

**DLAI 4155.7**

**DEFENSE LOGISTICS AGENCY  
INVENTORY CONTROL POINT  
QUALITY ASSURANCE TECHNICAL  
DEVELOPMENT PROGRAM (QATDP)  
COURSE CATALOG**

**AUGUST 1996**

**THE DEFENSE LOGISTICS AGENCY INVENTORY CONTROL POINTS (ICP) QUALITY ASSURANCE TECHNICAL DEVELOPMENT PROGRAM (QATDP) COURSE CATALOG.**

(This publication is new and must be reviewed in its entirety.)

**A. REFERENCES:**

1. DLAD 4155.7, Quality Assurance Technical Development Program for Defense Logistics Agency Inventory Control Points, August 1996.
2. DLAD 4155.2, Quality Assurance Program for the Defense Logistics Agency Inventory Control Points, January 1995.
3. DLAM 4745.12, Defense Business Management System User's Manual, 01 Oct 95.
4. DoD 5000.52-M, Acquisition Career Development Program, Draft Replacement for Nov 1991 Version.
5. DLAD 4105.20, Product Verification Program for Inventory Control Points, 20 Jan 95
6. DoD 1430.12, Civilian Employee Development and Training, 24 Nov 87.

**B. PURPOSE.** This instruction:

1. Supports Reference A1.
2. Establishes a catalog of mandatory and optional courses used in the QATDP.
3. Establishes the foundation for a technical infrastructure of courses and training sources which support the ICP mission.
4. Provides course description, prerequisite, and equivalency information on QATDP courses.
5. Provides the information necessary to generate Individual Development Plans (IDPs) for personnel performing quality assurance functions.
6. Provides the means to achieve the technical skills required to perform Quality Assurance duties.
7. Lists certification requirements for personnel who independently develop contract QA requirements or perform product conformance functions at the ICP.

**C. APPLICABILITY AND SCOPE.** This instruction provides information on courses necessary to fulfill the policy requirements of QATDP (DLAD 4155.7). This instruction applies to all ICP personnel performing or supervising product conformance or quality assurance functions as defined in DLAD 4155.2, QA Program for the DLA ICPs, (hereafter referred to as the ICP QA Program).

**D. DEFINITIONS:**

1. Annual Review. A formal review/analysis performed by MMLXQ on an annual basis of all courses using field comments and other input to determine whether there are any problems in existing courses which need to be addressed.

2. Certification. Formal recognition of an individual's technical development and skills. Personnel may be trained technically but not certified due to lack of hands-on experience or failure to demonstrate commodity oriented technical skills.

3. Commodity Certification. Certification in a commodity skill area.

4. Course Validation. A formal review performed by the subject matter expert (SME) on courses that do not have DLA Programs of Instruction (POIs) to determine if the course is still adequate to meet the needs of DLA personnel.

5. Equivalent Training. Any training course that has been approved as a substitute for a QATDP training course.

6. First-Line Supervisors (FLS). Employee's immediate management representative responsible for employee's performance appraisal. Does not include "lead" or "senior" specialists nor team leaders unless these personnel are officially responsible for employee's performance appraisal.

7. Major Change. Any change to course content required when DLA policy is affected.

8. Minor Change. Any change to course content when DLA policy is not affected.

9. Onsite Training. Training normally provided by certified DLA instructors who are assigned to a DLA training activity; e.g., DCMDs, DCPSO, Centers and Depots. Onsite training is normally given at a location convenient to class participants.

10. Periodic Course Evaluation. A formal review performed by the SME on courses that are taught onsite using DLA POIs to determine if the course curriculum is still adequate and current for use by DLA personnel. Normally, periodic course evaluations are performed after the annual review unless otherwise specified by MMLXQ.

11. Priority Codes. Codes used to identify the priority of training requirements.

a. Priority 1: Mission essential course which is required in order for the employee to perform his/her duties in a satisfactory manner. All courses prescribed in Figure 1A. are Priority 1 courses if needed for certification in an assigned skill area.

b. Priority 2: Course which is required for career development, attainment of skills/knowledge for future assignments, or replacement of skills/knowledge lost due to extended periods of nonuse.

c. Priority 3: Optional Course that will increase productivity of employee or cross-train employee in additional job series.

12. Program of Instruction. The lesson plan for an onsite course that includes a listing of course objectives. POIs are prepared in a standardized format as specified by MMLXQ.

13. Quality Assurance. An integrated system of actions comprising the prevention, detection, and assessment of product or service deficiencies and the cost and readiness effect of deficiencies on materiel management systems.

14. Quality Assurance Personnel. All personnel who are performing QA functions at DLA Inventory Control Points.

15. Quality Assurance Technical Development Program (QATDP). The formal program for identifying and accomplishing the technical development needs of personnel performing product conformance or other quality assurance functions.

16. Subject Matter Expert. The person, generally from HQ DLA staff, responsible for the technical accuracy and content of a specific course.

17. Technical Development. The activities associated with providing QA personnel training needed to develop required skills, knowledge, and abilities associated with their assignment.

#### **E. PROCEDURES - COURSE CATALOG.**

1. This Course Catalog provides specific information on technical development courses that are currently available. Defense Acquisition Workforce Improvement Act (DAWIA) courses are included only to the extent they are required for technical development purposes. Recommendations for including courses in the Course Catalog should be sent through channels to DLA, ATTN: MMLXQ (W. A. Lugosky), 8725 John L. Kingman Hwy, Suite 4240, Ft. Belvoir, VA 22060-6221. The course catalog is a listing of courses available at the time of publication of this instruction. There is no guarantee that the course information is accurate. The information listed in this Course Catalog is the best available at the time of publication. The student is required to contact the training source for the latest information.

2. In those instances when statements under the Course Equivalency section indicate that equivalency may be granted on the basis of experience or completion of a similar course, the policy requirements of this instruction must be met. The QATDP Panel shall evaluate similar courses and or experience prior to making a determination on equivalency.

3. The course number, title, source, location, purpose or objective, description, prerequisite, and course equivalency are listed for each course.

Most courses are numbered using a unique alpha/numeric designation called a course code. Previous course codes were all 3 digit alpha/numeric identifiers whose first alpha character categorized the course as follows:

- A - Aerospace/Aircraft
- B - Ammunition
- C - Clothing/Textile
- E - Electronics
- F - Materials
- G - Mechanical
- H - Subsistence
- J - Petroleum
- K - Medical Devices
- L - Defense National Stockpile Related
- M - Management/Supervision
- N - Nuclear
- P - Packaging/Packing
- Q - QA Related courses
- R - PLFA Unique Training Courses
- S - General
- T - Testing Laboratory
- U - Unique Training
- V - Commodity and Specialized Experiences
- W - Licenses and Qualifications
- X - Computer Software

4. We will continue to try to designate additional courses with 3-digit alphanumeric identifiers. However, DAWIA courses and specialty courses may be known more universally by course identifiers that don't match the 3-digit

convention. The purpose of the course code convention was a shorthand identifier for automated system entry. The DBMS training application currently in use does not limit the course identifier to three characters.

5. PLFA unique training (local) courses may be identified by using the course code "R". Each activity may identify their own unique courses by publishing a supplement to this instruction. Licenses and qualifications, and their renewals, may be tracked using the "W" identifier.

BBR101

TITLE: BASIC BLUEPRINT READING

SOURCE: DCPSO Atlanta  
805 Walker St.  
Suite #3  
Marietta, GA 30060  
(770)590-6648 DSN 697-6648

LOCATION: On-site

LENGTH: 16 Hours.

OBJECTIVE: This course is will provide the student with the ability to visualize three-dimensional items from two-dimensional engineering drawings and determine the required dimensions and features.

COURSE DESCRIPTION: This course introduces the student to the blueprint: how information and requirements are portrayed; standard drawing formats and layouts; basic lines and symbols; and how to visualize the item depicted. There are practical exercises which give the student experience in going from an object to a blueprint and vice-versa. In addition, fractions, rounding off, shop terminology, and geometric dimensioning and tolerancing symbols (contained in American Society for Mechanical Engineers (ASME) Y14.5M-1994 are reviewed and discussed.

PREREQUISITE: None

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.

C02

TITLE: FOOTWEAR AND LEATHER PRODUCTS

SOURCE: Defense Personnel Support Center (DPSC)  
2800 South 20th Street  
Philadelphia, PA 19145-5099

LOCATION: Same as source.

LENGTH: 80 Hours.

OBJECTIVE: Provides training in the manufacture and inspection requirements of footwear leather and leather products.

COURSE DESCRIPTION: This course covers laboratory testing, types of leather, applications of leather, and parts of hides and skins; terms: curing, finishing, and manufacturing processes; upper cutting, upper fitting, stock fitting, lasting (nine parts), bottoming, making, and finishing rooms; and Goodyear welt. This course includes an in-depth study of wet operations: trimming, sorting, soaking, fleshing, unhalving, bathing, pickling, tanning, wrinkling, splitting, shaving, retanning, coloring, and fat liquoring. The dry operations cover drying condition, staking, buffing, finishing, plating, measuring, and grading.

PREREQUISITE: Personnel nominated should have satisfactorily completed course PQM101, Production and Quality Management Fundamentals.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction. An equivalency test is not available.

C03

TITLE: QUALITY ASSURANCE OF PARACHUTES

SOURCE: San Antonio Air Logistics Command (SAALC)  
ATTN: SAALC/MMIRLC  
Kelly AFB, San Antonio, TX 78241

or

U.S. Navy  
Naval Weapons Center  
China Lake, CA

or

U.S. Army  
Natick Laboratories  
Natick, MA

LOCATION: To be determined by source.

LENGTH: 40 Hours.

OBJECTIVE: To provide training for QA personnel responsible for the inspection and acceptance of parachutes and parachute components manufactured by Government contractors.

COURSE DESCRIPTION: Student obtains training and hands-on application of in-plant testing, acceptance inspection, and classification of defects on the various types of parachutes, harnesses, packs, hardware, and components. The course also includes an introduction to parachutes and components, their functions and missions; MIL-P-6645 (General Specifications for Personnel Parachutes); MIL-P-7567 (Detailed Manufacturing Instruction for Personnel Parachutes); MIL-H-7195 (General Hardware Specification); MIL-STD-849 (Inspection Requirements, Definitions, and Classification of Defects for Parachutes); actual first article inspection; packing instructions by a certified parachute rigger; and onsite review of the actual use of parachute equipment.

PREREQUISITE: Personnel nominated should have successfully completed course S89, DoD In-Plant Quality Assurance.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.



CO5

TITLE: EMBROIDERED INSIGNIA

SOURCE: Defense Contract Management District Northeast  
495 Summer Street  
Boston, MA 02210-2184

LOCATION: DCMAO Springfield  
240 U.S. Route 22  
Springfield, NJ 67081-3170

LENGTH: 40 Hours.

OBJECTIVE: To provide training in the manufacture and inspection requirements of embroidered insignia.

COURSE DESCRIPTION: Formal classroom instruction and plant visits will cover cartoon or stitch enlargement; master punching, master punching control number; punching number; repeat punching; serial numbers, and span and splice.

PREREQUISITE: Personnel nominated must have satisfactorily completed course PQM101, Production and Quality Management Fundamentals.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.

CO6

TITLE: BASIC TENTAGE

SOURCE: Defense Personnel Support Center (DPSC)  
2800 South 20th Street  
Philadelphia, PA 19145-5099

LOCATION: Same as source.

LENGTH: 80 Hours.

OBJECTIVE: To provide training in the manufacture and inspection requirements of tentage items.

COURSE DESCRIPTION: The course program covers the administrative procedures pertaining to tentage and equipage items. Students are instructed in QA and construction requirements through a detailed study of tentage specifications, blueprint drawings, and examination of erected tents and tent liners. Students are introduced to defect classification and in-process and end item inspection techniques.

PREREQUISITE: Personnel nominated should have successfully completed course PQM101, Production and Quality Management Fundamentals.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.

C15

TITLE: FUNDAMENTALS OF CLOTHING AND TEXTILES

SOURCE: Defense Personnel Support (DPSC)  
2800 South 20th Street  
Philadelphia, PA 19145-5099

LOCATION: To be announced by DPSC prior to course.

LENGTH: 80 Hours.

OBJECTIVE: This course is designed to acquaint students with fundamentals of textile manufacturing and clothing fabrication enabling them to perform their QA duties in a more knowledgeable manner.

COURSE DESCRIPTION: The course program provides an overview of textile fibers, yarns, cloth, dyeing, and finishing. Pattern development, cutting room procedures, thread, seaming, stitching, equipment capabilities, garment construction, finishing, pressing, and defect identification will be discussed in detail.

PREREQUISITE: Personnel nominated must have satisfactorily completed course S89, DoD In-Plant Quality Assurance. (This prerequisite is applicable to DCMC personnel only. There is no prerequisite for Center/Depot personnel).

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course or a combination of both, in accordance with the policy section of this instruction.

C16

TITLE: QUALITY ASSURANCE OF CLOTH

SOURCE: Defense Personnel Support Center (DPSC)  
2800 South 20th Street  
Philadelphia, PA 19145-5099

LOCATION: To be announced by DPSC prior to course.

LENGTH: 80 Hours.

OBJECTIVE: This course is designed to provide the students with detailed knowledge in evaluating and inspecting finished cloth.

COURSE DESCRIPTION: Emphasis is placed on providing the student with a working knowledge of fibers, yarns, major cloth types (woven, knitted, nonwoven), and dyeing and finishing of cloth. In addition, the student will become familiar with performance standards for cloth, and physical and chemical testing of cloth. DPSC conducts a 2 -day portion of the course, which provides hands-on experience in cloth inspection using a perch, and indepth examination of contractual QA requirements for cloth, including Federal Standard No. 4B, Glossary of Fabric Imperfections, and the point system for cloth.

PREREQUISITE: Personnel nominated should have successfully completed course C15, Fundamentals of Clothing and Textiles, and PQM101, Production and Quality Management Fundamentals. (This prerequisite is applicable to DCMC personnel only. There is no prerequisite for Center/Depot personnel).

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or a combination of both, in accordance with the policy section of this instruction.

C17

TITLE: LIFE SUPPORT CLOTHING AND EQUIPMENT

SOURCE: Defense Personnel Support Center (DPSC)  
2800 South 20th Street  
Philadelphia, PA 19145-5099

LOCATION: To be announced by DPSC prior to course.

LENGTH: 40 Hours.

OBJECTIVE: This course is designed to provide the students with detailed knowledge of various life-support clothing and equipment items manufactured from rubber and/or synthetic rubber-coated cloth.

COURSE DESCRIPTION: Emphasis is placed on providing the student with a working knowledge of coated cloth, including base cloth, coating compounds, and methods of application. Students will become familiar with coated cloth defects and terminology in accordance with MIL-STD-1487. Several life support clothing and equipment items, such as Toxicological Agent Protective Coveralls, Anti Exposure Suits, Extreme Cold Weather Trousers, Life Rafts, and Life Preservers, will be reviewed indepth, including specification requirements, use of items, inspections, and testing requirements. In addition, actual defective items will be examined to provide hands-on experience in identification of defects.

PREREQUISITE: Personnel nominated should have successfully completed course C15, Fundamentals of Clothing and Textiles, and course S89, DoD In-Plant Quality Assurance. (This prerequisite is applicable to DCMC personnel only. There is no prerequisite for Center/Depot personnel).

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or a combination of both, in accordance with the policy section of this instruction.

C20

TITLE: DRESS UNIFORMS

SOURCE: Defense Personnel Support Center Philadelphia (DPSC)  
2800 South 20th Street,  
Philadelphia, PA 19145-5099

LOCATION: DPSC

LENGTH: 40 Hours.

OBJECTIVE: Acquaint students with fundamentals of tailoring processes and manufacturing techniques used in the production of military dress coats and trousers. Model form coat examinations are emphasized.

COURSE DESCRIPTION: Instruction includes manufacturing techniques specifically related to military dress uniforms. Relevant topics include canvas front and fused front construction, lapels and bridle tape insertion, collar setting, sleeve setting, and pocket and button alignment. Classroom discussions include first article requirements, end item specifications, and inspection standards such as MIL-STD-1490 and MIL-STD-1488. Certain inspection Techniques are demonstrated and discussed: table examination, model form examination, and conformity to Government-supplied shapers. The course includes a procedures review for handling Contractor Furnished Material (CFM) and Government Furnished Material (GFM), including claims for alleged defective GFM.

PREREQUISITE: C15, Fundamentals of Clothing and Textiles, and the Farnsworth Munsell 100 Hue Test.

COURSE EQUIVALENCY: None authorized.

CON101

TITLE: CONTRACTING FUNDAMENTALS  
(Formerly MANAGEMENT OF DEFENSE ACQUISITION CONTRACTS)

SOURCE: U.S. Army Logistics Management Center (ALMC)  
AMXMC-A-R  
Fort Lee, VA 23801-6040  
(AV) 687-2177/3593

or

DCPSO Atlanta  
805 Walker St.  
Suite #3  
Marietta, GA 30060  
(770)590-6648 DSN 697-6648

LOCATION: Same as source

LENGTH: 160 Hours

OBJECTIVE: To provide basic acquisition training to military and civilian personnel who are currently serving in or anticipate assignment to a position in which they will engage in DoD contracting functions.

COURSE DESCRIPTION: This is a basic survey course encompassing the entire contracting process from receipt of a purchase request through contract completion and contract closeout. The course is designed for students new to the contracting workforce, either as entry-level or crossovers from other career fields. Students are introduced to the organization and utilization of the Federal Acquisition Regulation (FAR) and the DoD Supplement to the FAR (DFARS), as well as ethics and basic contract law concepts. Application of the information is reinforced through a series of practical exercises that include preparing a solicitation, conducting a bid opening, conducting negotiations, as well as writing a Price Negotiation Memorandum, and post award problems based on the negotiated contract.

PREREQUISITE: Primary duties or immediately impending assignment in any contracting, property management, manufacturing, quality, or production area.  
COURSE EQUIVALENCY: See Defense Acquisition University Catalog for list of recognized equivalent courses. For the purposes of the QATDP only, students who have completed the course, Management of Defense Acquisition Contracts, (formerly identified as course Q05), prior to July 1996 will receive equivalency.

E04

TITLE: SOLID STATE ELECTRONICS TRAINING

SOURCE: Defense Supply Center Columbus (DSCC)  
Columbus, OH 43215

LOCATION: To be determined by source.

LENGTH: 80 Hours.

OBJECTIVE: Upon completion of this course, the student will have an understanding of the manufacturing processes for solid-state electronic devices; the requirements of MIL-PRF-19500, General Specification for Semiconductor Devices, and MIL-M-38510, General Specification for Microcircuits; and the test methods in MIL-STD-750, Test Methods for Semiconductor Devices, and MIL-STD-883, Test Methods and Procedures for Microelectronics.

COURSE DESCRIPTION: Instruction will cover semiconductor wafer fabrication and assembly, the requirements of the military specifications and standards, and the QA requirements.

PREREQUISITE: Personnel nominated must be assigned to or supporting components in the Federal Supply Classes 5961 and 5962 (semiconductors and microcircuits).

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.



E12

TITLE: DIGITAL PRINCIPLES AND APPLICATION

SOURCE: Local Colleges and Universities

LOCATION: Same as source.

LENGTH: 2 Semester Hours, 5 Quarter Hours (approximately 40 hours).

OBJECTIVE: Upon completion of this course, the student will have an overview of digital computer operations and digital devices used in data processing.

COURSE DESCRIPTION: This course provides the student with the basic tools to perform QA of digitally controlled electronic equipment. Upon completion of this course, the student should have a basic knowledge of binary mathematics, graphic symbols for logic diagrams and basic computer circuit operation. The student should be able to analyze a digital system to determine the method of operation, type of logic used and circuit operating characteristics.

PREREQUISITE: None.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.

F06

TITLE: WOOD PRODUCTS

SOURCE: Defense Supply Center Columbus (DSCC)  
Columbus, OH 43215

LOCATION: Same as source.

LENGTH: 80 Hours.

OBJECTIVE: To provide the student with basic knowledge of wood products. After completing this course, the student will be familiar with a variety of wood products, technical requirements, quality requirements, characteristics inspection/grading techniques, mill processes, treatment, and preservation methods.

COURSE DESCRIPTION: Representatives from industry and Government provide concentrated instruction on wood products characteristics, mill processes, inspection/grading processes, wood treatment, and preservation methods and requirements, specifications and standards, packaging/packing, shipping/storage, and subjects of special concern to QARs working in the wood products commodity area. Instruction methods include lecture, discussion, and practical exercises.

PREREQUISITE: None.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.

F07

TITLE: WOOD PRODUCTS REFRESHER COURSE

SOURCE: DCMC Portland Seattle  
ATTN: DCMDW-GWTA  
Portland, OR 97204  
503-326-3262 ext. 13

LOCATION: On-Site as required

LENGTH: 16 Hours.

OBJECTIVE: To provide those who have been involved with the wood products commodity with an update so that they are familiar with the current practices in government and industry. Since different geographical areas are often involved with only those types of wood products common to that particular area, this course will be tailored to fit local needs.

COURSE DESCRIPTION: Instruction is provided on wood products characteristics, mill processes, inspection/grading processes, wood treatment, and preservation methods and requirements, specifications and standards, packaging/packing, shipping/storage, and subjects of special concern to QARs working in local geographical area.

PREREQUISITE: Students must have successfully completed F06.

COURSE EQUIVALENCY: None

G02

TITLE: AEROSPACE PROPULSION TECHNICIAN, GAS TURBINE ENGINE MAINTENANCE

SOURCE: Air Training Command  
Randolph Air Force Base  
ATC/TTPPR  
Universal City, TX 78150-5000

LOCATION: Chanute Air Force Base  
Rantoul, IL 78148-5000

LENGTH: 96 Hours.

OBJECTIVE: As a result of this training, the student will be able to describe in detail the component parts of a gas turbine engine; identify and properly use hand tools, measuring tools, and torque device; and disassemble, inspect parts, reassemble, adjust, and test operate the engine.

COURSE DESCRIPTION: (ATC Course No. C3AZR45470A-000). Instruction includes Ground Safety Procedures; Constructional Features and Operating Principles; Oil System; Fuel System; Pneumatic Load Control System; Electrical System and Instrumentation, Types, and Use of Maintenance Forms; Disassembly, Inspection, and Assembly of Power Unit; Inspection Requirements, Testing, and Troubleshooting; Evaluation Program; Measurement Test and Test Critique; and course Critiques and Graduation.

PREREQUISITE: Personnel nominated must have completed course S44, Drawings, Dimensions, and Tolerancing, or demonstrate an ability to read engineering drawings.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with policy section of this instruction.

G10

TITLE: RAILROAD EQUIPMENT FUNDAMENTALS

SOURCE: Federal Railway Administration (FRA)  
Associate Administration for Safety  
RRS12  
400 7th Street, SW  
Washington, DC 20590

LOCATION: Transportation and Safety Institute (TSI)  
6500 South MacArthur Blvd.  
Oklahoma City, OK 73125

LENGTH: 40 Hours.

OBJECTIVE: Completion of this course will provide QA personnel with the technical ability to evaluate and assure contractor compliance on new, reworked, and modified railcars. Association of American Railroads (AAR) and FRA interchanged safety requirements and hands-on experience are emphasized. QA personnel with little or no experience prior to attendance will be capable of performing interchange and safety inspections, as well as verifying the need for and performance of repairs.

COURSE DESCRIPTION: Provides specialized training on safety appliances, brakes, draft gears, cushion underframes, trucks, wheels and axles, friction and roller bearings, couplers, interchange and safety inspections; and AAR/FRA rules for boxcars, flats, tank cars, and other specialized equipment. Exhibits, hands-on experience, and demonstrations are used to provide training on repair procedures, quality techniques, safety requirements, and cleaning of tank cars.

PREREQUISITE: None.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.

G15

TITLE: MACHINE TOOL ORIENTATION

SOURCE: Defense Supply Center Richmond (DSCR)  
Richmond, VA

LOCATION: To be determined by source.

LENGTH: 36 Hours.

OBJECTIVE: To familiarize personnel with the requirements for the repair/rebuild of industrial plant equipment (IPE).

COURSE DESCRIPTION: Course provides instruction on actions necessary to assure proper receipt verification of IPE at the contractor's plant. The purchase description contained in all DIPEC contracts will be used as a guide in the course to parallel actual DCMC QA activities in contractor's plants. In-process verification, which is vital to assuring quality of rebuilt IPE, will be covered in detail. The course will also include verification of contractor's operational tests, cutting tests, alignment tests, and accuracy tests. It will also include those actions necessary to verify compliance with specified standards, including paint, electrical, and safety.

PREREQUISITE: Personnel attending this course should possess proficiency in algebra and plane geometry. Personnel must also have successfully completed course S44, Drawings, Dimensions, and Tolerancing; course S06, Measuring Techniques; and course S07, Calibration System Requirements, or demonstrated ability to perform in the areas covered by these courses.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.

G20

TITLE: AUTOMOTIVE EQUIPMENT ACCEPTANCE AND TEST

SOURCE: U.S. Army Tank Automotive Command (TACOM)  
Warren, MI 48090-5000

LOCATION: Onsite as determined by source.

LENGTH: 40 Hours.

OBJECTIVE: Course is designed primarily as a workshop in which the student learns the basic inspection skills and practices used in the automotive field. Under the guidance of the instructors, this program tends to develop skill and self-assurance concerning the inspection and acceptance of military vehicles for the Armed Forces.

COURSE DESCRIPTION: Classroom instruction is limited to that necessary to adequately cover material for the successful performance and completion of associated practical exercises. Consequently, the majority of the work is done by the student on the vehicle and on the test track. Military vehicles, welding requirements, automotive systems and components, and final inspection and road test are covered. This course also serves as a review of the tools and techniques used in automotive inspection.

PREREQUISITE: Personnel must have successfully completed course S44, Drawing, Dimensions and Tolerancing, and course S06, Measuring Techniques or equivalent.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.

HO2

TITLE: FOOD MICROBIOLOGY

SOURCE: The Center for Professional Advancement  
P.O. Box 1052  
East Brunswick, NJ 08816-1052  
Com (908) 613-4535

LOCATION: Same as source.

LENGTH: 24 Hours.

OBJECTIVE: Upon completion of this course, the student will have an overall understanding of basic microbiology as it relates to food, and an awareness of how raw material and in-process controls are essential for the prevention of food-borne illnesses.

COURSE DESCRIPTION: (CPA-FD-492.) The course covers the following topics: introduction to food microbiology; review of basic microbiology; preservation of foods by environmental control: temperature, water activity, pH, and redox potential; fungi, mycotoxin, machinery mold; food-borne illness of microbial origin: enteric and other gram negative microorganisms; food-borne illness of emerging importance: gram positive microorganisms; food-borne illnesses of miscellaneous origins; food microbiology approaches to problem solving; indicator tests and their value; fermentation; and microbiology of modified atmosphere stored foods.

PREREQUISITE: None.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of completion of a similar course. An equivalency test is not available.



HO3

TITLE: BETTER PROCESS CONTROL

SOURCE: The Food Processors Institute  
National Food Processors Association  
1401 New York Avenue, NW, Suite 400  
Washington D.C. 20005  
Com (202) 393-0890

LOCATION: Various universities

LENGTH: 24 Hours.

OBJECTIVE: Upon completion of this course, the student can be certified to supervise thermal processing systems, acidification, and container closure evaluation programs for low-acid canned foods.

COURSE DESCRIPTION: The course covers the following topics:  
microbiology of canning; acidified foods; food container handling; inplant sanitation; product records; thermal processing systems which include instrumentation, still retorts, pressure processing, hydrostatic retorts, agitating cookers, and aseptic systems.

PREREQUISITE: None.

COURSE EQUIVALENCY: None authorized.

H04

TITLE: GOOD MANUFACTURING PRACTICE FOR THE FOOD INDUSTRY

SOURCE: The Center for Professional Advancement  
P.O. Box 1052  
East Brunswick, NJ 08816-0257  
(908) 613-4535

LOCATION: Same as Source.

LENGTH: 24 Hours.

OBJECTIVE: Upon completion of this course, the student will gain an understanding of the structure, policies, and enforcement programs of the U.S. Food and Drug Administration relating to food manufacturing and labeling. The participant will receive and be able to apply the concepts of food GMPs for their particular food commodity.

COURSE DESCRIPTION: This is an introductory course in the laws and regulations enforced by the U.S. Food and Drug Administration as they relate to the processing of foods. Emphasis will be on adherence to the GMPs and the firm's compliance. In addition, considerable time will be spent on the meaning of the terms of "adulteration" and "misbranding" of foods. The class will discuss communication with FDA, the agency's regulatory philosophy and administrative and regulatory programs. The group will take part in exercises which will increase the participant's knowledge of writing standard operating procedures, investigating a complaint involving microbiological contamination, and in handling complaints and threats.

PREREQUISITE: None.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience or completion of a similar course. An equivalency test is not available.

H05

TITLE: HAZARD ANALYSIS CRITICAL CONTROL POINT

SOURCE: The Food Processors Institute  
1401 New York Avenue, N.W.  
Washington, DC 20005  
(202) 393-0890

LOCATION: Same as source or Onsite.

LENGTH: 24 Hours.

OBJECTIVE: Upon completion of this training, the student will have a conceptual and practical understanding of the Hazard Analysis Critical Control Point (HACCP) preventative system for assuring the safe production of food products.

COURSE DESCRIPTION: The Hazard Analysis Critical Control Point (HACCP) system is a preventive system for assuring safe production of food products. It is based on a common sense application of technical and scientific principles to the food production process from field to table. The principles of HACCP are applicable to all phases of food production, including basic agriculture, food preparation and handling, food processing, food service, distribution systems consumer handling and use.

The most basic concept underlying HACCP is that of prevention rather than inspection. A food grower, processor, handler, distributor or consumer should have sufficient information concerning the food and the related procedures they are using, so they will be able to identify where a food safety problem may occur and how it will occur. A HACCP program deals with control of factors affecting the ingredients, product and process. The objective is to make the product safely, and to be able to prove that the product has been made safely.

PREREQUISITE: None.

COURSE EQUIVALENCY: None Authorized.

ISO001

TITLE: INTRODUCTION TO ISO 9000/ANSI/ASQC Q90 QUALITY SERIES STANDARDS

SOURCE: Defense Logistics Agency  
ATTN: AQCJ/Workforce Development  
8725 John L. Kingman Hwy  
Ft. Belvoir, VA 22060-6190  
(703) 617-7504/DSN 667-7504  
FAX (703) 617-7134/DSN 667-7134

LOCATION: Onsite as determined by DLA activity

LENGTH: 16 Hours.

OBJECTIVE: Upon completion of this training, DLA employees will have a basic understanding of the ISO 9000/ANSI/ASQC Q90 Quality Series Standards and the application of standards within DLA Procurement and contract administration.

COURSE DESCRIPTION: This course provides DLA personnel with an understanding of specific topics including: terminology; intent; interrelationships between the ISO 9000/ANSI/ASQC Q90 Quality Series Standards; the DoD use of Commercial Quality System Standards; and the impact of using the ISO 9000/ANSI/ASQC Q90 Series Standards within the Defense Logistics Agency.

PREREQUISITE: Attendees should be familiar with DoD unique quality assurance requirements and each individual should read the ISO 9000/ANSI/ASQC Q91-Q93 Quality Series Standards prior to attending this training session.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of similar training courses or both experience and training.

J03

TITLE: SPECIFICATION TESTING OF PROPELLANTS

SOURCE: HQ San Antonio Air Logistics Center (AFLC)  
Kelly AFB, TX 78241-5000

LOCATION: Aerospace Fuels Laboratory  
Vandenberg AFB, CA 93437

or

Aerospace Fuels Laboratory  
Patrick AFB, FL 32925

LENGTH: 24 Hours.

OBJECTIVE: Upon completion of this course, the student will have a basic knowledge of the use of laboratory equipment and the various methods of analyzing and testing propellants.

COURSE DESCRIPTION: Student will receive instructions on such chemicals as alcohols, esters, aldehydes, acids, alkalies, salts, propellants, oxidizers, and RP-1, RJ-1, hydrazine, UDHM, nitrogen, tetroxide, inhibited red fuming nitric acid, liquid oxygen, and nitrogen. Additional instructions will include application of approved test methods, interpretation of test results, and contractual testing requirements.

PREREQUISITE: Personnel nominated to attend must have an actual or anticipated need to become familiar with the testing of propellants and oxidizers.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.

J06

TITLE: QUALITY ASSURANCE MANAGEMENT OF COMPRESSED GAS CYLINDERS

SOURCE: Defense Supply Center Richmond (DSCR)  
Richmond, VA 23297-5000

LOCATION: Same as source.

LENGTH: 32 Hours.

OBJECTIVE: Upon completion of this course, the student will have a basic knowledge of the QA management of cylinders, beginning with the manufacture and continuing through rehabilitation and refilling and concluding with disposal of the cylinder. The student will also be acquainted with the various types of compressed gas cylinders and valves and provided a general knowledge of the regulatory requirements governing the manufacture and useful life of compressed gas cylinders.

COURSE DESCRIPTION: To provide instruction on various liquefied and compressed gases and cylinders, interpretation of test results, and contractual requirements. Specific attention is devoted to the Code of Federal Regulations (CFR), Title 29, in the discussion of CFRs, QA problem areas, and overall efforts to improve the compressed gas and cylinder area. Instruction consists of the following: classroom lectures, demonstrations of the various types of valves through the use of cutaways, and field trips to a cylinder filling station and a cylinder rehabilitation facility.

PREREQUISITE: Personnel nominated to attend must have an actual or anticipated need to become familiar with the manufacture and useful life of and regulations governing compressed gases and cylinders.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.

J07

TITLE: QUALITY ASSURANCE OF INTO-PLANE SERVICING CONTRACTS

SOURCE: Defense Logistics Agency  
ATTN: AQCJ  
8725 John L. Kingman Hwy  
Ft. Belvoir, VA 22060-2261

LOCATION: Onsite as determined by DCMD.

LENGTH: 20 Hours.

OBJECTIVE: The student is familiarized with his/her responsibilities and the special quality and safety procedures required to administer QA surveillance over an into-plane servicing contractor's facility.

COURSE DESCRIPTION: The course stresses the specialized quality and safety procedures that are required from the into-plane service contractors. The presentation goes into great detail to explain the need for various requirements and provides the student with sufficient background on the reason for them. During a visit to a facility, an actual demonstration of the various operations is scheduled, to be followed by a period permitting the students hands-on practice and application of what they have learned.

PREREQUISITE: None.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.

J08

TITLE: QUALITY ASSURANCE OF COAL

SOURCE: Defense Logistics Agency  
ATTN: AQCJ  
8725 John L. Kingman Hwy  
Ft. Belvoir, VA 22060-6160

LOCATION: To be determined by source.

LENGTH: 40 Hours.

OBJECTIVE: Upon completion of this course, the student will be knowledgeable of the source inspection requirements for coal.

COURSE DESCRIPTION: The training includes a review of DFSC contract provisions, the background of coal procurement in DoD, and, in general, the coal industry. Instruction includes sessions on coal sampling and laboratory analysis. Field trips are conducted to a coal supplier and Department of Energy (DoE) coal analysis laboratory and sample preparation facilities. Field trips may vary according to availability, activity, and student needs. Instruction is provided with the assistance of personnel from the U.S. Army Coal Analysis Laboratory and Sampling Division and DCMC.

PREREQUISITE: None.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.



J15

TITLE: SPECIFICATION TESTING OF AVIATOR'S BREATHING OXYGEN (ABO)

SOURCE: HQ San Antonio Air Logistics Center (ALC)  
SA-ALC-FT  
Kelly AFB, TX 78241-5000

LOCATION: Various as determined by the source.

LENGTH: 32 Hours.

OBJECTIVE: Upon completion of this course, the student will have a basic knowledge of sampling equipment/techniques and the use of laboratory equipment to analyze both liquid and gaseous ABO.

COURSE DESCRIPTION: Students will receive instructions on the use of proper equipment and techniques for sampling cryogenic liquids. The acceptance tests required by MIL-Q-27210 will be observed/performed by the students, utilizing specialized laboratory testing instruments. Additional instruction will include interpretation of test results, contractual testing requirements, and the safety hazards associated with this commodity.

PREREQUISITE: Personnel nominated to attend must have an actual or anticipated need to become proficient in the acceptance testing of aviator's breathing oxygen or similar gases.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.

NOTE: Class size is limited to four personnel.

J20

TITLE: PETROLEUM IN-PLANT QUALITY ASSURANCE

SOURCE: HQ DLA  
ATTN: AQCJ  
8725 John L. Kingman Hwy  
Ft. Belvoir, VA 22060-2261  
DSN: 427-2364  
Comm: (703) 767-2364

LOCATION: Various as determined by source.

LENGTH: 80 Hours.

OBJECTIVE: To provide the student commodity knowledge of the chemical and physical properties of petroleum, petroleum processes, and laboratory testing of petroleum products. To train QA personnel responsible for the In-Plant Quality Evaluation (IQUE) of petroleum products. Upon completion of this course, the student will be able to perform the duties of a QAR as they pertain to bulk petroleum contracts at the plant level.

COURSE DESCRIPTION: Students will receive an overview of process chemistry, the principles of petroleum refining, the unique techniques associated with the measurement and transportation of bulk petroleum and petroleum industry quality control procedures. Classroom activities include how to apply IQUE concepts to petroleum manufacturing, contract review, and flowing and proofing petroleum processes.

PREREQUISITE: Individuals must have completed course S89, DoD In-Plant Quality Assurance. Students must have also completed at least 30 days of on-the-job training at a bulk petroleum contractor's plant.

COURSE EQUIVALENCY: None authorized.

J22

TITLE: MARITIME CONFINED SPACE

SOURCE: Marine Field Service  
National Fire Protection Association  
Batterymarch Park  
Quincy, MA 02269  
Comm: (617) 770-3000

LOCATION: To be determined by source

LENGTH: 24 Hours.

OBJECTIVE: To provide participants' with instructions and hand-on training exercises that will enable them to recognize and execute the responsibilities of a Shipyard Competent person as it relates to hazardous conditions in confined space entry.

COURSE DESCRIPTION: The three day course is designed to teach competent persons the importance and value of hazard recognition, evaluation, and control. Working in small groups with experienced marine chemists, participants will, through a unique hands-on training program developed specifically for this class, receive instruction in testing and instrumentation. This program affords the student the opportunity to integrate and apply the course concepts taught by testing compartments containing a wide variety of atmospheric conditions. These compartments simulate shipboard confined spaces.

PREREQUISITE: Nominees should occupy, or be expected to occupy, a position which requires duty performance in Tanker/Barge operations, or be required to enter any confined space.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of completion of a similar course in accordance with the Policy section of this instruction.

J23

TITLE: MARINE MEASUREMENT

SOURCE: Petroleum Extension Service Energy Training Ctr  
North Harris County College  
2700 W. W. Thorne Dr.  
Houston, Texas  
Comm: (713) 443-7144

LOCATION: To be determined by source

LENGTH: 40 Hours.

OBJECTIVE: This course is intended to develop the managerial capabilities of the student by providing an understanding of the principles, policies, organization, and techniques necessary to attain an efficient and reliable inventory measurement in marine type petroleum operations.

COURSE DESCRIPTION: The course will cover the specialized equipment, standards, and techniques required to accurately measure petroleum liquids on ships and barges. Lectures also include the agencies, legal aspects, and accounting practices Pertaining to marine shipment and custody transfer. Instruction stresses discharge rather than loading operations. The course is designed for personnel who are responsible for receiving and shipping petroleum liquids at a marine facility or personnel who are responsible for supervision or accounting functions as a headquarters. Participants should have a working knowledge of petroleum properties and standard measurement equipment.

PREREQUISITE: Nominees should occupy, or be expected to occupy, a position which requires duty performance in Tanker/Barge operations.

COURSE EQUIVALENCY: None authorized.

J24

TITLE: INTRODUCTION TO PETROLEUM REFINERY PROCESSING

SOURCE: The Center for Professional Advancement  
Post Office Box 964  
East Brunswick, New Jersey 08816-0964  
Comm: (908) 613-4535/4500

LOCATION: To be determined by source

LENGTH: 24 Hours.

OBJECTIVE: This three day intensive course presents a detailed overview of the integrated fuels refinery of today, from the crude oil feed stock to the finished products. Emphasis is placed on motor and jet fuel, distillate heating fuel production, and the refinery processes used. This course has been designed for technical personnel who have limited refinery operation experience or who are involved in supporting operations.

COURSE DESCRIPTION: This introductory course will present a thorough overview of the modern integrated crude petroleum refinery, its feedstocks, product slate and the processes employed to convert crude oil and intermediate streams into finished products. The chemistry of hydrocarbons, crude oil, crude oil properties and fuel product quality will also be discussed. The details of each refining process will be presented, covering operation description and conditions, feedstock and catalyst selection, product yield, economics and the relationship between process parameters, unit performance and product output and properties. Finally, attention will be given to refinery optimization and future operations, including anticipated changes in crude oil and product slates and the effect of alternate feedstocks such as shale oil and coal derived liquids.

PREREQUISITE: None

COURSE EQUIVALENCY: Equivalency may be granted on the basis of completion of a similar course in accordance with the Policy section of this instruction.

J25

TITLE: OIL SPILL CONTROL COURSE

SOURCE: Oil and Hazardous Material Control Training Div  
Texas Engineering Extension Service  
The Texas A&M University System  
F.E. Drawer K  
College Station, Texas 77843  
Comm: (713) 845-3418

LOCATION: Same as source

LENGTH: 40 Hours.

OBJECTIVE: The Oil Spill Control Course is designed to provide participants with the information and training necessary for handling an oil spill within the capabilities of available equipment and manpower. Students learn to work efficiently within the framework of the law, maximizing their effectiveness under various spill conditions and minimizing spill damage and expense.

COURSE DESCRIPTION: The Oil Spill Control Course is designed to provide participants with the information and training necessary for handling an oil spill within the capabilities of available equipment and manpower. Students learn to work efficiently within the framework of the law, maximizing their effectiveness under various spill conditions and minimizing spill damage and expense. At the close of the course, each student should be able to recognize potential spill situations; modify and update existing contingency plans to enhance their effectiveness. Also, students will become familiar with legal requirements for properly reporting oil spills, effectively handling the public relations aspects and become aware of the legal implications at the spill scene.

PREREQUISITE: None

COURSE EQUIVALENCY: Equivalency may be granted on the basis of completion of a similar course in accordance with the Policy section of this instruction.

J26

TITLE: PETROLEUM TANKSHIP OPERATIONS

SOURCE: The World Trade Institute  
One World Trade Center, 55 West  
New York, New York 10048  
Com: (212) 466-4044

LOCATION: To be determined by source

LENGTH: 24 Hours.

OBJECTIVE: To acquaint participant with the special terminology, the problems involving ship and cargo, government regulations, trade-off of time and cost and factors which must be understood to achieve cost-effective movement of petroleum.

COURSE DESCRIPTION: This course will provide participant with the type of information needed to make more knowledgeable decisions in all aspects of petroleum shipment such as, segregated ballast requirements, demurrage rates, port and tanker safety act, ullage, cargo retains, time charter, tanker load/discharge, inert gas systems, problems with hydrocarbon vapors, and applying these characteristics to their job.

PREREQUISITE: None

COURSE EQUIVALENCY: Equivalency may be granted on the basis of completion of a similar course in accordance with the Policy section of this instruction.

J27

TITLE: AVIATION FUELS, SPECIFICATIONS AND TEST METHODS

SOURCE: American Society for Testing and Materials (ASTM)  
100 Bar Harbor Drive  
West Conshohocken, PA 19428-2959  
(610)832-9500

LOCATION: Same as source

LENGTH: 24 Hours.

OBJECTIVE: This course is designed for laboratory supervisors and supervisory fuel handling personnel who require a general understanding of fuel specifications and fuel quality control. It is not intended for laboratory technicians or those who run the tests, because it does not address the detailed conduct of the various standard and non-standard test methods. The course addresses the "why" not the "how" of aviation fuels.

COURSE DESCRIPTION: This course is designed for petroleum handling personnel who require a general understanding of fuel specifications and fuel quality control. It is not intended for laboratory technicians or those who run the tests, because it does not address the detailed conduct of the various standard and non-standard test methods. It addresses the "why" and not the "how" of aviation fuels. Specifications and test methods focuses on why they affect product performance and availability. At the completion of this workshop, you will be acquainted with both jet fuel and aviation gasoline specifications on a world-wide basis and be familiar with the refining processes used to make fuels.

PREREQUISITE: None

COURSE EQUIVALENCY: Equivalency may be granted on the basis of completion of a similar course in accordance with the Policy section of this instruction.



N12

TITLE: MATERIAL CONTROL REQUIREMENTS, MCS-6

SOURCE: Naval Sea Systems Command Technical Representative (NSTR)  
Pittsburgh, PA 15122

LOCATION: On-site as determined by DCMDs or correspondence mode.

LENGTH: 24 hours if provided in formal classroom mode or variable dependent on student's own pace of learning if provided in correspondence mode.

OBJECTIVE: To familiarize personnel with the special naval nuclear material control requirements.

COURSE DESCRIPTION: This course covers materials technology, equipment, techniques for alloy identity and condition verification testing, and the specific requirements of the standard for control of material for plan components, MCS-6. The course also includes a workshop in which the lessons learned are applied during a review of material test reports.

PREREQUISITE: None.

COURSE EQUIVALENCY: None authorized.

P01

TITLE: DEFENSE BASIC PRESERVATION AND PACKING

SOURCE: School of Military Packaging Technology (SMPT)  
ATTN: AMXMC-SMPT-A22  
Aberdeen Proving Ground, MD 21005-5001

or

DCPSO Atlanta  
805 Walker St.  
Suite #3  
Marietta, GA 30060  
(770)590-6648 DSN 697-6648

LOCATION: Correspondence or On-site

LENGTH: 48 Hours

OBJECTIVE: To train QA personnel in the basic preservation and packing principles and procedures in preparing new and repairable material for storage and shipment.

COURSE DESCRIPTION:(SMPT822-F13(COR)). This course encompasses the most predominantly used processes, methods, procedures, and containers used in the field of preservation and packing at DoD installations. The course consists of the following topics: military and industrial preservation, corrosion control, cleaning and drying, electrostatic discharge control, preservation materials and equipment, preservatives, cushioning, blocking and bracing, preservation methods, miscellaneous packaging requirements, introduction to packing, fiberboard boxes, triple-wall corrugated fiberboard boxes, wooden boxes, crates, miscellaneous containers and Fast Packs, weatherproofing the pack, cargo unitization, marking and labeling, hazardous materials, packing of parcel post, and industrial packaging. The course consists of 15 lessons and a final examination.

PREREQUISITE: None.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction. This course was previously designated at S08. Completion of S08 is equivalent to this course.

P02

TITLE: DEFENSE MARKING FOR SHIPMENT AND STORAGE

SOURCE: School of Military Packaging Technology (SMPT)  
ATTN: AMXMC-SMPT-A22  
Aberdeen Proving Ground, MD 21005-5001

LOCATION: Correspondence

LENGTH: 28 Hours

OBJECTIVE: To train QA personnel in the current requirements and procedures for the uniform marking of military supplies and equipment for shipment and storage with emphasis on the problem areas that give rise to frequent reports of marking errors and deficiencies.

COURSE DESCRIPTION: (SMPT 8B-F32 (COR)). An overview of the Uniform Military Movement and Issue Priority Systems (UMMIPS) defense marking scope and applicability; general and detailed marking requirements; MIL-STD-129 appendix information; marking and labeling of hazardous materials. This course consists of 13 lessons and a final examination.

PREREQUISITE: None

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.

P03

TITLE: DEFENSE PACKAGING DATA SYSTEM-CODE INTERPRETATION

SOURCE: School of Military Packaging Technology (SMPT)  
ATTN: AMXMC-SMPT-A22  
Aberdeen Proving Ground, MD 21005-5001

LOCATION: Correspondence

LENGTH: 16 Hours

OBJECTIVE: To train QA personnel in the proper implementation of MIL-STD-2073, and in understanding and interpreting packaging data.

COURSE DESCRIPTION:(SMPT-4 (COR)). Introduction to MIL-STD-2073-1; definitions and packaging terminology; general requirements, QA provisions; categorization and interpretation of predetermined data; and shipment container selection. This course consists of 10 lessons and a final examination.

PREREQUISITE: None

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.

P04

TITLE: HAZARDOUS MATERIALS HANDLING

SOURCE: School of Military Packaging Technology (SMPT)  
ATTN: AMXMC-SMPT-A22  
Aberdeen Proving Ground, MD 21005-5001

LOCATION: Correspondence

LENGTH: 4 Hours

OBJECTIVE: To train QA personnel who are assigned contracts that require the handling, loading, unloading, and storing of hazardous materials to recognize the hazard class labels, placards, and the compatibility for loading and/or storage and safety of hazardous materials.

COURSE DESCRIPTION: (SMPT-5 (COR)). This course addresses the following topics: recognition of material handling markings; recognition of hazard class labels and the effects that may occur if a hazardous material is accidentally released; segregation of various classes of hazards according to published compatibility charts for loading of trucks, railcars, anti-aircraft; neutralization and cleanup of minor spills; emergency measures in case of incidents; and the recognition and proper disposition of damaged hazardous material containers. This course consists of five lessons and a final examination.

PREREQUISITE: None

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.

P05

TITLE: PACKAGING AND HANDLING OF ELECTROSTATIC DISCHARGE SENSITIVE (ESDS) ITEMS

SOURCE: School of Military Packaging Technology (SMPT)  
ATTN: AMXMC-SMPT-A22  
Aberdeen Proving Ground, MD 21005-5001

LOCATION: Correspondence

LENGTH: 8 Hours

OBJECTIVE: This course is designed to provide a basic understanding of the Electrostatic Discharge (ESD) phenomenon, its causes, the damage resulting from ESD, and the techniques of damage control. The objective of the course is to reduce repair costs, prevent excessive equipment downtime, and enhance mission effectiveness within DoD.

COURSE DESCRIPTION: (SMPT-6 (COR)). This course includes an introduction to Electrostatic Discharge (ESD); controlling static discharge; guidance for handling ESDS items; and packaging, marking, and labeling. This course consists of six lessons and a final examination.

PREREQUISITE: None

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.

PQM101

TITLE: PRODUCTION AND QUALITY MANAGEMENT FUNDAMENTALS

SOURCE: Chief, Student Operations  
AFIT - School of Systems and Logistics  
Building 641  
AFIT/LSA  
2950 P Street  
Wright-Patterson AFB, OH 45433-7765

LOCATION: On-Site

LENGTH: 80 Hours.

OBJECTIVE: Provides production, manufacturing, and quality assurance principles, policies, and practices used in the DoD.

COURSE DESCRIPTION: This is an entry-level course that emphasized the basic production, manufacturing, and quality assurance principles, processes and practices used in the DoD. This course addresses topics such as automation tools, industrial base, materiel control, technical support to negotiations, pre-award and post-award activities, producibility, technical surveillance, process evaluation, statistically tools, quality assurance planning, and engineering.

PREREQUISITE: None.

COURSE EQUIVALENCY: None.

Q54

TITLE: PACKAGING OF HAZARDOUS MATERIALS FOR TRANSPORTATION

SOURCE: Course 8B-F7/822-F7(JT) (60 Hours)  
DEFENSE PACKAGING OF HAZARDOUS MATERIALS FOR TRANSPORTATION  
School of Military Packaging Technology (SMPT)  
Aberdeen Proving Ground, MD 21005-5001

or

Course A-822-0012(NV) (80 Hours)  
TRANSPORTATION AND STORAGE OF HAZARDOUS MATERIALS  
Naval School, Physical Distribution Management  
Oakland, CA 94265-5030

or

Course DACS AMMO L-17(JT) (80 Hours)  
TECHNICAL TRANSPORTATION OF HAZARDOUS MATERIALS  
USA Defense Ammunition Center and School  
Savanna, IL 61074-9639

LOCATION: Same as source.

LENGTH: 60 to 80 Hours.

OBJECTIVE: To train QA personnel in the current requirements and procedures in the preparation of hazardous materials for transportation, including marking, certification, handling, and storage through the approved methods and techniques of DoD and DoT.

COURSE DESCRIPTION: (SMPT-8B-F7/822-F7(JT)). Course covers the use of DoD; DoT; International Air Transport Association (IATA) Restricted Articles Regulations; Intergovernmental Maritime Consultative Organization (IMCO); and Official Air Transport Restricted Articles Tariff and Circular No. 6-D; regulatory documents for the transportation of hazardous materials by rail, public highway, commercial aircraft and vessel. The transportation of hazardous materials by military aircraft (AFR 71-4); comparison of DoD, DoT, IATA, and IMCO containers authorized for use in packaging hazardous materials classifications and labels; IMCO classifications and labeling requirements; and MIL-STD-129 requirements for hazardous and other materials requiring special handling data/certification on label DD Form 1387-2, Special Handling Data/Certification, are also covered.

PREREQUISITE: This course is designed for QA personnel who are assigned contracts that require the packaging of hazardous military supplies and equipment.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both.



Q61

TITLE: DEFENSE SPECIFICATION MANAGEMENT

SOURCE: U.S. Army Logistics Management Center (ALMC)  
Ft. Lee, VA 23801-6040  
(AV) 687-2177/3595

LOCATION: Same as source.

LENGTH: 80 Hours.

PURPOSE: This course provides instruction for personnel who, in the performance of their assignments, are required to make decisions that govern and relate to the development or use of specifications.

COURSE DESCRIPTION: (8D-F1-(JT)). The course covers DoD management concepts and policies involved in the development, preparation, and use of specifications. It includes types of specifications, technical development of materiel requirements, quality assurance, and packaging sections of a specification, and the coordination of specifications. The role of specifications in the acquisition process is covered with emphasis on cost considerations in the development and application of specifications.

PREREQUISITE: Nominees must be commissioned, warrant, and senior noncommissioned officers or civilians (GS-9 and above) who have actual or scheduled job assignments which require responsibility for writing, reviewing, coordinating, applying, or using specifications.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction. In addition PQM103 is equivalent to Q61.

SQC001

TITLE: STATISTICAL QUALITY CONTROL

SOURCE: DCPSO Atlanta  
805 Walker St.  
Suite #3  
Marietta, GA 30060  
(770)590-6648 DSN 697-6648

LOCATION: On-site.

LENGTH: 80 Hours.

PURPOSE: This course is designed for personnel engaged in assuring satisfactory performance of processes for products or services.

COURSE DESCRIPTION: This course is designed to provide the participant with a working knowledge of the basic statistical techniques, currently utilized in the interpretation and evaluation of process control and acceptance sampling plans. Topics include: statistical and probabilistic concepts, statistical process controls, process capability analysis, selection and evaluation of sampling plans, and procedures for sampling inspection by attributes and variables.

PREREQUISITE: Participants attending this course must have a working knowledge of advanced algebraic techniques or have successfully completed DCPSO course Basic Algebra, S71, or an equivalent course.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of completion of a similar course or courses provided the same topics were covered. The course covers all the subject matter in S09, Statistical Sampling, S81, Statistical Process Control, and S91 SPC for Short Production Runs.

S06

TITLE: MEASURING TECHNIQUES

SOURCE: DCPSO Atlanta  
805 Walker St.  
Suite #3  
Marietta, GA 30060  
(770)590-6648 DSN 697-6648

LOCATION: Onsite

LENGTH: 40 Hours.

OBJECTIVE: Upon completion of this course, the student should be able to make the proper selection of measuring instruments for checking various dimensional and geometric requirements as specified on engineering drawings.

COURSE DESCRIPTION: An introduction to measurement problems and their solutions along with the required mathematics. Precision measuring equipment is demonstrated to include the techniques and setups required to obtain the measurements specified by the drawing. Surface plate and thread measurements are emphasized. Provides knowledge as to the accuracy that can be expected and the limitations of each measuring device. The course gives the students the opportunity to practice the techniques taught and become proficient in the instruments through a number of practical exercises beginning with the simple and progressing to the complex.

PREREQUISITE: Must have successfully completed or have been granted equivalency for S44, Drawings, Dimensions, and Tolerancing, or demonstrated an ability to read engineering drawings.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction. An equivalency test is available.

S07

TITLE: CALIBRATION SYSTEM REQUIREMENTS

SOURCE: DCPSO Atlanta  
805 Walker St.  
Suite #3  
Marietta, GA 30060  
(770)590-6648 DSN 697-6648

LOCATION: Onsite

LENGTH: 24 Hours.

OBJECTIVE: Upon completion of this course, the student will have a basic understanding of ANSI Z540-1, Calibration Laboratories and Measuring and Test Equipment - General Requirements, and DLAR 8250.2, DLA Calibration and Measurement Program.

COURSE DESCRIPTION: The course of instruction provides the student with an understanding of calibration system requirements imposed by contract. Specific topics will include relationships between certified measurement standards and national standards; accuracy of standards, calibration frequency and intervals; use of calibration labels on measuring and test equipment; calibration certificates and reports; and calibration procedures for production tooling used as a method of acceptance inspection. QA personnel will be given their responsibilities for a metrology review.

PREREQUISITE: None.

COURSE EQUIVALENCY: None authorized.

S09

TITLE: STATISTICAL SAMPLING

SOURCE: DCPSO Atlanta  
805 Walker St.  
Suite #3  
Marietta, GA 30060  
(770)590-6648 DSN 697-6648

LOCATION: Onsite

LENGTH: 24 Hours.

OBJECTIVE: Upon completion of this course, the student will be able to understand the terms used in statistical quality control, evaluate and select an appropriate sampling plan, apply standard and special sampling plans.

COURSE DESCRIPTION: This course consists of sections covering such items as types of inspection and design of an attributes sampling plan, inspection by variables, and sampling techniques. Definition of the basic terms used in statistical quality control and evaluation of sampling procedures are integrated into the lesson plan as required. Appropriate uses for particular sampling plans are demonstrated as examples throughout the course.

PREREQUISITE: Personnel nominated should have a good knowledge of fundamental mathematics and quality assurance principles, some knowledge of basic probability and statistical methods would be helpful.

COURSE EQUIVALENCY: Equivalency may be granted based on the successful completion of a statistical quality control course offered by an accredited college or technical school. Course SQC001, Statistical Quality Control, incorporates the subject matter in S09, S81, S91 courses.

S13

TITLE: WELDING PROCESSES

SOURCE: HQ DLA  
ATTN: AQCJ  
8725 John L. Kingman Hwy.  
Ft. Belvoir, VA 22060-2661  
(703)767-2364

LOCATION: Onsite as determined by DCMC.

LENGTH: 40 Hours.

OBJECTIVE: This course provides the student with a basic understanding of welding processes. The objective of this course is to enable the student to effectively monitor welding processes and verify compliance to contract requirements and applicable military specifications and standards.

COURSE DESCRIPTION: This course covers the principles, procedures, characteristics, and equipment associated with various welding processes. Topics include arc welding, gas welding, plasma arc, resistance welding, brazing, welding qualification, weld inspection, electrode classification, and safety.

PREREQUISITE: Personnel nominated for this course should have a basic knowledge of Metallurgy.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of completion of a similar course. Equivalency based on experience alone is not authorized. An equivalency test is not available.

S32

TITLE: AUTOMATIC TEST EQUIPMENT (ATE)

SOURCE: Defense Contract Management District East  
495 Summer Street  
Boston, MA 02110-2184

LOCATION: Onsite

LENGTH: 40 Hours.

OBJECTIVE: Upon completion of this course, the QAR will be able to explain the basic principles and terminology associated with ATE, comprehend the responsibilities related to the QA of ATE, and recognize the importance of requesting staff assistance when ATE is used at a contractor's facility.

COURSE DESCRIPTION: This course covers the basic principles of ATE in layman terms. ATE and related computer software terms are explained to allow the QAR to recognize the requirements for ATE and the contractor's use of ATE.

PREREQUISITE: None.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.

S44

TITLE: DRAWINGS, DIMENSIONS, AND TOLERANCING

SOURCE: DCPSO Atlanta  
805 Walker St.  
Suite #3  
Marietta, GA 30060  
(770)590-6648 DSN 697-6648

LOCATION: Onsite

LENGTH: 40 Hours.

OBJECTIVE: Upon completion of this course, the student will understand the basic language used in engineering drawings and specifications, and the requirements imposed on a contractor by the technical data package of the contract.

COURSE DESCRIPTION: The engineering drawing portion of the course introduces the student to lines, symbols, projections, dimensioning, tolerances, bills of material, changes, and administrative information making up an engineering drawing. Course will also cover established rules, principles, and methods of dimensioning and tolerancing used to define the required condition of a part or component on an engineering drawing; practices for indicating tolerances on linear and angular dimensions, applicability for material condition modifiers, and rules for interpreting limits and tolerances; symbology, datum referencing; and tolerances of location. The student will solve inspection problems requiring a knowledge of precision measuring equipment and shop mathematics. A brief review of surface texture, screw threads, and gears is also included.

PREREQUISITE: Students should bring a calculator to this class.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.



S44A

TITLE: ADVANCED GEOMETRIC DIMENSIONING AND TOLERANCING

SOURCE: DLA Civilian Personnel Support Office (DCPSO)  
805 Walker St  
Suite #3  
Marietta, GA 30060  
(770)590-6648 DSN 697-6648

LOCATION: Onsite as determined by DCPSO.

LENGTH: 40 Hours.

OBJECTIVE: Upon completion of this course, the student will fully understand and apply the requirements of Geometric Dimensioning and Tolerancing as delineated by the American Society of Mechanical Engineers ASME/ANSI Y14.5.

COURSE DESCRIPTION: The student will perform practical "hands on" exercises utilizing mechanical measuring setups using a computer-operated coordinate measuring machine. The mechanical measuring setups will consist of form tolerances, orientation tolerances, profile, runout, position, symmetry, concentricity, and tangent planes. Additional topics include coordinate versus position theory, tangent planes, free state variation, and extended datum principles.

PREREQUISITE: S44, Drawings, Dimensioning and Tolerancing. Students should bring a calculator to this class.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.

S48

TITLE: SURFACE TREATMENT OF METALS

SOURCE: DCPSO Atlanta  
805 Walker St.  
Suite #3  
Marietta, GA 30060  
(770)590-6648 DSN 697-6648

LOCATION: Onsite as determined by DCMDs.

LENGTH: 40 Hours.

OBJECTIVE: To provide the student with an understanding of chemical cleaning, conversion coating, electroplating, and painting processes as well as the associated MIL-SPECs/STDs.

COURSE DESCRIPTION: This course is designed to be an introduction to the various cleaning processes required to achieve a desired surface. Conversion coatings, passivation treatments, electroplating, painting and methods of application are addressed. Corrosion effects and corrosion prevention are discussed. Associated MIL-SPECs/STDs and industry standards are discussed. Also addressed is the evaluation of surface treatment processes.

PREREQUISITE: Personnel nominated for this course should have a basic knowledge of chemistry.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.

S50

TITLE: METALURGY

SOURCE: DCPSO Atlanta  
805 Walker St.  
Suite #3  
Marietta, GA 30060  
(770)590-6648 DSN 697-6648

LOCATION: Onsite

LENGTH: 40 Hours.

OBJECTIVE: To provide the student with an overview of those principles of metallurgy that apply to metal forming processes and an understanding of the more common specifications regulating these processes. It serves as the foundation course for QA personnel involved with mechanical testing, thermal joining (welding), heat treatment, and surface treatment (plating, anodizing, etc.) of metals.

COURSE DESCRIPTION: The course includes an explanation of the terms and definitions used in production of the various alloys and the processes to make these alloys into useful products. The structure, properties, and modification of ferrous and nonferrous metals will be discussed.

PREREQUISITE: None.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.

S53

TITLE: QUALITY ASSURANCE OF COMPOSITE MATERIALS

SOURCE: Institute for Aviation Research  
Composites Lab  
Wichita State University

LOCATION: To be determined by source.

LENGTH: 80 Hours.

OBJECTIVE: To train QA personnel on the basic knowledge of the principles for the producibility and QA of composite materials.

COURSE DESCRIPTION: Provides a technical understanding of producibility and QA of Composite Materials. Instruction will cover principles of composites, motives for their use, description of the materials and composite material engineering drawings. Review guidelines for structural design, processing methods, and fabrication and assembly methods are also covered. In the area of QA the guidelines for inspectibility of design, in-process controls, post processing and post assembly inspection, acceptance and rejection criteria, to include documentation and record keeping, are covered.

PREREQUISITE: None.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.

S54

TITLE: ELECTRONICS PART I

SOURCE: DCPSO Atlanta  
805 Walker St.  
Suite #3  
Marietta, GA 30060  
(770)590-6648 DSN 697-6648

or

Military Service Schools, Local Colleges, Universities,  
Vocational Schools, or Correspondence

LOCATION: Same as source.

LENGTH: Varies (160-960 hours).

OBJECTIVE: This course provides the student with a knowledge of electronic theory, law, and its application, fundamentals of magnetism, principles of alternating current, network theorems, bridge circuits, rectifiers, and filters.

COURSE DESCRIPTION: Provides the student with a better understanding of the fundamental principles of electricity. A comprehensive review of all necessary mathematical concepts is first presented, starting with decimals and fractions, and in an orderly development continued by steps, to elementary plane trigonometry. After completing the development of math, students are then introduced to the fundamental concepts of electricity, starting with sources of electricity, magnetism, and direct current theory. During all phases of the learning program, students are given opportunities to put their newly acquired theories to use by means of carefully supervised practical exercises. Using a step-by-step procedure, the students are then taught the theories and uses of alternating current generation, AC circuits including impedance and resonance. During the final week, a complete review and examination are scheduled to further aid the student in retaining the knowledge gained during the course.

PREREQUISITE: Personnel nominated must have a knowledge of high school level algebra.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.

S55

TITLE: ELECTRONICS PART II

SOURCE: DCPSO Atlanta  
805 Walker St.  
Suite #3  
Marietta, GA 30060  
(770)590-6648 DSN 697-6648

or

Military Service Schools, Local Colleges, Universities,  
Vocational Schools, or Correspondence

LOCATION: Same as source.

LENGTH: Varies (200-1050 hours).

OBJECTIVE: Upon completion of this course, students will have an understanding of the QA surveillance of electronic components, systems, and subsystems.

COURSE DESCRIPTION: This course will allow the student to acquire the basic knowledge and principles involved in electronic circuits, semiconductors integrated circuits and power supplies. Motors and other electronic items will be addressed in order for the student to understand the manufacturing processes associated with electronic equipment. This course also includes the use of electronic measuring equipment and large variety of common test equipment that is used by DoD contractors.

PREREQUISITE: Personnel nominated must have successfully completed course S54, Electronics Part I, or its equivalent.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.

S60

TITLE: SPECIFICATIONS AND STANDARDS

SOURCE: DCPSO Atlanta  
805 Walker St.  
Suite #3  
Marietta, GA 30060  
(770)590-6648 DSN 697-6648

LOCATION: Onsite

LENGTH: 32 Hours.

OBJECTIVE: To acquaint the student with military specifications and standards, their format, use, and how to obtain specifications and standards.

COURSE DESCRIPTION: Course covers the contents of military and Federal specifications, methods of changing specifications, the DoD Index of Specifications and Standards (DoDISS). Various types of specifications/standards and the process to correct errors or omissions are discussed. The method to obtain specifications is also included.

PREREQUISITE: None.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.

S61

TITLE: DEFENSE SUPPLY CENTER CONTRACT QUALITY ASSURANCE

SOURCE: DCPSO Atlanta  
805 Walker St.  
Suite #3  
Marietta, GA 30060  
(770)590-6648 DSN 697-6648

LOCATION: Onsite as determined by Defense Supply Centers

LENGTH: 40 hours

OBJECTIVE: Upon completion of this course, the student will have a working knowledge of the acquisition quality assurance policies and procedures implemented by Defense Supply Centers. The student will be able to implement and conduct an effective quality assurance program in support of DLA's supply management mission.

COURSE DESCRIPTION: This course covers the DLAD 4155.2, Quality Assurance Program for DLA Inventory Control Points and the associated programs, functions, and responsibilities in the backdrop of the current organizational structure of Commodity Business Units and Integrated Processing Units. Preaward and postaward quality assurance functions are covered in detail, including determination of contract QA requirements, preparation of quality assurance letters of instruction, investigation and resolution of customer complaints, and the evaluation of contractor quality history. Additional subjects include, waivers/deviations, first article requirements, and storage standards.

PREREQUISITE: None.

COURSE EQUIVALENCY: None authorized.



S61A

TITLE: DEFENSE FUEL SUPPLY CENTER QUALITY ASSURANCE OVERVIEW

SOURCE: Defense Fuel Supply Center (DFSC)  
ATTN: DFSC-TQ  
8725 John J. Kingman Rd.  
Ft. Belvoir, VA 22060-6222

LOCATION: Onsite as determined by DFSC

LENGTH: To be determined

OBJECTIVE: Upon completion of this course, the student will have a working knowledge of the fuels acquisition quality assurance, contract quality assurance, and fuel quality surveillance policies, programs, and procedures implemented by DFSC and the Military Services. The student will be able to implement and conduct basic quality functions as part of a multifunctional workforce or supervise and manage fuels quality personnel in support of the DLA/DFSC supply management mission.

COURSE DESCRIPTION: This course covers the DLAD 4155.2, Quality Assurance Program for DLA Inventory Control Points as it applies to the DFSC's specialized fuel mission. The course delineates the associated programs, functions, and responsibilities in the backdrop of the current organizational structure of Commodity Business Units, Integrated Processing Units, and/or multifunctional teams. Preaward and postaward quality assurance functions are covered in detail, including determination of contract QA requirements, preparation of quality assurance letters of instruction, investigation and resolution of customer complaints, and the evaluation of contractor quality history. Additional subjects include contract quality assurance, fuel quality surveillance, waivers/deviations, and storage standards.

PREREQUISITE: Minimum of thirty (30) days work experience in the acquisition or logistics of government fuels.

COURSE EQUIVALENCY: None authorized.

S81

TITLE: STATISTICAL PROCESS CONTROL (SPC)

SOURCE: DCPSO Atlanta  
805 Walker St.  
Suite #3  
Marietta, GA 30060  
(770)590-6648 DSN 697-6648

LOCATION: Onsite

LENGTH: 40 Hours.

OBJECTIVE: This course is designed to provide the student with a working knowledge of the application, development, interpretation, evaluation, and implementation of SPC.

COURSE DESCRIPTION: Topics include the fundamentals of control charts; construction of control charts for attributes and variables data; interpretation, revision, and analysis of control charts; process capability analysis; and the implementation of SPC.

PREREQUISITE: Personnel nominated should have a working knowledge of fundamental arithmetic and algebraic techniques. Of primary importance is the addition, subtraction, multiplication, and division of numbers, including decimal and fractional values, plus the determination of powers and roots. Personnel nominated are advised to review these fundamentals before attending the course. It is recommended that personnel nominated become familiar with the operation of a hand-held scientific calculator and that they bring the calculator to class.

COURSE EQUIVALENCY: Equivalency may be granted on the basis of experience, completion of a similar course, or combination of both in accordance with the policy section of this instruction.

S91

TITLE: STATISTICAL PROCESS CONTROLS (SPC) FOR SHORT PRODUCTION RUNS

SOURCE: DCPSO Atlanta  
805 Walker St.  
Suite #3  
Marietta, GA 30060  
(770)590-6648 DSN 697-6648

LOCATION: On-site

LENGTH: 40 Hours.

OBJECTIVE: This course is designed to provide the student with a working knowledge of the applications, development, interpretation, evaluation and implementation of SPC charting techniques for short production runs, other unique production environments and support processes.

COURSE DESCRIPTION: Topics include review of concepts and fundamentals of statistical process control as addressed in S81. Main focus will be on the construction, revision, interpretation and evaluation of alternate charting techniques that can be utilized for short production runs, other unique production environments and to control processes outside the typical production environment, (support processes). Charts addressed include: Target, Individual X/Moving Range, Moving Average/Moving Range, Short Run X Bar and R, Short Run Attribute, along with 3-D, Group and Pre-Control charts.

PREREQUISITE: Personnel nominated should have a working knowledge of fundamental algebra and SPC techniques. Successful completion of the S81 SPC course is required prior to attending. Students are requested to review traditional SPC concepts and techniques prior to attending this course. It is recommended that student familiarize themselves with the use of a hand held statistical calculator and bring a calculator to class.

COURSE EQUIVALENCY: Equivalency will be granted on the basis of completion of International Quality Institute's course; SPC for Short Production Runs, or similar course in accordance with the policy section of this instruction.

U10

TITLE: ULTRASONIC EVALUATION

SOURCE: DCPSO Atlanta  
805 Walker St.  
Suite #3  
Marietta, GA 30060  
(770)590-6648 DSN 697-6648

LOCATION: Onsite

LENGTH: 40 Hours.

OBJECTIVE: This course provides the student with a knowledge of the principles, procedures, applications, and capabilities of ultrasonic inspection methods. Students are required to demonstrate proficiency in test methods.

COURSE DESCRIPTION: This course provides instruction in the principles, procedures, and techniques of applying ultrasonic energy to the inspection of materials for determining the presence of discontinuities in material, lack of bond between materials, and for thickness measurement. Topics include the theory of ultrasonic sound transducers, wave propagation in different media, coupling methods, test techniques, pulse-echo and through-transmission systems, calibration blocks, and interpretation of indications. This course is intended to enable the student to determine that proper inspection techniques and procedures have been applied in accordance with contract requirements and applicable military specifications and standards.

PREREQUISITE: Personnel nominated should have met the visual acuity requirements of DLAR 8220.4 and have a working knowledge of high school level algebra.

COURSE EQUIVALENCY: Equivalency guidelines of DLAR 8220.4 will be used when granting equivalency in accordance with the policy section of this instruction.

U11

TITLE: MAGNETIC PARTICLE EVALUATION

SOURCE: DCPSO Atlanta  
805 Walker St.  
Suite #3  
Marietta, GA 30060  
(770)590-6648 DSN 697-6648

LOCATION: Onsite

LENGTH: 24 Hours.

OBJECTIVE: This course provides the student with a knowledge of the principles, procedures, applications, and capabilities of magnetic particle inspection methods. Students are required to demonstrate proficiency in test methods per the qualification requirement of DLAR 8220.4.

COURSE DESCRIPTION: This course covers the theory of magnetic particle inspection, magnetizing procedures, and techniques, interpretation of test results, and pertinent specifications. Topics include principles of magnetism (direct/indirect/circular/longitudinal), current selection, direction of field, methods (wet/dry/visible/fluorescent), equipment, application, and interpretation of indications. This course is intended to enable the student to determine that proper inspection techniques and procedures have been applied in accordance with contract requirements and applicable military specifications and standards.

PREREQUISITE: Personnel nominated to attend must have met the visual acuity requirements of DLAR 8220.4.

COURSE EQUIVALENCY: The guidelines of DLAR 8220.4 will be used when granting equivalency.

U12

TITLE: RADIOGRAPHIC EVALUATION

SOURCE: DCPSO Atlanta  
805 Walker St.  
Suite #3  
Marietta, GA 30060  
(770)590-6648 DSN 697-6648

LOCATION: Onsite

LENGTH: 64 Hours.

OBJECTIVE: This course provides the student with a knowledge of the principles, procedures, applications, and capabilities of radiographic inspection methods. Students are required to demonstrate proficiency in test methods per the qualification requirements of DLAR 8220.4.

COURSE DESCRIPTION: This course covers the theory of gamma radiation and x-radiation. It covers radiation characteristics, interaction with matter, gamma sources and x-ray equipment, as well as radiation safety, radiographic procedures, techniques, and interpretation. This course is intended to enable the student to determine proper inspection techniques and procedures have been applied in accordance with contract requirements and applicable military specifications and standards.

PREREQUISITE: Personnel nominated to attend must have met the visual acuity requirements of DLAR 8220.4 and have a working knowledge of high school level algebra.

COURSE EQUIVALENCY: Equivalency guidelines of DLAR 8220.4 will be used when granting equivalency in accordance with the policy section of this instruction.

U13

TITLE: LIQUID PENETRANT EVALUATION

SOURCE: DCPSO Atlanta  
805 Walker St.  
Suite #3  
Marietta, GA 30060  
(770)590-6648 DSN 697-6648

LOCATION: Onsite

LENGTH: 16 Hours.

OBJECTIVE: This course provides the student with a knowledge of the principles, procedures, applications, and capabilities of liquid penetrant inspection methods. Students are required to demonstrate proficiency in test methods per the qualification requirements of DLAR 8220.4.

COURSE DESCRIPTION: This course covers the theory of liquid penetrant inspection, including basic principles, equipment, procedures, and interpretation of results. Topics include penetrant types, developers, emulsifier, solvents, surface preparation, applications, and interpretation of indications. The course is intended to enable the student to determine that proper inspection techniques and procedures have been applied in accordance with contract requirements and applicable military specifications and standards.

PREREQUISITE: Personnel nominated to attend must have met visual acuity requirements of DLAR 8220.4.

COURSE EQUIVALENCY: Equivalency guidelines of DLAR 8220.4 will be used when granting equivalency in accordance with the policy section of this instruction.

U14

TITLE: EDDY CURRENT EVALUATION

SOURCE: Commercial Sources (e.g., Magna Flux Inc., Caterpillar Institute)

LOCATION: Onsite

LENGTH: 40 Hours.

OBJECTIVE: This course provides the student with a knowledge of the principles, procedures, applications, and capabilities of eddy current inspection methods. Students are required to demonstrate proficiency in test methods per the qualification requirements of DLAR 8220.4, Nondestructive Testing, Certification/Qualification of QA personnel.

COURSE DESCRIPTION: This course provides instruction in the principles, procedures, and techniques of eddy current evaluation. Topics include eddy current instruments, inspection coils, readout devices, measurement of conductivity, resistance, reactance, and impedance, phase analysis, modulation analysis, applications, calibration and interpretation. This course is intended to enable the student to determine proper inspection techniques and procedures have been applied in accordance with contract requirements and applicable military specifications and standards.

PREREQUISITE: Personnel nominated to attend must have met the visual acuity requirements of DLAR 8220.4 and should have knowledge of basic electricity.

COURSE EQUIVALENCY: Equivalency guidelines of DLAR 822.4 will be used when granting equivalency in accordance with the policy section of this instruction.



## **F. RESPONSIBILITIES**

1. MMLXQ is the office of primary responsibility (OPR) for this instruction and will:

- a. Conduct an annual review of the course catalog.
- b. Consolidate feedback on courses and use in review process.
- c. Review input concerning need for new course entries into the course catalog.
- d. Update Course Catalog as appropriate.

2. The Inventory Control Point will:

- a. Identify to MMLXQ the need for new training course development and the revision/deletion of training courses which are no longer current or adequate.
- b. Develop commodity specific courses as identified by MMLXQ.
- c. Provide updates to MMLXQ concerning information changes to the Course Catalog.

3. The QATDP Panel will:

- a. Assist MMLXQ in maintaining the accuracy of the Course Catalog by providing updated information on the courses.
- b. Review course descriptions and related training sources for equivalency to current sources.
- c. Maintain a list of courses which have been determined to be equivalent to QATDP courses.
- d. Distribute course equivalency information as appropriate.
- e. Evaluate course feedback for all certification courses (DLA and non-DLA).
- f. Identify the need for new training courses.
- g. Seek alternate training sources.

7. ICP FLSs will identify training and career development needs of subordinate personnel to provide for the required skills, knowledge, and abilities in order to perform their duties. Provide this information to the QATDP Panel.

8. QA Personnel will:

- a. Review and discuss technical development requirements and course impressions with the FLS.
- b. Notify their FLS of specialized technical development training requirements not previously identified but required by current item assignments.
- e. Identify training needs/courses to their supervisors as the need arises.

## **G. EFFECTIVE DATE AND IMPLEMENTATION**

1. This instruction is effective upon publication in the DLAPS CD-ROM.

2. Supplementation of this instruction is authorized; however, the effectiveness of this instruction would be further enhanced if information for the new courses is passed through channels to MMLXQ for incorporation into the Course Catalog.

**H. INFORMATION REQUIREMENTS**

There are no information requirements for this instruction.