

Dated: June 3, 2003.

**John D. Hawke, Jr.,**

*Comptroller of the Currency.*

By order of the Board of Governors of the Federal Reserve System, June 9, 2003.

**Jennifer J. Johnson,**

*Secretary of the Board.*

By order of the Board of Directors.

Federal Deposit Insurance Corporation.

Dated in Washington, DC, this 10 day of June, 2003.

**Robert E. Feldman,**

*Executive Secretary.*

Dated: May 29, 2003.

**James E. Gilleran,**

*Director, Office of Thrift Supervision.*

[FR Doc. 03-15088 Filed 6-13-03; 8:45 am]

BILLING CODE 4810-33, 6210-01, 6714-01, 6720-01-P

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 25

[Docket No. NM249; Special Conditions No. 25-03-05-SC]

#### Special Conditions: Embraer Model ERJ-170 Series Airplanes; Electronic Flight Controls (Command Signal Integrity)

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed special conditions.

**SUMMARY:** This notice proposes special conditions for the Embraer Model ERJ-170 series airplanes. These airplanes will have novel or unusual design features when compared to the state of technology envisioned in the airworthiness standards for transport category airplanes. These design features are associated with electronic flight control systems. The applicable airworthiness regulations do not contain adequate or appropriate safety standards for these design features. These proposed 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. Additional special conditions will be issued for this and other novel or unusual design features of Embraer Model 170 series airplanes.

**DATES:** Comments must be received on or before July 16, 2003.

**ADDRESSES:** Comments on this proposal may be mailed in duplicate to: Federal Aviation Administration, Transport Airplane Directorate, Attention: Rules

Docket (ANM-113), Docket No. NM249, 1601 Lind Avenue SW., Renton, Washington 98055-4056; or delivered in duplicate to the Transport Airplane Directorate at the above address. All comments must be marked: Docket No. NM249. 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:** Tom Groves, FAA, International Branch, ANM-116, Transport Airplane Directorate, Aircraft Certification Service, 1601 Lind Avenue SW., Renton, Washington 98055-4056; telephone (425) 227-1503; facsimile (425) 227-1149; e-mail [tom.groves@faa.gov](mailto:tom.groves@faa.gov).

#### SUPPLEMENTARY INFORMATION:

##### Comments Invited

The FAA invites interested persons to participate in this rulemaking by submitting written comments, data, or views. 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 concerning these proposed special conditions. The docket is available for public inspection 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 notice 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 the proposed special conditions in light of the comments we receive.

If you want the FAA to acknowledge receipt of your comments on this proposal, 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 May 20, 1999, Embraer applied for a type certificate for its new Model ERJ-170 airplane. Two basic versions of the Model ERJ-170 are included in the application. The ERJ-170-100 airplane is a 69-78 passenger, twin-engine

regional jet with a maximum takeoff weight of 81,240 pounds. The ERJ-170-200 is a derivative with a lengthened fuselage. Passenger capacity for the ERJ-170-200 is increased to 86, and maximum takeoff weight is increased to 85,960 pounds.

##### Type Certification Basis

Under the provisions of 14 CFR 21.17, Embraer must show that the Model ERJ-170 series airplanes meet the applicable provisions of 14 CFR part 25, as amended by Amendments 25-1 through 25-98.

If the Administrator finds that the applicable airworthiness regulations (*i.e.*, part 25, as amended) do not contain adequate or appropriate safety standards for Embraer Model ERJ-170 series airplanes because of novel or unusual design features, special conditions are prescribed under the provisions of § 21.16.

In addition to the applicable airworthiness regulations and special conditions, Embraer Model ERJ-170 series airplanes 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, and the FAA must issue a finding of regulatory adequacy pursuant to § 611 of Public Law 93-574, the "Noise Control Act of 1972."

Special conditions, as defined in 14 CFR 11.19, are issued in accordance with § 11.38 and become part of the type certification basis in accordance with § 21.17(a)(2), Amendment 21-69, effective September 16, 1991.

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 or should any other model already included on the same type certificate be modified to incorporate the same novel or unusual design features, the special conditions would also apply to the other model under the provisions of § 21.101(a)(1), Amendment 21-69, effective September 16, 1991.

##### Novel or Unusual Design Features

The ERJ-170 airplane will use fly-by-wire (FBW) technology as a means of sending command and control signals to the control surface actuators of the rudder, rudder trim, elevator, spoilers, horizontal stabilizer, and auto speedbrake. The ailerons will be controlled by a traditional cable linkage to the hydraulic actuators.

The ERJ-170 FBW flight control systems provide two modes of operation, direct and normal. Direct mode provides an analog link between pilot commands and control surfaces. In direct mode, flight control transducers send signals to Actuator Control Electronics units (ACE). The ACE sends analog command and control signals to the Power Control Units (PCU), which move the control surface actuators of the rudder, rudder trim, elevator, spoilers, horizontal stabilizer, and auto speedbrake.

In normal mode, the rudder, elevator and spoiler command-to-surface gain schedules are tailored to particular flight conditions to provide improved control characteristics. These gains are calculated digitally in the Flight Control Module (FCM) and supplement the direct mode commands provided by the ACEs.

In the ERJ-170 FBW design being presented, command and control of the airplane's aerodynamic control surfaces will be achieved by electronic interfaces. These interfaces involve not only direct commands to the PCU but all the necessary feedback sensor signals. A successful demonstration of signal integrity must include all the elements which contribute to the command and control signals to the control surface closed loop system (CSCL). The CSCL may include the following:

- (1) The computing components and wiring;
- (2) The input components, such as column position sensors;
- (3) Feedback components, such as control surface position, inertial reference, and air data sensors; and,
- (4) Actuation components and their structural mounting components.

A system evaluation that includes all the inputs to and elements of the CSCL in an integrated environment (including signals that could disturb the system) is necessary to ensure appropriate system robustness throughout the flight envelope.

For the purpose of this proposed special condition, the control surface closed loop system does not include pilot input to the flight control system. Pilot in the loop control inputs and the associated handling requirements are adequately covered by existing regulations, including regulations in subpart B as well as §§ 25.671 and 25.672.

The signal paths within the control surface closed loop system can be susceptible to interference from electromagnetic and electrostatic sources within the integrated systems environment of the aircraft as well as

external causes, such as HIRF and lightning (not considered in this special condition), which could modify the command and control signals.

The effects of interference sources within the system may include, but are not restricted to, the following:

- Loss of data bits,
- Unwanted transients in the power supply source,
- Disruption of normal computer operations,
- Misbehavior of signals by parallel computers (e.g., redundancy management),
- Adverse effects caused by transport lag, and
- Any other cause that may alter the command and control signals.

For those reasons, special design measures and laboratory tests intended to validate these designs will be required to demonstrate the integrity of the FBW Flight Controls System to a level of safety equivalent to that which is achieved with traditional hydromechanical designs.

The regulations which primarily address hydromechanical flight control systems, (i.e., 14 CFR 25.671 and 25.672) do not specifically require that command and control signals remain unaltered from internal or external interference. Traditional designs feature steel cables and pushrods as means to move surface actuators which are hydraulically powered. These designs are not likely to be affected by spurious electromagnetic and computer induced signals, as are the FBW designs.

Similar special conditions have been issued previously for other airplanes that utilize FBW flight control systems, such as the Airbus A320 series, Airbus A330/340 series, and most recently, the Boeing 777 series.

The special conditions applied to the Boeing 777 series include a requirement for changes in mode of flight critical control systems. This requirement was intended to ensure a minimum level of availability for normal mode flight control. For the Boeing 777 series, the FAA did not consider § 25.1309(b) adequate for that purpose.

In the ERJ-170 FBW flight control system, normal mode consists of a simple analog control signal augmented by limited authority digitally computed signals. Direct mode consists of only the analog signal. The FAA believes that the existing 14 CFR 25.1309(b) provides a suitable requirement for assessing the effect and frequency of FBW flight control system mode changes or lost functionality for the ERJ-170 series, and thus the specific requirement included with the Boeing 777 series special

conditions was not included in these proposed special conditions.

In addition to the specific difference noted above, a number of smaller changes were made to the Boeing 777 series special condition to create these proposed special conditions. These additional changes were made to improve readability and to define with greater precision the intended scope of some of the paragraphs through use of consistent and defined terminology.

#### Applicability

As discussed above, these special conditions are applicable to the Embraer Model ERJ-170 series airplanes. Should Embraer apply later for a change to the type certificate to include another model incorporating the same novel or unusual design features, these special conditions would apply to that model as well under the provisions of § 21.101(a)(1), Amendment 21-69, effective September 16, 1991.

#### Conclusion

This action affects only certain novel or unusual design features on the Embraer Model ERJ-170 series airplanes. It is not a rule of general applicability, and it 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 Proposed Special Conditions

Accordingly, the Federal Aviation Administration (FAA) proposes the following special conditions as part of the type certification basis for Embraer Model ERJ-170 series airplanes.

#### Electronic Flight Controls (Command Signal Integrity)

In addition to compliance with §§ 25.671 and 25.672, the following requirements must be met:

(a) It must be shown that either the FBW flight control system signals cannot be altered unintentionally or that altered signal characteristics would meet the following criteria:

(1) Stable gain and phase margins are maintained for all control surface closed loop systems. Pilot control inputs (pilot in the loop) are excluded from this requirement.

(2) Sufficient pitch, roll, and yaw control power is available to provide control for continued safe flight and

landing, considering all the FBW flight control system signal malfunctions that are not extremely improbable.

(3) The effect of spurious signals on the systems which are included in the control surface loop must not result in unacceptable transients or degradation of the airplane's performance. Specifically, signals that would cause a significant uncommanded motion of a control surface actuator must be readily detected and deactivated, or the surface motion must be arrested by other means in a satisfactory manner. Small amplitude residual system oscillations may be acceptable.

(b) It must be demonstrated that the output from the control surface closed loop system does not result in uncommanded, sustained oscillations of flight control surfaces. The effects of minor instabilities may be acceptable, provided that they are thoroughly investigated, documented, and understood.

Issued in Renton, Washington, on June 6, 2003.

**Ali Bahrami,**

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 03-15140 Filed 6-13-03; 8:45 am]

BILLING CODE 4910-13-P

## CONSUMER PRODUCT SAFETY COMMISSION

### 16 CFR Part 1700

#### Petition Requesting Amendment to Child-Resistance Testing Pass/Fail Criterion for Unit Dose Packaging (Petition No. PP 03-1)

**AGENCY:** Consumer Product Safety Commission.

**ACTION:** Notice of petition.

**SUMMARY:** The current regulatory definition of a child-resistance test failure for unit dose, *i.e.*, non-reclosable packaging under the Poison Prevention Packaging Act (PPPA), is a child gaining access to the number of individual unit doses that constitute the amount that "may cause serious personal injury or serious illness" or more than eight individual unit doses, whichever is less. The Commission has received a petition (Petition No. PP 03-1) requesting that the Commission amend that requirement to eliminate the first criterion related to the toxicity of the substance to be packaged and define a unit dose packaging failure to be a child gaining access to more than eight individual unit doses. The Commission solicits written comments concerning the petition.

**DATES:** The Office of the Secretary must receive comments on the petition by August 15, 2003.

**ADDRESSES:** Comments on the petition, preferably in five copies, should be mailed to the Office of the Secretary, Consumer Product Safety Commission, Washington, DC 20207, telephone (301) 504-0800, or delivered to the Office of the Secretary, Room 501, 4330 East-West Highway, Bethesda, Maryland 20814. Comments may also be filed by facsimile to (301) 504-0127 or by email to [cpsc-os@cpsc.gov](mailto:cpsc-os@cpsc.gov). Comments should be captioned "Petition PP 03-1, Petition for Amendment of the Child-Resistance Testing Requirements for Unit Dose Packaging." A copy of the petition is available for inspection at the Commission's Public Reading Room, Room 419, 4330 East-West Highway, Bethesda, Maryland. The petition is also available on the CPSC Web site at <http://www.cpsc.gov>.

**FOR FURTHER INFORMATION CONTACT:** Rockelle Hammond, Office of the Secretary, Consumer Product Safety Commission, Washington, DC 20207; telephone (301) 504-6833; e-mail: [rhammond@cpsc.gov](mailto:rhammond@cpsc.gov).

**SUPPLEMENTARY INFORMATION:** By letter of March 17, 2003, and supplemental information provided by letter of May 5, 2003, the Healthcare Compliance Packaging Council (HCPC) requests a change to the Commission's regulatory requirements under the PPPA for testing the ability of unit dose child-resistant, *i.e.*, "special" packaging to resist attempts by children to open it. The HCPC request addresses the portion of the requirements defining a testing failure for unit dose packaging. Unit dose packaging is non-reclosable packaging typically including a limited number of tablets (usually one or two) per unit, *e.g.*, blister, strip or pouch packaging.

The HCPC members include companies involved in the manufacture of pharmaceutical-grade plastic films, aluminum, and paperboard used to produce unit dose blister and strip packaging, as well as manufacturers of machinery used to create unit dose formats. HCPC corporate members include firms that provide packaging services to the pharmaceutical manufacturers on a contract basis, as well as companies that purchase bulk quantities of drug products from pharmaceutical manufacturers and repackage those products into unit dose and other formats for use by hospitals, clinics, and other similar facilities.<sup>1</sup>

<sup>1</sup>March 17, 2003 HCPC letter at 3.

The child resistance testing requirements were promulgated under authority of the PPPA. The testing requirements are the mechanism for assessing the ability of a particular form of "special packaging" to resist attempts by children to gain access to its contents. The definition of a child-resistance test failure for unit dose packaging is a child gaining access to the number of individual unit doses that constitute the amount that may cause "serious personal injury or serious illness" or more than eight individual unit doses, whichever is less.<sup>2</sup>

The HCPC's specific request is as follows. "The definition of test failure for unit dose packaging should be an objective standard, *i.e.*, 'any child who opens or gains access to more than 8 individual units during the full 10 minutes of testing.'" The HCPC asserts that "unit dose packaging is inherently safer than cap-and-vial closures" and that "the current regulation creates a disincentive for pharmaceutical manufacturers and packagers to use safer unit dose packaging."<sup>3</sup>

The HCPC request has been docketed as petition number PP 03-1. The Commission is particularly interested in receiving comments on the petition from: (1) Consumers; (2) dispensing physicians; (3) poison control centers; (4) pharmaceutical manufacturers; (5) chain drug store, government, independent, and hospital pharmacies; and (6) drug repackagers, wholesalers and distributors.

Interested parties may obtain a copy of the petition by writing or calling the Office of the Secretary, Consumer Product Safety Commission, Washington, DC 20207; telephone (301) 504-0800. The petition is available on the CPSC World Wide Web site at <http://www.cpsc.gov>. A copy of the petition is also available for inspection from 8:30 a.m. to 5 p.m., Monday through Friday, in the Commission's Public Reading Room, Room 419, 4330 East-West Highway, Bethesda, Maryland.

Dated: June 10, 2003.

**Todd A. Stevenson,**

*Secretary, Consumer Product Safety Commission.*

[FR Doc. 03-15064 Filed 6-13-03; 8:45 am]

BILLING CODE 6355-01-P

<sup>2</sup> 16 CFR 1700.20(a)(2)(ii).

<sup>3</sup> March 17, 2003 HCPC letter at 3-5.