[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0833; Product Identifier 2018-CE-031-AD]

RIN 2120-AA64

Airworthiness Directives; Weatherly Aircraft Company

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for all Weatherly Aircraft Company (Weatherly) Models 201, 201A, 201B, 201C, 620, 620A, 620B, 620B-TG, and 620TP airplanes. This proposed AD was prompted by reports of fatigue cracking of the center wing and outer wing spar hinge brackets due to corrosion pitting. This proposed AD would require repetitive inspections of the wing hinge brackets, pins, and wing spar structure with repair or replacement of parts as necessary. We are proposing this AD to address the unsafe condition on these products.

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, 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 NPRM, contact Weatherly Aircraft Company, 2034 West Potomac Avenue, Chicago, Illinois 60622-3152; telephone: (424) 772-1812; email: garybeck@cox.net. You may review copies of the referenced service information at the FAA, Policy and Innovation Division, 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 by searching for and locating Docket No. FAA-2018-0833; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the regulatory evaluation, any comments received, and other information. The street address for Docket Operations (phone: 800-647-5527) is listed above. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Mike Lee, Aerospace Engineer, Los Angeles Aircraft Certification Office, FAA, 3960 Paramount Blvd., Suite 100, Lakewood, California, 90712; phone: (562) 627-5325; fax: (562) 627-5210; email: mike.s.lee@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-2018-0833; Product Identifier 2018-CE-018-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. We will consider all comments received by the closing date and may amend this NPRM 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 NPRM.

Discussion

In 2015, we were notified of a fatal accident caused by the in-flight structural failure of a wing on a Weatherly Model 620B airplane. The accident investigation found multiple fatigue cracks in the center wing front spar lower hinge bracket. As a result of operator inspections, a cracked hinge bracket in the center wing to outer wing joint was also reported on a different airplane. The hinge bracket from the second report had completely failed, and the airplane was relying on the second failsafe hinge bracket to carry the wing loads. This condition, if not addressed, could result in failure of the wing front spar lower hinge brackets and lead to in-flight separation of the wing with consequent loss of control of the airplane.

To correct this unsafe condition, we issued AD 2016-07-11 (81 FR 18461, March 31, 2016) ("AD 2016-07-11"), which requires a one-time visual inspection of the center and outer wing front spar lower hinge brackets for cracks and corrosion and corrective action as necessary. AD 2016-07-11 also requires sending a report of the inspection results to the FAA.

Since we issued AD 2016-07-11, Weatherly has developed improved center wing hinge brackets manufactured from corrosion resistant material. Weatherly also issued new service information for repetitive visual and detailed inspections. Since the cause of the fatigue cracks were attributed to corrosion pits on the accident airplane, we propose to issue this new AD to require those repetitive visual and detailed inspection actions.

Related Service Information under 1 CFR part 51

We reviewed Weatherly 201/620 Service Bulletin SB-201/620-18001, Revision C, dated May 21, 2018. The service information describes procedures for initial and repetitive inspections of the wing hinge brackets, pins, and wing spar structure for corrosion and/or cracks with repair or replacement as necessary. 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

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 require repetitive visual and detailed inspections of the wing hinge brackets, pins, and wing spar structure for corrosion and/or cracks with replacement of parts as necessary.

Costs of Compliance

We estimate that this proposed AD affects 94 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Detailed inspection for corrosion and cracks with wing removed.	50 work-hours X $85 per hour = $4,250 per inspection cycle	Not applicable	$4,250 per inspection cycle	$399,500 per inspection cycle
Visual inspection for corrosion with bolts and pin caps removed.	4 work-hours X $85 per hour = $340 per inspection cycle	Not applicable	$340 per inspection cycle	$31,960 per inspection cycle

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 airplanes that might need these replacements.

On-condition costs

Action	Labor cost	Parts cost (includes hardware)	Cost per product
Replacement of the assembly if all parts are found with corrosion.	0 work-hours since part is already removed from airplane	$10,500	$10,500

The on-condition costs reflects the cost to replace the entire assembly. The scope of damage found in the required inspection and which specific parts need replaced could vary significantly from airplane to airplane. We have no way of determining how much damage may be found on each airplane or the cost to repair damaged parts on each airplane or the number of airplanes that may require repair.

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.

This proposed AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to small airplanes, gliders, balloons, airships, domestic business jet transport airplanes, and associated appliances to the Director of the Policy and Innovation Division.

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.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Weatherly Aircraft Company: Docket No. FAA-2018-0833; Product Identifier 2018-CE-031-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Weatherly Aircraft Company (Weatherly) Models 201, 201A, 201B, 201C, 620, 620A, 620B, 620B-TG, and 620TP airplanes, all serial numbers, certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 5740, Wing Attach Hinge Fitting.

(e) Unsafe Condition

This AD was prompted by reports of cracks found on the center wing front spar lower hinge bracket. We are issuing this AD to detect and correct corrosion and cracks on the wing hinge brackets and pin assemblies. The unsafe condition, if not addressed, could result in failure of the wing front and rear spar lower hinge brackets and lead to in-flight separation of the wing with consequent loss of control of the airplane.

(f) Compliance

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

(g) Detailed Inspection

(1) Within 3 months after the effective date of this AD and thereafter at intervals not to exceed 5 years, inspect each center and outer wing spar and spar cap, wing hinge bracket, and hardware for corrosion and cracks by following paragraphs 7 through 22 under the Detailed Inspection section in Weatherly 201/620 Service Bulletin SB-201/620-18001, Revision C, dated May 21, 2018 (Weatherly SB-201/620-18001, Revision C), except this AD does not require you to contact Weatherly.

(2) Serial numbers (S/N) 1155 and 1558 have already had the initial detailed inspection required by paragraph (g)(1) of this AD and only the 5-year repetitive detailed inspections are required for these airplanes.

(3) If any corrosion or cracking is found during any of the inspections required in paragraph (g)(1) of this AD, before further flight, repair or replace any parts with corrosion and cracking as specified in paragraphs 7 through 13 under the Detailed Inspection section in Weatherly SB-201/620-18001, Revision C.

(h) Visual Inspection

Within 12 months after the initial detailed inspection required in paragraph (g) of this AD and thereafter at intervals not to exceed 12 months, visually inspect each forward and rear wing hinge bracket attachment pins, bolts, removed caps, spacers, and hardware for corrosion by following paragraphs 4 through 7 under the Visual Inspection section in Weatherly SB-201/620-18001, Revision C. If any corrosion is found during any of the inspections required by this paragraph, before further flight, inspect further, repair, and/or replace any parts with corrosion as specified in paragraphs 5 and 6 under the Visual Inspection section in Weatherly SB-201/620-18001, Revision C. You may perform a detailed inspection in accordance with paragraph (g) of this AD instead of any visual inspection required by paragraph (h) of this AD.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Los Angeles ACO Branch, 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 certification office, send it to the attention of the person identified in paragraph (j) 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.

(j) Related Information

(1) For more information about this AD, contact Mike Lee, Aerospace Engineer, Los Angeles Aircraft Certification Office, FAA, 3960 Paramount Blvd., Suite 100, Lakewood, California, 90712; phone: (562) 627-5325; fax: (562) 627-5210; email: mike.s.lee@faa.gov.

(2) For service information identified in this AD, contact Weatherly Aircraft Company, 2034 West Potomac Avenue, Chicago, Illinois 60622-3152; telephone: (424) 772-1812; email: garybeck@cox.net. You may view this referenced service information at the FAA, Policy and Innovation Division, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

Issued in Kansas City, Missouri, on September 7, 2018.

Melvin J. Johnson
Aircraft Certification Service
Deputy Director, Policy and Innovation Division, AIR-601

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