with Boeing Alert Service Bulletin 767–54A0094, dated May 22, 1998. Repeat the inspection until the actions specified by paragraph (d) or (e) of this AD have been accomplished.

(1) For airplanes in Groups 1, 3, and 4; and for airplanes in Group 2 on which the diagonal brace has accumulated more than 32,000 total flight cycles: Repeat the inspection at intervals not to exceed 1,000 flight cycles.

(2) For airplanes in Group 2 on which the diagonal brace has accumulated 32,000 or fewer total flight cycles: Repeat the inspection at intervals not to exceed 3,000 flight cycles.

(c) If any cracking or damage is detected during any inspection required by paragraph (a) or (b) of this AD, prior to further flight, remove the diagonal brace and perform additional inspections to detect damage of the strut secondary load paths, in accordance with Part 4 of Boeing Alert Service Bulletin 767–54A0094, dated May 22, 1998; and accomplish the requirements of paragraphs (c)(1) and, if applicable, (c)(2) of this AD.

(1) Prior to further flight, replace the one-piece diagonal brace with a new three-piece diagonal brace, in accordance with Part 3 of the Accomplishment Instructions of the alert service bulletin. Such replacement constitutes terminating action for the requirements of this AD.

(2) If any additional damage of the alternate load paths is detected, prior to further flight, repair in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate; or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative who has been authorized by the Manager, Seattle ACO, to make such findings.

(d) For airplanes on which no cracking is detected during the inspection required by paragraph (a) of this AD, in lieu of accomplishing repetitive inspections in accordance with paragraph (b) of this AD, rework of the forward and aft lugs of the diagonal brace may be accomplished in accordance with Part 2 of the Accomplishment Instructions of Boeing Alert Service Bulletin 767–54A0094, dated May 22, 1998. If such rework is accomplished: Within 12,000 flight cycles after the rework, repeat the inspection required by paragraph (a) of this AD; and, prior to the accumulation of 37,500 total flight cycles on the diagonal brace, replace the one-piece diagonal brace with a new three-piece diagonal brace, in accordance with Part 3 of the Accomplishment Instructions of the alert service bulletin. Such replacement constitutes terminating action for the requirements of this AD.

Optional Terminating Action

(e) Replacement of the one-piece diagonal brace with a new three-piece diagonal brace, in accordance with Part 3 of the Accomplishment Instructions of Boeing Alert Service Bulletin 767–54A0094, dated May 22, 1998, constitutes terminating action for the requirements of this AD.

Alternative Methods of Compliance

(f) 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, Seattle ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

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

Special Flight Permits

(g) 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.

Incorporation by Reference

(h) Except as specified by paragraph (c)(2) of this AD, the actions shall be done in accordance with Boeing Alert Service Bulletin 767–54A0094, dated May 22, 1998. 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 Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124–2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(i) This amendment becomes effective on April 12, 1999.

Issued in Renton, Washington, on March 17, 1999.

Darrell M. Pederson,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 99–7117 Filed 3–25–99; 8:45 am]

BILLING CODE 4910–13–U

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 96–NM–256–AD; Amendment 39–11090; AD 99–07–05]

RIN 2120–AA64

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 all Lockheed Model L–1011–385 series airplanes, that requires repetitive external visual inspections and internal borescope inspections to detect discrepancies of the elevator assembly; and either repair or repair/modification of certain identified discrepancies. This amendment is prompted by a report of fretting at the diagonal truss to web joint of the elevator and cracking in the cap fillet radius adjacent to the joint, apparently due to loose fasteners as a result of local vibration. The actions specified by this AD are intended to detect and correct such fretting and cracking, which could result in reduced structural integrity of the elevator and consequent flutter instability if coupled with other structural failures.

DATES: Effective April 30, 1999.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of April 30, 1999.

ADDRESSES: The service information referenced in this AD may be obtained from Lockheed Martin Aircraft & Logistics Center, 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, Small Airplane Directorate, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, 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, Systems and Flight Test Branch, ACE–116A, FAA, Small Airplane Directorate, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia 30349; telephone (770) 703–6063; fax (770) 703–6097.

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 all Lockheed Model L–1011–385 series airplanes was published in the **Federal Register** on May 9, 1997 (62 FR 25565). That action proposed to require repetitive external visual inspections and internal borescope inspections to detect discrepancies of the elevator assembly; and repair/modification of any discrepancy.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due

consideration has been given to the comments received.

Support for the Proposal

One commenter supports the proposed AD.

Request To Revise the Cost Estimate

One commenter states that inspection and modification of the elevator, in accordance with Part II of the Accomplishment Instructions of Lockheed L–1011 Service Bulletin 093–55–031, dated April 26, 1996, requires approximately 320 work hours instead of the 20 work hours specified in the service bulletin. The FAA infers that the commenter considers that the cost estimate included in the proposed AD is too low and should be revised.

The FAA does not concur. The economic analysis of the AD is limited only to the cost of actions actually required by the rule. It does not consider the costs of an ''on condition'' action, such as either the repair or repair/modification specified by paragraph (b) of this AD, which is required to be accomplished only if any discrepancy is detected during the required inspection. In light of this, the FAA considers that the cost estimate provided in the proposed AD is appropriate. No change has been made to this estimate in the final rule.

Request To Change the Inspection Requirements

One commenter requests that a one-time inspection be accomplished on all elevators, unless previously accomplished within the last 24 months in accordance with Lockheed L–1011 Service Bulletin 093–55–031, dated April 26, 1996. The commenter states that, because no damage has been found outboard of elevator station (ES) 187.5 by either the commenter or the manufacturer, inspection outside that area is unnecessary. The commenter adds that no damage has been found on airplanes having an elevator previously modified to incorporate larger (5/32-inch) fasteners in accordance with Lockheed L–1011 Service Bulletin 093–55–018, Revision 1, dated July 12, 1990. Based on these findings, the commenter maintains that those airplanes should not be subject to the inspection requirements of the proposed AD.

The FAA does not concur that a one-time inspection, instead of the repetitive inspections required by paragraphs (a) and (b) of this AD, would be adequate to detect and correct the unsafe condition. Although the FAA agrees that elevator damage has been limited to elevators on which the smaller fasteners are installed, and to the truss structure inboard of ES 187.5, Service Bulletin 093–55–031 describes only possible sources of such damage. While it appears that loose fasteners are the cause, the FAA has determined that it is possible that other factors could be involved. In light of that possibility and until the exact cause has been identified, the FAA has determined that mandating repetitive inspections is the only means to detect future damage to the elevator assembly, regardless of the fastener configuration of the truss structure. No change has been made to the repetitive inspections required by paragraph (a) of the final rule.

Requests To Change Repair/ Modification Requirements

One commenter requests removal of the words ''any discrepancy'' from paragraph (b) of the proposed AD, because such wording would require accomplishment of the Part II inspection/modification [i.e., repair/ modification] of the referenced service bulletin, even if the noted discrepancy is outside the scope of interest of this proposed AD. The commenter adds that the restriction should be limited to the repair of damages detected during inspections.

The FAA concurs and agrees that the term ''any discrepancy,'' is too broad and needs clarification. The FAA has revised paragraph (b) of this final rule to specify that corrective action is required only for those discrepancies identified in paragraph (a) of this AD.

That same commenter requests that the repair of all damage found during inspections be accomplished prior to further flight, in accordance with the Lockheed L–1011 Structural Repair Manual (SRM), or instructions approved by a designated engineering representative (DER).

The FAA partially concurs. The FAA concurs with the commenter's request to allow repairs in accordance with the Lockheed L–1011 SRM. The FAA has reviewed the SRM procedure and finds that it may be used as an acceptable means of compliance for the repair required by paragraph (b) of this AD. However, the FAA has determined that the repair/modification (if accomplished) must be accomplished in accordance with Lockheed L–1011 Service Bulletin 093–55–031. Paragraph (b) of the final rule has been changed accordingly.

The FAA does not concur with the commenter's request to allow repair in accordance with DER-approved instructions. The FAA does not consider it appropriate for a DER to approve the repairs required by this AD. While DER's are authorized to approve certain repairs for cracking found during routine maintenance inspections or other types of inspections, the FAA considers that any cracking detected in the principal structural elements (PSE) during an inspection required by this AD indicates an airworthiness concern of a complex nature. Therefore, such cracking does not warrant ''routine'' handling, but requires expeditious action or a special approach to address the unsafe condition. In light of this, the FAA has determined that DER approval of repairs for AD-mandated discrepancy findings is not appropriate in this AD; therefore, DER approval is not included as an alternative source of information for accomplishing the repairs required by paragraph (b) of the final rule.

The same commenter states that modification of the elevator, in accordance with Part II of the Accomplishment Instructions of the referenced service bulletin, should not be required because the modification requires 320 work hours per ''set'' (two elevators) to accomplish, and that repairs with repetitive inspections would provide an equivalent level of safety.

The FAA partially concurs. The FAA agrees that the operator may have the option of accomplishing either the repair or the repair/modification, with continued inspections thereafter, and that accomplishment of either of these actions will provide an adequate level of safety. The final rule has been changed accordingly.

The FAA points out that Service Bulletin 093–55–031 specifies that accomplishment of the Part II repair/ modification procedure closes out the inspection requirements. However, paragraph (a) of the final rule requires repetitive inspections after accomplishment of either the repair or the repair/modification. NOTE 2 has been added to the final rule to clarify that the inspections are to be continued after accomplishment of either of these actions.

Request To Correct the Part Number Specified in the Service Bulletin

One commenter notes that Part II A.(3) of the Accomplishment Instructions of Lockheed L–1011 Service Bulletin 093–55–031, dated April 26, 1996, incorrectly specifies part number (P/N) HLT319–5 flush head Hi-loks as alternative parts to MS20470AD5 rivets. The commenter states that the correct specification should be ''P/N HLT318–5 protruding head Hi-loks,'' which has been confirmed by the manufacturer.

The FAA concurs that clarification of the specified part number is necessary,

based on information received from the manufacturer. The correct part number has been added to paragraph (c) in the final rule.

Request To Add a Reporting Requirement

One commenter recommends mandatory reporting of damages found during the initial inspection because the manufacturer has not yet determined the cause and extent of failures of the inboard ribs.

The FAA does not concur. Although the FAA agrees that mandatory reporting could help identify the extent of the cracking found in the elevator truss structure, it is unlikely that such reports could identify the root cause. For this reason, the FAA has not added a reporting requirement to the final rule. However, if the commenter or other operators wish to obtain the results of such inspections and provide findings to the FAA, the FAA would consider further analysis of such data.

Conclusion

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 Impact

There are approximately 235 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, that it will take approximately 20 work hours per airplane to accomplish the required actions, and that the average labor rate is $60 per work hour. Based on these figures, the cost impact of the AD on U.S. operators is estimated to be $140,400, or $1,200 per airplane.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

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. 106(g), 40113, 44701.

§ 39.13 [Amended]

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

99–07–05 Lockheed: Amendment 39–11090. Docket 96–NM–256–AD.

Applicability: All Model L–1011–385 series airplanes, certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct fretting at the diagonal truss to web joint of the elevator, and cracking in the cap fillet radius adjacent to the joint, which could result in reduced structural integrity of the elevator and consequent flutter instability if coupled with other structural failures, accomplish the following:

Initial and Repetitive Inspections

(a) Within 12 months after the effective date of this AD, perform an external visual inspection and internal borescope inspection to detect discrepancies (i.e., loose/missing fasteners or rivets, sponginess, sheared rivets, fretting, damage, and cracking) of the elevator assembly, in accordance with Part I of the Accomplishment Instructions of Lockheed L–1011 Service Bulletin 093–55–031, dated April 26, 1996. Repeat the inspections thereafter at intervals not to exceed 18 months.

Repair or Repair/Modification

(b) If any discrepancy described in paragraph (a) of this AD is detected during any inspection required by this AD, prior to further flight, accomplish either the repair in accordance with the applicable sections of the Lockheed L–1011 Structural Repair Manual, or the repair/modification in accordance with Part II of the Accomplishment Instructions of Lockheed L–1011 Service Bulletin 093–55–031, dated April 26, 1996. Repeat the inspections required by paragraph (a) of this AD thereafter at intervals not to exceed 18 months.

Note 2: This AD requires repetitive inspections after accomplishment of either the repair or the repair/modification.

Correct Part Number

(c) Part II A. (3) of the Accomplishment Instructions of Lockheed L–1011 Service Bulletin 093–55–031, dated April 26, 1996, incorrectly specifies the part number to be used as a replacement for ⅛-inch-diameter rivets as ''HLT319–5.'' The correct part number and description are identified as ''HLT318–5 protruding head Hi-lok.'' Where there are differences between the AD and the service bulletin, the AD prevails.

Alternative Methods of Compliance

(d) 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 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Atlanta ACO.

Special Flight Permits

(e) 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.

Incorporation by Reference

(f) Except as provided by paragraph (b) of this AD, the actions shall be done in accordance with Lockheed L–1011 Service Bulletin 093–55–031, dated April 26, 1996. 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 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 Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(g) This amendment becomes effective on April 30, 1999.

Issued in Renton, Washington, on March 17, 1999.

John J. Hickey,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 99–7116 Filed 3–25–99; 8:45 am]

BILLING CODE 4910–13–U

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 99–ANE–09–AD; Amendment 39–11089; AD 99–04–15]

RIN 2120–AA64

Airworthiness Directives; Dr.Ing.h.c.F. Porsche Aktiengesellschaft (Porsche) 3200N01, N02, and N03 Reciprocating Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule, request for comments.

SUMMARY: This document publishes in the **Federal Register** an amendment adopting Airworthiness Directive (AD) 99–04–15 that was sent previously to all known U.S. owners and operators of Porsche PFM3200N01, N02, and N03 reciprocating engines by individual letters. This AD requires replacement of valve springs prior to further flight on PFM3200N01, N02, and NO3 engines. This amendment is prompted by reports of six cases of undetected fatigue failures of valve springs, with one valve spring failure causing an in-flight engine failure that ended in an emergency landing. The actions specified by this AD are intended to prevent an in-flight engine shutdown due to undetected fatigue failures of valve springs.

DATES: Effective April 12, 1999, to all persons except those persons to whom it was made immediately effective by priority letter AD 99–04–15, issued on February 8, 1999, which contained the requirements of this amendment.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of April 12, 1999.

Comments for inclusion in the Rules Docket must be received on or before May 26, 1999.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 99–ANE–09–AD, 12 New England Executive Park, Burlington, MA 01803–5299. Comments may also be sent via the Internet using the following address: ''9-ad-engineprop@faa.gov.'' Comments sent via the Internet must contain the docket number in the subject line.

The applicable service information may be obtained from Porsche Aviation Products, Inc., 1600 Holcomb Avenue, Reno, Nevada, 89502; Attn: Mr. Gary Butcher, telephone (702) 329–3937, fax (702) 329–0426. This information may be examined at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803–5299; telephone (781) 238–7176, fax (781) 238–7199.

SUPPLEMENTARY INFORMATION: The Luftfahrt-Bundesamt Authority (LBA), which is the German airworthiness authority, recently notified the Federal Aviation Administration (FAA) that an unsafe condition may exist on certain Dr.Ing.h.c.F. Porsche Aktiengesellschaft (Porsche) PFM3200N01, N02, and N03 reciprocating engines. The LBA advises that they have received reports of six cases of undetected fatigue failures of valve springs with one valve spring failure causing an in-flight engine failure that ended in an emergency landing. A metallurgical analysis determined that the relative motion between the valve spring and valve spring retainer will result in fatigue cracking of the valve spring and eventual failure of the spring. This condition, if not corrected, could result in an in-flight engine shutdown.

Porsche has issued Service Bulletin (SB) No. N/105–036, dated October 8, 1998, that specifies procedures for replacing all valve springs in each engine cylinder head. The LBA has classified this SB as mandatory and has issued airworthiness directive (AD) FCAA 1998–436, dated October 8, 1998, in order to assure the airworthiness of these engines in Germany.

This engine model is manufactured in Germany and is type certificated for operation in the United States under the provisions of section 21.29 of the Federal Aviation Regulations (14 CFR 21.29) and the applicable bilateral airworthiness agreement. Pursuant to this bilateral airworthiness agreement, the LBA has kept the FAA informed of the situation described above. This engine model is used on a high-performance single-engine airplane. The nature of the valve spring failure is such that the pilot may not have advanced warning of engine failure. Therefore, the FAA has determined that the compliance time should reflect a reasonable degree of conservatism. The FAA has examined the findings of LBA, reviewed all available information, and determined that airworthiness directive (AD) action is necessary for products of this type design that are certificated for operation in the United States.

On February 8, 1999, the FAA issued AD 99–04–15, applicable to Porsche PFM3200N01, N02, and N03 reciprocating engines, installed on but not limited to Mooney M20L series airplanes.

Since an unsafe condition has been identified that is likely to exist or develop on other engines of this same type design, this AD requires replacement of valve springs prior to further flight on PFM3200N0 1, N02, and N03 engines with 500 hours or more time-in-service (TIS) since new or since last overhaul after the effective date of this AD. Additionally, this AD requires replacement of valve springs by 500 hours TIS on PFM3200N01, N02, and N03 engines with less than 500 hours TIS since new or since last overhaul after the effective date of this AD. After the initial valve spring replacement, this AD requires replacement of springs at intervals not to exceed 500 hours TIS.

Since it was found that immediate corrective action was required, notice and opportunity for prior public comment thereon were impracticable and contrary to the public interest, and good cause existed to make the AD effective immediately by individual letters issued on February 8, 1999, to all known U.S. owners and operators of Porsche PFM3200N01, N02, and N03 reciprocating engines. These conditions still exist, and the AD is hereby published in the **Federal Register** as an