



European Union Aviation Safety Agency

Airworthiness Directive Reading Exercise

November, 25th – 26th 2019

Note: More than one answer can be correct

Your safety is our mission.

An Agency of the European Union 

EASA AD Reading Exercise

Part 3, presented by:

Tanja KISTER

Safety Information Officer

DOES THE AD APPLY [...]?

Reading of AD 2009-0110

Applies to: CFM56-5B series engines

Requires: Repetitive inspections of certain low pressure turbine (LPT) rear frames / imposes life limits

Operator case:

- LPT rear frame P/N 338-171-705-0 is not mentioned in this AD
- AD requires action in accordance with SB 72-0620 R02
- SB 72-0620 R02 states that P/N 338-171-705-0 is also applicable
- Related FAA AD 2009-18-01 also applies to P/N 338-171-705-0

[AD 2009-0110](#)

Reading of AD 2009-0110

Question 21: Does the EASA AD require action(s) on LPT rear frames having P/N 338-171-705-0?

A. Yes

B. No

C. AD is unclear

Reading of AD 2009-0110

Explanation:

- P/N 338-171-705-0 is mentioned nowhere in EASA AD 2009-0110
Affected P/N are specified > no actions for this P/N
- P/N 338-171-705-0 is covered through EASA AD 2007-0221
Published based on the SB at original issue
Current standard for same subject SB: Old AD superseded, new AD retaining requirements
- Specific case: Both EASA and FAA are State of Design Authority
Both issue State of Design ADs - CFM is a US-French Joint Venture (see [AD FAQ](#))

MISMATCH EASA AD VS SB > EASA AD TAKES PRECEDENCE

Reading of AD 2012-0177

Applies to: A380 aeroplanes

Requires: Repetitive inspections of certain landing gear door hinge fittings

Operator case:

- The AD applies to all MSN
- Inspection SB listed in the AD is not effective for my MSN

[AD 2012-0177](#)

Reading of AD 2012-0177

Question 22: Is the AD applicable to my MSN?

A. Yes

B. No, only when an affected part is installed

C. AD is unclear

Reading of AD 2012-0177

Explanation:

- **SB effectivity = production line data**
Configuration changes applied in service not considered
- **Affected parts may become installed in service on any A380 aeroplane**
Parts installation AD paragraph (4) prohibits future installation
AD applies to all aeroplanes on which this part may become installed (see [AD FAQ](#))
- **New AD standard: Groups to determine AD actions**
Group 1 = affected part installed / Group 2 = no affected part installed
Group 2 only needs to comply with AD paragraph (4) > do not install affected part

EASA AD APPLIES ≠ ALL AD ACTIONS APPLY

Reading of AD 2019-0026

Applies to: Airbus A330 and A340 aeroplanes

Requires: One-time inspection (DET + SDI) of aft lug of certain slat tracks

Operator case:

- Sequence of instructions in inspection SB A330-57-3144R00 is
 - (1) Check if affected P/N is installed
 - (2) If affected P/N installed (= Group 1 aeroplane)
 - > perform DET and SDI as required by AD §(1)
- No compliance time in the AD to establish if an aeroplane is Group 1 or 2

AD 2019-0026

Reading of AD 2019-0026

Question 23: How and when do we determine if an affected P/N is installed in-service?

A. Inspection is required, implied by §(1) and the SB

B. No inspection is required

C. Any adequate identification method is acceptable

Reading of AD 2019-0026

Explanation:

- EASA AD does not prescribe a compliance time and method
On purpose, to give flexibility to operators
- Compliance time for affected part determination:
First AD action may be due within 24 months (after AD effective date) as per AD §1
It must be determined beforehand if an affected part is installed
- Method for affected part determination:
Records check to determine P/N installed, OR
Physical inspection of installed P/N

EASA AD = EVOLVING TO PROVIDE FLEXIBILITY

Reading of AD 2018-0218

Applies to: Certain Airbus A320 family aeroplanes

Requires: Repetitive inspections of certain wing structural parts
Corrective action(s)
Provides an optional terminating modification

Operator case:

- Applicability lists 4 bullet points to exclude aeroplanes with several mods/SBs
- Our [A319 or A320] MSN are post-mod 33421
- Our MSN do not have any other mod/SB embodied

[AD 2018-0218](#)

Reading of AD 2018-0218

Question 24: Our NAA states that the AD indicates 3 conditions to be met for our MSN to be excluded from the AD Applicability.
Is our NAA correct?

A. No

B. Yes

C. All exclusion conditions must be met

Reading of AD 2018-0218

Explanation:

- An aeroplane with Airbus mod 33421 is not affected
Meeting one condition is sufficient to be excluded from the Applicability
- Applicability could have been phrased more clearly
"[...] except aeroplanes meeting one or more of the configuration criteria (1-4) below"
- But: "[...] except aeroplanes on which mod X is embodied in production
AND mod Y is embodied in production"
Aeroplanes must have both mods embodied to be excluded from the Applicability

COMMENT ON PAD / CONTACT US!

Reading of AD 2018-0247

Applies to: Certain Trig Avionics Mode S transponders

Requires: One-time inspection to determine type of installation
Modification to improve retaining cam (depending on findings)

Authority case:

- Our understanding of §(4) of the AD (Parts Installation) is that
 - no unconventional installation is allowed
 - even when the part has been modified

[AD 2018-0247](#)

Reading of AD 2018-0247

Question 25: Is the Authority's understanding correct?

A. Yes

B. No

C. Paragraph (4) requires conventional installation, as defined in the AD

Reading of AD 2018-0247

Explanation:

- **Unconventional installation may still be allowed**
If the transponder is not an affected part (post-mod = improved retaining cam)
- **Unsafe condition**
Exists only on pre-mod transponders installed in an ,unconventional way'
Does not exist on pre-mod transponders which remain installed in a 'conventional' way
Does not exist on post-mod parts installed in any way (conventional or unconventional)
- **AD requires conventional installation, but only for pre-mod parts**
Answer C is therefore also not wrong

Reading of AD 2019-0004

Applies to: Certain Thales GPS receivers

Requires: Removal of certain procedures from the navigation database,
AFM change for certain ATR aircraft

Operator case:

- I understand the AD is only applicable to aircraft
 - having the GPS receiver installed **AND**
 - operating in Satellite-based Augmentation System ([SBAS](#)) coverage areas
- There is no SBAS coverage in New Zealand (NZ)
- Thus, I can state that the AD is not applicable for our aircraft

[AD 2019-0004](#)

Reading of AD 2019-0004

Question 26: Is the operator's conclusion correct?

A. No

B. Yes

C. Depends on the decision of the NZ National Airworthiness Authority

Reading of AD 2019-0004

Explanation:

- AD (if adopted by NZ Authority) applies to the GPS receiver
Consequently applies to all aircraft with the GPS receiver installed
- Operator can request exemption from NZ Authority
Stating “no need to comply with AD” under current operating conditions
Reason: Aircraft with GPS receiver installed is operated outside SBAS coverage
- EASA recommends to still record the AD at aircraft level
To ensure future operators (potentially operating in SBAS coverage) are aware

AD APPLIES ≠ NEED TO COMPLY WITH AD

Reading of AD 2018-0234R1 (now R2)

Applies to: Airbus A350 aeroplanes

Requires: Certain dispatch restrictions and repetitive greasing of thrust reverser actuators

Operator case:

- Malfunctioning TRA removed from aircraft and sent to Goodrich/UTAS for repair
- TRA stayed in-shop for more than 4 months
- Goodrich SB RA35078-048 states spare actuators are not affected, BUT
- Note 2 of the AD requires initial and repetitive greasing

[AD 2018-0234R1](#)

Reading of AD 2018-0234R1 (now R2)

Question 27: Is it necessary to repetitively grease TRA that are in-shop to meet the requirement of AD Note 2?

A. Yes

B. No

C. Open to interpretation; AD does not specify

Reading of AD 2018-0234R1 (now R2)

Explanation:

- Aircraft-level AD does not require actions for parts held as spares
Time while part was held in shop may be disregarded
Status of the part must be determined / part must comply with AD upon (re-)installation on aircraft
- Note indicates that greasing while in shop is allowed (not required)

<i>REQUIREMENT</i> AD PARAGRAPH + COMPLIANCE TIME	<i>AD NOTE</i> REQUIREMENT
<i>MORE RESTRICTIVE</i> SUPERSEDING AD (SEE FAQ)	<i>AD REVISION</i> MORE RESTRICTIVE (SEE FAQ)

Reading of AD 2019-0235

Applies to: Certain ACR Electronics (ARTEX) ELT units

Requires: Repetitive testing and modification
(depending on installation and history)

Operator case:

- We understand this AD is only applicable to ELT:
 - installed on a helicopter OR
 - previously installed on a helicopter and now installed on an aeroplane
- It should not apply to an ELT that has always been installed on an aeroplane

[AD 2019-0235](#)

Reading of AD 2019-0235

Question 28: Is the operator's understanding correct?

A. Yes

B. No

C. Not clear

Reading of AD 2019-0235

Explanation:

- AD applies to ELT P/N and s/n as listed
- AD actions are due only for affected parts
Pre-mod and currently or previously installed on helicopter
- All ELT in Applicability may potentially become affected parts
Upon first installation on a helicopter (if pre-mod)
Status of any ELT in Applicability must be determined upon installation on an aircraft

AFFECTED PART MAY BECOME INSTALLED – RECORD AD

Reading of AD 2019-0197 (case 1)

Applies to: Certain A318, A319 and A320 aeroplanes

Requires: Replacement of certain fuel level sensor brackets (identified by P/N)

Operator case:

- AD applies to all MSN except if mod 158133 embodied in production
- Our MSN does not match any of the 3 defined Groups of aeroplanes:
 - Does not have mod 158133 (excluded)
 - Does not have mod 160029 (Group 1)
 - Does not have SB A320-28-1216 with/without SB A320-57-1193 (Group 2/3)

[AD 2019-0197](#)

Reading of AD 2019-0197 (case 1)

Question 29: Does the AD apply to my aeroplane?

A. No

B. Yes

C. Unclear

Reading of AD 2019-0197 (case 1)

Explanation:

- AD applies to all MSN without mod 158133 installed
- Groups determine actions for certain configurations:
 - AD §1: Part replacement on Group 1
 - AD §2: Part replacement on Group 2
 - AD §3: Actions for Group 3
- AD §4 does not refer to any Group
 - Applies to all aeroplanes in the Applicability
 - Regardless if they belong or do not belong to any defined Group

Reading of AD 2019-0197 (case 2)

Applies to: Certain A318, A319 and A320 aeroplanes

Requires: Replacement of certain fuel level sensor brackets (identified by P/N)

Operator case:

- We have 39 aeroplanes with mod 158133 embodied in production
- We have 119 aeroplanes with mod 160029 embodied in production
- None have SB A320-28-1216, so our aeroplanes are Group 1
- But SB A320-28-1238 R1 Effectivity only lists 80 of our MSN

AD 2019-0197

Reading of AD 2019-0197 (case 2)

Question 30: Do we have to apply SB A320-28-1238 R1 on all our aeroplanes?

A. No

B. Yes

C. Unclear

Reading of AD 2019-0197 (case 2)

Explanation:

- 119 MSN with mod 160029 are Group 1
Unless mod 158133 is also embodied
- 39 MSN with mod 158133 are excluded
Including those that also have mod 160029 embodied
No action for these aeroplanes
- SB correctly identifies 80 MSN (119-39)

AD ONLY APPLIES TO AIRCRAFT IN APPLICABILITY

Reading of AD 2019-0020

Applies to: Airbus A350 aeroplanes

Requires: Replacement of certain slat geared rotary actuators (SGRA)

Operator case:

- We have SGRA with s/n listed in Table 1 of the applicable Liebherr SB
- The SGRA have “SB 4774A-27-01” or “SB 4775A-27-01” on the identification plate

[AD 2019-0020](#)

Reading of AD 2019-0020

Question 31: Are SGRA marked “SB 4774A-27-01” or “SB 4775A-27-01” serviceable parts?

A. Unclear

B. No

C. Yes

Reading of AD 2019-0020

Explanation:

- Affected parts = SGRA with certain P/N and s/n
Excluding: Parts inspected/repaired as per Liebherr SB
SB requires marking of SB number on part after SB accomplishment



- Serviceable part = SGRA which are not affected parts
As per AD definition of “serviceable part”

Reading of AD 2018-0262

Applies to: Certain IPECO flight crew seats

Requires: Modification, re-identification and repetitive inspections of certain seats springs

Operator case:

- Our aircraft do not have the affected seats installed
- Some of our aircraft have seat spring P/N 1A527-0016 installed
- §(8) of the AD allows installation of these springs under conditions

Reading of AD 2018-0262

Question 32: Does §(8) apply to an affected spring on any seat, or does it apply to affected springs on affected seats only?

A. The AD applies to all affected seats

B. All affected springs must be inspected

C. Open to interpretation

Reading of AD 2018-0262

Explanation:

➤ Seat-level AD

Springs affected only if installed on a seat specified in the Applicability

➤ Unsafe condition: Identified for affected spring on this seat type

May or may not be specific to this type of installation

Presence of unsafe condition on other seat types > to be investigated outside this AD

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.

REPORT INFORMATION – AD REMARKS §4.

Reading of AD 2018-0265-E (now R1)

Applies to: Rotax 915 iSc3 and Rotax 914 engines

Requires: Replacement of certain exhaust valves

Authority case:

- The AD identifies several non-EASA aircraft
- For example microlights and home-builts

[AD 2018-0265-E](#)

Reading of AD 2018-0265-E (now R1)

Question 33: Why is the Applicability of the AD defined as such?

- A. The AD applies to the affected engines, irrespective of the aircraft on which they are (or will be) installed
- B. Actions are required as per the AD, regardless of the aircraft configuration
- C. AD Applicability is incorrect

Reading of AD 2018-0265-E (now R1)

Explanation:

- **AD applies at engine level**
Irrespective of the aircraft type on which the engine is (or will be) installed
- **Aircraft affected by engine/part installation must be identified**
As required by Regulation EU No. 748/2012 (Part 21) §21.A.3B(d)
- **List of engine installations provided by BRP-Rotax**
Some aircraft not subject to EASA regulation
Kept to raise awareness that unsafe condition may exist on these aircraft types

“INSTALLED ON, BUT NOT LIMITED TO [...]” – INFORMATION ONLY

Reading of AD 2019-0030 (now AD 2019-0275)

Applies to: Certain Airbus MBB-BK117 helicopters

Requires: Repetitive inspections of certain engine mount bushings to detect delamination

Operator case:

- The new AD was published 13 February 2019
- It supersedes the old AD 2015-0198 dated 30 September 2015
- But the effective date of the new AD is 27 February 2019

[AD 2019-0030](#)

Reading of AD 2019-0030 (now AD 2019-0275)

Question 34: Is AD 2015-0198 already superseded before the new AD becomes effective?

A. Yes, new AD is valid upon publication


B. No, previous AD remains legally valid until the effective date of new AD

C. Do not know

Reading of AD 2019-0030 (now AD 2019-0275)

Explanation:

- Published AD: Valid until effective date of revised / superseding AD
Watermark already added to old AD upon publication of new AD (practical reasons)

EASA	AIRWORTHINESS DIRECTIVE
	<p>AD No.: 2015-0198</p> <p>Date: 30 September 2015</p> <p>Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.</p> <p>This AD is issued in accordance with EU 748/2012, Part 21.A.3B. In accordance with 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 [EU 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].</p>
Design Approval Holder's Name: AIRBUS HELICOPTERS DEUTSCHLAND GmbH	Type/Model designation(s): MBB-BK 117 D-2 helicopters
TCDS Number:	EASA.R.010
Foreign AD:	Not applicable
Supersededure:	None
ATA 71	Power Plant – Engine Mount Bushings – Inspection

**EASA**
European Union Aviation Safety Agency

Airworthiness Directive
AD No.: 2019-0030
Issued: 13 February 2019

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 HELICOPTERS DEUTSCHLAND GmbH
Type/Model designation(s): MBB-BK117 D-2 helicopters

Effective Date: 27 February 2019

TCDS Number(s): EASA.R.010

Foreign AD: Not applicable

Supersededure: This AD supersedes EASA AD 2015-0198 dated 30 September 2015.

ATA 71 – Power Plant – Engine Mount Bushings – Inspection / Replacement

Reading of AD 2019-0140

Applies to: Airbus A330-941 aeroplanes

Requires: Replacement of certain chemical oxygen generators

Operator case:

- AD is applicable to a particular aircraft model not within our fleet
- AD contains a part restriction

[AD 2019-0140](#)

Reading of AD 2019-0140

Question 35: Should we also evaluate the Part Installation §(2) for other A330 models in our fleet?

A. Yes

B. Open to interpretation

C. No

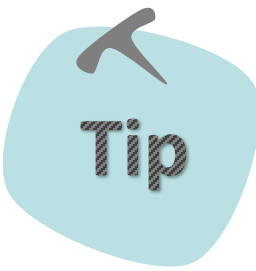
Reading of AD 2019-0140

Explanation:

- Aircraft level AD only applicable to A330-941 aeroplanes
- EASA AD [2015-0119](#) covers same unsafe condition for A330/A340 except A330-941
- AD cannot contain requirements for aircraft outside the Applicability

AIRCRAFT NOT IN APPLICABILITY – AD DOES NOT APPLY

Comments and Questions



Before sending any ‘continued airworthiness’ question to EASA, please review our [AD Homepage](#) and our [AD FAQ](#).

For submitting your comments on a Proposed AD, click on  “send comment” just below the subject/description.

For specific or general continued airworthiness (AD, SIB, etc.) questions, contact the EASA Programming and Continued Airworthiness Information (PCAI) Section at ads@easa.europa.eu.

Thank you for your participation!

For any (further) questions,
please provide these during the Q&A session at the end of the AD Workshop,
or submit these in Slido during the Workshop.

If there is insufficient time during the Q&A for all questions,
EASA will provide a written answer after the AD Workshop.

E-mail ads@easa.europa.eu

easa.europa.eu/connect



Your safety is our mission.

An Agency of the European Union 