DATA ITEM DESCRIPTION

Form Approved
OMB No 0704-0188

1 TITLE	2 IDENTIFICATION NUMBER
Training Materials	DI-ILSS-80872

3 DESCRIPTION / PURPOSE

3.1 Provides the minimum materials required to support a military services training program on the end item equipment.

4 APPROVAL DATE (YYMMDD)	5 OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6a DTIC APPLICABLE	6b GIDEP APPLICABLE
890629	S/DPSC-RST		

7 APPLICATION / INTERRELATIONSHIP

7.1 This DID contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract.

8 APPROVAL LIMITATION	9a APPLICABLE FORMS	9b AMSC NUMBER
		S4775

PREPARATION INSTRUCTIONS

10.1 General. The training materials shall be suitable for application in a self paced, self directed format. The materials shall contain sufficient written or audio-visual instructions to guide students through all specified didactic and hands-on training without a need for instruction lectures and with a minimum requirement for instructor interface with students. Existing manufacturer's training and service manuals can be used in so far as they meet specified requirements. The role of the instructor will be to observe and evaluate student progress, to answer questions, provide supplemental training when necessary, and to insert training malfunctions into the equipment. The training materials should be for students with prerequisite knowledge of electronics theory, use of general electronic test equipment, and a basic knowledge of hand tools.

10.1.1 Format. The materials provided shall be in the contractor's own format. However, each text shall include a table of contents. This shall include a listing of all major subjects and the page number on which they appear.

10.2 Contents. The training materials shall consist of a programmed text, instructor guidance and supplemental written and audio-visual material used to support a training program. All instruction, information, and schematics shall be in the English language and use standard symbology.

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11 DISTRIBUTION STATEMENT

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

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Block 10, Preparation Instructions (Continued)

10.2.1 Programmed Text. The programmed text shall be designed to guide the student through the clinical application, operation, inspection, adjustment, troubleshooting, and repair of the equipment. The programmed text shall be divided into the sections listed below. Each section, except as noted, shall include at the end a written or practical exercise to evaluate student understanding of information provided in that section. Each section may refer the student to other supplemental written or audio-visual material (transparencies, 35mm slides, charts, or VHS format video cassettes), which shall be included in the package. The following lists the requirements for each section. Additional sections and material can be added.

10.2.1.1 Required Material. This section shall list all equipment and material required by the student to complete the programmed text, including test equipment, audio-visual material, tools, supplies, and simulators. No student exercise is required.

10.2.1.2 Clinical Application. This section shall give a detailed explanation of the equipment's diagnostic or therapeutic use in the medical environment. The purpose of this section is to give the student sufficient background information on medical applications and terminology associated with the equipment to communicate with medical personnel using it. This section may be combined with the following section.

10.2.1.3 Operating Procedures. This section shall guide the student step-by-step through the hands-on operation of the equipment from start-up to shut-down. The instructions will be sufficiently detailed to allow the student to operate and evaluate performance of all operator accessible controls and functions. It shall also include sufficient information for interfacing the equipment with the patient or simulators for routine use, as applicable. Before the student is instructed to operate the equipment, all safety precautions to prevent injury or equipment damage shall be clearly explained. The purpose of this section is to give the student sufficient information to operate the unit and conduct in-service user training classes.

10.2.1.4 Routine Inspection. This section shall guide the student step-by-step through routine inspection of the unit to assure proper and safe operation. Inspection shall be listed in a checklist format, followed with detailed information if needed. This section should include:

(1) Daily user maintenance or performance checks.

(2) Monthly or annual preventive maintenance inspection to include inspection of components subject to wear, routine servicing requirements such as lubrication or filter changes, safety inspection, tolerance, and frequency of inspection.

Block 10, Preparation Instructions (Continued)

10.2.1.5 Calibration. This section shall list all adjustments and calibrations required to assure accurate and safe operation of the equipment, including frequency and tolerances. This shall include user daily calibration, periodic calibration, and calibration/adjustments required to bring the unit back into specifications. All test equipment and simulators required to perform these calibrations or adjustments shall be listed.

10.2.1.6 Troubleshooting. This section will explain in detail how all functions of the system operate, including detailed circuit theory. In the course of explaining theory of operation, significant waveforms and voltages will be shown in the text as well as proper equipment hookup to measure these. A troubleshooting guideline shall be given to help the student locate common problems. Warnings shall clearly be listed when improper test equipment hookup might cause personal injury or damage to equipment.

10.2.1.7 Repair. This section shall show the student how to repair high failure parts (including malfunctions inserted by instructor) remove equipment covers/access panels, disassemble major systems, and reassemble. Warnings shall clearly be stated if injury or equipment damage can be caused by improper disassembly (e.g.: counter balances). Specialized tools required shall be listed.

10.2.2 Instructor Guidance. Guidance for instructors to use in applying the programmed text shall be provided under separate cover. The guidance shall include:

(1) Answers to all student exercise.

(2) Descriptions of points in the programmed text where instructor involvement, observation, or action is necessary or recommended to insure safety or verify student performance.

(3) Instructional Malfunctions consisting of a listing of various equipment malfunctions to be introduced by the instructor and diagnosed and repaired by the student. A minimum of five malfunctions is required for each separately identifiable system or circuit. The malfunctions should approximate as nearly as possible, problems likely to occur, and may consist of a combination of system maladjustments and bad components. A listing of malfunctions will be given which shall include:

a. Action required by instructor to install malfunction; exact component to replace or maladjustment to make.

b. Description of symptom caused by malfunction.

c. Test equipment and tools required to detect the malfunction.

d. Suggested allowable time for student to diagnose malfunction.

e. Availability and cost of bad components to be used as malfunctions.