



## Airworthiness Directive

**AD No.:** 2020-0251

**Issued:** 11 November 2020

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 DEFENCE & SPACE S.A.

**Type/Model designation(s):**

CN-235 aeroplanes

**Effective Date:** 25 November 2020

**TCDS Number(s):** EASA.A.186

**Foreign AD:** Not applicable

**Supersedure:** This AD supersedes EASA AD 2018-0134 dated 25 June 2018.

**ATA 53 – Fuselage – Central Fuselage Frames 21, 23 and 24 / Wing Fitting Attachments – Inspections**

**ATA 05 – Time Limits / Maintenance Checks – Airworthiness Limitations List – Amendment**

**Manufacturer(s):**

EADS-CASA, formerly Construcciones Aeronáuticas S.A. (CASA)

**Applicability:**

CN-235, CN-235-100, CN-235-200 and CN-235-300 aeroplanes, all manufacturer serial numbers (MSN).

**Definitions:**

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

**The applicable ALL:** Airbus Defence & Space (D&S) CN-235 Airworthiness Limitations List (ALL) DT-86-3001 Revision R dated 20 March 2018 and DT-06-3009 Revision A dated January 2007.

**The AMP:** The Aircraft Maintenance Programme (AMP), on the basis of which the operator or the owner ensures the continuing airworthiness of each operated aeroplane. For affected CN-235 aeroplanes operated under EU regulations, compliance with the AMP is required by Commission Regulation (EU) 1321/2014, Part M.A.301, paragraph 3.



**The AOT:** Airbus D&S Alert Operators Transmission (AOT) AOT-CN235-53-0005 Revision 2.

**Groups:** Group 1 are CN-235 and CN-235-100 aeroplanes.

Group 2 are CN-235-200 aeroplanes.

Group 3 are CN-235-300 aeroplanes.

**Reason:**

The airworthiness limitations and/or certification maintenance instructions for the EADS-CASA CN-235 aeroplanes, which are approved by EASA, are currently defined and published in Airbus D&S CN-235 ALL DT-86-3001 and DT-06-3009 documents. These instructions have been identified as mandatory for continued airworthiness.

Failure to accomplish these instructions could result in an unsafe condition.

EASA previously issued AD 2018-0134 to require accomplishment of the actions specified in Airbus D&S DT-86-3001 Revision R.

Since that AD was issued, damage tolerance analysis determined the need to amend inspections of Primary Structural Elements (PSE) F47 (Central Fuselage Frame (FR) 24) and PSE F48 (Central Fuselage FR24, Wing Fitting Attachment) and on Secondary Structural Elements (SSE) FC0203 (Machined Frames FR21 and FR24, Attachment to Wing Fittings) and SSE FC0304 (Machined Frames FR21, FR23 and FR24). Airbus D&S issued the AOT, as defined in this AD, to provide inspection instructions. It is expected that these instructions will be incorporated into the ALL at the next Revision.

For the reason described above, this AD retains the requirements of EASA AD 2018-0134, which is superseded, and requires accomplishment of the actions specified in the applicable ALL, as defined in this AD, and in addition those specified in the AOT.

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

Required as indicated, unless accomplished previously:

**Inspection(s):**

- (1) Within the compliance times as specified in Table 1 of this AD, and, thereafter, at intervals not to exceed the values specified in Table 2 of this AD, as applicable, accomplish a high frequency eddy current (HFEC) and an ultrasonic (US) inspection of PSE F48 in accordance with the instructions of the AOT.



Table 1 – Initial PSE F48 Inspection (see Note 1 of this AD)

<b>Group</b>	<b>MSN / Configuration</b>	<b>Compliance Time</b> (whichever occurs later, <b>A</b> or <b>B</b> )
1	MSN 001 to 062 inclusive	<b>A:</b> Before exceeding 11 800 flight hours (FH) or 13 600 flight cycles (FC), whichever occurs first
		<b>B:</b> Within 50 FH or 50 FC, whichever occurs first after the effective date of this AD
	MSN 063 and higher	<b>A:</b> Before exceeding 9 100 FH or 10 500 FC, whichever occurs first
		<b>B:</b> Within 50 FH or 50 FC, whichever occurs first after the effective date of this AD
2	MSN 001 to 062 inclusive	<b>A:</b> Before exceeding 10 900 FH or 13 600 FC, whichever occurs first
		<b>B:</b> Within 50 FH or 50 FC, whichever occurs first after the effective date of this AD
	MSN 063 and higher	<b>A:</b> Before exceeding 8 400 FH or 10 500 FC, whichever occurs first
		<b>B:</b> Within 50 FH or 50 FC, whichever occurs first after the effective date of this AD
3	All MSN, except L3-02 configuration	<b>A:</b> Before exceeding 13 400 FH or 15 200 FC, whichever occurs first
		<b>B:</b> Within 50 FH or 50 FC, whichever occurs first after the effective date of this AD
	L3-02 configuration	<b>A:</b> Before exceeding 15 800 FH or 16 100 FC, whichever occurs first
		<b>B:</b> Within 50 FH or 50 FC, whichever occurs first after the effective date of this AD

Note 1: Unless indicated otherwise, the FH and FC specified in Table 1 of this AD are those accumulated since first flight of the aeroplane.

Table 2 – Intervals (not to exceed)

<b>Group</b>	<b>Interval (FH or FC, whichever occurs first since last inspection)</b>
1	435 FH or 500 FC
2	401 FH or 500 FC
3	706 FH or 800 FC



- (2) Within the compliance times and, thereafter, at intervals not to exceed the values specified in Table 3 of this AD, as applicable, accomplish an HFEC inspection of PSE F47 in accordance with the instructions of the AOT.

Table 3 – PSE F47 Inspection

<b>Group</b>	<b>Compliance Time</b> (whichever occurs later, <b>A</b> or <b>B</b> )	<b>Interval</b> (FH or FC, whichever occurs first)
1	<b>A:</b> Before exceeding 1 131 FH or 1 300 FC, whichever occurs first since the last inspection	1 131 FH or 1 300 FC
	<b>B:</b> Within 50 FH or 50 FC, whichever occurs first after the effective date of this AD	
2	<b>A:</b> Before exceeding 1 044 FH or 1 300 FC, whichever occurs first after the last inspection	1 044 FH or 1 300 FC
	<b>B:</b> Within 50 FH or 50 FC, whichever occurs first after the effective date of this AD	
3	<b>A:</b> Before exceeding 1 148 FH or 1 300 FC, whichever occurs first after the last inspection	1 148 FH or 1 300 FC
	<b>B:</b> Within 50 FH or 50 FC, whichever occurs first after the effective date of this AD	

- (3) For CN-235-300 aeroplanes in Maritime Patrol (SM01) configuration: Within the compliance time and, thereafter, at intervals not to exceed the values specified in Table 4 of this AD, accomplish an HFEC and US inspection of SSE FC0203 and an HFEC inspection of SSE FC0304 in accordance with the instructions of the AOT.

Table 4 – SSE FC0203 and SSE FC0304 Inspection

<b>SSE</b>	<b>Compliance Time</b> (whichever occurs later, <b>A</b> or <b>B</b> )	<b>Interval</b> (FH or FC, whichever occurs first)
FC0203	<b>A:</b> Within 4 655 FH or 1 500 FC, whichever occurs first since the last inspection	4 655 FH or 1 500 FC
	<b>B:</b> Within 50 FH or 50 FC, whichever occurs first after the effective date of this AD	
FC0304	<b>A:</b> Within 24 638 FH or 7 940 FC, whichever occurs first since the last inspection	24 638 FH or 7 940 FC
	<b>B:</b> Within 50 FH or 50 FC, whichever occurs first after the effective date of this AD	



**Maintenance Tasks and Replacement of Life Limited Parts:**

(4) From the effective date of this AD, accomplish the following actions, as specified in the ALL, as applicable to aeroplane model and depending on aeroplane configuration:

(4.1) Replace each component before exceeding the applicable life limit, and

(4.2) Within the thresholds and intervals, accomplish all applicable maintenance tasks.

**Corrective Action(s):**

(5) In case of finding discrepancies during accomplishment of any task as required by paragraph (1), (2), (3) or (4) of this AD, as applicable, before next flight, accomplish the applicable corrective action(s) in accordance with the applicable Airbus D&S maintenance documentation. If a detected discrepancy cannot be corrected by using existing Airbus D&S instructions, before next flight, contact Airbus D&S for approved instructions and accomplish those instructions accordingly.

**Aircraft Maintenance Programme (AMP) Revision:**

(6) Within 12 months after the effective date of this AD, revise the approved AMP, on the basis of which the operator or the owner ensures the continuing airworthiness of each operated aeroplane, by incorporating the limitations, tasks and associated thresholds and intervals described in the ALL, as applicable to aeroplane model and depending on aeroplane configuration.

**Credit:**

(7) For an AMP that, on the effective date of this AD, is already updated to incorporate the maintenance tasks and life limitations as specified in Airbus D&S ALL Revision R, that action ensures the continued accomplishment of those tasks and limitations.

Consequently, for an aeroplane to which that AMP applies, it is acceptable to accomplish the new and more restrictive tasks and limitations, as applicable to aeroplane model and depending on aeroplane configuration, as defined in, and within the compliance times, as specified in, the ALL, to comply with paragraph (4) of this AD.

For that AMP, it is acceptable to incorporate the new and more restrictive tasks and limitations, as applicable to aeroplane model and depending on aeroplane configuration, as defined in the ALL, into the AMP to comply with paragraph (6) of this AD.

**Recording AD Compliance:**

(8) When the AMP of an aeroplane has been revised as required by paragraph (6) or (7) of this AD, as applicable, that action ensures continued accomplishment of the tasks as required by paragraphs (4) and (5) of this AD for that aeroplane. Consequently, after revising the AMP, as required by paragraph (6) or (7) of this AD, as applicable, it is not necessary that accomplishment of individual action is recorded for demonstration of AD compliance on a continued basis.



**Ref. Publications:**

Airbus D&S ALL DT-86-3001 Revision R dated 20 March 2018.

Airbus D&S ALL DT-06-3009 Revision A dated January 2007.

Airbus D&S AOT-CN235-53-0005 Revision 2 dated 09 July 2020.

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 12 October 2020 as PAD 20-165 for consultation 09 November 2020. No comments were received during the consultation period.
3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness 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](#). This may include reporting on the same or similar components, other than those covered by the design to which this AD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.
5. For any question concerning the technical content of the requirements in this AD, please contact: Airbus D&S Services / Engineering Support, Fax: +34 91 585 3127, E-mail: [MTA.TechnicalService@airbus.com](mailto:MTA.TechnicalService@airbus.com).

For North American operators, contact alternatively:

E-mail: [TechnicalSupport@airbusmilitaryna.com](mailto:TechnicalSupport@airbusmilitaryna.com).

