**14 CFR Part 39**

**[Docket No. 94–NM–17–AD; Amendment 39–9104; AD 94–26–09]**

## Airworthiness Directives; Lockheed Model L–1011–385 Series Airplanes

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule.

**SUMMARY:** This amendment adopts a new airworthiness directive (AD), applicable to certain Lockheed Model L–1011–385 series airplanes, that requires an initial servicing or overhaul of the ram air turbine (RAT), and incorporating repetitive overhaul actions into the FAA-approved maintenance program. This amendment is prompted by reports indicating that, during routine maintenance of the RAT, the turbine blade assembly separated during spin tests. The actions specified by this AD are intended to prevent separation of the turbine blade assembly, which could damage the airplane structure and systems, and, under certain circumstances, could lead to reduced controllability of the airplane.

**DATES:** Effective February 3, 1995.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of February 3, 1995.

**ADDRESSES:** The service information referenced in this AD may be obtained from Lockheed Aeronautical Systems Support Company, Field Support Department, Dept. 693, Zone 0755, 2251 Lake Park Drive, Smyrna, Georgia 30080. 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, Small Airplane Directorate, Atlanta Aircraft Certification Office, Campus Building, 1701 Columbia Avenue, Suite 2–160, College Park, Georgia; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Thomas Peters, Aerospace Engineer, Flight Test Branch, ACE–160A, FAA, Small Airplane Directorate, Atlanta Aircraft Certification Office, Campus Building, 1701 Columbia Avenue, Suite 2–160, College Park, Georgia 30337–2748; telephone (404) 305–7367; fax (404) 305–7348.

**SUPPLEMENTARY INFORMATION:** A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to certain Lockheed Model L–1011–385 series airplanes was published in the **Federal Register** on April 25, 1994 (59 FR 19683). That action proposed to require an initial servicing or overhaul of the ram air turbine (RAT), and incorporating repetitive overhaul actions into the FAA-approved maintenance program.

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

One commenter supports the proposal.

The Air Transport Association (ATA) of America, on behalf of some of its member operators, suggests that the proposal be withdrawn because it is ''an inappropriate use of the airworthiness directive.'' This commenter states that AD's are not the proper vehicle for addressing maintenance problems. The commenter points out that the AD is based on failures that have been reported, not during service, but during routine maintenance of the RAT. Further, the commenter states that the FAA's analysis identifies the problem area as the turbine blade assembly, and the maintenance deficiency as lack of lubrication; yet the FAA's proposed corrective action is a complete overhaul of the unit. The commenter questions whether the FAA considered a ''simpler remedy,'' such as a periodic lubrication requirement or increased frequency of functional checks. The commenter requests that the FAA examine vehicles other than the AD to ensure that appropriate maintenance is performed.

The FAA does not concur with the commenter's request to withdraw the AD, nor does it concur with the commenter's implication that the AD is not the proper vehicle for addressing the unsafe condition. According to section 39.1 of the Federal Aviation Regulations (FAR) (14 CFR 39.1), the issuance of an AD is based on the finding that an unsafe condition is likely to exist or develop in aircraft of a particular type design. The responsibilities placed on the FAA by the Federal Aviation Act do not limit it from making any unsafe condition—whether resulting from maintenance, design defect, or otherwise—the proper subject of an AD. Therefore, regardless of the cause or the source of an unsafe condition, the FAA has the authority to issue an AD when it is found that an unsafe condition is likely to exist or develop on other products of the same type design.

Further, it is within the FAA's authority to issue AD's to require actions to address unsafe conditions that are not otherwise being addressed (or addressed adequately) by normal maintenance procedures. The FAA may address such unsafe conditions by requiring revisions to maintenance programs as a condition under which airplanes may continue to be operated. While the subject of this AD relates to a problem with the RAT assembly that was identified during regular maintenance procedures, the FAA points out that reports of this problem came from several different operators. From the data garnered from these reports, the FAA has identified the existence of an unsafe condition. Although the unsafe condition is one that, feasibly, *could* have been addressed by the operators' maintenance programs, it is obvious that the current maintenance programs are inadequate in addressing it. In light of this, the unsafe condition is likely to exist or develop in the affected airplanes. As a result, the FAA is issuing this AD to eliminate the unsafe condition by revising the maintenance programs accordingly. The AD is the appropriate vehicle for mandating such actions.

The FAA acknowledges that some operators currently may have better maintenance programs that address an unsafe condition. If a program is adequate, an operator would already be in compliance with the AD, or would be in a position to obtain an approval for an alternative method of compliance with the AD (i.e., to follow the operator's current program rather than revise it to comply with the AD). The obligation of the FAA to issue the AD and address an unsafe condition remains, however, and the rule must apply to everyone to ensure that all affected airplanes are covered, regardless of who operates them.

In developing this AD action, the FAA did consider optional actions to address strictly the bearing lubrication problem. However, in reviewing the available data, the FAA found that there were no mandatory replacement or refurbishment times for the RAT in the majority of affected operators' maintenance programs. Under normal maintenance procedures, the RAT's are functionally tested on the an average of every 48 months or 4,000 flights (at a ''D'' check). In cases where operators had replaced or refurbished the RAT's, those actions were accomplished ''on condition'' only, that is, after the RAT's had failed certain functional (spin-up) testing. In the reported incidents, the RAT's had not been serviced, nor had functional testing indicated that they needed servicing, since new. It is likely that RAT's have been installed on many other affected airplanes, and have had

no servicing whatsoever since delivery that would ensure adequate lubrication of the turbine bearing. In light of this, the FAA has clearly identified an unsafe condition that must be addressed by the actions specified by this AD to be incorporated in the operators' maintenance programs.

Further, the FAA points out that the normal means for air carriers to comply with AD's such as this is to incorporate the repetitive requirements into their approved maintenance program. Therefore, the FAA could accomplish this same result by enumerating the specific overhaul/servicing actions identified by the maintenance program revision. However, from an administrative point of view, there is a distinct advantage in requiring a maintenance program revision. By imposing the overhaul/servicing requirements, compliance with the AD with respect to each action would have to be recorded in the operator's maintenance records; whereas, in the case of this AD, the only required recording of the compliance relates to the one-time changes in the maintenance program required by paragraph (b) of the rule.

One commenter requests that the proposal be revised to require only a one-time inspection and servicing of the RAT. Data gathered from the results of the inspection could then be evaluated to determine the condition of the fleet and if additional actions are warranted. This commenter believes that the reported bearing failures were isolated incidents, and that issuance of the proposed AD is an ''overreaction'' to these reports. The FAA does not concur. From data already obtained, the FAA has determined that a sufficient number of failures have occurred which clearly indicate that the RAT installed in the Model L–1011–385 is likely to develop problems in the turbine bearing unless measures are implemented to periodically lubricate the bearing. Issuance of this AD is the result of that determination.

One commenter supports the intent of the proposed rule, but requests that proposed paragraph (b) be revised to delete the requirement for a complete overhaul of the RAT every eight years. The commenter considers this to be excessive. The commenter states that the turbine separation problems, like those that have occurred, should be correctable by periodically performing only the servicing procedures in accordance with Lockheed TriStar L–1011 Service Bulletin 093–29–098, dated December 6, 1993 (reference Dowty Service Bulletin RAT16C10–29–168). The FAA concurs that the servicing procedures are acceptable in ensuring that the addressed problems associated with the turbine blade assembly are monitored and corrected in a timely manner. Accordingly, the FAA has revised paragraph (b) to provide operators with the option of accomplishing either the complete overhaul of the RAT or the servicing procedures, at eight-year intervals.

Another commenter requests that the proposal be revised to allow RAT's that have been overhauled previously in accordance with Dowty Overhaul Manual 29–21–01 to be considered in compliance with the AD, even though the overhaul manual does not call for the replacement of the roller bearing, part number RA56341. The commenter states that the lubrication problem addressed by the proposed AD occurs mainly in the turbine ball bearing (part number 601017118), not the roller bearing. The Dowty Overhaul Manual does not call for replacement of the roller bearing if it is still serviceable; however, Lockheed TriStar L–1011 Service Bulletin 093–29–098, dated December 6, 1993, which was cited in the proposed rule, calls for the replacement of the roller bearing, regardless of its condition. The FAA does not concur with the commenter's request. The replacement of the roller bearing, as called for in the referenced service bulletin, is necessary because of corrosion damage problems that can occur in the roller bearing. This corrosion damage may be difficult to detect by visual inspection alone; thus, initial replacement of the bearing (during overhaul) is all the more important. However, this corrosion problem will be monitored and corrected, if necessary, during the regular repetitive servicing or overhaul (every eight years) required by this AD. In light of this, inspection and reinstallation of both the roller and ball bearings, if serviceable, would be acceptable at the recurrent actions required by the AD. A note has been added to the final rule to clarify that replacement of the roller bearing is necessary when initially overhauling the RAT.

The FAA has recently reviewed the figures it has used over the past several years in calculating the economic impact of AD activity. In order to account for various inflationary costs in the airline industry, the FAA has determined that it is necessary to increase the labor rate used in these calculations from $55 per work hour to $60 per work hour. The cost estimate information, below has been revised to reflect this increase in the specified hourly labor rate.

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

**Cost Estimate**

There are approximately 236 Lockheed Model L–1011–385 series airplanes of the affected design in the worldwide fleet. The FAA estimates that 117 airplanes of U.S. registry will be affected by this AD.

For operators electing to service the RAT, it will take approximately 48 work hours per RAT to accomplish those actions, at an average labor rate of $60 per work hour. Based on these figures, the total cost impact of the servicing actions on U.S. operators is estimated to be $2,880 per RAT.

For operators electing to overhaul the RAT, it will take approximately 170 work hours per RAT to accomplish those actions, at an average labor rate of $60 per work hour. Based on these figures, the total cost impact of the overhaul actions on U.S. operators is estimated to be $10,200 per RAT.

The number of work hours that will be required to perform either the servicing or overhaul of the RAT, as indicated above, is presented as if those actions were to be accomplished as ''stand alone'' actions. However, in actual practice, these actions for the most part could be accomplished coincidentally or in combination with normally scheduled airplane inspections and other maintenance program tasks. Therefore, the actual number of any necessary additional work hours will be minimal in many instances. Additionally, any costs associated with special airplane scheduling will be minimal.

Incorporation of the requirements of this AD into the FAA-approved maintenance program will require approximately 40 work hours per operator to accomplish, at an average labor rate of $60 per work hour. Based on these figures, the total cost impact of incorporation of the maintenance program change on U.S. operators is estimated to be $2,400 per operator.

The FAA recognizes that the obligation to maintain aircraft in an airworthy condition is vital, but sometimes expensive. Because AD's require specific actions to address specific unsafe conditions, they appear to impose costs that would not otherwise be borne by operators.

However, because of the general obligation of operators to maintain aircraft in an airworthy condition, this appearance is deceptive. Attributing those costs solely to the issuance of this AD is unrealistic because, in the interest of maintaining safe aircraft, most prudent operators would accomplish the required actions even if they were not required to do so by the AD.

A full cost-benefit analysis has not been accomplished for this AD. As a matter of law, in order to be airworthy, an aircraft must conform to its type design and be in a condition for safe operation. The type design is approved only after the FAA makes a determination that it complies with all applicable airworthiness requirements. In adopting and maintaining those requirements, the FAA has already made the determination that they establish a level of safety that is cost-beneficial. When the FAA, as in this AD, makes a finding of an unsafe condition, this means that the original cost-beneficial level of safety is no longer being achieved and that the required actions are necessary to restore that level of safety. Because this level of safety has already been determined to be cost-beneficial, a full cost-benefit analysis for this AD would be redundant and unnecessary.

### Regulatory Impact

The regulations adopted herein will not have substantial direct effects 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, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

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. App. 1354(a), 1421 and 1423; 49 U.S.C. 106(g); and 14 CFR 11.89.

### § 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

**94–26–09 Lockhead:** Amendment 39–9104. Docket 94–NM–17–AD.

*Applicability:* Model L–1011–385 series airplanes having serial numbers 193A through 193Y inclusive, 293A through 293F inclusive, and 1002 through 1250 inclusive; certificated in any category.

*Compliance:* Required as indicated, unless accomplished previously.

To prevent separation of the turbine blade assembly, which could damage the airplane structure and systems, and, under certain circumstances, lead to reduced controllability of the airplane, accomplish the following:

(a) Remove, disassemble, inspect, test, and service the ram air turbine (RAT) in accordance with Lockheed TriStar L–1011 Service Bulletin 093–29–098, dated December 6, 1993; or completely overhaul the RAT in accordance with Chapter 29–21–01 of Dowty Aerospace Hydraulics—Cheltenham Overhaul Manual; at the applicable time specified in either paragraph (a)(1) or (a)(2) of this AD:

**Note 1:** Overhaul of the RAT in accordance with this paragraph includes replacement of the roller bearing (part number RA56341).

(1) For airplanes on which the RAT has not been serviced or overhauled within 6 years prior to the effective date of this AD: Accomplish the procedures within 2 years after the effective date of this AD.

(2) For airplanes on which the RAT has been serviced or overhauled within 6 years prior to the effective date of this AD in accordance with a method that is equivalent to the procedures described in Dowty Aerospace Hydraulics—Cheltenham Service Bulletin RAT16C10–29–168, dated December 1, 1993: Accomplish the procedures within 8 years after the date of the immediately preceding servicing of the RAT.

(b) Within 24 months after the effective date of this AD, revise the FAA-approved maintenance program to incorporate procedures for servicing of the RAT in accordance with Lockheed TriStar L–1011 Service Bulletin 093–29–098, dated December 6, 1993; or complete overhaul of the RAT in accordance with Chapter 29–21–01 of Dowty Aerospace Hydraulics—Cheltenham Overhaul Manual. One or the other of these actions must be accomplished at intervals not to exceed 8 years.

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Atlanta Aircraft Certification Office (ACO), FAA, Small Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Atlanta ACO.

**Note 2:** Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Atlanta ACO.

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

(e) The servicing actions shall be done in accordance with Lockheed TriStar L–1011 Service Bulletin 093–29–098, dated December 6, 1993. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Lockheed Aeronautical Systems Support Company, Field Support Department, Dept. 693, Zone 0755, 2251 Lake Park Drive, Smyrna, Georgia 30080. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Atlanta Aircraft Certification Office, Small Airplane Directorate, Campus Building, 1701 Columbia Avenue, Suite 2–160, College Park, Georgia; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on February 3, 1995.

Issued in Renton, Washington, on December 19, 1994.

**Darrell M. Pederson,**

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 95–52 Filed 1–3–95; 8:45 am]

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## 14 CFR Part 71

**[Airspace Docket No. 94–AGL–24]**

## Alteration of VOR Federal Airway V–216

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** This action amends the airspace designation for Federal Airway V–216 by realigning the airway from the Peck, MI, Very High Frequency