

has certain part numbers, and replacement of the outer cylinder of the wing landing gear with a new, improved, or reworked part if necessary. This proposal also would require removal of the load evening system, if such a system is installed. This action is necessary to prevent fracture of the outer cylinder of the wing landing gear, which could result in collapse of the wing landing gear. This action is intended to address the identified unsafe condition.

**DATES:** Comments must be received by June 13, 2003.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2000-NM-419-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-nprmcomment@faa.gov](mailto:9-anm-nprmcomment@faa.gov). Comments sent via fax or the Internet must contain "Docket No. 2000-NM-419-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 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:** Tamara Anderson, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 917-6421; 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 2000-NM-419-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. 2000-NM-419-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

##### **Discussion**

The FAA has received a report indicating that the wing landing gear on a Boeing Model 747-300 series airplane collapsed while the airplane was turning onto a runway. Investigation revealed that the outer cylinder of the wing landing gear was fractured. We have received additional reports of air leaking from the wing landing gear, due to fracture of the outer cylinder, on certain Model 747 series airplanes. Fracture of the outer cylinder has been attributed to cracks caused by heat damage on the inner surface of the outer cylinder that resulted from machining at the top of the outer cylinder during production or overhaul. Chrome plating was applied at the top of the outer cylinder to be used by a piston in the load evening system that was installed on early Model 747 series airplanes. Later Model 747 series airplanes were not equipped with a load evening system because Boeing determined the

system was unnecessary. However, certain airplanes not equipped with a load evening system were delivered with chrome plating on the outer cylinder. Cracking or heat damage of the outer cylinder of the wing landing gear, if not corrected, could lead to fracture of the outer cylinder of the wing landing gear, which could result in collapse of the wing landing gear.

The outer cylinder of the wing landing gear is interchangeable among all Model 747 series airplanes, except certain Model 747-400 series airplanes that are certificated to a maximum airplane taxi weight of 913 kilo-pounds (kips). Therefore, any Model 747 series airplane, except such Model 747-400 series airplanes, may have the subject outer cylinders installed and may be subject to the same unsafe condition.

##### **Explanation of Relevant Service Information**

We have reviewed and approved Boeing Service Bulletin 747-32-2472, dated November 30, 2000, which describes procedures for a one-time inspection to determine whether the outer cylinder of the wing landing gear has certain part numbers. For airplanes with the affected part numbers, the service bulletin recommends replacement of the existing outer cylinder with a new, improved, or reworked part. The procedures for rework, if accomplished, include the following:

- A nitral etch inspection of the inner surface of the upper end of the outer cylinder for the presence of chrome plating.
- Removal of any chrome plating that is found.
- A magnetic particle inspection for cracking of the outer cylinder.
- A nitral etch inspection for heat damage of the outer cylinder.
- Rework of the outer cylinder to remove any crack or heat damage.
- Changing the part number of the outer cylinder.

Accomplishment of the actions specified in Boeing Service Bulletin 747-32-2472 is intended to adequately address the identified unsafe condition.

Boeing Service Bulletin 747-32-2472 recommends accomplishment of Boeing Service Bulletin 747-32-2131 concurrently with the actions in Boeing Service Bulletin 747-32-2472. We have reviewed and approved Boeing Service Bulletin 747-32-2131, Revision 2, dated March 15, 1974, which describes procedures for removal of the load evening system installed on the wing landing gear.