

information on the positions of the primary flight controls to the FDR from transmitting noisy signals or becoming improperly calibrated, resulting in the transmission of incomplete or inaccurate data to the FDR. This lack of reliable data could hamper discovery of the unsafe condition which caused an accident or an incident and prevent the FAA from developing and mandating actions to prevent additional incidents or accidents caused by that same unsafe condition.

**DATES:** Comments must be received by April 14, 2003.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2000-NM-120-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9 a.m. and 3 p.m., Monday through Friday, except Federal holidays. Comments may be submitted via fax to (425) 227-1232. Comments may also be sent via the Internet using the following address: [9-anm-nprmcomment@faa.gov](mailto:9-anm-nprmcomment@faa.gov). Comments sent via fax or the Internet must contain "Docket No. 2000-NM-120-AD" in the subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 for Windows or ASCII text.

The service information referenced in the proposed rule may be obtained from Empresa Brasileira de Aeronautica S.A. (EMBRAER), P.O. Box 343—CEP 12.225, Sao Jose dos Campos—SP, Brazil. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington.

**FOR FURTHER INFORMATION CONTACT:** Robert D. Breneman, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1263; fax (425) 227-1149.

#### **SUPPLEMENTARY INFORMATION:**

##### **Comments Invited**

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the

proposed rule. The proposals contained in this action may be changed in light of the comments received.

Submit comments using the following format:

- Organize comments issue-by-issue. For example, discuss a request to change the compliance time and a request to change the service bulletin reference as two separate issues.
- For each issue, state what specific change to the proposed AD is being requested.
- Include justification (*e.g.*, reasons or data) for each request.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this action must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 2000-NM-120-AD." The postcard will be date stamped and returned to the commenter.

##### **Availability of NPRMs**

Any person may obtain a copy of this NPRM by submitting a request to the FAA, Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2000-NM-120-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

##### **Discussion**

A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR 39) to add an airworthiness directive (AD), applicable to all EMBRAER Model EMB-120 series airplanes, was published as a notice of proposed rulemaking (NPRM) in the **Federal Register** on April 27, 2001 (66 FR 21107). That NPRM would have required replacing certain existing potentiometers with recently manufactured potentiometers, modifying the flexible couplers that attach the shafts of the potentiometers to the shafts of the primary flight controls, performing repetitive calibration tests of the potentiometers and obtaining repetitive readouts of the flight data recorder (FDR), and reporting the results to the FAA. Those actions were intended to prevent the potentiometers that provide information on the positions of the primary flight controls

to the FDR from transmitting noisy signals or becoming improperly calibrated, resulting in the transmission of incomplete or inaccurate data to the FDR. This lack of reliable data could hamper discovery of the unsafe condition which caused an accident or an incident and prevent the FAA from developing and mandating actions to prevent additional incidents or accidents caused by that same unsafe condition.

##### **Comments**

Due consideration has been given to the comments received in response to the original NPRM.

##### **Request to Change Applicability**

One commenter requests that the applicability of the NPRM be changed from "all Model EMB-120 series airplanes" to "All Model EMB-120 series airplanes with a Flight Data Recorder installed or required by the Federal Aviation Regulations, certificated in any category." The commenter points out that some Model EMB-120 series airplanes have been converted from passenger operation to freighter operation and, therefore, are no longer required to operate with FDRs. The FAA agrees and has changed this AD so that it applies to "Model EMB-120 series airplanes which are required by 14 CFR 135 to operate with a flight data recorder (FDR), certificated in any category."

##### **Request To Change Requirement to Replace All In-service Potentiometers**

Three commenters request that the proposed replacement of all in-service potentiometers with potentiometers manufactured less than 12 months ago be changed. The commenters suggest instead that a download of the FDR testing data be performed to identify potentiometers with noisy signals and that only those potentiometers should be replaced.

The FAA agrees. EMBRAER has developed a procedure for determining whether or not a potentiometer has a noisy signal. That procedure has been incorporated into Section 31-30-00 of the EMBRAER Model EMB-120 Airplane Maintenance Manual (AMM), dated April 10, 2002. Accordingly, we have revised paragraphs (a), (b), and (c) of this supplemental NPRM to require testing of the potentiometers and replacement of those with noisy signals.

##### **Request To Change the Interval for Repetitive Calibration and Readout**

The same three commenters request that the interval for the repetitive testing of potentiometers be extended from 6