

# **Airworthiness Directive**

AD No.: 2019-0012

Issued: 24 January 2019

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 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: Type/Model designation(s)

AIRBUS A321 aeroplanes

Effective Date: 07 February 2019

TCDS Number(s): EASA.A.064

Foreign AD: Not applicable

Supersedure: None

ATA 57 – Wings – Flap Parts – Inspection / Replacement [Wrong Material]

## Manufacturer(s):

Airbus, formerly Airbus Industrie

#### **Applicability:**

Airbus A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231 and A321-232 aeroplanes, all manufacturer serial numbers (MSN).

## **Definitions:**

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

The inspection SB: Airbus Service Bulletin (SB) A320-57-1198.

Suspected part: Outer flaps, having a serial number (s/n) as listed in the Appendix 1 of this AD.

**Affected part**: A suspected part that has not passed (defects found) a special detailed inspection (SDI) in accordance with the instructions of the inspection SB.

**Serviceable part**: A not suspected part; or a suspected part that has passed (no defects found) an SDI in accordance with the instructions of the inspection SB.



### Reason:

Following a quality control review on the Airbus final assembly line, it was discovered that wrong aluminum alloy was delivered by a supplier for several structural parts. The results of the investigations highlighted that part of the stock could be impacted by this wrong material. Prompted by this finding, EASA published AD 2015-0218, requiring an SDI of certain cabin, cargo compartment and airframe parts. Subsequent investigation results established that outer flaps structure are also affected. Structural investigations demonstrated the capability to sustain the static limits loads, and sufficient fatigue life up to a certain inspection threshold.

This condition, if not detected and corrected, could affect the structural integrity of the outer flap, possibly resulting in reduced control of the aeroplane.

To address this potential unsafe condition, Airbus issued the inspection SB to provide inspection instructions.

For the reasons described above, this AD requires a one-time SDI of suspected parts for material identification and, depending on findings, replacement with serviceable parts.

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

Required as indicated, unless accomplished previously:

## Inspection(s):

(1) Within 6 years after the effective date of this AD, but not exceeding 12 years since the applicable reference date as defined in Appendix 1 of this AD, depending on the suspected outer flap s/n, accomplish an SDI of each suspected part in accordance with the instructions of the inspection SB.

## Corrective Action(s):

- (2) If, during the SDI as required by paragraph (1) of this AD, an affected part is detected, within 6 years after the effective date of this AD, but not exceeding 12 years since the applicable reference date, as defined in Appendix 1 of this AD, contact Airbus for approved instructions and accomplish those instructions accordingly.
- (3) Replacing an affected part with a serviceable part on an aeroplane in accordance with the instructions of the applicable aircraft maintenance manual is an acceptable alternative method to comply with the requirements of paragraph (2) of this AD for that aeroplane.

#### Credit:

- (4) An aeroplane having an MSN not identified in the inspection SB is not affected by the requirements of paragraph (1) of this AD, provided it has been determined that no affected part is installed on that aeroplane.
  - A review of aeroplane delivery and/or maintenance records is acceptable to make this determination, provided those records can be relied upon for that purpose and the s/n of the suspected parts can be positively identified from that review.



### Parts Installation:

(5) From the effective date of this AD, it is allowed to install a suspected part on any aeroplane, provided that, following installation, the part is inspected as required by paragraph (1) of this AD.

#### **Ref. Publications:**

Airbus SB A320-57-1198 original issue dated 24 January 2017.

The use of later approved revisions of the above-mentioned document 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.
- This AD was posted on 29 November 2018 as PAD 18-162 for consultation until 27 December 2018. The Comment Response Document can be found in the <u>EASA Safety Publications Tool</u>, 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.
- 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 <u>EU aviation safety</u> 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: <a href="mailto:account.airworth-eas@airbus.com">account.airworth-eas@airbus.com</a>.



Appendix 1 – Suspected parts (see Note 1 of this AD)

MSN	Left hand outer flap	Right hand outer flap	Deference date
	s/n	s/n	Reference date
4585	TB 14607	TB 14626	08 February 2011
4643	TB 14643	TB 14643	28 March 2011
4648	TB 14648	TB 14648	30 March 2011
4654	TB 14654	TB 14654	29 March 2011
4662	TB 14662	TB 14662	28 April 2011
4669	TB 14669	TB 14669	28 April 2011
4672	TB 14672	TB 14585	11 April 2011
4682	TB 14682	TB 14682	28 April 2011
4698	TB 14698	TB 14698	11 May 2011
4703	TB 14703	TB 14703	19 May 2011
4706	TB 14706	TB 14706	18 May 2011
4710	TB 14710	TB 14710	18 May 2011
4719	TB 14719	TB 14719	27 May 2011
4728	TB 14728	TB 14728	31 May 2011
4731	TB 14731	TB 14731	07 June 2011
4737	TB 14737	TB 14737	09 June 2011
4746	TB 14834	TB 14746	23 June 2011
4753	TB 14753	TB 14753	22 June 2011
4761	TB 14761	TB 14761	29 June 2011
4771	TB 14771	TB 14771	07 July 2011
4779	TB 14779	TB 14779	08 July 2011
4783	TB 14788	TB 14788	18 July 2011
4788	TB 14783	TB 14783	03 August 2011
4792	TB 14792	TB 14792	27 July 2011
4811	TB 14811	TB 14811	17 August 2011
4819	TB 14863	TB 14819	23 August 2011
4824	TB 14824	TB 14824	30 August 2011
4826	TB 14826	TB 14826	30 August 2011
4830	TB 14830	TB 14830	30 August 2011
4834	TB 14746	TB 14834	09 September 2011
4838	TB 14838	TB 14838	14 October 2011
4843	TB 14843	TB 14843	23 September 2011
4847	TB 14940	TB 14940	22 September 2011

MSN	Left hand outer flap	Right hand outer flap s/n	Reference date
4856	TB 14856	TB 14856	29 September 2011
4863	TB 14881	TB 14863	03 November 2011
4873	TB 14873	TB 14873	18 October 2011
4881	TB 14819	TB 14881	21 November 2011
4885	TB 14885	TB 14885	24 October 2011
4893	TB 14893	TB 14893	28 October 2011
4898	TB 14898	TB 14898	28 October 2011
4901	TB 14901	TB 14901	23 November 2011
4916	TB 14916	TB 14916	16 November 2011
4923	TB 14923	TB 14923	16 November 2011
4925	TB 14925	TB 14925	14 November 2011
4932	TB 14932	TB 14932	28 November 2011
4935	TB 14935	TB 14935	02 December 2011
4940	TB 14949	TB 14949	07 December 2011
4945	TB 14945	TB 14945	02 December 2011
4949	TB 14957	TB 14957	06 December 2011
4957	TB 14960	TB 14960	12 December 2011
4960	TB 14962	TB 14962	15 December 2011
4962	TB 14966	TB 14966	23 December 2011
4966	TB 14971	TB 14971	30 December 2011
4971	TB 15009	TB 15009	29 December 2011
4976	TB 14976	TB 14976	27 December 2011
4994	TB 14994	TB 14994	17 January 2012
5009	TB 15025	TB 15025	10 February 2012
5025	TB 15035	TB 15035	16 March 2012
5028	TB 15028	TB 15028	08 February 2012
5035	тв 15038	TB 15038	14 February 2012
5038	TB 15044	TB 15044	17 February 2012
5044	TB 14847	TB 14847	28 February 2012
5049	TB 15049	TB 15049	28 February 2012
5054	TB 15054	TB 15054	29 February 2012
5059	TB 15059	TB 15059	05 March 2012
5065	TB 15065	TB 15065	13 March 2012
5074	TB 15074	TB 15074	29 March 2012

MSN	Left hand outer flap s/n	Right hand outer flap s/n	Reference date
5083	TB 15083	TB 15083	21 March 2012
5087	TB 15087	TB 15087	30 March 2012
5099	TB 15099	TB 15099	16 April 2012
5118	TB 15118	TB 15124	26 April 2012
5124	TB 15124	TB 15118	27 April 2012
5126	TB 15126	TB 15126	26 April 2012
5133	TB 15133	TB 15133	02 May 2012
5154	TB 15154	TB 15154	15 May 2012
5160	TB 15192	TB 15192	29 May 2012
5164	TB 15164	TB 15164	12 June 2012
5169	TB 15169	TB 15169	25 May 2012
5173	TB 15180	TB 15180	30 June 2012
5177	TB 15160	TB 15235	15 June 2012
5180	TB 15177	TB 15177	03 July 2012
5186	TB 15186	TB 15186	25 June 2012
5192	TB 15205	TB 15205	20 June 2012
5197	TB 15227	TB 15173	27 June 2012
5199	TB 15199	TB 15199	22 June 2012
5205	TB 15210	TB 15210	28 June 2012
5210	TB 15233	TB 15233	28 June 2012
5227	TB 15197	TB 15227	22 August 2012
5233	TB 15237	TB 15237	02 August 2012
5235	TB 15241	TB 15241	27 July 2012
5237	TB 15247	TB 15247	30 July 2012
5241	TB 15251	TB 15251	23 August 2012
5244	TB 15244	TB 15244	03 August 2012
5247	TB 15257	TB 15257	23 August 2012
5251	TB 15235	TB 15160	22 August 2012
5254	TB 15254	TB 15254	08 August 2012
5257	TB 15265	TB 15265	06 September 2012
5265	TB 15271	TB 15271	23 August 2012
5269	TB 15269	TB 15269	28 August 2012
5271	TB 15275	TB 15275	06 September 2012
5275	TB 15282	TB 15282	05 September 2012



MSN	Left hand outer flap	Right hand outer flap	
			Reference date
5279	TB 15279	TB 15279	08 November 2012
5282	TB 15285	TB 15285	04 September 2012
5285	TB 15287	TB 15287	19 September 2012
5287	TB 15292	TB 15292	12 September 2012
5292	TB 15297	TB 15297	17 September 2012
5295	TB 15295	TB 15295	02 March 2015
5297	TB 15303	TB 15303	05 October 2012
5300	TB 15300	TB 15300	21 September 2012
5303	TB 15173	TB 15197	28 September 2012
5306	TB 15309	TB 15309	11 October 2012
5309	TB 15306	TB 15306	31 October 2012
5314	TB 15314	TB 15314	24 January 2013
5317	TB 15317	TB 15317	18 October 2012
5321	TB 15321	TB 15321	27 December 2012
5328	TB 15328	TB 15328	19 December 2012
5332	TB 15332	TB 15332	29 October 2012
5336	TB 15336	TB 15336	27 December 2012
5340	TB 15340	TB <b>153</b> 40	30 October 2012
5343	TB 15343	TB 15343	29 November 2012
5346	TB 15346	TB 15346	07 December 2012
5350	TB 15350	TB 15350	06 November 2012
5354	TB 15354	TB 15354	31 October 2012
5357	TB 15357	TB 15357	26 November 2012
5368	TB 15368	TB 15368	07 December 2012
5374	TB 15374	TB 15374	29 November 2012
5377	TB 15377	TB 15377	12 December 2012
5382	TB 15382	TB 15382	13 December 2012
5385	ТВ 15385	TB 15385	27 December 2012
5388	TB 15388	TB 15388	04 December 2012
5392	TB 15392	TB 15392	07 December 2012
5402	TB 15404	TB 15404	14 December 2012
5404	TB 15402	TB 15402	14 December 2012
5409	TB 15413	TB 15413	12 December 2012
5413	TB 15418	TB 15418	19 December 2012
5418	TB 15422	TB 15422	19 December 2012

NACNI	Left hand outer flap	Right hand outer flap	
MSN	s/n	s/n	Reference date
5422	TB 15427	TB 15427	21 December 2012
5427	TB 15432	TB 15432	28 December 2012
5432	TB 15435	TB 15435	21 December 2012
5435	TB 15409	TB 15409	21 January 2013
5438	TB 15438	TB 15438	31 January 2013
5444	TB 15444	TB 15444	12 February 2013
5447	TB 15450	TB 15447	05 February 2013
5450	TB 15456	TB 15450	23 January 2013
5456	TB 15447	TB 15485	07 February 2013
5459	TB 15462	TB 15462	05 February 2013
5462	TB 15534	TB 15456	06 February 2013
5465	TB 15470	TB 15465	12 February 2013
5469	TB 15469	TB 15469	20 March 2013
5470	TB 15475	TB 15470	26 September 2013
5475	TB 15481	TB 15475	19 February 2013
5481	TB 15459	TB 15490	26 February 2013
5485	TB 15490	TB 15481	22 February 2013
5490	TB 15485	TB <b>15</b> 459	06 March 2013
5495	TB 15495	TB 15495	25 March 2013
5500	TB 15500	TB 15500	14 March 2013
5504	TB 15509	TB 15504	25 March 2013
5509	TB 15504	TB 15509	18 March 2013
5513	TB 15513	TB 15513	25 March 2013
5519	TB 15519	TB 15519	15 April 2013
5523	TB 15523	TB 15523	27 March 2013
5528	TB 15528	TB 15528	27 March 2013
5534	TB 15549	TB 15534	02 April 2013
5538	TB 15543	TB 15543	09 April 2013
5543	TB 15546	TB 15546	16 April 2013
5546	TB 15465	TB 15549	17 April 2013
5549	TB 15555	TB 15555	18 April 2013
5555	TB 15558	TB 15558	17 April 2013
5558	TB 15573	TB 15538	22 April 2013
5567	TB 15567	TB 15573	25 April 2013
5573	TB 15575	TB 15575	26 April 2013



MSN	Left hand outer flap	Right hand outer flap	Reference date
	s/n	s/n	
5575	TB 15582	TB 15582	26 April 2013
5582	TB 15584	TB 15584	07 May 2013
5584	TB 15588	TB 15588	07 May 2013
5588	TB 15594	TB 15594	17 May 2013

Note 1: The aeroplane MSN as identified in Appendix 1 of this AD is for reference only, based on aeroplane configuration at the time of Airbus delivery to the first operator.

