

APPENDIX VII

70. ENGINEERING RELEASE RECORDS AND CORRELATION OF MANUFACTURED PRODUCTS

70.1 Purpose. This appendix establishes the minimum requirements for achieving proper relationship between engineering/manufacturing data and manufactured configuration items.

70.2 Scope. The criteria of this appendix applies to the contractor's engineering release system pertaining to:

- a. Elements of data required
- b. Production release functional capabilities
- c. Release of engineering changes
- d. Field release functional capabilities.

70.2.1 After the initial release of data, criteria are set forth for the control of incorporating Class I engineering changes in CIs. The internal control system of the contractor shall be capable of:

- a. Reconciling engineering work authorizations to contract requirements.
- b. Verifying that released engineering and purchase orders are in accordance with contract requirements.
- c. Assuring that engineering changes are incorporated into configuration items as required by the release engineering changes.

70.3 Applicability. The criteria of this appendix apply to all contracts requiring the preparation of engineering drawings and specifications for configuration items. The contractor shall be responsible for compliance by his subcontractors, vendors, and suppliers to the extent specified in paragraph 1.3 of this standard. An engineering release system complying with the intent of this appendix shall be implemented by the contractor for CSCIs to assure that the objectives of this appendix are met.

70.4 Engineering release requirements. The contractor shall prepare and maintain engineering release records in accordance with his formats and procedures, and the minimum requirements herein.

70.4.1 Elements of data required. The contractor's engineering release records shall contain the standard configuration identification numbers.

70.4.1.1 Configuration item (CI) elements.

- a. CI number
- b. CI serial numbers
- c. Top assembly drawing number
- d. CI specification identification number

70.4.1.2 Drawing elements.

- a. Drawing number (including specification control source control drawing numbers)
- b. Drawing title
- c. Code identification number (CAGE)
- d. Number of sheets
- e. Date of release
- f. Change letters
- g. Date of change letter release
- h. Ancillary document numbers (engineering change proposals, waivers, etc.)

70.4.1.3 Part number elements. The contractor's engineering release records for part number elements shall be standard configuration identification numbers:

- a. Controlling drawing number
- b. Part numbers released

70.4.2 Production release functional capabilities. To the extent that the contractor has detail design responsibility, the contractor's release function and documentation, including drawings and associated lists, shall be capable of determining the following released engineering requirements:

- a. The composition of any part number at any level in terms of subordinate part numbers, except for standard parts.

- b. All next higher (next assembly) part numbers of any part, except parts assembling into standard parts.
- c. The composition of any configuration item (CI) in terms of part numbers and subordinate numbers.
- d. The configuration item number and serial numbers (effectivity) on which any subordinate provisioned or to-be-provisioned part is used. This does not apply to subcontractors, vendors, and suppliers who are not producing configuration items.
- e. Identification numbers which have been partially or completely released for any CI number and serial number as applicable.
- f. The CI numbers and serial numbers which constitute effectivity of each engineering change.
- g. The specification numbers or standard part numbers used within any non-standard part number.
- h. The subcontractor, vendor, or supplier part numbers which have been assigned.
- i. The contractor specification document, specification control drawing numbers, or source control drawing numbers association with any subcontractor, vendor, or supplier part number.

70.4.3 Release of engineering changes. The contractor's release function and documentation shall be capable of identifying engineering changes and retaining the record of superseded configuration requirements, affecting items which have been formally accepted by the procuring activity. All engineering changes released for production incorporation shall be identified by identification numbers, and shall be completely released prior to formal acceptance of the CI where first installed. The configuration released for each CI at the time of its formal acceptance shall be retained in release records for the time required by retention-of-records requirements in the contract.

70.4.4 Field release functional capabilities. Engineering data defining formally accepted equipment which is under the jurisdiction of the contractor, of Government through testing, and which is progressing through testing or through activation programs, shall be maintained current with all field activity requirements and released as follows:

- a. Requirements may be replaced by superseding requirements in the release records for units which are logistically supported by the contractor and which were accepted prior to the established product baseline (physical configuration audit).

- b. Superseded requirements of the product baseline shall be retained as a reference release and superseding requirements added as a requirements release for all units of the CI which have been formally accepted or are under the jurisdiction of the contractor. Superseded requirements shall be retained in all release records until status accounting records indicate that superseded configurations no longer exist.
- c. Engineering changes to CIs which have been formally accepted by the procuring activity, and which are not under the jurisdiction of the contractor, shall be released for Government action.

70.4.5 Correlation of engineering changes with manufactured products. It is the objective that each engineering change approved by the procuring activity be incorporated in all units within one design, series or type, model, series of the CI affected. Complete verification of the production incorporation of engineering changes is required to assure that engineering changes directed were accomplished on specific items. Such verification is a requirement of the quality control system(s) to be implemented in accordance with the latest editions of FAA-STD-013, FAA-STD-016, and FAA-STD-018, whichever is a requirement of the contract. These standards also require demonstration that the FAA contractor satisfactorily controls the design, manufacture, and incorporation of engineering changes.