producer's user fee for classification service is based on the 2001 base fee for HVI classification.

The fee was calculated by applying the formula specified in the Uniform Cotton Classing Fees Act of 1987, as amended by Public Law 102–237. The 2001 base fee for HVI classification exclusive of adjustments, as provided by the Act, was $2.22 per bale. An increase of 2.51 percent, or 6 cents per bale increase due to the implicit price deflator of the gross domestic product added to the $2.22 would result in a 2002 base fee of $2.28 per bale. The formula in the Act provides for the use of the percentage change in the implicit price deflator of the gross national product (as indexed for the most recent 12-month period for which statistics are available). However, gross *national* product has been replaced by gross *domestic* product by the Department of Commerce as a more appropriate measure for the short-term monitoring and analysis of the U.S. economy.

The number of bales to be classed by the United States Department of Agriculture from the 2002 crop is estimated at 16,504,065 bales. The 2002 base fee was decreased 15 percent based on the estimated number of bales to be classed (1 percent for every 100,000 bales or portion thereof above the base of 12,500,000, limited to a maximum adjustment of 15 percent). This percentage factor amounts to a 35 cents per bale reduction and was subtracted from the 2002 base fee of $2.28 per bale, resulting in a fee of $1.93 per bale.

With a fee of $1.93 per bale, the projected operating reserve would be 51.3 percent. The Act specifies that the Secretary shall not establish a fee which, when combined with other sources of revenue, will result in a projected operating reserve of more than 25 percent. Accordingly, the fee of $1.93 must be reduced by 48 cents per bale, to $1.45 per bale, to provide an ending accumulated operating reserve for the fiscal year of 25 percent of the projected cost of operating the program. This would establish the 2002 season fee at $1.45 per bale.

Accordingly, § 28.909, paragraph (b) would be revised to reflect the increase of the HVI classification fee from $1.35 to $1.45 per bale.

As provided for in the Uniform Cotton Classing Fees Act of 1987, as amended, a 5 cent per bale discount would continue to be applied to voluntary centralized billing and collecting agents as specified in § 28.909 (c).

Growers or their designated agents receiving classification data would continue to incur no additional fees if only one method of receiving classification data was requested. The fee for each additional method of receiving classification data in § 28.910 would remain at 5 cents per bale. Computer punched cards would be eliminated as an optional method of disseminating classing data to producers for the 2002 and subsequent crops because there is an insufficient demand for the use of this method. Accordingly, this change would be reflected in § 28.910 (a). The fee in § 28.910 (b) for an owner receiving classification data from the central database would remain at 5 cents per bale, and the minimum charge of $5.00 for services provided per monthly billing period would remain the same. The provisions of § 28.910 (c) concerning the fee for new classification memoranda issued from the central database for the business convenience of an owner without reclassification of the cotton will remain the same.

The fee for review classification in § 28.911 would be increased from $1.35 to $1.45 per bale.

The fee for returning samples after classification in § 28.911 would remain at 40 cents per sample.

List of Subjects in 7 CFR Part 28

Administrative practice and procedure, Cotton, Cotton samples, Grades, Market news, Reporting and record keeping requirements, Standards, Staples, Testing, Warehouses.

For the reasons set forth in the preamble, 7 CFR Part 28 is amended as follows:

PART 28—[AMENDED]

1. The authority citation for 7 CFR Part 28, Subpart D, continues to read as follows:

Authority: 7 U.S.C. 471–476.

2. In § 28.909, paragraph (b) is revised to read as follows:

§ 28.909 Costs.

* * * * *

(b) The cost of High Volume Instrument (HVI) cotton classification service to producers is $1.45 per bale.

* * * * *

3. In § 28.910, paragraph (a) (3) is removed:

* * * * *

4. In § 28.911, the last sentence of paragraph (a) is revised to read as follows:

§ 28.911 Review classification.

(a) * * * The fee for review classification is $1.45 per bale.

* * * * *

Dated: May 21, 2002.

Kenneth C. Clayton,

Administrator, Agricultural Marketing Service.

[FR Doc. 02–13230 Filed 5–22–02; 2:06 pm]

BILLING CODE 3410–02–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 23

[Docket No. CE184; Special Condition 23–118–SC]

Special Conditions; Avidyne Corporation on the Cirrus Design Corporation Model SR20/SR22; Protection of Systems for 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 Avidyne Corporation, 55 Old Bedford Road, Lincoln, Massachusetts, 01773 for a Supplemental Type Certificate for the Cirrus Design Corporation SR20/SR22 airplane. This airplane will have novel and unusual design features when compared to the state of technology envisaged in the applicable airworthiness standards. These novel and unusual design features include the installation of an electronic flight instrument system (EFIS) display Model 700–00006–XXX–( ) manufactured by Avidyne Corporation for which the applicable regulations do not contain adequate or appropriate airworthiness standards for the protection of these systems from the effects of high intensity radiated fields (HIRF). These special conditions contain the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to the airworthiness standards applicable to this airplane.

DATES: The effective date of these special conditions is May 7, 2002. Comments must be received on or before June 24, 2002.

ADDRESSES: Comments may be mailed in duplicate to: Federal Aviation Administration, Regional Counsel, ACE–7, Attention: Rules Docket Clerk, Docket No. CE184, Room 506, 901 Locust, Kansas City, Missouri 64106. All comments must be marked: Docket No. CE184. 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: Ervin Dvorak, Aerospace Engineer, Standards Office (ACE–110), Small Airplane Directorate, Aircraft Certification Service, Federal Aviation Administration, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone (816) 329–4123.

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 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 notice number and be submitted in duplicate to the address specified above. All communications received on or before the closing date for comments will be considered by the Administrator. 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 action must include a self-addressed, stamped postcard on which the following statement is made: ''Comments to Docket No. CE184.'' The postcard will be date stamped and returned to the commenter.

Background

On April 20, 2001, Avidyne Corporation, 55 Old Bedford Road, Lincoln, Massachusetts, 01773, made an application to the FAA for a new Supplemental Type Certificate for the Cirrus Design Corporation Models SR20/SR22 airplanes. The Cirrus SR20/SR22 are currently approved under TC No. A00009CH. The proposed modification incorporates a novel or unusual design feature, such as digital avionics consisting of an EFIS, that is vulnerable to HIRF external to the airplane.

Type Certification Basis

Under the provisions of 14 CFR part 21, § 21.101, Avidyne Corporation must show that the Cirrus SR20/SR22 aircraft meet the following provisions, or the applicable regulations in effect on the date of application for the change to the Cirrus SR20/SR22.

Model SR20: Part 23 of the Federal Aviation Regulations effective February 1, 1965, as amended by 23–1 through 23–47, except as follows: 14 CFR part 23, §§ 23.573, 23.575, 23.611, 23.657, 23.673 through Amendment 23–48; 14 CFR §§ 23.783, 23.785, 23.867, 23.1303, 23.1307, 23.1309, 23.1311, 23.1321, 23.1323, 23.1329, 23,1361, 23.1383, 23.1401, 23.1431, 23.1435 through Amendment 23–49; 14 CFR part 23, §§ 23.3, 23.25, 23.143, 23.145, 23.155, 23.1325, 23.1521, 23.1543, 23.1555, 23.1559, 23.1567, 23.1583, 23.1585, 23.1589 through Amendment 23–50; 14 CFR part 23, §§ 23.777, 23.779, 23.901, 23.907, 23.955, 23.959, 23.963, 23.965, 23.973, 23.975, 23.1041, 23.1091, 23.1093, 23.1107, 23.1121, 23.1141, 23.1143, 23.1181, 23.1191, 23.1337 through Amendment 23–51; 14 CFR part 23, § 23.1305 through Amendment 23–52.

Model SR22: Part 23 of the Federal Aviation Regulations effective February 1, 1965, as amended by 23–1 through 23–53, except as follows: § 23.301 through Amendment 47; §§ 23.855, 23.1326, 23.1359, not applicable. 14 CFR part 36 dated December 1, 1969, as amended by current amendment as of the date of type certification.

Equivalent Levels of Safety finding (ACE–96–5) made per the provisions of 14 CFR part 23, § 23.221; Refer to FAA ELOS letter dated June 10, 1998 for models SR20, SR22. Equivalent Levels of Safety finding (ACE–00–09) made per the provisions of 14 CFR part 23, §§ 23.1143(g) and 23.1147(b); Refer to FAA ELOS letter dated September 11, 2000, for model SR22. Equivalent Levels of Safety finding (ACE–01–01) made per the provisions of 14 CFR part 23, §§ 23.1143(g) and 23.1147(b); Refer to FAA ELOS letter dated February 14, 2000, for model SR20.

Special Condition (23–ACE–88) for ballistic parachute; Refer to FAA letter November 25, 1997, for models SR20, SR22.

Discussion

If the Administrator finds that the applicable airworthiness standards do not contain adequate or appropriate safety standards because of novel or unusual design features of an airplane, 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 after public notice and become part of the type certification basis in accordance with 14 CFR part 21 § 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 model already 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.

Novel or Unusual Design Features

Carpenter Avionics Inc. plans to incorporate certain novel and unusual design features into an airplane for which the airworthiness standards do not contain adequate or appropriate safety standards for protection from the effects of HIRF. These features include EFIS, which are susceptible to the HIRF environment, that were not envisaged by the existing regulations for this type of airplane.

Protection of Systems From High Intensity Radiated Fields (HIRF)

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 sensitive solid state advanced components in analog and digital electronics circuits, these advanced systems are readily responsive to the transient effects of induced electrical current and voltage caused by the HIRF. The HIRF can degrade electronic systems performance by damaging components or upsetting system functions.

Furthermore, the HIRF environment has undergone a transformation that was not foreseen when the current requirements were developed. Higher energy levels are radiated from transmitters that are used for radar, radio, and television. Also, the number of transmitters has increased significantly. There is also uncertainty concerning the effectiveness of airframe shielding for HIRF. Furthermore, coupling to cockpit-installed equipment through the cockpit window apertures is undefined.

The combined effect of the technological advances in airplane 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 airplane.

Effective measures against the effects of exposure to HIRF must be provided by the design and installation of these systems. 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. These special conditions require that the airplane be evaluated under these energy levels for the protection of the electronic system and its associated wiring harness. These external threat levels, which are lower than previous required values, 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 HIRF 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 HIRF environment defined below:

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 over the complete modulation period.

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 rms per meter, electrical field strength, from 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.

A preliminary hazard analysis must be performed by the applicant, for approval by the FAA, to identify either electrical 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 airplane. The systems identified by the hazard analysis that perform critical functions are candidates for the application of HIRF requirements. 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 HIRF requirements apply only to critical functions.

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

Applicability

As discussed above, these special conditions are applicable to Cirrus Design Corporation SR20/SR22 airplanes. Should Avidyne Corporation apply at a later date for a supplemental type certificate to modify any other model on the same type certificate to incorporate the same novel or unusual design feature, 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 of airplane. It is not a rule of general applicability and affects only the applicant who applied to the FAA for approval of these features on the airplane.

The substance of these special conditions has been subjected to the notice and comment period in several prior instances and has been derived without substantive change from those previously issued. It is unlikely that prior public comment would result in a significant change from the substance contained herein. For this reason, and because a delay would significantly affect the certification of the airplane, which is imminent, the FAA has determined that prior public notice and comment are unnecessary and impracticable, and good cause exists for adopting these special conditions upon issuance. The FAA is requesting comments to allow interested persons to submit views that may not have been submitted in response to the prior opportunities for comment described above.

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 part 21, § 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 Cirrus Design Corporation SR20/SR22 airplanes modified by Avidyne Corporation to add an EFIS.

1. *Protection of Electrical and Electronic Systems from High Intensity Radiated Fields (HIRF).* Each system that performs critical functions must be designed and installed to ensure that the operations, and operational capabilities of these systems to perform critical functions, are not adversely affected when the airplane is exposed to high intensity radiated electromagnetic fields external to the airplane.

2. For the purpose of these special conditions, the following definition applies: *Critical Functions:* Functions whose failure would contribute to, or cause, a failure condition that would prevent the continued safe flight and landing of the airplane.

Issued in Kansas City, Missouri on May 7, 2002.

Dorenda D. Baker,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. 02–13131 Filed 5–23–02; 8:45 am]

BILLING CODE 4910–13–P