


EASA	COMMENT RESPONSE DOCUMENT
	EASA PAD No. 13-031 [Published on 06 February 2013 and officially closed for comments on 06 March 2013]

Commenter 1: Company name – Ken Dickenson – 04.03.2013

Comment # 1

1. INTRODUCTION

The pieces of information chosen by Airbus, and accepted by the EASA, to form an ICA sometimes complicate the activities of maintenance organisations approved under Part-145 and Continuing Airworthiness Management Organisations (CAMO) approved under Part-M. This is the case with Certification Maintenance Requirements (a part of ICA specified as mandatory in approval of the type design).

The issue of an AD to address new or amended mandatory instructions and/or airworthiness limitations may cause additional prejudice to maintenance organisations and CAMO. The AD calls the attention of the competent authority for the oversight of the continuing airworthiness of individual aircraft to the matter and may amplify the difficulties of CAMO/maintenance organisations, especially when the data selected are not sufficient to form an ICA.

This PAD/AD is founded on an unstable basis.

The review of PAD 13-031 has to take into account the context in which the mandatory instructions and corresponding airworthiness limitations are introduced, and the rules governing this context. This is a requisite to achieve a correct introduction of mandatory directives compatible with the activities of maintenance organisations and CAMO.

To make this report easier to read, the subject context and the rules governing this context are described in the Appendix to this report. The Appendix to this report describes a process for the certification of a (recent) aeroplane type (and the benefits to properly comply).

The EASA stressed the impact of using ambiguous terms and the importance for providing clarity and accuracy (see Note 1). We have tried to pay particular attention to the terms used in the subject PAD and in this discussion: For example, “approved” does not mean “mandatory”, and “safety task” does not necessarily imply “mandatory compliance”.

Note 1 Refer to the EASA Proposed CM-21A-J-001 issue 01. Refer also to the FAA Advisory Circular (AC) 20-176 “Design Approval Holder Best Practices for Service Bulletins Related to Airworthiness Directives”.

2. SECTION ‘REASON’

Please could the EASA provide its answers to the following questions?

☐ Would not the use of a unique term for “maintenance requirements”, “maintenance tasks”, and “instructions” improve the section “Reason”?

The International Standards and Recommended Practices in the paragraph 10.4 of Chapter 10 in the Part IIIA of the Annex 8 (Amdt 103) to the Convention on

International Civil Aviation refer to “maintenance tasks and frequencies that have been specified as mandatory by the State of Design in approval of the type design” (ref. to the Appendix to this report, Part I, paragraph A.).

☐ Could the EASA provide the reasons why public has not been consulted earlier on this issue (i.e. PAD should have been published approximately a year ago) and the corrective actions the EASA intends to implement to prevent the possibility of reoccurrence?

This Section states that “The original issue of this document introduced more restrictive maintenance requirements and/or airworthiness limitations”. Failure to comply with more restrictive mandatory maintenance tasks or airworthiness limitations can result in an unsafe condition.

☐ Would the following proposal for the section “Reason” be more appropriate?

“The Instructions for Continued Airworthiness (ICA) that have been specified as mandatory in approval of the type design for Airbus A318/A319/A320/A321 aeroplanes are currently collected in the Airworthiness Limitations Section (ALS).

The Certification Maintenance Requirements (CMR) and their respective airworthiness limitations were previously listed in Airbus A318/A319/A320/A321 CMR document referenced AI/ST4/993.436/88. DGAC France issued AD F-2005-101 (EASA approval 2005-5886) to require compliance with these mandatory maintenance tasks and airworthiness limitations as specified in that document.

The CMR and corresponding airworthiness limitations are now specified in Airbus A318/A319/A320/A321 ALS Part 3, which is approved by the EASA. The original issue of this ALS Part introduced more restrictive maintenance tasks and/or airworthiness limitations. Since, the revision 01 of the Airbus A318/A319/A320/A321 ALS Part 3 has been approved. Failure to comply with the mandatory maintenance tasks or airworthiness limitations contained in this ALS Part could result in an unsafe condition.

For the reasons described above, this AD supersedes DGAC France AD F-2005-101 and requires the implementation of the mandatory maintenance tasks and airworthiness limitations as specified in Airbus A318/A319/A320/A321 ALS Part 3 revision 01.”

3. SECTION ‘REQUIRED ACTION(S) AND COMPLIANCE TIME(S)’

☐ Would the paragraph (1) impose an excessive flexibility reduction on the organisations managing the continuing airworthiness of Airbus A318/A319/A320/A321 aeroplanes?

This paragraph is confusing. It requires after (How soon after? One day, one month or six months?) the effective date of this AD, the accomplishment of all applicable (see Note 2) maintenance tasks (see Note 3) within the compliance times defined in the Record Of Revisions (ROR) pages of the A318/A319/A320/A321 ALS Part 3 revision 01. Why is it required to immediately carry out the first accomplishment of the applicable CMR tasks, on (recent) aeroplanes that have not accumulated a life close to the corresponding airworthiness limitations? As long as the interval is not exceeded, there is no unsafe condition.

Note 2: Depending on aeroplane configuration.

Note 3: As included by reference in the Record of Revisions pages of ALS Part 3 revision 01.

Would the following proposal for the paragraph (1) be more appropriate?

“(1) From the effective date of this AD, comply with the instructions and corresponding compliance times as specified in the Record of Revisions (ROR) pages of Airbus A318/A319/A320/A321 ALS Part 3 Revision 01.”

☐ What are the (new) restrictions introduced by the paragraph (2)?

Are not these instructions standard practices? Should EASA confirm the need for their introduction in the AD:

☐ Should not other relevant standard practices be introduced (e.g. reporting of failures)?

☐ What should be done for corrective actions that have been applied, but not approved, in the past (i.e. when there was no requirement on this matter in the CMR-related AD or when there was/is no such AD at all)?

Of course, they may be numerous.

Should not these standard practices be included in the rules governing the A318/A319/A320/A321 ALS Part 3 at the opportunity of the next revision? Would not this be a more reasonable solution?

☐ Would the following proposal for the paragraph (3) be more appropriate?

“(3) Compliance with the requirements of paragraph (1) of this AD can be demonstrated by:

(3.1) Revising as follows the approved Aircraft Maintenance Programme (AMP), on the basis of which the operator or the owner ensures the continuing airworthiness of each operated aeroplane: Incorporate all CMR tasks and airworthiness limitations specified in Airbus A318/A319/A320/A321 ALS Part 3 Revision 01 that are relevant to the aeroplane type,

and

(3.2) Complying with the approved AMP described in paragraph (3.1) of this AD.”

4. COMPLIANCE WITH THE A318/A319/A320/A321 ALS PART 3 REVISION 01

a. APPLICABLE MAINTENANCE PROCEDURES

The GM No. 1 to 21.A.239(a) indicates that the Office of Airworthiness (see Note 4) should ensure (see Note 5) that the manuals approved by the EASA (the Aircraft Flight Manual, Master Minimum Equipment List, the ALS of the ICA and the CMR document, where applicable), including any subsequent revisions, are checked to determine that they meet the respective requirements, and that they are provided to the EASA for approval (ref. subparagraph w, paragraph 3.1.4 of the GM). The subject check is a compliance verification (ref. paragraph 3.1.3 of the GM).

Note 4: Office of Airworthiness of the Design Approval Holder organisation.

Note 5: The term “ensure” is important as it implies that the compliance verification is not necessarily performed by the Office of Airworthiness.

We infer from this GM that (i) the EASA Certification Directorate (see Note 6) has checked the A318/A319/A320/A321 ALS Part 3 revision 01 before approving it, and (ii) the TC holder has produced the A318/A319/A320/A321 ALS Part 3 revision 01 (ALS Part 3 author role) and performed an independent check (ALS Part 3 Compliance Verification Engineer (CVE) role).

Note 6: Probably a series of Experts and the EASA Project Certification Manager.

☐ Can the EASA indicate the reference of the (basic – see Note 7) maintenance procedure to conform in order to declare the compliance with the AD (resulting from this PAD) for the functional check required by the CMR task 324500-00002-1-C?

Note 7: Reference is made to the maintenance procedure developed by the TC holder: some alternative maintenance procedures may exist.

Although it is crucial for the activities of maintenance organisations and CAMO, this information is obviously not given in the A318/A319/A320/A321 ALS Part 3 revision 01.

☐ Is a compliance verification of the MPD carried out?

With the other CMR tasks of the A318/A319/A320/A321 ALS Part 3 revision 01, CAMO and maintenance organisations are taken for a ride from a document to another, i.e. ALS Part 3 ☐ Maintenance Review Board Report (MRBR) ☐ Maintenance Planning Document (MPD) ☐ Aircraft Maintenance Manual (AMM). To the best of our knowledge, Airbus considers that ICA do not embrace the MPD and some operators do not develop their Aircraft Maintenance Programme on the basis of the MPD.

☐ Is this interruption in the ICA chain acceptable for the demonstration of compliance with AD, taking into account the potential MPD quality issues?

☐ Which maintenance procedure(s) has (/have) to be followed?

The introduction of the A318/A319/A320/A321 ALS Part 3 revision 01 indicates that the referenced MRBR tasks (if any) “cover the content of the CMR requirement in terms of maintenance procedure”. However, when several MRBR tasks are referenced, what should be done:

☐ Comply with the maintenance procedure(s) called up by each MRBR task?

or

☐ Comply with the maintenance procedure(s) called up by one of the listed MRBR tasks?

This is not explained and creates confusion. In addition, the MRBR does not reference maintenance procedures (as previously mentioned).

The combination of data chosen by Airbus, and accepted by the EASA, to form an ICA specified as mandatory in approval of the type design, contributes sometimes to make more complex the activities of maintenance organisations and CAMO. This is the case with CMR. The adequate combination for CMR includes:

- (i) A unique CMR task identifier,
- (ii) A CMR task description,
- (iii) The cross-reference to the maintenance procedure(s) to fulfil the CMR task objective,
- (iv) The airworthiness limitations, and
- (v) The applicability.

Neither the MRBR (approved, compliance not mandatory) nor the MPD (not approved, compliance not mandatory) is an appropriate repository for referencing the maintenance procedure(s) necessary to show compliance with mandatory instructions (as described in this report). A misleading message is therefore conveyed when an ALS Part references MRBR or MPD tasks instead of the relevant maintenance procedure. The cross-reference between CMR and MRBR tasks could be given in the MRBR.

Refer also to the paragraph E. of the Part II in the Appendix to this report.

The EASA correctly recommends (see Note 8) that in their Service Bulletins (SB) related to AD, design organisations should “not refer to documents that simply refer to other documents. Instead [they should] refer to the end document that provides the actual instruction”. But, why would this apply only to SB?

Note 8: Refer to Proposed CM-21A-J-001 issue 01.

The application of the EASA’s recommendation to the A318/A319/A320/A321 ALS Part 3 would (i) minimize the possibility of errors or extensive judgment, and (ii) alleviate the burden AD and the A318/A319/A320/A321 ALS Part 3 revision 01 generate on operators (without jeopardizing safety) for aeroplanes that have been previously processed in accordance with the end manual that provides the actual procedure.

b. ROR PAGES

☐ Is it acceptable to refer to MRBR tasks in the paragraphs 4. and 5. of the ROR?

Some operators may comply with MRBR tasks using maintenance procedures alternative to the ones given in the AMM, for example.

How is it ensured that such alternative procedures are acceptable for the compliance with the CMR tasks? It is usually not possible to review them. It is therefore inappropriate within the frame of an AD/ALS to:

- ☐ Refer to the MRBR/MPD tasks.
- ☐ Take credit for the previous accomplishment of MRBR/MPD tasks.
- ☐ Would the paragraphs 4.2. and 5.1. of the subject ROR pages be confusing?

Could the EASA explain why the following scenario (see Note 9) is not acceptable? An operator of an A320-200 aeroplane (average flight time 2 FH/FC) performs the initial functional check of the positive/negative ΔP protection of safety valves at 49500 FH since aeroplane initial entry into service (interval 50000 FH for the aeroplane certified operational life of 60000 FH). Then, when the aeroplane reaches 60000 FH the operator applies the MOD 39020 retrofit SB. The operator recalculates the next accomplishment deadline for the subject functional check from 49500 FH, and set the new deadline to 85500 FH (interval 36000 FH for the aeroplane certified operational life of 120000 FH).

Note 9: A similar scenario applies with the MOD 37734.

If this scenario is acceptable, the paragraphs 4.2. and 5.1. impose (in some cases) an excessive flexibility reduction on the organisations managing the continuing airworthiness of Airbus A318/A319/A320/A321 aeroplanes. In such a case, the section 'REQUIRED ACTION(S) AND COMPLIANCE TIME(S)' of the PAD should be revised to eliminate the over conservatism.

c. SUBPART 3-0 PARAGRAPH 5.

☐ Could the EASA confirm that when no adequate MRBR task exists for 'Major' failure conditions requiring a maintenance task, a CMR task has been introduced in the A318/A319/A320/A321 ALS Part 3 revision 01?

The FAA states in the disposition of public comments for the Advisory Circular (AC) 25-19X (see Note 10): "The second quote regarding Major effects is not in the original AC but is currently applied by EASA and TCCA. Our experience is the identification of CCMR for Major failure conditions is rare; but it is occasionally necessary when the certification process needs to supplement the MSG-3 process".

Note 10: Refer to "Disposition of public comments AC No. 25-19X", page 2 using [this link](#).

☐ Could the EASA confirm that when a MRBR task has been selected to cover a Candidate CMR (CCMR) that has not been reflected in the A318/A319/A320/A321 ALS Part 3 revision 01, the Failure Effect Category (FEC) 8 has been systematically assigned to the MRBR task?

The FAA states in the disposition of public comments for the Advisory Circular (AC) 25-19X: "[...] comment that the FEC8 task would not be overlooked is true only when it remains FEC8. There have been cases where FEC8 tasks were reclassified as a non-FEC8 tasks due to lack of traceability between the FEC8 task and the CCMR".

d. SUBPART 3-0 PARAGRAPH 6.

☐ Could the EASA provide the interval escalation limit for each two-star CMR task?

This paragraph of the A318/A319/A320/A321 ALS Part 3 revision 01 indicates it has been demonstrated that the use of approved escalation practices or an approved reliability program to manage a maintenance program does not give rise to undue escalation, as operators adjust their maintenance programs based on data collection and analytical techniques.

In the paragraph 'reason' of the PAD 12-029, the EASA acknowledges the difficulties encountered by operators and their competent authority in dealing with interval escalations: "[...] It is common practice to escalate the intervals of many MPD tasks, based on operator's experience and service records. Whether such escalation is acceptable from a safety perspective is usually difficult to determine by the competent authority". If it is difficult to determine for MPD tasks whether an escalation is acceptable from a safety perspective, it is even more difficult for two-star CMR tasks.

5. WAY FORWARD

We recommended to:

☐ Cancel the EASA PAD 13-031,

☐ Require the publication of an Airbus A318/A319/A320/A321 ALS Part 3 revision that will address the subject within a reasonable timeframe (e.g. before the summer 2013),

☐ Issue an AD requiring compliance with this Airbus A318/A319/A320/A321 ALS Part 3 revision.

6. CONCLUSION

It is our considered opinion that the PAD 13-031 may contribute to the confusion and could expose the public to its potential consequences. We therefore believe that remedial action is necessary. Consequently, the engineers who have commented the PAD 13-031 would respectfully request if the answers to these questions could be developed by the EASA.

It could be felt that, within various departments of the TCH, a shortfall in direction or experience in the management of aircraft continuing airworthiness could be holding an unmerited influence when addressing ALS issues.

We would like to express in anticipation our thanks to the EASA for the consideration given to our comments and for the release of public answers.

[APPENDIX submitted to EASA]

EASA response:

Comments understood but not agreed. In the view of EASA, the commenter provides a personal view on EASA AD policy and Airbus ALS documentation, rather than providing comments specifically focusing on PAD 13-031. In addition, a Comment Response Document is not a forum to open an online debate on either EASA or Airbus standard practices.

As the opinions expressed do not address the merits of the proposed requirements as expressed in the PAD, no changes have been made to the Final AD in response to these comments.

Commenter 2: Lufthansa Technik – Damir Ostojic – 01.03.2013
Comment # 2

After review of PAD we would like to provide following comments [regarding the section] Required Action(s) and Compliance Time(s):

To [Paragraph] (1): Why is it required to accomplish all applicable maintenance tasks within compliance time? This is not required by ALS Part 3. The intention should [be] focused on new introduced or tasks with more restrictive changes. Basically we have to follow compliance time as written in ALS Part 3 Rev 01 / Record of Revision / REVISION 01 Compliance Time.



A318/A319/A320/A321 AIRWORTHINESS LIMITATIONS SECTION

ALS PART 3

CERTIFICATION MAINTENANCE REQUIREMENTS

RECORD OF REVISIONS

The European Aviation Safety Agency (EASA) Certification Directorate approves the ALS Part 3. Variations must also be approved (unless justified in accordance with a procedure stated herein).

REVISION NUMBER	SUB-PARTS	APPROVED BY EASA	EASA AD	INSERTION IN MAINT. PROG.
00	ROR 3-1	NOV 23/11		
01	ROR 3-1	JUN 15/12		

Note: The ALS Part 3 is covered by the Certification Document 00D050AM093/C01.

R Revision 01 is approved by EASA under reference 10040191.

R REVISION 01 COMPLIANCE TIME:

R 1. Except as stated in paragraph 4. and paragraph 5. of this Record Of Revisions (ROR), it is mandatory to comply with the maintenance requirements and airworthiness limitations defined in the sub-part 3-1 of the A318/A319/A320/A321 ALS Part 3 revision 01 from 15-Jun-2013.

N 2. From 23-Nov-2012 to 14-Jun-2013, it is mandatory to comply with the maintenance requirements and airworthiness limitations defined in, either:

N – The sub-part 3-1 of the A318/A319/A320/A321 ALS Part 3 at revision 00, except as stated in paragraph 5. of this ROR,

N or

N – The sub-part 3-1 of the A318/A319/A320/A321 ALS Part 3 at revision 01.

R 3. From 15-Jun-2012 date to 22-Nov-2012, it is mandatory to comply with the maintenance requirements and airworthiness limitations defined in, either:

R – The CMR Document (EASA version) at issue 23, except as stated in paragraph 4. and paragraph 5. of this ROR,

R or

R – The CMR Document (FAA version) at issue 17, except as stated in paragraph 4. and paragraph 5. of this ROR,

R or

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ALS PART 3

PAGE: 1-ROR

EASA APPROVED

To [Paragraph] (2): we don't understand the meaning of this chapter at all!? What kind of discrepancies are you talking about? Do you mean findings? Are Documentation inconsistencies meant? In any case the Airbus together with certification Authority has to make sure that required accomplishment instruction are available at the time the document has been issued. Also Airbus has to make sure that Accomplishment Instruction are covering the changed/new task requirement and that the task can be performed on aircraft. We have an impression that this PAD as written is shifting the TC Holder responsibilities and possible problems to operators. This should not be the case.

To [Paragraph] (3): No Comment.

EASA response:

Comment on § (1) – It is current EASA practice to require (by AD) the accomplishment of specific actions, rather than updating the approved maintenance programme, although § (3) of PAD 13-027 makes clear that that is an acceptable method to comply. It also should be noted that, by itself and without an EASA AD, the Airbus ALS document cannot be considered to contain 'required' actions, except through European regulation EC 2042/2003 Part M – however, that regulation does not apply outside Europe. Nevertheless, the comment is understood and EASA may consider revising the current policy for future 'ALS' type AD actions.

Comment on § (2) – EASA has found it necessary to make it explicit (in the AD) that, in case of finding any discrepancies during an action required by the AD, corrective action is required, and to specify when. The 'how to' can be found in Airbus documentation – exactly which document is sometimes not referenced in the Airbus ALS document – or obtained by contacting Airbus to request those instructions.

Comment on § (3) – Noted.

No changes have been made to the Final AD in response to these comments.