

MIL-STD-1292 (AV)
3 May 1976

MILITARY STANDARD
CONTRACTOR NEW EQUIPMENT TRAINING PROGRAMS



FSC 69GP

MIL-STD-1292(AV)
3 May 1976

DEPARTMENT OF DEFENSE
WASHINGTON, D.C. 20301

Contract Training Requirements

MIL-STD-1292(AV)

1. This Standard is approved for use by all organizations of the U. S. Army Aviation Systems Command.
2. Recommended corrections, additions, or deletions should be addressed to:

Commander
U.S. Army Aviation Systems Command
ATTN: DRSAV-EKS
St. Louis, MO 63166

MIL-STD-1292 (AV)
3 May 1976

FOREWORD

The intent of this document is to improve the standardization of contractor New Equipment Training Programs. The material contained herein establishes guidelines for training and data requirements necessary in the qualification of DoD personnel as designated by the procuring agency. The contractor New Equipment Training Programs include the installation, operation, repair and check out of systems/equipment. Training will be accomplished by the contractor, on-site at a military installation, the contractor's facility or other activity so designated.

MIL-STD-1292 (AV)
3 May 1976

CONTENTS

	PAGE
1. SCOPE	1
1.1 Purpose	1
1.2 Objective	1
1.3 Application	1
2. REFERENCED DOCUMENTS	1
2.1 Government documents	1
2.2 Source of documents	2
3. DEFINITIONS	3
4. REQUIREMENTS	3
4.1 Contract training programs	3
4.1.1 Operator training courses	3
4.1.2 Instructor/Key Personnel training courses	3
4.1.3 Maintenance training courses	3
4.1.4 Computer programming training courses	3
4.1.5 Specialist training courses	3
4.1.6 Counterpart courses	4
4.1.7 Updating/Refresher courses	4
4.1.8 Aircrew Ground School courses	4
4.1.9 Aircrew Flight courses	4
4.1.10 Staff Planner/Familiarization courses	4
4.2 Contract Training Conference	4
4.3 Conduct of contract training	5
4.3.1 Facilities	5
4.3.1.1 Classroom and laboratory facilities	5
4.3.1.2 Housing and messing facilities	5
4.3.2 Convening schedule	5
4.3.2.1 Course commencement	5
4.3.2.2 Schedule of classes	5
4.3.2.3 Reporting instructions	6
4.3.2.4 System/Equipment availability	6
4.3.3 Instructor qualifications	6
4.3.3.1 Technical qualifications	6
4.3.3.2 Personnel qualifications	6
4.3.4 Student-instructor ratio	6
4.3.5 Evaluation of student progress & performance	7

MIL-STD-1292 (AV)
3 May 1976

	PAGE
4.3.6 Availability of equipment & material for training	7
4.3.7 Monitoring/Inspection	7
4.3.7.1 Monitoring of the training program	7
4.3.7.2 Inspection of facilities	8
4.3.8 Security	8
4.3.8.1 Security clearances	8
4.3.8.2 Security regulations	8
4.4 Additional contract training considerations	8
4.4.1 Instructor advisory services	8
4.4.2 On-the-job training	9
4.4.3 Incremental submission of Draft Training Data	9
4.4.4 Audio/Visual Aids, General	9
4.4.5 Training Aids, Devices, General	9
4.4.6 Suitcase Training Kits	9
4.4.6.1 Packaging of Suitcase Training Kits	9
4.4.7 Quality Assurance Provisions, General	10
4.5 Contract training data requirements	10
APPENDIX A - Glossary of Terms	12

MIL-STD-1292 (AV)
3 May 1976

CONTRACTOR NEW EQUIPMENT TRAINING PROGRAMS

1. SCOPE

1.1 Purpose. This standard establishes the requirements for preparing, validating, verifying, conducting and revising training programs acquired to train military and civilian technicians, instructors or other personnel specified in the contract to operate, program, maintain, repair, overhaul and instruct on the system/equipment. Courses required to support a training program are conducted by a contractor or his subcontractor at a military installation, the contractor's facility or designated activity.

1.2 Objective. The contract training program provides designated instructor, maintenance, programming and operator personnel with necessary knowledge and skills to adequately support or instruct on specific system/equipment. The contract program will be suitable for use by the Government, with only configuration change updates throughout the life cycle of the system/equipment.

1.3 Application. This standard is applicable to training programs for development and production of system/equipment being procured.

2. REFERENCED DOCUMENTS

2.1 The following documents of the issue in effect on date of invitation for bids form a part of this standard to the extent specified herein. Data Item Descriptions under 4.5 will apply for preparation of printed materials required by this standard.

Governmental Specifications

MIL-Q-9858	Quality Program Requirements
MIL-T-23991	Training Devices, Military's General Specifications for
MIL-T-81821	Trainers, Maintenance, Equipment and Services, Ground Specification for

Standards

MIL-STD-1354	Motion Picture Format, Super 8mm
MIL-STD-1850	Motion Picture Format, 16 Millimeter

MIL-STD-1292 (AV)
3 May 1976

MIL-STD-1851	Film Slide, Photographic, 2 inch x 2 inch
MIL-STD-1852	Mount Film Slide, Photographic, Fileable (Overhead Projector)
MIL-STD-1853	Cartridge Co-planner, Magnetic, Type Cpii (Compact Cassette), Audio-Visual Use of
MIL-STD-1854	Film Strip, Photographic, Super 8 Millimeter
MIL-STD-1855	Tape, 1/4 inch, Audio, Magnetic, Recording, Formats for
MIL-STD-1856	Tape, Video, Magnetic, Format for

Manuals

DOD Instruction 5220.22-M	Industrial Security Manual
TD-3	Department of Defense Authorized Data List, Index of Data Item Descriptions

Non-Governmental Document

A.T.A. Specification No. 300	Specification for Packaging of Airline Supplies
---------------------------------	--

2.2 Source of Documents

a. Copies of listed military standards, specifications and DOD manuals should be obtained from the procuring activity or as directed by the contracting officer from the DOD Single Stock Point, Commanding Officer, U. S. Naval Publications and Forms Center, 5801 Tabor Avenue, Philadelphia, Pennsylvania 19120.

b. Applications for copies of the non-government document should be addressed to the Air Transport Association of America, 1709 New York Avenue, N.W., Washington, D. C. 20006.

MIL-STD-1292 (AV)

3 May 1976

3. DEFINITIONS (See Appendix A, Glossary of Terms).

4. REQUIREMENTS

4.1 Contract Training Programs. The contractor shall develop and conduct training course(s) for Government personnel as specified herein. All training will be conducted utilizing an approved Training Course Curriculum Outline (TCCO), based on an approved Task and Skill Analysis, Training Task Analysis, and Maintenance Allocation Chart (MAC). Course classification, when applicable, shall include, but not necessarily be limited to, the following:

4.1.1 Operator Training Courses. Operator courses are specifically developed to provide the necessary information, skill development and practical application required by the student to set up, check out, operate and, when required, perform preventive maintenance on the respective system/equipment. Pilot/Aircrew training, when required, shall be conducted in accordance with paragraph 4.1.8 and 4.1.9.

4.1.2 Instructor/Key Personnel (I&KP) Training Courses. Instructor courses are specifically developed to provide the necessary information, skill development, and practical application required by student instructors to demonstrate, train and instruct other groups of students on the system/equipment, to include use of Ground Support Equipment (GSE) and Special Test Equipment (STE).

4.1.3 Maintenance Training Courses. Maintenance training courses are specifically developed to provide maintenance personnel of appropriate personnel specialities/occupational fields with the necessary information, skill development, check out, inspection, assembly, disassembly, troubleshooting, repair and overhaul of system/equipment for the specified level of maintenance in accordance with the maintenance philosophy applicable to the system/equipment. These courses to include the use of GSE/STE.

4.1.4 Computer Programming Training Courses. Computer programming courses are specifically developed to provide the student with the necessary information, skill development and practical application to flow chart, write, code, assemble, debug and revise programs for system/equipment computers.

4.1.5 Specialist Training Courses. Specialist courses are specifically developed to provide engineers and technicians of appropriate professional specialities with the necessary information, skill development and practical application required to investigate, analyze, determine optimum solutions and implement corrective actions for unique or complex installation, operating, maintenance or support of the system/equipment.

MIL-STD-1292 (AV)
3 May 1976

4.1.6 Counterpart Courses. Counterpart courses are informal training courses established for the direct exchange of information between equivalent contractor and Government professional engineering, technical, Quality Assurance, administrative and supervisory personnel, to determine and provide the information and data necessary for the development of the methods, procedures, processes, techniques, controls, inspections, job standards, training and other functions required to establish complete maintenance and operational support of the system/equipment by Government activities.

4.1.7 Updating/Refresher Courses. Updating/Refresher courses are specifically developed to augment prior training courses or provide previously trained personnel, such as Field Maintenance Technicians (FMTs), with additional training required for support of the system/equipment and use of GSE/STE.

4.1.8 Aircrew Ground School Courses. Aircrew Ground School courses are specifically developed to provide designated aircrew personnel (i.e., Army Aviators and Enlisted Air Crewmen) with the necessary data, information, procedures and techniques required to safely and adequately operate a specific model aircraft.

4.1.9 Aircrew Flight Courses. Aircrew flight courses are specifically developed to provide previously designated aircrew personnel with actual in-flight training and experience in the safe operation, emergency procedures, tactical use and, when applicable, in-flight maintenance of a specific model aircraft, airborne equipment and systems contained therein.

4.1.10 Staff Planner/Familiarization Courses. Staff Planner (or Familiarization) courses are conducted for staff personnel who are engaged in planning, budgeting, and approving programs for development, production and distribution of new or modified equipment. These courses are conducted during the research and development cycle to provide a general review of the entire capabilities and limitations of the equipment, and familiarize personnel with the maintenance or operational features as they apply to a specific piece of equipment.

4.2 Contract Training Conference. When specifically requested by the procuring activity and within 30 days after the execution of the contract, the contractor shall recommend in writing to the procuring activity a date and place for a training conference. The conference shall be convened at such a place and on such a date as agreed upon by the contractor and the procuring activity. Sufficient leadtime will be provided to permit the contractor to adequately plan and prepare the conference agenda. At the training conference, the contractor shall make a

MIL-STD-1292(AV)
3 May 1976

detailed presentation of the proposed training program plan, using Logistic Support Analysis (LSA), drawings and data as may have been developed and are required to define and evaluate the contractor's training approach. The contractor shall provide technical assistance as required. The contractor, procuring activity, training support agent(s) and training agent(s) (or their designated representatives) shall review the training program and reach an agreement upon detailed requirements of the contract training course(s) to be provided. Additional conferences may be held as required by the procuring activity. The preparation and distribution of training conference minutes are the responsibility of the contractor.

4.3 Conduct of Contract Training. Conduct of contract training shall be as specified in 4.3.1 through 4.3.8.2.

4.3.1 Facilities.

4.3.1.1 Classroom and Laboratory Facilities. The contractor shall provide a minimum of 36 square feet of factory classroom floor space and a minimum of 75 square feet of laboratory/shop floor space per student. Space shall be sufficiently soundproof to insure that instructions can be understood and distractions are kept to a minimum. The contractor shall provide adequate heating/cooling, lighting, laboratory facilities, consumable supplies and laboratory and classroom furniture necessary for health, comfort and convenience of the student. Certain requirements specified may be waived with the concurrence of the contracting officer. At Government activities, on-site classroom and laboratory space will be provided by the Government, unless otherwise specified, and will conform to the above requirements if possible.

4.3.1.2 Housing and Messing Facilities. The contractor shall not be responsible for housing or messing facilities or transportation; however, he shall include in his training proposal a resume of housing, messing, medical and transportation facilities available in the local area if the training course(s) is conducted at other than Government facilities.

4.3.2 Convening Schedule.

4.3.2.1 Course Commencement. Unless the contract delivery schedule states otherwise, course convening dates will be scheduled to avoid personnel travel on weekends or established national holidays.

4.3.2.2 Schedule of Classes. Classes shall be scheduled on a 40-hour workweek basis, 8 hours per day, 5 workdays per week, unless otherwise specified by the procuring activity. Class instruction periods

MIL-STD-1292(AV)

3 May 1976

for lecture/demonstration shall normally be 50 minutes duration, with a 10-minute break period between periods of instruction. Length of application periods may vary as the situation determines. A reasonable number of additional hours may be planned and assigned for homework. Holidays shall be made up by additional workdays for the course(s). To meet urgent requirements, the procuring activity may direct a second shift or accelerated training where circumstances and availability of system/equipment so dictate. The daily schedule of the training course(s) shall be conducted so as to allow optimum utilization of the system/equipment by using Government activity.

4.3.2.3 Reporting Instructions. Students reporting for training will be directed to report to a designated individual at the contractor's/subcontractor's facility for endorsement of orders. The names of authorized students for each training course will be provided to the contractor prior to the course convening date. The contractor shall insure that only those personnel designated by the Government are admitted for attendance and participation in training programs procured under the provisions of this standard.

4.3.2.4 System/Equipment Availability. A minimum of 4 hours per day will be provided the contractor for practical application of the system/equipment to be used in the training course(s) at the Government site. Due to conflicts with the using activity's daily schedule, the availability of the system/equipment may be after the hours of 2000 (8:00 p.m.), Monday through Friday.

4.3.3 Instructor Qualifications.

4.3.3.1 Technical Qualifications. Contractor instructors shall possess a thorough technical knowledge of the subject to be taught, including design concepts and theory of operations. He shall possess and be able to demonstrate his ability to perform the maintenance and operational tasks that will be required in the practical or laboratory portion of the training course(s).

4.3.3.2 Personnel Qualifications. Contractor instructors shall have experience as a technical training instructor, which includes successful completion of a military instructor training course or equivalent training and experience. He, as an educator, shall have a professional understanding of principles of learning and teaching methods and be able to demonstrate his ability to apply these principles and methods.

4.3.4 Student-Instructor Ratio. The student-instructor ratio shall be no greater than twelve to one in the theoretical phase of the course

MIL-STD-1292 (AV)

3 May 1976

and no greater than four to one in the laboratory (practical) phase. Deviations may be authorized upon mutual agreement by the procuring activity and the contractor.

4.3.5 Evaluation of Student Progress and Performance. Pretests, progress tests and post-tests shall be developed by the contractor as required. During the conduct of the training course(s), the contractor shall continually evaluate each student and shall administer an average of one progress test on the theoretical and practical phases of the training program per week. The contractor shall notify the appropriate representative of the procuring activity of signs of unsatisfactory progress of any student and of circumstances which may be hindering the progress of the students and the training program.

4.3.6 Availability of Equipment and Material for Training. The contractor shall provide (excluding Government Furnished Equipment (GFE)) training equipment, test equipment, hand tools and materials for the training course(s) when conducted at the contractor's facility. GFE, if requested by the contractor, will be made available in accordance with the training equipment priority directives of the using agency. The contractor shall be responsible for maintaining all equipment and materials used in the training program in an operable/usable condition during each training course, except for those periods of instruction which require rendering equipment inoperable such as disassembly performed as a part of the training course. On completion of a training program, all equipment and materials used therein which are to be returned to or become the property of the Government, shall be refurbished by the contractor and restored to Government acceptance standards prior to requesting disposition instructions. This requirement for refurbishment will not apply to equipment and materials used in training courses at a Government training site when a Government maintenance and repair capability has been previously established or if such effort is covered by separate existing contract or order items.

4.3.7 Monitoring/Inspection. The contractor's facilities or the training site may be visited at any time by designated representatives of the training agent or procuring activity to inspect, monitor or appraise the contractor's performance in developing and conducting the training program.

4.3.7.1 Monitoring of the Training Program. The cognizant representative of the procuring activity may request that a sample lesson or lessons be taught to the proposed instructor(s) before the start of the training course(s). The procuring agency has the right to reject an instructor, using the critique of the instructor's lesson presentation as one of the factors. Visits during the training course(s) by the

MIL-STD-1292(AV)

3 May 1976

representatives of the procuring activity and training agent will be made to monitor and appraise the training program to determine if the objectives and training requirements are being met.

4.3.7.2 Inspection of Facilities. Designated representatives of the procuring activity or training agent may visit the contractor's facilities prior to the start of the training course(s) to approve classroom and laboratory facilities. This inspection shall determine the adequacy of the areas and the satisfactory arrangement and provisioning of the training site,

4.3.8 Security.

4.3.8.1 Security Clearances. The contractor shall forward security clearances and visit requests to the Government installations for contractor instructors, equipment operators, etc., at least 60 days prior to the start of the training program. The procuring activity will instruct Government students/command to submit appropriate security clearances to the cognizant Government representatives at the contractor's activity or military command at the training site.

4.3.8.2 Security Regulations. The contractor shall observe the security requirements applicable to the system/equipment upon which the training is to be conducted. This shall apply to personnel, training, materials and space being utilized for the training program. Security guidance shall be in accordance with the Industrial Security Manual (DoD 5220.22-M).

4.4 Additional Contract Training Considerations.

4.4.1 Instructor Advisory Services. When required, the contractor shall provide qualified instructor personnel to perform the instructor advisory services. These instructor advisory services shall be performed at such locations or facilities as directed by the contract. Normally, the instructor advisory will not be required prior to delivery of the system/equipment for training purposes and bulk training materials to the military schools. The instructor(s) assigned to provide these services will be required to perform one or more of the following: (1) Assist Government instructors in the preparation and improvement of training material and in conducting the training course(s); (2) Develop or revise training data and aids for training course(s) now in existence or proposed for use at Government schools; (3) Instruct Government personnel on the system/equipment. This may consist of conducting the initial training (pilot) course(s) on the system/equipment at military sites; (4) Assist Government instructors in the initial set up and check out of training material at the Government site; (5) Provide technical assistance to Government instructors and training school staff to insure proper operation, maintenance and repair of system/equipment.

MIL-STD-1292(AV)
3 May 1976

4.4.2 On-the-job-Training. If required, after a training course has been conducted by a contractor, the contractor shall provide on-the-job training (OJT) to the maintenance personnel and/or instructor(s) assigned to the system/equipment. The contractor shall use his CFS (Contract Field Service) representative(s), who was/were assigned to maintain the system/equipment or factory instructor personnel, to conduct OJT. If the CFS representative(s) is to be utilized, his/their duties shall be coordinated so as not to interfere with previously assigned CFS duties, as described under a separate contract line item. The CFS representative shall progressively decrease his direct maintenance and increase his OJT efforts during the interim support period so that Government maintenance personnel will assume full maintenance responsibility of the system/equipment prior to the end of the interim support period. The OJT shall not interfere with the using activity's utilization of the system/equipment.

4.4.3 Incremental Submission of Draft Training Data. When specified on the DD Form 1423, draft copies of Training Data; i.e., Programs of Instruction, Training Manuals, etc., shall be submitted in sections (blocks of instruction) for approval by the procuring agency. Incremental submittal of Training Data in sections is required as curricula development progresses within the contractor's training organization. The procuring agency shall review Training Data for content and format within 15 working days after receipt. All sections shall be approved by the procuring agency at least 10 working days prior to the start of the training course. Draft copies submitted are for review purposes only and shall not be considered as data delivered in accordance with DD Forms 1423.

4.4.4 Audio/Visual Aids, General. Audio/Visual (AV) shall be prepared in accordance with applicable paragraph of MIL-T-81821 and MIL-STD-1850, -1851, -1852, -1853, -1854, -1855, -1856, and MIL-STD-1354.

4.4.5 Training Aids, Devices, General. When required, the contractor shall provide the procuring activity with Detail Trainer Specifications. Trainer Specifications shall meet the requirements set forth in MIL-T-81821 and MIL-T-23991.

4.4.6 Suitcase Training Kits. To provide a training capability during Development Test/Operational Test, the contractor shall propose a training kit for each major area of instruction. Each training kit shall consist of sufficient training materials to enable an instructor to conduct follow-on training courses to test personnel.

4.4.6.1 Packaging of Suitcase Training Kits. Unless otherwise specified, training kits shall be packaged to conform to CAT I Containers, ATA Specification 300.

MIL-STD-1292(AV)
3 May 1976

4.4.7 Quality Assurance Provisions, General. An organized Quality Assurance program shall be established in accordance with MIL-Q-9858. Each training item; i.e., Training Device/Aid, Training Kit, etc., specifically manufactured or produced to support contractor New Equipment Training programs shall be inspected to determine compliance with the requirements specified in the Scope of Work or Detail Specification with respect to materials, parts, design, construction, safety, workmanship, name plates and markings.

4.5 Contract Training Data Requirements. The contractor shall apply the systems approach in the development and preparation of the training program. Data reflecting this technique, as selected for the applicable training program, will be submitted as required by the Contract Data Requirements List (DD Form 1423) attached to the Request for Proposal (RFP), Invitation for Bid (IFB) or the contract as appropriate. Readability level and its validation for data items, will be as specified by the procuring activity. Data Item Descriptions of TD-3, which are applicable to this standard, are listed below. The issues in effect on date of contract form a part of the specification to the extent specified therein.

<u>Title</u>	<u>Data Item No.</u>
Reports, Engineering Change Status, Maintenance Training Equipment (MTE)	DI-E-6118
Report, Equipment Configuration/Accountability, MTE	DI-E-6119
Specification, Trainers, Maintenance Equipment and Services	DI-E-6122
Index, Audio/Visual Aids-Training Equipment and Training Courses	DI-E-6123
Audio/Visual Aids, Master Reproducibles and Review Copies, Training Equipment & Training Courses	DI-E-6124
Exhibits, Engineering Change Proposals-Training Courses MTE, Related Items and Services	DI-E-6204
Report, Cost MTE	DI-F-6125
Report, Funding Status, Basic Ordering Agreement, Maintenance Equipment	DI-F-6203
Report, Make or Buy Analysis, MTE	DI-H-6100
Report, Material Requirements/Receipt MTE	DI-H-6103
Outlines, Acceptance and Test MTE	DI-H-6129
Task and Skill Analysis Report	DI-H-6130
Training and Training Equipment Plan	DI-H-6131
Records, Equipment Service, MTE	DI-H-6132
Manuals, Photographic, MTE	DI-H-6133
Reports, Engineering and Production Progress, MTE	DI-H-6134

MIL-STD-1292 (AV)
3 May 1976

<u>Title</u>	<u>Data Item No.</u>
Reports, Facilities, MTE	DI-H-6135
Reports, Acceptance, MTE	DI-H-6136
Reports, Rejected Nonoperable Parts Utilization, MTE	DI-L-6139
Manuals, Operation and Maintenance Instruction, MTE	DI-M-6152
Report, Material Shortage, MTE	DI-P-6164
Forms, Student Evaluation - Training Course	DI-P-6167
Outlines, Training Courses	DI-H-6197
Guides, Lesson Training Courses	DI-H-6198
Sheets, Student Info/Instructor Training Courses	DI-H-6199
Proposals, Training Courses and Instructor Training Services	DI-P-6200
Minutes, Conferences, Formal Reviews, Inspections and Audit - Training Equipment and Courses	DI-P-6201
Agenda, Conferences & Conferences Requests, Training Equipment and Training Courses	DI-P-6202
Charts, Milestones - MTE	DI-H-6205

Custodian:

Army - AV
Navy -
Air Force -

Preparing Activity:

Army - AV

Project No. 69GP-A040

MIL-STD-1292 (AV)
3 May 1976

APPENDIX A

GLOSSARY OF TERMS

AUDIO-VISUAL EQUIPMENT

An item of equipment, such as a film projector, used to display or present audio-visual materials for recreational or operational purposes. When the item of equipment is used for instructional purposes, it is referred to as "training aid equipment (instructional aid equipment)."

BEHAVIORAL OBJECTIVES

Objectives written in a specified manner in order to achieve a clear and complete statement of instructional intent. See "Objectives."

CLOCK-HOUR

An hour (60 minutes) of instruction.

CONTACT-HOUR

An hour (60 minutes) of instruction (either "hands-on" or lecture). See "Clock-Hour."

CONTRACT FIELD SERVICES (CFS)

Those engineering and technical services provided to DoD personnel by commercial or industrial companies on-site at defense locations by trained and qualified engineers and technicians. CFS personnel must possess specialized knowledge, experience, and skills, or have access to information covering the installation, operation, and maintenance of DoD weapons equipment and systems. Contractors providing field service personnel must have adequate staff, finances, and organizational and technical capability to ensure the economical and competent performance of their contracts.

CONTRACT PLANT SERVICES (CPS)

Those engineering and technical services provided to DoD personnel by a manufacturer of military equipment or components in the manufacturer's plant and other facilities by trained and qualified engineers and technicians employed by the manufacturer. Formal factory training is within the scope of the CPS.

MIL-STD-1292(AV)
3 May 1976

CRITERION TEST (under TESTS)

A measurement tool used to measure observable behavior.

CURRICULUM

1. A training program or course of instruction conducted within a military or technical school.
2. An expansion of the curriculum outline into specific topics, along with detailed topic objectives, to include behavior, conditions and standards.

DIFFERENCE TRAINING

Training of personnel which updates, raises or expands the student's knowledge beyond that originally taught. The acquisition of new skills by the student on new associated equipment to tie into skills previously acquired.

DOUBLE SHIFT

The use of school facilities for more than the normal 8-hour workday. Double shift scheduling is used with reference to the provision of sessions of instruction twice a day. Double-shifting is employed in activities where classrooms or laboratories are insufficient on a single-shift basis for the student load enrolled, but where sufficient berthing and messing facilities are available.

EVALUATION

A logical, deliberate process of making judgments and decisions to appraise the value of a method, procedure, process, etc. In training it consists of the following steps:

- a. Determining the purposes or objectives
- b. Determining the criteria
- c. Obtaining information
- d. Making judgments
- e. Making decisions

MIL-STD-1292(AV)
3 May 1976

FACTORY TRAINING

Training or instructions provided by a vendor or manufacturer of equipment, system or device that is furnished to the Government, regardless of the site at which the training is conducted. Also known as contractor plant services (CPS), contract specialized training and contract training.

FIELD MAINTENANCE TECHNICIAN (FMT)

A DoD individual who provides technical advice and assistance relating to the installation, operation, maintenance and supply of equipment; maintenance oriented (AMCR 700-100).

FIELD SERVICE REPRESENTATIVE (FSR)

An employee of a manufacturer of military equipment or components who provides a liaison or advisory service between his company and military users of his company's equipment or components. This service is an important element in providing a technical communication channel between the producer and the military field users.

GOVERNMENT-FURNISHED EQUIPMENT (GFE)

Equipment(s) which have been selected and are to be furnished by the Government to a contractor or Government activity for installation in, or use with, or in support of the system during production, conversion, or modification.

INITIAL TRAINING

First, cadre, or nucleus group or personnel, as required for DT/OT or as instructors	Additional personnel required to man Resident School installations or NET Teams	Personnel required to replace the original personnel
--	---	--

---Initial Factory---

-----Follow-on-----

---Replacement---

-----Initial Factory-----

-----School-----

(Transition point to Army school, if one established. If no school established, use "initial factory", "follow-on factory", and "replacement factory".)

MIL-STD-1292 (AV)

3 May 1976

INSTRUCT

To provide situations, conditions or activities which are designed to facilitate the acquisition of knowledge or skill. The act of transferring skills/knowledge from one who knows and can do to one or more individuals who do not know and cannot do. To communicate knowledge. To teach.

INSTRUCTION

The process which the instructor engages, employs or designs a course to transfer knowledge or skills to the learners.

INSTRUCTIONAL UNIT

An assembly of lessons which have been integrated, either to complete a usable bit of knowledge or skill, or to aid in scheduling a course or program. The basic components of courses. Same as "Unit of Instruction" or "Program of Instruction".

INSTRUCTOR

1. The person doing the teaching. The term "instructor" is commonly used in lieu of "teacher", which is reserved primarily for those positions which in civilian terms are professional in rank or function.
2. An individual assigned to an instructional element or function within a school who has the primary responsibility of instructing students.

JOB

A sum total of all the functions or tasks performed within a rating, occupation, or responsibility.

JOB PLAN

An instruction sheet which provides for the individual student a list of the principle steps to be taken in doing a job in the order in which they are to be done.

JOB TASK ANALYSIS

A procedure for determining the tasks that either are, or should be, performed by personnel occupying a given type of position or fulfilling a given function. Also known as Task Analysis or Skill Analysis.

MIL-STD-1292(AV)
3 May 1976

KNOWLEDGE

An awareness of the mental and physical aspects and facts involved, in whatever detail is required for the situation.

LEARNING OBJECTIVE

An identification, in terms of student performance, of the knowledges and skills to be acquired by a learner. See "Objectives".

LEARNING REQUIREMENT ANALYSIS

An analysis of job or task requirements to determine specifically what the student needs to learn. The analysis specified entry level behaviors, enabling objectives and terminal performance criteria in the affective, cognitive, and motor performance areas.

LESSON GUIDE

An organized outline of a single lesson topic based on an approved instructor's guide. It is individual in nature, being the property of the instructor and reflecting his experience, training and thinking. Also known as lesson plan.

LOGISTIC SUPPORT ANALYSIS (LSA)

The composite analytical studies, decisions and related documentation conducted in connection with the design of an item to determine or influence the maintainability and reliability characteristics of the item and to determine the total support requirements resulting from the design. For new items, the analysis is conducted concurrently with the design process. For existing or off-the-shelf items, the analysis is conducted as required to determine the characteristics and resulting support requirements.

MAINTENANCE

All actions taken to retain system/equipment in a serviceable condition or to restore it to serviceability. It includes inspection, testing, troubleshooting, servicing, classification as to serviceability, repair, rebuilding and reclamation. (Joint Chief of Staff Publication 1.)

MAINTENANCE CONCEPT

The planned or envisioned methods that will be employed to sustain the system/equipment of a defined level of readiness or in a specified condition in support of the operational requirement. This includes significant system/equipment characteristics; e.g., built-in-test, compatibility

MIL-STD-1292(AV)
3 May 1976

with existing or planned test and support equipments, etc., and a generalization of logistics support element requirements (manpower, equipment, facilities, workload distribution throughout the defined maintenance level, etc). The maintenance concept is initially stated by the Government for design and support planning purposes and provides the basis or point of departure for development of the plan to maintain. The maintenance concept may be influenced or modified by economic technical or logistics considerations as the design development of the system/equipment proceeds.

MAINTENANCE LEVELS

Maintenance tasks divided into the number of levels required to maximize the common standards which can be applied to the many and varied maintenance activities of the military establishment. They are the modular increments of which all maintenance activities are composed. JCS Pub 1 defines three levels of maintenance: Depot, Intermediate and Organizational.

a. Depot Maintenance. That maintenance performed on material requiring major overhaul or a complete rebuild of parts, assemblies, sub-assemblies and end items, including the manufacture of parts, modifications, testing and reclamation as required. Depot maintenance serves to support lower categories of maintenance by providing technical assistance and performing that maintenance beyond their responsibility. Depot maintenance provides stocks of serviceable equipment by using more extensive facilities for repair than are available in lower level maintenance activities (JCS Pub 1).

b. Intermediate Maintenance (Field). That maintenance which is the responsibility of, and performed by, designated maintenance activities for direct support of using organizations. Its phases normally consist of calibration, repair or replacement of damaged or unserviceable parts, components or assemblies; the emergency manufacture of nonavailable parts; and providing technical assistance to using organizations (JCS Pub 1).

c. Organizational Maintenance. That maintenance which is the responsibility of and performed by a using organization on its assigned equipment. Its phases normally consist of inspecting, servicing, lubricating, adjusting and the replacing of parts, minor assemblies and sub-assemblies (JCS Pub 1).

METHODS

The means, techniques, procedures, etc., of instruction. There are many methods appropriate for use. Included may be such processes as lecture, recitation, laboratory, examination, study periods, demonstrations, use of training aids, group discussions, reviews, demonstration-performance,

MIL-STD-1292(AV)
3 May 1976

panel discussions, role playing, case studies, craftsman, programmed instruction and coach and pupil methods.

OBJECTIVES

1. In the abstract sense, it is the effect desired. In the concrete sense, it is the physical object of the action taken.

2. Behavioral objectives are objectives written in a specified manner in order to achieve a clear and complete statement of instructional intent. Specifically, the following three conditions must be met:

a. Describe, explicitly, what a student must be able to do upon completion of instruction, clearly identifying the kind of behavior that he should be capable of exhibiting.

b. State the important conditions under which the student demonstrates his mastery of the objective, describing elements of the situation fully enough so that the desired behavior is clearly distinguishable from other possible behaviors.

c. Specify the standard of performance a student must meet in demonstrating his attainment of the objective, establishing the minimum level acceptable.

NOTE - There are times when it is not possible to specify the standards of performance a student must meet in demonstrating his attainment of objectives involving team play, patriotic conduct and other attitudinal skills.

3. Learning objectives are an identification, in terms of trainee performance, of the knowledges and skills to be acquired by a learner. Nearly all learning objectives are composed of three elements:

a. Behavior - Identifies what the trainee will do to demonstrate what he has learned. Achievement is normally demonstrated by means of a performance test or a written achievement examination or both.

b. Conditions - Describes the conditions (aiding or limiting factors) under which the desired behavior (performance) is to be demonstrated.

c. Standards - Defines the standards (accuracy or proficiency) which the performance must meet.

4. Performance objectives are a set of specific skills or knowledge which the student must learn and be able to demonstrate upon completion of training.

MIL-STD-1292(AV)

3 May 1976

5. Terminal objectives are a three-part objective describing behavioral actions, performance conditions and the attainment standard expected at the completion of the course.

6. Enabling objectives are three-part objectives, leading to the achievement of terminal objective.

ON-THE-JOB TRAINING (OJT)

Training in the performance of a task or duty while engaged in its performance during daily operational and maintenance situations. Usually follows or supplements formal classroom instruction or training.

OPERATOR TRAINING

The training received by an individual in which he learns the methods and procedures necessary to manipulate the controls of specific equipment to derive information of significance to the operations of that equipment. Also includes duties such as plotting, communication and other activities which act upon the data or are caused by the derivation of information from the equipment or are necessary to interpret the data derived or are undertaken in order to insert information into the equipment. In the field of electronics, this term is usually applied in the sense of "radar operator" or something similar. However, in a broader sense, it applies to a pilot/aviator operating the actual aircraft, or a man who is causing a gun mount to traverse and evaluate by manual or other methods, or a man who is observing aircraft simulator who will perform functions of an operator nature as a result of these observations. Similarly, it applies to personnel such as vehicle operators who operate aircraft GFE.

PERFORMANCE OBJECTIVES

A set of specific skills or knowledges which the student must learn and be able to demonstrate how well he has mastered the skills required for the performance of his job. For some circumstances, this could be a written test if designed as a job sample for a man whose responsibility involves only paper procedures. See "Tests". A student effort or assigned course accomplished that is measurable.

PROCURING ACTIVITY/AGENCY

The activity assigned the responsibility for procuring or providing the supplies or services.

PROFICIENCY TEST

A test which is designed to measure what a man's capabilities in terms of the job. It may be composed of both performance tests and written tests.

MIL-STD-1292(AV)

3 May 1976

A performance test is sometimes taken as a comprehensive procedure used to examine a man's capability to do what the job required.

PROFICIENCY TRAINING

Training conducted to improve or maintain the capability of individuals and teams to perform in a specified manner.

PROGRAM OF INSTRUCTION (POI)

The training management document which specifies the purpose, prerequisites, content, duration and sequence of instruction for formal resident and non-resident courses. Same as "Unit of Instruction" or "Instructional Unit".

READABILITY

A measure of the degree to which variable material is understandable by a reader. Normally used in describing a difficult level of material in terms of a standard educational level. A number of testing methods are used to validate readability levels.

SIMULATOR

Any training device, machine or apparatus that reproduces a desired condition or set of conditions synthetically. A relatively complex item of training equipment, using electronic and mechanical means to reproduce all conditions necessary for an individual or a crew to practice operational tasks in accordance with training objectives.

SKILL

The ability to use and apply knowledge and experience acquired.

STANDARD INTEGRATED SUPPORT MANAGEMENT SYSTEM (SISMS)

A consolidation of tri-service Joint Operating Agreements (JOAs) and related contract and data requirements providing standard policies and procedures for use in management of multiservice systems. It incorporates the concept of single service management through application of Integrated Weapon Support Management (IWSM). It delineates management responsibilities of executive and participating services and provides methodology, directly or by reference, in all disciplines required to assure system support throughout the life cycle.

MIL-STD-1292 (AV)
3 May 1976

STUDENT

Generally synonymous with "trainee". However, there is a trend in the direction of terming a man in recruit training or first follow-on training as a "trainee" and other personnel under instruction as "students".

SUBJECT

1. The matter which is described by the title of the lesson.
2. The principle matter with which a course or program is concerned.
3. A major division of organized knowledge, such as electronics or aeronautic.

SYSTEM

A composite of subsystems, assemblies (or sets), skills and techniques capable of performing and/or supporting an operational (or non-operational) role. A complete system includes related facilities, items, materials, services and personnel required for its operation to the degree that it can be considered a self-sufficient item in its intended operational (or non-operational) and/or support environment.

SYSTEMS APPROACH

The coordinated integration of relevant subject matter, student and instructor activities, equipment and facilities, and instructional methods and techniques to achieve specific, job-oriented learning objectives.

TASK ANALYSIS

A method by which the knowledge, skill, and affective elements of task performance are systematically examined and recorded. A task analysis brings into focus such items as the classes of behaviors, conditions of performance, and the degrees of proficiency required. A completed task analysis will display all the learning requirements necessary for the development of learning objectives for a training program. Also known as skill analysis and job task analysis.

TESTS

1. Pretest. A test administered prior to a course, area, unit, topic, or other portion of the course, to determine the knowledges and skills and attitudes held by students at the start.

MIL-STD-1292(AV)

3 May 1976

2. Progress Test. A test administered at some point in a course, area, unit, topic, or other portion of a course, to determine the degree to which students are accomplishing the learning desired.
3. Qualifying Test. A test administered to determine whether a man is qualified for a task for which he has been selected or trained, or for which he is being considered. A qualifying test can be construed as a special type of progress test. "Qualifying Test" may also be applied to tests used for selecting personnel for training, although the usage is not so common.
4. Diagnostic Test. An examination used to spotlight areas of student difficulty with subject matter or the learning situation, to enable the instructor to better allot his time according to the difficulty of the individual topic or unit to be taught; a pretest to determine the student's entering level of knowledge.
5. Performance Test. A sample work situation in which a man being tested performs a practical task which requires him to demonstrate how well he has mastered the skills required for the performance of his job. For some circumstances this could be a written test if designed as a job sample for a man whose responsibility involves only paper procedures.
6. Achievement Test. A general term for tests designed to measure relative accomplishment in a specific area.
7. Written Test. A test in which a man demonstrates his capabilities by written techniques. Not usually a performance test, and hence is usually a measure of supporting knowledges rather than skills.
8. Identification Test. A test in which the student is required to recognize a piece of equipment, a picture of equipment, a verbal description, and its function or use. May be a performance test, a written test, or other type of test.
9. Proficiency Test. A test which is designed to measure a man's capabilities in terms of the job. It may be composed of both performance tests and written tests. A performance test is sometimes defined as a skill demonstration, while a proficiency test is defined as a comprehensive procedure used to examine the man's capability to do what the job requires.
10. Test Item Card. A card on which an examination item is recorded for future use. The card usually provides an indication of the correct answer and may include data on reliability, validity, and difficulty based on previous usage. If proficiency testing (go/no go) is utilized, reliability, validity and difficulty will not apply.

MIL-STD-1292 (AV)
3 May 1976

11. Standard Test Bank. File of test item cards which may additionally include data on difficulty level, validity, etc.
12. Advancement Examination. An examination given periodically to enlisted personnel to help select those who are to be advanced in rating. It is based, by rating and pay grade, on the qualifications established by the Manual of Qualifications for Advancement.
13. Quiz. A short test administered by the instructor to measure achievement on material recently taught or on any small, newly completed unit of work.
14. Criterion Test. A measurement tool used to measure observable behavior.

TRAINING ACTIVITIES

1. Military commands which have a primary mission of conducting or supporting training.
2. The schools and institutions at which courses are offered.

TRAINING AGENT

The command, office or headquarters exercising command of, and providing support of, some major increment of the Government's total training effort. Also known as Training Agency.

TRAINING AID EQUIPMENT (INSTRUCTIONAL AID EQUIPMENT)

1. Audio-visual equipment which is used by the instructor or student to enhance the process of teaching or learning; and which is not itself the subject of instruction (except when its use or maintenance, in the training environment, is the subject of instruction); and which generally, although not always, has applicability for purposes other than training. Typical of such equipments are: motion picture projectors, overhead projectors, slide projectors, tape recorder and playback units, sound film readers, record players, sound on slide projectors, opaque projectors, and so forth. It is to be noted that some items may be viewed as both "Training Equipment" and "Training Aid Equipment." For example, a motion picture projector in use for general entertainment purposes may be the subject of instruction in operation and maintenance, in which case it may also be used in the same course of instruction as a "Training Aid Equipment" to present films which enhance the instructional process. (See "Training Equipment").

TRAINING ANALYSIS PROCEDURE (Prioritization)

A technique of system analysis which provides a ranking of tasks within

MIL-STD-1292(AV)
3 May 1976

a system in terms of the payoff of task training (as reflected by improved system operation) per training equipment dollar expended.

TRAINING EQUIPMENT

Equipment designed for operational purposes which is the subject of instruction or which is used by the instructor or student as an element of the process of teaching or learning; and which has or had as its prime or initial purpose for existence some function other than that of training personnel; and which, in order to achieve its prime purpose, requires that training be provided for the personnel who are associated with it for this purpose. It may be subjected to repeated or continuing usage over an extended period of time without immediate degradation of its useful characteristics. Durable material which is to be expended is not included. Further clarification with "Nontechnical Equipment," "Technical Equipment," and "Logistic Support Equipment" as related to "Training Equipment" is as follows:

a. Nontechnical Equipment. Equipment which has not been assigned to a Systems Command for design, development, modernization, procurement, selection for special use, and similar functions.

b. Technical Equipment. Equipment which has been assigned to the cognizance of a Systems Command for design, development, modernization, procurement, selection for special use, and similar functions.

c. Logistic Support Equipment. A term used to differentiate between equipment used for training and all other equipment required at an activity to support its assigned mission. All Class 3 plant property and minor property required for the operation and maintenance of a training activity is considered logistic support equipment.

TRAINING LITERATURE

That body of writings published for the primary purpose of informing all concerned as to doctrine, tactics, techniques and procedures adopted for use in training individuals and units of the United States Army.

TRAINING MISSION

1. The stated objective and purpose of an activity whose principle role is one of providing training.
2. The flight of an aircraft for purposes of training the pilot and crew.

MIL-STD-1292 (AV)
3 May 1976

TRAINING PACKAGE/KITS

All Programs of Instruction/Instructional Units, student handouts, graphic aid, 35mm slides, VTRs, motion picture films, training aids, etc., necessary to prepare and conduct additional courses in support of the training program for the Weapon System/End Item.

TRAINING PLAN

The principle document for stating billets, personnel, military construction and training material support requirements. It controls the planning and implementing action for meeting the requirements of the system, subsystem or subsystem component or non-hardware-oriented development, to produce trained and qualified personnel required to install, operate, maintain or otherwise use the same being introduced into the Army.

TRAINING PLANNING CONFERENCE

The principle training planning conference formally or informally scheduled for the purpose of developing and documenting personnel and training support requirements for new or modified system or developments introduced into the DoD inventory. The degree of participation and formality depends on the magnitude of the new development or extent of modification.

TRAINING PROGRAM

An assembly or series of courses or other requirements which have been organized to fulfill a broad overall training objective. A program is usually assembled for one of the following:

- a. A position, trade, or occupation.
- b. An organization, activity, or segment thereof.
- c. A function or field.

TRAINING REQUIREMENT

1. A requirement to train personnel in a specified quantity to perform identified duties and thereafter be available for assignment to the duties at a specified time.
2. A requirement for a training or education program which will produce trained personnel for an identified purpose.

MIL-STD-1292(AV)

3 May 1976

3. The performance which is required of a man in order to be effective in a given situation. Thus, the jobs to which men are assigned have performance connotations, which are training requirements in the sense that men must be trained to perform as required.

4. A need, established by the training organization, for support of specified nature.

TRAINING SITUATION ANALYSIS

An analytic procedure for determining the nature of the tasks to be accomplished in work performance, and classifying these tasks in a framework of frequency, difficulty and criticality. The results of the analysis form the basis for recommendations for simulation equipment concepts and functional characteristics.

TRAINING SUPPORT

The providing of resources, such as billets, personnel, funds, facilities, hardware, course materials and services for the use of the training organization.

TRAINING SUPPORT AGENT

The command, office or headquarters responsible for supporting the training agencies by providing material and other forms of support within command or office involved. Also known as the "Training Support Agency/New Equipment Training Office".

TRAINING TASK ANALYSIS

A system for proceeding from an inventory of tasks, such as that provided by a job task analysis, to an organized set of both terminal and enabling training objectives.

UNIT OF INSTRUCTION

An assembly of lessons which have been integrated either to complete a usable bit of knowledge of skill or to aid in scheduling a course or program. The basic components of courses. Same as "Instructional Unit" or "Program of Instruction".

MIL-STD-1292(AV)
3 May 1976

VIDEOTAPE RECORDINGS (VIR)

A record of visual and aural information derived from a television's system and recorded electromagnetically (television tape "videotape" recording) or photographically (television film "Kinescope" recording), or by other means which may be reproduced and displayed through a television system or projected as a motion picture film. Inherent in the definition, as used herein, is that the television recording is a complete production. (A television recording within the meaning of this definition may contain motion picture film either integrated into the recording electronically or edited into a television film recording.)

