Board contends that the proposed amendment will provide continuity between fiscal periods and the terms of office of the chairperson. The Board indicates that this will allow the Board to operate more effectively.

A 7-day comment period is deemed appropriate to permit implementation of this amendment, if adopted, before the annual meeting of the Board that is tentatively scheduled for the beginning of July 1996.

List of Subjects in 7 CFR Part 1160

Milk, Fluid milk products, Promotion.

For the reasons set forth in the preamble, it is proposed that 7 CFR part 1160, is amended as follows:

PART 1160—FLUID MILK PROMOTION ORDER

1. The authority citation for 7 CFR Part 1160 continues to read as follows:

Authority: 7 U.S.C. 6401–6417.

2. Section 1160.209(a) is revised to read as follows:

§ 1160.209 Duties of the Board.

The Board shall have the following duties:

(a) To meet not less than annually, and to organize and select from among its members a chairperson, who may serve for a term of a fiscal period pursuant to § 1160.113, and not more than two consecutive terms, and to select such other officers as may be necessary;

* * * * *

Dated: May 2, 1996.

Lon Hatamiya,

Administrator.

[FR Doc. 96–11458 Filed 5–7–96; 8:45 am]

BILLING CODE 3410–02–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 29

[Docket No. 96–ASW–2; Notice No. SC–96–2–SW]

Special Condition: Sikorsky Model S76C, High Intensity Radiated Fields

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed special condition.

SUMMARY: This notice proposes a special condition for the Sikorsky Model S76C helicopter. This helicopter will have a novel or unusual design feature associated with the installation of electronic systems that perform critical functions. The applicable airworthiness regulations do not contain adequate or appropriate safety standards for the protection of electronic systems that perform critical functions from the effects of external high intensity radiated fields (HIRF). This notice contains the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that established by the applicable airworthiness standards.

DATES: Comments must be received on or before June 7, 1996.

ADDRESSES: Comments on this proposal may be mailed in duplicate to the Federal Aviation Administration (FAA), Office of the Assistant Chief Counsel, Attn: Rules Docket No. 96–ASW–2, Fort Worth, Texas 76193–0007, or delivered in duplicate to the Office of the Assistant Chief Counsel, 2601 Meacham Blvd., Fort Worth, Texas. Comments must be marked Docket No. 96–ASW–2. Comments may be inspected in the Rules Docket weekdays, except Federal holidays, between 9 a.m. and 3 p.m.

FOR FURTHER INFORMATION CONTACT: Mr. Robert McCallister, FAA, Rotorcraft Directorate, Regulations Group, Fort Worth, Texas 76193–0110; telephone (817) 222–5121.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of this proposed special condition by submitting such written data, views, or arguments as they may desire. Communications should identify the regulatory docket 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 before taking action on this proposal. The special condition proposed in this notice may be changed in light of comments received. All comments received 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. 96–ASW–2.'' The postcard will be date and time stamped and returned to the commenter.

Background

Sikorsky Aircraft Corporation, Stratford, Connecticut, applied for an amendment to the Type Certificate for Model S76C helicopter on August 15, 1990. The amendment will allow installation of Turbomeca Arriel Model 2S1 engines with FADEC control and 30 second/2 minute ratings as alternate engines for the Sikorsky Model S76C helicopter. This is a 12 (14 including crew) passenger, twin engine, 11,700 pound transport category helicopter.

Type Certificate Basis

The type certification basis is 14 Code of Federal Regulations part 29, February 1, 1965, and Amendments 29–1 through 29–11; in addition, portions of Amendment 29–12, specifically, §§ 29.67, 29.71, 29.75, 29.141, 29.173, 29.175, 29.931, 29.1189(a)(2), 29.1555(c)(2), 29.1557(c); Amendment 29–13, specifically § 29.965; Amendment 29–24, specifically § 29.1325; Amendment 29–30 specifically § 29.811; Amendment 29–34, specifically §§ 29.67(a)(1)(i), 29.923(a), (b) (1) & (3), 29.1143(f), 29.1305(a) (24) & (25), 29.1521 (i) & (j) and 29.1549(e); and Amendment 36–14 of 14 CFR part 36, Appendix H.

If the Administrator finds that the applicable airworthiness regulations do not contain adequate or appropriate safety standards for these helicopters 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 Federal Aviation Administration § 11.49 after public notice, as required by §§ 11.28 and 11.29(b), and become part of the type certification basis in accordance with Federal Aviation Administration 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 § 21.101(a)(1).

Discussion

The Sikorsky Model S76C helicopter, at the time of the application for amendment to U.S. Type Certificate

H1NE, was identified as incorporating one and possibly more electrical, electronic, or combination of electrical and electronic (electrical/electronic) systems that will perform functions critical to the continued safe flight and landing of the helicopters. A Full Authority Digital Engine Control (FADEC) is an example of an electronic device that performs the critical functions of engine control. The control of the engines is critical to the continued safe flight and landing of the helicopter during visual flight rules (VFR) and instrument flight rules (IFR) operations.

If it is determined that this helicopter currently or at a future date incorporates other electrical/electronic systems performing critical functions, those systems also will be required to comply with the requirements of this special condition.

Recent advances in technology have prompted the design of aircraft that include advanced electrical and electronic systems that perform functions required for continued safe flight and landing. However, these advanced systems respond to the transient effects of induced electrical current and voltage caused by the HIRF incident on the external surface of the helicopters. These induced transient currents and voltages can degrade the performance of the electrical/electronic systems by damaging the components or by upsetting the systems' functions.

Futhermore, the electromagnetic environment has undergone a transformation not envisioned by the current application of § 29.1309(a). Higher energy levels radiate from operational transmitters currently used for radar, radio, and television; the number of transmitters has increased significantly.

Existing aircraft certification requirements are inappropriate in view of these technological advances. In addition, the FAA has received reports of some significant safety incidents and accidents involving military aircraft equipped with advanced electrical/electronic systems when they were exposed to electromagnetic radiation.

The combined effects of technological advances in helicopter design and the changing environment have resulted in an increased level of vulnerability of the electrical and electronic systems required for the continued safe flight and landing of the helicopters. Effective measures to protect these helicopters against the adverse effects of exposure to HIRF will be provided by the design and installation of these systems. The following primary factors contributed to the current conditions: (1) increased use of sensitive electronics that perform critical functions, (2) reduced electromagnetic shielding afforded helicopter systems by advanced technology airframe materials, (3) adverse service experience of military aircraft using these technologies, and (4) an increase in the number and power of radio frequency emitters and the expected increase in the future.

The FAA recognizes the need for aircraft certification standards to keep pace with technological developments and a changing environment and, in 1986, initiated a high priority program to (1) determine and define electromagnetic energy levels; (2) develop guidance material for design, test, and analysis; and (3) prescribe and promulgate regulatory standards. The FAA participated with industry and airworthiness authorities of other countries to develop internationally recognized standards for certification.

The FAA and airworthiness authorities of other countries have identified a level of HIRF environment that a helicopter could be exposed to during IFR operations. While the HIRF requirements are being finalized, the FAA is adopting a special condition for the certification of aircraft that employ electrical/electronic systems that perform critical functions. The accepted maximum energy levels that civilian helicopter system installations must withstand for safe operation are based on surveys and analysis of existing radio frequency emitters. This special condition will require the helicopters' electrical/electronic systems and associated wiring be protected from these energy levels. These external threat levels are believed to represent the worst-case exposure for a helicopter operating under IFR.

The HIRF environment specified in this proposed special condition is based on many critical assumptions. With the exception of takeoff and landing at an airport, one of these assumptions is the aircraft would be not less than 500 feet above ground level (AGL). Helicopters operating under visual flight rules (VFR) routinely operate at less than 500 feet AGL and perform takeoffs and landings at locations other than controlled airports. Therefore, it would be expected that the HIRF environment experienced by a helicopter operating VFR may exceed the defined environment by 100 percent or more.

This special condition will require the systems that perform critical functions, as installed in the aircraft, to meet certain standards based on either a defined HIRF environment or a fixed value using laboratory tests.

The applicant may demonstrate that the operation and operational capability of the installed electrical/electronic systems that perform critical functions are not adversely affected when the aircraft is exposed to the defined HIRF environment. The FAA has determined that the environment defined in Table 1 is acceptable for critical functions in helicopters operating at or above 500 feet AGL. For critical functions of helicopters operating at less than 500 feet AGL, additional factors must be considered.

The applicant may also demonstrate by a laboratory test that the electrical/electronic systems that perform critical functions can withstand a peak electromagnetic field strength in a frequency range of 10 KH_Z to 18 GH_Z. If a laboratory test is used to show compliance with the defined HIRF environment, no credit will be given for signal attenuation due to installation. A level of 100 v/m and other considerations, such as an alternate technology backup that is immune to HIRF, are appropriate for critical functions during IFR operations. A level of 200 v/m and further considerations, such as an alternate technology backup that is immune to HIRF, are more appropriate for critical functions during VFR operations.

Applicants must perform a preliminary hazard analysis to identify electrical/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 helicopters. The systems identified by the hazard analysis as performing critical functions are required to have HIRF protection.

A system may perform both critical and noncritical functions. Primary electronic flight systems and their associated components perform critical functions such as attitude, altitude, and airspeed indications. HIRF requirements would apply only to the systems that perform critical functions.

Compliance with HIRF requirements will be demonstrated by tests, analysis, models, similarity with existing systems, or a combination of these methods. The two basic options of either testing the rotorcraft to the defined environment or laboratory testing may not be combined. The laboratory test allows some frequency areas to be under tested and requires other areas to have some safety margin when compared to the defined environment. The areas required to have some safety margin are those that have been, by past testing, shown to exhibit

greater susceptibility to adverse effects from HIRF; and laboratory tests, in general, do not accurately represent the aircraft installation. Service experience alone will not be acceptable since such experience in normal flight operations may not include an exposure to HIRF. Reliance on a system with similar design features for redundancy, as a means of protection against the effects of external HIRF, is generally insufficient because all elements of a redundant system are likely to be concurrently exposed to the radiated fields.

The modulation that represents the signal most likely to disrupt the operation of the system under test, based on its design characteristics, should be selected. For example, flight control systems may be susceptible to 3 H_Z square wave modulation while the video signals for electronic display systems may be susceptible to 400 H_Z sinusoidal modulation. If the worst-case modulation is unknown or cannot be determined, default modulations may be used. Suggested default values are a 1 KH_Z sine wave with 80 percent depth of modulation in the frequency range from 10 KH_Z to 500 MH_Z and 1 KH_Z square wave with greater than 90 percent depth of modulation from MH_Z to 18 GH_Z. For frequencies where the unmodulated signal would cause deviations from normal operation, several different modulating signals with various waveforms and frequencies should be applied.

Acceptable system performance would be attained by demonstrating that the critical function components of the system under consideration continue to perform their intended function during and after exposure to required electromagnetic fields. Deviations from system specifications may be acceptable but must be independently assessed by the FAA on a case-by-case basis.

TABLE 1.—FIELD STRENGTH VOLTS/METER

Frequency	Peak	Average
10–100 KH_Z	50	50
100–500	60	60
500–2000	70	70
2–30 MH_Z	200	200
30–100	30	30
100–200	150	33
200–400	70	70
400–700	4020	935
700–1000	1700	170
1–2 GH_Z	5000	990
2–4	6680	840
4–6	6850	310
6–8	3600	670
8–12	3500	1270
12–18	3500	360

TABLE 1.—FIELD STRENGTH VOLTS/METER—Continued

Frequency	Peak	Average
18–40	2100	750

As discussed above, these special conditions are applicable initially to the Sikorsky Model S76C helicopter. Should Sikorsky 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 § 21.101(a)(1).

Conclusion

This action affects only certain unusual or novel design features on one model of helicopter. 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 affected helicopters.

List of Subjects in 14 CFR Parts 21 and 29

Aircraft, Air transportation, Aviation safety, Rotorcraft, Safety.

The authority citation for this special condition is as follows:

Authority: 42 U.S.C. 7572; 49 U.S.C. 106(g), 40105, 40113, 44701, 44702, 44704, 44709, 44711, 44713, 44715, 45303.

The Proposed Special Condition

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration (FAA) proposes the following special condition as a part of the type certification basis for the Sikorsky Model S76C helicopter.

Protection for Electrical and Electronic Systems From High Intensity Radiated Fields

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 helicopters are exposed to high intensity radiated fields external to the helicopters.

Issued in Fort Worth, Texas, on April 26, 1996.

Larry M. Kelly,

Acting Manager, Rotorcraft Directorate, Aircraft Certification Service.

[FR Doc. 96–11496 Filed 5–7–96; 8:45 am]

BILLING CODE 4910–13–M

Federal Aviation Administration

14 CFR Part 39

[Docket No. 95–NM–241–AD]

RIN 2120–AA64

Airworthiness Directives; Airbus Model A310 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the adoption of a new airworthiness directive (AD) that is applicable to certain Airbus Model A310 series airplanes. This proposal would require repetitive inspections to detect discrepancies of the slat universal joint and steady bearing assemblies, and replacement of any discrepant assembly with a new, like assembly. The proposal also would require replacement of all slat universal joint and steady bearing assemblies with improved assemblies, which would terminate the repetitive inspections. This proposal is prompted by reports of broken or missing inner races on the slat universal joint and steady bearing assemblies of the slat transmission system. The actions specified by the proposed AD are intended to prevent cracking of the inner race, which could cause it to break off and, consequently, allow the slat universal joint and steady bearing assemblies to become worn; this situation could result in failure of the shaft of the slat transmission system, and subsequent uncommanded movement of the associated slat.

DATES: Comments must be received by June 17, 1996.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM–103, Attention: Rules Docket No. 95–NM–241–AD, 1601 Lind Avenue, SW., Renton, Washington 98055–4056. Comments may be inspected at this location between 9:00 a.m. and 3:00 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT: Charles Huber, Aerospace Engineer, Standardization Branch, ANM–113, FAA, Transport Airplane Directorate,