

THE BOEING COMPANY

PROPERTY CONTROL ACCOUNTABILITY REQUIREMENTS

Form MAC 5166

These terms prescribe the requirements Seller must meet in establishing and maintaining control over Boeing or Government property. Seller must comply with the requirements of FAR 45.5 "Management of Government Property in the Possession of Contractors," which is incorporated by reference, and with these terms.

These terms apply to all Boeing or Government property provided in connection with this contract from the time that Seller received that property until Boeing, in writing, releases Seller from accountability for the property and will survive the termination of the Purchase Contract in which these terms have been incorporated.

1. DEFINITIONS.

- A. Agency-peculiar property (see FAR 45.301).
- B. Facilities (see FAR 45.301).
- C. Government-furnished property (see FAR 45.101).
- D. Government property (see FAR 45.101).
- E. Material (see FAR 45.301).
- F. Real property (see FAR 45.101).
- G. Special Test Equipment (STE) (see FAR 45.101).
- H. Special tooling (see FAR 45.101).

2. SELLER PROPERTY CONTROL SYSTEM APPROVAL.

A. If Seller does not have a "Government Approved" Property Control System, Seller must establish written procedures and an implemented Property Control System that are fully compliant with the terms of this Form 5166. The Property Control System must include the development of property records for use during performance of the contract and retention of those records for as long as required by the contract. Seller must request Boeing's approval of Seller's Property Control System. Boeing will evaluate Seller's proposed Property Control System, identify any necessary changes, and, once accepted, approve Seller's procedures and the implementation of the System. Once approved, Seller must maintain its approved Property Control System in strict accordance with the procedures approved by Boeing. Boeing reserves the right to review Seller's approved Property Control System to assure compliance with the requirements of this Form 5166.

B. Boeing will accept a "Government Approved" Property Control System without review.

C. Boeing's approval of or acceptance of the Government's approval of Seller's Property Control System applies only to the specific Seller name and address identified in Boeing's written approval acceptance notification to Seller.

3. PROPERTY CONTROL SYSTEM DISAPPROVAL AND REINSTATEMENT (BOEING/GOVERNMENT)

A. Boeing reserves the right to withdraw approval of Seller's Property Control System, previously approved by Boeing Property Management and excluding government approved property systems, at any time. Boeing will notify Seller in writing of a proposed withdrawal, reasons for the withdrawal, and corrective action required. Seller must promptly address problems identified and report resolution to Boeing in writing within thirty (30) days. Failure to resolve problems may result in withdrawal of approval of Seller's Property Control System and may require immediate return of Boeing or Government-furnished property. As required, Boeing may permit utilization of property for completion of work in process pending resolution of problem areas.

B. Seller must notify Boeing in writing of any unsatisfactory rating or disapproval of Seller's Government Approved Property Control System. Seller must also provide Boeing a copy of any corrective action plan submitted to the Government, including a schedule of completion. If the Property Control System is subsequently re-evaluated and rated satisfactory or approved, a copy of that rating or approval must be provided to Boeing.

C. Seller must notify Boeing in writing of Seller's relocation, name change or discontinuance of business as soon as such conditions are known. If Seller intends to relocate, no Boeing or Government furnished property may be moved to the new location without Boeing's prior written consent.

4. **USAGE LIMITATION.** Boeing or Government property may be used only for its intended purpose unless otherwise approved by Boeing or the Government. Seller must immediately notify Boeing in writing if any additional property is required or if any Boeing/Government property provided is not needed.

5. **TITLE.** Title to all materials, facilities, STE, and Special Tooling (other than that subject to a special tooling clause) acquired by the Seller on behalf of Boeing or the Government (collectively "property") not vested in Boeing or the Government upon Seller's receipt of the property will pass to and vest in Boeing or the Government when Seller first uses the property in performing this subcontract or when Boeing or the Government has paid for the property, whichever is earlier.

6. NOTICE OF INTENT TO ACQUIRE STE.

A. If Seller intends to acquire or fabricate any STE or STE components for use under this contract, Seller must submit a MAC 3168A "Notice of Intent To Acquire Special Test Equipment" to Boeing at least 60 days in advance of the acquisition or fabrication. The Seller is not to proceed with any acquisition or fabrication until Boeing approves the acquisition or fabrication in writing.

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B. If Boeing or the Government furnishes STE or STE components, the STE or STE components are furnished subject to the Government Property clause of this contract. The Government is not required to deliver the STE or STE components any sooner than the Seller could have acquired or fabricated them after expiration of the 60-day notice period.

C. If an engineering change requires the acquisition or fabrication of new STE or STE components or a substantial modification to existing STE or STE components, the Seller must comply with paragraph 6.A, above. The Notice provided must refer to the engineering change that required the proposed acquisition of, fabrication of, or substantial modification to STE or STE components.

7. **IDENTIFICATION.** Identification of Boeing or Government Property will be performed as follows:

A. **Special Test Equipment (STE)/Agency Peculiar Property (APP).** Boeing will provide Government Property numbered stickers or metal tags for affixing to the STE/APP. Seller will promptly affix the stickers or tags to the STE/APP. To the maximum extent possible, Seller will affix the sticker or tag to the STE/APP such that the sticker or tag is easily accessible to barcode reading devices. Reports, documents, inventories and correspondence referring to the STE/APP will include the Government Property number as part of the descriptive data.

B. **Special Tooling** will be identified according to the following Boeing tool identification criteria.

(1) All identifying markings are subject to examination, as Boeing deems necessary.

(2) Boeing tool code identification letters and part numbers shall be shown on all inventories, shipping documents, receiving reports, and other records relating to the tool.

(3) If Seller has an established system of tool identification, Seller may use that system in addition to the Boeing system. Seller markings must be identified as such. If Seller uses its own system in addition to the Boeing system, Seller must cross reference each item of special tooling with Seller's and Boeing's tool identification codes.

(4) Special Tooling codes will be determined and assigned as follows, unless otherwise instructed:

a. Tool Code letters are assigned in accordance with Boeing's Manufacturing Engineering Procedure T-1.0, which is available upon request and can also be accessed via a link in the Tool Configuration Web page accessed via CITIS. Suffixes are assigned to match the applicable engineering drawing part number or production assembly number.

b. When multiple tools with the same Tool Code letters and suffixes perform successive operations on the same numbered part, those tools will be successively identified by sequence use. For example:

First Tool: 68A321046-2001 FB
Second Tool: 68A321046-2001 FB2

c. Duplicate number references will be used to identify duplicate tools. For example:

74A314912-2001 CKF Orig.
74A314912-2001 CKF Dup. 002

d. When a tool is composed of more than one component or detail, each detail will be identified with a detail number. For example:

75A250342-2003 AF Det. 1
75A250342-2003 AF Det. 2

(5) All tool rework required by engineering change will be recorded on the tool record at time of rework by indicating the engineering order, drawing revision, or other engineering authorization number or code to which the tool is reworked. Rework of Special Tooling due to engineering design changes must be certified by completion on an automated, TOOL COMPLETION REPORT, via the Boeing St. Louis Tool Configuration Web page accessed via CITIS.

8. **SPECIAL TEST EQUIPMENT COMPLETION REPORT FORM (MAC1500A).**

A. The MAC 1500A must list all standard components that may be removed and utilized in a feasible and economical manner. The MAC 1500A will be signed by an officer, or an authorized designated representative, of the Seller as certification that STE quality, quantity, and identification statements are correct and that the list is complete.

B. Invoices for STE will not be payable until Boeing approves the MAC 1500A. Boeing will not approve the MAC 1500A until the STE has tested parts that have been accepted by Boeing and the Government.

9. **AUTOMATED TOOL COMPLETION REPORT**

A. The Seller shall identify all Special Tooling produced, procured, or reworked via the Boeing St. Louis Tool Configuration web page accessed via the seller's CITIS account. Boeing will not process or approve the automated TCR until Boeing has inspected or accepted the parts or assemblies for which the tools invoiced were provided, unless specific authorization to the contrary is provided. Tool lists must include the following data:

(1) Boeing tool number and code (see Manufacturing Engineering Procedure T-1.0, which is available upon request or via the Tool Configuration web page link), consisting of the part number the tool is

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designed to make, preceded by the tool code letters (e.g. 68A321046-2001 AJ), or other Special Tooling identification, as instructed.

- (2) The acquisition cost of each tool must equal the purchase order line item value on new tools or tool rework involving supplier compensation.

B. When the Seller submits an automated TCR, the action certifies that tool quality and identification statements are correct and that the tool list is complete to the degree stated. Only one tool per TCR is allowed.

C. Boeing will pay for Special Tooling only after Boeing accepts the first item made with the Special Tooling, and the automated TCR has been approved by the Boeing Procurement Agent and data recorded by Boeing Property Management. The approved TCR will serve as the supplier invoice, no additional supplier paperwork is required.

10. **RECEIPT OF PRE-PRODUCTION UNITS (PPUs) QUALIFICATION/RELIABILITY TEST UNITS (Q/RTUs) AND AGENCY PECULIAR PROPERTY (APP)**. Invoices,

where applicable, for PPUs and Q/RTUs acquired or furnished will be payable only after Seller has submitted to the Boeing Procurement Agent shipping documentation containing the nomenclature, type, model, part or drawing number, quantity, serial number and unit cost of each invoiced PPU or Q/RTU. If Seller received APP, Seller must sign and submit to the Boeing Procurement Agent a copy of the Government's documentation against which APP was received, e.g., DD 1348, DD 1149, or DD 250.

11. **RECEIPT OF GOVERNMENT-OWNED MATERIAL (GOM)**.

A. Seller will, within 10 days, acknowledge receipt of GOM provided under this contract by forwarding a signed copy of each receipt document with the verification of quantity received to the Boeing Procurement Agent.

B. The Seller shall report to the Government via Standard Form 364, Report of Discrepancy (ROD) shortages/overages and other discrepancies for property received directly from the Government. A copy of the Form shall be provided to the Boeing Procurement Agent.

C. Damaged or missing subassemblies shall be reported to the Boeing Procurement Agent and the appropriate Government agency that exercises cognizance over the Seller's facility.

12. **SELLER'S LIABILITY**.

A. Seller's liability for shortages, loss, damage, or destruction to Boeing/Government property is set forth in the Purchase Contract applicable to that property. Seller's liability will survive until Boeing, in writing, releases Seller from such liability without regard to the termination or expiration of the Purchase Contract in which these terms have been incorporated. Seller may incur additional liability if use or consumption of Boeing/Government

property unreasonably exceeds the production allowances specified elsewhere in this contract.

B. Seller shall promptly investigate and report to Boeing all cases of loss, damage, or destruction of Boeing or Government property in Seller's possession or control, including accepted products or end items. A written loss, damage or destruction report shall be submitted to Boeing, or if directed, to the Government within 15 working days after the loss, damage, or destruction becomes known. Reports must include the following information about each lost, damaged, or destroyed item:

- (1) Production Purchase Contract Number under which the item was last used;
- (2) Description and item identification number of the item;
- (3) Estimated replacement or repair cost;
- (4) Date and time of loss, damage, or destruction;
- (5) Actions taken to prevent further loss, damage or destruction, and to prevent repetition of similar incidents;
- (6) Statement that no insurance costs or other means of the subcontract covering loss, damage, or destruction of property were charged to the subcontract, if applicable;
- (7) Security classification of the item, if any; and
- (8) All known facts or circumstances that led to the loss, damage or destruction, and a certification that the item was being used for its intended purpose.

13. **INVENTORY REQUIREMENTS**. Items of property provided to Seller by Boeing or produced or acquired by the Seller for use on a Boeing Purchase Contract will be retained or disposed of as set forth in the applicable Boeing Purchase Contract or other written instructions from Boeing. Physical inventories of Boeing and Government property in the possession of Seller, or for which the Seller has responsibility, shall be performed by Seller at least annually utilizing the on-line Vendor Inventory Process (VIP). The Seller shall prepare a Department of Defense (DoD) DD1662 Form, Property in the Custody of Contractors, annually in accordance with, and including all information set forth in, DFARS 245.505-14, and shall submit the completed DD 1662 to the Boeing Property Department. Seller must retain records of each inventory and copies must be submitted to Boeing. Physical inventories are also required immediately upon termination or completion of a contract unless Boeing anticipates a follow-on contract. In that event, Seller shall indicate on his property record documents that record balances have been transferred (referencing new Purchase Contract No.) in lieu of preparing a final inventory list. Final inventory records are to be submitted to the Boeing Procurement Agent responsible for this contract.

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14. **ACCESS.** Seller will permit Boeing, the Government, and their designees reasonable access to any Boeing or Government property located on Seller's premises. Seller will also require that its' subcontractors permit such access.

15. **SHIPPING/TRANSFERRING PROPERTY.** If Seller ships or transfers Boeing or government property to its' subcontractor or agent, Seller shall maintain files sufficiently documented to reflect Seller's review and approval of the subcontractor's or agent's Property Control System. Boeing or government property to be shipped to Boeing must be identified on Seller's shipping documents and on Boeing's shipping instructions and shipment must be authorized by Boeing.

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Addendum

DISCLAIMER

The sole intent of this addendum is to provide further clarification and understanding of the Supplier's roles and responsibilities related to tool quality already implied with FAR references imbedded in the body of MAC 5166. Under no circumstances does this addendum change or modify the Supplier's Property Management responsibilities specified in MAC 5166.

DEFINITIONS

- a. Accountable Tooling - All special tooling or special inspection equipment which is not of a temporary or expendable type and is of such a specialized nature that its use, without substantial modification or alteration is limited to the production and/or inspection of a particular item, or the performance of a particular service. This category shall include, but is not limited to, jigs, dies, fixtures, molds, patterns, special taps, special cutters and special gauges. Accountable Tooling may consist of Government-Furnished Property (GFP), Contractor-Acquired Property (CAP) and/or Customer-Furnished Property (CFP).
 - b. Electronic Data – Any electronic digital information provided with its intended use being the design, development, production, manufacture, assembly, operations, repair, testing, maintenance, inspection or modification of any Special Tool product.
 - c. Federal Acquisition Regulations (FAR) – Requirements established by the government defining the responsibilities of the government and the contractor relative to executing a government contract.
 - d. Master Model – A full scale three-dimensional structure which establishes the complete outside (or inside) surfaces of the part or assembly as defined by Design-Engineering data and/or loft lines, and may carry other coordinating data such as trim lines, hole pattern, and Tooling originated points. Purposes: * To make casts for dies, from tools, etc. * To control contoured areas not defined by any other media. * To coordinate detail and assembly tools.
 - e. Master Tool – Authority type tools establishing nominal dimensions that control the accuracy of production tools so that parts and/or assemblies can be produced within allowable tolerances to their nominal dimensions. A tool is considered a master when it controls either of the following;
 - a. Interchangeability between parts and/or assemblies where tolerance requirements are not compatible with ordinary manufacturing procedures.
 - b. Coordination of engineering defined holes, tool holes, surfaces, and/or contour are required within a tool family.
- Examples of master tools include, but are not limited to the following;
- 1) Master Model (MAM)
 - 2) Master (MA)
 - 3) Interchangeability Control Tool (ICT)
 - 4) Sample Part (SP)
- f. Process Validation Assessment (PVA) - A detailed examination of manufacturing and/or support processes, procedures and controls used in the fabrication and assembly of hardware at supplier's facility.
 - g. Report of Discrepancy (ROD) – Standard Form SF364 used to report overages, shortages, or damages discovered upon receipt of Special Tooling.
 - h. Special Tool (ST) – Special tools may be design and non-design fabrication and assembly tools such as jigs, dies, fixtures, molds, patterns, and gages. These tools are of such a specialized nature that their use is limited to the production of a specified product. Special tooling does not include material, special test equipment, facilities, general or special machine tools, or capital items.
 - i. Specification Outside Processing (SPECO) – Special instructions furnished to the Supplier or Co-Producer with requirements pertaining to the manufacturing, processing, and/or testing of assemblies, installations, or detail parts.
 - j. Tool Completion Report (TCR) – An automated report used to provide notification of all Special Tooling produced, procured, or reworked. The Automated Tool Completion Report (ATCR) is accessible on the Boeing St. Louis Tool Configuration web page accessed via the seller's CITIS account.

GENERAL REQUIREMENTS

1. All master tools, interface control tools, and other primary control media once used to establish production or inspection tooling configurations shall not be altered or repaired without written instruction (in every instance) from the Boeing Procurement Agent. The Procurement Agent will coordinate modifications and/or repairs with Manufacturing Engineering, Tool Engineering, and Supplier Quality.
2. Upon acceptance of the program master tool by Boeing Tooling Quality, the original tool drawing/model (with all deviations incorporated) shall be forwarded to the concerned Boeing division (via the procurement agent). Thereafter, design responsibility reverts to the concerned Boeing division and no changes may be made to the master tool and/or drawing without specific written instruction by the concerned Boeing division.
3. The prime responsibility for the creation, accountability, control, and maintenance of program master tools is vested in Boeing. The responsibility for certain master tools may be delegated. The

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degree of delegation will be defined by the Purchase Order.

4. The supplier is required to use all program master tools and electronic data as established by the master contract or purchase order.

DETAIL REQUIREMENTS

a. Quality Assurance

- a. Whenever digital data or master control drawing information is used, tooling work must be accomplished with proper attention to the temperature of the material. Dimensions and coordinate values are nominal at 68 deg F. Machining, tool construction, fabrication, rework and inspection may be done at other temperatures, provided compensation is made for the effect of thermal expansion and contraction of the material between 68 deg F and the actual material temperature, when dimensions and coordinate values are verified. All measurements must be traceable to the National Institute of Standards Technology (N.I.S.T.) or an equivalent organization.

Whenever physical master gages are coordinated to production tooling, the work must be accomplished with proper attention to the temperature. Nominal temperature range should be within 63 to 78 deg F.

- b. Supplier verification for all new, relocated, reactivated, or modified tools/details is required to ensure product conformity/integrity for Boeing tools or Boeing managed Government owned tools. Inspection acceptance of Boeing tools or Boeing managed Government owned tools shall be the responsibility of the supplier and may be verified at the option of Boeing. At its discretion, Boeing may review the verification requirements. Re-verification of tooling shall be required under the following circumstances:

- 1) Tooling that has been exposed to a significant event that could affect its ability to produce conforming product, is considered suspect and will be subject to Supplier verification. Supplier verification records will be made available to Boeing upon request.
- 2) Boeing tools or Boeing managed Government owned tools that have been through an earthquake of 5.0 on the Richter scale within a 50 mile radius, or a similar disturbance are considered suspect and will be subject to Supplier verification. Supplier verification records will be made available to Boeing upon request.

- c. Boeing expects all tools to be inspected prior to each use. Visual inspection should include checking for worn, broken or loose bushings, assuring the working surfaces are free from damage, loose and removable details are available and in good working condition, pins and other associated tooling hardware are available and unimpaired.

- d. Boeing or the supplier will perform the following inspection of Boeing tools or Boeing managed Government owned tools;

- 1) View the crating, sealing, unsealing, and uncrating of tools.
- 2) Visually inspect tools for damage in shipment.
- 3) Verify that no changes have been made to any tools without written instruction from the concerned Procurement Agent.
- 4) Verify the tool's revision level is current with supplier's requirements as applicable.

- e. When shop wear or damage is suspected, the supplier should immediately notify the procurement agent and arrange for the tool to be checked and corrected if required.

Based off the tool's criteria (type, size, production needs) Boeing shall determine the appropriate method to accomplish the task including.

- 1) Request tool(s) be sent back to Boeing for conformity check.
- 2) Provide appropriate media (plaster splash/ reference tooling and drawings) in support of a supplier's conformity check.
- 3) Provide support at the supplier's site by Boeing tool personnel with suitable verification instruments/devices.
- 4) Other suitable means.

- f. When damage or deviations are found on Boeing tools or Boeing managed Government owned tools, the supplier shall immediately report the finding(s) to the Boeing Procurement Agent. Boeing will accept documentation of discrepancies on the appropriate format (for example, CLEAR form C). The discrepant tool must not be used until Boeing's written disposition is received and implemented.

Note: All information must be in English and dimensioned in Inches.

- g. Special tools used for fabrication purposes are not intended for use as an inspection media unless otherwise stated in the Boeing purchase order.

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- h. Supplier shall verify part configuration back to the engineering drawing and/or applicable tooling (as specified by contract) during first article inspection.
- b. Compliance
 - a. The requirements of this document shall apply to all contracts and/or purchase orders specifying the procurement of tools and/or the fabrication of parts/details using accountable tooling.

If a change order to an existing purchase order requires compliance with this document, the supplier shall conform to these requirements within 30 days from the issuance of the change order or submit a plan for review and approval to achieve compliance. This will apply unless otherwise specified on the purchase order change
- c. Replacement of Master Tooling with Digital Configuration Control
 - a. When using a digital configuration reference instead of master tooling (i.e. MA, MAM, ICT, TS), it is possible that the master tooling and digital master may not match. A check may be required to verify the digital master matches the master tool. The digital configuration control will replace the use of master tooling as a manufacturing control media. The digital configuration control will be used to check or manufacture production tools, replacing the use of master tooling. The goal of this effort is to have all features of the production tool(s) digitally controlled, including all previously master controlled tooling features. The digital configuration control must comply with the engineering design.

It is possible that the digital configuration control data may have to be reverse engineered in some cases. That will be decided between engineering and fabrication tooling.
- d. Service
 - a. The Supplier shall conduct a physical inventory at least annually or as specified by the applicable Boeing division purchase order or contract. For Boeing and Government owned tooling, the Supplier shall verify that a physical inventory was completed and all records are in agreement, except for any discrepancies that shall be reported. Upon inventory completion, the Supplier must transmit a signed copy to Boeing.

MAC 5166 Clause Link:
<http://forms.boeing.com/docs/stl/pub//a5166.doc>
 - b. Suppliers shall permit Boeing, the Government and their designee's reasonable access to the Supplier's facilities as necessary for oversight and/or surveillance of accountable tooling and tool control records and procedures. Suppliers will also require its subcontractors permit such access.
- c. The Supplier shall notify the Boeing Procurement Agent upon receipt of accountable tools from any source other than Boeing if said tools will be used in fulfillment of a Boeing contract. Said notification shall include Boeing serial number (when available), tool code and tool number.
- e. Shipment of Tools
 - a. Suppliers may at their option and expense, ship tools to sub-tier Suppliers; however the Supplier will retain accountability and responsibility for the tools. The Supplier shall inform Boeing in writing of the shipment, no later than sixty (60) days after the shipping date. Said notification shall include;
 - 1) Destination
 - 2) Date of Receipt
 - 3) Tool Number
 - 4) Boeing Serial Number
 - 5) Tool Code
 - b. Supplier may be instructed by Boeing to ship tools from supplier's facility. In these cases supplier will be reimbursed for normal transportation and packaging charges. Any special packaging or premium transportation charges must be approved by Boeing prior to shipment (except shipment made by Government bills of lading).
 - c. Accountable tools to be shipped to Boeing must be authorized by Boeing. They must be identified on Supplier's shipping documents and on Boeing's shipping instructions
- f. Supplier Receipt of Tools (Boeing Initiated Shipment)
 - a. Upon completion of receipt of tools, the Supplier shall acknowledge receipt of the tools within ten (10) days by forwarding a signed copy of applicable documents to the Boeing Procurement Agent.
- g. Handling and Protection of Master Tools
 - a. Master tools are precision instruments that must be properly maintained to assure engineering tolerance in production parts and/or assemblies meet the requirements of interchangeability. The following instructions apply to all Boeing master tools (Boeing or supplier furnished).
 - 1) No master tools are to be used for direct manufacture. Strict adherence to this rule is mandatory.

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- 2) Proper handling and maintenance of master tooling will be assured through surveillance of Boeing and/or supplier quality control. Large master tools will not be lifted from points other than the lifting lugs, hoist rings, lift holes, or other designed lift points.
 - 3) Special care shall be taken by the supplier to provide warehousing and storage that will maintain the tools in good working condition (e.g. free from distortion, corrosion, loss, etc). When not in use, master tools shall be boxed and stored in a manner that will prevent atmospheric or other physical damage to tools and containers. Under no circumstances shall outside storage of master tools be permitted.
 - 4) Damage to program master tools must be reported promptly to the Boeing Procurement Agent who will coordinate with Quality Assurance and tool engineering for corrective action.
- 3) Tools transferred to Boeing or another supplier must be complete and operable after removal of corrosion preventative compound.
 - c. The supplier is required to maintain a procedure for storage, handling, and maintenance of all accountable tools to prevent damage. In addition, the following condition applies: Equipment with conventional electrical wiring, motor starting relays or plumbing will be stored inside weather-tight buildings.
- h. Preparing Master Tools for Storage and Shipping
 - a. All loose parts, including chained loose parts, such as bushings, pins, and detached assembly components, must be cleaned and corrosion preventative compound applied.
 - b. All machined and gauging steel surfaces must be cleaned and corrosion preventative compound applied.
 - c. All details shall be nested and securely fastened to prevent damaged during shipping. A detail inventory shall be performed to ensure all details are accountable prior to shipping.
 - i. Storage, Handling, and Maintenance of Accountable Tools
 - a. Supplier shall maintain all tools in good repair while they are in the possession of the supplier or their sub-tier Suppliers. Location of the tools in direct use or storage shall govern the type of protective finish to be applied. In no event should the tools be subjected to conditions that will tend to induce corrosion or damage.
 - b. Supplier shall treat all critical surfaces with corrosion preventative compound before shipping or storage.
 - 1) Regardless of storage location (inside or outside) protect all tools, as well as all bushings and pins, with corrosion preventative compound.
 - 2) Protect special test equipment in storage insofar as it contributes to the preservation of the equipment.
 - j. Storage of Accountable Tools
 - a. Storage will be negotiated between the Supplier and the procurement agent of the affected Boeing division.

APPENDICES

APPENDIX 1

Part Fabrication Moved for one Supplier to Another Checklist

APPENDIX 2

Reworking and/or Repair of Special Tooling

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APPENDIX 1 – PART FABRICATION MOVED FROM ONE SUPPLIER TO ANOTHER CHECKLIST

CHECKLIST

1. Tools Used and Listed on SPECO
 - a. Are all tools accounted for and in good working condition?
 - 1) Are tools missing, are there worn or missing details, Etc.? Reference FAR 45.5
 - 2) Do tools listed in SPEC match the tools needed to fabricate the part? If no, notify Procurement Agent who coordinates with SM&P ME and tooling to resolve discrepancies.
 - 3) Are some tools no longer required? If so, they should be declared excess for Boeing disposition.
2. Tools Used but not Listed on SPECO (Government or Boeing Owned)
 - a. Supplier notifies Procurement Agent who coordinates with SM&P ME to revise SPECO as required.
3. Address Required Clarifications
 - a. Tool Usage
 - b. SPECO Part Configuration Instructions
 - 1) Trim Issues
 - 2) Tooling Tabs
 - 3) Holes
 - 4) Part Processing
 - 5) Etc.
 - c. Procurement Agent coordinates with SM&P ME to revise SPECO as required.
4. Check Condition of Furnished Tool
 - a. Issue a ROD (Report of Discrepancy) on all tools received in damaged condition.

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APPENDIX 2 – REWORKING SPECIAL TOOLING

REQUIREMENTS

Rework of Special Tooling is authorized via one of four scenarios with a TCR completion;

SCENARIO 1:

The Supplier initiates non-conformances as required for Special Tooling.

SCENARIO 2:

Design Engineering releases Engineering Orders (EO) as required to incorporate design changes or corrective actions.

SCENARIO 3:

Quality Engineering initiates CLEAR-II documentation as required for Special Tooling.

SCENARIO 4:

Supplier initiates tool improvements.

RESPONSIBILITIES

SUPPLIER

- a. Scenario #1 Input - The Supplier initiates non-conformances as required for Special Tooling.
- b. Step 1 – The Supplier notifies the Procurement Agent once they have initiated a non-conformance against a USG Special Tool.
- c. Step 4 – The Supplier performs root cause analysis and identifies corrective action when notified of a CLEAR-II document having been issued against Special Tooling.
- d. Step 6 - The Supplier coordinates with the Procurement Agent, SM&P, and Manufacturing Engineering to determine where (@ Supplier or @ Boeing) the Special Tooling rework will be performed and who will be performing the work (Supplier or Boeing personnel).
- e. Step 7 – The Supplier returns tooling to Boeing. Once it is determined the tooling will be reworked at Boeing facilities, Boeing will instruct supplier to return tools to Boeing.
- f. Step 11 – The Supplier performs rework operations at the Supplier's facilities.

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FIGURE 1. REWORKING SPECIAL TOOLING

