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

TITLE OF PROPOSAL: Amendment to Part 9 RPAS

Stage of Amendment: Final

Def Stan 00-970 NPA Serial No: 2014-002
Unsatisfactory Report Serial No: N/A
MAA Originator: Grade C2 Name R A Bennett-Jones Post MAA-Cert-ADS1a

Affected Part: (including paragraphs) Part 9 UK.601c, UK.601f, UK.1301a and UK.1601a
Cross-reference to other relevant amendment proposals or documents: None

ADS Point of Contact details
Rank/Grade and Name: As above
Telephone Number mil/civ; 9679 35109 030 679 35109
Civilian Email address: MAA-Cert-ADSGroup@mod.uk.

Part 1 (for issue to User Community)

INTRODUCTION (Not more than 250 words)
As part of the change to a Certification Document the requirements listed have been sentenced as no longer needed within Def Stan 00-970 Part 9 as they are adequately covered elsewhwere. Details in Annex A.

For configuration purposes the numbering will not be changed, but the text to these items will be set to 'Reserved'.

1 of 6
The new text will be clearly identifiable within Annex A.

<table>
<thead>
<tr>
<th>SUMMARY OF PROPOSED AMENDMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Change:</strong> See Annex A</td>
</tr>
</tbody>
</table>

**Impact Assessment:**

**Objective:** Clarification of Requirements.

**Risk Assessment:** The impact of not incorporating the recommended changes is the possibility of misinterpretation of the requirements.

**Courses of Action.**

1. **Do nothing.** Not incorporating the changes will result in reviewing the proposals for compliance with the requirement on a case by case basis adding additional cost.

2. **Partial Amendment** Due to the minor nature of the change partial amendment is not considered.

3. **Full Amendment.** There is no reason that full implementation of all the changes should not be completely feasible. The changes will remove the additional work required to comply with the 00-970 Clauses. Retrospective mandation is not considered necessary.

**Preferred Course of Action.** Full Amendment

**Costs and Benefits:**

1. **Do nothing.** There is no benefit of the do nothing option, which could result in increased cost to the department in confirming compliance with Def Stan 00-970.

2. **Partial Amendment. No Benefit.**

3. **Full Amendment.** Full amendment will clarify Def Stan 00-970 Part 9 and will reduce duplication of effort, possibly resulting in improved overall compliance with the document.

**Consultation period ends:** N/A

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.

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

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

Accepted changes will be authorised at the following levels:
- Changes requiring retrospective 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>Signature:</th>
<th>Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rank/Grade:</th>
<th>Post:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date signed:</th>
<th>Date for amendment to be incorporated:</th>
</tr>
</thead>
</table>
### Part 3 - NOTIFICATION OF AUTHORIZED AMENDMENT (Def Stan 00-970 NAA)

<table>
<thead>
<tr>
<th>Document Part:</th>
<th>Part 9</th>
<th>Sub-Part:</th>
<th>Section 2</th>
</tr>
</thead>
</table>

|----------------------------------|-----|----------------|---------|

<table>
<thead>
<tr>
<th>Originator:</th>
<th>R A Bennett-Jones</th>
<th>Date:</th>
<th>16 May 2014</th>
</tr>
</thead>
</table>

**Amendment to be Incorporated on** 11/07/2014

**APPROVAL**

*This Def Stan 00-970 NPA has been approved by MAA-Cert-SandADS on behalf of DG MAA*

**INCORPORATION**

*The amendment will be incorporated in issue 13*

Signed (IAW with part 2).

for DG MAA
### Annex A

Current Text and sentencing.

<table>
<thead>
<tr>
<th>REQUIREMENTS</th>
<th>COMPLIANCE</th>
<th>GUIDANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UK 601c.</strong> Signatures - Provision shall be made to ensure that the RPAV has a sufficient level of conspicuity required for the safe peacetime interaction with other air users, the RPAV-pilot and commander, airspace managers including air traffic controllers, air traffic control radars and the general public.</td>
<td>Intentionally Blank</td>
<td>Signature requirements that will depend on the operational scenario. Types of signature to be considered are Infra-red, Radar, Electromagnetic, Noise and Visual.</td>
</tr>
</tbody>
</table>

It is not clear why this requirement is necessary as there are comprehensive requirements for Anti-collision and position lighting, which are the normal certification requirements for conspicuity in the visual spectrum, so compliance in that regard can be easily referred to the appropriate elements elsewhere in the Part 9.

Recommend Delete.

| UK 601f. The RPAS shall comply with the requirements of MAP RA 5000 series technical Procedures for the Procurement of Aircraft, Weapons and Electronic Systems For the Test, evaluation and validation of design qualification. | As agreed between the RPAS Design Organisation and the MOD (PTL). | See MAP RA 5000 series. |

This doesn’t seem to be a certification requirement. The original requirement referred to Def Stan 05-123 to ensure it was mandated. There is now a requirement to contract for the MRP and the 5000 series have been included in new contracts along with the MoC.

Recommend Delete.
### REQUIREMENTS

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Compliance</th>
<th>Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK 1301a. The RPAS Requirement Specification equipment certification requirements shall be based on the standard procedures for the approval and certification of airborne equipment using MAP RA 5000 series and Def Stan 05-57.</td>
<td>Intentionally Blank</td>
<td>Intentionally Blank</td>
</tr>
</tbody>
</table>

See above

Recommend Delete

#### UK U1601a. The skill levels and training requirements on the RPAV-pilots and RPAV Commanders shall be established.

These requirements shall be agreed with the MOD (PTL), included in the RPAS requirements Specification and addressed in the RPAS Safety Case. The need for manned aircraft piloting skills shall be avoided, if practicable.

Training in ATC procedures, airspace management, meteorology, safety of flight, air law, etc, are likely to be required. (See STANAG 4670 -Recommended Guidance for the Training of Designated Unmanned Aerial Vehicle Operator (DUO)).

This requirement seems to place responsibility for a significant part of the training DLOD into the certification process. The skill level of the RPAS operator would stem from the system design features e.g. level of automation and the required OPS, inappropriate to include as a requirement in the compliance column. I believe that this sits with the training DLOD and RM and should not be a Certification activity.

Recommend Delete

---

New Text.

The requirement numbers will be retained for configuration control purposes and the word ‘Reserved’ inserted in place of the original text.