

9/20/16

## Supplier Quality Notice

### **095870 Supplier Quality Assurance Manual Rev 06**

This is to notify you of changes to BAE Systems' Supplier Quality Assurance Manual. Please see the following changes/additions:

Legend:

- Addition
- Changed
- Deletion

#### 5.2 Requests for Information/Change/Material Disposition

All requests for information/clarification, requests for change, and requests for disposition of nonconforming material should be directed to the APR **and respective Supplier Quality representative**. VIR, form number UA- 111/097908, is required to formally request the information/change/material disposition and will be available through the Purchasing website. The Supplier is not authorized to incorporate any changes until formal approval is received via a change to the purchasing agreement.

#### 6.1 Sub-tier Management

The Supplier assumes all responsibility for the end-item deliverables and any associated documentation. In the event that a third party is used in the execution of this purchasing agreement, the Supplier is responsible to:

- manage that sub-tier supplier
- ensure that, where required by paragraph 7.1 and its subparagraphs, that only **suppliers approved by BAE Systems Platforms and Solutions Services or by an accredited third party, such as NADCAP**, are used for special processes
- flow down the requirements of this manual and all relevant/directed purchasing agreement requirements
- provide sub-tier documentation upon request by BAE Systems
- ensure timely response from the sub-tier supplier if corrective action becomes necessary

At no time will BAE Systems actively engage a sub-tier supplier without first notifying the Supplier.

#### 6.7 Counterfeit Electronic Parts Prevention Plan

## 6.8 Commercial Off The Shelf (COTS) Parts

### 7.2 Part Identification Marking

#### A. Combat Vehicles

The Supplier shall ensure that items are legibly marked in accordance with the purchasing agreement, drawing, and/or the specification requirements. If this identification is no longer visible after all finishing processes have been completed that info must be reapplied with the identification method to be determined by the supplier. Objective evidence must be made available upon request to support the original marking methods used.

In addition to the above requirements, all parts must be identified with the part number as listed on the P/O line item, and the Suppliers cage code, Site # or Logo as applicable. The identification process cannot affect form, fit or function of the part. Markings shall be legible after all finishing processes are completed.

#### B. Weapons Systems

- The Supplier shall ensure that Items are legibly marked in accordance with drawing requirements and the requirements of the Purchasing Agreement. If identification is not legible after all finished processes have been completed, the supplier must submit a VIR form requesting directions from BAE Systems Identification is required for any part that does not have an identification requirement referenced on either the drawing/specification; The identification method is to be a printed label and Bag, Tag or Box. The information contained on the label for the Bag, Tag or Box shall contain the following information: Part Number, Part name, Quantity, Purchase Order #, rev Level, and Supplier's Cage Code.

## 7.3 CARC Paint Marking

## 8.1 Supplier Monitoring and Rating

BAE Systems rates and monitors the performance of its suppliers. A supplier's rating is based upon:

### A. Combat Vehicles

- Overall Risk Assessment Rating =  $[(100 - P1 - P2 - P3) +/- P4]$ 
  - Product quality rating (70% of the total Risk Assessment) P1 = (total rejections / total receipts)
    - Receiving Inspection rejections 1:1 ratio
    - Work In-Process Inspection rejections 2:1 ratio
  - Corrective actions issued for product nonconformance's (15% of the total risk assessment) P2 = (3 points for each product SCAR issued up to a maximum deduction of 15 points)
  - Supplier's responsiveness to issues (15% of the total risk assessment) P3 = (3 points for each occurrence of a late response to a corrective action up to a maximum deduction of 15 points)
  - Audit compliance P4= (+2.5, 0, -2.5)
    - 90% - 100% compliance +2.5 points added to the overall risk assessment
    - 80% - 89.9% compliance 0 points added or subtracted from the overall risk assessment
    - <79.9% compliance 2.5 points subtracted from the overall risk assessment
  -

Suppliers who fall below a determined level (90% Total Quality Rating) of performance may be subject to various activities including, but not limited to, audit by BAE Systems, request for a corrective action improvement plan, and/or prohibiting the supplier from receiving new business.

### B. Weapons Systems

- BAE Systems Weapons Systems rates and monitors the performance of its suppliers. A supplier's rating is based upon:
  - a. ○ Receiving Quality Rating 40%
  - b. ○ Production Quality Rating 40%
  - c. ○ SCAR's and Audit findings Issued 20%

## 8.3 Inspection

The Supplier will inspect the first piece manufactured for this Purchasing Agreement to all drawing characteristics, drawing notes and Purchasing Agreement requirements and will maintain on file a report which includes the following elements (Note: If product under this purchasing agreement has been in continuous production and/or has not been changed since the last order, an additional first piece requirement is not required. Continuous production is defined as no break in production or process in excess of twenty four (24) months, unless otherwise directed):

- Supplier's name and the manufacturing address
- Purchasing agreement number and line number

- Item number, description, and revision as they appear on the purchasing agreement
- Lot quantity
- Certificate of compliance for the delivered item (as defined by paragraph 8.5)
- Material certificates/ballistic firing records (where applicable)
- Special process certifications (where applicable)
- First Article Test reports (where applicable)
- Production test reports (where applicable)
- Date of last control test and next control test, and, if a control test was performed on the current lot, a copy of the control test report (where applicable)
- Verification of all drawing notes, dimensions, and associated QAP/QAR/SQAP/Specification requirements, with **the** requirement and measured values recorded. **Variable data shall be recorded with actual values measured for each sample.** The supplier shall provide traceability from the measured value to the drawing characteristic (Ex. ballooned drawing (all characteristics, including drawing notes, numbered))
- For assemblies, verification of all component-level (**those components identified on the top level drawing or are identified in the BOM listed on the top level drawing**) drawing notes, dimensions, and associated QAP/QAR/SQAP/Specification requirements, with the requirement and measured values recorded. **Variable data shall be recorded with actual values measured for each sample**
- Inspector's name, signature, and date (**electronic or digital signatures are acceptable**)

This First Piece/First Article Inspection report will be submitted to BAE Systems as required by **the** Purchasing Agreement. BAE Systems reserves the right to request additional copies of First Piece/First Article and In-process inspection records at any time. Requests for records **shall** be fulfilled within five (5) business days.

Following the First Piece/First Article Inspection, the Supplier shall have a process in place which assures that all supplied product is compliant to all Purchasing Agreement requirements. This process shall consist of a C=0 sampling plan, SPC, or any other method which assures that the final shipped product is compliant. If required by contract **the** supplier may be required to submit a plan to BAE for approval. Record of **the** plan approval shall be kept on file with the first piece acceptance documentation. **If the first piece fails to meet the functional, dimensional or TDP requirements, a new first pc must be generated, tested and measured. Likewise, if the manufacturing process or design of the part changes, new parts must be obtained that represents this new process/design and a delta First Piece/First Article inspection is permissible with prior approval.**

Inspection requirements for certain special processes, testing, and fasteners:

- Visual weld inspection shall be 100% or per applicable specification requirements
- Verification/validation of finishing processes shall be performed on each manufacturing lot unless a higher frequency is required by the relevant specification
- Non-Destructive Evaluation (NDE) / Non-Destructive Testing (NDT) as required by specification/contract.
- Frequency-based testing such as sample/quantity or sample/time period shall be followed.

- Documented/specified fastener quality assurance requirements shall be followed.

### 8.5 Certificate of Compliance

The Supplier, when required by the purchasing agreement or upon request by BAE Systems, shall generate and provide a Certificate of Compliance. The instructions for submitting the Certificate of Compliance shall be as defined by CDR. This certificate, signed by an authorized representative, shall contain the following information:

- Supplier's name and address
- BAE Systems' purchasing agreement number and line number
- BAE Systems' item number, description, and revision as specified on the purchasing agreement
- Quantity
- A statement that the product/service meets all of the requirements of the purchasing agreement and its technical data package at the prescribed revision level.
- Exceptions, including waivers and deviations (as applicable)
- Signature, printed name, and title of signer (electronic or digital signatures are acceptable)
- Date

### 8.9 Corrective Action

The Supplier is responsible for implementing systems capable of resolving problems adversely affecting quality. The Supplier shall:

- Contain all discrepant parts whether they are completed, in-process, in inventory, in-transit, previously shipped or in the field.
- Determine root cause of the issue, why it wasn't detected in their system and what systemically failed to allow the deficiency.
- Identify impacts to similar items that use the same process/material/equipment and which may be affected by this discrepancy (read across).
- Implement corrective action to correct the deficiencies.
- Implement preventative actions to preclude future occurrences of the issue(s).

Records which document the above actions shall be maintained and made available to BAE Systems upon request; these records may be in the Supplier's format as long as they address all requirements specified in this document.

In the event that a non-conformance is discovered by BAE Systems, BAE Systems may issue either a notification of nonconformance (Level I Corrective Action) or a Supplier Corrective Action Request (SCAR, Level II Corrective Action).

A notification of nonconformance, Level I Corrective Action informs the Supplier that a non-conformance was identified but does not require a formal response from the Supplier. The Supplier is still responsible and shall correct the identified non-conformance in their process and document the actions taken in accordance with their internal corrective action procedures.

A SCAR requires that the Supplier provide formal written analysis of the root cause and documented corrective and preventative actions. The formal response from the Supplier must be received on or before the response due date or the Supplier's performance and/or risk rating may be impacted.

BAE Systems will, based on the supplied SCAR response, determine what follow up actions are required, if any, and completion of **all** follow up actions will be required before the SCAR can be closed.

## 8.12 Data Submission Instructions

All data submissions, unless otherwise specified, shall be submitted electronically. The email subject line should include the relevant Purchasing Agreement number and part number. Paperwork does not need to be shipped with the product.

Please see the following for the respective site you will be shipping to:

- a. Anniston, AL - [sqa.anniston@baesystems.com](mailto:sqa.anniston@baesystems.com).
- b. Louisville, KY – [sqa-admin.minneapolis@baesystems.com](mailto:sqa-admin.minneapolis@baesystems.com)
- c. Minneapolis, MN - [sqa-admin.minneapolis@baesystems.com](mailto:sqa-admin.minneapolis@baesystems.com)
- d. San Jose, CA – [gs.sqasanjose@baesystems.com](mailto:gs.sqasanjose@baesystems.com)
- e. Sterling Heights, MI - [sqasterlinghts.pands@baesystems.com](mailto:sqasterlinghts.pands@baesystems.com)
- f. York, PA - [pgayork.landa@baesystems.com](mailto:pgayork.landa@baesystems.com)
- g. Aiken, SC - [sqaiken.pands@baesystems.com](mailto:sqaiken.pands@baesystems.com)
- h. Elgin, OK - [pgayork.landa@baesystems.com](mailto:pgayork.landa@baesystems.com)
- i. Aberdeen SD - [sqa-admin.minneapolis@baesystems.com](mailto:sqa-admin.minneapolis@baesystems.com)

## 9.1 Cleanliness and Preservation

The Supplier shall furnish parts/components which are free of mill scale, rust, carbon deposit, weld spatter, or any surface contaminant that would be detrimental to appearance or functional performance (i.e. would prevent proper adhesion of coatings). **When specified on the drawing, specification and/or purchasing agreement**, bare metal surfaces, ferrous and non-ferrous **metals**, shall be protected from corrosion. Technical information regarding the preservative used shall be maintained on file by the supplier and made available to BAE Systems upon request.

Any openings on components, such as electrical connectors, hydraulic/pneumatic fittings/ports, bare machined holes, and fuel ports, shall be properly plugged or capped to prevent internal contamination.

## 9.2 Packaging for Electrostatic Discharge (ESD) Sensitive Items

All Class 1, Class 2 and Class 3 parts, assemblies, and equipment, as defined by MIL-STD-1686, are to be packaged in accordance with Paragraph 5.8 of MIL-STD-1686 (MIL-E-17555). External shipping packaging for Class 1, Class 2, and Class 3 devices shall be identified with the ESD symbol. All other components with solderable leads and which are considered non-ESD sensitive per MIL-STD-1686 shall be packaged in material that meets the requirements of MIL-B-81705, Type II or Type III. Bare printed wiring boards are to be packaged in heat-sealed non-static-generating poly bags that meet the requirements of MIL-**PRF**-81705 and MIL-HDBK-263.

#### 9.4 Age Sensitive Materials

For elastomeric products (such as natural and synthetic rubbers), potting compounds, shrinkable tubing, epoxies, adhesives, sealants, paints, and other like product which have a manufacturer-specified shelf life, the following requirements apply:

- Permanently mark the product (or packaging if marking the product would damage it), in a manner that is not detrimental to its form, fit, or function, with the date of expiration or “best if used by” date and lot traceability information (i.e. lot number, date of manufacture, batch number, etc.) The method of marking is optional unless otherwise specified
- The product must be received by BAE Systems with a minimum of 50 % of its shelf life remaining or as directed by contract.
- For kits containing age-sensitive materials, the outside of the kit’s container shall be marked with the “Earliest Expiration Date” and the earliest expiration date of the materials contained in the kit (ex. Earliest Expiration Date 04/2015)

Assemblies containing age sensitive materials, where those materials are fully consumed, shall not be subject to age control marking unless otherwise specified