

right outboard mid-flaps; and corrective action, if necessary. The proposed AD would also have mandated the previously optional overhaul or replacement of the carriage spindles, which would have ended the repetitive inspections required by the existing AD. This new action revises the proposed rule by adding a new requirement to the nickel plating procedures and extending the compliance time for the overhaul or replacement. The actions specified by this new proposed AD are intended to prevent severe flap asymmetry due to fractures of the carriage spindles on an outboard mid-flap, which could result in reduced control or loss of controllability of the airplane. This action is intended to address the identified unsafe condition.

DATES: Comments must be received by December 1, 2003.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2002-NM-219-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-nprmcomment@faa.gov*. Comments sent via fax or the Internet must contain "Docket No. 2002-NM-219-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 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: Robert Hardwick, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 917-6457; fax (425) 917-6590.

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 action may be changed in light of the comments received.

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 proposed 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 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 action must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 2002-NM-219-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. 2002-NM-219-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 all Boeing Model 737-100, -200, -200C, -300, -400, and -500 series airplanes, was published as a notice of proposed rulemaking (NPRM) in the **Federal Register** on March 4, 2003 (68 FR 10188). That NPRM (the "original NPRM") proposed to supersede AD 2002-22-05, amendment 39-12929 (67 FR 66316, October 31, 2002), which is applicable to all Boeing Model 737-100, -200, -200C, -300, -400, and -500 series airplanes. That proposal would have continued to require repetitive inspections to find cracks, fractures, or

corrosion of each carriage spindle of the left and right outboard mid-flaps; and corrective action, if necessary. That NPRM also proposed to mandate the previously optional overhaul or replacement of the carriage spindles, which would end the repetitive inspections required by the existing AD. Fractures of the carriage spindles on an outboard mid-flap could result in severe flap asymmetry and consequent reduced control or loss of controllability of the airplane.

Actions Since Issuance of Previous Proposal

Due consideration has been given to the comments received in response to the original NPRM. Some of the comments have resulted in changes to the original NPRM.

Request To Change Maximum Thickness of Nickel Plating

One commenter, the manufacturer, asks that the maximum thickness of the nickel plating, as specified in paragraph (d)(2) of the original NPRM, be changed. The commenter provides substantiating data which show that, since the rate of plating is directly related to the rate of hydrogen generation in the plating process, limiting the deposition rate more efficiently minimizes hydrogen generation during plating and reduces the potential for hydrogen embrittlement of the part. The commenter asks that paragraph (d)(2) be changed to read, "After initial application of the plating current and during the plating process, the rate of plating deposit must be maintained between .001-inch-per-hour and a maximum of .002-inch-per-hour."

The FAA partially agrees with the commenter. The material and configuration of the outboard flap carriage are such that there is increased concern for hydrogen embrittlement in the large diameter of the spindle region. After reviewing the service experience and finding no other existing related requirements, the FAA finds it necessary to include the plating requirements in this AD. Controlling the deposition rate is a direct method of controlling the quality of the plate and generation of hydrogen during the plating process. The absorption and diffusion of hydrogen into the metal during the plating process leads to a condition known as "hydrogen embrittlement." Metals affected by hydrogen embrittlement have reduced ductility and may prematurely fail during normal usage due to this condition. The original requirement of 0.020-inch-per-plating/baking cycle did not control the deposition rate, and