

4.8.2006

PL 186, 01531 VANTAA, FINLAND, Tel. +358 (0)9 4250 11, Fax +358 (0)9 4250 2499

www.ilmailuhallinto.fi

Euroopan unionin yhteisen ilmailuviranomaisen EASA:n päätöksen 2/2003 mukaisesti suunnitteluvaltion lentokelpoisuusmääräyksen noudattaminen on ilma-aluksen jatkuvan lentokelpoisuuden edellytyksenä. Määräyksen mukaisen toimenpiteen saa tehdä ja kuitata, jollei Ilmailuhallinto määrää toisin, se jolla ilmailumääräyksen AIR M2-1, AIR M4-1, AIR M5-3, AIR M5-10, AIR M6-1, OPS M2-10, JAR-OPS 1 tai JAR OPS 3 mukaisesti on oikeus tehdä kyseisen ilma-aluksen tai -välineen määräaikaishuoltoja.

Suunnitteluvaltion lentokelpoisuusmääräys (Yhdysvallat) AD 2006-15-08

Honeywell International. Polttoainesäätimen tarkastus

Koskee: Niitä turbiinimoottoreita TPE331-1, -2, -2UA, -3U, -3UW, -5, -5A, -5AB, -5B, -6, -6A, -10, -10AV, -10GP, -10GT, -10P, -10R, -10T, -10U, -10UA, -10UF, -10UG, -10UGR, -10UR, -11U, -12JR, -12UA, -12UAR ja -12UHR, joihin asennetun Woodward-polttoainesäätimen osanumero on lueteltu oheisessa lentokelpoisuusmääräyksessä.

Lentokelpoisuusmääräyksen vaatimat toimenpiteet:

- A.** Tarkasta polttoainesäädin (FCU) säätimen seuraavassa määräaikaishuollossa mutta kuitenkin viimeistään 1000 lentotunnin kuluessa laskettuna 24.8.2006:sta oheisen lentokelpoisuusmääräyksen AD2006-15-08 (AD) kohdan (f) ohjeiden mukaisesti. Toista tarkastus sen jälkeen 1000 lentototunnin välein AD:n kohdan (g) ohjeiden mukaisesti.
- B.** Vaihda polttoainesäädin uuteen AD:n kohdan (h), (i) tai (j) mukaisesti ja joka tapauksessa viimeistään 31.12.2012.

Tehty toimenpide sekä suunnitteluvaltion lentokelpoisuusmääräyksen numero on merkittävä ilma-aluksen teknilliseen päiväkirjaan.

Jos ilma-aluksen omistaja, haltija tai käyttäjä haluaa korvata lentokelpoisuusmääräyksen vaatimat toimenpiteet muilla vastaavan turvallisuustason antavilla toimenpiteillä, voi hän jättää perustellun hakemuksen EASA:lle osoitteessa European Aviation Safety Agency, Postfach 10 12 53, D-50452 KÖLN, Saksa.

2006-15-08

HONEYWELL INTERNATIONAL INC.

(FORMERLY ALLIEDSIGNAL INC., GARRETT ENGINE DIVISION; GARRETT TURBINE ENGINE COMPANY; AND AIRESEARCH MANUFACTURING COMPANY OF ARIZONA)
Amendment 39-14688

Docket No. FAA-2006-23706; Directorate Identifier 2006-NE-03-AD

PREAMBLE

Effective Date

(a) This airworthiness directive (AD) becomes effective August 24, 2006.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Honeywell International Inc. TPE331-1, -2, -2UA, -3U, -3UW, -5, -5A, -5AB, -5B, -6, -6A, -10, -10AV, -10GP, -10GT, -10P, -10R, -10T, -10U, -10UA, -10UF, -10UG, -10UGR, -10UR, -11U, -12JR, -12UA, -12UAR, and -12UHR turboprop engines with the part numbers (P/Ns) of Woodward fuel control unit (FCU) assemblies listed in this AD, installed. These engines are installed on, but not limited to, the following airplanes:

Manufacturer	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)	3101 and 3201 Series, and HP.137 JETSTREAM MK.1.
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 Wytownia 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.
SHORTS BROTHERS and HARLAND, LTD.	SC7 (SKYVAN) Series.
THRUSH (ROCKWELL COMMANDER)	S-2R.
TWIN COMMANDER (JETPROP COMMANDER)	680, 690 and 695 Series.

Unsafe Condition

(d) This AD results from reports of loss of the fuel control drive, leading to engine overspeed, overtorque, overtemperature, uncontained rotor failure, and asymmetric thrust in multi-engine airplanes. We are issuing this AD to prevent destructive overspeed that could result in uncontained rotor failure, 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 of Engines With Affected FCU Assemblies

(f) At the next scheduled inspection of the fuel control drive, but within 1,000 hours-in-service after the effective date of this AD:

- (1) Perform an initial dimensional inspection of the fuel control drive for wear or damage. Information on spline inspection can be found in Section 72-00-00 of the applicable maintenance manuals.
- (2) Repair or replace the fuel pump, if the spline fails the dimensional inspection, with any serviceable fuel pump.
- (3) Repair or replace the FCU assembly, if the splines fail the dimensional inspection, with a serviceable modified FCU assembly.

Repetitive Inspections of Engines With Affected FCU Assemblies

(g) Thereafter, within 1,000 hours since-last-inspection:

- (1) Perform repetitive dimensional inspections of the fuel control drive, for wear or damage. Information on spline inspection can be found in Section 72-00-00 of the applicable maintenance manuals.
- (2) Repair or replace the fuel pump, if the spline fails the dimensional inspection, with any serviceable fuel pump.
- (3) Repair or replace the FCU assembly if the splines fail the dimensional inspection, with a serviceable modified FCU assembly.

TPE331-1, -2, and -2UA Series Engines

(h) For TPE331-1, -2, and -2UA series engines, replace Woodward FCU assemblies, P/Ns 869199-13/ -20/ -21/ -22/ -23/ -24/-25/ -26/ -27/ -28/ -29/ -31/ -32/ -33/ -34, and -35, with a serviceable, modified FCU assembly the next time the FCU assembly is removed for cause that requires return, or when the FCU assembly requires overhaul, but not later than December 31, 2012. Information on replacement FCU assembly P/Ns, configuration management, rework, and replacement information, can be found in Honeywell Alert Service Bulletin (ASB) No. TPE331-A73-0271, Revision 1, dated January 25, 2006.

TPE331-3U, -3UW, -5, -5A, -5AB, -5B, -6, -6A, -10AV, -10GP, -10GT, -10P, and -10T Series Engines

(i) For TPE331-3U, -3UW, -5, -5A, -5AB, -5B, -6, -6A, -10AV, -10GP, -10GT, -10P, and -10T series engines, replace Woodward FCU assemblies, P/Ns 893561-7/ -8/ -9/ -10/ -11/ -14/ -15/ -16/ -20/ -26/ -27, and -29, and P/Ns 897770-1/ -3/ -7/ -9/ -10/ -11/ -12/ -14 / -15/ -16/ -25/ -26, and -28, with a serviceable, modified FCU assembly the next time the FCU assembly is removed for cause that requires return, or when the FCU assembly requires overhaul, but not later than December 31, 2012. Information on replacement FCU assembly P/Ns, configuration management, rework, and replacement information, can be found in Honeywell ASB No. TPE331-A73-0262, Revision 2, dated June 17, 2005.

TPE331-10, -10R, -10U, -10UA, -10UF, -10UG, -10UGR, -10UR, -11U, -12JR, -12UA, -12UAR, and -12UHR Series Engines

(j) For TPE331-10, -10R, -10U, -10UA, -10UF, -10UG, -10UGR, -10UR, -11U, -12JR, -12UA, -12UAR, and -12UHR series engines, replace Woodward FCU assemblies, P/Ns 897375-2/ -3/ -4/ -5/ -8/ -9/ -10/ -11/ -12/ -13/ -14/ -15/ -16/ -17/ -19/ -21/ -24/ -25/ -26, and -27, and P/Ns 897780-1/ -2/ -3/ -4/ -5/ -6/ -7/ -8/ -9/ -10/ -11/ -14/ -15/ -16/ -17/ -18/ -19/ -20/ -21/ -22/ -23/ -24/ -25/ -26/ -27/ -30/ -32/ -34/ -36/ -37, and -38, and P/Ns 893561-17/ -18, and -19, with a serviceable, modified FCU assembly the next time the FCU assembly is removed for cause that requires return, or when the FCU assembly requires overhaul, but not later than December 31, 2012. Information on replacement FCU assembly P/Ns, configuration management, rework, and replacement information, can be found in Honeywell ASB No. TPE331-A73-0254, Revision 2, dated June 17, 2005.

Definitions

(k) For the purposes of this AD:

- (1) A "serviceable, modified FCU assembly" for engines affected by paragraph (h), (i), or (j) of this AD, is an FCU assembly with a P/N not listed in this AD.
- (2) The "fuel control drive" is a series of mating splines located between the fuel pump and fuel control governor, consisting of the following four drive splines: The fuel pump internal spline, the fuel control external "quill shaft" spline, and the stub shaft internal and external splines.
- (3) A "removal for cause that requires return", for engines affected by paragraph (h), (i), or (j) of

this AD, is an FCU assembly that has displayed an unserviceable or unacceptable operating condition requiring the FCU to be removed from service and sent to a repair or overhaul shop.

Optional Method of Compliance for TPE331 Series Engines Installed On Single-Engine Airplanes

(l) As an optional method of compliance to paragraph (h), (i), or (j) of this AD, for TPE331 series engines installed on single-engine airplanes, having an affected Woodward FCU assembly perform the following steps as necessary:

- (1) Continue repetitive dimensional inspections of the fuel control drive, for wear or damage as specified in paragraph (g)(1) of this AD.
- (2) Repair or replace the fuel pump or FCU assembly if the splines fail the dimensional inspection, with any serviceable fuel pump or FCU assembly.

Terminating Action

(m) Performing an FCU assembly replacement as specified in paragraph (h), (i), or (j) of this AD, is terminating action for the initial and repetitive inspections required by this AD.

Alternative Methods of Compliance

(n) 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.

Related Information

(o) Information pertaining to operating recommendations for applicable engines after a fuel control drive failure is contained in
OI 331-12R5 dated July 10, 2006, for multi-engine airplanes and in
OI 331-18R3 dated July 10, 2006, for single-engine airplanes.

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 14, 2006.

Francis A. Favara, *Manager, Engine and Propeller Directorate, Aircraft Certification Service.*