EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2009-0092 **Date: 17 April 2009** Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.

This AD is issued in accordance with EC 1702/2003, Part 21A.3B. In accordance with EC 2042/2003 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive unless otherwise specified by the Agency [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].

Type Approval Holder's Name :	**Type/Model designation(s) :**
Rolls-Royce Deutschland Ltd & Co KG	Tay 620-15, Tay 650-15 & Tay 651-54 series engines

TCDS Number :	EASA.E.063
Foreign AD :	Not applicable
Supersedure :	None

ATA 72	**Engine – High Pressure Compressor Discs Stages 1, 3, 6, 7 and 12 – Decrease of approved lives**

Manufacturer(s):	Rolls-Royce plc.
Applicability:	Tay 620-15, Tay 650-15 and Tay 651-54 series engines, all engine serial numbers. These engines are known to be installed on, but not limited to, Fokker F28 Mark 0070 and Mark 0100, and Boeing 727 series aeroplanes.
Reason:	Following a review of operational data of the Tay 651-54 engine, it has been found that the actual stress levels in the Tay 651-54 engine High Pressure Compressor (HPC) stages 1, 3, 6, 7 and 12 discs were higher than those originally assumed and therefore the approved lives needed to be reduced. As Tay 651-54 service run HPC discs may be installed on Tay 620-15 and Tay 650-15 engine models, it is necessary to reduce the maximum approved lives of the affected HPC disc serial numbers installed on Tay 620-15 and Tay 650-15 engines as well. The approved lives of the affected HPC stages 1, 3, 6, 7 and 12 discs specified in this Airworthiness Directive supersede the approved lives given in the Time Limits Manuals, Chapter 05-10-01. Exceeding of the approved life limits could potentially result in non-contained disc failure.

<table>
<tr><td>Effective Date:</td><td>04 May 2009</td></tr>
<tr><td>Required Action(s) and Compliance Time(s):</td><td>Within 30 days after the effective date of this AD, amend the approved Operator’s maintenance programme to incorporate the new life as follows:

<u>For Tay 651-54 Engines:</u>

The maximum approved lives (MAL) of the High Pressure Compressor (HPC) rotor discs are reduced to :

<table>
<tr><th>For</th><th>Part Number</th><th>the MAL is</th></tr>
<tr><td>HPC Stage 1 Disc</td><td>JR18049</td><td>18,800 cycles</td></tr>
<tr><td>HPC Stage 3 Disc</td><td>JR18743</td><td>18,100 cycles</td></tr>
<tr><td>HPC Stage 6 Disc</td><td>JR18748</td><td>19,300 cycles</td></tr>
<tr><td>HPC Stage 7 Disc</td><td>JR17365</td><td>17,300 cycles</td></tr>
<tr><td>HPC Stage 12 Disc</td><td>JR31928</td><td>18,900 cycles</td></tr>
</table>
<u>For Tay 620-15 and Tay 650-15 Engines:</u>

The maximum approved lives (MAL) of certain High Pressure Compressor (HPC) rotor discs are reduced.

The disc serial numbers and the maximum approved lives are defined in Rolls-Royce Deutschland Non-Modification Service Bulletin TAY-72-A1740 Initial Issue.</td></tr>
<tr><td>Ref. Publications:</td><td>Rolls-Royce Deutschland Alert NMSB TAY-72-A1740 Initial Issue

Rolls-Royce Deutschland Time Limits Manuals T-TAY-2RR (Tay 620-15)

Rolls-Royce Deutschland Time Limits Manuals T-TAY-3RR (Tay 650-15)

Rolls-Royce Deutschland Time Limits Manuals T-TAY-5RR (Tay 651-54)

The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.</td></tr>
<tr><td>Remarks :</td><td>1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.

2. This AD was posted on 25 February 2009 as PAD 09-046 for consultation until 25 March 2009. The Comment Response Document can be found at: http://ad.easa.europa.eu/

3. Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA. E-mail ADs@easa.europa.eu.

4. For any question concerning the technical content of the requirements in this AD, please contact:
Rolls-Royce Deutschland Ltd & Co KG
Eschenweg 11,D-15827 Blankenfelde-Mahlow, Germany
Telephone: +49 (0) 33 7086 1768, Fax +49 (0) 33 7086 3356</td></tr>
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