

Proposed Rules

Federal Register

Wednesday, June 2, 1999

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF AGRICULTURE

Food Safety and Inspection Service

9 CFR Parts 317, 318, and 381

[Docket No. 97-076N]

RIN 0583-AC50

Irradiation of Meat and Meat Products

AGENCY: Food Safety and Inspection Service, USDA.

ACTION: Notice; reopening of comment period.

SUMMARY: The Food Safety and Inspection Service (FSIS) is reopening the comment period for the proposed rulemaking, "Irradiation of Meat and Meat Products," which closed on April 26, 1999, in response to the great interest in this proposal. (64 FR 9089, February 24, 1999). The comment period will be reopened to include comments received from April 27, 1999, until 15 days after the date of publication of this notice.

DATES: Comments must be received on or before June 17, 1999.

ADDRESSES: Send one original and two copies of written comments to: FSIS Docket #97-076P, U.S. Department of Agriculture, Food Safety and Inspection Service, Room 102, 300 12th Street, SW., Washington, DC 20250-3700.

FOR FURTHER INFORMATION CONTACT: Daniel L. Engeljohn, Ph.D., Director, Regulation Development and Analysis Division, Office of Policy, Program Development, and Evaluation, Food Safety and Inspection Service, U.S. Department of Agriculture (202) 720-5627.

Done in Washington, DC on: May 26, 1999.

Thomas J. Billy,
Administrator.

[FR Doc. 99-13933 Filed 6-1-99; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 98-NM-150-AD]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 737-100, -200, -300, -400, and -500 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Supplemental notice of proposed rulemaking; reopening of comment period.

SUMMARY: This document revises an earlier proposed airworthiness directive (AD), applicable to certain Boeing Model 737-100, -200, -300, -400, and -500 series airplanes, that would have required repetitive testing of certain main tank fuel boost pumps to identify those with degraded performance, and replacement of degraded pumps with new or serviceable pumps. That originally proposed AD also would have required eventual replacement of the existing low pressure switches for boost pumps located in the main fuel tanks with higher threshold low pressure switches, which, when accomplished, would terminate the repetitive testing. That proposal was prompted by reports of engine power loss caused by unsatisfactory performance of the fuel boost pumps. This new action revises the proposed rule by reducing the compliance time for certain airplanes. The actions specified by this new proposed AD are intended to prevent fuel suction feed operation on both engines without flight crew indication, and possible consequent multiple engine power loss.

DATES: Comments must be received by June 28, 1999.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 98-NM-150-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9:00 a.m. and 3:00 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from

Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT: Dorr Anderson, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2684; fax (425) 227-1181.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this notice may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 98-NM-150-AD." The postcard will be date stamped and returned to the commenter.

Availability of NPRMs

Any person may obtain a copy of this NPRM by submitting a request to the FAA, Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 98-NM-150-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

Discussion

A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to add an airworthiness directive (AD), applicable to certain Boeing Model 737-100, -200, -300, -400, and -500 series airplanes, was published as a notice of proposed rulemaking (NPRM) in the **Federal Register** on August 10, 1998 (63 FR 42596). That NPRM would have required repetitive testing of certain main tank fuel boost pumps to identify those with degraded performance, and replacement of degraded pumps with new or serviceable pumps. That NPRM also would have required eventual replacement of the existing low pressure switches for boost pumps located in the main fuel tanks with higher threshold low pressure switches, which, when accomplished, would terminate the repetitive testing. That NPRM was prompted by reports of engine power loss caused by unsatisfactory performance of the fuel boost pumps. That condition, if not corrected, could result in fuel suction feed operation on both engines without flight crew indication, and possible consequent multiple engine power loss.

Clarification of this Supplemental NPRM

The FAA clarifies in this supplemental NPRM that any description of the relationship between the low pressure switches and the fuel pump assembly does not imply that those switches are part of the fuel pump assembly.

Comments

Due consideration has been given to the comments received in response to the NPRM.

Request to Address All Fuel Pumps

One commenter questions whether the proposed AD applies to fuel boost pumps other than those of the three manufacturers [i.e., Thompson Ramo Wooldridge (TRW), Argo-Tech, and General Electric Company (GEC)] identified in the proposed AD. The FAA infers that the commenter requests that the final rule be revised to include additional boost pumps to ensure that all possible pump configurations are addressed.

The FAA concurs. The FAA agrees that all pump configurations on affected Boeing Model 737 series airplanes may be subject to the identified unsafe condition. In the originally proposed rule, the FAA addressed only currently certified pumps [GEC (formerly Plessey), TRW, and Argo-Tech]. However, in order to also consider

additional pump types that may become certified in the future, the FAA has revised the groups affected by this AD to distinguish only "GEC fuel pumps" [paragraph (a)] and "non-GEC fuel pumps" [paragraph (b)].

Request to Revise Actions and Compliance Time for Certain Airplanes

One commenter, a manufacturer of fuel boost pumps, requests that the actions and compliance times specified in the originally proposed rule apply to TRW and Argo-Tech pumps equally, based on the pumps' similarity and use of many common parts. The commenter reports that it builds TRW pumps with Argo-Tech nameplates.

The FAA concurs with this request and rationale. As stated previously, new paragraph (b) of this supplemental NPRM would apply to all non-GEC fuel pumps, which includes both TRW and Argo-Tech fuel pumps. Fuel pumps manufactured by TRW or Argo-Tech are identified as "Argo-Tech/TRW" pumps in this supplemental NPRM. This supplemental NPRM proposes a uniform compliance time of 2 years for all fuel pumps.

Conclusion

Since these changes expand the scope of the originally proposed rule, the FAA has determined that it is necessary to reopen the comment period to provide additional opportunity for public comment.

Additional Comments Received

The following are additional comments to the originally proposed rule, with the FAA's responses to those comments.

Support for the Proposal

One commenter has no objection to the originally proposed rule. Another commenter states its intention to comply with the requirements of the originally proposed rule.

Request for Name Correction

One commenter requests that the final rule identify "Thompson Ramo Wooldridge," rather than "Thompson Rand Wooldridge," as the correct name of the pump manufacturer. The FAA acknowledges this correction and has included the correct name in this supplemental NPRM.

Requests to Revise Compliance Time

Several commenters discussed the compliance periods in the proposed rule.

1. One commenter, a foreign civil airworthiness authority, indicates that a 2-year compliance period should be

applied to all pumps regardless of the manufacturer, because the primary concern of the proposed AD is not the pump type but undetected low fuel delivery pressure.

The FAA concurs with this request. As stated previously, this supplemental NPRM has been revised to apply the same compliance times for all pump types. In the originally proposed rule, the FAA proposed a compliance time of 3 years for airplanes equipped with TRW pumps to accommodate the fleetwide demand for parts (approximately 12,000 pressure switches will be required), recognizing that the degraded mode of operation has not been observed to date on boost pumps other than those manufactured by GEC. However, in light of the amount of time that has elapsed since the originally proposed rule was issued, the FAA finds it likely that all parts will be available within the 2-year compliance time.

2. Another commenter, an association of airline pilots, recommends a 1-year compliance time for airplanes equipped with boost pumps manufactured by GEC and a 2-year compliance time for all other affected airplanes. The commenter provides no justification for its request.

As explained previously, the FAA has revised the compliance times for all airplanes to 2 years. The FAA does not concur with the request to reduce the compliance time to 1 year. Sufficient parts will not be available to support a 1-year incorporation period for the GEC pumps. In addition, the unsafe condition does not warrant the excessive amount of industry disruption that would result from a 1-year compliance time. In developing an appropriate compliance time, the FAA considered the safety implications, parts availability, and normal maintenance schedules for timely replacement of the low pressure switches. In consideration of all of these factors, the FAA determined that the compliance time, as proposed, represents an appropriate interval in which replacement of the switches can be accomplished in a timely manner within the fleet, while still maintaining an adequate level of safety. Operators are permitted to accomplish the requirements of an AD at a time earlier than that specified as the compliance time; therefore, if an operator elects to accomplish the switch replacement prior to the end of the compliance period (2 years after the effective date of this AD), it is that operator's prerogative to do so. If additional data are presented that would justify a shorter compliance time, the FAA may consider further rulemaking on this issue.

3. Another commenter, the airplane manufacturer, recommends that compliance times be based on airplane model (i.e., 2 years for Model 737-300, -400, and -500 series airplanes; 3 years for Model 737-100 and -200 series airplanes), rather than boost pump type. The commenter provides no justification for its request.

The FAA does not concur. No certification tests have been conducted confirming that Boeing Model 737-100 and -200 series airplanes are less susceptible to power loss on suction feed operation than Boeing Model 737-300, -400, and -500 series airplanes. No change to the originally proposed rule in this regard is necessary.

Requests to Revise Applicability

One commenter, the airplane manufacturer, requests that Boeing Model 737-100 and -200 series airplanes equipped with Argo-Tech/TRW pumps be excluded from the applicability statement of the originally proposed rule. In support of its request, the commenter states that there is no known history of problems with pressure degradation with Argo-Tech/TRW pumps, and no fleet experience of engine power loss events on Model 737-100 and -200 series airplanes due to the low threshold pressure switches. The manufacturer concludes that the data do not indicate that modification of airplanes equipped with Argo-Tech/TRW pumps would improve safety.

The FAA does not concur with the commenter's request to revise the applicability of this AD. The FAA recognizes that Argo-Tech/TRW fuel boost pumps have not exhibited pressure degradation to the extent that pump performance is affected. However, the unsafe condition addressed by this final rule is not limited to the causes of degraded pump output pressure. The FAA's determination of the unsafe condition is based on the fact that airplanes may transition to suction feed operation without an indication to the flight crew. With the currently installed low pressure switches, this transition may occur on any Boeing Model 737-100, -200, -300, -400, or -500 series airplane. In addition, the FAA notes that no testing of in-service Boeing Model 737 series airplanes operating on suction feed fuel has been conducted to ensure proper operation during all phases of flight. In fact, the limited information available to the FAA and the airplane manufacturer regarding suction feed operation on Boeing Model 737 series airplanes indicates that the engines will experience power loss during particular phases of flight. This is true for both types of engines—on

new as well as older airplanes. The FAA considers dual engine power loss to be an unsafe condition. No change to the applicability of this supplemental NPRM is necessary.

Request to Revise Repetitive Interval

One commenter recommends that the boost pump pressure tests be repeated at intervals of 90 days rather than 6 months. This commenter provides no justification for its request.

The FAA does not concur with the request to reduce the repetitive test interval. Based on the apparent gradual nature of pump degradation, the FAA has determined that the 6-month interval for the repetitive pressure tests is sufficient to verify acceptable pump performance and detect gradual pump degradation. Therefore, no change to the originally proposed rule in this regard is required.

Request to Remove Minimum Equipment List (MEL) Restriction

One commenter, the airplane manufacturer, requests that the FAA remove the restriction on dispatch with the main tank boost pumps inoperative. The commenter indicates that the restriction would unnecessarily ground airplanes that are operating under the MEL. Alternatively, the commenter recommends a minimum amount of time (after the effective date of the AD) before the restriction becomes active. The commenter states that a 90-day compliance time for the initial test is sufficient to ensure that tests are completed in a timely manner. The commenter explains that such a grace period would ensure that no airplanes are grounded.

The FAA does not concur with the commenter's request to remove the MEL restriction. The FAA cannot allow dispatch with inoperative boost pumps unless the assumed operative pump can be shown to be operating in a nondegraded mode. This restriction will prevent possible dispatch on suction feed operation. In addition, the FAA does not concur with the commenter's request for a grace period before restricting dispatch. In its efforts to prevent grounding airplanes, the FAA has considered several issues. The alert service bulletin informing operators of this potential condition (Boeing Alert Service Bulletin 737-28A1114) was issued October 30, 1997, and the FAA has determined that this initial testing has been completed on almost all U.S.-registered airplanes. In addition, any remaining airplanes on which initial testing has not been completed may be tested during overnight stops. Further, operators have had sufficient time to

position spares to prevent grounding airplanes. Therefore, no change to the originally proposed NPRM in this regard is necessary.

Request to Apply Life Limits to Boost Pumps

One commenter, an association of airline pilots, requests that the FAA impose appropriate life limiting measures to GEC-manufactured fuel boost pumps to minimize the possibility of significant degradation of pump performance. The commenter further requests that the FAA add a requirement to modify GEC pumps to eliminate the corrosion problem.

The FAA does not concur with the requests. The FAA finds that this degraded mode condition is expected to affect less than 10% of GEC-manufactured pumps. The FAA anticipates that the overwhelming majority of GEC boost pumps will not require replacement. Therefore, the FAA does not consider that imposing life limits on the pumps is an appropriate action at this time. In addition, the FAA finds that replacement of the low pressure switches with improved higher threshold pressure switches will ensure that low pump output pressure will be indicated properly and addressed to prevent engine operation on suction feed. Despite these findings, it should be noted that GEC has indicated its full intent to provide improved boost pumps to replace pumps that exhibit degraded mode operation, and in fact is implementing a retrofit plan to replace degraded pumps with improved pumps. The FAA's method to ensure that all pumps are performing to specification is to require periodic pressure tests and eventual replacement of the low pressure switches with higher threshold pressure switches. No change to this proposed AD in this regard is necessary.

Request for Revision of Parts Cost

One commenter, the airplane manufacturer, requests that the cost impact information of the originally proposed rule be revised to clarify parts cost and responsibility. The commenter requests deletion of the incorrect claim that parts would be provided by the manufacturer at no cost to operators. The manufacturer also provides cost estimates for replacement switches.

The FAA concurs with the commenter's request and acknowledges that the originally proposed rule implies that replacement parts will be provided at no cost by the manufacturer. The FAA's intent was that the originally proposed rule indicate that no parts cost would be associated with testing of the fuel boost pumps. The cost impact

information of this proposed AD has been revised to include the cost estimates for replacement switches provided by the manufacturer.

Request to Revise Compliance Time to Credit Work Accomplished

One commenter, the airplane manufacturer, requests clarification of the compliance time specified as "within 90 days after the effective date of the AD" for the proposed requirement to perform initial testing of the boost pump. The commenter recommends that the compliance language be revised to "Prior to 90 days after the effective date of this AD. * * *" The commenter questions whether operators would be considered to be in compliance if they performed the initial tests prior to the effective date of the AD, or whether they would be required to repeat those tests.

The FAA does not consider that a change to this supplemental NPRM is necessary in this regard. The FAA recognizes the commenter's concern regarding the 90-day compliance time for the initial test. Operators are given credit for work previously performed by means of the phrase in the Compliance section of the AD that states, "Required as indicated, unless accomplished previously." Therefore, in the case of this supplemental NPRM, if the initial inspection has been accomplished previously (i.e., prior to the effective date of the AD), this supplemental NPRM would not require that the inspection be repeated. However, this supplemental NPRM does propose to require that repetitive tests be performed thereafter at intervals not to exceed 6 months, for airplanes equipped with GEC fuel pumps, and that the other follow-on actions be accomplished as necessary.

Request for Clarification of Power Loss Events

One commenter, the airplane manufacturer, requests that the FAA clarify the description of the engine power loss events to indicate that they occurred only on airplanes equipped with GEC pumps and that total power loss occurred on only one engine of an affected airplane.

The FAA agrees that the Discussion section of the proposed rule may have been unclear regarding whether both engines on affected airplanes experienced power losses.

The FAA acknowledges that power loss events have been reported on only one engine per airplane, that these events occurred only on airplanes equipped with GEC fuel boost pumps, and that no cases of dual engine power loss have been reported.

Request for Clarification of the Unsafe Condition

One commenter requests that the proposed AD be revised to clarify whether "products" refers to airplanes or to fuel boost pumps in the statement "... an unsafe condition is likely to exist or develop on other products of the same type design."

The FAA recognizes that the cited statement may have been unclear in the context of the originally proposed rule. By this statement, the FAA is addressing airplanes of the same type design as the Boeing Model 737 series airplanes on which the engine power loss events occurred.

Request to Require Improved Pumps

One commenter recommends that airplanes "equipped with one or more of the subject GEC fuel pumps should be required to be equipped with at least one Argo-Tech, TRW, or new-design (if/when available) GEC fuel pump at the most critical position (if applicable) in each main tank within 2 years." The FAA infers that the commenter requests that GEC pumps be replaced with improved pumps within 2 years. The commenter provides no justification for its recommendation.

The FAA does not concur with the commenter's request. The FAA has determined that the vast majority of GEC boost pumps will not experience such pump degradation. Therefore, a requirement to replace those boost pumps is considered an unjustifiable burden to operators. No change to this supplemental NPRM in this regard is necessary.

Request for Clarification of Requirements

One commenter requests that the originally proposed rule be revised to clarify certain requirements. The commenter suggests that additional text be included under the heading "Differences Between Proposed Rule and Service Bulletin" to further specify those Argo-Tech/TRW fuel pumps that are affected by paragraphs (b) and (c) of the originally proposed rule.

The FAA concurs partially. The FAA agrees that further specification of the parts numbers of the affected fuel pumps might have clarified certain proposed requirements; however, as stated previously, paragraphs (b) and (c) of the originally proposed rule have been revised to remove any distinction between Argo-Tech and TRW fuel pumps and to group them with "non-GEC fuel pumps."

Request for Clarification of Design Responsibility

One commenter, the pump manufacturer, requests that the FAA clarify in the Discussion section that the low pressure switches are not part of the fuel pump assembly or within the pump manufacturer's control.

The FAA concurs with the commenter's request. Although there was no intent in the originally proposed rule to imply such a relationship, the FAA acknowledges that low pressure switches are not part of the fuel pump assembly and has revised the Discussion section of this supplemental NPRM accordingly.

Request for a Review of Other Airplane Models

One commenter, an association of airline pilots, recommends that the FAA conduct a review to determine whether similar incompatibilities between fuel system low pressure switches and check valves exist elsewhere in the transport airplane fleet. The commenter expressed concern that additional airplane models may be susceptible to the unsafe condition identified in the proposed rule.

The FAA concurs with the commenter's request. The FAA has completed a review of large transport airplanes manufactured by Airbus, Boeing, and Lockheed. A deficiency in the low fuel pressure indication has not been identified on any of those other airplane models.

Additional Change to this Supplemental NPRM

The FAA notes that it may be necessary to clarify the proposed criteria for allowing dispatch with a main tank fuel boost pump inoperative. As a result, paragraph (a)(1) of this supplemental NPRM has been revised to specify that, prior to dispatch, the operative pump must be tested and any necessary follow-on corrective actions performed.

Cost Impact

There are approximately 2,772 airplanes of the affected design in the worldwide fleet. The FAA estimates that 1,140 airplanes of U.S. registry would be affected by this proposed AD.

It would take approximately 2-8 work hours per airplane to accomplish the proposed testing for airplanes equipped with GEC pumps, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the testing proposed by this AD on U.S. operators is estimated to be \$120-\$480 per airplane, per testing cycle.

It would take approximately 4–6 work hours per airplane to accomplish the proposed modification, at an average labor rate of \$60 per work hour. Required parts would cost \$1,900 [for airplanes equipped with part number (P/N) 60B92400–3 low pressure switches] or \$2,700 (for airplanes equipped with P/N 10–3067–3 low pressure switches). Based on these figures, the cost impact of the modification proposed by this AD on U.S. operators is estimated to be \$273,600–\$410,400, or \$2,140–\$3,060 per airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the proposed 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 proposed herein would 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 proposal would not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this proposed regulation (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) if promulgated, 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 copy of the draft regulatory evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend 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:

Boeing: Docket 98–NM–150–AD.

Applicability: Model 737–100, –200, –300, –400, and –500 series airplanes; line numbers 1 through 3002 inclusive; 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 (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 fuel suction feed operation on both engines without flight crew indication, and possible consequent multiple engine power loss, accomplish the following:

Requirements for Airplanes Equipped with GEC Boost Pumps:

(a) For airplanes equipped with one or more main tank fuel boost pumps manufactured by the General Electric Company (GEC), of the United Kingdom: Accomplish paragraphs (a)(1), (a)(2), (a)(3), and (a)(4) of this AD.

(1) As of the effective date of this AD, no airplane shall be dispatched with any main tank fuel boost pump inoperative unless the initial testing and any follow-on corrective actions required by paragraph (a)(2) of this AD have been accomplished on the operative pump in that main tank.

(2) Test each GEC-manufactured main tank fuel boost pump to determine the output pressure, in accordance with Boeing Alert Service Bulletin 737–28A1114, Revision 1, dated April 2, 1998; at the later of the times specified in paragraphs (a)(2)(i) and (a)(2)(ii) of this AD. If the fuel boost pump output pressure measured during the testing required by this paragraph is less than 23 pounds per square inch gauge (psig), as measured at the input to the engine fuel

pump; or less than 36 psig, as measured at the fuel boost pump low pressure switch; prior to further flight, replace the fuel boost pump with a new or serviceable fuel pump, in accordance with the alert service bulletin.

(i) Prior to the accumulation of 3,000 total flight hours, or within 1 year since date of manufacture of the airplane, whichever occurs first; or

(ii) Within 90 days after the effective date of this AD.

(3) Repeat the testing required by paragraph (a)(2) of this AD thereafter at intervals not to exceed 6 months, until accomplishment of the requirements of paragraph (a)(4) of this AD.

(4) Within 2 years after the effective date of this AD, replace all four low pressure switches installed downstream of the main tank fuel boost pumps with higher threshold low pressure switches, in accordance with Boeing Alert Service Bulletin 737–28A1114, Revision 1, dated April 2, 1998. Accomplishment of this replacement constitutes terminating action for the requirements of paragraph (a) of this AD.

Requirements for Airplanes Equipped with non-GEC boost pumps:

(b) For airplanes other than those identified in paragraph (a) of this AD: Within 2 years after the effective date of this AD, replace all four low pressure switches installed downstream of the main tank fuel boost pumps with higher threshold low pressure switches, in accordance with Boeing Alert Service Bulletin 737–28A1114, Revision 1, dated April 2, 1998.

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, 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 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

(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.

Issued in Renton, Washington, on May 21, 1999.

D.L. Riggan,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.
[FR Doc. 99–13877 Filed 6–1–99; 8:45 am]

BILLING CODE 4910–13–P