

UK National Aerospace **NDT** Board

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THE 62nd MEETING OF THE UK NATIONAL AEROSPACE NDT BOARD

Meeting Date: Tuesday 6th March 2018
Time: 10.00am
Location: BINDT, Midsummer House, Riverside Way, Northampton, NN1 5NX

Minutes

NANDTB/2018/M1

1. Confirmation of the agenda (and any other business)

1.1 Auditor Advisory

1.2 Joint Aerospace Forum

2. Attendance & apologies for absence (Annex A)

Refer to attached.

TG went through the apologies, it was noted that there was no CAA representation.

JB welcomed John Iley (alternate for Airbus) as a new observer to the Board. The members introduced themselves.

3. Notes of the 61st meeting (distributed earlier)

a. Confirmation

The minutes were confirmed and will be uploaded to the website as confirmed minutes.

Action 01/2018 – TG to upload minutes from 61st meeting

b. Review of allocated actions

Ref	Actions brought forward	Remarks
10/2017	BF to email individuals requesting this information for L2/L3 personnel	Ongoing
16/2017	KP will re-amend NANDTB_17 and bring back to the following meeting	Agenda item
27/2017	AMENDED WG to agree criteria to manage OA's consisting of MC, RB, JB, NC, NLB and PJB, with MC being the lead on this WG	Ongoing – however BS is to be removed from this group and NLB and MC will be added with MC being the lead.

29/2017	JB to circulate the NADCAP advisory regarding this	Ongoing
33/2017	TG to correct and upload minutes from meeting	Closed
34/2017	TG to upload NANDTB_06	Closed
35/2017	TG to check formatting, including footers, then upload NANDTB_18	Closed
36/2017	JD, JB, DG and GMcC volunteered to review for the next meeting	N25 – on agenda
37/2017	CW, JB, RB and SW volunteered to review for the next meeting	N27 – on agenda
38/2017	IA/OA will conduct another review in December	Closed – this was dealt with remotely and the final version needs to be reviewed
39/2017	NANDTB WG in Jan, BS (Chair) AW, PB, MC/DG	Ongoing
40/2017	TG NANDTB_12	Agenda item
41/2017	JB to send to MC, then IA/OA and WG	Closed
42/2017	TG AD_011	Closed
43/2017	JB to write article for NDT News	Ongoing
44/2017	JB to draft an advisory covering this	Ongoing
45/2017	JB to write article for NDT News	Closed/superseded
46/2017	KP to Chair a Nadcap lobby to present the case for Board accreditation	Closed
47/2017	MC/DG to collate costs and implications for UK OAs to support this	Closed/superseded
48/2017	JB to send copy of presentation to all for our own use. (Not to be circulated.)	Closed
49/2017	KP will make a proposal on how to proceed, which will be reviewed by correspondence	Closed

4. Membership

a. Election of Chair/Vice Chair

Discussion taking place regarding the Chair/Vice Chair position.

JB stated to the Board that he would be walking away at the end of the meeting not being Chair of the meeting.

KP did state that if nobody else wanted to consider being Chair of the Board then he would do it.

A vote took place for KP to take on the role of Chair – unanimous

JD expressed an interest, however he was unsure if his employer would allow him to take on this role. After it a discussion AW expressed an interest as Vice Chair and it was suggested that perhaps AW and JD could share the Vice Chair role, however as JD was not in a position to confirm that he could take on this role at this meeting. AW stated that he would consider the role of Vice Chair.

A vote therefore took place for AW to take on the role of Vice Chair, this vote was unanimous

JB did state however that if JD would like to consider sharing the Vice Chair role with AW after speaking to his employer then this could be brought up at a later meeting.

b. Review NANDTB_06

This document was amended in real time.

CD stated that there is a new representative to represent the Pt 145 part of the business, to be added, JB stated that there needs to be an employer's letter of nomination.

Action 02/2018 – TG to upload the new version of the document

Action 03/2018 – CD to provide a letter of nomination for the Pt 145 representative

5. UK NANDTB Document Review

a. NANDTB_03 – NANDTB Constitution – previously reviewed

b. NANDTB_17 – KP – This is delayed until the next meeting – WG revised to GL, GMcC and JB as BS has now left the Board.

c. NANDTB_25 – TG tabled - this document was approved.

Action 04/2018 – TG to upload the new version of the document

d. NANDTB_27 – KP – This document was circulated prior to the meeting, it was reviewed and the only changes to this were the contact details for BINDT.

Action 05/2018 – TG to upload the new version of the document

e. NANDTB_12 – This document was tabled, it was suggested as this document was very large that it should be reviewed out of the meeting. GL/SA stated that with regards to 4.15/4.1.6 and 4.1.7 they should not be regulated to this as they do not follow CAP747/GR23 and there are no corresponding requirements in the MAA regulations. They are not stating that they should be a special case, however as the only Military regulated Inside Agency, they do not following CAP747.

GL stated that he has an independent qualification as per the minimum requirement. It was noted that these are the Board's requirements and BINDT audit requirements, this has nothing to do with where they came from, these are the Board's requirement and they are stating that they want the RL3 to be independently qualified and why should Tri School as an Inside Agency be any different to any other Inside Agency?

This is a result of an audit finding being found over the last 3/4 years and since this has been found, these have been the Board's requirements. GL stated that this matter has not been brought up in an audit and the question is why have they been allowed to get away with this for so long. MC stated that they have not been doing things wrong because they send people out for other certification. GL asked if the Board is sufficiently relaxed to allow Tri School to continue in the same manner that they have for the past 4/5 years of auditing,

on the full understanding that the source requirement does not apply to the MAA and its inside agency? NLB asked what the problem was complying with the 3 points listed and GL stated that it is the principle that the providence of those 3 paragraphs do simply not apply to them as they are an MAA company.

NLB stated that these requirements are not in the current version of NANDTB_12, this is just a draft for approval, which is why this has never been picked up on an audit. GL asked why this is suddenly going in to this document and MC explained that when the checklist was put together there was some clarification around wording. There has been no change in the intent of the questions, it has just been clarified. If you take the RL3 at an Outside Agency, they may not hold all methods so they may have another L3 designated as an examiner in the method that he doesn't hold and that L3 examiner will be independently examined. Part of the reason this is not a problem for any other Outside Agencies is because most of the examiners hold central certification so there is no general theory implication, it is a specific theory and practical so this is not a huge issue.

NLB also comment that most Outside Agencies do not do this for every method in which they are certified. MC stated that for example Colin Thomas has 5 methods and he is the only person who will examine the SWS L3's.

PB asked if GL if he thought this was morally and ethically correct? As a model whether for the MAA or the CAA did GL did not think that the paragraphs are impartial and correct in order to justify the standing as a L3 be able to train on and he was not understanding why an argument was occurring in relation to this. GL stated that it is to do with the unique business model of the MOD in that they only train their own people and they will progress through L1, L2 and L3 and at some point someone will become the RL3 of their own inside agency who will administer exams to other L3s. PB asked if GL thought that this was beneficial to either him or another RL3 as well? GL stated that he did and he would love to get the courses, but it is a really difficulty for him to be able to generate a business case for this on the basis that it comes from a rule that simply does not apply to the MOD. PB stated that this was BINDT/NANDTB requirement. KP stated that as a Board they believe this is best practice and this is how L3s and RL3s should be qualified.

GL stated that this was not the Tri School of NDT this is his regulator. PB asked GL what would be the process that he would like to see implemented in to this document? What is the MAA regulation that GL complies with? GL stated that it requires the RL3 to hold one as per the standard. There is no MAA requirement for them to do 4/5/6/7/8. This is not to say that at some point in the future they will not align with the CAA and at which point they will come on board. This is not the Tri School of NDT pleading for an exemption, he is asking that 4.1.5, 4.1.6 and 4.1.7 should be applicable to organisation that are CAP747. The auditor will audit and skip over those points.

KP stated that what needs to be looked at is this checklist when it is voted on, is it applicable to the MAA regulations or is it NANDTB regulations and what they want to impose on any Inside/Outside Agency for accreditation by the UKNANDTB? MC stated that if you allow one agency whether Inside or Outside to deviate, then the rest would also like to. GL stated that he didn't agree with this, he is not asking for an exemption and he is not trying to be

awkward for the sake of it, it is the overall requirement of the MAA. KP stated that Tri School is in on what the Board mandates as they are sitting around the table and if the Board think that what is tabled today is applicable to all regards of where the source data came from then this is what they have to buy in to.

NLB stated that everybody needs to be on a level playing field and that the NANDTB requirements should apply to all Inside and Outside Agencies, it has nothing to do with Civil or Military requirements, these are NANDTB requirements. SA stated that if the CAA hadn't specified this requirement in GR23, then this argument wouldn't be happening. SA has got confirmation from the CAA that CAP747 is not applicable to military aircraft.

MC suggested that the current version of the checklist Tri School are audited against, they have findings against it and the MAA simply issues a memo based on those and findings and states that it is not bothered and carry on? Every time they are audited then there will be a finding.

KP stated that Tri School are buying in to by complying to this document and asking for an audit, they are already buying in to what the Board is lying down. If Tri School do not want to comply with it then why buy in to it? GL stated that it is not about not wanting to comply, it is about the provenience of where it comes from. If it didn't appear in CAP747 then it wouldn't be an issue. KP stating go around the room he does not see any one who has any issues and therefore the paragraphs are relevant and it is how the Board wants this document to look.

This was discussed in great length.

GMcC asked if this had been discussed with the CAA? - It was noted that there was no representation at this meeting and at the next meeting, it was noted that they need to attend to answer questions.

It was noted that there is another column headed assessors comments/objective evidence and when the relevant questions are reached in the audit, there should be comments put in this section.

NLB stated that there were two issues :-

1. Approve the document/don't approve the document
2. Decide what is going to happen with Tri School about those clauses?

It was noted that this document should go through as is. A vote took place to approve this document :-

6 voted for/2 abstentions - **implementation within 6 months from publication of NANDTB_12**

Action 06/2018 – TG to circulate the checklist/NANDTB_12 with the minutes

f. Audit Checklist

This document was approved as it had previously been circulated.

6. Qualifying Agencies

a. Auditor Oversight, review matrix

TG tabled the matrix.

The current BINDT auditor staff are Karen Reader, Alan Parsons and Clive Hammond.

NLB did state that AP had accepted a new position within BINDT and at the current time BINDT are advertising for another lead auditor so in the next quarter there will hopefully be another lead assessor. AP will remain as he is until somebody is taken on and trained up.

JD confirmed that he would witness the GKN – Isle of Wight.

Action 07/2018 – TG to liaise with Tara Ashton about informed JD of the above

The witnessing of Clive Hammond was discussed and it was discussed that one of Clive's audits should be moved to the UK so that he could be witnessed.

BINDT will look at replacing one of Karen's with Clive so that he could be witnessed.

GMcL stated that he would witness this audit.

Action 08/2018 – TG would liaise with Tara Ashton about this

7. EN4179:2017 (JB)

JB informed the Committee that the AIA sub-committee is proceeding ahead with the next revision. The MOU between AIA and ASD-Stan is that the spec gets updated every 5 years so the last revision, the next revision is currently being worked on. There was a WG that had been set up under ASD-Stan and Chris Stephenson was the Chair of this WG, there have been requests for people to join this committee and they were going to represent the EU, however this has not worked and people have not expressed an interest so JB needs to send out an email to the Chairs of the agreed countries to see if they will put someone forward to be part of the team, the countries are Germany, UK, France, Italy, Sweden and Spain. JB will email all of the Chairs from the ANDTBF Board for representatives.

It was noted that JD will be attending the AIA sub-committee meeting in Florida.

JI stated that he would like someone to sit on this group.

8. ANDTBF (JB)

At the last meeting JB confirmed that the NDT Task Group had agreed the position that exams would need to be made available for review by the Nadcap auditor with effect from 31 March and if somebody supplies to Boeing then this was by 31 January. This was a problem within the UK hence why the NANDTB Committee was initially set up. The checklist was agreed and circulated, a pre-audit was done in 2017 with an audit by Phil Ford, with no findings. The motion agreed in October which stated that the exams had to be available for review by the Nadcap auditor also stated that unless the aerospace board had been audited and reviewed by a body (TBA). There was a meeting in Jan/Feb at Rolls Royce, there was a presentation made by the team to get people to buy in to what was being done in the UK. At the Nadcap meeting it was agreed that they would accept the audit that Phil Ford did and this is going to be accepted and recognised. Boeing were insistent that there be some sort of certification for this and so Nadcap PRI are going to issue the UK NANDTB a certificate. The audit only has to happen every 3 years, however an audit 12 months from the date of the last audit needs to be conducted.

The audit has to be done by a Nadcap auditor, the checklist adopted by the task group is now document AC114/11.

Funding ideas were discussed within the committee. NLB confirmed that BINDT would pay for the first audit and after that a policy needs to be devised to pay for the audits going forward. JB stated that it would be good to see what the audit is going to cost and it was then suggested that a WG, offline put some ideas together for raising funds.

WG consisting of MC, KP, AW, RD was formed to get together to discuss raising funds.

MC asked that now that Nadcap recognise the Board, can the OA/IA's now use a logo to state this? JB stated that people who are Nadcap accredited do put the Nadcap logo on their release paperwork.

AW also stated the deadline of 31/03/2018 for the audits to be done has now been extended to the end of July.

9. Part 145 Orgs and SIG's – Input (GMc)

GMcC advised that there was only a query regarding the L3 basic exam, checklist updates and the Terahertz inspection.

10. Regulators Update – (BF/NC)

There were no representatives from the CAA present.

11. OA/IA Group (MC)

MC stated that the last meeting was in December, via Webex where NANDTB_12 and the checklist have been the main priority of the group.

MC confirmed that there was a meeting Thursday 8th that Phil Ford is attending to talk the group through the latest revisions in Nadcap and the changes to the disclosure of exams.

DG queried the L3 training program and DG requested if it was at the discretion of the RL3. MC stated that her interpretation of the document is that, this is not, this is the way that people are moving forward. The publication ANDTBF_10 it was stated did not have an implementation date, however JB stated that the publication date is at the bottom of the document.

12. Any other business

a. Terahertz Inspection

KP presented his power point.

Q&As which KP answered.

PB stated that a few weeks ago he had a query regarding the above from Anne Briggs, PB asked if KP had contacted her, KP stated that he had not and PB stated that he would send the contact details for Anne to KP.

Action 09/2018 – PB to provide Anne Briggs details of KP

KP stated that the suggested route of approval which he would like the Committees contribution on is that someone does L1 UT formal training as foundation to go in to terahertz formal training as the principals are largely the same. Meggit are going to put the procedure together for this.

It was suggested that this method perhaps be listed on NANDTB_18?

After a lengthy discussion TG tabled NANDTB_18 for it perhaps to be incorporated into this. KP stated that if the suggestions that have been made get formalised in to Meggit's written practice as a route to qualification for this inspection and then terahertz is added to NANDTB_18 as

something between an emerging technology and a proven technology, then there is a route forward.

Regarding the number of questions KP suggested that there are 40 in the GT UT and KP is suggesting another 20 on top of this.

KP will have a look at NANDTB_18 and decide if this is the correct place to put it.

b. CT Inspection – operator approval.

KP had brought this up following an enquiry via the Aerospace forum, as it was going to become an issue because people/businesses want to start using actual CT images for the acceptance of parts, but there is no underlying qualification structure. It was pointed out that looking at a 3D image data sets is not the same thing as looking at a 2D image on a screen (digital). KP had no presentation but this is something that the Board needs to think about.

It was pointed out that the intent of the 2017 revision of EN4179, already included within the scope of non-film radiography ALL aspects of digital radiography, thus including CT as a 'technique within the method'. Therefore, it is the responsibility of the RL3 to ensure that CT users have had appropriate training and examination within the bounds of EN4179 digital conversion (or initial qualification using digital as the base technique) to enable them to effectively discharge their work through a CT system using an approved technique.

c. Auditor Advisory

This was discussed and the Board is made up of the Primes who discussed the advisory given.

After a lengthy discussion nothing for the UK will change, the exams will remain open book. JB it stated to put a statement in the mins.

It was suggested that an advisory in relation to this be created.

Action 10/2018 – TG to circulate this Advisory to the Board members

d. Joint Aerospace Forum

GMCC reported that from the aerospace meeting the previous week, they were talking about changes of chairs/vice chairs from the aerospace group, SIG group and the UKNANDTB. It was asked whether a joint aerospace forum to go across all three groups to open up communication channels, to ensure no overlap in work.

The chairs/vice chairs used to meet up to discuss all items going across.

Action 11/2018 - JB will email KP the flow chart he has that will need changing and also cc TG in

13. Date and location of the next meeting

5th July – Flybe - Exeter

18th September – Bombardier - Belfast

11th December – SWS - Cardiff

Actions allocated and carried over from meeting 62nd Meeting

Ref	Actions brought forward	Remarks
10/2017	BF to email individuals requesting this information for L2/L3 personnel	Ongoing
27/2017	AMENDED WG to agree criteria to manage OA's consisting of MC, RB, JB, NC, NLB and PJB, with MC being the lead on this WG	Ongoing – however BS is to be removed from this group and NLB and MC will be added with MC being the lead.
29/2017	JB to circulate the NADCAP advisory regarding this	Ongoing
39/2017	NANDTB WG in Jan, BS (Chair) AW, PB, MC/DG	Ongoing
43/2017	JB to write article for NDT News	Ongoing
44/2017	JB to draft an advisory covering this	Ongoing
01/2018	TG to upload minutes from 61st meeting	
02/2018	TG to upload the new version of the document – NANDTB_06	
03/2018	CD to provide a letter of nomination for the Pt 145 representative	
04/2018	TG to upload the new version of the document _NANDTB_25	
05/2018	TG to upload the new version of the document – NANDTB_27	
06/2018	TG to circulate the checklist/NANDTB_12 with the minutes	
07/2018	TG to liaise with Tara Ashton about informing JD of the audit details etc	
08/2018	TG would liaise with Tara Ashton about this	
09/2018	PB to provide Anne Briggs details of KP	
10/2018	TG to circulate this Advisory to the Board members	
11/2018	JB will email KP the flow chart he has that will need changing and also cc TG in	

Annex A – attendance and apologies for absence at the 6 March 2018 NANDTB meeting no. 62

Name (member unless stated otherwise)	Representing	In attendance	Apologies for absence
Alun Williams + John Iley	Airbus UK	1 + 1	
Ben Forshaw (Observer)	CAA replacing TB		1
Bobby Scott	Bombardier	1	
Carl Sheppard	British Airways		
Chris Durrant	Safran Landing Systems Ltd	1	
Clive Worrall	British Airways	1	
Dave Griffin (Co-opted)	Vice Chair representing BINDT OA/IA Group	1	
Guy Lawton	MoD	1	
Jes Dugard	MoD	1	
Graham Mcleod	Honeywell	1	
Graham McCully (Co-opted)	Pt. 145 Orgs and SIG members	1	
Jon Biddulph (Chair)	Rolls Royce	1	
Kevin Pickup	BAE Systems	1	
Michelle Clapham (Co-opted)	Chair representing BINDT OA/IA Group	1	
(Robert) Neal Cuddy (Observer)	CAA replacing TB		1
Nicole Banks (Observer)	BINDT	1	
Patrick Boulton (Voting member)	BINDT	1	
Phil Byram	BAE Systems		1
Ralph Duff	Bombardier		
Rob Bright	Flybe		1
Steven Arrowsmith (Observer)	MAA	1	
Stuart Wroot	Leonardo Helicopters	1	
Tracy Grant (Secretary)	BINDT	1	
	Totals	18	4