



**Airworthiness  
Directive**  
**D-2004-313R5**

**Luftfahrt-Bundesamt**  
Airworthiness Directive Section  
Hermann-Blenk-Str. 26  
38108 Braunschweig  
G E R M A N Y

*This Airworthiness Directive supersedes the Airworthiness Directives D-2004-313R4 of 31 August 2005*

**Rolls-Royce Deutschland**

**Effective Date: 15 November 2005**

**Affected:**

Kind of aeronautical product:

Manufacturer:

Type:

Models affected:

Aircraft Engine

Rolls-Royce plc., Derby, United Kingdom and

Rolls-Royce Deutschland Ltd & Co KG, Dahlewitz, Germany

TAY 620 and TAY 650

All TAY 611-8, TAY 620-15, TAY 620-15/20, TAY 650-15, TAY 650-15/10 and TAY 651-54 turbine engines, that have at least one Low Pressure (LP) compressor case ice impact panel of Service Bulletin TAY-72-1326 standard installed.

Note: LP compressor case ice impact panels of Service Bulletin TAY-72-1326 standard are defined in the relevant manufacturer Service Bulletin.

All TAY 611-8C turbine engines prior to Engine Serial Number 85078.

German Type Certificate No.:

6327 and 6328

**Subject:**

Repeated visual inspection to determine the bonding conditions of the LP compressor case ice impact panels. Introduction of new LP compressor case ice impact panels with additional retention features.

**Reason:**

An event has occurred on a Tay 620-15/20 powered aircraft where all the LP compressor case ice impact panels of Rolls-Royce Service Bulletin TAY-72-1326 standard on both engines were released in flight. The released LP compressor case ice impact panels were caught in front of the fan outlet guide vanes, resulting in bypass duct blockage and significant thrust loss.

The actions specified by this Airworthiness Directive are intended to make sure that the bonding of these LP compressor case ice impact panels complies with the design intent.

**Action:**

The following actions are required by this Airworthiness Directive:

For Tay 611-8, Tay 620-15, Tay 620-15/20, Tay 650-15, Tay 650-15/10 and Tay 651-54 turbine engines:

1. Repeated examination of the bonding conditions of the LP compressor ice case impact panels in accordance with the accomplishment instructions of Rolls-Royce Service Bulletin TAY-72-1638 Revision 3 or TAY-72-1639 Revision 2.
2. Repair or replacement of all low pressure compressor ice impact panels if any visible movement, rocking motion or re-appearing moisture on the LP compressor case ice impact panel have been detected during the above examination in accordance with the accomplishment instructions of Rolls-Royce Service Bulletin TAY-72-1638 Revision 3 or TAY-72-1639 Revision 2.
3. Rework of affected LP compressor case ice impact panels in accordance with the accomplishment instructions of Rolls-Royce Service Bulletin TAY-72-1638 Revision 3 or TAY-72-1639 Revision 2.
4. Introduction of new LP compressor case ice impact panels with additional retention features in accordance with the accomplishment instructions of Rolls-Royce Service Bulletin TAY-72-A1643 Revision 1 or TAY-72-A1650 Initial Issue.

For Tay 611-8C turbine engines:

1. Introduction of new LP compressor case ice impact panels with additional retention features in accordance with the accomplishment instructions of Rolls-Royce Service Bulletin TAY-72-A1650 Initial Issue.

All necessary actions must be performed on the basis of the referenced manufacturer Service Bulletins.

**Compliance:**

All compliance times of the mentioned actions have to be in compliance with the referenced manufacturer Service Bulletins.

**Technical publication of the manufacturer:**

Rolls-Royce Service Bulletins TAY-72-1638 Revision 3 of 25 February 2005, TAY-72-1639 Revision 2 of 21 September 2004, TAY-72-A1643 Revision 1 of 02 November 2005 and TAY-72-A1650 Initial Issue of 02 November 2005. These Service Bulletins become herewith part of this AD and can be obtained from:

Rolls-Royce Deutschland Ltd & Co KG  
Service Engineering  
Eschenweg 11, Dahlewitz  
15827 Blankenfelde-Mahlow  
G E R M A N Y  
Fax + 49 (0) 33-708-63615

**EASA-Approval**

Approved by the European Aviation Safety Agency (EASA) under approval no. 2005-6399 on 02 November 2005.

SUPERSEDED