

# AIRWORTHINESS DIRECTIVE

released by DIRECTION GENERALE DE L'AVIATION CIVILE

*Inspection and/or modifications described below are mandatory. No person may operate a product to which this Airworthiness Directive applies except in accordance with the requirements of this Airworthiness Directive.*

Translation of 'Consigne de Navigabilité' ref. : 2001-240(B)  
In case of any difficulty, reference should be made to the French original issue.

## CFM INTERNATIONAL

### CFM56 series turbofan engines

No. 4 bearing (ATA 72)

#### 1. APPLICABILITY

This Airworthiness Directive (AD) applies to CFM56 turbofan engines installed on BOEING 737, BOEING KC135, McDONNELL DOUGLAS DC8, AIRBUS A319, A320, A321, A340 or other aeroplanes. The list of affected engines is given in referenced Service Bulletins.

#### 2. REASONS

A batch of 47 No. 4 bearings SKF P/N 305-355-717-0 received an inadequate heat treatment. Two failures occurred leading to engine replacement.

New information about CFM56-7B with the DMS option led to the cancellation of AD 2001-207(B) and to the issuing of this AD.

#### 3. MANDATORY ACTIONS AND COMPLIANCE

##### 3.1. Reduced interval for chip detector inspection

##### 3.1.1. For CFM56-2B, CFM56-2, CFM56-3 and CFM56-7 without DMS option

Between 50 to 75 flight hours following the effective date of this Airworthiness Directive, inspect the aft sump Magnetic Chip Detector. Repeat the inspection every 50 to 75 flight hours as long as the No. 4 bearing has not been replaced.

##### 3.1.2. For CFM56-5B

Between 50 to 75 flight hours following the effective date of this Airworthiness Directive, check the Electronic Magnetic Chip Detector indication. Repeat the check every 50 to 75 flight hours as long as the No. 4 bearing has not been replaced.

##### 3.1.3. For CFM56-5C

After each flight check for the presence of class 2 fault messages "magnetic chip detected" through aircraft system as long as the No. 4 bearing has not been replaced.

n/JFS

.../...

June 13, 2001

CFM INTERNATIONAL  
CFM56 series turbofan engines

2001-240(B)

**3.1.4.** For CFM56-7B with DMS option

No later than on the effective date of this Airworthiness Directive, check FMC-MCDU for message 79-21141 or 79-21142. Repeat the check every day as long as the No. 4 bearing has not been replaced.

**3.2. No. 4 bearing replacement**

If bearing particles are found during the above chip detector inspection, replace the No. 4 bearing before the next flight. If no bearing particles are found, replace the No. 4 bearing before December 31<sup>st</sup>, 2001 or before 2000 flight hours since effective date of this Airworthiness Directive whichever occurs first.

For uninstalled engines replace the No. 4 bearing before installation.

For spare parts on shelves, do not use these parts.

It is forbidden to install two affected engines on the same aeroplane.

---

**REF.:** Chip detector inspection Service Bulletins:

CFM56-2B SB 72-A0639 dated May 15, 2001  
CFM56-2 SB 72-A896 dated May 15, 2001  
CFM56-3/-3B/-3C SB 72-A0965 dated May 15, 2001  
CFM56-5B SB 72-A0392 dated May 15, 2001  
CFM56-5C SB 72-A0458 dated May 15, 2001  
CFM56-7B SB 72-A0328 Revision 1 (to be published)

Replacement of No. 4 bearing Service Bulletins:

CFM56-2B SB 72-A0640 dated May 15, 2001  
CFM56-2 SB 72-A897 dated May 15, 2001  
CFM56-3/-3B/-3C SB 72-A0966 dated May 15, 2001  
CFM56-5B SB 72-A0393 dated May 15, 2001  
CFM56-5C SB 72-A0459 dated May 15, 2001  
CFM56-7B SB 72-A0329 dated May 15, 2001

---

This Airworthiness Directive replaces AD 2001-207(B) which is cancelled by its Revision 1.

---

**EFFECTIVE DATE : JUNE 23, 2001**