



## 適航指令發布單

### Airworthiness Directive Issuance Form

民航局 AD 編號 AD number	CAA-2018-10-001	發布日期 Date issued	2018/10/3
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	Airbus A319-113, A319-114, A320-211 and A320-212 aeroplanes, all manufacturer serial numbers.		
主旨摘要	Powerplant - CFM56-5A Engine Mount Titanium Crossbeam - Replacement [Life Limitation]		
民航局 CAA <input type="checkbox"/> 本國產品 Native products <input type="checkbox"/> 其他個案 Other	設計國民航主管機構 Original Authorities <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"><input type="checkbox"/> FAA</div> <div style="width: 50%;"><input type="checkbox"/> Germany LBA</div> <div style="width: 50%;"><input checked="" type="checkbox"/> EASA</div> <div style="width: 50%;"><input type="checkbox"/> CAA-NL</div> <div style="width: 50%;"><input type="checkbox"/> Brazil</div> <div style="width: 50%;"><input type="checkbox"/> UK CAA</div> <div style="width: 50%;"><input type="checkbox"/> Transport Canada Civil Aviation</div> <div style="width: 50%;"><input type="checkbox"/> Japan CAB</div> <div style="width: 50%;"><input type="checkbox"/> DGAC</div> <div style="width: 50%;"><input type="checkbox"/> CAA of Israel</div> <div style="width: 50%;"><input type="checkbox"/> Other _____</div> </div>		
	設計國 AD 編號 Original AD number	2018-0212	
	1. 直接採用原 AD 之內容?(Is the original AD directly adopted?) <input checked="" type="checkbox"/> 是(Yes) <input type="checkbox"/> 否(No) _ a. 生效日期另訂為(Re-specify the effective date as) : _____ b. 執行時限另訂為(Re-specify the compliance time or period as) : _____ 2. 使用人是否需要將 AD 執行結果向民航局提出報告?(Do Users need to report the status of compliance to the CAA?) <input type="checkbox"/> 是(Yes) <input checked="" type="checkbox"/> 否(No)		
備註 Note	ATA 71. Ref. Publications: Airbus SB A320-71-1073 original issue dated 08 June 2018. and Airbus SB A320-71-1076 original issue dated 08 June 2018.		
註： 1. AD 內容後附。 2. 航空器產品使用人得向民航局提出豁免、替代符合方法、執行時限之展延之申請。 3. 如有任何問題，請聯絡交通部民用航空局初始適航科。Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail： <a href="mailto:adcaa@mail.caa.gov.tw">adcaa@mail.caa.gov.tw</a> Note： 1. The AD text is enclosed. 2. Exemption, an alternative method of compliance or adjustment of the compliance time may be proposed to the CAA for approval. 3. For further information, please contact Civil Aeronautics Administration on Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail： <a href="mailto:adcaa@mail.caa.gov.tw">adcaa@mail.caa.gov.tw</a>			



## Airworthiness Directive

**AD No.:** 2018-0212

**Issued:** 28 September 2018

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 of that Regulation.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [Regulation (EU) 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

### Design Approval Holder's Name:

AIRBUS

### Type/Model designation(s):

A319 and A320 aeroplanes

**Effective Date:** 12 October 2018

**TCDS Number(s):** EASA.A.064

**Foreign AD:** Not applicable

**Supersedure:** None

### ATA 71 – Powerplant – CFM56-5A Engine Mount Titanium Crossbeam – Replacement [Life Limitation]

#### Manufacturer(s):

Airbus, formerly Airbus Industrie

#### Applicability:

Airbus A319-113, A319-114, A320-211 and A320-212 aeroplanes, all manufacturer serial numbers.

#### Definitions:

For the purpose of this AD, the following definitions apply:

**The SB:** Airbus Service Bulletin (SB) A320-71-1073.

**Affected crossbeam:** Forward engine mount titanium crossbeams having Part Number (P/N) 238-0204-501, including any crossbeams where the P/N cannot be identified.

**Crossbeam accumulated life:** Number of flight cycles (FC) accumulated by an affected crossbeam since first installation on aeroplane, based on maintenance records and/or data provided by Airbus, or determined in accordance with the instructions of the SB (see Note 1 of this AD), or using the Monte Carlo counting method in accordance with Airbus In-Service Information (ISI) 00.05.00002. For an affected crossbeam where the P/N and/or the date of manufacture cannot be identified, the



accumulated life must be determined in accordance with the Life Estimation Tables included in Appendix 01 of this AD, assuming a date of manufacture “before 01 January 1988”.

Note 1: Appendix 1 of this AD can be used, in lieu of Appendix 3 of the SB, to determine the life of an affected crossbeam, selecting in Appendix 1 of this AD a date of manufacture which is equal to, or earlier than the date of manufacture of that affected crossbeam.

#### **Reason:**

The forward engine mount crossbeam of the CFM56-5A engine, P/N 238-0204-501, is made of titanium. A life limit of 64 000 FC has been demonstrated. Due to potential transferability of a crossbeam from one aeroplane to another, it is necessary to track the life of this part and to remove it before exceeding the life limit.

This condition, if not corrected, could lead to forward engine mount crossbeam failure, possibly resulting in engine detachment in flight and consequent reduced control of the aeroplane.

To address this potential unsafe condition, Airbus published the SB, providing instructions to identify the P/N of the crossbeam installed on an aeroplane and to remove affected crossbeam before exceeding the life limit. Airbus also issued SB A320-71-1076, providing modification instructions for installation of improved forward engine mount steel crossbeams P/N 642-2002-503.

For the reason described above, this AD requires the implementation of the new life limit for the affected crossbeams.

#### **Required Action(s) and Compliance Time(s):**

Required as indicated, unless accomplished previously:

##### **Replacement:**

- (1) Before the crossbeam accumulated life exceeds 64 000 FC, replace each affected crossbeam in accordance with the instructions of the SB.

##### **Modification:**

- (2) Replacing on an aeroplane any affected crossbeam with crossbeam having P/N 642-2002-503 in accordance with instructions provided by Airbus is an acceptable alternative method to comply with the requirements of paragraph (1) of this AD, provided that, following modification, no affected crossbeam is installed on that aeroplane.

##### **Parts Installation:**

- (3) From the effective date of this AD, except as required by paragraph (2) of this AD, it is allowed to install on any aeroplane an affected crossbeam having P/N 238-0204-501, provided it has accumulated less than 64 000 FC since first installation on an aeroplane.
- (4) From the effective date of this AD, do not install on any aeroplane an affected crossbeam having unknown life, or a crossbeam where the P/N cannot be identified (see Note 2 of this AD).



Note 2: For the purpose of paragraph (4) of this AD, removal of a crossbeam (e.g. for maintenance purposes) from an aeroplane and, within the same maintenance visit, subsequent re-installation of that crossbeam on the same aeroplane, is not considered 'installation'.

#### Ref. Publications:

Airbus SB A320-71-1073 original issue dated 08 June 2018.

Airbus SB A320-71-1076 original issue dated 08 June 2018.

The use of later approved revisions of the above-mentioned documents is acceptable for compliance with the requirements of this AD.

#### Remarks:

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
2. This AD was posted on 10 July 2018 as PAD 18-091 for consultation until 07 August 2018. The Comment Response Document can be found in the [EASA Safety Publications Tool](#), in the compressed (zipped) file attached to the record for this AD.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).
4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the [EU aviation safety reporting system](#).
5. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS – Airworthiness Office – EIAS; Fax +33 5 61 93 44 51;  
E-mail: [account.airworth-eas@airbus.com](mailto:account.airworth-eas@airbus.com).



## Appendix 01 – Life estimation table

Life estimation done on:	Date of manufacture												
	Before 01 January 1988	01 January 1988	01 June 1988	01 January 1989	01 June 1989	01 January 1990	01 June 1990	01 January 1991	01 June 1991	02 April 1992	20 October 1992	05 July 1995	09 August 1995
31 August 2018	63 169	62 826	62 213	61 400	60 425	59 048	58 092	56 754	55 879	54 104	52 936	47 392	47 198
30 September 2018	63 363	63 020	62 407	61 594	60 619	59 242	58 285	56 947	56 073	54 298	53 130	47 586	47 391
31 October 2018	63 563	63 220	62 607	61 794	60 819	59 442	58 486	57 147	56 273	54 498	53 330	47 786	47 591
30 November 2018	63 757	63 414	62 801	61 987	61 013	59 635	58 679	57 341	56 466	54 692	53 524	47 979	47 785
31 December 2018	63 957	63 614	63 001	62 188	61 213	59 835	58 879	57 541	56 667	54 892	53 724	48 180	47 985
31 January 2019	To be replaced	63 814	63 201	62 388	61 413	60 035	59 079	57 741	56 867	55 092	53 924	48 380	48 185

Life estimation done on:	Date of manufacture												
	07 May 1996	13 January 1997	27 May 1997	26 January 1998	19 February 1998	23 February 1998	04 March 1998	31 March 1998	21 May 1998	20 July 1998	01 August 1998	18 June 1999	09 August 2000
31 August 2018	45 649	44 213	43 496	42 166	42 027	42 004	41 952	41 796	41 502	41 155	41 086	39 153	36 525
30 September 2018	45 842	44 407	43 689	42 359	42 221	42 198	42 146	41 990	41 695	41 349	41 279	39 347	36 719
31 October 2018	46 042	44 607	43 889	42 559	42 421	42 398	42 346	42 190	41 895	41 549	41 479	39 547	36 919
30 November 2018	46 236	44 800	44 083	42 753	42 615	42 591	42 539	42 384	42 089	41 742	41 673	39 741	37 112
31 December 2018	46 436	45 000	44 283	42 953	42 815	42 792	42 740	42 584	42 289	41 943	41 873	39 941	37 312
31 January 2019	46 636	45 201	44 483	43 153	43 015	42 992	42 940	42 784	42 489	42 143	42 073	40 141	37 512



Life estimation done on:	Date of manufacture												
	29 September 2000	19 April 2001	17 August 2001	28 August 2001	20 November 2001	19 March 2002	26 September 2002	05 December 2002	10 March 2004	11 January 2005	14 May 2005	24 March 2006	21 April 2006
31 August 2018	36 200	34 987	34 286	34 222	33 731	33 045	31 944	31 540	28 808	27 001	26 288	26 583	26 421
30 September 2018	36 394	35 181	34 480	34 416	33 925	33 238	32 137	31 734	29 002	27 195	26 481	26 777	26 615
31 October 2018	36 594	35 381	34 680	34 616	34 125	33 438	32 337	31 934	29 202	27 395	26 681	26 977	26 815
30 November 2018	36 788	35 575	34 874	34 809	34 319	33 632	32 531	32 127	29 396	27 589	26 875	27 171	27 008
31 December 2018	36 988	35 775	35 074	35 010	34 519	33 832	32 731	32 328	29 596	27 789	27 075	27 371	27 208
31 January 2019	37 188	35 975	35 274	35 210	34 719	34 032	32 931	32 528	29 796	27 989	27 275	27 571	27 409

