

## Data Item Description

1. IDENTIFICATION NUMBER. DI-SAFT-80102B

2. TITLE. Safety Assessment Report (SAR)

3. DESCRIPTION/PURPOSE.

3.1 The Safety Assessment Report is a comprehensive evaluation of the safety risks being assumed prior to test or operation of the system or at contract completion. It identifies all safety features of the system, design, and procedural hazards that may be present in the system being acquired, and specific procedural controls and precautions that should be followed.

4. APPROVAL DATE. 950731

5. OFFICE OF PRIMARY RESPONSIBILITY (OPR). F/AFMC-SE

6. a. DTIC APPLICABLE. . b. GIDEP APPLICABLE.

7. APPLICATION/INTERRELATIONSHIP.

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

7.2 Data Items which relate to this DID are DI-SAFT-80101B, System Safety Hazard Analysis Report; DI-SAFT-80105B, System Safety Program Progress Report; and DI-SAFT-80106B, Health Hazard Assessment Report.

7.3 This DID supersedes DI-SAFT-80102A.

8. APPROVAL LIMITATION.

9. a. APPLICABLE FORMS. None

b. AMSC NUMBER. F-7139

10. PREPARATION INSTRUCTIONS.

10.1 Source Document. The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments and revisions, shall be as reflected in the contract.

10.2 Contents. The Safety Assessment Report (SAR) shall include the following information:

10.2.1 Introduction. State, in narrative form, the purpose of the safety assessment report.

10.2.2 System Description. This section may be developed by referencing other program documentation such as technical manuals, System Program Plan, System Specification, etc., and shall include the following:

a. The purpose and intended use of the system.

b. A brief historical summary of system development.

c. A brief description of the system and its components. Include name, type, model number, and general physical characteristics of the overall system and its major subsystems and components. Software and its roles shall be included in this description.

- d. As applicable, a description of any other system(s) which will be tested or operated in combination with this system.
- e. As applicable, either photos, charts, flow/functional diagrams, sketches, or schematics to support the system description, test, or operation.

10.2.3 System Operations.

- a. A description or reference of the procedures for operating, testing and maintaining the system. Discuss the safety design features and controls incorporated into the system as they relate to the operating procedures.
- b. A description of any special safety procedures needed to assure safe operations, test and maintenance, including emergency procedures.
- c. A description of anticipated operating environments, and any specific skills required for safe operation, test, maintenance, transportation or disposal.
- d. A description of any special facility requirements or personal equipment to support the system.

10.2.4 Systems Safety Engineering. This section shall include:

- a. A summary or reference of the safety criteria and methodology used to classify and rank hazardous conditions.
- b. A description of or reference to the analyses and tests performed to identify hazardous conditions inherent in the system.
  - (1) A list of all hazards by subsystem or major component level that have been identified and considered from the inception of the program in an appendix to this SAR.
    - (a) A discussion of the hazards and the actions that have been taken to eliminate or control these items.
    - (b) A discussion of the effects of these controls on the probability of occurrence and severity level of the potential mishaps.
    - (c) A Discussion of the residual risks that remain after the controls are applied or for which no controls could be applied.
  - (2) A discussion of or reference to the results of tests conducted to validate safety criteria requirements and analyses.

10.2.5 Conclusions and Recommendations. This section shall include:

- a. A short assessment of the results of the safety program efforts. A list of all significant hazards along with specific safety recommendations or precautions required to ensure the safety of personnel and property. The list of hazards will be categorized as to whether or not they may be expected under normal or abnormal operating conditions.
- b. For all hazardous materials generated by or used in the system, the following information shall be included.
  - (1) Materiel identification as to type, quantity, and potential hazards.
  - (2) Safety precautions and procedures necessary during use, storage, transportation, and disposal.
  - (3) A copy of the Material Safety Data Sheet (OSHA Form 20 or DD Form 1813) as required.

- c. A statement that the system does not contain or generate hazardous materials (i.e., explosive, toxic, radioactive, carcinogenic, etc.).
- d. A statement signed by the contractor system safety manager and the program manager stating that all identified hazards have been eliminated or controlled and that the system is ready to test, operate, or proceed to the next acquisition phase. In addition, include recommendations applicable to the safe interface of this system with the other system(s).

10.2.6 Reference. A list of all pertinent references such as test reports, preliminary operating manuals and maintenance manuals.