2. A threat external to the airframe of the following field strengths for the frequency ranges indicated. Both peak and average field strength components from the Table are to 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 threat levels identified above are the result of an FAA review of existing studies on the subject of HIRF, in light of the ongoing work of the Electromagnetic Effects Harmonization Working Group of the Aviation Rulemaking Advisory Committee.

Applicability

As discussed above, these special conditions are applicable to Bombardier Inc. Model CL–600–1A11 airplane modified by Duncan Aviation, Inc. Should Duncan apply at a later date for a supplemental type certificate to modify any other model included on the same type certificate to incorporate the same novel or unusual design feature, these 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 Bombardier Inc. Model CL–600–1A11 airplane modified by Duncan Aviation, Inc. 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 the special conditions for this airplane 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 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

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 Bombardier Inc. Model CL–600–1A11 airplanes modified by Duncan.

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 April 25, 2001.

Donald L. Riggin,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 01–11254 Filed 5–3–01; 8:45 am]

BILLING CODE 4910–13–U

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 25

[Docket No. NM191, Special Conditions No. 25–179–SC]

Special Conditions: Lockheed-Georgia Model 1329–25; and Models 1329–23A, –23D and –23E airplanes modified by STC SA2326SW (JetStar 731); High-Intensity Radiated Fields (HIRF)

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final special conditions; request for comments.

SUMMARY: These special conditions are issued for the Lockheed-Georgia Model 1329–25, and Models 1329–23A, –23D and –23E airplanes modified by STC SA2326SW, for the modifications installed by Duncan Aviation Inc. These modified airplanes will have novel and unusual design features when compared to the state of technology envisioned in the airworthiness standards for transport category airplanes. The

modification incorporates the installation of dual Attitude Heading Reference Systems (ARHS) that provide input to both pilot and copilot flight instruments displaying critical flight parameters (attitude) to the flightcrew. The applicable airworthiness standards do not contain adequate or appropriate safety standards for the protection of these systems from the effects of high-intensity radiated fields (HIRF). The special conditions contain the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that provided by the existing airworthiness standards.

DATES: The effective date of these special conditions is April 17, 2001. Comments must be received on or before June 4, 2001.

ADDRESSES: Comments on these special conditions may be mailed in duplicate to: Federal Aviation Administration, Transport Airplane Directorate, Attn: Rules Docket (ANM–114), Docket No. NM191, 1601 Lind Avenue SW., Renton, Washington, 98055–4056; or delivered in duplicate to the Transport Airplane Directorate at the above address. Comments must be marked: Docket No. NM191. 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: Mark Quam, FAA, Standardization Branch, ANM–113, Transport Airplane Directorate, Aircraft Certification Service, 1601 Lind Avenue SW., Renton, Washington, 98055–4056; telephone (425) 227–2145; facsimile (425) 227–1149.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA has determined that good cause exists for making these special conditions effective upon issuance; however, interested persons are invited to submit such written data, views, or arguments as they may desire. Communications should identify the Docket or 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 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 these special conditions must include a self-addressed, stamped postcard on which the following statement is made: ''Comments to Docket No. NM191.'' The postcard will be date stamped and returned to the commenter.

Background

On February 21, 2001, Duncan Aviation, Inc., P.O. Box 81887, Lincoln, Nebraska, applied for a supplemental type certificate (STC) to modify the Lockheed-Georgia Model 1329–25, and Models 1329–23A, –23D and –23E airplanes modified by STC SA2326SW, listed on Type Certificate 2A15. These airplanes are four engine transport category airplanes of the executive type, capable of carrying two flight crewmembers and ten passengers. All models are powered by four aft mount AiResearch TFD–731 engines. In the Model 1329–23A, –23D, and –23E airplanes modified by STC SA232SW, the Pratt & Whitney turbojet engines have been replaced with the AiResearch TFE–731 engines. The modification incorporates the installation of dual Rockwell Collins Attitude Heading Reference Systems (ARHS) that provide input to both pilot and copilot flight instruments displaying critical flight parameters (attitude and heading) to the flightcrew. The AHRS can be susceptible to disruption to both command/response signals as a result of electrical and magnetic interference. This disruption of signals could result in loss of all critical flight displays and annunciations or present misleading information to the pilot.

Type Certification Basis

Under the provisions of 14 CFR 21.101, Duncan Aviation, Inc., must show that the Lockheed-Georgia Model 1329–25, and Models 1329–23A, –23D and –23E airplanes modified by STC SA2326SW, as changed, continue to meet the applicable provisions of the regulations incorporated by reference in Type Certificate No. 2A15, 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 certification basis for the modified Lockheed-Georgia Model 1329–25, and Models 1329–23A, –23D and –23E airplanes modified by STC SA2326SW, includes CAR 4b, dated December 31, 1953, as amended by Amendments 4b–1 through 4b–9 as listed in the Type Certificate Data Sheet (TCDS) 2A15.

If the Administrator finds that the applicable airworthiness regulations (i.e., CAR 4b, as amended) do not contain adequate or appropriate safety standards for the Lockheed-Georgia Model 1329–25, and Models 1329–23A, –23D and –23E airplanes modified by STC SA2326SW, because of a novel or unusual design feature, special conditions are prescribed under the provisions of § 21.16.

In addition to the applicable airworthiness regulations and special conditions, these Lockheed-Georgia Model 1329–25; and Models 1329–23A, –23D, and –23E airplanes must comply with the fuel vent and exhaust emission requirements of part 34 and the noise certification requirements of part 36.

Special conditions, as defined in § 11.19, are issued in accordance with § 11.38 and become 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 Duncan apply at a later date 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, these special conditions would also apply to the other model under the provisions of § 21.101(a)(1).

Novel or Unusual Design Features

As noted earlier, the modified Lockheed-Georgia Model 1329–25, and Models 1329–23A, –23D and –23E airplanes modified by STC SA2326SW, will incorporate dual Attitude and Heading Reference Systems (AHRS) that provide input to both pilot and copilot flight instruments displaying critical flight parameters (attitude and heading) to the flightcrew. The AHRS can be susceptible to disruption to both command/response signals as a result of electrical and magnetic interference. This disruption of signals could result in loss of all critical flight displays and annunciations or present misleading information to the pilot.

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 avionic/electronic 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 Lockheed-Georgia Model 1329–25; and Models 1329–23A, –23D and –23E. These special conditions require that new avionic/electronic and electrical systems, such as the AHRS, that perform critical functions be designed and installed to preclude component damage and interruption of function due to both the direct and indirect effects of HIRF.

High-Intensity Radiated Fields (HIRF)

With the trend toward increased power levels from ground-based transmitters, plus the advent of space and satellite communications, coupled with electronic command and control of the airplane, the immunity of critical avionic/electronic and electrical systems to HIRF must be established.

It is not possible to precisely define the HIRF to which the airplane will be exposed in service. There is also uncertainty concerning the effectiveness of airframe shielding for HIRF. Furthermore, coupling of electromagnetic energy to cockpit-installed equipment through the cockpit window apertures is undefined. Based on surveys and analysis of existing HIRF emitters, an adequate level of protection exists when compliance with the HIRF protection special condition is shown with either paragraph 1, or paragraph 2, below:

1. A minimum threat of 100 volts rms per meter electric field strength from 10 KHz to 18 GHz.

a. The threat must be applied to the system elements and their associated wiring harnesses without the benefit of airframe shielding.

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

2. A threat external to the airframe of the following field strengths for the frequency ranges indicated. Both peak and average field strength components from the Table are to 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	20
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 threat levels identified above are the result of an FAA review of existing studies on the subject of HIRF, in light of the ongoing work of the Electromagnetic Effects Harmonization Working Group of the Aviation Rulemaking Advisory Committee.

Applicability

As discussed above, these special conditions are applicable to Lockheed-Georgia Model 1329–25, and Models 1329–23A, –23D and —23E airplanes modified by STC SA2326SW, with the modifications installed by Duncan Aviation. Should Duncan Aviation apply at a later date for a supplemental type certificate to modify any other model included on the same type certificate to incorporate the same novel or unusual design feature, these 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 Lockheed-Georgia Model 1329–25, and Models 1329–23A, -23D and -23E airplanes modified by STC SA2326SW, that are further modified by Duncan Aviation. 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 the special conditions for this airplane 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 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

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 Lockheed-Georgia Model 1329–25, and Models 1329–23A, –23D and –23E airplanes modified by STC SA2326SW, that are further modified by Duncan Aviation, Inc.

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 April 17, 2001.

Ali Bahrami,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 01–11253 Filed 5–3–01; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2000–SW–40–AD; Amendment 39–12216; AD 94–14–20 R1]

RIN 2120–AA64

Airworthiness Directives; Sikorsky Aircraft Corporation Model S–76A Helicopters

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment revises an existing airworthiness directive (AD) for Sikorsky Aircraft Corporation (Sikorsky) Model S–76A helicopters. That AD currently requires a one-time inspection of the tail rotor blade (blade) spar elliptical centering plug (centering plug) for disbonding and the addition of a retaining pad on the pitch change shaft between the output tail rotor gearbox flange and the inboard tail rotor spar. This amendment contains the same requirements as the existing AD but clarifies that the 500-hour time-in-service (TIS) repetitive inspections, which could cause inadvertent damage, are not required. This AD also incorporates by reference a revised alert service bulletin (ASB) that does not include the 500-hour TIS repetitive inspections. This amendment is prompted by operator confusion about whether the current AD continues to require the 500-hour TIS repetitive inspections. The actions specified by this AD are intended to verify that the FAA has determined that the 500-hour TIS repetitive inspections are not required to prevent the centering plug from disbonding and moving out of position, loss of tail rotor control, and subsequent loss of control of the helicopter.

DATES: Effective June 8, 2001.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of June 8, 2001.

ADDRESSES: The service information referenced in this AD may be obtained from Sikorsky Aircraft Corporation, Attn: Manager, Commercial Tech Support, 6900 Main Street, Stratford, Connecticut 06614, phone (203) 386–3001, fax (203) 386–5983. This 1 information may be examined at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Richard Noll, Aviation Safety Engineer, Boston Aircraft Certification Office, 12 New England Executive Park, Burlington, MA 01803, telephone (781) 238–7160, fax (781) 238–7199.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) by revising AD 94–14–20, Amendment 39–8969 (59 FR 41238, August 11, 1994), which applies to Sikorsky Model S–76A helicopters, was published in the **Federal Register** on January 30, 2001 (66 FR 8184). The action proposed to require a one-time inspection of the blade centering plug for disbonding and the addition of a retaining pad on the pitch change shaft between the output tail rotor gearbox flange and the inboard tail rotor spar. The action also clarified that 500-hour TIS repetitive inspections, which could cause inadvertent damage, are not required and proposed to incorporate by reference a revised ASB that does not include the 500-hour TIS repetitive inspections.

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were received on the proposal or the FAA's determination of the cost to the public. The FAA has determined that air safety and the public interest require the adoption of the rule as proposed except for some editorial changes that are made in paragraphs (a) and (e). These changes were made to better identify the service information that is incorporated by reference. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

The FAA estimates that this AD will affect 150 helicopters of U.S. registry. This revised AD will not impose any additional burden or costs.

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.

For the reasons discussed above, I certify that this action (1) is not a ''significant regulatory action'' under Executive Order 12866; (2) is not a ''significant rule'' under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption **ADDRESSES.**

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

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

§ 39.13 [Amended]

2. Section 39.13 is amended by removing Amendment 39–8969 (59 FR 41238, August 11, 1994), and by adding a new airworthiness directive (AD), Amendment 39–12216, to read as follows:

94–14–20 R1 Sikorsky Aircraft Corporation: Amendment 39–12216. Docket No. 2000–SW–40–AD. Revises AD 94–14–20, Amendment 39–8969, Docket No. 93–SW–13–AD.

Applicability: Model S–76A helicopters, with tail rotor blade (blade) assembly, part number (P/N) 76101–05001 (all dash numbers) or 76101–05101 (all dash numbers), installed with more than 130