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

TITLE OF PROPOSAL:
Def Stan 00-970 Part 5 – Large Aircraft. Issue 1

Stage of Amendment: Issue 1

Def Stan 00-970 NPA Serial No: 2014/001
Unsatisfactory Report Serial No: N/A
MAA Originator: Mr/ C2 Brian Jones MAA-Cert-ADS1b

Affected Part: New Def Stan 00-970 Part 5
Cross-reference to other relevant amendment proposals or documents: N/A

ADS Point of Contact details
Rank/Grade and Name: Mr B Jones
Telephone Number mil/civ; 9679 35379 030 679 35379
Civilian Email address: MAA-Cert-ADS GROUP@mod.uk

Part 1 (for issue to User Community)

INTRODUCTION (Not more than 250 words)

Defence Standard 00-970 needs to provide clarity on the requirements for certification of large aircraft and to develop in accordance with the strategy of recognising where civil requirements may be deemed appropriate for certification of military aircraft. This NPA advises the regulated community of the proposed publication of a Draft Def Stan 00-970 Part 5 (Large Type Aeroplanes) which extensively references EASA CS25 plus appropriate military requirements derived and/or cross-referenced to other parts of Def Stan 00-970 or other appropriate recognised Standards. On closure of the NPA and pending resolution of any comments, the intent will be to submit the document for NAA as the authoritative Def Stan 00-970 Part 5.

There has been an intent to develop a Part 5 of Def Stan 00-970 since the early 1990s when all fixed wing requirements were incorporated back into Part 1, removing many of the previous
The MAA Certification Division developed this new draft Part 5, using the current CS25 and DS 970 requirements, by undertaking a detailed SME or SQEP agencies (eg RAF CAM) review of the need for military deviations, additions or amendments to existing CS25 requirements; using Def Stan 00-970 Pts 1, 7, 11 and 13 as a baseline.

### SUMMARY OF PROPOSED AMENDMENT

**New Def Stan 00-970 Part 5 Issue 1**  
**Change:** New Standard issued

#### Impact Assessment:

**Objective:**  
This standard will provide design certification requirements for the design of new large aircraft and Major Changes to existing air systems, in the Large Aircraft category, for operation in the UK military environment. It will also enable designs to be compliant with European civil legislation, negating the current need for special conditions and waivers for operations in the European civil environment.

**Risk Assessment:** The impact of not incorporating the recommended changes is the possibility of misinterpretation of the requirement in that all fixed wing aircraft design requirements will remain in the Def Stan 00-970 Part 1. With the Standard being cited by regulation as the baseline Type Certification Basis for aircraft to be certified for operation in the UK military environment iaw RA 1500. The increasing complexity and diversity of aircraft specifications makes it necessary to raise separate requirements for the different types of aircraft to be operated i.e. combat aircraft, medium sized aircraft and large transport type aircraft.

#### Courses of Action.

1. **Do nothing.** Undesirable for the reasons stated above.
2. **Partial Amendment** N/A.
3. **Full Amendment.** Publish New Issue

**Preferred Course of Action.** New Issue

#### Costs and Benefits:

1. **Do nothing** Significant Cost as new designs or significant modification will require review of 970 pt 1 and EASA requirements and may need special conditions and waivers
2. **Partial Amendment** N/A
3. **Full Amendment** Significant benefit as Pt5 will provide clear requirements for large aircraft and new designs will be compliant with EASA Specifications allowing EU operations without special conditions and waivers.
Consultation period ends:  17/10/2014
The consultation period for this proposed amendment ends on the stated date. Please send your feedback via email to MAA-Cert-ADSGroup@mod.uk.
Part 2 (for MAA internal use)

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

<table>
<thead>
<tr>
<th>Comment reference</th>
<th>Date</th>
<th>From (name)</th>
<th>Post</th>
<th>Précis or Topic of Comment</th>
<th>MAA Response</th>
</tr>
</thead>
</table>

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

Initial Issue of Def Stan 00-970 Part 5 – Large Aircraft

This NPA advises the regulated community of the proposed publication of a Draft Def Stan 00-970 Part 5 (Large Type Aeroplanes) which extensively references EASA CS25 plus appropriate military requirements derived and/or cross-referenced to other parts of Def Stan 00-970 or other appropriate recognised Standards

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.

Interim recommendation to provide the Draft issue one to DStan for display on the DStan web site for a consultation period of three months following which comments will be reviewed and the draft standard amended accordingly before release of issue one.

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.

Approval is sought for release of Issue 1 of DStan 00-970 Part 5 to DStan.

Accepted changes will be authorised at the following levels:

- Changes requiring retrospective mandation: 2* D/Tech
- Changes not requiring retrospective mandating, but introduce novel or contentious requirements or resulting in major changes to requirements: 2* Head of Reg & Cert
- Changes not requiring retrospective mandating but having a significant engineering impact: 1* Head of Reg & Cert
- Changes not requiring retrospective mandating but having a Minor engineering impact: OF4/B2
- Changes deemed as administrative only: Sqn Ldr/C1.

Approved by:
<table>
<thead>
<tr>
<th><strong>Signature:</strong></th>
<th>[Signature]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name:</strong></td>
<td>M. N. Deaney</td>
</tr>
<tr>
<td><strong>Rank/Grade:</strong></td>
<td>Capt. RN</td>
</tr>
<tr>
<td><strong>Post:</strong></td>
<td>Dep Head Certification</td>
</tr>
<tr>
<td><strong>Date signed:</strong></td>
<td>28 Jan 2015</td>
</tr>
<tr>
<td><strong>Release date:</strong></td>
<td>30/01/2015</td>
</tr>
</tbody>
</table>
Part 3 - NOTIFICATION OF AUTHORIZED AMENDMENT (Def Stan 00-970 NAA)

<table>
<thead>
<tr>
<th>Document Part:</th>
<th>Part 5</th>
<th>Sub-Part:</th>
<th>n/a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsatisfactory Report Reference:</td>
<td>n/a</td>
<td>NPA Reference:</td>
<td>2014/001</td>
</tr>
<tr>
<td>Originator:</td>
<td>B Jones</td>
<td>Date:</td>
<td>29 Jan 2015</td>
</tr>
<tr>
<td>Amendment to be Incorporated on</td>
<td>30 Jan 2015</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

APPROVAL

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

INCORPORATION

The amendment will be incorporated in issue 15

Signed (IAW with part 2).

for DG MAA
<table>
<thead>
<tr>
<th>Serial No.</th>
<th>Pt5 Ref</th>
<th>Comment</th>
<th>Recommendation</th>
<th>MAA Comments</th>
<th>MAA Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPA 2014/001</td>
<td>for MAA Comments</td>
<td>Under Requirement, the word ‘section’ should be capitalised.</td>
<td>Capitalise the word ‘Section’.</td>
<td>Admin change</td>
<td>Accepted</td>
</tr>
<tr>
<td>NPA 2014/002</td>
<td>Sec 2 UK 20a</td>
<td>Under Compliance reference is made to the ‘Project Team Leader’ and later throughout the whole standard.</td>
<td>Replace ‘Project Team Leader’ throughout the standard with ‘Type Airworthiness Authority’.</td>
<td>PTL is correct - The PTL is the contracting authority.</td>
<td>Not Accepted</td>
</tr>
<tr>
<td>NPA 2014/003</td>
<td>Sec 2 UK 20b</td>
<td>Under Guidance the title of Leaflet 50 is wrong</td>
<td>Replace with ‘Estimates...’ with ‘Estimation...’</td>
<td>Admin change</td>
<td>Accepted</td>
</tr>
<tr>
<td>NPA 2014/004</td>
<td>Sec 2 UK 20b</td>
<td>Under Guidance at foot of page, double quotation marks missing from beginning of Leaflet 52 title.</td>
<td>Insert “...” before the words ‘damaged’.</td>
<td>Admin change</td>
<td>Accepted</td>
</tr>
<tr>
<td>NPA 2014/005</td>
<td>Sec 2 UK 20b</td>
<td>Under Guidance an incorrect Section is quoted.</td>
<td>Part 1, Section 2, Fig 2 should read ‘Part 1, Section 4, Fig 2’.</td>
<td>Admin change</td>
<td>Accepted</td>
</tr>
<tr>
<td>NPA 2014/006</td>
<td>UK References</td>
<td>Inconsistency in UK clause format in Requirement column. Up to page 12 there is a space between ‘UK’ and the number. After page 12 there is either a full stop between ‘UK’ and the number or ‘UK’ immediately precedes the number (see UK301a). Some CS 25 clauses have the full stop missing too.</td>
<td>All ‘UK’ and ‘CS 25’ clauses to have a full stop after ‘UK’ to maintain consistency with the CS 25 clauses, i.e. ‘UK:20b’ or CS 25.301.</td>
<td>Admin change</td>
<td>Accepted</td>
</tr>
<tr>
<td>NPA 2014/007</td>
<td>Sec 2 UK 333a</td>
<td>In sub para (e) there is an incomplete reference to another sub section.</td>
<td>Expand to give the full reference ‘Part 1 Section 4 Sub section 4.13’.</td>
<td>Admin change</td>
<td>Not Accepted</td>
</tr>
<tr>
<td>NPA 2014/008</td>
<td>Sec 2 UK 301a</td>
<td>Reference is twice made to Part 1 Section 3 Clause 3.1. Is this not a sub section covering a number of clauses? This inconsistency is seen throughout the standard. A clause is an individual requirement such as ‘clause 3.1.17’ and has the extra digit grouping.</td>
<td>All references to such clauses should be changed to read ‘Sub section’ throughout the standard</td>
<td>Not accepted</td>
<td>Not Accepted</td>
</tr>
<tr>
<td>NPA 2014/009</td>
<td>CS25 397</td>
<td>Under Guidance the Def Stan clauses referred to do not exist.</td>
<td>Determine the correct clauses to refer to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NPA 2014/010</td>
<td>CS25 399</td>
<td>Under Guidance the Def Stan clauses referred to do not exist.</td>
<td>Determine the correct clauses to refer to</td>
<td>Admin change</td>
<td>Accepted</td>
</tr>
<tr>
<td>NPA 2014/011</td>
<td>UK562a</td>
<td>Under Requirement the letter ‘t’ appears twice randomly after ‘UK’ and the number.</td>
<td>Under Guidance the title of ‘Leaflet 50 is wrong’.</td>
<td>Admin change</td>
<td>Accepted</td>
</tr>
<tr>
<td>NPA 2014/012</td>
<td>Sec 2 UK 571b</td>
<td>Under Compliance reference is made to the ‘Project Authority’. Who is this?</td>
<td>Change to refer to the ‘Project Team Leader’.</td>
<td>Admin change</td>
<td>Accepted</td>
</tr>
<tr>
<td>NPA 2014/013</td>
<td>Sec 2 UK 581a</td>
<td>Under Requirement reference is made to ‘...Clauses 4.27 to 40...’. i.e. a mixture of sub sections and clauses.</td>
<td>Change to refer to ‘...Sub section 4.27...’ deleting ‘...to as this is not applicable.</td>
<td>Admin change</td>
<td>Accepted</td>
</tr>
<tr>
<td>NPA 2014/014</td>
<td>Sec 2 UK 609a</td>
<td>Under Compliance Sub section 5.1 is referred to covers more than one engine air intakes. Refer to the specific clauses appropriate to air intakes.</td>
<td>Change reference to ‘See Part 1, Section 5, Clauses 5.1.40 to 5.1.50’.</td>
<td>The original reference to 7.2.8 seems appropriate. As the clause 25.609 and UK609 refer to protection of structure. Suggest separate UK requirements may be needed for Engine and armament systems.</td>
<td>Partial Accept</td>
</tr>
<tr>
<td>NPA 2014/015</td>
<td>Sec 2 UK 723a</td>
<td>Under Requirement the reference to Design vertical Velocity in Leaflet 46 is at para 3.1 to include this in the reference. Also capitalise the initial letter of the word ‘vertical’.</td>
<td>Change reference to ‘...Leaflet 46 paragraph 3.1...’ and capitalise ‘vertical’.</td>
<td>Admin change</td>
<td>Accepted</td>
</tr>
<tr>
<td>NPA 2014/016</td>
<td>Sec 2 UK 771a</td>
<td>Under Guidance reference is made to ‘Air Staff’. Is this the correct terminology?</td>
<td>Confirm the correct terminology and/or organization to be consulted.</td>
<td>Should be PTL as he/she is the contractual signatory</td>
<td>Accepted</td>
</tr>
<tr>
<td>NPA 2014/017</td>
<td>Sec 2 UK 771a</td>
<td>Under Compliance an incorrect reference is made by omitting the clause sub section.</td>
<td>The reference should read Part 1, Section 4, Clauses 4.13 to 4.15.16.</td>
<td>Admin change</td>
<td>Accepted</td>
</tr>
<tr>
<td>NPA 2014/018</td>
<td>Sec 2 UK 775b</td>
<td>Under Requirement the clause refers to nothing to do with the subject. Clause 4.13.8 refers to cable trapping.</td>
<td>Determine the correct reference</td>
<td>Admin change</td>
<td>Admin change</td>
</tr>
<tr>
<td>NPA 2014/019</td>
<td>Sec 2 UK 777d</td>
<td>Under Compliance reference is made to ‘FAP101A-0001-1’. It is not a microfiche publication.</td>
<td>The correct reference is AP101A-0001-1 and is a pdf publication available on Tech Docs On-Line (TDOL).</td>
<td></td>
<td>Accepted</td>
</tr>
<tr>
<td>NPA 2014/020</td>
<td>Sec 2 UK 853a</td>
<td>Under Guidance reference is made to ‘STANAG 3800 (cancelled)’.</td>
<td>The STANAG is cancelled so reference to it should be removed.</td>
<td></td>
<td>Accepted</td>
</tr>
<tr>
<td>NPA 2014/021</td>
<td>Sec 2 UK 853a</td>
<td>Under Requirement 7.41 is not a paragraph.</td>
<td>Change the reference to ‘...Sub section 7.4...’.</td>
<td>Admin change</td>
<td>Accepted</td>
</tr>
<tr>
<td>NPA 2014/022</td>
<td>Sec 2 UK 899a</td>
<td>Under Guidance reference is made to ‘STANAG 4327’. This is not listed on the DISTAN database.</td>
<td>Confirm status of STANAG 4327</td>
<td>Admin change</td>
<td>Accepted</td>
</tr>
<tr>
<td>NPA 2014/023</td>
<td>Sec 2 UK 899a</td>
<td>Under Requirement the word ‘Clause’ has been omitted from the reference.</td>
<td>Insert the word ‘Clause’ between ‘Section 5’ and ‘5.1.63’.</td>
<td>Admin change</td>
<td>Accepted</td>
</tr>
<tr>
<td>NPA 2014/024</td>
<td>Sec 2 UK 921a</td>
<td>Under Compliance a partial reference is given.</td>
<td>The correct reference should be ‘...Part 13, Sub section 5...’.</td>
<td>Admin change</td>
<td>Accepted</td>
</tr>
<tr>
<td>NPA 2014/025</td>
<td>Sec 2 UK 923a</td>
<td>Under Requirement clauses 5.2.36 to 5.2.54 are noted. Clauses 5.2.56 and 5.2.59 seem equally applicable.</td>
<td>Include Clauses 5.2.56 and 5.2.59 and amend reference to read ‘...Clauses 5.2.36 to 5.2.59...’. Admin change</td>
<td>Admin change</td>
<td>Accepted</td>
</tr>
<tr>
<td>NPA 2014/026</td>
<td>Sec 2 UK 1315a</td>
<td>Under Requirement the references are abbreviated and lack of punctuation makes Clause ‘51.90’ appear to be incorrect.</td>
<td>Amended to read ‘...Part 1, Section 5, Clause 5.1.90 and Part 1, Section 6 Leaflet 20 paragraph 3.6 shall...’</td>
<td>Admin change</td>
<td>Accepted</td>
</tr>
</tbody>
</table>
NPA 2014/001/027 Sec 2 UK 1322a Under Requirement the full reference to the quoted Sub section should be given. Full reference should read ...see Part 1, Section 4, Sub section 4.19... Admin change Accepted

NPA 2014/001/028 Sec 2 UK 1381b Muddled reference under Compliance. Correct reference should read Refer to Part 13, Section 1, Clause 6.11.1. Admin change Accepted

NPA 2014/001/029 Sec 2 UK 1383a Under Guidance the reference should be reformatted for consistency. Reformat the reference to read Part 13, Section 1, Clause 1.1.1.1. Admin change Accepted

NPA 2014/001/030 Sec 2 UK 1383b Under Guidance the reference should be reformatted for consistency. Reformat the reference to read Part 13, Section 1, Clauses 1.1.1.1 to 1.1.1.6. Admin change Accepted

NPA 2014/001/031 Sec 2 UK 1441a Under Compliance part of the reference is missing. Amend reference to read 'Part 1, Section 3, Clauses 3.2.7 to 3.2.15'. Admin change Accepted

NPA 2014/001/032 Sec 2 UK 1445c Under Guidance reference is made to Def Stan 08-41. This is Obsolescent. Include the word 'Obsolescent' after the Def Stan reference. Admin change Accepted

NPA 2014/001/033 Sec 2 UK 1445s Under Compliance there are multiple references to 'Project Team'. I don't believe the Project Team has the specialist knowledge to do this. Identify the correct organization to fulfil this function. Project Team is correct, however we should if possible identify any MOD specialist areas who may be able to advise, e.g. RAFCAM in this area. Add a section in Guidance, to state that RAFCAM may provide guidance and advice on suitable Partial Accept

NPA 2014/001/034 Sec 2 UK 1447a Under Requirement reference is made to the 'Project Team'. This is not a Project Team function. Identify the correct organization to fulfil this function. Agree on change to aircraft specification Accepted

NPA 2014/001/035 Sec 2 UK 1447c Under Guidance there are multiple references to Project Team Leader. I don't believe the Project Team Leader has the specialist knowledge to do this. Identify the correct organization to fulfil this function. Agree, may consider adding reference to specialist area for advice/guidance in the Guidance field Partial Accept

NPA 2014/001/036 Sec 2 UK 1447e Under Requirement reference is made to the 'Project Team Leader'. This is not a Project Team Leader function. Identify the correct organization to fulfil this function. Agree, but see reference above to specialist areas giving advice in the GM. Partial Accept

NPA 2014/001/037 Sec 2 UK 1447f Under Requirement and Compliance reference is made to the 'Project Team Leader'. This is not a Project Team Leader function. Identify the correct organization to fulfil this function. Agree, but see reference above to specialist areas giving advice in the GM. Partial Accept

NPA 2014/001/038 Sec 2 UK 1447l Under Requirement reference is made to the 'Project Team Leader'. This is not a Project Team Leader function. Identify the correct organization to fulfil this function. Ref AM.Para 1.9. TW (ADS1) 30/10/2014 Agree, but see reference above to specialist areas giving advice in the GM. Partial Accept

NPA 2014/001/039 Sec 2 UK 1447p Under Guidance there is an incomplete reference. Reference should read 'Part 13, Section 2, Leaflet 3 Para 1.9. Admin change Accepted

NPA 2014/001/040 Sec 2 UK 1447q Under Guidance there is an incomplete reference. Reference should read 'Part 13, Section 2, Leaflet 3 Para 1.9. Admin change Accepted

NPA 2014/001/041 Sec 2 UK 1447r Under Guidance there is an incomplete reference. Reference should read 'Part 13, Section 2, Leaflet 3 Para 1.9. Admin change Accepted

NPA 2014/001/042 Sec 2 UK 1527a Under Guidance at sub para (c) an incorrect Leaflet is referred to. Amend to read '...Leaflet 2...'. Admin change Accepted

NPA 2014/001/043 Sec 2 UK 1527a Under Guidance at sub para (d) an incorrect Leaflet is referred to. Amend to read '...Leaflet 3...'. Admin change Accepted

NPA 2014/001/044 Sec 2 UK 1527a Under Guidance at sub para (e) the Leaflet referred to appears to be incorrect. Identify the correct Leaflet to refer to. Admin change Accepted

NPA 2014/001/045 Sec 2 UK 1555a Under Guidance the clauses referred to are incorrect. Correct clauses are '...Clauses 4.15.22 to 4.15.26...'. Admin change Accepted

NPA 2014/001/046 Sec 2 UK 3.1.1 Under Compliance the reference is incorrect. Amend reference to read '...Part 1, Section 1, Clause 1.1.28...'. Admin change Accepted

NPA 2014/001/047 Sec 2 UK 20a There are references to unpaved runways but not 'Natural Surface' is this an oversight? Manual of Aerodrome Design & Safeguarding used as reference. As a result, scope amended to include 'all surfaces not within the scope of CS-29: Minor changes to Guidance. Agree 'natural surface' is a subset but no need to specifically mention. Guidance refers out to 00-970 classification of runway types. Main AMC and Guidance moved to Subpart C (Structures) with similar requirements added to relevant parts Subpart B and Subpart D. Partial Accept

NPA 2014/001/048 Sec 2 UK 735a I understand the intent of the following, but most large aircraft will be unable to comply as they are not fitted with flying control locks. Quote...The parking brake shall be capable of meeting the requirements of CS 25.735 for at least 24 hours when all engines are stopped, when flying control locks have been applied, and no power is supplied from an outside source. Reference should read ...see Part 1, Section 1, Clause 1.1.28. Reworded to remove reference to unpaved runways (CS-29 excludes only 'unprepared' runways but fails to provide an EASA definition for this term). As a result, scope amended to include 'all surfaces not within the scope of CS-29: Minor changes to Guidance. Agree 'natural surface' is a subset but no need to specifically mention. Guidance refers out to 00-970 classification of runway types. Main AMC and Guidance moved to Subpart C (Structures) with similar requirements added to relevant parts Subpart B and Subpart D. Noted

NPA 2014/001/049 Sec 2 UK 771b Should the whole crew not be considered in the following? Quote...Pilot Compartment Armour Protection As we refer to crew stations elsewhere within UK 771/UK771a to colour requirements at crew stations) the title of UK771b should be changed to a similar description for consistancy. i.e. Pilot compartment and crew station armour protection. Reference to clause is incorrect: should be 4.15.13 to 4.15.16. Should also change the words in the requirement to: 'Where protective armour for the crew is required as part of the aeroplane specification it shall meet the requirements of Part 1 Section 4 Clauses 4.15.13 to 4.15.16.' Recommended Delete See NPA/2014/001/144 Accepted

NPA 2014/001/050 Sec 2 UK 755a Do not understand the following, however I believe personnel should be restrained adequately to prevent injury or accidental exit from aircraft when near an open door. Quote...UK.755a Open Doors in Flight, Crew Restraint For crew members whose duties require them to stand near an open door in flight, a body harness providing vertical head-up suspension from the panniers and adequate restraint for both pelvis and thorax, when seated, shall be provided. Close this and refer to Comment NPA 2014/001/164 Accepted
Part 5 ISSUE 1 NPA Feed MAA Task register
20150129-DefStan 00.970 - Pt 5 NPA 2014-001 Feedback Response.xls
24/02/2015

NPA 2014/001/051  Sec 2 UK 3.1.1 Normally you must enter the flight deck on large aircraft to jettison equipment or stores. The (only immediate) things that spring to mind are a refueling hose (tanker aircraft) and Stores carried in any Counter Measure Dispensing Systems (CMDs). Quote UK.3.1.1 Jettisoning of Stores. (1) It shall be possible to jettison safely within an appropriate envelope, all external stores that could be critical for operational or flight safety reasons. (2) It shall be possible to jettison safely all stores carried internally; this may require the bomb doors to be opened. When the aeroplane is on the ground, it shall be possible to release mechanically any store and/or its jettisonable carrier without entering the cockpit.

Requirement is appropriate although Ref to Pi1 sect 1.1.33 in the compliance column of UK1.1.1 appears incorrect. should read clause 1.1.29-30

Not Accepted

NPA 2014/001/052  Sec 2 UK 3.1.23 UK 3.1.23 Cargo Tie-down Fittings Must comply with the requirements of CS 25.562 "Perhaps should read CS 25.561" Cargo tie-down fittings for floor attachments shall be in accordance with the requirements of Def Stan 00-3 "There aren’t any details within Def Stan 00-3 issue 4". Perhahps should read CS 25.561" Agree that the correct ref should be CS25.561 and also Pt 1 Sec 42.22-49.50. Def Stan 00-3 clause 10.6 refers and is appropriate.

Partial Accept


Clearances are adequately covered in CS1707. Growth potential should be defined in conjunction with the appropriate PTL. Change UK1707a to read 'Growth potential shall be agreed with the relevant Project Team Leader'.

Accepted

NPA 2014/001/054  Sec 2 UK Various Multiple Comments (on file) relating to current in service aeroplane. Multiple comments from reviewer all referring to changes needed to their current platform to comply rather than application to a new design. Not really applicable but Content noted.

Noted

NPA 2014/001/055  Sec 2 UK 305a and UK 306a The Design Proof Load requirement detailed in these two sections is the same. Rationalisation of repeated requirement Agree that the requirement is duplicated within UK305a. However the best CDA will be to take the requirement from UK305a, place in UK303a and then delete UK305a in toto.

Partial Accept

NPA 2014/001/056  Sec 2 UK 571a If this is to be used as a certification standard, where the requirement refers to demonstrating adequate fatigue performance throughout the operational life of the aircraft may need clarification. The operational life may well vary through the life of the aircraft and the designer has no control over this. Suggest this should be clarified to reflect the operational life in the aircraft design specification or similar. Suggest that the term "operational life should be clarified – such as defined in the aircraft specification, or similar. Agree that the inclusion of additional wording is needed to their current platform to comply rather than application to a new design. Not really applicable but Content noted.

Accepted

NPA 2014/001/057  Sec 2 UK 571a AMC identifies that a fatigue evaluation MUST be conducted using DS00-970 or CS25 – is this not a requirement then? Suggest either alignment of verb AMC or transfer to a requirement. Requirement reviewed and in line with NPA2014/001/58 "Must" is to be replaced with "Should". Recommended.

PartialAccept

NPA 2014/001/058  Sec 2 UK 571a I would suggest that the sensitivity to elevated spectra work in the GM of DS01-970 3.2.18 (and Leaflet 37) is important for a civil aircraft used in a military environment. We need to know those features that will be vulnerable to an increased severity of usage – common in the military environment. I do not think this is included in the CC25. Include the AMC/GM from DS00-970 3.2.18 in this standard. Reward compliance to "A fatigue evaluation should be carried out in accordance with the requirements of DS00-970 Part 1 section 3.2." This then makes it clearer that the Def Stan requirements need to be considered and if necessary formally rejected as a certification requirement.

Noted

NPA 2014/001/059  Sec 2 UK 571a The guidance states "The approach to be used will be defined by the aircraft military configuration, role and usage." I do not think this is a very clear piece of guidance. Firstly, I am unsure as to how the mil configuration, role or usage can DEFINE the fatigue approach. I think that this section is suggesting that if a large aircraft is used in a close to a civil role would be more likely to use CS25 whereas a more military large aircraft may be more likely to use DS00-970 but this may not be a correct interpretation of the GM. Furthermore, I would suggest it is unlikely that a large aircraft will have a DS00-970 basis but that the military deltas to a civil basis might be to DS00-970. Suggest rewording to make the meaning clearer. Maybe better specification. Rewrite guidance material. "The fatigue evaluation approach will be defined by the aircraft military configuration, role and usage as determined by the aircraft specification. The methodology used will be articulated by the Design Organisation for acceptance by the PTL".

Accepted

NPA 2014/001/060  Sec 2 UK 571a Also the GM contains a MUST that is not referred to a higher instruction. Ref to higher instruction (if applicable) or alignment of verb with GM or move to requirement. Amended wording suggested above at NPA2014/001/55 - 59 addresses this issue.

Noted

NPA 2014/001/061  Sec 2 UK 571b The requirement section does not identify that the subject is aboardment of FATIGUE TEST ARTICLES. The AMC does not not the requirement. As written it is confusing. Change title and paragraph to refer to teardown inspection of fatigue test articles. Suggest the first sentence of existing DS00-970 3.2.16 may be appropriate. Change wording in first sentence of the requirement to read: Following completion of fatigue testing to support analysis to demonstrate a satisfactory residual strength..." Either include a reference for monitored factors or include the factors in the requirement also ref to Leaflet 38). Agree. Insert reference to Leaflet 38 as per UK. 571d 37 needs to be added to the guidance column.

Accepted

NPA 2014/001/062  Sec 2 UK 571b No reference is made to Leaflet 37. Include ref to Leaflet 37 in GM. Partial

NPA 2014/001/063  Sec 2 UK 571b AMC refers to retaining the fatigue test article for service life which will normally follow residual strength testing. There is no mention of RST or to consider RST in the requirements or elsewhere in the AMC. Suggest that RST considerations should be included and consideration of test / analysis approach should be undertaken. This is now answered at NPA2014/001/61.

Accepted

NPA 2014/001/064  Sec 2 UK 571b Last sentence of REQ states that life MUST be limited to 90% pending teardown. This does not refer to a higher req or requirement. It should be noted that this figure was put in to ensure that teardowns were done, rather than from any sound statistical basis. Suggest that SHALL be limited to 90% of the life is more appropriate. Agree with NPA recommendation. Text should be changed to ...shall be limited to 90%...."

Accepted

NPA 2014/001/065  Sec 2 UK 571c If DS00-970 is a certification standard how can the effectiveness of the fleet-wide monitoring system be demonstrated in service at the point of certification? Suggest that a methodology for the demonstration of the effectiveness of the monitor shall be developed is may be more appropriate for a certification standard. Agree: Re-word final sentence to "Methodology for demonstration of effectiveness of the monitor shall be developed."

Accepted

NPA 2014/001/066  Sec 2 UK 571c If DS00-970 is a certification standard how can the effectiveness of the fleet-wide monitoring system be demonstrated in service at the point of certification? Suggest that a methodology for the demonstration of the effectiveness of the monitor shall be developed is may be more appropriate for a certification standard. Agree: Re-word final sentence to "Methodology for demonstration of effectiveness of the monitor shall be developed."

Accepted
NPA 2014/001/067
Sec 2 UK 571c
AMC refers to 'advanced' direct strain measuring technique. Not sure what is meant by advanced. Suggest remove the work advanced as it could cause confusion as to what you require. I think this a legacy from very old measurement systems such as the Vickers-Lambie Strain recorder which would not be fit for this
Agree with NPA comment. Remove the word advanced. Accepted

NPA 2014/001/068
sec 2 UK 571c
Requirement identifies that the monitoring system 'covers' all critical features. There is no guidance of what is meant by that. Also CS25 uses PSEs rather than critical feature. Suggest refer to leaflet 38 and consider whether this leaflet is fit for the purpose you intend. Maybe consider what terminology should be used PSE/critical feature etc.
Agree. Insert reference to Leaflet 38 as per UK. 571d but also include that "it should be noted that CS25.571 also refers to critical features as principal structural elements or detailed design points." 

NPA 2014/001/069
sec 2 UK 571d
As written the requirement identifies that instrumentation shall be fitted for the PURPOSE of estimating fatigue damage accumulation – this is written around the fatigue meter and I do not think this is what you mean. Suggest the important point is that there should be an APPROPRIATE Individual Aircraft Tracking (IAT) system. For some aircraft it may be sufficient to count GAG cycles whereas others may require far more. Delete requirement covered within 571c with reference to Lift. 38 within GM.

NPA 2014/001/070
Sec 2 UK 571d
Not sure 'in-service loads assessment' is the correct terminology. I understand that civil regs require loads validation (flight loads survey etc) and this is an activity undertaken during the V&V phase of aircraft development. I am not sure whether this is referring to loads survey or OLM. I think it is the latter and hence surely this is covered by UK571c. Suggest that the requirement is Service Monitoring / OLM etc and how it is done should be as appropriate/rather than defined in the Def Stan. Suggest this is legacy regulation that may no longer be applicable in its current state.
Agree, covered under 571c. delete

NPA 2014/001/071
Sec 2 UK 20g
UK20g and UK4737a are closely related but are not cross referenced in either section. Cross reference Reference to UK 473 load cases added to UK 721 series. Accepted

NPA 2014/001/072
Sec 1 1.01
Slate certification in all classes of controlled airspace - Class G is not defined as controlled so is this excluded? Define 'controlled' airspace
Addressed in Section 1 change Accepted

NPA 2014/001/073
sec 1 1.03
Numbering error; two para 1.03 amend para numbering Admin change Accepted

NPA 2014/001/074
sec 1 1.03
unclear whether compliance to one of the standards equals to compliance to both or whether compliance has to be demonstrated, where applicable, to both standards. Clarify phrasing & primacy: With both either (either) UK military certification standards and (or) European Aviation Safety Agency
Para 1.0.3 updated to improve clarity and explain all requirements to be considered as part of TCB under MRP modified wording to provide clarity. Accepted

NPA 2014/001/075
Sec 1 1.4.2
It may also be used for the certification of significant or major modifications and specialist conversions, for example, tankers. Where does significant come from? Civil Change product rule? Remove significant and major. 
Agreed, significant and major removed. Accepted

NPA 2014/001/076
Sec 1 1.4.3
There may be cases when there is no SC but that IMM or AMC is introduced through the MCRI process. Redact to direct discussion revolving around additional requirements to be captured in the MCRI process. Updated . Paragraph re written
Accepted

NPA 2014/001/077
Sec 1 1.4.4
Acceptance process is normally related to individual aircraft acceptance, not to Type. As such it is not clear what the roles have to do with a certification procedure but should be reviewed against any impact on the agreed certification requirements of the TCG. Redraft to refer to certification requirements, not procedures. 
Agreed. Complete para is not necessary (was in previous version of DS970) and does not contribute to use or understanding of document, deleted Accepted

NPA 2014/001/078
Sec 1 1.4.5
Note that where the CS 25 makes reference to 'the Agency', for the purposes of this standard, this reference should be read as meaning both EASA and the MAA. This could cause confusion. The MAA should not be referred to as an Agency? Modified to read . Note that where CS 25 makes reference to 'the Agency', this should be considered to mean the certifying authority. 1.4.5 deleted, Sentence moved to 1.4.4 Accepted

NPA 2014/001/079
Sec 1 1.4.5
Why use the term 'primarily focussed' and why only note AMC, what about GM? What is required - remove reference to DH and refer to RA?5 DS970 amended to remove reference to DH and utilise wording similar to RA1500 (aiworthiness mitigations considered necessary to provide equivalent level of safety)
Agreed. Para serves no purpose, deleted Accepted

NPA 2014/001/080
Sec 1 1.4.6.2b
The identification of risk to the DH is RIL non-compliance against certification. Clarify what is required - remove reference to DH and refer to RA?5? DS970 amended to remove reference to DH and utilise wording similar to RA1500 (aiworthiness mitigations considered necessary to provide equivalent level of safety)
Agreed. Para serves no purpose, deleted Accepted

NPA 2014/001/081
Sec 1 1.4.6.6
This para appears confused with the role of the MOD PTL, TAA and Capability D. Identify what the para is aiming to achieve and reword
Agreed Para serves no purpose, deleted Not Accepted

NPA 2014/001/082
Sec 2 UK 1a
This standard is applicable to Class III aeroplanes (Large, heavy, low to medium manoeuvrability aeroplanes) as defined in Part 1 section 2 Leaflet 1. Boundary between Class II and III is not clear. Should this also be defined as a mass limit similar to CS23 / CS25? There has never been a clear designation of limits in Part 1, therefore issue is Pt 1, not Pt 5. Production of Part 3 will clarify this, no change to Pt 5. see also NPA2014/001/083
Partial Accepted

NPA 2014/001/083
Sec 2 UK 1a
PIL is only applicable to Class III aircraft - What about Class II? Excluding Class II implies aircraft normally certified against CS-25 such as UK MPA options P-8/C-295/Q0400 are to be certified according to Pt 1, which is not appropriate. Leaflet 1 is out-of-date, it clearly links applicability to certification standards by structural-relaated operating characteristics. Propose that this requirement is deleted Partial Accepted

NPA 2014/001/084
Sec 2 UK 20a
Full stop missing between UK and 20a -20g Insert full stops Admin change Accepted

NPA 2014/001/085
Sec 2 UK20g - UK 20g
Guidance refers to UK20 however, there is no UK20 Change to read UK 20 clauses Admin change Accepted

Page 4 of 14
| NPA 2014/001/086 | Sec 2 UK20a | Not applicable to scope of CS-25 Subpart B. CS 25 refers to "unprepared runways" as being out of scope in Subpart B. Transport Canada define an unprepared runway as "Any naturally occurring surface used as a runway that has not been altered by man." Therefore CS25 Subpart B is clearly applicable for many forms of unpaved runways. Regardless of the validity of these new requirements, the terminology is confused, mixing "unpaved" with "unprepared." UK req 20 should just be a placeholder to a completely new requirement number, as req 20 of CS25 relates to Scope of Subpart B only. Notwithstanding the confusion between unprepared/unpaved definition, Req 20 should read "Requirements for operations on unprepared runway surfaces are considered under req 3.xx in Section 3." Applicable req's to unprepared runways should be moved to Section 3. | See response to NPA 2014/001/047. | Noted |
| NPA 2014/001/087 | Sec 2 UK20a | There are references to unpaved runways but not "Natural Surface" is this an oversight? | See response to NPA 2014/001/047. | Noted |
| NPA 2014/001/088 | Sec 2 UK20c | Heavy cross-referencing to Pt1 Sect4. More appropriate as AMC material. | Delete | See response to NPA 2014/001/047. Transferred to AMC of UK 473b. | Noted |
| NPA 2014/001/089 | Sec 2 UK 20c | Definition of airplane configuration; is it not the configuration of the airplane that is required not a definition? Amend text: the configuration of the aeroplane shall be agreed with the PTL (TAA7). | See response to NPA 2014/001/047. Change accepted, content transferred to AMC of UK 473b. | Noted |
| NPA 2014/001/090 | Sec 2 UK20c | Not applicable to scope of CS-25 Subpart B. This is a contractural requirement only. Is it a certification requirement. | See response to NPA 2014/001/047. Transferred to AMC of UK 473b. | Noted |
| NPA 2014/001/091 | Sec 2 UK20d | Not applicable to scope of CS-25 Subpart B. Surely this is required by the overall AFM requirement 25.1581? If this special procedure requirement is kept, then all military capabilities will require references to remind the need for special procedures, e.g. aerial delivery, AAR, low level flight, etc. | Delete subreq, or move subreq to 1581 as it an explicit req is really required. Should this be in a different section (not scope) | See response to NPA 2014/001/047. Accepted, deleted. |
| NPA 2014/001/092 | Sec 2 UK20e | Not applicable to scope of CS-25 Subpart B. The only requirement here is to quantify RIL increase associated with ROS/MOS. RIL requirements must, however, be articulated in the Equipment Subpart, under 1309(b). Similar to 20a, this would be better referenced as UK MCRI O-04 for consistency, and/or referenced under UK.1309(b). | Re-word to focus on actual requirement being quantitative assessment of RIL, and move UK.1309(b) or Section 3. Remove NOS, ROS and MOS is covered in RA 1300 series. | See response to NPA 2014/001/047. This in not within the scope of CS25.1309. Have moved first para to replace UK 1553a which is now a general clause for NOS/ROS/MOS not just unpaved runways. Put it in GM. Have moved second para to AMC of UK 1553a as RIL quantification is better referenced out to the MRP. | Accepted |
| NPA 2014/001/093 | Sec 2 UK20f | Not applicable to scope of CS-25 Subpart B. Isn't this a little too obvious to be a requirement and wouldn't it be assured through PRA and other common-mode system safety assessment techniques? Propose that this requirement is deleted | See response to NPA 2014/001/047. Retained, as military aircraft have various stores and configurations and a certification requirement is needed. The assessment would not be probabilistic. Moved to UK 721d. | Partial Accept |
| NPA 2014/001/094 | Sec 2 UK20f | Ground Clearance - This clause and relative sub-paragraphs contain references to arrester hooks, which seems to be inappropriate for this class/category of aircraft. Reduces text to make difference to CS-25 clear in terms of military efficiency. Transfer to Subpart D. | See response to NPA 2014/001/047. Retained, as some aircraft within the weight category of CS-25 have arrester hooks. The requirement states "if fitted." Moved to UK 721d. | Partial Accept |
| NPA 2014/001/095 | Sec 2 UK20g | This appears to be a design requirement. Not applicable to scope of CS-25 Subpart B. Safety requirement would be covered by 1309. However operational efficiency could be considered a valid military certification requirement. Text needs reducing to get to the actual requirement difference (consideration of operational efficiency, i.e., availability of aircraft following trampling), rather than a repeat of the full Pt1 requirement. | See response to NPA 2014/001/047. The requirement refers to safety and this is considered a certification requirement. Moved to Subpart D UK 721e (replacing previous UK 721d, similar reqpt). | Accepted |
| NPA 2014/001/096 | Sec 2 UK143a | Firstly, the requirements are not made explicit, they are cross-referenced to Pt1 1. first Pt 1 cross-referenced requirements relate to aerodynamic and performance and handling effects from movable surfaces such as bomb Bay doors. The second cross-reference also mandated wind tunnel testing which is no longer necessary with modern-day CFD modelling and recommend this moved to AMC. I think this requirement would be more applicable to 143(b), as it is quite similar to 25.143b(3). | Re-word to make requirement explicit rather than cross-referenced. Shouldn't this be an AMC? Re-number to UK 143b. | See response to NPA 2014/001/047. The requirement refers to safety and this is considered a certification requirement. Additional requirement UK143b needs to be added to consider external stores. Suggested wording is: "The requirements of CS25.143 shall apply for such symmetric and asymmetric combinations of internal and external stores as are stated in the aeroplane specification. The effects of internal and external stores on the mass and its distribution and on the aerodynamic characteristics of the aeroplane shall be considered for each mission flight phase. When the stores contain expendable loads, the requirements of CS25.143 apply throughout the range of store loadings." | Partial Accept |
**NPA 2014/001/097**

<table>
<thead>
<tr>
<th>Sec</th>
<th>Section</th>
<th>Requirement</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sec 2</td>
<td>UK 145a</td>
<td>External Stores</td>
<td>Replace UK145a with the following: shall also apply to symmetric and asymmetric combinations of internal and external stores as are stated in the aeroplane specification.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2.1.26 internal and external store loads and clause 2.6.7 are appropriate. Therefore the requirement for UK145a should read</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&quot;If the aeroplane is capable of carrying external stores, the tests shall first be made without the stores fitted to establish the basic stability of the aeroplane, and then repeated with the stores fitted to establish any de-stabilising effect of the stores. The loading shall include combinations of stores which result in: (a) highest mass, (b) highest pitch inertia, (c) the most probable store loading(s) for Service use if this/these are not covered by (a) and (b) above, (d) the most aerodynamic de-stabilising configuration. The requirements of CS25.145 shall apply for such symmetric and asymmetric combinations of internal and external stores as are stated in the aeroplane specification. The effects of internal and external stores on the mass and its distribution and on the aerodynamic characteristics of the aeroplane shall be considered for each mission flight phase. When the stores contain expendable loads, the requirements of CS25.145 apply th</td>
</tr>
</tbody>
</table>

**NPA 2014/001/098**

<table>
<thead>
<tr>
<th>Sec</th>
<th>Section</th>
<th>Requirement</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sec 2</td>
<td>UK 145a</td>
<td>2.3 When the urgency of the mission justifies operation under conditions in which the NOS requirements could not be met, ROS or MOS will be applied. These requirements involve a lower level of safety by reducing margins, allowing (where applicable) for the jetting of stores where necessary, or ignoring the possibility of engine failure. Criteria for these standards will be introduced later.&quot; Is this a cert requirement?</td>
<td>Propose delete or move to more appropriate location</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The text reference by DAT is not from Pt 1 91a 2.3 but from lft1 para 2.3. Therefore reject the NPA as presented due to incorrect reference.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>See also NPA 2014/001/097 and 099</td>
</tr>
</tbody>
</table>

**NPA 2014/001/099**

<table>
<thead>
<tr>
<th>Sec</th>
<th>Section</th>
<th>Requirement</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sec 2</td>
<td>UK 145a</td>
<td>2.6.7 If the aeroplane is capable of carrying external stores, the tests shall first be made without the stores fitted to establish the basic stability of the aeroplane, and then repeated with the stores fitted to establish any de-stabilising effect of the stores. Is this a cert requirement?</td>
<td>Propose delete or move to more appropriate location</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CS25.145 is longitudinal control. Requirements of2.6.7 are appropriate for UK145(a). Recommend reject NPA Comment.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>see also NPA/2014/001/097 and 098</td>
</tr>
</tbody>
</table>

**NPA 2014/001/100**

<table>
<thead>
<tr>
<th>Sec</th>
<th>Section</th>
<th>Requirement</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sec 2</td>
<td>UK 145a</td>
<td>The first cross-referenced requirement is not a certification requirement, as it is establishes procedural conditions for testing. The second cross-reference brings out full 21 requirements in Pt 1 Clause 2.3. Seems excessive.</td>
<td>Review necessity of each individual cross-referenced requirement, eliminate the cross-references and make the requirements explicit.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The reference out to 2.3 is for ground handling characteristics and therefore incorrect when considered in relationship to Long Stab &amp; Cont (CS25.145 / UK145) and needs removing from UK145a. Thought should be given to adding these under CS25.231 or a new requirement UK231a. The refs to 2.1.26 and 2.6.7 have been reviewed under NPA/2014/001/097 are considered appropriate.</td>
</tr>
</tbody>
</table>

**NPA 2014/001/101**

<table>
<thead>
<tr>
<th>Sec</th>
<th>Section</th>
<th>Requirement</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sec 2</td>
<td>UK 145a</td>
<td>Full stop missing between UK and 145a</td>
<td>Insert full stop</td>
</tr>
</tbody>
</table>

**NPA 2014/001/102**

<table>
<thead>
<tr>
<th>Sec</th>
<th>Section</th>
<th>Requirement</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sec 2</td>
<td>UK 147</td>
<td></td>
<td>Admin Change</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Not Accepted</td>
</tr>
</tbody>
</table>

**NPA 2014/001/103**

<table>
<thead>
<tr>
<th>Sec</th>
<th>Section</th>
<th>Requirement</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sec 2</td>
<td>UK 235a</td>
<td>The requirement clearly differes from the CS, however it is unclear whether this falls into the &quot;capability&quot; area of a requirements specification as the aircraft will be airworthy if it remains inside the CS25 envelope and may not be required to operate at the 00-970 Levels</td>
<td>Insert a new clause UK147a shall also apply to symmetric and asymmetric combinations of internal and external stores as are stated in the aeroplane specification.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Agree. Clause similar to 145a for inclusion of consideration of external stores in the directional and lateral control mode should be added. Suggest:- UK147a.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&quot;If the aeroplane is capable of carrying external stores, the tests shall first be made without stores fitted to establish the basic handling characteristics of the aeroplane and then repeated with the stores fitted to establish any effects due to the stores. The stores loadings shall include combination of stores which result in: (a) highest mass, (b) highest pitch inertia, (c) highest roll inertia. (d) The most probable store loading(s) for Service use if this/these are not covered by (a) to (c) above</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The requirements of CS25.147 shall apply for such symmetric and asymmetric combinations of internal and external stores as are stated in the aeroplane specification. The effects of internal and external stores on the mass and its distribution and on the aerodynamic characteristics of the aeroplane shall be considered for each mission flight phase. When the stores contain expendable loads, the requirements of CS25.145 apply th</td>
</tr>
</tbody>
</table>

**NPA 2014/001/104**

<table>
<thead>
<tr>
<th>Sec</th>
<th>Section</th>
<th>Requirement</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sec 2</td>
<td>UK 235a</td>
<td>Directional Stability And Control - this clause and relative sub-paragaphes contain references to arresting hooks, which seems to be inappropriate for this class/category of aircraft</td>
<td>Consider revision, to remove capability requirements/design related information</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Requires revision to restate the requirements.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>There are aircraft variants that fall into this weight cat that have arrestor hooks i.e. 53 VA(USN)</td>
</tr>
</tbody>
</table>

**NPA 2014/001/105**

<table>
<thead>
<tr>
<th>Sec</th>
<th>Section</th>
<th>Requirement</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sec 2</td>
<td>UK233b</td>
<td>The requirement clearly differs from the CS, however it is unclear whether this falls into the &quot;capability&quot; area of a requirements specification as the aircraft will be airworthy if it remains inside the CS25 envelope and may not be required to operate at the 00-970 Levels</td>
<td>Consider revision, to remove capability requirements/design related information</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>This is a Certification requirement. Wording to remain as is.</td>
</tr>
</tbody>
</table>
Propose that this requirement is deleted.

CS25.301 is a general loads requirement. UK301 is also a general requirement to consider the requirements of DS00-970. Consider UK301 is therefore appropriate and suggest reject the NPA Recommendation / Comment.

Not Accepted

CS25 appears to cover design limit loads and ultimate loads adequately, proof load is covered in UK303a

Propose that this requirement is deleted.

See NPA 2014/001/155. Agree that the requirement is duplicated within UK305a. However the best COA will be to take the requirement from UK305a, place in UK303a and then delete UK305a in toto.

Accepted

Part 5 certification

Propose that this requirement is deleted.

This refers to Operational Flight Loads. Recommend Retitle to: Operational - General; AMC through DS 00-970 Part 1 Sect 2 Leaflet 3

Partial Accept

UK235 states ‘Symmetric manoeuvring conditions’ whereas Def Stan states ‘Symmetrical Flight Conditions’

What is the reason for flight considering using ‘Symmetrical Manoeuvring Conditions’?

PT 5 wording of 25.331: lite not correct when checked with CS25: Change 25.331 to ‘Symmetrical Manoeuvring Conditions’

Accepted

Reference to UK341

should read UK 341A

Admin change

Accepted

Appears to be in conflict with UK331a as it implies that the CS25.331 requirement can be used - UD, VH gust loads appear very similar

explicitly detail any differences between def stan and CS

Considered acceptable as this clause takes into account operational flight conditions and associated gust loads. However, recommend that at UK331a that for GM reference to Clause 3.5 is deleted.

Not Accepted

The reason for this requirement is unclear it is considered that a civil derived baseline is appropriate.

Clarify military requirement.

The CS does not take into account combined pitch and roll, which is covered by DS00-970 requirements. Recommend retain as a UK requirement and reject the NPA comment.

Not Accepted

CS25 has rather different control loads, not understand how the DS and CS technically relate

seek clarification as to why CS is not used for the maximum control forces?

Required Def Stan max loads within the control circuit are greater than those of CS25 and may be dependent on what the aircraft is intended to be utilised for as to if the CS25 reqs are adequate. Recommend retain as a UK requirement and reject the NPA comment.

Not Accepted

Control System Loads - Surely this somewhat convoluted clause is redundant; given that CS.25-143 is applicable and it is clearly articulated at CS.25-143B that ‘It must be possible to make a smooth transition from one flight condition to any other flight condition without exceptional piloting skill, alertness, or strength…’ Deletion of this additional requirement would more correctly put the burden of proof onto the Design Organisation to demonstrate that no ‘exceptional’ strength is required to control the aircraft.

Propose that this requirement is deleted.

Agree that CS25.399 covers the loads from CS25.397. However if loads in UK397a are to be used, then UK395a will be applicable. Suggest amend to read "if UK397a requirements are applicable then dual control ……….."

CS25 states 'Symmetric manoeuvring conditions' whereas Def Stan states 'Symmetric Flight Conditions'

Considered acceptable as this clause takes into account operational flight conditions and associated gust loads. However, recommend that at UK331a that for GM reference to Clause 3.5 is deleted.

Accepted

UK395a has been applied as compliance section indicated forces can be reduced to 50% from 75% defined in CS

add comment in compliance / guidance section on the applicability of UK395A

Agree that CS25.399 covers the loads from CS25.397. However if loads in UK397a are to be used, then UK395a will be applicable. Suggest amend to read "if UK397a requirements are applicable then dual control ……….."

The first note within the compliance column needs deleting. Recommend that second note is moved to GM.

Accepted

Dual Control System - The Note ‘For dual control aeroplanes which are derived from a single pilot design of aeroplane and are intended…’ suggests that this clause and detail might have been mistakenly carried forward from another part of 00-970, as no aircraft in this class/category are designed with a single pilot design.

The requirement references are correct and are the equivalent Pt 5 references from Pt 1 Sect 3.4. In addition add 'must be determined from test data.' to final sentence of requirement.

Accepted

The requirement text implies that compliance is not mandatory - ‘should be considered’

recognising the differences between D Stan / CS requirements if this is the intent clarify in compliance/guidance section

Text of final sentence read “…shall be considered.” which is appropriate for requirement.

Not Accepted

The only delta from the information within CS 25.301 to CS 25.307 related to proof load tests is covered later in UK303a.

Propose that this requirement is deleted.

CS25.301 is a general loads requirement. UK301 is also a general requirement to consider the requirements of DS00-970. Consider UK301 is therefore appropriate and suggest reject the NPA Recommendation / Comment.

Not Accepted

Subject to the aeroplanes design philosophy, there may be no requirement for instrumentation?

Remove and put in AMC for UK.571a

Recommendation made to delete UK571.d See comments made at NPA 2014/001/069 - 70.

Accepted

no need to reference Part 1 Section 3 Clause 3.13 as it purely references out to section 4

remove reference to Part 1 Section 3 Clause 3.13.

Agree. Remove ref to Pt 1 sect 3 clause 3.13.

Admin change

Accepted

does the prescriptive nature of the D STAN requirements add any additional protection beyond the CS requirement

Propose use of CS derived requirements.

consideration the DS 00-970 lightning requirements list under UK351A are appropriate for military applications. Recommend reject.

DefStan 59-113 is appropriate, civ a/c avoid lightning where possible, some mil a/c (eg NPA) are more likely to be in lightning threat regions, overall review of lightning requirements in 97/09-113 may be pertinent against CS Comment NPA 2014/001/128, same issue see also NPA 2014/001/1124

Not Accepted
| NPA 2014/001/127 | Sec 2 UK.581a | Lightning Protection - Given the predominance of reference to CS.25 that has been used and that the DEF STANs and the CS both ultimately point to the same EUROCAE ED documents, would it not be more consistent to quote here something along the lines of:  
"For lighting protection - direct effects - and compliance with CS.25,851, CS.25.899 and CS.25,954, the following interpretative material and acceptable means of compliance shall be used:  
- Environment and test waveforms defined in EUROCAE document ED-84 (including amendment N°1 dated 06/09/99 – Aircraft Lightning Environment and Related Test Waveforms) or equivalent SAE ARP5412.  
- Lightning zoning as defined in EUROCAE document ED-91 (including amendment N°1 dated 06/09/99 – Aircraft Lightning Zoning) or equivalent SAE ARP5414 instead of AC 20-62A.  
- Acceptable means of compliance as defined in EUROCAE document ED-81 (including amendment N°1 dated 26/08/99 – Certification of Aircraft Electrical/Electronic Systems for the Indirect Effects of Lightning) or equivalent SAE ARP5413.  
Consideration of the CS 06-970 lightning requirements list under UK581a are appropriate for military applications. Reject. |
| NPA 2014/001/128 | Sec 2 UK.581a (cont'd) | For lightning protection - indirect effects – and compliance with CS.25,1309 and CS.25,1316, the following interpretative material and acceptable means of compliance shall be used:  
- CS25 also uses MILSTD 810 / ed 14G to qualify against sand and dust.  
- Requirement overlaps with CS25.729  
- Environment and test waveforms defined in EUROCAE document ED-84 (including amendment N°1 dated 06/09/99 – Aircraft Lightning Environment and Related Test Waveforms) or equivalent SAE ARP5412.  
- Lightning zoning as defined in EUROCAE document ED-91 (including amendment N°1 dated 06/09/99 – Aircraft Lightning Zoning) or equivalent SAE ARP5414 instead of AC 20-62A.  
- Acceptable means of compliance as defined in EUROCAE document ED-81 (including amendment N°1 dated 26/08/99 – Certification of Aircraft Electrical/Electronic Systems for the Indirect Effects of Lightning) or equivalent SAE ARP5413.  
- CS25.631 - (cont'd)  
- 609 does not overlap with 729 as 609 considers protection of structure and 729 is specific only to birdstrike damage. Recommend the UK requirement (in place but amended with a statement that Dependant on the role of the aircraft the higher of the energy requirement of CS25.631 or Pt 1 sect 4.9 shall be considered against the overall requirements of Pt 1 section 4.9)  
See NPA 2014/001/129 for recommended COA and amended wording of the requirement  
Partial Accept  
| NPA 2014/001/129 | UK.603a | Marking of Aircraft Parts - It is suggested that this requirement would be more appropriately contained amongst those related to the assessment and approval of a design organisation, where configuration control and part marking control and part marking methodologies are more naturally reviewed.  
- Part 4 of the CS25 shows an initial example of the marking of aircraft military parts.  
- The marking of aircraft military parts has been defined in MIL-A-8445 (Military Standard 8445).  
- For bird strike protection. Therefore recommend leave the UK requirement in place but amend with a statement that Dependant on the role of the aircraft the higher of the energy requirement of CS25.631 or Pt 1 sect 4.9 shall be considered against the overall requirements of Pt 1 section 4.9  
See NPA 2014/001/129 for recommended COA and amended wording of the requirement  
Partial Accept  
| NPA 2014/001/130 | Sec 2 UK.603a | Marking of Aircraft Parts - It is suggested that this requirement would be more appropriately contained amongst those related to the assessment and approval of a design organisation, where configuration control and part marking control and part marking methodologies are more naturally reviewed.  
- Part 4 of the CS25 shows an initial example of the marking of aircraft military parts.  
- The marking of aircraft military parts has been defined in MIL-A-8445 (Military Standard 8445).  
- For bird strike protection. Therefore recommend leave the UK requirement in place but amend with a statement that Dependant on the role of the aircraft the higher of the energy requirement of CS25.631 or Pt 1 sect 4.9 shall be considered against the overall requirements of Pt 1 section 4.9  
See NPA 2014/001/129 for recommended COA and amended wording of the requirement  
Partial Accept  
| NPA 2014/001/131 | Sec 2 UK.608a | Requirement overlaps with CS25.729  
CS25 also uses MILSTD 810 / ed 14G to qualify against sand and dust.  
- Requirement overlaps with CS25.729  
- Environment and test waveforms defined in EUROCAE document ED-84 (including amendment N°1 dated 06/09/99 – Aircraft Lightning Environment and Related Test Waveforms) or equivalent SAE ARP5412.  
- Lightning zoning as defined in EUROCAE document ED-91 (including amendment N°1 dated 06/09/99 – Aircraft Lightning Zoning) or equivalent SAE ARP5414 instead of AC 20-62A.  
- Acceptable means of compliance as defined in EUROCAE document ED-81 (including amendment N°1 dated 26/08/99 – Certification of Aircraft Electrical/Electronic Systems for the Indirect Effects of Lightning) or equivalent SAE ARP5413.  
- CS25.631 - (cont'd)  
- 609 does not overlap with 729 as 609 considers protection of structure and 729 is specific only to birdstrike damage. Recommend the UK requirement (in place but amended with a statement that Dependant on the role of the aircraft the higher of the energy requirement of CS25.631 or Pt 1 sect 4.9 shall be considered against the overall requirements of Pt 1 section 4.9)  
Partial Accept  
| NPA 2014/001/132 | Sec 2 CS25.631 - UK.631a | Bracket missing  
Insert bracket  
Admin change  
Accepted  
| NPA 2014/001/133 | Sec 2 UK.631a | CS requirement appears to be more onerous to achieve than DEF STAN  
Propose that this requirement is deleted  
Provided the definition of VC and Vm are analogous, the energy requirements of CS25.631 do seem to be more onerous. However, the requirements of Pt 1 sect 4.9 appear more stringent for the areas considered for birdstrike protection. Therefore recommend leave the UK requirement in place but amend with a statement that Dependant on the role of the aircraft the higher of the energy requirement of CS25.631 or Pt 1 sect 4.9 shall be considered against the overall requirements of Pt 1 section 4.9  
Partial Accept  
| NPA 2014/001/134 | Sec 2 UK.631a | Bird Strike Damage - It is suggested that this requirement might be inappropriate. The basic CS.25 requirement is properly based on the context of large aircraft operations, whereas that in Part 1 Section 4 has its basis in Fast Jet Operations. Moreover, the CS.25 applies to the complete aircraft, whereas that in Part 1 focuses more particularly on windscreen; providing therefore a much more limited consideration of the situation.  
- Part 4 of the CS25 shows an initial example of the marking of aircraft military parts.  
- The marking of aircraft military parts has been defined in MIL-A-8445 (Military Standard 8445).  
- For bird strike protection. Therefore recommend leave the UK requirement in place but amend with a statement that Dependant on the role of the aircraft the higher of the energy requirement of CS25.631 or Pt 1 sect 4.9 shall be considered against the overall requirements of Pt 1 section 4.9  
See above NPA 2014/001/134. Retain UK163a  
Not Accepted  
| NPA 2014/001/135 | Sec 2 UK.671a | Combat Vulnerability, Primary, Trim, Servo and Engine Controls - The inclusion of the second paragraph: “Control circuits shall be run in those areas of the airframe where combat damage is less probable with respect to threat and the role of the aeroplane. e.g. Duplicated parts of control circuits shall be located as far apart as possible.” is felt to be un-necessarily restrictive. The basic CS.25 requirement unconditionally requires that the aircraft be capable of continued safe flight after any of the probable failure conditions arise; which through the inclusion of the first paragraph of UK.671a now includes combat damage. It is suggested that the subject paragraph is moved to the Compliance column and the ‘shall’ converted into ‘should’  
Agree modification to text required, disagree CS25 is adequate.  
Move text to AMC (also modify Pt 1 at same time) Retain AMC as it stands, but add para as follows: “Control circuits should be run in those areas of the airframe where combat damage is less probable with respect to threat and the role of the aeroplane. In addition duplicated parts of control circuits should be located as far apart as practicable.” Paragraphs related to trim and APV systems may need reconsideration too.  
Partial Accept  
| NPA 2014/001/136 | Sec 2 UK.671b | not a true cert requirement, validation of use would be through workload / operability assessments AMC 25-11 Electronic Flight Deck Displays  
Propose that this requirement is deleted  
Not related to Electronic displays, this is more related to the controls themselves so the AMC referenced is not appropriate.  
Not Accepted  
| NPA 2014/001/137 | Sec 2 UK.672a | not a cert requirement  
Propose that this requirement is deleted  
Agree wording as written isn’t a requirement, delete.  
Accepted  
| NPA 2014/001/138 | Sec 2 UK.689a | Ultimate Factor - This additional requirement seems to be un-necessary given the unpublicated application of CS25 and the role of the aircraft.  
As per original comment there are no ultimate control load factors listed within CS25 which only details  
Not Accepted  
| NPA 2014/001/139 | Sec 2 UK.721b | Guidance refers to U20 - there is no UK20  
Change to read UK 20 clauses  
Admin change  
Accepted  
| NPA 2014/001/140 | Sec 2 UK.721c | Dynamic Instability of the undercarriage units - This additional requirement seems to be un-necessary given the overarching requirements of CS 25.143 and 25.235 that have already been applied unconditionally.  
Requirement UK21C is specific to undercarriage and is not necessarily covered in the CS25. CS25.143 is specific to controllability and manoeuvrability and CS25.235 is damage to structure due to damping of U/C on uneven ground. Reject comment and retain requirement.  
Not Accepted  

---

Page: 8 of 14
| NPA 2014/001 | 141 | Sec 2 UK721d | no additional requirement just referencing UK 202g | Propose that this requirement is deleted | Clause superseded. | Not Accepted |
| NPA 2014/001 | 142 | Sec 2 UK723a | Shock Absorption Tests - Given that most new aircraft designs have computer controlled flight control systems, this requirement is unlikely to be relevant. It is suggested that the test be shifted to the Guidance columns, so that its relevance can be considered in the context of the aircraft design being considered. | UK 202g relates to undercarriage tests and has nothing to do with flight control systems. Requirement is applicable to mil ops. Recommend Reject. | Not Accepted |
| NPA 2014/001 | 143 | Sec 2 UK733a | Tyres – Operating Conditions | Is this additional requirement really relevant? | Considered acceptable as this clause takes into account the military operating environment for wheels, tyres and brakes. Recommend reject. | Not Accepted |
| NPA 2014/001 | 144 | Sec 2 UK735a | Parking – It is suggested that reference to flying control locks being applied be deleted. | Current wording is confusing. Recommend replace with "The parking brake shall be capable of meeting the requirements of CS 29.735 for at least 24 hours when all engines are stopped, with any required inter-dependent systems engaged (for example control system gust locks) and no power is supplied from an outside source." | Not Accepted |
| NPA 2014/001 | 145 | Sec 2 UK735a | Most large aircraft will be unable to comply as they are not fitted with flying control locks. | As above | Noted |
| NPA 2014/001 | 146 | Sec 2 UK 735b | Propose that this requirement beyond the CS equivalent of 6 stops is there any value for this requirement beyond the CS equivalent of 6 stops? | This requirement is unlikel | 
| NPA 2014/001 | 147 | Sec 2 UK735c | this would be covered under CS 25.1435 and AMC 25.1309 | This requirement is covered in CS 25.1435 and therefore this Def Stan 970 requirement can be removed. | Accepted |
| NPA 2014/001 | 148 | Sec 2 UK735e | CS 25.1435 has higher values | Propose that this requirement is deleted | The brake operating energy can vary i.e. hydraulic, pneumatic etc and consequently the proof and ultimate factors could vary. CS 25 requirements for the specific operating energy will cover proof and ultimate factors requirements, therefore this Def Stan requirement can be removed. | Accepted |
| NPA 2014/001 | 149 | Sec 2 UK735e | Proof and Ultimate Factors - Should this additional requirement apply to 735c rather than e? | Notwithstanding the above, the test "The brake control circuit shall have proof and ultimate factors not less than 1.125 and 1.5 respectively under the appropriate loads as determined by the Aeroplane Designer." seems un-necessarily prescriptive given the underdetermined application of CS 25.1309 later in the specification an anti skid system approved by the TAA shall be provided for all braked wheels’ but remove the remainder of the statement and replace with CS 25 and AMC Anti skid requirements are to be met. It is not clear why we, the MAA wish to specify that all part 5 FW aircraft must have an anti skid system, and why "approved by the TAA". Why would the fitting of AS be a military requirement over and above the CS? Neat justification. Secondly, if we do retain this requirement the selected system should not be "approved by the TAA" this assumes the TAA has design competence in selecting and specifying this type of system, which is the DoT job, not the TAAs. Reopened: MPS to review. Retain Unless otherwise stated in the Airplane Specification an anti skid system should be provided for all braked wheels’ but remove the remainder of the statement and replace with CS 25 and AMC Anti skid requirements are to be met. | Not Accepted |
| NPA 2014/001 | 150 | Sec 2 UK735f (d) | Propose that this requirement is deleted | Retain: Unless otherwise stated in the Airplane Specification an anti skid system approved by the TAA shall be provided for all braked wheels’ but remove the remainder of the statement and replace with CS 25 and AMC Anti skid requirements are to be met. It is not clear why we, the MAA wish to specify that all part 5 FW aircraft must have an anti skid system, and why "approved by the TAA". Why would the fitting of AS be a military requirement over and above the CS? Neat justification. Secondly, if we do retain this requirement the selected system should not be "approved by the TAA" this assumes the TAA has design competence in selecting and specifying this type of system, which is the DoT job, not the TAAs. Reopened: MPS to review. Retain Unless otherwise stated in the Airplane Specification an anti skid system should be provided for all braked wheels’ but remove the remainder of the statement and replace with CS 25 and AMC Anti skid requirements are to be met. | Accepted |
| NPA 2014/001 | 151 | Sec 2 UK735f (d) | Anti Skid System - Should this additional requirement apply to 735e rather than f? | Retain: Unless otherwise stated in the Airplane Specification an anti skid system approved by the TAA shall be provided for all braked wheels’ but remove the remainder of the statement and replace with CS 25 and AMC Anti skid requirements are to be met. Retain: "Unless otherwise stated in the Airplane Specification an anti skid system shall be provided for all braked wheels’ but remove the remainder of the statement and replace with CS 25 and AMC Anti skid requirements are to be met." | Partial Accept |
| NPA 2014/001 | 152 | Sec 2 UK745a | Propose that this requirement is deleted | This requirement is too specific. CS25 covers the requirement and consequently the Def stan requirement can be removed. | Accepted |
| NPA 2014/001 | 153 | Sec 2 UK771a | Colour Standards at Crew Stations - Other than carrying forward a historical precedent, no logic is apparent from this ‘paint it grey’ requirement. Current civil aircraft design organisations have more rigorously considered the man-machine interface and their cockpits safely house crew on extended operations. It is suggested that the requirement is either obsolete and be deleted, or further consideration be given to the content, e.g. mandating that the TAA consider the ergonomic, HF, NVG etc. requirements with the Design Organisation in determining what colours should apply in the crew accommodations and workplaces. | Colour Standards at Crew Stations - Other than carrying forward a historical precedent, no logic is apparent from this ‘paint it grey’ requirement. Current civil aircraft design organisations have more rigorously considered the man-machine interface and their cockpits safely house crew on extended operations. It is suggested that the requirement is either obsolete and be deleted, or further consideration be given to the content, e.g. mandating that the TAA consider the ergonomic, HF, NVG etc. requirements with the Design Organisation in determining what colours should apply in the crew accommodations and workplaces. | Not Accepted |
| NPA 2014/001 | 154 | Sec 2 UK773b | Colour Standards at Crew Stations - Other than carrying forward a historical precedent, no logic is apparent from this ‘paint it grey’ requirement. Current civil aircraft design organisations have more rigorously considered the man-machine interface and their cockpits safely house crew on extended operations. It is suggested that the requirement is either obsolete and be deleted, or further consideration be given to the content, e.g. mandating that the TAA consider the ergonomic, HF, NVG etc. requirements with the Design Organisation in determining what colours should apply in the crew accommodations and workplaces. | Colour Standards at Crew Stations - Other than carrying forward a historical precedent, no logic is apparent from this ‘paint it grey’ requirement. Current civil aircraft design organisations have more rigorously considered the man-machine interface and their cockpits safely house crew on extended operations. It is suggested that the requirement is either obsolete and be deleted, or further consideration be given to the content, e.g. mandating that the TAA consider the ergonomic, HF, NVG etc. requirements with the Design Organisation in determining what colours should apply in the crew accommodations and workplaces. | Not Accepted |
| NPA 2014/001 | 155 | Sec 2 UK773b | Pilot Compartment View (AAR) | Admin change | Not Accepted |
| NPA 2014/001 | 156 | Sec 2 UK775e | This is not a cert requirement | Propose that this requirement is deleted | This requirement is dependant and ensures visual requirements for reconnaissance type aircraft is needed dependent on aircraft role. Therefore reject recommendation. This is not a certification requirement as written, it's an operational requirement, in addition it is impossible to achieve compliance with the word 'good'; rewrite. | Partial Accept |
| NPA 2014/001 | 157 | Sec 2 UK775a | This is not a cert requirement | Propose that this requirement is deleted | Agree remove: Section 6/1/15. Endorsed Struc4 6/1/15. | Accepted |
| NPA 2014/001/158 | Sec 2 | UK 775b | Full stop missing between UK and 775b | Insert full stop | Admin change | Not Accepted |
| NPA 2014/001/159 | Sec 2 | UK 775b | Windshield and Windows, Bird strike requirements - refers to Pt 1 Sec 4 Cl 4.13.8 which is not related to this requirement | Propose that this requirement is deleted | Admin change | Accepted |
| NPA 2014/001/160 | Sec 2 | UK775b | Windshield and Windows, Bird strike requirements - See comments above related to UK 631a - Bird Strike Damage | The reference in the requirements column needs to be changed to UK631a (if the UK631a requirement is kept). | Accepted |
| NPA 2014/001/161 | Sec 2 | UK783b | Full stop missing between UK and 783b | Insert full stop | Admin change | Not Accepted |
| NPA 2014/001/162 | Sec 2 | UK783b | The incorrect as it relates also to ultimate loads - first para is a duplicate of requirements contained within CS25.303 and UK303A last para is superfluous as it repeats CS25.365 | Requirement seems appropriate as door loads may differ under mil op requirements. Reject NPA comments. | Not Accepted |
| NPA 2014/001/163 | Sec 2 | UK783b | Door Proof Load Factors - This seems an un-necessary repetition of the content of Subpart C – Structure. | Requirement seems appropriate as door loads may differ under mil op requirements. Reject NPA comments. | Not Accepted |
| NPA 2014/001/164 | Sec 2 | UK785a | Open Doors in Flight, Crew Restraint - Whilst accepting that crew members whose duties require them to stand near an open door in flight should be provided a suitable harness, should not the Design and Airworthiness | Accept comment and re-write requirement to read “Open Doors in Flight, Crew Restraint - A suitable attachment point shall be provided for a suitable crew harness configuration when operations require crew members to stand near an open door in flight”. | Accepted |
| NPA 2014/001/165 | Sec 2 | UK785b | Extract from CS25 Design Eye Position - The position at each pilot’s station from which a seated pilot achieves the required combination of outside visibility and instrument scan. The design eye position (DEP) is a single point selected by the applicant that meets the specifications of CS 25.775(d), CS 25.777(c), and CS 25.1321 for each pilot station. It is normally a point fixed in relation to the aircraft structure (neutral seat reference point) at which the midpoint of the pilot’s eyes should be located when seated at the normal position. The DEP is the principal dimensional reference point for the location of flight deck panels, controls, displays, and external vision. | Consider deletion of this requirement | Agree Delete | Accepted |
| NPA 2014/001/166 | Sec 2 | UK785c | The fact that the seat is adjustable CS25.777 and satisfies Crash loads considered in CS25.561 would imply some form of locking device. | Consider deletion of this requirement | Retain requirement as lock not explicit in civil requirements | Not Accepted |
| NPA 2014/001/168 | Sec 2 | CS25.811a | Apart from one part of the compliance requirement to UK.811a that requires black and golden yellow striping around emergency exits, there appears to be no technical advantage in maintaining the Part 5 requirement. In fact UK.811a and its compliance will lead to a conflict of compliance against CS 25.811(a), particularly where letter height and colours of signage are stated. | It is recommended that UK.811a is removed; if a real safety requirement exists with respect to striping around exits then this could be maintained as mil specific AMC but it should be read in conjunction with the AMC for the CS; CS 25.811 represents civil requirement developed for standard civil usage, should retain 811a as mil usage requirement should be retained. | Not Accepted |
| NPA 2014/001/169 | Sec 2 | UK831a | Full stop missing between UK and 831a | Insert full stop | Admin change | Not Accepted |
| NPA 2014/001/170 | Sec 2 | UK841a | Clause 3.7 reference to low pressure differential systems (fast jet only) Pressure schedule in 00-970 is different to CS 25.841 in that is it required to maintain a cabin altitude of 6000 ft cruise altitude compared with 8000 ft. the requirement for Standard couplings in accordance with Def Stan 53-68 (cancelled) shall be used in the duct system is not a valid cert requirement. | Consider revision of requirement | Agree to remove most of Def Stan reqmt. however certain Clause 3.7 reqmts. should be retained (in addition to CS25.841). Replacement wording for UK841 is below: UK841a - In addition to the requirements of clause CS25.841 (provision of cabin pressure altitude of not more than 2438 m (8000 ft) at the maximum operating altitude under normal operating conditions), the maximum cabin differential pressure shall be as high as possible consistent with weight and other considerations. At least it shall be such that a cabin altitude of 1,850 m (6,065 ft) is maintained at the maximum cruising altitude stated in the Aeronautical Specification. UK841b - Means shall be provided whereby the pressure differential can be reduced to zero at any altitude. Caution information must be provided to alert the crew when the aeroplane is under controlled depressurisation flight conditions above 8,000 ft to remind them that oxygen supply for the crew and occupants is required. | Not Accepted |
| NPA 2014/001/171 | Sec 2 | UK851b | Referencing out to leaflet 87 is not appropriate | Consider revision of requirement | TYWAD(S1) Agree rewrite required (need to put reqmt into correct column). Move 'Combat fire protection shall be included for example for low flying Tactical Transport and during take off, approach, overshoot and landing' from AMC into Requirement and clarify AMC to state 'Applicable detail based Part 1 Section 4 Leaflet 87. Additionally for separation of flight critical systems (e.g. ballistic effects etc), refer to Part 13 Para 3.9' | Accepted |
| NPA 2014/001/172 | Sec 2 | UK858a | Full stop missing between UK and 858a | Insert full stop | Admin change | Noted |
| NPA 2014/001/173 | Sec 2 | UK899a | AMC 899 contains significantly more detail broadly equivalent to Section 4 Clauses 4.27.7 | Consider revision to refer only to specific additional clauses | AMC 899 covers Electrical Bonding & Protection Against Static Electricity and UK 899a brings in specific National | Not Accepted |
| NPA 2014/001/174 | Sec 2 | UK901a | Comma between UK and 901a | Insert full stop | Admin change | Noted |
Part 5 ISSUE 1 NPA Feed MAA Task register
20150129-DefStan 00-970 -Pt 5 NPA 2014-001 Feedback Response.xls
24/02/2015

Page 11 of 14

NPA 2014/001/175 Sec 2 UK901a
This implies that we will be asking R-R, GE, P&W, to comply with the whole of DStan 00-970 Part 11, instead of the normal CS-E or FARP-33 baselines. Additional military specific requirements should be in relation to Subpart E of CS-E, and referenced in a separate section of Part 5 or separated in a specific section of Part 11. Voyager and A400M were certified with very few military requirements over and above the civil certification requirements. Furthermore, A400M engine requirements (through M65s) were believed to be later transposed to Civil Authority ownership (SCs).

Engine Reqs should be divorced from this section of Part 5 with Section 2's scope limited to Engine Installation only, similar to CS-25 / CS-E

*Engines fitted to large aeroplanes should be certificated to the requirements of Def Stan 00-970 Part 11. (Where reference is made in CS 25 to a requirement in CS-E this shall be interpreted to mean the corresponding requirement in Def Stan 00-970 Part 11.) Where applicable to the role and use of the aeroplane, the requirements of Part 11 Section 6 shall be applied as determined.

NPA 2014/001/176 Sec 2 UK937a
Not sure that 5.1.63 adds any higher level of safety over 25.937...

5.1.63 Feathering:
(a) Each propeller must have the capability of being feathered under the most adverse conditions of altitude and airspeed likely to arise following sudden engine failure. (Surely this is covered by the less prescriptive Req in 25.937)
(b) On multi-engine aeroplanes, a cycle of feather, unfeather and feather shall be possible over the range of operating conditions approved for the aeroplane. (CS-E 180 requires a 10 feather cycle test to be carried out - therefore Req N/A)
(c) On single engine aeroplanes, it is desirable that the conditions of (b) shall be met, unless a system capable of carrying out only one complete feather can be justified with the agreement of the Project Team Leader who will assess the need for carrying out feathering and unfeatherung during training. (Surely an EL01s is achieved through 25.937?)
(d) The feathering system for each propeller shall be separate from and independent of those of other propellers. (Isn't this covered by the "no single failure red"?)

Means to prevent inadvertent operation shall be provided.

NPA 2014/001/177 Sec 2 UK937a
CS 25.937, CS 25.1027 and CS 25.901 cover all of the requirements in 5.1.63

Consider deletion of requirement

Review req rationale with technical SME support.

Same as NPA 2014/001/176. Recommend reject NPA comment. Unlike civil aircraft military operations may require engines to be shut down and feathered and then restarted in flight for increased duration on task. This is not necessarily covered in CS25.937 and UK037a is therefore considered appropriate.

NPA 2014/001/178 Sec 2 UK951a
This requirement does not belong in SubPart E. Handling Characteristic requirements belong in SubPart B.

Consider deletion of requirement

Transfer to other section.

NPA 2014/001/179 Sec 2 UK951b
The requirement is not necessary as it is covered by other CS25 requirements, namely 903b) and 25.953, covering independence requirements for engines and their related systems, and fuel systems respectively.

Further, battle damage vulnerability is a Section 3 (Military specific) requirement.

Consider deletion of requirement

NPA comments rejected. CS25.993 only refers to engines and no ref is made to fuel systems. CS25.953 is applicable but UK951b covers the areas applicable to reduction of vulnerability to battle damage. For future work it may be necessary to uplift all Vulnerability of battle damage into part 13 in total.

NPA 2014/001/180 UK963a
The requirement is not necessary as it is covered by 25.953, covering independence requirements for fuel systems.

Further, battle damage vulnerability is a Section 3 (Military specific) requirement.

Consider deletion of requirement

The Draft Pt 5 is currently incorrect. UK963a as published should be deleted as it is covered by UK 951b - Reduction of vulnerability to battle damage. UK 963a remains extant but needs to be expanded to cover up to 5.2.64 to consider jetissonable tanks which may be appropriate for a large tactical role aircraft.

NPA 2014/001/181 UK965a
25.965 is a comprehensive group of requirements to confirm that non-leakage is assured through design and operational considerations. It is not clear why UK965 is necessary, i.e. why 25.965 does not provide an EL01s.

Consider deletion of requirement

NPA comments rejected. CS25.965 does not include a static test. This military requirement originates from Joint Airworthiness Committee (JAC) Leaflet 578, dated September 1992, and is currently included in Def Stan Pt 1 Sect 5 Clause 2.5.153. Recommend requirement is retained in Part 5.

NPA 2014/001/182 Sec 2 UK975a
It could be argued that CS25.975 covers AAR CS25.975 c(3)(ii) Refuelling and defuelling (where applicable).

Propose that this requirement is deleted

CS25.975 does not cover fuel tank venting requirements for AAR. Therefore Part 5 needs to signpost to Part 13, Sect 3.5 for AAR refuelling design requirements.

NPA 2014/001/183 sec 2 UK981a
No significant comments. Cross-referencing could be removed as the two cross-referenced requirements are relatively short.

Remove cross-referencing and copy Part 1 (Section 5) clauses into this requirement.

Agree to move wording to the Part 5, in 2 requirements 981a and 981b, wording as in the referenced clauses of section 5, however this refers to AMC 25.981: need to identify appropriate AMC (25.981 doesn't refer to ballistic ignition sources). Copy 5.2.34 to UK25.981 with no specific AMC; Copy 5.2.35 to uk25.981b with AMC as in the Section 5 and AMC25.981

Partial Accept

Not Accepted

Not Accepted

Not Accepted

Accepted
PART 5 ISSUE 1 NPA Feedback Response.xls

20150129-DefStan00.970-Pt 5 NPA 2014-001 Feedback Response.xls

24/02/2015

Page 12 of 14

**NPA 2014/001/184**

Sec 2 UK1301a

Config management is a separate subject to the 1301 requirement. 25.1301 is a design functioning/operating requirement, and marking requirements are not applicable here. Marking requirements belong outside certification specifications.

Propose that this requirement is deleted

Agree requirements referenced in Part 1 overly prescriptive and not necessary for Cert, 1301 itself not adequate though, change 1301a to All parts shall be marked where this is necessary to demonstrate compliance with design and individual aircraft build standard. AMC: ‘Suitable identification methods and procedures should be identified in the Aeroplane Specification in order to support Configuration Management and Continuing Airworthiness’ Could add GM to provide guidance on suitable marking methods (industry standards)

Accepted

**NPA 2014/001/185**

Sec 2 UK1301c

Tempest is not a certification requirement

Propose that this requirement is deleted

The requirement for the DO to discuss Tempest requirements with the PTL appear appropriate as the operating envelope that we require the aircraft for may require the DO to choose specific items to meet the need within the design. Whilst there is correlation between build standard/actual build and TEMPEST performance, the requirement for TEMPEST originates from lists other than Def Stan 00-970.

Accepted

**NPA 2014/001/186**

Sec 2 UK1301d

EMC is covered under CS25.1309

Propose that this requirement is deleted

Disagree with proposal to delete, however this needs to be rewritten as there is no requirement written in the requirement field. Recommend: ‘The Military Electromagnetic Compatibility and field strength Requirements in the Aeroplane Specification shall be achieved’. AMC: ‘Specific test methods, margins and associated test detail should be specified by the Project Team Leader and an agreed programme of analysis and testing completed, see guidance material UK1301f Retain GM as written

1301d gives the PTL the ability to vary the requirement in light of the role of the specific aircraft being built. Military aircraft may require a higher EMC level due to the nature of use. Reject

**NPA 2014/001/187**

Sec 2 UK1302a

Pt 5 Sect 3 may be more appropriate.

Rewrite for clarity HF/operation not physical design and move requirements to Part 5, Section 3 clause 3.6 needs to remain. However will require further
guidance on suitable marking methods. GM to provide guidance on suitable marking methods (industry standards)

Rewrite for clarity H/F operation

Agree comment: needs rewrite to reflect that CS25.1302 requirements need to be achieved when using NBC equipment, also when reviewing Checklist comments on this from E3 they recommend referencing out to some elements of Part 1. Rewrite requirement as: Rqmt 'Where the Aeroplane Specification requires the flight crew to utilise NBC personal protection equipment, the requirements of CS25.1302 shall be satisfied' AMC: 25.1302'. GM: ‘For NBC specific requirements refer to Part 5, Section 3, clause 3.1.24 referring out to Part 13’

Accepted

**NPA 2014/001/188**

Sec 2 UK1302b

This is a standardisation requirement, not a certification requirement. Table 25 is very prescriptive. If there is a need for standardised controls, standardisation should be achieved through the use of STANAG requirements, not DefStan requirements.

Propose that this requirement is deleted

This requirement should be retained, however it should be changed to reflect the requirements of Part 1, ie that the AAR controls shall be grouped with the rest of the fuel system controls, AMC should be CS25.1302. The list of controls etc is already in the Part 13 and therefore the reference in Part 13 requirements in section 3 shall draw all AAR requirements in that area into a TCB for an aircraft which has AAR capability (tanker or receiver) Therefore change requirement to: Air to Air refuelling controls which are required to be operated by the flight crew shall be located with the main fuel system controls'. AMC: 25.1302. MPS requested to review/ amend/endorse

Accepted

**NPA 2014/001/189**

Sec 2 UK1310a

Not a certification requirement

Propose that this requirement is deleted

Agree with DAT: 50% growth potential is not a certification requirement: the requirement should be to ensure safe operation in all configurations (AW CS25.1310; delete requirement

Accepted

**NPA 2014/001/190**

Sec 2 UK1315a

The following is N/A - Where the Aircraft Type and role requires it, the requirements included in the Aeroplane Specification for installation in the Aeroplane shall be grouped with the rest of the fuel system controls. The requirement could be changed to reflect the requirement of Part 1, ie that the AAR controls shall be grouped with the rest of the fuel system controls, AMC should be CS25.1302. The list of controls etc is already in the Part 13 and therefore the reference in Part 13 requirements in section 3 should draw all AAR requirements in that area into a TCB for an aircraft which has AAR capability (tanker or receiver) Therefore change requirement to: Air to Air refuelling controls which are required to be operated by the flight crew shall be located with the main fuel system controls. AMC: 25.1302. MPS requested to review/ amend/ endorse.

Requirements would be better grouped with the rest of the fuel system controls. Clause 5.1.90 – is there a JAC paper that discusses this? If not, the 5s test requirement has proved to be safe for civil aircraft, and A440AM – we may wish to use the 5s test noting that CS 25.943 and CS 25.1315 also capture the requirement to meet the flight envelope in CS 25.333 and also the greatest duration expected for the acceleration.

Requirement for compliance with Section 6 Leaflet 20 Para 3.6 needs to remain. However will require further review during Pt 1 review.

No requirement for UK.943a. Reference to Section 1, Part 5, Clause 5.1.90 is being removed from UK.1315a. Further detail at NPA 2014/001/192

Not Accepted

**NPA 2014/001/191**

sec 2 UK1315a

Incorrect reference clause is 5.1.90 not 51.90

Admin change

Accepted
**NPA 2014/001/192**  
Sec 2  UK1315a  
The difference between 970 and the CS is the duration of the test, 10 seconds (970) versus 5 second (CS) or the longest duration at can experience negative G.  
Propose that this requirement is deleted  
Requirement for compliance with Section 6 Leaflet 20 Para 3.6 needs to remain; however will require further review.  

**NPA 2014/001/193**  
Sec 2  UK1316a  
Consider being consistent with comments at UK581a  
The requirement is the same except for the inclusion of which Def Stan to show compliance against. Cut UK 1316a down to Extra compliance statement 'Compliance against this requirement shall be shown using Def Stan 59-113.'  
Not Accepted

**NPA 2014/001/194**  
Sec 2  UK1321a  
Duplicated by 1381a. NVG compatibility not suited to scope of 25.1321. The more appropriate location is within 25.1381.  
Propose that this requirement is deleted  
Admin change  
Noted

**NPA 2014/001/195**  
Sec 2  UK1322a  
Is there really a requirement for visual signing an “Abandon Aircraft” command? Are internal communication channels insufficient?  
Propose that this requirement is deleted  
Is there a military Delta here for the ability to communicate with crew who are remote from the pilot to tell them to escape. Recommend retain, but rewrite to remove reference to Part 1. EG: “In multi-seat aeroplanes, where crew in-flight escape is possible there shall be a means for Pilots to order crew to abandon the aircraft”. AMC: “The means of communication should be both aural and visual” (b) At least one method of communicating the Abandon Aircraft order should be available in the event of catastrophic failures arising from CS25.1309 analysis or arising as a result of enemy action!  
Not Accepted

**NPA 2014/001/196**  
Sec 2  UK1329a  
Is this a PTL or TAA responsibility? This is a flight safety requirement, so I think its a responsibility of both.  
Generic issue between PTL/TAA needs to be resolved.  
This is a PTL responsibility, will be covered in his RTSR, no change to rmqr, close comment  
Not Accepted

**NPA 2014/001/197**  
Sec 2  UK1381b  
Full stop missing between UK and 1381b  
Insert full stop  
Admin change  
Noted

**NPA 2014/001/198**  
Sec 2  UK1381b  
This requirement is effectively implied within the text of 25.1381. Therefore, this additional requirement is unnecessary.  
Propose that this requirement is deleted  
This requirement should be explicit. Reject  
Not Accepted

**NPA 2014/001/199**  
Sec 2  UK1383b  
(a) On all aeroplanes required to operate at night, the external lighting circuits shall be controlled by a single master switch. All aeroplanes shall be equipped with sufficient illumination for night formation flying.  
(b) All external lighting shall be dimmable.  
(c) There should be no possibility of downward recognition lights  
Consider re-location to Section 10  
It is correctly placed with other external light requirements. Reject  
Not Accepted

**NPA 2014/001/200**  
Sec 2  UK1411a and UK 1411b  
CS 25.1561 Safety equipment (a) Each safety equipment control to be located in the crew in emergency, such as controls for automatic liferaft releases, must be plainly marked as to its method of operation. (b) Each location, such as a locker or compartment, that carries any fire extinguishing, signalling, or other lifesaving equipment must be marked accordingly. (c) Stowage provisions for required emergency equipment must be conspicuously marked to identify the contents and facilitate the easy removal of the equipment. (d) Each liferaft must have obviously marked operating instructions. (e) Approved survival equipment must be marked for identification and method of operation.  
Propose deletion of UK1411a and UK 1411b as they are covered by the CS -  
UK 1411a - agree, delete.  
UK 1411b - retain - the requirement for survivors to be able to release liferafts from outside the aircraft is not covered by CS-25.  
Three new requirements covering first aid and emergency medical kits added to 6 Subpt F from 970 (1141b, 1141c, 1141d)  
Partial Accept

**NPA 2014/001/201**  
Sec 2  UK1411a  
Marking is not a certification requirement. Such requirements should be contained within a separate MiDIII procurement standard.  
Move to Section 3 or elsewhere  
Delete (see NPA/2014/001/122).  
Not Accepted

**NPA 2014/001/202**  
Sec 2  UK1411b  
CS25 already has the sub-requirement below: Rafts automatically or remotely released outside the aeroplane must be attached to the aeroplane by means of the static line prescribed in CS 25.1415.  
Propose that this requirement is deleted  
Retain - the requirement for survivors to be able to release liferafts from outside the aircraft is not covered by CS-25.  
Not Accepted
WEAPONS AND WEAPON CARRIERS
- 1.5.1.22 Weapons (system, sights, stores, pods, guns etc.) whilst being carried by aeroplanes in icing or snow, must not be adversely affected by accretions during use, deployment or jettison, unless the weapon or aeroplane speciﬁcation permits otherwise. Furthermore, ice accretion on such systems must not hazard the aeroplane during use of the weapon system.

Agree that only requirement 1.5.1.22 is applicable to weapon systems. Approved

Public Address System, Pilot Priority Control
The pilots shall be able to take priority control and side tone is only required at the pilots’ stations. Covered under CS25.1423(f) - Be accessible for immediate use from each of two ﬂight-crew member stations in the pilot compartment.

Propose that this requirement is deleted. CS25.1423(f) requires it to be accessible for immediate use from each of two ﬂight-crew member stations in the pilot compartment. It does not state that the pilot must have priority control. There is no requirement for the pilots to take priority control, CS2 clause is adequate. Delete

Oxygen Systems Large Aircraft - Whilst not arguing with the content related to Oxygen Systems per se, it is suggested that the content of Part 13 Leaflet 3 might beneﬁt from some revision, as some elements of its content were drawn into question during the recent certiﬁcation activities. The certiﬁcation review items discussed during the TCE review for A400M could form a reasonable starting point for further consideration between the MAAs, RAFCAM and the QinetiQ fraternities.

Agree that review needs to be carried out, and should be part of a programme of engagement, this is unlikely to be addressed in the short term, unless major issues exist in current rmnts making them unworkable (in comparison with existing Pt 1) then publish and engage as proposed. Accept comment, but retain requirements as written for publication, pending further review

CS25 states ‘Equipment standards for the Oxygen distributing system’ whereas Def Stan states ‘Equipment Standards for the Distributing System’ and no reference to CS25

Minor issue: The word ‘Oxygen’ is missing from the Part 5 title, insert ‘Oxygen’ into title to make it same as CS25.1445

Full stop missing between UK and 1447a

Insert full stop

Some elements can be viewed as design, and not certiﬁcation, but not easy to ‘disentangle’ this in the short term, retain pending further review

Unclear if requirement adds any value beyond CS

Having reviewed CS25 requirement and Pt 13 requirement it strongly suggest that this requirement is retained as it provides far more detail relevant to military related requirements.

Admin change

quotes ‘described in UK20 requirements’

Admin change

This is not considered to be a certiﬁcation requirement

Propose that this requirement is deleted

Clearances are adequately covered in CS1707. Growth potential should be deﬁned in conjunction with the appropriate PTL. Change UK1707a to read ‘Growth potential shall be agreed with the relevant Project Team Leader’. MAA-Cert-ES1-AvSys - See response to NPA comment 2014/001/053 and close in conjunction with that issue.

Further RA requirements detailing procurement and continued airworthines. RA 1500 requires the MRP so this is nugatory. Move to UK1529a and cover whole aircraft continued airworthiness.

CS25 has a title ‘APU CONTROLS AND ACCESSORIES’

Insert a title in the Def Stan

This speciﬁcally comments on EEWs, for which there are further RA requirements detailing procurement and continued airworthiness. RA 1500 requires the MRP so this is nugatory. Move to UK1529a and cover whole aircraft continued airworthiness.

The Def Stan does not include CS25 Appendix A which is referred to from within the CS25 which is referred to from the AMC table.

Insert reference to Appendix A

Close comment with clariﬁcation

AMC table
General AMC which is not referred to within the Def Stan.

General AMC which is not referred to within the Def Stan. Close comment with clariﬁcation

UK3.1.7
Referencing the whole of part 13 will lead to ambiguity as it will contradict elements of the CS

Identify speciﬁc requirements that are applicable beyond use of part 5 cs25, suggest identiﬁcation against speciﬁc role / mission ﬁt

There was never an intention to reference the whole of part 13. The wording clearly states that is used selectively as a reference where applicable.

UK3.1.9
Refer to BS 30 100 which is believed to have been withdrawn

Use extant standards ideally international/civilian

Agree should find different standard, comment remains open pending resolution, but does not prevent publication, also need to consider same issue in Parts 1 and 7

The term PTL is widely used where it is more appropriate to use TAA.

Reject see previous comments

There are many cross-references to other parts of the Def Stan 00-970

Reduce the cross-referencing by embedding other Def Stan re's into Part 5

Reject, ongoing 970 development will achieve this, close comment