

NA-013 - Requirements for Recognition of examinations by NANDTB

1. Introduction:

The NANDTB uses European Standard EN4179 as the standard for the examination of NDT personnel. The Australian Civil Aviation Safety Authority recognises AS 3669, and other qualification standards it finds acceptable.

The Australian Civil Aviation Regulations permit the maintenance organisation to train and examine their employees including NDT personnel, provided it is under the control of the employer's Responsible NDT Level 3. This procedure details the guidance for maintenance organisations that wish to provide their own examinations, and have them recognised by the NANDTB.

Control and governance of the examination process is by the Responsible Level 3 and must be acceptable to this procedure, if the examination paper is to be recognised by the NANDTB. NDT examinations shall be based on a syllabus acceptable to the NANDTB such as ISO 25107, and applies to all levels of examinations submitted for recognition by the Board.

2. Definitions/References

Definitions as per EN 4179.

References: a) EN 4179 Aerospace series - Qualification and approval of personnel for non-destructive testing

b) CAO 100.27: Non-destructive Testing Authorities.

3. Employer Provided Examinations

Recognition of examinations by the NANDTB is not mandatory. The Responsible Level 3 controls the employer's NDT training and examination processes. However, subsequent use of employer provided examinations to justify NDT qualifications to the NANDTB will be required to receive such recognition. This will be easier if the employer has the examinations accepted by the Board prior to an examinee sitting such examinations. This includes the general, specific and practical examinations.

NOTE¹: The employer must engage a Responsible Level 3 or an Examiner approved by the Responsible Level 3 to administer the examination process.

NOTE²: For Level 1 Limited examinations Board recognition not required. Responsible Level 3 to manage internally.

4. Candidates:

Candidates should have completed the NDT training requirements as detailed in EN4179, or other approved standard and the employer's NDT Written Practice before undertaking examinations. Recognition of Prior Learning (RPL) may be used by employers to permit a candidate to sit an examination.

5. Examiners:

Examiners grading the examination shall be aerospace Level 3 qualified in the method(s) examined. The examiner must be familiar with the governing regulations, the employer's written practice, procedures, inspection methods and products relevant to the candidate's work. Level 3 examiner services may be contracted provided they meet the above requirements.

With respect to the specific and practical examinations the examiner must be conscious of the use or reference to any commercially sensitive or other controlled data. In these instances the examiner should consider ‘blacking’ out such material prior to sending to the NANDTB for approval or give consideration to using a wider scope examination where applicable.

6. Examination procedure and questions:

- 6.1 Questions: General, specific and practical examination format and questions shall conform to EN4179 or other approved standard.
- 6.2 For Level 3, the general examination questions shall address the general knowledge of other test methods used by the employer at the initial certification as well as the test method for which certification is sought.
Passing a “basic” examination at a *level 2 proficiency* covering the other NDT methods used before passing any NDT method examination shall be considered satisfactory evidence the other NDT methods have satisfactorily covered.
- 6.3 Duration: The duration of the examination shall be determined by the Responsible Level 3 and stated on the examination paper.
- 6.4 Permitted aids: The permitted aids shall be determined by the Responsible Level 3 and stated on the examination paper.
- 6.5 Invigilation: All examinations shall be taken under supervision to ensure candidates have fair access to approved aids, and are not subject to interference of any kind.
- 6.6 Cheating: Candidates who use prohibited aids, cheat or attempt to cheat shall record a fail result.
- 6.7 When submitting examinations for NANDTB recognition it is highly recommended to give each examination a *unique identifying number* for traceability reasons. This will prevent the need to send the same examination in more than once for recognition as it will be known by NANDTB which exams have previously been recognised by the Board.

7 Security of Examination Material:

Prepared examinations are to be securely stored before use and candidates may not review examination questions outside the time allocated for the examination. Practical samples used during training shall not be used for examination.

8. Assessment of Examinations:

Assessment, scoring and reporting of results shall be carried out in accordance with the applicable standard.

9. Repeated examinations:

When a candidate has not passed an examination the Responsible Level 3 shall determine if there are requirements for additional training, and the actions to be taken if the exam is not passed for a second time.

10. Examination results:

A certificate shall be issued by the employer or on behalf of the employer to each candidate who has passed the examination. The certificate shall contain the following:

- Name of the Employer or Examining Organisation
- Name of the candidate

- Statement that the examination meets the requirements of the standard used for examination
- NDT method, level and type of examination (or specific inspection technique)
- Date of issue of the certificate
- Signature of the examiner or the organisation's authorising person

No certificate will be issued for parts of an examination.

11. Examination Records:

For each candidate, a record shall be kept of the examinations and results by the Responsible Level 3 or the employer, as per the applicable qualification standard.

Generally for an employer provided examinations, the examination record shall include all written papers, marking, examiner comments and the results from any previous examinations undertaken. Results of examinations may only be released by permission of the candidate.

12 Document Control

Appendix 1 to this procedure is the *Examination Document Control Form* which is to be used by the employer/examiner/responsible level 3 to request the NANDTB to review its aerospace NDT examination(s) and NANDTB for final approval. It is in three parts;

Part A- Details of applicant/employer requesting an examination to be reviewed by the Board and specific detail of the examination.

Part B- Declaration by the Responsible Level 3/Examiner.

Part C- Declaration by the NANDTB Examination Co-ordinator.

NOTE: It is good practice for the examiner/responsible level 3 give each individual examination an identification number. This will be particularly beneficial if the examination is require to be used by another applicant and requires Board approval as second review may not be applicable.

The Examination Co-ordinator is responsible for;

- Selection of two examination reviewers and co-ordination of the review.
- Security of examination.
- Creation of examination review records, notifying applicant of the review outcome and forwarding to the secretary for filing.

The Examination Reviewer is a current Level 3 in the method, and exercises his/her knowledge and best judgement to assess the relevance and suitability of the questions for the method, level of the exam and examination format as per EN4179 or other approved applicable standard. The Examination Reviewer shall decline the review request if he/she has a conflict of interest.

Appendix 2 to this procedure is the *Examination recognition Reviewer Checklist form*. This form is sent to each NANDTB examination reviewer by the Examination co-ordinator to capture their review results.

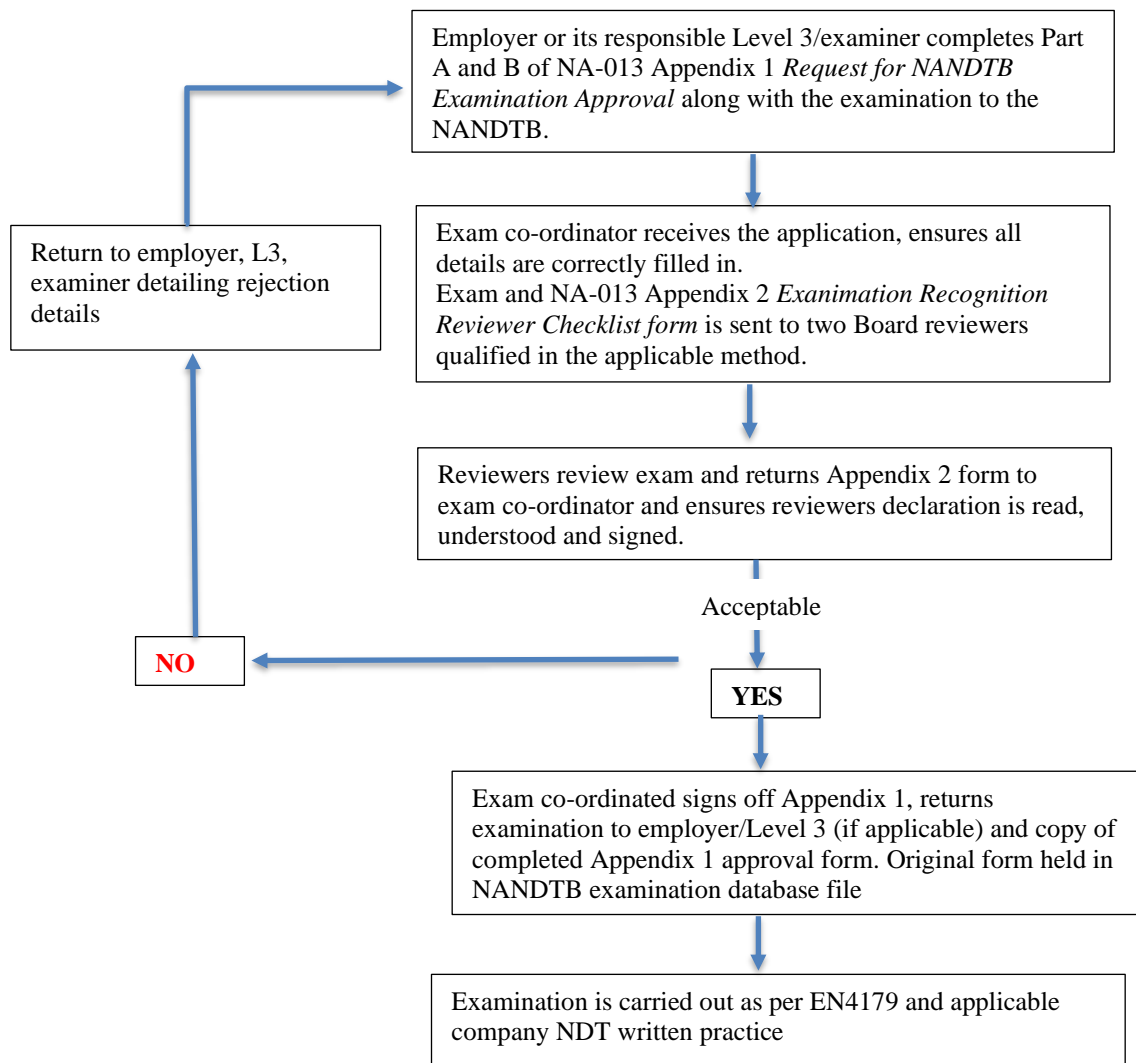
A copy of Appendix 1 *Examination Document Control Form* is also sent out with appendix 2 to the examination reviewer, after completion of Part A and B, so the reviewer understands the type and level of examinations requiring review along with knowledge of the applicable sector under which the examination/s will be given.

13 Examinations Provided by the Employer.

As stated above, an employer is permitted to provide NDT training and examinations to its employees in accordance with its Written Practice. The flowchart below and the application Form in Appendix 1 describes the process for NDT examinations provided by the employer to be recognised by the NANDTB.

NOTE: The employer must engage a Responsible Level 3 or an Examiner approved by the Responsible Level 3 to administer the examination process.

13.1 Employer Supplied Examination NANDTB approval Processes Flowchart



14 Fees and Charges

The applicant may be held responsible for any costs incurred by the NANDTB to execute the examination review process. The Board will notify the applicant if costs are to be recovered before the review is undertaken.

Appendix 1 Examination Document Control Form

Request for NANDTB Examination Approval				
Part A: To be completed by the employer/Responsible Level 3				
Name of the organisation:				
Address for all correspondence:				
Name and phone contact for the examiner/Responsible Level 3:				
Name of student/examinee sitting exam/s:				
Employment Sector of examinee: eg Defence, AMO, Civil-RPT/GA, manufacturing, mixed etc. This is required to determine the suitability of specific and practical examinations.				
Date of this request:		Planned examination(s) date:		
Identify the examinations for this request. Enter NDT method, Level and individual examination identification (ID) number in the applicable boxes				
	General	Specific	Practical	Level (1,2,3)
METHOD (MT, PT, ET, UT, RT or other)				
Company EXAM ID #				
Part B Declaration by the Responsible Level 3/Examiner				
I _____ am the Responsible Level 3/Level 3 examiner for _____ and will treat all examination materials as confidential, and do the following;				
1. Administer the examination(s) according to the instructions on the paper.				
2. Ensure the candidates only access the examination paper during the examination period.				
3. Mark the examination paper according to the marking guide where one is provided.				
4. Retain the examination paper securely from unauthorised access				
5. Abide by any other directions from the NANDTB				
Signed: Examiner/Responsible Level 3 _____ Date: _____				
Part C to be completed by the NANDTB Examination Co-ordinator after completion of Appendix 2				
I _____ the NANDTB Examination Co-ordinator declare that the examinations shown above have been reviewed according to procedure NA-013 and found to be acceptable / unacceptable (select).				
Signed: NANDTB Examination Co-ordinator _____ Date: _____				
Notes:				

Appendix 2 Examination Recognition Reviewer Checklist form

Complete checklist for *each* examination review

Examination details			
Organisation/Level 3 applicant:			
a. NDT Method:		b. NDT Level:	
c. Examination type: <i>(General, Specific, Practical or L3 other "basic" examination)</i>			
d. Examination identifying number: <i>(if supplied):</i>			

Only complete the section applicable to the examination supplied. ~~Strikethrough~~ non-applicable examinations.

1. General Examination	YES/NO
<i>A written examination addressing the basic principles and theory of an NDT method.</i>	
a. Examination paper states the NDT method	
b. Examination paper states the NDT level of certification	
c. Examination paper states this is a <i>closed book</i> examination	
d. Correct number of questions: Minimum of 40 questions administered for Level 1, 2 and 3.	
e. Examination questions are considered appropriate for the NDT Level being administered	
f. Examination questions are considered appropriate with regards to covering the broader content of the method, with due consideration given to all relevant techniques used within the method	

2. Basic Examination – Applicable for Level 3 only	YES/NO
<i>Passing a separate "basic" examination at a Level 2 proficiency prior to passing any method examination is considered acceptable when other methods used by employer have not been incorporated in a general examination.</i>	
a. The examination paper states the "other" methods as used by the employer	
b. Examinations questions are considered appropriate for the for those used by the employer	

3. Specific Examination	YES/NO
<i>A written examination to determine an individual's understanding of operating procedures, codes, standards, test techniques, equipment etc. for an NDT method as used by the employer</i>	
a. Examination paper states the NDT method	
b. Examination paper states the NDT level of certification	
c. Examination states " <i>This is an open book examination</i> "	
d. Correct number of questions: Minimum of 30 questions administered for Level 1, 2 and 3.	
e. Examination questions are considered appropriate for the NDT Level being administered	
f. Examinations questions are considered specific to those expected to be used by the employer with regards to: I. the techniques used within the method	

<p>II. the type of products to be inspected</p> <p>III. codes, standards and operating procedures</p> <p><i>Examples maybe line/base maintenance, manufacturing, general aviation aircraft, regular transport aircraft, military, workshop based, rotor craft etc.</i></p>	
<p>g. Questions need to be written to ensure the candidate understands the information contained in reference material used rather than merely finding its location.</p> <p><i>For example, do not ask 'What is the minimum UV light intensity when using UV lamps', more so ask 'why is there is a need for a minimum intensity'.</i></p>	
<p>NOTE: There may be security or commercially sensitive reasons why certain specific questions cannot be shared with the Board. In this instance parts of question may be blackened out or the specific examination can be designated as <i>wide scope</i> examination. Refer EN4179 for clarification.</p>	

4. Practical Examination	YES/NO
<p><i>An examination to demonstrate an individual's ability to conduct an NDT method as used by the employer. Questions and answers need not be written, but a checklist must be used and observations and results must be documented.</i></p>	
a. Examination paper states the NDT method	
b. Examination paper states the NDT Level of certification	
c. A written checklist should be used during all practical examination and is suitable evidence to be submitted with recognition application.	
d. Test samples are considered <i>specific</i> to those expected to be encountered by the candidate in the performance of his/her duties with the employer	
e. Test samples are considered appropriate for the examination <i>Level</i> being administered	
<p>f. Level 1: The candidate must inspect at least one test sample for each technique and a minimum of two samples per method.</p> <p>Level 2: The candidate must inspect at least one test sample for each technique and a minimum of two samples per method.</p> <p>Level 3: The candidate shall demonstrate proficiency by preparing an NDT procedure or work instruction appropriate to the employers' requirements for the method.</p> <p><i>Guidance note: When the Level 3 candidate duties will include processing and or acceptance of aeronautical product, proficiency in performing such duties shall be demonstrated by a hands-on practical examination equivalent to that of a Level 2.</i></p>	

5. Examination Reviewer's Declaration:
a. Acceptable / Unacceptable (select):
b. Comments:
<p>c. I,....., a NANDTB member and appointed examination Reviewer, declare that the examination presented above for NANDTB recognition has been reviewed according to NA-013. No copies or notes have been taken or shared with other parties and all documents have been returned to the Examination co-ordinator or destroyed as applicable.</p> <p>Sign:.....</p> <p>Date:</p>