

NANDTB News July 2010

The Board continues to work with the Civil Aviation Safety Authority to finalise a Memorandum of Understanding. The pursuance of the MOU has delayed the election of Board officers which was due in March. Also, the Board continues to develop the aerospace stream with the AINDT Conference Committee for Melbourne in October.

With the participation of CASA and their workshop on the new Safety Regulations this will be a valuable aviation event for those who can make it, and the exposure to what NDT is happening in other industries will be worthwhile as well. The sophistication of applications such as phased array and digital radiography in petro-chemical and land transport has advanced significantly in recent times.

Level 3 recognition by the Board continues to be requested by individuals from within Australia and elsewhere. With existing CASA NDT Airworthiness Authorities not making reference to a qualification level, the process of Board recognition gives the industry at large an independent assessment of some of the most knowledgeable NDTers around. The web site is clearly the main way that individuals learn about the Board and its activities.

Report of the 8th Aerospace NDT Board Forum – London 15th June 2010

The meeting was held at the offices of ADS, Aerospace, Defence and Security organisation, an umbrella group for companies operating in these industries, and hosted by Rolls Royce plc. Although EASA could not be present, 19 members of national Boards were in attendance and the main outcomes and discussions are outlined below;

The chairman John Biddulph made the point that the meetings needed to be productive. That is, the output should include documents and guidelines as well as learning opportunities, otherwise there is little reason for the group to continue to meet. To this end he was pleased to note the development of a more suitable visual acuity test by the UK NANDTB and offered to the forum for evaluation and use. A description of this test appears later in this report.

Bulgaria has submitted an application for full membership of the Forum, and Italy, Turkey and Australia have agreed to review the application and offer recommendations on its acceptance. The annual report of the Forum is completed and will be circulated with the minutes. It will also be available on the EFNDT web site which supports this Forum.

The task group working on a syllabus for ultrasonic testing in aerospace reported its progress which generated discussion. Work done thus far noted that significant differences exist in the various syllabi used by various training schools, which appear to be dependent on the client's needs. Engine manufacturers and maintainers used different syllabi to airframe oriented organisations. There was general agreement that a structural model should have a basic course of core material supplemented with specific subject elements. This is the model the working group will use. COSAC (France) is about to finalise a NDT training syllabus with PRI (USA) in the coming months.

The revised experience reduction matrix proposed by the Swiss Board was found not to be in compliance with the current version of the EN4179 standard, and therefore rejected. The maximum 50% reduction in experience required for subsequent NDT methods continues to apply once qualification in the first NDT method is achieved. It is not method dependent. Regardless of this permitted reduction, the employer remains responsible to ensure its NDT staff are competent for their work.

Andy Bakewell from the UK Board and a chair of British Standards Institute committees, made a presentation on a new visual acuity test developed by the UK NANDTB in response to the demonstrable variability in current vision testing regimes. There exists variability between regimes and even within the same type of test, depending on which organisation was preparing the test materials. Such things as font, font size and font spacing may vary and each has influence on an individual's visual perception. These variables made it impossible for a Responsible Level 3 to determine equivalences as would be required by the standard. Andy also noted that there was very little agreement within medical specialists and colleges on the efficacy or preferences of the currently accepted tests.

The proposed alternate test uses a "tumbling E" configuration which eliminated many of the unwanted characteristics of current tests, which in nearly all cases required the subject to read words and letters. Forum members were encouraged to review the proposal, evaluate the test and apply it in their own

jurisdictions if they believed it to be beneficial. Until such times as the vision testing statements of the governing standards including ISO 9712 and EN 473 are amended, these should also be administered to remain compliant. The presentation was recently given to a NADCAP meeting and was well received.

With the recent move from Jaeger 1 to Snellen 20/25, it is almost impossible to get Snellen charts which meet this requirement and can be used at 30 cm. The required recognisable line in the proposed test is dimensionally equivalent to the Snellen 20/25. It is intended to promote this test as a global standard, able to be used regardless of language and educational standard, and it will be offered to BSI as a standards project. If accepted, the process would take about four years. The presentation is to be posted on the NANDTB website as soon as practicable.

Qualification levels of technicians were discussed at length from the perspective of the inadequacy of the Level 2 qualification as an indicator of the technician's specific competencies. Requirements related to product, industry sector or specific technology are not reflected in such certificates granted under EN4179, and need to be determined if an employer is to engage the person using these competencies. It was suggested that techniques within the method, such as phased array, inspection of composites, digital radiography and the like, may need to be added to statements of qualification.

The chairman was critical of many of the Forum's members for not responding to action items in a timely manner. The UK, Polish and Australian Boards were excluded from these comments. Finally some Forum members commented very favourably on the Australian Board's web site. These comments show the importance of the site and indicate a level of maturity of the Australian Board achieved by only one or two others.

