

### Any Voltage Outside Tolerances: Replacement

(c) If, during the measurement required by paragraph (b) of this AD, any recorded voltage is found to be outside the tolerances specified in the applicable Bombardier alert service bulletin identified in Table 3 of this AD, before further flight, replace the stall protection computer (SPC) with a new SPC and do the follow-on actions (*i.e.*, recording in Appendix A and repeat actions), per "PART A—Initial Special Check" of the Accomplishment Instructions of the applicable Bombardier alert service bulletin identified in Table 3 of this AD.

### All Vane Angles Within Tolerances: Disconnection and Measurement

(d) If, during the measurement required by paragraph (b) of this AD, all of the recorded AOA vane angles for both AOA transducers are found to be within the tolerances specified in the applicable Bombardier alert service bulletin listed in Table 3 of this AD, before further flight, do the follow-on actions (*i.e.*, disconnect breakout box, and measure the baseline resistance of the AOA transducer between certain pins), per "PART B—AOA Transducer Assembly Rework/Baseline Resistance Check" of the Accomplishment Instructions of the applicable Bombardier alert service bulletin identified in Table 3 of this AD. After doing the follow-on actions, the applicable AFM revision required by paragraph (a) of this AD may be removed from the AFM.

### One or More AOA Vane Angles Outside Tolerances, But All Vane Angles Within Tolerances

(e) If, during the measurement required by paragraph (b) of this AD, one or more of the recorded AOA vane angles for either or both AOA transducers are found to be outside the tolerances specified in the applicable Bombardier alert service bulletin listed in Table 3 of this AD, but all recorded vane angles are within the expanded tolerances specified in "Table A—Tolerances" of "PART A—Initial Special Check" of the Accomplishment Instructions of the applicable Bombardier alert service bulletin identified in Table 3 of this AD, do the action specified in paragraph (e)(1) of this AD, except as provided by paragraph (e)(2) of this AD.

(1) Before further flight, do the actions specified in paragraph (g) of this AD.

(2) In lieu of doing the actions required by paragraph (e)(1) of this AD, do the actions specified in paragraphs (e)(2)(i) and (e)(2)(ii) of this AD.

(i) Before further flight, measure the baseline resistance of the other AOA transducer (with recorded vane angles within the tolerances specified in the applicable Bombardier alert service bulletin listed in Table 3 of this AD) per "Table A—Tolerances" of "PART A—Initial Special Check" of the Accomplishment Instructions of the applicable Bombardier alert service bulletin identified in Table 3 of this AD.

(ii) Within 150 flight hours after doing the measurement required by paragraph (b) of this AD, do the actions specified in paragraph (g) of this AD.

### Any AOA Vane Angle Outside Tolerances

(f) If, during the measurement required by paragraph (b) of this AD, any recorded AOA vane angle of the AOA transducers is found to be outside the tolerances specified in the applicable Bombardier alert service bulletin listed in Table 3 of this AD, before further flight, do the actions specified in paragraph (g) of this AD.

### Transducer Assembly Rework and Baseline Resistance Measurement

(g) Except as provided by paragraph (e)(2) of this AD, before further flight after doing the measurement required by paragraph (b) of this AD, rework the AOA transducer assemblies and measure the baseline resistance of the applicable AOA transducers by doing all actions specified in "PART B—AOA Transducer Assembly Rework/Baseline Resistance Check" of the Accomplishment Instructions of the applicable Bombardier alert service bulletin identified in Table 3 of this AD, per the applicable Bombardier alert service bulletin. After doing the rework, the applicable AFM revision required by paragraph (a) of this AD may be removed from the AFM.

### Repetitive Measurements and Corrective Actions

(h) Within 300 flight hours after doing the measurement required by paragraph (b) of this AD, measure the resistance of both AOA transducers by doing all actions specified in "PART C—Repetitive Resistance Check/AOA Transducer Assembly Rework" of the Accomplishment Instructions of the applicable alert service bulletin listed in Table 3 of this AD, per the applicable Bombardier alert service bulletin. Repeat the measurement at least every 300 flight hours.

(i) If, during the measurement required by paragraph (h) of this AD, any recorded resistance is found to be outside the tolerances specified in the applicable Bombardier alert service bulletin listed in Table 3 of this AD (*i.e.*, more than 20 ohms from its baseline resistance value), before further flight, do corrective actions (*e.g.*, replace AOA transducer with new AOA transducer; perform a visual inspection of the vane assembly; rework, if necessary; a test; and measure baseline resistance of applicable AOA transducer), as applicable, per PART C—Repetitive Resistance Check/AOA Transducer Assembly Rework" of the Accomplishment Instructions of the applicable alert service bulletin listed in Table 3 of this AD.

### Concurrent Requirements: Inspection

(j) For airplanes identified in paragraphs (j)(1), (j)(2), and (j)(3) of this AD: Before or at the same time with accomplishment of the requirements of paragraph (b) of this AD, inspect the left- and right-side AOA vane decal to verify that the correct decal is installed per paragraph (j)(1), (j)(2), or (j)(3) of this AD, as applicable.

(1) For Model CL-600-2A12 (CL-601) and CL-600-2B16 (CL-601-3A and -3R) series airplanes having serial numbers 3001 through 3066 inclusive, and 5001 through 5194 inclusive, respectively, on which AOA calibration decals, part numbers (P/N) 600-

52267-5 and 600-52267-6, have been installed: Inspect per Bombardier Alert Service Bulletin A601-0519, dated July 30, 1999, excluding Service Bulletin Compliance Sheet.

(2) For Model CL-600-1A11 (CL-600) series airplanes having serial numbers 1004 through 1085 inclusive, on which AOA calibration decals, P/Ns 600-52267-5 and 600-52267-6, have been installed: Inspect per Bombardier Alert Service Bulletin A600-0693, dated July 30, 1999, excluding Service Bulletin Compliance Sheet.

(3) For Model CL-600-2B16 (CL-604) series airplanes having serial numbers 5301 through 5990 inclusive, on which AOA calibration decals, P/Ns 600-52267-5 and 600-52267-6, have been installed: Inspect per Bombardier Alert Service Bulletin A604-11-009, dated July 30, 1999, excluding Service Bulletin Compliance Sheet.

### Concurrent Requirements: Corrective Actions

(k) If either of the AOA vane decals is found to be incorrect during the inspection required by paragraph (j) of this AD, before further flight, replace the AOA vane decal(s) with new vane decal(s), and ensure that the new decal(s) is the correct type, per the applicable alert service bulletin identified in paragraph (j)(1), (j)(2), or (j)(3) of this AD; except as provided by paragraph (l) of this AD.

(l) If replacement decals are not available, before further flight, remove existing decals and do the alignment check(s) of the AOA vane transducers per the applicable alert service bulletin identified in paragraph (j)(1), (j)(2), or (j)(3) of this AD.

### Parts Installation

(m) As of the effective date of this AD, no person shall install an AOA transducer assembly on any airplane, unless the actions required by paragraphs (b) through (l) of this AD, as applicable, have been done.

### Alternative Methods of Compliance

(n) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, New York Aircraft Certification Office (ACO), FAA. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, New York ACO.

**Note 2:** Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the New York ACO.

### Special Flight Permits

(o) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

**Note 3:** The subject of this AD is addressed in Canadian airworthiness directive CF-2002-05, dated January 18, 2002.