

Discussion

Has FAA Taken Any Action to This Point?

Maintenance inspection procedures did not allow for thorough inspection of the wing structure on Univair Models Alon A-2 and A2-A; ERCO 415-C, 415-CD, 415-D, 415-E, and 415-G; Forney F-1 and F-1A; and Mooney M10 airplanes. This caused us to issue AD 94-18-04, Amendment 39-9017 (59 FR 43727, August 25, 1994) to require installing inspection openings in the outer wing panels, inspecting (one-time) the wing outer panel structure for corrosion, and repairing any corrosion found.

After AD 94-18-04 was issued, Univair revised Service Bulletin No. 29 to the Revision B level. Univair Service Bulletin No. 29, Revision B, dated January 2, 1995, changed the dimension of one of the openings to position it symmetrically between two ribs; and clarified the dimensioning system utilized in placement of the inspection openings. Univair SB No. 29, Revision B, also presented further discussion of the service difficulties encountered on the referenced subject and clarified the intent of the preliminary inspection procedure that may be accomplished prior to the installation of the inspection openings.

This caused us to issue AD 94-18-04 R1, Amendment 39-9173 (60 FR 62321, March 14, 1995).

What Has Happened Since AD 94-18-04 R1 To Initiate This Proposed Action?

The FAA has received additional reports of corrosion damage in the wing outer panel structural components continuing to go undetected. Univair has revised Service Bulletin No. 29 to the Revision C level, dated July 8, 1999. This revision changes the one-time inspection of the wing outer panel structural components for corrosion to a repetitive inspection.

The FAA's Determination and an Explanation of the Provisions of This Proposed AD

What Has FAA Decided?

After examining the circumstances and reviewing all available information related to the incidents described above, we have determined that:

- The unsafe condition referenced in this document exists or could develop on other Univair Models Alon A-2 and A2-A; ERCO 415-C, 415-CD, 415-D, 415-E, and 415-G; Forney F-1 and F-1A, and Mooney M10 airplanes of the same type design;
- The inspection specified in the previously-referenced service information and AD 94-18-04 R1 should be made repetitive on the affected airplanes; and
- AD action should be taken in order to correct this unsafe condition.

What Would This Proposed AD Require?

This proposed AD would supersede AD 94-18-04 R1 with a new AD that would retain the actions required in AD 94-18-04 R1 and make the one-time inspection of the wing outer panel structural components for corrosion a repetitive inspection.

How Does the Revision to 14 CFR Part 39 Affect This Proposed AD?

On July 10, 2002, FAA published a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs FAA's AD system. This regulation now includes material that relates to special flight permits, alternative methods of compliance, and altered products. This material previously was included in each individual AD. Since this material is included in 14 CFR part 39, we will not include it in future AD actions.

Cost Impact

How Many Airplanes Would This Proposed AD Impact?

We estimate that this proposed AD affects 2,600 airplanes in the U.S. registry.

What Would Be the Cost Impact of This Proposed AD on Owners/Operators of the Affected Airplanes?

We estimate the following costs to accomplish this proposed installation of the inspection openings:

Labor cost	Parts cost	Total cost per airplane
6 workhours × \$60 per hour = \$360	\$67	\$427

We estimate the following costs to accomplish the proposed inspection:

Labor cost	Parts cost	Total cost per airplane	Total cost on U.S. operators
2 workhours × \$60 per hour = \$120	Not applicable	\$120	\$120 × 2,600 = \$312,000

The FAA has no method of determining the number of repetitive inspections each owner/operator would incur over the life of each of the affected airplanes so the cost impact is based on the initial inspection.

The FAA has no method of determining the number of repairs or replacements each owner/operator would incur over the life of each of the affected airplanes based on the results of the proposed inspections. We have no

way of determining the number of airplanes that may need such repair. The extent of damage may vary on each airplane.

Compliance Time of This Proposed AD

What Would Be the Compliance Time of This Proposed AD?

The compliance time of this proposed AD is “within the next 12 calendar

months after the effective date of this AD.”

Why Is the Proposed Compliance Time Presented in Calendar Time Instead of Hours Time-in-Service (TIS)?

The unsafe condition specified by this proposed AD is caused by corrosion. Corrosion can occur regardless of whether the airplane is in operation or is in storage. Therefore, to assure that the unsafe condition specified in this