Communications Avionics Systems to add an EFIS.

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 November 30, 2007.

Patrick R. Mullen,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. E7–23852 Filed 12–7–07; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 23

[Docket No. CE278, Special Condition 23–218–SC]

Special Conditions; ASPEN Avionics Inc. Model EFD 1000; Electronic Flight Instrument System (EFIS); Protection of Systems for High Intensity Radiated Fields (HIRF)

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final special conditions; request for comments.

SUMMARY: These special conditions are issued to ASPEN Avionics Inc., for a Supplemental Type Certificate for the models listed under the heading ''Type Certification Basis'' under the Approved Model List Process. These airplanes 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 Model EFD 1000 manufactured by ASPEN Avionics Inc., 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 November 30, 2007. Comments must be received on or before January 9, 2008.

ADDRESSES: Comments may be mailed in duplicate to: Federal Aviation Administration, Regional Counsel, ACE–7, Attention: Rules Docket Clerk, Docket No. CE278, Room 506, 901 Locust, Kansas City, Missouri 64106. All comments must be marked: Docket No. CE278. 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: Jim Brady, Aerospace Engineer, Standards Office (ACE–111), Small Airplane Directorate, Aircraft Certification Service, Federal Aviation Administration, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone (816) 329–4132.

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 Docket No. 278.'' The postcard will be date stamped and returned to the commenter.

Background

On June 26, 2007, ASPEN Avionics Inc., made an application to the FAA for a new Supplemental Type Certificate under the Approved Model List Process for the project airplanes. 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, ASPEN Avionics Inc., must show that the affected airplane models, as changed, continue to meet the applicable provisions, of the regulations incorporated by reference in Type Certificate Numbers listed below 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'' and can be found in the Type Certificate Numbers listed below. In addition, the type certification basis of airplane models that embody this modification will include section § 23.1301 of Amendment 23–20; §§ 23.1309, 23.1311, and 23.1321 of Amendment 23–49; and § 23.1322 of Amendment 23–43; exemptions, if any; and the special conditions adopted by this rulemaking action.

Aircraft make	Aircraft model(s)	Type certificate No.	Certification basis	Class 1 or 2
Aermacchi S.p.A (Siai Marchetti) ..	S.205–18/F, S.205–18/R, S.205–20/F, S.205–20/R, S.205–22/R, S.208, S.208A.	A9EU	FAR 23	1
	F.260, F.260B, F.260C, F.260D, F.260E, F.260F	A10EU	CAR 3	1
Aero Commander (Dynac Aerospace Corp).	10, 10A, 100, 100A, 100–180	1A21	CAR 3	1

Aircraft make	Aircraft model(s)	Type certificate No.	Certification basis	Class 1 or 2
Aeronautica Macchi S.p.A (Macchi).	AL 60, AL 60–B, AL 60–F5, AL 60–C5	7A12	CAR 3	1
	AM–3	A19EU	FAR 23	1
Aerostar Aircraft Corp. (Piper Aerostar).	360, 400	A11WE	FAR 23	2
American Champion	402	A3CE	CAR 3	2
	8KCAB, 8GCBC	A21CE	FAR 23	1
Aviat (Sky International)	A–1, A–1A, A–1B	A22NM	FAR 23	1
	S–1S, S–1T, S–2, S–2A, S–2B, S–2C, S–2S	A8SO	FAR 23	1
Bellanca (Alexandria Aircraft LLC)	14–19, 14–19–2, 14–19–3, 14–19–3A,17–30, 17–31, 17–31TC.	1A3	CAR 3	1
	17–30A, 17–31A, 17–31ATC	A18CE	FAR 23	1
Cessna	120, 140	A–768	CAR 3	1
	140A	5A2	CAR 3	1
	150, 150A, 150B, 150C, 150D, 150E, 150F, 150G,150H, 150J, 150K, 150L, 150M, A150K, A150L, A150M, 152, A152.	3A19	CAR 3, FAR 23	1
	170, 170A, 170B	A–799	CAR 3	1
	172, 172A, 172B, 172C, 172D, 172E, 172F, 172G,172H, 172I, 172K, 172L, 172M, 172N, 172P, 172Q,172R, 172S.	3A12	CAR 3, FAR 23	1
	172RG, P172D, R172E, R172F, R172G, R172H, R172J, R172K, 175, 175A, 175B, 175C.	3A17	CAR 3	1
	177, 177A, 177B	A13CE	FAR 23	1
	177RG	A20CE	FAR 23	1
	180, 180A,180B, 180C, 180D, 180E, 180F, 180G, 180H, 180J, 180K.	5A6	CAR 3	1
	182, 182A, 182B, 182C, 182D, 182E, 182F, 182G, 182H, 182J, 182K, 182L, 182M, 182N, 182P, 182Q, 182R, 182S, 182T, R182, T182, TR182, T182T.	3A13	CAR 3, FAR 23	1
	185, 185A, 185B, 185C, 185D, 185E, A185E, A185F	3A24	CAR 3	1
	190, 195, 195A, 195B	A–790	CAR 3	1
	210, 210A, 210B, 210C, 210D, 210E, 210F, T210F, 210G, T210G, 210H, T210H, 210J, T210J, 210K, T210K, 210L, T210L, 210M, T210M, 210N, P210N, T210N, 210R, P210R, T210R, 210–5, 210–5A.	3A21	CAR 3	1
	206, P206, P206A, P206B, P206C, P206D, P206E, TP206A, TP206B, TP206C, TP206D, TP206E, U206, U206A, U206B, U206C, U206D, U206E, U206F, U206G, TU206A, TU206B, TU206C, TU206D, TU206E, TU206F, TU206G, 206H, T206H.	A4CE	CAR 3	1
	207, 207A, T207, T207A	A16CE	FAR 23	1
	T–303 (Crusader)	A34CE	FAR 23	2
	310, 310A (USAF U–3A), 310B, 310C, 310D, 310E (USAF U–3B), 310F, 310G, 310H, E310H, 310I, 310J, 310J–1, E310J, 310K, 310L, 310N, 310P, T310P, 310Q, T310Q, 310R, T310R.	3A10		2
	320, 320A, 320B, 320C, 320D, 320E, 320F, 320–1, 335, 340, 340A.	3A25	CAR 3	2
	336	A2CE	CAR 3	2
	337, 337A , 337B, T337B, 337C, 337E, T337E, T337C, 337D, T337D, M337B, 337F, T337F, 337G, T337G, 337H, P337H, T337H, T337H–SP.	A6CE	CAR 3, FAR 23	2
Cirrus Design Corp	SR20, SR22	A00009CH	FAR 23	1
Commander Aircraft Co	112, 112TC, 112B, 112TCA, 114, 114A, 114B, 114TC	A12SO	CAR 3	1
Cub Crafters	CC18–180, CC18–180A	A00006SE	FAR 23	1
DeHavilland/Bombardier	DHC–2 Mark I, DHC–2 Mark II, DHC–2 Mark III	A–806	CAR 3	1
	DH.C1, 21, 22, 22A	A44EU	FAR 21	1
Diamond Aircraft Company	DA 20–A1, DA20–C1	TA4CH	FAR 23	1
	DA 40	A47CE	FAR 23	1
Extra (Extra Flugzeugbau GmbH)	EA300, EA300L, EA300S, EA300/200	A67EU	FAR 23	1
	EA–400	A43CE	FAR 23	1
Found Aircraft Development, Inc	FBA–2C, FBA–2C1 (Bush Hawk), FBA–2C2 (Bush Hawk XP).	A7EA	CAR 3, FAR 23	1
Gulfstream American Corporation	G44, G44A, SCAN Type 30	A–734	CAR 4a	2
Grob-Werke	G115, G115A, G115B, G115C, G115C2, G115D, G115D2, G115EG.	A57EU	FAR 23	1
	G120A	A49CE	FAR 23	1
Grumman American (Tiger Aircraft LLC).	AA–1, AA–1A, AA–1B, AA–1C	A11EA	FAR 23	1
	AA–5, AA–5A, AA–5B, AG–5B	A16EA	FAR 23	1
Hawker Beechcraft	35–33, 35–A33, 35–B33, 35–C33, 35–C33A, E33, E33A, E33C, F33, F33A, F33C, G33, H35, J35, K35, M35, N35, P35, S35, V35, V35A, V35B, 36, A36, A36TC, B36TC.	3A15	CAR 3	1

Aircraft make	Aircraft model(s)	Type certificate No.	Certification basis	Class 1 or 2
	35, A35, B35, C35, D35, E35, F35, G35, 35R	A–777	CAR 3	1
	76	A29CE	FAR 23	1
	95, B95, B95A, D95A, E95, 95–55, 95–A55, 95–B55, 95–B55A, 95–B55B (T–42A), 95–C55, 95–C55A, D55, D55A, E55, E55A, 56TC, A56TC, 58, 58A.	3A16	CAR 3, FAR 23	2
	19A, B19, M19A, 23, A23, A23A, A23–19, A23–24, B23, C23, A24, A24R, B24R, C24R.	A1CE	CAR 3	1
	50, B50, C50, D50, D50A, D50B, D50C, D50E, D50E–5990, E50, F50, G50, H50, J50.	5A4	CAR 3	2
	45 (YT–34), A45 (T–34A) or (B–45), D45 (T–34B)	5A3	CAR 3	1
Helio (Alliance Aircraft Group, LLC).	H–250, H–295, HT–295, H391, H391B, H–395, H–395A, H–700, H–800.	1A8	CAR 3	1
	HST–550, HST–550A	A4EA	CAR 3	1
	500	A2EA	CAR 3	2
King's Engineering Fellowship (The).	Model 44	A2WI	FAR 23	2
	4500–300, 4500–300 Series II	A17CE	FAR 23	2
Lake/Revo (Global Amphibians LLC).	Colonial C–1, Colonial C–2, Lake LA–4, Lake LA–4A, Lake LA–4P, Lake LA–4–200, Lake Model 250.	1A13	CAR 3	1
Lancair (Columbia Aircraft)	LC40–550FG, LC41–550FG, LC42–550FG	A00003SE	FAR 23	1
Liberty Aerospace Incorporated	XL–2	A00008DE	FAR 23	1
Lockheed Aircraft Corporation	402–2	2A11	CAR 3	2
Luscombe Aircraft Corporation	11A, 11E	A–804	CAR 3	1
Maule	Bee Dee M–4, M–4, M–4C, M–4S, M–4T, M–4–180C, M–4–180S, M–4–180T, M–4–210, M–4–210C, M–4–210S, M–4–210T, M–4–220, M–4–220C, M–4–220S, M–4–220T, M–5–180C, M–5–200, M–5–210C, M–5–210TC, M–5–220C, M–5–235C, M–6–180, M–6–235, M–7–235, MX–7–235, MX–7–180, MX–7–420, MXT–7–180, MT–7–235, M–8–235, MX–7–160, MXT–7–160, MX–7–180A, MXT–7–180A, MX–7–180B, M–7–235B, M–7–235A, M–7–235C, MX–7–180C, M–7–260, MT–7–260, M–7–260C, M–7–420AC, MX–7–160C, MX–7–180AC, M–7–420A, MT–7–420.	3A23	CAR 3	1
Mooney Aircraft Corp	M20, M20A, M20B, M20C, M20D, M20E, M20F, M20G, M20J, M20K, M20L, M20M, M20R, M20S.	2A3	CAR 3	1
	M22	A6SW	CAR 3	1
Moravan (Moravan a.s.)	ZLIN 562L	A30EU	FAR 23	1
	ZLIN Z–242L, Z–143L	A76EU	FAR 23	1
Navion Aircraft Company, Ltd. (Navion).	Navion, Navion A, Navion B, Navion D, Navion E, Navion F, Navion G, Navion H.	A–782	CAR 3	1
OMF (Ostmeck. Flugzeugbau GmbH).	OMF–100–160	A46CE	FAR 23	1
Partenavia (Vulcanair S.p.A.)	P68, P68B, P68C, P68C–TC, P68 "Observer," P68 "Observer 2," P68 TC "Observer", AP68TP 300 "Spartacus", AP68TP 600 "Viator", VA300.	A31EU	FAR 23	2
Pilatus Aircraft Limited	PC–6, PC–6–H1, PC–6–H2, PC–6/350, PC–6/350–H1, PC–6/350–H2, PC–6/A, PC–6/A–H1, PC–6/A–H2, PC–6/B–H2, PC–6/B1–H2, PC–6/B2–H2, PC–6/B2–H4, PC–6/C–H2, PC–6/C1–H2.	7A15	CAR 3	1
	PC–7	A50EU	FAR 23	1
Piper (New Piper)	PA–12, PA–12S	A–780	CAR 3	1
	PA–18, PA–18S, PA–18–105, PA–18S–105, PA–18A, PA–18–125, PA–18S–125, PA–18AS–125, PA–18–135, PA–18A–135, PA–18S–135, PA–18AS–135, PA–18–150, PA–18A–150, PA–18S–150, PA–18AS–150, PA–19, PA19S.	1A2	CAR 3	1
	PA–20, PA–20S, PA–20–115, PA–20S–115, PA–20–135, PA–20S–135.	1A4	CAR 3	1
	PA–22, PA–22–108, PA–22–135, PA–22S–135, PA–22–150, PA–22S–150, PA–22–160, PA–22S–160.	1A6	CAR 3	1
	PA–23, PA–23–160, PA–23–235, PA–23–250	1A10	CAR 3	2
	PA–24, PA–24–250 PA–24–260, PA–24–400	1A15	CAR 3	1
	PA–28–140, PA–28–150, PA–28–151, PA–28–160, PA–28–161, PA–28–180, PA–28–235, PA–28S–160, PA–28–161, PA–28–181, PA–28–235, PA–28S–160, PA–28R–201, PA–28R–201T, PA–28RT–201, PA–28RT–201T, PA–28–201T, PA–28–236.	2A13	CAR 3	1
	PA–30, PA–39, PA–40	A1EA	CAR 3	2
	PA–32–260, PA–32–300, PA–32S–300, PA–32R–300, PA–32RT–300, PA–32RT–300T, PA–32R–301(SP), PA–32R–301(HP), PA–32R–301T, PA–32–301, PA–32–301T, PA–32–301FT, PA32–301XTC.	A3SO	CAR 3	1
	PA–34–200, PA–34–200T, PA–34–220T	A7SO	CAR 3	2

Aircraft make	Aircraft model(s)	Type certificate No.	Certification basis	Class 1 or 2
	PA–44–180, PA–44–180T	A19SO	FAR 23	1
	PA–46–310P, PA–46–350P, PA–46–500TP	A25SO	FAR 23	1
Prop-Jets, Inc	200, 200A, 200B, 200C, 200D, 400	3A18	CAR 3	1
PZL (Panstwowe Zaklady Lotnicze).	PZL–104 WILGA 80, PZL–104M WILGA 2000, PZL–WARSZAWA.	A55EU	FAR 23	1
	PZL–KOLIBER 150A, PZL–KOLIBER 160A,	A69EU	FAR 23	1
PZL (PZL Mielec)	PZL M20 03	A68EU	FAR 23	2
	PZL M26 01	A44CE	FAR 23	1
Slingsby Aviation Ltd	T67M260, T67M260–T3A	A73EU	FAR 23	1
SOCATA (SOCATA Groupe Aerospatiale).	TB9, TB10, TB20, TB21, TB200	A51EU	FAR 23	1
	100S, 150ST, 150T, 235E, 235C MS880B, MS885, MS894A, MS893A, MS892A–150, MS892E–150, MS893E, MS894E.	7A14	CAR 3	1
SOCATA (SOCATA Groupe Aerospatiale).	GA–7 (Cougar)	A17SO	FAR 23	2
Stinson (Univair Aircraft Corporation).	108, 108–1, 108–2, 108–3, 108–5	A–767	CAR 3	1
Twin Commander Aircraft Corporation.	500, 500–A, 500–B, 500–U, 500–S, 520, 560, 560–A, 560–E.	ATC 542	CAR 3	1
WACO Aircraft Company	WACO YMF	ATC 542	Aero 7A	1
Zenair Ltd	CH2000	TA5CH	FAR 23	1

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.

Special conditions, as appropriate, as defined in § 11.19, are issued in accordance with § 11.38 after public notice 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 the applicant apply 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, the special conditions would also apply to the other model under the provisions of § 21.101.

Novel or Unusual Design Features

ASPEN Avionics 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, 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 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 one modification to the aircraft models listed under the heading ''Type Certification Basis.'' Should ASPEN Avionics Inc., apply at a later date to extend this modification to include additional airplane models, the special conditions would apply to that model as well under the provisions of § 21.101.

Conclusion

This action affects only certain novel or unusual design features on one modification to the aircraft models listed under the heading ''Type Certification Basis.'' 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 21.16 and 21.101; and 14 CFR 11.38 and 11.19.

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 EFD 1000 EFIS manufactured by ASPEN Avionics Inc.

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 November 30, 2007.

Patrick R. Mullen,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. E7–23835 Filed 12–7–07; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2007–28943; Directorate Identifier 2007–NM–011–AD; Amendment 39–15295; AD 2007–25–13]

RIN 2120–AA64

Airworthiness Directives; Boeing Model 767–300F Series Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Boeing Model 767–300F series airplanes. This AD requires replacing the rotomolded duct(s) of the mix manifold system with new duct(s). This AD results from a report of failures of the duct joint seal of the mix manifold system. We are issuing this AD to prevent air conditioning leakage into the mix manifold bay. Such leakage could decrease the air flow to the flight compartment and main cabin or could allow smoke into the flight compartment in the event of a fire in the main cabin or forward cargo compartment.

DATES: This AD becomes effective January 14, 2008.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of January 14, 2008.

ADDRESSES: For service information identified in this AD, contact Boeing Commercial Airplanes, P.O. Box 3707, Seattle, Washington 98124–2207.

Examining the AD Docket

You may examine the AD docket on the Internet at *http://www.regulations.gov;* or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (telephone 800–647–5527) is the Document Management Facility, U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue, SE., Washington, DC 20590.

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