been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent a horizontal stabilizer slat (slat) from separating, impact with a main or tail rotor blade, and subsequent loss of control of the helicopter, accomplish the following:

(a) Within 50 hours time-in-service (TIS) and thereafter at intervals not to exceed 100 hours TIS, visually inspect the brackets, part number (P/N) 206–023–119–109 or –110 or P/N 407–023–801–127 or –128, that attach the slats, P/N 407–023–002–117, to the horizontal stabilizer for a crack.

(1) If any crack is found, replace the slat assembly, P/N 407–023–002–117, with an airworthy segmented slat assembly, P/N 407–023–001–101, before further flight. Replace the slat assembly in accordance with Part II of the Accomplishment Instructions in Bell Helicopter Textron Alert Service Bulletin No. ASB 407–99–32, dated December 7, 1999.

(2) If no crack is found, replace each slat assembly, P/N 407–023–002–117, with an airworthy segmented slat assembly, P/N 407–023–001–101, prior to flight after December 31, 2000.

(b) Installing airworthy segmented slat assemblies, P/N 407–023–001–101, constitutes terminating action for the requirements of this AD.

(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, Regulations Group, Rotorcraft Directorate, FAA. Operators shall submit their requests through an FAA Principal Maintenance Inspector, who may concur or comment and then send it to the Manager, Regulations Group.

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

(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 helicopter to a location where the requirements of this AD can be accomplished.

(e) The modification shall be done in accordance with Part II of the Accomplishment Instructions in Bell Helicopter Textron Alert Service Bulletin No. ASB 407–99–32, dated December 7, 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 Bell Helicopter Textron Canada, 12,800 Rue de l'Avenir, Mirabel, Quebec JON1LO, telephone (450) 437–2862 or (800) 363–8023, fax (450) 433–0272. Copies may be inspected at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on November 22, 2000.

Note 3: The subject of this AD is addressed in Transport Canada (Canada) AD CF–2000–09, dated March 21, 2000.

Issued in Fort Worth, Texas, on September 29, 2000.

Henry A. Armstrong,

Manager, Rotorcraft Directorate, Aircraft Certification Service.

[FR Doc. 00–26236 Filed 10–17–00; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 99–NM–248–AD; Amendment 39–11932; AD 2000–20–20]

RIN 2120–AA64

Airworthiness Directives; Boeing Model 747–400 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain Boeing Model 747–400 series airplanes, that requires removal of existing inertial reference units (IRU) and installation of modified IRU's. This amendment is prompted by a report of the failure of the left and center IRU's on a single flight. The actions specified by this AD are intended to prevent loss of multiple IRU's in flight, which could result in the loss of navigation data during flight. This could compromise the ability of the flight crew to maintain the safe flight and landing of the airplane.

DATES: Effective November 22, 2000.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of November 22, 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: Jay G. Yi, Aerospace Engineer, Systems and Equipment Branch, ANM–130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055–4056; telephone (425) 227–1013; 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 747–400 series airplanes was published in the **Federal Register** on October 6, 1999 (64 FR 54229). That action proposed to require removal of existing inertial reference units (IRU) and installation of modified IRU's.

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 To Extend Compliance Time

Three commenters request that the FAA extend the proposed compliance time for the installation of modified IRU's.

The first commenter states that sending all its units back to the parts manufacturer for modification will take at least two weeks per unit. Additionally, taking the unmodified units off all of its airplanes and shipping them will delay completion of the installation required by the proposed AD until receipt of the modified units. Therefore, the proposed installation would not be accomplished until February 2002. The commenter adds that the dual inertial reference system (IRS) failure that prompted this proposal, as stated in the preamble, was caused by a short circuit in the brake system control unit (BSCU). The airplane manufacturer later determined that the short circuit was due to moisture ingested into the BSCU, and released Boeing Service Bulletins 747–25–3080, Revision 2, dated February 29, 1996 (improves the integrity of the drip shields), and 747–53–2402, dated December 21, 1995 (installs protective panels over the drip shields to protect them from damage) to address this condition. The commenter has completed these modifications, and notes that these modifications significantly reduce the likelihood of water damage to the BSCU. The commenter states that, considering these airplane modifications and the realities of the modification stated above, a two-year compliance time would be more realistic.

The second commenter states that 12 months is an unrealistic and unnecessary compliance time, and submits the following factors for consideration:

• First, the IRU part numbers addressed by the proposal are used on Boeing Model 737–300/400/500, 757, and 767 series airplanes, in addition to Model 747–400 series airplanes. Many of the 747–400 operators also operate some of the other airplane types and have common spares. The operators will either have to maintain separate spares for the Model 747–400 series airplanes, or modify all of the spares. If the operators are forced into maintaining separate spares, this will increase the quantity of spare units required.

• Second, while there is a potential for this condition to develop, the probability of occurrence is lower than implied in the proposal. The availability of standby heading and attitude systems, plus the ability of the IRU to recover heading and attitude capability, also reduce the urgency to complete all updates within 12 months. Considering the above factors, the commenter recommends the compliance time be extended from 12 months to at least 24 months, with the expectation that an extension will likely be needed for full compliance.

The third commenter requests that the compliance time be changed from 12 months to 24 months, but does not give a reason for this request.

The FAA concurs with the commenters' requests to extend the compliance time for installation of modified IRU's; however, the FAA does not concur with the length of time requested by the commenters. Following careful consideration of the comments, the FAA considers that an extension of the compliance time specified in paragraph (a) of this AD from 12 months to 18 months will not compromise safety. Paragraph (a) of this final rule has been revised accordingly.

Request To Revise Applicability

Three commenters request that the applicability of the proposed rule be revised.

The first commenter requests that the proposed applicability be revised to apply to all Model 747–400 series airplanes, not just specific line numbers as written in the applicability section. The commenter states that some of its recent deliveries of Model 747–400 series airplanes had the upgraded IRU's installed at delivery, and those line numbers are not included in the current applicability of the proposed rule. The commenter also notes that it is possible that one or more of the upgraded IRU units were replaced with an older IRU after the airplane went into service; therefore, it is the commenter's intent to accomplish the proposed requirements on all of its Model 747–400 series airplanes.

The second commenter requests that the statement ''certain Boeing Model 747–400 series airplanes,'' in the preamble of the proposed rule be revised to read, ''all Boeing Model 747–400 series airplanes equipped with Honeywell inertial reference systems.'' The commenter notes that explicitly stating this up front in the proposed AD provides clarification of the airplanes affected by the proposal. The commenter also recommends identifying a second grouping in the applicability section to make the spares requirement [paragraph (b)] applicable to all Model 747–400 series airplanes.

The third commenter states that some Model 747–400 series airplanes not specified in the proposal may have had replacement IRU's installed that should be modified.

The FAA does not concur with the commenters' request. In response to the first and second commenters, all new 747–400 series airplanes after line number 1187 were delivered with newly designed IRU's installed, and the FAA previously disseminated instructions to operators about replacement or exchange of the new IRU's with older-type IRU's. In response to the third commenter, the FAA has addressed the intent of the commenter's request in paragraph (b) of this AD.

Request To Revise Spares Paragraph

One commenter suggests that since the problem referenced in the proposed rule is unique to Model 747–400 series airplanes, and other IRS-equipped fleets can continue using older part numbers, the text in the spares paragraph should be revised from ''any airplane'' to ''any 747 airplane.''

Two commenters recommend the wording in the spares paragraph be revised to read, ''As of the required compliance date for this AD, no person shall install an IRU with a Boeing part number which precedes S242T101–113 on a Boeing 747–400 series airplane,'' or ''Subsequent to the required compliance date of this AD, no person shall install a Honeywell IRU having a Boeing part number that precedes S242T101–113 on a Boeing Model 747–400 series airplane.'' The commenter states that this is to require the use of modified IRU's after the compliance date, thereby permitting the use of existing inventory during the interim period and to preclude the use of any IRU preceding part number S242T101–113 after the compliance date.

The FAA does not concur with the commenters' requests to change the words in the spares paragraph from ''on any airplane'' to ''on any Boeing Model 747–400 airplane,'' or ''with a Boeing part number that precedes S242T202–113 on a Boeing Model 747–400 series airplane.'' The applicability statement of all AD actions lists all models affected by that AD. All of the requirements stated in an AD are applicable only to the airplane models listed in the applicability, and based on information received from the parts manufacturer, only the IRU's having the part numbers listed in the spares paragraph are affected by the AD.

Additionally, the FAA does not concur with changing ''As of the effective date * * * '' to ''As of the compliance date * * * '' Removing an unsafe condition that already exists on an airplane necessarily involves performing maintenance on the airplane, and the FAA always provides some kind of ''grace period'' in order to minimize disruption of operations. On the other hand, prohibiting installation of spares that have been determined to create an unsafe condition does not require any additional maintenance activity; it simply requires use of one part rather than another. In general, once an unsafe condition has been determined to exist, it is the FAA's normal policy not to allow that condition to be introduced into the fleet. In developing the technical information on which every AD is based, one of the important considerations is the availability of parts that the AD will require to be installed. When it is determined that those (safe) parts are immediately available to operators, it is the FAA's policy to prohibit installation of the unsafe parts as of the effective date of the AD.

Therefore, the FAA finds that there is no justification for making the changes requested by the commenters. No change to the final rule is necessary in this regard.

Request To Revise Statement of Unsafe Condition

One commenter requests that the unsafe condition as stated in the proposed rule be revised from '' * * * compromise the ability of the flight crew to maintain the safe flight and landing of the airplane'' to '' * * * compromise the ability of the flight crew to subsequently cope with adverse operating conditions.'' The commenter states that the loss of primary data to both pilots, in addition to loss of other navigational information is improbable. The commenter adds that while loss of primary data could impact operations during adverse conditions, with standby data available, loss of primary data does not impact safe flight of the airplane.

The FAA does not concur with the commenter's request. The FAA has determined that, should an airplane lose all three IRU's, which would result in operating with only one standby instrument, it would indeed impact safe flight of the airplane due to reduced controllability resulting from loss of the IRU's. No change to the final rule is necessary in this regard.

Request To Revise Certain Sections in the Preamble

One commenter describes revisions to various sections of the preamble of the proposed rule. In the ''Summary'' section, the commenter revises the wording to state that the proposed AD is applicable to 747–400 series airplanes equipped with the Honeywell IRS, and to present a logical sequence for the event and the consequences. The commenter also changes the statement of unsafe condition from '' * * * maintain the safe flight and landing of the airplane'' to '' * * * subsequently cope with adverse operating conditions.'' In the ''Discussion'' and ''Explanation of Relevant Service Information'' sections, the commenter suggests revising the wording to ascribe the reported event specifically to a Model 747–400 series airplane equipped with the Honeywell IRS, to indicate the data loss, and to discuss attributed causes of the event. In the ''Explanation of Requirements of Proposed Rule'' section, the commenter revises the wording to clarify the intent of Boeing Alert Service Bulletin 747–34A2638, Revision 1, dated April 8, 1999, as applicable to multiple part numbers of Honeywell IRU's. In the ''Differences Between Proposed Rule and Alert Service Bulletin'' section, the commenter revises the wording to identify the time necessary to perform the required replacement as being consistent with the alert service bulletin estimate, and to identify compliance time based on initial estimates from Honeywell and operators' recommendations.

Another commenter states that actions specified in the proposal are intended to prevent loss of navigation during flight. The commenter discusses the various navigation systems and notes that it is rare that navigation data from the IRU's are used during the approach and landing phase of flight. The commenter further states that the event that prompted the NPRM included loss of primary heading and attitude data from the left and center IRU's, as well as loss of navigation data. The right IRU was still providing valid heading and attitude reference, and the standby systems were available. The commenter adds that when the voltage was removed, the faulted IRU's could have been reset to the ''ATTITUDE'' mode, which returns the primary heading and attitude functions.

The same commenter states that the proposal states that this condition is likely to exist on other products of the same type design. However, the commenter notes that to its knowledge, this is the only occurrence of this condition throughout the entire service life of the Model 747–400 series airplane. In addition, the commenter states that service information has been issued to address the broken or damaged drip shields, which allowed liquid to enter the BSCU and cause the electrical fault. The commenter recommends the wording in the ''Explanation of Requirements of Proposed Rule'' be changed to ''may develop'' or similar wording which better describes the low probability of occurrence for this condition.

The FAA concurs with the commenter's description of the intent of these sections; however, because only the ''Summary'' section is restated in the final rule, no change to the other sections, as stated above, is necessary. Additionally, the ''Summary'' section of this final rule only represents a brief synopsis of the AD, it is accurate as proposed, therefore, no change to the final rule is necessary.

Request To Revise Cost Impact Information

Three commenters request that the cost information in the proposed rule be revised.

The first commenter states that the cost to U.S. operators estimated in the proposal is approximately $3,000, and reasons that the true costs involved are significantly higher for the following reasons:

- First, the cost estimate in the proposal allowed for 1 hour per airplane; however, the actual time to remove, install, and functionally check all three IRU's will be longer.
- Second, the cost estimate did not include any of the operators' costs for internal processing, shipping, and handling.
- Third, the operators may have to purchase additional spare units to support rotation of IRU's through the modification program.
- Fourth, the estimate does not include the cost to modify or update the IRU's. In addition, the commenter notes that, although there is no cost specified in the proposal for the required parts, the parts manufacturer will charge for the modification of some parts. Therefore, the statement that the manufacturer will provide parts at no cost is inaccurate and should not be included in the proposal.

The second commenter states that the estimated work hours in the cost information section should be revised from 1 work hour to 2.25 work hours to identify cost impacts consistent with the estimated time to perform the proposed replacement.

The third commenter makes no specific request for a change to the proposed rule, but states that, if the 12-month compliance time is retained, it could be faced with purchasing additional shipsets of IRS units (assuming they are available in time) in order to expedite accomplishment of the fleet campaign. The commenter notes that a shipset costs about $450,000, and two additional shipsets might be needed.

The FAA agrees with the first commenter, in that the service bulletin does not specify that the required parts will be supplied by the parts manufacturer at no cost to the operators. The service bulletin merely states that the operator can supply the parts. Information received from the parts manufacturer states that it will supply the parts for the actions required by this AD; however, any other modifications will be paid for by the operators. No change to the final rule is necessary in this regard.

The FAA does not concur with revising the work hours necessary for accomplishment of the required replacement. The cost impact information describes only the ''direct'' costs of the specific actions required by this AD. The number of work hours necessary to accomplish the required actions, specified as 1 work hour in the cost impact information below, was provided to the FAA by the manufacturer based on the best data available to date. This number represents the time necessary to perform only the actions actually required by this AD. The FAA recognizes that, in accomplishing the requirements of any AD, operators may incur ''incidental'' costs in addition to the ''direct'' costs. The cost analysis in AD rulemaking actions, however, typically does not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions. Because incidental costs may vary significantly from operator to operator, they are almost impossible to calculate. No change to the final rule is necessary in this regard.

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 429 Model 747–400 series airplanes of the affected design in the worldwide fleet. The FAA estimates that 50 airplanes of U.S. registry will be affected by this AD, that it will take approximately 1 work hour per airplane to accomplish the required replacement, and that the average labor rate is $60 per work hour. Required parts will be supplied by the parts manufacturer at no cost to the operators. Based on these figures, the cost impact of the AD on U.S. operators is estimated to be $3,000, or $60 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. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

Regulatory Impact

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a ''significant regulatory action'' under Executive Order 12866; (2) is not a ''significant rule'' under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption **ADDRESSES.**

List of Subjects in 14 CFR Part 39

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

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

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

2000–20–20 Boeing: Amendment 39–11932. Docket 99–NM–248–AD.

Applicability: Model 747–400 series airplanes, having line numbers 696 through 1187 inclusive, certificated in any category; equipped with Honeywell inertial reference units (IRU).

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 (c) 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 loss of multiple IRU's in flight, which could result in the loss of navigation data, and compromise the ability of the flight crew to maintain the safe flight and landing of the airplane, accomplish the following:

Replacement

(a) Within 18 months after the effective date of this AD, remove the left, center, and right IRU's, and install modified IRU's, in accordance with Boeing Alert Service Bulletin 747–34A2638, Revision 1, dated April 8, 1999.

Note 2: Removal of existing left, center, and right IRU's and replacement with modified IRU's in accordance with Boeing Alert Service Bulletin 747–34A2638, dated January 29, 1999, is considered acceptable for compliance with paragraph (a) of this AD.

Spares

(b) As of the effective date of this AD, no person shall install an IRU having Boeing part number S242T101–110, S242T101–111, or S242T101–112, on any airplane.

Alternative Methods of Compliance

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

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

(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.

Incorporation by Reference

(e) The replacement shall be done in accordance with Boeing Alert Service Bulletin 747–34A2638, Revision 1, dated April 8, 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.

(f) This amendment becomes effective on November 22, 2000.

Issued in Renton, Washington, on October 6, 2000.

Donald L. Riggin,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 00–26308 Filed 10–17–00; 8:45 am]

BILLING CODE 4910–13–P