



SPECIAL AIRWORTHINESS INFORMATION BULLETIN

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SUBJ: Engine Controls

SAIB: NE-11-22

Date: February 23, 2011

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) alerts you, owners and operators of airplanes equipped with **Rolls-Royce Corporation AE 3007C and AE 3007C1 turbofan engines** of the potential for uncommanded engine in-flight shutdowns (IFSDs). These engines are installed on, but not limited to, Cessna Citation 750 airplanes. This SAIB applies to AE 3007C and AE 3007C1 engines controlled by Full Authority Digital Electronic Control (FADEC) Rolls-Royce hardware part number 23073177 that have not incorporated Service Bulletin No. AE3007C-73-046. At this time, the airworthiness concern is not an unsafe condition that would warrant airworthiness directive action under Title 14 of the Code of Federal Regulations (14 CFR) part 39.

Background

This SAIB addresses a potential cause for engine IFSD due to uncommanded reverse voltages being applied to the engine's fuel shutoff valve (contained within the fuel pump metering unit). This reverse voltage is caused by a permanent magnet alternator lead short or an internal FADEC power supply component malfunction. There have been reports of three uncommanded engine shutdowns in-service, which were caused by this reverse voltage condition.

Recommendations

To prevent uncommanded reverse voltages from causing an engine IFSD, we recommend that you perform Rolls-Royce Service Bulletin No. AE3007C-73-046 (any FAA-approved revision) at the next maintenance opportunity. This Service Bulletin installs a new FADEC diode adapter, part number 86632307, which connects between the aircraft harness and the J4 connector of the FADEC.

Additionally, you should ensure that replacement FADEC units with Rolls-Royce hardware part number 23073177 installed into AE 3007C and AE 3007C1 engines are in compliance with Rolls-Royce Service Bulletin No. AE3007C-73-046. Installation of replacement FADEC units not in compliance with this Service Bulletin will increase your risk of an engine IFSD.

For Further Information Contact

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For Related Service Information Contact

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