| Federal Reserve Bank | Rate | Effective |
|---|---|---|
| Boston | 3.50 | Nov. 10, 2004. |
| New York | 3.50 | Nov. 10, 2004. |
| Philadelphia | 3.50 | Nov. 10, 2004. |
| Cleveland | 3.50 | Nov. 10, 2004. |
| Richmond | 3.50 | Nov. 10, 2004. |
| Atlanta | 3.50 | Nov. 10, 2004. |
| Chicago | 3.50 | Nov. 10, 2004. |
| St. Louis | 3.50 | Nov. 12, 2004. |
| Minneapolis | 3.50 | Nov. 10, 2004. |
| Kansas City | 3.50 | Nov. 10, 2004. |
| Dallas | 3.50 | Nov. 12, 2004. |
| San Francisco | 3.50 | Nov. 10, 2004. |

* * * * *

By order of the Board of Governors of the Federal Reserve System, November 15, 2004.

**Jennifer J. Johnson,**

*Secretary of the Board.*

[FR Doc. 04–25658 Filed 11–18–04; 8:45 am]

**BILLING CODE 6210–01–P**

## DEPARTMENT OF TRANSPORTATION

## Federal Aviation Administration

## 14 CFR Part 23

**[Docket No. CE213; Special Conditions No. 23–152–SC]**

## Special Conditions: Thielert Aircraft Engines; Cessna Model 172 K, L, M, N, P, R, and S Series Airplanes; Installation of Thielert TAE–125–01 Aircraft Diesel Engine for 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 Thielert Aircraft Engines, GmbH, Lichtenstein, Germany for a supplemental type certificate for the Cessna Model 172 series airplanes. The supplemental type certificate for these airplanes will have a novel or unusual design feature associated with the installation of an aircraft diesel engine that uses an electronic engine control system instead of a mechanical control 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.

**DATES:** The effective date of these special conditions is: November 1, 2004. Comments must be received on or before December 20, 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. CE213, 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. CE213. 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:** Pete Rouse, Federal Aviation Administration, Aircraft Certification Service, Small Airplane Directorate, ACE–111, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329–4135, 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. CE213.'' The postcard will be date stamped and returned to the commenter.

### Background

On February 11, 2002, Thielert Aircraft Engines applied for a supplemental type certificate for the Cessna Model 172 series airplanes. The supplemental type certificate will allow Thielert Aircraft Engines to install a Thielert Aircraft engine (TAE 125–01 aircraft diesel engine (ADE)) that is equipped with an electronic engine control system with full authority capability in these airplanes.

### Type Certification Basis

Under the provisions of 14 CFR, part 21, § 21.101, Thielert Aircraft Engines must show that the Cessna Model 172 meets the applicable provisions of the original certification basis of the Cessna Model 172, as listed on Type Certificate No. 3A12, issued on November 4, 1955; exemptions, if any; and the special conditions adopted by this rulemaking action. The Cessna Model 172 was originally certified under part 3 of the Civil Air Regulations.

If the Administrator finds that the applicable airworthiness regulations (*i.e.*, CAR 3; 14 CFR, part 23) do not contain adequate or appropriate safety standards for the Cessna 172 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 Thielert Aircraft Engines modified Cessna Model 172 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 Thielert

Aircraft Engines modified Cessna Model 172 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 Thielert Aircraft Engines modified Cessna Model 172 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 Thielert Aircraft Engines modified Cessna Model 172. Should Thielert Aircraft Engines apply at a later date for a supplemental type certificate to modify any other model included on the same type certificate as the Thielert Aircraft Engines modified Cessna Model 172 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 Cessna Model 172 K, L, M, N, P, R, and S series airplanes. 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 supplemental type certification basis for Thielert Aircraft Engines modified Cessna Model 172 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:

Field strength (volts per meter)

| Frequency | 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–2GHz | 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 23–49. 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 November 1, 2004.

**James E. Jackson,**

*Acting Manager, Small Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 04–25698 Filed 11–18–04; 8:45 am]

**BILLING CODE 4910–13–P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

### 14 CFR Part 71

**[Docket No. FAA–2004–19576; Airspace Docket No. 04–ACE–66]**

## Modification of Class E Airspace; Boone, IA

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Direct final rule, request for comments.

**SUMMARY:** This action amends Title 14 Code of Federal Regulations, part 71 (14 CFR part 71) by revising Class E airspace at Boone, IA. A review of controlled airspace at Boone, IA revealed it does not comply with criteria for 700 feet above ground level (AGL) airspace required to protect aircraft executing Standard Instrument Approach Procedures (SIAPs) to Boone Municipal Airport. The review also identified noncompliance with criteria for diverse departures from the airport and other discrepancies in the legal description of airspace area.

The intended effect of this rule is provide controlled airspace of appropriate dimensions to protect aircraft departing from and executing SIAPs to Boone Municipal Airport. It also corrects discrepancies in the legal description of Boone, IA Class E airspace area and brings the airspace area and legal description into compliance with FAA Orders.

**DATES:** This direct final rule is effective on 0901 UTC, March 17, 2005.

Comments for inclusion in the Rules Docket must be received on or before December 27, 2004.

**ADDRESSES:** Send comments on this proposal to the Docket Management System, U.S. Department of Transportation, Room Plaza 401, 400 Seventh Street, SW., Washington, DC 20590–0001. You must identify the docket number FAA–2004–19576/Airspace Docket No. 04–ACE–66, at the beginning of your comments. You may also submit comments on the Internet at *http://dms.dot.gov.* You may review the public docket containing the proposal, any comments received, and any final disposition in person in the Dockets Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Office (telephone 1–800–647–5527) is on the plaza level of the Department of Transportation NASSIF Building at the above address.

**FOR FURTHER INFORMATION CONTACT:** Kathy Randolph, Air Traffic Division, Airspace Branch, ACE–520C, DOT Regional Headquarters Building, Federal Aviation Administration, 901 Locust, Kansas City, MO 64106; telephone: (816) 329–2525.

**SUPPLEMENTARY INFORMATION:** This amendment to 14 CFR 71 modifies the Class E airspace area extending upward from 700 feet above the surface at Boone, IA. An examination of controlled airspace for Boone Municipal Airport revealed it does not comply with FAA Order 7400.2E, Procedures for Handling Airspace Matters, and FAA Order 8260.19C, Flight Procedures and Airspace, criteria for 700 feet AGL airspace required to protect aircraft executing SIAPs. The review also identified noncompliance with FAA Order 7400.2E criteria for diverse departures from the airport and other discrepancies in the legal description of the airspace area.

This amendment modifies the airspace area from a 6.6-mile radius to an 6.5-mile radius of Boone Municipal Airport, adds northeast and southeast extensions to the airspace area, modifies the northwest extension and brings the legal description of the Boone, IA Class E airspace area into compliance with FAA Orders 7400.2E and 8260.19C. This area will be depicted on appropriate aeronautical charts. Class E airspace areas extending upward from 700 feet or more above the surface of the earth are published in paragraph 6005 of FAA Order 7400.9M, Airspace Designations and Reporting Points, dated August 30, 2004, and effective September 16, 2004, which is incorporated by reference in 14 CFR 71.1. The Class E airspace designation listed in this document will be published subsequently in the Order.

### The Direct Final Rule Procedure

The FAA anticipates that this regulation will not result in adverse or negative comment and, therefore, is issuing it as a direct final rule. Previous actions of this nature have not been controversial and have not resulted in adverse comments or objections. Unless a written adverse or negative comment, or a written notice of intent to submit an adverse or negative comment is received within the comment period, the regulation will become effective on the date specified above. After the close of the comment period, the FAA will publish a document in the **Federal Register** indicating that no adverse or negative comments were received and confirming the date on which the final rule will become effective. If the FAA does receive, within the comment period, an adverse or negative comment, or written notice of intent to submit such a comment, a document withdrawing the direct final rule will be published in the **Federal Register**, and a notice of proposed rulemaking may be published with a new comment period.

### Comments Invited

Interested parties are invited to participate in this rulemaking by submitting such written data, views, or arguments, as they may desire. Comments that provide the factual basis supporting the views and suggestions presented are particularly helpful in developing reasoned regulatory decisions on the proposal. Comments are specifically invited on the overall regulatory, aeronautical, economic, environmental, and energy-related aspects of the proposal. Communications should identify both docket numbers and be submitted in triplicate to the address listed above. Commenters wishing the FAA to acknowledge receipt of their comments on this notice must submit with those comments a self-addressed, stamped postcard on which the following statement is made: ''Comments to Docket No. FAA–2004–19576/Airspace Docket No. 04–ACE–66.'' The postcard will be date/time stamped and returned to the commenter.

### Agency Findings

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

The FAA has determined that this regulation is noncontroversial and unlikely to result in adverse or negative comments. For the reasons discussed in the preamble, I certify that this regulation (1) is not a ''significant regulatory action'' under Executive Order 12866; (2) is not a ''significant