DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2002–NM–76–AD; Amendment 39–12732; AD 2002–08–20]

RIN 2120–AA64

Airworthiness Directives; Boeing Model 737–600, –700, –700C, and –800 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that is applicable to all Boeing Model 737–600, –700, –700C, and 800 series airplanes. This action requires inspecting the airplane following any suspected limit cycle oscillation (LCO) of the elevator tab; and revising the airplane flight manual (AFM) to limit airspeeds under certain conditions and to provide the flight crew with information regarding elevator tab LCO. This action also requires repetitive cleaning of the elevator tab and a one-time cleaning of the elevator balance bays. This action provides for the option to repetitively clean the elevator tab and balance bays following every deicing/anti-icing of the horizontal stabilizer, which would temporarily allow airspeeds exceeding those limited by the AFM revision. For certain airplanes, this action requires trimming the elevator balance panel seals, which will terminate the optional repetitive cleaning procedures for the balance bays. This action is necessary to prevent the accumulation of fluid or residue in the balance bays and foreign substances on the external surfaces of the elevator tab, which can lead to limit cycle oscillation, severe vibration, flutter, and loss of controllability of the airplane. This action is intended to address the identified unsafe condition.

DATES: Effective May 13, 2002.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of May 13, 2002.

Comments for inclusion in the Rules Docket must be received on or before June 25, 2002.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM–114, Attention: Rules Docket No. 2002–NM–76–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. Comments may be submitted via fax to (425) 227–1232. Comments may also be sent via the Internet using the following address: *9-anm-iarcomment@faa.gov.* Comments sent via fax or the Internet must contain ''Docket No. 2002–NM–76–AD'' in the subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 for Windows or ASCII text.

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 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.

FOR FURTHER INFORMATION CONTACT: Steve O'Neal, Aerospace Engineer, Flight Test Branch, ANM–160S, telephone (425) 227–2699 (for operations-related questions); or Nancy Marsh, Aerospace Engineer, Airframe Branch, ANM–120S, telephone (425) 227–2028 (for airframe-related questions); FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055–4056; fax (425) 227–1180.

Other Information: Sandi Carli, Airworthiness Directive Technical Editor/Writer; telephone (425) 227–1120, fax (425) 227–1232. Questions or comments may also be sent via the Internet using the following address: *sandi.carli@faa.gov.* Questions or comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 for Windows or ASCII text.

SUPPLEMENTARY INFORMATION: The FAA has received reports of numerous incidents of severe airframe vibration, or limit cycle oscillation (LCO), in flight after the horizontal stabilizer had been deiced/anti-iced on the ground. The reported incidents occurred on Boeing Model 737–600, –700, and –800 series airplanes. The empennage structure on these, as well as Model 737–700C series airplanes, is identical; therefore, all of these airplanes are subject to the identified unsafe condition. These events have been attributed to an accumulation of deicing/anti-icing fluid or other residue in the elevator balance panel cavities and on the external surfaces of the elevator tab. The accumulation of fluid in the balance bays has been attributed to inadequate drainage provisions. Drainage provisions on Model 737–900 series airplanes are improved over those on the airplanes affected by this AD.

Preliminary results of the investigation of the incidents indicated that only Type I and Type II deicing/anti-icing fluids were susceptible to this type of accumulation; however, a recent LCO event occurred following deicing/anti-icing with Type I and Type IV fluid on one affected airplane. One operator reported finding up to 30 liters of fluid trapped in the balance bays on one airplane. Other operators have reported visible accumulations of foreign substances on the external surfaces of the elevator tab. The additional weight of accumulated residue on the tab can initiate LCO. The elevator tab is so aerodynamically sensitive that repairing and painting the subject area have been prohibited by related existing ADs. The reported airspeeds at the onset of the incidents have ranged from 276 to 325 knots.

Fluid or residue accumulated in the balance bays, or foreign substances accumulated on the external surfaces of the elevator tab, in combination with normally recommended maximum operating airspeeds, can initiate LCO or flutter and result in loss of controllability of the airplane.

Related Rulemaking

The FAA has issued related ADs on Model 737–600, –700, and –800 series airplanes: AD 2001–04–08, amendment 39–12127 (66 FR 13229, March 5, 2001); AD 2001–08–09, amendment 39–12186 (66 FR 20194, April 20, 2001); and AD 2001–14–05, amendment 39–12315 (66 FR 36145, July 12, 2001). Those ADs prohibit painting or repairing the elevator tab because of its sensitivity to changes in mass characteristics. This action further addresses the accumulation of foreign substances on the elevator tab, and the resulting associated sensitivity to the additional mass caused by these accumulations.

Explanation of Relevant Service Information

The FAA has reviewed and approved Boeing Alert Service Bulletin 737–55A1084, dated March 7, 2002, which describes procedures for modifying the elevator balance panel seals on the inboard side of the balance panels in bays 2, 3, and 4. The modification, which involves trimming the seals to specified dimensions, will reduce the possibility of fluid accumulating in the elevator balance bays. This modification is incorporated in production on airplanes having line numbers 1092 and subsequent.

The FAA has reviewed Boeing Service Letter 737–SL–12–017, dated April 10, 2002, which describes procedures for cleaning deicing/anti-icing fluid residue from the elevator balance panel cavity area.

Explanation of the Requirements of the Rule

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of the same type design, this AD is being issued to prevent the accumulation of fluid or residue in the balance bays and foreign substances on the external surfaces of the elevator tab, which can lead to LCO, severe vibration, flutter, and loss of controllability of the airplane. This AD requires inspecting the airplane following any suspected LCO of the elevator tab; and revising the airplane flight manual (AFM) to limit airspeeds following deicing/anti-icing of the horizontal stabilizer, and to provide the flight crew with information regarding elevator tab LCO. This action requires repetitive cleaning of the elevator tab and a one-time cleaning of the elevator balance bays. This action provides for the option to repetitively clean the elevator tab and balance bays following every deicing/anti-icing of the horizontal stabilizer, which would temporarily allow airspeeds exceeding those limited by the AFM revision. For certain airplanes, this action requires trimming the elevator balance panel seals, which will terminate the optional repetitive cleaning procedures for the balance bays.

Interim Action

This is considered to be interim action. The manufacturer has advised that it is currently developing an elevator tab with an improved design, which, when installed, would terminate the requirements of this AD. Once the redesigned elevator tab is developed, approved, and available, the FAA may consider additional rulemaking.

Determination of Rule's Effective Date

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this 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 under the caption **ADDRESSES**. All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Submit comments using the following format:

- Organize comments issue-by-issue. For example, discuss a request to change the compliance time and a request to change the service bulletin reference as two separate issues.
- For each issue, state what specific change to the AD is being requested.
- Include justification (e.g., reasons or data) for each request.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the 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 that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: ''Comments to Docket 2002–NM–76–AD.'' The postcard will be date stamped and returned to the commenter.

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.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and that it is not a ''significant regulatory action'' under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, 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:

2002–08–20 Boeing: Amendment 39–12732. Docket 2002–NM–76–AD.

Applicability: All Model 737–600, –700, –700C, and –800 series airplanes; certificated in any category.

Note 1: The applicability of this AD includes ALL Model 737–700 series airplanes, including Model 737–700 BBJ airplanes.

Note 2: 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 (i) 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 the accumulation of fluid or residue in the elevator balance bays, and foreign substances on the external surfaces of the elevator tab, which can lead to limit cycle oscillation, flutter, and loss of controllability of the airplane, accomplish the following:

Revision of the Airplane Flight Manual (AFM)—Airspeed Limitations

(a) Within 10 days after the effective date of this AD, revise the Limitations section of the FAA-approved AFM to include the following procedures (this may be accomplished by inserting a copy of this AD into the AFM):

''After any ground deicing/anti-icing of the horizontal stabilizer, airspeed must be limited to 270 KIAS until the crew has been informed that applicable maintenance procedures have been accomplished that would allow exceedance of 270 KIAS. Once the applicable maintenance procedures have been accomplished, exceeding 270 KIAS is permissible only until the next deicing/anti-icing.''

Optional Post-Deicing/Anti-Icing Cleaning

(b) Accomplishment of the applicable cleaning procedures specified by paragraphs (b)(1) and (b)(2) of this AD allows the temporary operation of the airplane at airspeeds exceeding 270 KIAS—until the next deicing/anti-icing of the horizontal stabilizer.

(1) For all airplanes: Clean the external aerodynamic surfaces of the elevator tab to remove accumulated deicing/anti-icing fluid, residue, or other foreign substances, in accordance with the procedures for Airplane Cleaning in Section 12–40–00 (G) of Boeing 737–600/700/800/900 Maintenance Manual Document D633A101.

(2) For airplanes having line numbers 1 through 1091 inclusive: Until the actions required by paragraph (f) of this AD have been accomplished, clean the elevator balance bays in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA. For a cleaning method to be approved by the Manager, Seattle ACO, as required by this paragraph, the Manager's approval letter must specifically reference this AD.

AFM Revision—Non-Normal Procedures

(c) Within 10 days after the effective date of this AD, revise the Non-Normal Procedures section of the FAA-approved AFM (Boeing Document D631A001) to include the following procedures (this may be accomplished by inserting a copy of this AD into the AFM):

Elevator Tab Limit Cycle Oscillation

An Elevator Tab Limit Cycle Oscillation (LCO) will be characterized by a high frequency, possibly severe vibration, originating in the tail of the airplane, and emanating forward through the airframe structure. LCO events have previously occurred at airspeeds greater than 275 KIAS, and in an altitude range between 10,000 and 25,000 feet following ground deicing/anti-icing of the horizontal stabilizer. This vibration may, or may not, be felt in the control column. Cabin crew may be able to confirm the source of any airframe vibrations. If LCO is suspected in flight, immediately reduce airspeed (WITHOUT use of speed brakes, or changing aircraft configuration) to 270 KIAS, or until the vibration ceases, whichever indicated airspeed is lower. DO NOT USE SPEED BRAKES FOR THE REMAINDER OF THE FLIGHT.

Use of the speed brakes in other emergencies is at the discretion of the flight crew. Remain at or below the indicated airspeed at which the vibration ceased for the remainder of the flight, but do not exceed 270 KIAS. Evaluate the need to land at the nearest practicable airport. Landing airport selection should be based upon consideration of all pertinent factors such as: weather, distance to destination, range available at the reduced airspeed, maximum landing weight, and possible airframe damage. Use of ground spoilers during landing rollout is permitted.''

Elevator Tab Cleaning

(d) Within 250 flight cycles or 90 days after the effective date of this AD, whichever occurs first: Clean the external aerodynamic surfaces of the elevator tab to detect accumulated deicing/anti-icing fluid, residue, or other foreign substances, in accordance with the procedures for Airplane Cleaning in Section 12–40–00 (G) of Boeing 737–600/700/800/900 Maintenance Manual Document D633A101. Thereafter, repeat the tab cleaning procedure at least every 250 flight cycles or 90 days, whichever occurs first.

Balance Bay Cleaning

(e) For airplanes having line numbers 1 through 1091 inclusive: Prior to or concurrently with the accomplishment of the seal trim required by paragraph (f) of this AD, clean the elevator balance bays in accordance with Boeing Service Letter 737-SL–12–017, dated April 10, 2002. If the balance bays have been cleaned at least one time in accordance with paragraph (b)(2) of this AD, and if the seal trim has been accomplished in accordance with paragraph (f) of this AD, it is not necessary to repeat this procedure.

Seal Trim

(f) For airplanes having line numbers 1 through 1091 inclusive: Within 90 days after the effective date of this AD, trim the elevator balance bay seals in accordance with Boeing Alert Service Bulletin 737–55A1084, dated March 7, 2002. Following accomplishment of the seal trim required by this paragraph and the balance bay cleaning required by paragraph (e) of this AD, the optional repetitive cleaning procedures specified by paragraph (b)(2) of this AD are no longer necessary.

Post-LCO Inspection

(g) Before the next revenue flight following any suspected limit cycle oscillation (LCO) of the elevator tab: Inspect the airplane in accordance with a method approved by the Manager, Seattle ACO, FAA. For an inspection method to be approved by the Manager, Seattle ACO, as required by this paragraph, the Manager's approval letter must specifically refer to this AD.

Spare Parts

(h) As of the effective date of this AD, no person may install on any airplane an elevator balance panel bay seal having part number 183A9140–1, –5, or –9.

Alternative Methods of Compliance

(i) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle ACO, FAA. 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 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

(j) 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, provided the maximum operating airspeed is 270 knots indicated airspeed (KIAS) during the ferry flight.

Incorporation by Reference

(k) The modification required by paragraph (f) of this AD must be done in accordance with Boeing Alert Service Bulletin 737–55A1084, dated March 7, 2002; and Boeing Service Letter 737–SL–12–017, dated April 10, 2002. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124–2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(l) This amendment becomes effective on May 13, 2002.

Issued in Renton, Washington, on April 19, 2002.

Lirio Liu-Nelson,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 02–10244 Filed 4–25–02; 8:45 am]

BILLING CODE 4910–13–U

DEPARTMENT OF COMMERCE

Bureau of Industry and Security

15 CFR Chapter VII

[Docket No. 020417087–2087–01]

RIN 0694–XX21

Industry and Security Programs; Change of Agency Name

AGENCY: Bureau of Industry and Security, Commerce.

ACTION: Final rule; Nomenclature change.