

Signed in Washington, DC on June 18, 1995.

**Bruce R. Weber,**

*Acting Administrator, Consolidated Farm Service Agency, and Acting Executive Vice-President, Commodity Credit Corporation.*

[FR Doc. 95-15862 Filed 6-27-95; 8:45 am]

BILLING CODE 3410-05-P

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 23

[Docket No. 125CE, Special Condition 23-ACE-81]

#### Special Conditions; Twin Commander Model 695 Airplane

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

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

**SUMMARY:** These special conditions are issued for the Twin Commander Model 695 airplane modified by Garrett Aviation Services, Augusta, Georgia. 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 electronic displays 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 these airplanes.

**EFFECTIVE DATE:** The effective date of these special conditions is June 28, 1995. Comments must be received on or before July 28, 1995.

**ADDRESSES:** Comments may be mailed in duplicate to: Federal Aviation Administration, Office of the Assistant Chief Counsel, ACE-7, Attention: Rules Docket Clerk, Docket No. 125CE, Room 1558, 601 East 12th Street, Kansas City, Missouri 64106. All comments must be marked: Docket No. 125CE. Comments may be inspected in the Rules Docket weekdays, except Federal holidays, between 7:30 a.m. and 4:00 p.m.

**FOR FURTHER INFORMATION CONTACT:** Ervin Dvorak, Aerospace Engineer, Standards Office (ACE-110), Small Airplane Directorate, Aircraft Certification Service, Federal Aviation

Administration, 601 East 12th Street, Kansas City, Missouri 64106; telephone (816) 426-6941.

#### SUPPLEMENTARY INFORMATION:

##### Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety, and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on these special conditions.

Interested persons are invited to submit such written data, views, or arguments as they may desire. Communications should identify the regulatory docket and special conditions 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. These special conditions may be changed in light of the comments received. All comments submitted will be available in the rules docket for examination by interested parties, 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 request, must include a self-addressed and stamped postcard on which the following statement is made: "Comments to Docket No. 125CE." The postcard will be date stamped and returned to the commenter.

##### Background

On October 31, 1994, Garrett Aviation Services, 1550 Hangar Road, Augusta, Georgia 30906, made an application to the FAA for a supplemental type certificate (STC) for the Twin Commander Model 695 airplane. The proposed modification incorporates a novel or unusual design feature, such as digital avionics consisting of an electronic flight instrument system (EFIS), that is vulnerable to HIRF external to the airplane.

##### Type Certification Basis

The type certification basis for the Twin Commander Model 695 Airplane is given in Type Certification Data Sheet No. 2A4 plus the following:

§ 23.1301 of Amendment 23-20; §§ 23.1309, 23.1311, and 23.1321 of Amendment 23-41 and § 23.1322 of Amendment 23-43; exemptions, if any; and the special conditions adopted by this remaking action.

##### Discussion

The FAA may issue and amend special conditions, as necessary, as part of the type certification basis if the Administrator finds that the airworthiness standards, designated according to § 21.101(b), 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 to establish a level of safety equivalent to that established in the regulations. Special conditions are normally issued according to § 11.49, after public notice, as required by §§ 11.28 and 11.29(b), effective October 14, 1980, and become a part of the type certification basis in accordance with § 21.101(b)(2).

Garrett Aviation Services, 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 electronic systems, 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