DATA ITEM DESCRIPTION

Title: Human Engineering Simulation Concept

Number: DI-HFAC-80742B
AMSC Number: A7316 **Approval Date:** 19980708
DTIC Applicable: **Limitation:**
Office of Primary Responsibility: A/AMCOM **GIDEP Applicable:**
Applicable Forms:
Use/Relationship: The Human Engineering Simulation Concept describes the contractor's intended use of mockups and simulators in support of human engineering analysis, design support, and test and evaluation.

a. This data item description (DID) contains the format and content preparation instructions for the Human Engineering Simulation concept resulting from applicable tasks delineated in the SOW.

b. This DID is related to DI-HFAC-80741B, "Human Engineering Progress Report." This document may be used by the procuring activity to assist in and assess simulation approaches when there is a need to resolve potential critical human performance problems, particularly where government facilities, models, data or participants are required.

c. This DID supersedes DI-HFAC-80742A.

Requirements:
1. Format. The Human Engineering Simulation Concept format shall be contractor selected. Unless effective presentation would be degraded, the initially used format arrangement shall be used for all subsequent submissions.

2. Content. The Human Engineering Simulation Concept shall contain the following information:

a. Rationale and general description. The need for a mockup or simulation program shall be described. The overall simulation concept shall be described. Benefits to be derived shall be stated. The interrelationships between mockups, simulators, and other human engineering analysis, design support, and test and evaluation techniques shall be described.

b. Techniques. Each simulation technique and procedure proposed by the contractor shall be fully described. Rationale for the

selection of techniques shall be given. The specific contributions of each technique to human engineering analysis, design support, and test and evaluation shall be stated. Previous efforts conducted by the contractor or others to validate each proposed technique shall be described, including a discussion of results.

c. Intended use . The intended use of each simulation technique shall be described with regard to each of the following:

(1) Human performance and workload analysis, test, and demonstration.

(2) System design development, test, and demonstration.

(3) System effectiveness studies, tactics development, and verification.

(4) Development and verification of operator skill, knowledge, and other training data.

(5) Operator procedures development and verification, including degraded mode and emergency procedures.

(6) Training equipment design and verification studies.

(7) Development and verification of technical publications.

d. Schedule . A detailed schedule shall be identified. Compatibility between the simulation schedule and the release of program analyses, design, and test products for each area of utilization described in paragraph 2c. above, shall be described.

e. Facilities and special requirements . Simulation facilities shall be described. Any requirements to utilize government facilities, models, data, or other government property shall be identified. If the contractor requires participation bygovernment personnel (e.g., as subjects in simulation studies), appropriate information shall be provided - such as number and qualifications of personnel, desired level of participation, and schedule of participation.

f. Scenarios and mission descriptions . The scenarios and missions to be simulated shall be described. Information on mission objectives, geography, threats, weather conditions, or any other data relevant to system simulation shall be presented.

3. End of DI-HFAC-80742B.