## U.S. DEPARTMENT OF TRANSPORATION FEDERAL AVIATION ADMINISTRATION

## **Airworthiness Directive**

**88-12-10 GARRETT ENGINE DIVISION,** ALLIED-SIGNAL INCORPORATED (FORMERLY GARRETT TURBINE ENGINE COMPANY, FORMERLY AIRESEARCH MANUFACTURING COMPANY OF ARIZONA): Amendment 39-5910.

Applies to model TPE331-10, -10R, -10U, -10UA, -10UF, -10UG, -10UGR, -10UR, and -11U turboprop engines equipped with second stage turbine rotors, part numbers 3102106-1, -6, and -8, installed in aircraft certificated in all categories.

Compliance is required as indicated, unless already accomplished.

To prevent an uncontained engine failure, accomplish the following:

(a) Remove from service the second stage turbine rotor per the schedule below in accordance with the accomplishment instructions of Garrett Alert SB TPE331-A72-0571, dated March 31, 1988:

| Second Stage Turbine Rotor Cycles<br>Since New (CSN) | Removal Schedule  |
|--|---|
| 0 to 4,400   | Prior to 4,800 cycles since new CSN.  |
| 4,401 to 5,000                                       | Within 400 cycles after the effective date of this AD or 5,200 CSN, whichever occurs first. |
| 5,001 to 5,900                                       | Within 200 cycles after the effective date of this AD or 6,000 CSN, whichever occurs first. |
| 5,901 to 6,800                                       | Within 100 cycles after the effective date of this AD or 6,800 CSN, whichever occurs first. |

(b) Remove from service prior to January 1, 1989, all second stage turbine rotors with 4,800 or more cycles since new CSN, regardless of the schedule provided in paragraph (a) above.

NOTE: Garrett SB TPE331-72-0180 Revision 12, dated March 31, 1988, which defines critical component service life limits includes the required life limit and states the cycle definitions.

- (c) Aircraft may be ferried in accordance with the provisions of FAR 21.197 and 21.199 to a base where the AD can be accomplished.
- (d) Upon request, an equivalent means of compliance with the requirements of this AD may be approved by the Manager, Los Angeles Aircraft Certification Office, Federal Aviation Administration, Northwest Mountain Region, 4344 Donald Douglas Drive, Long Beach, California 90808.

(e) Upon submission of substantiating data by an owner or operator through an FAA maintenance inspector, the Manager, Los Angeles Aircraft Certification Office, Northwest Mountain Region, may adjust the compliance schedule specified in this AD.

Garrett SB, TPE331-A72-0571, dated March 31, 1988, identified and described in this document, is incorporated herein and made a part hereof pursuant to 5 U.S.C. 552(a)(1). All persons affected by this directive who have not already received the manufacturer's SB may obtain copies upon request to Garrett General Aviation Services Division, Distribution Center, 2340 East University, Phoenix, Arizona 85034.

This document may also be examined at the Office of the Regional Counsel, Federal Aviation Administration, New England Region, 12 New England Executive Park, Burlington, Massachusetts 01803, Room 311, Rules Docket Number 88-ANE-18, between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday, except federal holidays.

This amendment, 39-5910, becomes effective June 6, 1988.