



△ Measurements are to be taken at at least three locations on the skin panel of the vertical fin. Care has to be taken that the external calipers are held squarely to the skin panel wall while measurements are being taken, since tilting of the calipers can lead to false results. If the panel thickness, including the primer coating, is at least 0.778 mm (0.03063 inch) at every measured location, no further action is necessary.

Vertical Fin-Skin Panelling
Figure 1

(b) If the wall thickness, including the primer coating, of the panelling is less than 0.778 millimeter (0.03063 inch) at any of the measured locations, replace the vertical fin with an airworthy part before further flight.

(c) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Contact the Safety Management Group, Rotorcraft Directorate, FAA, for information about previously approved alternative methods of compliance.

(d) This amendment becomes effective on July 30, 2004.

Note 2: The subject of this AD is addressed in Luftfahrt-Bundesamt (Federal Republic of Germany) AD 2003-219, dated August 21, 2003.

Issued in Fort Worth, Texas, on June 16, 2004.

David A. Downey,
Manager, Rotorcraft Directorate, Aircraft
Certification Service.

[FR Doc. 04-14318 Filed 6-24-04; 8:45 am]

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**DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration**

14 CFR Part 39

[Docket No. 2002-NE-19-AD; Amendment
39-13693; AD 2004-13-11]

RIN 2120-AA64

**Airworthiness Directives; Rolls-Royce
plc RB211 Trent 875-17, Trent 877-17,
Trent 884-17, Trent 884B-17, Trent
892-17, Trent 892B-17, and Trent 895-
17 Series Turbofan Engines**

AGENCY: Federal Aviation
Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new
airworthiness directive (AD) for Rolls-
Royce plc (RR) RB211 Trent 875-17,

Trent 877-17, Trent 884-17, Trent 892-17, Trent 892B-17, and Trent 895-17 series turbofan engines that have not incorporated RR Service Bulletin (SB) No. RB.211-72-D495, dated February 7, 2003. This AD requires initial and repetitive visual inspections or ultrasonic inspections of the intermediate pressure (IP) compressor rear stubshaft and IP turbine shaft for load-bearing spline flank wear, and replacement of these shafts if necessary. This AD results from reports of load-bearing spline flank wear of the IP compressor rear stubshaft and IP turbine shaft, revealed at inspection during overhaul. We are issuing this AD to prevent the loss of drive between the IP turbine and the IP compressor, which could result in a turbine rotor overspeed condition, possible uncontained engine failure, and damage to the airplane.

DATES: This AD becomes effective July 30, 2004.

ADDRESSES: You can get the service information identified in this AD from Rolls-Royce plc, P.O. Box 31 Derby, DE24 8BJ, United Kingdom; telephone 011-44-1332-242424; fax 011-44-1332-249936.

You may examine the AD docket at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA.

FOR FURTHER INFORMATION CONTACT: Christopher Spinney, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299, telephone (781) 238-7175; fax (781) 238-7199.

SUPPLEMENTARY INFORMATION: The FAA proposed to amend 14 CFR part 39 with a proposed airworthiness directive (AD). The proposed AD applies to RR RB211 Trent 875-17, Trent 877-17, Trent 884-17, Trent 892-17, Trent 892B-17, and Trent 895-17 series turbofan engines. We published the proposed AD in the **Federal Register** on January 27, 2003 (68 FR 3836). That action proposed to require initial and repetitive visual inspections for load-bearing spline flank wear of the IP compressor rear stubshaft and IP turbine shaft, and replacement of these shafts if necessary.

Comments

We provided the public the opportunity to participate in the development of this AD. We have considered the comments received.

Request To Use an Alternate Ultrasonic Inspection

Three commenters request that we incorporate the intent of the latest issue of RR Mandatory Service Bulletin (MSB)

No. RB.211-72-D339, Revision 1, dated March 28, 2003. The commenters ask that they be allowed to use an alternate ultrasonic inspection of the IP compressor-IP turbine shaft spline wear with a reduced repeat inspection time interval, introduced by the revised MSB.

We agree. We have reviewed the latest revision of RR MSB No. RB.211-72-D339, Revision 2, dated June 20, 2003, with RR and the Civil Aviation Authority (CAA), which is the airworthiness authority for the United Kingdom (U.K.), and we have approved the alternate ultrasonic inspection in this AD. Also, because that MSB adds the Trent 884B-17 engine to the applicability, we have added that engine to this AD applicability. We have concluded that since the proposal already applies to the Trent 884-17, adding the Trent 884B-17 engine would not require us to issue a supplemental notice of proposed rulemaking. Currently, there are no Trent 884B-17 engines installed on airplanes of U.S. registry.

Request To Change Compliance Intervals to Cycles Accumulated on Component

One commenter requests that we change compliance intervals from cycles accumulated on the engine, to cycles accumulated on the component. The commenter states that components are sometimes switched between engines, making cycle counting difficult.

We agree. Cycle counting on the component is a more precise way to set the inspection intervals and is introduced in this proposal. Also, this AD corrects an error in the NPRM where the initial inspection interval was 4,500 cycles from the effective date of the AD, and should have been 4,500 cycles-since-new (CSN).

Initial Inspection Drawdown Added

We have added an initial inspection drawdown of 100 cycles for engines that have not had an initial inspection, but are over the initial inspection threshold. We are not aware of any engines over the initial threshold and that have not had the initial inspection.

Clarification of Engine Applicability

We have clarified the wording in the engine applicability, to state that the AD applies to engines that have not incorporated RR SB No. RB.211-72-D495, dated February 7, 2003. That SB incorporates a modification for positive lubrication of the IP compressor rear stubshaft and IP turbine shaft.

Conclusion

We have carefully reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting the AD with the changes described previously. We have determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD. The assigned paragraph letters in the regulatory section have been changed from what appeared in the proposal, as we are continuing our introduction of plain language into our documents.

Costs of Compliance

There are about 350 RR RB211 Trent 875-17, Trent 877-17, Trent 884-17, Trent 892-17, Trent 892B-17, and Trent 895-17 series turbofan engines of the affected design in the worldwide fleet. We estimate that 90 engines installed on airplanes of U.S. registry would be affected by this AD. We also estimate that it would take about 0.5 work hours per engine to perform the proposed inspections, and that the average labor rate is \$65 per work hour. Based on these figures, we estimate the total cost to U.S. operators for performing one inspection to be \$2,925.

Regulatory Findings

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866;
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a summary of the costs to comply with this AD and placed it in the AD Docket. You may get a copy of this summary by sending a request to us at the address listed under **ADDRESSES**. Include "AD Docket No. 2002-NE-19-AD" in your request.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

Adoption of the Amendment

■ Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration amends 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

■ 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

■ 2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2004-13-11 Rolls-Royce plc: Amendment 39-13693. Docket No. 2002-NE-19-AD.

Effective Date

(a) This AD becomes effective July 30, 2004.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Rolls-Royce plc (RR) RB211 Trent 875-17, Trent 877-17, Trent 884-17, Trent 892-17, Trent 892B-17, and

Trent 895-17 series turbofan engines that have not incorporated RR SB No. RB.211-72-D495, dated February 7, 2003. These engines are installed on, but not limited to, Boeing 777 series airplanes.

Unsafe Condition

(d) This AD results from reports of load-bearing spline flank wear of intermediate pressure (IP) compressor rear stubshaft and intermediate pressure (IP) turbine shaft, revealed at inspection during overhaul. We are issuing this AD to prevent the loss of drive between the IP turbine and the IP compressor, which could result in a turbine rotor overspeed condition, possible uncontained engine 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 Visual Inspection of the IP Turbine Shaft and IP Compressor Stubshaft

(f) At the next accessibility of the IP turbine shaft, not to exceed the later of 4,500 cycles-since-new (CSN) or 100 cycles after the effective date of this AD on the IP turbine shaft, do the following:

(1) Inspect the IP turbine shaft splines for wear. Information on inspecting IP turbine

shaft splines can be found in RR Mandatory Service Bulletin (MSB) No. RB.211-72-D339, Revision 2, dated June 20, 2003.

(2) If the IP turbine shaft spline wear measured in paragraph (f)(1) of this AD is greater than 0.005 inch, remove the IP turbine shaft from service.

(3) If the IP turbine shaft spline wear measured in paragraph (f)(1) of this AD is greater than 0.001 inch, inspect IP compressor stubshaft splines for wear. Information on inspecting IP compressor stubshaft splines can be found in RR MSB No. RB.211-72-D339, Revision 2, dated June 20, 2003.

(4) If the IP compressor stubshaft spline wear measured in paragraph (f)(3) of this AD is greater than 0.005 inch, remove the IP compressor stubshaft from service.

(5) For the purposes of this AD, accessibility of the IP turbine shaft is defined as removal of the IP turbine module from the engine.

Repetitive Visual Inspections of the IP Turbine Shaft and IP Compressor Stubshaft

(g) Perform repetitive visual inspections of the IP turbine shaft and IP compressor stubshaft using the procedures specified in paragraph (f)(1) through (f)(4) of this AD, at each accessibility, not to exceed the applicable repetitive inspection intervals in the following Table 1:

TABLE 1.—REPETITIVE VISUAL INSPECTION INTERVALS

Results of last inspection	Reinspection interval
(1) If wear was less than 0.001 inch on IPT shaft splines and IPC stubshaft splines.	Reinspect within 4,500 cycles-since-last visual inspection (CSLI) of the IPT shaft splines.
(2) If wear was 0.001 inch or greater on IPT shaft splines or on the IPC stubshaft splines.	Reinspect within 2,000 CSLI of the IPT shaft splines or IPC stubshaft, whichever occurs first.
(3) If an ultrasonic measurement of wear was less than 0.013 inch	Reinspect within 3,000 cycles since last ultrasonic inspection.

Optional Initial Ultrasonic Inspection of the IPT Shaft and IPC Stubshaft

(h) As an option to the initial visual inspection specified in paragraph (f) of this AD, do the following:

(1) At the later of 4,400 CSN or 100 cycles after the effective date of this AD on the IPT shaft, ultrasonically inspect the IP compressor stubshaft. Information on the ultrasonic inspection can be found in RR

MSB No. RB.211-72-D339, Revision 2, dated June 20, 2003.

(2) If wear is greater than 0.013 inch, remove engine from service within an additional 100 cycles-in-service.

Optional Repetitive Ultrasonic Inspections of the IP Turbine Shaft and IP Compressor Stubshaft

(i) As an option to the repetitive visual inspections specified in paragraph (g) of this AD, do the following:

(1) Ultrasonically inspect the IP compressor stubshaft, using the repetitive inspection intervals in Table 2 of this AD. Information on the ultrasonic inspection can be found in RR MSB No. RB.211-72-D339, Revision 2, dated June 20, 2003.

TABLE 2.—REPETITIVE ULTRASONIC INSPECTION INTERVALS

Results of last inspection	Reinspection interval
(i) If visually inspected wear was less than 0.001 inch on IPT shaft splines and IPC stubshaft splines.	Reinspect within 4,400 cycles-since-last visual inspection (CSLVI) of the IPT shaft splines.
(ii) If visually inspected wear was 0.001 inch or greater on IPT shaft splines or on the IPC stubshaft splines.	Reinspect within 2,000 CSLVI of the IPT shaft splines or IPC stubshaft, whichever occurs first.
(iii) If ultrasonically inspected wear was less than 0.013 inch	Reinspect within 3,000 since last ultrasonic inspection.

(2) If wear is greater than 0.013 inch, remove engine from service within an additional 100 cycles-in-service.

Alternative Methods of Compliance

(j) The Manager, Engine 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) None.

Related Information

(1) Rolls-Royce plc MSB No. RB.211-72-D339, Revision 2, dated June 20, 2003, pertains to the subject of this AD.

Issued in Burlington, Massachusetts, on June 18, 2004.

Francis A. Favara,

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

[FR Doc. 04-14317 Filed 6-24-04; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Part 39**

[Docket No. 2001-SW-15-AD; Amendment 39-13687; AD 2001-24-07 R1]

RIN 2120-AA64

Airworthiness Directives; Agusta S.p.A. Model A109C, A109E, and A109K2 Helicopters

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment revises an existing airworthiness directive (AD), for the Agusta S.p.A. (Agusta) Model A109C, A109E, and A109K2 helicopters, that currently requires inspecting the main rotor blade (blade) tip cap for bonding separation and a crack, and also requires a tap inspection of the tip cap for bonding separation in the blade bond area and a dye-penetrant inspection of the tip cap leading edge along the welded joint line of the upper and lower tip cap skin shells for a crack. This amendment requires those same actions, but corrects a blade part number (P/N) that was stated incorrectly in the Applicability section of the existing AD. This amendment is prompted by the need to correct a blade P/N. The actions specified by this AD are intended to prevent failure of a blade tip cap, excessive vibration, and subsequent loss of control of the helicopter.

DATES: Effective July 30, 2004.

The incorporation by reference of certain publications listed in the regulations was approved previously by the Director of the Federal Register as of January 7, 2002.

ADDRESSES: The service information referenced in this AD may be obtained from Agusta, 21017 Cascina Costa di Samarate (VA) Italy, Via Giovanni Agusta 520, telephone 39 (0331) 229111, fax 39 (0331) 229605-222595. This information may be examined at the FAA, Office of the Regional Counsel,

Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas; 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.

FOR FURTHER INFORMATION CONTACT:

Richard Monschke, Aviation Safety Engineer, FAA, Rotorcraft Directorate, Rotorcraft Standards Staff, Fort Worth, Texas 76193-0110, telephone (817) 222-5116, fax (817) 222-5961.

SUPPLEMENTARY INFORMATION:

A proposal to amend 14 CFR part 39 by revising AD 2001-24-07, Amendment 39-12523 (66 FR 60144, December 3, 2001), for the specified Agusta helicopters, was published in the **Federal Register** on January 27, 2004 (69 FR 3859). The action proposed to correct a P/N that was stated incorrectly in the previous AD, and to require:

- A tap inspection of the upper and lower sides of the tip cap for bonding separation and in the tip cap to blade bond area;
- A visual inspection of the upper and lower side of the blade tip cap for swelling or deformation; and
- A dye-penetrant inspection of the tip cap leading edge along the welded joint line of the upper and lower tip cap skin shells for a crack.

AD 2001-24-07 superseded AD 98-19-04, Amendment 39-11039 (64 FR 7494, February 16, 1999), Docket No. 98-SW-40-AD. AD 98-19-04 required inspecting between the metal shells and honeycomb core for bonding separation, visually inspecting the blade tip for swelling or deformation, and visually inspecting the welded bead along the leading edge of the blade tip cap for a crack. AD 2001-24-07 retained those requirements, and added a requirement for a tap inspection of the tip cap for bonding separation in the blade bond area, and a dye-penetrant inspection of the tip cap leading edge along the welded joint line of the upper and lower tip cap skin shells for a crack. Installing a tip cap, P/N 709-0103-29-109, on an affected blade is a terminating action for the requirements of the existing AD for that blade.

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were received on the proposal or the FAA's determination of the cost to the public. The FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

The FAA estimates that this AD will affect 44 helicopters of U.S. registry, and

the actions will take approximately 6 work hours per helicopter to accomplish the initial and repetitive inspection at an average labor rate of \$65 per work hour. Based on these figures, we estimate the total cost impact of the AD on U.S. operators to be \$17,160, assuming that no blade will need to be replaced as a result of these inspections.

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption **ADDRESSES**.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

■ Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39—AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

■ 2. Section 39.13 is amended by removing Amendment 39-12523 (66 FR 60144), and by adding a new airworthiness directive (AD), Amendment 39-13687, to read as follows:

2001-24-07 R1 Agusta S.p.A.: Amendment 39-13687. Docket No. 2001-SW-15-AD. Revises AD 2001-24-07, Amendment 39-12523.

Applicability: Model A109C, A109E, and A109K2 helicopters, with main rotor blade