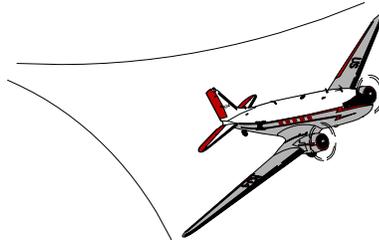


SPECIAL AIRWORTHINESS INFORMATION BULLETIN



U.S. Department
of Transportation

**Federal Aviation
Administration**

CE-04-76
August 12, 2004

Aircraft Certification Service
Washington, DC

We post SAIBs on the internet at www.airweb.faa.gov

This is information only. Recommendations are not mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) alerts you, owners and operators of **airplanes that may have a Rolls-Royce or Packard Merlin engine** installed, that the Civil Aviation Authority (CAA) of the United Kingdom (UK), Safety Regulation Group, issued a Letter to Owners/Operators (LTO) Number 2440, on May 29, 2003, concerning these engines. The LTO is attached for reference.

Background

LTO 2440 was issued as a safety recommendation after a fatal accident involving a Spitfire airplane. The recommendation involves periodic inspection of Rotax magnetos installed on Merlin engines. We are not aware of any service problems related to this issue in U.S. registered airplanes. The Merlin engine is used in airplanes on the U.S. registry that are certificated in the Limited Category and in many military surplus experimental airplanes. We have no record of Rolls-Royce or Packard Merlin engines having a U.S. type certificate. Limited category types were in many cases approved along with their original military engines.

Recommendation

We highly recommend that owners and operators of airplanes (**which includes versions of the North American P-51 and F-51 Mustang, British Spitfire and possibly other types**) that use the Merlin engine determine if they should initiate inspections and maintenance in accordance with LTO 2440. Additional information should be obtained from the contacts listed on the LTO. The CAA website is <http://www.caa.co.uk>.

This SAIB is for information only. It does not prevent the FAA from initiating rulemaking action in the future if the situation so dictates.

For Further Information Contact

Karl Schletzbaum, Aerospace Engineer, FAA Small Airplane Directorate, Room 301, 901 Locust, Kansas City, Missouri 64106; phone: (816) 329-4146; fax: (816) 329-4090; email: karl.schletzbaum@faa.gov

Safety Regulation Group
Applications and Certification Section

29 May 2003

Our Ref 9/97/CtAw/278

LETTER TO OWNERS/OPERATORS NO 2440
ROLLS-ROYCE AND PACKARD MERLIN SERIES ENGINES
INSPECTION AND OVERHAUL OF ROTAX MAGNETOS

Following the investigation into the fatal accident of a Spitfire aircraft in June 2001, the following overhaul and inspection recommendations applicable to Rolls-Royce and Packard Merlin engines equipped with Rotax magnetos, are promulgated to owners/operators and BCAR A8-20 approved organisations. It is recommended that this information be included in the Aircraft Maintenance Programme and the first Magneto inspection be performed on all engines within 50 operating hours of the date of this LTO or one year whichever is the sooner.

1. At periods not exceeding 12 months inspect the Rotax Magnetos. The inspection should include visual checks of the:
 - (a) Setting, condition and function of the contact breaker points.
 - (b) Condition of the insulator.
 - (c) Correct lubrication
 - (d) Anti-tracking paint condition
 - (e) Other apparent faults and signs of deterioration
2. Copper inserts are to be used in the high-tension leads. The use of aluminium or any other metal is not permitted.
3. The magneto insulator, Part Number N72791, should be replaced at each magneto overhaul.
4. Magneto overhaul should be accomplished at half the 500-hour engine overhaul life, i.e. at every 250 hours.

Enquiries regarding this LTO should be referred to Mr C Denis, Propulsion Department – 1E (Telephone No 01293 573641) at the address shown.

R J TEW
Airworthiness Directive Co-ordinator

Civil Aviation Authority
Floor 1E Aviation House Gatwick Airport South West Sussex England RH6 0YR
Phone +44 (0) 1293 573149 Fax +44 (0) 1293 573993