



DEF STAN 00-970 NOTICE OF PROPOSED AMENDMENT (Def Stan 00-970-NPA)

TITLE OF PROPOSAL:

Clarification of Part 1 Section 4 Clauses 4.22.48 and 49. Barrier Safety Nets.

Stage of Amendment: Development

Def Stan 00-970
NPA Serial No: 2012-002

Unsatisfactory
Report Serial No: 2012-002

MAA Originator: C2/Grade R A Bennett-Jones MAA-Cert-ADS1a

Affected Part:
(including paragraphs) Part 1 Section 4 Clauses 48 and 49

Cross-reference to other
relevant amendment
proposals or documents:

Proposed Issue Date Dec 2012 (Issue 10)

Weblink of where this document can be accessed

ADS Point of Contact details

Rank/Grade and Name: As above

Telephone Number mil/civ; 9679 35109 / 35366 030 679 35109 / 35366

Civilian Email address: MAA-Cert-ADS Group@mod.uk

Part 1 (for issue to Regulated Community)**INTRODUCTION (Not more than 250 words)**

The new text will be clearly identifiable within Annex A.

Clarification of the requirements Unsatisfactory Report 2012-002 refers.

1. The requirement to employ energy absorption in the longitudinal forward and lateral directions exceeds the equivalent civil requirement and is impractical to comply with.
2. The need to highlight the potential use of Barrier Safety Nets in Def Stan 00-970 was highlighted at the 72nd MASAAG.
3. Ambiguity in 4.22.48 and 4.22.49 has been removed.
4. It is felt worthwhile to reference Def Stan 00-3 as guidance material.

SUMMARY OF PROPOSED AMENDMENT

Change: See Annex A

Impact Assessment:

Objective: Clarification of the requirement

Risk Assessment: The impact of not incorporating the recommended changes is the possibility of misinterpretation of the requirement

Courses of Action.

1. **Do nothing.** The option to do nothing is not desirable for the following reason. Not incorporating the administrative changes will result in continuing misunderstanding of the requirement, leading to possible ambiguity of the requirement and lack of full compliance.
2. **Partial Amendment** – Due to the minor nature of the change partial amendment is not considered.
3. **Full Amendment.** There is no reason that full implementation of all the changes should not be completely feasible. The changes will remove ambiguity within 00-970. It is highly likely that the additional detail will be complied with in full. Retrospective mandation is not be considered necessary.

Preferred Course of Action. Amendment

Benefits and Costs:

1. **Do nothing.** There is little benefit of this option and could result in increased non compliance with Def Stan 00-970.
2. **Partial Amendment – No benefit.**
3. **Full Amendment.** Full amendment will clarify Def Stan 00-970 Part 1 and will reduce ambiguity, possibly resulting in improved overall compliance with the document. The changes proposed here represent current practice and would have no or little economic impact.

Post Implementation Review:

Timing of post-implementation review.

The author will establish the impact of the implementation of the change and consider lessons learned from this implementation.

Consultation period ends: 28-Oct-12

The consultation period for this proposed amendment ends on the stated date. Please send your feedback via email to MAA-Cert-ADS group@mod.uk.



Part 2 (for MAA internal use)

Log of Comments (to be completed once the consultation period has ended).

Comment reference	Date	From (name)	Post	Précis or Topic of Comment	MAA Response

Recap of Proposal: *A short summary of the proposal amendment including what changes were incorporated following the consultation period.*

Recommendation. *This section will be completed once all the comments have been received. The recommendation is for the relevant Head of Division to approve the proposal.*

Approval. *This section will detail exactly what has been approved and by whom, and confirm the date for the amendment to be incorporated as well as the date the NPA should be reviewed to determine what the effects of the amendment were in terms of meeting the objective of the change, if there were any unintended consequences and establishing whether the estimated costs were correct.*

Accepted changes will be authorised at the following levels:

- Changes requiring retrospective mandate: 2 *
- Changes not requiring retrospective mandate but having an engineering impact: 1*
- Changes deemed as administrative only: C1 or Equivalent.

Approved by:

Signature	
Name	
Rank/Grade	
Post	
Date signed	
Date for amendment to be incorporated	
Date for NPA review to take place	



Part 3 - NOTIFICATION OF AUTHORIZED AMENDMENT (Def Stan 00-970 NAA)

Document Part:		Sub-Part	
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Unsatisfactory Report Reference		NPA Reference	
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Originator		Date	
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Amendment to be Incorporated on	XX/XXX/XX
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INTRODUCTION

AUTHORIZED AMENDMENT

FURTHER ACTION

APPROVAL

This Def Stan 00-970 NPA has been approved by the xxxx on behalf of DG MAA

INCORPORATION

The amendment will be incorporated in....

Signed (IAW with part 2).

for DG MAA



Annex A.

Proposed change.

EXISTING TEXT

CARGO AND FREIGHT		
4.22.48 Where the cargo or freight might be a hazard to personnel in a crash landing or ditching energy absorption in the longitudinal forward and the lateral directions shall be provided. Static strength of support structure and energy absorbers in these directions shall meet the relevant requirements of 4.22.14 - 4.22.16 in conjunction with Table 35 or 41 as appropriate.		Configuration requirements and normal strength requirements are stated in 4.8 and Part 1, Section 3, Clause 3.1. See Leaflet 77 for Operational Recommendations.
4.22.49 Static strength in other directions shall meet the requirements for equipment of 4.22.44 or 4.22.47 as appropriate.		

REPLACEMENT TEXT

CARGO AND FREIGHT		
4.22.48 Wherever it can be reasonably foreseen that, if cargo or freight moved or broke free during a crash landing or ditching it would: (a) cause injury to crew or other occupants, (b) cause a fire,	For Category C aeroplanes compliance with the 9g longitudinal forward static inertia requirement could be achieved by restraining the cargo to withstand the normal in-flight and ground loads (not less than 3g in the longitudinal forward direction), provided none of the conditions in	Barrier Safety Nets provide protection to occupants forward of the cargo by withstanding the forces, within a defined expansion zone, resulting from a 9g forward acceleration by the cargo.

<p>(c) prevent the use of an emergency exit, (d) prevent the use of emergency equipment, (e) prevent access to items which might be needed by the crew after the crash,</p> <p>then it shall be restrained to meet the relevant requirements of 4.22.14 - 4.22.16 in conjunction with Table 35 or 41 as appropriate.</p>	<p>4.22.48 (b) to (e) are met and provided that Barrier Safety Nets are employed.</p>	
<p>4.22.49 Where the cargo or freight would not pose a hazard in a crash landing or ditching as described at 4.22.48 (a) to (e) it shall be restrained to withstand normal in-flight and ground loads, the factors to be decided by trade-off studies (see Leaflet 75 Para. 6).</p>		<p>Def Stan 00-3 provides detailed guidance regarding cargo restraint.</p>