

(f) *Shoulder Strap Loads*. Where upper torso straps (shoulder straps) are used for sofa occupants, tension loads in individual straps must not exceed 1,750 pounds. If dual straps are used for restraining the upper torso, the total strap tension loads must not exceed 2,000 pounds.

Applicability

As discussed above, these special conditions are applicable to the Cessna Model 680 Sovereign. Should Cessna Aircraft Company apply at a later date for a change to the type certificate to include another model incorporating the same novel or unusual design feature, the special conditions would apply to that model as well under the provisions of § 21.101(a)(1), Amendment 21-69, effective September 16, 1991.

Conclusion

This action affects only certain novel or unusual design features on the Cessna Model 680 Sovereign airplane. It is not a rule of general applicability, and it affects only the applicant who applied to the FAA for approval of these features on the airplane.

List of Subjects in 14 CFR Part 25

Aircraft, Aviation safety, Reporting and recordkeeping requirements.

The authority citation for these special conditions is as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701, 44702, 44704.

The Proposed Special Conditions

Accordingly, the Federal Aviation Administration (FAA) proposes the following special conditions as part of the type certification basis for the Cessna Aircraft Company Model 680 Sovereign airplanes.

The minimum acceptable standards of injury criteria and testing requirements for dynamic certification of the Model 680 side-facing single-occupant seats are as follows:

(a) *Existing Criteria*. As referenced by § 25.785(b), all injury protection criteria of §§ 25.562(c)(1) through (c)(6) apply to the occupants of the side-facing seats. Head injury criteria (HIC) assessments are only required for head contact with the seat and/or adjacent structures.

(b) *Body-to-wall/furnishing contact*. The seat must be installed aft of a structure such as an interior wall or furnishing that will contact the pelvis, upper arm, chest, or head of an occupant seated next to the structure. A conservative representation of the structure and its stiffness must be included in the tests. It is recommended, but not required, that the contact surface of this structure must be

covered with at least two inches of energy absorbing protective padding (foam or equivalent), such as Ensolite.

(c) *Thoracic Trauma*. Testing with a Side Impact Dummy (SID), as defined by 49 CFR Part 572, Subpart F, or its equivalent, must be conducted and TTI injury criteria acquired with the SID must be less than 85, as defined in 49 CFR Part 572, Subpart F. SID TTI must be processed as defined in Federal Motor Vehicle Safety Standard (FMVSS) Part 571.214, section S6.13.5. Rational analysis, comparing an installation with another installation where TTI data were acquired and found acceptable, may also be viable.

(d) *Pelvis*. Pelvic lateral acceleration must not exceed 130g, pelvic acceleration data must be processed as defined in FMVSS Part 571.214, section S6.13.5

(f) *Shoulder Strap Loads*. Where upper torso straps (shoulder straps) are used for occupants, tension loads in individual straps must not exceed 1,750 pounds. If dual straps are used for restraining the upper torso, the total strap tension loads must not exceed 2,000 pounds.

Issued in Renton, Washington, on May 5, 2003.

Ali Bahrami,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 03-12043 Filed 5-14-03; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2002-CE-05-AD]

RIN 2120-AA64

Airworthiness Directives; Cessna Aircraft Company Models 401, 401A, 401B, 402, 402A, 402B, 411, and 411A Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes to supersede Airworthiness Directive (AD) 79-10-15 R2, which applies to all Cessna Aircraft Company (Cessna) Models 401, 401A, 401B, 402, 402A, 402B, 411, and 411A airplanes. AD 79-10-15 R2 currently requires repetitive inspections of the right and left wing spar lower cap areas for fatigue cracks and requires wing spar cap repair or replacement as necessary. Cessna has

performed fatigue and crack growth analyses of the wings of these airplanes, and the Federal Aviation Administration (FAA) has evaluated this information and determined that a wing spar modification is necessary as well as periodic inspections. This proposed AD would require you to repetitively inspect the wing spar caps for fatigue cracks with any necessary repair or replacement on all airplanes and incorporate a spar strap modification on each wing spar on certain airplanes. The actions specified by this proposed AD are intended to prevent wing spar cap failure due to undetected fatigue cracks. Such failure could result in loss of a wing with consequent loss of airplane control.

DATES: The FAA must receive any comments on this proposed rule on or before August 8, 2003.

ADDRESSES: Submit comments to FAA, Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 2002-CE-05-AD, 901 Locust, Room 506, Kansas City, Missouri 64106. You may view any comments at this location between 8 a.m. and 4 p.m., Monday through Friday, except Federal holidays. You may also send comments electronically to the following address: 9-ACE-7-Docket@faa.gov. Comments sent electronically must contain "Docket No. 2002-CE-05-AD" in the subject line. If you send comments electronically as attached electronic files, the files must be formatted in Microsoft Word 97 for Windows or ASCII text.

You may get service information that applies to this proposed AD from the Cessna Aircraft Company, Product Support, PO Box 7706, Wichita, Kansas 67277; telephone: (316) 517-5800; facsimile: (316) 942-9006. You may also view this information at the Rules Docket at the address above.

FOR FURTHER INFORMATION CONTACT: Paul Nguyen, Aerospace Engineer, FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Mid-Continent Airport, Wichita, Kansas 67209; telephone: (316) 946-4125; facsimile: (316) 946-4107.

SUPPLEMENTARY INFORMATION:

Comments Invited

How Do I Comment on This Proposed AD?

The FAA invites comments on this proposed rule. You may submit whatever written data, views, or arguments you choose. You need to include the rule's docket number and submit your comments to the address specified under the caption **ADDRESSES**.

We will consider all comments received on or before the closing date. We may amend this proposed rule in light of comments received. Factual information that supports your ideas and suggestions is extremely helpful in evaluating the effectiveness of this proposed AD action and determining whether we need to take additional rulemaking action.

Are There Any Specific Portions of This Proposed AD I Should Pay Attention to?

The FAA specifically invites comments on the overall regulatory, economic, environmental, and energy aspects of this proposed rule that might suggest a need to modify the rule. You may view all comments we receive before and after the closing date of the rule in the Rules Docket. We will file a report in the Rules Docket that summarizes each contact we have with the public that concerns the substantive parts of this proposed AD.

How Can I Be Sure FAA Receives My Comment?

If you want FAA to acknowledge the receipt of your mailed comments, you must include a self-addressed, stamped postcard. On the postcard, write "Comments to Docket No. 2002-CE-05-AD." We will date stamp and mail the postcard back to you.

Discussion

Has FAA Taken Any Action to This Point?

Reports of fatigue cracks on Cessna 401, 402, and 411 series airplanes caused FAA to take AD action (AD 79-10-15 R2, Amendment 39-3711) to require repetitive inspections of the right and left wing spar lower cap areas for fatigue cracks and to require wing spar cap repair or replacement as necessary.

Accomplishment of the inspections required by AD 79-10-15 R2 is required in accordance with Cessna Service Bulletin ME79-16, Revision 3, dated February 8, 1980.

AD 79-10-15 R2 allowed for the incorporation of Cessna Service Kit SK402-36 or SK411-56 on the front wing spar lower cap as terminating action for the repetitive inspections on the applicable wing.

What Has Happened Since AD 79-10-15 R2 To Initiate This Proposed Action?

Since issuance of AD 79-10-15, Cessna has analyzed the wing, including fatigue and crack growth analyses, on the affected airplanes. Analysis included:

- A determination of the probable location and modes of damage based

on analytical results, available test data, and service information;

- Classical fatigue analyses;
- Crack growth and residual strength analyses including use of linear elastic fracture mechanics methods;
- Full-scale ground testing to validate analytical models; and
- A flight strain survey to develop stress spectra used in the analyses.

The inspections required by AD 79-10-15 R2 in accordance with Cessna Service Bulletin ME79-16, Revision 3, are accomplished using a surface eddy current inspection method.

Based on the analysis, Cessna has found that the eddy current method will not find the crack until it is .03 inch longer than the critical crack length. When the crack reaches the critical length, it is not reliably detectable because it is under the head of the fastener. Once the main spar cap is severed, the remaining structure will no longer meet the residual strength requirements. Wing separation could then occur under loading conditions significantly less than those established for the design limit load.

Cessna reported only one instance where cracks were detected using the nondestructive inspection (NDI) eddy current procedure. There are other reported instances where cracks were detected visually in the wheel well area on the aft flange. The problem with visual inspections is the access doubler flanges cover a large percentage of the forward spar flange. This limits the effectiveness of the visual inspections.

To meet industry NDI standards, cracks need to be found on Cessna Models 401, 401A, 401B, 402, 402A, 402B, 411, and 411A airplanes through NDI inspection methods with a 90-percent probability of detection at a 95-percent confidence level.

Cessna's analysis indicates that the probability and confidence levels are not being met.

Is There Service Information That Applies to This Subject?

Cessna has issued the following:

- Service Bulletin MEB01-06 and Service Kit SK402-46, both dated September 24, 2001; and
- Service Bulletin MEB01-07 and Service Kit SK411-59, both dated September 24, 2001.

This service information includes procedures for inspecting and modifying the lower wing spar caps.

The FAA's Determination and an Explanation of the Provisions of This Proposed AD

What Has FAA Decided?

After examining the circumstances and reviewing all available information related to the incidents described above, we have determined that:

- Cessna's analysis of the problems with the eddy current inspection on the wing spar cap area on the Cessna 401, 402, and 411 series airplanes is valid;
- The unsafe condition referenced in this document exists or could develop on these airplanes that are the same type design;
- The actions specified in the previously-referenced service information should be accomplished on the affected airplanes; and
- AD action should be taken in order to correct this unsafe condition.

What Would This Proposed AD Require?

This proposed AD would supersede AD 79-10-15 R2 with a new AD that would require you to either (depending on the aircraft configuration):

- For airplanes that do not incorporate one of certain Cessna Service Kits: repetitively inspect the wing spar caps for fatigue cracks and repair or replace the wing spar caps as necessary and incorporate a spar strap modification on each wing spar; or
- For airplanes that incorporate one of certain Cessna Service Kits: repetitively inspect the wing spar caps for fatigue cracks and repair or replace the wing spar caps as necessary.

How Does the Revision to 14 CFR Part 39 Affect This Proposed AD?

On July 10, 2002, FAA published a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs FAA's AD system. This regulation now includes material that relates to special flight permits, alternative methods of compliance, and altered products. This material previously was included in each individual AD. Since this material is included in 14 CFR part 39, we will not include it in future AD actions.

Cost Impact

How Many Airplanes Would This Proposed AD Impact?

We estimate that this proposed AD affects 400 airplanes in the U.S. registry.

What Would Be the Cost Impact of This Proposed AD on Owners/Operators of the Affected Airplanes?

We estimate the following costs to accomplish the proposed modification and initial inspection:

Labor cost	Parts cost	Total cost per airplane	Total cost on U.S. operators
485 workhours × \$60 per hour = \$29,100 per airplane.	\$1,763 per airplane	\$29,100 + \$1,763 = \$30,863 per airplane.	\$30,863 × 400 = \$12,345,200.

The above figures do not take into account the cost of repetitive inspections. The FAA does not have any way of determining the number of repetitive inspections each owner/operator would incur during the operating life of the affected airplanes.

Regulatory Impact

Would This Proposed AD Impact Various Entities?

The regulations proposed herein would 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. Therefore, it is determined that this proposed rule would not have federalism implications under Executive Order 13132.

Would This Proposed AD Involve a Significant Rule or Regulatory Action?

For the reasons discussed above, I certify that this proposed action (1) is not a “significant regulatory action” under Executive Order 12866; (2) is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) if promulgated, 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. A copy of the draft regulatory evaluation prepared for this action has been placed in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption **ADDRESSES**.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend 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. FAA amends § 39.13 by removing Airworthiness Directive (AD) 79–10–15

R2, Amendment 39–3711, and by adding a new AD to read as follows:

Cessna Aircraft Company: Docket No. 2002–CE–05–AD; Supersedes AD 79–10–15 R2, Amendment 39–3711.

(a) *What airplanes are affected by this AD?*

This AD affects Models 401, 401A, 401B, 402, 402A, 402B, 411, and 411A airplanes, all serial numbers, that are certificated in any category.

(b) *Who must comply with this AD?*

Anyone who wishes to operate any of the airplanes identified in paragraph (a) of this AD must comply with this AD.

(c) *What problem does this AD address?*

The actions specified by this AD are intended to prevent wing spar cap failure due to undetected fatigue cracks. Such failure could result in loss of a wing with consequent loss of airplane control.

(d) *What actions must I accomplish to address this problem?* To address this problem, you must repetitively inspect the wing spar caps for fatigue cracks and repair or replace the wing spar caps as necessary and incorporate a spar strap modification (as specified) on each wing spar in accordance with Cessna Service Bulletin MEB01–6 and Cessna Service Kit SK402–46, both dated September 24, 2001; or Cessna Service Bulletin MEB01–7 and Cessna Service Kit SK411–59, both dated September 24, 2001, as follows:

Initial and repetitive compliance times	Affected airplanes
(1) Inspect and modify at whichever of the following that occurs later and repair or replace as necessary prior to further flight after the inspection, unless already accomplished, and repetitively inspect at the intervals specified in paragraphs (d)(3)(i), (d)(3)(ii), and (d)(3)(iii) of this AD: (i) Upon accumulating 5,500 hours time-in-service (TIS) on a wing spar; or (ii) Within the next 200 hours TIS after the effective date of this AD or 12 months after the effective date of this AD, whichever occurs first.	Cessna Models 411 and 411A airplanes that do not incorporate Cessna Service Kit SK411–56, SK411–56A, or SK411–56B.
(2) Inspect and modify at whichever of the following that occurs first and repair or replace as necessary prior to further flight after the inspection, unless already accomplished, and repetitively inspect at the intervals specified in paragraphs (d)(4)(i) and (d)(4)(ii) of this AD: (i) Upon accumulating 6,500 hours TIS on a wing spar; or (ii) Within the next 200 hours TIS after the effective date of this AD or 12 months after the effective date of this AD, whichever occurs first.	Cessna Models 401, 401A, 401B, 402, 402A, and 402B airplanes that do not incorporate Cessna Service or Kit SK402–36, SK402–36A, (SK402–36B, or SK402–36C.

Initial and repetitive compliance times	Affected airplanes
(3) Inspect in the following areas (modification not required for these airplanes) and repair or replace as necessary prior to further flight after the inspection where cracks are found. Inspection areas are defined in the Cessna Model 411 Supplemental Inspection Document (SID): (i) Area "A" (<i>Inspection ID 57-10-11</i>): Initially upon accumulating 5,400 hours TIS after incorporating the applicable service kit on a wing spar or within the next 100 hours TIS after the effective date of this AD, whichever occurs later, unless already accomplished, and thereafter at intervals not to exceed 2,500 hours TIS. (ii) Area "B" (<i>Inspection ID 57-10-12</i>): Initially upon accumulating 5,400 hours TIS after incorporating the applicable service kit on a wing spar or within the next 100 hours TIS after the effective date of this AD, whichever occurs later, unless already accomplished, and thereafter at intervals not to exceed 1,000 hours TIS. (iii) Area "C" (<i>Inspection ID 57-10-08</i>): Upon accumulating 19,900 hours TIS after incorporating the applicable service kit on a wing spar or within the next 100 hours TIS after the effective date of this AD, whichever occurs later, unless already accomplished, and thereafter at intervals not to exceed 2,000 hours TIS. (4) Inspect in the following areas (modification not required for these airplanes) and repair or replace as necessary prior to further flight after the inspection. Inspection areas are defined in the Cessna Model 401/402 Supplemental Inspection Document (SID): (i) Area "A" (<i>Inspection ID 57-10-11</i>) and Area "B" (<i>Inspection ID 57-10-12</i>): Initially upon accumulating 7,400 hours TIS after incorporating the applicable service kit on a wing spar or within the next 100 hours TIS after the effective date of this AD, whichever occurs later, unless already accomplished, and thereafter at intervals not to exceed 5,000 hours TIS. (ii) Area "C" (<i>Inspection ID 57-10-08</i>): Initially upon accumulating 19,900 hours TIS after incorporating the applicable service kit on a wing spar or within the next 100 hours TIS after the effective date of this AD, whichever occurs later, unless already accomplished, and thereafter at intervals not to exceed 2,500 hours TIS.	Cessna Models 411 and 411A airplanes that incorporate Cessna Service Kit SK411-56, SK411-56A, SK411-56B, or SK411-59. This includes airplanes that had Cessna Service Kit SK411-59 incorporated as required by paragraph (d)(1) of this AD. Cessna Models 401, 401A, 401B, 402, 402A, and 402B airplanes that incorporate Cessna Service Kit SK402-36, SK402-36A, SK402-36B, SK402-36C, or SK402-46. This includes airplanes that had Cessna Service Kit SK402-46 incorporated as required by paragraph (d)(2) of this AD.

(e) *Can I comply with this AD in any other way?*

(1) To use an alternative method of compliance or adjust the compliance time, follow the procedures in 14 CFR 39.19. Send these requests to the Manager, Wichita Aircraft Certification Office (ACO). For information on any already approved alternative methods of compliance, contact Paul Nguyen, Aerospace Engineer, FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Mid-Continent Airport, Wichita, Kansas 67209; telephone: (316) 946-4125; facsimile: (316) 946-4107.

(2) Alternative methods of compliance approved in accordance with AD 79-10-15 R2, which is superseded by this AD, are not approved as alternative methods of compliance with this AD.

(f) *How do I get copies of the documents referenced in this AD?* You may get copies of the documents referenced in this AD from the Cessna Aircraft Company, Product Support, PO Box 7706, Wichita, Kansas 67277; telephone: (316) 517-5800; facsimile: (316) 942-9006. You may view these documents at FAA, Central Region, Office of the Regional Counsel, 901 Locust, Room 506, Kansas City, Missouri 64106.

(g) *Does this AD action affect any existing AD actions?* This amendment supersedes AD 79-10-15 R2, Amendment 39-3711.

Issued in Kansas City, Missouri, on May 9, 2003.

James E. Jackson,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. 03-12113 Filed 5-14-03; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2003-CE-20-AD]

RIN 2120-AA64

Airworthiness Directives; Dornier Luftfahrt GMBH Models 228-100, 228-101, 228-200, 228-201, 228-202, and 228-212 Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes to adopt a new airworthiness directive (AD) that would apply to certain Dornier Luftfahrt GMBH (Dornier) Models 228-100, 228-101, 228-200, 228-201, 228-202, and 228-212 airplanes that have electrical cabin/

cockpit heater option P05 or option P09 installed. This proposed AD would require you to modify the cockpit and cabin auxiliary heating wiring. This proposed AD is the result of mandatory continuing airworthiness information (MCAI) issued by the airworthiness authority for Germany. The actions specified by this proposed AD are intended to correct problems with the current design of the heater wiring, which could result in failure of the auxiliary cabin heater. Such failure could lead to overheating and smoke in the cockpit.

DATES: The Federal Aviation Administration (FAA) must receive any comments on this proposed rule on or before June 23, 2003.

ADDRESSES: Submit comments to FAA, Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 2003-CE-20-AD, 901 Locust, Room 506, Kansas City, Missouri 64106. You may view any comments at this location between 8 a.m. and 4 p.m., Monday through Friday, except Federal holidays. You may also send comments electronically to the following address: 9-ACE-7-Docket@faa.gov. Comments sent electronically must contain "Docket No. 2003-CE-20-AD" in the subject line. If you send comments electronically as attached electronic