DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 13

[Docket No. 28764; Amdt. No. 13–28]

RIN 2105–AC63

Inflation Adjustment of Civil Monetary Penalties; Correction

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule, correction.

SUMMARY: This document contains a correction to the final rule published in the Federal Register on December 20, 1996, (61 FR 67444). That final rule implements the Federal Civil Penalties Inflation Adjustment Act of 1990, as amended by the Debt Collection Improvement Act of 1996.

EFFECTIVE DATE: January 29, 1997.

FOR FURTHER INFORMATION CONTACT: Joyce Redos, (202) 267–7158.

SUPPLEMENTARY INFORMATION:

Need for Correction

In the final rule document (FR Doc. 96–32258) published in the Federal Register on December 20, 1996, (61 FR 67444), the chart entitled, Minimum and Maximum Civil Penalties Adjusted for Inflation, Effective January 21, 1997, is corrected to read as follows:

List of Subjects in 14 CFR Part 13

Administrative practice and procedure, Air transportation, Investigations, Law enforcement, Penalties.

The Amendments

Accordingly, 14 CFR part 13 is corrected by making the following correcting amendments:

PART 13—INVESTIGATIVE AND ENFORCEMENT PROCEDURES

1. The authority citation for part 13 is revised to read as follows:

Authority: 18 U.S.C. 6002; 28 U.S.C. 2461 (note); 49 U.S.C. 106(g), 5121–5124, 40113–40114, 44103–44106, 44702–44703, 44709–44710, 44713, 46101–46110, 46301–46316, 46501–46502, 46504–46507, 47106, 47111, 47122, 47306, 47531–47532.

§ 13.305 [Amended]

2. In § 13.305(d), the chart is revised to read as follows:

MINIMUM AND MAXIMUM CIVIL PENALTIES—ADJUSTED FOR INFLATION, EFFECTIVE JANUARY 21, 1997

United States Code citation	Civil monetary penalty description	Minimum penalty amount as of 10/23/96	New adjusted minimum penalty amount	Maximum penalty amount as of 10/26/96	New adjusted maximum penalty amount
49 U.S.C. 5123(a) (changed 1990).	Violations of hazardous materials transportation law or regulations.	$250 per violation per day	$250 per violation per day	$25,000 per violation per day.	$27,500 per violation per day.
49 U.S.C. 46301(a)(1) (1958).	Violations of FAA statute or regulations by a person.	N/A	N/A	$1,000 per violation per day or per flight.	$1,100 per violation per day or per flight.
49 U.S.C. 46301(a)(2) (changed 1987).	Violations of FAA statute or regulations by a person operating an aircraft for the transportation of passengers or property for compensation.	N/A	N/A	$10,000 per violation per day or per flight.	$11,000 per violation per day or per flight.
49 U.S.C. 46301(a)(3)(A) (1974).	Violations of FAA statute or regulations involving the transportation of hazardous materials by air.	N/A	N/A	$10,000 per violation per day or per flight.	$11,000 per violation per day or per flight.
49 U.S.C. 463(a)(3)(B) (1988).	Violations of FAA statute or regulations involving the registration or recordation under chapter 441 of aircraft not used to provide air transportation.	N/A	N/A	$10,000 per violation per day or per flight.	$11,000 per violation per day or per flight.
49 U.S.C. 46301(b) (1987).	Tampering with a smoke alarm device.	N/A	N/A	$2,000 per violation	$2,200 per violation.
49 U.S.C. 46302 (1984)	Knowingly providing false information about alleged violations involving the special aircraft jurisdiction of the United States.	N/A	N/A	$10,000 per violation	$11,000 per violation.
49 U.S.C. 46303 (1984)	Carrying a concealed deadly or dangerous weapon.	N/A	N/A	$10,000 per violation	$11,000 per violation.

Issued in Washington, DC on January 23, 1997.

Donald P. Byrne,

Assistant Chief Counsel.

[FR Doc. 97–2244 Filed 1–28–97; 8:45 am]

BILLING CODE 4910–13–M

14 CFR Part 27

[Docket No. 97–ASW–1; Special Condition 27–ASW–4]

Special Condition: McDonnell Douglas Helicopter Systems Model MD–600N Helicopter

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final special condition; request for comments.

SUMMARY: This special condition is issued for McDonnell Douglas Helicopter Systems (MDHS) Model MD–600N helicopter. This helicopter will have a novel or unusual design feature associated with the Full Authority Digital Engine Control (FADEC). The applicable airworthiness regulations do not contain appropriate safety standards to protect systems that perform critical functions from the effects of high-intensity radiated fields (HIRF). This special condition contains additional

safety standards that the Administrator considers necessary to ensure that critical functions of systems will be maintained when exposed to HIRF.

DATES: Effective January 29, 1997. Comments for inclusion in the Rules Docket must be received by April 29, 1997.

ADDRESSES: Comments may be mailed in duplicate to the Federal Aviation Administration (FAA), Office of the Assistant Chief Counsel, Attn: Rules Docket No. 97–ASW–1, Fort Worth, Texas 76193–0007, or delivered in duplicate to the Office of the Assistant Chief Counsel, 2601 Meacham Blvd., Fort Worth, Texas 76137. Comments must be marked Docket No. 97–ASW–1. Comments may be inspected in the Rules Docket weekdays, except Federal holidays, between 9 a.m. and 3 p.m.

FOR FURTHER INFORMATION CONTACT: Robert McCallister, FAA, Rotorcraft Standards Staff, Regulations Group, Fort Worth, Texas 76193–0110; telephone (817) 624–5121.

SUPPLEMENTARY INFORMATION: The FAA has determined that notice and opportunity for prior public comment hereon are impracticable because these procedures would significantly further delay issuance of the approval design and thus delay delivery of the affected helicopter. Reaching agreement on the certification basis has delayed issuance of this special condition. These notice and comment procedures are also considered unnecessary since the public has been previously provided with a substantial number of opportunities to comment on substantially identical special conditions, and their comments have been fully considered. Therefore, good cause exists for making this special condition effective upon issuance.

Comments Invited

Although this final special condition was not subject to notice and opportunity for prior public comment, comments are invited on this final special condition. Interested persons are invited to comment by submitting such written data, views, or arguments as they may desire. Communications should identify the regulatory docket number and be submitted in duplicate to the address specified under the caption **ADDRESSES.** All communications received on or before the closing date for comments will be considered. This special condition may be changed in light of 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. Persons wishing the FAA to acknowledge receipt of their comments submitted in response to this special condition must submit a self-addressed, stamped postcard on which the following statement is made: ''Comments to Docket No. 97–ASW–1.'' The postcard will be date and time stamped and returned to the commenter.

Background

On April 7, 1995, MDHS, located in Mesa, Arizona, made application to the FAA to amend Type Certificate (TC) H3WE to include the Model MD–600N helicopter.

Type Certification Basis

Based upon the criteria of 14 CFR part 21 (part 21), Subpart B, § 21.19, the FAA will approve design of the MD–600N model helicopter as an amendment to TC H3WE, and a new TC will not be required. The certification basis for the MD–600N will be part 27, as amended by Amendments 27–1 through 27–30, except as more specifically stated as follows:

Section 27.561 as amended through Amendment 24
Section 27.562 as amended through Amendment 25
Section 27.607 as amended through Amendment 3
Section 27.785 as amended through Amendment 20
Section 27.863 as amended through Amendment 16
Section 27.1325 as amended through Amendment 12

The Model MD–600N will use digital electronics in systems such as the FADEC, which make the rotorcraft vulnerable to HIRF. The existing airworthiness regulations do not contain adequate or appropriate safety standards for the protection of these systems from the effects of HIRF external to the helicopter; therefore, a special condition is required; reference FAA Policy Memorandums dated December 5, 1989, January 30, 1990, March 8, 1991, and July 29, 1992.

Special conditions may be issued and amended, as necessary, as a part of the type certification basis if the Administrator finds that the airworthiness standards designated in accordance with § 21.101(b)(2) do not contain adequate or appropriate safety standards because of novel or unusual design features of an aircraft or installation. Special conditions, as appropriate, are issued in accordance with § 11.49 and will become a part of the type certification basis, as provided by § 21.101(b)(2).

Special conditions are initially applicable to the model for which they are issued. Should the applicant apply for a supplemental type certificate (STC) to modify any other model included on the same TC 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).

Discussion

The MDHS Model MD–600N, at the time of application, incorporated one and possibly more electrical/electronic systems, such as FADEC, that will be performing functions critical to the continued safe flight and landing of the helicopter. FADEC is an electronic device that performs the functions of engine control during visual flight rules (VFR) and instrument flight rules (IFR) operations in instrument meteorological conditions. After the MD–600N design is finalized, MDHS will provide the FAA with a hazard analysis that will identify any other critical functions, required for continued safe flight and landing, performed by the electrical/electronic systems.

Recent advances in technology have given rise to the application in aircraft designs of advanced electrical and electronic systems that perform critical functions. These advanced systems are responsive to the transient effects of induced electrical current and voltage caused by HIRF incident on the external surface of the helicopter. These induced transient currents and voltages can degrade the performance of the electrical/electronic systems by damaging the components or by upsetting the systems' functions.

Furthermore, the electromagnetic environment has undergone a transformation not envisioned by the current application of the § 27.1309(a) requirement. Higher energy levels radiate from operational transmitters that are currently used for radar, radio, and television. Also, the number of transmitters has increased significantly.

Existing aircraft certification requirements are inappropriate in view of these technological advances. In addition, the FAA has received reports of some significant safety incidents and accidents involving military aircraft equipped with advanced electronic systems when they were exposed to electromagnetic radiation.

The combined effects of the technological advances in helicopter design and the changing environment have resulted in an increased level of vulnerability of the electrical/electronic

systems required for the continued safe flight and landing of the helicopter. Effective measures to protect these helicopters against the adverse effects of exposure to HIRF will be provided by the design and installation of these systems. The following primary factors contributed to the current conditions: (1) increased use of sensitive electronics that perform critical functions, (2) reduced electromagnetic shielding afforded helicopter systems by advanced technology airframe materials; (3) adverse service experience of military aircraft using these technologies, and (4) an increase in the number and power of radio frequency emitters and the expected increase in the future.

The FAA recognizes the need for aircraft certification standards to keep pace with the developments in technology and environment and, in 1986, initiated a high priority program to (1) determine and define the electromagnetic energy levels; (2) develop and describe guidance material for design, test, and analysis; and (3) prescribe and promulgate regulatory standards.

The FAA participated with industry and airworthiness authorities of other countries to develop internationally recognized standards for certification.

The FAA and airworthiness authorities of other countries have identified a level of HIRF environment that a helicopter could be exposed to during IFR operations. While the HIRF requirements are being finalized, the FAA is adopting special conditions for the certification of aircraft that employ electrical/electronic systems performing critical functions. The accepted maximum energy levels that civilian helicopter system installations must withstand for safe operations are based on surveys and analysis of existing radio frequency emitters. These external threat levels are believed to represent the worst-case exposure for a helicopter operating under IFR.

The specified HIRF environment is based on many critical assumptions. With the exception of takeoff and landing at an airport, one of these assumptions is that the aircraft would be not less than 500 feet above ground level (AGL). Helicopters operating under visual flight rules (VFR) routinely operate at less than 500 feet AGL and perform takeoffs and landings at locations other than controlled airports. Therefore, it would be expected that the HIRF environment experienced by a helicopter operating VFR may exceed the defined environment by 100 percent or more.

This special condition will require the systems that perform critical functions, as installed in aircraft, to meet certain standards based on either a defined HIRF environment or a fixed value using laboratory tests.

The applicant may demonstrate that the operation and operational capabilities of the installed electrical/electronic systems that perform critical functions are not adversely affected when the aircraft is exposed to the HIRF environment. The FAA has determined that the environment defined in Table I is acceptable for critical functions in helicopters operating at or above 500 feet AGL. For critical functions in helicopters operating at altitudes less than 500 feet AGL, additional considerations must be given.The applicant may demonstrate by a laboratory test that the electrical/electronic systems that perform critical functions withstand a peak electromagnetic field strength in a frequency range of 10 KHz to 18 GHz. If a laboratory test is used to show compliance with the HIRF requirements, no credit would be given for signal attenuation due to installation. A level of 100 v/m and further considerations, such as an alternate technology backup that is immune to HIRF, are appropriate for critical functions during IFR operations. A level of 200 v/m and further considerations, such as an alternate technology backup that is immune to HIRF, are more appropriate for critical functions during VFR operations.

For helicopters, the primary electronic flight displays are critical for IFR operations and a FADEC is an example of a critical functioning system for all operations (both IFR and VFR).

A preliminary hazard analysis must be performed by the applicant for approval by the FAA to identify electrical/electronic systems 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 helicopter. The systems identified by the hazard analysis that perform critical functions are the ones that are required to have HIRF protection.

A system may perform both critical and noncritical functions. Primary electronic flight display systems and their associated components perform critical functions such as attitude, altitude, and airspeed indication. HIRF requirements would only apply to the critical functions.

Compliance with HIRF requirements will be demonstrated by tests, analysis, models, similarity with existing systems, or a combination of these methods. Service experience alone will not be acceptable since such experience in normal flight operations may not include an exposure to the HIRF environmental condition. 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 concurrently exposed to the fields.

The modulation should be selected for the signal most likely to disrupt the operation of the system under test, based on its design characteristics. For example, flight control systems may be susceptible to 3 Hz square wave modulation while the video signals for electronic display systems may be susceptible to 400 Hz sinusoidal modulation. If the worst-case modulation is unknown or cannot be determined, default modulations may be used. Suggested default values are a 1 KHz sine wave with 80 percent depth of modulation in the frequency range from 10 KHz to 400 MHz and 1 KHz square wave with greater than 90 percent depth of modulation from 400 MHz to 18 GHz. For frequencies where the unmodulated signal would cause deviations from normal operation, several different modulating signals with various waveforms and frequencies should be applied.

Acceptable system performance would be attained by demonstrating that the critical function components of the system under consideration continue to perform their intended function during and after exposure to required electromagnetic fields. Deviations from system specification may be acceptable but must be independently assessed by the FAA on a case-by-case basis.

TABLE 1.—FIELD STRENGTH VOLTS/METER

Frequency	Peak	Average
10–100 KHz	50	50
100–500	60	60
500–2000	70	70
2–30 MHz	200	200
30–100	30	30
100–200	150	33
200–400	70	70
400–700	4020	935
700–1000	1700	170
1–2 GHz	5000	990
2–4	6680	840
4–6	6850	310
6–8	3600	670
8–12	3500	1270
12–18	3500	360
18–40	2100	750

As discussed above, this special condition would be applicable to the

Model MD600N helicopter, modified by MDHS. Should MDHS apply at a later date for a STC to modify any other model on TC H3WE to incorporate 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 unusual or novel design features on one series of helicopters. It is not a rule of general applicability and will affect only the manufacturer who applied to the FAA for approval of these features on the affected helicopters.

The substance of this special condition has been subjected to the notice and comment procedure in several prior special conditions and has been finalized without substantive change. It is unlikely that prior public comment would result in a significant change in the substance contained herein. For this reason, and because a delay would significantly affect the certification of the helicopters, which is imminent, the FAA has determined that prior public notice and comment are unnecessary and impracticable, and good cause exists for adopting this special condition immediately. Therefore, this special condition is being made effective upon issuance. The FAA is requesting comments to allow interested persons to submit views that may not have been submitted in response to prior opportunities for comment.

List of Subjects in 14 CFR Parts 21 and 27

Aircraft, Air transportation, Aviation safety, Rotorcraft, Safety.

The authority citation for this special condition is as follows:

Authority: 49 U.S.C. 1344, 1348(c), 1352, 1354(a), 1355, 1421 through 1431, 1502, 1651(b)(2); 42 U.S.C. 1857f-10, 4321 *et seq.*: E.O. 11541; 49 U.S.C. 106(g).

The Final Special Condition

Accordingly, pursuant to the authority delegated to me by the Administrator, the following special condition is issued as part of the supplemental type certification bases for the McDonnell Douglas Helicopter Systems Model MD–600N helicopter.

Protection for Electrical/Electronic Systems From High Intensity Radiated Fields

Each system that performs critical functions must be designed and installed to ensure that the operation and operational capabilities of these critical functions are not adversely affected when the helicopter is exposed to high intensity radiated fields external to the helicopter.

Issued in Fort Worth, Texas, on January 21, 1997.

Eric Bries,

Acting Manager, Rotorcraft Directorate Aircraft Certification Service.

[FR Doc. 97–2243 Filed 1–28–97; 8:45 am]

BILLING CODE 4910–13–P

14 CFR Part 39

[Docket No. 96–CE–38–AD; Amendment 39–9908; AD 97–03–02]

RIN 2120–AA64

Airworthiness Directives; Glasflugel Models H301 ''Libelle'', H301B ''Libelle'', Standard ''Libelle'', Standard Libelle 201B, Club Libelle 205, and Kestrel Sailplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that applies to Glasflugel Models H301 ''Libelle'', H301B ''Libelle'', Standard ''Libelle'', Standard Libelle 201B, Club Libelle 205, and Kestrel sailplanes. This AD requires measuring and adjusting the control surface weight and static moment, and inserting amendments into the Glasflugel Flight and Service Manual. This AD results from reports of considerable variation of the weight and static moment of the control surface on the affected sailplanes found during repair or repainting of the control surface. The actions specified by this AD are intended to prevent sailplane flutter because the weight and static moment of the control surface are not within certain limits, which could result in flutter and subsequent loss of control of the sailplane.

DATES: Effective March 21, 1997.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of March 21, 1997.

ADDRESSES: Service information that applies to this AD may be obtained from Glasflugel, c/o Hr. H. Streifeneder, Glasfaser-Flugzeug-Service GmbH, Hofener Weg, D–72582 Grabenstetten, Germany. This information may also be examined at the Federal Aviation Administration (FAA), Central Region, Office of the Assistant Chief Counsel, Attention: Rules Docket 96–CE–38–AD, Room 1558, 601 E. 12th Street, Kansas City, Missouri 64106; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Mr. J. Mike Kiesov, Project Officer, FAA, Small Airplane Directorate, 1201 Walnut, suite 900, Kansas City, Missouri 64106; telephone (816) 426–6932; facsimile (816) 426–2169.

SUPPLEMENTARY INFORMATION:

Events Leading to This AD

A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD that would apply to Glasflugel Models H301 ''Libelle'', H301B ''Libelle'', Standard ''Libelle'', Standard Libelle 201B, Club Libelle 205, and Kestrel sailplanes was published in the Federal Register on October 15, 1996 (61 FR 53683). The action proposed to require measuring and adjusting the control surface weight and static moment, and inserting the following amendments into the Glasflugel Flight and Service Manual, as applicable:

Sailplane models	Glasflugel Flight and Service Manual amendment page numbers
H301 Libelle and H301B Libelle.	pages 14a and 14b.
Standard Libelle	pages E14a and E14b.
Standard Libelle 201B	pages E15a and E15b.
Club Libelle 205	pages 42a and 42b.
Kestrel	pages 27a and 27b.

Accomplishment of the proposed action as specified in the notice of proposed rulemaking (NPRM) would be in accordance with the instructions in the above-referenced Glasflugel Flight and Service Manual amendments.

The NPRM resulted from reports of considerable variation of the weight and static moment of the control surface on the affected sailplanes found during repair or repainting of the control surface.

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were received on the proposed AD or the FAA's determination of the cost to the public.

The FAA's Determination

After careful review of all available information related to the subject presented above, the FAA has determined that air safety and the public interest require the adoption of the rule as proposed except for minor editorial corrections. The FAA has determined that these minor corrections will not change the meaning of the AD