

Recommended Practice No.

SNT-TC-1A

PERSONNEL QUALIFICATION
AND CERTIFICATION IN
NONDESTRUCTIVE TESTING

2024

EDITION



Recommended Practice No.

SNT-TC-1A

PERSONNEL QUALIFICATION
AND CERTIFICATION IN
NONDESTRUCTIVE TESTING

2024

EDITION



Copyright © 2024 by The American Society for Nondestructive Testing.

The American Society for Nondestructive Testing Inc. (ASNT) is not responsible for the authenticity or accuracy of information herein. Published opinions and statements do not necessarily reflect the opinion of ASNT. Products or services that are advertised or mentioned do not carry the endorsement or recommendation of ASNT.

No part of this publication may be reproduced or transmitted in any form, by means electronic or mechanical including photocopying, recording or otherwise, without the expressed prior written permission of The American Society for Nondestructive Testing Inc. IRRSP, *NDT Handbook*, *The NDT Technician*, and *asnt.org* are trademarks of the American Society for Nondestructive Testing Inc. ACCP, ASNT, *ASNT Daily*, *Chat NDT with ASNT*, *Level III Study Guide*, *Materials Evaluation*, *Nondestructive Testing Handbook*, *Research in Nondestructive Evaluation*, and *RNDE* are registered trademarks of the American Society for Nondestructive Testing Inc.

first printing 04/24
ebook 04/24

Errata, if available for this printing, may be obtained from ASNT's website, *asnt.org*. Ebooks contain all corrections and updates, including the latest errata.

ISBN: 978-1-57117-601-1 (print)
ISBN: 978-1-57117-602-8 (ebook)

Printed in the United States of America

Published by:
The American Society for Nondestructive Testing Inc.
1201 Dublin Road., Suite G4
Columbus, OH 43215
asnt.org

Publications Team:
Jill Ross, Director of Publications

Editorial:
Cynthia M. Leeman, Editorial Projects Manager

Production:
Joy Grimm, Production Manager
Synthia Jester, Digital Publishing Manager

Global Certification & Accreditation Team:
Katie Downton, Quality Manager
Michelle Thomas, Program Administrator

ASNT Mission Statement:
ASNT's mission is to advance the field of nondestructive testing.

ASNT Code of Ethics:

The *ASNT Code of Ethics* was developed to provide members of the Society with broad ethical statements to guide their professional lives. In spirit and in word, each ASNT member is responsible for knowing and adhering to the values and standards set forth in the Society's Code. More information, as well as the complete version of the *Code of Ethics*, can be found on ASNT's website, *asnt.org*.

FOREWORD

This Recommended Practice establishes the general framework for a qualification and certification program. In addition, the document provides the educational, experience, and training recommendations for the different test methods.

This Recommended Practice is not intended to be used as a strict specification. It is recognized, however, that contracts require programs, which meet the intent of this document. For such contracts, purchaser and supplier must agree upon acceptability of an employer's program.

The verb "should" has been used throughout this document to emphasize the recommendation presented herein. It is the employer's responsibility to address specific needs and to modify these guidelines as appropriate in a written practice. In the employer's written practice, the verb "shall" is to be used in place of "should" to emphasize the employer's needs.

The 2024 Edition of SNT-TC-1A is annotated so that users of the 2020 edition can quickly and easily locate new and updated material. The vertical lines in the margins of this document indicate that information in the text has been modified in some way.

An SNT-TC-1A Interpretation Panel is available to respond to written inquiries regarding the SNT-TC-1A guidelines. These responses clarify the intent of ASNT's Standards Council and the recommendations of SNT-TC-1A and are subject to the statement of "Scope" in each edition of SNT-TC-1A.

To make an inquiry, download the form from the ASNT website (asnt.org/MajorSiteSections/Standards.aspx).

Inquiries related to this recommended practice should be directed to:
Secretary, ASNT Standards Council
standards@asnt

Ethics Statement

The NDT profession plays a critical role in ensuring public safety by providing information on the condition and integrity of critical infrastructure and products through its various NDT methods and techniques. The NDT profession has a responsibility to act ethically in all activities including the proper collection, interpretation, and reporting of NDT data. To this end, ASNT highly encourages all individuals and companies using this standard/document to incorporate the topic of ethics and ethical behavior of its employees and contractors into their training programs and examinations.

SNT-TC-1A COMMITTEE

Publication and review of this Recommended Practice was under the direction of the SNT-TC-1A Committee which is a committee of the Standards Council (StC). The StC reports to the Board of Directors of The American Society for Nondestructive Testing.

Subcommittee Members:

Michael Ruddy, Chair	Dave Culbertson	Brian Laite	Bill Plumstead Jr.
Marvin Trimm, Vice Chair	David Dechene	Brock Mackin	Bill Plumstead Sr.
David Bajula	Paul Deeds	Walt Matulewicz	Jason Slonaker
Bill Baker	David Harvey	Clyde May	Dave Vigne
Rao Brahmaji	Hugh Howerton	Ramon Orozco	
Terry Clausing	Michael Kirby	Jessica Osbourne	
Daniel Craig	Doron Kishoni	John Pariseau	

Notice to users of this document:

When certificates or wallet cards are issued and provided by the employer, the requirements of ASNT Policy G-14 (asnt.org/MajorSiteSections/About/Leadership_Governance/Policies) shall be followed to ensure appropriate usage of the ASNT name, acronym, and logo.

The certificate shall indicate that the certification is in accordance with the requirements of the employer’s written practice.

See Section 9.5 for further guidance on properly issued certification certificates and wallet cards.

CONTENTS

FOREWORD	iii
Ethics Statement	iii
SNT-TC-1A SUBCOMMITTEE	iv
SUMMARY OF CHANGES	vi
RECOMMENDED PRACTICE NO. SNT-TC-1A: PERSONNEL QUALIFICATION AND CERTIFICATION IN NONDESTRUCTIVE TESTING	1
1.0 Scope	1
2.0 Definitions	1
3.0 Nondestructive Testing Methods	2
4.0 Levels of Qualification	3
5.0 Written Practice	3
6.0 Education, Training, and Experience Requirements for Initial Qualification	3
7.0 Training Programs	6
8.0 Examinations	7
9.0 Certification	11
10.0 Technical Performance Evaluation	12
11.0 Interrupted Service	12
12.0 Recertification	12
13.0 Termination	13
14.0 Reinstatement	13
15.0 Referenced Publications	13
APPENDIXES	15
Appendix A – NDT Practical Examination Checklist	15
Appendix B – Example Certification Template	16

SUMMARY OF CHANGES

The changes made are also indicated with a line in the margin for easy identification.

SNT-TC1A 2024 Edition

1. Paragraph 1.5 was deleted.
2. Paragraphs 2.1.7 and 2.1.11—revision to terms, “Detection Rate” and “False Call” to clarify their intended use.
3. Paragraphs 2.1.15 and 2.1.18—the revision to paragraph 2.1.18 was to further clarify the term “Predictive Maintenance.” Additionally, to show contrast to the term “NDT,” the definition for “Nondestructive Testing” from ASTM E1316 was included as well (new paragraph 2.1.15).
4. The text within parentheses in paragraph 2.1.21 was revised to read “(This is usually done prior to performing any NDT but can be carried out anytime there is concern about the performance of NDT or instrument response.)”
5. In Table 6.3.1B, digital radiography (DR), computed radiography (CR), and computed tomography (CT) image interpreter recommendations were added.
6. Paragraph 6.4 was added to recognize a percentage of actual hands-on experience in the form of lab hours may be applied toward the applicable experience recommendations in Tables 6.3.1A and 6.3.1B. This recommendation is only applicable to expanded training programs at education institutions or colleges.
7. In paragraph 8.1.2, a recommendation was added to ensure personnel administering written multiple-choice examinations are trained and the training is documented.
8. Paragraph 8.1.4 was modified and paragraphs 8.6.4.2 and 8.6.4.3 were added to recommend an NDT Level II practical examination for NDT Level II personnel who are actually performing NDT as part of their job function.
9. In paragraph 8.1.7, a recommendation was added to document acceptance of an outside supplier for examination services.
10. In paragraphs 8.2.1 and 8.2.1.1, restrictions were added regarding the use of eye drops to temporarily improve vision. This issue and other vision-related topics are under review by a Technical Advisory Group (TAG) Committee, so more changes are expected at a later date, including more on eye drops.
11. Paragraphs 8.3 and 8.4 added reference to CP-105 for General and Specific examinations.
12. In paragraphs 8.3.2 and 8.4.1, reference to CP-105 for General and Specific examinations was added.
13. In Table 8.3.3, digital radiography (DR), computed radiography (CR), and computed tomography (CT) image interpreter number of examination question recommendations were added.
14. In paragraphs 8.3.4, 8.4.4, 8.5.6, 8.6.3.2, 8.6.4.2, and 8.6.5, the new ASNT 9712 Program was added. ACCP remains in for now because there is a five-year transition in place.
15. Paragraphs 8.3.4, 8.4.4, 8.5.6, 8.6.3.2, and 8.6.4.3 were part of a reorganization of Section 8 based on audits from the Employer-Based Certification Program.
16. Paragraphs 8.5.4.1, 8.5.4.2, 8.5.4.3, 8.5.5.1, 8.5.5.2, 8.5.5.3, 8.5.7, 8.6.4.3, and 8.6.5 were modified to include the new ASNT 9712 Program.
17. In paragraphs 9.5 and 12.2, the dates when certification and recertification actually begins were added. This issue came out of an interpretation inquiry to SNT-TC-1A about the date certification starts. See Interpretation 85-6.

RECOMMENDED PRACTICE NO. SNT-TC-1A: PERSONNEL QUALIFICATION AND CERTIFICATION IN NONDESTRUCTIVE TESTING

1.0 Scope

- 1.1 It is recognized that the effectiveness of nondestructive testing (NDT) applications depends upon the capabilities of the personnel who are responsible for, and perform, NDT. This Recommended Practice has been prepared to establish guidelines for the qualification and certification of NDT personnel whose specific jobs require appropriate knowledge of the technical principles underlying the nondestructive tests they perform, witness, monitor, or evaluate.
- 1.2 This document provides guidelines for the establishment of a qualification and certification program.
- 1.3 These guidelines have been developed by The American Society for Nondestructive Testing Inc. to aid employers in recognizing the essential factors to be considered in qualifying personnel engaged in any of the NDT methods listed in Section 3.0.
- 1.4 It is recognized that these guidelines may not be appropriate for certain employer's circumstances and/or applications. In developing a written practice as required in Section 5.0, the employer should review the detailed recommendations presented herein and modify them, as necessary, to meet particular needs. Such modification may alter but shall not eliminate basic provisions of the program such as training, experience, testing, and recertification. Supporting technical rationale for modification of detailed recommendations should be provided in an Annex to the written practice.

2.0 Definitions

- 2.1 Terms included in this document are defined as follows:
 - 2.1.1 **Calibration, Instrument:** the comparison of an instrument with, or the adjustment of an instrument to, a known reference(s) often traceable to the applicable country's national institute or standards body. (See also Standardization, Instrument.)
 - 2.1.2 **Certification:** written testimony of qualification.
 - 2.1.3 **Certifying Agency:** the employer of the personnel being certified..
 - 2.1.4 **Certifying Authority:** the person or persons properly designated in the written practice to sign certifications on behalf of the employer.
 - 2.1.5 **Closed-Book Examination:** an examination administered without access to reference material except for materials supplied with or in the examination. (See paragraph 8.1.3.)
 - 2.1.6 **Comparable:** being at an equivalent or similar level of NDT responsibility and difficulty as determined by the employer's NDT Level III.
 - 2.1.7 **Detection Rate:** expressed as a percentage, it represents the number of flaws or indications detected in a specimen compared to the number of flaws or indications that are actually in the specimen being examined.
 - 2.1.8 **Documented:** the condition of being in written form.
 - 2.1.9 **Employer:** the corporate, private, or public entity, which employs personnel directly or indirectly for wages, salary, fees, or other considerations. This would include employers who obtain their qualified supplemental workforce personnel through third-party agencies, provided the use and certification of those supplemental employees is addressed in the employer's written practice.

- 2.1.10 **Experience:** work activities accomplished in a specific NDT method under the direction of qualified supervision including the performance of the NDT method and related activities but not including time spent in organized training programs.
- 2.1.11 **False Call:** when an acceptable indication or unflawed grading unit is identified as being a defect or a flawed grading unit.
- 2.1.12 **Grading Unit:** a qualification specimen can be divided into sections called grading units, which do not have to be of equal length or be equally spaced. Grading units are unflawed or flawed, and the percentage of flawed/unflawed grading units required should be approved by the NDT Level III.
- 2.1.13 **Limited Certification:** nondestructive test methods may be further subdivided into limited disciplines or techniques to meet specific employers' needs; these are NDT Level II certifications, but to a limited scope.
- 2.1.14 **Method:** one of the disciplines of NDT; for example, ultrasonic testing, within which various test techniques may exist.
- 2.1.15 **Nondestructive Testing (NDT):** the development and application of technical methods to examine materials or components in ways that do not impair future usefulness and serviceability in order to detect, locate, measure, and evaluate flaws; to assess integrity, properties, and composition; and to measure geometrical characteristics.
- 2.1.16 **Outside Agency:** a company or individual who provides NDT Level III services and whose qualifications to provide these services have been reviewed by the employer engaging the company or individual.
- 2.1.17 **Personalized Instruction:** may consist of blended classroom, supervised laboratory, and/or hybrid online competency-based course delivery. Modular content is covered through online presentations, in the classroom, and/or in small groups. Personalized instruction also enables students to achieve competency using strategies that align with their knowledge, skills, and learning styles.
- 2.1.18 **Predictive Maintenance (PdM):** evaluates the condition of equipment (typically in service) by performing periodic or continuous (online) equipment condition monitoring. Condition monitoring evaluates leading performance indicators of specified machinery, components, and assemblies (including structures in whole and in part such as buildings and bridges, etc.), detectable via the applied method. PdM uses principles of statistical process control to assess the condition by focusing on leading indicators that may signify deterioration in performance or potential equipment, structural, or material failure. The ultimate goal of PdM is to perform maintenance based upon the condition such that the maintenance activity is cost-effective and before the equipment loses optimum performance or fails.
- 2.1.19 **Qualification:** demonstrated skill, demonstrated knowledge, documented training, and documented experience required for personnel to properly perform the duties of a specific job.
- 2.1.20 **Recommended Practice:** a set of guidelines to assist the employer in developing uniform procedures for the qualification and certification of NDT personnel to satisfy the employer's specific requirements.
- 2.1.21 **Standardization, Instrument:** the adjustment of an NDT instrument using an appropriate reference standard, to obtain or establish a known and reproducible response. (This is usually done prior to performing any NDT but can be carried out anytime there is concern about the performance of NDT or instrument response.) (See also Calibration, Instrument.)
- 2.1.22 **Technique:** a category within an NDT method; for example, ultrasonic thickness testing.
- 2.1.23 **Third-Party Agency:** a company or organization, without an established written practice, providing supplemental workforce to the employer; for example, a temporary staffing company.
- 2.1.24 **Training:** an organized program developed to impart the knowledge and skills necessary for qualification.
- 2.1.25 **Written Practice:** a written procedure developed by the employer that details the requirements for qualification and certification of its employees.

3.0 Nondestructive Testing Methods

- 3.1 Qualification and certification of NDT personnel in accordance with this Recommended Practice is applicable to each of the following methods:

Acoustic Emission Testing	Magnetic Particle Testing
Electromagnetic Testing	Microwave Technology Testing
Ground Penetrating Radar	Neutron Radiographic Testing
Guided Wave Testing	Radiographic Testing
Laser Methods Testing	Thermal/Infrared Testing
Leak Testing	Ultrasonic Testing
Liquid Penetrant Testing	Vibration Analysis
Magnetic Flux Leakage Testing	Visual Testing

4.0 Levels of Qualification

- 4.1 There are three basic levels of qualification. The employer may subdivide these levels for situations where additional levels are deemed necessary for specific skills and responsibilities.
- 4.2 While in the process of being initially trained, qualified, and certified, an individual should be considered a trainee. A trainee should work with a certified individual. The trainee should not independently conduct, interpret, evaluate, or report the results of any NDT.
- 4.3 The recommended technical knowledge and skill sets for the three basic levels of qualification are as follows:
 - 4.3.1 NDT Level I. An NDT Level I individual should have sufficient technical knowledge and skills to be qualified to properly perform specific standardizations, specific NDT, and specific evaluations for acceptance or rejection determinations according to written instructions and to record results. The NDT Level I should receive the necessary instruction and supervision from a certified NDT Level II or III individual.
 - 4.3.2 NDT Level II. An NDT Level II individual should have sufficient technical knowledge and skills to be qualified to set up and standardize equipment and to interpret and evaluate results with respect to applicable codes, standards, and specifications. The NDT Level II should be thoroughly familiar with the scope and limitations of the methods for which qualified and should exercise assigned responsibility for on-the-job training and guidance of trainees and NDT Level I personnel. The NDT Level II should be able to organize and report the results of NDT tests.
 - 4.3.3 NDT Level III. An NDT Level III individual should have sufficient technical knowledge and skills to be capable of developing, qualifying, and approving procedures; establishing and approving techniques; interpreting codes, standards, specifications, and procedures; and designating the particular NDT methods, techniques, and procedures to be used. The NDT Level III should be responsible for the NDT operations for which qualified and assigned and should be capable of interpreting and evaluating results in terms of existing codes, standards, and specifications. The NDT Level III should have sufficient practical background in applicable materials, fabrication, and product technology to establish techniques and to assist in establishing acceptance criteria when none are otherwise available. The NDT Level III should have general familiarity with other appropriate NDT methods, as demonstrated by an ASNT Level III Basic examination or other means. The NDT Level III, in the methods in which certified, should have sufficient technical knowledge and skills to be capable of training and examining NDT Level I, II, and III personnel for certification in those methods.

5.0 Written Practice

- 5.1 The employer shall establish a written practice for the control and administration of NDT personnel training, examination, and certification.
- 5.2 The employer's written practice should describe the responsibility of each level of certification for determining the acceptability of materials or components in accordance with the applicable codes, standards, specifications, and procedures.
- 5.3 The employer's written practice should describe the training, experience, and examination requirements for each level of certification by method and technique, as applicable.
- 5.4 The employer's written practice should identify the test techniques within each test method applicable to its scope of operations.
- 5.5 The employer's written practice shall be reviewed and approved by the employer's NDT Level III.
- 5.6 The employer's written practice shall be maintained on file.

6.0 Education, Training, and Experience Requirements for Initial Qualification

- 6.1 Candidates for certification in NDT should have sufficient education, training, and experience to ensure qualification in those NDT methods in which they are being considered for certification. Documentation of prior certification may be used by an employer as evidence of qualification for comparable levels of certification.
- 6.2 Documented training and/or experience gained in positions and activities comparable to those of Levels I, II, and/or III prior to establishment of the employer's written practice may be considered in satisfying the criteria of paragraph 6.3.
- 6.3 To be considered for certification, a candidate should satisfy one of the following criteria for the applicable NDT level:
 - 6.3.1 NDT Levels I and II
 - 6.3.1.1 Table 6.3.1 A lists the recommended training and experience hours to be considered by the employer in establishing written practices for initial qualification of NDT Level I and Level II individuals.

TABLE 6.3.1 A
Recommended Initial Training and Experience Levels

Method	NDT Level	Technique	Training Hours	Experience	
				Minimum Hours in Method or Technique	Total Hours in NDT
Acoustic Emission Testing (AE)	I		40	210	400
	II		40	630	1200
Electromagnetic Testing (ET)	I	Alternating Current Field Measurement (ACFM)	40	210	400
	II		40	630	1200
	I	Eddy Current Testing (ECT)	40	210	400
	II		40	630	1200
	I	Remote Field Testing (RFT)	40	210	400
	II		40	630	1200
Ground Penetrating Radar (GPR)	I		8	60	120
	II		20	420	800
Guided Wave Testing (GW)	I		40	240	460
	II		40	240	460
Laser Methods Testing (LM)	I	Profilometry	8	70	130
	II		24	140	260
	I	Holography/Shearography	40	210	400
	II		40	630	1200
Leak Testing (LT)	I	Bubble Leak Testing (BT)	2	3	15
	II		4	35	80
	I	Pressure Change Leak Testing (PCT)	24	105	200
	II		16	280	530
	I	Halogen Diode Leak Testing (HDLT)	12	105	200
	II		8	280	530
	I	Mass Spectrometer Leak Testing (MST)	40	280	530
	II		24	420	800
Liquid Penetrant Testing (PT)	I		4	70	130
	II		8	140	270
Magnetic Flux Leakage Testing (MFL)	I		16	70	130
	II		12	210	400
Magnetic Particle Testing (MT)	I		12	70	130
	II		8	210	400
Microwave Technology Testing (MW)	I		40	210	400
	II		40	630	1200
Neutron Radiographic Testing (NR)	I		28	420	800
	II		40	1680	2400

(CONTINUED NEXT PAGE)

TABLE 6.3.1 A (CONTINUED FROM PAGE 4)

Recommended Initial Training and Experience Levels

Method	NDT Level	Technique	Training Hours	Experience	
				Minimum Hours in Method or Technique	Total Hours in NDT
Radiographic Testing (RT)	I	Radiography	40	210	400
	II		40	630	1200
	I	Computed Radiography (CR)	40	210	400
	II		40	630	1200
	I	Computed Tomography (CT)	40	210	400
	II		40	630	1200
	I	Digital Radiography (DR)	40	210	400
	II		40	630	1200
Thermal/Infrared Testing (IR)	I		32	210	400
	II	Building Diagnostics	34	1260	1800
	II	Electrical & Mechanical	34	1260	1800
	II	Materials Testing	34	1260	1800
Ultrasonic Testing (UT)	I		40	210	400
	II		40	630	1200
	II	Full Matrix Capture (FMC)	80	320	n/a
	II	Phased Array Ultrasonic Testing (PAUT)	80	320	n/a
	II	Time of Flight Diffraction (TOFD)	40	320	n/a
Vibration Analysis (VA)	I		24	420	800
	II		72	1680	2400
Visual Testing (VT)	I		8	70	130
	II		16	140	270

Notes:

- 1.0 A person may be qualified directly to NDT Level II with no time as a certified NDT Level I, providing the recommended training and experience consists of the sum of the hours recommended for NDT Level I and Level II.
- 2.0 For NDT Level III certification, the experience should consist of the sum of the hours for NDT Level I and Level II, plus the additional time in paragraph 6.3.2 as applicable. The formal training should consist of the NDT Level I and Level II training, plus any additional formal training as defined in the employer's written practice.
- 3.0 Listed training hours may be adjusted as described in the employer's written practice depending on the candidate's actual education level (e.g., high school, college graduate in engineering, etc.).
- 4.0 Training should be outlined in the employer's written practice. MT training hours may be counted toward MFL training hours as defined in employer's written practice.
- 5.0 If an individual is currently certified in an ET technique and a full-course format was used to meet the initial qualifications in that technique, the minimum training hours to qualify in another ET technique at the same NDT level may be reduced up to 40% if so defined in the employer's written practice. If an individual is certified in an ET technique, the minimum experience to qualify for another ET technique at the same level or to the next level may be reduced by up to 50% if so defined in the employer's written practice.
- 6.0 While fulfilling total NDT experience requirements, experience may be gained in more than one (1) method; however, the minimum hours must be met for each method.
- 7.0 If an individual is currently certified in an RT technique and a full-course format was used to meet the initial qualifications in that technique, the minimum additional training hours to qualify in another technique at the same

- level should be 24 hours (of which at least 16 hours should be equipment familiarization). The training outline should be as defined in the employer's written practice. If an individual is certified in a technique, the minimum additional experience required to qualify for another technique at the same level may be reduced by up to 50%, as defined in the employer's written practice.
- 8.0 Independent of the RT, CR, CT, DR, or NR training recommended for Level I and Level II certification, a trainee is required to receive radiation safety training as required by the regulatory jurisdiction.
- 9.0 If an individual is currently certified in one (1) thermal/infrared technique and a full-course format was used to meet the initial qualifications in that technique, the minimum additional training hours to qualify in another technique at the same level should be 20 hours (of which at least 16 hours should be specific technique familiarization). The training outline should be as defined in the employer's written practice. If an individual is certified in a technique, the minimum additional experience required to qualify for another technique at the same level may be reduced by up to 50%, as defined in the employer's written practice.
- 10.0 Full Matrix Capture (FMC), Time of Flight Diffraction (TOFD), and Phased Array Ultrasonic Testing (PAUT) require UT Level II certification as a prerequisite.
- 11.0 In addition to the training recommended in this table for FMC, TOFD, and PAUT, supplemental specific hardware and software training should be required for automated or semiautomated technique applications. The employer's written practice should fully describe the nature and extent of the additional training required for each specific acquisition or analysis software and instrument/system used. The employer's written practice should also describe the means by which the examiner's qualification will be determined for automated and semiautomated techniques.

TABLE 6.3.1 B
Recommended Initial Training and Experience Levels for NDT Level II Limited Certifications

Examination Method	Limited Certification Technique	Technician's Starting Point	Formal Training	Minimum Work Experience in Technique (Hours)
Radiographic Testing	Film Interpretation	Non-Radiographer	40	220
		RT Level I	24	220
	DR/CR Interpretation	Non-Radiographer	40	220
		RT Level I	24	220
	CT Interpretation	Non-Radiographer	40	220
		RT Level I	24	220
Ultrasonic Testing	Digital Thickness Measurement (numeric output only)	Trainee	8	40
	A-scan Thickness Measurement	Trainee	24	175

- 6.3.1.2 Table 6.3.1 B lists initial training and experience hours, which may be considered by the employer for specific limited applications as defined in the employer’s written practice.
- 6.3.1.3 Limited certifications should apply to individuals who do not meet the full training and experience of Table 6.3.1 A. Limited certifications issued in any method should be approved by the NDT Level III and documented in the certification records.

6.3.2 NDT Level III

- 6.3.2.1 Have a bachelor’s degree (or higher) in engineering or science, plus one additional year of experience beyond the Level II requirements in NDT in an assignment comparable to that of an NDT Level II in the applicable NDT method(s), or:
- 6.3.2.2 Have completed with passing grades at least two (2) years of engineering or science study at a university, college, or technical school, plus two additional years of experience beyond the NDT Level II requirements in NDT in an assignment at least comparable to that of NDT Level II in the applicable NDT method(s), or:
- 6.3.2.3 Have four (4) years of experience beyond the NDT Level II requirements in NDT in an assignment at least comparable to that of an NDT Level II in the applicable NDT method(s).

The above NDT Level III requirements may be partially replaced by experience as a certified NDT Level II or by assignments at least comparable to NDT Level II as defined in the employer’s written practice.

- 6.4 It is recognized that expanded training programs at educational institutions and colleges may include additional hands-on application and lab hours in applicable methods and/or techniques beyond the required minimum training hours. Those additional hours may be considered toward the required experience hours as approved by the NDT Level III and documented within the employer’s written practice. Additionally, the maximum credit for these hours should not exceed 25% of the required experience hours. A minimum of 75% of the required experience hours shall be gained in the field.

7.0 Training Programs

- 7.1 Personnel being considered for initial certification should complete sufficient organized training. The organized training may include instructor-led training, personalized instruction, virtual instructor-led training, computer-based training, or web-based training. Computer-based training and web-based training should track hours and content of training with student examinations in accordance with paragraph 7.2. The sufficiently organized training shall be such as to ensure the student is thoroughly familiar with the principles and practices of the specified NDT method related to the level of certification desired, and applicable to the processes to be used and the products to be tested. All training programs should be approved by the NDT Level III responsible for the applicable method.
- 7.2 The training program should include sufficient examinations to ensure understanding of the necessary information.

- 7.3 Recommended training course outlines and references for NDT Levels I, II, and III personnel, which may be used as technical source material, are contained in ANSI/ASNT CP-105: *ASNT Standard Topical Outlines for Qualification of Nondestructive Testing Personnel*.
- 7.4 The employer who purchases outside training services is responsible for ensuring that such services meet the requirements of the employer's written practice.

8.0 Examinations

8.1 Administration and Grading

- 8.1.1 All qualification examination questions shall be approved by the NDT Level III responsible for the applicable method and documented.
- 8.1.2 An NDT Level III should be responsible for the administration and grading of examinations specified in paragraphs 8.3 through 8.8 for NDT Level I, II, or other Level III personnel. The administration and grading of examinations may be delegated to a qualified representative of the NDT Level III and documented. Training should be provided to the individual administering the examinations. This training and qualification shall be documented. A qualified representative of the employer may perform the actual administration and grading of NDT Level III examinations specified in paragraph 8.7.
 - 8.1.2.1 To be designated as a qualified representative of the NDT Level III for the administration and grading of NDT Level I, Level II, and Level III personnel qualification examinations, the designee should have documented, appropriate instruction by the NDT Level III in the proper administration and grading of qualification examinations prior to conducting and grading independent qualification examinations for NDT personnel. Additionally, the Practical examination should be administered by a person certified in the applicable NDT method as NDT Level II or III. The NDT Level II Practical examination specified in paragraph 8.5 shall be administered by a qualified NDT Level III.
- 8.1.3 All NDT Level I, II, and III written examinations should be closed-book except that necessary data, such as graphs, tables, specifications, procedures, codes, etc., may be provided with or in the examination. Questions utilizing such reference materials should require an understanding of the information rather than merely locating the appropriate answer.
- 8.1.4 For NDT Level I and II personnel, a composite grade should be determined by simple averaging of the results of the General, Specific, and Practical examinations described in the following sections. For NDT Level III personnel, the composite grade should be determined by simple averaging of the results of the Basic, Method, Specific, and Practical (if applicable) examinations described in the following sections.
- 8.1.5 Examinations administered by the employer for qualification should result in a passing composite grade of at least 80%, with no individual written examination having a passing grade less than 70%. The Practical examination should have a passing grade of at least 80%.
- 8.1.6 When an examination is administered and graded for the employer by an outside agency and the outside agency issues grades of pass or fail only, on a certified report, then the employer may accept the pass grade as 80% for that particular examination.
- 8.1.7 The employer who purchases outside services is responsible for ensuring that the examination services meet the requirements of the employer's written practice and be documented.
- 8.1.8 In no case shall an examination be administered by oneself or by a subordinate.

8.2 Vision Examinations

- 8.2.1 Near-Vision Acuity. The examination should ensure natural or corrected (no pharmacological agents) near-distance acuity in at least one eye such that the applicant is capable of reading a minimum of Jaeger No. 2 or equivalent type and size letter at the distance designated on the chart but not less than 12 in. (30.5 cm) on a standard Jaeger test chart. The ability to perceive an Ortho-Rater minimum of 8 or similar test pattern is also acceptable. This should be administered annually.
 - 8.2.1.1 Pharmacological agents (eye drops) that would improve or enhance visual acuity at any distance shall not be used.
- 8.2.2 Color-Contrast Differentiation. The examination should demonstrate the capability of distinguishing and differentiating contrast among colors or shades of gray used in the method as determined by the employer. This should be conducted upon initial certification and at five (5) year intervals thereafter.
- 8.2.3 Vision examinations expire on the last day of the month of expiration.

- 8.3 General (Written—for NDT Levels I and II)
- 8.3.1 The General examinations should address the basic principles of the applicable method.
- 8.3.2 In preparing the examinations, the NDT Level III should select or devise appropriate questions covering the applicable method and techniques described by the employer’s written practice and the applicable elements of the outline in ANSI/ASNT CP-105.
- 8.3.3 The minimum number of questions that should be given is shown in Table 8.3.3.
- 8.3.4 A valid ACCP, ASNT NDT, or ASNT 9712 Level II certificate may be accepted as fulfilling the General examination criteria for each applicable method if the NDT Level III has determined that the ASNT examinations meet the requirements of the employer’s written practice. This acceptance should be documented.

TABLE 8.3.3
Minimum Number of Examination Questions

Method / Technique	General		Specific	
	Level I	Level II	Level I	Level II
Acoustic Emission Testing	40	40	20	20
Electromagnetic Testing				
Alternating Current Field Measurement	40	40	20	20
Eddy Current Testing	40	40	20	20
Remote Field Testing	30	30	20	20
Ground Penetrating Radar	30	40	20	20
Guided Wave Testing	40	40	20	20
Laser Methods Testing				
Profilometry	30	30	20	20
Holography/Shearography	30	30	20	20
Leak Testing				
Bubble Leak Testing	20	20	15	15
Pressure Change Leak Testing	20	20	15	15
Halogen Diode Leak Testing	20	20	15	15
Mass Spectrometer Leak Testing	20	20	20	40
Liquid Penetrant Testing	40	40	20	20
Magnetic Flux Leakage Testing	20	20	20	15
Magnetic Particle Testing	40	40	20	20
Microwave Technology Testing	40	40	20	20
Neutron Radiographic Testing	40	40	20	20
Radiographic Testing				
Radiography	40	40	20	20
Radiographic Interpretation (Film, DR, CR, CT) - Non-Radiographer		40		20
Radiographic Interpretation (Film, DR, CR, CT) - Radiographer (Certified RT NDT Level I)		20		15
Computed Radiography	40	40	20	20
Computed Tomography	40	40	20	20
Digital Radiography	40	40	20	20

TABLE 8.3.3**Minimum Number of Examination Questions**

Method / Technique	General		Specific	
	Level I	Level II	Level I	Level II
Thermal/Infrared Testing	40		20	
Building Diagnostics		50		40
Electrical & Mechanical Testing		50		40
Materials Testing		50		40
Ultrasonic Testing	40	40	20	20
Full Matrix Capture		40		30
Phased Array Ultrasonic Testing		40		30
Time of Flight Diffraction		40		30
Digital Thickness Measurement (numeric output only)		20		10
A-scan Thickness Measurement		30		15
Vibration Analysis	40	40	20	60
Visual Testing	40	40	20	20

8.4 Specific (Written—for NDT Levels I and II)

8.4.1 The Specific examination should address the equipment, operating procedures, and NDT techniques that the individual may encounter during specific assignments described by the employer's written practice and the applicable elements of the outline in ANSI/ASNT CP-105.

8.4.2 The Specific examination should also cover the procedures, specifications or codes, and acceptance criteria used in the NDT conducted by the employer.

8.4.3 The minimum number of questions that should be given is shown in Table 8.3.3.

8.4.4 A valid ACCP, ASNT NDT, or ASNT 9712 Level II certificate may be accepted as fulfilling the Specific examination criteria for each applicable method if the NDT Level III has determined that the ASNT examinations meet the requirements of the employer's written practice. This acceptance should be documented. If this assessment cannot be accomplished, an employer-administered Specific examination should be completed.

8.5 Practical (for NDT Level I and II)

8.5.1 The candidate should demonstrate familiarity with and ability to operate the necessary NDT equipment, record, and analyze the resultant information to the degree required.

8.5.2 At least one flawed specimen or component should be tested, and the results of the NDT analyzed by the candidate.

8.5.2.1 Phased Array Ultrasonic Testing and Time of Flight Diffraction Practical Examination. Flawed samples used for practical examinations should be representative of the components and/or configurations that the candidates would be testing under this technique and approved by the NDT Level III.

8.5.2.2 Film Interpretation Limited Certification. The Practical examination should consist of review and grading of a sufficient number of radiographs to demonstrate satisfactory performance to the satisfaction of the NDT Level III. The number of radiographs should be addressed in the employer's written practice.

8.5.3 The description of the specimen, the NDT procedure, including checkpoints, and the results of the examination should be documented.

8.5.4 NDT Level I Practical Examination

8.5.4.1 Specimens. Proficiency should be demonstrated in performing the applicable NDT technique on one or more flawed specimens as appropriate for the method and approved and documented by the NDT Level III (Grading Key).

- 8.5.4.2 Evaluation. The NDT Level I should evaluate the results to the degree of responsibility as described in the employer's written practice. The candidate should detect all discontinuities and conditions specified and documented by the NDT Level III. The written practice should address the acceptable detection rate as well as the maximum number of false calls acceptable.
- 8.5.4.3 Grading. A checklist containing at least 10 different checkpoints requiring an understanding of test variables and the employer's procedural requirements should be included in this Practical examination. While it is normal to score the Practical on a percentile basis (80% required), the Practical examination checklist should also contain a single checkpoint or multiple checkpoints that failure to successfully complete will result in failure of the examination. This requirement should be clearly marked on the checkpoint(s).
- 8.5.5 NDT Level II Practical Examination
 - 8.5.5.1 Specimens. Proficiency should be demonstrated in selecting and performing the applicable NDT technique within the method and interpreting and evaluating the results on one or more flawed specimens as appropriate for the method and approved and documented by the NDT Level III (Grading Key).
 - 8.5.5.2 Evaluation. The candidate should detect all discontinuities and conditions specified and documented by the NDT Level III. The written practice should address the acceptable detection rate as well as the maximum number of false calls acceptable.
 - 8.5.5.3 Grading. A checklist containing at least 10 different checkpoints requiring an understanding of NDT variables and the employer's procedural requirements should be included in this Practical examination. While it is normal to score the Practical on a percentile basis (80% required), the practical examination checklist should also contain a single checkpoint or multiple checkpoints that failure to successfully complete will result in failure of the examination. This requirement should be clearly marked on the checkpoint(s).
- 8.5.6 A valid ACCP or ASNT 9712 Level II certificate may be accepted as fulfilling the Practical examination criteria for each applicable method if the NDT Level III has determined that the ASNT examinations meet the requirements of the employer's written practice. This acceptance should be documented. If this assessment cannot be accomplished, an employer-administered Practical examination should be completed.
- 8.5.7 An example of a Practical examination checklist is attached as Appendix A to this Recommended Practice. The example checklist has been provided as guidance on the development of practical examinations for any method and level.
- 8.6 NDT/PdM Level III Examinations
 - 8.6.1 Basic Examinations
 - 8.6.1.1 NDT Basic Examination (does not need to be retaken to add another test method as long as the candidate holds a current NDT Level III certificate or certification). The minimum number of questions that should be given is as follows:
 - 8.6.1.1.1 Fifteen (15) questions relating to understanding the SNT-TC-1A document,
 - 8.6.1.1.2 Twenty (20) questions relating to applicable materials, fabrication, and product technology, and
 - 8.6.1.1.3 Twenty (20) questions that are similar to published NDT Level II questions for other appropriate NDT methods.
 - 8.6.1.2 PdM Basic Examination (does not need to be retaken to add another test method as long as the candidate holds a current Level III certificate or certification.). The minimum number of questions that should be given is as follows:
 - 8.6.1.2.1 Fifteen (15) questions relating to understanding the SNT-TC-1A document,
 - 8.6.1.2.2 Twenty (20) questions relating to applicable machinery technology, problems, and corrective actions, and
 - 8.6.1.2.3 Thirty (30) questions that are similar to published NDT Level II questions for other appropriate PdM and reliability methods.
 - 8.6.2 Method Examination (for each method).
 - 8.6.2.1 Thirty (30) questions relating to fundamentals and principles that are similar to published ASNT NDT Level III questions for each method,
 - 8.6.2.2 Fifteen (15) questions relating to application and establishment of techniques and procedures that are similar to the published ASNT NDT Level III questions for each method, and

- 8.6.2.3 Twenty (20) questions relating to capability for interpreting codes, standards, and specifications relating to the method.
- 8.6.3 Specific Examination (for each method).
 - 8.6.3.1 Twenty (20) questions relating to specifications, equipment, techniques, and procedures applicable to the employer's product(s) and methods employed and to the administration of the employer's written practice.
 - 8.6.3.2 A valid ACCP or ASNT 9712 Level III certificate may be accepted as fulfilling the Specific examination criteria for each applicable method if the NDT Level III has determined that the ASNT examinations meet the requirements of the employer's written practice. This acceptance should be documented. If this assessment cannot be accomplished, an employer-administered Specific examination should be completed.
- 8.6.4 Practical Examination (for each method).
 - 8.6.4.1 The candidate should prepare an NDT procedure appropriate to the employer's needs; however, if documented experience demonstrates that the candidate has previously prepared acceptable NDT procedures in the method using the specifications, codes, and standards that are applicable to that employer, a written Practical examination (for example, preparation of a procedure) is not required. If experience is substituted for the written Practical examination, the employer should document the pertinent practical experience of the NDT Level III candidate.
 - 8.6.4.2 If the NDT Level III will be required to perform NDT or evaluate NDT results, the Practical examination should include the same demonstrations of the candidate's ability to perform the required activity(ies) as required in paragraph 8.5.5. For NDT Level III personnel certified under the employer's current written practice, this requirement should be met prior to the next recertification date, in the applicable method.
 - 8.6.4.3 If the NDT Level III needs to meet the recommendations in paragraph 8.6.4.2, a valid ACCP or ASNT 9712 Level III certificate may be accepted as fulfilling the practical examination criteria in paragraph 8.5.5 for each applicable method if the NDT Level III has determined that the ASNT examinations meet the requirements of the employer's written practice. This acceptance should be documented. If this assessment cannot be accomplished, an employer-administered Practical examination should be completed.
- 8.6.5 A valid endorsement on an ASNT NDT, ACCP Professional, or ASNT 9712 Level III certificate fulfills the examination criteria described in paragraphs 8.6.1 and 8.6.2 for each applicable NDT method. A valid ACCP Professional or ASNT 9712 Level III certificate also fulfills the examination criteria described in paragraph 8.5.5.
- 8.7 Reexamination
 - 8.7.1 Those failing to attain the required grades should wait at least thirty (30) days or receive suitable additional training as determined by the NDT Level III before reexamination.

9.0 Certification

- 9.1 Certification of NDT personnel to all levels of qualification is the responsibility of the employer.
- 9.2 Certification of NDT personnel should be based on demonstration of satisfactory qualification in accordance with Sections 6.0, 7.0, and 8.0, as described in the employer's written practice.
- 9.3 At the option of the employer, an outside agency may be engaged to provide NDT Level III services. In such instances, the responsibility of certification of the employees shall be retained by the employer.
- 9.4 Personnel certification records should be maintained on file by the employer for the duration specified in the employer's written practice and should include the following:
 - 9.4.1 Name of certified individual.
 - 9.4.2 Level of certification, NDT method and/or technique, as applicable, and limitations (if any), as applicable.
 - 9.4.3 Educational background and experience of certified individuals.
 - 9.4.4 Statement indicating satisfactory completion of training in accordance with the employer's written practice.
 - 9.4.5 Results of the vision examinations prescribed in paragraph 8.2 for the current certification period.
 - 9.4.6 Current examination copy(ies) or evidence of successful completion of examinations.
 - 9.4.7 Composite grade(s) or suitable evidence of grades.
 - 9.4.8 Signature of the NDT Level III that verified qualifications of candidate for certification.
 - 9.4.9 Dates of certification and/or recertification.

- 9.4.10 Certification expiration date.
- 9.4.11 Signature of employer's Certifying Authority.
- 9.5 Dates of certification and expiration.
 - 9.5.1 The date of certification should be a date after which the employer's requirements for education, training, experience, and examinations have been met for each method and/or technique, as specified in the employer's written practice.
 - 9.5.2 The date of certification is the date when the Certifying Authority signs the certification record.
 - 9.5.3 The date of expiration should be five (5) years from the date established in paragraph 9.5.2.
- 9.6 Certification certificates and wallet cards. The following recommendations are considered best practice and should be followed:
 - 9.6.1 The legal name of the employer should be clearly identified followed by the document number and revision/edition number of the written practice.
 - 9.6.2 The certificate should indicate "SNT-TC-1A" followed by the four-digit year of the applicable edition of SNT-TC-1A that the written practice was developed to follow.
 - 9.6.3 Full legal name of the certified individual in the ISO basic Latin alphabet. Additional characters may also be used where customary to accommodate local languages.
 - 9.6.4 Level of certification, NDT method and/or technique, as applicable, and limitations (if any).
 - 9.6.5 Limitations of certification authorization should be clearly defined, when appropriate for the employer, which may include restrictions on product forms, industry sectors, codes, standards, and examination procedures.
 - 9.6.6 The full printed legal name and signature of both the designated NDT Level III that verified the qualifications of the candidate for certification and the designated Certifying Authority when the Level III and Certifying Authority are identified as separate positions in the employer's written practice.
 - 9.6.6.1 If applicable, the ASNT-issued Level III identification number, when either or both of the signers hold ASNT Level III certifications.
 - 9.6.7 The certificate or wallet card should be fully completed at the time of signing by the designated NDT Level III and/or Certifying Authority so that no fill-in-the-blank data remains to be completed by others.
 - 9.6.7.1 When changes or alterations to certificates or wallet cards are needed, the issuing of a new card or certificate is required.
 - 9.6.8 Dates of certification and expiration.

10.0 Technical Performance Evaluation

- 10.1 NDT personnel may be reexamined anytime at the discretion of the employer and have their certificates extended or revoked.
- 10.2 Periodically, as defined in the employer's written practice, NDT Level I and II personnel should be reevaluated by the NDT Level III administering a Practical examination. The Practical examination should follow the format and guidelines described in paragraph 8.5.
 - 10.2.1 If the NDT Level III needs to meet the recommendations in paragraph 8.6.4.2, the requirements in paragraph 10.2 should be met.

11.0 Interrupted Service

- 11.1 The employer's written practice should include rules covering the types and duration of interrupted service that requires reexamination and recertification.
- 11.2 The written practice should specify the requirements for reexamination and/or recertification for the interrupted service.

12.0 Recertification

- 12.1 All levels of NDT personnel shall be recertified periodically in accordance with one of the following criteria:
 - 12.1.1 Evidence of continuing satisfactory technical performance.
 - 12.1.2 Examination in those portions of the examinations in Section 8.0 deemed necessary by the employer's NDT Level III.
- 12.2 The recommended maximum recertification interval is five (5) years from the date the Certifying Authority signs the certification record for all certification levels. Certifications expire on the last day of the month of expiration.

- 12.3 When new techniques are added to the employer's written practice and the NDT Level III personnel is assigned to perform examinations using these new techniques, the NDT Level III personnel should receive applicable training, take applicable examinations, and obtain the necessary experience, such that the NDT Level III meets the requirements of the new techniques in Table 6.3.1 A, prior to their next recertification date, in the applicable method.

13.0 Termination

- 13.1 The employer's certification shall be deemed revoked when employment is terminated.
- 13.2 An NDT Level I, Level II, or Level III whose certification has been terminated may be certified to the former NDT level by a new employer based on examination, as described in Section 8.0, provided all of the following conditions are met to the new employer's satisfaction:
- 13.2.1 The employee has proof of prior certification.
- 13.2.2 The employee was working in the capacity to which certified within six (6) months of termination.
- 13.2.3 The employee is being recertified within six (6) months of termination.
- 13.2.4 Prior to being examined for certification, employees not meeting the above requirements should receive additional training as deemed appropriate by the NDT Level III.

14.0 Reinstatement

- 14.1 An NDT Level I, Level II, or Level III whose certification has been terminated may be reinstated to the former NDT level, without a new examination, provided all of the following conditions are met:
- 14.1.1 The employer has maintained the personnel certification records required in paragraph 9.4.
- 14.1.2 The employee's certification did not expire during termination.
- 14.1.3 The employee is being reinstated within six (6) months of termination.

15.0 Referenced Publications

- 15.1 The following documents contain provisions which, through reference in this text, constitute provisions of this Recommended Practice. Copies may be obtained from The American Society for Nondestructive Testing Inc., 1201 Dublin Rd., Suite #G04, Columbus, OH 43215, USA, or asnt.org.
- 15.1.1 ANSI/ASNT CP-105: *ASNT Standard Topical Outlines for Qualification of Nondestructive Testing Personnel*, latest edition.
- 15.1.2 ANSI/ASNT CP-9712 (ISO 9712:2021):2023 *Standard Nondestructive Testing-Qualification and Certification of NDT Personnel*
- 15.1.2 ASNT Central Certification Program, *ASNT Document CP-1*, latest edition.
- 15.1.3 ASNT Policy G-14 - *Use of the ASNT Name and ASNT Marks*, latest edition.
- 15.2 The following document contains specific NDT terms which, though referenced in this text, constitute provisions of this Recommended Practice. Copies may be obtained from ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959, USA or astm.org.
- 15.2.1 ASTM E 1316 (latest edition) - *Standard Terminology for Nondestructive Examinations*, Section A - Common NDT Terms.

APPENDIXES

Appendix A – NDT Practical Examination Checklist

NDT PRACTICAL EXAMINATION CHECKLIST

NAME: _____ EMPLOYEE #: _____

COMPANY: _____ LOCATION: _____

DATE: _____ NDT METHOD: _____

PROCEDURE DESCRIPTION: _____

SPECIMEN(S) DESCRIPTION: _____

Time Started: _____

Time Completed: _____

No.	Categories	Points	Score	Remarks
1.	Knowledge of NDT Procedure - Familiarity - Utilization - Consideration for limitations - Adherence to procedural details	10		Record the presence or absence of actions that support your score. Was the procedure picked up, thumbled through, read ahead of time, highlighted or marked up. Did the candidate refer to the procedure when questions arose? Did the output comply with the procedure?
2.	Equipment and Material - Stated in procedure or user experience - Proficiency in set up, utilization, and calibration - Proficiency in technique and standardization	5		Record the presence or absence of actions that support your score. Note the equipment and materials used. Evaluate the procedure for calibration adequacy, ease of use, and care.
3.	Test Specimen Care and Custody - Appropriate pre-cleaning - Maintenance/control - Appropriate post-cleaning	5		Record the presence or absence of actions that support your score. Note preparation adequacy, specimen care, final cleaning, and final specimen condition.
4.	Operations - Calibration verification - Adhering to procedures - Adherence to the sequencing requirements - Utilization of appropriate testing media - Inspecting designated areas of interest	10		Record the presence or absence of actions that support your score. State if calibration was verified or not. List steps followed. Note any steps missed. Describe actual test media used, area of interest, and area(s) missed.
5.	Detection of Indications⁽¹⁾ - Adherence to procedure requirements - Accuracy (detection of critical indications) - Finding detectable indications	15		Record the presence or absence of actions that support your score. List all procedure requirements not followed. Note number of hits, misses, and false calls. Reference attached report annotated.
6.	Interpretation of Indications - Adherence to procedure requirements - Accuracy (interpreting the critical indications) - Interpreting relevant indications	15		Record the presence or absence of actions that support your score. Identify metrics reflecting inspection accuracy or inaccuracy. Refer to attached report and interpretation standards compared to known defect map and characterization.
7.	Evaluation of Indications⁽²⁾ - Following procedure requirements - Accuracy (evaluating the critical indications) - Evaluating relevant indications	20 ⁽³⁾		Record the presence or absence of actions that support your score. Quantify discrimination accuracy and margin of error between relevant and nonrelevant indications.
8.	Documentation and Records - Accurate documentation - Proper data processing - Appropriate control of records - Compliance with procedural routing	10		Record the presence or absence of actions that support your score. State degree of completeness, legibility, clarity, correctness, and appearance of reports with errors and omissions.
9.	General Health and Safety - Familiarity with health and safety of method - Volatile substances - Electrical hazards - Respiratory concerns - Compliance with specific site procedures	5		Record the presence or absence of actions that support your score. State violations of industry standards and practices. General statement of compliance is acceptable if no violations.
10.	General Observable Conduct - Proficiency in knowledge of the method - Proficiency in application of the method - Proficiency in the results - Adherence to a professional behavior	5		Record the presence or absence of actions that support your score. List comments or behavior that supports or detracts from examinee performance.

(1) The candidate should detect all discontinuities and conditions specified by the NDT Level III.

(2) No more than 10% false calls allowed.

(3) 80% of designated defects correctly classified (16 points required to pass).

Print/Signature of NDT Level III: _____

Date: _____

Appendix B – Example Certification Template

Date of Certification:	{Insert}
Date of Certification Expiration:	{Insert}

9.6.8

{INSERT LEGAL COMPANY NAME}

9.6.1

NDT CERTIFICATE

This is to certify that the individual named below has successfully completed experience, training, and examination requirements in accordance with the provisions of {INSERT LEGAL COMPANY NAME} NDT Certification Procedure for the Qualification and Certification of NDT personnel {INSERT CERTIFICATION PROCEDURE IDENTIFICATION NUMBER & REVISION}.

9.6.1

{INSERT FULL LEGAL NAME OF INDIVIDUAL}

9.6.3

Is hereby certified to perform the following Nondestructive Testing Method(s)

9.6.4 & 9.6.5

NDT Method	NDT Level	NDT Technique (as applicable per certification procedure)	Limitations (if any)
{Insert}	{Insert}	{Insert}	{Insert}

9.1

9.6.4

9.6.4

9.6.4

Certified on behalf of the Certifying Authority - {INSERT LEGAL COMPANY NAME}

Sign:

9.6.6 & 9.6.6.1

Print Name:

{INSERT LEGAL COMPANY NAME} Designated Level III

Sign:

9.6.6

Print Name:

9.6.2

This company NDT Certification Procedure intends to meet or exceed the requirements of ASNT SNT-TC-1A {INSERT EDITION YEAR OF ISSUANCE THAT THE COMPANY IS REQUIRED TO COMPLY WITH} as it applies to NDT performed by this company.

ISBN: 978-1-57117-601-1
Catalog No.: 10197