

# Proposed Rules

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This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

## DEPARTMENT OF AGRICULTURE

### Food Safety and Inspection Service

9 CFR Parts 308, 310, 318, 320, 325, 326, 327 and 381

[Docket No. 95-029N]

#### Pathogen Reduction; Hazard Analysis and Critical Control Point (HACCP) Systems: Extension of Comment Period

**AGENCY:** Food Safety and Inspection Service, USDA.

**ACTION:** Extension of comment period.

**SUMMARY:** The Food Safety and Inspection Service (FSIS) is extending the comment period for its February 3, 1995, proposal titled "Pathogen Reduction; Hazard Analysis and Critical Control Points (HACCP) Systems" (60 FR 6774). FSIS has received several requests to extend the comment period. FSIS believes there is merit to some of the requests and, therefore, is extending the comment period for 30 days.

**DATES:** Comments must be received by July 5, 1995.

**ADDRESSES:** *Written comments should be sent to:* Diane Moore, FSIS Docket Clerk, Room 4352, South Agriculture Building, Food Safety and Inspection Service, U.S. Department of Agriculture, Washington, DC 20250. Oral comments, as provided by the Poultry Products Inspection Act, should be directed to the appropriate person listed in the proposed rule.

**FOR FURTHER INFORMATION CONTACT:** Judith A. Segal, Director, Policy, Evaluation and Planning Staff, Food Safety and Inspection Service, USDA, (202) 720-7773.

**SUPPLEMENTARY INFORMATION:** On February 3, 1995, FSIS published a proposed rule, "Pathogen Reduction; Hazard Analysis and Critical Control Point (HACCP) Systems" (60 FR 6774). In that document, the Agency proposed a number of regulatory changes

applicable to Federal- and State-inspected meat and poultry establishments. The proposed changes are designed to reduce the occurrence and numbers of pathogenic microorganisms in meat and poultry products as well as control other hazards, thereby reducing the incidence of foodborne illness associated with the consumption of these products.

FSIS has received several requests to extend the comment period. These requests state that additional time is needed to permit the drafting of meaningful, well-considered comments on the Agency's far-reaching proposals, which take into account the new information and understanding growing out of the public hearing, scientific/technical conferences and public information briefings FSIS has conducted during the comment period. Also, extending the comment period will provide individuals, organizations, States, and foreign countries a better opportunity to respond to issues raised in others' comments received orally or in writing.

FSIS continues to believe that there is an important public health need to complete this rulemaking promptly. The complexity and importance of this rulemaking also require, however, that FSIS provide every reasonable opportunity for persons to provide meaningful comments, which it needs to develop sound and effective final rules. Therefore, the Agency has decided to extend the comment period for 30 days, to July 5, 1995.

FSIS also intends to convene a two-day public meeting, four to six weeks after the close of the comment period, to permit further public discussion, during the Agency's decisionmaking process, based on issues raised in the administrative record developed during the comment period. The Agency will provide notice in the **Federal Register** of the dates, times, location, and topics for the meeting.

Done at Washington, DC, on May 26, 1995.

**Michael R. Taylor,**

*Acting Under Secretary for Food Safety.*

[FR Doc. 95-13387 Filed 5-31-95; 8:45 am]

BILLING CODE 3410-DM-P

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 25

[Docket No. NM-93; Special Conditions No. 25-ANM-99]

#### Special Condition: Cessna Aircraft Company, Model 750 (Citation X) Airplane, High-Intensity Radiated Fields

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final special condition.

**SUMMARY:** This special condition for the Cessna Aircraft Company (Cessna) is issued for the Model 750 (Citation X) airplane. This new airplane will utilize new avionics/electronic systems that provide critical data to the flightcrew. The applicable regulations do not contain adequate or appropriate safety standards for the protection of these systems from the effects of high-intensity radiated fields. This special condition contains the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that established by the existing airworthiness standards.

**EFFECTIVE DATE:** July 3, 1995.

**FOR FURTHER INFORMATION CONTACT:** Mark Quam, FAA, Standardization Branch, ANM-113, Transport Airplane Directorate, Aircraft Certification Service, 1601 Lind Avenue SW., Renton, Washington, 98055-4056; telephone (206) 221-2145, facsimile (206) 227-1320.

#### SUPPLEMENTARY INFORMATION:

##### Background

On October 15, 1991, Cessna Aircraft Company (Cessna), 6030 Cessna Blvd., P.O. Box 7704, Wichita, KS 67277-7704, applied for a new type certificate in the transport airplane category for the Model 750 (Citation X) airplane. The Cessna Model 750 is a T-tail, low swept wing, medium-sized business jet powered by two GMA-3007C turboprop engines mounted on pylons extending from the aft fuselage. Each engine will be capable of delivering 6,000 pounds thrust. The flight controls will be powered and capable of manual reversion. The airplane has a seating capacity of up to twelve passengers, and a maximum takeoff weight of 31,000 pounds.

### Type Certification Basis

Under the provisions of § 21.17 of the FAR, Cessna must show, except as provided in § 25.2, that the Model 750 (Citation X) meets the applicable provisions of part 25, effective February 1, 1965, as amended by Amendments 25-1 through 25-74 and Amendment 25-80. In addition, the proposed certification basis for the Model 750 includes part 34, effective September 10, 1990, plus any amendments in effect at the time of certification; and part 36, effective December 1, 1969, as amended by Amendment 36-1 through the amendment in effect at the time of certification. No exemptions are anticipated. This special condition will form an additional part of the type certification basis.

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 Cessna Model 750 because of a novel or unusual design feature, special conditions are prescribed under the provisions of § 21.16 to establish a level of safety equivalent to that established in the regulations.

Special conditions, as appropriate, are issued in accordance with § 11.49 of the FAR after public notice, as required by §§ 11.28 and 11.29, and become part of the type certification basis in accordance with § 21.17(a)(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, 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 750 incorporates new avionics/electronic installations, including a digital Electronic Flight Instrument System (EFIS), Air data System, Attitude and Heading Reference System (AHRS), Navigation and Communication System, Autopilot System, and a Full Authority Digital Engine Control (FADEC) system that controls critical engine parameters. These systems may be vulnerable to high-intensity radiated fields external to the airplane.

### Discussion

At the time that Cessna applied for type certification of the Cessna Model 750 (Citation X) airplane, the existing lightning protection airworthiness certification requirements were

insufficient to provide an acceptable level of safety for new technology avionics and electronic systems. The two existing regulations that specifically pertained to lightning were § 25.581 (the airframe in general), and § 25.954 (fuel system protection). There were, however, no regulations that specifically addressed protection of electrical and electronic systems from lightning.

On March 29, 1994, the FAA published in the **Federal Register** Notice of Proposed Special Conditions No. SC-94-1-NM (59 FR 14571) for the Cessna Model 750 (Citation X). These special conditions were proposed requirements to protect the airplane systems from the effects of lightning and high-intensity radiated fields (HIRF). Cessna, commenting to the docket by letter, noted that there were differences in the preamble language from the language used in issue papers that discussed the proposed method of compliance with the special conditions. The FAA agreed. Although the special conditions proposed were not changed from the original notice, the methods of compliance discussed in the issue papers that preceded the original notice were, in fact, different in certain respects than the methods of compliance discussed in the original notice. The FAA inadvertently left out Cessna's proposed alternative methods of complying with the proposed special conditions. As the methods of compliance proposed by Cessna deviate in certain respects from previous methods of compliance with the proposed special conditions, the FAA agreed these methods should also be made available for the public record and comment as well. Therefore, Notice SC-94-1-NM was republished in the **Federal Register** on September 12, 1994, as Notice SC-94-1A-NM (59 FR 46775) in its entirety, including Cessna's proposed alternative methods of compliance with the special conditions.

The FAA agrees with Cessna's proposed alternative method of testing and evaluation of the effects of lightning on the installed airplane systems when complying with the proposed special conditions. However, lightning protection is no longer considered a novel or unusual design feature relative to the regulations, as Amendment 25-80, effective May 21, 1994, was added to 14 CFR part 25 of the FAR (59 FR 22116, April 28, 1994). The lightning special condition differs from the rule in that the definitions of critical and essential functions are retained as a separate paragraph (i.e. item 3 in the notice). The rule also provides approaches to compliance for designing and verifying lightning protection in

§ 25.1316(c) that would be no different than the approaches to compliance for the special conditions.

As there is no longer a need for lightning special conditions, the proposed lightning special condition has been removed from this final special condition and § 25.1316, as adopted by Amendment 25-80, will be added to the Cessna 750 certification basis as authorized under § 21.17(a)(1)(i). Cessna's proposed method of testing and evaluation of the effects of lightning on the installed airplane systems for compliance with the lightning special condition can be utilized when complying with § 25.1316, as the intent of the lightning special condition and § 25.1316 are identical.

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 Cessna Model 750, to require that new technology electrical and electronic systems, such as the EFIS, FADEC, AHRS, etc., be designed and installed to preclude component damage and interruption of function due to both the direct and indirect effects 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 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, the FAA considers that 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–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

Cessna's market for the Model 750 Citation X includes, at the present time, two European JAA member countries. Consequently, Cessna intends to pursue certification to meet the European JAA requirements as well as the FAA requirements. To reduce the testing required, Cessna proposes to test to an environment that combines a proposed FAA certification environment (from the SAE AE4R Subcommittee) and a proposed JAA certification environment (from EUROCAE WG-33) to form a "worst case" certification environment. Cessna's proposed environment consists of the following:

Where the combined proposed certification environment is less than 100 volts per meter, Cessna would test to the proposed certification environment (JAA or FAA, whichever is higher). Where the combined environment is greater than 100 volts per meter, Cessna would test to the proposed JAA environment (less aircraft attenuation above 200 MHz). The aircraft attenuation would be established by the results of full vehicle tests conducted by Cessna on Model 650, Citation III, and Citation VII aircraft. Cessna's proposed Model 750 HIRF certification environment is as follows:

PROPOSED CESSNA 750 (CITATION X (CX)) HIRF CERTIFICATION ENVIRONMENT

Frequency (Hz)	Proposed FAA certification environment (peak/avg)	Proposed JAA certification environment (peak/avg)	Proposed CX environment (peak/avg)
10K–500K.	50/50	40/40	50/50
500K–2M.	40/40	40/40	40/40
2M–30M.	100/100	100/100	100/100
30M–100M.	20/20	20/20	20/20
100M–200M.	50/30	50/30	50/30
200M–400M.	70/70	70/70	70/70
400M–700M.	1520/750	700/30	700/30
700M–1G.	1300/170	1300/70	1300/70
1G–2G .	2500/180	2500/160	2500/160
2G–4G .	3500/360	3500/240	3500/240
4G–6G .	6800/280	3200/280	3200/280
6G–8G .	1800/330	800/330	800/330
8G–12G	3500/215	3500/330	3500/330
12G–18G.	1700/270	1700/180	1700/180

Discussion of Comments

There were no comments received in response to Notice SC-94-1-NM other than those submitted by Cessna, as discussed earlier in this document. No comments were received in response to Supplemental Notice SC-94-1A-NM.

The Federal Aviation Administration's Analysis/Summary

The FAA does not agree with Cessna's proposed alternative method of compliance (i.e., the proposed CX threat environment) for the evaluation of the effects of HIRF on the installed airplane systems. The FAA has not formally adopted any of the certification environments proposed by Cessna listed above. The latest published FAA policy that defines the external environment acceptable for airplane testing is dated July 29, 1992, and is reflected earlier in the preamble to these special conditions. If Cessna wishes to reduce testing by combining the FAA and JAA environments, Cessna should test to the higher of the values given in the environment tables that have been adopted by the FAA and JAA. It should be noted that frequencies above 18 GHz should be used only if the pass/fail criteria are not met in the 12-18 GHz range, or if the system is designed to operate in the range from 18-40 GHz.

The FAA's option of testing using 100 volts per meter threat from 10 KHz to 18

GHz requires that this treat be applied to the systems elements and associated wiring without the benefit of airframe shielding. The 100 volts per meter test can be established by systems tests and analysis acceptable to the FAA.

In summary, the FAA has determined that Cessna must utilize the FAA's HIRF envelop (the first HIRF envelope and not the proposed SAE AE4R envelop) or may combine the FAA HIRF envelope and the JAA envelope and test to the greater values.

As discussed earlier in this document, the special conditions are applicable initially to the Model 750. Should Cessna apply at a later date for a change to the type certificate to include another model incorporating that same novel or unusual design feature, the 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 Cessna Model 750 (Citation X) 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, Reporting and record keeping requirements.

The authority citation for these 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 Special Conditions

Accordingly, pursuant to the authority delegated to me by the Administrator, the following special condition is issued as part of the type certification basis for the Cessna Model 750 (Citation X) series 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.

2. 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.

Issued in Renton, Washington, on May 8, 1995.

**Darrell M. Pederson,**

*Acting Manager, Transport Airplane  
Directorate, Aircraft Certification Service.*

[FR Doc. 95-13397 Filed 5-31-95; 8:45 am]

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#### 14 CFR Part 25

[Docket No. NM-109; Notice No. SC-95-3-NM]

#### **Special Condition: Gulfstream Aerospace Corporation, Model Gulfstream V, High-Intensity Radiated Fields**

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Notice of proposed special conditions.

**SUMMARY:** This notice proposes special conditions for the Gulfstream Model Gulfstream V airplane. This new airplane will utilize new avionics/electronic systems that provide critical data to the flightcrew. The applicable regulations do not contain adequate or appropriate safety standards for the protection of these systems from the effects of high-intensity radiated fields. These proposed 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:** Comments must be received on or before July 17, 1995.

**ADDRESSES:** Comments on this proposal may be mailed in duplicate to: Federal Aviation Administration, Office of the Assistant Chief Counsel, Attn: Rules Docket (ANM-7), Docket No. NM-109, 1601 Lind Avenue SW., Renton, Washington 98055-4056; or delivered in duplicate to the Office of the Assistant Chief Counsel at the above address. Comments must be marked: Docket No. NM-109. 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:** Standardized Branch, ANM-113, Transport Airplane Directorate, Aircraft Certification Service, 1601 Lind Avenue SW., Renton, Washington 98055-4056.

#### **SUPPLEMENTARY INFORMATION:**

##### **Comments Invited**

Interested persons are invited to participate in the making of these proposed 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 before further rulemaking action is taken on these proposals. The proposals contained in this notice may be changed in light of 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 notice must submit with those comments a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. NM-109." The postcard will be date stamped and returned to the commenter.

##### **Background**

On February 26, 1992, Gulfstream Aerospace Corporation, P.O. Box 2206, Savannah, GA 31402-2206, applied for an amended type certificate in the transport airplane category for the Model Gulfstream V airplane. The Gulfstream V is a T-tail, low swept wing, business jet airplane powered by two Rolls-Royce BR710-48 turbofan engines mounted on pylons extending from the aft fuselage. Each engine will be capable of delivering 14,750 pounds thrust. The flight controls will be powered and capable of manual reversion. The airplane has a seating capacity of up to nineteen passengers, and a maximum takeoff weight of 89,000 pounds.

##### **Type Certification Basis**

Under the provisions of § 21.17 of the FAR, Gulfstream must show, except as provided in § 25.2, that the Model Gulfstream V meets the applicable provisions of part 25, effective February 1, 1965, as amended by Amendments 25-1 through 25-75. In addition, the proposed certification basis for the Model Gulfstream V includes part 34, effective September 10, 1990, plus any amendments in effect at the time of certification; and part 36, effective December 1, 1969, as amended by Amendment 36-1 through the amendment in effect at the time of certification. No exemptions are anticipated. The special conditions that may be developed as a result of this notice will form an additional part of the type certification basis. In addition,

the certification basis may include other special conditions that are not relevant to these proposed special conditions.

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 Gulfstream V because of a novel or unusual design feature, special conditions are prescribed under the provisions of § 21.16 to establish a level of safety equivalent to that established in the regulations.

Special conditions, as appropriate, are issued in accordance with § 11.49 of the FAR after public notice, as required by §§ 11.28 and 11.29, and become part of the type certification basis in accordance with § 21.17(a)(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 incorporated 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 Gulfstream V incorporates new avionic/electronic installations, including a digital Electronic Flight Instrument System (EFIS), Air Data System, Attitude and Heading Reference System (AHRS), Navigation and Communication System, Autopilot System, and a Full Authority Digital Engine Control (FADEC) system that controls critical engine parameters. These systems 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 Gulfstream V which would require that new technology electrical and electronic systems, such as the EFIS, FADEC, AHRS, etc., be designed and installed to preclude component damage and interruption of