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LUFTDYKTIGHETSPÅBUD (LDP)

MOTORER

HONEYWELL -13
(Tidligere AlliedSignal)

Med hjemmel i lov av 11. juni 1993 nr. 101 om luftfart, kap. XV § 15-4 jf. kap. IV § 4-1 og Samferdselsdepartementets bemyndigelse av 25. mars 1994, fastsetter Luftfartstilsynet følgende forskrift om luftdyktighet.

2000-067 KONTROLL/UTSKIFTING AV "HPC IMPELLER"

Påbudet gjelder:

Honeywell International Inc. (AlliedSignal Inc.) modeller som er listet i vedlagte kopi av FAA AD 2000-15-09.

Påbudet omfatter:

Utfør tiltak som beskrevet i vedlagte kopi av FAA AD 2000-15-09.

Tid for utførelse:

Til de tider og intervaller som beskrevet i vedlagte kopi av FAA AD 2000-15-09, med virkning fra denne LDP's gyldighetsdato.

Referanse:

FAA AD 2000-15-09.

Gyldighetsdato:

2000-10-10.

AIRWORTHINESS DIRECTIVE

REGULATORY SUPPORT DIVISION
P.O. BOX 26460
OKLAHOMA CITY, OKLAHOMA 73125-0460



U.S. Department
of Transportation
**Federal Aviation
Administration**

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The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2000-15-09 Honeywell International Inc.: Amendment 39-11841. Docket 99-NE-10-AD.

Applicability

Honeywell International Inc. (formerly AlliedSignal Inc. and Garrett Turbine Engine Company) TFE731-2, -3, -4, and -5 series turbofan engines with high pressure compressor (HPC) impeller part numbers (P/Ns) 3073393-1, 3073394-1, 3073433-1, 3073434-1, 3073398-All (All denotes all dash numbers), 3073435-All, and 3075171-All, installed on, but not limited to, Avions Marcel Dassault-Breguet Aviation (AMD/BA) Falcon 10, Dassault-Aviation Mystere-Falcon 50, and 900 series airplanes; Dassault Aviation Mystere-Falcon 20 series airplanes; Learjet Inc. Models 31, 35, 36, and 55 series airplanes; Lockheed-Georgia Corporation 1329-23 and -25 series airplanes; Israel Aircraft Industries Ltd. 1124 series and 1125 Westwind series airplanes; Cessna Aircraft Co. Model 650 Citation III, VI, and VII series airplanes; Raytheon Aircraft Co. HS-125 series airplanes; and Sabreliner Corporation NA-265-65 airplanes.

Note 1: 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 (e) 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 failure of the HPC impeller due to fatigue cracking, accomplish the following:

Initial Inspection

(a) Remove and inspect the applicable HPC impeller in accordance with Section 2.A. of the Accomplishment Instructions of AlliedSignal Inc. Alert Service Bulletin (ASB) TFE731-A72-3641, Revision 1, dated October 20, 1999, or ASB TFE731-A72-3641 dated November 24, 1998, and, if necessary, replace the impeller with a serviceable impeller at the earlier of the following:

- (1) At the next core zone inspection (CZI) after the effective date of this AD; or
- (2) At the next access to the HPC module after the effective date of this AD.

Repetitive Inspection

(b) Thereafter, remove and inspect the applicable HPC impeller in accordance with Section 2.A. of the Accomplishment Instructions of ASB TFE731-A72-3641, dated November 24, 1998, or ASB TFE731-A72-3641, Revision 1, dated October 20, 1999, and, if necessary, replace the impeller with a serviceable impeller, whenever either of the following conditions are met:

- (1) At every CZI; or
- (2) At access to the HPC module if the impeller has accumulated more than 1,000 cycles since the last Eddy Current Inspection (ECI).

Definitions

(c) This AD defines access to the HPC module as whenever the low pressure compressor case is removed from the compressor interstage diffuser.

(d) For the purposes of this AD, a serviceable impeller is defined as an impeller that complies with all applicable visual, dimensional, and fluorescent penetrant inspections requirements for the level of maintenance being accomplished, as contained in the Heavy Maintenance Manual, and is either an impeller with fewer than 1000 engine operation cycles since new or an impeller with fewer than 1000 engine operation cycles since last ECI.

Alternative Method of Compliance

(e) 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 (LAACO). Operators shall submit their request through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, LAACO.

Note 2: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the LAACO.

Special Flight Permits

(f) Special flight permits may be issued in accordance with §§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.

Documents Incorporated by Reference

(g) The actions required by this AD shall be done in accordance with the following AlliedSignal Inc. Alert Service Bulletins:

Document No.	Pages	Revision	Date
TFE731-A72-3641	10	Original	November 24, 1998
Total pages: 10			
TFE731-A72-3641	12	1	October 20, 1999
Total pages: 12			

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Honeywell Engines and Systems (formerly AlliedSignal) Technical Publications and Distribution, M/S 2101-201, P.O. Box 52170, Phoenix, AZ 85072-2170; telephone: (602) 365-2493 (General Aviation), (602) 365-5535 (Commercial), fax: (602) 365-5577 (General Aviation), (602) 365-2832 (Commercial). Copies may be inspected at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street NW., suite 700, Washington, DC.

Effective Date

(h) This amendment becomes effective on October 10, 2000.

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: (562) 627-5246, fax: (562) 627-5210.

Issued in Burlington, Massachusetts, on July 10, 1999.

David A. Downey Assistant Manager, Engine and Propeller Directorate, Aircraft Certification Service

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MOTORER

LUFTDYKTIGHETSPÅBUD (LDP)

HONEYWELL -14
(Tidligere AlliedSignal)

Med hjemmel i lov av 11. juni 1993 nr. 101 om luftfart, kap. XV § 15-4 jf. kap. IV § 4-1 og Samferdselsdepartementets bemyndigelse av 25. mars 1994, fastsetter Luftfartstilsynet følgende forskrift om luftdyktighet.

**2002-046 "CENTRIFUGAL COMPRESSOR IMPELLER REVISED OPERATING CYCLE
COUNT & CENTRIFUGAL COMPRESSOR IMPELLER INSPECTIONS**

Påbudet gjelder:

Honeywell International Inc. (AlliedSignal Inc.) modeller som er listet i vedlagte kopi av FAA AD 2002-09-09.

Påbudet omfatter:

Utfør tiltak som beskrevet i vedlagte kopi av FAA AD 2002-09-09.

Tid for utførelse:

Til de tider og intervaller som beskrevet i vedlagte kopi av FAA AD 2002-09-09.

Referanse:

FAA AD 2002-09-09.

Gyldighetsdato:

2002-06-25.

AIRWORTHINESS DIRECTIVE

Aircraft Certification Service
Washington, DC



U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "www.airweb.faa.gov/rgl"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2002-09-09 Honeywell International, Inc.: Amendment 39-12742. Docket No. 2000-NE-50-AD.

Applicability

This airworthiness directive (AD) is applicable to Honeywell International, Inc. (formerly AlliedSignal, Inc., Textron Lycoming, Avco Lycoming, and Lycoming) former military T53 series turboshaft engines with centrifugal compressor impellers part numbers (P/N's) 1-100-078-07 or 1-100-078-08 installed. These engines are installed on, but not limited to, Bell Helicopter Textron manufactured AH-1, UH-1, and SW-204/205 (UH-1) series surplus military helicopters that have been certified in accordance with Secs. 21.25 or 21.27 of the Federal Aviation regulations (14 CFR 21.25 or 21.27).

Note 1: This 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 (e) 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

Compliance with this AD is required as indicated, unless already done.

To prevent centrifugal compressor impeller failure, which can result in an uncontained engine failure, in-flight engine shutdown, or damage to the helicopter, do the following:

Centrifugal Compressor Impeller Revised Operating Cycle Count

(a) Within 25 operating cycles or 7 calendar days, whichever occurs first, after the effective date of this AD, do a revised centrifugal compressor impeller operating cycle count (prorate) in accordance with the accomplishment instructions of Honeywell International, Inc. Service Bulletin (SB) No. T53-L-13B-0020, Revision 3, dated October 25, 2001, for T53-L-13B Lycoming engines, SB No. T53-L-13B/D-0020, Revision 1, dated April 25, 2001 for T53-L-13B/D Lycoming engines, and SB No. T53-L-703-0020, Revision 1, dated April 25, 2001 for T53-L-703 Lycoming engines.

(b) Following the revised operating cycle count required by paragraph (a) of this AD, remove from service installed centrifugal compressor impellers that exceed their life limit or whose life cannot be determined, within 50 hours time-in-service (TIS), or 25 operating cycles, whichever occurs first and replace with a serviceable part that does not exceed the life limit.

(c) Installation of uninstalled centrifugal compressor impellers that exceed their life limit, which is revised in accordance with paragraph (a) of this AD is prohibited.

Centrifugal Compressor Impeller Inspections

(d) Following the revised operating cycle count required by paragraph (a) of this AD, inspect centrifugal compressor impellers, part numbers (P/N's) 1-100-078-07 and 1-100-078-08, in accordance with the accomplishment instructions of AlliedSignal, Inc. SB No. T53-L-13B-0108, Revision 1, dated November 22, 1999, for T53-L-13B Lycoming engines; SB No. T53-L-13B/D-0108, Revision 1, dated November 22, 1999 for T53-L-13B/D Lycoming engines; or SB No. T53-L-703-0108, Revision 1, dated November 22, 1999 for T53-L-703 Lycoming engines, as follows:

(1) For centrifugal compressor impellers with equal to or greater than 4,600 cycles-in-service (CIS), initially inspect within 200 CIS after the effective date of this AD.

(2) For those centrifugal compressor impellers with less than 4,600 CIS, initially inspect no later than 4,800 CIS.

(3) Centrifugal compressor impellers found cracked must be removed from service prior to further flight and replaced with a serviceable part.

(4) If no cracks are detected, perform repetitive inspections of the centrifugal compressor impellers at intervals not to exceed 500 CIS since last inspection.

Alternative Methods of Compliance

(e) 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 (ACO). Operators must submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

Note 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(f) Special flight permits may be issued in accordance with Secs. 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be done.

Documents That Have Been Incorporated By Reference

(g) The inspection must be done in accordance with the following Honeywell International Inc. (HII) and AlliedSignal, Inc. (ASI) service bulletins:

Document No.	Pages	Revision	Date
HII, SB No. T53-L-13B-0020	All	3	Oct. 25, 2001.
Total pages 13			
HII, SB No. T53-L-13B/D-0020	All	1	April 25, 2001.
Total pages 12			
HII, SB No. T53-L-703-0020	All	1	April 25, 2001.
Total pages 12			
ASI	1	Original	July 22, 1999.
SB No. T53-L-13B-0108	2	1	Nov. 22, 1999.
	3-12	Original	July 22, 1999.
Total pages 12			
ASI	1	Original	July 22, 1999.
SB No. T53-L-13B/D-0108	2	1	Nov. 22, 1999.
	3-12	Original	July 22, 1999.
Total pages 12			
ASI	1	Original	July 22, 1999.
SB No. T53-L-703-0108	2	1	Nov. 22, 1999.
	3-12	Original	July 22, 1999.
Total pages 12			

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Honeywell International, Inc., 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. Copies may be inspected, by appointment, at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

Effective Date

(h) This amendment becomes effective on June 13, 2002.

Issued in Burlington, Massachusetts, on April 29, 2002.

Diane S. Romanosky,

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

[FR Doc. 02-11216 Filed 5-8-02; 8:45 am]

BILLING CODE 4910-13-U

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LUFTDYKTIGHETSPÅBUD (LDP)

MOTORER

HONEYWELL -15
(Tidligere AlliedSignal)

Med hjemmel i lov av 11. juni 1993 nr. 101 om luftfart, kap. XV § 15-4 jf. kap. IV § 4-1 og Samferdselsdepartementets bemyndigelse av 25. mars 1994, fastsetter Luftfartstilsynet følgende forskrift om luftdyktighet.

2003-017 "WELD REPAIRED FIRST STAGE COMPRESSOR IMPELLERS"

Påbudet gjelder:

Honeywell International Inc. (AlliedSignal Inc.) modeller som er listet i vedlagte kopi av FAA AD 2002-25-02.

Påbudet omfatter:

Utfør tiltak som beskrevet i vedlagte kopi av FAA AD 2002-25-02.

Tid for utførelse:

Til de tider som er beskrevet i vedlagte kopi av FAA AD 2002-25-02.

Referanse:

FAA AD 2002-25-02.

Gyldighetsdato:

2003-02-26.

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
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The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2002-25-02 Honeywell International Inc.: Amendment 39-12977. Docket No. 2001-NE-11-AD.

Applicability: This airworthiness directive (AD) is applicable to Honeywell International Inc. (formerly AlliedSignal Inc., Garrett Turbine Engine Company and AiResearch Manufacturing Company of Arizona) TPE331-3, -5, -6, -8, -10, and -11 series turboprop and TSE331-3 series turboshaft engines. These engines are installed on, but not limited to Ayres S-2R series; Beech 18 and 45 series and Models JRB-6, 3N, 3NM, 3TM, and B100; Cessna Model 441; Construcciones Aeronauticas, S.A. (CASA) C-212 series; De Havilland DH 104 series 7AXC (Dove); Dornier 228 series; Fairchild SA226 and SA227 series (Swearingen Merlin and Metro series); Grumman American G-164 series; Jetstream 3101; Mitsubishi MU-2B series (MU-2 series); Prop-Jets, Inc. Model 400; Rockwell Commander S-2R; Shorts Brothers and Harland, Ltd. SC7 (Skyvan); Pilatus PC-6 series (Fairchild Porter and Peacemaker); and Schweizer G-164 series; and Twin Commander Aircraft Corp. (Jetprop Commander) Models 695 and 695A airplanes; and Sikorsky S-55 series (Helitec Corp. S55T) helicopters.

Note 1: This 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 (c) 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: Compliance with this AD is required as indicated, unless already done.

To prevent an uncontained engine failure, in-flight shutdown, and secondary damage, do the following:

Removal of Weld Repaired First Stage Compressor Impellers From Service

(a) Remove from service weld repaired first stage compressor impellers, P/N's 896223-1, -2, -3, and -7 and 3107109-2, with SN's listed in Table 1 and Table 2 of the Accomplishment Instructions in 2.A.(1) and 2.A.(2) of Honeywell Alert Service Bulletin TPE331-A72-2083, revision 1, dated May 17, 2002, in accordance with the following schedule:

(1) Remove impellers with no record of cycles since weld repair, within 3,600 cycles-in-service (CIS) or at the next engine overhaul, or at the next major Continuous Airworthiness Maintenance (CAM) compressor section inspection, after the effective date of this AD, whichever occurs first.

(2) Remove impellers with more than 8,900 cycles since "weld repair," within 3,600 CIS, or at the next engine overhaul, or at the next major CAM compressor section inspection after the effective date of this AD, whichever occurs first.

(3) After the effective date of this AD, remove impellers with 8,900 or less cycles since "weld repair," before reaching 12,500 cycles since weld repair.

(b) For purposes of this AD, weld repaired or weld repair is defined as an impeller repair which involved heat treating and that was performed from 1980 through 1997 at Honeywell Aerospace Services, Aftermarket-Phoenix Repair and Overhaul, 1944 E. Sky Harbor Circle, Phoenix, AZ. 85034 (FAA Certificate Number ZN3R030M). Former names and FAA certificate numbers for Honeywell's Repair and Overhaul Facility are listed in section 2.A. of the Accomplishment Instructions in Honeywell Alert Service Bulletin TPE331-A72-2083, revision 1, dated May 17, 2002.

Alternative Methods of Compliance

(c) 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 (ACO). Operators must submit their request through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

Note 2: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(d) Special flight permits may be issued in accordance with §§ 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 done.

Documents That Have Been Incorporated by Reference

(e) The impeller removals must be done in accordance with Honeywell International Inc. Alert Service Bulletin TPE331-A72-2083, revision 1, dated May 17, 2002. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Honeywell Engines, Systems and Services, Technical Data Distribution, M/S 2101-201, P.O. Box 52170, Phoenix, AZ 85072-2170; telephone: (602) 365-2493 (General Aviation), (602) 365-5535 (Commercial); fax: (602) 365-5577 (General Aviation and Commercial). Copies may be inspected at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW., Suite 700, Washington, DC.

Effective Date

(f) This amendment becomes effective on January 21, 2003.

Issued in Burlington, Massachusetts, on December 2, 2002.

Jay J. Pardee,

Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 02-31172 Filed 12-13-02; 8:45 am]

BILLING CODE 4910-13-P

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LUFTDYKTIGHETSPÅBUD (LDP)

MOTORER

HONEYWELL -16
(Tidligere AlliedSignal)

Med hjemmel i lov av 11. juni 1993 nr. 101 om luftfart, kap. XV § 15-4 jf. kap. IV § 4-1 og Samferdselsdepartementets
bemyndigelse av 25. mars 1994, fastsetter Luftfartstilsynet følgende forskrift om luftdyktighet.

2004-032 "FIRST STAGE TURBINE DISK"

Påbudet gjelder:

Honeywell International Inc. (AlliedSignal Inc.) modeller som er listet i vedlagte kopi av
FAA AD 2004-09-29.

Påbudet omfatter:

Utfør tiltak som beskrevet i vedlagte kopi av FAA AD 2004-09-29.

Tid for utførelse:

Til de tider som er beskrevet i vedlagte kopi av FAA AD 2004-09-29.

Referanse:

FAA AD 2004-09-29.

Gyldighetsdato:

2004-06-28.

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
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**Federal Aviation
Administration**

We post ADs on the internet at "www.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2004-09-29 Honeywell International Inc. (formerly AlliedSignal Inc., Garrett Turbine Engine Company, and AiResearch Manufacturing Company of Arizona): Amendment 39-13619. Docket No. 2003-NE-02-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective June 15, 2004.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Honeywell International Inc. (formerly AlliedSignal Inc., Garrett Turbine Engine Company and AiResearch Manufacturing Company of Arizona) TPE331-10-501C, -10-511C, -10-501K, -10-511K, -10-501M, -10-511M, -10AV-511B, -10AV-511M, -10GP-511D, -10GT-511D, -10N-511S, -10N-512S, -10N-513S, -10N-514S, -10N-515S, -10N-531S, -10N-532S, -10N-533S, -10N-534S, -10N-535S, -10P-511D, -10R-501C, -10R-502C, -10R-511C, -10R-512C, -10R-513C, -10T-511D, -10T-511K, -10T-511M, -10T-512K, -10T-513K, -10T-515K, -10T-516K, -10T-517K, -10U-501G, -10U-502G, -10U-511G, -10U-512G, -10U-503G, -10U-513G, -10UA-511G, -10UF-501H, -10UF-511H, -10UF-512H, -10UF-513H, -10UF-514H, -10UF-515H, -10UF-516H, -10UG-513H, -10UG-514H, -10UG-515H, -10UG-516H, -10UGR-513H, -10UGR-514H, -10UGR-516H, -10UR-513H, -10UR-516H, -11U-601G, -11U-602G, -11U-611G, and -11U-612G turboprop engines with first stage turbine disk part number (P/N) 3101520-1 or P/N 3107079-1, with serial numbers (SNs) listed in Table 1 of Honeywell International Inc. Alert Service Bulletin (ASB) TPE331-A72-2102, dated March 28, 2002, installed. These engines are installed on, but not limited to Mitsubishi MU-2B series, Construcciones Aeronauticas S.A. (CASA) C-212 series, Fairchild SA226 series (Swearingen Merlin and Metro series), Twin Commander 680 and 690 series (Jetprop Commander), Dornier 228 series, Beech 18 and 45 series, Beech Models JRB-6, 3N, 3TM, and B100, Cessna Aircraft Company Model 441 Conquest, and Jetstream 3201 series airplanes.

Unsafe Condition

(d) This AD results from a report of a first stage turbine disk found cracked at the disk bore. We are issuing this AD to prevent cracked first stage turbine disks from causing uncontained disk separation, resulting in engine damage and shutdown and damage to the airplane.

Compliance

(e) You are responsible for having the actions required by this AD performed within the compliance times specified unless the actions have already been done.

Initial Inspection

(f) Perform a fluorescent penetrant inspection (FPI) of first stage turbine disks, P/N 3101520-1, in accordance with 2.A.(4)(a) through 2.A.(4)(d) of Accomplishment Instructions of ASB TPE331-A72-2102, dated March 28, 2002, and the following:

(1) For first stage turbine disks with 4,100 cycles-since-new (CSN) or less, inspect at next access, but no later than 4,500 CSN.

(2) For first stage turbine disks with more than 4,100 CSN, inspect at next access, but within 400 cycles-in-service (CIS) after the effective date of this AD.

(3) First stage turbine disks that pass FPI must be eddy current inspected (ECI) before return to service. Information on procedures for returning disks to Honeywell Engines, Systems, & Services, for ECI, can be found in ASB TPE331-A72-2102, dated March 28, 2002.

(4) First stage turbine disks, P/N 3107079-1, do not require initial inspection because they received an initial FPI and ECI at the time of conversion.

Repetitive Inspections

(g) Perform repetitive FPIs of first stage turbine disks P/N 3101520-1 and P/N 3107079-1, in accordance with 2.B.(3)(a) through 2.B.(3)(d) of Accomplishment Instructions of ASB TPE331-A72-2102, dated March 28, 2002 and the following:

(1) FPI first stage turbine disks at each scheduled hot section inspection.

(2) First stage turbine disks that pass FPI must be ECI before they are returned to service.

Information on procedures for returning disks to Honeywell Engines, Systems, & Services, for ECI, can be found in ASB TPE331-A72-2102, dated March 28, 2002.

Optional Terminating Action

(h) Replacing a first stage turbine disk, that has a SN specified in this AD, with a disk that does not have a SN specified in this AD, is terminating action for the repetitive inspection requirements specified in paragraphs (g)(1) through (g)(2) of this AD.

Definition

(i) For the purposes of this AD, next access is when the turbine wheel assembly is removed from the engine or before installation into an engine.

Alternative Methods of Compliance

(j) The Manager, Los Angeles Aircraft Certification Office, has the authority to approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19.

Material Incorporated by Reference

(k) You must use Honeywell International Inc. ASB TPE331-A72-2102, dated March 28, 2002 to perform the inspections required by this AD. The Director of the Federal Register approved the incorporation by reference of this service bulletin under 5 U.S.C. 552(a) and 1 CFR part 51. You can get the service information identified in this AD from Honeywell Engines, Systems & Services, Technical Data Distribution, M/S 2101-201, P.O. Box 52170, Phoenix, AZ 85072-2170; telephone: (602) 365-2493 (General Aviation); (602) 365-5535 (Commercial); fax: (602) 365-5577 (General Aviation and Commercial). You may examine the service information, at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:
http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Related Information

(l) None.

Issued in Burlington, Massachusetts, on April 28, 2004.
Jay J. Pardee,
Manager, Engine and Propeller Directorate, Aircraft Certification Service.
[FR Doc. 04-10241 Filed 5-10-04; 8:45 am]
BILLING CODE 4910-13-P

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LUFTDYKTIGHETSPÅBUD (LDP)

MOTORER

HONEYWELL -17
(Tidligere AlliedSignal)

Med hjemmel i lov av 11. juni 1993 nr. 101 om luftfart, kap. XV § 15-4 jf. kap. IV § 4-1 og Samferdselsdepartementets bemyndigelse av 25. mars 1994, fastsetter Luftfartstilsynet følgende forskrift om luftdyktighet.

2007-025 "UNCONTAINED FAILURE OF TURBINE ROTOR - LOW CYCLE FATIGUE"

Påbudet gjelder:

Honeywell International Inc. (AlliedSignal Inc.) motor- modeller som beskrevet i vedlagte kopi av FAA AD 2006-14-03.

Påbudet omfatter:

Utfør tiltak som beskrevet i vedlagte kopi av FAA AD 2006-14-03.

Tid for utførelse:

Til de tider som er beskrevet i vedlagte kopi av FAA AD 2006-14-03 med virkning fra denne LDP's gyldighetsdato.

Referanse:

FAA AD 2006-14-03.

Gyldighetsdato:

2007-05-02.

AIRWORTHINESS DIRECTIVE

www.faa.gov/aircraft/safety/alerts/
www.gpoaccess.gov/fr/advanced.html

U.S. Department
of Transportation
**Federal Aviation
Administration**



2006-14-03 Honeywell International Inc. (formerly AlliedSignal Inc., Garrett Engine Division; Garrett Turbine Engine Company; and AiResearch Manufacturing Company of Arizona):
Amendment 39-14674. Docket No. FAA-2006-23704; Directorate Identifier 2006-NE-02-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective August 9, 2006.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Honeywell International Inc. TPE331-1, -1U, -1UA, -2, -2UA, -3U, -3UW, -3W, -5, -5A, -5AB, -5B, -5U, -6, -6A, -6U, -8, -8A, -9, -9U, -10, -10A, -10AV, -10B, -10G, -10GP, -10GR, -10GT, -10J, -10N, -10P, -10R, -10T, -10U, -10UA, -10UF, -10UG, -10UGR, -10UJ, -10UK, -10UR, -11U, -11UA, -12, -12B, -12JR, -12UA, -12UAR, -12UER, and -12UHR series turboprop and TSE331-3U model turboshaft engines. These engines are installed on, but not limited to, the following aircraft:

Manufacturer	Airplane model
Aero Planes, LLC (formerly McKinnon Enterprises)	G-21G.
Allied AG Cat Productions (formerly Schweizer)	G-164 series.
Ayres	S-2R series.
British Aerospace Ltd (formerly Jetstream)	3201 series, and HP.137 Jetstream MK.1.
Cessna Aircraft Company	441 Conquest.
Construcciones Aeronauticas, s.a. (CASA)	C-212 series.
DeHavilland	DH104 series 7AXC (Dove).
Dornier	228 series.
Fairchild	SA226 AND SA227 series (Swearingen Merlin and Metro series).
Grumman American	G-164 series.
Mitsubishi	MU-2B series (MU-2 series).
Pilatus	PC-6 series (Fairchild Porter and Peacemaker).
Polskie Zaklady Lotnicze Spolka (formerly Wytwornia Sprzetu Komunikacyjnego).	PZL M18, PZL M18A, PZL M18B.
Prop-Jets, Inc.	400.
Raytheon Aircraft (formerly Beech)	C45G, TC-45G, C-45H, TC-45H, TC-45J, G18S, E18S-9700, D18S, D18C, H18, RC-45J, JRB-6, UC-45J, 3N, 3NM, 3TM, B100, C90, and E90.

Manufacturer	Airplane model
Shorts Brothers and Harland, Ltd.	SC7 (Skyvan) series.
Thrush (Rockwell Commander)	S-2R.
Twin Commander (Jetprop Commander)	680 and 690 series.

Manufacturer	Helicopter Model
Sikorsky	S-55 series (Helitec Corp. S55T).

Unsafe Condition

(d) This AD results from several reports of uncontained turbine rotor separation on engines used in special-use operations. We are issuing this AD to prevent uncontained failure of the turbine rotor due to low-cycle-fatigue (LCF), and damage to the aircraft.

Compliance

(e) You are responsible for having the actions required by this AD performed within the compliance times specified unless the actions have already been done.

Turbine Rotors Installed Before the Effective Date of This AD

(f) For turbine rotors installed before the effective date of this AD, and currently or previously used in special-use operations:

(1) Within 100 major cycles-in-service after the effective date of this AD, or upon removal of the turbine rotor(s) from the engine, whichever occurs first, do the following:

(i) Determine the total equivalent cycles accrued for turbine rotors. Use paragraph 2.A. of the Accomplishment Instructions of the applicable Honeywell Alert Service Bulletin (ASB) for your model engines listed in the following Table A, to make the determination.

TABLE A.—HONEYWELL ASBS FOR DETERMINING TOTAL EQUIVALENT CYCLES

For engines	Use ASB No.	Turbine rotor removal schedule
(A) TPE331-1 through -6 series and TSE331-3U model.	TPE331-A72-2111, dated November 12, 2002	Use ASB Table 1.
(B) TPE331-8 through -9 series	TPE331-A72-2123, dated February 8, 2006	Use ASB table 1.
(C) TPE331-10 through -11 series	TPE331-A72-2130, dated September 27, 2005	Use ASB Table 1.
(D) TPE331-12 series	TPE331-A72-2131, dated September 27, 2005	Use ASB Table 1.

(ii) If you are unable to determine equivalent cycles for prior special-use operations due to the absence of actual data regarding the number of takeoffs and landings per major cycle, you must use a onetime ratio of six takeoffs and landings per major cycle to estimate prior special-use equivalent cycles for each turbine rotor.

(iii) For each turbine rotor affected on the Life Limited Part Log Card, record the total equivalent cycles accrued, as determined in paragraphs (f)(1)(i) and (f)(1)(ii) of this AD, by complying with the recording requirements for your model engine listed in the following Table B:

TABLE B.—SERVICE BULLETINS (SBS) FOR RECORDING TOTAL EQUIVALENT CYCLES

For engines	Record using
(A) TPE331-1 through -6 series and TSE331-3U model	Honeywell SB No. TPE/TSE331-72-0019, Revision 22, dated May 16, 2001.
(B) TPE331-8 through -9 series	AlliedSignal SB No. TPE331-72-0117, Revision 11, dated November 13, 1997.
(C) TPE331-10 through -11 series	Honeywell SB No. TPE331-72-0180, Revision 31, dated November 7, 2003.
(D) TPE331-12 series	Honeywell SB No. TPE331-72-0476, Revision 27, dated September 17, 2003.

(2) Remove from service turbine rotors affected by paragraph (f) of this AD using the applicable Turbine Rotor Removal Schedule in Table A of this AD, or, within nine months after the effective date of this AD, whichever occurs later.

Used Turbine Rotors Installed On or After the Effective Date of this AD

(g) For used turbine rotors installed on or after the effective date of this AD, and currently or previously used in special-use operations:

(1) Before further flight, determine and record total equivalent cycles using paragraphs (f)(1)(i) through (f)(1)(iii) of this AD.

(2) Remove from service, turbine rotors affected by paragraph (g) of this AD using the applicable Turbine Rotor Removal Schedule in Table A of this AD.

New (Zero Cycles) Turbine Rotors Installed On or After the Effective Date of This AD

(h) For all new (zero cycles) turbine rotors installed on or after the effective date of this AD used in special-use operations:

(1) Use the new counting method by counting and recording minor and major cycles when accrued, and determine equivalent cycles by the method described in paragraphs (f)(1)(i) and (f)(1)(iii) of this AD.

(2) Using the ratio of six takeoffs and landings per major cycle for unknown cycle history, as referenced in paragraph (f)(1)(ii) of this AD, is not permitted.

Definitions

(i) An engine used in special-use operations is defined as an engine that accrues major and minor cycles and is installed in an aircraft that makes multiple takeoffs and landings without engine shutdown.

(j) Total equivalent cycles, is that combination of major and minor cycles as specified in the Honeywell ASBs listed in Table A of this AD.

(k) Total equivalent cycle life limits listed in the ASBs, are the cycle life limits specified in the SBs listed in Table B of this AD.

(l) The "recording of total equivalent cycles on the Life Limited Part Log Card" is that same procedure specified for "accumulated cycles" or "total cycles" in the SBs listed in Table B of this AD.

(m) "Turbine rotors" include first, second, and third stage seal plates, air seals, rotor disks, wheels, and assemblies, and are parts that have part numbers specified in the ASBs listed in Table A of this AD.

(n) A major cycle is an engine start, takeoff, landing, and shutdown.

(o) A minor cycle, which occurs within a major cycle, is an additional landing with an engine speed reduction to ground idle with no engine shutdown followed by a takeoff.

(p) A "used turbine rotor" is a turbine rotor whose cycles-since-new are more than zero.

Alternative Methods of Compliance

(q) The Manager, Los Angeles Aircraft Certification Office, has the authority to approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19.

Material Incorporated by Reference

(r) You must use the service information specified in Table C of this AD to perform the actions required by this AD. The Director of the Federal Register approved the incorporation by reference of the documents listed in Table C of this AD in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Honeywell Engines, Systems & Services, Technical Data Distribution, M/S 2101-201, P.O. Box 52170, Phoenix, AZ 85072-2170; telephone: (602) 365-2493 (General Aviation); (602) 365-5535 (Commercial); fax: (602) 365-5577 (General Aviation and Commercial) for a copy of this service information. You may review copies at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

TABLE C.—INCORPORATION BY REFERENCE

Service Bulletin (SB)	Page	Revision	Date
Honeywell SB No. TPE/TSE331-72-0019 Total Pages: 16	1	22	May 16, 2001.
	2-11	21	March 3, 2000.
	12	22	May 16, 2001.
	13-16	21	March 3, 2000.
AlliedSignal SB No. TPE331-72-0117 Total Pages: 10	1	11	November 13, 1997.
	2	9	May 24, 1995.
	3-10	11	November 13, 1997.
Honeywell SB No. TPE331-72-0180 Total Pages: 54	1	31	November 7, 2003.
	2-3	29	August 23, 2002.
	4-5	31	November 7, 2003.
	6-7	29	August 23, 2002.
	8-13	31	November 7, 2003.
	14	27	February 23, 2001.
	15-17	31	November 7, 2003.
	18	27	February 23, 2001.
19	31	November 7, 2003.	

