

certain Bombardier Model CL-600-1A11 (CL-600), CL-600-2A12 (CL-601), and CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604) series airplanes. This proposal would require revising the Airplane Flight Manual (AFM) to provide the flightcrew with procedures and limitations for operating the airplane with out-of-tolerance angle of attack (AOA) transducers. This proposal also would require, among other actions, measuring the vane angles and voltage of the AOA transducers; reworking the AOA transducer assemblies; repetitive measurements of the resistance of both AOA transducers; and follow-on and corrective actions, as applicable. This action is necessary to prevent flat spots on the potentiometers of the AOA transducers due to wear, which may cause a delay in the commands for stall warning, stick shaker, and stick pusher operation. This action is intended to address the identified unsafe condition.

DATES: Comments must be received by March 31, 2003.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2002-NM-157-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. Comments sent via fax or the Internet must contain "Docket No. 2002-NM-157-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 Bombardier, Inc., Canadair, Aerospace Group, P.O. Box 6087, Station Centre-ville, Montreal, Quebec H3C 3G9, Canada. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, New York Aircraft Certification Office, 10 Fifth Street, Third Floor, Valley Stream, New York.

FOR FURTHER INFORMATION CONTACT:

Luciano Castracane, Aerospace Engineer, Systems and Flight Test Branch, ANE-172, FAA, New York Aircraft Certification Office, 10 Fifth Street, Third Floor, Valley Stream, New

York 11581; telephone (516) 256-7535; fax (516) 568-2716.

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 2002-NM-157-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. 2002-NM-157-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

Discussion

Transport Canada Civil Aviation (TCCA), which is the airworthiness authority for Canada, notified the FAA that an unsafe condition may exist on certain Bombardier Model CL-600-1A11 (CL-600), CL-600-2A12 (CL-601), and CL-600-2B16 (CL-601-3A, CL-

601-3R, and CL-604) series airplanes. TCCA advises that, during testing of an airplane, flat spots were discovered on the potentiometers of the angle of attack (AOA) transducers due to wear. Since the AOA transducers work in conjunction with the stall protection system (SPS), these flat spots, if not corrected, may cause a delay in the commands for stall warning, stick shaker, and stick pusher operation.

Explanation of Relevant Service Information

The manufacturer has issued the applicable Canadair Challenger temporary revisions to the Airplane Flight Manual (AFM) listed in Table 2 of this AD. The temporary revisions describe procedures for revising the Limitations, Emergency Procedures, Normal Procedures, and Abnormal Procedures Sections of the FAA-approved Canadair Challenger AFM, as applicable, to provide the flightcrew with procedures and limitations for operating the airplane with out-of-tolerance AOA transducers.

The manufacturer also has issued the applicable Bombardier service bulletins listed in Table 3 of this AD, which describe the following procedures:

- Measuring the vane angles and voltage of the AOA transducers; follow-on and corrective actions, as applicable; and recording and reporting incorporation of the service bulletin to Bombardier. The follow-on and corrective actions include replacing the stall protection computer (SPC) with a new SPC; recording and repeating actions; disconnecting the breakout box; measuring the baseline resistance of the AOA transducer between certain pins; and measuring the baseline resistance of the other AOA transducer for temporary deferral of reworking the AOA transducer assemblies; as applicable. Certain follow-on actions eliminate the need for the AFM revisions described previously.

- Reworking the AOA transducer assemblies and measuring the baseline resistance of the applicable AOA transducers, which eliminate the need for the AFM revisions described previously;

- Performing repetitive measurements of the resistance of both AOA transducers, and doing applicable corrective actions. The corrective actions include replacement of the AOA transducer with new AOA transducer; visual inspection of the vane assembly; rework, if necessary; a test; and measurement of baseline resistance of the applicable AOA transducer.

In addition, the manufacturer has issued Bombardier Alert Service