# Quality Provisions

## Standard Text Codes

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<tr>
<td>Pedigree Program / Hardware Acceptance Program (HAR) – For New and Modified Hardware</td>
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The supplier shall have a formal and documented pedigree program for the hardware they produce and the hardware they procure. The Supplier shall support an on-site Hardware Acceptance Review (HAR) with Northrop Grumman Innovation Systems (NGIS) and NGIS customers prior to the delivery of all items on this procurement. The HAR shall consist of a presentation along with a review of data. The presentation shall include:

a. A flowchart identifying the major manufacturing processes and tests in chronological order.

b. A table summarizing all nonconforming conditions in which each nonconformance shall be described, shall have the final hardware disposition identified, and shall include rationale for hardware acceptance.

c. A table showing details of the as-designed configuration, the as-built configuration, and the as-built configuration of the previous delivery (if requested, the configuration of the qualification test article shall be available). All deviations between the previous delivery and the current as-built configuration shall be identified and shall reference the NGIS document that authorized the change.

d. A table of all design changes from the previously delivered unit shall reference the NGIS document that authorized each change.

e. A table showing document and process details (document number, document revision, revision approval date) of the qualified manufacturing baseline, the manufacturing documents used on the current build, and the manufacturing documents used on the previous delivery. Any deviations between these three sets of documents and processes shall reference the NGIS document that authorized the deviation.

In addition to the presentation noted above, the supplier shall provide a complete set of build and test documentation from the beginning of item build through final acceptance. This includes copies of sub-tier data (excluding pre-approved COTS items), supplier as-run manufacturing, all supplier tests with records & history of failures anomalies/resolution, supplier inspection documentation, travelers, work instructions, process procedures, acceptance test procedures, non-destructive testing results, certificates of conformance, manufacturing certs, etc., copies of all nonconformance documentation, an as-designed versus as-built (ADAB) configuration log, limited life item data, closeout photographs, storage and transportation history, risk assessment and mitigation efforts associated with the product, and safety data.
All pedigree data packages for designs that do not have NGIS flight history shall also include qualification test data and qualification test reports. NGIS requires notification within a minimum of 5 business days prior to the expected date of the review. Supplier shall correct all deficiencies prior to shipping or NGIS accepting hardware.

When requested, the supplier shall also make available interface control data and safety data.

When required, the same information noted above may be requested during mission assurance reviews, investigations and failure reviews, Independent Readiness Reviews, and critical events.