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PERFORMANCE SPECIFICATION

TRAINING DATA PRODUCTS

This specification is approved for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This performance specification for training data products (See 6.5.27) establishes data requirements to support the life-cycle maintenance of training data products and is a source document for training (See 6.5.26) related Data Item Descriptions (DIDs). This specification may be used by contractors and the Government in establishing the training data requirements to be delivered.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commander, Naval Air Warfare Center Aircraft Division, Code 414100B120-3, Highway 547, Lakehurst, NJ 08733-5100, by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

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2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3 and 4 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3 and 4 of this specification, whether or not they are listed.

2.2 Non-Government publications. The following document(s) form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted are those listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DoDISS are the issues of the documents cited in the solicitation.

Interactive Multimedia Association Recommended Practices for Interactive Courseware Portability (not Government adopted)

(Requests for copies should be addressed to the Interactive Multimedia Association, 48 Maryland Avenue (Suite 202), Annapolis, MD 21401-8011.)

2.3 Order of precedence. In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 General. The contractor shall use, to the maximum extent possible, all previously developed data that can be applied toward satisfying the data requirements of this specification. This includes Government furnished data and data developed by the contractor incident to other contractual requirements.

3.1.1 Front matter. The content of front matter (See 6.5.7) for specified training data products shall conform to Appendix A of this document, except for the Training Conduct Support Document.

3.2 Training data product performance requirements. The training data products shall support personnel performance requirements. The training data products shall provide the information necessary to support attainment of the physical and mental skills and attitudes required for mission accomplishment. The performance requirements associated with each training data product and it's associated DID (See 6.3) are as follows:

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3.2.1 Training situation document. This training data product shall provide specific requirements data necessary to verify the efficiency of a training system (See 6.5.30) to meet existing training needs and to survey training programs and technologies for applicability to new training needs.

3.2.2 Instructional performance requirements document. This training data product shall provide specific personnel performance requirements data necessary to support the design of a training program.

3.2.3 Instructional media requirements document. This training data product shall provide specific requirements data necessary for the development of instructional media (See 6.5.8).

3.2.4 Instructional media design package. This training data product shall provide specific requirements data for documentation necessary for the development and production of courseware (See 6.5.5).

3.2.5 Training program structure document. This training data product shall provide information necessary for the acquisition of resources for the conduct of training. It shall also provide information necessary for training implementation management.

3.2.6 Course conduct information package. This training data product shall provide data required by the Government for outsourcing (See 6.5.16) the conduct of training. This product shall provide sufficient information for an accurate evaluation of a student's (See 6.5.22) capabilities to meet all objectives of a course (See 6.5.3) and shall identify prerequisite (See 6.5.17) knowledge and skills (See 6.5.20) of students entering the course. This product shall inform students of the training syllabus, organization, operation, scheduling, and other pertinent information. This product shall also provide information on an evaluation of a trainee's (See 6.5.25) performance, the trainee evaluation of training, and shall provide the trainee with a certificate of training.

3.2.7 Training conduct support document. This training data product shall provide definition and direction for instructors and trainees for the conduct of formal training. This product also supports the trainee's mastery of knowledge, skills, and attitudes for a given subject.

3.2.8 Training evaluation document. This training data product shall provide specific requirements data necessary to determine the effectiveness of training.

3.2.9 Test package. This training data product shall provide specific requirements data necessary for the examination of an individual's knowledge, skills, attitudes, and achievement of learning objectives (See 6.5.11).

3.2.10 Instructional media package. This training data product shall provide specific data necessary to support the transfer of knowledge, skills, and attitudes by use of instructional media.

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3.2.11 Training system support document. This training data product shall provide specific data necessary for the operation and life-cycle software configuration management of a training system.

4. VERIFICATION

4.1 Classifications of inspections. This specification provides two types of verification (Type A and Type B) which can be used for the verification of training data products. Acceptable evaluation criteria values shall be as specified in the contract. The inspection requirements specified herein are classified as follows:

a. Training data product accuracy and completeness verification procedures (See 4.2.1).
b. Training data product life-cycle maintenance verification procedures (See 4.2.2).

4.2 Training data product accuracy verification. Verification Types A and B, listed below, shall be used to verify the accuracy, completeness, and life-cycle maintenance capability of each training data product as specified in the contract. Each verification type involves two steps: 1) examine the product to determine the percentage of accuracy and, 2) evaluate the results of the examination conducted in step one to determine that the evaluation criteria values specified in the contract are met. Examine and evaluate – these words are used throughout this section and are to be viewed as separate but related steps of the verification process. The quantity of training data to be examined and the evaluation criteria values (stated as a percentage or as pass/fail) shall be as specified in the contract. Equipment hazard, personnel safety, and environmental related data shall be examined for 100% accuracy. The evaluation will be a review of the examination results and a determination as to whether the training data product meets, exceeds, or fails to meet the evaluation criteria values (stated as a percentage or pass/fail) as stated in the contract. The Government maintains the right to re-examine data to ensure its integrity. Verification requirements and the criteria for determining performance are as follows:

4.2.1 Training data product accuracy and completeness verification procedures (Type A). Examination and evaluation of the data contained in the training data product shall verify accuracy and completeness as follows:

a. Step 1: Examinations shall confirm traceability of the training data to the mission and design parameters. Examinations shall determine a percentage of accuracy for the data that was examined. The quantity of training data to be examined for completeness, scope of coverage, comprehensiveness, clarity, logical sequence, accuracy, and references shall be as specified in the contract.
b. Step 2: Evaluations shall validate the integrity of the data. Evaluations shall determine if the results of the examination meet contract requirements. Results of the examinations shall be evaluated during progress reviews, acceptance inspections, course trials (See 6.5.4), and small group trials (See 6.5.21) as specified in the contract.

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4.2.2 Training data product life-cycle maintenance verification procedures (Type B). Examination and evaluation of the data contained in the training data product shall verify data life-cycle maintenance capability (See 6.5.15) as follows:

a. Step 1: Examinations shall confirm that an audit trail exists among the training data product, other training data products, and the mission/system configuration. Examinations shall determine a percentage of accuracy for the data that was examined. The quantity of data to be examined for the existence of an audit trail shall be as specified in the contract.
b. Step 2: Evaluations shall validate the integrity of the audit trail. Evaluations shall determine if the results of the examination meet contract requirements. Results of the examinations shall be evaluated during progress reviews, acceptance inspections, course trials, and small group trials, as specified in the contract.

4.2.3 Training data product performance requirements/verification criteria cross-reference. Table I provides a cross-reference between the Section 3 performance requirements paragraph and the corresponding Section 4 verification criteria paragraph for each training data product.

TABLE I. Performance requirements/verification criteria cross-reference.

TRAINING DATA PRODUCT	MIL-PRF-29612 Section 3 paragraph	MIL-PRF-29612 Section 4 paragraph
Training situation document	3.2.1	4.3.1
Instructional performance requirements document	3.2.2	4.3.2
Instructional media requirements document	3.2.3	4.3.3
Instructional media design package	3.2.4	4.3.4
Training program structure document	3.2.5	4.3.5
Course conduct information package	3.2.6	4.3.6
Training conduct support document	3.2.7	4.3.7
Training evaluation document	3.2.8	4.3.8
Test package	3.2.9	4.3.9
Instructional media package	3.2.10	4.3.10
Training system support document	3.2.11	4.3.11

4.3 Data product performance verification. Specific examination and evaluation requirements for each of the training data products are as follows:

4.3.1 Training situation document. The following verification procedures shall be performed for the training situation document:

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4.3.1.1 Training situation document - Type A. Examinations and evaluations shall be performed as follows:

a. Examine the data that describes the existing training situation to determine that it is sufficient to support the conduct of a situation analysis. Evaluate the data using a pass/fail method.
b. Examine the training situation analysis data to determine that the impact statements provide an accurate description of the specific resource deficiencies or excesses caused by the situation. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
c. Examine the training situation analysis data to determine that the recommendations support the most cost effective alternative. Evaluate the data using a pass/fail method.
d. Examine the training technology assessment data to determine if similar systems that were analyzed had features applicable to the new training requirement. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
e. Examine the training technology assessment data to determine if the simulation and instructional features list provides the optimal mix of training equipment (See 6.5.28) required to support the training under study. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.

4.3.2 Instructional performance requirements document. The following verification procedures shall be performed for the instructional performance requirements document:

4.3.2.1 Instructional performance requirements document - Type A. Examinations and evaluations shall be performed as follows:

a. Examine the document to determine whether training program design parameters are traceable to specific program mission elements to be supported by the training. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
b. Examine the performance data concerning collective and individual task (See 6.5.24) statements, performance measures and levels, and affected occupational skill areas to determine their relationship with personnel performance requirements. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
c. Examine the learning objectives to determine that each describes the behavior, condition, and standard required to support the related task performance. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
d. Examine the task descriptions to determine that each describes a single unit of specific work behavior with clear beginning and ending points, and is directly observable or

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otherwise measurable. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.

e. Examine the task difficulty level, conditions, and standards of the learning objectives, and the learning (See 6.5.9) difficulty required to identify student target population (See 6.5.23) prerequisites to determine the data accuracy. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
f. Examine the learning objectives data to determine if the learning objectives, learning types, instructional methodologies, learning hierarchies, and instructional setting supports the minimum learning requirements for personnel performance. Evaluate the data using a pass/fail method.
g. Examine the training course mission, recommended course length, and class size data to determine the supportability of student throughput requirements. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
h. Examine the data concerning media to determine if learning objectives are supported by the recommended materials. Evaluate the data using a pass/fail method.
i. Examine the learning objectives hierarchies data and flow diagrams to determine that they will support the development of a cost effective course of instruction. Evaluate the data using a pass/fail method.
j. Examine the learning objectives data to ensure the strategy for combining, sequencing, and presenting learning objectives will support course development. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
k. Examine the learning objectives data to determine:

    (1) Traceability of the learning objective to the particular task that it supports.
    (2) Adequacy of the learning objectives for developing lesson (See 6.5.12) materials.

    Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
l. Examine the Personnel Performance Profile (PPP) item number to determine if it reflects the correct knowledge and skill category. Evaluate the data using a pass/fail method.

4.3.2.2 Instructional performance requirements document - Type B. Examine the quantity of data relating to the audit trail among performance tasks, learning objectives, and media as specified in the contract. Evaluate the results of the examinations during acceptance inspections and course trials to verify data life-cycle maintenance capability as specified in the contract. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.

4.3.3 Instructional media requirements document. The following verification procedures shall be performed for the instructional media requirements document:

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4.3.3.1 Instructional media requirements document - Type A. Examinations and evaluations shall be performed as follows:

a. Examine the media selection model data to determine its capability to support the identification of cost effective media for the specified training requirement. Evaluate the data using a pass/fail method.
b. Examine the instructional media requirements document to determine whether the instructional media delivery system recommendations are traceable to specific mission elements. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
c. Examine the cost effectiveness and alternative analysis study results to determine that results are accurately reflected in the recommendations for primary and alternate instructional media delivery systems. Evaluate the data using a pass/fail method.
d. Examine the data concerning alternatives to determine whether each alternative considered will support the training requirement. Evaluate the data using a pass/fail method.
e. Examine the sensory stimulus (See 6.5.19) requirements to determine their accuracy for supporting each of the specified learning objectives. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
f. Examine the recommended instructional media delivery system data to determine the capability to support the learning objective stimulus requirements. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
g. Examine the instructional media delivery system functional characteristics data to determine the traceability to the sensory stimulus requirement. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
h. Examine the functional characteristics data to determine whether the characteristics are stated in performance terms. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
i. Examine the training system modification data to determine that all training deficiencies are satisfied. Evaluate the data using a pass/fail method.

4.3.4 Instructional media design package. The following verification procedures shall be performed for the instructional media design package:

4.3.4.1 Instructional media design package - Type A. Examinations and evaluations shall be performed as follows:

a. Examine the summary description of the training program data to determine if resources required to operate the instructional media package can be provided by the Government. Evaluate the data using a pass/fail method.

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b. Examine the courseware design strategy to determine that all critical elements have been addressed. Evaluate the data using a pass/fail method.
c. Examine the lesson strategy to determine its ability to support the development of lessons. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
d. Examine the lesson strategy and resulting prototype lesson to determine if the prototype lesson conforms to the lesson format guide (See 6.5.13). Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
e. Examine the lesson design strategies for traceability to the applicable learning objective, and the scope of lesson strategies for appropriateness to the related task learning difficulty. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
f. Examine the lesson strategy for traceability to the courseware development process. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
g. Examine the remediation (See 6.5.18) and branching design criteria (See 6.5.2) to determine whether they allow for differences in learning processes. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
h. Examine the performance tracking control features to ensure sufficient features are included to obtain all information necessary for student tracking and progress reporting. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
i. Examine the courseware logic flow diagrams (See 6.5.6) to determine that the diagrams contain sufficient data to support the development of courseware. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.

4.3.4.2 Instructional media design package - Type B. Examine the quantity of data relating to the audit trail among course strategy, lesson strategy, lesson content, tasks, learning objectives, and flow diagrams as specified in the contract. Evaluate the results of the examinations during acceptance inspections and course trials to verify data life-cycle maintenance capability as specified in the contract. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.

4.3.5 Training program structure document. The following verification procedures shall be performed for the training program structure document:

4.3.5.1 Training program structure document - Type A. Examinations and evaluations shall be performed as follows:

a. Examine the training planning data to determine that the training needs and training strategies support mission requirements by course, training program, and Service

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component for peacetime and mobilization. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.

b. Examine the training planning data (including justification and impact) to determine that it is traceable to mission needs and training requirements. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
c. Examine training planning data concerning the milestone schedules to determine whether proposed milestone schedules support the parent program schedules. Evaluate the data using a pass/fail method.
d. Examine the training planning resource requirements and availability data to determine traceability to course data and milestone schedules. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
e. Examine the training course data to determine whether it will support management of development and the conduct of training. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.

4.3.5.2 Training program structure document - Type B. Examine the quantity of data relating to the audit trail among mission needs, training requirements, course data, and resource requirements as specified in the contract. Evaluate the results of the examinations during acceptance inspections and course trials to verify data life-cycle maintenance capability as specified in the contract. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.

4.3.6 Course conduct information package. The following verification procedures shall be performed for the course conduct information package.

4.3.6.1 Course conduct information package - Type A. Examinations and evaluations shall be performed as follows:

a. Examine the trainee orientation guidance data to determine that it contains all information required to introduce the student to all aspects of the training course. This includes examination of data related to the organization conducting the training, student reporting, housing, messing, transportation, syllabus, course scheduling, and student record keeping. Evaluate the data using a pass/fail method.
b. Examine the training course standards data to determine that student prerequisite skills have been identified. Evaluate the data using a pass/fail method.
c. Examine the training course standards data to determine that sufficient information is provided to measure a graduate student's capability to meet the terminal learning objectives and enabling learning objectives. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
d. Examine training course standards data to determine that terminal learning objectives and enabling learning objectives meet the training requirement. Evaluate the data using a pass/fail method.

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e. Examine the trainee materials data (student handouts) to determine that all information necessary to support the student's achievement of the terminal learning objectives and enabling learning objectives is included. The evaluation shall consist of a small group trial method as specified in the contract. Evaluate the data using a pass/fail method.
f. Examine the trainee and training course completion data to determine that all requirements were addressed. Evaluate the data using a pass/fail method.
g. Examine the trainee and training course completion data to determine that the instructor was properly prepared to conduct the course, that the time allocated and training method used for each lesson was satisfactory, and that each student achieved the course objectives. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
h. Examine the trainee and training course completion data to determine that a course completion certificate has been prepared for each student who successfully completed the course. Evaluate the data using a pass/fail method.

4.3.6.2 Course conduct information package - Type B. Examine the quantity of data relating to the audit trail among the course objectives, terminal learning objectives, and enabling learning objectives as specified in the contract. Evaluate the results of the examinations during acceptance inspections and course trials to verify data life-cycle maintenance capability as specified in the contract. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.

4.3.7 Training conduct support document. The following verification procedures shall be performed for the training conduct support document:

4.3.7.1 Training conduct support document - Type A. Examinations and evaluations shall be performed as follows:

a. Examine the document to determine that the front matter content requirements have been accurately documented and logically sequenced to reflect program design and training applicability parameters. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
b. Examine the lesson plan (See 6.5.14) data to determine that required definition and direction exists for the instructor to promote the effective, efficient transfer of knowledge, skills, and attitudes. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
c. Examine data contained in individual lessons to determine accuracy of content. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract. The examination of data, required to prepare the instructor to conduct the lesson, shall include the following:

    (1) The traceability of the learning objective to training task.
    (2) The traceability of the lesson topic to course objective.

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(3) The traceability of the lesson topic to learning objective.
(4) Classroom -vs.- laboratory ratio for skill type learning objectives.
(5) The traceability of the learning activity (See 6.5.10) data to the enabling learning objective.
(6) Hierarchical sequencing (simplest to most complex) of discussion points within lessons.

d. Examine the trainee guide to determine the correlation of data between the lesson plan data and trainee guide data. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
e. Examine the On-the-Job Training (OJT) Handbook data to determine traceability to the training requirement. Evaluate the data using a pass/fail method.
f. Examine the OJT Handbook to ensure it supports independent student learning. Evaluate the data using a pass/fail method.
g. Examine the display quality of the visual aids to determine they enhance the learning process. Evaluate the display quality of the visual aids using a pass/fail method.
h. Examine the training material (See 6.5.29) change data to determine the completeness of the change package compared to the basis for the change requirement. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.

4.3.7.2 Training conduct support document - Type B. Examine the quantity of data relating to the audit trail among tasks, learning objectives, lessons, topics, and training equipment/media as specified in the contract. Evaluate the results of the examinations during acceptance inspections and course trials to verify data life-cycle maintenance capability as specified in the contract. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.

4.3.8 Training evaluation document. The following verification procedures shall be performed for the training evaluation document:

4.3.8.1 Training evaluation document - Type A. Examinations and evaluations shall be performed as follows:

a. Examine the training evaluation planning data to determine whether the data will support a complete evaluation of the specified training element. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
b. Examine the training evaluation results data to determine its applicability and data points are appropriate to support evaluation of the specified training element. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.

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c. Examine the training evaluation summary of findings to determine that they are based on data collected. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
d. Examine the training evaluation conclusions and recommendations to determine if they are complete and appropriate. Evaluate the data using a pass/fail method.
e. Examine the instructional delivery system test and evaluation data to determine that operationally critical issues reflect mission essential elements of the specific instructional delivery system. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.

4.3.9 Test package. The following verification procedures shall be performed for the test package:

4.3.9.1 Test package - Type A. Examinations and evaluations shall be performed as follows:

a. Examine the test items to determine that they are sufficient to measure a student's achievement of the related learning objectives. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
b. Examine test items to determine whether each learning objective has been evaluated sufficiently to support variations in tests. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
c. Examine the test item answers to determine that the data is traceable to the supporting reference and that the answers are correct. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
d. Examine the instructions to the examinee to determine that all guidance to be followed while taking the test is complete, pertinent, and necessary. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
e. Examine the tests to determine if safety considerations have been addressed. Evaluate the data using a pass/fail method.
f. Examine the testing schedule in the testing plan to determine that the knowledge and performance tests are scheduled at logical intervals. Evaluate the data using a pass/fail method.
g. Examine the testing plan to determine that the review, remediation, and retesting procedures will provide adequate opportunity for students to achieve the learning objectives. Evaluate the data using a pass/fail method.
h. Examine the test administration data to determine that the answers in the test answer sheet are traceable to supporting documentation. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.

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i. Examine the test administration data to determine that the test answer keys and/or scoring templates are traceable to the test answer sheets. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
j. Examine the test administration data to determine that the computer-based grade computation strategy is correct. Evaluate the data using a pass/fail method.
k. Examine the cross-reference chart to determine whether the relationships among test item, lesson topic, learning objective, training task, and job task are correct. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.

4.3.9.2 Test package - Type B. Examine the quantity of data relating to the audit trail showing the relationships among learning objectives, test questions, and tests as specified in the contract. Evaluate the results of the examinations during acceptance inspections and course trials to verify data life-cycle maintenance capability as specified in the contract. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.

4.3.10 Instructional media package. The following verification procedures shall be performed for the instructional media package:

4.3.10.1 Instructional media package - Type A. Examinations and evaluations shall be performed as follows:

a. Examine the instructional media package data to determine that the video script scene numbers are traceable to the story board. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
b. Examine the instructional media package data to determine that the video script's supporting audio script includes a description of the synchronization with the video action. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
c. Examine the script data sheet/lecture guide data to determine traceability to the instructional media. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
d. Examine the instructional media package data to determine that the program media is supportable with planned resources (hardware). Evaluate the data using a pass/fail method.
e. Examine the instructional media package data to determine that the courseware data files will run unmodified, as designed, on the specified media delivery system with the run-time programs. Evaluate the data using a pass/fail method.

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f. Examine the instructional media package data to determine it's portability capability. This examination shall consist of operating the multimedia training product on a variety of hardware as specified in the contract. Evaluate the data using a pass/fail method.
g. Examine the instructional media package data to determine that the courseware provides stimulus and response cues which support the learning objectives. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
h. Examine the instructional media package data to determine that there are no royalties, recurring licensing or run-time fees, use tax, or similar additional payments for associated presentation programs necessary to interpret and execute the courseware, documentation, or associated training materials. Evaluate the data using a pass/fail method.

4.3.10.2 Instructional media package - Type B. Examine the quantity of data as specified in the contract. Evaluate the results of the examinations during acceptance inspections and course trials to verify data life-cycle maintenance capability as specified in the contract. Examinations and evaluations shall be performed as follows:

a. Examine the instructional media package data to determine that an audit trail exists showing the relationships among scripts, story boards, lecture guides, and data files. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
b. Examine the instructional media package data to determine that the instructional media programs contain all software applications necessary for life-cycle maintenance of the instructional media. Evaluate the data using a pass/fail method.

4.3.11 Training system support document. The following verification procedures shall be performed for the training system support document:

4.3.11.1 Training system support document - Type A. Examinations and evaluations shall be performed as follows:

a. Examine the trainer software application data to determine whether the step-by-step directions for software utilities will accomplish the procedures. Evaluate the data using a pass/fail method.
b. Examine the trainer software application data to determine whether the step-by-step directions for file generation will accomplish the procedures. Evaluate the data using a pass/fail method.
c. Examine the software description and flow diagrams to determine that they depict the functional relationships of the modules and the interfaces between modules. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.

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d. Examine the training system operating data to determine that the configuration and performance characteristics are traceable to the learning objectives. Evaluate the data using a pass/fail method.
e. Examine the training system operating data to determine that the functional description of the training system instructor controls and displays are keyed to a picture of the actual equipment and depict the status of normal operation as well as the malfunction of a particular system or equipment. Evaluate the data using a pass/fail method.
f. Examine the training system operating data to determine that the list of daily readiness checks is provided with instructions for set-up and running, as well as a method for diagnosing the results. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
g. Examine the training system operating data to determine that all emergency procedures have been adequately addressed. Evaluate the data using a pass/fail method.
h. Examine the training system operating procedures data to determine their adequacy. This examination will consist of using the operating procedures to operate the training system. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.
i. Examine the training exercises/malfunctions to determine that each exercise is traceable to the learning objective. Evaluate the level of accuracy determined during the examination against the required percentage of accuracy as specified in the contract.

5. PACKAGING

5.1 Packaging. For acquisition purposes, the packaging requirements shall be as specified in the contract or order (See 6.2). When actual packaging of materiel is to be performed by DoD personnel, these personnel need to contact the responsible packaging activity to ascertain requisite packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activity within the Military Department or Defense Agency, or within the Military Department's System Command. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Intended use. This specification is intended to be used in the acquisition of training data products.

6.2 Acquisition requirements. Acquisition documents must specify the following:

a. Title, number, and date of the specification.

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b. Issue of DoDISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (See 2.2).
c. Packaging requirements (See 5.1).
d. The type of verification (Type A, Type B, or both) required (See 4.2).
e. Which verification examinations and evaluations will be required. Include any additional or alternate verification criteria (See Section 4).
e. Quantity of training data to be examined and evaluated during verification. (See Section 4).
f. Data product performance verification criteria values (percentage or pass/fail) (See Section 4). Equipment hazard, personnel safety, and environmental related data will be examined for 100% accuracy (See 4.2).
g. How and when the verifications will be performed (e.g., progress reviews, acceptance inspections, course trials, small group trials) (See Section 4).
h. The activity (contractor or Government) that will perform the verification examination (See Section 4).
i. The activity (contractor or Government) that will perform the verification evaluation (See Section 4).
j. Activity or program specific format requirements for training data products.

6.3 Associated Data Item Descriptions. This specification is cited in DoD 5010.12-L, Acquisition Management Systems and Data Requirements Control List (AMSDL), as the source document for the following DIDs. When it is necessary to obtain the data, the applicable DIDs must be listed on the Contract Data Requirements List (DD Form 1423), except where the DoD Federal Acquisition Regulations Supplement exempts the requirement for a DD Form 1423.

DID Number	DID Title
DI-ILSS-81517	Training Situation Document
DI-ILSS-81518	Instructional Performance Requirements Document
DI-ILSS-81519	Instructional Media Requirements Document
DI-ILSS-81520	lnstructional Media Design Package
DI-ILSS-81521	Training Program Structure Document
DI-ILSS-81522	Course Conduct Information Package
DI-ILSS-81523	Training Conduct Support Document
DI-ILSS-81524	Training Evaluation Document
DI-ILSS-81525	Test Package
DI-ILSS-81526	Instructional Media Package
DI-ILSS-81527	Training System Support Document

The above DIDs were current as of the date of this specification. The current issue of the AMSDL must be researched to ensure that only current and approved DIDs are cited on the DD Form 1423.

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6.4 Tailoring guidance. Tailoring is the process by which individual requirements (sections, paragraphs, or sentences) of specifications, standards, and related documents are modified to ensure an optimal balance between operational needs and cost. Tailoring specifications may involve the deletion of requirements and/or the identification of alternate or additional verification requirements. This data product specification is written and structured so that referenced documents, requirements, and verification provisions can be readily tailored to suit different applications. The contractor should only provide data to the level of detail specified in the contract and DIDs. The life-cycle support data requirements for the training program should be provided by the Government in the contract. Each training program is unique, therefore, this specification must be tailored to include the minimum data necessary to provide life-cycle training program conduct and maintenance support. Proper tailoring of requirements is vital to a sound, cost effective, and supportable training program. Preparers of solicitations and contracts should tailor the requirements of Sections 3 and 4 of this specification to ensure proper application. Detailed tailoring guidance is provided in
MIL-HDBK-1379-1, Department of Defense Handbook, Guidance for Acquisition of Training Data Products and Services (Part 1 of 4 Parts).

6.5 Definitions. Definitions, acronyms, and terms relating to training are as follows:

6.5.1 Acronyms used in this specification:

a. OJT - On-the-Job Training
b. PPP - Personnel Performance Profile

6.5.2 Branching design criteria. Previously determined paths developed by the designer and influenced by the user's input. Branching is intended to allow for differences in trainees learning processes.

6.5.3 Course. A complete integrated series of lessons that are identified by a common title and/or number.

6.5.4 Course trials. A full length course conducted in a target environment (facilities, instructors and trainees) using the curriculum and supporting training material prepared for that course. It has as its purpose the "shaking down" or "validating" of the curriculum and materials in a classroom situation to determine their effectiveness in attaining the approved learning objectives or training goals.

6.5.5 Courseware. Paper-based, audiovisual, or electronically stored instructional material necessary to deliver a lesson, instructional module, or course. Courseware also includes the special applications programs and other software necessary to present instruction.

6.5.6 Courseware logic flow diagram. A graphic representation of actions/events required in accomplishment of the presentation of a course.

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6.5.7 Front matter. Data required at the beginning of a document to provide purpose, identification, foreword, and other data not included in the body of the document.

6.5.8 Instructional media. The means used to present information to a trainee to induce learning.

6.5.9 Learning. A change in the behavior of the trainee as a result of stimulus or experience. The behavior can be physical and overt, intellectual, attitudinal or a combination of these types of behaviors.

6.5.10 Learning activity. An event intended to promote trainee learning.

6.5.11 Learning objective. A statement of the behavior or performance expected of a trainee as a result of a learning experience, expressed in terms of the behavior, the conditions under which it is to be exhibited, and the standards to which it will be performed or demonstrated.

6.5.12 Lesson. A segment of instruction that contains an objective, information (to be imparted to the trainee), and an evaluation instrument (test).

6.5.13 Lesson format guide. An organized outline of a single lesson that serves as a blueprint for the development of all lessons within a course.

6.5.14 Lesson plan. A plan for instruction that provides specific definition and direction to the instructor on learning objectives, equipment, instructional media material requirements, and conduct of the training.

6.5.15 Life-cycle maintenance capability. The ability to update, modify, and otherwise change training materials and/or equipment after delivery.

6.5.16 Outsourcing. Contracting for good and services required to conduct training.

6.5.17 Prerequisite. A requirement the trainee must possess before being able to attend a training course or lesson.

6.5.18 Remediation design criteria. Previously determined paths developed by the designer and influenced by the user's input. The remediation is intended to re-teach information the trainee has failed to understand. It may also be supplemental instruction to correct student non-understanding of course material or a student learning deficiency.

6.5.19 Sensory stimulus. A capability (e.g., sound, motion, odor, color, scale representation) that activates a human sense.

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6.5.20 Skill. The ability to perform a job related activity that contributes to the effective performance of a task.

6.5.21 Small group trial. Tryout of a training course on a representative sample of the student target population to gather data on the effectiveness of instruction in regard to error rates, criterion test performance, and time to complete the course.

6.5.22 Student. An individual who has been placed in a learning situation in order to acquire skills, knowledge, and attitudes. Also called "trainee".

6.5.23 Student target population. The audience for which training presentation is directed, or the audience for which training materials are designed.

6.5.24 Task. A single unit of specific work behavior with clear beginning and ending points that are directly observable or otherwise measurable. A task is performed for its own sake, that is, it is not dependent upon other tasks, although it may fall in a sequence with other tasks in a duty or job.

6.5.25 Trainee. Identical to the definition for "student".

6.5.26 Training. Instruction and applied exercises for the attainment and retention of knowledge, skills, and attitudes.

6.5.27 Training data product. Contains information related to the analysis, design, development, presentation, evaluation, or the life-cycle maintenance of training, regardless of it's form or physical characteristics.

6.5.28 Training equipment. Items used in the support of training, such as trainers, operational equipment, and other associated hardware.

6.5.29 Training materials. A general term covering plans, control documents, lesson guides, trainee guides and other non-hardware training products.

6.5.30 Training system. An integrated combination of all elements (e.g., training material and equipment, personnel and support) necessary to conduct training.

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6.6 Subject term (key word) listing.

Course
Evaluation
Instructional
Lesson
Media
Test
Training
Training conduct
Training situation

Custodians:
Army - AV
Navy - AS
Air Force -94

Review Activities:
Army - TM
Navy - SH, EC, MC, TD
Air Force - 11
NSA - NS
DLA - CS, GS, IS, DP

Preparing activity:
Navy - AS
(Project: ILSS-0067)

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APPENDIX A

FRONT MATTER CONTENT REQUIREMENTS FOR TRAINING DATA PRODUCTS

A.1 SCOPE

A.1.1 Scope. The front matter content requirements for training data products are included here to eliminate the need to repeat the requirements in each applicable DID.

A.1.2 Application. This appendix is intended for application to training data products. This appendix is a mandatory part of the specification. The information contained herein is intended for compliance as specified in the contract.

A.2 APPLICABLE DOCUMENTS (This section does not apply to this appendix.)

A.3 FRONT MATTER CONTENT FOR TRAINING DATA PRODUCTS

A.3.1 Front matter. Portions of the following data requirements are subject to deletion tailoring dependent on the program requirements:

a. Cover to include:

   (1) Document title.
   (2) Date of preparation.
   (3) The security classification marking shall be in accordance with the National Industrial Security Program Operating Manual (NISPOM), DoD 5220.22-M.

b. List of effective pages.
c. Letter of promulgation.
d. Change record.
e. Hazard awareness notice.
f. Foreword/preface.
g. Definitions.
h. Table of contents.
i. List of illustrations.
j. List of tables.
k. A description of the application of the training data product shall consist of:

   (1) Composition.
   (2) Function.
   (3) Use.
   (4) Assignments.
   (5) Equipment requirements.

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(6) Instruction sheets.
(7) Test requirements.
(8) Division of materials into functional parts.

l. Executive summary.

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STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

INSTRUCTIONS

1. The preparing activity must complete blocks 1,2,3, and 8. In block 1, both the document number and revision letter should be given.
2. The submitter of this form must complete blocks 4, 5, 6, and 7.
3. The preparing activity must provide a reply within 30 days from receipt of the form.

NOTE: This form may not be used to request copies of documents, not to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

I RECOMMEND A CHANGE:	**1. DOCUMENT NUMBER**	**2. DOCUMENT DATE (YYMMDD)**
3. DOCUMENT TITLE		
4. NATURE OF CHANGE (Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.)		
5. REASON FOR RECOMMENDATION		
6. SUBMITTER		
a. NAME (Last, First, Middle Initial)	b. ORGANIZATION	
C. ADDRESS (include Zip Code)	d. TELEPHONE (Include Area Code) (1) Commercial (2) AUTOVON	7. DATE SUBMITTED (YYMMDD)
8. PREPARING ACTIVITY Naval Air Systems Command (PMA205)		
a. NAME Freeman, Jim	b. TELEPHONE (Include Area Code) (1) Commercial (908) 323-7480	(2) AUTOVON DSN: 624-7480
c. ADDRESS (Include Zip Code) Commander, Naval Air Warfare Center Aircraft Division Code 414100B120-3, Highway 547, Lakehurst, NJ 08733-5100	IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT; Defense Quality and Standardization Office 5203 Leesburg Pike, Suite 1403, Falls Church, VA 22041-3466 Telephone (703) 756-2340 AUTOVON 289-2340	

DD Form 1426, OCT 89 Previous editions are obsolete.

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