

# UK National Aerospace **NDT** Board

C/o The British Institute of NDT  
Midsummer House, Riverside Way  
Bedford Road, Northampton, NN1 5NX,  
United Kingdom  
Tel: +44(0)1604-438251

E-mail: tracy.grant@bindt.org



## THE 67<sup>th</sup> MEETING OF THE UK NATIONAL AEROSPACE NDT BOARD

Meeting Date: Wednesday 5<sup>th</sup> June 2019  
Time: 10.00am  
Location: Argyll Ruane, Sheffield

### Minutes

NANDTB/2019/M2

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

Added to Agenda in real time.

#### 2. Attendance & apologies for absence (Annex A)

Round table introduction for the benefit of Tara Ashton and Simon Wright.

Apologies from Jon Biddulph, Rob Bright, Neal Cuddy, Ralph Duff, Guy Lawton, Graham McLeod, Graham McCully.

#### 3. Notes of the 65<sup>th</sup> meeting (distributed earlier)

##### a. Confirmation

The minutes were amended in real time and will be uploaded to the website as confirmed minutes.

**Action 13/2019 – TG to upload minutes from 66<sup>th</sup> meeting**

##### b. Review of allocated actions

Ref	Actions brought forward	Remarks
27/2017	<b>AMENDED</b> 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 (NANDTB_12)	Update to be given in document review section
16/2018	MC will look at NANDTB_16 and draft some wording and will circulate via email to the Board to approve	<b>CLOSED</b>
22/2018	A WG to look at NANDTB_12/OAQS 11 checklist has been formed to review both documents together – WG of KP, MC, GL and PJB.	<b>Joined with 27/2017</b>
24/2018	WG of MC/PB/GMcC and AW has been put together to review NANDTB_19	Update to be given in document review section

27/2018	OA/IA to create a dashboard to look at excessive number of NCRs/repeat NCRs and top NCR's for a specific year - to look at every meeting	Full report of dashboard outcome by September
29/2018	TG to circulate the document with the minutes for approval at the next meeting	Nothing to circulate until September
30/2018	TG to upload the amended NANDTB_06	CLOSED
32/2018	WG consisting of KP/RB/JB to look at this for amendment – NANDTB_03	ONGOING – RB to go back on this WG
33/2018	WG consisting of KP/RB/JB to look at this for amendment – NANDTB_04	ONGOING – RB to go back on this WG
38/2018	CD to create a response of why it is felt that thermography should remain in the standard, information to be collated from the OA/IA group	CLOSED – as is remaining in the Standard – NC did look in to this and provided figures
01/2019	TG to upload minutes from 65 <sup>th</sup> meeting	CLOSED
02/2019	TG to upload NANDTB_16	CLOSED
03/2019	Watch how standard develops - 9712	CLOSED
04/2019	NC to capture ST and TT D1 rating	CLOSED – prEN has now been received
05/2019	KP to contact the Latvian Board	ONGOING
06/2019	TG to add Alan Parsons as BINDT alternate	CLOSED
07/2019	TG to upload NANDTB_16	CLOSED
08/2019	TG to upload NANDTB_17	CLOSED
09/2019	TG to upload NANDTB_22	CLOSED
10/2019	KP to send a response to MC regarding this presentation – ML2000	CLOSED
11/2019	JB will circulate NANDTB_10 draft	ONGOING
12/2019	GMCC to find the list of specs	CLOSED

### Other Matters

AP stated that following on from the last meeting, the comment about the basic being taken out of the new version of 9712 for L3's, it was noted that the basic L3 is going to remain in the standard. It was noted that there is a meeting this month regarding this, however there are 800+ comments regarding this.

#### 4. Membership

##### a. Review NANDTB\_06

Amendments were noted and TG to amend back at the office.

**Action 14/2019 – TG to make amendments and upload new NANDTB\_06 documents**

#### 5. UK NANDTB Document Review

##### a. NANDTB\_12 – under review with WG

TG tabled the amended document.

The paragraph looking at overseas agencies was looked at in depth. In the past Singapore and China had affiliated themselves with the UK Board. This is good but it does mean that controlling them is difficult. There will be a push for the ANDTBF to enforce that the Singapore and Chinese Boards abide by ANDTBF\_08 and that they take on responsibility for auditing/approving their own IA/OAs. This would then mean that overseas agencies do not need to be audited by the UK Board. Regarding oversight the UK based agencies felt they were getting picked on because it was easier to go to them than go to China, this situation will also be resolved if the Chinese and Singapore Boards take responsibility for their own..

3.1.9 SLA – this was changed to 10 from 7, it was noted that this is not an issue at the moment.

3.1.14 – last sentence only to remain.

4.1.6 – saying the RL3 needs to do his certification at another OA independent to the one that they work for. The issue there is surrounding the methods that the RL3 is not certified in and this reads that all other L3s in those methods need to go externally, however this is not the intent, the intent is that they appoints a method lead who does their examinations externally and then the RL3 can authorize the method leads to administer exams in those methods within their own agency. The RL3 plus any method leads appointed by the RL3 need to do their L3 initial exams at an independent OA.

AP will add addendum to the above to state that any L3s will remain valid until the next recertification when they will need to go external.

Due to the makeup of the European EN4179 review team being only Germany, Spain and the UK, both Spain and Germany wanted to take out the basic exam requirement. The Forum will need to vote to maintain ANDTBF\_10 and then the Board will need to comply with this.

Regarding the basic exam, SW stated that if a candidate attends who already holds 5 methods at L2, why is this not an exemption. KP stated if it is the first time gaining L3 then they should have no problem complying with these requirements. AP stated that if someone attended to do RT L3 and they already held PT and MT L2, PCN would still require them to do the UT and ET questions, but they would be exempt from the questions that they do hold L2 certification in. 4179 at the current time holds no exemptions.

AP will up-issue NANDTB\_12 and circulate for final approval for this to then be uploaded.

**b. NANDTB\_19 - WG to review this document**

This document was produced to help RL3s justify getting their L2s additional training for composite materials. This was discussed at a WG and whether the need for this document still exists. This document was issued 10 years ago, does the Board feel that composite materials are not sufficiently covered by any other training. People who use composites day to day have this fairly well covered.

AP stated that this document was drafted in 2010 when composites was not as popular as it is today. The general feeling was that organisations now have this under control.

A discussion took place regarding this document and it was felt that this document be a guidance document as opposed to a requirements document.

KP asked if NANDTB\_19 is a useful document, it was noted that it was useful as a guidance document, however the suggestion was to remove composites and make it new materials and alter the scope of it.

**Action 15/2019 – WG to look at the document PJB, PB, AW, MC, KP and GMcC**

Following on from this it was wondered whether AM needs to be on this, PJB stated that there is a lot of work being done by the Universities with regard to developing standards for AM. There are none at the moment.

KP also stated that BSI have been invoked and a pre advisory standard is being developed.

**Action 16/2019 - PJB will take back to the Standards Committee, Holly Tyler is looking at this**

**6. Qualifying Agencies**

**a. Auditor Oversight, review matrix**

TG tabling the oversight matrix.

Andy Kular is ready to go, he has done the exam. He needs to do 2 observations and then has to lead 2 audits under witness by a BINDT auditor.

AP stated that a comprehensive oversight is carried out for UKAS. After he has done the 2 and 2, BINDT will be happy to let him out.

KP would like to see feedback on him before he is signed off by the Board.

**Action 17/2019 - KP will speak to Pratt & Witney regarding an audit that has been carried out at the overseas agency**

**7. Standard Review**

**a. prEN4179**

A draft document of the new 4179 standard has been circulated to the Board. At this stage, formal comments are not invited.

The biggest change is with regards to the basic examination definition. This has been clarified now in that it is only the methods used by the employer that need to be in it.

No L2 Limited.

8.4.1 still remains with a new exam every time you change employer.

7.1.1 exams can only be conducted after 75% of the experience is gained.

Discussions taking place.

JB wanted to know whether the Board/UK should maintain adherence to ANDTBF\_08 that there should be 4 additional methods with one of them being volumetric inspection or stick with what is in the Standard and the general examination is only on the other methods as used by the employer.

Lengthy discussion taking place regarding this.

KP will raise with the Forum that if you hold a L2 in the other methods, can they just do a L3?

**KP asked the Board the question – if there is a vote at the Forum to continue with mandating ANDTBF\_10, the basic examination shall consist of 4 of the other common methods, one being at least volumetric or go with the Standard and do the other methods used by the employer and if there are no other methods then the L3 will only hold one method.**

Vote taking place in accordance with the above – 6 for, 1 against

OA/IA would vote for this, if they received a vote, the MAA were also in favour of maintaining ANDTF\_10.

Annex 1 L1 limited recertification interval is set at 2 years – it was asked what the point of this was did anybody know? BAE Systems use L1 limited to become effective sooner for the company but not everybody does that.

Until this document is approved for comment, this should be left as it is.

This should also be discussed when NC attends a meeting. NANDTB\_17 should perhaps be aligned with the above.

**8. ANDTBF (JB)**

JB is representing the UK Board - next meeting in June in Switzerland.

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

GMCC has not sent anything Pt. 145 through.

**10. Regulators Update – (BF/NC)**

SA was the only regulator in the room and he stated that there is not much from the MAA, some of the RA documents are being updated.

NC has sent through an update re Brexit, there is not much to report as before. The Forum Chair

has been contacted by KP regarding what things will look like after Brexit.

NC stated in his update that following the last meeting CAA contacted EASA seeking to establish if there has been any development as to whether EASA will recognise the UK Board post EU Brexit. There was no reply. The CAA microsite is still the source of information. The UK CAA have stated that they will continue to recognise EASA 145 releases. For European organisations following EN4179 the UK will accept releases however this is time limited to 2 years. As to whether UK approvals will be valid it depends on Brexit negotiation outcome and EASAs position. As information the UK have completed a UK bilateral agreement with the FAA who are satisfied with the UK system.

KP did state that he thinks that when the UK have a position of understanding the NANDTB Board will probably need to get together with the Aerospace Forum, Andy Bakewell, the SIG Group and the Aerospace Group to figure out with the Aerospace industry how things will be taken forward.

#### **11. OA/IA Group (MC)**

Since the last Board meeting there has been a meeting and an election for a new Vice Chair has been carried out. During discussions of the TOR, it was decided that it would be better to have 2 Co-Chairs rather than a Vice Chair/Chair on alternating cycles, every January someone is elected, but there will be continuity because someone always knows what is going on.

There was a vote via Doodle Poll and since then there has been a briefing via email on the outcome of the Board last time.

Strong feeling from members of the OA/IA that they would like 4 weeks' notice of an OA/IA meeting but they do not want a date set until there are draft minutes from the Board.

Email briefings are a good way to keep in touch, even if the group only meet twice a year.

#### **12. Funding for the PRI AC7114/11 audit of the UK NANDTB (KP)**

KP asked if everybody has received an invoice.

TG has not received anything from Safran so an invoice has not been raised.

#### **13. Any other business**

##### **a. NADCAP**

Phil Ford contacted KP and asked if it was possible for NANDTB to provide him with any drafts or updates to ANDTBF\_08, the issue that any changes made by the Forum not being flowed down to the task group and then not being agreed by the group.

KP suggested that NADCAP get invited to the NANDTB and KP will speak to Helmuth Hoeller about him being invited to the ANDTBF.

KP asked the NANDTB if they agreed that NADCAP get invited to the meetings. It was agreed unanimously that NADCAP NDT TG be invited to the UK Board meetings as an observer only.

**Action 18/2019 – KP to invite NADCAP to the next NANDTB**

##### **b. PCN Aero**

At the last meeting JB stated that PCN Aero couldn't provide equivalency. Work had previously been done to address issues whereby the specific exam should be put together around referenced standards. After the last meeting PJB and AP took it upon themselves to do a gap analysis on 4179 and 9712 and to try and bring PCN Aero to make it a best fit document to get

PCN Aero recognised.

PCN Aero has been reviewed and this has been drafted along with SWS, AIT and SW at Morgan Ward, to make the document fit and to make it user friendly to organisations. Following the meeting, changes/amendments to PCN Aero were made and then reviewed at a meeting with KP and JB.

Following that meeting KP sent an email to PJB and AP to recommend that PCN Aero in its current form should be sent to the UK NANDTB to recognise PCN Aero as another scheme, as it currently is. It was also hoped to petition the CAA to get these words listed in GR23.

NC sent a response stating – regarding PCN Gen Aero this would be a key piece of work and CAA will participate. As we are seeking to use the “other” recognised NDT qualification program route, depending upon the outcome of Brexit, perhaps the time will come to seek formal EASA recognition and not just by CAA. As an aside Part 145.A.30 (GF) states in accordance with the European or equivalent standard recognised by an Agency.

AP stated that in its current version PCN Aero is recognised by the CAA and by the NANDTB. From this document there are lots and lots of changes.

There is an added requirement for a PCN Aero examination center, which must also be an OA, this gives BINDT the confidence that they have the experience and knowhow to write the specific exam questions. At the PCN audits, the questions will be looked at more like in an OA/IA.

The certificate will also be changed to include more information and each of the specimens tested will have the technique next to it.

It was asked if the certificate would state the written practice of the employer. PJB stated that the intention is to prepare a core document suite and then a box for the employer to provide any other specifications that they would like the candidate to be examined in accordance with.

SW did state that he is going back to reiterate what he stated previously in that if a person moves employment then their certification is revoked as the Board's rule states. This has been raised twice. The minute that person moves employment then they have to redo the specific and practical exam. SW would now like to know if different rules are being applied.

4179 and 9712 are two different certification schemes, one is for second party and one is for third party. A candidate who has specs listed on his certificate can go somewhere else, the RL3 could look at that certificate and state that those specs are what are required. It now appears however that what is being proposed is being approached in the same way. SW appealed to state that if there is evidence on a certificate, where the previous employer had done what is needed and also the specs have been specified, can this not be transferred over, if the L3 does the review and it marries up with the written practice of the new employer, if there are gaps then the gap analysis will pick this up and those parts will need to be fulfilled. If it is however correct and it marries up, certification can then be carried over to the end date of the examination of the previous employer? SW asked if this could be looked at again.

PJB did state that PCN Aero is not an equivalency but would like the Board to accept the scheme in its entirety.



Regarding what SW has brought up, it has been written into the document that it is up to the new employers RL3 to decide the above. If someone is working under 4179, it is up to the RL3 to evaluate the situation.

It does state in the document that when someone moves employment it is up to the RL3 of the new employer to vet the certificate and apply any further training/exams he feels is necessary. If someone has been trained under 4179, then these will be necessary.

This document has been changed significantly and it has vastly been improved.

Once NC and the CAA have recognised this document, NANDTB\_10 can be updated and scenarios will also be added to the back.

There is a spec list at the back, it has been agreed that this list should be kept as small as possible. It was suggested that a small WG to look at these specs get together to look at these.

It was hoped that this document could be rolled out asap. The Board were asked if people wanted more time and nobody stated that they needed this.

There was a question raised to the OA/IAs about how long it should take to answer a question. It was 2 minutes before, this has been changed to 3.

**KP asked the Board the question – all those in favour of recognising PCN Gen Aero issue 7 as a recognised scheme under the UK NANDTB.**

Vote taking place in accordance with the above – 6 for, 0 against, 1 abstention

This will now be sent on to the CAA stating that the UK NANDTB have approved this.

If there are any amendments/queries, can people get these to PJB and AP asap as this document needs to be prepared for ratification.

**Action 19/2019 – PJB, AP, JD, GMcC, PH and David Penney from AIT look at the above specifications – dates to be looked at and SWS was suggested as a venue**

**Action 20/2019 – BINDT PJB/AP to get this document ready for ratification at CMC 10/07**

PJB did state that David Penney spoke to him about AIT's sample stock. It was noted that there was no reason why they could not hold one sample set and number them differently for a different exam. AP stated this could hopefully be changed for PCN Aero.

#### **c. Equipment Calibration**

A discussion about equipment calibration took place.

KP will liaise with PJB and the NADCAP task group and this will be driven forward through the appropriate routes.

**Action 21/2019 – KP to take this to NADCAP task group**

#### **14. Date and location of the next meeting**

17 September – Airbus, Broughton

10 December - SWS, Cardiff



### Actions allocated and carried over from meeting 67<sup>th</sup> Meeting

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27/2017	<b>AMENDED</b> 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 (NANDTB_12)	Update to be given in document review section
22/2018	A WG to look at NANDTB_12/OAQS 11 checklist has been formed to review both documents together – WG of KP, MC, GL and PJB.	Joined with 27/2017
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33/2018	WG consisting of KP/RB/JB to look at this for amendment – NANDTB_04	ONGOING – RB to go back on this WG
05/2019	KP to contact the Latvian Board	ONGOING
11/2019	JB will circulate NANDTB_10 draft	ONGOING
<b>13/2019</b>	<b>TG to upload minutes from 66<sup>th</sup> meeting</b>	
<b>14/2019</b>	<b>TG to make amendments and upload new NANDTB_06 documents</b>	
<b>15/2019</b>	<b>WG to look at the document PJB, PB, AW, MC, KP and GMcC</b>	
<b>16/2019</b>	<b>PJB will take back to the Standards Committee, Holly Tyler is looking at this</b>	
<b>17/2019</b>	<b>KP will speak to Pratt &amp; Witney regarding the audit that has been carried out at the overseas agency</b>	
<b>18/2019</b>	<b>KP to invite NADCAP to the next NANDTB</b>	
<b>19/2019</b>	<b>PJB, AP, JD, GMcC, PH and David Penney from AIT look at the above specifications – dates to be looked at and SWS was suggested as a venue</b>	
<b>20/2019</b>	<b>BINDT PJB/AP to get this document ready for ratification at CMC 10/07</b>	
<b>21/2019</b>	<b>KP to take equipment calibration to NADCAP task group</b>	

**Annex A – attendance and apologies for absence at the 26 February 2019 NANDTB meeting no. 67**

Name (member unless stated otherwise)	Representing	In attendance	Apologies for absence
Alun Williams	Airbus UK	1	
Ben Forshaw (Observer)	CAA replacing TB		
Chris Durrant	Safran Landing Systems Ltd	1	
Clive Worrall	British Airways	1	
Gary Reay	Leonardo Helicopters	1	
Guy Lawton	MoD		1
Graham Mcleod	Honeywell		1
Graham McCully (Co-opted)	Pt. 145 Orgs and SIG members		1
Jes Dugard	MoD	1	
John Brand	Safran Landing Systems Ltd (Pt 145)	1	
Jon Biddulph	Rolls Royce		1
Kevin Pickup (Chair)	BAE Systems	1	
Michelle Clapham (Co-opted)	Chair representing BINDT OA/IA Group	1	
(Robert) Neal Cuddy (Observer)	CAA replacing TB		1
Patrick Boulton (Voting member)	BINDT	1	
Paul Harris	British Airways	1	
Phil Byram	BAE Systems	1	
Ralph Duff	Bombardier		1
Rob Bright	Flybe	1	
Simon Wright (Co-opted)	AIT	1	
Steven Arrowsmith (Observer)	MAA	1	
Tracy Grant (Secretary)	BINDT	1	
	<b>Totals</b>	<b>15</b>	<b>6</b>

Tara Ashton – BINDT