

NA-011 Model Written Practice

In sections of the CASA Regulations it states that only appropriately trained and authorised persons may carry out work, be it maintenance, repair, manufacturing, design, etc. The model written practice shown here, if followed, is one way to demonstrate compliance with that requirement for organisations using NDT. For some parts of a written practice the reader is directed to refer to the detail to be found in the Standard. However for the specific organisational procedures to be followed, such as in house approval of NDT staff, these need sufficient detail to be clearly understood and implemented.

Much of the model is drawn directly from the EN 4179 and NAS 410 standards. Persons formulating a written practice are advised to consult these Standards for the specific requirements of each section. It is also recommended that for organisations with little or no experience in formulating such documents, the use of external expertise may be cost effective. It is stressed that this is only one model, and compliance with the standards may be achieved using other models.

Section 1

1.1 Organisation's full legal identification

Self explanatory

1.2 State the NDT methods and context of use in the organisation

The NDT methods described in the context of their use. For example "Ultrasonic inspections for piston engine overhaul", or "Radiographic inspection of manufactured composite aircraft components". These statements provide a view of the company's operations which will be helpful when reviewing the written practice.

1.3 Reference EN 4179 / NAS 410

Self explanatory

1.4 Definitions peculiar to the organisation

Self explanatory

Section 2

2.1 Levels of qualified NDT personnel used in the organisation.

Each level used including any level 1 "limited", instructors or NDT auditors.

2.2 Duties and responsibilities of the various levels

This is basically a work statement based on the level description found in the standard plus any other company requirements for the position.

2.3 Identification of the organisation's level 3 person and full listing of the level 3 duties

Similar to 2.2 but would include the use of any external support or other arrangements in place to satisfy the standard.

Section 3

3.1 Specified training and qualification programs used for each NDT level and method used

The training could be internal or external. For external training it may be as simple as referring to the training provider's course, or specific qualification. Internal training would refer to the specific training material/document approved by the

Level 3 or NANDTB for the method or task. This document should give a course content/outline. The training material/document need not be included in the written practice but should be available for audit purposes.

3.2 Specified experience requirements for each NDT level and method used

The minimum requirements will be as per the standard. Additional requirements and those for level 1 “limited” will be as determined and approved by the Level 3 or NANDTB.

3.3 Vision requirements and how these are tested

The minimum vision standard for NDT staff will be as per the standard but show also any procedures to be followed by the NDT staff, including for example trade tests which would be used in the event of colour vision deficiencies.

3.4 Examination practices and how these are approved by the Level 3 or NANDTB

This would be similar to the format used in 3.1 but applied to the examinations. For internally administered examinations, which will always include applied exams, the process of their formulation, security and periodic review should be described. The term “appropriate level of knowledge” is used in the standard and this could be defined here in the context of the organisations NDT activities.

Section 4

4.1 Approval procedures of the organisation

The specific process to be followed by those persons involved in applying for and granting company authorisations to carry out NDT. It would also include requirements for verification of supporting information such as training, qualifications, experience and any references.

4.2 Re-approval procedures

Same as 4.1

4.3 Conditions for loss of Approval

Using the guidance of the standard for the routine circumstances leading to loss of approval, but described in the context of the organisations operations. For example breaches of business confidentiality on matters like inspection results, may be important for some companies and of no importance to others.

4.4 Auditing and compliance procedures

The who, how and when of auditing the organisation’s NDT processes and administration should be described. Reference should be made to any audit guides or documents routinely used for the purpose.

4.5 Records and their control

Record keeping in aerospace is a fundamental activity and a frequent source of non-compliance. All documents related to the training and approval of NDT staff need appropriate security and accessibility, but no special considerations outside the industry norms.

Section 5

5.1 Requirements for subcontractors

Either the organisation accepts the contractor’s quality system for its NDT services or personnel provided, or the subcontractor must comply with the company’s quality requirements. Either way these arrangements need to be documented.

5.5 Control of subcontractors’

This section would outline how 5.1 is achieved and monitored.