exposure to flight conditions more severe than those for which the airplane has been certificated.

- Avoid abrupt and excessive maneuvering that may exacerbate control difficulties.
- Do not engage the autopilot.
- If the autopilot is engaged, hold the control wheel firmly and disengage the autopilot.
- If an unusual roll response or uncommanded roll control movement is observed, reduce the angle-of-attack.
- Do not extend flaps when holding in icing conditions. Operation with flaps extended can result in a reduced wing angle-of-attack, with the possibility of ice forming on the lower surface further aft on the wing than normal, possibly aft of the protected area.
- If the flaps are extended, do not retract them until the airframe is clear of ice.
- Report these weather conditions to Air Traffic Control.''

(b) Incorporating the AFM revisions, as required by this AD, may be performed by the owner/operator holding at least a private pilot certificate as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7), and must be entered into the aircraft records showing compliance with this AD in accordance with section 43.9 of the Federal Aviation Regulations (14 CFR 43.9).

(c) 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.

(d) An alternative method of compliance or adjustment of the compliance time that provides an equivalent level of safety may be approved by the Manager, Small Airplane Directorate, FAA, 1201 Walnut, suite 900, Kansas City, Missouri 64106. The request shall be forwarded through an appropriate FAA Maintenance Inspector, who may add comments and then send it to the Manager, Small Airplane Directorate.

**Note 3:** Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Small Airplane Directorate.

(e) All persons affected by this directive may examine information related to this AD at the FAA, Central Region, Office of the Regional Counsel, Room 1558, 601 E. 12th Street, Kansas City, Missouri 64106.

(f) This amendment (39–10331) becomes effective on March 13, 1998.

Issued in Kansas City, Missouri, on February 6, 1998.

**Michael Gallagher,**

*Manager, Small Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 98–3636 Filed 2–13–98; 8:45 am]

BILLING CODE 4910–13–U

## DEPARTMENT OF TRANSPORTATION

## Federal Aviation Administration

## 14 CFR Part 39

**[Docket No. 96–NM–78–AD; Amendment 39–10341; AD 98–04–29]**

**RIN 2120–AA64**

## Airworthiness Directives; Boeing Model 727 Series Airplanes

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule.

**SUMMARY:** This amendment adopts a new airworthiness directive (AD), applicable to all Boeing Model 727 series airplanes, that requires a one-time visual inspection of the manual extension gearbox assembly of the main landing gear (MLG) to detect whether certain gearbox housings have been installed; repetitive dye penetrant inspections of these housings to determine whether cracking has occurred; and ultimately, replacement of these housings with correct housings. This amendment is prompted by a report indicating that a manual gearbox assembly which contained an incorrect housing was installed on a Model 727 series airplane. The actions specified by this AD are intended to detect the installation of manual extension gearbox assemblies with incorrect housings. This condition, if not corrected, could reduce the structural integrity of the manual extension gearbox assembly, and ultimately result in an inability to lock the MLG in a down position during landing.

**DATES:** Effective March 24, 1998.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of March 24, 1998.

**ADDRESSES:** 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 Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 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:** Walter M. Sippel, Aerospace Engineer, Airframe Branch, ANM–120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington; telephone (425) 227–2774; fax (425) 227–1181.

**SUPPLEMENTARY INFORMATION:** A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to all Boeing Model 727 series airplanes was published in the **Federal Register** on October 3, 1996 (61 FR 51621). That action proposed to require a one-time visual inspection of the manual extension gearbox assembly of the main landing gear (MLG) to detect whether this assembly contains the correct left and right gearbox housings/housing assemblies. If incorrect housings/housing assemblies are installed, that action also proposed to require repetitive dye penetrant inspections of these housings to determine whether cracking has occurred; and ultimately, replacement of these housings with correct housings.

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

### Support for the Proposal

Three commenters support the proposed rule.

### Request to Withdraw the Proposal

Several commenters state that the proposed AD is unnecessary because AD 79–04–01 R3, amendment 39–4000 (45 FR 84014, December 22, 1980), addresses the problem, thus the proposed AD only duplicates time and effort. One of these commenters points out that the ''incomplete information . . .'' of Boeing Overhaul Manual 32–35–01 (referred to in the Discussion Section of the preamble of the proposed AD) is ''a very gray area.'' This commenter contends that almost all overhaul manuals contain ''incomplete information,'' even when components are affected by AD's. The commenters assert that it is the responsibility of the operators and component vendors to determine which parts are affected by an AD. Two of these commenters state that all of their gearbox housings comply with the requirements of AD 79–01–04 R3.

The FAA does not concur that the proposed AD should be withdrawn. The FAA acknowledges that, even though an overhaul manual may contain

incomplete information, operators are responsible for the overall airworthiness of the airplane. In addition, component vendors should be cognizant of AD's that affect parts they are overhauling.

However, as explained in the Discussion section of the preamble of the proposed AD, the FAA has received a report indicating that a manual extension gearbox assembly for the MLG on a Boeing Model 727 series airplane had been replaced with a modified gearbox assembly that did not comply with AD 79–01–04 R3. In light of this report and the fact that the manufacturer's overhaul manual contained incomplete information for a period of time, the FAA finds that there currently may be other Model 727 series airplanes in service that are operating with incorrect gearbox housing/housing assemblies installed. Therefore, the FAA has determined that a one-time visual inspection of the manual extension gearbox assembly of the main landing gear (MLG) is necessary to detect whether or not these discrepant housings have been installed.

**Request to Extend Compliance Time for One-Time Visual Inspection**

One commenter requests that the compliance time for accomplishing the proposed one-time visual inspection be extended from the proposed 6 months to the first ''C'' check after the effective date of the AD. The commenter points out that it has found no cracked gearbox housing since accomplishment of AD 79–04–01 R3.

The FAA does not concur. In developing an appropriate compliance time for this action, the FAA considered the safety implications, parts availability, and normal maintenance schedules for timely accomplishment of the visual inspection. In consideration of these items, as well as the report indicating that a manual gearbox assembly containing an incorrect housing had been installed on an airplane in service, the FAA has determined that a 6-month compliance time is appropriate.

**Request to Extend Compliance Time for Initial Dye Penetrant Inspection**

One commenter requests that the compliance time for accomplishing the dye penetrant inspection required by paragraph (c) of the proposed AD be extended from the proposed ''prior to further flight'' to ''within 100 hours time-in-service or 50 landings, whichever occurs first.'' The commenter states that the proposed compliance time is not justified because the FAA has not received recent reports of incorrect housing/housing assemblies that have been cracked. This commenter also states that it would have to special schedule its fleet of airplanes to accomplish this inspection within the proposed compliance time; this would entail considerable additional expenses and schedule disruptions.

The FAA concurs partially. The FAA finds that stress corrosion cracking in the vertical support attaching lugs of the MLG manual extension-gearbox housing is caused by the combined action of corrosion and stress, either external (applied) or internal (residual). It is difficult to predict when stress corrosion cracking will occur because corrosion is influenced by unpredictable factors, such as the operating environment, maintenance, and the passage of time. If those housings/housing assemblies are still installed on airplanes more than 17 years after AD 79–04–01 R3 was issued, there is a greater likelihood that stress corrosion cracking exists; therefore, the FAA finds that accomplishment of a dye penetrant inspection prior to further flight following accomplishment of the initial visual inspection is warranted.

However, the FAA's intent is that the dye penetrant inspection be conducted during a regularly schedule maintenance visit for the majority of the affected fleet, when the airplanes would be located at a base where special equipment and trained personnel would be readily available, if necessary. The FAA finds that in lieu of accomplishing a dye penetrant inspection, an operator may choose to replace the discrepant part with an updated part prior to further flight following accomplishment of the initial visual inspection. Therefore, paragraph (c) of the final rule has been revised to provide operators with this option.

**Request to Revise Dye Penetrant Inspection Requirement**

One commenter requests that operators be advised of where the incorrect gear boxes were found and of the source that obtained them. Subsequently, the discrepant gear boxes could be tracked and the proposed inspection requirements could be limited to those operators that received the discrepant housings from the suspect sources. The commenter also suggests that the initial visual inspection be accomplished within 300 landings and repeated at intervals not to exceed 6 months, and suggests that the replacement be accomplished within 18 months.

The FAA does not concur. The FAA is unable to determine all sources of discrepant housings. Therefore, the FAA finds that the proposed one-time visual inspection is necessary to determine whether certain gearbox housings have been installed. In addition, the FAA finds that a compliance time based on a number of landings is not acceptable because, as discussed previously, it is difficult to predict when stress corrosion cracking will occur.

**Request to Revise Applicability of the Proposal**

Two commenters request that the applicability of the proposed AD be revised to exclude airplanes whose operators are confident of their gearbox installations or have internal procedures to ensure that only correct housing/housing assemblies are installed in accordance with AD 79–04–01 R3.

The FAA does not concur. A one-time visual inspection to confirm the presence of correct housings should not pose an undue burden to operators. If an operator chooses to review its available records, however, to determine that incorrect manual extension gearbox assemblies have not been installed, the operator may request approval of an alternative method of compliance in accordance with the provisions of paragraph (d) of this AD.

**Request to Revise Table 2 of the Proposal**

One commenter requests that Table 2 of the proposed AD, which lists the part numbers of correct replacement housings and housing assemblies, be revised to include the Boeing part number of the die forging from which these parts could be made. (Not all of the correct parts are made from this forging.) The commenter points out that the part number on this die forging is easily ascertained and permanent, unlike the numbers on the housings/housing assemblies currently listed in Table 2. For the reasons the commenter states, the FAA concurs and has revised Table 2, as requested. In addition, because all the incorrect housings/housing assemblies are made from a certain die forging, the FAA has added the Boeing part number of that forging to Table 1, which lists the part numbers of incorrect housing and housing assemblies.

**Conclusion**

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the changes previously described. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

## Cost Impact

There are approximately 1,560 Boeing Model 727 series airplanes of the affected design in the worldwide fleet. The FAA estimates that 1,054 airplanes of U.S. registry will be affected by this AD.

The FAA estimates that it will take approximately 2 work hours per airplane to accomplish the required one-time visual inspection, at an average labor rate of $60 per work hour. Based on these figures, the cost impact of the AD on U.S. operators is estimated to be $126,480, or $120 per airplane.

Should a dye penetrant inspection need to be performed, the FAA estimates that each inspection will take approximately 20 work hours per airplane, at an average labor rate of $60 per work hour. Based on these figures, the cost impact of the proposed dye penetrant inspection on U.S. operators is estimated to be $1,200 per airplane, per inspection.

Should parts have to be replaced, the FAA estimates that it will take approximately 16 work hours per airplane to accomplish the replacement, at an average labor rate of $60 per work hour. Replacement parts will cost approximately $4,000 per housing. Based on these figures, the cost impact of replacement of parts on U.S. operators is estimated to be $4,960 per airplane if one housing is to be replaced, and $8,960 if both housings are to be replaced.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator will accomplish those actions in the future if this AD were not adopted.

## Regulatory Impact

The regulations adopted herein will 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 final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this action (1) is not a ''significant regulatory action'' under Executive Order 12866; (2) is not a ''significant rule'' under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) 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 final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it 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:

**98–04–29 Boeing:** Amendment 39–10341. Docket 96–NM–78–AD.

*Applicability:* All Model 727 airplanes, 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 (d) 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 detect the installation of manual extension gearbox assemblies that do not contain required gearbox housings/housing assemblies, and ultimately could result in the inability of the flight crew to lock the main landing gear (MLG) in the down position during landing, accomplish the following:

(a) Within 6 months after the effective date of this AD, visually inspect the manual extension gearbox assembly of the MLG, in accordance with Boeing Service Bulletin 727–32–279, dated June 22, 1979, to determine whether left and right gearbox housings/housing assemblies having Boeing part numbers listed in Table 1 of this AD are installed.

**Note 2:** If the part number is not visible, a conductivity test may be performed to determine the type of housing material. Incorrect housings are made of 7079–T6 aluminum; correct housings are made of 7075–T73 aluminum.

TABLE 1.—BOEING PART NUMBERS OF INCORRECT HOUSINGS AND HOUSING ASSEMBLIES

| Housings* | Housing assemblies |
|---|---|
| 65–27485–3 | 65–27485–1 |
| 65–27485–4 | 65–27485–2 |
| 65–27485–9 | 65–27485–7 |
| 65–27485–10 | 65–27485–8 |

* All housings are made from die forging 65–27485–6.

(b) If none of the incorrect housings/housing assemblies are installed, no further action is required by this AD.

(c) If any of the incorrect housings/housing assemblies are installed, prior to further flight, accomplish either paragraph (c)(1) or (c)(2) of this AD.

(1) Perform a dye penetrant inspection to detect cracking of the housing, in accordance with Boeing Service Bulletin 727–32–279, dated June 22, 1979.

(i) If no cracking is detected during the dye penetrant inspection, the incorrect housing/housing assembly may be reinstalled. Thereafter, accomplish the actions required by paragraphs (c)(1)(i)(A) and (c)(1)(i)(B) of this AD.

(A) After reinstallation, repeat the dye penetrant inspection at intervals not to exceed 9 months.

(B) Within 18 months after the initial dye penetrant inspection required by paragraph (c)(1) of this AD is accomplished, replace the housing/housing assemblies with parts having an applicable Boeing part number listed in Table 2 of this AD, in accordance with the service bulletin. This replacement constitutes terminating action for the repetitive dye penetrant inspections required by paragraph (c)(1)(i)(A) of this AD and, thereafter, no further action is required by this AD.

(ii) If any cracking is detected during the dye penetrant inspection, prior to further flight, replace the housing/housing assemblies with parts having an applicable Boeing part number listed in Table 2 of this AD, in accordance with the service bulletin. This replacement constitutes terminating action for the repetitive dye penetrant inspections required by paragraph (c)(1)(i)(A) of this AD and, thereafter, no further action is required by this AD.

(2) Replace the discrepant part with an applicable Boeing part number listed in Table 2 of this AD, in accordance with the service bulletin. Thereafter, no further action is required by this AD.

**Note 3:** This AD prohibits the reinstallation (or installation) of any housing that is cracked, even though the service bulletin provides instructions for reinstallation of a cracked, incorrect housing in certain circumstances.

TABLE 2.—BOEING PART NUMBERS OF CORRECT REPLACEMENT HOUSINGS AND HOUSING ASSEMBLIES

| Housings* | Housing assemblies |
|---|---|
| 65–27485–13 | 65–27485–11 |
| 65–27485–14 | 65–27485–12 |
| 65–27485–19 | 65–27485–17 |
| 65–27485–20 | 65–27485–18 |

* Housings may be made from die forging 65–27485–15.

**Note 4:** Although not listed in the service bulletin or in AD 79–04–01 R3 (amendment 39–4000), housings/housing assemblies having part numbers 65–27485–19/65–27485–17 and 65–27485–20/65–27485–18 are fully interchangeable with those having part numbers 65–27485–13/65–27485–11 and 65–27485–14/65–27485–12.

(d) 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 5:** Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

(e) 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.

(f) The inspections and replacement of parts shall be done in accordance with Boeing Service Bulletin 727–32–279, dated June 22, 1979. 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.

(g) This amendment becomes effective on March 24, 1998.

Issued in Renton, Washington, on February 6, 1998.

**Darrell M. Pederson,**

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 98–3635 Filed 2–13–98; 8:45 am]

BILLING CODE 4910–13–U

## DEPARTMENT OF TRANSPORTATION

## Federal Aviation Administration

## 14 CFR Part 39

**[Docket No. 97–CE–12–AD; Amendment 39–10329; AD 98–04–17]**

**RIN 2120–AA64**

## Airworthiness Directives; Pilatus Britten-Norman Ltd. BN–2, BN–2A, and BN–2B Series Airplanes

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule.

**SUMMARY:** This amendment supersedes Airworthiness Directive (AD) 97–03–03, which applies to certain Pilatus Britten-Norman Ltd. (Pilatus) BN–2, BN–2A, and BN–2B series airplanes that do not have Modification NB/M/1571 generator terminal diodes installed. AD 97–03–03 currently requires the installation of higher capacity diodes on the generator switches regardless of whether the airplane is equipped with the original 50 amp DC generating system or a Modification NB/M/1148, which is a 70 amp system. This action retains the actions of AD 97–03–03, but modifies the applicability section to reflect that this AD does not apply to Pilatus BN–2, BN–2A, and BN–2B series airplanes with 50 amp DC generation systems installed. This AD is the result of reports that the applicability section of AD 97–03–03 is incorrect. The actions specified by this AD are intended to prevent a loss of electrical power to the navigation, communications, and lighting systems, which could impair the pilot's ability to maintain control of the airplane.

**DATES:** Effective March 23, 1998.

The incorporation by reference of Pilatus Britten-Norman Aircraft Manufacturers Service Bulletin (SB) BN–2/SB.228, Issue 2, dated January 17, 1996, as listed in the regulations was previously approved by the Director of the Federal Register as of March 23, 1997 (62 FR 4909, February 3, 1997).

**ADDRESSES:** Service information that applies to this AD may be obtained from Pilatus Britten-Norman, Ltd., Bembridge, Isle of Wight, United Kingdom, PO35 5PR. This information may also be examined at the Federal Aviation Administration (FAA), Central Region, Office of the Regional Counsel, Attention: Rules Docket 97–CE–12–AD, Room 1558, 601 E. 12th Street, Kansas City, Missouri 64106; or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Mr. Roger P. Chudy, Project Officer, Small Airplane Directorate, 1201 Walnut, suite 900, Kansas City, Missouri, 64106; telephone (816) 426–6932; facsimile (816) 426–2169.

**SUPPLEMENTARY INFORMATION:**

### Events Leading to the Issuance of This AD

A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD that would apply to certain Pilatus BN–2, BN–2A, and BN–2B series airplanes equipped with Pilatus Modification NB/M/1148 (a 70 amp generating system), but without generator terminal diodes installed in accordance with Modification NB/M/1571, was published in the **Federal Register** on July 7, 1997, (62 FR 36240). The action proposed to supersede AD 97–03–03, which requires installing type 60S6 diodes on the terminals of the STBD (RIGHT) GEN and PORT (LEFT) GEN switches (SW2 and SW3), regardless of the generating system being used on the airplane. This superseding action retains the same action as AD 97–03–03, but changes the applicability section so that it applies only to the Pilatus BN–2, BN–2A, and BN–2B airplanes that have Modification NB/M/1148 (70 amp DC generation system) incorporated, and do not have Pilatus Modification NB/M/1571 (Introduction of Increased Rated Diode—70 amp DC generation system) incorporated. This action would not apply to certain Pilatus BN–2, BN–2A, and BN–2B series airplanes with a 50 amp DC generation system installed.

Accomplishment of this action would be in accordance with Pilatus Britten-Norman Ltd. Service Bulletin No. BN–2/SB.228, Issue 2, dated January 17, 1996.

### The FAA's Determination

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were received on the proposed rule or the FAA's determination of the cost to the public.

After careful review of all available information related to the subject presented above, the FAA has determined that air safety and the public interest require the adoption of the rule as proposed except for minor editorial corrections. The FAA has determined that these minor corrections will not change the meaning of the AD and will not add any additional burden upon the public than was already proposed.