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## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 25

[Docket No. NM150; Special Conditions No. 25-140-SC]

#### Special Conditions: Bombardier Inc., Model BD-700-1A10 Global Express; 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 Bombardier Model BD-700-1A10 airplanes manufactured by Bombardier. These airplanes will have novel and unusual design features when compared to the state of technology envisioned in the airworthiness standards for transport category airplanes. These 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 August 14, 1998. Comments must be received on or before September 23, 1998.

**ADDRESSES:** Comments on these special conditions may be mailed in duplicate to: Federal Aviation Administration, Transport Airplane Directorate, Regulations Branch, ANM-114, 1601 Lind Avenue SW., Renton, Washington, 98055-4056; Attn: Docket No. NM150, or delivered in duplicate to the same address. Comments may be inspected in the Docket weekdays, except Federal holidays, between 7:30 a.m. and 4:00 p.m.

**FOR FURTHER INFORMATION CONTACT:** Greg Dunn, FAA, Standardization Branch, ANM-113, Transport Airplane Directorate, Aircraft Certification

Service, 1601 Lind Avenue SW., Renton, Washington, 98055-4056; telephone (425) 227-2799; 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 regulatory docket and special condition 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 submitted 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 request must submit with those comments a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. NM150." The postcard will be date stamped and returned to the commenter.

##### Background

On January 27, 1994, Bombardier Inc., submitted an application to Transport Canada for FAA type certification (TC) of the Bombardier Inc. Model BD-700-1A10 Global Express airplane. The BD-700-1A10 is a long range, transport category airplane powered by two BMW/Rolls Royce BR710 turbo-fan engines. The airplane's basic use is as a business jet with two-pilot cockpit, a rest area for a third pilot and flight attendant, and interior/seating arrangements for up to nineteen passengers, for a total occupancy of twenty-three persons. The overall length of the BD-700-1A10 is 99 feet, the height is 24 feet, and the wing span is 92 feet. The airplane has a maximum takeoff weight of 91,250 pounds, a maximum landing weight of 78,600 pounds, a maximum operating altitude of 51,000 feet, and a design range of

6500 nautical miles at Mach 0.8 or 6330 nautical miles at Mach 0.85.

##### Type Certification Basis

Under the provisions of 14 CFR § 21.17, Bombardier must show that the BD-700-1A10 Global Express meets the applicable provisions of part 25, effective February 1, 1965, as amended by Amendments 25-1 through 25-79. Subsequent to the January 27, 1994, date of application for type certification, Bombardier elected to comply with those sections of part 25 amended by Amendments 25-80 through 86, 25-88, 25-90, 25-91, and other sections that are not relevant to these special conditions. In addition, the certification basis for the BD-700-1A10 includes part 34, effective September 10, 1990, plus any amendments in effect at the time of certification; and part 36, effective December 1, 1969, as amended by Amendment 36-1 through the amendment in effect at the time of certification. These special conditions will form an additional part of the type certification basis. The certification basis may also include other special conditions and exemptions that are not relevant to these special conditions.

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 BD-700-1A10 Global Express because of a novel or unusual design feature, special conditions are prescribed under the provisions of § 21.16 to establish a level of safety equivalent to that established in the regulations.

Special conditions, as appropriate, are issued in accordance with § 11.49 of the FAR after public notice, as required by §§ 11.28 and 11.29(b), and become part of the type certification basis in accordance with § 21.17(a)(2).

Special conditions are initially applicable to the model for which they are issued. Should the type certificate for that model be amended later to include any other model that incorporates the same novel or unusual design feature, the special conditions would also apply to the other model under the provisions of § 21.101(a)(1).

##### Novel or Unusual Design Features

The Bombardier BD-700-1A10 airplane will utilize electrical and electronic systems, such as electronic displays (Honeywell Primus 2000) and

Full Authority Digital Engine Controls (Rosec) that perform critical functions. The disruption of signals to these systems could result in loss of critical flight systems or misleading information being presented to the pilot.

#### Discussion

There is no specific regulation that addresses protection requirements for electrical and electronic systems from high intensity radiated fields (HIRF). Increased power levels from ground-based radio transmitters, and the growing use of sensitive electrical and electronic 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 Bombardier BD-700-1A10, which require that new electrical and electronic systems 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 digital avionics 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 2 below:

1. A minimum threat of 100 volts per meter peak 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.

Frequency	Field Strength (volts per meter)	
	Peak	Average
10 KHz—100 KHz	50	50
100 KHz—500 KHz	60	60
500 KHz—2 MHz	70	70
2 MHz—30 MHz	200	200
30 MHz—100 MHz	30	30
100 MHz—200 MHz	150	33
200 MHz—400 MHz	70	70
400 MHz—700 MHz	4020	935
700 MHz—1 GHz	1700	170
1 GHz—2 GHz	5000	990
2 GHz—4 GHz	6680	840
4 GHz—6 GHz	6850	310
6 GHz—8 GHz	3600	670
8 GHz—12 GHz	3500	1270
12 GHz—18 GHz	3500	360
18 GHz—40 GHz	2100	750

The threat levels identified in the above table differ in some minor respects from those published previously for other airplanes. They are considered appropriate, however, for the Bombardier BD-700-1A10 in view of its intended use.

#### Applicability

As discussed above, these special conditions are applicable to BD-700-1A10 airplanes manufactured by Bombardier. Should Bombardier apply at a later date for a change to the type certificate to include another model incorporating the same novel or unusual design feature, the special conditions would apply to that model as well under the provisions of § 21.101(a)(1).

#### Conclusion

This action affects only certain design features on Bombardier BD-700-1A10 airplanes manufactured by Bombardier. 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.

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 Bombardier BD-700-1A10 is imminent, the FAA finds that good cause exists to make these special conditions effective upon issuance.

The substance of the special conditions has been subjected to the

notice and comment procedure 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 immediately. Therefore, these special conditions are 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 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 BD-700-1A10 airplanes manufactured by Bombardier.

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 August 14, 1998.

**John J. Hickey,**

Acting Manager, Transport Airplane Directorate Aircraft Certification Service, ANM-100.

[FR Doc. 98-22642 Filed 8-21-98; 8:45 am]

BILLING CODE 4910-13-P

**DEPARTMENT OF ENERGY****Federal Energy Regulatory Commission****18 CFR Part 381****[Docket No. RM98-15-000]****Annual Update of Filing Fees**

August 17, 1998.

**AGENCY:** Federal Energy Regulatory Commission.**ACTION:** Final rule; annual update of Commission filing fees.

**SUMMARY:** In accordance with § 381.104 of the Commission's regulations, the Commission issues this update of its filing fees. This notice provides the yearly update using data in the Commission's Payroll Utilization Reporting System to calculate the new fees. The purpose of updating is to adjust the fees on the basis of the Commission's costs for Fiscal Year 1997.

**EFFECTIVE DATE:** September 23, 1998.

**FOR FURTHER INFORMATION CONTACT:** Kelly Williams, Office of the Executive Director and Chief Financial Officer, Federal Energy Regulatory Commission, 888 First Street, NE, Room 42-65, Washington, DC 20426, 202-219-2896.

**SUPPLEMENTARY INFORMATION:** In addition to publishing the full text of this document in the **Federal Register**, the Commission also provides all interested persons an opportunity to inspect or copy the contents of this document during normal business hours in the Public Reference Room at 888 First Street, NE, Room 2A, Washington, DC 20426.

The Commission Issuance Posting System (CIPS), an electronic bulletin board service, provides access to the texts of formal documents issued by the Commission. CIPS can be accessed via Internet through FERC's Homepage (<http://www.ferc.fed.us>) using the CIPS link or the Energy Information Online icon. The full text of this document will be available on CIPS in ASCII and WordPerfect 6.1 format. CIPS is also available through the Commission's electronic bulletin board service at no charge to the user and may be accessed

using a personal computer with a modem by dialing 202-208-1397, if dialing locally, or 1-800-856-3920, if dialing long distance. To access CIPS, set your communications software to 19200, 14400, 12000, 9600, 7200, 4800, 2400 or 1200 bps, full duplex, no parity, 8 data bits, and 1 stop bit. User assistance is available at 202-208-2474 or by E-mail to [CipsMaster@FERC.fed.us](mailto:CipsMaster@FERC.fed.us).

This document is also available through the Commission's Records and Information Management System (RIMS), an electronic storage and retrieval system of documents submitted to and issued by the Commission after November 16, 1981. Documents from November 1995 to the present can be viewed and printed. RIMS is available in the Public Reference Room or remotely via Internet through FERC's Homepage using the RIMS link or the Energy Information Online icon. User assistance is available at 202-208-2222, or by E-mail to [RimsMaster@FERC.fed.us](mailto:RimsMaster@FERC.fed.us).

Finally, the complete text on diskette in WordPerfect format may be purchased from the Commission's copy contractor, La Dorn Systems Corporation, also located in the Public Reference Room at 888 First Street, NE, Washington, DC 20426.

**Annual Update of Filing Fees in Part 381**

The Federal Energy Regulatory Commission (Commission) is issuing this notice to update filing fees that the Commission assesses for specific services and benefits provided to identifiable beneficiaries. Pursuant to § 381.104 of the Commission's regulations, the Commission is establishing updated fees on the basis of the Commission's Fiscal Year 1997 costs. The adjusted fees announced in this notice are effective September 23, 1998.

The new fee schedule is as follows:

Fees Applicable to the Natural Gas Policy Act:	
1. Petitions for rate approval pursuant to 18 CFR 284.123(b)(2). [18 CFR 381.403] .....	\$7,140
Fees Applicable to General Activities:	
1. Petition for issuance of a declaratory order (except under Part I of the Federal Power Act). [18 CFR 381.302(a)] .....	14,360

2. Review of a Department of Energy remedial order:	
Amount in controversy:	
\$0-9,999. [18 CFR 381.303(b)] ..	100
\$10,000-29,999. [18 CFR 381.303(b)] .....	600
\$30,000 or more. [18 CFR 381.303(a)] .....	20,960
3. Review of a Department of Energy denial of adjustment:	
Amount in controversy:	
\$0-9,999. [18 CFR 381.304(b)] ..	100
\$10,000-29,999. [18 CFR 381.304(b)] .....	600
\$30,000 or more. [18 CFR 381.304(a)] .....	10,990
4. Written legal interpretations by the Office of General Counsel. [18 CFR 381.305(a)] .....	
	4,120
Fees Applicable to Natural Gas Pipelines:	
1. Pipeline certificate applications pursuant to 18 CFR 284.224. [18 CFR 381.207(b)] .....	
	1,000
Fees Applicable to Cogenerators and Small Power Producers:	
1. Certification of qualifying status as a small power production facility. [18 CFR 381.505(a)] .....	
	12,340
2. Certification of qualifying status as a cogeneration facility. [18 CFR 381.505(a)] .....	
	13,970
3. Applications for exempt wholesale generator status. [18 CFR 381.801] .....	
	1,620

**List of Subjects in 18 CFR Part 381**

Electric power plants, Electric utilities, Natural gas, Reporting and recordkeeping requirements.

**Linwood A. Watson, Jr.,**

*Acting Secretary.*

In consideration of the foregoing, the Commission amends Part 381, Chapter I, Title 18, *Code of Federal Regulations*, as set forth below.

**PART 381—FEES**

1. The authority citation for Part 381 continues to read as follows:

**Authority:** 15 U.S.C. 717-717w; 16 U.S.C. 791-828c, 2601-2645; 31 U.S.C. 9701; 42 U.S.C. 7101-7352; 49 U.S.C. 60502; 49 App. U.S.C. 1-85.

**§ 381.302 [Amended]**

2. In § 381.302, paragraph (a) is amended by removing "\$ 13,910" and inserting "\$ 14,360" in its place.

**§ 381.303 [Amended]**

3. In § 381.303, paragraph (a) is amended by removing "\$ 20,300" and inserting "\$ 20,960" in its place.