

## DATA ITEM DESCRIPTION

**Title:** HUMAN ENGINEERING PROGRAM PLAN

**Number:** DI-HFAC-81742

**AMSC Number:** N7715

**DTIC Applicable :** N/A

**Office of Primary Responsibility:** N/AIR 4.6

**Applicable Forms:**

**Approval Data:** 20070404

**Limitation:** N/A

**GIDEP Applicable:** N/A

**Use/relationship:** The Human Engineering Program Plan (HEPP) describes the contractor's Human engineering program, identifies, and explains how the elements will be managed.

- a. This Data Item Description (DID) contains the format and content preparation instructions for the HEPP resulting from applicable tasks delineated in the SOW.
- b. This DID supersedes DI-HFAC-80740A.

### Requirements:

1. Reference documents: The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments, notices, and revisions shall be as cited in the current issue of the DODISS at the time of the solicitation.
2. Format. The HEPP format shall be contractor selected but must contain all elements discussed in below. Unless effective presentation would be degraded, the initially used format arrangement shall be used for all subsequent submissions.
3. Content. The HEPP shall contain the following information:
  - a. Table of contents, lists of illustrations, and introductions:
  - b. Tailoring. This section shall propose tailoring of MIL-HDBK-46855 as specifically applicable to this contract; additional to any tailoring already accomplished by the procuring activity or where exceptions or others tailoring changes are warranted. This proposed tailoring of MIL-HDBK-46855 shall identify specific provisions by paragraph, rational, for tailoring on the human engineering program. If no tailoring of MIL-HDBK-46855 is proposed beyond that specified by the procuring activity, this shall be stated.

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c. Organization. This section shall identify and describe the contractor's primary organization element responsibility for complying with human engineering requirements. The functions and internal structure of this element shall be defined. Structural definition shall include the number of proposed personnel on an annual basis and summary job descriptions for each person. In addition, the relationships of this element to other organizations elements responsible for areas impacted by human engineering such as those charged with equipment and software design, safety, training, test, and evaluation, integrated logistics support, and other engineering specialty programs (such as availability, reliability, maintainability, configuration management) shall be fully explained.

d. Human engineering in subcontractor efforts. If any work related to system components or software having operator or maintainer interface is to be performed under subcontract, the subcontractor's organizational element responsible for human engineering shall be described to the extent as the prime engineering requirements proposed for inclusion in each of these subcontracts. The method(s) by which the prime contractor monitors subcontractor compliance shall be fully described.

e. Human engineering in system analysis. This section shall identify those human engineering efforts in system analysis (or, where contractually required, in systems engineering), as described in MIL-HDBK-46855, which are contractually applicable, and the organizational element(s) responsible for their performance. Human engineering participation in system mission analysis, determination of system functional requirements and capabilities, allocation of system functional requirements to human/hardware/software, development of system functional flows, and performance of system effectiveness studies shall be fully described. Any data required from the procuring activity shall also be described.

f. Human engineering in equipment detail design. This section shall describe the human engineering effort in equipment detail design to ensure compliance with the applicable provisions of the human engineering requirements and guides specified in the contract. human engineering participation in studies, tests, mock-up evaluations, dynamic simulation, detail drawing reviews, systems design reviews and system/equipment/component design and performance specification preparation and reviews shall be fully described. Finally, this section shall propose tailoring of the requirements and guides as specifically applicable to the contract, additionally to any tailoring already accomplished by the procuring activity or where exceptions and other tailoring changes are warranted. This proposed tailoring of the guidelines shall identify specific provisions, by paragraph, as applicable. If no tailoring of the guidelines is proposed beyond that specified by the procuring activity, this shall be stated.

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g. Human Engineering in equipment procedure development. This section shall describe the human engineering effort in equipment procedure development to ensure compliance with MIL-HDBK-46855. The methods shall be stated by which the contractor shall ensure that;

(1) Operator and maintainer functions and tasks are allocated, organized, and sequenced for efficiency, safety, and reliability.

(2) The results of this effort are reflected in operational, technical, and training publications and in training system design.

h. Derivation of personnel and training requirements. This section shall describe the methods by which the contractor shall ensure that operator and maintainer personnel and training requirements are based upon human performance requirements developed from systems analysis data.

i. Human engineering in test and evaluation. This section shall describe human engineering test and evaluation as an integrated effort within the contractor's total test and evaluation program and shall contain specific information to show how and when the contractor will follow human engineering test and evaluation guidance of MIL-HDBK-46855. Design milestones shall be identified at which human engineering test are to performed to access compatibility among human performance requirements, personnel aptitude and skill requirements, training requirements, and equipment design aspects of personnel equipment/software interface. Major test and demonstration objectives shall be identified and proposed test methods shall be described. This section shall also identify the human engineering personnel involved in test and evaluation, and a summary of the human engineering tests, evaluations, and demonstrations in relationship to major project milestones such as 90 per cent design release, project level design reviews, first article demonstration tests, and commencement of procuring activity testing.

j. Human engineering deliverable data products. This section shall identify and briefly describe each human engineering deliverable data product specified in the contract.

k. Time-Phase schedule and level of effort. This section consists of a milestone chart that identifies each separate human engineering effort to be accomplished and shall state the level of effort (in person work months) for each task.

4. End of DI-HFAC-81742.