

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 feature, or should any other model already included on the same type certificate be modified to incorporate the same novel or unusual design feature, the special conditions would also apply to the other model under the provisions of § 21.101(a)(1).

Novel or Unusual Design Features

The Model Hawker 800 airplanes with TFE731-5BR-1H engines incorporate a revised engine electronic control system and an electronic controlled mach trim system. These systems perform critical to safety of flight functions and may be vulnerable to high-intensity radiated fields external to the airplane.

Discussion

There is no specific regulation that addresses protection requirements for electrical and electronic systems from HIRF. Increased power levels from ground based radio transmitters and the growing use of sensitive electrical and electronic systems to command and control airplanes have made it necessary to provide adequate protection.

To ensure that a level of safety is achieved equivalent to that intended by the regulations incorporated by reference, special conditions are proposed for the model Hawker 800 with TFE731-5BR-1H engines and a mach trim system. These special conditions require that electrical and electronic components that perform critical functions and are embodied in the mach trim system or TFE731-5BR-1H engine electronic control system be designed and installed to ensure that operation and operational capabilities of these systems to perform critical functions are not adversely affected when the airplane is exposed to HIRF.

High-Intensity Radiated Fields (HIRF)

With the trend toward increased power levels from ground based transmitters, plus the advent of space and satellite communications, coupled with electronic command and control of the airplane, the immunity of critical digital electronic systems to HIRF must be established.

It is not possible to precisely define the HIRF to which the airplane will be exposed in service. There is also uncertainty concerning the effectiveness of airframe shielding for HIRF. Furthermore, coupling of electromagnetic energy to cockpit-installed equipment through the cockpit window apertures is undefined. Based on surveys and analysis of existing HIRF

emitters, an adequate level of protection exists when compliance with the HIRF protection special condition is shown with either paragraphs 1 or 2 below:

1. A minimum threat of 100 volts per meter peak electric field strength from 10 KHz to 18 GHz.

a. The threat must be applied to the system elements and their associated wiring harnesses without the benefit of airframe shielding.

b. Demonstration of this level of protection is established through system tests and analysis.

2. A threat external to the airframe of the following field strengths for the frequency ranges indicated.

Frequency	Peak (V/M)	Average (V/M)
10 KHz-100 KHz	50	50
100 KHz-500 KHz	60	60
500 KHz-2000 KHz	70	70
2 MHz-30 MHz	200	200
30 MHz-70 MHz	30	30
70 MHz-100 MHz	30	30
100 MHz-200 MHz	150	33
200 MHz-400 MHz	70	70
400 MHz-700 MHz	4,020	935
700 MHz-1000 MHz	1,700	170
1 GHz-2 GHz	5,000	990
2 GHz-4 GHz	6,680	840
4 GHz-6 GHz	6,850	310
6 GHz-8 GHz	3,600	670
8 GHz-12 GHz	3,500	1,270
12 GHz-18 GHz	3,500	360
18 GHz-40 GHz	2,100	750

As discussed above, the proposed special conditions would be applicable initially to certain components on Hawker 800 airplanes with TFE731-5BR engines and a mach trim system. Should Raytheon Corporate Jets, Inc. apply at a later date for a change to the type certificate to add or revise electrical or electronic equipment that performs critical functions or to include another model incorporating the same novel or unusual design feature, these special conditions would apply to that model as well under the provisions of § 21.101(a)(1).

Conclusion

This action affects only certain design features on the Hawker 800 airplane. It is not a rule of general applicability and affects only the manufacturer who applied to the FAA for approval of these features on the airplane.

List of Subjects in 14 CFR Part 25

Aircraft, Aviation safety, Federal Aviation Administration, Reporting and recordkeeping requirements.

The authority citation for these proposed special conditions is as follows:

Authority: 49 U.S.C. app. 1344, 1348(c), 1352, 1354(a), 1355, 1421 through 1431, 1502, 1651(b)(2), 42 U.S.C. 1857f-10, 4321 et seq.; E.O. 11514; and 49 U.S.C. 106(g).

The Proposed Special Conditions

Accordingly, the Federal Aviation Administration (FAA) proposes the following special conditions as part of the type certification basis for Raytheon Hawker 800 series airplanes equipped with Garrett TFE731-5BR-1H turbo fan engines and electronically controlled mach trim system. These special conditions would apply only to electrical and electronic components that perform critical functions and are embodied in the mach trim system or TFE731-5BR-1H engine electronic control system.

1. *Protection from Unwanted Effects of High-Intensity Radiated Fields (HIRF).* Each electrical and electronic system that performs critical functions must be designed and installed to ensure that the operation and operational capability of these systems to perform critical functions are not adversely affected when the airplane is exposed to high-intensity radiated fields.

2. For the purpose of these special conditions, the following definition applies: *Critical Functions.* Functions whose failure would contribute to or cause a failure condition that would prevent the continued safe flight and landing of the airplane.

Issued in Renton, Wash., on January 31, 1995.

Darrell M. Pederson,

Assistant Manager, Transport Airplane Directorate, Aircraft Certification Service, ANM-101.

[FR Doc. 95-3123 Filed 2-7-95; 8:45 am]

BILLING CODE 4910-13-M

14 CFR Part 39

[Docket No. 94-NM-240-AD]

Airworthiness Directives; Lockheed Model 382 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the superseding of an existing airworthiness directive (AD), applicable to certain Lockheed Model 382 series airplanes, that currently requires a revision to the Airplane Flight Manual to require takeoff operation in accordance with revised performance data. This action would require installation of certain valve housings for the propeller

governor on the outboard engines. This proposal is prompted by a report of a change that had been incorporated into the propeller governor of these airplanes during production, which altered the thrust decay characteristic of the propeller when operating in an engine failure scenario. The actions specified by the proposed AD are intended to ensure that the airplane maintains adequate thrust decay characteristics in the event of critical engine failure during takeoff.

DATES: Comments must be received by April 6, 1995.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-103, Attention: Rules Docket No. 94-NM-240-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9:00 a.m. and 3:00 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from Lockheed Aeronautical Systems Support Company, 2251 Lake Park Drive, Smyrna, Georgia 30080. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Atlanta Aircraft Certification Office, 1701 Columbia Avenue, Suite 2-160, College Park, Georgia.

FOR FURTHER INFORMATION CONTACT: Thomas Peters, Aerospace Engineer, FAA, Flight Test Branch, ACE-160, Small Airplane Directorate, Atlanta Aircraft Certification Office, Campus Building, 1701 Columbia Avenue, Suite 2-160, College Park, Georgia 30337-2748; telephone (404) 305-7367; fax (404) 305-7348.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this notice may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments

submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 94-NM-240-AD." The postcard will be date stamped and returned to the commenter.

Availability of NPRMs

Any person may obtain a copy of this NPRM by submitting a request to the FAA, Transport Airplane Directorate, ANM-103, Attention: Rules Docket No. 94-NM-240-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

Discussion

On June 23, 1994, the FAA issued AD 94-14-09, amendment 39-8961 (59 FR 35236, July 11, 1994), applicable to certain Lockheed Model 382 series airplanes, to require a revision to the Airplane Flight Manual (AFM) to require takeoff operation in accordance with revised performance data. That action was prompted by a report of a change that had been incorporated into the propeller governor of these airplanes during production, which altered the thrust decay characteristic of the propeller when operating in an engine failure scenario. The requirements of that AD are intended to ensure that the airplane is operated at sufficient speeds to mitigate the problems associated with a faster thrust decay and to prevent the airplane from departing the side of the runway.

In the preamble to AD 94-14-09, the FAA indicated that the AFM revision required by that AD was considered to be only "interim action" until a design change in the propeller governor was developed to address the ground minimum control speed (V_{mcg}) characteristics. The FAA also indicated that, once such a design change was developed, approved, and available, the FAA would consider further rulemaking on this subject.

The manufacturer recently has advised the FAA that it has been unable to develop a new modification of the subject governors (which have servo-type valve housing assemblies, having part number 714325-2, -3, -5, -6, or -7) that would provide adequate thrust decay characteristics. However, the manufacturer has advised that propeller

governors with valve housing assemblies having part number 714325-1, which were manufactured before the line production change, do provide adequate thrust decay characteristics. On the basis of the data presented, the FAA finds that installation of these valve housing assemblies having part number 714325-1 will ensure adequate thrust decay characteristics in the event of a critical engine failure during takeoff and, thus, will positively address the unsafe condition presented by fast thrust decay. This proposed rulemaking follows from that determination.

Since the problem associated with maintaining adequate thrust decay characteristics of the propeller when operating in an engine failure scenario is likely to exist or develop on other products of this same type design, the proposed AD would supersede AD 94-14-09 to require removal of any servo-type valve housing assembly, having part number 714325-2, -3, -5, -6, or -7 installed on any outboard engine, and replacement of those assemblies with part number 714325-1. Replacement would be required in accordance with Lockheed Document SMP-515C, Card No. CO-135. The proposed compliance time of 24 months is considered adequate to accomplish the replacement during normal maintenance schedules, and also is considered to be ample time for obtaining required parts. Installation of valve housing assemblies, having part number 714325-1, would constitute terminating action for the takeoff operation procedures required by AD 94-14-09; once the replacement is accomplished, the previously required AFM revision could be removed.

As a result of recent communications with the Air Transport Association (ATA) of America, the FAA has learned that, in general, some operators may misunderstand the legal effect of AD's on airplanes that are identified in the applicability provision of the AD, but that have been altered or repaired in the area addressed by the AD. The FAA points out that all airplanes identified in the applicability provision of an AD are legally subject to the AD. If an airplane has been altered or repaired in the affected area in such a way as to affect compliance with the AD, the owner or operator is required to obtain FAA approval for an alternative method of compliance with the AD, in accordance with the paragraph of each AD that provides for such approvals. A note has been included in this notice to clarify this requirement.

There are approximately 112 Model 382, 382E, and 382G series airplanes of the affected design in the worldwide fleet. The FAA estimates that 18

airplanes of U.S. registry would be affected by this proposed AD, that it would take approximately 8 work hours per airplane to accomplish the proposed actions, and that the average labor rate is \$60 per work hour. Required parts would cost approximately \$90,000 per airplane. Based on these figures, the total cost impact of the proposed AD on U.S. operators is estimated to be \$1,628,640, or \$90,480 per airplane.

The FAA has been advised that the only U.S. operator of Lockheed Model 382 series airplanes has already equipped half of its fleet (9 airplanes) with the valve housing assembly that would be required by this proposed rule. Therefore, the future economic cost of this rule on U.S. operators is now only \$814,320.

The regulations proposed herein would not have substantial direct effects 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, in accordance with Executive Order 12612, it is determined that this proposal would not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that 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); and (3) if promulgated, 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 copy of the draft regulatory evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend 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. App. 1354(a), 1421 and 1423; 49 U.S.C. 106(g); and 14 CFR 11.89.

§ 39.13 [Amended]

2. Section 39.13 is amended by removing amendment 39-8961 (59 FR 35236, July 11, 1994), and by adding a new airworthiness directive (AD), to read as follows:

Lockheed: Docket 94-NM-240-AD.

Supersedes AD 94-14-09, Amendment 39-8961.

Applicability: Model 382, 382E, and 382G series airplanes; equipped with a servo-type valve housing assembly, having part number 714325-2, -3, -5, -6, or -7, installed on any outboard engine; 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 use the authority provided in paragraph (c) to request approval from the FAA. This approval may address either no action, if the current configuration eliminates the unsafe condition; or different actions necessary to address the unsafe condition described in this AD. Such a request should include an assessment of the effect of the changed configuration on the unsafe condition addressed by this AD. In no case does the presence of any modification, alteration, or repair remove any airplane from the applicability of this AD.

Compliance: Required as indicated, unless accomplished previously.

To ensure that the airplane maintains adequate thrust decay characteristics in the event of critical engine failure during takeoff, accomplish the following:

(a) Within 60 days after August 10, 1994 (the effective date of AD 94-14-09, amendment 39-8961), revise the Limitations and Performance Data Sections of the FAA-approved Airplane Flight Manual (AFM) to include information specified in Lockheed Airplane Flight Manual Supplement 382-16, dated August 11, 1993, and operate the airplane accordingly thereafter. The requirements of this paragraph may be accomplished by inserting AFM Supplement 382-16 into the AFM.

(b) Within 24 months after the effective date of this AD, replace the servo-type valve housing assemblies having part number 714325-2, -3, -5, -6, or -7, with part number 714325-1, on the propeller governors installed on the outboard engines, in accordance with Lockheed Document SMP-515C, Card No. CO-135. Replacement of these assemblies with part number 714325-1, constitutes terminating action for the requirements of paragraph (a) of this AD; once the replacement is accomplished, the AFM revision may be removed.

Note 2: Propeller governors with servo-type valve housing assemblies having part number 714325-2, -3, -5, -6, or -7, may be retained or replaced with part number 714325-1 for use on the inboard engine positions.

(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, Atlanta Aircraft Certification Office (ACO), FAA, Small Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Atlanta ACO.

Note 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Atlanta ACO.

(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.

Issued in Renton, Washington, on February 2, 1995.

Darrell M. Pederson,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.
[FR Doc. 95-3073 Filed 2-7-95; 8:45 am]

BILLING CODE 4910-13-U

14 CFR Part 39

[Docket No. 94-NM-221-AD]

Airworthiness Directives; Boeing Model 747 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the adoption of a new airworthiness directive (AD) that is applicable to certain Boeing Model 747 series airplanes. This proposal would require repetitive inspections to detect cracks and/or corrosion of the girt bar support fitting at certain main entry doors; and repair or replacement of the support fitting. This proposal would also provide for various terminating actions for the repetitive inspections. This proposal is prompted by reports that, during scheduled deployment tests of main entry door slides, corrosion was found on the floor structure supports for the escape slides of the main deck entry doors on these airplanes. The actions specified by the proposed AD are intended to prevent such corrosion, which could result in separation of the escape slide from the lower door sill during deployment, and subsequently prevent proper operation of the escape slides at the main entry doors during an emergency.

DATES: Comments must be received by April 6, 1995.

ADDRESSES: Submit comments in triplicate to the Federal Aviation