CONFIRMED MINUTES OF THE 33rd MEETING OF THE
UK NATIONAL AEROSPACE NDT BOARD

Meeting held on 2011-10-13 at the Chamberlain Hotel, 130 - 135 Minories, London EC3N 1NU.

NANDTB/2011/M5

1. The agenda (other business) was confirmed

2. Attendance & apologies for absence (see annex A)
   a. The chairman thanked MT&D for providing facilities for the present meeting.

3. Notes of the last meeting
   a. The notes of the last meeting (distributed earlier) were confirmed without amendment.
   b. Actions and matters arising from the last meeting (not covered by the agenda)

<table>
<thead>
<tr>
<th>Ref</th>
<th>Agreed action</th>
<th>Remarks</th>
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<tr>
<td>2011/23</td>
<td>GMcc, JRT and CT to draft an industry standard for ET of Aerospace Products that would suffice for use in open book specific exams as well as for use in question and training development.</td>
<td>CF</td>
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| 2011/42 | Secretary to
   a. modify (defining terms for OA, IA and ATO, etc) and distribute draft NANDTB/12 for comment;
   b. draft a letter to the CAA for the chairman’s signature regarding a GR23 requirement for control of job specific (OTJ) training
   c. distribute the BINDT ATO checklist with these minutes.                                                                                     | CF      |
<p>|        |                                                                                                                                                                                                 | Completed |
| 2011/43 | CT to request that TEG compile an OA examiner checklist for use when designing/preparing examinations for consideration by the Board at its next meeting                                                                 | CF      |
| 2011/44 | Secretary to request progress report on development of UK NANDTB micro site.                                                                                                                                     | Completed |
| 2011/45 | PJM to ensure that the following is reflected in relevant requirements: The Board will recognise only those ATO with certificated QMS (to ISO 9001 or BINDT recognised equivalent). OA/IA must operate a quality management system, but need not have a certificated QMS. | CF      |
| 2011/46 | CAA to write to the Board concerning control of PCN examinations conducted overseas, and the effect upon Maintenance Organisations that have D1 rating issued by UK Authority, and which employ PCN holders qualified through AQB based outside the UK.                         | Covered under an agenda item at the present (33rd) meeting. |</p>
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<th>2011/47</th>
<th>PCN received a query: “I've just attended an 80 hour IRT course and in the process of building up my hours for level 2. What I need to know is how can I achieve the next step to level 3? When are PCN (aero) / NANDTB going to bring this qualification on board?” <strong>PJM</strong> to refer to the next meeting of the PCN CMC and <strong>Secretary</strong> to add with a response to FAQ.</th>
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4. Membership *(current list)*
   a. The meeting noted the status of member’s nominations and confirmed contact details

5. Overseas airworthiness approvals
   a. TB had invited Graham Rourke (CAA) to come to this meeting to provide input on overseas approvals and the need for recognition of PCN certification.
   b. PJM confirmed that PCN Aero examinations overseas are limited at present to SWS in Singapore. JRT raised the matter of differing UK Board recognition of PCN certificates resulting from UK PCN AQB and overseas PCN AQB (Singapore Welding Society - SWS).
   c. TAECO, an accredited internal agency, covers HAESL, HEACO and TAECO qualification and internal certification. JB explained that the UK Board does not recognise the BINDT accreditation granted to overseas agencies as giving the Board control over the training and examinations under the HAECO (Swire) group. GR asked whether this was down to a liability issue? JB responded that it was more a matter of not accepting responsibility because it did not have a direct overview of the assessments and accreditation. It preferred to see training and examinations for overseas candidates conducted in the UK.
   d. GR pointed out that there are 4 member states currently conducting oversight visits to Part 145 operations in the far eastern region. He pointed out that EASA recognising the competence and efficiency of the UK Board and would like to see these NDT training and approval operations brought under the control of the UK board. GR queried whether the UK Board might extend its overview of BINDT assessments and OA/IA accreditation at overseas locations. JB pointed out that the Board witnesses BINDT assessments in the UK, and that their employers accepted this, but his view was that they would not accept overview of assessments overseas. GR suggested that the overseas OA/IA might be required to pay for a UK Board member attending assessments in an overview capacity.
   e. JB: do other NANDTB conduct operations overseas? GR responded that the French Board does conduct operations overseas. It was also believed that the German Board conducted operations overseas. At the present time there is a dilemma for EASA concerning the lack of NANDTB oversight of training and examinations in regions outside of the EU (e.g. South America) where EASA has a responsibility for Part 145 approvals. Part 145 does allow for NDT qualifications not under control of a NANDTB, but the AMC does encourage an NANDTB oversight. TB suggested that the current UK Board policy to restrict its operational cover to the UK could be damaging to UK plc. GMcC asked whether it was the responsibility of a nation to set up a Board to satisfy the EASA Part 145 requirements? GR responded by stating that there is not sufficient motivation to set up a board in some countries, not least because the problem of EASA recognition might be problematic. CT: do we really have a problem if we accept that BINDT is applying the same standard of assessment overseas as in the UK. JB accepted that this is the case, but it could expose the board if it granted recognition to organisations where it did not conduct oversight. CT: we take our responsibility seriously, and there is anecdotal evidence that other boards do not take so seriously their responsibility. GR: we would like to be able to recognise national systems outside Europe, but NDT is a specialised subject and EASA relies upon the European boards. TB: EASA perceives the UK Board as having established the right criteria, and discharged their responsibilities with due diligence (a model for others to follow?).
   f. JB asked for views of the members. JRT reminded the meeting that there existed a conundrum concerning recognition of PCN Aero certificates issued resulting from SWS examinations, and the need for BINDT to write to these individuals pointing out the lack of UK Board recognition of their qualifications. TB suggested that SWS write to the UK Board seeking bilateral recognition of their training and examinations. JB pointed out that the Board does recognise PCN Aero in the UK because it is confident that the qualification elements and being used within the company EN 4179 written practice (which is in itself subject to oversight). CT: giving a personal view, would have greater confidence in a PCN qualification
than others issued overseas under very little (if any) external control. JB: accepts that different NANDTB’s are operating to different standards than the UKB. BS expressed confidence in some organisations assessed by overseas NANDTB – a confidence coming from personal experience of assessing them himself. GR: we accept the PCN certificate as a ‘basic licence’ upon which the employer builds within his EN4179 WP. TAECO is on the UK CAA list of approved Internal Agencies.

g. JB: is the fact that we cannot conduct direct oversight of BINDT overseas audits a blocker? JRT reminded the meeting that the frequency of UKB oversight of UK Aero AQB is once every 5 – 8 years, and that one visit to SWS at that sort of frequency would not be a huge burden (with direct costs reimbursed by the auditee). There was general discussion on the overseas PCN case, and it was agreed that PCN Aero qualifications – wherever the AQB was located – are deemed to be under the control of the Board.

h. JB: turning to overseas OA/IA accreditation – as a matter of principle – which is only TAECO at present. This was an historical matter, and the Board agreed to recognition in this case. Action: TAECO to write to the Board after seeking support from the Chinese (should this be aviation authority?), seeking recognition of the BINDT accreditation, inclusion in NANDT/21 (recognition of overseas organisations), and seeking authorisation to have the Board’s logo on their IA Certificate. TB pointed out that should there be further overseas applicants, their need for BINDT accreditation (e.g., coming under EASA regulation) could be reviewed on a case by case basis. This was agreed, and there would be a need to reflect this in the BINDT OA/IA system documentation.

Action 2011/48: PJM/BINDT to publicise the agreed UK NANDTB policy on recognition of overseas PCN aerospace AQB and BINDT accredited Outside and Internal Agencies

Action 2011/49: Secretary to include an agenda item for the next meeting on how the UK Board would in future maintain oversight of overseas AQB and IA audits.

6. External relationships

a. JB provided a briefing on a meeting between the Chairmen and Secretaries of BINDT Aerospace Group, NDT SIG and UK NANDTB (JB PowerPoint).

Action 2011/50: Secretary to include Joint Aerospace NDT Forum (JANDTF) PPP as annex C to minutes; JB to draft article for NDT News on JANDTF; BINDT to facilitate annual or bi-annual meeting(s) of JANDTF in order to avoid duplication of effort.

7. Documents for discussion and/or approval

a. The meeting reviewed the status of NANDTB documents and noted that the website version of NANDTB/01 was not at the correct issue

Action 2011/51: Secretary to update NANDTB/01 on website

b. External regulations, standards or specifications (to advise/note changes)

i JB reported on two separate meetings in Paris on the revision of 4179; US strawman issued, but ANDTB working on a European Forum strawman in order to ensure that the European view was captured. A further meeting is planned as soon as the European draft is complete. A webe is planned for next week to review comments received and to make progress in producing a strawman by December. The subsequent agreed draft will go to ASD Stan and be circulated to national aerospace standards committees (UK ACE 61/-/5). Could it possibly become EN ISO 9712? JRT thought yes, but agreed to check with the CEN and ISO regulations.

Action 2011/52: Secretary to review regulations to ascertain the route for CEN standards to be adopted as ISO standards.

ii The near vision European standard is also progressing well: PJM reported strong support for this work. JRT reported that the draft EN ISO 9712 made it possible to use the Tumbling E test (which will enable PCN to use it across all sectors).

8. UKNANDTB Website

a. development and maintenance. DJG reported via e-mail:

i At its meeting on 29 September, BINDT Council approved plans to proceed with the preparation of a Project Requirements Document for the websites upgrade. This is
basically a Specification drawn by the developer and us, resulting in a fixed price for the upgrade itself which will also require Council approval.

ii It is envisaged that the PRD work will be commenced end-Jan 2012 and, assuming that we get the approval to proceed with the upgrade itself, we envisage this work taking place during the summer 2012, with a view to a launch in September 2012. This of course will cover the micro-sites including NANDTB.

iii We had hoped for a more rapid approval process, however Council naturally wishes to apply due diligence to what is a significant investment. I appreciate the NANDTB’s patience and feel sure that this will be rewarded with an attractive, dynamic and useful website.

**Action 2011/53: Secretary** to invite comments on the present NANDTB website for concatenation and recirculation to the Board before sending to BINDT Pubs with request for an update to the website.

**Action 2011/54: Secretary** to distribute NANDTB website statistical report with the minutes

9. Control of Qualifying Agencies
   a. PCN: **AQB** Audit Programme
      i There had been no PCN AQB audits conducted since the last Board meeting.
   b. **Outside Agencies**
      i PJM reported a SWS of NDT reassessment, conducted by MC and CM of BINDT CSD and witnessed by himself.
   c. **Internal Agencies**
      i PJM reported a MoD Tri-service school of NDT surveillance, conducted by MC and CM of BINDT CSD and witnessed by himself.

**Action 2011/55: PJM** to ensure that the MoD Tri-service school of NDT is listed in QS2

**Action 2011/56: PJM** to distribute the audit programmes to the Board for each meeting so that oversight arrangements can be considered.

**Action 2011/57: PJM** to take action to make audit reports available to the Board members, and the CAA and MAA, via a secure access area of the Board’s website.

**Action 2011/58: Secretary** to include new standing item on the agenda: Reports of AQB/IA/OA/ and relevant ATO assessments conducted since last meeting (to be made available by PJM to the Board at each meeting where audits had occurred since the previous meeting).

**Action 2011/59: NANDTB/12 revision sub group** to capture the discussed detail in the revision, as well as the criteria decided at the previous meeting: “the Board agreed to recognise only those ATO with certificated QMS to ISO 9001 or BINDT recognised equivalent, such as part 21/145 approval”.

10. Outside agency questions
   a. BS: what did we agree in respect of quality management system approvals for OA? The meeting referred to the previous meeting minutes in which it is stated that “OA/IA must operate a quality management system, but need not have a certified QMS”.

   b. Following discussion it was agreed to remove the L3 services element from the OA checklist.

**Action 2011/60: PJM** to remove the L3 services element from the present OA checklist.

11. TEG issues
   a. A recent meeting had been postponed; as a result there was nothing to report.

12. Liaison and contact with other NANDTB
   a. JB reported from recent international harmonisation meeting in Paris (see schematic attached as annex D). It was noted that the next meeting will be held in Firenze.

13. Any other business
a. Bobby Scott introduced the topic ‘Level 3 experience requirements in accordance with EN4179 and equivalency of ONC, HNC, HND etc.’ stating that the dispensations for training and experience times were written with US qualifications in mind. Could the Board decide whether alternative dispensations in terms of UK qualifications might be considered equivalent? It was agreed to form a sub-group to come back to the next meeting with a proposal.

**Action 2011/61: sub-group** comprising BS, DG, CS/CW to propose alternative dispensations in terms of UK qualifications that might be considered equivalent to those presently listed in EN 4179.

14. Date and location of

a. the 34th meeting of the UK NAndtB: 2011-12-01 (Messier, Gloucester)

b. the 35th to 40th meetings of the UK NAndtB:
   i. 35th meeting: 2012-02-01 at BINDT, Northampton
   ii. 36th meeting: 2012-04-04 at BA, LHR or Hayes
   iii. 37th meeting: 2012-06-06 at Bombardier, Belfast
   iv. 38th meeting: 2012-08-22 at Caparo Testing, venue TBD
   v. 39th meeting: 2012-10-03 at MoD, Abbey Wood
   vi. 40th meeting: 2012-12-05 at MT&D, Cardiff
ANNEX A - attendance at NANDTB meeting on 13th October 2011

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
<th>Remarks</th>
</tr>
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<tbody>
<tr>
<td>Alun Williams</td>
<td>Airbus UK</td>
<td>Apologies</td>
</tr>
<tr>
<td>Bobby Scott</td>
<td>Bombardier</td>
<td>Attending</td>
</tr>
<tr>
<td>Chris Dootson</td>
<td>BAE Systems</td>
<td>Attending</td>
</tr>
<tr>
<td>Chris Durrant</td>
<td>Messier Dowty</td>
<td>Attending</td>
</tr>
<tr>
<td>Graham Rourke</td>
<td>CAA</td>
<td>Attending</td>
</tr>
<tr>
<td>Carl Sheppard</td>
<td>British Airways</td>
<td>Attending</td>
</tr>
<tr>
<td>Clive Worrall</td>
<td>British Airways</td>
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</tr>
<tr>
<td>Colin Thomas</td>
<td>Messier Dowty</td>
<td>Attending</td>
</tr>
<tr>
<td>Dave Griffin</td>
<td>UK TEG</td>
<td>Attending</td>
</tr>
<tr>
<td>Graham McCully</td>
<td>Part 145, SIG and OA</td>
<td>Attending</td>
</tr>
<tr>
<td>John Purcell</td>
<td>MOD</td>
<td>Attending</td>
</tr>
<tr>
<td>John Thompson</td>
<td>NANDTB Secretary</td>
<td>Attending</td>
</tr>
<tr>
<td>Jon Biddulph</td>
<td>Rolls-Royce</td>
<td>Attending</td>
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<tr>
<td>Keith Phillips</td>
<td>Airbus UK</td>
<td>Attending</td>
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<tr>
<td>Peter Milligan</td>
<td>BINDT</td>
<td>Attending</td>
</tr>
<tr>
<td>Phil Berkley</td>
<td>Agusta Westland</td>
<td>Attending</td>
</tr>
<tr>
<td>Stan Gane</td>
<td>Honeywell</td>
<td>Apologies</td>
</tr>
<tr>
<td>Ted Blacklay</td>
<td>CAA</td>
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ANNEX B: Actions agreed at the 33rd NANDTB meeting

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<td>2011/42</td>
<td>Sub-group comprising JB, CT, PJM and JRT to define terms for OA, IA and ATO, etc., and draft NANDTB/12 rev for comment and approval by 34th meeting.</td>
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<td>2011/43</td>
<td>CT to request that TEG compile an OA examiner checklist for use when designing/preparing exams for consideration by the Board at its next meeting</td>
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New actions agreed at 33rd meeting

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2011/50 **Secretary** to include Joint Aerospace NDT Forum (JANDTF) PPP as annex C to minutes; **JB** to draft article for NDT News on JANDTF; **BINDT** to facilitate annual or bi-annual meeting(s) of JANDTF in order to avoid duplication of effort. | completed |

2011/51 **Secretary** to update NANDTB/01 on website | Waiting for an opportunity |

2011/52 **Secretary** to review regulations to ascertain the route for CEN standards to be adopted as ISO standards. | Waiting for an opportunity |

2011/53 **Action 2011/53: Secretary** to invite comments on the present NANDTB website for concatenation and recirculation to the Board before sending to BINDT Pubs with request for an update to the website. | e-mail dated 2011-11-08 |

2011/54 **Secretary** to distribute NANDTB website statistical report with the minutes | completed |

2011/55 **PJM** to ensure that the MoD Tri-service school of NDT is listed in QS2 |

2011/56 **PJM** to distribute the audit programmes to the Board for each meeting so that oversight arrangements can be considered. |

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2011/59 **NANDTB/12 revision sub group** to capture the discussed detail in the revision, as well as the criteria decided at the previous meeting: “the Board agreed to recognise only those ATO with certificated QMS to ISO 9001 or BINDT recognised equivalent, such as part 21/145 approval”. Include definitions of terms for OA, IA and ATO, etc. | Sub-group meetings delayed |

2011/60 **PJM** to remove the L3 services element from the present OA checklist. |

2011/61 **Sub-group** comprising BS, DG, CS/CW to propose alternative dispensations in terms of UK qualifications that might be considered equivalent to those presently listed in EN 4179. |
Annex C – UK Aerospace work domains and relationships

Work Domains and Relationships

UK National Aerospace NDT Board
Training & qualification of NDT personnel:
- PCN/AERO Certification Advisory Board
- BINDT Outside/Internal Agency accreditation oversight
- EN4179 interpretation
- EN4179 revision
- ANDTBF Member

BINDT Aerospace Group
Strategic Issues, e.g.:
- NDT for future industry goals
- New NDT technologies
- NDT validation processes
- NDT for Design
- NDT risk management
- NDT succession
- Advise BINDT on Aerospace needs

R&T Organisations

ADS NDT Special Interest Group
Common Aerospace NDT Issues, e.g.:
- Nadcap/NUCAP
- Requirements for LED UV Lamps
- ACE 61/75
- Responsible for ballot comments on new standards and submitting new work items

Chair: Jon Biddulph
Secretary: John Thompson

Chair: Andy Bakewell
Secretary: Ian Cooper