



# 適航指令發布單

## Airworthiness Directive Issuance Form

民航局AD編號 AD number	CAA-2022-06-001B	發布日期 Date issued	2024/04/17												
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	Airbus A319-111, A319-112, A319-113, A319-114, A319-115, A319-151N, A319-153N, A320-251N, A320-252N, A320-253N, A320-271N, A320-272N, A320-273N, A321-251N, A321-251NX, A321-252N, A321-252NX, A321-253N, A321-253NX, A321-271N, A321-271NX, A321-272N and A321-272NX aeroplanes, all manufacturer serial numbers.														
主旨摘要 Subject	Aircraft Flight Manual / Section Limitations - Amendment / Auto Flight - New flight Guidance Standard - Modification														
民航局 CAA  <input type="radio"/> 本國產品 Native product  <input type="radio"/> 其他個案 Other	設計國民航主管機構 Original Authority <table><tr><td><input type="radio"/> FAA</td><td><input type="radio"/> Germany LBA</td></tr><tr><td><input checked="" type="radio"/> EASA</td><td><input type="radio"/> CAA-NL</td></tr><tr><td><input type="radio"/> Brazil</td><td><input type="radio"/> UK CAA</td></tr><tr><td><input type="radio"/> Transport Canada Civil Aviation</td><td><input type="radio"/> Japan CAB</td></tr><tr><td><input type="radio"/> DGAC</td><td><input type="radio"/> CAA of Israel</td></tr><tr><td></td><td><input type="radio"/> Other_____</td></tr></table>			<input type="radio"/> FAA	<input type="radio"/> Germany LBA	<input checked="" type="radio"/> EASA	<input type="radio"/> CAA-NL	<input type="radio"/> Brazil	<input type="radio"/> UK CAA	<input type="radio"/> Transport Canada Civil Aviation	<input type="radio"/> Japan CAB	<input type="radio"/> DGAC	<input type="radio"/> CAA of Israel		<input type="radio"/> Other_____
<input type="radio"/> FAA	<input type="radio"/> Germany LBA														
<input checked="" type="radio"/> EASA	<input type="radio"/> CAA-NL														
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<input type="radio"/> Transport Canada Civil Aviation	<input type="radio"/> Japan CAB														
<input type="radio"/> DGAC	<input type="radio"/> CAA of Israel														
	<input type="radio"/> Other_____														
	設計國AD編號 Original AD number	2022-0096R2													
	1. 直接採用原AD之內容? (Is the original AD directly adopted?) <input checked="" type="radio"/> 是(Yes) <input type="radio"/> 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="radio"/> 需要(Yes) <input checked="" type="radio"/> 不需要(No)														
備註 Note	This AD revises EASA AD 2022-0096 R1 (CAA-2022-06-001A) dated 23 November 2022. The original issue of this AD superseded EASA AD 2020-0118 dated 22 May 2020.														

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)2349-6330 / 6332, Fax：(02)2545-8464, [adcaa@mail.caa.gov.tw](mailto:adcaa@mail.caa.gov.tw)

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)2349-6330 / 6332, Fax：(02)2545-8464, [adcaa@mail.caa.gov.tw](mailto:adcaa@mail.caa.gov.tw)



## Airworthiness Directive

**AD No.:** 2022-0096R2

**Issued:** 12 April 2024

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, or Annex Vb Part ML.A.301, as applicable, 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 Annex Vb Part ML.A.303, as applicable] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

### Design Approval Holder's Name:

AIRBUS S.A.S.

### Type/Model designation(s):

A319, A320 and A321 aeroplanes

**Effective Date:** Revision 02: 19 April 2024  
Revision 01: 30 November 2022  
Original issue: 14 June 2022

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

**Foreign AD:** Not applicable

**Supersedure:** This AD revises EASA AD 2022-0096-R1 dated 23 November 2022. The original issue of this AD superseded EASA AD 2020-0118 dated 22 May 2020.

### ATA – Aircraft Flight Manual / Section Limitations – Amendment

### ATA 22 – Auto Flight – New flight Guidance Standard – Modification

### Manufacturer(s):

Airbus, formerly Airbus Industrie

### Applicability:

Airbus A319-111, A319-112, A319-113, A319-114, A319-115, A319-151N, A319-153N, A320-251N, A320-252N, A320-253N, A320-271N, A320-272N, A320-273N, A321-251N, A321-251NX, A321-252N, A321-252NX, A321-253N, A321-253NX, A321-271N, A321-271NX, A321-272N and A321-272NX aeroplanes, all manufacturer serial numbers.

### Definitions:

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

**The AFM TR:** Airbus Airplane Flight Manual (AFM) Temporary Revision (TR) 784 issue 1 or TR 785 issue 1, as applicable.



**The SB 1:** Airbus Service Bulletin (SB) A320-22-1819, SB A320-22-1820, SB A320-22-1821, SB A320-22-1822, SB A320-22-1823, SB A320-22-1824, SB A320-22-1827, or SB A320-22-1828, as applicable.

**The SB 2:** Airbus SB A320-22-1895.

**Airbus date of manufacture:** The date of transfer of title (ownership) of the aeroplane upon delivery by Airbus to the first operator, which is referenced in Airbus documentation.

**Affected FG:** Flight Guidance (FG) 2G and 3G standards as listed in Appendix 1 of this AD.

**Serviceable FG:** FG 3G standards as listed in Appendix 2 of this AD.

**Groups:** Group 1 aeroplanes are those that have an affected FG 3G installed.

Group 2 aeroplanes are those that have an affected FG 2G installed.

Group 3 aeroplanes are those that do not have an affected FG installed.

Note 1: An aeroplane on which Airbus modification (mod) 167616, or mod 168507, or mod 163903, or mod 166790, or mod 168506 has been embodied in production is a Group 3 aeroplane, provided that no affected FG has been installed on that aeroplane since Airbus date of manufacture.

Note 2: A Group 2 aeroplane on which a FG 2G standard is (optionally) replaced with a serviceable FG, in accordance with the instructions of the SB 1, becomes a Group 3 aeroplane.

#### Reason:

Following a non-stabilised approach, an Airbus A321neo aeroplane initiated an automatic go-around, i.e. with autopilot (AP) ON, which induced an aeroplane pitch-up attitude that resulted in an AP disconnection.

Investigations identified that this pitch-up attitude after go-around initiation was due to the combination of AP ON, high lift configuration and application of Take-Off Go-Around (TOGA) thrust within 50 seconds after full retraction of the speed brakes.

Deeper analysis by computed simulation determined that, for some aeroplane models of the A320 family, when operated at a significant aft centre of gravity (CG), the pitch attitude could further increase after the above-mentioned AP disconnection. However, such situation was never encountered in flight.

This condition, if not corrected, could lead to increased flight crew workload during critical phases of flight, possibly resulting in reduced control of the aeroplane.

To address this potential unsafe condition, Airbus published the AFM TR, as defined in this AD, conditioning the use of speed brake to prevent the above-mentioned condition, and Flight Operations Transmission 999.0034/20, providing operational recommendations. Consequently, EASA issued AD 2020-0118 to require amendment of the applicable AFM by incorporating the AFM TR.



After that AD was issued, Airbus developed a new FG 3G standard and issued the SB, providing installation instructions, to address the potential unsafe condition and to allow removal of the AFM TR limitation. Consequently, EASA issued AD 2022-0096 (later revised to provide clarifications), retaining the requirements of EASA AD 2020-0118, which was superseded, and requiring installation of the new FG 3G standard on Group 1 aeroplanes.

Since EASA AD 2022-0096R1 was issued, Airbus issued the SB 2 to introduce an in-service FG 3G updated standard for certain A319 aeroplanes fitted with CFM56 engines on which the SB 1 may not be applicable based on their specific configuration.

For the reasons described above, this AD is revised to include reference to the SB 2, and to provide an extended compliance time for the aeroplanes using SB 2.

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

Required as indicated by this AD, unless the actions required by this AD have been already accomplished:

#### **AFM Amendment:**

- (1) For Group 1 and 2 aeroplanes: Within 30 days after 05 June 2020 [the effective date of EASA AD 2020-0118], amend the applicable AFM by incorporating the AFM TR, inform all flight crews, and, thereafter, operate the aeroplane accordingly.
- (2) Amending the applicable AFM of an aeroplane by incorporating a later AFM revision, which includes the same content as the AFM TR, is an acceptable method to comply with the requirements of paragraph (1) of this AD for that aeroplane.

#### **Modification:**

- (3) For Group 1 aeroplanes, as applicable:  
 Within 24 months after 14 June 2022 [the effective date of the original issue of this AD], install a serviceable FG on the aeroplane in accordance with the instructions of the SB 1;  
 or  
 Within 9 months after the effective date of this AD, install a serviceable FG on the aeroplane in accordance with the instructions of the SB 2.

Note 3: The SB 2 is applicable to aeroplanes having an affected FG 3G installed with configuration FMGC 3G STD H2CPC18 or H2CPC19, and have configuration EIS 1 or EIS 2, and are equipped with CFM56 engines.

#### **Removal of AFM Amendment:**

- (4) After modification of an aeroplane as required by paragraph (3) of this AD, or as specified in Note 2 of this AD, as applicable, the operational procedure of the applicable AFM TR is no longer necessary and can be removed from the AFM of that aeroplane.

#### **FG Standard Installation:**

- (5) Do not install an affected FG on any aeroplane, as required by paragraph (5.1) or (5.2) of this AD, as applicable.



(5.1) For Group 1 and 2 aeroplanes: After modification of the aeroplane as required by paragraph (3) of this AD, or as specified in Note 2 of this AD, as applicable.

(5.2) For Group 3 aeroplanes: From 14 June 2022 [the effective date of the original issue of this AD] (see Note 1 and 2 of this AD).

#### Ref. Publications:

Airbus A319 AFM TR 784 issue 1, EASA approval date 30 April 2020.

Airbus A319/A320/A321 AFM TR 785 issue 1, EASA approval date 30 April 2020.

Airbus SB A320-22-1819 original issue dated 07 March 2022, or Revision 01 dated 20 April 2023.

Airbus SB A320-22-1820 original issue dated 23 May 2022, or Revision 01 dated 28 November 2022.

Airbus SB A320-22-1821 original issue dated 26 November 2021, or Revision 01 dated 24 March 2022, or Revision 02 dated 16 September 2022, or Revision 03 dated 19 May 2023.

Airbus SB A320-22-1822 original issue dated 14 February 2022, or Revision 01 dated 06 July 2023.

Airbus SB A320-22-1823 original issue dated 30 March 2022, or Revision 01 dated 20 June 2023.

Airbus SB A320-22-1824 original issue dated 18 March 2022, or Revision 01 dated 30 June 2023.

Airbus SB A320-22-1827 original issue dated 07 February 2022.

Airbus SB A320-22-1828 original issue dated 22 December 2021.

Airbus SB A320-22-1895 original issue dated 15 September 2023.

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. The original issue of this AD was posted on 28 April 2022 as PAD 22-049 for consultation until 26 May 2022. No comments were received during the consultation period.
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](#). 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 – Airworthiness Office – 1IASA; E-mail: [account.airworth-eas@airbus.com](mailto:account.airworth-eas@airbus.com).



## Appendix 1 – List of Affected FG

- Affected FG 2G standards listed below:

P/N (see Note 3 of this AD)	Designation	FIN	Serial Number Range
C13042AAxx	CEO CFMI FG 2G HONEYWELL PEGASUS	1CA1 1CA2	All
C13043AAxx	CEO CFMI FG 2G THALES GE	1CA1	All
C13043CAxx		1CA2	
C13042BAxx	CEO IAE PW FG 2G HONEYWELL PEGASUS	1CA1 1CA2	All
C13043BAxx	CEO IAE PW FG 2G THALES GE	1CA1	All
C13043DAxx		1CA2	

Note 3: 'xx' represents any numerical sequence.

- Affected FG 3G standards listed below:

FMGC LRU	FMGC Hardware	FG Software	Designation	FIN	Serial Number Range
C13207AA01	C13207AA00	G2858AAA01	CEO/NEO CFMI FG 3G HONEYWELL PEGASUS	1CA1	All
C13207CA02	C13207CA00	G2858AAA02		1CA2	
C13207CA03	C13207CA00	G2858AAA03			
C13207CA04	C13207CA00	G2858AAA04			
C13207CA05	C13207CA00	G2858AAA05			
C13207CA06	C13207CA00	G2858AAA06			
C13207CA07	C13207CA00	G2858AAA07			
C13207CA08	C13207CA00	G2858AAA08			
C13208AA01	C13208AA00	G2858AAA09	CEO/NEO CFMI FG 3G THALES GE	1CA1	All
C13208AA02	C13208AA00	G2858AAA10		1CA2	
C13208AA03	C13208AA00	G2858AAA11			
C13208AA04	C13208AA00	G2858AAA12			
C13208AA05	C13208AA00	G2858AAA13			
C13208AA06	C13208AA00	G2858AAA14			
C13208AA07	C13208AA00	G2858AAA15			
C13208AA08	C13208AA00	G2858AAA16			
C13208CA08	C13208CA00	G2858AAA17			
C13207DA04	C13207DA00	G2858AAA18	CEO/NEO IAE PW FG 3G HONEYWELL PEGASUS	1CA1	All
C13207DA05	C13207DA00	G2858AAA19		1CA2	
C13207DA06	C13207DA00	G2858AAA20			
C13207DA07	C13207DA00	G2858AAA21			
C13208BA04	C13208BA00	G2858AAA22	CEO/NEO IAE PW FG 3G THALES GE	1CA1	All
C13208BA05	C13208BA00	G2858AAA23		1CA2	
C13208BA06	C13208BA00	G2858AAA24			
C13208BA07	C13208BA00	G2858AAA25			
C13208DA06	C13208DA00	G2858AAA26			



## Appendix 2 – List of Serviceable FG 3G

FMGC LRU/ FG Software	FMGC Hardware	Designation	FIN	STD
C13207CA09	C13207CA00	CFMI FG 3G HONEYWELL PEGASUS	1CA1 1CA2	PC20
C13208AA09	C13208AA00	CFMI FG 3G THALES GE		
C13208CB09	C13208CB00	CFMI FG 3G THALES GE with mezzanine (increase memory)		
C13207DA08	C13207DA00	IAE PW FG 3G HONEYWELL PEGASUS		PI18
C13208BA08	C13208BA00	IAE PW FG 3G THALES GE		
C13208DB08	C13208DB00	IAE PW FG 3G THALES GE with mezzanine (increase memory)		
All later approved standards				

