Note 3: 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

(e) Special flight permits may be issued in accordance with §§ 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) The inspections shall be done in accordance with Boeing Alert Service Bulletin 737–53A1173, Revision 2, dated January 15, 1998, or Boeing Alert Service Bulletin 737–53A1173, Revision 3, dated May 6, 1999. Except as provided by paragraph (b) of this AD, repairs shall be accomplished in accordance with Boeing Service Bulletin 737–53–1173, Revision 1, dated April 25, 1996, or Boeing Alert Service Bulletin 737–53A1173, Revision 2, dated January 15, 1998, or Boeing Alert Service Bulletin 737–53A1173, Revision 3, dated May 6, 1999. The preventive modifications, if accomplished, shall be done in accordance with Boeing Alert Service Bulletin 737–53A1173, Revision 3, dated May 6, 1999. 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.

(g) This amendment becomes effective on April 24, 2000.

Issued in Renton, Washington, on March 10, 2000.

Donald L. Riggin,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 00–6491 Filed 3–17–00; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 99–NM–22–AD; Amendment 39–11640; AD 2000–05–30]

RIN 2120–AA64

Airworthiness Directives; Boeing Model 747 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain Boeing Model 747 series airplanes, that requires repetitive inspections to detect discrepancies of the cables, fittings, and pulleys of the engine thrust control cable installation, and replacement, if necessary. This AD also requires certain preventative actions on the engine thrust control cable installation for certain airplanes. This amendment is prompted by reports of failure of engine thrust control cables. The actions specified by this AD are intended to prevent such failures, which could result in a severe asymmetric thrust condition during landing, and consequent reduced controllability of the airplane.

DATES: Effective April 24, 2000.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of April 24, 2000.

ADDRESSES: The service information referenced in this AD may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124–2207. 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 Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Dionne M. Krebs, Aerospace Engineer, Propulsion Branch, ANM–140S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055–4056; telephone (425) 227–2250; fax (425) 227–1181.

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 Boeing Model 747 series airplanes was published in the **Federal Register** on October 1, 1999 (64 FR 53275). That action proposed to require repetitive inspections to detect discrepancies of the cables, fittings, and pulleys of the engine thrust control cable installation, and replacement, if necessary. The action also proposed to require certain preventative actions on the engine thrust control cable installation for certain airplanes.

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 rule.

Request for Clarification of Applicability

One commenter does not request a specific change to the proposal, but suggests that since Model 747–200B SUD and 747–200B SUD SF series airplanes are not specified in the applicability section of the proposed AD, those model airplanes are excluded from the proposal.

The FAA does not concur with the commenter's statement. Although Model 747–200B SUD and 747–200B SUD SF series airplanes are not specified in the applicability section of the proposal, the FAA stated the applicability according to the airplane models identified in the 747 type certificate data sheet (TCDS). All models of the airplane are encompassed by the identification in the TCDS. The FAA notes that the commenter previously modified its Model 747–200B series airplanes to stretched upper deck and special freighter configurations; however, since the Model 747–200B SUD and 747–200B SUD SF series airplanes are not specifically identified in the 747 TCDS, the FAA has determined that those modified airplanes are Model 747–200B series airplanes. Therefore the final rule does apply to the Model 747–200B SUD and 747–200B SUD SF series airplanes. No change to the final rule is necessary.

Request for Extension of Compliance Time

Two commenters request that the compliance time for the repetitive inspection intervals specified in paragraph (a) of the proposed AD be extended.

The first commenter suggests that the inspection intervals correspond to its current maintenance program, which specifies a thrust control cable system inspection for the cables and pulleys from the fuselage outboard at ''1C'' check intervals, and the cables and pulleys internal to the fuselage at ''3C'' check intervals. (This commenter considers a ''C'' check interval to be 18 months.) The commenter states that it has no reports of significant damage or wear to the cables on airplanes in service or in check. It estimates that the 18-month repetitive inspection interval specified in the proposal would necessitate approximately 20 additional work hours for unscheduled seat and sidewall removals.

The second commenter requests that the areas of the thrust control cable

system covered by the ceiling, sidewall, and floor panels located in the pressurized cabin area be inspected at its normal ''D'' check interval. (This commenter considers a ''D'' check interval to be 60 months.) The commenter states that, as specified in the maintenance planning document, it has implemented an inspection to verify the integrity of the thrust control cables from the cockpit to the pylon area. However, the majority of its airplanes have an extended 280-inch upper deck, which makes it difficult to perform the detailed visual inspections for the upper deck area in accordance with the proposal. The commenter suggests that the areas not covered by the ceiling, sidewall, and floor panels located in the pressurized cabin area, as well as the wing and pylon area, can be inspected in accordance with paragraph (a) of the proposed rule.

The FAA concurs with the first commenter's statement that the thrust control cable system inspection for the cables and pulleys from the fuselage outboard be accomplished at ''1C'' check intervals. The FAA chose an 18-month inspection interval in order to encompass the 747 operators' current maintenance program for accomplishment of the inspection at ''1C'' check intervals. The FAA infers that the 18-month interval is consistent with the commenter's current inspection maintenance schedule of the thrust control cables and pulleys from the fuselage outboard. The FAA also concurs with the second commenter that the inspection interval required by paragraph (a) of the final rule is appropriate for those areas not covered by the ceiling, sidewall, and floor panels located in the pressurized cabin area, as well as the wing and pylon area.

The FAA does not concur with the commenters' requests to extend the compliance time for the repetitive inspections of certain areas of the thrust control cable system to ''3C'' check or ''D'' check intervals per the commenters' current maintenance programs. When establishing the 18-month inspection interval for the thrust control cable inspections, the FAA was aware that unscheduled maintenance actions, in addition to the operator's existing maintenance program, may be necessary. Additionally, the FAA is aware of thrust control cable failures on airplanes that should have been previously inspected in accordance with the inspection intervals and procedures recommended in the manufacturer's maintenance planning document. The second commenter provides no substantiating data relevant to its request for extending the repetitive inspection interval for certain areas of the thrust control cable system. Based on a review of the service experience for airplanes that should be utilizing the manufacturer's maintenance planning document to perform the thrust control cable inspections, the FAA has determined that the current inspection intervals have not prevented failures of the thrust control cables.

In developing an appropriate compliance time for the repetitive inspections, the FAA considered not only the degree of urgency associated with addressing discrepancies of the thrust control cables, fittings, and pulleys, but other factors as well. Those factors include the recommendations of the manufacturer, and the practical aspect of accomplishing the repetitive inspections within an interval of time coinciding with normal scheduled maintenance for the majority of affected operators. Considering those factors, the FAA has determined that the compliance time of 18 months after the effective date of this AD represents the maximum interval in which the affected airlines can continue to operate without compromising safety. In view of those factors, and the amount of time that has already elapsed since issuance of the notice of proposed rulemaking, the FAA has determined that further delay of these inspections is, in general, not appropriate. The FAA may, however, approve a request for an adjustment of the compliance time under the provisions of paragraph (h) of this final rule if data are submitted to substantiate that such an adjustment would provide an equivalent level of safety. No change to the final rule is necessary.

Request to Allow Operator's Equivalent Procedures

One commenter states that it has modified the nacelle strut idler pulley in accordance with the instructions specified in Boeing Service Bulletin 747–76–2067, Revision 1, and is performing inspections through its maintenance program at an interval of ''1D'' checks and/or ''1C'' checks. Therefore, with this inspection in place, the commenter notes that there is no need to comply with the requirements in paragraph (d) of the proposed rule.

The FAA interprets this as a request that the commenter be allowed to use its own operator procedures to accomplish the actions required by paragraph (c)(2)(ii), as referenced in paragraph (d) of the final rule. Paragraph (d) of the final rule states, ''Where Boeing Service Bulletin 747–76–2067, Revision 1, dated November 19, 1987, specifies that the actions required by paragraph (c)(2)(ii) of this AD may be accomplished in accordance with an 'operator's comparable procedure,' the actions must be accomplished in accordance with the applicable chapters of the Boeing 747 Maintenance Manual, as specified in the service bulletin.'' Paragraph (c)(2)(ii) of the final rule requires a detailed visual inspection to detect wear of the engine thrust control cables in any area where an aluminum-type pulley is installed. The intent of paragraphs (c)(2)(ii) and (d) of the final rule is to require the use of the standard inspection procedures provided in the Boeing 747 Maintenance Manual when inspecting the thrust control cable after the replacement of an aluminum-type pulley. Since the commenter states that its airplanes have been modified in accordance with the instructions specified in the service bulletin, no further action is required by the commenter in this regard. However, the airplane manufacturer has determined that damaged components of a worn aluminum pulley could cause the thrust control cables to wear in any area where an aluminum-type pulley was installed; therefore, the FAA has determined that a one-time inspection of the thrust control cables as required by paragraph (c)(2)(ii) of this AD, in lieu of depending on the repetitive inspections required by paragraph (a) of the AD, is required to detect that wear. Therefore, no change to the final rule is necessary.

Proposed Repetitive Inspection Requirement

One commenter does not request a specific change to the proposal, but suggests that the repetitive inspections identified in paragraph (a) of the proposed AD do not appear to be justified. The commenter reiterates from the proposal the statements that the thrust control cable failures were found on Model 757 and 767 series airplanes and that because of similar design, the thrust control cables could fail on other airplane models. The commenter states that the proposed AD does not identify what caused the thrust control cable failures on the Model 757 and 767 series airplanes, where the thrust control cables failed, or how other airplane models could have a similar condition. The commenter also questions whether or not the thrust control cable failures could have been prevented with a modification or a one-time inspection. The commenter asks if the operators of the Model 757 and 767 series airplanes that experienced the failures had a maintenance program in place to inspect the cables, and if so, when was the last maintenance inspection before the failures occurred.

The commenter further notes that it inspects its thrust control cables and pulleys from the fuselage outboard at ''1C'' check intervals, and the cables internal to the fuselage at ''3C'' check intervals. (The commenter considers a ''C'' check interval to be 18 months.) The commenter states that it has had no reports of significant damage or wear to the cables.

In response to this commenter, the FAA is providing the following information, in general terms, to clarify the circumstances surrounding the thrust control cable failures on the Model 757 and 767 series airplanes. The first Model 757 failure event occurred on the right engine thrust control cable, which was severed by arcing with a cargo compartment light power wire. The failure condition was discovered while the airplane was at the gate, during engine start, when the flightcrew could not control the engine speed. The second Model 757 failure event was due to thrust cable chafing with a window heat power supply cable. The failure condition was detected when, at stable cruise, the right thrust lever ''jumped back'' and at the same time, the right engine began to accelerate towards N1 redline, despite attempts by the flightcrew to hold back the right thrust lever to idle power. The Model 767 thrust control cable failure occurred during the engine start; at airplane push-back from the gate, the number 2 engine accelerated without command. Investigation revealed that the cause of the failure was a broken thrust control cable at a location adjacent to the right-hand wing root.

In response to the commenter's question, there is no evidence in any of the aforementioned events that the operators were not following the manufacturer's maintenance planning document recommendation for thrust control cable inspections. The incident reports for those failure events did not provide data on how long it had been between thrust control cable inspections when the failures occurred. In AD's similar to this one, for Model 747 series airplanes, the FAA has required both modifications, as well as repetitive inspections, to address the hazard associated with failures of the thrust control cables on the Model 757 and 767 series airplanes.

The proposed AD did not identify specific details of the Model 757 or 767 series airplanes thrust control cable failures because the specific failure modes of the thrust control cables may not exist on the Model 747 series airplane. The unsafe condition addressed by this final rule relates to the effect of a thrust control cable failure on the controllability of the airplane. In that respect, certain Model 747, 757, and 767 series airplanes have similar design characteristics so that when the engine control thrust ''B'' cable fails during landing, it changes the position of the thrust reverser directional control valve, causing the thrust reverser to stow and the engine to accelerate. The other engine(s) are not affected by the thrust control cable failure, and remains in full reverse. This severe asymmetric thrust condition during landing is the unsafe condition. None of the modifications required by paragraphs (b) through (g) of the final rule, nor those modifications specified in the associated AD's applicable to Model 757 or 767 series airplanes, change the effects of a thrust control ''B'' cable failure. The repetitive inspections required by paragraph (a) of the final rule are intended to detect wear and corrosion prior to thrust control cable failure. Such wear and corrosion could be caused by numerous problems, not just those problems addressed by the actions specified in paragraphs (b) through (g) of the final rule.

Although modifications have been developed to address specifically identified failure modes of the thrust control cables, there is no available modification that will eliminate the unsafe condition. Therefore, the FAA has determined that repetitive inspections of the thrust control cable system are the only proactive method to alleviate the unsafe condition. Additionally, although the commenter reports that it has not yet identified areas of significant thrust control cable wear or damage during its regular maintenance intervals, the fact that wear and damage to the cables has been identified and addressed by the manufacturer supports the FAA's position that repetitive inspections are required to address the unsafe condition. No change to the final rule is necessary.

Explanation of Change Made to the Final Rule

The FAA has revised Figure 1 of Appendix 1 in the final rule to correct the percentage of wear of each outer wire of the thrust control cables as illustrated. The correct percentage (40%) was specified in Appendix 1, Paragraph 2.B.(1) of the proposal. Figure 1 of Appendix 1 in the proposal illustrated, ''Each outer wire worn less than 50%.'' Figure 1 of Appendix 1 in the final rule illustrates ''Each outer wire worn less than 40%.''

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 change previously described. The FAA has determined that this change will neither increase the economic burden on any operator nor increase the scope of the AD.

Cost Impact

There are approximately 624 airplanes of the affected design in the worldwide fleet. The FAA estimates that 182 airplanes of U.S. registry will be affected by this AD.

It will take approximately 3 work hours per airplane to accomplish the required inspection to verify the engine thrust control cable integrity, at an average labor rate of $60 per work hour. Based on these figures, the cost impact of the inspection required by this AD on U.S. operators is estimated to be $32,760, or $180 per airplane, per inspection cycle.

For airplanes identified in Boeing Service Bulletin 747–76–2019 (30 U.S.-registered airplanes), it will take approximately 4 work hours per airplane to accomplish the required modification, at an average labor rate of $60 per work hour. No parts are required. Based on these figures, the cost impact of the modification required by this AD on U.S. operators is estimated to be $7,200, or $240 per airplane.

For airplanes identified in Boeing Service Bulletin 747–76–2067, Revision 1 (12 U.S.-registered airplanes), it will take approximately 6 work hours per airplane to accomplish the required inspection of the nacelle strut idler pulleys, at an average labor rate of $60 per work hour. Based on these figures, the cost impact of the one-time inspection required by this AD on U.S. operators is estimated to be $4,320, or $360 per airplane.

For airplanes identified in Boeing Service Bulletin 747–76A2068, Revision 3 (4 U.S.-registered airplanes), it will take approximately 16 work hours per airplane to accomplish the required replacement, at an average labor rate of $60 per work hour. Required parts will cost approximately $2,000 per airplane. Based on these figures, the cost impact of the replacement required by this AD on U.S. operators is estimated to be $11,840, or $2,960 per airplane.

For airplanes identified in Boeing Alert Service Bulletin 747–76A2073, Revision 1 (12 U.S.-registered airplanes), it will take approximately 4

work hours per airplane to accomplish the required action, at an average labor rate of $60 per work hour. The cost of required parts will be minimal. Based on these figures, the cost impact of this required action on U.S. operators is estimated to be $2,880, or $240 per airplane.

Currently, there are no airplanes identified in Boeing Service Bulletin 747–53–2327, Revision 2, and subject to this AD, on the U.S. Register. However, should an affected airplane be imported and placed on the U.S. Register in the future, it would require approximately 1 work hour to accomplish this required inspection, at an average labor rate of $60 per work hour. Based on these figures, the cost impact of this one-time inspection would be $60 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 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 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 adding the following new airworthiness directive:

2000–05–30 Boeing: Amendment 39–11640. Docket 99–NM–22–AD.

Applicability: Model 747–100, –100B, –100B SUD, –200B, –200C, –200F, –300, SR, and SP series airplanes; certificated in any category; equipped with Pratt & Whitney Model JT9D–3 or –7 series engines, General Electric Model CF6–45 or –50 series engines, or Rolls-Royce Model RB211–524B, C, or D series engines.

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 (h) 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 prevent engine thrust control cable failures, which could result in a severe asymmetric thrust condition during landing, and consequent reduced controllability of the airplane, accomplish the following:

Note 2: For the purposes of this AD, a detailed visual 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.''

Repetitive Inspections

(a) For all airplanes: Within 18 months after the effective date of this AD, accomplish the ''Thrust Control Cable Inspection Procedure'' specified in Appendix 1 (including Figure 1) of this AD to verify the integrity of the engine thrust control cables. Prior to further flight, replace any discrepant component found, in accordance with the procedures described in the Boeing 747 Maintenance Manual. Repeat the detailed visual inspection thereafter at intervals not to exceed 18 months.

Modification

(b) For airplanes identified in Boeing Service Bulletin 747–76–2019, dated June 9, 1971: Within 18 months after the effective date of this AD, modify the strut bulkhead assembly to enlarge the holes (2 places in each strut) through which the engine thrust control cables pass, in accordance with the service bulletin.

Inspection/Replacement

(c) For airplanes equipped with General Electric Model CF6 series engines and identified in Boeing Service Bulletin 747–76–2067, Revision 1, dated November 19, 1987: Within 18 months after the effective date of this AD, perform a one-time inspection of each nacelle strut idler pulley to determine the type of pulley installed, in accordance with the service bulletin.

Note 3: This paragraph does not apply to airplanes equipped with Pratt & Whitney Model JT9D–70 engines.

(1) If no aluminum-type pulley is installed, no further action is required by this paragraph.

(2) If any aluminum-type pulley is installed, prior to further flight, accomplish paragraphs (c)(2)(i) and (c)(2)(ii) of this AD in accordance with the service bulletin.

(i) Replace any aluminum-type pulley with a phenolic-type pulley having Boeing part number BACP30F4.

(ii) Except as provided by paragraph (d) of this AD: Perform a detailed visual inspection of the engine thrust control cables in any area where an aluminum-type pulley was installed, to detect wear. If any wear outside the criteria contained in Chapter 20–21–03 of the Boeing 747 Maintenance Manual is found, prior to further flight, replace the cable with a new cable, in accordance with the service bulletin. If any wear within the criteria contained in the maintenance manual is found, no further action is required by this paragraph.

Note 4: Accomplishment of the actions specified in Boeing Service Bulletin 747–76–2067, dated September 26, 1986, is acceptable for compliance with the actions required by paragraph (c) of this AD.

(d) Where Boeing Service Bulletin 747–76–2067, Revision 1, dated November 19, 1987, specifies that the actions required by paragraph (c)(2)(ii) of this AD may be accomplished in accordance with an ''operator's comparable procedure,'' the actions must be accomplished in accordance with the applicable chapters of the Boeing 747 Maintenance Manual, as specified in the service bulletin.

Replacement

(e) For airplanes identified in Boeing Service Bulletin 747–76A2068, Revision 3, dated August 22, 1991; including Notice of Status Change 747–76A2068 NSC 2, dated December 12, 1991: Within 18 months after the effective date of this AD, replace aluminum idler pulley brackets with steel brackets, in accordance with paragraphs E., F., G., and H. of the Accomplishment Instructions of the service bulletin.

Inspection/Modification

(f) For airplanes identified in Boeing Alert Service Bulletin 747–76A2073, Revision 1, dated July 28, 1988: Within 18 months after the effective date of this AD, accomplish paragraphs (f)(1) and (f)(2) of this AD, in accordance with the alert service bulletin.

(1) Perform a detailed visual inspection of the engine thrust control cables and pulley mounting bracket screws in the area aft and above main entry door number 2 on the left and right sides of the airplane to detect damage. If any damage is found, prior to further flight, replace the cable with a new cable.

(2) Modify the pulley mounting bracket.

Note 5: Accomplishment of the actions specified in Boeing Alert Service Bulletin 747–76A2073, dated February 4, 1988, is acceptable for compliance with the actions required by paragraph (f) of this AD.

Inspection/Modification/Replacement

(g) For Model 747–100B SUD series airplanes identified in Boeing Service Bulletin 747–53–2327, Revision 2, dated September 24, 1998, with angle assemblies having Boeing part numbers 015U0454–63 and 015U0454–64 installed at body station 970: Within 18 months after the effective date of this AD, perform a detailed visual inspection to measure the clearance between the engine thrust control cables and the cable penetration holes, in accordance with the Cable Chafing Inspection of the Accomplishment Instructions of the service bulletin. If insufficient clearance exists, as specified in the service bulletin, prior to further flight, accomplish paragraphs (g)(1) and (g)(2) of this AD.

(1) Modify the cable penetration holes or replace the plate, as applicable, in accordance with Figure 7 of the service bulletin.

(2) Perform a detailed visual inspection of the engine thrust control cables in any area of the plate to detect wear, in accordance with Chapter 20–21–03 of the Boeing 747 Maintenance Manual. If any wear outside the criteria contained in the maintenance manual is found, prior to further flight, replace the cable with a new cable, in accordance with the procedures described in the Boeing 747 Maintenance Manual. If any wear within the criteria contained in the maintenance manual is found, no further action is required by this paragraph.

Alternative Methods of Compliance

(h) 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 Aircraft Certification Office (ACO), FAA, Transport 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, Seattle ACO.

Note 6: 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

(i) 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

(j) Except as provided by paragraphs (a), (d), and (g)(2) of this AD, the actions shall be done in accordance with the following Boeing Service Bulletins, which contain the specified list of effective pages, as applicable:

Service bulletin referenced and date	Page No. shown on page	Revision level shown on page	Date shown on page
76–2019, June 9, 1971	1–6	Original	June 9, 1971.
747–76–2067, Revision 1, November 19, 1987	1–4	1	November 19, 1987.
	5–12	Original	September 26, 1986.
747–76A2068, Revision 3, August 22, 1991	1, 3–30	3	August 22, 1991.
	2	2	July 20, 1989.
Notice of Status Change 747–76A2068, NSC 2, December 12, 1991.	1	Original	December 12, 1991.
747–76A2073, Revision 1, July 28, 1988	1–4, 12	1	July 28, 1988.
	5–11, 13	Original	February 4, 1988.
747–53–2327, Revision 2, September 24, 1998	1–80	2	September 24, 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.

(k) This amendment becomes effective on April 24, 2000.

Appendix 1

Thrust Control Cable Inspection Procedure

1. General

A. Clean the cables, if necessary, for the inspection, in accordance with Boeing 747 Maintenance Manual 12–21–05.

B. Use these procedures to verify the integrity of the thrust control cable system. The procedures must be performed along the entire cable run for each engine. To ensure verification of the portions of the cables which are in contact with pulleys and quadrants, the thrust control must be moved by operation of the thrust and/or the reverse thrust levers to expose those portions of the cables.

C. The first task is an inspection of the control cable wire rope. The second task is an inspection of the control cable fittings. The third task is an inspection of the pulleys.

Note: These three tasks may be performed concurrently at one location of the cable system on the airplane, if desired, for convenience.

2. Inspection of the Control Cable Wire Rope

A. Perform a detailed visual inspection to ensure that the cable does not contact parts other than pulleys, quadrants, cable seals, or grommets installed to control the cable routing. Look for evidence of contact with other parts. Correct the condition if evidence of contact is found.

B. Perform a detailed visual inspection of the cable runs to detect incorrect routing, kinks in the wire rope, or other damage. Replace the cable assembly if:

(1) One cable strand had worn wires where one wire cross section is decreased by more than 40 percent (see Figure 1),

(2) A kink is found, or

(3) Corrosion is found.

C. Perform a detailed visual inspection of the cable: To check for broken wires, rub a cloth along the length of the cable. The cloth catches on broken wires.

(1) Replace the 7x7 cable assembly if there are two or more broken wires in 12 continuous inches of cable or there are three or more broken wires anywhere in the total cable assembly.

(2) Replace the 7x19 cable assembly if there are four or more broken wires in 12 continuous inches of cable or there are six or more broken wires anywhere in the total cable assembly.

3. Inspection of the Control Cable Fittings

A. Perform a detailed visual inspection to ensure that the means of locking the joints are intact (wire locking, cotter pins, turnbuckle clips, etc.). Install any missing parts.

B. Perform a detailed visual inspection of the swaged portions of swaged end fitting to detect surface cracks or corrosion. Replace the cable assembly if cracks or corrosion are found.

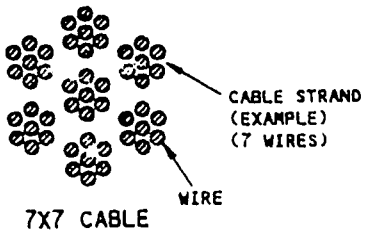
C. Perform a detailed visual inspection of the unswaged portion of the end fitting. Replace the cable assembly if a crack is visible, if corrosion is present, or if the end fitting is bent more than 2 degrees.

D. Perform a detailed visual inspection of the turnbuckle. Replace the turnbuckle if a crack is visible or if corrosion is present.

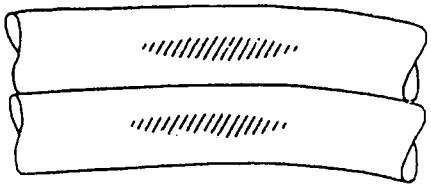
4. Inspection of Pulleys

A. Perform a detailed visual inspection to ensure that pulleys are free to rotate. Replace pulleys which are not free to rotate.

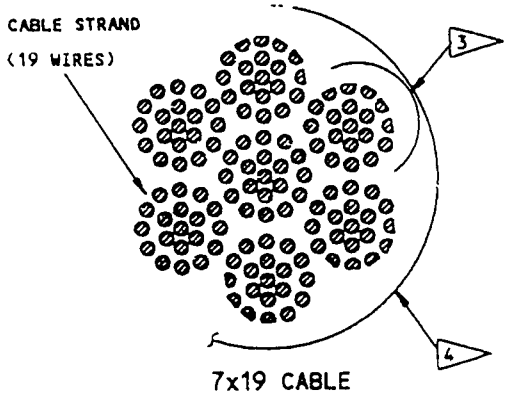
BILLING CODE 4910–13–P



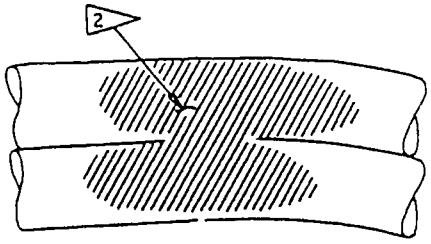
7X7 CABLE



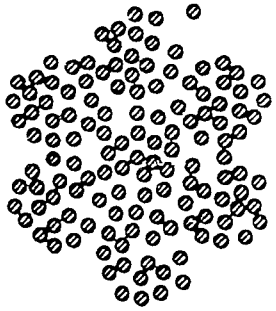
EACH OUTER WIRE WORN
LESS THAN 40%
(WORN AREAS NOT BLENDED)



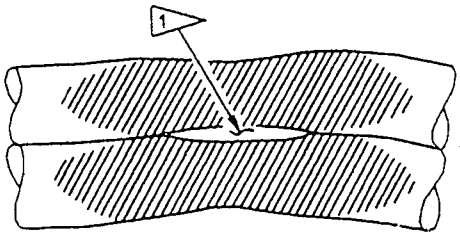
7x19 CABLE



EACH OUTER WIRE WORN 40–50%
(WORN AREAS ARE BLENDED)



EXAMPLE OF INTERNAL WEAR



EACH WIRE IS WORN MORE THAN 50%

1 VISIBLE SPACE BETWEEN WIRES.

2 WEAR CONDITION RESULTING IN BLENDED SURFACES BETWEEN WIRES.

3 THE OUTER WIRE WEAR AREA ON CABLE STRAND. A VISIBLE SPACE BETWEEN WIRES 1 OR A FULLY BLENDED SURFACE 2 SURFACE OVER APPROXIMATELY SIX WIRES INDICATES 50 PERCENT WIRE WEAR.

4 CABLE WEAR MAY OCCUR ON ONE SIDE ONLY OR ON FULL CIRCUMFERENCE. CABLE WEAR CAN EXTEND ALONG THE CABLE FOR A DISTANCE EQUAL TO USUAL CABLE TRAVEL.

FIGURE 1

Issued in Renton, Washington, on March 10, 2000.

Donald L. Riggin,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 00–6490 Filed 3–17–00; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 99–NM–237–AD; Amendment 39–11637; AD 2000–05–27]

RIN 2120–AA64

Airworthiness Directives; British Aerospace Model BAe 146–100A, –200A, and –300A Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment supersedes an existing airworthiness directive (AD), applicable to certain British Aerospace Model BAe 146–100A, –200A, and –300A series airplanes, that currently requires either a one-time non-destructive test (NDT) inspection or a detailed visual inspection for cracking of the fuselage skin in the vicinity of frame 29 between stringers 12 and 13, and repair, if necessary. This amendment requires that the current thresholds for these inspections be reduced and that repetitive inspections be performed. This amendment is prompted by issuance of mandatory continuing airworthiness information by a foreign civil airworthiness authority. The actions specified by this AD are intended to detect and correct fatigue cracking of the fuselage skin in the specified area, which could result in reduced structural integrity of the airplane.

DATES: Effective April 24, 2000.

The incorporation by reference of British Aerospace Service Bulletin SB.53–144, Revision 1, dated May 21, 1999, as listed in the regulations, is approved by the Director of the Federal Register as of April 24, 2000.

The incorporation by reference of British Aerospace Service Bulletin SB.53–144, dated April 27, 1998, was approved previously by the Director of the Federal Register as of November 10, 1998 (63 FR 53550, October 6, 1998).

ADDRESSES: The service information referenced in this AD may be obtained from British Aerospace Regional Aircraft American Support, 13850 Mclearen Road, Herndon, Virginia 20171. 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 Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Norman B. Martenson, Manager, International Branch, ANM–116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055–4056; telephone (425) 227–2110; fax (425) 227–1149.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) by superseding AD 98–21–06, amendment 39–10814 (63 FR 53550, October 6, 1998), which is applicable to certain British Aerospace Model BAe 146–100A, –200A, and –300A series airplanes, was published in the **Federal Register** on October 14, 1999 (64 FR 55636). The action proposed to require either a one-time non-destructive test (NDT) inspection or a detailed visual inspection for cracking of the fuselage skin in the vicinity of frame 29 between stringers 12 and 13, and repair, if necessary. The action also proposed to require that the current thresholds for these inspections be reduced and that repetitive inspections be performed.

Comments Received

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

Request to Cite Revision 1 of Service Bulletin

One commenter, the manufacturer, states that, although paragraph (a) of the proposed AD contains the statement ''* * * at the earlier of the applicable times specified in paragraphs (a)(1) and (a)(2) * * *,'' the commenter considers the paragraph's structure to be confusing. [Paragraphs (a)(1) and (a)(2) require compliance times as specified in British Aerospace Service Bulletin SB.53–144, dated April 27, 1998, and Revision 1, dated May 21, 1999, respectively]. The commenter requests that the main text of the proposed rule be revised to cite only Revision 1 of Service Bulletin SB.53–144 and its associated inspection periods, which are reduced from those specified in the original issue of the service bulletin. The commenter states that it has monitored results of inspections and has conducted metallurgical analysis on samples. From this effort, it has concluded that any uninspected airplanes should be inspected at the reduced compliance times specified in the later revision of the service bulletin.

The FAA acknowledges that clarification of the AD may be helpful. However, the FAA does not concur with the request to include only those compliance times recommended in Revision 1 of Service Bulletin SB.53–144. Omitting compliance thresholds of an existing AD could result in the inadvertent extension of the compliance time for certain airplanes in a superseding AD. If the compliance thresholds of the existing AD are not restated in the new AD, such that only the compliance times of the new AD are required, the new grace period can result in additional time allowed before the inspection must be accomplished. Therefore, when an AD is superseded specifically to reduce a compliance threshold, such an inadvertent extension of the compliance threshold would be contrary to the intent of requiring accomplishment of the existing requirements within an earlier timeframe.

In this case, the FAA's intent was to ensure that operators accomplish the inspection at the earliest time required by either the existing AD or this superseding AD. Consequently, this AD includes both the thresholds required by AD 98–21–06 and the reduced thresholds recommended in the service bulletin. An airplane subject to the requirements of the existing AD, and due to be inspected per the requirements of the existing AD, should still be inspected if the compliance time in the existing AD is earlier than that specified in the new AD.

Reference to Original Service Bulletin

The same commenter, in relation to the previous comment, suggests that the proposed AD be revised to reference the original issue of the service bulletin in a note to the AD. The commenter states that the note could identify that although the compliance times recommended in Revision 1 of the service bulletin are reduced, the inspection remains the same and, if the inspection has already been conducted, further inspections should continue in accordance with the Maintenance Review Board (MRB).

The FAA does not concur. Since ''NOTE 2'' of the AD already states that the actions defined in the original issue and Revision 1 of the service bulletin are identical, the FAA does not consider it necessary to add further information in regard to Service Bulletin SB.53–144. Additionally, since paragraph (b) of the