DATA ITEM DESCRIPTION	Form Approved OMB No. 0704-0188

1. TITLE	2 IDENTIFICATION NUMBER
List of Faults Inserted for Training Purposes	DI-ILSS-80502

3. DESCRIPTION / PURPOSE

3.1 The List of Faults Inserted for Training Purposes identifies faults which can be inserted into equipment to simulate equipment failures for training purposes.

3.2 The List of Faults Inserted for Training Purposes is used to develop training course material.

4 APPROVAL DATE (YYMMDD)	5 OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6a DTIC APPLICABLE	6b. GIDEP APPLICABLE
871230	A/AMSEL-ED-TO		

7. APPLICATION / INTERRELATIONSHIP

7.1 This Data Item Description (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.

7.2 The contract should specify the number and location of the faults and the simulated equipment failures or should require the contractor to make these determinations. When the contractor is required to make the determinations, the contract should specify the criteria to be used by the contractor in making the determinations.

8 APPROVAL LIMITATION	9a. APPLICABLE FORMS	9b. AMSC NUMBER
		A4283

10 PREPARATION INSTRUCTIONS

10.1 General. The List of Faults Inserted for Training Purposes shall identify those faults which can be inserted by a training instructor to simulate equipment failures. Faults are defined as hardware items and software employed to simulate (artificially induce) equipment failure. Equipment failure is defined as any equipment hardware or software malfunction.

10.2 Format. The List of Faults Inserted for Training Purposes format shall be contractor selected and present the data in a clear and logically organized arrangement. When consistent with an effective presentation, the contractor's selected format used in the initial submission shall be used for subsequent submissions including revisions.

10.3 Content. The List of Faults Inserted for Training Purposes content shall list faults by declining failure rate estimates (see 10.3.2) and shall be as follows:

10.3.1 Identification Number. Contractor assigned sequential identification number.

10.3.2 Failure Rate Estimate. Estimation of the failure rate (number of projected failures per equipment usage factor) for the failure being simulated. The failure rate estimate shall be based on an equipment usage factor that is scaled to a constant value for all failure rate estimates. The purpose of the failure rate estimate is to prioritize the simulated failures; not to develop or establish accurate failure rates. Therefore, the failure rate estimates shall be of sufficient accuracy and precision to prioritize the list, but need not be accurate or precise beyond this requirement.

11. DISTRIBUTION STATEMENT

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

DD Form 1664, MAR 87   *Jun 86 edition may be used until exhausted.*

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10. PREPARATION INSTRUCTIONS (Continued)

10.3.3 <u>Failure Criticalness</u>. Identification and discussion of the criticalness of an actual equipment failure identical to the one being simulated.

10.3.4 <u>Fault Description</u>. Comprehensive description of the fault used to simulate the equipment failure. The fault description shall be in sufficient detail to permit manufacture of the fault hardware and duplication of the software used to simulate the equipment failure.

10.3.5 <u>Fault Location</u>. Identification and location of the fault within the equipment (e.g., assembly, subassembly, module, circuit card, wiring harness, component).

10.3.6 <u>Fault Procedures</u>. Comprehensive description of the specific procedures required to simulate the equipment failure using the fault. The description shall be in sufficient detail to permit the precise application of the procedures.

10.3.7 <u>Fault Hazards</u>. Identification and description of any safety hazards associated with using the fault.

10.3.8 <u>Fault Cost</u>. The estimated cost to manufacture an exact copy of the fault hardware and duplicate an exact copy of the fault software required to simulate the equipment failure.

10.3.9 <u>Simulated Equipment Failure Identification</u>. Identification and location of the simulated failure within the equipment (e.g., assembly, subassembly, software, module, circuit card, wiring harness).

10.3.10 <u>Simulate Failed Item Identification</u>. Identification and description of the specific item (e.g., part, device, software segment, component, switch, wire) which is being simulated as having failed within the equipment.

10.3.11 <u>Simulated Failure Symptoms</u>. Identification and description of the symptoms associated with the simulated equipment failure.

10.3.12 <u>Test, Measurement, and Diagnostic Equipment</u>. Identification and description of the test, measurement, and diagnostic equipment required to detect, locate, isolate, and identify the item which is being simulated as having failed.

10.3.13 <u>Simulated Failure Detection and Isolation Procedures</u>. Comprehensive description of the specific procedures required to detect, locate, isolate, and identify the item which is being simulated as having failed. The description shall be of sufficient detail to permit precise application of the procedures using the identified test, measurement, and diagnostic equipment.

10.3.14 <u>Equipment Failure Corrective Actions</u>. Description of the actions which would be required to correct the equipment failure, assuming the simulated equipment failure was a real equipment failure not being simulated by the fault.

10.3.15 <u>Equipment Status</u>. Description of the actions required to return the equipment to the equipment status existing prior to the use of the fault.