). That action proposed to require modification of the in-flight entertainment (IFE) system to connect it to a different power source.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

One commenter states that it does not operate any of the airplanes affected by the proposed AD.

Use Modification Developed by Airplane Manufacturer

One commenter requests that the FAA revise the proposed AD to require modification per procedures developed by the airplane manufacturer (Boeing) rather than by the STC holder (Flight Structures, Inc.). The commenter states that a modification developed by the airplane manufacturer is appropriate because installation of an IFE system per the subject STC does not change the power distribution from the production configuration. The commenter acknowledges the intent of the proposed AD but would prefer a solution developed by Boeing to ensure commonality among all Boeing Model 767-200 series airplanes. The commenter notes that such commonality is important for operating and maintenance procedures. The commenter also adds that, if the FAA adopts its recommendation, the compliance time for the proposed AD should be extended to allow time for Boeing to release a service bulletin and for the affected operators to do the modification.

We do not concur with the commenter's request. The IFE system--including the electrical components and wiring that provides electrical power to the system--was installed by the STC holder and is not common to all Boeing Model 767-200 series airplanes. The fact that installation of the subject IFE system was approved by STC indicates that it represents a major change from the design previously approved under the type certificate for the Model 767-200 series airplanes. As such, the STC holder, not the airplane manufacturer, is responsible for the development of corrective actions for potential unsafe conditions related to the equipment installed per the STC.

Further, contrary to what the commenter states, the installation of the IFE system by the subject STC does include wiring changes, as well as the redesignation and reassignment of several circuit breakers on the airplane. The development of an appropriate modification necessitates knowledge of the wiring and circuit breaker changes involved with installation of the system. We cannot assume that the airplane manufacturer has the necessary engineering data, since these data are proprietary to the holder of the subject STC.

Also, since the STC holder has already developed appropriate service information (as described in the proposed AD), there is no reason to extend the compliance time as requested by the commenter. No change to the final rule is necessary in this regard.

Use of Circuit Breakers as Power Switches

One commenter disagrees with the FAA's inference in the preamble of the proposed AD that circuit breakers are used as power switches for the IFE system, thereby causing the circuit breaker to be opened and closed frequently. The commenter states that the IFE systems on its airplanes are typically powered on all the time except when maintenance on the IFE system is necessary. The commenter notes that this is consistent with how the majority of airplane electrical systems are managed. The commenter asserts that the circuit breakers are only used to deenergize the IFE system during non-normal and emergency situations.

The commenter requests no specific change to the AD. We acknowledge the commenter's statements, but find that no change to the final rule is necessary. We have determined that it is not acceptable to rely on system circuit breakers as the sole means of removing power from the IFE system. The use of circuit breakers as switches may result in degradation of the circuit breakers to the point where they may not trip at their rated current. Also, during non-normal or emergency situations, it is essential for the crew to quickly remove power from the IFE system to identify and isolate smoke or fumes that may be caused by the components or wiring of the IFE system or to determine whether the IFE system is not the source of smoke or fumes. As stated in the proposed rule, the circuit breakers for the IFE system represent the only means of removing power from the IFE systems. This may prevent the crew from removing power from the IFE system immediately. Therefore, we find it necessary to issue this AD to require modification of the IFE system so that power can be removed from it manually or automatically without affecting other systems necessary for safe flight and landing of the airplane.

Conclusion

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

Cost Impact

There are approximately 17 Model 767-200 series airplanes modified by STC SA4998NM in the worldwide fleet. The FAA estimates that all 17 airplanes are of U.S. registry and will be affected by this AD, that it will take approximately 8 work hours per airplane to accomplish the required actions, and that the average labor rate is \$60 per work hour. Required parts will cost approximately \$300 per airplane. Based on these figures, the cost impact of this AD on U.S. operators is estimated to be \$13,260, or \$780 per airplane.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

Regulatory Impact

The regulations adopted herein will 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. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) 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. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

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

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (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.

Sec. 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "av-info.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2001-16-21 Boeing: Amendment 39-12390. Docket 2000-NM-238-AD.

Applicability: Model 767-200 series airplanes modified by supplemental type certificate (STC) SA4998NM, certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent the inability of the flight crew to remove power from the in-flight entertainment (IFE) system when necessary; which, during a non-normal or emergency situation, could result in inability to control smoke or fumes in the airplane flight deck or cabin; accomplish the following:

Modification

(a) Within 18 months after the effective date of this AD, modify the in-flight entertainment system to change the power source from the main electrical bus to a utility electrical bus, in accordance with Flight Structures Service Bulletin 89FS134-23-01, Revision 2, dated September 21, 2000.

Spares

(b) As of the effective date of this AD, no person may install an IFE system in accordance with STC SA4998NM on any airplane, unless it is modified in accordance with this AD.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

Note 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(e) The actions shall be done in accordance with Flight Structures Service Bulletin 89FS134-23-01, Revision 2, dated September 21, 2000. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Flight Structures, Inc., 4407 172nd Street NE, Arlington, Washington 98223. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(f) This amendment becomes effective on September 21, 2001.

Issued in Renton, Washington, on August 9, 2001.

Vi L. Lipski,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 01-20588 Filed 8-16-01; 8:45 am]

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