

## COMMENT AND RESPONSE DOCUMENT

### FOR NPA 23E-4 AND NPA 25E,J-287

#### ENGINE/ APU ROTOR FAILURE

#### 1. Comments

Comments were received from AECMA. Agreements, with no comments were received from:

CAA  
CAA Monaco  
Daimler Benz Aerospace  
SNECMA  
Transport Canada

#### 2. Analysis of AECMA comments

- Paragraph 8a(3)

Comment: Reference to ISO paper should be “ISO 2685” instead of “ISO 2685:1992”. We think this an editorial error.

Response: The existing text contains the correct reference to the ISO Standard, which is referred to in JAR-25 (ACJ 25.1181). No change will be made.

- Paragraph 8d(2)

Comment: *Emergency decent* should be *Emergency descent*- Editorial error.

Response: Comment agreed; this error will be corrected. The FAA will be informed of this (and other) corrections introduced into the AMJ.

- Paragraph 8d(2)(iii), Note

Comment: At the end of the Note, the sentence *Further guidance regarding ... high altitude operations* has been omitted, comparatively to AC20-128A.

Response: The commentator is correct. However, the paragraph referred to in his comment was added by the FAA after the agreement of the text in the PPIHWG. The guidance referred to in AC20-128A is AC 25-20, which has not been formally adopted by JAA, so this AMJ will not reference AC 25-20.

- Paragraph 9b

Comment: *Transitional energy* should be *Translational energy*. This is an editorial error.

Response: Either word would be acceptable, but *translational* is the better word. The Concise Oxford Dictionary defines:

- *transition* as *passage... from one place... to another*
- *translation* as *... impart motion without rotation to.*

The problem is that the AMJ, as proposed, uses both words. The text will be modified to use the word *translational* throughout.

NOTE: The same change will be made in Paragraph 9e.

- Paragraph 9c

Comment: *objectives of Paragraph 10a should be objectives of Paragraph 10c.*

Response: Paragraph 10a (and 10b) state that an analysis should be made and give advice on the way in which this analysis should be done. However, only in paragraph 10c are the objectives of the analysis given. This change will be made.

- Paragraph 10c(3)(i)

Comment: *as defined in Paragraph 9a. should be as defined in Paragraph 9a. or 9c.*

Response: Whilst it is true that the alternative model can be used to show that the objective is met, this is already adequately stated in paragraph 9c. If this change were to be made, we might also need to consider stating the similar additional way in which the objectives for the Intermediate Fragment in 10c(3)(ii) can be met, for consistency. The current wording of the AMJ is consistent with that of ACJ No 2 to JAR 25.903(d)(1) at Change 14 and there is no record of any significant problems arising. The current wording will be retained for the benefit of Harmonisation.

The changes which result from the agreed comments will be found in the final text of the AMJ.

## RATIONALE OF THE CHANGES MADE FOR THE FINAL NPA VERSION

1. There are a number of typographical and editorial changes made since the publication of the AMJ proposal. There are not commented on individually, but may be reviewed on the “electronic” versions of the document. The changes mentioned below are those which are considered to have an influence on the intent or understanding of the AMJ. Some of these revisions result from NPA comments received by the JAA. In some cases the change has been introduced by the FAA since the document was agreed in the PPIHWG. These changes are identified by [FAA].

### AMJ 20-128A

- Paragraph 8d(1)  
A sentence is added here which gives the reason for accepting a lower standard for Part 23 aeroplanes. This is a revision introduced by the FAA since the PPIHWG agreed version, but it has an error in it. Although the FAA AC 20-128A refers here to ‘Par 25’, what was intended was ‘Part 23’. Hence for the JAA AMJ the term “JAR-23” has been used. [FAA].
- Paragraph 9b and 9e  
*translational* replaces *transitional* for consistency.
- Paragraph 9c  
This paragraph now refers to paragraphs 10c, where the appropriate safety objectives are located.
- Paragraph 10  
A new paragraph gives a brief explanation about the origin of the ‘hazards ratios’, which are quoted in Paragraph 10c(3) of the AMJ [FAA].
- Paragraph 10c (3) (ii)  
The reference has been changed to ‘Paragraph 9b’, to be consistent with the reference in 10c(3)(i).
- Paragraph 10c(3)NOTE  
This NOTE presents two separate messages, only one of which specifically relates to the sub-paragraph on Multiple Disc Fragments. An editorial change has been made to give better clarity.

## APPENDIX 1 TO AMJ 20-128A

- Title Page  
'APU' is added to the title, to clarify the applicability.
- Paragraph 6.8.1  
Reference to Figure 3 of ACJ No 2 to JAR 25.903 Change 13d.1 is deleted, since the information contained in the reference is already given in Paragraph 6.8.1. [FAA]