

'Regular update of CS-25'

RMT.0673

Commentor:	UK CAA
AMC 25.603(b) Suitability and durability of materials	
Page No: 13	
Paragraph No: 1	
Comment: Some additional wording is recommended to add precision to the wording associated with in-service defects.	
Justification: To add clarity so that other in-service defects (for example, approved unrepaired allowable damage) are addressed rather than just repair related defects.	
Proposed Text: Suggest the text in the first sentence is amended to state '.... production defects and in-service <u>defects including</u> repair process defects (including size limitations) ...'	

Commentor:	UK CAA
AMC 25.605(b) New fabrication methods	
Page No: 14	
Paragraph No: 2	
Comment: Additional text is recommended to ensure that identified critical inspection and/ process-controlled steps that form part of the certification have an appropriate level of substantiation/testing/evaluation prior to any changes or alterations.	
Justification: Reminds applicants that identified critical inspection and/ process-controlled steps that form part of the certification require an appropriate level of substantiation/testing/evaluation prior to any changes or alterations. This would include both physical and non-physical changes to the part.	
Proposed Text: Add an additional sentence, 'Identified critical inspection and/or process-controlled steps form part of the certification and should not be amended without the appropriate evaluation.'	

Commentor:	UK CAA
<p>AMC 25.775(d) Windshields and Windows</p> <p>Page No: 15</p> <p>Paragraph No: 2 and 6</p> <p>Comment: Structural issues could also be caused by lightning and static build up interacting with the windshield. It would be helpful if this amendment addressed lightning and static build up, considering:</p> <ul style="list-style-type: none"> a. Their interaction with the windscreen generally (including effects on windshield structure and any heating systems) AND b. Their potential interaction with retained liquid in between layers (including explosive evaporation of accumulated water – see the reference to water ingress in the Chinese Accident Report Recommendation) <p>Justification: This would both ensure a fuller evaluation of the potential risks, and more fully address the information in the referenced Chinese Accident Report Recommendation.</p> <p>Proposed Text: Consider adding a final paragraph that reads: “The applicant should ensure that the safety analysis undertaken to address AMC 25:775 include proper consideration of the effects of both lightning and static build up, both generally (in terms of their effect on the windshield structure) and in terms of their interaction with any retained liquids (e.g. the potential for explosive evaporation of those liquids).”</p>	

Commentor:	UK CAA
<p>AMC 25.775(d) Windshields and Windows</p> <p>Page No: 15</p> <p>Paragraph No: 5</p> <p>Comment: The amendment appears to be focussed on the loss of all/part of a windshield section, however, the Chinese recommendation also refers to transparency.</p> <p>Although the various factors affecting transparency are covered in Section 5 of the AMC, the need to address transparency is not explicitly addressed in the proposed changes (e.g. the amendment refers to structural failure of the windshield, but it isn’t clear whether this includes sudden crazing of the windshield material).</p> <p>It might be helpful to make the reference to transparency more explicit, to ensure that organisations undertaking the analyses identified in the proposed change understand the need to address transparency.</p> <p>Justification: This will ensure that organisations undertake a fuller evaluation of the potential events that could lead to lack of transparency in windshields. It will also ensure that the issue of transparency raised in the referenced Chinese accident report is explicitly addressed.</p>	

Proposed Text:

Amend the penultimate sentence of the final paragraph to refer to lack of transparency as well as structural failure "...mitigate the risk of any failure condition adversely affecting other adjacent systems or components that may lead to a structural failure or the loss of transparency of the windshield"