

[4910-13-U]

DEPARTMENT OF TRANSPORTATION (DOT)

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-05-21176; Directorate Identifier 2005-CE-25-AD; Amendment 39-14128; AD 2005-12-12]

RIN 2120-AA64

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

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments

SUMMARY: The FAA is adopting a new airworthiness directive (AD) to supersede AD 79-10-15, which applies to all Cessna Aircraft Company (Cessna) Models 401, 401A, 401B, 402, 402A, 402B, 411, and 411A airplanes. AD 79-10-15 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. This AD is the result of fatigue and crack growth analyses of the wings of these airplanes, recent cracks found on similar design Model 402C airplanes, and the FAA's determination that repetitive inspections and a wing spar modification are necessary to address the unsafe condition. Consequently, this AD would require repetitive inspections and a spar strap modification on each wing. The actions specified by this AD are intended to prevent wing spar cap failure caused by undetected fatigue cracks. Such failure could result in loss of a wing with consequent loss of airplane control. FAA is also issuing AD 2005-12-13 to require the spar strap modification and long-term inspections on Models 402C and 414A airplanes.

DATES: This AD becomes effective on June 22, 2005.

As of June 22, 2005, the Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulation.

We must receive any comments on this AD by August 3, 2005.

ADDRESSES: Use one of the following to submit comments on this AD:

- DOT Docket web site: Go to <http://dms.dot.gov> and follow the instructions for sending your comments electronically.
- Government-wide rulemaking web site: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.
- Mail: Docket Management Facility; US Department of Transportation, 400 Seventh Street, S.W., Nassif Building, Room PL-401, Washington, DC 20590-001.
- Fax: 1-202-493-2251.
- Hand Delivery: Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street, S.W., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

To get the service information identified in this AD, contact Cessna Aircraft Company, Product Support, P.O. Box 7706, Wichita, Kansas 67277; telephone: (316) 517-5800; facsimile: (316) 942-9006.

To view the comments to this AD, go to <http://dms.dot.gov>. The docket number is FAA-05-21176; Directorate Identifier 2005-CE-25-AD.

FOR FURTHER INFORMATION CONTACT: Paul Nguyen, Aerospace Engineer, FAA, ACE-118W, Wichita Aircraft Certification Office, 1801 Airport Road, Mid-Continent Airport, Wichita, Kansas 67209; telephone: (316) 946-4125; facsimile: (316) 946-4107.

SUPPLEMENTARY INFORMATION:

What events have caused this AD?

Initial AD Action:

Reports of fatigue cracks of the wing spar lower cap areas caused FAA to issue AD 79-10-15, Amendment 39-3711 against Cessna Models 401, 401A, 401B, 402, 402A, 402B, 411, and 411A airplanes. AD 79-10-15 currently requires repetitive inspections of the right and left wing spar lower cap areas for fatigue cracks and wing spar cap repair or replacement as necessary.

Accomplishment of the actions mandated by AD 79-10-15 currently requires following Cessna Service Bulletin ME79-16, Revision 3, dated February 8, 1980.

AD 79-10-15 allows 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.

In addition to AD 79-10-15, FAA issued AD 99-11-13 (64 FR 29781, June 3, 1999), requiring inspections of the forward, aft, and auxiliary wing spars for cracks on Cessna Models 402C airplanes with repair or replacement as necessary. AD 99-11-13 also required the operator to report the results of the inspections to FAA. AD 99-11-13 resulted from an accident where the right wing of a Cessna 402C failed just inboard of the nacelle at Wing Station (WS) 87. Investigation revealed fatigue cracking of the forward main spar that initiated at the edge of the front spar forward lower spar cap. FAA determined the spar cap cracking could continue to develop over the life of the affected airplanes and issued AD 2000-23-01, Amendment 39-11971 (65 FR 70645, November 27, 2000), to require repetitive inspections of the forward, aft, and auxiliary wing spars for cracks on Cessna Models 402C airplanes with repair or replacement as necessary. The Model 402C airplanes have a similar type design to that of the Models 401, 401A, 401B, 402, 402A, 402B, 411, 411A, and 414A airplanes.

Wing Analysis:

Cessna 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 following Cessna Service Bulletin ME79-16, Revision 3, use a nondestructive inspection (NDI) surface eddy current method.

Based on the analysis, Cessna 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 less than those established for the design limit load.

Cessna reported only one instance where use of the NDI eddy current procedure detected cracks. There are other reported instances where cracks were detected visually on the aft flange in the wheel well area. The access doubler flanges cover a large percentage of the forward spar flange, hampering the effectiveness of 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 the probability and confidence levels are not being met. The FAA concurs.

Action Based on Cessna's Analysis:

We issued proposals to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include two ADs that would apply to Cessna Models 401, 401A, 401B, 402, 402A, 402B, 402C, 411, 411A, and 414A airplanes. The proposals (Docket Nos. 2002-CE-05-AD and 2002-CE-57-AD) published in the *Federal Register* as notices of proposed rulemaking (NPRMs) on May 15, 2003 (68 FR 26239 and 68 FR 26244). The NPRMs proposed the following:

- Docket No. 2002-CE-05-AD: applied to Cessna Models 401, 401A, 401B, 402, 402A, 402B, 411, and 411A airplanes and proposed to supersede AD 79-10-15 with a new AD that would require one of the following (depending on the aircraft configuration):
 - ✓ For airplanes that do not incorporate one of the specified 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 the specified Cessna Service Kits: repetitively inspect the wing spar caps and straps for fatigue cracks and repair or replace the wing spar caps and straps as necessary.
- Docket No. 2002-CE-57-AD: applied to Cessna Models 402C and 414A airplanes and proposed to supersede AD 2000-23-01 with a new AD that would require you to:
 - ✓ inspect the wing spar caps for fatigue cracks;
 - ✓ repair or replace the wing spar caps as necessary; and
 - ✓ incorporate a spar strap modification on each wing spar.

The FAA invited interested persons to participate in the development of these amendments during the original 75-day comment periods. We extended the comment periods for another 30 days and then reopened the comment periods for another 60 days. We received numerous comments on the NPRMs.

In addition, FAA held two public meetings: one on March 3 and 4, 2004, in Herndon, Virginia, and another on August 18, 2004, in Kansas City, Missouri. The public meetings allowed an open flow of communication among FAA, the public, and industry on issues related to the NPRMs.

After analyzing all information related to this subject, FAA decided not to issue the ADs as proposed, and that the best way to address the unsafe condition is for FAA, the public, and industry to develop alternative solutions to address the unsafe condition.

Therefore, FAA withdrew the two NPRMs and gathered the necessary information to address the situation. That information led to FAA's determination, at that time, to initiate AD action against the Models 401, 401A, 401B, 402, 402A, 402B, 411, and 411A airplanes; and not against the Models 402C and 414A airplanes. The plan was to address the action through the regular rulemaking process with a notice of proposed rulemaking.

Most Recent Service History:

In 2005, the FAA received reports of (and analyzed data from) cracks found in the wings of two Cessna Model 402C airplanes. The Model 402C airplanes have a similar type design to that of the Models 401, 401A, 401B, 402, 402A, 402B, 411, 411A, and 414A airplanes.

On the first airplane, information indicated the airplane had severe cracking on its left wing in the vicinity of the forward spar and outboard engine beam. The main lower spar cap had completely failed at about WS 114. The airplane had cracks in the lower wing skin and the web splice doubler. Also found were two popped rivets: one between the heat shield and the wing skin and another between the factory installed web splice doublers and web. The airplane had 20,355 total hours time-in-service (TIS).

During the airplane's most recent flights before the cracking was found, the pilot noticed that roll trim was required. The flights required the pilot to use aileron trim to maintain level flight. The airplane landed safely and inspection revealed the cracks.

On the second airplane, fatigue cracks were found at about WS 114 in the main lower spar cap of another Model 402C airplane that had over 20,000 total hours TIS. Fatigue analysis shows that similar fatigue cracks could also develop in the wings of the Model 414A airplanes.

Logbook records indicated that both airplanes with cracked spars were in compliance with AD 2000-23-01. The FAA received a third report of another cracked spar found at WS 114 on one of the two Model 402C incident airplanes.

Therefore, FAA issued Emergency AD 2005-05-51 to detect and correct cracking in the wing spars of the Cessna Models 402C and 414A airplanes before the cracks could grow to failure. Such a wing failure could result in the wing separating from the airplane with consequent loss of control of the airplane.

Emergency AD 2005-05-51 superseded AD 2000-23-01 and:

- required the visual inspections of the forward, aft, and auxiliary wings spars for cracks more frequently on Model 402C airplanes including special emphasis areas;
- added inspection requirements for the Model 414A airplanes; and
- included provisions to position the airplane to a home base, hangar, maintenance facility, etc.

Emergency AD 2005-05-51 did not affect those airplanes that incorporated a spar strap modification on each wing following the original release of (or a later FAA-approved revision to) Cessna Service Bulletin MEB02-5 and Cessna Service Kit SK402-47 (currently at MEB02-5 Revision 2 and SK402-47B).

Long-term Continued Operational Safety:

Emergency AD 2005-05-51 was considered an interim action to immediately require visual inspection of the forward, aft, and auxiliary wing spars for cracks. The intent was to immediately detect existing cracking before it grew to wing failure.

Cessna developed inspection techniques (eddy current) for the forward spar that are more effective at detecting cracks before the structural integrity of the wing is compromised. These inspection techniques allow for longer intervals between repetitive inspections than in emergency AD 2005-05-51. Based on this, FAA issued AD 2005-05-52, Amendment 39-14022 (70 FR 13362, dated March 21, 2005). The inspection techniques addressed by AD 2005-05-52 for the Cessna Models 402C and 414A airplanes are similar to those required by AD 79-10-15 for the Models 401, 401A, 401B, 402, 402A, 402B, 411, and 411A airplanes.

However, based on the analysis and recent service history, the FAA has determined that the long-term operational safety of the Cessna airplanes addressed by both AD 2005-05-52 and AD 79-10-15 can only be assured through the incorporation of a spar strap modification and long-term repetitive inspections. Since Models 402, 401A, 401B, 402, 402A, 402B, 411, and 411A have a similar type design to that of Models 402C and 414A airplanes, FAA is also issuing AD 2005-12-13 to require the spar strap modification and long-term inspections on those airplanes.

What is the potential impact if FAA took no action? Wing spar cap failure caused by undetected fatigue cracks could result in loss of a wing with consequent loss of airplane control.

Is there service information that applies to this subject? Cessna has issued the following:

- Original issue dated September 24, 2001, and Revision 1, dated December 22, 2003, of both Cessna Multi-engine Service Bulletin MEB01-06 and Service Kit SK402-46A; and
- Original issue dated September 24, 2001, of both Cessna Multi-engine Service Bulletin MEB01-07 and Service Kit SK411-59.

This service information includes procedures for inspecting lower wing spar caps and incorporating a spar strap modification.

FAA's Determination and Requirements of the AD

What has FAA decided? We have evaluated all pertinent information and identified an unsafe condition that is likely to exist or develop on other products of this same type design.

Since the unsafe condition described previously is likely to exist or develop on other Cessna Aircraft Company Models 401, 401A, 401B, 402, 402A, 402B, 411, and 411A airplanes of the same type design, we are issuing this AD to detect and correct wing spar cap failure caused by undetected fatigue cracks. Such failure could result in loss of a wing with consequent loss of airplane control.

What does this AD require? This AD supersedes AD 79-10-15 with a new AD that incorporates the actions in the previously-referenced service bulletins.

Why do the compliance times of this AD range between 100 hours TIS and 800 hours TIS? We have established the compliance times based on risk analysis that also allows for compliance scheduling. Some of these airplanes utilize "for hire" operations and could accumulate as many as 200 hours TIS in a month. The compliance time range is based on total hours TIS, which will address those high-usage airplanes first.

We are issuing this AD as a final rule; request for comments instead of a notice of proposed rulemaking (NPRM). We have evaluated comments from the previous AD actions on this subject and the two public meetings as well as the incidents that have occurred since (e.g., the actions of Emergency AD 2005-05-52). Based on this, FAA has determined that addressing the unsafe condition with public comment prior to issuing this AD action is impracticable. The FAA will evaluate any new comments received and amend the AD as necessary.

How does the revision to 14 CFR part 39 affect this AD? On July 10, 2002, we 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 altered products, special flight permits, and alternative methods of compliance. 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.

Comments Invited

Will I have the opportunity to comment before you issue the rule? This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment; however, we invite you to submit any written relevant data, views, or arguments regarding this AD. Send your comments to an address listed under ADDRESSES. Include "Docket No. FAA-05-21176; Directorate Identifier 2005-CE-25-AD" in the subject line of your comments. If you want us to acknowledge receipt of your mailed comments, send us a self-addressed, stamped postcard with the docket number written on it; we will date-stamp your postcard and mail it back to you. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify it. If a person contacts us through a nonwritten communication, and that contact relates to a substantive part of this AD, we will summarize the contact and place the summary in the docket. We will

consider all comments received by the closing date and may amend the AD in light of those comments.

Authority for this Rulemaking

What authority does FAA have for issuing this rulemaking action? 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

Will this AD impact various entities? 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.

Will this AD involve a significant rule or regulatory action? 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 “AD Docket FAA-05-21176; Directorate Identifier 2005-CE-25-AD” in your request.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, 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) 79-10-15, Amendment 39-3711, and by adding a new AD to read as follows:

2005-12-12 **Cessna Aircraft Company:** Amendment 39-14128; Docket No. FAA-05-21176; Directorate Identifier 2005-CE-25-AD.

When Does This AD Become Effective?

(a) This AD becomes effective on June 22, 2005.

Are Any Other ADs Affected By This Action?

(b) Yes. This AD supersedes AD 79-10-15; Amendment 39-3711.

What Airplanes Are Affected by This AD?

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

What is the Unsafe Condition Presented in This AD?

(d) This AD is the result of fatigue cracks found in the lower wing spar caps. We are issuing this AD to prevent wing spar cap failure caused by undetected fatigue cracks. Such failure could result in loss of a wing with consequent loss of airplane control.

What Must I do to Address This Problem?

(e) Repetitive Inspection and Modification of the Wing Spars:

(1) For Cessna Models 411 and 411A airplanes that do not incorporate Cessna Service Kit SK411-56, SK411-56A, SK411-56B, or SK411-59, maintain the repetitive inspections required by AD 79-10-15, Amendment 39-3711, and do the actions below. You may terminate the repetitive inspections of AD 79-10-15 after you incorporate the modification using the service information in paragraph (h)(2) of this AD:

If You have Equal To or More Than,	But Less Than,	Then Initially Inspect and Modify using the service information in paragraph (h)(2) of this AD, and reinspect as specified in paragraph (e)(3) of this AD.
(i) 18,000 hours time-in-service (TIS) on the wing or wing spar	Not applicable	Within 100 hours TIS after June 22, 2005 (the effective date of this AD), unless already done.
(ii) 12,000 hours TIS on the wing or wing spar	18,000 hours TIS	Within 200 hours TIS after June 22, 2005 (the effective date of this AD), unless already done.
(iii) 10,000 hours TIS on the wing or wing spar	12,000 hours TIS	Within 400 hours TIS after June 22, 2005 (the effective date of this AD), unless already done.
(iv) 5,500 hours TIS on the wing or wing spar	10,000 hours TIS	Within 800 hours TIS after June 22, 2005 (the effective date of this AD), unless already done.

(v) 0 hours TIS on the wing or wing spar	5,500 hours TIS	At whichever of the following occurs later: <ul style="list-style-type: none"> • Upon accumulating 5,500 hours TIS on the wing or wing spar; or • Within 800 TIS after June 22, 2005 (the effective date of this AD), unless already done.
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(vi) If the wings or wing spars were replaced with new or used wings or wing spars during the life of the airplane and logbook records positively show the TIS of the wings or wing spars, then initially inspect and modify at applicable wing or wing spar times in paragraphs (e)(1)(i) through (e)(1)(v) of this AD.

(vii) If the wings or wing spars were replaced with new or used wings or wing spars during the life of the airplane and logbook records cannot positively show the TIS of the wings or wing spars, then inspect and modify within 100 hours TIS after June 22, 2005 (the effective date of this AD), unless already done.

(2) For Cessna Models 401, 401A, 401B, 402, 402A, and 402B airplanes that do not incorporate Cessna Service Kit SK402-36, SK402-36A, SK402-36B, SK402-36C, SK402-46, or SK402-46A, maintain the repetitive inspections required by AD 79-10-15, Amendment 39-3711, and do the actions below. You may terminate the repetitive inspections of AD 79-10-15 after you incorporate the modification using the service information in paragraph (h)(1) of this AD:

If You have Equal To or More Than,	But Less Than,	Then Initially Inspect and Modify using the service information in paragraph (h)(1) of this AD, and reinspect as specified in paragraph (e)(4) of this AD.
(i) 18,000 hours TIS on the wing or wing spar	Not applicable	Within 100 hours TIS after June 22, 2005 (the effective date of this AD), unless already done.
(ii) 12,000 hours TIS on the wing or wing spar	18,000 hours TIS	Within 200 hours TIS after June 22, 2005 (the effective date of this AD), unless already done.
(iii) 10,000 hours TIS on the wing or wing spar	12,000 hours TIS	Within 400 hours TIS after June 22, 2005 (the effective date of this AD), unless already done.
(iv) 6,500 hours TIS on the wing or wing spar	10,000 hours TIS	Within 800 hours TIS after June 22, 2005 (the effective date of this AD), unless already done.
(v) 0 hours TIS on the wing or wing spar	6,500 hours TIS	At whichever of the following occurs later: <ul style="list-style-type: none"> • Upon accumulating 6,500 hours TIS on the wing or wing spar; or • Within 800 TIS after June 22, 2005 (the effective date of this AD), unless already done.

(vi) If the wings or wing spars were replaced with new or used wings or wing spars during the life of the airplane and logbook records positively show the TIS of the wings or wing spars, then initially inspect and modify at applicable wing or wing spar times in paragraphs (e)(2)(i) through (e)(2)(v) of this AD.

(vii) If the wings or wing spars were replaced with new or used wings or wing spars during the life of the airplane and logbook records cannot positively show the TIS of the wings or wing spars, then inspect and modify within 100 hours TIS after June 22, 2005 (the effective date of this AD), unless already done.

(3) For all Cessna Models 411 and 411A airplanes with Cessna Service Kit SK411-56, SK411-56A, SK411-56B, or SK411-59 incorporated, inspect in the following areas and repair or replace as necessary prior to further flight after the inspection where cracks are found. Inspection areas and procedures are defined in the Cessna Model 411 Supplemental Inspection Document (SID):

(i) Area “A” (Inspection ID 57-10-11): Initially upon accumulating 5,500 hours TIS after incorporating the applicable service kit on a wing spar or within the next 100 hours TIS after June 22, 2005 (the effective date of this AD), whichever occurs later, unless already done, and thereafter at intervals not to exceed 2,500 hours TIS.

(ii) Area “B” (Inspection ID 57-10-12): Initially upon accumulating 5,500 hours TIS after incorporating the applicable service kit on a wing spar or within the next 100 hours TIS after June 22, 2005 (the effective date of this AD), whichever occurs later, unless already done, and thereafter at intervals not to exceed 1,000 hours TIS.

(iii) Area “C” (Inspection ID 57-10-08): Upon accumulating 20,000 hours TIS after incorporating the applicable service kit on a wing spar or within the next 100 hours TIS after June 22, 2005 (the effective date of this AD), whichever occurs later, unless already done, and thereafter at intervals not to exceed 2,000 hours TIS.

(4) For all Cessna Models 401, 401A, 401B, 402, 402A, and 402B airplanes with Cessna Service Kit SK402-36, SK402-36A, SK402-36B, SK402-36C, SK402-46, or SK402-46A incorporated, inspect in the following areas and repair or replace as necessary prior to further flight after the inspection where cracks are found. Inspection areas and procedures are defined in the Cessna Models 401 and 402 SID (compliance times in this AD take precedence over the compliance times in the SID):

(i) Area “A” (Inspection ID 57-10-11): Initially upon accumulating 15,000 hours TIS after incorporating the applicable service kit on a wing spar or within the next 100 hours TIS after June 22, 2005 (the effective date of this AD), whichever occurs later, unless already done, and thereafter at intervals not to exceed 5,000 hours TIS.

(ii) Area “B” (Inspection ID 57-10-12): Initially upon accumulating 7,500 hours TIS after incorporating the applicable service kit on a wing spar or within the next 100 hours TIS after June 22, 2005 (the effective date of this AD), whichever occurs later, unless already done, and thereafter not to exceed 5,000 hours TIS. You may request an alternative method of compliance to adjust the compliance times for these inspections by following the procedures in 14 CFR 39.19 and this AD.

(iii) Area “C” (Inspection ID 57-10-08): Upon accumulating 20,000 hours TIS after incorporating the applicable service kit on a wing spar or within the next 100 hours TIS after June 22, 2005 (the effective date of this AD), whichever occurs later, unless already done, and thereafter at intervals not to exceed 2,500 hours TIS.

(f) Wing Spar Replacement if Cracks Found During any Inspection Required by this AD:

(1) Prior to further flight, replace the wing spar with a new wing spar or a used wing spar where wing or wing spar hours TIS can be positively identified. Do not install used wings spars when you are not able to positively identify total wing or wing spar hours TIS.

(2) After replacement, initially inspect at the applicable time in paragraphs (e)(1)(i) through (e)(1)(vii) or (e)(2)(i) through (e)(2)(vii) of this AD and repetitively inspect at the times specified in paragraphs (e)(3)(i) through (e)(3)(iii) or (e)(4)(i) through (e)(4)(iii) of this AD.

(g) Reporting Requirement: Report any cracks you find within 10 days after the cracks are found or within 10 days after June 22, 2005 (the effective date of this AD), whichever occurs later. Do not report if no cracks are found. Include in your report the aircraft serial number, aircraft TIS, wing spar cap TIS, crack location and size, corrective action taken, and a point of contact name and phone number. Send your report to Paul Nguyen, Aerospace Engineer, FAA, ACE-118W, Wichita Aircraft Certification Office, 1801 Airport Road, Mid-Continent Airport, Wichita, Kansas 67209; telephone: (316) 946-4125; facsimile: (316) 946-4107.

(h) Service Information to Perform the Actions of this AD:

(1) Original issue dated September 24, 2001, and Revision 1, dated December 22, 2003, of both Cessna Multi-engine Service Bulletin MEB01-06 and Service Kit SK402-46A; and

(2) Original issue dated September 24, 2001, of both Cessna Multi-engine Service Bulletin MEB01-07 and Service Kit SK411-59.

May I Request an Alternative Method of Compliance?

(i) You may request a different method of compliance or a different compliance time for this AD by following the procedures in 14 CFR 39.19. Unless FAA authorizes otherwise, send your request to your principal inspector. The principal inspector may add comments and will send your request to the Manager, Wichita Aircraft Certification Office, FAA. For information on any already approved alternative methods of compliance, contact Paul Nguyen, Aerospace Engineer, FAA, ACE-118W, Wichita Aircraft Certification Office, 1801 Airport Road, Mid-Continent Airport, Wichita, Kansas 67209; telephone: (316) 946-4125; facsimile: (316) 946-4107.

Does This AD Incorporate Any Material by Reference?

(j) You must do the actions required by this AD following the instructions in Cessna Multi-Engine Service Bulletin MEB01-6 and Service Kit SK402-46, both dated September 24, 2001; Cessna Multi-Engine Service Bulletin MEB01-6, Revision 1 and Service Kit SK402-46A, both dated December 22, 2003; and Cessna Multi-Engine Service Bulletin MEB01-7 and Service Kit SK411-59, both dated September 24, 2001. The Director of the Federal Register approved the incorporation by reference of this service bulletin in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. To get a copy of this service information, contact Cessna Aircraft Company, Product Support, P.O. Box 7706, Wichita, Kansas 67277; telephone: (316) 517-5800; facsimile: (316) 942-9006. To review copies of this service information, go to the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, go to:

http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html or call (202) 741-6030. To view the AD docket, go to the Docket Management Facility; US Department of Transportation, 400 Seventh Street, S.W., Nassif Building, Room PL-401, Washington, DC 20590-001 or on the Internet at <http://dms.dot.gov>. The docket number is FAA-05-21176; Directorate Identifier 2005-CE-25-AD.

Issued in Kansas City, Missouri, on June 7, 2005

Kim Smith,
Acting Manager, Small Airplane Directorate,
Aircraft Certification Service.