AM EASA-FAA workshop 2021 November
EAAMIRG AM update

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CM–S-008 Issue 03 issued 30 April 2021 - paragraph Parts of no Criticality:

Some quotes from the CM paragraph Parts of no Criticality:

…...

However, some simple applications can readily be determined to be of no criticality, i.e. being of no, or minimal, safety concern, e.g.some interiors items, some minor propulsion applications etc.

…...

For parts of no criticality, i.e. being of no, or minimal, safety concern either at aircraft or passenger level, the applicant will be required to demonstrate, at least:

……

- agreement to use this approach with the regulatory authority on a case by case basis, unless the repair or replacement application can be readily shown to fall within the scope of this CM guidance, in which case such data would need to be available to the regulatory authority in accordance with established regulatory authority practices, e.g. during audits, upon request etc., as required by the scope of the applicants approval.

…..

Furthermore, for DOA holders with established minor modification approval capability, such parts manufactured using AM can be addressed under a minor change approval provided all other aspects of the change meet the requirements for minor classification.

CM–S-008 Issue 03 issued 30 April 2021 - paragraph Parts of no Criticality:

Some quotes from the CM paragraph Parts of no Criticality (cont'd):

…….
Note: Industry - EASA dialogue continues regarding the definition and management of criticality.
……
Note: For the purposes of certification efficiency, particularly for parts of no criticality, being of no, or minimal, safety concern either at aircraft or passenger level, and in order to help to provide a 'level playing field', EASA is of the opinion that industry may benefit from:
- developing common standards regarding expectations for compliance data, e.g. statistics, testing etc.,
- developing simple common data presentation protocols for the purposes of certification

These actions may aid the certification and regulatory authority audit processes. Such a task could be addressed through use of an appropriate standardisation organisation, or other industry/regulatory authority groups, and should not compromise the classification and criticality of the product as agreed between applicants and the regulatory authorities through normal product certification processes.

EAAMIRG activity on criticality categorisation

EAAMIRG activity: comparison of approaches within the EAAMIRG group regarding ‘criticality’ classification and related points with the goal to:

(1) offer similar examples for the purposes of comparison, and

(2) develop meaningful generic 'good practice' guidance to allow recognition of different efforts between criticality categories.

Way of working:

- Defined a template for matrix with company categorisations/classifications
- Going from critical to not critical
- 11 responses amongst EAAMIRG members received on the nr of categories/ classes
- EAAMIRG members also provided examples for each of the categories
- Please note the categories are generic and exist already independent from the EASA CM
- Summary presented on next slide.

EAAMIRG activity on criticality categorisation

Companies	Application field	Categories used by EAAMIRG companies from Critical -> Not Critical			
Response of 11 companies	Structures, systems, systems installation, engines	Fatigue critical Parts	Fatigue sized parts	Static sized parts	Non loaded-remaining parts
		Class 1	Class 2	Class 3	Class 4
		Class 1	Class 2		Class 3
		Critical parts	Significant parts	Business sensitive parts	Other parts
		Critical part	Important part		other part
		Critical part	Important part	Structural part	Non-structural part
		Critical	Classified parts	Un-classified secondary load carrying parts or un-classified parts with severe bussiness impact	Un -classified parts with low load requirements

Note: Application field does not cover seats or cabin interiors

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		Critical part	Significant parts	Business service parts	Other parts
		Critical part	Important part		other part
		Critical part	Important part	Structural part	Non-structural part
		Critical	Classified parts	Un-classified secondary load carrying parts or un-classified parts with severe bussiness impact	Un -classified parts with low load requirements

CRITICAL

MEDIUM CRITICALITY

LOW CRITICALITY

NOT CRITICAL

Conclusions on current status:

- EAAMIRG companies use 3 to 4 different categories
- What is critical and what is not critical is clearly defined, categories inbetween have more variety
- Categorie coverage also depending if application on structure, systems or engines
- Categories have link to functionality or consequence of failure, but also business impact

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Thank you

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