

**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