

# Rules and Regulations

Federal Register

Vol. 61, No. 166

Monday, August 26, 1996

This section of the FEDERAL REGISTER contains regulatory documents having general applicability and legal effect, most of which are keyed to and codified in the Code of Federal Regulations, which is published under 50 titles pursuant to 44 U.S.C. 1510.

The Code of Federal Regulations is sold by the Superintendent of Documents. Prices of new books are listed in the first FEDERAL REGISTER issue of each week.

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 29

[Docket No. 96-ASW-2; Special Condition 29-ASW-16]

#### Special Condition: Sikorsky Model S76C, High Intensity Radiated Fields

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

**ACTION:** Final special condition.

**SUMMARY:** This special condition is issued 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. This special condition contains additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that established by the airworthiness standards.

**EFFECTIVE DATE:** August 26, 1996.

#### FOR FURTHER INFORMATION CONTACT:

Mr. Robert McCallister, FAA, Rotorcraft Directorate, Regulations Group, Fort Worth, Texas 76193-0110; telephone (817) 222-5121.

#### SUPPLEMENTARY INFORMATION:

##### Background

Sikorsky Aircraft Corporation, Stratford, Connecticut, applied for an amendment to the Type Certificate for the Model S76C helicopter on August 15, 1990. The amendment will allow installation of turbomecha 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 Certification 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 § 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 § 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 § 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).

#### Novel or Unusual Design Feature

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 helicopter. 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.

#### Discussion of Comments

Notice of proposed special Condition No. SC-96-2-SW was published in the Federal Register on May 8, 1996, 61 FR 20760. No comments were received. Therefore, the special condition is adopted as proposed.

#### 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 helicopter.

#### List of Subjects in 14 CFR Part 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, 44707, 44709, 44711, 44713, 44715, 45303.

#### The Special Condition

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 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 August 13, 1996.

Michele M. Owsley,  
Acting Manager, Rotorcraft Directorate,  
Aircraft Certification Service.  
[FR Doc. 96-21714 Filed 8-23-96; 8:45 am]  
BILLING CODE 4910-13-M

#### 14 CFR Part 29

[Docket No. 96-ASW-4; Special Condition 29-ASW-18]

#### Special Condition: Eurocopter Deutschland Model MBB-BK 117 A-1, A-3, A-4, B-1, B-2, and C-1 Helicopters, Electronic Flight Instrument System

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

**ACTION:** Final special condition; request for comments.

**SUMMARY:** This special condition is issued for the Eurocopter Deutschland Models MBB-BK 117 A-1, A-3, A-4, B-1, B-2, and C-1 helicopters. These helicopters will have a novel or unusual design feature associated with the Electronic Flight Instrument System. The applicable airworthiness regulations do not contain adequate or appropriate safety standards for the protection of these critical function systems from the effects of external high intensity radiated fields (HIRF). This special condition contains additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that provided by the applicable airworthiness standards.

**DATES:** Effective August 26, 1996. Comments must be received on or before October 25, 1996.

**ADDRESSES:** Comments may be mailed in duplicate to: Federal Aviation Administration (FAA), Office of the Assistant Chief Counsel, Attn: Rules Docket No. 96-ASW-4, Fort Worth, Texas 76193-0007, or delivered in duplicate to the Office of the Assistant Chief Counsel, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. Comments must be marked Docket No. 96-ASW-4. 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, Rotorcraft Standards Staff, Fort Worth, Texas 76193-0110; telephone (817) 222-5121.

**SUPPLEMENTARY INFORMATION:** The FAA has determined that notice and opportunity for prior public comment hereon are impracticable because these

procedures would significantly delay issuance of the approval design and thus delay delivery of the affected helicopter. These notice and comment procedures are also considered unnecessary since the public has been previously provided with a substantial number of opportunities to comment on substantially identical special conditions, and their comments have been fully considered. Therefore, good cause exists for making this special condition effective upon issuance.

#### Comments Invited

Although this final special condition was not subject to notice and opportunity for prior public comment, comments are invited on this final special condition. Interested persons are invited to comment on this final 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 under the caption **ADDRESSES**. All communications received on or before the closing date for comments will be considered. This special condition 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 special condition must submit with those comments a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. 96-ASW-4." The postcard will be date and time stamped and returned to the commenter.

#### Background

On May 9, 1996, American Eurocopter Corporation, Grand Prairie, Texas, notified the FAA that they intended to issue a Supplemental Type Certificate under their Designated Alteration Station Authorization for installation of an Electronic Flight Instrument System in Eurocopter Deutschland Models MBB-BK 117 A-1, A-3, A-4, B-1, B-2, and C-1 helicopters. These are 7 (10 with approved kit) passenger, twin engine, 7,385 pound transport category helicopters.

#### Type Certification Basis

The certification basis established for the Eurocopter Deutschland Models MBB-BK 117 A-1, A-3, A-4, B-1, B-2,

and C-1 helicopters includes: 14 CFR 21.29 and 14 CFR part 29 (part 29) effective February 1, 1965, Amendments 29-1 through 29-16. In addition, the certification basis includes the Airworthiness Criteria for helicopter instrument flight rules (IFR) certification dated December 15, 1978. Also, the certification basis includes Equivalent Safety Findings for Models A-1 and A-3, §§ 29.811(h)(1), 29.921, 29.1151, 29.1121(c), and 29.1203(a); for Models A-3 and A-4, §§ 29.401(a), 29.865(b)(2), 29.923(a)(3)(ii) and (c)(2); for Models B-2 and C-1, §§ 29.175(b), 29.811(h)(i), and 29.1151(b).

If the Administrator finds that the applicable airworthiness regulations do not contain adequate or appropriate safety standards for this helicopter because of a novel or unusual design feature, special conditions are prescribed under the provisions of 14 CFR 21.16 to establish a level of safety equivalent to that established in the regulations.

Special conditions, as appropriate, are issued in accordance with 14 CFR 11.49 and become part of the type certification basis in accordance with 14 CFR 21.101(b)(2). Provision is made for the public comment period in 14 CFR 11.28. Special conditions are initially applicable to the model for which they are issued. Should the applicant apply for a supplemental type certificate to modify any other model included on the same type certificate 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 Eurocopter Deutschland Models MBB-BK 117 A-1, A-3, A-4, B-1, B-2, and C-1 helicopters, at the time of application, were identified as having modifications that incorporate 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. The electronic flight instrument system performs the attitude display function. The display of attitude, altitude, and airspeed is critical to the continued safe flight and landing of the helicopters for IFR operations in instrument meteorological conditions. Eurocopter Deutschland will provide the FAA with a hazard analysis that will identify any other critical functions performed by the electrical/electronic systems that are critical to the continued safe flight and landing of the helicopters.