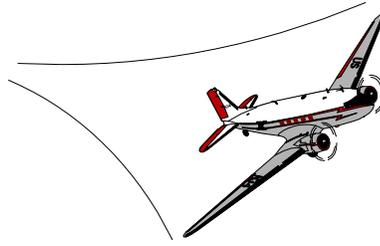


SPECIAL AIRWORTHINESS INFORMATION BULLETIN



U.S. Department
of Transportation

**Federal Aviation
Administration**

NE-04-56
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Aircraft Certification Service
Washington, DC

www.faa.gov/certification/aircraft

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) advises owners, operators, and repair stations of recently issued service information regarding the compressor adapter coupling for certain (see below) **Rolls-Royce Corporation (RRC) [formerly Allison Engine Company] Model 250 series engines**.

Manufacturer	Model(s)
Rolls-Royce Corporation (RRC)	250-C20, -C20B, -C20J, -C20F, -C20W, -C20S and 250-B17 series engines
Installed on, but not limited to:	
Augusta	A109, A109A and A109A II
B-N Group Ltd.	BN-2T
Bell	206A, 206B and 206L
Enstrom	TH-28, 480 and 480B
MDHI	369D, 369E, 369H, 369HM, 369HS and 369HE
Eurocopter Deutschland	BO-105C and BO-105S
Eurocopter France	AS355E, AS355F, AS355F1 and AS355F2
Schweizer	269D

Background

The FAA has received reports of failures of Rolls-Royce compressor adapter couplings (part numbers 23039791-1, -2, and -3). The compressor adapter coupling is part of the shafting system between the gas generator turbine and the compressor. **Failure of this part results in immediate and total loss of power from the engine.** To minimize the dangers posed by a failure of the compressor adapter coupling, these engines should be maintained by carefully and completely following the current Rolls-Royce Corporation service information, Commercial Engine Bulletin (CEB) CEB-A-1392 (for the 250-C20 engine models listed above) and TP-CEB-A-1334 (for the 250-B17 series engines).

During overhaul, some new compressor adapter couplings were inadvertently installed in impellers that have fretting damage on the mating surface. After the impeller and compressor adapter coupling are separated for any reason, the correct procedure is to machine the impeller prior to reassembly. The machining operation cleans the impeller surface that fits to the compressor adapter coupling. Fretting is not allowed on the impeller after machining and prior to installation of the new

compressor adapter coupling. The appropriate version of the compressor adapter coupling (-1, -2, or -3) must then be installed to achieve the proper fit with the impeller. Failure to install the proper version compressor adaptor coupling may lead to part failure.

Analysis is continuing on this issue and we are considering a number of alternatives, including mandatory action related to the above manufacturer service documents and recommendations.

Recommendation

We highly recommend that you follow the actions specified in RRC's service information documents, CEB-A-1392 and TP-CEB-A-1334, when servicing and maintaining the compressor adapter coupling and related assemblies.

For Further Information Contact

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For Service Bulletin Information Contact

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