

DATA ITEM DESCRIPTION

Title: AIRWORTHINESS SPECIFICATION

Number: DI-SESS-81766

Approval Date: 20090519

AMSC Number: F9066

Limitation: N/A

DTIC Applicable: N/A

GIDEP Applicable: N/A

Preparing Activity: 11 (ASC/836 AESG/SYE)

Applicable Forms: N/A

Use/relationship: The purpose of the Airworthiness Specification is to document the airworthiness certification basis: applicable airworthiness certification criteria, compliance standards/requirements, and methods of compliance. The specification will be used to support the government's airworthiness type certification of the aircraft design.

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.

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 contract.

2. Format. Contractor format is acceptable

3. Content. The Airworthiness Specification shall describe the airworthiness certification basis for either a new aircraft or for modifications of an existing aircraft. MIL-HDBK-516, "*Airworthiness Certification Criteria*", shall be used as a guide during preparation of the Airworthiness Specification. The Airworthiness Specification shall include:

3.1. Document Identifiers. The specification shall contain information needed to maintain configuration control (e.g., date, revision, managing office) throughout the life of the system.

3.2. System Description. The Airworthiness Specification shall include sufficient information to identify the system being certified (e.g., mission design series (MDS), engine types and quantity, crew and passenger capabilities). It shall also contain a list of previous certifications obtained, either civil or military.

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If a derivative aircraft program, a summary of modifications required to convert the previously certified basic aircraft to the as-delivered configuration shall be included. Also, identify the previous certification authority and the applicable type certification basis. For commercial derivative aircraft, all design features and functions of the aircraft not fully covered by Federal Aviation Administration (FAA) type certification that have been approved by the contracting agency and documented on the approved FAA Form 8130-31, "*Statement of Conformity – Military Aircraft*", shall be clearly identified in the Airworthiness Specification.

3.3. Certification Basis. The Airworthiness Specification shall identify the as-delivered aircraft airworthiness type certification basis. For commercial derivative aircraft, the certification basis must be defined by the approved FAA type certification basis, including supplemental type certificates, as supplemented by the United States Air Force (USAF) airworthiness certification basis.

To construct the USAF airworthiness certification basis:

- a. Identify the applicability of each MIL-HDBK-516 airworthiness certification criterion. For each non-applicable criterion, include rationale for why the criterion does not need to be verified to assure airworthiness. For commercial derivative aircraft, only sections 4 and 14 of MIL-HDBK-516 must be addressed if full FAA type certification is planned. For any portion of the design that will not be included in the FAA approved type design, identify all applicable MIL-HDBK-516 criteria impacted by the non-FAA approved design.
- b. Define the compliance standards (requirements) for each applicable criterion, including specific numerical values where appropriate, to objectively define the airworthiness certification requirements.
- c. Define methods of compliance for each applicable criterion. Methods of compliance define how the compliance standards shall be verified (analysis, test, etc.) to assure compliance with each applicable criterion.

Military and civil references included with the airworthiness criteria in MIL-HDBK-516 shall be used only as guidance in developing the criteria compliance standards and methods of compliance. They shall be included in the Airworthiness Specification only as part of the compliance standard or method of compliance.

3.4. First Flight. For the purposes of determining safety of flight minimums for first flight release, identify the sub-set of the certification basis to be complied with and the necessary level of compliance required prior to first flight. This could be a sub-set of the certification basis due to limited data availability and restricted functionality typical to first flight operations.

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3.5. Limitations. Reference government approved exemptions and waivers and other limits, restrictions, and procedures that the operator must observe to safely operate and maintain the system.

4. End of DI-SESS-81766