

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

TITLE OF PROPOSAL:

Update of Part 5 to Issue 3 as a consequence of EASA CS25 amendments 17 and 18

Stage of Amendment: Issue One

Def Stan 00-970 NPA Serial No:	2016-001		
Unsatisfactory Report Serial No:	n/a		
MAA Originator:	Grade/Rank	Name	Post
	C2	[REDACTED]	DSA-MAA-Cert-ADS1b

Affected Part: (including paragraphs)	Def Stan 00-970 Part 5 Issue 2
Cross-reference to other relevant amendment proposals or documents:	n/a

ADS Point of Contact details			
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Part 1 (for issue to User Community)

INTRODUCTION (Not more than 250 words)

EASA has updated the CS25 via amendments 17 and 18. This NPA is to up-issue the Defence Standard 00-970 Part 5 to include these changes and to provide any additional military requirements identified as a consequence of these amendments.

The new text will be clearly identifiable within Annex A.

SUMMARY OF PROPOSED AMENDMENT

Change: *See Annex A.*

Defence Standard 00-970 Part 5 issue 2 (the Part 5) is based on and refers to CS25 amendment 16. Additionally, the Part 5 also includes specific military requirements for the design and certification of aeroplanes that will be placed on the United Kingdom Military Aircraft Register for use in the United Kingdom's military operating environment.

The Part 5 directly refers to the CS25 and therefore, when EASA amends the CS25 the amendments must be reviewed for any effect on the military requirements contained in the Part 5 and the Standard must consequently be up issued to record the CS25 changes and to provide any subsequent changed or new military requirements to the user

Amendment 17 adds a new CS25 requirement together with a number of AMC additions and changes. Amendment 18 contains mostly administrative changes to the CS and revised AMC (see annex A) The addition of a new CS in amendment 17 necessitates a change to the wording of a related Military Requirement (UK25.1301d,. See Annex A).

Impact Assessment:

Objective: **up-issue of Part 5 to Issue 3**

Risk Assessment: The impact of not incorporating the recommended changes is the possibility of misinterpretation of the requirement and non compliance with military requirements.

Courses of Action.

1. **Do nothing.** *Maintain existing Military requirements which differ from the Civil Requirements at increasing costs*
2. **Partial Amendment.** *Not recommended*
3. **Full Amendment.** *Maintain coherence with Civil Specifications*

Preferred Course of Action. Full incorporation

Costs and Benefits:

1. **Do nothing.** *MAA could not support such action. Not Recommended.*
2. **Partial Amendment.** *Not Recommended*
3. **Full Amendment.** *This solution will maintain coherence with Civil Certification Specifications. Recommended.*

Consultation period ends: **Internal only 30 July 2016**

The consultation period for this proposed amendment ends on the stated date. Please send your feedback via email to DSA-MAA-Cert-ADSGroup@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 to be retrospectively mandated: 2* Director Technical
- Changes introducing novel or contentious requirements or resulting in major change to requirements but not retrospectively mandated: 1* Head Reg/Cert.
- Changes having a significant engineering impact but not retrospectively mandated: OF5/B1 Dep Head Reg & Cert
- Changes having a Minor engineering impact but not retrospectively mandated: OF4/B2 SO1 S and ADS
- Changes which are editorial or administrative but not retrospectively mandated: OF3/C1. ADS1/2


Approved by:

Signature:	
Name:	
Rank/Grade:	Wg Cdr
Post:	DSA-MAA-Cert-S and ADS
Date signed:	26/07/2016
Date for amendment to be incorporated:	19 Sep 2016

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

Document Part:	5	Sub-Part:	
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Unsatisfactory Report Reference:		NPA Reference:	2016- 001
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Originator:		Date:	26 July 2016
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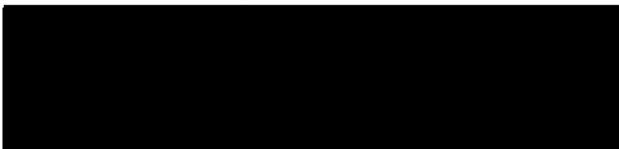
Amendment to be Incorporated on:	19/Sep/2016
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APPROVAL

This Def Stan 00-970 NAA has been approved by the 00-970 Working Group on behalf of Director MAA

INCORPORATION

The amendment will be incorporated in issue 17



Signed (IAW with part 2).

For D MAA

Annex A

Part 5 is amended as follows:

1. **Section 1 Page ii; Revision Note** – (CS)25 Amendment 16 is changed to ‘Amendments 17 and 18’.
2. **Section 1 Clause 1.4.3:** Text inserted:
(*In addition to the requirements of this Part of Defence Standard 00-970, users must also include relevant requirements contained in Part 11 and Part 13.*)
3. **CS25 Amendment 17 changes accepted:** Refer to CS25 amendment 17 Change notice
4. **CS25 Amendment 18 changes accepted:** Refer to CS25 amendment 18 Change notice
5. **Part 5 Section 2 changes Military related requirements. CS amendment affected changes**

Requirement	Title	Change
UK25.302a	Interaction of Systems and structures, Active Control Systems.	Administrative/Editorial Amendment
UK25.399a	Dual Control System	Administrative/Editorial Amendment
UK25.1301d	Electromagnetic Compatibility Requirements	Amended to accommodate Military HIRF requirements (CS25.1317)
AMC 25 – 11	Electronic Display Systems	Added Military Guidance Referring to Part 1 and Part 13 (See A-2)
Section 3	All	Requirement referencing changes to indicate Part 5 requirement rather than CS25. i.e. UK5 3.1.11 replaces UK25.3.1.11 (See A-2)

New text in *grey italics*, changed text in highlight

INDEX	REQUIREMENT	COMPLIANCE	GUIDANCE
	<p>CS25 General Acceptable Means of Compliance - AMC</p> <p>AMC 25-11 Electronic Display Systems</p>	<p>Intentionally Blank</p>	<p><i>Depending on the type and role of the aircraft Project Teams may wish to consider utilisation of EASA CS25 AMC 25-11 which contains general guidance for the design, installation, integration, and approval of electronic flight deck displays, components, and systems installed in large aeroplanes. Additional military guidance is contained in Part 1 and Part 13.</i></p>
	<p>UK25.1301d Electromagnetic Compatibility Requirements</p> <p>Each system that performs a function whose failure would reduce the capability of the aeroplane or the ability of the flight crew to respond to an adverse operating condition must be designed and installed such that the system is Electromagnetically Compatible (EMC) with the natural and man-made Electric, Magnetic and Electromagnetic (EM) environments in which the aircraft are to be deployed.</p>	<p>Specific margins, test methods and associated test detail should be specified by the Project Team Lead and an agreed programme of analysis and testing completed.</p>	<p>Consideration of EMC aspects needs to take place at an early stage in the design process as many interference problems arise due to lack of attention to EMC in the design of circuits, choice of components, operating bandwidths, installation layout and choice of signals, and signal processing. The occurrence of unintended circuit behaviour is to be anticipated, and suitable measures adopted to prevent this behaviour causing problems.</p> <p>For aircraft a Target Clearance Environment is frequently defined based on a Target HIRTA and a target Susceptibility RADHAZ Designator (SRAD) code. This is then modified by the inclusion of safety margins to derive the aircraft test environment. The aircraft contractually specified environment may include a safety margin but it should be at a level that allows the same test</p>

INDEX	REQUIREMENT	COMPLIANCE	GUIDANCE
			<p>evidence to be used to support both contractual clearance and the Target Clearance Environment.</p> <p>Special conditions may be applicable to electrical installations concerned with armaments and with externally mounted stores of all types. Very special conditions apply to circuits concerned with the firing of electroexplosive devices (EEDs), the object being to avoid inadvertent operation even in the presence of electromagnetic interference.</p> <p>Requirements applicable to the limitation of propagated electromagnetic energy whether radiated or conducted are stated in Def Stan 59-411. Supporting guidance can also be found in STANAG 3614, BR2924, and the Low Flying Handbook.</p>

