Dated: February 9, 1990.

Robert C. Keeney,

Deputy Director, Fruit and Vegetable Division.

[FR Doc. 90-3497 Filed 2-9-90; 2:39 pm]

BILLING CODE 3410-02-M

Farmers Home Administration

7 CFR Part 1965

Rural Rental Housing Displacement Prevention

AGENCY: Farmers Home Administration, USDA.

ACTION: Interim rule.

SUMMARY: The Farmers Home Administration (FmHA) revises its rural rental housing (RRH) and labor housing (LH) regulations which deal with prepayment of these loans. The action is being taken to correct problems raised by the interim rule currently in effect governing these procedures. It has been pointed out that the sequence of steps dealing with the acceptance of prepayment and offer of incentives to avert prepayment are reversed from the sequence mandated by law. No change other than this sequence reversal is being made. Changes being made are therefore mandated by the provisions of Subtitle C, "Rural Rental Housing Displacement Prevention," portion of the Housing and Community Development Act of 1987.

DATES: Effective on February 13, 1990.

FOR FURTHER INFORMATION CONTACT: Arlene Halfon, Senior Loan Specialist, Multiple Family Housing Servicing and Property Management Division, Room 5329, South Agriculture Building, Washington, DC 20250, telephone (202) 447-3187.

SUPPLEMENTARY INFORMATION:

Classification: This action has been reviewed under USDA procedures established in Departmental Regulation 1512-1, which implements Executive Order 12291 and has been determined to be "nonmajor." It will not result in an annual effect on the economy of $100 million or more; a major increase in costs or prices for consumers, individual industries, Federal, State or local government agencies, or geographic regions; or have significant adverse effects on competition, employment, investment, productivity, innovations, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

Environmental Impact Statement: This document has been reviewed in accordance with 7 CFR Part 1940, Subpart G, "Environmental Program." It is the determination of FmHA that this action does not constitute a major Federal action significantly affecting the quality of the human environment and, in accordance with the National Environmental Policy Act of 1969, Public Law 91-190, and Environmental Impact Statement is not required.

Intergovernmental Review: This program/activity is listed in the Catalog of Federal Domestic Assistance under Nos. 10.427, Rural Rental Assistance Payments (Rental Assistance); 10.415, Rural Rental Housing Loans; 10.405, Farm Labor Housing Loans and Grants. For the reasons set forth in the Final Rule related Notice(s) to 7 CFR part 3015, subpart V, this program/activity is included in the scope of Executive Order 12372, which requires intergovernmental consultation with State and local officials.

Regulatory Flexibility Act: In compliance with the Regulatory Flexibility Act (Public Law 96-354), Mr. Neal Sox Johnson, Acting Administrator of FmHA, has determined that this action will not have a significant economic impact on a substantial number of small entities because only a few hundred borrowers have attempted to prepay since implementation of the interim rule in May 1988.

General Information

Background and Statutory Authority

The Housing and Community Development Amendments to the Housing Act of 1949, signed into law in 1979, and the Housing and Community Development Act of 1980, implemented in § 1965.90 of Subpart B of Part 1965 of this chapter, provided that FmHA Section 514 and Section 515 Multi-Family Housing borrowers, who received loans prior to December 21, 1979, and who have not subsequently become subject to restrictions due to specified servicing actions, may prepay their loans and remove their housing from the low- and moderate-income market without restrictions. Those who received loans or other qualifying servicing actions on or after December 21, 1979, are only eligible to prepay after their restrictive-use requirements expire in either 15 or 20 years from the date of the loan or the servicing action. Under these provisions, 51 percent of FmHA projects and 44 percent of FmHA units nationwide were eligible to prepay. To keep the problems of tenants displaced from these prepaid projects from growing severe, Congress issued several moratoriums in 1986 and 1987 preventing prepayments, except under specified conditions. FmHA, in June 1987, issued revised regulations to ease the burden of displacement on tenants. A more recent legislative action on this issue was the passage of the Housing and Community Development Act of 1987. This law included provisions dealing with "Rural Rental Housing Displacement Prevention." As part of the law, Congress mandated the FmHA issue regulations to carry out the legislation within 60 days of enactment. These regulations were published in the **Federal Register** on April 22, 1988, and effective May 23, 1988, as an interim rule with comments on an emergency basis.

Several comments to that interim rule stated that two steps in the published procedure were reversed from the sequence required by law. There have also been two lawsuits based on that interpretation. While we do not feel that there has been a significant impact on tenants due to the reversal of the sequence, we are changing the interim rule, again on an interim and emergency basis, to bring the regulation into compliance with the law. This is in compliance with 5 U.S.C. section 553, "The Administrative Procedures Act," which allows an exception to proposed rulemaking and comment period, for good cause, if comment is shown to be unnecessary, impractical or contrary to the public good. It would be impractical to go through a public comment period since Congress had mandated the initial issuance of regulations within 60 days and these new changes should have been in that rule.

Due to the emergency nature of this regulation, and in accordance with section 534(c) of the Housing Act of 1949, as amended, there will be no prior notification to Congress before publication of this rule, and no waiting period between the date this final rule is published and the effective date of the regulation.

We are not inviting comments to this interim rule. Comments pertinent to this rule were received in response to the initial interim rule and will be addressed fully in the proposed rule.

The Change in this rule is as follows:

Exhibit E to subpart B of part 1965 is being amended to reverse the present sequence of steps and provide that incentive offers to avert prepayment will be made to *all* borrowers without restrictive-use provisions who request to prepay, even if the borrowers are willing to accept restrictions in their releases, or the loan can legally be accepted without restrictions. Incentives offered in these cases may be minimal.

List of Subjects in 7 CFR Part 1965

Administrative practice and procedure, Low- and moderate-income housing—Rental, Mortgages.

Accordingly, chapter XVIII, title 7, Code of Federal Regulations is amended as follows:

PART 1965—REAL PROPERTY

1. The authority citation for part 1965 continues to read as follows:

Authority: 7 U.S.C. 1989; 42 U.S.C. 1480; 5 U.S.C. 301; 7 CFR 2.23; 7 CFR 2.70.

Subpart B—Security Servicing for Multiple Housing Loans

Exhibit E—Prepayment of Loans Not Subject to Restrictive-Use Provisions

2. In Exhibit E to subpart B of part 1965 the paragraphs in the first column below are redesignated as shown in the second column below:

Old paragraph	New paragraph
V A.	III. F
V C., D. E., F	IV B., C., D., E
V B.	V C.
IV A., B.	V A., B.

Exhibit E—Prepayment of Loans Not Subject to Restrictive-Use Provisions

3. Paragraph I B is revised to read as follows:

I. *Purpose:*

* * * * *

B. Requests to pay FmHA multiple family housing loans in full require that certain actions be taken to ensure the affordability of the housing for specified tenants for a guaranteed period of time. When a prepayment request is received from a borrower who can document the ability to pay the loan in full, FmHA is required to: provide incentives to borrowers to either remain in the program themselves or to sell the project to a new borrower who will remain in the program; accept the prepayment if it can be shown that doing so will not cause displacement of tenants or affect the supply of affordable housing for tenants served by the Section 514 or 515 programs; or require that borrowers sell their projects to non-profit borrowers who, with FmHA assistance, will continue to operate the project for the benefit of very-low- and low-income tenants. FmHA assistance to non-profits through the latter provision are limited by legislation each year.

* * * * *

4. Newly redesignated paragraph III F is revised to read as follows:

III. *Prepayment of Loans Covered by this Exhibit:*

* * * * *

F. *Notification to new tenants.* Leases of tenants who move to the project will state that a prepayment of the loan is pending, and that they have been given a copy of the letter sent to tenants in accordance with paragraph III C of this Exhibit.

* * * * *

5. The introductory language of newly redesignated paragraph IV and IV B are revised, and paragraph IV A is added to read as follows:

IV. *Determination of Need and Offer of Incentives to Extend Low-Income Use.*

A. *Determination of Need.* The District Office will review local market conditions, information submitted for the prepayment report, and reponses to a 30-day tenant comment period. They will determine how much need there is for the housing.

B. *Offer of Incentives to Extend Low-Income Use.* The borrower will show evidence of the nature of the prepayment to be made, whether through refinancing or sale of the project. If the possibility of an actual prepayment cannot be demonstrated by the borrower, the prepayment offer will be withdrawn by this borrower, or it will be rejected and appeal rights given. If the borrower can demonstrate the ability to prepay, the District Office will send a letter stating that:

* * * * *

6. Newly redesignated paragraph IV B 1 is amended by changing the reference "paragraph V D" to read "paragraph IV C 2."

7. Newly redesignated paragraph IV B 5 is amended in the first sentence by removing the words "or appeal this action."

8. Newly redesignated paragraph IV C 1 is amended by changing the reference "paragraph V C" to read "paragraph IV B."

9. Newly redesignated paragraph IV D 1 is amended in the heading and first sentence by removing the words "or loses the appeal."

10. Newly redesignated paragraph IV D 2 is amended by changing the reference "Form FmHA 1965–B–1" to read "FmHA Form Letter 1965–B–1."

11. Newly redesignated paragraph IV E 4 is amended by changing the word "increases" in the first sentence to read "increase".

12. The introductory text of newly redesignated paragraphs V and V A, and paragraph V C are revised to read as follows:

* * * * *

V. *When the Borrower Rejects the Incentive Package:*

A. *Determination of Acceptance of Prepayment.* The District Office will determine whether the prepayment may be accepted. Section 1965.90(b)(4) may be used in helping to make this determination. The District Office may accept prepayment if:

* * * * *

C. *Appeal Rights if Prepayment is Rejected.* The borrower will be notified by letter that:

1. Prepayment was denied. The letter should state the reasons for denial and appeal rights should be given in accordance with Subpart B of Part 1900 of this chapter. Borrowers should be advised that when the denial of prepayment is appealed, the level of incentives offered may be appealed simultaneously. The appeal must be received within 30 days of the date of the letter.

2. If the borrower does not respond within 30 days or loses the appeal, the State Office will advise the National Office by means of FmHA Form Letter 1965–B–1 to remove the name from the waiting list. Tenants and any agencies notified in accordance with paragraph III C will be notified by the District Office that prepayment will not take place.

13. In Paragraph VI the introductory text is revised to read as follows:

VI. *Sale to Non-Profit Organization or Public Agency.* If prepayment cannot be accepted, the borrower will be required to offer to sell the project to a non-project organization or public agency. The following steps will be taken in this process.

* * * * *

14. Paragraph VI B is amended in the last sentence by adding the phrase "including publications directed to minorities" between the words "media" and "determined."

15. Paragraph VI C 4 is amended by changing the reference "paragraph E–3 of this subsection" to read "paragraph E 3 of this section."

Dated: January 23, 1990.

Neal Sox Johnson,

Administrator, Farmers Home Administration.

[FR Doc. 90–3231 Filed 2–12–90; 8:45 am]

BILLING CODE 3410–07–M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Parts 21 and 23

[Docket No. 078CE, Special Condition 23–ACE–49]

Special Conditions: SOCATA Model TBM–700 Series Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final Special Conditions.

SUMMARY: These special conditions are being issued to become part of the type certification basis for the SOCATA Model TRM–700 series airplanes. These airplanes will have novel and unusual design features when compared to the state of technology envisioned in the airworthiness standards for normal, utility, acrobatic, and commuter category airplanes. These novel and unusual design features include the

installation of electronic displays and the protection of them from indirect effects of lightning and high energy radiated electromagnetic fields (HERF), and evacuation of fumes from pressurized airplanes for which the applicable regulations do not contain adequate or appropriate airworthiness standards. These special conditions contain the additional safety standards which the Administrator considers necessary to establish a level of safety equivalent to that provided by the applicable airworthiness standards.

EFFECTIVE DATE: March 14, 1990.

FOR FURTHER INFORMATION CONTACT: Ervin E. Dvorak, Aerospace Engineer, Standards Office (ACE-110), Aircraft Certification Service, Central Region, Federal Aviation Administration, Room 1544, 601 East 12th Street, Federal Office Building, Kansas City, Missouri 64106; telephone (816) 426-5688.

SUPPLEMENTARY INFORMATION:

Background

On January 22, 1989, SOCATA—Group Aerospatiale made an application for type certificate approval of the Model TBM-700 Series airplane to the FAA and Direction Generale De L'Aviation Civile (DGAC) of France. The Model TBM-700 airplane is a pressurized, single-engine turboprop, of conventional metal material, with 6-7 seats and a maximum altitude of 30,000 feet. The installation may incorporate an electronic attitude director indicator (EADI) and an electronic horizontal situation indicator (EHSI) in lieu of the traditional mechanical or electro-mechanical displays providing similar information to the flight crew.

Type Certification Basis

The type certification basis for the SOCATA Model TBM-700 series airplane is as follows: Part 21 of the Federal Regulation (FAR) § 21.29; Part 23 of the FAR, effective February 1, 1965, including amendments 23-1 through 23-33 and §§ 23.783 and 23.807 of amendment 23-36; SFAR 27 effective February 1, 1974, as amended by amendments 27-2 through 27-5; Part 36, effective December, 1969 as amended by amendments 36-1 through the amendment effective on the date of type certification; exemptions, if any; and the special conditions that may result from this proposal.

Discussion

Special conditions may be issued and amended, as necessary, as part of the type certification basis if the Administrator finds that the airworthiness standards designated in accordance with § 21.17(a)(1) do not contain adequate or appropriate safety standards because of novel and unusual design features of an airplane or installation. Special conditions, as appropriate, are issued in accordance with § 11.49 after public notice, as required by §§ 11.28 and 11.29(b), effective October 14, 1980, and will become a part of the type certification basis, as provided by § 21.17(a)(2).

The proposed type design of the SOCATA Model TBM-700 series airplane contains a number of novel and design features not envisaged by the applicable airworthiness standards. Special conditions are considered necessary because the applicable airworthiness standards do not contain adequate or appropriate safety standards for the novel or unusual design features of the SOCATA Model TBM-700 series airplane. Special conditions resulting from this notice will also be applicable to all SOCATA Model TBM series airplanes, including the installation of similar EFIS, without further amendment of the special conditions.

Electronic Flight Instrument System (EFIS)

The proposed cathode-ray tube (CRT) electronic display units will contain primary attitude, heading, and navigation cockpit displays. The cockpit instrument panel configuration would feature two displays, an EADI and an EHSI on the pilot side of the instrument panels. All other displays, i.e., airspeed, altitude, vertical speed, etc., will be conventional electromechanical instruments. On some later installations, another EADI and EHSI may be installed on the copilot side.

Emissive color on a CRT display will inevitably appear different than reflective colors on conventional electromechanical displays. Different intensities and color temperatures of ambient illumination will also affect the perceived colors. Therefore, display legibility must be adequate for all cockpit lighting condition, including direct sunlight.

Features of this system are novel and unusual relative to the applicable airworthiness requirements. Current small airplane airworthiness requirements are based on "single-fault" or "fail-safe" concepts and, when promulgated, the FAA did not envision use of complex, safety-critical systems in small airplanes. The current small airplanes requirements envisioned instruments that were single function; i.e., a failure would cause loss of only one instrument function, although several instrument functions may have been housed in a common case.

Flight instruments for the pilot are required to be grouped in front of the pilot so deviation from looking forward along the airplane flight path is minimized when the pilot shifts from viewing the flight path to viewing the flight instruments.

For instrument flight, the airplane must be equipped with the minimum flight instruments listed in the operating rules. This minimum listing of instruments includes all instruments that have long been accepted as the minimum for continued safe flight. Standby instruments for flight instruments are not required by the small airplane airworthiness requirements because the FAA has long accepted that the small airplane could be flown safely by using partial panel techniques following a single instrument failure. The basic airman certification program for an instrument flight rules (IFR) rating has long included requirements for the pilot to demonstrate the ability to fly the airplane safely following failure of any one of the previously cited instruments.

The special condition will provide appropriate requirements for installation of electronic displays featuring design characteristics where a single malfunction or failure could affect more than one primary instrument, display, or system. The special condition would also provide requirements to assure adequate reliability of system design functions that are determined to be essential for continued safe flight and landing of the airplane.

For installations where electronic displays take the place of traditional instruments, the reliability must be less than that of the traditional instruments. This concerns the collective reliability of the traditional instruments rather than the reliability of a single traditional instrument. For this reason, the special condition includes requirements needed for their certification.

The special condition will also require a detailed examination of each item of equipment/component of the electronic display system, and installation of the system, to determine if the airplane is dependent upon its function for continued safe flight and landing or if its failure would significantly reduce the capability of the airplane or the ability of the crew to cope with these diverse operating conditions. Each component of the installation identified by such an examination as being critical to the safe operation of the airplane would be required to meet the proposed special condition.

The existing § 23.1309, which was incorporated into Part 23 by amendment 23–14, dated December 20, 1973, has been used as a means of evaluating systems for those airplanes that include § 23.1309 in their type certification basis. The "no-single-fault" or "fail-safe" concept of § 23.1309, along with experience based on service-proven designs and good engineering judgment, have been used to successfully evaluate most airplane systems and equipment. The type of certification basis for this airplane includes § 23.1309, however, the "single-fault" concept does not provide an adequate means for determining and evaluating the effect of certain failure conditions which may exist in complex systems such as an EFIS installation. Therefore, the FAA considers it necessary to include the proposed additional system analysis requirements in the certification basis. This will also allow the use of the "rational method" of safety analysis of the systems to assure a level of safety intended in the applicable requirements.

The development of rational methods for safety assessment of systems is based on the premise that an inverse relationship exists between the probability of a failure condition and its effect on the airplane. That is, the more serious the effect, the lower the probability must be that the related failure condition will occur. Rational methods for showing compliance for safety assessment of systems may be shown by the use of numerical analysis, but it is not mandatory. In many cases, adequate data is not available for preparing a stand-alone numerical analysis for showing compliance. Therefore, in small airplane certification, a rational analysis based on identification of failure modes and their consequences is frequently a more acceptable substantiation of compliance with the various required levels of system reliability than a numerical analysis alone.

If it is determined that the airplane includes systems that perform critical functions, it will be necessary to show that those systems meet more stringent requirements. These systems would be required to establish either that there will be no failures of that system or that a failure is extremely improbable. Critical functions means those functions whose failure would contribute to or cause a failure condition which would prevent the continued safe flight and landing of the airplane. This special condition provides reliability requirements that are based on the criticality of the system's function and provides the standards needed for certification of complex safety-critical systems being proposed for installation.

The special condition also requires that the occurrence of system(s) failures that would significantly reduce the airplane's capability or the ability of the crew to cope with adverse operating conditions, and thereby be potentially catastrophic, be improbable. It is recognized that any system(s) failure will reduce the airplane's or crew's capability by some degree, but that reduction may not be the degree leading to potentially catastrophic results.

Protection of Systems From High Energy Radiated Electromagnetic Fields (HERF)

Recent advances in technology have given rise to the application in aircraft designs of advanced electrical and electronic systems that perform functions required for continued safe flight and landing. Due to the use of solid state components and digital electronics, these advanced systems are readily responsive to the transient effects of induced electrical current and voltage caused by the high energy radiated electromagnetic fields (HERF) incident on the external surface of aircraft. These induced transient currents and voltages can degrade electronic systems performance by damaging components or upsetting system functions.

Furthermore, the electromagnetic environment has undergone a transformation that was not envisioned when the current requirements were developed. Higher energy levels are radiated from transmitters that are used for radar, radio, and television. Also, the population of transmitters has increased significantly.

At present, aircraft certification requirements, as well as the industry standards for protection from the adverse effects of HERF, are inadequate in view of the aforementioned technological advances. In addition, some significant safety events have been reported of incidents and accidents involving military aircraft equipped with advanced electronic systems when they were exposed to electromagnetic radiation.

The combined effect of the technological advances in aircraft design and the changing environment has resulted in an increased level of vulnerability of electrical and electronic systems required for the continued safe flight and landing of the aircraft. Effective measures against the effects of exposure to high energy radiated electromagnetic fields (HERF) must be provided by the design and installation of these systems. The primary factors that have contributed to this increased concern are: (1) The increasing use of sensitive electronics that perform critical functions; (2) the reduced electromagnetic shielding afforded airplane systems by advanced technology airframe materials; (3) the adverse service experience of military airplanes that use these technologies; and (4) the increase in the number and power of radio frequency emitters and expected future increases.

Cognizant of the need for aircraft certification standards to cope with the developments in technology and environment in 1986, the FAA initiated a high priority program (1) to determine and define the electromagnetic energy levels; (2) to develop and describe guidance material for design, test, and analysis; and (3) to prescribe and promulgate regulatory standards. The FAA sought and received the participation of international airworthiness authorities and industry to develop internationally recognized standards for certification

At this time, the FAA and other airworthiness authorities have established an agreed level of HERF environment that the airplane is expected to be exposed to in service. While the HERF requirements are being finalized, the FAA has adopted special conditions for the certification of aircraft that employ electrical and electronic systems that perform critical functions. The accepted maximum energy levels in which civilian airplane system installations must be capable of operating safely are based on surveys and analysis of existing radio frequency emitters. This special condition requires that the airplane be evaluated uder these energy levels for the protection of the electronic system and its associated wiring harness. These external threat levels are believed to represent the worst case to which an airplane would be exposed in the operating environment.

These special conditions require qualification of systems that perform critical functions, as installed in aircraft, to the defined HERF environment in paragraph 1 or, as an option to a fixed value using laboratory tests, in paragraph 2, as follows:

(1) The applicant may demonstrate that the operation and operational capability of the installed electrical and electronic systems that perform critical functions are not adversely affected when the aircraft is exposed to the HERF environment, defined below, or

FIELD STRENGTH VOLTS/METER

Frequency	* Peak	Average
10-500 KH_z	80	80
500-2000	80	80
2-30 MH_z	200	200
30-100	33	33
100-200	33	33
200-400	150	33
400-1000	6.3K	2K
1-2 GH_z	9K	1.5K
2-4	17K	1.2K
4-6	14.5K	800
6-8	4K	666
8-12	9K	2K
12-20	4K	509
20 40	4K	1K

(2) The applicant may demonstrate by a laboratory test that the electrical and electronic systems that perform critical functions withstand a peak of electromagnetic field strength of 100 volts per meter in a frequency range of $10KH_z$ to $18GH_z$. When using a laboratory test to show compliance with the HERF requirements, no credit is given for signal attenuation due to installation.

In view of the revised HERF envelope, the requirement for the fixed value test has been changed to 100 v/m from the previously used value of 200 v/m. The applicant opting for the fixed value laboratory test, in lieu of the HERF envelope, will be subject to post certification reassessment based on the finalized rule requirements. The applicants should be cautioned that choosing 100 v/m may make it difficult, under post certification reassessment requirements, to qualify the installation without design upgrade. If the system should not meet the post certification reassessment requirements, additional protection provisions and/or testing may be required.

A preliminary hazard analysis must be performed by the applicant for approval by the FAA to identify electrical and/or electronic systems that perform critical functions. The term "critical" means those functions whose failure would contribute to, or cause, a failure condition that would prevent the continued safe flight and landing of the aircraft. The systems that perform critical functions as identified by the hazard analysis, are candidates for application of HERF requirements. The primary electronic flight display and the full authority digital engine control (FADEC) systems are examples of systems that perform critical functions. A system may perform both critical and non-critical functions. Primary electronic flight display systems, and their associated components, perform critical functions such as attitude, altitude, and airspeed indication. The HERF requirements only apply to critical functions.

Compliance with HERF requirements may be demonstrated by tests, analysis, models, similarity with existing systems, or a combination thereof. Service experience alone is not acceptable since such experience in normal flight operations may not include an exposure to the HERF environmental condition. Reliance on a system with similar design features for redundancy as a means of protection against the effects of external HERF is generally insufficient since all elements of a redundant system are likely to be exposed to the fields concurrently.

The modulation should be selected as the signal most likely to disrupt the operation of the system under test, based on its design characteristics. For example, flight control systems may be susceptible to 3 Hz square wave modulation while the video signals for electronic display systems may be susceptible to 400 Hz sinusoidal modulation. If the worst case modulation is unknown or cannot be determined, default modulations may be used. Suggested default values are a 1 KHz sine wave with 80% depth of modulation in the frequency range from 10 KHz to 400 MHz and 1 KHz square wave with greater than 90% depth of modulation from 400 MHz to 18 GHz. For frequencies where the unmodulated signal caused deviations from normal operation, several different modulating signals with various waveforms and frequencies should be applied.

Acceptable system performance is attained by demonstrating that the system under consideration continues to perform its intended function during and after exposure to required electromagnetic fields. Deviations from system specification may be acceptable and will need to be independently assessed for each application for approval by the FAA.

Protection of EFIS from Indirect Effect of Lightning

Concern for the vulnerability of airplane electronic systems to the effects of lightning has increased substantially over the past few years due to the use of solid-state components and digital electronics in airplane systems that are susceptible to transient effects of induced electrical current and voltage caused by either a direct lightning strike to the airplane or by the electric fields created by a nearby lightning flash. These induced transient currents and voltages can degrade electronic system performance by damaging components or upsetting system functions.

The applicable regulations include standards for protection from lightning damage to the structure of the airplane (§ 23.867) and from lightning ignition of fuel vapor (§ 23.954). However, these standards do not provide the level of safety for the EFIS that is inherently provided by traditional mechanical or electromechanical displays providing similar information to the flight crew.

The advent of an advanced electronic system in airplane design requires additional consideration be given to protect these systems from the indirect effects of lightning. Increased dependence on electronic equipment for safe operation of an airplane makes adequate protection of that equipment a primary requirement.

The Society of Automotive Engineers (SAE) and the Radio Technical Commission for Aeronautics (RTCA) has developed acceptable methods and procedures for determining compliance with these special conditions. They are as follows: SAE AE4L Committee Report AE4L-87-3, REV B, "Protection of Aircraft Electrical/Electronic Systems Against the Indirect Effects of Lightning", dated October 1989, and RTCA DO-160B, Section 22, "Lightning Induced Transient Susceptibility", dated March 8, 1988. SAE Report AE4L-87-3, REV B provides procedures to verify the protection of systems installed in an aircraft, while Section 22 of RTCA DO-160B, provides methods to qualify equipment prior to installation in an aircraft.

Cockpit Evacuation of Noxious/Toxic Fumes

Small airplanes have typically been unpressurized where noxious/toxic fumes could be evacuated by opening windows or, if pressurized, have had maximum operating altitudes such that the airplane could be readily depressurized to evacuate noxious/toxic fumes without creating an unsafe condition. The SOCATA Model TBM-700 airplane will not have noxious/toxic fume evacuation provisions because of higher differential pressures and longer times needed to depressurize and ventilate the cockpit. Because of the need to maintain an acceptable environment at the maximum operating altitudes of this airplane, this notice proposes special conditions to require the capability to evacuate noxious/toxic fumes from the cockpit and to require the ventilation air for normal operations to be free of harmful or hazardous concentrations of gases and vapors.

Conclusion

In review of the design features discussed for the installation in the SOCATA Model TBM-700 series airplane, the following special conditions are issued to provide a level of safety equivalent to that intended by the referenced regulations. This action is not a rule of general applicability and affects only the model/series of airplanes identified in these special conditions.

The substance of these special conditions has been subject to the notice and public comment procedure in several prior instances (54 FR 4317; October 25, 1989), (54 FR 41955; October 13, 1989), (53 FR 14782; April 26, 1988), and (51 FR 37711; October 24, 1986). Also, special conditions with similar requirements have been promulgated without public procedures because the FAA has determined that good cause existed for immediate adoption (55 FR 270; January 4, 1990) and (54 FR 242; December 19, 1989). For this reason, and because a delay would significantly affect the applicant's installation of the system and the certification of the airplane, which is imminent, the FAA has determined that good cause exists for adopting these special conditions without further notice. Therefore, special conditions are being issued without substantive change for this airplane and made effective 30 days from the date of publication.

List of Subjects in 14 CFR Parts 21 and 23

Aircraft, Air transportation, Aviation safety, Safety.

The authority citation for these special conditions is as follows:

Authority: Secs. 313(a), 601, and 603 of the Federal Aviation Act of 1958; as amended (49 U.S.C. 1354(a); 1421, and 1423); 49 U.S.C. 106(g) (Revised Pub. L. 97-449, January 12, 1983); 14 CFR 21.16 and 21.101; and 14 CFR 11.28 and 11.49.

Adoption of Special Conditions

Accordingly, pursuant to the authority delegated to me by the Administrator of the Federal Aviation Administration, the following special conditions are issued as part of the type certification basis for the SOCATA Model TBM-700 series airplanes:

1. Electronic Flight Instrument Displays

In addition to, and in lieu of, the applicable requirements of Part 23 of the FAR and requirements to the contrary, for instruments, systems, and installations whose design incorporates electronic displays that feature design characteristics where a single malfunction or failure could affect more than one primary instrument display or system, and/or system design functions that are determined to be essential for continued safe flight and landing of the airplane, the following special condition applies:

(a) Systems and associated components must be examined separately and in relation to other airplane systems to determine whether the airplane is dependent upon its function for continued safe flight and landing and whether its failure would significantly reduce the capability of the airplane or the ability of the crew to cope with adverse operating conditions. Each system and each component identified by this examination upon which the airplane is dependent for proper functioning to ensure continued safe flight and landing, or whose failure would significantly reduce the capability of the airplane or the ability of the crew to cope with adverse operating conditions, must be designed and examined to comply with the following requirements:

(1) It must be shown that there will be no single failure or probable combination of failures under any foreseeable operating condition that would prevent the continued safe flight and landing of the airplane, or it must be shown that such failures are extremely improbable.

(2) It must be shown that there will be no single failure or probable combination of failures under any foreseeable operating condition that would significantly reduce the capability of the airplane or the ability of the crew to cope with adverse operating conditions, or it must be shown that such failures are improbable.

(3) Warning information must be provided to alert the crew to unsafe system operating conditions and to enable them to take appropriate corrective action. Systems, controls, and associated monitoring and warning means must be designed to minimize initiation of crew action that would create additional hazards.

(4) Compliance with the requirements of this special condition may be shown by analysis and, where necessary, by appropriate ground, flight, or simulator tests. The analysis must consider:

(i) Modes of failure, including malfunction and damage from foreseeable sources;

(ii) The probability of multiple failures, and undetected faults;

(iii) The resulting effects on the airplane and occupants, considering the state of flight and operating conditions; and

(iv) The crew warning cues, corrective action required, and the capability of detecting faults.

(5) Numerical analysis may be used to support the engineering examination.

(b) Electronic display indicators, including those incorporating more than one function, may be installed in lieu of mechanical or electro-mechanical instruments if:

(1) The electronic display indicators:

(i) Are easily legible under all lighting conditions encountered in the cockpit, including direct sunlight;

(ii) In any normal mode of operation, do not inhibit the primary display of attitude; and

(iii) Incorporate sensory cues for the pilot that are equivalent to those in the instrument being replaced by the electronic display units.

(2) The electronic display indicators, including their systems and installations, must be designed so that one display of information essential to safety and successful completion of the flight will remain available to the pilot, without need for immediate action by any crewmember for continued safe operation, after any single failure or probable combination of failures that is not shown to comply with paragraph (a)(1) of this section.

2. Protection of Electronic Flight Instrument Systems from Indirect Effects of Lightning and High Energy Radiated Electromagnetic Fields (HERF)

(a) Each system that performs critical functions must be designed and installed to ensure that the operation and operational capabilities of these critical functions are not adversely affected when the airplane is exposed to: (1) lightning and (2) high energy radiated electromagnetic fields external to the airplane.

(b) Each essential function of the system must be protected to ensure that the essential function can be recovered after the airplane has been exposed to lightning.

(c) For the purpose of the above, the following definitions apply:

(1) 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) Essential Functions. Functions whose failure would contribute to or would cause a hazardous failure condition that would significantly impact the safety of the airplane or the ability of the flight crew to cope with adverse operating conditions.

3. Cockpit Evacuation of Noxious/Toxic Fumes

In the absence of specific requirements for evacuating noxious/toxic fumes from the cockpit the following applies:

The ventilating air in the flight crew and passenger compartments must be free of harmful or hazardous concentrations of gases and vapors in normal operations and in the event of a reasonable probable failure or malfunctioning of the ventilation heating, pressurization, or other system and equipment. If the accumulating of hazardous quantities of noxious/toxic fumes in the cockpit area is reasonably probable, the evacuation of such fumes must be readily accomplished, starting with full cockpit pressurization and without depressurizing beyond safe limits.

Issued in Kansas City, Missouri on January 31, 1990.

Barry D. Clements,

Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. 90-3208 Filed 2-12-90; 8:45 am]

BILLING CODE 4910-13-M

Office of the Secretary

14 CFR Part 252

[OST Docket No. 46783; Notice 90-4]

RIN 2105-AB58

Smoking Aboard Aircraft

AGENCY: Office of the Secretary, DOT.

ACTION: Interim final rule and request for comments.

SUMMARY: The Department is amending its smoking rule to incorporate a recent statutory ban on smoking aboard aircraft on almost all fight segments within the United States. The statutory ban applies to both U.S. and foreign air carriers. The rule also codifies a blanket waiver concerning single-entity charters and makes other clarifying changes.

DATES: This interim final rule is effective February 25, 1990, in order to correspond with the statutory ban on smoking on most flight segments within the United States. Comments must be received on or before April 16, 1990.

ADDRESSES: Comments should be mailed in duplicate to Documentary Services Division, C-55, Department of Transportation, room 4107, 400 Seventh Street, SW., Washington, DC 20590. In order to facilitate the Department's review, we request that six additional copies of the comments be submitted and that commenters include a reference to the docket number of this notice. Comments will be available for review by the public at this address from 9 a.m. through 5 p.m., Monday through Friday. Persons wishing acknowledgement of their comments' receipt should include a stamped, self-addressed postcard. The Documentary Services Division will time and date-stamp the card and return it to the commenter.

FOR FURTHER INFORMATION CONTACT: Joanne Petrie, Office of the Assistant General Counsel for Regulation and Enforcement, U.S. Department of Transportation, 400 Seventh Street, SW., Washington, DC 20590 (202) 366-9306.

SUPPLEMENTARY INFORMATION:

Current Requirements

Until 1985, the Civil Aeronautics Board (CAB) had authority over certain aspects of airline service, including smoking aboard aircraft. (Any safety considerations regarding smoking aboard aircraft were, and still are, regulated by the Federal Aviation Administration.) The CAB originally adopted regulations governing smoking aboard aircraft in 1973 and completed a comprehensive review and rulemaking on the subject in 1984. Pursuant to the CAB Sunset Act of 1984, responsibility for oversight and enforcement of this, and other aviation consumer protection regulations, is now lodged in the Office of the Secretary, U.S. Department of Transportation.

14 CFR part 252 sets forth rules for the smoking of tobacco aboard aircraft. The rule bans smoking when the ventilation system is not fully functioning, when a plane is on the ground, and on all aircraft of less than 30 seats. It also bans smoking of cigars and pipes. In addition, the rule provides that any confirmed passenger who checks in on time is entitled to a seat in the no-smoking section. The air carrier must expand the no-smoking section to accommodate all qualified passengers, and must make special provision to ensure that if a no-smoking section is placed between the smoking sections, the nonsmoking passengers are not "unreasonably burdened." The regulations are focused on the rights of nonsmokers; there is no right to a smoking seat. Airlines are free to ban smoking if they choose. At least one U.S. air carrier currently bans smoking on all of its flights in North America.

14 CFR parts 121 and 135, which are administered by the Federal Aviation Administration (the FAA), require that each airplane having more than 19 passenger seats be equipped with "no smoking" signs that must be turned on for each takeoff and landing, and at any other time deemed necessary by the pilot in command. In response to requirements contained in the 1987 DOT Appropriations Act (Pub. L. 100-202), the rules also currently provide that the signs be turned on during domestic flight segments that are scheduled in the *Official Airline Guide* to be 2 hours or less in duration. No one may smoke when these signs are turned on. Both the statute and the regulation banning smoking on flights of 2 hours or less expire on April 24, 1990. Another FAA provision requires that passengers be briefed on the smoking regulations before takeoff. Finally, the FAA regulation requires that no person smoke in a lavatory and that air carriers post placards notifying passengers that tampering with smoke detectors is prohibited by Federal law. Violations of the various Office of the Secretary (OST) and FAA regulations may result in civil and criminal penalties.

Recent Statutory Changes

Public Law 101-164, which was signed by President Bush on November 21, 1989, amended section 404(d)(1)(A) of the Federal Aviation Act of 1958 (49 U.S.C. 1374(d)(1)(A)), so that it reads as follows:

> * * * it shall be unlawful to smoke in the passenger cabin or lavatory on any scheduled airline flight segment in air transportation or intrastate air transportation, which is—
>
> (i) between any two points within Puerto Rico, the United States Virgin Islands, the District of Columbia, or any State of the United States (other than Alaska and Hawaii), or between any point in any one of the aforesaid jurisdictions (other than Alaska and Hawaii) and any point in any other of such jurisdictions;
>
> (ii) within the State of Alaska or within the State of Hawaii; or
>
> (iii) scheduled for 6 hours or less in duration, and between any point described in clause (i) and any point in Alaska or Hawaii, or between any point in Alaska and any point in Hawaii.

The statute provided that the amendment would take effect upon the commencement of the 96th day following the date of enactment of this Act.

The Interim Final Rule

This interim final rule incorporates the statutory ban into the regulations so that the public can have one clear statement of the provisions governing smoking aboard aircraft. The statutory ban is self-executing and goes into effect whether or not the OST and FAA regulations are updated. As provided in Public Law 101-164, it shall be unlawful to smoke aboard the specified flight

segments in the United States as of February 25, 1990.

Over the years, we have received a number of questions concerning part 252. In addition to incorporating the statutory change, we are also making other minor editorial changes in this document for clarity. The changes are discussed in detail in the following section. We invite public comment on both the editorial changes and our implementation of the statutory ban.

Section by Section Analysis

The interim final rule adds a new § 252.1, *Purpose*, in order to describe the statutory ban on smoking on specified U.S. flight segments that is mandated by Congress and the continuance of the other protections that are set out in the rule. In addition, the statement that there is no right to smoke is transferred from the current *Applicability* section to this new section for clarity.

Section 252.3, *Applicability*, for the first time adds a reference to foreign carriers. Public Law 101–164 (and the accompanying legislative history) make it clear that the statute bans smoking on U.S. flight segments by foreign air carriers. For example, if a foreign air carrier flies from London to New York to Chicago, it must ban smoking on the New York to Chicago flight segment. Foreign air carriers may, however, continue to set whatever smoking rules they wish on inbound or outbound flight segments to or from the U.S.

Section 252.5, *Smoking ban on U.S. segments*, is a new section that implements Public Law 101–164. It states that U.S. and foreign direct air carriers shall prohibit smoking on each nonstop flight segment between locations specified by Congress. It applies to flights that are listed in the *Official Airline Guide*, or that are part of a longer flight that is listed in that publication, since the statutory ban applies only to scheduled service. U.S. and foreign air carriers may allow smoking on U.S. flight segments to or from Hawaii or Alaska (or between Hawaii and Alaska), if the flight segment is scheduled in the current *Official Airline Guide* to be more than 6 hours in duration.

This rule makes several minor, clarifying changes to § 252.7, *No-smoking sections*. For clarity, we are adding a phrase to indicate that this section only applies to flights not covered by the domestic-segment ban. In paragraph (b), we are adding a statement that the requirement to accommodate all non-smokers applies to each class of service; a carrier cannot comply with part 252 by giving a coach non-smoking seat to a first class passenger. Over the years, we have received a number of questions on this point and believe that this addition will provide clarification of what the rule has always required. We have also made a number of minor editorial corrections. First, we are changing the term "smoking area" to "smoking section" in paragraph (1) so that it will be consistent with the rest of this provision. Second, we are deleting the phrase "and charter service" from paragraph (1) because it is confusing. As noted in § 252.3, the entire rule, with the exception of § 252.5, applies to charters.

Section 252.11, *Aircraft on the ground*, continues an existing provision but is now set off in its own provision for clarity. A note concerning air taxis is added in § 252.13, *Small Aircraft*, for clarity. In addition, we request comments on changing the applicability of this section from "less than 30 seats" to "30 or fewer seats." The FAA currently defines air carriers as having "30 or fewer seats" or "more than 30 seats." We believe that this change would have no practical impact on air carriers and would eliminate the current anomaly between this OST rule and the FAA definitions concerning air carriers.

Section 252.17, *Enforcement*, draws a distinction between U.S. air carriers' obligations concerning no-smoking sections on flight segments not covered by the total ban and all carriers' obligations concerning the U.S. flight segment ban. In addition, the rule removes a redundant phrase ("the banning of smoking") because the section already notes that "smoking is not permitted."

A new section, § 252.19, *Single-entity charters*, is also added to codify a blanket waiver issued in 1982 (Order 82–1–106, January 25, 1982). A single-entity charter is defined in § 207.1 as "a charter, the cost of which is borne by the charterer and not the individual passenger, directly or indirectly." Examples include where a school charters a plane for an athletic team or if a company charters a plane to take its employees to a business function. The provision provides that on single-entity charters, air carriers need not comply with the procedures of part 252 if such a request is made by the charterer, provided that each passenger on such a flight is given notice of the smoking procedures for the flight at the time he or she first makes arrangements to take the flight. The order noted that the waiver shall apply only to the extent passengers on single-entity charter flights have advance notice that the airline will not be assigning seats and that separate seating for nonsmokers may not be available.

The rule eliminates the current § 252.7, *Waivers*, because it is no longer necessary. Originally, the provision was added to encourage carriers to consider innovative ways to accommodate non-smoking passengers. With the new statutory ban, waivers will rarely be needed. To the extent they might be needed, however, the Federal Aviation Act, as amended, provides for exemptions from the regulation if it is in the public interest.

This rule also makes a number of other minor changes. An editorial note is added to part 252 to cross reference the FAA rules concerning passenger briefing on smoking and on "no smoking" lights or placards. Because the old rule applied only to U.S. airlines, it used the term "air carriers," which is defined in the Federal Aviation Act as U.S. air carriers. The new rule uses the terms "U.S. air carriers" and "foreign air carriers" to avoid confusion, particularly since some parts of the rule will only apply to U.S. carriers while other parts will apply to both U.S. and foreign air carriers. The rule modifies statements that "carriers shall adopt and enforce rules prohibiting smoking" to read "carriers shall prohibit smoking." The more direct language is simpler and is equally applicable to flights in U.S. and foreign air transportation. Finally, the rule uses only odd-number section numbers in order to leave room for further regulatory additions.

Regulatory Impacts

This action has been reviewed under Executive Order 12291, and it has been determined that this is not a major rule. It will not result in an annual effect on the economy of $100 million or more. There will be no increase in production costs or prices for consumers, individual industries, Federal, State or local governments, agencies, or geographic regions. Furthermore this rule will not adversely affect competition, employment, investment, productivity, innovation, or the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets. Accordingly, a regulatory impact analysis is not required.

This proposed regulation is significant under the Department's Regulatory Policies and Procedures, dated February 26, 1979, because it involves a subject of substantial public interest. A full regulatory evaluation is not required, however, because the overall economic impact of the proposal is expected to be minimal. In addition, the rulemaking will merely implement statutory requirements, and the Office of the

Secretary has no discretion to minimize whatever minor economic impact may result from the statutory change.

I certify that this proposal, if adopted, will not have a significant economic impact on a substantial number of small entities. Similarly, it would have no impact on the environment. The rule would not impose any reporting or paperwork requirements under the Paperwork Reduction Act. In accordance with Executive Order 12612, I have determined that this rule does not have sufficient federalism implications to warrant preparation of a Federal Assessment. Because the statutory ban goes into effect on February 25, 1990, I find good cause to make this interim final rule effective in less than 30 days.

List of Subjects in 14 CFR Part 252

Air Carriers, Foreign Air Carriers, Consumer protection, Smoking.

Accordingly, the Office of the Secretary of the U.S. Department of Transportation is revising 14 CFR part 252 so that it reads as follows:

PART 252—SMOKING ABOARD AIRCRAFT

Sec.

Authority: Secs. 204, 404, 407 and 416 of Pub. L. 85–726 and 101–164, as amended, 72 Stat. 743, 760, 766, 771, 49 U.S.C. 1324, 1374, 1377, 1386.

Cross Reference: For smoking rules of the Federal Aviation Administration, see 14 CFR 121.317(c), 121.571(a)(l)(i), 129.29, 135.117(a)(1), and 135.127(a).

§ 252.1 Purpose.

This part implements a ban on smoking of tobacco on flight segments between most U.S. points as required by section 335 of Public Law 101–164. It also continues smoking restrictions on other flights. Nothing in this regulation shall be deemed to require U.S. or foreign air carriers to permit the smoking of tobacco aboard aircraft.

§ 252.3 Applicability.

Section 252.5 applies to scheduled-service flight segments operated by U.S. and foreign direct air carriers between the U.S. points specified in that section. The remainder of this part applies to all operations of U.S. direct air carriers, except on-demand services of air taxi operators

§ 252.5 Smoking ban on U.S. segments.

U.S. and foreign direct air carriers shall prohibit smoking in the passenger cabin and lavatories on any nonstop flight segment that is listed in the current *Official Airline Guide,* or is part of a longer flight that is listed in that publication, and that is:

(a) Between any two points within an area composed of Puerto Rico, the U.S. Virgin Island, the District of Columbia, and the 48 contiguous states of the United States;

(b) Between any two points within the State of Alaska or within the State of Hawaii; or

(c) Scheduled in the current *Official Airline Guide* to be six hours or less in duration and that is:

(1) Between any point in paragraph (a) of this section and any point in Alaska or Hawaii; or

(2) Between any point in Alaska and any point in Hawaii.

§ 252.7 No-smoking sections.

(a) Except as provided in paragraph (b) of this section, U.S. air carriers operating nonstop flight segments to which §§ 252.5 and 252.13 do not apply shall provide, at a minimum:

(1) A no-smoking section for each class of service;

(2) A sufficient number of seats in each no-smoking section to accommodate all persons in that class of service who wish to be seated there;

(3) Expansion of no-smoking sections to meet passenger demand; and

(4) Special provisions to ensure that if a no-smoking section is placed between smoking sections, the nonsmoking passengers are not unreasonably burdened.

(b) On flights for which passengers may make confirmed reservations and on which seats are assigned before boarding, a U.S. air carrier need not provide a seat in a no-smoking section to a passenger who has not met the carrier's requirements as to time and method of obtaining a seat on the flight, or who does not have a confirmed reservation. If a seat is available in the established no-smoking section, however, a U.S. air carrier shall seat there any enplaning passenger who so requests, regardless of boarding time or reservation status.

§ 252.9 Ventilation systems.

U.S. air carriers shall prohibit smoking whenever the ventilation system is not fully functioning. Fully functioning for this purpose means operating so as to provide the level and quality of ventilation specified and designed by the manufacturer for the number of persons currently in the passenger compartment.

§ 252.11 Aircraft on the ground.

U.S. air carriers shall prohibit smoking whenever the aircraft is on the ground.

§ 252.13 Small aircraft.

U.S. air carriers shall prohibit smoking on aircraft designed to have a passenger capacity of less than 30 seats.

Note.—This section, like the rest of this part, does not apply to on-demand services of air taxi operators; see § 252.3 in this part.

§ 252.15 Cigars and pipes.

U.S. air carriers shall prohibit the smoking of cigars and pipes aboard aircraft.

§ 252.17 Enforcement

U.S. and foreign air carriers shall take such action as is necessary to ensure that smoking by passengers or crew is not permitted in the passenger cabin or lavatories on no-smoking flight segments. U.S. air carriers shall take such action as is necessary to ensure that smoking by passengers or crew is not permitted in no-smoking sections or at other times or places where smoking is prohibited by this part, and to maintain required separation of passengers in smoking and no-smoking areas.

§ 252.19 Single-entity charters.

On single-entity charters operated pursuant to §§ 207.50 or 208.300 of this title, U.S. air carriers need not comply with the procedures of part 252 if such a request is made by the charterer, provided that each passenger on such flights is given notice of the smoking procedures for the flight at the time he or she first makes arrangements to take the flight.

Issued February 7, 1990, at Washington, DC.

Samuel K. Skinner,

Secretary of Transportation.

[FR Doc. 90–3300 Filed 2–8–90; 10:07 am]

BILLING CODE 4910–62–M

COMMODITY FUTURES TRADING COMMISSION

17 CFR Parts 5 and 31

Fees for Applications for Contract Market Designation, Audits of Leverage Transaction Merchants, and Leverage Commodity Registration

AGENCY: Commodity Futures Trading Commission.

ACTION: Final schedule of fees.