

Q226 Space Station Product Assurance Requirements - rev 7/16/01

When Buyer's contract includes Quality Code Q226 as a requirement, the provisions of Buyer's Purchase Contract titled "Inspection" or "Inspection and Correction of Defects" are supplemented by including the following:

- A. For all Flight/Qualification hardware and Ground Support Equipment (GSE), Seller's contractual commitment for a Quality Assurance Program is defined by SSP 41173 titled "Space Station Quality Assurance Requirements", Revision A dated 26 October 1994.

EXCEPTIONS: Paragraphs 1.3.5, 1.6, 3.1.3, 3.1.5.1, 3.4.8.4 and 4.0 do not apply to this contract. "NASA" means Government in paragraphs 3.5.1.15 and 3.5.1.16. "NASA" means NASA or Buyer in paragraphs 3.4.5 and 3.12. "NASA" means Buyer in paragraphs 3.5.4.2 and 3.7.2.

- B. For all Flight/Qualification hardware as well as, where explicitly specified, GSE, Seller's contractual commitments for Safety, Reliability and Maintainability Programs are defined by Data Requirements Imposed by the purchase contract and SSP 30000 Section 9 titled "Product Assurance Requirements," Revision E, dated June 1993.

Exceptions to SSP 30000 Section 9: All references therein to Space Station Freedom should be International Space Station Alpha. All references to specific data requirements in the text shall be understood to refer to the corresponding The Boeing Company data requirement when contractually imposed. Paragraphs 1.0, 2.1.3, 2.1.7, 2.2.2, 2.3, 3.1.1.1, 3.1.1.2, 3.1.2.1, 3.1.2.2, 3.1.3, 3.2.2.3, 3.2.3, 3.2.3.1, 3.2.3.2, 3.2.3.3, 3.2.4, 3.2.5, 3.2.6, 3.2.6.1, 3.2.12, 3.2.13, 3.3.1, 3.3.2, 3.3.2, 3.3.3, 4.0, 5.0, and 6.0 are either redundant to other contractual requirements or do not apply to this contract. The applicable revisions of referenced documents are to be found in the Applicable Documents section of either the Data Requirements Document or RC1800, the General Specification for Procured Items. The last sentence of paragraph 3.1 does not apply. In paragraph 3.1.1, references to audits and surveys do not apply. In paragraph 3.2, SSP 30000, Section 4, Part 2 should be D684-10041-1, Integrated Logistics Plan. The last sentence of paragraph 3.2.7 does not apply.

Copies of the referenced documents may be obtained by application to:

National Aeronautics and Space Administration (NASA)
Acquisition and Dissemination Branch Attention: ATSS-AD
Washington, D.C. 20546

- C. For Deliverable Development hardware the Seller's internal Quality System will, as a minimum, satisfy the requirements for the applicable fidelity as defined in the following table. Additional requirements may be defined on drawings, specifications and the purchase contract.

HARDWARE DEFINITIONS

Engineering Model (EM) - A complete, high-fidelity, form, fit and function model of essentially flight configuration, used to proof or perfect the physical or functional design and prove readiness for flight.

Breadboard (BB) - An assembly of preliminary circuits or parts used to prove the feasibility of a device, circuit, system or principle. It may use low grade parts and is a functional model with form or fit requirements only as needed to serve the test purposes.

PRODUCT ASSURANCE REQUIREMENTS

FUNCTIONS

Drawing/Spec Review
 QA Planning Support
 QA Provisions
 Product Inspection
 Test Plan
 Test Procedures and
 Reports
 Identification and
 Data Retrieval
 Procurement Quality
 Nonconformance Con
 Design Review Support
 FMEA
 Hazard Analyses

ENGINEERING MODELS (1)

Approve
 Approve/Insert

 Per Note (2)
 Review
 Approve

 Per Note (3)

 Ident & Damage
 Eng. & QA Dispo
 NR
 NR
 NR

BREADBOARDS

NR
 NR

 NR
 NR
 NR

 NR

 NR
 Eng. Disposition
 NR
 NR
 NR

NR -- Not Required

Note:

1. Minimum requirements only. Additional requirements may be defined in Statement of Work (S.O.W.), Source Control Drawing (SCD), or Purchase Contract.
2. Inspections will be performed as deemed appropriate to confirm that fabrication processes are under control and to establish inspection techniques prior to production of flight/qualification hardware.
3. In accordance with SSP 41173 except that serialization is required only for end items, assemblies containing life-limited components or parts, or replacement units requiring maintenance, servicing or calibration. The backward traceability requirements for controlled EEE parts is limited to designating the generic name and original manufacturer's part number on the engineering drawings