DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2006-26498; Directorate Identifier 2006-CE-83-AD; Amendment 39-15056; AD 2007-10-15]

RIN 2120-AA64

Airworthiness Directives; Cessna Aircraft Company Models 208 and 208B Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) to supersede AD 2006-06-06, which applies to certain Cessna Aircraft Company (Cessna) Models 208 and 208B airplanes. AD 2006-06-06 currently requires you to incorporate information into the applicable section of the Airplane Flight Manual (AFM) and Pilot's Operating Handbook (POH) and requires you to install placards. Since we issued AD 2006-06-06, Cessna issued new S1 Known Icing Equipment AFM supplements and developed a low airspeed awareness system. Consequently, this AD requires you to incorporate the applicable AFM supplement revision and temporarily retain the requirements of AD 2006-06-06 until the above revisions are incorporated. One of the AFM requirements is the installation of a functional low airspeed awareness system to operate the airplane in known icing conditions. We are issuing this AD to assure that the pilot has enough information and the necessary equipment to prevent loss of control of the airplane while in-flight during icing conditions.

DATES: This AD becomes effective on June 21, 2007.

ADDRESSES: To get the service information identified in this AD, contact the Cessna Aircraft Company, Product Support, P.O. Box 7706, Wichita, Kansas 67277.

      To view the AD docket, go to the Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590-001 or on the Internet at http://dms.dot.gov. The docket number FAA-2006-26498; Directorate Identifier 2006-CE-83-AD.

      FOR FURTHER INFORMATION CONTACT: Robert P. Busto, Aerospace Engineer, Wichita Aircraft Certification Office, FAA, 1801 Airport Road, Wichita, Kansas 67209; telephone: (316) 946-4157; fax: (316) 946-4107.
SUPPLEMENTARY INFORMATION:

Discussion

On January 25, 2007, we issued a proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD that would apply to Cessna Models 208 and 208B airplanes. This proposal was published in the Federal Register as a notice of proposed rulemaking (NPRM) on February 1, 2007 (FR 72 4663). The NPRM proposed to supersede AD 2006-06-06, which currently requires you to incorporate information into the applicable section of the Airplane Flight Manual (AFM) and Pilot's Operating Handbook (POH) and requires you to install placards. The NPRM would require you to incorporate new S1 Known Icing Equipment AFM supplements and to install a low airspeed awareness system.

Comments

We provided the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal and FAA's response to each comment. As policy, we do not address anonymous comments.

Comment Issue No. 1: Provide More Time for Installation of the Low Airspeed Awareness System

Corporate Air, the Regional Air Cargo Carriers Association (RACCA), and Federal Express request an extension to the compliance time for installing the low airspeed awareness system. The NPRM proposes a compliance time of 30 days, and the commenters want an extension until September 2007 in order to prevent unnecessary grounding of their airplanes. The commenters state that this should not present a safety problem since the icing season does not start until the end of September or early October.

The FAA concurs that the compliance time for the low airspeed awareness system can be extended and will increase it from 30 days to 90 days after the effective date of the AD. Cessna has issued new S1 Known Icing Equipment AFM supplements, dated February 20, 2007. These supplements incorporate all the actions from the NPRM, including the requirement for the installation of a functional low airspeed awareness system when flying into known icing conditions.

We are changing the final rule to require the incorporation of the applicable S1 Known Icing Equipment AFM supplement, dated February 20, 2007, and to extend the compliance time from 30 days to 90 days after the effective date of the AD.

Comment Issue No. 2: Do Not Retain the Actions From AD 2006-06-06

RACCA believes that there is no need for the FAA to restate the actions of AD 2006-06-06 in the AD. The commenter states that as soon as the new AD becomes effective, the actions of AD 2006-06-06 are superseded and are no longer necessary.

We concur that, as of the effective date of the new AD, the actions of AD 2006-06-06 are superseded. However, we are allowing 90 days after the effective date of this AD before the new actions must be incorporated. It is essential to address the unsafe condition and assure that the actions of AD 2006-06-06 remain in effect until the actions required by the new AD are incorporated.

We have not made changes to the final rule based on this comment.
Comment Issue No. 3: Clarify Whether Alternative Methods of Compliance (AMOC) Approved per AD 2006-06-06 Are Retained for This AD

Since the FAA is retaining the actions of AD 2006-06-06 until the new actions are done, RACCA questions whether it is the FAA's intent to allow the AMOCs approved for AD 2006-06-06. It is the FAA's intent to retain the AMOCs approved for AD 2006-06-06 during the 90-day compliance period until the new actions are required.

We are changing the final rule to state that AMOCs approved for AD 2006-06-06 are approved for this AD until the actions required by paragraph (e) of this AD are done.

Comment Issue No. 4: Concern About the Reliability and Accuracy of the Low Airspeed Awareness Alert System

Corporate Air expresses concern about the reliability and accuracy of the low airspeed awareness alert system. The commenter did not request a specific change other than the change in compliance time referenced previously. We infer that the commenter either wants the requirement taken out of the AD or the AD delayed until further research can be done.

The FAA and Cessna conducted flight tests of the low airspeed awareness system during certification where the system passed all certification tests and was found acceptable. The system was designed to meet reliability certification requirements. We have determined that a functional low airspeed awareness system is necessary for the Cessna Models 208 and 208B to safely operate in known icing conditions.

We have not made changes to the final rule based on this comment.

Comment Issue No. 5: Require Equipment Other Than the Low Airspeed Awareness System

Stephen McClure believes that there will not be any benefit in safety from the installation of the low airspeed awareness system, because the airplane airspeed indicators already fill the need. He feels that pilots need to be trained to avoid and/or exit icing conditions once encountered. As an alternative, the commenter believes a better wing ice detection light system, automatic boot cycling system, and Goodrich ice detection system would provide a better safety benefit than the low airspeed awareness system.

We do not agree that the low airspeed awareness system is not necessary and have determined that it is necessary for flight in known icing conditions. The accident/incident history of the Model 208 indicates that pilots have not been diligent in the management of the aircraft when operating in icing conditions, as aircraft performance can decay very quickly. Additionally, the accident that occurred in Moscow in 2006 and recent flight tests have shown that the aural stall warning system does not provide sufficient time before a stall in all icing conditions. The low airspeed awareness system addresses each of these concerns by providing an alert with sufficient time to allow pilots to take the proper corrective action. The commenter is correct in stating that training pilots to avoid and/or exit icing conditions is a prudent course of action. Cessna has issued new S1 Known Icing Equipment AFM supplements, dated February 20, 2007. These supplements incorporate all the actions from the NPRM, including the requirement for the installation of a functional low airspeed awareness system when flying into known icing conditions.

We agree with the commenter that the additional systems referenced would enhance safety. However, the accident/incident history on the Models 208 and 208B does not justify requiring the installation of such equipment through AD action. The pilot's failure to detect icing conditions has not been the problem on the affected airplanes; the problem has been having the information, training, and/or equipment necessary to operate safely once icing conditions are encountered.
Additionally, the FAA examined the effectiveness of auto deice boot cycling during icing tunnel tests in 2005 and discovered that, at typical speeds associated with the Models 208 and 208B airplanes, the deice boot clearing effectiveness was not significantly improved over manually cycling at a certain accretion thickness. Therefore, the benefit of an automatic deice boot cycling system would be to relieve pilot workload. Service history on the Models 208 and 208B airplanes and many other aircraft with manual boot cycling systems does not justify the need to mandate an automatic system.

We are changing the final rule to require the incorporation of the applicable S1 Known Icing Equipment AFM supplement, dated February 20, 2007, and the extension of the compliance time from 30 days to 90 days after the effective date of the AD.

**Conclusion**

We have carefully reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed except for the changes previously discussed and minor editorial corrections. We have determined that these changes and minor corrections:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than is already required.

**Costs of Compliance**

We estimate that this AD affects 765 airplanes in the U.S. registry.

The AD requires inserting the applicable new S1 Known Icing Equipment AFM supplement, dated February 20, 2007, into the AFM/POH, which includes the installation of a low airspeed awareness alert system. We estimate the following costs to do the actions of this AD:

<table>
<thead>
<tr>
<th>Labor Cost</th>
<th>Parts Cost</th>
<th>Total Cost Per Airplane</th>
<th>Total Cost on U.S. Operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 work-hours X $80 per hour = $1,760</td>
<td>$6,440</td>
<td>$8,200</td>
<td>$6,273,000</td>
</tr>
</tbody>
</table>

**Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106 describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this AD.
Regulatory Findings

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:
1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a summary of the costs to comply with this AD (and other information as included in the Regulatory Evaluation) and placed it in the AD Docket. You may get a copy of this summary by sending a request to us at the address listed under ADDRESSES. Include “Docket No. FAA-2006-26498; Directorate Identifier 2006-CE-83-AD” in your request.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39–AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

   Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2006-06-06, Amendment 39-14514, (71 FR 13533, March 16, 2006), and adding the following new AD:

Effective Date

(a) This AD becomes effective on June 21, 2007.

Affected ADs

(b) This AD supersedes AD 2006-06-06, Amendment 39-14514.

Applicability

(c) This AD applies to Models 208 and 208B, all serial numbers, that are certificated in any category.

Unsafe Condition

(d) This AD results from our determination that the revisions dated February 20, 2007, to the S1 Known Icing Equipment AFM supplement are necessary and should be incorporated into the Airplane Flight Manual (AFM)/Pilot's Operating Handbook (POH); and that a low airspeed awareness system should be required when operating in known icing conditions. We are issuing this AD to assure that the pilot has enough information and the necessary equipment to prevent loss of control of the airplane while in-flight during icing conditions.

New Actions Required by this AD

(e) Unless already done, within the next 90 days after the effective date of this AD, incorporate the applicable new S1 Known Icing Equipment AFM supplement, dated February 20, 2007, into the AFM/POH:

<table>
<thead>
<tr>
<th>Document</th>
<th>Affects</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Model 208 (675 SHP) FAA-approved Flight Manual Supplement S1 “Known Icing Equipment,” Cessna document D1352-S1-10, dated February 20, 2007, or later FAA-approved revision that incorporates the same information.</td>
<td>Cessna Model 208 airplanes with a Pratt &amp; Whitney of Canada Ltd., PT6A-114A turboprop engine installed (675 SHP) or FAA-approved engine of equivalent or higher horsepower installed, equipped with airframe deicing pneumatic boots, that are not currently prohibited from flight in known or forecast icing.</td>
</tr>
<tr>
<td>Document</td>
<td>Affects</td>
</tr>
<tr>
<td>----------</td>
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</tr>
<tr>
<td>(2) Model 208 (600 SHP) FAA-approved Flight Manual Supplement S1 “Known Icing Equipment,” Cessna document D1307-S1-09, dated February 20, 2007, or later FAA-approved revision that incorporates the same information.</td>
<td>Cessna Model 208 airplanes with a Pratt &amp; Whitney of Canada Ltd., PT6A-114 turboprop engine installed (600 SHP) or FAA-approved engine of equivalent horsepower installed, equipped with airframe deicing pneumatic boots, that are not currently prohibited from flight in known or forecast icing.</td>
</tr>
<tr>
<td>(3) Model 208B (675 SHP) FAA-approved Flight Manual Supplement S1 “Known Icing Equipment,” Cessna document D1329-S1-10, dated February 20, 2007, or later FAA-approved revision that incorporates the same information.</td>
<td>Cessna Model 208B airplanes with a Pratt &amp; Whitney of Canada Ltd., PT6A-114A turboprop engine installed (675 SHP) or FAA-approved engine of equivalent or higher horsepower installed, equipped with airframe deicing pneumatic boots, that are not currently prohibited from flight in known or forecast icing.</td>
</tr>
<tr>
<td>(4) Model 208B (600 SHP) FAA-approved Flight Manual Supplement S1 “Known Icing Equipment,” Cessna document D1309-S1-10, dated February 20, 2007, or later FAA-approved revision that incorporates the same information.</td>
<td>Cessna Model 208B airplanes with a Pratt &amp; Whitney of Canada Ltd., PT6A-114 turboprop engine installed (600 SHP) or FAA-approved engine of equivalent horsepower installed, equipped with airframe deicing pneumatic boots, that are not currently prohibited from flight in known or forecast icing.</td>
</tr>
</tbody>
</table>

Note: The above supplements require the installation of a functional low airspeed awareness system. Cessna Service Bulletin CAB06-11 and Service Kit SK 208-171, both dated October 9, 2006, provide instructions for such an installation.

(f) The owner/operator holding at least a private pilot certificate as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7) may insert the information into the POH specified in all paragraphs (e)(1) through (e)(4) of this AD. Make an entry into the aircraft records showing compliance with this portion of the AD in accordance with section 43.9 of the Federal Aviation Regulations (14 CFR 43.9).

**Actions Retained From AD 2006-06-06**

(g) The actions in paragraphs (h) and (i) of this AD below are retained in this AD from AD 2006-06-06. The new actions required by this AD in paragraph (e) above terminate the requirement for the actions in paragraphs (h) and (i) of this AD.

(h) No later than March 27, 2006 (3 days after March 24, 2006, which is the effective date of AD 2006-06-06), incorporate the following revisions into the Airplane Flight Manual (AFM), unless already done:
<table>
<thead>
<tr>
<th>Affected airplanes</th>
<th>Incorporate the Following AFM Revision Document</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Cessna Model 208 airplanes and Model 208B airplanes, all serial numbers.</td>
<td>Section 2: Limitations and Section 4: Normal Procedures: Temporary Revision 208PHTR05, dated June 27, 2005, to the POH and FAA-approved AFM.</td>
</tr>
<tr>
<td>(2) Cessna Model 208 airplanes with a Pratt &amp; Whitney of Canada Ltd., PT6A-114A turboprop engine installed (675 SHP) or FAA-approved engine of equivalent horsepower installed, equipped with airframe deicing pneumatic boots, that are not currently prohibited from flight in known or forecast icing.</td>
<td>Section 9: Optional Systems Description and Operating Procedures: Revision 6 of the 208 (675 SHP) POH/FAA-approved AFM Supplement S1 “Known Icing Equipment,” Cessna document D1352-S1-06, dated June 27, 2005.</td>
</tr>
<tr>
<td>(3) Cessna Model 208 airplanes with a Pratt &amp; Whitney of Canada Ltd., PT6A-114 turboprop engine installed (600 SHP) or FAA-approved engine of equivalent horsepower installed, equipped with airframe deicing pneumatic boots, that are not currently prohibited from flight in known or forecast icing.</td>
<td>Section 9: Optional Systems Description and Operating Procedures: Revision 6 of the Cessna Model 208 (600 SHP) POH/FAA-approved AFM Supplement S1 “Known Icing Equipment,” Cessna document D1307-S1-06, dated June 27, 2005.</td>
</tr>
<tr>
<td>(4) Cessna Model 208B airplanes with a Pratt &amp; Whitney of Canada Ltd., PT6A-114A turboprop engine installed (675 SHP) or FAA-approved engine of equivalent horsepower installed, equipped with airframe deicing pneumatic boots, that are not currently prohibited from flight in known or forecast icing.</td>
<td>Section 9: Optional Systems Description and Operating Procedures: Revision 7 of the 208B (675 SHP) POH/FAA-approved AFM Supplement S1 “Known Icing Equipment,” Cessna document D1329-S1-07, dated June 27, 2005.</td>
</tr>
<tr>
<td>(5) Cessna Model 208B airplanes with a Pratt &amp; Whitney of Canada Ltd., PT6A-114 turboprop engine installed (600 SHP) or FAA-approved engine of equivalent horsepower installed, equipped with airframe deicing pneumatic boots, that are not currently prohibited from flight in known or forecast icing.</td>
<td>Section 9: Optional Systems Description and Operating Procedures: Revision 6 of the 208B (600 SHP) POH/FAA-approved AFM Supplement S1 “Known Icing Equipment,” Cessna document D1309-S1-06, dated June 27, 2005.</td>
</tr>
</tbody>
</table>
No later than March 27, 2006 (3 days after March 24, 2006, which is the effective date of AD 2006-06-06), you must do the following actions, unless already done. These changes are to the POH and FAA-approved AFM and to the POH/FAA-approved AFM Supplement S1 “Known Icing Equipment” mandated in paragraph (h) of this AD. The owner/operator holding at least a private pilot certificate as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7) may do the placard POH/AFM requirements as specified in the paragraphs below. Make an entry into the aircraft records showing compliance with portion of the AD in accordance with section 43.9 of the Federal Aviation Regulations (14 CFR 43.9):

1. For Cessna Model 208 airplanes and Model 208B airplanes, all serial numbers, equipped with airframe deicing pneumatic boots, that are not currently prohibited from flight in known or forecast icing: You are prohibited from continued flight after encountering moderate or greater icing conditions. The airplane can dispatch into forecast areas of icing but must exit moderate or greater icing conditions if encountered.

2. For Cessna Model 208 airplanes and Model 208B airplanes, all serial numbers, equipped with airframe deicing pneumatic boots, that are not currently prohibited from flight in known or forecast icing:
   (i) Insert the text in Appendix 1 of this AD preceding the KINDS OF OPERATION LIMITS paragraph in the LIMITATIONS section of the Cessna Models 208 or 208B POH and FAA-approved AFM.
   (ii) Insert the text in Appendix 2 of this AD in the LIMITATIONS section of the Cessna Models 208 or 208B POH and FAA-approved AFM KNOWN Icing EQUIPMENT SUPPLEMENT S1 at the beginning of the paragraph “REQUIRED EQUIPMENT.”

3. For Cessna Models and Models 208B airplanes, all serial numbers, equipped with airframe deicing pneumatic boots that are not currently prohibited from flight in known or forecast icing: Install three placards with black letters on a white background. The placards must be located on the instrument panel under the radio stack, immediately above the pilot's flight instruments, or below the vertical speed indicator. Lettering on the placard must be a minimum height of 1/8-inch.
   (i) Placard 1 must include the text of Appendix 3 of this AD.
   (ii) Placard 2 must include the following text: “120 KIAS Minimum in Icing Flaps Up except 110 KIA if Climbing to Exit Icing.”
   (iii) Placard 3 must include the following text: “Disconnect autopilot at first indication of ice accretion.”

4. For Cessna Models 208 and 208B airplanes, all serial numbers, equipped with airframe deicing pneumatic boots that are not currently prohibited from flight into known or forecast icing:
   (i) Insert the text in Appendix 4 of this AD under the “AIRSPEED LIMITATIONS” paragraph in the LIMITATIONS section of the Cessna Models 208 and 208B POH and FAA-approved AFM.
   (ii) Replace the text in the KNOWN ICING EQUIPMENT SUPPLEMENT S1 under the “MINIMUM SPEED IN ICING CONDITIONS” paragraph with the text in Appendix 4 of this AD.
   (iii) Insert the following text in the LIMITATIONS section of the POH/AFM under the “OTHER LIMITATIONS” paragraph and in the LIMITATIONS section of the KNOWN ICING EQUIPMENT SUPPLEMENT S1 under the “AUTOPILOT OPERATION IN ICING CONDITIONS” paragraph: “Disconnect autopilot at first indication of ice accretion.”

5. For Cessna Model 208 airplanes and Model 208B airplanes, all serial numbers, equipped with airframe deicing pneumatic boots, that are not currently prohibited from flight in known or forecast icing:
   (i) Replace the text in the PERFORMANCE section of the Cessna Models 208 or 208B POH and FAA-approved AFM KNOWN ICING EQUIPMENT SUPPLEMENT S1 under the “STALL SPEEDS” paragraph with the text in Appendix 5 of this AD.
   (ii) Replace the “WARNING” text in the LIMITATIONS section of the Cessna Models 208 or 208B POH and FAA-approved AFM KNOWN ICING EQUIPMENT SUPPLEMENT S1 under “ENVIRONMENTAL CONDITIONS” with: “FLIGHT IN THESE CONDITIONS ARE PROHIBITED.”
(iii) Replace the last two sentences in the LIMITATIONS section of the Cessna Models 208 or 208B POH and FAA-approved AFM KNOWN ICING EQUIPMENT SUPPLEMENT S1 under “ENVIRONMENTAL CONDITIONS” with the following text: “Exit strategies should be determined during pre-flight planning.”

**Alternative Methods of Compliance (AMOCs)**

(j) The Manager, Wichita Aircraft Certification (ACO), has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Robert P. Busto, Aerospace Engineer, Wichita ACO, FAA, 1801 Airport Road, Wichita, Kansas 67209; telephone: (316) 946-4157; fax: (316) 946-4107. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(k) AMOCs approved for AD 2006-06-06 are approved for this AD until the actions in paragraph (e) of this AD are done. After this, they are no longer valid. The paragraph designations of the AMOC refer to paragraphs (e) and (f) of AD 2006-06-06, which are paragraphs (h) and (i) of this AD respectively.

**Related Information**

(l) To get copies of the AFM supplements and service information referenced in this AD, contact: Cessna Aircraft Company, Product Support, P.O. Box 7706, Wichita, Kansas 67277. To view the AD docket, go to the Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC, or on the Internet at http://dms.dot.gov. The docket number is Docket No. FAA-2006-26498; Directorate Identifier 2006-CE-83-AD.
Appendix 1 Retained From AD 2006-06-06

Changes to the Cessna Models 208 or 208B Pilot's Operating Handbook (POH) and FAA-Approved Airplane Flight Manual (AFM)

Affected Cessna Models 208 or 208B POH and FAA-Approved AFM

Insert the following text at the beginning of the KINDS OF OPERATION LIMITS paragraph in the LIMITATIONS section of the Cessna Models 208 or 208B POH and FAA-approved AFM. This may be done by inserting a copy of this AD into the POH/AFM:

“Continued flight after encountering moderate or greater icing conditions is prohibited. One or more of the following defines moderate icing conditions for this airplane:

- Indicated airspeed in level cruise flight at constant power decreases by 20 knots.
- Engine torque required to maintain airspeed increases by 400 ft. lbs.
- Airspeed of 120 KIAS cannot be maintained in level flight.
- An accretion of \( \frac{1}{4}\)-inch of ice is observed on the wing strut.
- Disregard any mention of approval for flight in icing conditions within the POH/AFM.”
Appendix 2 Retained From AD 2006-06-06

Changes to the Cessna Models 208 or 208B Pilot's Operating Handbook (POH) and FAA-Approved Airplane Flight Manual (AFM)

Affected Cessna Models 208 or 208B POH and FAA-Approved AFM

Insert the following text in the LIMITATIONS section of the POH and FAA-approved AFM KNOWN ICING EQUIPMENT SUPPLEMENT S1, at the beginning of the paragraph “REQUIRED EQUIPMENT.” This may be done by inserting a copy of this AD into the POH/AFM:

“Continued flight after encountering moderate or greater icing conditions is prohibited. One or more of the following defines moderate icing conditions for this airplane:
- Indicated airspeed in level flight at constant power decreases by 20 knots.
- Engine torque required to maintain airspeed increases by 400 ft. lbs.
- Airspeed of 120 KIAS cannot be maintained in level flight.
- An accretion of \(\frac{1}{4}\)-inch of ice is observed on the wing strut.
- Disregard any mention of approval for flight in icing conditions within the POH/AFM.”
Appendix 3 Retained From AD 2006-06-06

Cessna Model 208 Airplanes and Model 208B Airplanes, Equipped With Airframe Deicing Pneumatic Boots, That Are Not Currently Prohibited From Flight in Known or Forecast Icing

Install a placard with black letters on a white background. The placard shall be located on the instrument panel in one of the following areas: Under the radio stack, immediately above the pilot's flight instruments, or below the pilot's vertical speed indicator. Lettering on the placard shall be a minimum \1/8\-inch tall and state the following:

“Continued flight after encountering moderate or greater icing conditions is prohibited. One or more of the following defines moderate icing conditions for this airplane:
Airspeed in level flight at constant power decreases by 20 KIAS.
Engine torque required to maintain airspeed increases by 400 ft. lbs.
120 KIAS cannot be maintained in level flight.
Ice accretion of 1/4 inch observed on the wing strut.”
Appendix 4 Retained From AD 2006-06-06

Changes to the Cessna Models 208 or 208B Pilot's Operating Handbook (POH) and FAA-Approved Airplane Flight Manual (AFM) Supplement S1

Affected Cessna Models 208 or 208B POH and FAA-Approved AFM and FAA-Approved Supplement S1

Insert the following text into the LIMITATIONS section under the “AIRSPEED LIMITATIONS” paragraph of the Cessna Models 208 or 208B POH and FAA-approved AFM, and replace the text in the KNOWN ICING EQUIPMENT SUPPLEMENT S1 under the “MINIMUM SPEED IN ICING CONDITIONS” paragraph with the following text. This may be done by inserting a copy of this AD into the POH/AFM:

“Minimum airspeed in icing conditions, for all flight phases including approach, except takeoff and landing:

Flaps up: 120 KIAS
Flaps 10[deg]: 105 KIAS
Flaps 20[deg]: 95 KIAS

Exception for flaps up: when climbing to exit icing conditions airspeed can be reduced to 110 KIAS minimum.

Flaps must be extended during all phases (takeoff and landing included) at airspeeds below 110 KIAS, except adhere to published AFM procedures when operating with ground deicing/anti-icing fluid applied.

Warning

The aural stall warning system does not function properly in all icing conditions and should not be relied upon to provide adequate stall warning when in icing conditions.”

Note: These are minimum speeds for operations in icing conditions. Disregard any reference to the original speeds within the POH/AFM.
Appendix 5 Retained From AD 2006-06-06

Changes to the Cessna Models 208 or 208B Pilot's Operating Handbook (POH) and FAA-Approved Airplane Flight Manual (AFM) Supplement S1

Replace the text in the PERFORMANCE section of the POH/AFM KNOWN ICING EQUIPMENT SUPPLEMENT S1 under the “STALL SPEEDS” paragraph with the following text:

“Ice accumulation on the airframe may result in a 20 KIAS increase in stall speed. Either buffet or aural stall warning should be treated as an imminent stall.”

“WARNING–The aural stall warning system does not function properly in all icing conditions and should not be relied upon to provide adequate stall warning when in icing conditions.”

Issued in Kansas City, Missouri, on May 10, 2007.
David R. Showers,
Acting Manager, Small Airplane Directorate, Aircraft Certification Service.
[FR Doc. E7-9398 Filed 5-16-07; 8:45 am]