

one-time general visual inspection to identify the material of the rudder assembly, and corrective actions, if necessary. For airplanes with a graphite assembly, this action requires repetitive general visual inspections of the flange bolts of the rudder front spar for any loose bolts, and corrective actions, if necessary. This action is necessary to detect and correct loose bolts common to the flange of the rudder front spar and main thrust hinge and actuator assembly, as well as the auxiliary actuator support fitting, which could cause the rudder actuator to separate from the rudder during certain flight conditions, resulting in loss of rudder control and consequent loss of control of the airplane. This action is intended to address the identified unsafe condition.

DATES: Effective January 7, 2004.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of January 7, 2004.

Comments for inclusion in the Rules Docket must be received on or before February 23, 2004.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2003-NM-243-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9 a.m. and 3 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. 2003-NM-243-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 or 2000 or ASCII text.

The service information referenced in this AD may be obtained from Boeing Commercial Airplane Group, PO 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: Nancy Marsh, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton,

Washington 98055-4056; telephone (425) 917-6440; fax (425) 917-6590.

SUPPLEMENTARY INFORMATION: The manufacturer, Boeing, has advised the FAA that it received two reports of loose bolts common to the flange of the rudder front spar and main thrust hinge and actuator assembly, as well as auxiliary actuator support fitting, on Boeing Model 737 series airplanes. In the first case, no additional damage was reported. In the second case, the holes common to the flange of the rudder front spar had become elongated and were repaired using oversized bolts.

Boeing has notified us that it has received nine additional reports of loose flange bolts. In all of the reported cases (including the original two), the rudders had a graphite spar. The airplanes on which the loose flange bolts were found had between 7,246 and 45,312 total flight hours and between 7,846 and 35,362 total flight cycles. The cause of the loose flange bolts has not yet been determined.

Loose bolts common to the flange of the rudder front spar and main thrust hinge and actuator assembly, as well as the auxiliary actuator support fitting, could cause the rudder actuator to separate from the rudder during certain flight conditions. This condition, if not detected and corrected, could result in loss of rudder control and consequent loss of control of the airplane.

Explanation of Relevant Service Information

The FAA has reviewed and approved Boeing Alert Service Bulletin 737-55A1087, dated October 2, 2003, which describes procedures for performing a one-time general visual inspection of the rudder assembly to determine if an aluminum/fiberglass rudder assembly, or, if a graphite rudder assembly, part number 65C27234-() or 65C25841-(), is installed; performing repetitive general visual inspections of the flange bolts (Stage 1); and corrective actions, if necessary. The corrective actions include retorquing or replacing the flange bolts as necessary, and contacting Boeing for certain conditions.

The alert service bulletin also describes additional Stage 2 and Stage 3 repetitive flange bolt inspections for certain airplanes.

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 registered in the United States, this AD requires accomplishment of the actions specified in the alert

service bulletin described previously, except as discussed below.

Interim Action

This is considered to be interim action. We are continuing to investigate the cause of the loose flange bolts. Once the cause and final action have been identified, we may consider further rulemaking. We are, however, currently considering further rulemaking to supersede this AD to require the Stage 2 and Stage 3 repetitive inspections described in the alert service bulletin. Should we determine that those inspections are necessary, the planned compliance time would allow enough time to provide notice and opportunity for prior public comment.

Differences Between This AD and the Alert Service Bulletin

Operators should note that Boeing Alert Service Bulletin 737-55A1087, dated October 2, 2003, specifies inspections in addition to those required by this AD. As stated above, this AD does not require the Stage 2 and Stage 3 repetitive inspections because the planned compliance time for those inspections would allow enough time to provide notice and opportunity for prior public comment.

Additionally, for any aluminum/fiberglass rudder assembly having an identification plate indicating a graphite assembly, or for any graphite rudder assembly having an identification plate indicating an aluminum assembly, the alert service bulletin specifies to contact Boeing for appropriate action. This AD requires operators to contact us, or a Boeing Company Designated Engineering Representative who has been authorized by us to make such findings.

Although the Work Instructions of the alert service bulletin recommend that operators report inspection findings of any loose flange bolt to the manufacturer, this AD does not require operators to submit those inspection findings.

Explanation of Compliance Time for One-time Inspection

Operators should note that the compliance time for accomplishment of the one-time inspection of the rudder assembly to identify the material of the rudder assembly and front spar and the initial Stage 1 repetitive flange bolt inspection required by this AD is 120 days after the effective date of this AD. In developing an appropriate compliance time for this AD, we considered not only the manufacturer's recommendation, but also the degree of urgency associated with addressing the