

installed per one of three supplemental type certificates (STC). This proposed AD would prohibit you from operating any affected airplane with these engine and propeller configurations unless a new STC for an elevator servo-tab with a redundant control linkage is installed. This proposed AD also allows the option of future installations of one of three STCs if a new STC for an elevator servo-tab with a redundant control linkage is also installed. This proposed AD is the result of reports of the control rod to the servo trim tab system detaching from the servo trim tab, which caused the servo trim tab to flutter on airplanes with a turbine engine installed. We are issuing this proposed AD to prevent a single failure of the elevator servo trim tab system, which could cause severe elevator flutter. Such failure could lead to possible loss of control of the airplane.

DATES: We must receive any comments on this proposed AD by December 15, 2003.

ADDRESSES: Use one of the following to submit comments on this proposed AD:

- By mail: FAA, Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 2000-CE-73-AD, 901 Locust, Room 506, Kansas City, Missouri 64106.

- By fax: (816) 329-3771.

- By e-mail: 9-ACE-7-

Docket@faa.gov. Comments sent electronically must contain "Docket No. 2000-CE-73-AD" in the subject line. If you send comments electronically as attached electronic files, the files must be formatted in Microsoft Word 97 for Windows or ASCII.

You may get the service information identified in this proposed AD from:

- For STC No. SA3777NM: A.M. Luton 3025 Eldridge Avenue, Bellingham, Washington, 98225; telephone (360) 671-7817; facsimile (360) 671-7820.
- For STC No. SA09866SC: Texas Turbine Conversions, Inc., 8955 CR 135, Celina Texas 75009; telephone: (972) 382-4402; facsimile: (972) 382-4402.
- For STC No. SA09857SC: Canada Turbine Conversions, Inc., Lot 16, 105081 Highway 11, Pine Falls MB ROE 1MO, Canada.

- For STC No. SA01059SE: American Aeromotives, Inc. (American Aeromotives), 3025 Eldridge Avenue, Bellingham, Washington 98225, telephone: (360) 671-7817; facsimile: (360) 671-7820.

You may view the AD docket at FAA, Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 2000-CE-73-AD, 901 Locust, Room 506, Kansas City, Missouri 64106. Office

hours are 8 a.m. to 4 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT:

- For STC No. SA3777NM or STC No. SA01059SE: Richard Simonson, Aerospace Engineer, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue, SW, Renton, Washington 98055; telephone: (425) 917-6507; facsimile: (425) 917-6590.

- For STC No. SA09866SC: Richard Karanian, Aerospace Engineer, Special Certification Office, FAA, Rotorcraft Directorate, Special Certification Office, 2601 Meacham Boulevard, Fort Worth, Texas 76193-0190; telephone: (817) 222-5195; facsimile: (817) 222-5959.

- For STC No. SA09857SC: Peter W. Hakala, Aerospace Engineer, FAA, Special Certification Office, Rotorcraft Directorate, 2601 Meacham Boulevard, Fort Worth, Texas 76193-0190; telephone: (817) 222-5145; facsimile: (817) 222-5785.

SUPPLEMENTARY INFORMATION:

Comments Invited

How do I comment on this proposed AD? We invite you to submit any written relevant data, views, or arguments regarding this proposal. Send your comments to an address listed under **ADDRESSES**. Include "AD Docket No. 2000-CE-73-AD" in the subject line of your comments. If you want us to acknowledge receipt of your mailed comments, send us a self-addressed, stamped postcard with the docket number written on it. We will date-stamp your postcard and mail it back to you.

Are there any specific portions of this proposed AD I should pay attention to? We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. If you contact us through a nonwritten communication and that contact relates to a substantive part of this proposed AD, we will summarize the contact and place the summary in the docket. We will consider all comments received by the closing date and may amend this proposed AD in light of those comments and contacts.

Discussion

What events have caused this proposed AD? The FAA has received several reports of situations where pilots of Bombardier Inc. Model Otter DHC-3 airplanes with installed turbine engines have experienced buffeting of the elevators. All pilots declared an emergency and safely landed their aircraft.

Investigation found that the control rod to the servo trim tab system

detached from the servo trim tab and caused the servo trim tab to flutter. In all cases, the aircraft had been modified with a Pratt and Whitney PT6A-135 or a PT6A-34 turbine engine per STC No. SA3777NM.

The certification basis for STC SA3777NM includes freedom from flutter and control reversal and divergence, required by 14 CFR 23.629(f)(1). Further review reveals that this requirement was not complied with when the STC was issued. Subsequent to the issuance of the STC, single failures of the control system for the servo tab began causing the servo tab to flutter. The failures were attributed to the increased velocity and airflow over the servo tab caused by the turbine conversion.

As a method of compliance with 14 CFR 23.629(f)(1), American Aeromotives has identified the installation of STC No. SA01059SE (a new elevator servo-tab and redundant control linkage) on aircraft modified with a Pratt and Whitney PT6A-34/-135 turbine engine per STC No. SA3777NM.

FAA has inspected affected airplanes with STC No. SA09866SC or STC No. SA09857SC installed and confirmed that the same unsafe condition exists. At this time, neither of these two STC holders has identified a method of compliance with 14 CFR 23.629(f)(1).

As a method of compliance with 14 CFR 23.629(f)(1), FAA has identified the installation of STC No. SA01059SE (a new elevator servo-tab and redundant control linkage) on aircraft modified with STC No. SA09866SC or STC No. SA09857SC.

What are the consequences if the condition is not corrected? A single failure of the elevator servo trim tab system could cause severe elevator flutter and lead to possible loss of control of the airplane.

Is there service information that applies to this subject? American Aeromotives has issued Service Letter No. AAI-DHC3-02.01, Revision No: IR, dated April 9, 2002.

What are the provisions of this service information? The service letter includes procedures for incorporating STC No. SA01059SE, which includes a new elevator servo-tab and redundant control linkage.

FAA's Determination and Requirements of This Proposed AD

What has FAA decided? We have evaluated all pertinent information and identified an unsafe condition that is likely to exist or develop on other products of this same type design. Therefore, we are proposing AD action.