2020-24-05 Piper Aircraft, Inc.: Amendment 39-21335; Docket No. FAA-2017-1059; Project Identifier 2017-CE-035-AD.

(a) Effective Date

This airworthiness directive (AD) is effective December 28, 2020.

(b) Affected ADs

None.

(c) Applicability

This AD applies to the following Piper Aircraft, Inc. model airplanes that are certificated in any category:

Model	Serial Numbers
PA-28-140	28-20001 through 28-26946, and 28-7125001 through 28-7725290
PA-28-150 and PA-28-160	28-1 through 28-4377, and 28-1760A
PA-28-180	28-671 through 28-5859, 28-7105001 through 28-7205318, and 28-7305001 through 28-7505261
PA-28-235	28-10001 through 28-11378, 28-7110001 through 28-7710089, and 28E-11
PA-32-260	32-04, 32-1 through 32-1297, and 32-7100001 through 32-7800008
PA-32-300	32-15, 32-21, 32-40000 through 32-40974, and 32-7140001 through 32-7840222

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 5711, Wing Spar.

(e) Unsafe Condition

This AD was prompted by reports of corrosion found in an area of the main wing spar not easily accessible for inspection. The FAA is issuing this AD to detect and correct corrosion in the wing root area of the left and the right main wing spars. Corrosion of the main wing spar, if not detected and corrected, could cause the main wing spar to fail with consequent loss of control of the airplane.

(f) Compliance

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

(g) Inspect the Left and Right Main Wing Spars for Corrosion

Within the next 100 hours time-in-service (TIS) after the effective date of this AD or within the next 12 months after the effective date of this AD, whichever occurs first, and thereafter at intervals not to exceed 7 years, inspect the forward and aft surfaces of the left and right main wing spars between wing station (WS) 24.24 and WS 49.25 for corrosion as follows.

(1) Gain visual access to the inspection area by complying with either paragraph (g)(1)(i), (ii), (iii), or (iv) of this AD.

Note 1 to paragraph (g)(1) of this AD: Step 1 and figure 1 in Part I Wing Spar Inspection of Piper Aircraft, Inc. Service Bulletin No. 1304A, August 14, 2018 (Piper SB No. 1304A), contain instructions you may use for identifying the inspection area and determining if wing access panels have been installed.

(i) Remove existing wing inspection access panels and fairings.

(ii) Install Inspection Access Hole Kit part number 765-106V, and then remove the wing inspection access panels and fairings.

(iii) Access the inspection area during concurrent maintenance such as a wing tank removal, wing removal, or wing skin repair.

(iv) Use a lighted borescope capable of 10X or higher power magnification display through existing access points (e.g., wing root fairing, landing gear panels, internal lightening holes, or other access points depending on model).

(2) Identify the wing spar configuration for your airplane in accordance with table 1 and figure 2 (sheets 1 and 2) in Part I Wing Spar Inspection of Piper SB No. 1304A. Visually inspect each spar component for evidence of corrosion, including irregularities such as blisters, flakes, chips, lumps, bulging skin, and missing rivets.

Note 2 to paragraph (g)(2) of this AD: Paint coatings may mask the initial stages of corrosion, and faying surfaces, such as riveted lap joints, may hide corrosion.

(h) Corrective Actions

(1) If any evidence of corrosion is found during any inspection required by paragraph (g) of this AD, before further flight, remove the corrosion and determine whether the thickness of the component meets or exceeds the minimum thickness at all locations in accordance with table 2 and step 5 in Part I Wing Spar Inspection of Piper SB No. 1304A. If the thickness of the component at any location is less than the minimum thickness specified in table 2 of Part I Wing Spar Inspection of Piper SB No. 1304A, before further flight, repair the structure in accordance with a method approved by the Manager, Atlanta ACO Branch, FAA. For a repair method to be approved by the Manager, Atlanta ACO Branch, as required by this paragraph, the Manager's approval letter must specifically refer to this AD.

(2) If corrosion preventative compound was removed as part of any inspection required by paragraph (g) of this AD, before further flight, apply corrosion preventative compound by following step 1 in Part III Return to Service of Piper SB No. 1304A.

(i) Credit for Actions Done Following Previous Service Information

This paragraph provides credit for the initial inspection and application of corrosion preventative compound required by paragraphs (g) and (h)(2) of this AD if you performed the inspection before the effective date of this AD using Piper Aircraft, Inc. Service Bulletin No. 1304, dated August 23, 2017, and no evidence of corrosion was found.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Atlanta 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 (k) 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) For service information that contains steps that are labeled as required for Compliance (RC), the following provisions apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

(k) Related Information

For more information about this AD, contact Dan McCully, Aerospace Engineer, FAA, Atlanta ACO Branch, 1701 Columbia Avenue, College Park, Georgia 30337; telephone: (404) 474-5548; fax: (404) 474-5606; email: william.mccully@faa.gov.

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Piper Aircraft, Inc. Service Bulletin No. 1304A, August 14, 2018.

(ii) [Reserved]

(3) For Piper Aircraft, Inc. service information identified in this AD, contact Piper Aircraft, Inc., 2926 Piper Drive, Vero Beach, Florida 32960; telephone: (772) 567-4361; internet: https://www.piper.com.

(4) You may view this service information at FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: fedreg.legal@nara.gov, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.