

# Proposed Rules

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This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. 96-ANE-13]

RIN 2120-AA64

#### Airworthiness Directives; AlliedSignal Inc. TPE331 Series Turboprop 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 AlliedSignal Inc. TPE331 series turboprop engines equipped with Woodward fuel controls. This proposal would require revising the applicable Emergency Procedures or Abnormal Procedures Section of the applicable FAA-approved Airplane Flight Manual (AFM) or Pilot's Operating Handbook (POH) to include a paragraph relating to a non-responsive power lever. In addition, this proposal would require replacing or reworking orifice fittings and restrictors, which would constitute terminating action to the requirement to revise the applicable AFM. This proposal is prompted by reports of occasional icing of the inlet Pt2 sensor, which can produce an erroneous (high) pressure signal to the fuel control, causing little or no response to power lever movement. The actions specified by the proposed AD are intended to prevent a non-responsive power lever and lack of control of engine power.

**DATES:** Comments must be received by December 2, 1996.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), New England Region, Office of the Assistant Chief Counsel, Attention: Rules Docket No. 96-ANE-13, 12 New England Executive Park, Burlington, MA 01803-5299. Comments may also be submitted to the Rules Docket by using the following

Internet address: "epd-adcomments@mail.hq.faa.gov". All comments must contain the Docket No. 96-ANE-13 in the subject line of the comment. Comments may be inspected at this location between 8 a.m. and 4:30 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from AlliedSignal Aerospace, Attn: Data Distribution, M/S 64-3/2101-201, P.O. Box 29003, Phoenix, AZ 85038-9003; telephone (602) 365-2493, fax (602) 365-5577. This information may be examined at the FAA, New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Burlington, MA.

**FOR FURTHER INFORMATION CONTACT:** Joseph Costa, Aerospace Engineer, Los Angeles Aircraft Certification Office, FAA, Transport Airplane Directorate, 3960 Paramount Blvd., Lakewood, CA 90712-4137; telephone (310) 627-5246; fax (310) 627-5210.

#### 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 should 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 96-ANE-13." 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, New England Region, Office of the Assistant Chief Counsel, Attention: Rules Docket No. 96-ANE-13, 12 New England Executive Park, Burlington, MA 01803-5299.

#### Discussion

The Federal Aviation Administration (FAA) has received reports of "no response to power lever movement" after extended high altitude operation (20,000 feet or higher) with outside air temperature (OAT) below freezing, in clear air (no visible moisture), and engine anti-icing "OFF". An investigation has revealed that these incidents resulted from the inlet temperature and pressure (Pt2) sensor becoming blocked by ice caused by very small amounts of moisture accumulated in the sensor. Ice blockage of this sensor can produce an erroneous (high) pressure signal to the fuel control and thus create a fixed fuel flow irrespective of the position of the power lever. Occasional icing of the Pt2 sensor is currently not addressed the applicable FAA-approved Aircraft Flight Manual (AFM) or Pilot's Operating Handbook (POH). Icing of the Pt2 sensor may affect one or both engines simultaneously. This condition, if not corrected, could result in a non-responsive power lever and lack of control of engine power.

The FAA has reviewed and approved the technical contents of AlliedSignal Inc. Operating Information Letter No. 331-13, dated April 27, 1995, that recommends actions intended to supplement the applicable FAA-approved AFM or POH; Service Bulletin (SB) No. TPE331-73-0236, dated July 28, 1995, that describes procedures for replacing the inlet temperature and pressure sensor orifice fittings; and SB No. TPE331-73-0235, dated July 28, 1995, that describes procedures for replacing the inlet temperature and pressure sensor orifice fittings and reworking the inlet sensor Ps3 restrictors.

Since an unsafe condition has been identified that is likely to exist or develop on other products of this same type design, the proposed AD would require revising the Abnormal

Procedures or Emergency Procedures Section of the applicable FAA-approved AFM or POH to include a paragraph relating to a non-responsive power lever. In addition, this proposal would require replacing orifice fittings and reworking restrictors, which would constitute terminating action to the requirement to revise the applicable AFM or POH. The actions would be required to be accomplished in accordance with the service documents described previously.

There are approximately 9,438 engines of the affected design in the worldwide fleet. The FAA estimates that 4,700 engines installed on aircraft of U.S. registry would be affected by this proposed AD. The FAA estimates that 2,760 engines would need modification in accordance with SB No. TPE331-73-0236, dated July 28, 1995, that it would take approximately 2 work hours per engine to accomplish the proposed actions, and that the average labor rate is \$60 per work hour. Required parts would cost approximately \$80 per engine.

In addition, the FAA estimates that 1,240 engines would need modification in accordance with SB No. TPE331-73-0235, dated July 28, 1995, that it would take approximately 3 work hours per engine to accomplish the proposed actions, and that the average labor rate is \$60 per work hour. Required parts would cost approximately \$80 per engine. Based on these figures, the total cost impact of the proposed AD on U.S. operators is estimated to be \$874,400.

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:

AlliedSignal Inc.: Docket No. 96-ANE-13.

*Applicability:* AlliedSignal Inc. TPE331-3, -5, -6, -10, -11, -12 series turboprop engines equipped with Woodward fuel controls, installed on but not limited to the following aircraft: Ayres S2R-G5, S2R-G6, and S2R-G10; Beech Model B100; Construcciones Aeronauticas, S.A. (CASA) C-212 series; Dornier 228 series; Fairchild SA226 and SA227 series; Jetstream 3101 and 3201 series; Mitsubishi MU-2B series (MU-2 series); Short Brothers plc Model SC-7 Skyvan Series 3; Twin Commander Aircraft Corp. 680, 690 and 695 series.

*Note:* This airworthiness directive (AD) applies to each engine 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 engines 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 prevent a non-responsive power lever and lack of control of engine power, accomplish the following:

(a) Within 30 days after the effective date of this AD, for aircraft equipped with engine inlet ice protection, revise the applicable Emergency Procedures or Abnormal Procedures Section of the applicable FAA-approved Airplane Flight Manual (AFM) or Pilot's Operating Handbook (POH) to include the following paragraph relating to a non-responsive power lever. This may be accomplished by inserting a copy of this AD in the AFM or POH:

"NON-RESPONSIVE POWER LEVER: If a lack of response to the power lever is observed, turn ON the ignition and engine anti-ice for both engines. After the condition has cleared and normal operation is observed, which occurs in approximately three minutes, anti-ice and ignition can be turned OFF."

(b) Within 120 days after the effective date of this AD, or at next removal of the Pt2 sensor, whichever occurs first, replace or rework orifice fittings and restrictors in accordance with the Accomplishment Instructions of AlliedSignal Aerospace Service Bulletin (SB), No. TPE331-73-0235, dated July 28, 1995. Replacing the orifice fittings and reworking the inlet sensor Ps3 restrictor constitutes terminating action to the AFM or POH revision requirement stated in paragraph (a) of this AD.

(c) Within 120 days after the effective date of this AD, or at next removal of the Pt2 sensor, whichever occurs first, replace the orifice fittings in accordance with the Accomplishment Instructions of AlliedSignal Aerospace SB No. TPE331-73-0236, dated July 28, 1995. Replacing orifice fittings constitutes terminating action to the AFM or POH revision requirement stated in paragraph (a) of this AD.

(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, Los Angeles Aircraft Certification Office. The request should be forwarded through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles Aircraft Certification Office.

*Note:* Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the Los Angeles Aircraft Certification Office.

(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 aircraft to a location where the requirements of this AD can be accomplished.

Issued in Burlington, Massachusetts, on September 19, 1996.

James C. Jones,

*Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.*

[FR Doc. 96-25170 Filed 10-2-96; 8:45 am]

**BILLING CODE 4910-13-U**

### **14 CFR Part 39**

**[Docket No. 93-CE-45-AD]**

**RIN 2120-AA64**

### **Airworthiness Directives, de Havilland DHC-6 Series Airplanes**

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

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

**SUMMARY:** This document proposes to adopt a new airworthiness directive