

[INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION]

**Written Practice for Certification of Ultrasonic Testing Personnel for
Welded Joints in Metal Building Systems
in accordance with
ASNT Recommended Practice No. SNT-TC-1A, 2011 edition
*Personnel Qualification and Certification in Nondestructive Testing***

1.0 Scope

- 1.1** This written practice establishes the minimum requirements for education, training, experience, examination and certification of personnel responsible for conducting ultrasonic testing while in the employment of [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION]. It applies to all persons conducting ultrasonic testing (UT) that are required to be certified to the provisions of Recommended Practice No. SNT-TC-1A (2011).
- 1.2** The methods and techniques of UT covered by this written practice are used in accordance with the applicable codes, standards, specifications and procedures referenced below.
- 1.3** Annex A indicates where this Written Practice has deviated from Recommended Practice No. SNT-TC-1A (2011).

2.0 References

- 2.1** General
- 2.1.1** Recommended Practice No. SNT-TC-1A: Personnel Qualification and Certification in Nondestructive Testing (2011).*
- 2.1.2** Applicable supplements to Recommended Practice No. SNT-TC-1A.*
- 2.1.3** Interpreting SNT-TC-1A, current edition. (Contains inquiries to and responses from ASNT's SNT-TC-1A Interpretation Panel.)*
- 2.1.4** ANSI/ASNT CP-105: ASNT Standard Topical Outlines for Qualification of Nondestructive Testing Personnel, 2011 edition.*
- 2.1.5** ACCP-CP-1, ASNT Central Certification Program.*

*References available from the American Society for Nondestructive Testing (ASNT).

3.0 Definitions

- 3.1** *Certification*: written testimony of qualification.
- 3.2** *Certifying Agency*: the employer of the personnel being certified; specifically, [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION].
- 3.3** *Certifying Authority*: the person or persons properly designated in the written practice to sign certifications on behalf of the employer; specifically, the [INSERT THE POSITION OR TITLE OF THE COMPANY OFFICIAL WHO IS DESIGNATED TO SIGN CERTIFICATIONS ON BEHALF OF THE MBMA COMPANY AND LOCATION].
- 3.4** *Closed Book Examination*: an examination administered without access to reference material except for materials supplied with or in the examination. (See 8.7.)

- 3.5** *Comparable*: being at an equivalent or similar level of NDT responsibility and difficulty as determined by the employer's NDT Level III.
- 3.6** *Documented*: the condition of being in written form.
- 3.7** *Employer*: the corporate, private, or public entity, which employs personnel for wages, salary, fees, or other considerations; specifically, [\[INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION\]](#).
- 3.8** *Experience*: work activities accomplished in UT or other NDT methods, as applicable, under the direction of qualified supervision including the performance of UT and related activities, but not including time spent in organized training programs.
- 3.9** *Grading Unit*: a qualification specimen can be divided into sections called grading units, which do not have to be equal length or be equally spaced. Grading units are unflawed or flawed and the percentage of flawed/unflawed grading units required shall be approved by the NDT Level III.
- 3.10** *Limited Certification*: nondestructive test methods may be further subdivided into limited disciplines or techniques to meet specific employer's needs; these are NDT Level II certifications, but to a limited scope.
- 3.11** *Nondestructive Testing*: a process that involves the inspection, testing, or evaluation of materials, components and assemblies for materials' discontinuities, properties and machine problems without further impairing or destroying the part's serviceability. Throughout this document the term NDT applies equally to the NDT inspection methods used for material inspection, flaw detection or predictive maintenance (PdM) applications.
- 3.12** *Outside Agency*: a company or individual who provides NDT Level III services and whose qualifications to provide these services have been reviewed by [\[INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION\]](#).
- 3.13** *Qualification*: demonstrated skill, demonstrated knowledge, documented training, and documented experience required for personnel to properly perform the duties of a specific job.
- 3.14** *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.
- 3.15** *Technique*: a category within an NDT method; for example, within ultrasonic testing.
- 3.16** *Training*: an organized program developed to impart the knowledge and skills necessary for qualification.
- 3.17** *Written Practice*: a written procedure developed by the employer that details the requirements for qualification and certification of their employees.

4.0 Nondestructive Testing Methods

- 4.1** Qualification and certification of NDT personnel in accordance with this written practice is applicable to the following method and technique:
- 4.1.1** Ultrasonic Testing (UT).

5.0 Levels of Qualification

- 5.1** There are three basic levels of qualification.

- 5.2 While in the process of being initially trained, qualified, and certified, an individual shall be considered a trainee. A trainee shall work with a certified individual. The trainee shall not independently conduct, interpret, evaluate, or report the UT results.
- 5.3 The three basic levels of qualification are:
- 5.3.1 *NDT Level I.* An NDT Level I individual shall be qualified to properly perform specific calibrations, specific UT, and specific evaluations for acceptance or rejection determinations according to written instructions and to record results. The NDT Level I shall receive the necessary instruction and supervision from a certified NDT Level II or Level III individual.
- 5.3.2 *NDT Level II.* An NDT Level II individual shall be qualified to set up and calibrate equipment and to interpret and evaluate results with respect to applicable codes, standards, and specifications. The NDT Level II shall be thoroughly familiar with the scope and limitations of the UT method and shall exercise assigned responsibility for on-the-job training and guidance of trainees and NDT Level I personnel. The NDT Level II shall be able to organize and report the UT results.
- 5.3.3 *NDT Level III.* An NDT Level III individual shall be capable of developing, qualifying, and approving procedures; establishing and approving techniques; interpreting codes, standards, specifications, and procedures; and designating the particular UT methods, techniques, and procedures to be used. The NDT Level III shall be responsible for the NDT operations for which qualified and assigned and shall be capable of interpreting and evaluating results in terms of existing codes, standards, and specifications. The NDT Level III shall 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 shall have general familiarity with other appropriate NDT methods, as demonstrated by the NDT Level III Basic examination. The NDT Level III shall be capable of training and examining NDT Level I and Level II personnel for certification in UT.

6.0 Education, Training, and Experience Requirements for Initial Qualification

- 6.1 Candidates for certification in UT shall have sufficient education, training, and experience to ensure qualification in those UT methods in which they are being considered for certification. Documentation of prior certification may be used by [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION] as evidence of qualification for comparable levels of certification. Educational attainment, completed training and experience shall be documented on a "NONDESTRUCTIVE TESTING PERSONNEL QUALIFICATION RECORD FORM."
- 6.2 Documented training and/or experience gained in positions and activities comparable to those of NDT Levels I, II, and/or III prior to establishment of [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION] Written Practice may be considered in satisfying the criteria of Section 6.3.
- 6.3 To be considered for certification, a candidate shall satisfy one of the following criteria for the applicable NDT level:
- 6.3.1 *NDT Levels I and II*
Table I lists the required training and experience hours/months to be considered by [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION] for initial qualification of NDT Level I and NDT Level II individuals.
- 6.3.2 *NDT Level III*
- 6.3.2.1 Have graduated from a minimum four-year college or university curriculum with a degree in engineering or science, plus one additional year of experience beyond the NDT Level II requirements in UT in an assignment at least comparable to that of an NDT Level II in the UT method(s), or:
- 6.3.2.2 Have completed with passing grades at least two 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 UT in an assignment at least comparable to that of NDT Level II in the applicable UT method(s), or:
- 6.3.2.3 Have four years of experience beyond the NDT Level II requirements in UT in an assignment at least comparable to that of an NDT Level II in the applicable UT method(s).

7.0 Training Programs

- 7.1 Personnel being considered for initial certification shall complete sufficient organized training. The organized training may include instructor-led training, self-study, virtual instructor-led training, computer-based training or web-based training. Computer-based training and web-based training shall track hours and content of training with student examinations in accordance with 7.2. The sufficiently organized training shall be such as to ensure the student is thoroughly familiar with the principles and practices of the UT 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 shall be approved by the responsible NDT Level III.
- 7.2 The training program shall include sufficient examinations to ensure understanding of the necessary information.
- 7.3 Required 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: Topical Outlines for Qualification of Nondestructive Testing Personnel, as modified in Annex A.
- 7.4 When outside training services are purchased, [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION] is responsible for ensuring that such services meet the requirements of this Written Practice.

8.0 Examinations

8.1 Administration and Grading

- 8.1.1 An NDT Level III shall be responsible for the administration and grading of examinations specified in Sections 8.3 through 8.7 for NDT Level I, NDT Level II, or other NDT Level III personnel. The administration and grading of examinations may be delegated to a qualified representative of the NDT Level III and so recorded. A qualified representative of [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION] may perform the actual administration and grading of NDT Level III examinations specified in 8.7.
- 8.1.1.1 To be designated as a qualified representative of the NDT Level III for the administration and grading of NDT Level I and NDT Level II personnel qualification examinations, the designee shall have documented, specific instruction by the responsible 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 exam shall be administered by a person certified in the UT method as NDT Level II or NDT Level III.
- 8.1.1.2 Except as provided in 8.7.4 and 8.7.5, an NDT Level III candidate shall pass a Basic, Method and Specific NDT Level III examination, to be administered and scored by a certified outside agency. All questions used for NDT Level III examinations shall be approved by an NDT Level III certified in the UT method.
- 8.1.2 For NDT Level I and NDT Level II personnel, a composite grade shall be determined by simple averaging of the results of the general, specific, and practical examinations described below. For NDT Level III personnel, the composite grade shall be determined by simple averaging of the results of the basic, method, and specific examinations described below.
- 8.1.3 Examinations administered by [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION] for qualification shall result in a passing composite grade of at least 80 percent, with no individual examination having a passing grade less than 70 percent.
- 8.1.4 When an examination is administered and graded for [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION] by an outside agency and the outside agency issues grades of pass or fail only, on a certified report, then [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION] may accept the pass grade as 80 percent for that particular examination.
- 8.1.5 When outside services are purchased, [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION] is responsible for ensuring that the examination services meet the requirements of this written practice.

- 8.1.6 In no case shall an examination be administered by one's self or by a subordinate.
- 8.2** *Vision Examinations*
- 8.2.1 Near-Vision Acuity. The examination shall ensure natural or corrected near-distance acuity in at least one eye such that the applicant is capable of reading a minimum of Jaeger Number 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 shall be administered annually.
- 8.2.2 Vision examinations shall be administered by a certified testing agency and expire on the last day of the month of expiration.
- 8.3** *General Examinations (Written – for NDT Levels I and II)*
- 8.3.1 The general examinations shall address the basic principles of UT.
- 8.3.2 In preparing the examinations, the NDT Level III shall select or devise appropriate questions covering UT to the degree required by this written practice.
- 8.3.3 The content and format of the examination questions shall be similar to the example questions in the applicable appendix section of SNT-TC-1A or supplement. The supplement questions are intended only as examples. They shall not be used verbatim for qualification examinations.
- 8.3.4 The minimum number of questions that shall be given is listed in Table II.
- 8.4** *Specific Written Examinations (for NDT Levels I and II)*
- 8.4.1 The specific examination shall address the equipment, operating procedures, and UT techniques that the individual may encounter during specific assignments to the degree required by this written practice.
- 8.4.2 The specific examination shall also cover the specifications or codes and acceptance criteria used in the UT procedures of [\[INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION\]](#).
- 8.4.3 The minimum number of questions that shall be given is listed in Table II.
- 8.5** *Practical Examination (for NDT Levels I and II)*
- 8.5.1 The candidate shall demonstrate familiarity with and ability to operate the necessary UT equipment, record, and analyze the resultant information to the degree required.
- 8.5.2 At least one flawed specimen or component shall be tested and the results of the UT analyzed by the candidate.
- 8.5.3 The description of the specimen, the UT procedure, including checkpoints, and the results of the examination shall be documented.
- 8.5.4 NDT Level I Practical Examination. Proficiency shall be demonstrated in performing UT on one or more specimens or machine problems approved by the NDT Level III and in evaluating the results to the degree of responsibility as described in this written practice. At least ten (10) different checkpoints requiring an understanding of test variables and the procedural requirements of [\[INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION\]](#) shall be included in this practical examination. The candidate shall detect all discontinuities and conditions specified by the NDT Level III. The practical shall be scored on a percentile basis, but will contain checkpoints that failure to successfully complete will result in failure of the examination.
- 8.5.5 NDT Level II Practical Examination. Proficiency shall be demonstrated in selecting and performing UT and interpreting and evaluating the results on one or more specimens or machine problems approved by the NDT Level III. At least ten (10) different checkpoints requiring an understanding of UT variables and the procedural requirements of [\[INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION\]](#) shall be included in this practical examination. The candidate shall detect all discontinuities and conditions specified by the NDT Level III. The practical shall be scored on a percentile basis, but will contain checkpoints that failure to successfully complete will result in failure of the examination.
- 8.6** *Additional Written, Specific and Practical Examination Criteria*
- 8.6.1 NDT Level I, II, and III Written Examinations
- 8.6.1.1 All NDT Level I, II, and III written examinations shall 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 shall require an understanding of the information rather

than merely locating the appropriate answer. All questions used for NDT Level I and NDT Level II examinations shall be approved by the responsible NDT Level III.

- 8.6.1.2 A valid endorsement on an ACCP Level II certificate fulfills the corresponding examination criteria described in paragraphs 8.3 and 8.5.
- 8.6.1.3 A valid ASNT NDT Level II certificate may be accepted by [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION] as fulfilling the general examination criteria described in paragraph 8.3.
- 8.6.2 [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION] may delete the specific examination if the candidate has a valid ACCP or ASNT NDT Level II certificate in the UT method and if documented experience exists to permit such.
- 8.6.3 Practical Examinations
 - 8.6.3.1 Successful completion of an ACCP Level II general hands-on practical examination may be considered as fulfilling the requirements of paragraph 8.5.
- 8.6.4 The NDT Level III is responsible to ensure that if the ACCP and ASNT NDT Level II specific and practical examinations are used by [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION], as stated in 8.6.2 and 8.6.3.1, the requirements of 8.4.1, 8.4.2 and 8.5.5 are satisfied.

8.7 *NDT Level III Examinations*

- 8.7.1 Basic Examination
 - 8.7.1.1 NDT Basic Examination (required only once when more than one method examination is taken). The minimum number of questions that shall be given is as follows:
 - 8.7.1.1.1 Fifteen (15) questions relating to understanding the SNT-TC-1A document.
 - 8.7.1.1.2 Twenty (20) questions relating to applicable materials, fabrication, and product technology.
 - 8.7.1.1.3 Twenty (20) questions that are similar to published NDT Level II questions for other appropriate NDT methods.
 - 8.7.2 Method Examination
 - 8.7.2.1 Thirty (30) questions relating to fundamentals and principles that are similar to published ASNT NDT Level III questions for UT, and
 - 8.7.2.2 Fifteen (15) questions relating to application and establishment of techniques and procedures that are similar to the published ASNT NDT Level III questions for UT, and
 - 8.7.2.3 Twenty (20) questions relating to capability for interpreting codes, standards, and specifications relating to UT.
 - 8.7.3 Specific Examination
 - 8.7.3.1 Twenty (20) questions relating to specifications, equipment, techniques, and procedures applicable to the product(s) and methods employed and to the administration of this written practice by [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION].
 - 8.7.3.2 [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION] may delete the specific examination if the candidate has a valid ASNT NDT Level III or ACCP Professional Level III certificate in UT and if documented evidence of experience exists, including the preparation of UT procedures to codes, standards, or specifications and the evaluation of test results.
 - 8.7.4 A valid endorsement on an ASNT NDT Level III certificate fulfills the examination criteria described in 8.7.1 and 8.7.2 for each applicable NDT method.
 - 8.7.5 A valid endorsement of an ACCP Professional Level III certificate fulfills the examination criteria described in 8.7.1 and 8.7.2 for each applicable NDT method.

8.8 *Reexamination*

- 8.8.1 Those failing to attain the required grades shall 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 all NDT Levels of NDT personnel is the responsibility of [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION].
- 9.2 Certification of NDT personnel shall be based on demonstration of satisfactory qualification in accordance with Sections 6, 7, and 8, as described in this written practice.

9.3 At the option of [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION], 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 outside agency.

9.4 Personnel certification records shall be maintained on file by [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION] for the duration specified below and shall include the following:

9.4.1 Names of certified individuals.

9.4.2 Level of certification and NDT method.

9.4.3 Educational background and experience of certified individuals.

9.4.4 Statement indicating satisfactory completion of training in accordance with this written practice.

9.4.5 Results of the vision examinations prescribed in 8.2 for the current certification period.

9.4.6 Current examination copy(ies) or evidence of successful completion of examinations.

9.4.7 Other suitable evidence of satisfactory qualifications when such qualifications are used in lieu of the specific examination prescribed in 8.7.3.2 or as prescribed in the employer's written practice.

9.4.8 Composite grade(s) or suitable evidence of grades.

9.4.9 Signature of the NDT Level III that verified qualifications of candidates for certification.

9.4.10 Dates of certification and/or recertification and the dates of assignments to NDT.

9.4.11 Certification expiration date.

9.4.12 Signature of employer's certifying authority.

9.5 Personnel certification records shall be maintained in active files by [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION] during the employment of certified individuals. Following separation of employment or expiration of certification, the affected personnel certification records may be removed from active records, but maintained on file for at least 12 months.

10.0 Technical Performance Evaluation

10.1 NDT personnel may be reexamined any time at the discretion of [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION] and have their certification extended or revoked.

10.2 Each five years, NDT Level I and NDT Level II personnel shall be reevaluated by the NDT Level III administering a practical examination. The practical examination shall follow the format and guidelines described in 8.5.

11.0 Interrupted Service

11.1 Unless otherwise required by contract or governing provisions of applicable codes, standards, specifications, or regulations, reexamination and recertification of certified NDT personnel shall be required if a certified individual has not performed job duties in NDT for which certified:

11.1.1 During a contiguous period of one year or more, or;

11.1.2 For a total of one year or more during any period of two years or more.

11.2 All levels of NDT personnel with interrupted service shall be recertified by reexamination in any or all parts of the examinations for the applicable method(s) as deemed necessary by the responsible NDT Level III.

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 Reexamination in those portions of the examinations in Section 8 deemed necessary by the responsible NDT Level III.
- 12.2 All levels of NDT personnel shall be recertified every five years. Certifications expire on the last day of the month of expiration.

13.0 Termination

- 13.1 The certification by [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION] for the NDT Level I, NDT Level II or NDT Level III shall be deemed revoked when employment is terminated.
- 13.2 An NDT Level I, NDT Level II, or NDT Level III whose certification has been terminated may be certified to the former NDT level by [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION] based on examination, as described in Section 8, provided all of the following conditions are met to its 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 shall receive additional training as deemed appropriate by the NDT Level III.

14.0 Reinstatement

- 14.1 An NDT Level I, NDT Level II, or NDT 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 [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION] has maintained the personnel certification records required in section 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.

Table I: Level I and Level II Initial Training and Experience Levels in Ultrasonic Testing and NDT

| NDT Level | Training Hours | Experience | |
|-----------|----------------|-------------------------------------|--------------------|
| | | Minimum Hours in Ultrasonic Testing | Total Hours in NDT |
| I | 40 | 100 | 200 |
| II | 40 | 300 | 600 |

NOTE: For Level II certification, the experience shall consist of time at NDT Level I or equivalent. If a person is being qualified directly to NDT Level II with no time at NDT Level I, the experience (both UT and Total NDT) shall consist of the sum of the hours for NDT Level I and Level II, and the training shall consist of the sum of the hours for NDT Level I and Level II.

Experience credited toward "Total Hours in NDT" includes welding and materials inspection activities using other NDT methods, including visual welding inspection activities.

| NDT Level | Training Hours | Experience in Months (Alternate) | |
|-----------|----------------|--------------------------------------|---------------------|
| | | Minimum Months in Ultrasonic Testing | Total Months in NDT |
| I | 40 | 1 | 2 |
| II | 40 | 2.5 | 5 |

NOTE: For Level II certification, the experience shall consist of time at NDT Level I or equivalent. If a person is being qualified directly to NDT Level II with no time at NDT Level I, the experience (both UT and Total NDT) shall consist of the sum of the months for NDT Level I and Level II, and the training shall consist of the sum of the months for NDT Level I and Level II.

Experience credited toward "Total Hours in NDT" includes welding and materials inspection activities using other NDT methods, including visual welding inspection activities.

Table II: Minimum Number of Level I and Level II Written Examination Questions in Ultrasonic Testing

| General Examination | | Specific Examination | |
|---------------------|----------|----------------------|----------|
| Level I | Level II | Level I | Level II |
| 40 | 40 | 20 | 20 |

ANNEX A

[INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION] has modified Table I: Level I and Level II Initial Training and Experience Levels in Ultrasonic Testing and NDT, reducing the required experience level to approximately 50% of the hours recommended for full qualification.

[INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION] has added an “Experience by Months (ALTERNATE)” table, with a similar reduction of the required experience level.

[INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION] need not include Training and Examination on the following topics, as described in CP-105 (2011) unless such product categories are included in [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION]'s products:

- 2.4 Pipe and tubular products
- 2.5 Forgings
- 2.6 Castings
- 2.7 Composite structures
- 2.8 Other product forms as applicable – glass, etc.
- 4.0 Evaluation of Bonded Structures

[INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION] shall include Training, Specific Examinations and Practical Examination on the following subjects:

- 1) UT with irregular weld surface conditions, as-welded using [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION]'s joint production process
- 2) If UT is to be performed when the steel temperature immediately adjacent to the weld is above 125°F, UT at the elevated temperature permitted in [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION]'s UT procedures
- 3) If UT is to be performed through applied surface coatings other than couplant, UT through applied surface coatings, including inspection of coating bonding and thickness, at surface coating thicknesses permitted in [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION]'s UT procedures

[INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION] need not include Color Contrast Differentiation examinations as a part of Vision Examination.

SAMPLE FORMS

The "SAMPLE FORMS" attached to this Written Practice are used by [INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION] in the control and administration of the NDT personnel qualification and certification program.

Three Sample Forms are included:

- 1.** *Concise Version – Nondestructive Testing Personnel Qualification Record.* This basic, one-page form is useful in recording an employee's current certification status, latest examination results and recent training record. It does not contain other qualification details such as educational background, past and recent experience, examination details and certification history. It can be used to satisfy most audit requirements, but some auditors may request the additional details.
- 2.** *Full Version – Nondestructive Testing Personnel Qualification Record.* This five-page form can be used to accumulate all pertinent details regarding an employee's NDT personnel qualification and certification status and history. It also provides for various required approvals and authorizations. As such, it can be used to back up the Concise Version, in the event that a full audit is conducted and such details are requested.
- 3.** *Record of Authorizations and Designations.* A written practice developed around the detailed provisions of SNT-TC-1A necessarily makes reference to various options for establishment and delegation of authority. This form facilitates the recording of authorizations and designations, if such delegations are elected. Used in combination with the Full Version – Nondestructive Testing Personnel Qualification Record, all authorizations, designations and approvals referred to in SNT-TC-1A, 2011 edition, are covered.

[INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION]

NONDESTRUCTIVE TESTING PERSONNEL QUALIFICATION RECORD

Employee Name _____ ID _____

Current Status Trainee Level I Level II Level II-Limited

Method _____ Certification Date _____

Technique(s) _____ Expiration Date _____

Recertified By Continuing Satisfactory Performance Date _____ By _____

QUALIFICATION EXAMINATION RESULTS

General _____ Date _____ Admin. By _____
(Insert Score)

Specific _____ Date _____ Admin. By _____
(Insert Score)

Practical _____ Date _____ Admin. By _____
(Insert Score)

Composite Score _____ Verified By _____

VISION EXAMINATIONS

Near Vision Acuity (Annual) Date: _____ Admin. By _____

Jaeger Number 1 Jaeger Number 2 Other _____
 Acceptable Unacceptable Corrective Lenses Required Yes No

TRAINING: NDT AND UT RELATED

| Course Title | Date(s) | Duration (Hours) | Instructor | Location | Approved By | Exam(s) Given? |
|--------------|---------|------------------|------------|----------|-------------|---|
| | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N |
| | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N |
| | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N |
| | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N |
| | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N |
| | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N |
| | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N |
| | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N |

The above named employee has satisfactorily met the qualification requirements of the [\[INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION\]](#) Written Practice in accordance with *SNT-TC-1A* (2011). Other details of qualification, if any, are maintained on file and are available for audit upon request.

By _____

Dated _____

[INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION]

NONDESTRUCTIVE TESTING PERSONNEL QUALIFICATION RECORD

Employee Name _____ ID _____

Current Certification Status Level III

Method _____ Certification Date _____

Technique(s) _____ Expiration Date _____

Recertified By Continuing Satisfactory Performance Date _____ By _____

QUALIFICATION EXAMINATION RESULTS

Basic _____ Date _____ Admin. By _____
(Insert Score)

Method _____ Date _____ Admin. By _____
(Insert Score)

Specific _____ Date _____ Admin. By _____
(Insert Score)

Composite Score _____ Verified By _____

VISION EXAMINATIONS

Near Vision Acuity (Annual) Date: _____ Admin. By _____

Jaeger Number 1 Jaeger Number 2 Other _____
 Acceptable Unacceptable Corrective Lenses Required Yes No

TRAINING: NDT and UT RELATED

| Course Title | Date(s) | Duration (Hours) | Instructor | Location | Approved By | Exam(s) Given? |
|--------------|---------|------------------|------------|----------|-------------|---|
| | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N |
| | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N |
| | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N |
| | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N |
| | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N |
| | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N |
| | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N |
| | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N |

The above named employee has satisfactorily met the qualification requirements of the [\[INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION\]](#) Written Practice in accordance with *SNT-TC-1A* (2011). Other details of qualification, if any, are maintained on file and are available for audit upon request.

By _____

Dated _____

[INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION]

NONDESTRUCTIVE TESTING PERSONNEL QUALIFICATION RECORD

Employee Name _____ ID _____ Hire Date _____

EDUCATION

High School or Equivalent _____ Advanced _____

Certificate(s) and/or Degree(s) Obtained/Date(s) _____

Verified: Yes No By: _____

EXPERIENCE (Current Employer)

1. NDT-Related From _____ To _____
NDT Method/Technique(s) _____
Accumulated Hours Method Hours _____ Total NDT Hours _____
Codes, Stds., Specs. Used: _____

2. NDT-Related From _____ To _____
NDT Method/Technique(s) _____
Accumulated Hours Method Hours _____ Total NDT Hours _____
Codes, Stds., Specs. Used: _____

3. NDT-Related From _____ To _____
NDT Method/Technique(s) _____
Accumulated Hours Method Hours _____ Total NDT Hours _____
Codes, Stds., Specs. Used: _____

4. NDT-Related From _____ To _____
NDT Method/Technique(s) _____
Accumulated Hours Method Hours _____ Total NDT Hours _____
Codes, Stds., Specs. Used: _____

EXPERIENCE (Prior Employers)

1. NDT-Related From _____ To _____
NDT Method/Technique(s) _____
Accumulated Hours Method Hours _____ Total NDT Hours _____
Codes, Stds., Specs. Used: _____
Verified: Yes No By _____

2. NDT-Related From _____ To _____
NDT Method/Technique(s) _____
Accumulated Hours Method Hours _____ Total NDT Hours _____
Codes, Stds., Specs. Used _____
Verified: Yes No By _____

3. NDT-Related From _____ To _____
NDT Method/Technique(s) _____
Accumulated Hours Method Hours _____ Total NDT Hours _____
Codes, Stds., Specs. Used _____
Verified: Yes No By _____

4. NDT-Related From _____ To _____
NDT Method/Technique(s) _____
Accumulated Hours Method Hours _____ Total NDT Hours _____
Codes, Stds., Specs. Used _____
Verified: Yes No By _____

TRAINING: NDT AND UT RELATED

| Course Title | Date(s) | Duration (Hours) | Instructor | Location | Approved By | Exam(s) Given? |
|--------------|---------|------------------|------------|----------|-------------|---|
| | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N |
| | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N |
| | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N |
| | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N |
| | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N |
| | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N |
| | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N |
| | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N |
| | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N |
| | | | | | | <input type="checkbox"/> Y <input type="checkbox"/> N |

VISION EXAMINATIONS RECORDS

| Exam Date | Near Vision Acuity | Corrective Lenses Required? | Examined By | Approved By |
|-----------|---|---|-------------|-------------|
| | <input type="checkbox"/> J1 <input type="checkbox"/> J2 <input type="checkbox"/> Other _____ | <input type="checkbox"/> Y <input type="checkbox"/> N | | |
| | <input type="checkbox"/> J1 <input type="checkbox"/> J2 <input type="checkbox"/> Other _____ | <input type="checkbox"/> Y <input type="checkbox"/> N | | |
| | <input type="checkbox"/> J1 <input type="checkbox"/> J2 <input type="checkbox"/> Other _____ | <input type="checkbox"/> Y <input type="checkbox"/> N | | |
| | <input type="checkbox"/> J1 <input type="checkbox"/> J2 <input type="checkbox"/> Other _____ | <input type="checkbox"/> Y <input type="checkbox"/> N | | |
| | <input type="checkbox"/> J1 <input type="checkbox"/> J2 <input type="checkbox"/> Other _____ | <input type="checkbox"/> Y <input type="checkbox"/> N | | |

Limitations/Special Conditions:

By: _____

WRITTEN AND PRACTICAL EXAMINATIONS – LEVEL I AND LEVEL II

| | General | Specific | Practical | Composite |
|--|---------|----------|-----------|-----------|
| Method and Date | | | | |
| Number of Questions or Specimens (Practical) | | | | |
| Administered By | | | | |
| Graded By | | | | |
| Approved By | | | | |
| Score | | | | |
| | | | | |
| Method and Date | | | | |
| Number of Questions or Specimens (Practical) | | | | |
| Administered By | | | | |
| Graded By | | | | |
| Approved By | | | | |
| Score | | | | |
| | | | | |
| Method and Date | | | | |
| Number of Questions or Specimens (Practical) | | | | |
| Administered By | | | | |
| Graded By | | | | |
| Approved By | | | | |
| Score | | | | |
| | | | | |
| Method and Date | | | | |
| Number of Questions or Specimens (Practical) | | | | |
| Administered By | | | | |
| Graded By | | | | |
| Approved By | | | | |
| Score | | | | |
| | | | | |
| Method and Date | | | | |
| Number of Questions or Specimens (Practical) | | | | |
| Administered By | | | | |
| Graded By | | | | |
| Approved By | | | | |
| Score | | | | |

*Examination Waived (Reason): _____

WRITTEN EXAMINATIONS – LEVEL III

| | Basic | Method | Specific | Composite |
|---------------------|-------|--------|----------|-----------|
| Method and Date | | | | |
| Number of Questions | | | | |
| Administered By | | | | |
| Graded By | | | | |
| Approved By | | | | |
| Score | | | | |
| | | | | |
| Method and Date | | | | |
| Number of Questions | | | | |
| Administered By | | | | |
| Graded By | | | | |
| Approved By | | | | |
| Score | | | | |
| | | | | |
| Method and Date | | | | |
| Number of Questions | | | | |
| Administered By | | | | |
| Graded By | | | | |
| Approved By | | | | |
| Score | | | | |
| | | | | |
| Method and Date | | | | |
| Number of Questions | | | | |
| Administered By | | | | |
| Graded By | | | | |
| Approved By | | | | |
| Score | | | | |
| | | | | |
| Method and Date | | | | |
| Number of Questions | | | | |
| Administered By | | | | |
| Graded By | | | | |
| Approved By | | | | |
| Score | | | | |

*Examination Waived (Reason): _____

[INSERT THE MBMA MEMBER COMPANY NAME AND LOCATION]

RECORD OF AUTHORIZATIONS AND DESIGNATIONS

[NOTE TO USER: Various sections of the written practice refer to optional designations and delegations of authority, reflecting those options as set forth in SNT-TC-1A (2011). Most required approvals for specific qualification activities are recorded on the Full Version — Nondestructive Testing Personnel Qualification Record sample form. The following form will facilitate the recording of other authorizations and designations or delegations of authority pertaining to the written practice. If any are inappropriate or not applicable, they can be deleted, or others can be added.]

Training

- Outside Agency or Individual Used: [INSERT IDENTIFICATION OF AGENCY OR INDIVIDUAL]
Course(s): [INSERT COURSE TITLE(S)]
Designated/Approved By: [INSERT THE IDENTITY OF THE LEVEL III OR OTHER COMPANY OFFICIAL]
Effective: [INSERT APPROPRIATE DATE(S)] Expiration: [INSERT APPROPRIATE DATE(S)]

Examinations

Vision Examination(s)

- Vision Examination(s): Performed By: [INSERT THE IDENTITY OF THE EMPLOYER'S MEDICAL STAFF OR OTHER DESIGNATED FUNCTION]
Designated/Authorized By: [INSERT THE IDENTITY OF THE LEVEL III OR OTHER COMPANY OFFICIAL]
Effective: [INSERT APPROPRIATE DATE(S)] Expiration: [INSERT APPROPRIATE DATE(S)]

Written and Practical Examinations

- General Written Examination (Levels I/II): [INSERT APPROPRIATE LEVEL(S) AND METHOD(S)]
Delegated To: [INSERT IDENTITY OF DELEGATE] By: [INSERT IDENTITY OF DELEGATING AUTHORITY]
For: Administration Monitoring Scoring All
Effective: [INSERT APPROPRIATE DATE(S)] Expiration: [INSERT APPROPRIATE DATE(S)]
- Specific Written Examination: [INSERT APPROPRIATE LEVEL(S) AND METHOD(S)]
Delegated To: [INSERT IDENTITY OF DELEGATE] By: [INSERT IDENTITY OF DELEGATING AUTHORITY]
For: Administration Monitoring Scoring All
Effective: [INSERT APPROPRIATE DATE(S)] Expiration: [INSERT APPROPRIATE DATE(S)]
- Practical Examination: [INSERT APPROPRIATE LEVEL(S) AND METHOD(S)]
Delegated To: [INSERT IDENTITY OF DELEGATE] By: [INSERT IDENTITY OF DELEGATING AUTHORITY]
For: Administration Monitoring Scoring All
Effective: [INSERT APPROPRIATE DATE(S)] Expiration: [INSERT APPROPRIATE DATE(S)]

Basic Written Examination:

Delegated To: [INSERT IDENTITY OF DELEGATE] By: [INSERT IDENTITY OF DELEGATING AUTHORITY]

For: Administration Monitoring Scoring All

Effective: [INSERT APPROPRIATE DATE(S)] Expiration: [INSERT APPROPRIATE DATE(S)]

Method Written Examination: [INSERT APPROPRIATE METHOD(S)]

Delegated To: [INSERT IDENTITY OF DELEGATE] By: [INSERT IDENTITY OF DELEGATING AUTHORITY]

For: Administration Monitoring Scoring All

Effective: [INSERT APPROPRIATE DATE(S)] Expiration: [INSERT APPROPRIATE DATE(S)]

Certifications

Level I and Level II Certifications Authorized By: [INSERT IDENTITY OF THE DESIGNATED LEVEL III OR OTHER COMPANY OFFICIAL]

Effective: [INSERT APPROPRIATE DATE(S)] Expiration: [INSERT APPROPRIATE DATE(S)]

Level III Certifications Authorized By: [INSERT IDENTITY OF THE DESIGNATED COMPANY OFFICIAL]

Effective: [INSERT APPROPRIATE DATE(S)] Expiration: [INSERT APPROPRIATE DATE(S)]