

List of Subjects in 12 CFR Part 566

Liquidity, Reporting and recordkeeping requirements, Savings associations.

Accordingly, the Office of Thrift Supervision hereby proposes to amend part 566, chapter V, title 12, Code of Federal Regulations, as set forth below:

PART 566—LIQUIDITY

1. The authority section for part 566 continues to read as follows:

Authority: 12 U.S.C. 1462, 1462a, 1463, 1464, 1465, 1467a; 15 U.S.C. 1691, 1691a.

2. Section 566.1 is amended by revising paragraphs (d) and (g)(8), by adding paragraphs (g)(12) and (g)(13), and by removing paragraph (h) to read as follows:

§ 566.1 Definitions.

* * * * *

(d) *Net withdrawable accounts.* The term *net withdrawable accounts* means withdrawable accounts having unexpired maturities not exceeding one year, less the unpaid balance of all loans secured by such accounts, but not including tax and loan accounts, note accounts, accounts to the extent that security has been given upon them pursuant to any applicable regulations, U.S. Treasury General Accounts, or U.S. Time Deposit Open Accounts.

* * * * *

(g) * * *

(8) Shares or certificates in any open-end management investment company registered with the Securities and Exchange Commission under the Investment Company Act of 1940, while the portfolio of such company is restricted by its investment policy, changeable only by vote of the shareholders, to investments described in the other provisions of paragraphs (g)(1) through (g)(7), (g)(9), (g)(12), and (g)(13) of this section.

* * * * *

(12) Mortgage-related securities as described in 12 U.S.C. 1465(b)(1)(C)(vi).

(13) Mortgage loans on the security of a first lien on residential real property as described in 12 U.S.C. 1465(b)(1)(C)(vii).

3. Section 566.2 is amended by removing paragraphs (b), (c), and (e), by redesignating paragraph (a) as paragraph (b) and paragraph (d) as paragraph (c), by adding a new paragraph (a), by revising newly designated paragraph (b), and by removing the phrase "paragraph (a)" where it appears in newly designated paragraph (c) and adding in lieu thereof the phrase "paragraph (b)" to read as follows:

§ 566.2 Requirements.

(a) *Safety and soundness.* Each savings association must maintain sufficient liquidity to ensure its safe and sound operation.

(b) *Liquidity.* Except as otherwise provided in paragraph (c) of this section, each savings association shall maintain liquid assets of not less than 4 percent of the amount of its liquidity base at the end of the preceding calendar quarter.

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Dated: May 7, 1997.

By the Office of Thrift Supervision.

Nicolas P. Retsinas,

Director.

[FR Doc. 97-12574 Filed 5-13-97; 8:45 am]

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DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Part 25**

[Docket No. NM-141; Notice No. SC-97-3-NM]

Special Conditions: Boeing Model 737-600/-700/-800; High Intensity Radiated Fields (HIRF)/Engine Stoppage

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed special conditions.

SUMMARY: This notice proposes special conditions for Boeing Model 737-600/-700/-800 airplanes. These airplanes will have novel and unusual design features when compared to the state of technology envisioned in the airworthiness standards for transport category airplanes. This notice contains the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that provided by the existing airworthiness standards.

DATES: Comments must be received on or before (June 30, 1997.)

ADDRESSES: Comments on these special conditions may be mailed in duplicate to: Federal Aviation Administration, Office of the Assistant Chief Counsel, Attn: Rules Docket (ANM-7), Docket No. NM-141, 1601 Lind Avenue SW., Renton, Washington, 98055-4506; or delivered in duplicate to the Office of the Assistant Chief Counsel at the above address. Comments must be marked: Docket No. NM-141. Comments may be inspected in the Rules Docket weekdays, except Federal holidays, between 7:30 a.m. and 4:00 p.m.

FOR FURTHER INFORMATION CONTACT:

Gregory Dunn, FAA, Standardization Branch, ANM-113, Transport Airplane Directorate, Aircraft Certification Service, 1601 Lind Avenue SW., Renton, Washington, 98055-4056; telephone (425) 227-2799; facsimile (425) 227-1149.

SUPPLEMENTARY INFORMATION:**Comments Invited**

Interested persons are invited to participate in the making of these special conditions by submitting such written data, views, or arguments as they may desire. Communications should identify the regulatory docket or notice number and be submitted in duplicate to the address specified above. All communications received on or before the closing date for comments will be considered by the Administrator. The proposals described in this notice may be changed in light of the comments received. All comments submitted will be available in the Rules Docket for examination by interested persons, both before and after the closing date for comments. A report summarizing each substantive public contact with FAA personnel concerning this rulemaking will be filed in the docket. Persons wishing the FAA to acknowledge receipt of their comments submitted in response to this request must submit with those comments a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. NM-141." The postcard will be date stamped and returned to the commenter.

Background

On February 4, 1993, Boeing submitted an application for an amendment to Type Certificate A16WE to include the next generation 737 family of airplanes. Two of these airplanes will have the same length as the present 737-300 and 737-500. The third version will be the existing 737-400, stretched to add two additional passenger rows. In addition, all models will have increased wing size, higher thrust engines, and body structure modifications due to increased design weights and higher wing and tail loads. The maximum operating altitude is to be increased from 37,000 ft. to 41,000 ft. The long range cruise speed is increased to 0.78 Mach or better. The range is increased to be transcontinental of approximately 2,950 nmi. There is only one engine type being offered, which is a derivative of the existing CFM56 referred to as the CFM56-7. The proposed modification includes the installation of digital avionics,

including Air Data Inertial Reference System (ADIRS) and Common Display System (CDS), which are vulnerable to high-intensity radiated fields (HIRF) external to the airplane.

Type Certification Basis

Under the provisions of 14 CFR § 21.101, Boeing must show that the

Model 737-600/-700/-800 airplanes meet the applicable provisions of the regulations incorporated by reference in Type Certificate A16WE, or the applicable regulations in effect on the date of application for the change to the Model 737. The regulations incorporated by reference in the type

certificate are commonly referred to as the "original type certification basis." The proposed certification basis for the Model 737-600/-700/-800 airplanes includes 14 CFR part 25, as amended by Amendments 25-1 through 25-77, except as indicate below:

Section	Title	At Amdt. 25-
25.365	Pressurized Compartment Loads	0
25.561	Emergency Landing Conditions—General	0
25.562	Emergency Landing Dynamic Conditions	*64
25.571	Damage-tolerance and Fatigue Evaluation of Structure.	**0,77
25.607	Fasteners	**0,77
25.631	Bird Strike Damage	**0,77
25.699	Lift and Drag Device Indicator	**0,77
25.783(f)	Doors	**15,77
25.807(c)(3)	Emergency Exits	15
25.813	Emergency Exit Access	45
25.832	Cabin Ozone Concentration	**0,77
25.1309	Equipment, Systems and Installations	**0,77
25.1419(c)	Ice Protection	**23,77

Boeing has also elected to comply with Amendments 25-78 and 25-80 and portions of Amendments 25-79, 25-84, and 25-86.

*Flight attendant seats will be qualified to Technical Standard Order C127. Passenger and flight deck seats will comply with 14 CFR §§25.562 (a), (b), ((c), (1), (2), (3), (4), (7), and (8)).

**Applicable to new and significantly modified structure and systems and portions of the airplane affected by these changes. Where two amendment levels are shown for the same paragraph, the number without the asterisk (*) applies to structures, systems, and portions of the airplane which are not new or significantly modified. The structure, systems, and components which comply with the later amendment will be identified in Boeing document D010A001, approved by the FAA and JAA, and referenced on the type certificate data sheet.

***Boeing provides FAA approved data (Document number D6-49779) to 737 operators to enable the operators to show ozone compliance per 14 CFR § 121.578 for their specific route structures.

Amendment level "0" is the original published version of Part 25 (February 1, 1965).

In addition, the certification basis will be upgraded to include the Part 25 complement to any Part 121 amendments adopted prior to the certification date and having impact on transport category airplane type designs, and the special conditions proposed in this notice.

In addition to the applicable airworthiness regulations and special conditions, the Model 737-600/-700/-800 airplanes 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.

If the Administrator finds that the applicable airworthiness regulations (i.e., part 25, as amended) do not contain adequate or appropriate safety standards for the Boeing Model 737-600/-700/-800 airplanes because of novel or unusual design features, special conditions are prescribed under the provisions of 14 CFR § 21.16 to establish a level of safety equivalent to that established in the regulations.

Special conditions, as appropriate, are issued in accordance with 14 CFR § 11.49 after public notice, as required by 14 CFR §§ 11.28 and 11.29, and become part of the type certification

basis in accordance with 15 CFR § 21.101(b)(2).

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 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 14 CFR § 21.101(a)(1).

Novel or Unusual Design Features

The Boeing Model 737-600/-700/-800 airplanes will incorporate new avionic/electronic systems, such as the Air Data Inertial Reference System (ADIRS) and Common Display System (CDS), that perform critical functions. These systems may be vulnerable to HIRF external to the airplane. In addition, the CFM56-7B engine proposed for the Boeing 737-700 airplane is a high-bypass ratio fan jet engine that will not seize and produce transient torque loads in the same manner that is envisioned by current

§ 25.361(b)(1) related to "sudden engine stoppage."

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, a special condition is needed for the Boeing Model 737-600/-700/-800, which require that new electrical and electronic systems that perform critical functions be designed and installed to preclude component damage and interruption of function due to both the direct and indirect effects of HIRF.

For the CFM56-7B engine proposed for the 737-600/-700/-800 airplanes, the limit engine torque load imposed by sudden engine stoppage due to malfunction or structural failure (such as compressor jamming) has been specific requirement for transport category airplanes since 1957. The size,

configuration, and failure modes of jet engines has changed considerably from those envisioned in 14 CFR § 25.361(b) when the engine seizure requirement was first adopted.

Relative to the engine configurations that existed when the rule was developed in 1957, the present generation of engines are sufficiently different and novel to justify issuance of a special condition to establish appropriate design standards.

The FAA is developing a new regulation and a new advisory circular that will provide more comprehensive criteria for treating engine loads resulting from structural failures. In the meantime, a special condition is needed to establish appropriate criteria for the Boeing 737-600/-700/-800 airplanes.

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 avionics 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)
100 MHz-200 MHz ...	150	33
200 MHz-400 MHz ...	70	70
400 MHz-700 MHz ...	4,020	935
700 MHz-1 GHz	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

Limit Engine Torque Loads for Sudden Engine Stoppage

in order to maintain the level of safety envisioned by § 25.361(b), more comprehensive criteria are needed for the new generation of high bypass engines. The proposed special condition would distinguish between the more common events and those rare events resulting from structural failures in the engine. For these more rare but severe events, the proposed criteria would allow deformation in the engine supporting structure in order to absorb the higher energy associated with the high bypass engines, while at the same time protecting the adjacent primary structure in the wing and fuselage by applying an additional factor on these loads.

Applicability

As discussed above, these special conditions are applicable to the Model 737-600/-700/-800 airplanes. Should Boeing Commercial Airplane Group apply at a later date for a change to the type certificate to include another model incorporating the same novel or unusual design feature, the special conditions would apply to that model as well under the provisions of 14 CFR § 21.101(a)(1).

Conclusion

This action affects only certain design features on the Boeing Model 737-600/-700/-800 airplanes. It is not a rule of general applicability and affects only the applicant who applied to the FAA for approval of these features on the airplane.

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 Proposed Special Conditions

Accordingly the Federal Aviation Administration (FAA) proposes the following special conditions as part of the type certification basis for Boeing Model 737-600/-700/-800 airplanes.

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.

For the purpose of this special condition, 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.

2. *Engine Torque Loads.* In lieu of compliance with § 25.361(b), compliance with the following special condition is proposed:

(b) For turbine engine installations, the mounts and local supporting structure must be designed to withstand each of the following:

(1) The maximum torque load, considered as limit, imposed by:

(i) sudden deceleration of the engine due to a malfunction that could result in a temporary loss of power or thrust capability, and that could cause a shutdown due to vibrations; and

(ii) the maximum acceleration of the engine.

(2) The maximum torque load, considered as ultimate, imposed by sudden engine stoppage due to a structural failure, including fan blade failure.

(3) The load condition defined in paragraph (b)(2) of this section is also assumed to act on adjacent airframe structure, such as the wing and fuselage. This load condition is multiplied by a factor of 1.25 to obtain ultimate loads when the load is applied to the adjacent wing and fuselage supporting structure.

Issued in Renton, Washington, on May 2, 1997.

Stewart R. Miller,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

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Frequency	Peak (V/M)	Average (V/M)
10 KHz-100 KHz	50	50
100 KHz-500 KHz	60	60
500 KHz-2 MHz	70	70
2 MHz-30 MHz	200	200
30 MHz-100 MHz	30	30