
AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

AlliedSignal (Garrett/AiResearch) Turbine Engines - TFE731 Series

AD/TFE 731/34

1st and 2nd Stage Low Pressure Turbine Rotor Discs

9/2005

Applicability: Honeywell International Inc. (formerly AlliedSignal Inc. and Garrett Turbine Engine Co.) TFE731-2 and -3 series turbofan engines with the following low pressure (LP) 1st and 2nd stage turbine rotor disc part numbers (P/Ns), with serial numbers (SNs) listed in Tables 1, 2, and 3 of Honeywell International Inc. SB No. TFE731-72-3682, dated 26 November 2002, initially installed as new parts before 1 April 1991:

Part Numbers

3072069-All	3073014-All
3072070-All	3073113-All
3072351-All	3071114-All
3072542-All	3074103-All
3073013-All	3074105-All

(All denotes all dash numbers installed)

Note 1: These engines are installed on, but not limited to, the following aeroplanes:

Avions Marcel Dassault Mystere-Falcon 10 and 50 series

Cessna Model 650, Citation III, and Citation VI

Gulfstream Aerospace LP (formerly IAI) 1125 Westwind Astra series

Israel Aircraft Industries (IAI) 1124 series

Learjet 31, 35, 36, and 55 series

Lockheed-Georgia 1329-25 series (731 Jetstar, Jetstar II)

Raytheon Corporate Jets (formerly British Aerospace) DH/HS/BH-125 series;

Sabreliner NA-265-65 (Sabreliner 65)

AlliedSignal (Garrett/AiResearch) Turbine Engines - TFE731 Series

AD/TFE 731/34 (continued)

- Requirement:
1. For TFE731-2-2J, TFE731-2-2N, TFE731-2A-2A, and TFE731-3-1J engines, replace discs that are listed by SN in Tables 1 and 3 of SB No. TFE731-72-3682.
 2. For TFE731-2 series engines except TFE731-2-2J, TFE731-2-2N, and TFE731-2A-2A engines, replace discs that are listed by SN in Tables 1 and 2 of SB No. TFE731-72-3682.
 3. For TFE731-3 series engines except TFE731-3-1J, replace discs that are listed by SN in Table 3 of SB No. TFE731-72-3682.
 4. Do not install any LP 1st and 2nd stage turbine rotor disc that has a SN listed in Table 1, 2, or 3 of SB No. TFE731-72-3682 and determined to be manufactured before 1 April 1991.

Definition: For the purposes of this AD, access to the turbine discs is the level of disassembly that has removed the tie-shaft nut.

Note 2: FAA AD 2005-13-07 Amendment 39-14143 refers.

- Compliance:
1. Within 100 hours time- in-service (TIS) after the effective date of this Directive.
 2. At the next Major Periodic Inspection (MPI) or next access to the turbine discs after the effective date of this Directive, but within 2,200 hours TIS since the last disc inspection, whichever occurs first.
 3. At the next MPI or next access to the turbine discs after the effective date of this Directive, but within 1,500 hours TIS since the last disc inspection, whichever occurs first.
 4. After the effective date of this Directive.

This Airworthiness Directive becomes effective on 1 September 2005.

Background: This Directive results from a report of an uncontained failure of an LP 2nd stage turbine rotor disc that resulted in an in-flight engine shutdown. This Directive is intended to prevent LP turbine rotor disk separation, which could result in an uncontained engine failure and damage to the aeroplane.



David Villiers
Delegate of the Civil Aviation Safety Authority

22 July 2005