

coating's properties to result in maintaining a clear area of vision.

In summary, the current regulations identify speed and precipitation rate requirements that represent limiting conditions for windshield wipers and blowers, but not for hydrophobic coatings, so it is necessary to issue special conditions to maintain the level of safety represented by the current regulations.

These special conditions provide an appropriate safety standard for the hydrophobic coating technology as the means to maintain a clear area of vision by requiring it to be effective at low speeds and precipitation rates as well as the higher speeds and precipitation rates identified in the current regulation. These are the only new or changed requirements relative to those in § 25.773(b)(1) at Amendment 25-108.

Discussion of Comments

Notice of proposed special condition No. 25-06-07 for the Dassault Aviation Model Falcon 7X airplane was published in the **Federal Register** on July 12, 2006 (71 FR 39235). No comments were received and this special condition is adopted as proposed.

Applicability

As discussed above, this special condition is applicable to the Model Falcon 7X. Should Dassault Aviation apply at a later date for a change to the type certificate to include another model on the same type certificate incorporating the same novel or unusual design feature, the special condition would apply to that model as well.

Effective Upon Issuance

Under standard practice, the effective date of final special conditions would be 30 days after the date of publication in the **Federal Register**; however, as the certification date for the Dassault Model Falcon 7X is imminent, the FAA finds that good cause exists to make this special condition effective upon issuance.

Conclusion

This action affects only certain novel or unusual design features on one model of airplane. It is not a rule of general applicability.

List of Subjects in 14 CFR Part 25

Aircraft, Aviation safety, Reporting and recordkeeping requirements.

The authority citation for this special condition is as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701, 44702, 44704.

The Special Condition

Accordingly, pursuant to the authority delegated to me by the Administrator, the following special condition is issued as part of the type certification basis for Dassault Aviation Model Falcon 7X airplanes.

Pilot Compartment View—Hydrophobic Coatings in Lieu of Windshield Wipers

The airplane must have a means to maintain a clear portion of the windshield, during precipitation conditions, enough for both pilots to have a sufficiently extensive view along the ground or flight path in normal taxi and flight attitudes of the airplane. This means must be designed to function, without continuous attention on the part of the crew, in conditions from light misting precipitation to heavy rain at speeds from fully stopped in still air, to 1.5 V_{SR1} with lift and drag devices retracted.

Issued in Renton, Washington, on December 29, 2006.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E7-200 Filed 1-9-07; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 25

[Docket No. NM363; Special Conditions No. 25-344-SC]

Special Conditions: Gulfstream Aerospace Corporation Model G-1159A Airplanes; High-Intensity Radiated Fields (HIRF)

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final special conditions; request for comments.

SUMMARY: The FAA issues these special conditions for a Gulfstream Aerospace Corporation Model G-1159A airplane modified by AeroMech Incorporated. This modified airplane will have a novel or unusual design feature when compared to the state of technology envisioned in the airworthiness standards for transport category airplanes. The modification incorporates the installation of Innovative Solutions and Support integrated air data display units (ADDU). These systems perform critical functions. The applicable airworthiness regulations do not contain adequate or appropriate safety 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 that established by the existing airworthiness standards.

DATES: The effective date of these special conditions is December 29, 2006. We must receive your comments on or before February 9, 2007.

ADDRESSES: You may mail or deliver comments on these special conditions in duplicate to: Federal Aviation Administration, Transport Airplane Directorate, Attention: Rules Docket (ANM-113), Docket No. NM363, 1601 Lind Avenue, SW., Renton, Washington 98057-3356. You must mark your comments Docket No. NM363.

FOR FURTHER INFORMATION CONTACT: Greg Dunn, FAA, Airplane and Flight Crew Interface Branch, ANM-111, Transport Airplane Directorate, Aircraft Certification Service, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-2799; facsimile (425) 227-1320.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA has determined that notice and opportunity for prior public comment for these special conditions is impracticable because these procedures would significantly delay certification and 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. We therefore find that good cause exists for making these special conditions effective upon issuance. However, we invite interested persons to take part in this rulemaking by submitting written comments. The most helpful comments reference a specific portion of the special conditions, explain the reason for any recommended change, and include supporting data. We ask that you send us two copies of written comments.

We will file in the docket all comments we receive, as well as a report summarizing each substantive public contact with FAA personnel about these special conditions. You may inspect the docket before and after the comment closing date. If you wish to review the docket in person, go to the address in the **ADDRESSES** section of this preamble between 7:30 a.m. and 4 p.m., Monday through Friday, except Federal holidays.

We will consider all comments we receive on or before the closing date for

comments. We will consider comments filed late if it is possible to do so without incurring expense or delay. We may change these special conditions based on the comments we receive.

If you want the FAA to acknowledge receipt of your comments on these special conditions, include with your comments a pre-addressed, stamped postcard on which the docket number appears. We will stamp the date on the postcard and mail it back to you.

Background

On September 29, 2006, AeroMech Incorporated, 1616 Hewitt Avenue, Suite 312, Everett, Washington 98201, applied for a supplemental type certificate (STC) to modify a Gulfstream Aerospace Corporation model G-1159A airplane. The Gulfstream Aerospace Corporation Model G-1159A airplane is a small transport category airplane powered by two turbine engines. It operates with a 2-pilot crew and can seat up to 15 passengers. The modification incorporates the installation of Innovative Solutions and Support integrated air data display units. These systems have a potential to be vulnerable to high-intensity radiated fields (HIRF) external to the airplane.

Type Certification Basis

Under the provisions of 14 CFR 21.101, AeroMech Incorporated must show that Gulfstream Aerospace Corporation Model G-1159A airplane, as changed, continues to meet the applicable provisions of the regulations incorporated by reference in Type Certificate No. A12EA, or the applicable regulations in effect on the date of application for the change. The regulations incorporated by reference in the type certificate are commonly referred to as the "original type certification basis." The specific regulations are 14 CFR part 25 as amended by Amendments 25-1 through 25-8, 25-10, 25-12, 25-16 through 25-22, 25-24, 25-26, 25-27, 25-29 through 25-34, 25-37, 25-40 (as applicable to a new APU installation); § 25.1309 as amended by Amendment 25-41, and § 25.1329 (as applied to a new autopilot installation), § 25.994 (crashworthiness fuel system components), and § 25.581 (lightning protection), as amended by Amendment 25-23; and Special part 27, as amended by Amendment 27-2 (fuel venting emission). The special conditions contained in the FAA's letter to Grumman dated September 27, 1965, applicable to the Gulfstream Model G-1159 airplane, are also applicable to the Gulfstream Model G-1159A airplane, except that reference to Civil Air Regulations 4b.450 in the "Cooling

Systems" special conditions is replaced by § 25.1043, effective February 1, 1965. In addition, the special conditions pertaining to dynamic gust loads contained in the FAA AEA-212 letter dated July 22, 1980.

If the Administrator finds that the applicable airworthiness regulations (i.e., part 25, as amended) do not contain adequate or appropriate safety standards for the Gulfstream Aerospace Corporation Model G-1159A airplane because of a novel or unusual design feature, special conditions are prescribed under § 21.16.

In addition to the applicable airworthiness regulations and special conditions, Gulfstream Aerospace Corporation Model G-1159A airplane must comply with the fuel vent and exhaust emission requirements of 14 CFR part 34 and the noise certification requirements of 14 CFR part 36.

The FAA issues special conditions, as defined in § 11.19, under § 11.38, and they become part of the type certification basis under the provisions of § 21.101.

Novel or Unusual Design Features

As noted earlier, Gulfstream Aerospace Corporation G-1159A airplane modified by AeroMech Incorporated will incorporate Innovative Solutions and Support integrated air data display units that will perform critical functions. These systems may be vulnerable to high-intensity radiated fields external to the airplane. Current airworthiness standards of part 25 do not contain adequate or appropriate safety standards for protecting this equipment from adverse effects of HIRF. So this system is considered to be a novel or unusual design feature.

Discussion

There is no specific regulation that addresses protection requirements for electrical and electronic systems from HIRF. Increased power levels from ground-based radio transmitters and the growing use of sensitive avionics/electronics and electrical systems to command and control airplanes have made it necessary to provide adequate protection.

To ensure that a level of safety is achieved equivalent to that intended by the regulations incorporated by reference, special conditions are needed for the Gulfstream Aerospace Corporation G-1159A airplane modified by AeroMech Incorporated. These special conditions require that new avionics/electronics and electrical systems that perform critical functions be designed and installed to preclude

component damage and interruption of function because of HIRF.

High-Intensity Radiated Fields (HIRF)

High-power radio frequency transmitters for radio, radar, television, and satellite communications can adversely affect operation of airplane electric and electronic systems. Therefore, the immunity of critical avionics/electronics and electrical systems to HIRF must be established.

Based on surveys and analysis of existing HIRF emitters, an adequate level of protection exists when airplane system immunity is demonstrated when exposed to the HIRF environments in either paragraph 1 OR 2 below:

1. A minimum threat of 100 volts rms (root-mean-square) per meter electric field strength from 10 KHz to 18 GHz.

a. System elements and their associated wiring harnesses must be exposed to the environment without benefit of airframe shielding.

b. Demonstration of this level of protection is established through system tests and analysis.

2. An environment external to the airframe of the field strengths shown in the table below for the frequency ranges indicated. Immunity to both peak and average field strength components from the table must be demonstrated.

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 of the root-mean-square (rms) over the complete modulation period.

The environmental levels identified above are the result of an FAA review of existing studies on the subject of HIRF and of the work of the Electromagnetic Effects Harmonization Working Group of the Aviation Rulemaking Advisory Committee.

Applicability

These special conditions are applicable to a Gulfstream Aerospace

Corporation Model G-1159A airplane modified by AeroMech Incorporated. Should AeroMech Incorporated apply at a later date for a supplemental type certificate to modify any other similar model included on Type Certificate No. A12EA to incorporate the same or similar novel or unusual design feature, these special conditions would apply to that model as well under § 21.101.

Conclusion

This action affects only certain novel or unusual design features on a Gulfstream Aerospace Corporation Model G-1159A airplane modified by AeroMech Incorporated. 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.

List of Subjects in 14 CFR Part 25

Aircraft, Aviation safety, Reporting and recordkeeping requirements.

The authority citation for these special conditions is as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701, 44702, 44704.

The Special Conditions

Therefore, under the authority delegated to me by the Administrator, the following special conditions are issued as part of the supplemental type certification basis for the Gulfstream Aerospace Corporation Model G-1159A airplane modified by AeroMech Incorporated.

1. *Protection from Unwanted Effects of High-Intensity Radiated Fields (HIRF).* Each electrical and electronic system that performs critical functions must be designed and installed to ensure that the operation and operational capability of these systems to perform critical functions are not adversely affected when the airplane is exposed to high-intensity radiated fields.

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 Renton, Washington, on December 29, 2006.

Ali Bahrami,

Manager, Transport Airplane Directorate,
Aircraft Certification Service.

[FR Doc. E7-197 Filed 1-9-07; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2006-25824; Directorate Identifier 2004-SW-23-AD; Amendment 39-14876; AD 2007-01-05]

RIN 2120-AA64

Airworthiness Directives; Sikorsky Aircraft Corporation Model S-61L, N, R, and NM Helicopters

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD) for the specified Sikorsky Aircraft Corporation (Sikorsky) model helicopters that requires, within a specified time, creating a component history card or equivalent record. The AD also requires recording the hours time-in-service (TIS) and the external lift cycles (lift cycles) for each main gearbox input left and right freewheel unit (IFWU) assembly. Also, the AD requires calculating a moving average of lift cycles per hour TIS at specified intervals on each IFWU assembly. The moving average is used to determine if an IFWU assembly is used in repetitive external lift (REL) or non-REL helicopter operations. If an IFWU assembly is used in REL operations, this AD requires a visual and dimensional inspection of the IFWU assembly at specified intervals. This AD also requires recording certain information and replacing each part that is beyond the wear limits or that exhibits visual surface distress with an airworthy part. In addition, this AD requires permanently marking the REL IFWU camshafts and gear housings with the letters "REL" on the surface of these parts. This amendment is prompted by an accident in which the left and right IFWU assembly on a helicopter slipped or disengaged resulting in both engines over speeding, engine shutdowns, and loss of engine power to the transmissions. The actions specified by this AD are intended to prevent slipping in the IFWU assembly, loss of engine power to the transmissions, and subsequent loss of control of the helicopter.

DATES: Effective February 14, 2007.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of February 14, 2007.

ADDRESSES: You may get the service information identified in this AD from Sikorsky Aircraft Corporation, Attn: Manager, Commercial Tech Support, 6900 Main Street, Stratford, Connecticut 06614, phone (203) 386-3001, fax (203) 386-5983.

Examining the Docket

You may examine the docket that contains this AD, any comments, and other information on the Internet at <http://dms.dot.gov>, or at the Docket Management System (DMS), U.S. Department of Transportation, 400 Seventh Street, SW., Room PL-401, on the plaza level of the Nassif Building, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Kirk Gustafson, Aviation Safety Engineer, Boston Aircraft Certification Office, Engine and Propeller Directorate, FAA, 12 New England Executive Park, Burlington, MA 01803, telephone (781) 238-7190, fax (781) 238-7170.

SUPPLEMENTARY INFORMATION: A proposal to amend 14 CFR part 39 to include an AD for the specified model helicopters was published in the **Federal Register** on September 15, 2006 (71 FR 54443). That action proposed to require, within a specified time, creating a component history card or equivalent record and counting and recording the hours TIS and the lift cycles for each IFWU assembly. A lift cycle is defined as an external load lift and subsequent release of that load. Also, the AD proposed calculating a moving average of lift cycles per hour TIS at specified intervals on the IFWU assembly. The moving average would determine if an IFWU assembly is designated as an REL or non-REL IFWU assembly. Once an IFWU assembly is designated as an REL IFWU assembly, the moving average would no longer need to be calculated for that IFWU assembly. For an IFWU assembly designated as an REL IFWU assembly, the AD proposed a repetitive visual and dimensional inspection of the IFWU assembly at 500 hours TIS or 7500 lift cycles whichever occurs first. The AD proposed recording inspection information, providing a copy of the information to the FAA, and replacing each part that is beyond the wear or surface distress limits with an airworthy part. In addition, the AD proposed permanently marking the IFWU camshaft and gear housing with the letters "REL" on the surface of these parts.

Sikorsky has issued Alert Service Bulletin No. 61B35-67B, Revision B, dated August 11, 2003 (ASB). The ASB specifies implementing a moving average procedure for determining REL