Emergency airworthiness directive (AD) 2012-03-51 is sent to owners and operators of certain airplanes originally manufactured by Lockheed for the military as P2V airplanes.

Background

This emergency AD was prompted by a report of a significant crack in the principle wing structure on a Neptune Aviation Service, Inc. Model SP-2H (P2V-7) airplane. A crack approximately 24 inches long was found in the left side wing front spar and lower skin just outboard of the fuselage side of wing station 40. The crack propagated through the wing front spar web, lower chord, and wing lower skin through stringer No. 22 and aft to stringer No. 21. The cause of the cracking is unknown at this time. This condition, if not detected and corrected, could result in significant loss of structural integrity of the wing.

FAA’s Determination

We are issuing 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.

AD Requirements

This AD requires cleaning of the forward lower spar cap between wing stations 40 and 84.5 (right and left), and doing a detailed inspection for cracks, working fasteners, and other anomalies, including surface damage in the form of a nick, gouge, or corrosion; and repairing if necessary. The AD also requires sending inspection results (both positive and negative) to the FAA.

Interim Action

We consider this AD interim action. If final action is later identified, we might consider further rulemaking then.

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.
**Presentation of the Actual AD**

We are issuing this AD under 49 U.S.C. Section 44701 according to the authority delegated to me by the Administrator.

**2012-03-51 Lockheed (Original Manufacturer):** Directorate Identifier 2012-NM-018-AD.

(a) **Effective Date**

This Emergency AD is effective upon receipt.

(b) **Affected ADs**

None.

(c) **Applicability**

All of the airplanes identified in paragraphs (c)(1), (c)(2), (c)(3), (c)(4), (c)(5), (c)(6), and (c)(7) of this AD, certificated in any category:

1. Aero Union Corporation Model SP-2H (P2V-7) airplanes;
2. Central Air Service, Inc. Model SP-2H (P2V-7) airplanes;
3. Evergreen Air Center Model SP-2H (P2V-7) airplanes;
5. Minden Air Corp Model SP-2H (P2V-7) airplanes;
6. Neptune Aviation Service, Inc. Model SP-2H (P2V-7) airplanes; and
7. USDA Forest Service (type certificate previously held by U.S. Department of Agriculture) Model P2V-5F (SP-2E) airplanes.

(d) **Subject**

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

(e) **Unsafe Condition**

This AD was prompted by a report of a significant crack in the principle wing structure on a Neptune Aviation Service, Inc. Model SP-2H (P2V-7) airplane. We are issuing this AD to detect and correct cracks, working fasteners, and other anomalies in the principle wing structure, which could cause significant loss of structural integrity of the wing.

(f) **Compliance**

Comply with this AD within the compliance times specified.

(g) **Inspections**

Within one day after receipt of this AD: Do the actions specified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD.
(1) Gain access to the wing spar box between wing stations 40 and 84.5 (right and left sides of the airplane) through an access panel that allows for inspecting the forward lower spar cap assembly and remove or reposition any internal fuel bladder assembly that impedes access.

(2) Clean the exposed surface of the forward lower spar cap between wing stations 40 and 84.5 (right and left), and do a detailed inspection for cracks, working fasteners, and other anomalies, including surface damage in the form of a nick, gouge, or corrosion, of the forward lower spar cap between wing stations 40 and 84.5 (right and left).

(3) If any crack, working fastener, or other anomaly is found during any inspection required by paragraph (g)(2) of this AD, before further flight, repair in accordance with a method approved by the Manager, Denver Aircraft Certification Office (ACO), FAA. For a repair method to be approved by the Manager, Denver ACO, as required by this paragraph, the Manager’s approval letter must specifically refer to this AD.

(h) Definition

For the purposes of this AD, a detailed inspection is: “An intensive examination of a specific item, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids such as mirror, magnifying lenses, etc., may be necessary. Surface cleaning and elaborate procedures may be required.

(i) Reporting

Within 10 days after doing the inspection required by paragraph (g) of this AD: Submit a report of the findings (both positive and negative) of the inspections required by paragraph (g) of this AD to the Denver ACO, FAA, Attention: Roger Caldwell, 26805 East 68th Ave., Denver, CO 80249; phone: 303-342-1086; fax: 303-342-1088; e-mail: roger.caldwell@faa.gov. The report must include a detailed figure or picture of all cracks and damage and the location, orientation, and size of all cracks and damage. The report must also include the airplane serial number, the number of landings and flight hours on the airplane, and a description of how the airplane is operated (e.g., firefighting, photography, etc.).

(j) Paperwork Reduction Act Burden Statement

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW, Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.
(k) Special Flight Permit

Special flight permits, as described in Section 21.197 and Section 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199), are not allowed unless approved in accordance with the procedures specified in paragraph (l) of this AD.

(l) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Denver 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.

(m) Related Information

For further information about this AD, contact: Roger Caldwell, Aerospace Engineer, Denver Aircraft Certification Office, FAA, 26805 East 68th Avenue, Denver, CO 80249; phone: 303-342-1086; fax: 303-342-1088; e-mail: roger.caldwell@faa.gov.

Issued in Renton, Washington, on February 6, 2012.

Original signed by:

Ali Bahrami,
Manager, Transport Airplane Directorate,
Aircraft Certification Service.