

the Administrator, FSA, that the final results have been announced by the Secretary. If the county FSA office receives no notice to the contrary from the Administrator, FSA, by the end of the 12 month period as described above, the CED or designee shall destroy the records.

§ 1220.630 Instructions and forms.

The Administrator, AMS, is authorized to prescribe additional instructions and forms not inconsistent with the provisions of this subpart.

Dated: March 18, 2004.

A.J. Yates,

Administrator, Agricultural Marketing Service.

[FR Doc. 04-6519 Filed 3-19-04; 9:54 am]

BILLING CODE 3410-02-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 23

[Docket No. CE204; Special Conditions No. 23-144-SC]

Special Conditions: Centex Aerospace, Inc; Diamond DA20-C1 Katana, Installation of Full Authority Digital Engine Control (FADEC) System and the Protection of the System From the Effects of High Intensity Radiated Fields (HIRF)

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final special conditions; request for comments.

SUMMARY: These special conditions are issued to CenTex Aerospace, Inc., 7805 Karl May Drive, Waco, Texas 76708 for the Diamond DA20-C1 Katana airplane. This airplane will have a novel or unusual design feature associated with the installation of an engine that uses an electronic engine control system in place of the engine's mechanical system. The applicable airworthiness regulations do not contain adequate or appropriate safety standards for this design feature. These special conditions contain the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that established by the existing airworthiness standards.

DATE: The effective date of these special conditions is: March 16, 2004. Comments must be received on or before April 22, 2004.

ADDRESSES: Comments on this proposal may be mailed in duplicate to: Federal Aviation Administration (FAA),

Regional Counsel, ACE-7, Attention: Rules Docket, Docket No. CE204, 901 Locust, Room 506, Kansas City, Missouri 64106, or delivered in duplicate to the Regional Counsel at the above address. Comments must be marked: Docket No. CE204. Comments may be inspected in the Rules Docket weekdays, except Federal holidays, between 7:30 a.m. and 4 p.m.

FOR FURTHER INFORMATION CONTACT: Wes Ryan, Federal Aviation Administration, Aircraft Certification Service, Small Airplane Directorate, ACE-111, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: 816-329-4127, fax: 816-329-4090.

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 design approval and thus delivery of the affected aircraft. In addition, the substance of these special conditions has been subject to the public comment process in several prior instances with no substantive comments received. The FAA, therefore, finds that good cause exists for making these special conditions effective upon issuance.

Comments Invited

Interested persons are invited to submit such written data, views, or arguments as they may desire. Communications should identify the regulatory docket or special condition number and be submitted in duplicate to the address specified above. All communications received on or before the closing date for comments will be considered by the Administrator. The special conditions may be changed in light of the 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. Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must include a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. CE204." The postcard will be date stamped and returned to the commenter.

Background

On December 19, 2002, CenTex Aerospace applied for a Supplemental Type Certificate for the Diamond DA20-C1 Katana. The DA20-C1 is powered by

a reciprocating engine that is equipped with an electronic engine control system with full authority capability in place of the hydromechanical control system.

Type Certification Basis

Under the provisions of 14 CFR 21.101, CenTex Aerospace must show that the DA20-C1 meets the applicable provisions of the original certification basis of the DA20-C1, as listed on Type Certificate No. TA4CH, issued April 6, 1998; exemptions, if any; and the special conditions adopted by this rulemaking action. The DA20-C1 was originally certified under 14 CFR 21.29 and 14 CFR part 23 effective February 1, 1965, as amended by Amendments 23-1 through 23-42; JAR-VLA effective April 26, 1990, through Amendment VLA/92/1, effective January 1, 1992, used as a safety equivalence to part 23, as provided by AC 23-11; 14 CFR part 36, dated December 1, 1969, as amended by current amendment as of the date of type certification; Equivalent Level of Safety for part 23, § 23.903(a)(1) (reference Finding ACE-95-1, dated December 2, 1994); and the terms of this Special Condition.

If the Administrator finds that the applicable airworthiness regulations (*i.e.*, 14 CFR part 23) do not contain adequate or appropriate safety standards for the DA20-C1 because of a novel or unusual design feature, special conditions are prescribed under the provisions of § 21.16.

Special conditions, as appropriate, as defined in § 11.19, are issued in accordance with § 11.38, and become part of the certification basis for the supplemental type certification basis in accordance with § 21.101. 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 models that are listed on the same type certificate to incorporate the same novel or unusual design features, the special conditions would also apply under the provisions of § 21.101.

Novel or Unusual Design Features

The Diamond DA20-C1 will incorporate a novel or unusual design feature, an engine that includes an electronic control system with full authority digital engine control (FADEC) capability.

Many advanced electronic systems are prone to either upsets or damage, or both, at energy levels lower than analog systems. The increasing use of high power radio frequency emitters mandates requirements for improved high intensity radiated fields (HIRF) protection for electrical and electronic

equipment. Since the electronic engine control system used on the Diamond DA20-C1 will perform critical functions, provisions for protection from the effects of HIRF should be considered and, if necessary, incorporated into the airplane design data. The FAA policy contained in Notice 8110.71, dated April 2, 1998, establishes the HIRF energy levels that airplanes will be exposed to in service. The guidelines set forth in this notice are the result of an Aircraft Certification Service review of existing policy on HIRF, in light of the ongoing work of the Aviation Rulemaking Advisory Committee (ARAC) Electromagnetic Effects Harmonization Working Group (EEHWG). The EEHWG adopted a set of HIRF environment levels in November 1997 that were agreed upon by the FAA, the Joint Aviation Authorities (JAA), and industry participants. As a result, the HIRF environments in this notice reflect the environment levels recommended by this working group. This notice states that a FADEC is an example of a system that should address the HIRF environments.

Even though the control system will be certificated as part of the engine, the installation of an engine with an electronic control system requires evaluation due to the possible effects on or by other airplane systems (*e.g.*, radio interference with other airplane electronic systems, shared engine and airplane power sources). The regulatory requirements in 14 CFR part 23 for evaluating the installation of complex systems, including electronic systems, are contained in § 23.1309. However, when § 23.1309 was developed, the use of electronic control systems for engines was not envisioned; therefore, the § 23.1309 requirements were not applicable to systems certificated as part of the engine (reference § 23.1309(f)(1)). Also, electronic control systems often require inputs from airplane data and power sources and outputs to other airplane systems (*e.g.*, automated cockpit powerplant controls such as mixture setting). Although the parts of the system that are not certificated with the engine could be evaluated using the criteria of § 23.1309, the integral nature of systems such as these makes it unfeasible to evaluate the airplane portion of the system without including the engine portion of the system. However, § 23.1309(f)(1) again prevents complete evaluation of the installed airplane system since evaluation of the engine system's effects is not required.

Therefore, special conditions are proposed for the Diamond DA20-C1 airplane to provide HIRF protection and to evaluate the installation of the

electronic engine control system for compliance with the requirements of § 23.1309(a) through (e) at Amendment 23-49.

Applicability

As discussed above, these special conditions are applicable to the Diamond DA20-C1. Should CenTex Aerospace apply at a later date for a supplemental type certificate to modify any other model included on the same type certificate as the DA20-C1 to incorporate the same novel or unusual design features, the special conditions would apply to that model as well under the provisions of § 21.101.

Conclusion

This action affects only certain novel or unusual design features on one model, the Diamond DA20-C1. It is not a rule of general applicability, and it affects only the applicant who applied to the FAA for approval of these features on the airplane.

Under standard practice, the effective date of final special conditions would be 30 days after the date of publication in the **Federal Register**. However the FAA finds that good cause exists to make these special conditions effective upon issuance.

List of Subjects in 14 CFR Part 23

Aircraft, Aviation safety, Signs and symbols.

Citation

- The authority citation for these special conditions is as follows:

Authority: 49 U.S.C. 106(g), 40113 and 44701; 14 CFR 21.16 and 21.101; and 14 CFR 11.38 and 11.19.

The Special Conditions

- Accordingly, pursuant to the authority delegated to me by the Administrator, the following special conditions are issued as part of the type certification basis for Diamond DA20-C1 airplanes.

1. High Intensity Radiated Fields (HIRF) Protection. In showing compliance with 14 CFR part 21 and the airworthiness requirements of 14 CFR part 23, protection against hazards caused by exposure to HIRF fields for the full authority digital engine control system, which performs critical functions, must be considered. To prevent this occurrence, the electronic engine control system must be designed and installed to ensure that the operation and operational capabilities of this critical system are not adversely affected when the airplane is exposed to high energy radio fields.

At this time, the FAA and other airworthiness authorities are unable to

precisely define or control the HIRF energy level to which the airplane will be exposed in service; therefore, the FAA hereby defines two acceptable interim methods for complying with the requirement for protection of systems that perform critical functions.

(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 external HIRF threat environment defined in the following table:

Frequency	Field strength (volts per meter)	
	Peak	Average
10 kHz–100 kHz	50	50
100 kHz–500 kHz	50	50
500 kHz–2 MHz	50	50
2 MHz–30 MHz	100	100
30 MHz–70 MHz	50	50
70 MHz–100 MHz	50	50
100 MHz–200 MHz	100	100
200 MHz–400 MHz	100	100
400 MHz–700 MHz	700	50
700 MHz–1 GHz	700	100
1 GHz–2 GHz ...	2000	200
2 GHz–4 GHz ...	3000	200
4 GHz–6 GHz ...	3000	200
6 GHz–8 GHz ...	1000	200
8 GHz–12 GHz ...	3000	300
12 GHz–18 GHz ...	2000	200
18 GHz–40 GHz ...	600	200

The field strengths are expressed in terms of peak root-mean-square (rms) values.

or,

(2) The applicant may demonstrate by a system test and analysis that the electrical and electronic systems that perform critical functions can withstand a minimum threat of 100 volts per meter peak electrical strength, without the benefit of airplane structural shielding, in the frequency range of 10 KHz to 18 GHz. When using this test to show compliance with the HIRF requirements, no credit is given for signal attenuation due to installation. Data used for engine certification may be used, when appropriate, for airplane certification.

2. Electronic Engine Control System. The installation of the electronic engine control system must comply with the requirements of § 23.1309(a) through (e) at Amendment 23-46. The intent of this requirement is not to re-evaluate the inherent hardware reliability of the control itself, but rather determine the effects, including environmental effects addressed in § 23.1309(e), on the

airplane systems and engine control system when installing the control on the airplane. When appropriate, engine certification data may be used when showing compliance with this requirement.

Issued in Kansas City, Missouri, on March 16, 2004.

James E. Jackson,
Acting Manager, Small Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 04-6454 Filed 3-22-04; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 71

[Docket No. FAA-2003-16596; Airspace Docket No. 03-ASO-20]

Amendment of Class D, E2 and E4 Airspace; Columbus Lawson AAF, GA, and Class E5 Airspace; Columbus, GA

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This action amends Class D, E2, and E4 airspace at Columbus Lawson Army Air Field (AAF), GA, and Class E airspace at Columbus, GA. As a result of the relocation of the Lawson AAF Instrument Landing System (ILS) and the extension of Runway (RWY) 15-33, it has been determined a modification should be made to the Columbus Lawson AAF, GA, Class D, E2 and E4 airspace and to the Columbus, GA, Class E5 airspace areas to contain the ILS RWY 33 Standard Instrument Approach Procedure (SIAP) to the Lawson AAF Airport. Additional surface area airspace and controlled airspace extending upward from 700 feet Above Ground Level (AGL) is needed to contain the SIAP.

EFFECTIVE DATE: 0901 UTC, June 10, 2004.

FOR FURTHER INFORMATION CONTACT:
Water R. Cochran, Manager, Airspace Branch, Air Traffic Division, Federal Aviation Administration, P.O. Box 20636, Atlanta, Georgia 30320; telephone (404) 305-5627.

SUPPLEMENTARY INFORMATION:

History

On January 15, 2004, the FAA proposed to amend part 71 of the Federal Aviation Regulations (14 CFR part 71) by amending Class D, E2, and E4 airspace at Columbus Lawson AAF, GA, and Class E5 airspace at Columbus, GA, (69 FR 2311). This action provides

adequate Class D, E2, E4 and E5 airspace for IFR operations at Columbus Lawson AAF, GA. Designations for Class D airspace areas extending upward from the surface of the earth and Class E airspace designations for airspace designated as surface areas and airspace areas extending upward from 700 feet or more above the surface of the earth are published in Paragraphs 5000, 6002, 6004 and 6005 respectively, of FAA Order 7400.9L, dated September 2, 2003, and effective September 16, 2003, which is incorporated by reference in 14 CFR 71.1. The Class D and E designations listed in this document will be published subsequently in the Order.

Interested parties were invited to participate in this rulemaking proceeding by submitting written comments on the proposal to the FAA. No comments objecting to the proposal were received.

The Rule

This amendment to part 71 of the Federal Aviation Regulations (14 CFR part 71) amends Class D, E2, and E4 airspace at Columbus Lawson AAF, GA, and Class E5 airspace at Columbus, GA.

The FAA has determined that this rule only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. It, therefore, (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and (3) does not warrant preparation of a Regulatory Evaluation as the anticipated impact is so minimal. Since this is a routine matter that will only affect air traffic procedures and air navigation, it is certified that this rule, when promulgated, will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 71

Airspace, Incorporation by reference, Navigation (air).

Adoption of the Amendment

■ In consideration of the foregoing, the Federal Aviation Administration amends 14 CFR part 71 as follows:

PART 71—DESIGNATION OF CLASS A, CLASS B, CLASS C, CLASS D, AND CLASS E AIRSPACE AREAS; AIRWAYS; ROUTES; AND REPORTING POINTS

■ 1. The authority citation for part 71 continues to read as follows:

Authority: 49 U.S.C. 106(g); 40103, 40113, 40120; E.O. 10854, 24 FR 9565, 3 CFR, 1959-1963 Comp., p. 389.

§ 71.1 [Amended]

■ 2. The incorporation by reference in 14 CFR 71.1 of Federal Aviation Administration Order 7400.9L, Airspace Designations and Reporting Points, dated September 2, 2003, and effective September 16, 2003, is amended as follows:

Paragraph 5000 Class D Airspace

* * * * *

ASO GA D Columbus Lawson AAF, GA [Revised]

Columbus Lawson AAF, GA
(Lat. 32°20'14" N, long. 84°59'29" W)

That airspace extending upward from the surface to and including 2,700 feet MSL within a 4.2-mile radius of Lawson AAF, excluding that airspace within the Columbus Metropolitan Airport, GA, Class C airspace area. This Class D airspace area is effective during the specific days and times established in advance by a Notice to Airmen. The effective date and time will thereafter be continuously published in the Airport/Facility Directory.

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Paragraph 6002 Class E Airspace Designated as Surface Areas

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ASO GA E2 Columbus Lawson AAF, GA [Revised]

Columbus Lawson AAF, GA
(Lat. 32°20'14" N, long. 84°59'29" W)

Within a 4.2-mile radius of Lawson AAF; excluding that airspace within the Columbus Metropolitan Airport, GA, Class C airspace area. This Class E airspace area is effective during the specific days and times established in advance by a Notice to Airmen. The effective date and time will thereafter be continuously published in the Airport/Facility Directory.

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Paragraph 6004 Class E Airspace Areas Designated as an Extension to a Class D or Class E Surface Area

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ASO GA E4 Columbus Lawson AAF, GA [Revised]

Lawson AAF, GA
(Lat. 32°20'14" N, long. 84°59'29" W)

Lawson VOR/DME
(Lat. 32°19'57" N, long. 84°59'36" W)

Lawson NDB
(Lat. 32°17'36" N, long. 85°01'24" W)

That airspace extending upward from the surface within 1.2 miles each side of the Lawson VOR/DME 214° radial extending from the 4.2-mile radius of Lawson AAF to 6 miles southwest of the NDB. This Class E airspace area is effective during the specific days and times established in advance by a Notice to Airmen. The effective date and time