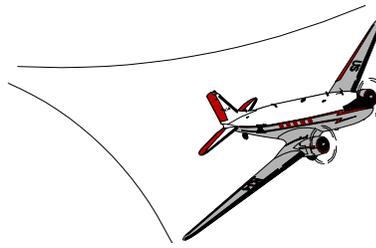


SPECIAL AIRWORTHINESS INFORMATION BULLETIN

REGULATORY SUPPORT DIVISION
P.O. BOX 26460
OKLAHOMA CITY, OKLAHOMA 73125-0460



U.S. Department
of Transportation
**Federal Aviation
Administration**

No. CE-00-18
March 30, 2000

SAIB's are posted on the internet at <http://av-info.faa.gov>

This is issued for informational purposes only and any recommendation for corrective action is not mandatory.

Introduction:

The purpose of this Special Airworthiness Information Bulletin (SAIB) is to advise owners and operators of Allison Engine Company AE 3007A series engines (registered trade name Rolls-Royce Allison) of upcoming configuration improvements concerning engine caused cabin smoke or odor events. This engine series is installed on, but not limited to Embraer EMB-135 and EMB-145 series airplanes.

Background:

Some instances of smoke or odor in the aircraft cabin have been produced by oil leaks or fuel vapors originating from Rolls-Royce Allison AE 3007A Series engines. This SAIB is being sent to operators to provide information regarding configuration modifications or inspections that are being made available to address engine related sources for such events.

The related Service Bulletins will be issued or re-issued classified as ALERT. Engine inspections and modifications which will be incorporated at Approved Maintenance Centers for all engines inducted May 2000 or later are as follows:

- Front frame to front sump interface improvements, Rolls-Royce Service Bulletin AE 3007A-72-143 (bulletin published initially 6 August 1999 -- Production incorporation September 1999 beginning with engine S/N CAE31081 [AE 3007A] and CAE311292 [AE 3007A1 Series]).
- Number 4 labyrinth seal inspection, criteria to be issued April 2000, to be conducted when the front frame/front sump modifications are addressed via Service Bulletin AE 3007A-72-143.
- Fan (zero) carbon seal with new design lip seal, Rolls-Royce Alert Service Bulletin AE 3007A-A-72-156 (to be issued by 1 April 2000 -- Production incorporation March 2000 beginning with engine serial number CAE311396).

Also, modifications related to the fuel nozzle tip will be released to production in May 2000. Field returned nozzles processed for scheduled maintenance will be upgraded starting in May 2000 at a rate subject to supplier rework capacity.

Recommendation:

The FAA recommends that owners/operators of AE 3007A engines have the engine modifications listed above (other than fuel nozzle improvements) incorporated when the engine is inducted into an Approved Maintenance Center in May, 2000 or later. Fuel nozzle improvements will be managed by Rolls-Royce Allison and the nozzle supplier without need for specific operator action.

Rolls-Royce Allison will be contacting selected airlines for in-service operational data of the initial installations of this modified nozzle.

The FAA also recommends owners/operators of AE 3007A engines be aware of the improvements being made to the engine Fault Isolation Manual (FIM). To aid diagnostics and actions if a odor/smoke event is determined to be caused by the engine, FIM Task 79-37-00-810-808 dated 27 Oct 99 or later, should be used for isolation of engine caused cabin smoke or odor events. Other tasks in the Fault Isolation Manual help to isolate these same leakage sources as indicated by symptoms of starting problems or visible leakage.

For Further Information Contact:

Kyri Zaroyiannis, Aerospace Engineer, FAA, Chicago Aircraft Certification Office, Propulsion Branch, ACE-118C; 2300 East Devon Avenue, Des Plaines, IL 60018; telephone: (847) 294-7836; facsimile: (847) 294-7834

CHANGE OF ADDRESS NOTICE

Airworthiness Directives (AD) for a particular make and model of aircraft are mailed to the aircraft owners using the permanent mailing address on file with the FAA Registry. If you need to change your address, **YOU MUST SIGN THIS FORM AND MAIL TO FAA Aircraft Registration.** A revised Certificate of Aircraft Registration will be mailed to you without charge.

SIGNATURE REQUIREMENTS:

- Individual Owner must sign
- Partnership, a general partner must sign
- Co-owner, each co-owner must sign continuing as necessary on an attached sheet
- Government, any authorized person may sign

MAIL TO:

**FAA Aircraft Registry, AFS-750
Mike Monroney Aeronautical Center
PO Box 25504
Oklahoma City, OK 73125-0504**

AIRCRAFT REGISTRATION #:	SERIAL #:
MAKE:	MODEL:

ADDRESS CHANGE REQUESTED

CANCELLATION OF REGISTRATION REQUESTED

NAME OF CERTIFICATE HOLDER			<p align="center">(Check applicable block, sign and date)</p> <p><input type="checkbox"/> 1. Aircraft Sold To: (Purchaser's name and address)</p> <p>_____</p> <p>_____</p> <p>_____</p> <p><input type="checkbox"/> 2. Aircraft Destroyed/Scrapped</p> <p><input type="checkbox"/> 3. Aircraft Exported To: _____</p> <p><input type="checkbox"/> 4. Other, Specify _____</p>		
STREET					
CITY	STATE	ZIP			
COUNTRY					
SIGNATURE (In Ink)	TITLE	DATE	SIGNATURE (In Ink)	TITLE	DATE

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**Federal Aviation
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