



適航指令發布單

Airworthiness Directive Issuance Form

民航局AD編號 AD number	CAA-2024-01-012	發布日期 Date issued	2024/02/02												
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	AC32. digital air data computers defined as affected part in this AD. These ADC are known to be installed on, but not limited to AW 189, Pilatus PC-21, Cessna 550, and aircraft having Supplemental Type Certificate embodied.														
主旨摘要 Subject	Navigation - Digital Air Data Computer - Replacement														
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_____
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<input type="radio"/> DGAC	<input type="radio"/> CAA of Israel														
	<input type="radio"/> Other_____														
	設計國AD編號 Original AD number	2024-0024													
	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	ATA 34. Ref. Publications: Thommen SB AC32/07 revision 1.0 dated 31 August 2023.														

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

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



Airworthiness Directive

AD No.: 2024-0024

Issued: 24 January 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:

THOMMEN AIRCRAFT EQUIPMENT AG

Type/Model designation(s):

AC32 Digital Air Data Computers

Effective Date: 07 February 2024

ETSO Authorisation: AC32 Z 34-17-01 issue 2, issued by FOCA in 2005

Foreign AD: Not applicable

Supersedure: None

ATA 34 – Navigation – Digital Air Data Computer – Replacement

Manufacturer(s):

Thommen Aircraft Equipment AG (Thommen)

Applicability:

AC32.() digital air data computers (ADC) defined as affected part in this AD.

These ADC are known to be installed on, but not limited to AW 189, Pilatus PC-21, Cessna 550, and aircraft having Supplemental Type Certificate (STC) embodied.

Definitions:

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

The SB: Thommen Service Bulletin (SB) AC32/07.

Affected part: AC32.() digital ADC units, having Part Number (P/N) AC32.10.21.10.XX, AC32.10.21.11.XX, AC32.11.21.XX.XX (where 'XX' represents any alpha/numerical sequence), and having a serial number (s/n) listed in Appendix A of the SB.

Serviceable part: Any AC32.() digital ADC that is not an affected part; or an affected part where the power module has been replaced by Thommen, in accordance with the instructions of Thommen SB AC32/07.



Groups: Group 1 aircraft are those that have an affected part installed. Group 2 aircraft are those for which AC32.() digital ADC units are eligible for installation, that do not have an affected part installed.

Reason:

Occurrences have been reported of AC32.() ADC that stopped functioning at temperatures below -20°C. The error is detectable and there is no transmission of erroneous data. The problem is caused by the power module and the affected units have been identified.

This condition, if not corrected, could lead to insufficient navigational data provided to the flight crew, possibly resulting in reduced control of the aircraft.

To address this potential unsafe condition Thommen identified the affected parts, and issued the SB to provide instructions to remove the affected part from service and return to Thommen for rectification.

For the reasons described above, this AD requires removal from service of each affected part. This AD also regulates (re)installation of affected parts.

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

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

Removal / Replacement:

- (1) For Group 1 aircraft: Within 12 months after the effective date of this AD, remove each affected part from service and replace it with a serviceable part in accordance with the instructions of the SB.

Part(s) Installation:

- (2) For Group 1 and Group 2 aircraft: From the effective date of this AD, it is allowed to install on any aircraft a Thommen AC32.() digital ADC, provided it is a serviceable part, as defined in this AD.

Ref. Publications:

Thommen SB AC32/07 revision 1.0 dated 31 August 2023.

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.
2. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.



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 [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: Thommen Aircraft Equipment AG, Sales Department , Hofackerstrasse 48, CH-4132 Muttenz, Switzerland, telephone: +41 61 965 22 22, E-mail: sales@thommen.aero.

