

Sektion 2. Utlandstillverkad flygmateriel

TITEL: Byte av tredje (3) turbinstegets statorenhet med P/N 86 83 79-1, -3, eller -5

GÄLLER: Modell TPE 331-1, -2, -2UA, -3U, -3UW, -5, -5A, -5AB, -5B, -6 och -6A och modell TSE 331-3U.

ÅTGÄRD: Utför åtgärder i enlighet med Service Bulletiner och underhållshandböcker angivna i FAA AD 93-05-09.

TID FÖR ÅTGÄRD: I tid och intervaller angivna i FAA AD 93-05-09.

UNDERLAG: Angivet i FAA AD 93-05-09.

REFERENS: FAA AD 93-05-09 och LFV skrivelse 9303-430-31207 daterad 1993-03-12.

UTGIVNINGS-DATUM: 1993-04-01

LFS: 1993:14

Åtgärd enligt LVD utgör nödvändig förutsättning för ifrågavarende flygmateriels luftvärdighet. Referens BCL M 1.11. Anteckning om åtgärd, som vidtagits i enlighet med LVD, skall införas i teknisk journal för berörd flygmateriel med hänvisning till ifrågavarande LVD-nummer. Angivet underlag refererar till senaste gällande revision/utgåva. LVD utges i luftfartsverkets författningssamlingar LFS.

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and 868379-3, from 4500 hours TIS to 3600 CIS; and for third stage turbine stator assemblies, P/N 868379-5, from 1100 CIS to 600 CIS. This priority letter AD retains from AD 87-19-02 both the one-time X-ray inspection of the outer ring to nozzle casting weld joint based on hours TIS, as well as the procedures for remarking third stage turbine stator assemblies P/N 868379-1 as P/N 868379-3. The actions are required to be accomplished in accordance with the service bulletins described previously.

Pursuant to the authority of the Federal Aviation Act of 1958, delegated to me by the Administrator, the following priority letter AD 93-05-09, applicable to Allied-Signal Inc., Garrett Engine Division, TPE331 series turboprop Engines, is issued and is effective immediately upon receipt.

93-05-09 Allied-Signal Inc., Garrett Engine Division: Priority Letter issued on March 8, 1993. Docket No. 93-ANE-05. Supersedes AD 87-19-02 (52 FR 33918, dated September 9, 1987), and priority letter AD 91-04-02, issued February 8, 1991.

Applicability: Allied-Signal Inc., Garrett Engine Division, Model TPE331-1, -2, -2UA, -3U, -3UW, -5, -5A, -5AB, -5B, -6, and -6A turboprop and Model TSE331-3U turboshaft engines containing third stage turbine stator assemblies Part Number (P/N) 868379-1, -3, or -5. These engines are installed on but not limited to: Mitsubishi MU-2B series (MU-2 series); Construcciones Aeronauticas, S.A. (CASA) C-212 series; Fairchild SA226 series (Swearingen Merlin and Metro series); Prop-Jets, Inc. Model 400; Twin Commander 680 and 690 (Jetprop Commander); Rockwell Commander S-2R; Shorts Brothers and Harland, Ltd. SC7 (Skyvan); Dornier 228 series; Beech 18 and 45 series and Models JRB-6, 3N, 3NM, 3TM, and B100; Pilatus PC-6 series (Fairchild Porter and Peacemaker); De Havilland DH 104 series 7AXC (Dove); Ayres S-2R series; Grumman American G-164 series; and Schweizer G-164 series airplanes; and Sikorsky S-55 series (Helitec Corp. S55T) helicopters.

Compliance: Required as indicated, unless accomplished previously.

To prevent an uncontained failure of the third stage turbine wheel, accomplish the following:

(a) If the cycles in service (CIS) since new or rework of third stage turbine stator assemblies, P/N 868379-1 and -3, are unknown, convert hours time in service (TIS) to CIS by multiplying the hours TIS since new or rework upon receipt of this AD by 1.5 to get CIS since new or rework upon receipt of this AD.

(b) Replace third stage turbine stator assemblies, P/N 868379-1 and -3, with new or reworked assemblies in accordance with the applicable Allied-Signal Inc., Garrett Engine Division, Engine Maintenance Manual, and the following schedule, based upon CIS:

CIS since New or Rework
upon receipt of this AD

Replacement Schedule

CIS unknown

Replace within 50 CIS after
receipt of this priority
letter AD.

5500 or more CIS

Replace within 50 CIS after
receipt of this priority
letter AD.

CIS since New or Rework
upon receipt of this AD

Replacement Schedule

4000 to 5499 CIS

Replace within 200 CIS after receipt of this priority letter AD, but not more than 5550 CIS since new or rework, whichever occurs first.

3200 to 3999 CIS

Replace within 400 CIS after receipt of this priority letter AD, but not more than 4200 CIS since new or rework, whichever occurs first.

Less than 3200 CIS

Replace prior to accumulating 3600 CIS since new or rework.

(c) During access to the third stage turbine stator assembly as required in paragraph (b) of this AD, remark all third stage turbine stator assemblies P/N 868379-1 as third stage turbine stator assemblies P/N 868379-3, in accordance with the Accomplishment Instructions of Garrett Turbine Engine Company (now Allied-Signal Inc., Garrett Engine Division) Alert Service Bulletin (ASB) No. TPE/TSE-331-A72-0384, Revision 3, dated July 1, 1987, or ASB No. TPE/TSE-331-A72-0384, Revision 4, dated September 4, 1987.

(d) Thereafter, replace third stage turbine stator assemblies, P/N 868379-1 and -3, with new or reworked assemblies in accordance with the applicable Allied-Signal Inc., Garrett Engine Division, Engine Maintenance Manual, at intervals not to exceed 3600 CIS since new or rework.

(e) Replace third stage turbine stator assemblies, P/N 868379-5, with new or reworked assemblies in accordance with the applicable Allied-Signal Inc., Garrett Engine Division, Engine Maintenance Manual, and the following schedule:

CIS since New or Rework
upon receipt of this AD

Replacement Schedule

CIS unknown

Replace within 50 CIS after receipt of this priority letter AD.

900 or more CIS

Replace within 50 CIS after receipt of this priority letter AD.

450 to 899 CIS

Replace within 150 CIS after receipt of this priority letter AD, but not more than 950 CIS since new or rework, whichever occurs first.

Less than 450 CIS

Replace prior to accumulating 600 CIS since new or rework.

(f) Thereafter, replace third stage turbine stator assemblies, P/N 868379-5, with new or reworked assemblies in accordance with the applicable Allied-Signal Inc., Garrett Engine Division, Engine Maintenance Manual, at intervals not to exceed 600 CIS since new or rework.

NOTE: Additional information regarding the replacement of the stator assembly can be obtained from Allied-Signal, Inc., Garrett Engine Division, ASB No. TPE331-A72-0861, dated November 19, 1992.

(g) For the purposes of this AD, rework of the third stage turbine stator assembly must include installation of a new inner seal support.

(h) Perform a one-time x-ray inspection of all third stage turbine stator assemblies, P/N 868379-1 and -3, for weld penetration in accordance with the following schedule and replace, if necessary, in accordance with the Accomplishment Instructions of Garrett Turbine Engine Company (now Allied-Signal Inc., Garrett Engine Division) ASB No. TPE331-A72-0559, dated July 1, 1987, ASB No. TPE331-A72-0559, Revision 1, dated September 4, 1987, or ASB No. TPE331-A72-0559, Revision 2, dated January 15, 1988, except those third stage turbine stator assemblies listed by serial number in Table 1 of those ASB's:

Hours TIS since New
On September 14, 1987

Inspection Schedule

Unknown hours TIS

Inspect within 200 hours TIS
after September 14, 1987.

5001 or more hours TIS

Inspect within 200 hours TIS
after September 14, 1987.

4000 to 5000 hours TIS

Inspect within 500 hours TIS
after September 14, 1987,
or prior to accumulating
5200 hours TIS since new,
whichever occurs first.

Less than 4000 hours TIS

Inspect prior to
accumulating 4500 hours TIS
since new.

NOTE: September 14, 1987, is the effective date of AD 87-19-02.

(i) An alternative method of compliance or adjustment of the initial 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.

(j) Special flight permits may be issued in accordance with FAR 21.197 and 21.199 to operate the aircraft to a location where the requirements of this AD can be accomplished.

(k) Copies of the applicable service information may be obtained from Garrett General Aviation Services Division, Distribution Center, 1944 East Sky Harbor Circle, Phoenix, Arizona 85034; telephone (602) 365-2548. This information may be examined at the FAA, New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Burlington, Massachusetts.

(l) This priority letter AD supersedes AD 87-19-02 (52 FR 33918, dated September 9, 1987), and priority letter AD 91-04-02, issued February 8, 1991.

(m) Priority letter AD 93-05-09, issued March 8, 1993, becomes effective upon receipt.

FOR FURTHER INFORMATION CONTACT: Joseph Costa, Aerospace Engineer, Propulsion Branch, ANM-140L, Los Angeles Aircraft Certification Office, Transport Airplane Directorate, Aircraft Certification Service, FAA, 3229 East Spring Street, Long Beach, California 90806-2425; telephone (310) 988-5246, fax (310) 988-5210.