Proposed Rules

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This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2013–0023; Directorate Identifier 96–CE–072–AD]

RIN 2120–AA64

Airworthiness Directives; Various Aircraft Equipped With Wing Lift Struts

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to revise an existing airworthiness directive (AD) that applies to certain aircraft equipped with wing lift struts. The existing AD currently requires repetitively inspecting the wing lift struts for corrosion; repetitively inspecting the wing lift strut forks for cracks; replacing any corroded wing lift strut; replacing any cracked wing lift strut fork; and repetitively replacing the wing lift strut forks at a specified time for certain airplanes. The existing AD also currently requires incorporating a ''NO STEP'' placard on the wing lift strut. Since we issued that AD, we have been informed that paragraph (c) in the existing AD is being misinterpreted and causing confusion. This proposed AD would clarify the intent of the language currently in paragraph (c) of the existing AD and would retain all other requirements of the existing AD. We are proposing this AD to correct the unsafe condition on these products.

DATES: We must receive comments on this proposed AD by March 4, 2013.

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- *Federal eRulemaking Portal:* Go to *http://www.regulations.gov.* Follow the instructions for submitting comments.
- *Fax:* 202–493–2251.
- *Mail:* U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- *Hand Delivery:* Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Piper Aircraft, Inc., Customer Services, 2926 Piper Drive, Vero Beach, Florida 32960; telephone: (772) 567–4361; Internet: *www.piper.com.* Copies of the instructions to the F. Atlee Dodge supplemental type certificate (STC) and information about the Jensen Aircraft STCs may be obtained from F. Atlee Dodge, Aircraft Services, LLC., 6672 Wes Way, Anchorage, Alaska 99518–0409, Internet: *www.fadodge.com.* You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329–4148.

Examining the AD Docket

You may examine the AD docket on the Internet at *http://www.regulations.gov;* or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800–647–5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Gregory ''Keith'' Noles, Aerospace Engineer, FAA, Atlanta Aircraft Certification Office, 1701 Columbia Avenue, College Park, Georgia 30337; phone: (404) 474–5551; fax: (404) 474–5606; email: *gregory.noles@faa.gov.*

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the **ADDRESSES** section. Include ''Docket No. FAA–2013–0023; Directorate Identifier 96–CE–072–AD'' at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to *http://www.regulations.gov,* including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

On December 22, 1998, we issued AD 99–01–05, amendment 39–10972 (63 FR 72132, December 31, 1998), for all The New Piper Aircraft, Inc. (currently Piper Aircraft, Inc.) airplane models equipped with wing lift struts. That AD superseded AD 93–10–06, amendment 39–8586 (58 FR 29965, May 25, 1993), and requires repetitively inspecting the wing lift struts for corrosion; repetitively inspecting the wing lift strut forks for cracks; replacing any corroded and/or dented wing lift strut; replacing any cracked wing lift strut fork; and repetitively replacing the wing lift strut forks at a specified time for certain airplanes. That AD also requires incorporating a ''NO STEP'' placard on the wing lift strut and provides the option of installing certain sealed wing lift struts that include the lift strut forks as terminating action for repetitive inspection and replacement requirements.

AD 93–10–06, amendment 39–8586 (58 FR 29965, May 25, 1993), resulted from reports of corrosion damage found on the wing lift struts and cracking found on the wing lift strut forks. AD 99–01–05, amendment 39–10972 (63 FR 72132, December 31, 1998), resulted from a need to clarify certain requirements of AD 93–10–06, eliminated the lift strut fork repetitive inspection requirement for the Piper PA–25 series airplanes, incorporated airplane models inadvertently omitted from the applicability, and required installing a placard on the lift strut.

We issued both ADs to detect and correct corrosion and cracking on the front and rear wing lift struts and forks, which could cause the wing lift strut to fail. This failure could result in the wing separating from the airplane.

Actions Since Existing AD Was Issued

Since we issued AD 99–01–05, amendment 39–39–10972 (63 FR 72132, December 31, 1998), we have been informed that the language in paragraph (c) is being misinterpreted and causing confusion. Paragraph (c) of the existing AD currently states, ''If holes are drilled in wing lift strut assemblies installed in accordance with (a)(4) or (b)(3) of this AD to attach cuffs, door clips, or other hardware, inspect the wing lift struts at intervals not to exceed 24 calendar months using the procedures specified in either paragraphs (a)(1) or (a)(2), including all subparagraphs, of this AD.''

Our intention was to specify that if a sealed wing lift strut assembly is installed as a replacement part, the repetitive inspection requirement is terminated only if the seal is never broken. We also intended to specify that if the seal is broken then that wing lift strut becomes subject to continued repetitive inspections.

We did not intend to promote drilling holes into or otherwise unsealing a sealed strut, nor did we intend to preclude a proper maintenance action that may temporarily unseal a sealed strut if all appropriate issues are considered, such as static strength, fatigue, material effects, immediate and long-term (internal and external) corrosion protection, resealing methods, etc. Current FAA regulations in 14 CFR 43.13(b) specify that maintenance performed will result in the part's condition to be at least equal to its original or properly altered condition. There are provisions in this proposed AD for approving such actions as an alternative method of compliance (AMOC).

Also, some type certificates held by Piper at the time AD 99–01–05, amendment 39–39–10972 (63 FR 72132, December 31, 1998), was issued now belong to other owners. We have modified the applicability to reflect these changes in ownership.

FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Proposed AD Requirements

This proposed AD would retain all requirements of AD 99–01–05, amendment 39–39–10972 (63 FR 72132, December 31, 1998). This proposed AD would also clarify our intent of required actions if the seal on a sealed wing lift strut is ever broken.

Paragraph Designation Changes to the Existing AD

Since AD 99–01–05, amendment 39–39–10972 (63 FR 72132, December 31, 1998), was issued, the AD format has been revised, and certain paragraphs have been rearranged. As a result, the corresponding paragraph identifiers have changed in this proposed AD, as listed in the following table:

TABLE 1—REVISED PARAGRAPH IDENTIFIERS

Requirement in AD 99–01–05	Corresponding requirement in this proposed AD
paragraph (a)	paragraph (h)
paragraph (a)(1)	paragraph (i)(1)
paragraph (a)(1)(i)	paragraph (i)(1)(i)
paragraph (a)(1)(ii)	paragraph (i)(1)(ii)
paragraph (a)(2)	paragraph (i)(2)
paragraph (a)(2)(i)	paragraph (i)(2)(i)
paragraph (a)(2)(ii)	paragraph (i)(2)(ii)
paragraph (a)(3)	paragraph (j)(1)
paragraph (a)(4)	paragraph (j)(2)
paragraph (a)(5)	paragraph (j)(3)
paragraph (b)	paragraph (k)
paragraph (b)(1)	paragraph (l)
paragraph (b)(1)(i)	paragraph (l)(1)
paragraph (b)(1)(ii)(B) & (b)(1)(iv)	paragraph (l)(2)
paragraph (b)(1)(ii)(C) & (b)(1)(iv)	paragraph (l)(3)
paragraph (b)(1)(ii)(A) & (b)(1)(iv)	paragraph (l)(4)
paragraph (b)(1)(iii), (b)(2), (b)(1)(iv)	paragraph (m)(1)
paragraph (b)(3) thru (b)(3)(ii)	paragraph (m)(2)
paragraph (b)(4) thru (b)(4)(vi)	paragraph (m)(3) thru (m)(3)(vi)
paragraph (b)(5) thru (b)(5)(ii)	paragraph (m)(4)
paragraph (c)	removed
paragraph (d)	paragraph (n)(1)
paragraph (d)(1)	paragraph (n)(2)
paragraph (d)(2)	paragraph (n)(3)

Costs of Compliance

We estimate that this proposed AD affects 22,000 airplanes of U.S. registry. We estimate the following costs to comply with this proposed AD. However, the only difference in the costs presented below and the costs associated with AD 99–01–05, amendment 39–39–10972 (63 FR 72132, December 31, 1998), is the change in the labor rate from $65 per hour to $85 per hour:

ESTIMATED COSTS

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection of the wing lift struts and wing lift strut forks.	8 work-hours × $85 per hour = $680 per inspection cycle.	Not applicable	$680 per inspection cycle..	$14,960,000 per inspection cycle.
Installation placard	1 work-hour × $85 = $85	$30	$115	$2,530,000

We estimate the following costs to do any necessary replacements that would be required based on the results of the proposed inspection. We have no way of determining the number of aircraft that might need these replacements:

ON-CONDITION COSTS

Action	Labor cost per wing lift strut	Parts cost per wing lift strut	Cost per product per wing lift strut
Replacement of the wing lift strut and/or wing lift strut forks	4 work-hours × $85 per hour = $340	$440	$780

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 rulemaking action.

Regulatory Findings

We have determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD 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.

For the reasons discussed above, I certify that the proposed regulation:

(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),

(3) Will not affect intrastate aviation in Alaska, and

(4) 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.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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) 99–01–05, amendment 39–10972 (63 FR 72132, December 31, 1998), and adding the following new AD:

Various Aircraft: Docket No. FAA–2013–0023; Directorate Identifier 96–CE–072–AD.

(a) Comments Due Date

The FAA must receive comments on this AD action by March 4, 2013.

(b) Affected ADs

This AD revises AD 99–01–05, amendment 39–39–10972 (63 FR 72132, December 31, 1998), which superseded AD 93–10–06, amendment 39–8586 (58 FR 29965, May 25, 1993). AD 99–26–19, amendment 39–11479 (64 FR 72524, December 28, 1999), also relates to the subject of this AD.

(c) Applicability

This AD applies to the following aircraft that are:

(1) equipped with wing lift struts; and

(2) certificated in any category.

Type certificate holder	Aircraft model	Serial numbers
FS 2000 Corp	L–14	All
FS 2001 Corp	J5A (Army L–4F), J5A–80, J5B (Army L–4G), J5C, AE–1, and HE–1.	All.
FS 2002 Corporation	PA–14	14–1 through 14–523.
FS 2003 Corporation	PA–12 and PA–12S	12–1 through 12–4036.
LAVIA ARGENTINA S.A. (LAVIASA)	PA–25, PA–25–235, and PA–25–260	25–1 through 25–8156024.
Piper Aircraft, Inc	TG–8 (Army TG–8, Navy XLNP–1)	All.
Piper Aircraft, Inc	E–2 and F–2	All.
Piper Aircraft, Inc	J3C–40, J3C–50, J3C–50S, (Army L–4, L–4B,L–4H, and L–4J), J3C–65 (Navy NE–1 and NE–2), J3C–65S, J3F–50, J3F–50S, J3F–60, J3F–60S, J3F–65 (Army L–4D), J3F–65S, J3L, J3L–S, J3L–65 (Army L–4C), and J3L–65S.	All.
Piper Aircraft, Inc	J4, J4A, J4A–S, and J4E (Army L–4E)	4–401 through 4–1649.
Piper Aircraft, Inc	PA–11 and PA–11S	11–1 through 11–1678.
Piper Aircraft, Inc	PA–15	15–1 through 15–388.
Piper Aircraft, Inc	PA–16 and PA–16S	16–1 through 16–736.
Piper Aircraft, Inc	PA–17	17–1 through 17–215.
Piper Aircraft, Inc	PA–18, PA–18S, PA–18 ''105'' (Special), PA–18S ''105'' (Special), PA–18A, PA–18 ''125'' (Army L–21A), PA–18S ''125'', PA–18AS ''125'', PA–18 ''135'' (Army L–21B), PA–18A ''135'', PA–18S ''135'', PA–18AS ''135'', PA–18 ''150'', PA–18A ''150'', PA–18S ''150'', PA–18AS ''150'', PA–18A (Restricted), PA–18A ''135'' (Restricted), and PA–18A ''150'' (Restricted).	18–1 through 18–8309025, 18900 through 1809032, and 1809034 through 1809040.
Piper Aircraft, Inc	PA–19 (Army L–18C), and PA–19S	19–1, 19–2, and 19–3.
Piper Aircraft, Inc	PA–20, PA–20S, PA–20 ''115'', PA–20S ''115'', PA–20 ''135'', and PA–20S ''135''.	20–1 through 20–1121.
Piper Aircraft, Inc.	PA–22, PA–22–108, PA–22–135, PA–22S–135, PA–22–150, PA–22S–150, PA–22–160, and PA–22S–160.	22–1 through 22–9848.

Note to paragraph (c) of this AD: There are airplanes commonly known as a ''Clipped Wing Cub'', which modify the airplane primarily by removing approximately 40 inches of the inboard portion of each wing. Such airplanes originally were and still are covered under this AD.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 57, Wings.

(e) Unsafe Condition

The subject of this AD was originally prompted by reports of corrosion damage found on the wing lift struts. The AD is being revised because of reports that paragraph (c) in the existing AD is being misinterpreted and causing confusion. This AD clarifies the intent of the language currently in paragraph (c) of AD 99–01–05, amendment 39–39–10972 (63 FR 72132, December 31, 1998), which is being removed by this AD. Our intention was to specify that if a sealed wing lift strut assembly is installed as a replacement part, the repetitive inspection requirement is terminated only if the seal remains intact. This AD retains all the actions currently required in AD 99–01–05. There are no new requirements in this AD and it does not add any additional burden to the owners/operators of the affected airplanes. We are issuing this AD to detect and correct corrosion and cracking on the front and rear wing lift struts and forks, which could cause the wing lift strut to fail. This failure could result in the wing separating from the airplane.

(f) Paragraph Designation Changes to Existing AD

Since AD 99–01–05, amendment 39–39–10972 (63 FR 72132, December 31, 1998), was issued, the AD format has been revised, and certain paragraphs have been rearranged. As a result, the corresponding paragraph identifiers have changed in this AD, as listed in the following table:

TABLE 1 TO PARAGRAPH (f) OF THIS AD—REVISED PARAGRAPH IDENTIFIERS

Requirement in AD 99–01–05	Corresponding requirement in this AD
paragraph (a)	paragraph (h)
paragraph (a)(1)	paragraph (i)(1)
paragraph (a)(1)(i)	paragraph (i)(1)(i)
paragraph (a)(1)(ii)	paragraph (i)(1)(ii)
paragraph (a)(2)	paragraph (i)(2)
paragraph (a)(2)(i)	paragraph (i)(2)(i)
paragraph (a)(2)(ii)	paragraph (i)(2)(ii)
paragraph (a)(3)	paragraph (j)(1)
paragraph (a)(4)	paragraph (j)(2)
paragraph (a)(5)	paragraph (j)(3)
paragraph (b)	paragraph (k)
paragraph (b)(1)	paragraph (l)
paragraph (b)(1)(i)	paragraph (l)(1)
paragraph (b)(1)(ii)(B) & (b)(1)(iv)	paragraph (l)(2)
paragraph (b)(1)(ii)(C) & (b)(1)(iv)	paragraph (l)(3)
paragraph (b)(1)(ii)(A) & (b)(1)(iv)	paragraph (l)(4)
paragraph (b)(1)(iii), (b)(2), (b)(1)(iv)	paragraph (m)(1)
paragraph (b)(3) thru (b)(3)(ii)	paragraph (m)(2)
paragraph (b)(4) thru (b)(4)(vi)	paragraph (m)(3) thru (m)(3)(vi)
paragraph (b)(5) thru (b)(5)(ii)	paragraph (m)(4)
Paragraph (c)	Removed
paragraph (d)	paragraph (n)(1)
paragraph (d)(1)	paragraph (n)(2)
paragraph (d)(2)	paragraph (n)(3)

(g) Compliance

Comply with this AD within the compliance times specified, unless already done (compliance with AD 99–01–05, amendment 39–10972 (63 FR 72132, December 31, 1998)).

Note 1 to paragraph (g) of this AD: This AD does not require any actions over that already required by AD 99–01–05, amendment 39–10972 (63 FR 72132, December 31, 1998). This AD clarifies the FAA's intention that if a sealed wing lift strut assembly is installed as a replacement part, the repetitive inspection requirement is terminated only if the seal is never broken. Also, if the seal is broken, then that wing lift strut becomes subject to continued repetitive inspections. We did not intend to promote drilling holes into or otherwise unsealing a sealed strut, nor did we intend to preclude a proper maintenance action that may temporarily unseal a sealed strut if all appropriate issues are considered, such as static strength, fatigue, material effects, immediate and long-term (internal and external) corrosion protection, resealing methods, etc.

(h) Remove Wing Lift Struts

Within 1 calendar month after February 8, 1999 (the effective date retained from AD 99–01–05, amendment 39–10972 (63 FR 72132, December 31, 1998)), or within 24 calendar months after the last inspection done in accordance with AD 93–10–06, amendment 39–8586 (58 FR 29965, May 25, 1993) (which was superseded by AD 99–01–05), whichever occurs later, remove the wing lift struts following Piper Aircraft Corporation Mandatory Service Bulletin (Piper MSB) No. 528D, dated October 19, 1990, or Piper MSB No. 910A, dated October 10 1989, as applicable. Before further flight after the removal, do one of the actions in either paragraph (i)(1), (i)(2), (j)(1), (j)(2), or (j)(3) of this AD, including all subparagraphs.

(i) Inspect Wing Lift Struts

(1) Before further flight after the removal required in paragraph (h) of this AD, inspect each wing lift strut for corrosion and perceptible dents following Piper MSB No. 528D, dated October 19, 1990, or Piper MSB No. 910A, dated October 10 1989, as applicable.

(i) *If no corrosion is externally visible and no perceptible dents are found on any wing lift strut during the inspection required in paragraph (i)(1) of this AD,* before further flight, apply corrosion inhibitor to each wing lift strut. Apply the corrosion inhibitor following Piper MSB No. 528D, dated October 19, 1990, or Piper MSB No. 910A, dated October 10 1989, as applicable. Repetitively thereafter inspect each wing lift strut at intervals not to exceed 24 calendar months following the procedures in paragraph (i)(1) or (i)(2) of this AD, including all subparagraphs.

(ii) *If external corrosion or perceptible dents are found on any wing lift strut during the inspection required in paragraph (i)(1) of this AD or during any repetitive inspection required in paragraph (i)(1)(i) of this AD,* before further flight, replace the affected wing lift strut with one of the replacement options specified in paragraph (j)(1), (j)(2), or (j)(3) of this AD. Do the replacement following the procedures specified in those paragraphs, as applicable.

(2) Before further flight after the removal required in paragraph (h) of this AD, inspect each wing lift strut for corrosion following the procedures in the Appendix to this AD. This inspection must be done by a Level 2 or Level 3 inspector certified using the guidelines established by the American Society for Non-destructive Testing, or MIL–STD–410.

(i) *If no external corrosion is found on any wing lift strut during the inspection required in paragraph (i)(2) of this AD and all requirements in the Appendix to this AD are met,* before further flight, apply corrosion inhibitor to each wing lift strut. Apply the corrosion inhibitor following Piper MSB No. 528D, dated October 19, 1990, or Piper MSB No. 910A, dated October 10, 1989, as applicable. Repetitively thereafter inspect each wing lift strut at intervals not to exceed 24 calendar months following the procedures in paragraph (i)(1) or (i)(2) of this AD, including all subparagraphs.

(ii) *If external corrosion is found on any wing lift strut during the inspection required paragraph (i)(2) of this AD or during any repetitive inspection required in paragraph (i)(2)(i) of this AD, or if any requirement in the Appendix of this AD is not met,* before further flight after any inspection in which corrosion is found or the Appendix requirements are not met, replace the affected wing lift strut with one of the replacement options specified in paragraph (j)(1), (j)(2), or (j)(3) of this AD. Do the replacement following the procedures specified in those paragraphs, as applicable.

(j) Wing Lift Strut Replacement Options

(1) Install original equipment manufacturer (OEM) part number wing lift struts (or FAA-approved equivalent part numbers) that have been inspected following the procedures in

either paragraph (i)(1) or (i)(2) of this AD, including all subparagraphs, and are found to be airworthy. Do the installations following Piper MSB No. 528D, dated October 19, 1990, or Piper MSB No. 910A, dated October 10, 1989, as applicable. Repetitively thereafter inspect the newly installed wing lift struts at intervals not to exceed 24 calendar months following the procedures in either paragraph (i)(1) or (i)(2) of this AD, including all subparagraphs.

(2) Install new sealed wing lift strut assemblies (these sealed wing lift strut assemblies also include the wing lift strut forks) following Piper MSB No. 528D, dated October 19, 1990, and Piper MSB No. 910A, dated October 10, 1989, as applicable. Installing one of these new sealed wing lift strut assemblies terminates the repetitive inspection requirements in paragraphs (i) and (l) of this AD, including all sub paragraphs, for that wing lift strut assembly.

(3) Install F. Atlee Dodge wing lift strut assemblies following F. Atlee Dodge Aircraft Services, Inc. Installation Instructions No. 3233–I for Modified Piper Wing Lift Struts Supplemental Type Certificate (STC) SA4635NM, dated February 1, 1991. Repetitively thereafter inspect the newly installed wing lift struts at intervals not to exceed 60 calendar months following the procedures in paragraph (i)(1) or (i)(2) of this AD, including all subparagraphs.

(k) Remove Wing Lift Strut Forks

For all affected airplane models, except for Models PA–25, PA–25–235, and PA–25–260 airplanes, within the next 100 hours time-in-service (TIS) after February 8, 1999 (the effective date retained from AD 99–01–05, amendment 39–10972 (63 FR 72132, December 31, 1998)) or within 500 hours TIS after the last inspection done in accordance with AD 93–10–06, amendment 39–8586 (58 FR 29965, May 25, 1993) (which was superseded by AD 99–01–05), whichever occurs later, remove the wing lift strut forks (unless already replaced in accordance with paragraph (j)(2) of this AD). Do the removal following Piper MSB No. 528D, dated October 19, 1990, or Piper MSB No. 910A, dated October 10, 1989, as applicable. Before further flight after the removal, do one of the actions in either paragraph (l) or (m) of this AD, including all subparagraphs.

(l) Inspect and Replace Wing Lift Strut Forks

Before further flight after the removal required in paragraph (k) of this AD, inspect the wing lift strut forks for cracks using magnetic particle procedures, such as those contained in FAA Advisory Circular (AC) 43.13–1B, Chapter 5, which can be found at *http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/99C827DB9BAAC81B86256B4500596C4E?OpenDocument&Highlight=43.13-1b.* Repetitively thereafter inspect at intervals not to exceed 500 hours TIS until the replacement time requirement specified in paragraph (l)(2) or (l)(3) of this AD is reached provided no cracks are found.

(1) *If cracks are found during any inspection required in paragraph (l) of this AD or during any repetitive inspection required in paragraph (l)(2) or (l)(3) of this AD,* before further flight, replace the affected wing lift strut forks with one of the replacement options specified in paragraph (m)(1), (m)(2), (m)(3), or (m)(4) of this AD. Do the replacement following the procedures specified in those paragraphs, as applicable.

(2) *If no cracks are found during the initial inspection required in paragraph (l) of this AD and the airplane is currently equipped with floats or has been equipped with floats at any time during the previous 2,000 hours TIS since the wing lift strut forks were installed,* at or before accumulating 1,000 hours TIS on the wing lift strut forks replace the wing lift strut forks with one of the replacement options specified in paragraph (m)(1), (m)(2), (m)(3), or (m)(4) of this AD. Do the replacement following the procedures specified in those paragraphs, as applicable. Repetitively thereafter inspect the newly installed wing lift strut forks at intervals not to exceed 500 hours TIS following the procedures specified in paragraph (l) of this AD, including all subparagraphs.

(3) *If no cracks are found during the initial inspection required in paragraph (l) of this AD and the airplane has never been equipped with floats during the previous 2,000 hours TIS since the wing lift strut forks were installed,* at or before accumulating 2,000 hours TIS on the wing lift strut forks, replace the wing lift strut forks with one of the replacement options specified in paragraph (m)(1), (m)(2), (m)(3), or (m)(4) of this AD. Do the replacement following the procedures specified in those paragraphs, as applicable. Repetitively thereafter inspect the newly installed wing lift strut forks at intervals not to exceed 500 hours TIS following the procedures specified in paragraph (l) of this AD, including all subparagraphs.

(m) Wing Lift Strut Fork Replacement Options

(1) Install new OEM part number wing lift strut forks of the same part numbers of the existing part (or FAA-approved equivalent part numbers) that were manufactured with rolled threads. Lift strut forks manufactured with machine (cut) threads are not to be used. Do the installations following Piper MSB No. 528D, dated October 19, 1990, or Piper MSB No. 910A, dated October 10, 1989, as applicable. Repetitively thereafter inspect the newly installed wing lift strut forks at intervals not to exceed 500 hours TIS following the procedures specified in paragraph (l)(1) of this AD, including all subparagraphs.

(2) Install new sealed wing lift strut assemblies (these sealed wing lift strut assemblies also include the wing lift strut forks) following Piper MSB No. 528D, dated October 19, 1990, and Piper MSB No. 910A, dated October 10, 1989, as applicable. This installation may have already been done through the option specified in paragraph (j)(2) of this AD. Installing one of these new sealed wing lift strut assemblies terminates the repetitive inspection requirement in paragraphs (i) and (l) of this AD, including all sub paragraphs, for that wing lift strut assembly. Installing one of these new sealed wing lift strut assemblies terminates the repetitive replacement requirement in paragraph (1) of this AD, including all sub paragraphs, for that wing lift strut.

(3) *For the airplanes specified below,* install Jensen Aircraft wing lift strut fork assemblies specified below in the applicable STC following Jensen Aircraft Installation Instructions for Modified Lift Strut Fitting. Installing one of these wing lift strut fork assemblies terminates the repetitive inspection requirement of this AD only for that wing lift strut fork. Repetitively inspect each wing lift strut as specified in paragraph (i)(1) or (i)(2) of this AD, including all subparagraphs.

(i) For Models PA–12 and PA–12S airplanes: STC SA1583NM;

(ii) For Model PA–14 airplanes: STC SA1584NM;

(iii) For Models PA–16 and PA–16S airplanes: STC SA1590NM;

(iv) For Models PA–18, PA–18S, PA–18 ''105'' (Special), PA–18S ''105'' (Special), PA–18A, PA–18 ''125'' (Army L–21A), PA–18S ''125'', PA–18AS ''125'', PA–18 ''135'' (Army L–21B), PA–18A ''135'', PA–18S ''135'', PA–18AS ''135'', PA–18 ''150'', PA–18A ''150'', PA–18S ''150'', PA–18AS ''150'', PA–18A (Restricted), PA–18A ''135'' (Restricted), and PA–18A ''150'' (Restricted) airplanes: STC SA1585NM;

(v) For Models PA–20, PA–20S, PA–20 ''115'', PA–20S ''115'', PA–20 ''135'', and PA–20S ''135'' airplanes: STC SA1586NM; and

(vi) For Model PA–22 airplanes: STC SA1587NM.

(4) Install F. Atlee Dodge wing lift strut assemblies following F. Atlee Dodge Installation Instructions No. 3233–I for Modified Piper Wing Lift Struts (STC SA4635NM), dated February 1, 1991. This installation may have already been done in accordance paragraph (j)(3) of this AD. Installing these wing lift strut assemblies terminate the repetitive inspection requirements of this AD for the wing lift strut fork only. Repetitively inspect the wing lift struts as specified in paragraph (i)(1) or (i)(2) of this AD, including all subparagraphs.

(n) Install Placard

(1) Within 1 calendar month after February 8, 1999 (the effective date retained from AD 99–01–05, amendment 39–10972 (63 FR 72132, December 31, 1998)), or within 24 calendar months after the last inspection required by AD 93–10–06 (58 FR 29965, May 25, 1993) (which was superseded by AD 99–01–05), whichever occurs later, and before further flight after any replacement of a wing lift strut assembly required by this AD, do one of the following:

(i) Install ''NO STEP'' decal, Piper (P/N) 80944–02, on each wing lift strut approximately 6 inches from the bottom of the wing lift strut in a way that the letters can be read when entering and exiting the airplane; or

(ii) Paint the words ''NO STEP'' approximately 6 inches from the bottom of the wing lift struts in a way that the letters can be read when entering and exiting the airplane. Use a minimum of 1-inch letters using a color that contrasts with the color of the airplane.

(2) The ''NO STEP'' markings required by paragraph (n)(1)(i) or (n)(1)(ii) of this AD must remain in place for the life of the airplane.

(o) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Atlanta Aircraft Certification Office, (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) AMOCs approved for AD 93–10–06, amendment 39–8586 (58 FR 29965, May 25, 1993) and AD 99–01–05, amendment 39–39–10972 (63 FR 72132, December 31, 1998) are approved as AMOCs for this AD.

(p) Related Information

(1) For more information about this AD, contact Gregory K. Noles, Aerospace Engineer, FAA, Atlanta ACO, 1701 Columbia Avenue, College Park, Georgia 30337; phone: (404) 474–5551; fax: (404) 474–5606; email: *gregory.noles@faa.gov.*

(2) For service information identified in this AD, contact Piper Aircraft, Inc., Customer Services, 2926 Piper Drive, Vero Beach, Florida 32960; telephone: (772) 567–4361; Internet: *www.piper.com.* Copies of the instructions to the F. Atlee Dodge supplemental type certificate (STC) and information about the Jensen Aircraft STCs may be obtained from F. Atlee Dodge, Aircraft Services, LLC., 6672 Wes Way, Anchorage, Alaska 99518–0409, Internet: *www.fadodge.com.* You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329–4148.

APPENDIX TO DOCKET NO. FAA–2013–0023

Procedures and Requirements for Ultrasonic Inspection of Piper Wing Lift Struts

Equipment Requirements

1. A portable ultrasonic thickness gauge or flaw detector with echo-to-echo digital thickness readout capable of reading to 0.001-inch and an A-trace waveform display will be needed to do this inspection.

2. An ultrasonic probe with the following specifications will be needed to accomplish this inspection: 10 MHz (or higher), 0.283-inch (or smaller) diameter dual element or delay line transducer designed for thickness gauging. The transducer and ultrasonic system shall be capable of accurately measuring the thickness of AISI 4340 steel down to 0.020-inch. An accuracy of +/− 0.002-inch throughout a 0.020-inch to 0.050-inch thickness range while calibrating shall be the criteria for acceptance.

3. Either a precision machined step wedge made of 4340 steel (or similar steel with equivalent sound velocity) or at least three shim samples of same material will be needed to accomplish this inspection. One thickness of the step wedge or shim shall be less than or equal to 0.020-inch, one shall be greater than or equal to 0.050-inch, and at least one other step or shim shall be between these two values.

4. Glycerin, light oil, or similar non-water based ultrasonic couplants are recommended in the setup and inspection procedures. Water-based couplants, containing appropriate corrosion inhibitors, may be utilized, provided they are removed from both the reference standards and the test item after the inspection procedure is completed and adequate corrosion prevention steps are then taken to protect these items.

- **Note:** Couplant is defined as ''a substance used between the face of the transducer and test surface to improve transmission of ultrasonic energy across the transducer/strut interface.''
- **Note:** If surface roughness due to paint loss or corrosion is present, the surface should be sanded or polished smooth before testing to assure a consistent and smooth surface for making contact with the transducer. Care shall be taken to remove a minimal amount of structural material. Paint repairs may be necessary after the inspection to prevent further corrosion damage from occurring. Removal of surface irregularities will enhance the accuracy of the inspection technique.

Instrument Setup

1. Set up the ultrasonic equipment for thickness measurements as specified in the instrument's user's manual. Because of the variety of equipment available to perform ultrasonic thickness measurements, some modification to this general setup procedure may be necessary. However, the tolerance requirement of step 13 and the record keeping requirement of step 14, must be satisfied.

2. If battery power will be employed, check to see that the battery has been properly charged. The testing will take approximately two hours. Screen brightness and contrast should be set to match environmental conditions.

3. Verify that the instrument is set for the type of transducer being used, i.e. single or dual element, and that the frequency setting is compatible with the transducer.

4. If a removable delay line is used, remove it and place a drop of couplant between the transducer face and the delay line to assure good transmission of ultrasonic energy. Reassemble the delay line transducer and continue.

5. Program a velocity of 0.231-inch/microsecond into the ultrasonic unit unless an alternative instrument calibration procedure is used to set the sound velocity.

6. Obtain a step wedge or steel shims per item 3 of the EQUIPMENT REQUIREMENTS. Place the probe on the thickest sample using couplant. Rotate the transducer slightly back and forth to ''ring'' the transducer to the sample. Adjust the delay and range settings to arrive at an A-trace signal display with the first backwall echo from the steel near the left side of the screen and the second backwall echo near the right of the screen. Note that when a single element transducer is used, the initial pulse and the delay line/steel interface will be off of the screen to the left. Adjust the gain to place the amplitude of the first backwall signal at approximately 80% screen height on the A-trace.

7. ''Ring'' the transducer on the thinnest step or shim using couplant. Select positive half-wave rectified, negative half-wave rectified, or filtered signal display to obtain the cleanest signal. Adjust the pulse voltage, pulse width, and damping to obtain the best signal resolution. These settings can vary from one transducer to another and are also user dependent.

8. Enable the thickness gate, and adjust the gate so that it starts at the first backwall echo and ends at the second backwall echo. (Measuring between the first and second backwall echoes will produce a measurement of the steel thickness that is not affected by the paint layer on the strut). If instability of the gate trigger occurs, adjust the gain, gate level, and/or damping to stabilize the thickness reading.

9. Check the digital display reading and if it does not agree with the known thickness of the thinnest thickness, follow your instrument's calibration recommendations to produce the correct thickness reading. When a single element transducer is used this will usually involve adjusting the fine delay setting.

10. Place the transducer on the thickest step of shim using couplant. Adjust the thickness gate width so that the gate is triggered by the second backwall reflection of the thick section. If the digital display does not agree with the thickest thickness, follow your instruments calibration recommendations to produce the correct thickness reading. A slight adjustment in the velocity may be necessary to get both the thinnest and the thickest reading correct. Document the changed velocity value.

11. Place couplant on an area of the lift strut which is thought to be free of corrosion and ''ring'' the transducer to surface. Minor adjustments to the signal and gate settings may be required to account for coupling improvements resulting from the paint layer. The thickness gate level should be set just high enough so as not to be triggered by irrelevant signal noise. An area on the upper surface of the lift strut above the inspection area would be a good location to complete this step and should produce a thickness reading between 0.034-inch and 0.041-inch.

12. Repeat steps 8, 9, 10, and 11 until both thick and thin shim measurements are within tolerance and the lift strut measurement is reasonable and steady.

13. Verify that the thickness value shown in the digital display is within +/− 0.002-inch of the correct value for each of the three or more steps of the setup wedge or shims. Make no further adjustments to the instrument settings.

14. Record the ultrasonic versus actual thickness of all wedge steps or steel shims available as a record of setup.

Inspection Procedure

1. Clean the lower 18 inches of the wing lift struts using a cleaner that will remove all dirt and grease. Dirt and grease will adversely affect the accuracy of the inspection technique. Light sanding or polishing may also be required to reduce surface roughness as noted in the EQUIPMENT REQUIREMENTS section.

2. Using a flexible ruler, draw a 1/4-inch grid on the surface of the first 11 inches from the lower end of the strut as shown in Piper Service Bulletin No. 528D or 910A, as applicable. This can be done using a soft (#2) pencil and should be done on both faces of the strut. As an alternative to drawing a complete grid, make two rows of marks spaced every 1/4-inch across the width of the strut. One row of marks should be about 11 inches from the lower end of the strut, and the second row should be several inches away where the strut starts to narrow. Lay the flexible ruler between respective tick marks of the two rows and use tape or a rubber band to keep the ruler in place. See Figure 1.

3. Apply a generous amount of couplant inside each of the square areas or along the edge of the ruler. Re-application of couplant may be necessary.

4. Place the transducer inside the first square area of the drawn grid or at the first 1/4-inch mark on the ruler and ''ring'' the transducer to the strut. When using a dual element transducer, be very careful to record the thickness value with the axis of the transducer elements perpendicular to any curvature in the strut. If this is not done, loss of signal or inaccurate readings can result.

5. Take readings inside each square on the grid or at 1/4-inch increments along the ruler and record the results. When taking a thickness reading, rotate the transducer slightly back and forth and experiment with the angle of contact to produce the lowest thickness reading possible. Pay close attention to the A-scan display to assure that the thickness gate is triggering off of maximized backwall echoes.

• **Note:** A reading shall not exceed .041 inch. If a reading exceeds .041-inch, repeat steps 13 and 14 of the INSTRUMENT SETUP section before proceeding further.

6. If the A-trace is unsteady or the thickness reading is clearly wrong, adjust the signal gain and/or gate setting to obtain reasonable and steady readings. If any instrument setting is adjusted, repeat steps 13 and 14 of the INSTRUMENT SETUP section before proceeding further.

7. In areas where obstructions are present, take a data point as close to the correct area as possible.

• **Note:** The strut wall contains a fabrication bead at approximately 40% of the strut chord. The bead may interfere with accurate measurements in that specific location.

8. A measurement of 0.024-inch or less shall require replacement of the strut prior to further flight.

9. If at any time during testing an area is encountered where a valid thickness measurement cannot be obtained due to a loss of signal strength or quality, the area shall be considered suspect. These areas may have a remaining wall thickness of less than 0.020-inch, which is below the range of this setup, or they may have small areas of localized corrosion or pitting present. The latter case will result in a reduction in signal strength due to the sound being scattered from the rough surface and may result in a signal that includes echoes from the pits as well as the backwall. The suspect area(s) shall be tested with a Maule ''Fabric Tester'' as specified in Piper Service Bulletin No. 528D or 910A.

10. Record the lift strut inspection in the aircraft log book.

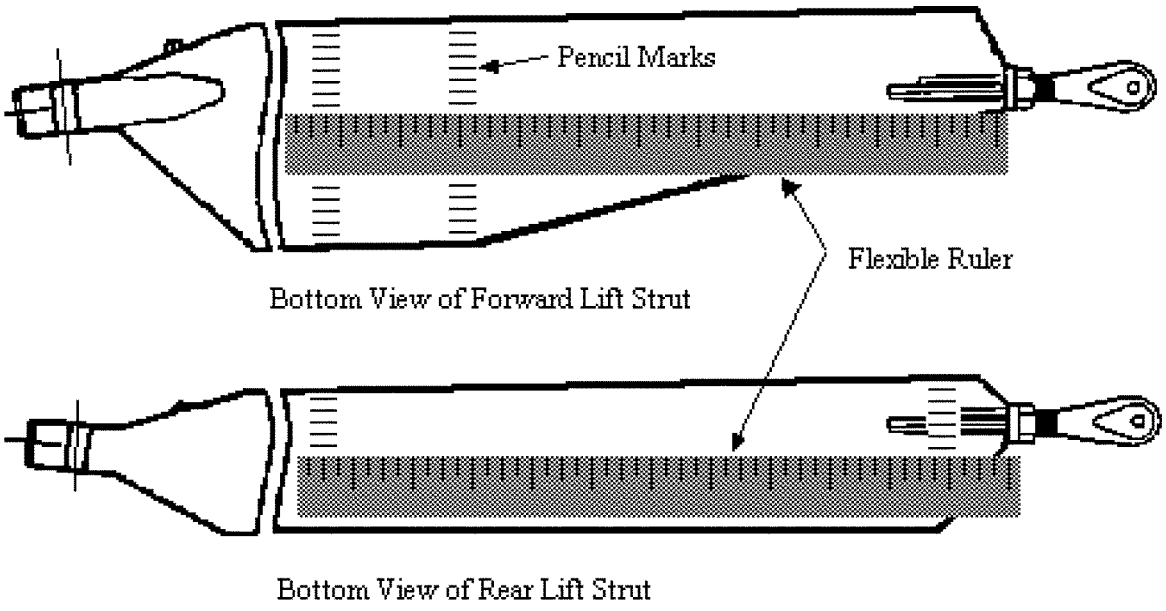

Figure 1

Issued in Kansas City, Missouri, on January 10, 2013.

John Colomy,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2013–00807 Filed 1–15–13; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2012–1318; Directorate Identifier 2012–NM–104–AD]

RIN 2120–AA64

Airworthiness Directives; the Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain The Boeing Company Model 747–200B, 747–300, 747–400, 747–400D, 747–400F series airplanes, and Model 767 series airplanes, powered by General Electric (GE) CF6–80C2 engines. This proposed AD was prompted by reports of failure of the electro-mechanical brake flex shaft (short flexshaft) of the thrust reverser actuation system (TRAS). This proposed AD would require replacing the short flexshaft on each engine with a new short flexshaft, testing of the electro-mechanical brake and center drive unit (CDU) cone brake to verify the holding torque, and performing related investigative and corrective actions if necessary. We are proposing this AD to prevent an uncommanded in-flight thrust reverser deployment and consequent loss of control of the airplane.

DATES: We must receive comments on this proposed AD by March 4, 2013.

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- *Federal eRulemaking Portal:* Go to *http://www.regulations.gov.* Follow the instructions for submitting comments.
- *Fax:* 202–493–2251.
- *Mail:* U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- *Hand Delivery:* Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H–65, Seattle, WA 98124–2207; telephone 206–544–5000, extension 1; fax 206–766–5680; Internet *https://www.myboeingfleet.com.*You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425–227–1221.

Examining the AD Docket

You may examine the AD docket on the Internet at *http://www.regulations.gov*; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800–647–5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Tung Tran, Aerospace Engineer, Propulsion Branch, ANM–140S, Seattle Aircraft Certification Office (ACO), FAA, 1601 Lind Avenue SW., Renton, WA 98057–3356; phone: 425–917–6505; fax: 425–917–6590; email: *Tung.Tran@faa.gov*.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the **ADDRESSES** section. Include ''Docket No. FAA–2012–1318; Directorate Identifier 2012–NM–104–AD'' at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to *http://www.regulations.gov*, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

We have received multiple reports of failure of the short flexshaft of the TRAS on Model 747 and 767 airplanes powered with GE CF6–80C2 engines. The TRAS brake was installed as a third lock to prevent an uncommanded thrust reverser deployment on Model 747 and 767 airplanes powered by GE CF6–80C2 engines. The failed short flexshafts were found to have cores that had become sheared and unbraided. A new short flexshaft design has been developed that incorporates a better end fitting attachment and a larger core diameter with the core wound specifically for use on a left and right thrust reverser half to increase its resistance to failure. We are proposing this AD to prevent an uncommanded in-flight thrust reverser deployment and consequent loss of control of the airplane.

Other Related Rulemaking

On August 13, 2003, we issued AD 2003–16–16, Amendment 39–13269 (68 FR 51439, August 27, 2003), for Model 747–400 series airplanes equipped with GE Model CF6–80C2 series engines. AD 2003–16–16 requires repetitive tests of the cone brake of the CDU of the thrust reversers, and corrective actions if necessary; installation of a TRAS lock and various related modifications and installations. Following installation of the TRAS lock, this action also requires repetitive functional tests of the TRAS lock, and corrective action if necessary.

On July 18, 2000, we issued AD 2000–15–04, Amendment 39–11833 (65 FR 47252, August 2, 2000), for Model 747–200 and –300 series airplanes equipped with GE Model CF6–80C2 series engines with Power Management Control engine controls. AD 2000–15–04 requires various inspections and functional tests to detect discrepancies of the thrust reverser control and indication system, and correction of any discrepancy found; and installation of a terminating modification, and repetitive functional tests of that installation, and repair, if necessary.

On April 26, 2000, we issued AD 2000–09–04, Amendment 39–11712 (65 FR 25833, May 4, 2000), for Model 767 series airplanes equipped with GE Model CF6–80C2 series engines. AD 2000–09–04 requires tests, inspections, and adjustments of the thrust reverser system; and installation of a terminating modification, and repetitive follow-on actions.

Relevant Service Information

We reviewed Boeing Alert Service Bulletin 747–78A2185, dated October 26, 2010; and Boeing Alert Service Bulletin 767–78A0100, dated October 26, 2010. This service information describes procedures for replacing the short flexshaft of each thrust reverser