



**EASA**  
European Aviation Safety Agency

# Airworthiness Limitation Section (ALS) AD's

Jan Mocsonoky  
Safety Information Officer  
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# AD on ALS - Content

- EASA Policy: AD on ALS revisions
- Policy background
- Current ALS AD writing standard



# Airworthiness Limitations Section

- EASA approved Airworthiness Limitations Section (ALS) is a part of the approved type design – 21.A.31(a)(3).
  - The ALS document is referenced in the Type Certification Data Sheet.



# Airworthiness Limitations Section

- Part of the Instructions for Continued Airworthiness (segregated and distinguishable)
  - Each mandatory replacement time, structural inspection interval and related structural inspection procedure - Damage Tolerant Airworthiness Limitation Items (based on Damage Tolerance evaluation; CS25.571)
  - Each mandatory replacement time of EWIS (Electrical Wiring Interconnection System) components; CS25.1701
  - Fuel Tank Airworthiness Limitations including Critical Design Configuration Control Limitations (CDCCL) inspections and procedures



# Airworthiness Limitations Section

- For some aircraft types, the ALS also includes:
  - SL ALI (Safe Life Airworthiness Limitation Items)
  - CMR (Certification Maintenance Requirements)
  - ASM (Ageing Systems Maintenance)
  - AISS (Aircraft Information System Security)



# Post-certification ALS change

- In-service experience or post-certification testing and evaluation may lead to:
  - Reduction or extension of inspection/replacement intervals or introduction of a new task or removal of an existing task.
  - Any change to the ALS must be approved by EASA.



# Airworthiness Directive mandating ALS

- Why does EASA issue ALS AD's
  - Part M.A.302 - “ every aircraft shall be maintained in accordance with a maintenance program approved by the competent authority, which shall be periodically (annually) reviewed and amended accordingly...”
  - Part M.A.302 – “The maintenance program must establish compliance with instructions for continued airworthiness issued by type certificate and supplementary type certificate holders...”



# Airworthiness Directive mandating ALS

- Part M.A.709 - requires CAMO/owners to hold and use applicable current maintenance data (including Instructions for Continued Airworthiness) in the performance of continuing airworthiness tasks.





# Airworthiness Directive mandating ALS

- Reduction of inspection/replacement interval of an ALS item or introduction of a new task – as a rule considered to be a potential unsafe condition.
  - Part 21.A.3B - EASA issue AD when an unsafe condition has been determined;
  - AMC 25-19 Certification Maintenance Requirements (CMR)-part of certification specification CS-25:
    - If, the CMR introduces more restrictive or new task, the CMR will be mandated by an AD.



# Airworthiness Directive mandating ALS

- EASA responsibility as of State of Design (Basic Regulation 216/2008 Article 20):
  - ICAO Annex 8 Chapter 4 – transmit to every contracting state ... any information found necessary for the continuing airworthiness
  - MCAI – Mandatory Continuing Airworthiness Information

*Annex 8, Chapter 4.2.1: “The term “mandatory continuing airworthiness information” includes mandatory requirements for modification, replacement of parts or inspection of aircraft and amendment of operating limitations and procedures. Among such information is that issued by Contracting States in the form of airworthiness directives.”*



# Comparison with other authorities

- Bilateral aspects: EU-US Bilateral agreement, technical implementation procedures for airworthiness - 3.1.3
- 3.1.3 Sharing Information on Any Airworthiness Limitation Changes. The FAA and EASA shall share information on any changes that affect operating limitations, life limits, or any other airworthiness limitation, including manual changes and changes to certification maintenance requirements. ....

The FAA and EASA shall treat a reduced life limit as an unsafe condition and shall accordingly issue an Airworthiness Directive (AD) in accordance with their internal procedures. The FAA and EASA may also issue an AD for other limitation changes if they are considered an unsafe condition.



## ALS AD's current writing standards

- Current standard (introduced mid-2014):
  - Requires accomplishment of each action (when due) as specified in ALS (part replacement and inspection tasks) - § (1)

Required as indicated, unless accomplished previously:

- (1) From the effective date of this AD, accomplish the following actions, as specified in ALS XXX:
  - (1.1) Replace each component before or upon reaching the applicable life limit, and
  - (1.2) Within the thresholds and intervals (see Note 1 of this AD), accomplish all applicable maintenance tasks.

Note 1: For the purpose of this AD, the thresholds and intervals as defined in ALS XXX includes 'special' compliance times as defined in that document for certain tasks.



# ALS AD's current writing standards

## ➤ Note 1: Clarifies that grace periods are also compliance times.

Note 1: For the purpose of this AD, the thresholds and intervals as defined in ALS XXX includes 'special' compliance times as defined in that document for certain tasks.

## ➤ Example

3.1. For A318 OR A319 OR A320 PRE-MOD 37734 OR A321 aircraft, first accomplishment of CMR task 213100-00001-1-C must be carried out no later than the aircraft accumulating 50000 FH since initial entry into service or the last accomplishment of MRB task 21.31.00/06 or within 3 Months from 23-Nov-2011, whichever occurs the latest.





## ALS AD's current writing standards

### ➤ Requires to take corrective action, depending on findings during accomplishment of tasks - § (2);

- (2) In case of finding discrepancies (as defined in XXX) during accomplishment of any task as required by paragraph (1) of this AD, within the compliance time specified in the ALS XXX, accomplish the applicable maintenance procedures for corrective actions in accordance with the approved maintenance documentation. If no compliance time is identified in the ALS XXX, accomplish the applicable corrective actions before next flight. If a detected discrepancy is not identified in the ALS XXX, before next flight, contact [the TC holder] for approved instructions and accomplish those instructions accordingly.



## ALS AD's current writing standards

- Requires within 12 months revision of the Aircraft Maintenance Programme (AMP) by incorporating all limitations, tasks and intervals as in ALS - § (3).
- (3) Within 12 months after the effective date of this AD, revise the approved aircraft maintenance programme (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 ALS XXX.



## ALS AD's current writing standards

- Credit for AMP that already incorporates earlier ALS revision – only incorporate the new and more restrictive tasks - § (4); Ex. EASA AD 2014-0224

- (4) 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 ALS YYY [= ALS previous Revision], that action ensures (see Note 2 of this AD) the continued accomplishment of those tasks and limitations.

Consequently, for an aircraft to which that AMP applies, it is acceptable to accomplish the new and more restrictive tasks and limitations, as defined in, and within the compliance times (see Note 1 of this AD) as specified in, ALS XXX, to comply with paragraph (1) of this AD.

For that AMP, it is acceptable to incorporate the new and more restrictive tasks and limitations, as defined in ALS XXX, into the AMP to comply with paragraph (3) of this AD.





## ALS AD's current writing standards

- Once the AMP is approved (by the NAA), the operator does not have to record AD compliance for each individual task (admin relief) - § (5);

(5) When the AMP of an aircraft has been revised as required by paragraph (3) or (4) of this AD, as applicable, that action ensures (see Note 2 of this AD) continued accomplishment of the tasks as required by paragraphs (1) and (2) of this AD for that aircraft. Consequently, after revising the AMP, as required by paragraph (3) or (4) of this AD, as applicable, it is not necessary that accomplishment of individual tasks is recorded for demonstration of AD compliance on a continued basis.



## ALS AD's current writing standards

- Note at the end of the AD, highlights the (regulatory) fact that in Europe, operators must comply with the approved AMP through Part M.A.301, paragraph 3 (Comm. Reg. No 1321/2014).

Note 2: For affected [insert aircraft type(s)] registered in Europe, complying with the approved AMP, as specified in paragraph (3) or (4) of this AD, as applicable, is required by Commission Regulation (EU) No [1321/2014](#), Part M.A.301, paragraph 3.



## AD FAQ

► Don't forget:

*COMMENT ON  
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[ads@easa.europa.eu](mailto:ads@easa.europa.eu)*



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**End slide**

Questions ?

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