

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 39**

[Docket No. 99-NM-226-AD]

RIN 2120-AA64

**Airworthiness Directives; Short Brothers Model SD3-60 SHERPA, SD3-SHERPA, SD3-30, and SD3-60 Series Airplanes****AGENCY:** Federal Aviation Administration, DOT.**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** This document proposes the adoption of a new airworthiness directive (AD) that is applicable to all Short Brothers Model SD3-60 SHERPA, SD3-SHERPA, SD3-30, and SD3-60 series airplanes. This proposal would require replacement of the existing pneumatic de-icing boot pressure indicator switch with a newly designed switch. This proposal is prompted by an occurrence on a similar airplane model in which the pneumatic de-icing boot indication light may have provided the flightcrew with misleading information as to the proper functioning of the de-icing boots. The actions specified by the proposed AD are intended to prevent ice accumulation on the airplane leading edges, which could reduce controllability of the airplane.

**DATES:** Comments must be received by November 5, 1999.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 99-NM-226-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.

Information concerning this proposal may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

**FOR FURTHER INFORMATION CONTACT:** Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

**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 notice may be changed in light of the comments received.

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 notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 99-NM-226-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. 99-NM-226-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

**Discussion**

On December 26, 1989, a British Aerospace Jetstream Model BA-3101 series airplane impacted the ground approximately 400 feet short of the runway while executing an instrument landing system (ILS) approach. The accident occurred at the Tri-Cities Airport, Pasco, Washington. The National Transportation Safety Board (NTSB) determined that the probable cause of the accident was the flightcrew's decision to continue an unstabilized ILS approach that led to a stall, most likely of the horizontal stabilizer, and loss of control at low altitude. Contributing to the stall and loss of control was the accumulation of leading edge ice, which degraded the aerodynamic performance of the airplane.

One result of the NTSB investigation was the determination that the flight deck wing de-icing light illuminated at a lower pressure than the pressure required to fully inflate the de-icing boots. The premature illumination of the wing de-icing light was due to a

failure within the wing de-icing boot system, which allowed sufficient air pressure to give the appearance of normal operation based on the de-icing light, without actually inflating the boots sufficiently to remove ice.

Based on an NTSB Safety Recommendation, the FAA reviewed the pneumatic de-icing boot system designs for airplanes operated under parts 121 and 135 of the Federal Aviation Regulations to ensure that the pneumatic pressure threshold at which each de-icing boot indication light is designed to illuminate is sufficient pressure for effective operation of the pneumatic de-icing boots. The FAA has determined that the flight deck pneumatic de-icing boot pressure indicator switch on all Short Brothers Model SD3-60 SHERPA, SD3-SHERPA, SD3-30, and SD3-60 series airplanes may allow the flight deck indication light to illuminate at a lower pressure [10 pounds per square inch gage (psig)] than the pressure required to fully inflate the de-icing boots (15 psig). This condition, if not corrected, could result in ice accumulation on the airplane leading edges, which could reduce controllability of the airplane.

**FAA's Conclusions**

These airplane models are manufactured in the United Kingdom and are type certificated for operation in the United States under the provisions of section 21.29 of the Federal Aviation Regulations (14 CFR 21.29) and the applicable bilateral airworthiness agreement. The FAA has determined that AD action is necessary for products of this type design that are certificated for operation in the United States.

**Explanation of Requirements of Proposed 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, the proposed AD would require that the existing pneumatic de-icing boot pressure indicator switch be replaced with a switch that activates the indicator light at 15 psig. The action would be required in accordance with a method approved by the FAA.

**Cost Impact**

The FAA estimates that 89 airplanes of U.S. registry would be affected by this proposed AD. Since the manufacturer has not yet developed one specific modification commensurate with the requirements of this proposal, the FAA is unable at this time to provide specific information as to the number of work hours or cost of parts that would be

required to accomplish the proposed modification. As indicated earlier in this preamble, the FAA specifically invites the submission of comments and other data regarding the economic aspect of this proposal.

### Regulatory Impact

The regulations proposed herein would 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 proposal would not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this proposed regulation (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) if promulgated, 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 copy of the draft regulatory evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption ADDRESSES.

### List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

### The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend 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:

**Short Brothers PLC:** Docket 99–NM–226–AD.

**Applicability:** All Model SD3–60 SHERPA, SD3–SHERPA, SD3–30, and SD3–60 series 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 (b) 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 ice accumulation on the airplane leading edges, which could reduce controllability of the airplane, accomplish the following:

### Modification

(a) Within 1 year after the effective date of this AD, replace the flight deck pneumatic de-icing boot pressure indicator switch with a switch that activates the flight deck indicator light at 15 pounds per square inch gage, in accordance with a method approved by the Manager, International Branch, ANM–116, FAA, Transport Airplane Directorate.

### Alternative Methods of Compliance

(b) 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, International Branch, ANM–116. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM–116.

**Note 2:** Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM–116.

### Special Flight Permits

(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.

Issued in Renton, Washington, on September 30, 1999.

**D.L. Riggins,**

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*  
[FR Doc. 99–26086 Filed 10–5–99; 8:45 am]

**BILLING CODE 4910–13–P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. 99–NM–242–AD]

RIN 2120–AA64

**Airworthiness Directives; Boeing Model 747–100, –200, 747SP, and 747SR Series; Airplanes Equipped With Pratt & Whitney JT9D–7, –7A, –7F, and –7J Series Engines**

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

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** This document proposes the adoption of a new airworthiness directive (AD) that is applicable to certain Boeing Model 747–100, –200, 747SP, and 747SR series airplanes. This proposal would require one-time detailed visual and eddy current inspections to detect cracking of the nose cowl mounting flange; rework of the nose cowl mounting flange; eddy current inspection to detect cracking of the reworked nose cowl mounting flange; and corrective action, if necessary. This proposal is prompted by reports of the nose cowl separating from the engine and departing the airplane following severe engine vibration. The actions specified by the proposed AD are intended to prevent separation of the nose cowl from the engine, which could cause collateral damage to the airplane, and, possibly, reduced controllability of the airplane.

**DATES:** Comments must be received by November 22, 1999.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM–114, Attention: Rules Docket No. 99–NM–242–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.

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:** Dionne Stanley, Aerospace Engineer, Propulsion Branch, ANM–140S, FAA,