



Federal Aviation Administration

Memorandum

Date: December 12, 2011
To: See Distribution List
From: David W. Hempe, Manager, Aircraft Engineering Division, AIR-100
Prepared by: Elizabeth Bumann, Engineering Procedures Office, AIR-110
Subject: Deviation from MCAI Order 8040.5 for AD Templates

This memorandum approves a deviation to Order 8040.5, *Airworthiness Directive Process for Mandatory Continuing Airworthiness Information* (MCAI), paragraph 11a, for changes to MCAI-related AD templates requested by the Office of the Federal Register (OFR).

Effective December 2, 2011, all MCAI-related AD actions must be issued with the following six (6) changes to the MCAI AD templates:

1) Rule portion of AD actions – Change the paragraph formatting to identify paragraph designators at the beginning of the heading, rather than after the heading. For example:

2011-09-12 Bombardier, Inc.: Amendment 39-16674. Docket No. FAA-2010-1157; Directorate Identifier 2010-NM-137-AD.

(a) **Effective Date**

This airworthiness directive (AD) becomes effective June 6, 2011.

2) For “Final Rule; request for comment” and “Final rule” ADs – Use the IBR language from the corresponding domestic AD templates located on sharepoint site <https://avssharepoint.faa.gov/avs/Teams/adinfolib/Tab4.aspx>.

3) Subject Heading (preamble) – Do not include reference to the product model; only list the design approval holder name and product type. For example:

“Airworthiness Directives; Bombardier, Inc. Airplanes”

Follow the guidance specified for the corresponding domestic AD templates on sharepoint site <https://avssharepoint.faa.gov/avs/Teams/adinfolib/Tab4.aspx>.

4) Summary (preamble) – The OFR has stated that quotations and blocked quotes in the Summary section are unacceptable. Therefore, revise the Summary section as follows:

“**SUMMARY:** We are [proposing/adopting/superseding/revising] a [new/existing] airworthiness directive (AD) for [certain/all] [*identify the make and models affected - follow the guidance specified for the corresponding domestic AD templates on sharepoint site <https://avssharepoint.faa.gov/avs/Teams/adinfolib/Tab4.aspx>*]. This [proposed] AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as [*concisely describe the unsafe condition identified in the MCAI, do not use technical terminology*]. We are issuing this [proposed] AD to require actions to correct the unsafe condition on these products.”

For example:

“**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain Bombardier, Inc. Model DHC-8-101, -102, -103, -106, -201, -202, -301, -311, -315, -401, and -402 airplanes. This AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as trapped water on the bottom of the cockpit windshield frames (or lower windshield frames). We are issuing this AD to require actions to correct the unsafe condition on these products.”

5) Discussion (preamble) – Place the quoted MCAI information into a block format that is sufficiently indented on both the right and left hand margins to clearly identify that the quoted material is subordinate to the parent paragraph. In addition, include the end-level effect of the unsafe condition. For example:

**“SUPPLEMENTARY INFORMATION:
Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the Federal Register on November 23, 2010 (75 FR 71369). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

There have been several in-service reports of finding trapped water on the bottom of the cockpit windshield frames (or lower windshield frames) that resulted in either corrosion or water ingress into the cockpit. In one occurrence, the trapped water caused severe corrosion of numerous anchor nuts that secure the windshield to the lower windshield frame, such that the intended fastening function was seriously compromised.

Corrosion of the lower windshield frames, including the anchor nuts that secure the windshield to the aircraft structure, can result in a serious structural degradation possibly leading to the loss of the windshield during flight. Also, water can leak into the cockpit and cause either a malfunction or failure of the electrical and electronics systems in the area of the cockpit instrument panels.

The corrective action includes installation of a drain system for the lower windshield frames. For Model DHC-8-401 and -402 airplanes, the installation also includes a related investigative action, and corrective actions if necessary. You may obtain further information by examining the MCAI in the AD docket.”

6) Reason section (rule portion) – Revise the template as follows:

“(e) **Reason**

This [proposed] AD was prompted by [*repeat language from Summary section*]. We are issuing this AD to [*state the intent of the AD, e.g., prevent/detect and correct/ensure*].”

For example:

(e) **Reason**

This AD was prompted by trapped water on the bottom of the cockpit windshield frames (or lower windshield frames). We are issuing this AD to prevent corrosion of the lower windshield frames, including the anchor nuts that secure the windshield to the aircraft which if not corrected, could result in a serious structural degradation possibly leading to the loss of the windshield during flight. Also, water can leak into the cockpit and cause either a malfunction or failure of the electrical and electronics systems in the area of the cockpit instrument panels.

These changes will be incorporated into the next revision of the MCAI-related AD templates and Order 8040.5. If you have any questions, please contact Elizabeth Bumann at (405) 954-8803.

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