

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2000-NM-145-AD; Amendment 39-13618; AD 2004-09-28]

RIN 2120-AA64

Airworthiness Directives; Lockheed Model L-1011 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment supersedes an existing airworthiness directive (AD), applicable to all Lockheed Model L-1011 series airplanes, that currently requires the implementation of a corrosion prevention and control program either by accomplishing specific tasks or by revising the maintenance inspection program to include such a program. This action requires accomplishment of new specific tasks and visual inspections for corrosion of certain structural areas and repair if necessary, or revision of the maintenance inspection program. This amendment relates to the recommendations of the Airworthiness Assurance Task Force assigned to review Model L-1011 series airplanes, which indicate that, to ensure long-term continued operational safety, various structural inspections should be accomplished. The actions specified by this AD are intended to prevent structural failure of the airplane due to corrosion.

DATES: Effective June 17, 2004.

The incorporation by reference of Lockheed Document Number LR 31889, "Corrosion Prevention and Control Program, TriStar L-1011," including Revision D, Appendices A, B, C, and D, dated August 15, 1999, as listed in the regulations, is approved by the Director of the Federal Register as of June 17, 2004.

The incorporation by reference of Lockheed Document Number LR 31889, "Corrosion Prevention and Control Program, TriStar L-1011," dated March 15, 1991, including "Errata Sheet, LR 31889, Corrosion Prevention and Control Program, TriStar L-1011," issued September 29, 1992; as listed in the regulations, was approved previously by the Director of the Federal Register as of December 17, 1993 (58 FR 60775, November 18, 1993).

ADDRESSES: The service information referenced in this AD may be obtained from Lockheed Martin Aircraft & Logistics Centers, 120 Orion Street, Greenville, South Carolina 29605. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Atlanta

Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:
http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

FOR FURTHER INFORMATION CONTACT: Carl Gray, Aerospace Engineer, Airframe and Propulsion Branch, ACE-117A, FAA, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia 30349; telephone (770) 703-6031; fax (770) 703-6097.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) by superseding AD 93-20-03, amendment 39-8710 (58 FR 60775, November 18, 1993), which is applicable to all Lockheed Model L-1011 series airplanes, was published in the Federal Register on April 25, 2001 (66 FR 20760). The action proposed to continue to require visual inspections, and repair if necessary, of certain structures, or a revision of the FAA-approved maintenance inspection program, as required by AD 93-20-03. The action also proposed to require accomplishment of various visual inspections for corrosion of certain structures, and repair, if necessary; or incorporation of Revision D of Lockheed Document Number LR 31889, "Corrosion Prevention and Control Program, TriStar L-1011," dated August 15, 1999 ("the Document"), into the FAA-approved maintenance inspection program.

Comments

Interested persons have had an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received. The sole commenter, the manufacturer, requests that certain paragraphs of the proposed AD be revised to correct and to convey the intent of the AD.

Request To Revise Paragraph (c)(1)

The commenter suggests rewording paragraph (c)(1) of the proposed AD as follows:

(1) Accomplish corrosion tasks C-55-320-05 Note 4 and C-55-330-05 Note 1, per Revision D of the Document. Thereafter, accomplish these corrosion tasks at intervals not to exceed 5 years.

The commenter contends that the proposed AD did not specify the affected Notes of the tasks, and would therefore require the whole task to be repeated at intervals of 5 years. The commenter explains that Note 4 to task C-55-320-05 was revised in Revision A of the Document to require bolt removal for inspection; the rest of this task is required by AD 93-20-03.

We agree with the request, for the reasons provided by the commenter. Although AD 93-20-03 is superseded by this AD, its requirements are restated in paragraphs (a) and (b) of this AD. Paragraph (c)(1) of this final rule has been revised accordingly.

Request To Revise Paragraph (c)(2)

The commenter suggests rewording paragraph (c)(2) of the proposed AD as follows:

(2) Accomplish corrosion task C-57-540-02 Note 5 per Revision D of the Document. Thereafter, accomplish this corrosion task at intervals not to exceed 5 years.

Again, the proposed AD did not specify the affected Note in paragraph (c)(2). The commenter explains that, based on operator experience, the Structures Working Group (SWG) approved changing the repetitive interval in Note 5 from 10 years to 5 years; this change became effective in Revision B of the Document. As written, the proposed AD would also affect the other notes of the task; as a result, the Note 3 task would be required at 5-year intervals instead of the desired 2.5-year intervals.

We agree with the request, for the reasons provided by the commenter and as discussed previously. Paragraph (c)(2) of this final rule has been revised accordingly.

Request To Revise Paragraph (c)(3)

The commenter suggests rewording paragraph (c)(3) of the proposed AD as follows:

(3) Accomplish corrosion task C-57-530-04 Note 3 per revision D of the Document. Thereafter, accomplish this corrosion task at intervals not to exceed 5 years.

Without reference to Note 3 in paragraph (c)(3), the proposed AD would require repetition of all actions of the task within 5-year intervals. The commenter explains that Note 3 was added in Revision B of the Document to address the upper wing access panels in the zones for this task. The rest of task C-57-530-04 is required by AD 93-20-03.

We agree with the request, for the reasons provided by the commenter and as discussed previously. Although AD 93-20-03 is superseded by this AD, its requirements are restated in paragraphs (a) and (b) of this AD. It is therefore necessary only to refer to Note 3 in paragraph (c). Paragraph (c)(3) of this final rule has been revised accordingly.

Request To Revise Paragraph (d)

The commenter requests that paragraph (d) of the proposed AD be revised as follows:

(d) . . . , in accordance with the procedures specified in Task C-55-350-01 Note 1 of Revision D of the Document. Thereafter, repeat this inspection at intervals not to exceed 15 years.

The commenter explains that inspection of the stabilizer bearing within 15-year intervals is required by Note 1 of the task, per Revision D of the Document. The rest of the task is required by AD 93-20-03.

We agree with the request for the reasons provided by the commenter and as discussed previously. Paragraph (d) of this final rule has been revised accordingly.

Request To Revise Paragraph (j)

The commenter requests that paragraph (j) of the proposed AD be revised to refer to Revision "D" (instead of Revision "4") of the Document. The commenter considers this a typographical error. We agree. This final rule has been revised accordingly.

Explanation of Change to Existing Requirements

The FAA has changed all references to a "detailed visual inspection" in the existing AD to "detailed inspection" in this action.

Conclusion

After careful review of the available data, including the comments noted above, we have determined that air safety and the public interest require the adoption of the rule with the changes previously described. We have determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

Cost Impact

There are approximately 187 Lockheed Model L-1011 series airplanes of the affected design in the worldwide fleet. We estimate that 117 airplanes of U.S. registry will be affected by this AD.

The actions that are currently required by AD 93-20-03 take about 20 work hours per inspection to accomplish, at an average labor rate of \$65 per work hour. Based on these figures, the cost impact of the currently required actions on U.S. operators is estimated to be \$152,100, or \$1,300 per airplane, per inspection cycle.

The new visual inspections required by this AD will take about 249 work hours per airplane to accomplish, at an average labor rate of \$65 per work hour. Based on these figures, the cost impact of the new requirements of this AD on U.S. operators is estimated to be \$1,893,645, or \$16,185 per airplane.

Revising the maintenance inspection program, if accomplished, would take about 1 work hour per airplane, at an average labor rate of \$65 per work hour. Based on these figures, the cost impact of this action is estimated to be \$65 per airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the requirements of this AD, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

Regulatory Impact

The regulations adopted herein will 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. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) 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. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (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. Section 39.13 is amended by removing amendment 39-8710 (58 FR 60775, November 18, 1993), and by adding a new airworthiness directive (AD), amendment 39-13618, to read as follows:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "www.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2004-09-28 Lockheed: Amendment 39-13618. Docket 2000-NM-145-AD. Supersedes AD 93-20-03, Amendment 39-8710.

Applicability: All Model L-1011 series airplanes, certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To prevent structural failure of the airplane due to corrosion, accomplish the following:

Restatement of the Requirements of AD 93-20-03:

Note 1: This AD refers to Lockheed Document Number LR 31889, "Corrosion Prevention and Control Program, TriStar L-1011," dated March 15, 1991, including "Errata Sheet, LR 31889, Corrosion Prevention and Control Program, TriStar L-1011," issued September 29, 1992; and Revision D, dated August 15, 1999 (hereafter, those publications are referred to as "the Document"), for corrosion tasks, definitions of corrosion levels, compliance times, and reporting requirements. In addition, this AD specifies inspection and reporting requirements beyond those included in the Document. Where there are differences between the AD and the Document, the AD prevails.

Note 2: As used throughout this AD, the term "the FAA" is defined differently for different operators, as follows: For those operators complying with paragraph (a) or (c) of this AD, "the FAA" is defined as "the Manager of the Atlanta Aircraft Certification Office (ACO)." For those operators operating under 14 CFR Part 121 or 129, and complying with paragraph (b) or (d) of this AD, "the FAA" is defined as "the cognizant Maintenance Inspector at the appropriate FAA Flight Standards office."

Corrosion Tasks

(a) Except as provided in paragraph (b) of this AD, complete each of the corrosion tasks specified in Section 4 of the Document in accordance with the procedures of the Document, and the schedule specified in paragraphs (a)(1) and (a)(2) of this AD. Corrosion task numbers C-32-710-01 (nose landing gear) and C-32-730-01 (main landing gear, left and right) are not required to be accomplished as part of this AD.

Note 3: A "corrosion task," as defined in Section 4 of the Document, includes inspections; procedures for a corrective action, including repairs, under identified circumstances; application of corrosion inhibitors; and other follow-on actions.

Note 4: Corrosion tasks completed in accordance with the Document before the effective date of this AD may be credited for compliance with the initial corrosion task requirements of paragraph (a)(1) of this AD.

Note 5: Where non-destructive inspection (NDI) methods are employed, in accordance with Section 4 of the Document, the standards and procedures used must be acceptable to the Administrator in accordance with 14 CFR 43.13.

(1) Complete the initial corrosion task of each "airplane area" specified in Section 4 of the Document as follows:

(i) For airplane areas that have not yet exceeded the "implementation age" (IA) for a corrosion task as of one year after December 17, 1993 (the effective date of AD 93-20-03, amendment 39-8710): Initial compliance must occur no later than the IA plus the repeat (R) interval.

(ii) For airplane areas that have exceeded the IA for a particular corrosion task, as of one year after December 17, 1993: Initial compliance must occur within one R interval for that task, measured from a date one year after December 17, 1993.

(iii) For airplanes that have reached or exceeded 20 years after the date of manufacture as of one year after December 17, 1993: Initial compliance must occur for each corrosion task within one R interval for that task, but not to exceed 6 years, measured from a date one year after December 17, 1993, whichever occurs first.

(iv) Notwithstanding paragraph (a)(1)(i), (a)(1)(ii), or (a)(1)(iii) of this AD, for airplane areas that exceed the IA for that area, the operator must accomplish the initial corrosion task for each such area at a minimum rate equivalent to one such area per year, beginning one year after December 17, 1993.

Note 6: This paragraph does not require inspection of any area that has not exceeded the IA for that area.

Note 7: This minimum rate requirement may cause an undue hardship on some small operators. In those circumstances, requests for adjustments to the implementation rate will be evaluated on a case-by-case basis under the provisions of paragraph (h) of this AD.

(2) Repeat each corrosion task at a time interval not to exceed the R interval specified in the Document for that task.

(b) As an alternative to the requirements of paragraph (a) of this AD: Prior to one year after December 17, 1993, revise the FAA-approved maintenance inspection program to include the corrosion prevention and control program specified in the Document; or to include an equivalent program that is approved by the FAA. In all cases, the initial corrosion task for each airplane area must be completed in accordance with the compliance schedule specified in paragraph (a)(1) of this AD. Corrosion task numbers C-32-710-01 (nose landing gear) and C-32-730-01 (main landing gear, left and right) are not required to be accomplished as part of this AD.

(1) Any operator complying with paragraph (b) of this AD may use an alternative recordkeeping method to that otherwise required by 14 CFR 91.417 or 121.380 for the actions required by this AD, provided it is approved by the FAA and is included in a revision to the FAA-approved maintenance inspection program.

(2) Subsequent to the accomplishment of the initial corrosion task, extensions of R intervals specified in the Document must be approved by the FAA.

New Requirements of This AD

(c) Except as provided in paragraph (e) of this AD, within 5 years after the effective date of this AD: Complete each of the corrosion tasks at the times specified in paragraphs (c)(1), (c)(2), (c)(3), and (c)(4) of this AD in accordance with the procedures specified in the Document. (Corrosion tasks number C-32-710-01 (nose landing gear) and C-32-730-01 (main landing gear, left and right) are not required to be accomplished as part of this AD.)

Note 8: A "corrosion task," as defined in Section 4 of the Document, includes inspections; procedures for a corrective action, including repairs, under identified circumstances; application of corrosion inhibitors; and other follow-on actions.

Note 9: Corrosion tasks completed in accordance with the Document before the effective date of this AD may be credited for compliance with the initial corrosion task requirements of paragraph (a)(1) of this AD.

Note 10: Where non-destructive inspection (NDI) methods are employed, in accordance with Section 4 of the Document, the standards and procedures used must be acceptable to the Administrator in accordance with FAR Section 43.13.

(1) Accomplish corrosion tasks C-55-320-05, Note 4; and C-55-330-05, Note 1; per Revision D of the Document. Thereafter, accomplish these corrosion tasks at intervals not to exceed 5 years.

(2) Accomplish corrosion task C-57-540-02, Note 5, per Revision D of the Document. Thereafter, accomplish this corrosion task at intervals not to exceed 5 years.

(3) Accomplish corrosion task C-57-530-04, Note 3, per Revision D of the Document. Thereafter, accomplish this corrosion task at intervals not to exceed 5 years.

(4) Accomplish corrosion task C-53-310-03, per Revision D of the Document. Thereafter, accomplish this corrosion task at intervals not to exceed 10 years.

Inspection of the Horizontal Stabilizer

(d) Within 15 years' time-in-service, or 5 years after the effective date of this AD, whichever occurs later: Conduct a free-play inspection of the horizontal stabilizer pivot bearing, disassemble ALL horizontal stabilizer pivot bearing assemblies, and perform a detailed inspection of the pivot bearing assembly components to detect corrosion, in accordance with the procedures specified in Task C-55-350-01, Note 1, of Revision D of the Document. Thereafter, repeat this inspection at intervals not to exceed 15 years.

Note 11: This paragraph does not require inspection of any area that has not exceeded the IA for that area.

Note 12: For the purposes of this AD, a detailed inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

Acceptable Alternative Compliance With Certain Requirements

(e) As an alternative to the requirements of paragraphs (c) and (d) of this AD: Within 90 days after the effective date of this AD, revise the FAA-approved maintenance program to incorporate and implement Revision D of Lockheed Document Number LR 31889, "Corrosion and Protection Control Program, TriStar L-1011," dated August 15, 1999.

Accommodating Scheduling Requirements

(f) To accommodate unanticipated scheduling requirements of paragraph (c) or (d) of this AD, it is acceptable for an R interval to be increased by up to 10%, but not to exceed 6 months. The FAA must be informed, in writing, of any such extension within 30 days after such adjustment of the schedule.

(g)(1) If, during any inspection conducted in accordance with this AD, Level 3 corrosion is determined to exist in any airplane area, accomplish the actions specified in either paragraph (g)(1)(i) or (g)(1)(ii) of this AD within 7 days after such determination. Information collection requirements contained in this regulation have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) and have been assigned OMB Control Number 2120-0056.

(i) Submit a report of that determination to the FAA and complete the corrosion task in the affected areas on all Model L-1011 series airplanes in the operator's fleet; or

(ii) Submit to the FAA for approval one of the following:

(A) A proposed schedule for performing the corrosion tasks in the affected areas on the remaining Model L-1011 series airplanes in the operator's fleet, which is adequate to ensure that any other Level 3 corrosion is detected in a timely manner, along with substantiating data for that schedule; or

(B) Data substantiating that the Level 3 corrosion found is an isolated occurrence.

Note 13: Notwithstanding the provisions of Section 1 of the Document, which would permit corrosion that otherwise meets the definition of Level 3 corrosion (i.e., which is determined to be a potentially urgent airworthiness concern requiring expeditious action) to be treated as Level 1 if the operator finds that it "can be attributed to an event not typical of the operator's usage of other airplanes in the same fleet," this paragraph requires that data substantiating any such finding be submitted to the FAA for approval.

(2) The FAA may impose schedules other than those proposed, upon finding that such changes are necessary to ensure that any other Level 3 corrosion is detected in a timely manner.

(3) Within the time schedule approved under paragraph (g)(1) or (g)(2) of this AD, accomplish the corrosion tasks in the affected areas of the remaining Model L-1011 series airplanes in the operator's fleet.

(h) If, as a result of any inspection after an initial inspection conducted in accordance with the requirements of this AD, it is determined that corrosion findings exceed Level 1 in any area, within 60 days after such determination, implement a means, approved by the FAA, to reduce future findings of corrosion in that area to Level 1 or better.

(i) Before any operator places into service any airplane subject to the requirements of this AD, a schedule for the accomplishment of corrosion tasks required by this AD must be established in accordance with paragraph (i)(1) or (i)(2) of this AD, as applicable:

(1) For airplanes previously maintained in accordance with this AD, the first corrosion task in each airplane area to be performed by the new operator must be accomplished in accordance with the previous operator's schedule or with the new operator's schedule, whichever would result in the earlier accomplishment date for that task. After each corrosion task has been performed once, each subsequent task must be performed in accordance with the new operator's schedule.

(2) For airplanes that have not been previously maintained in accordance with this AD, the first corrosion task for each airplane area to be performed by the new operator must be accomplished prior to further flight or in accordance with a schedule approved by the FAA.

(j) Reports of Level 2 and Level 3 corrosion must be submitted at least quarterly to Lockheed Martin Aircraft & Logistics Centers in accordance with Section 5 of Revision D of the Document.

Note 14: Reporting of Level 2 and Level 3 corrosion found as a result of any opportunity inspections is highly desirable.

Alternative Methods of Compliance

(k) In accordance with 14 CFR 39.19, the Manager, Atlanta ACO, FAA, is authorized to approve alternative methods of compliance for this AD.

Incorporation by Reference

(l) Except as otherwise specified in this AD, the actions must be done in accordance with Lockheed Document Number LR 31889, "Corrosion Prevention and Control Program, TriStar L-1011," dated March 15, 1991, including "Errata Sheet, LR 31889, Corrosion Prevention and Control Program, TriStar L-1011," issued September 29, 1992; and Lockheed Document Number LR 31889, "Corrosion Prevention and Control Program, TriStar L-1011," including Appendices A, B, C, and D, Revision D, dated August 15, 1999; as applicable. Revision D contains the following effective pages (the revision level of this document is listed only on the title pages of this document):

Page no.	Revision level shown on page	Date shown on page
Active Page Record, Page 0.5	D	August 15, 1999.

(1) The incorporation by reference of Lockheed Document Number LR 31889, "Corrosion Prevention and Control Program, TriStar L-1011," including Appendices A, B, C, and D, Revision D, dated August 15, 1999; is approved by the Director of the Federal Register, in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The incorporation by reference of Lockheed Document Number LR 31889, "Corrosion Prevention and Control Program, TriStar L-1011," dated March 15, 1991, including "Errata Sheet, LR 31889, Corrosion Prevention and Control Program, TriStar L-1011," issued September 29, 1992; was approved previously by the Director of the Federal Register as of December 17, 1993 (58 FR 60775, November 18, 1993).

(3) Copies may be obtained from Lockheed Martin Aircraft & Logistics Center, 120 Orion Street, Greenville, South Carolina 29605. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

http://www.archives.gov/federal_register/code_of_federal_regulations/ibr-locations.html.

Effective Date

(m) This amendment becomes effective on June 17, 2004.

Issued in Renton, Washington, on April 27, 2004.

Kevin M. Mullin,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 04-10245 Filed 5-12-04; 8:45 am]

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