

§ 9036.1 Threshold submission.

* * * * *

(b) * * *

(3) The candidate shall submit a full-size photocopy of each check or written instrument and of supporting documentation in accordance with 11 CFR 9034.2 for each contribution that the candidate submits to establish eligibility for matching funds. For purposes of the threshold submission, the photocopies shall be segregated alphabetically by contributor within each State, and shall be accompanied by and referenced to copies of the relevant deposit slips. In lieu of submitting photocopies, the candidate may submit digital images of checks and other materials in accordance with the procedures specified in 11 CFR 9036.2(b)(1)(vi). Digital images of contributions do not need to be segregated alphabetically by contributor within each State.

* * * * *

24. Section 9036.2 is amended by revising paragraph (b)(1)(vi) to read as follows:

§ 9036.2 Additional submissions for matching fund payments.

* * * * *

(b) * * *

(1) * * *

(vi) The photocopies of each check or written instrument and of supporting documentation shall either be alphabetized and referenced to copies of the relevant deposit slip, but not segregated by State as required in the threshold submission; or such photocopies may be batched in deposits of 50 contributions or less and cross-referenced by deposit number and sequence number within each deposit on the contributor list. In lieu of submitting photocopies, the candidate may submit digital images of checks, written instruments and deposit slips as specified in the Computerized Magnetic Media Requirements. The candidate may also submit digital images of contributor redesignations, reattributions and supporting statements and materials needed to verify the matchability of contributions. The candidate shall provide the computer equipment and software needed to retrieve and read the digital images, if necessary, at no cost to the Commission, and shall include digital images of every contribution received and imaged on or after the date of the previous matching fund request. Contributions and other documentation not imaged shall be submitted in photocopy form. The candidate shall maintain the originals of all contributor redesignations, reattributions and supporting statements

and materials that are submitted for matching as digital images.

* * * * *

Dated: September 7, 1999.

Scott E. Thomas,

Chairman, Federal Election Commission.

[FR Doc. 99-23578 Filed 9-10-99; 8:45 am]

BILLING CODE 6715-01-P

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Part 23**

[Docket No. CE153, Special Condition 23-096-SC]

Special Conditions; Meridian PA-46-400TP

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final special conditions; request for comments.

SUMMARY: These special conditions are issued to The New Piper Aircraft, Inc., 2926 Piper Drive, Vero Beach, Florida 32960 for a type certificate for the Meridian PA-46-400TP 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 electronic flight instrument system (EFIS) 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.

DATES: The effective date of these special conditions is August 27, 1999. Comments must be received on or before October 13, 1999.

ADDRESSES: Comments may be mailed in duplicate to: Federal Aviation Administration, Regional Counsel, ACE-7, Attention: Rules Docket Clerk, Docket No. CE153, Room 1558, 601 East 12th Street, Kansas City, Missouri 64106. All comments must be marked: Docket No. CE153. 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: 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 notice must include a self-addressed, stamped postcard on which the following statement is made: "Comments to CE153." The postcard will be date stamped and returned to the commenter.

Background

On February 12, 1997, The New Piper Aircraft, Inc., 2926 Piper Drive, Vero Beach, Florida 32960, made an application to the FAA for a new Type Certificate for the Meridian PA-46-400TP airplane. The Meridian is a derivative of the PA-46-350P Malibu Mirage currently approved under TC No. A25SO. 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, The New Piper Aircraft, Inc., must show that the Meridian PA-

46–400TP meets the following provisions, or the applicable regulations in effect on the date of application for the change to the Meridian PA–6–400TP:

Federal Aviation Regulations part 23 effective February 1, 1965, as amended by Amendments 23–1 through 23–52; Federal Aviation Regulations part 34 effective September 10, 1990, as amended by the amendment in effect on the date of certification; Federal Aviation Regulations part 36 effective December 1, 1969, as amended by amendment 36–1 through the amendment in effect on the day of certification; The Noise Control Act of 1972; exemptions, if any; and the special conditions adopted by this rulemaking action.

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 to establish a level of safety equivalent to that established in the regulations.

Special conditions are normally issued in accordance with § 11.49, after public notice, as required by §§ 11.28 and 11.29(b), and become a 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 Features

The New Piper Aircraft, 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.

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 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, or both, 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 The New Piper Aircraft, Inc., Meridian PA-46-400TP. Should The New Piper Aircraft, Inc., apply at a later date for a change to the type certificate to include any other model incorporating the same novel or unusual design feature, the special conditions would apply to that model as well under the provisions of § 21.101(a)(1).

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 21.17; and 14 CFR part 11, §§ 11.28 and 11.49.

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 The New Piper Aircraft, Inc., Meridian PA-46-400TP airplane:

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 August 27, 1999.

Michael Gallagher,

Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. 99-23720 Filed 9-10-99; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 23

[Docket No. CE149; Special Condition 23-097-SC]

Special Conditions: Soloy Corporation Model Pathfinder 21 Airplane; Airframe.

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final special conditions.

SUMMARY: These special conditions are issued for the Soloy Corporation Model Pathfinder 21 airplane. The Model Pathfinder 21 airplane is a Cessna Model 208B airplane as modified by Soloy Corporation to be considered as a multiengine, part 23, normal category airplane. The Model Pathfinder 21 airplane will have a novel or unusual design features associated with installation of the Soloy Dual Pac propulsion system, which consists of two Pratt & Whitney Canada Model PT6D-114A turboprop engines driving a single, Hartzell, five-blade propeller. 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.

EFFECTIVE DATE: October 13, 1999.

FOR FURTHER INFORMATION CONTACT:

Dave Keenan, Federal Aviation Administration, Aircraft Certification Service, Small Airplane Directorate, ACE-111, 601 East 12th Street, Kansas

City, Missouri 64106; 816-426-5688, fax 816-426-2169.

SUPPLEMENTARY INFORMATION:

Background

On February 6, 1992, Soloy Corporation applied for a supplemental type certificate (STC) for the Model Pathfinder 21 airplane, which would modify the Cessna Model 208B airplane by installing the Soloy Dual Pac propulsion system. This propulsion system consists of two Pratt & Whitney Canada (PWC) Model PT6D-114A turboprop engines driving a single, Hartzell, five-blade propeller through a combining gearbox. Soloy Corporation is seeking approval for this airplane, equipped with a Soloy Dual Pac propulsion system, as a normal category multiengine airplane. Title 14 CFR part 23 is not adequate to address a multiengine airplane with a single propeller. Hence, the requirement for these proposed special conditions, which will be applied in addition to the applicable sections of part 23.

The Soloy Dual Pac propulsion system is mounted in the nose of the Model Pathfinder 21 airplane. With this arrangement, an engine failure does not cause an asymmetric thrust condition that would exist with a conventional twin turboprop airplane. This asymmetric thrust compounds the flightcrew workload following an engine failure. The Model Pathfinder 21 airplane configuration has the potential to substantially reduce this workload.

Since the Model Pathfinder 21 airplane produces only centerline thrust, the only direct airplane control implications of an engine failure are the change in torque reaction and propeller slipstream effect. These transient characteristics require substantially less crew action to correct than an asymmetric thrust condition and do not require constant effort by the flightcrew to maintain control of the airplane for the remainder of the flight.

Safety Analysis

The FAA has conducted a safety analysis that recognizes both the advantages and disadvantages of the proposed Model Pathfinder 21 airplane. The scope of this safety analysis was limited to the areas affected by the unique propulsion system installation and assumes compliance with the design-related requirements of these proposed special conditions. The FAA examined the accident and incident history of small twin turboprop operations for the years of 1983 to 1994 in the United States and the United Kingdom. The FAA evaluated each event and determined if the outcome,