DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-5039; Directorate Identifier 2013-NM-148-AD]

RIN 2120-AA64

Airworthiness Directives; Airbus Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to supersede airworthiness directive (AD) 2000-10-18, that applies to certain Airbus Model A300 series airplanes; Model A300 B4-600, B4-600R, F4-600R series airplanes, and Model A300 C4-605R Variant F airplanes (collectively called Model A300-600 series airplanes); and Model A310 series airplanes.

AD 2000-10-18 requires repetitive inspections to detect cracks in the lower spar of the engine pylons between ribs 6 and 7, and repair if necessary. Since we issued AD 2000-10-18, we have determined that the compliance times for the initial inspection and the repetitive intervals must be reduced to allow timely detection of cracks in the engine pylon’s lower spar between ribs 6 and 7. This proposed AD would reduce the compliance times for the initial inspection and the repetitive intervals. We are proposing this AD to prevent fatigue cracking, which could result in reduced structural integrity of the engine pylon’s lower spar, and possible separation of the engine from the airplane.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].
ADDRESSES: You may send comments by any of the following methods:

- Fax: (202) 493-2251.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Airbus SAS, Airworthiness Office – EAW, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email account.airworth-eas@airbus.com; Internet http://www.airbus.com. You may view this 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 by searching for and locating Docket No. FAA-2016-5039; 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 Operations office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Dan Rodina, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-2125; fax (425) 227-1149.

**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-2016-5039; Directorate Identifier 2013-NM-148-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 based on 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 May 16, 2000, we issued AD 2000-10-18, Amendment 39-11742 (65 FR 34055, May 26, 2000). AD 2000-10-18 requires actions intended to address an unsafe
condition on certain Airbus Model A300 series airplanes; Model A300 B4-600, B4-600R, F4-600R series airplanes, and Model A300 C4-605R Variant F airplanes (collectively called Model A300-600 series airplanes); and Model A310 series airplanes.

Since we issued AD 2000-10-18, Amendment 39-11742 (65 FR 34055, May 26, 2000), we have determined that the compliance times for the initial inspection and the repetitive intervals must be reduced to allow timely detection of cracks in the engine pylon’s lower spar between ribs 6 and 7.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Airworthiness Directive 2013-0167, dated July 26, 2013 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition. The MCAI states:

Cracks were found between ribs 6 and 7 in the lower spar of engine pylons on A310, A300 and A300-600 aeroplanes. To prevent crack initiation, a first inspection programme of this area was rendered mandatory by DGAC [Direction Générale de l’Aviation Civile] France AD 93-228-154 (later revised, currently at Revision 3) [http://ad.easa.europa.eu/blob/19932283tb__Superseded.pdf/AD_F-1993-228-154R3_1] [which corresponds to certain actions in in FAA AD 2000-10-18, Amendment 39-11742 (65 FR 34055)] for A300 and A300-600 aeroplanes.

At a later date and due to new findings, a specific inspection programme for A310 aeroplanes was rendered mandatory by DGAC France AD 1999-239-287(B) [which corresponds to certain other actions in FAA AD 2000-10-18, Amendment 39-11742 (65 FR 34055, May 26, 2000)]. That [French] AD was later superseded by EASA AD 2008-0001 [http://ad.easa.europa.eu/blob/easa_ad_2008_0001_Superseded.pdf/AD_2008-0001_1], which introduced new
thresholds and intervals in the frame of the A310 extended service goal (ESG) exercise.

Since DGAC France AD 1993-228-154(B)R3 and EASA AD 2008-0001 were issued, a fleet survey and updated Fatigue and Damage Tolerance analyses have been performed in order to substantiate the second ESG for A300-600, called ESG2 exercise. The results of these analyses have shown that the inspection threshold and interval must be reduced to allow timely detection of cracks in the engine pylon lower spar between ribs 6 and 7.

For the reasons described above, this new [EASA] AD retains the requirements of DGAC France AD 1993-228-154(B)R3 and EASA AD 2008-0001, which are superseded, and requires accomplishment of the [eddy current or liquid penetrant] inspections [for cracking] and, depending on findings, [related investigative and] corrective actions [repairs], within the new thresholds and intervals specified in Airbus Service Bulletin (SB) A300-54-0073 Revision 03 [dated October 11, 2012] or SB A310-54-2017 Revision 06 [dated October 3, 2012] or SB A300-54-6014 Revision 07 [dated September 5, 2012].

Related investigative actions include eddy current or liquid penetrant inspections for cracking of areas with removed protection. The unsafe condition is cracking in the lower spar of the engine pylons between ribs 6 and 7, which could result in reduced structural integrity of the engine pylon’s lower spar, and possible separation of the engine from the airplane. You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov by searching for and locating it in Docket No. FAA-2016-5039.

The compliance times for the inspections vary, depending on airplane configuration and utilization as follows.
For Model A300-600 series airplanes:

- The compliance time for the initial inspection is before the accumulation of 10,900 total flight cycles.
- The compliance times for the repetitive inspection interval are 5,700 flight cycles for pre-doubler modified airplanes; and for post-doubler modified airplanes, the compliance times range from 7,200 flight cycles or 8,200 flight hours, to 8,400 flight cycles or 16,000 flight hours.
- The compliance times for the initial inspection following crack repair range from 5,200 flight cycles or 5,900 flight hours, to 6,600 flight cycles or 13,400 flight hours; and the compliance times for the post-repair repetitive inspection range from 2,200 flight cycles or 2,500 flight hours, to 3,400 flight cycles or 6,900 flight hours.

For Model A300 series airplanes:

- The compliance times for the initial inspection range from before the accumulation of 4,400 total flight cycles to 9,400 total flight cycles.
- The compliance times for the repetitive inspection interval range from 4,400 flight cycles to 6,100 flight cycles.
- The initial inspection compliance times for post-doubler modified airplanes range from 12,700 flight cycles or 25,700 flight hours, to 20,700 flight cycles or 30,900 flight hours after the modification; the post-doubler repetitive inspection interval ranges from 7,800 flight cycles or 16,600 flight hours, to 12,200 flight cycles or 18,200 flight hours.
The compliance times for the initial post-repair inspection range from 6,500 flight cycles or 13,900 flight hours, to 10,200 flight cycles or 15,200 flight hours; and the post-repair repetitive inspection interval ranges from 4,700 flight cycles or 10,000 flight hours, to 11,000 flight cycles or 23,300 flight hours.

For Model A310 series airplanes:

- The compliance times for the initial inspection range from before the accumulation of 3,000 total flight cycles or 14,900 total flight hours, to 6,400 total flight cycles or 12,800 total flight cycles.
- The compliance times for the repetitive inspection interval range from 4,600 flight cycles or 23,800 flight hours, to 6,200 flight cycles or 12,400 flight hours.
- The initial inspection compliance times for post-doubler modified airplanes range from 7,500 flight cycles or 37,200 flight hours, to 11,000 flight cycles or 22,000 flight hours after the modification; the post-doubler repetitive inspection interval ranges from 5,900 flight cycles or 29,500 flight hours, to 6,500 flight cycles or 13,000 flight hours.
- The compliance times for the initial post-repair inspection range from 4,500 flight cycles or 23,700 flight hours, to 5,400 flight cycles or 10,800 flight hours; and the post-repair repetitive inspection interval ranges from 2,500 flight cycles or 12,200 flight hours, to 2,800 flight cycles or 5,600 flight hours.
Related Service Information under 1 CFR part 51

Airbus has issued the following service bulletins.

- Airbus Service Bulletin A300-54-0073, Revision 03, dated October 11, 2012 (for Model A300 series airplanes).
- Airbus Service Bulletin A300-54-6014, Revision 07, dated September 5, 2012 (for Model A300-600 series airplanes).

This service information describes procedures for inspecting for cracking of the engine pylon’s lower spar between ribs 6 and 7 and related investigative actions. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

FAA’s Determination and Requirements of this Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.
Differences Between this Proposed AD and the MCAI or Service Information

Unlike the procedures described in the following service information, this proposed AD would not permit further flight if cracks are detected in the lower spar of the engine pylons between ribs 6 and 7. We have determined that, because of the safety implications and consequences associated with that cracking, any cracked lower spar of the engine pylons between ribs 6 and 7 must be repaired or modified before further flight. This difference has been coordinated with the EASA.

- Airbus Service Bulletin A300-54-0073, Revision 03, dated October 11, 2012 (for Model A300 series airplanes).
- Airbus Service Bulletin A300-54-6014, Revision 07, dated September 5, 2012 (for Model A300-600 series airplanes).

Where the “Grace periods” specified in paragraph 1.E., “Compliance,” of the service information identified previously contain ambiguous language, i.e., “for aircraft that have already exceeded or are close to exceed the threshold or scheduled interval,” this proposed AD does not include that language. We have clarified this exception to the service information in paragraph (i)(2) of this proposed AD.

Costs of Compliance

We estimate that this proposed AD affects 156 airplanes of U.S. registry.

We also estimate that it would take about 6 work-hours per product to comply with the basic requirements of this proposed AD. The average labor rate is $85 per
work hour. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be $79,560, or $510 per product.

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions specified in this proposed AD. We have no way of determining the number of aircraft that might need these actions.

**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 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 this 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.

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2000-10-18, Amendment 39-11742 (65 FR 34055, May 26, 2000), and adding the following new AD:

   Airbus: Docket No. FAA-2016-5039; Directorate Identifier 2013-NM-148-AD.

(a) Comments Due Date

   We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF
(b) Affected ADs

This AD replaces AD 2000-10-18, Amendment 39-11742 (65 FR 34055, May 26, 2000).

(c) Applicability

This AD applies to the Airbus airplanes identified in paragraphs (c)(1) through (c)(6) of this AD, certificated in any category, except airplanes on which Airbus Modification 10149 has been incorporated in production.


(2) Airbus Model A300 B4-601, B4-603, B4-620, and B4-622 airplanes.

(3) Airbus Model A300 B4-605R and B4-622R airplanes.

(4) Airbus Model A300 F4-605R and F4-622R airplanes.

(5) Airbus Model A300 C4-605R Variant F airplanes.

(6) Airbus Model A310-203, -204, -221, -222, -304, -322, -324, and -325 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 54, Nacelles/pylons.

(e) Reason

This AD was prompted by a determination that the inspection compliance time and repetitive interval must be reduced to allow timely detection of cracks in the engine pylon’s lower spar between ribs 6 and 7. We are issuing this AD to prevent fatigue
cracking, which could result in reduced structural integrity of the engine pylon’s lower spar, and possible separation of the engine from the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Inspections and Corrective Actions

Except as provided by paragraphs (i)(1) and (i)(2) of this AD, at the applicable time specified in paragraph 1.E., “Compliance,” of the applicable Airbus service bulletin specified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD: Do an eddy current or liquid penetrant inspection for cracking of the engine pylon’s lower spar between ribs 6 and 7; and do all applicable related investigative and corrective actions; in accordance with the Accomplishment Instructions of the applicable Airbus service bulletin specified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD, except as required by paragraph (i)(3) of this AD. Do all applicable related investigative and corrective actions before further flight. Repeat the inspection of the engine pylon’s lower spar between ribs 6 and 7 thereafter at the applicable time and intervals specified in paragraph 1.E., “Compliance,” of the applicable Airbus service bulletin specified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD until a repair or modification specified in the Accomplishment Instructions of the applicable Airbus service bulletin identified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD is done.

Note 1 to paragraph (g) of this AD: An additional source of guidance for accomplishing the modification specified in Airbus Service Bulletin A300-54-0073,
Revision 03, dated October 11, 2012, can be found in Airbus Service Bulletin A300-54-0080, Revision 02, dated July 9, 2002.

Note 2 to paragraph (g) of this AD: An additional source of guidance for accomplishing the modification specified in Airbus Service Bulletin A300-54-6014, Revision 07, dated September 5, 2012, can be found in Airbus Service Bulletin A300-54-6020, Revision 02, dated July 9, 2002.

Note 3 to paragraph (g) of this AD: An additional source of guidance for accomplishing the modification specified in Airbus Service Bulletin A310-54-2017, Revision 06, dated October 3, 2012, can be found in Airbus Service Bulletin A310-54-2023, Revision 03, dated July 9, 2002.

(1) Airbus Service Bulletin A300-54-0073, Revision 03, dated October 11, 2012 (for Model A300 series airplanes).

(2) Airbus Service Bulletin A300-54-6014, Revision 07, dated September 5, 2012 (for Model A300-600 series airplanes).


(h) Post-Repair/Modification and Corrective Actions

For airplanes on which any repair or modification specified in the Accomplishment Instructions of the applicable Airbus service bulletin identified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD is done: Except as provided by paragraphs (i)(1) and (i)(2) of this AD, at the applicable time specified in paragraph 1.E., “Compliance,” of the applicable Airbus service bulletin specified in paragraphs (g)(1),
(g)(2), and (g)(3) of this AD: Do an eddy current or liquid penetrant inspection for cracking of the engine pylon’s lower spar between ribs 6 and 7; and do all applicable related investigative and corrective actions; in accordance with the Accomplishment Instructions of the applicable Airbus service bulletin specified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD, except as required by paragraph (i)(3) of this AD. Do all applicable related investigative and corrective actions before further flight. Repeat the inspection of the engine pylon’s lower spar between ribs 6 and 7 thereafter at the applicable time and intervals specified in paragraph 1.E., “Compliance,” of the applicable Airbus service bulletin specified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD.

(i) Exceptions to Service Information

(1) Where a “Threshold” is specified in paragraph 1.E., “Compliance,” of the service information specified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD, the “FC” and “FH” compliance times are total flight cycle and total flight hour compliance times, except that if a repair or service bulletin identified in paragraph 1.E., “Compliance,” of the service bulletins specified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD has been done, the “FC” and “FH” compliance times are flight cycle and flight hour compliance times since the identified repair or service bulletin was done.

(2) Except as provided by paragraphs (i)(2)(i) and (i)(2)(ii) of this AD: For the “Grace period” specified in paragraph 1.E., “Compliance,” of the service information specified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD, operators must comply with the actions specified in paragraphs (g) and (h) of this AD, as applicable, at the later of the applicable times in the “Threshold” and “Grace Period” specified in paragraph 1.E., “Compliance,” of the service information, except the language “for aircraft that have
already exceeded or are close to exceed the threshold or scheduled interval” does not apply.

(i) Where Airbus Service Bulletin A300-54-0073, Revision 03, dated October 11, 2012; and Airbus Service Bulletin A310-54-2017, Revision 06, dated October 3, 2012; specify a compliance time “. . . after receipt of this Inspection Service Bulletin without exceeding the requirements of previous issue of this ISB,” this AD requires compliance within the specified compliance time after the effective date of this AD.

(ii) Where Airbus Service Bulletin A300-54-6014, Revision 07, dated September 5, 2012, specifies a compliance time “. . . after receipt of this Inspection Service Bulletin without exceeding the requirements of previous issue of this SB,” this AD requires compliance within the specified compliance time after the effective date of this AD.

(3) If any crack is found during any inspection required by this AD and an Airbus service bulletin specified in paragraph (g)(1), (g)(2), or (g)(3) of this AD specifies to contact Airbus: Before further flight, repair the crack using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Airbus’s EASA Design Organization Approval (DOA).
(j) Credit for Previous Actions

This paragraph provides credit for actions required by paragraphs (g) and (h) of this AD, if those actions were performed before the effective date of this AD using an applicable service bulletin specified in paragraphs (j)(1) through (j)(10) of this AD.


(2) Airbus Service Bulletin A300-54-0073, Revision 02, dated July 9, 2002 (for Model A300 series airplanes), which is not incorporated by reference in this AD.


(4) Airbus Service Bulletin A300-54-6014, Revision 03, dated June 4, 1998 (for Model A300-600 series airplanes), which is not incorporated by reference in this AD.

(5) Airbus Service Bulletin A300-54-6014, Revision 04, dated March 9, 2002 (for Model A300-600 series airplanes), which is not incorporated by reference in this AD.

(6) Airbus Service Bulletin A300-54-6014, Revision 05, dated September 1, 2011 (for Model A300-600 series airplanes), which is not incorporated by reference in this AD.

(7) Airbus Service Bulletin A300-54-6014, Revision 06, dated May 24, 2012 (for Model A300-600 series airplanes), which is not incorporated by reference in this AD.

(9) Airbus Service Bulletin A310-54-2017, Revision 04, dated July 9, 2002 (for Model A310 series airplanes), which is not incorporated by reference in this AD.

(10) Airbus Service Bulletin A310-54-2017, Revision 05, dated November 16, 2007 (for Model A310 series airplanes), which is not incorporated by reference in this AD.

(k) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, 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 International Branch, send it to ATTN: Dan Rodina, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-2125; fax (425) 227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. 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. The AMOC approval letter must specifically reference this AD.
(2) **Contacting the Manufacturer:** As of the effective date of this AD, for any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the EASA; or Airbus’s EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.

**Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2013-0167, dated July 26, 2013, for related information. This MCAI may be found in the AD docket on the Internet at [http://www.regulations.gov](http://www.regulations.gov) by searching for and locating it in Docket No. FAA-2016-5039.
(2) For service information identified in this AD, contact Airbus SAS, Airworthiness Office – EAW, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email account.airworth-eas@airbus.com; Internet http://www.airbus.com. You may view this 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.

Issued in Renton, Washington, on March 24, 2016.

Michael Kaszycki,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.
[FR Doc. 2016-07569 Filed: 4/4/2016 8:45 am; Publication Date: 4/5/2016]