

BAE Systems Platforms & Services

Contract Deliverable Requirement: Additions, Changes, and Deletions to CDRs

October 2015



CDRs Added

083 Electrostatic Discharge (ESD)

- *Supplier **shall** have an ESD program in place per ANSI/ESD S20.20.*
- *Supplier **shall** protect the parts using approved ESD protective packaging per MIL-STD-2073 preservation code GX.*
- *Labeling **shall** be per MIL-STD-130 and MIL-STD-129.*

Changes to CDRs

Rev 04:

001 Inspection/Test Data Reports

All of Supplier's actual inspection/test data for the specified item shall be submitted by the Supplier to BAE Systems on a suitable form. The data shall be submitted with the shipment of the item. As applicable, the data shall include the following information:

- Part Number
- Serial Number
- Quantity of parts
- Identification of each characteristic inspected/tested **to include but not limited to: dimensional coordinates, drawing notes, (e.g., protective coatings, chemical and physical properties), etc. A ballooned drawing (all characteristics, including drawing notes, numbered) shall accompany the report to identify the characteristics inspected.**
- Actual Inspection/test results
- Date of inspection/test
- Inspector's signature, stamp or initials
- Indication of First Piece (when applicable)

The verbiage in **red** was deleted.

Rev 05:

001 Inspection/Test Data Reports

All of Supplier's actual inspection/test data for the specified item shall be submitted by the Supplier to BAE Systems on a suitable form. The data shall be submitted **prior to shipment of the item in accordance with the Data Submission Instructions for this item**. As applicable, the data shall include the following information:

- Part Number
- Serial Number
- Quantity of parts
- Identification of each characteristic inspected/tested.
- **A ballooned drawing shall accompany the report to identify the characteristics inspected.**
- Actual Inspection/test results
- Date of inspection/test
- Inspector's signature, stamp or initials
- Indication of First Piece (when applicable)

The verbiage in **blue** was changed

The verbiage in **green** was added

Changes to CDRs cont'

Rev 04:

002 Detailed Inspection Test Procedure

The Supplier shall prepare and maintain a written, detailed inspection/test procedure for the subject item. **Prior to the start of inspection**, the Supplier shall submit the procedure(s) to the BAE Systems in accordance with the Data Submission Instructions for this part. Each procedure shall contain the following information:

- Part Number
- Procedure Revision
- Identification of each characteristic to be submitted to inspection/test, its requirement, and drawing and/or specification requirement reference and their respective acceptance criteria
- Sequence of each inspection/test
- Equipment to be used for each inspection/test and for complex operations, the setup of the inspection/test equipment
- The inspection/test environment
- Definition of the test/inspection report documenting the test/inspection results
- Changes to this procedure shall be submitted to BAE Systems for approval prior to conduct of inspection/test.

The verbiage in **red** was deleted.

Rev 05:

002 Detailed Inspection Test Procedure

The Supplier shall prepare and maintain a written, detailed inspection/test procedure for the subject item. The Supplier shall submit the procedure(s) to the BAE Systems in accordance with the Data Submission Instructions for this part **prior to start of inspection/test**. Each procedure shall contain the following information:

- Part Number
- Procedure Revision
- Identification of each characteristic to be submitted to inspection/test, its requirement, and drawing and/or specification requirement reference and their respective acceptance criteria
- Sequence of each inspection/test
- Equipment to be used for each inspection/test and for complex operations, the setup of the inspection/test equipment
- The inspection/test environment
- Definition of the test/inspection report documenting the test/inspection results
- Changes to this **inspection/test** procedure shall be submitted to BAE Systems for approval prior to conduct of inspection/test.

The verbiage in **green** was added

Changes to CDRs cont'

Rev 04:

003 First Piece Inspection Report

The Supplier shall submit their First Piece Inspection Report **for this item** as specified in SQAM paragraph 8.3. This report shall be submitted as specified in the Data Submission Instructions for this item.

The verbiage in **red** was deleted.

Rev 05:

003 First Piece Inspection Report

The Supplier shall submit their First Piece Inspection Report as specified in SQAM paragraph 8.3 **prior to shipment of the product per** the Data Submission Instructions for this item.

The verbiage in **blue** was changed

Changes to CDRs cont'

Rev 04

004 First Article Test (FAT)

The Supplier shall submit a FAT plan in accordance with the Data Submission Instructions for this item within thirty (30) days after receipt of the Purchasing Agreement. The FAT plan shall include:

- Dates for submittal of the FAT procedure
- Dates and location(s) for all testing with anticipated start/completion dates
- Date for submittal of the FAT report.

The Supplier shall update/resubmit the FAT plan to cover any changes to the schedule. The procedure and test reports may be prepared using MIL-HDBK-831 as a guide and shall be approved by BAE Systems prior to start of test. BAE Systems and its Government customer reserve the right to witness FAT testing at any point in the schedule.

Following First Article approval, it is the Supplier's responsibility to notify the BAE Systems Authorized Purchasing Representative to determine what testing must be repeated when any of the following occurs:

- Receipt of new Purchasing Agreement or contract
- Significant change in manufacturing process (introduction of a new manufacturing technique, etc.)
- Change in any drawing configuration, component, or sub-component parts
- Change in manufacturing location
- A break in production or process in excess of **twelve (12) months**, unless otherwise specified

The only thing that changed in Rev 05 is 12 months changed to 24 months

Changes to CDRs cont'

Rev 04:

005 Customer Source Surveillance (CSS)

Source Surveillance, inspection, and/or test by a BAE Systems source inspection representative is required for each shipment of this item. In order to accommodate BAE Systems source inspection representatives, the Supplier shall make all facilities, equipment, inspection records, and assistance readily available.

The Supplier shall provide five (5) working days advance notification of requests for source inspection through submission of Form 092245. Requests shall be submitted in accordance with the Data Submission Instructions specified for this item. Requests submitted with less than five (5) working days' notice may impact the Supplier's delivery rating. Unauthorized shipment of product without BAE Systems source inspection may result in the shipment being rejected and returned to the Supplier at the Supplier's expense.

Rev 05:

005 Customer Source Surveillance (CSS)

Source Surveillance, inspection, and/or test by a BAE Systems source inspection representative is required for each shipment of this item. In order to accommodate BAE Systems source inspection representatives, the Supplier shall make all facilities, equipment, inspection records, and assistance readily available.

The Supplier shall provide five (5) working days advance notification of requests for source inspection through submission of Form 092245. Requests shall be submitted in accordance with the Data Submission Instructions specified for this item. **Unauthorized shipment of product without BAE Systems source inspection may result in the shipment being rejected, a Supplier Corrective Action Request may be issued and product may be** returned to the Supplier at the Supplier's expense.

The verbiage in **blue** was changed

Changes to CDRs cont'

Rev 04:

006 Government Source Surveillance/Inspection (GSS/GSI)

Government surveillance/inspection is required prior to shipment from your plant and cannot be waived by BAE Systems.

Supplier must notify BAE Systems prior to, or in conjunction with, notification to DCMA so that BAE Systems has the opportunity to perform any reviews/inspections prior to submission to DCMA.

Upon receipt of the Purchasing Agreement, promptly notify the Government representative who normally services your facility so that appropriate planning for Government inspection can be accomplished. If the local Government Representative directs that surveillance/inspection should take place at a sub-tier supplier facility, the full wording of this requirement shall be incorporated into the Purchasing Agreement with that sub-tier supplier. The text of this requirement may be incorporated by reference. At no time shall the Supplier flow any Government Surveillance/Inspection requirements to their sub-tier suppliers without the direction of their local Government Representative.

The verbiage in red was deleted.

Notification to the local Government representative of pending inspections shall be made in accordance with FAR 52.246-2(i) (2), which can be found at https://www.acquisition.gov/far/current/html/52_246.html. **As of this revision, the FAR requires two (2) working days notification for resident representatives and seven (7) working days for all other instances; however the latest revision of the FAR shall apply. In the event the representative or office cannot be located, the BAE Systems Authorized Purchasing Representative shall be notified immediately.**

Government inspection must be made prior to shipment. Unauthorized shipment of product without Government Source Surveillance may result in rejection and subsequent return at the Supplier's cost, and withholding of your invoice payment. GSS shall not replace Supplier inspection nor relieve the Supplier of its responsibility to meet all requirements of the purchasing agreement.

Rev 05:

006 Government Source Surveillance/Inspection (GSS/GSI)

Government surveillance/inspection is required prior to shipment from your plant and **cannot be waived** by BAE Systems. **Unauthorized shipment of product without Government Source Surveillance may result in rejection and subsequent return at the Supplier's cost, and withholding of your invoice payment. GSS shall not replace Supplier inspection nor relieve the Supplier of its responsibility to meet all requirements of the purchasing agreement.**

This paragraph was moved up from the bottom



Supplier must notify BAE Systems prior to, or in conjunction with, notification to DCMA so that BAE Systems has the opportunity to perform any reviews/inspections prior to submission to DCMA. **Supplier shall notify** the local Government **DCMA** representative of pending inspections in accordance with FAR 52.246-2(i) (2), which can be found at https://www.acquisition.gov/far/current/html/52_246.html.

The verbiage in blue was changed

The verbiage in green was added

Changes to CDRs cont'

Rev 04:

009 Soldering

- The Supplier shall submit soldering plans in accordance with the Data Submission Instructions for this item (30) days after receipt of the Purchasing Agreement
- Procedures shall be submitted for all subcontracted soldering operations
- BAE Systems reserves the right to disapprove the plan or to require changes in the plan, which it deems necessary to ensure the product conforms to IPC J-STD-001, Class 3 and Purchasing Agreement requirements
- A new Purchasing Agreement number with the same prime contract number as previously approved does not require extension of approval
- The plan shall include, as a minimum, detailed procedures to be followed and utilized throughout all areas of performance
- The Supplier must have approval from BAE Systems prior to beginning production. This approval will be in the form of a letter notifying you that your facility has satisfactorily completed a High-Reliability Audit. The approved program must be utilized in the performance of Purchasing Agreement
- Any and all records required by the approved program may be requested at any time and must be immediately available for review
- BAE Systems must approve changes to this program following approval

Rev 05:

009 Soldering

- The Supplier shall submit soldering plans in accordance with the Data Submission Instructions for this item within (30) days of receipt of the Purchasing Agreement
- Procedures shall be submitted for all subcontracted soldering operations
- BAE Systems reserves the right to disapprove the plan or to require changes in the plan, which it deems necessary to ensure the product conforms to IPC J-STD-001, Class 3 and Purchasing Agreement requirements
- A new Purchasing Agreement number with the same prime contract number as previously approved does not require extension of approval
- The plan shall include, as a minimum, detailed procedures to be followed and utilized throughout all areas of performance
- The Supplier must have approval from BAE Systems prior to beginning production. This approval will be in the form of a letter notifying you that your facility has satisfactorily completed a **Soldering** Audit. The approved program must be utilized in the performance of Purchasing Agreement
- Any and all records required by the approved program may be requested at any time and must be immediately available for review
- BAE Systems must approve changes to this program following approval

The verbiage in **blue** was changed

Changes to CDRs cont'

Rev 04:

016 Plating

The Supplier shall provide written certification documenting that the plating was performed in accordance with drawing and Purchasing Agreement requirements. The facility actually performing the plating shall prepare the certification. When baking for hydrogen embrittlement relief is required, the certification shall define the required bake time at temperature and contain a statement that the items were baked at the required temperature for the required minimum time specified in accordance with the required revision level of the specification.

Certification **MUST** include as a minimum:

- Part number
- Purchasing Agreement number
- Plating process specification used
- Baking temperature
- Baking time
- A statement that the baking operation was started within 3 hours of plating completion
- Complete lot traceability to all certifications related to the BAE Systems Purchasing Agreement
- Signature/title of the Supplier's representative
- Report date

The verbiage in **red** was deleted.

A. Electroplated Coating of Cadmium or Zinc:

All fasteners which are electroplated in cadmium or zinc shall be hydrogen embrittlement relieved by baking at 375°F ±25°F for 23 hours minimum. This baking process shall be initiated within four (4) hours of completion of the plating process.

Components requiring electroplated coating of cadmium or zinc, which are incorporated in equipment to be delivered under this Purchasing Agreement, shall allow the use of ASTM B 633, Type 2, of equivalent thickness, except salt spray test per ASTM B 633 is not required. An alternate coating for ASTM B 633 shall be Ion Vapor Deposited (IVD) Aluminum MIL-DTL-83488, Type II, of equivalent thickness. For components requiring non-electroplated coatings of cadmium or zinc, the alternate coating shall be MIL-DTL-83488, Type II, of equivalent thickness.

B. Solid Film Lubricant, MIL-PRF-46010:

When performing solid film lubricant on steel products, the parts shall receive a solid film bake cure at 300° F, unless the drawing specifies a specific temperature.

SEE NEXT SLIDE FOR REV 05

Changes to CDRs cont'

Rev 05:

016 Plating

The Supplier shall provide written certification documenting that the plating was performed in accordance with drawing and Purchasing Agreement requirements. The facility actually performing the plating shall prepare the certification. When baking for hydrogen embrittlement relief is required, the certification shall define the required bake time at temperature and contain a statement that the items were baked at the required temperature for the required minimum time specified in accordance with the required revision level of the specification.

Certification **MUST** include as a minimum:

- Part number
- Purchasing Agreement number
- Plating process specification used
- Baking temperature
- Baking time
- A statement that the baking operation was started within 3 hours of plating completion
- Complete lot traceability to all certifications related to the BAE Systems Purchasing Agreement
- Signature/title of the Supplier's representative
- Report date

Changes to CDRs cont'

Rev 04:

018 Physical and Chemical Test Reports

With each shipment, the Supplier shall provide all actual chemical, mechanical, and/or physical test results pertaining to the material shipped under this Purchasing Agreement with traceability to the original mill/manufacturer, heat lot, and country of origin, as applicable. This data shall be provided to BAE Systems in accordance with the Data Submission Instructions for this part.

Rev 05:

018 Physical and Chemical Test Reports

With each shipment, the Supplier shall provide **a material certification including** all actual chemical, mechanical, and/or physical test results pertaining to the material shipped under this Purchasing Agreement with traceability to the original mill/manufacturer, heat lot, and country of origin, as applicable. This data shall be provided to BAE Systems in accordance with the Data Submission Instructions for this part.

The verbiage in **green** was added

Changes to CDRs cont'

Rev 04

019 Test Samples – Tensile Testing

With each shipment, the Supplier shall provide a set of two un-machined test bars suitable for the mechanical testing required by Purchasing Agreement or referenced specification. Both bars shall be made from the same melt and heat treated in the same lot as the supplied parts.

Rev 05

019 Test Samples – Tensile Testing

Addition

With each shipment, the Supplier shall provide a set of two **samples (un-machined test bars/sheet stock)** suitable for the mechanical testing as required by Purchasing Agreement or referenced specification. Both shall be made from the same melt and heat treated in the same lot as the supplied parts. Identify by paint marking.

The verbiage in **blue** was changed

Changes to CDRs cont'

Rev 04

020 Heat Treating

With each shipment, the Supplier shall provide a written certification that heat treatment was performed in accordance with drawing and Purchasing Agreement requirements. When the drawing specifies a hardness range for materials due to quench and temper or other practices, actual results shall recorded on the certification. When heat treating is performed by a facility other than the Supplier shown on Purchasing Agreement, the name of that subcontractor and a copy of the certificate furnished by the subcontractor for the heat treatment shall be furnished to BAE Systems. When specified on the drawing and/or the Purchasing Agreement, test samples shall be provided to BAE Systems for evaluation.

Note: there are bullets A. through G. that do not have any changes/additions or deletions

Rev 05

020 Heat Treating

With each shipment, the Supplier shall provide a written certification that heat treatment was performed in accordance with drawing and Purchasing Agreement requirements.

Supplier shall conduct a visual inspection for cracks or other injurious defects.

The verbiage in **green** was added

When the drawing specifies a hardness range for materials due to quench and temper or other practices, actual results shall recorded on the certification.

When heat treating is performed by a facility other than the Supplier shown on Purchasing Agreement, the name of that subcontractor and a copy of the certificate furnished by the subcontractor for the heat treatment shall be furnished to BAE Systems.

When specified on the drawing and/or the Purchasing Agreement, test samples shall be provided to BAE Systems for evaluation.

The below processes shall be completed as stated per specific drawing requirements.

Bullets A. through G. are listed below this sentence on the actual document

Changes to CDRs cont'

Rev 04

023 Age Control

Age-sensitive items include, but are not limited to, paint, adhesives, and rubber products. The following requirements apply to all items with this requirement:

- Age-sensitive items shall be delivered with a minimum of 75% of the shelf life remaining
- All age-sensitive items and their respective shipping containers shall be permanently marked with the cure/manufacture and the expiration dates in addition to any other marking requirements
- For parts delivered on a spool or reel, the marking must be applied to a visible location on the outside of the spool or reel
- The cure/manufacture and expiration dates shall be in either Quarter/Year format (for product with a shelf life in excess of three (3) years) or Month/Year format (for product with a shelf life of three (3) years or less). The method of marking and the marking height shall be in the manufacturer's format, however the marking shall not affect the part's form, fit, or function

Example:

	CURE	4Q/2010
EXP	4Q/2016	

- In addition to the requirements of SQAM paragraph 8.5, Certificates of Conformance for age sensitive items shall include:
 - Lot traceability by run, batch, lot, or date of manufacture
 - Shelf life expiration date (as required by specification)
 - Storage conditions to achieve shelf life, if not stated on the material package

SEE NEXT SLIDE FOR REV 05

Changes to CDRs cont'

Rev 05

The verbiage in **green** was added

023 Age Control

Age-sensitive items include, but are not limited to, paint, adhesives, and rubber products. The following requirements apply to all items with this requirement:

- **Age-sensitive items shall be delivered as directed by requirement assigned from below.**
 - **With a minimum of 50% of the shelf life remaining or**
 - **With a minimum of 75% of the shelf life remaining.**
 - **With a minimum of 85% of the shelf life remaining.**
 - **Other as directed by contract.**
 - Age-sensitive items shall be delivered with a minimum of **50%** of the shelf life remaining or as directed by contract.
 - All age-sensitive items and their respective shipping containers shall be permanently marked with the cure/manufacture and the expiration dates in addition to any other marking requirements
 - For parts delivered on a spool or reel, the marking must be applied to a visible location on the outside of the spool or reel
 - The cure/manufacture and expiration dates shall be in either Quarter/Year format (for product with a shelf life in excess of three (3) years) or Month/Year format (for product with a shelf life of three (3) years or less). The method of marking and the marking height shall be in the manufacturer's format, however the marking shall not affect the part's form, fit, or function
- Example:
- | | |
|------|---------|
| CURE | 4Q/2010 |
| EXP | 4Q/2016 |
- In addition to the requirements of SQAM paragraph 8.5, Certificates of Conformance for age sensitive items shall include:
 - Lot traceability by run, batch, lot, or date of manufacture
 - Shelf life expiration date (as required by specification)
 - Storage conditions to achieve shelf life, if not stated on the material package

The verbiage in **blue** was changed

Changes to CDRs cont'

Rev 04:

026 Quality Requirements

The Supplier shall maintain on file, and provide to BAE Systems upon request, objective quality evidence demonstrating compliance to all of the requirements of this Purchasing Agreement. When documentation is requested by BAE Systems, the documentation shall be provided in a commonly readable electronic format and shall be emailed to the authorized BAE Systems representative requesting the information or as specified by that individual.

Rev 05:

026 Quality Requirements

The Supplier **shall** maintain on file, and provide to BAE Systems upon request, objective quality evidence demonstrating compliance to all of the requirements of this Purchasing Agreement. When documentation is requested by BAE Systems, the documentation shall be provided in a commonly readable electronic format and **shall** be **provided to BAE Systems in accordance with the Data Submission Instructions for this part.**

The verbiage in **blue** was changed

Changes to CDRs cont'

Rev 04:

028 Unique Identification (UID)

This item requires UID marking in accordance with the TDP requirements.

If the UID marking is already present, verify that it is intact and scannable. If the scan fails, replace the existing marking with new UID marking.

It is acceptable to add UID marking to an existing data plate as long as the following human readable information (HRI) is present:

- Cage Code
- Part Number
- Serial Number

The verbiage in **red** was deleted.

- **In the event the print location for the UID mark cannot be met, it is acceptable to locate the UID mark in an area close to the desired location.**

Rev 05:

028 Unique Identification (UID)

This item requires UID marking in accordance with the TDP requirements. If the UID marking is already present, verify that it is intact and **able to be scanned**. If the scan fails, replace the existing marking with new UID marking.

It is acceptable to add UID marking to an existing data plate as long as the following human readable information (HRI) is present:

- Cage Code
- Part Number
- Serial Number

The verbiage in **blue** was changed

Changes to CDRs cont'

Rev 04:

032 Ballistic Requirements-Transparent Armor

A ballistic first article test shall be performed and accepted prior to any production of transparent armor. All drawing and specification requirements shall be met as required for the ballistic FAT and ballistic lot testing.

BAE Systems source inspection shall be requested prior to shipping the samples for ballistic testing.

In addition to the marking requirements, specified in the PO and on the drawings, ALL test specimens, shipping containers and associated documents shall be clearly marked "First Article Sample" or "Lot Sample."

All Ballistic test samples shall have the following documents e-mailed to BAE Systems SQA prior to shipment with copies included with the shipment:

- **BAE Systems source inspection report/waiver with SQA stamp or signature**
- **Government stamp on packing list when CDR006 is assigned to the PO**
- **Ballistic Test Submittal Form with SQA signature**

The verbiage in **red** was deleted.

Following Ballistic First Article approval, the supplier shall submit lot samples for testing per the schedule in the ballistic test specification.

The supplier shall notify the BAE Systems Authorized Purchasing Representative to determine if the FAT must be repeated when any of the following occurs:

- **Receipt of new Purchasing Agreement or contract**
- **Change in manufacturing process (introduction of a new manufacturing technique or new laminated glass source)**
- **Change in any drawing configuration, component, or sub-component parts**
- **Change in manufacturing location**
- **A break in production or process in excess of twelve (12) months, unless otherwise specified**

BAE Systems shall respond in writing. The supplier shall retain a copy of the response as quality evidence.

SEE NEXT SLIDE FOR REV 05

Changes to CDRs cont'

Rev 05:

032 Ballistic Requirements-Transparent Armor

A ballistic first article test shall be performed and accepted prior to any production of transparent armor. All drawing and specification requirements shall be met as required for the ballistic FAT and ballistic lot testing.

BAE Systems source inspection shall be requested prior to shipping the samples for ballistic testing.

In addition to the marking requirements, specified in the PO and on the drawings, ALL test specimens, shipping containers and associated documents shall be clearly marked "First Article Sample" or "Lot Sample."

All Ballistic test documentation shall be provided in accordance with the Data Submission Instructions for this item.

Following Ballistic First Article approval, the supplier shall submit lot samples for testing per the schedule in the ballistic test specification.

The verbiage in **blue** was changed

Changes to CDRs cont'

Rev 04:

034 Ballistic Requirements- Metal and Composite Materials

The Supplier shall provide a copy of the material certification and Government approval letter, including firing number, for each heat/lot of ballistic material in accordance with the Data Submission Instructions for this item.

For armor castings and extrusions, the Supplier shall maintain a listing of Government-approved firing numbers for all material recipes supplied to BAE Systems.

If the material is manufactured to MIL-DTL-46100 or MIL-DTL-12560, thermal processing of cut edges (plasma or laser cutting) shall require NDE of the edges to verify that the thermal processing did not cause edge cracking. The Supplier shall provide a copy of the NDE results in accordance with the Data Submission Instructions for this item for each shipment.

Rev 05:

034 Ballistic Requirements- Metal and Composite Materials

This entire section changed completely

- A. **Ballistic Firing Records for Plate and Composites- The Supplier shall provide a copy of the:**
 - a. **Physical and Chemical Test Reports**
 - b. **Government Ballistic Test Certification**
- B. **Including firing number, for each heat/lot of ballistic material in accordance with the Data Submission Instructions for this item. Ballistic Firing Records for Casting - For armor castings and extrusions, the Supplier shall maintain a listing of Government approved firing numbers for all material recipes supplied to BAE Systems.**
- C. **Aluminum Forgings - Require ballistic test for each lot, including longitudinal and transverse tensile tests per MIL-DTL-45225. Results shall be provided in accordance with the Data Submission Instructions for this item.**
- D. **Thermally cut edges of MIL-DTL-46100, or MIL-DTL-12560 steel armor shall meet the following requirements:**
 - a. **The heat affected zone shall not exceed 1.2 times the plate thickness or .625 inches maximum as determined by Rockwell C hardness testing to meet or exceed the minimum allowable hardness per the applicable specification. This shall be verified for each thermal cutting procedure (heat input, travel speed, laser wattage, plate thickness range, etc.) to be used for the order. A report with actual test results shall be submitted.**
 - b. **Each steel armor part shall be non-destructively tested on thermally cut edges (water jet, machining or other non-thermal process do not require NDT testing) using either magnetic particle or dye penetrant inspection.**
 - c. **Magnetic particle inspect in accordance with ASTM E709 or dye penetrant inspect in accordance with ASTM E165.**
 - d. **In any four inches of edge length, linear indication length shall not exceed twice the plate thickness. Multiple linear indications shall not exceed twice the plate thickness when their lengths are summed. No more than ten indications in any four inch length are permitted.**
 - e. **Linear indications may be reworked by grinding or machining within the feature limits of size, and re-inspected.**
 - f. **Reduced inspection may be permitted upon demonstration of no rejectable defects for a continuous period of time with approval of BAE Supplier Quality to AQL 1.0 to the C=0 sampling plan**
- E. **Non Destructive Inspection (NDI) documentation shall be provided in accordance with the Data Submission Instructions for this item.**

Changes to CDRs cont'

Rev 04:

041 Critical Safety Item (CSI)

The Supplier shall provide documentation for all Critical Safety Items (CSI), Hardness Critical Items (HCI), or Observable Critical Items (OCI) identified for this item by the TDP. **Sample size for this inspection shall be 100% for the identified characteristic(s).** Actual results, including an authorized signature and date of acceptance, traceable to a specific shipment shall be recorded and provided prior to shipment. **Summary data may be included.** Submission of documentation shall be made in accordance with the Data Submission Instructions for this item.

The verbiage in **red** was deleted.

Rev 05:

041 Critical Safety Item (CSI)

The Supplier shall provide documentation for all Critical Safety Items (CSI), Hardness Critical Items (HCI), or Observable Critical Items (OCI) identified for this item by the TDP. **Sample size for this inspection shall be 100% for the identified characteristic(s).** Actual results, including an authorized signature and date of acceptance, traceable to a specific shipment shall be recorded and

Changes to CDRs cont'

Rev 04:

042 Commercial Off The Shelf (COTS) Parts

Commercial Off the Shelf (COTS) parts are ordered out of a standard catalog by the catalog part number and include items such as fuel filters, standard hydraulic fittings, and light bulbs. These parts are not designed for a specific application and are typically acquired from manufacturers that supply the same part to a variety of markets. **Parts ordered to the requirements of an ordinance drawing which references or specifies the use of a COTS part are not COTS parts.**

Paragraph 8.3 of the SQAM is not applicable to this item; the Supplier shall provide a certificate of conformance and/or a packing slip as the objective quality evidence where no other objective evidence is available.

The verbiage in **red** was deleted.

COTS parts will be identified with the manufacturer's part number and name or logo. The method of marking and marking height shall be in the manufacturer's format. The Supplier shall mark the shipping container with their Vendor Number.

Rev 05:

042 Commercial Off The Shelf (COTS) Parts

The verbiage in **green** was added

Commercial Off the Shelf (COTS) parts are ordered out of a standard catalog by the catalog part number and include items such as fuel filters, standard hydraulic fittings, and light bulbs. These parts are not designed for a specific application and are typically acquired from manufacturers **and authorized distributors** that supply the same part to a variety of markets.

Paragraph 8.3 of the SQAM is not applicable to this item; the Supplier shall provide a certificate of conformance and/or a packing slip as the objective quality evidence where no other objective evidence is available.

Changes to CDRs cont'

CDR 047 has been revamped, consolidating each data submission CDR into one. CDRs 048, 049, 050, 051 and 052 have been deleted and the new verbiage in CDR 047 reflects the verbiage below in Rev 05

047 Data Submission Instructions

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

For Louisville and Minneapolis, all data submissions shall be packaged in a separate envelope clearly marked "Certifications". This envelope shall be placed inside of the shipping container with the parts. For shipments with multiple containers of the same product, the envelope will be located in Box 1 of the delivery. In addition, do not include data submissions with certified parts or with parts which have completed source inspection.

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

- Anniston, AL - sqa.anniston@baesystems.com.
- Louisville, KY - sqa-admin.minneapolis@baesystems.com
- Minneapolis, MN - sqa-admin.minneapolis@baesystems.com
- Santa Clara, CA - pqasc.landa@baesystems.com
- Sterling Heights, MI - sqasterlinghts.pands@baesystems.com
- York, PA - pqayork.landa@baesystems.com
- Aiken, SC - sqaiken.pands@baesystems.com

Changes to CDRs cont'

Rev 04:

057 PPAP-Level 2

The Supplier shall complete a PPAP in accordance with Level 2 of the Production Part Approval Process (PPAP) manual and shall submit the following to BAE Systems for approval:

- Design Record
- Engineering Change Documents (if applicable)
- Dimensional Results with ballooned drawing (all characteristics, including drawing notes, numbered)
- Photograph of the part marking
- Material, Performance Test Results
- Qualified Laboratory Documentation
- Appearance Approval Report (if applicable)
- Sample Product
- Part Submission Warrant (PSW)

The only thing that changed in Rev 05 is 12 months changed to 24 months

All other requirements of the PPAP shall be completed, retained on file, and made available to BAE Systems upon request.

The Supplier shall not ship product to BAE Systems prior to receipt of a signed/approved PSW. Product shipped in advance of PPAP approval shall be subject to rejection.

Process or product changes require PPAP resubmission. Notification to BAE Systems prior to changes is essential as additional audits or supplier identification may be required prior to resubmission; such changes are to be communicated to your BAE Systems Procurement or Quality contact via the Product/Process Change Request (Form 1310). Process or product changes are defined as changes in the processing of the product that could affect its ability to meet design, durability, and reliability requirements, including:

- Use of a process or material other than those which were previously approved,
- Production from new or modified tools (except perishable tools), dies, molds, patterns, etc., including additional or replacement tooling,
- Production following any refurbishment or rearrangement of existing tooling or equipment,
- Production from tooling and equipment transferred from another manufacturing site,
- Change of a supplier for parts or services (e.g. heat treating, plating, welding),
- Break in production or product produced after tooling has been inactive for volume production for **12 months** or more,
- Any change in material, including not only raw material but also chemical compounds or processes (i.e. paints, adhesives, sealers, lubricants, plating, heat treat processes, etc.) which become part of the finished product; this includes changing to an engineering approved alternative material or any change in the sequence of operations,
- Upon request of BAE Systems' Purchasing or Quality representative.

Changes to CDRs cont'

Rev 04:

058 PPAP-Level 3

The Supplier shall complete a PPAP in accordance with Level 3 of the Production Part Approval Process (PPAP) manual and shall submit the following to BAE Systems for approval:

- Design Record
- Engineering Change Documents (if applicable)
- Customer Engineering Approval (if required)
- Design FEMA
- Process Flow Diagrams
- Process FEMA
- Control Plan
- Measurement System Analysis Studies
- Dimensional Results with ballooned drawing (all characteristics, including drawing notes, numbered)
- Photograph of the part marking
- Material, Performance Test Results
- Initial Process Studies
- Qualified Laboratory Documentation
- Appearance Approval Report (if applicable)
- Sample Product
- Records of Compliance
- Part Submission Warrant (PSW)

The only thing that changed in Rev 05 is 12 months changed to 24 months

All other requirements of the PPAP shall be completed, retained on file, and made available to BAE Systems upon request.

The Supplier shall not ship product to BAE Systems prior to receipt of a signed/approved PSW. Product shipped in advance of PPAP approval shall be subject to rejection.

Process or product changes require PPAP resubmission. Notification to BAE Systems prior to changes is essential as additional audits or supplier identification may be required prior to resubmission; such changes are to be communicated to your BAE Systems Procurement or Quality contact via the Product/Process Change Request (Form 1310).

Process or product changes are defined as changes in the processing of the product that could affect its ability to meet design, durability, and reliability requirements, including:

- Use of a process or material other than those which were previously approved,
- Production from new or modified tools (except perishable tools), dies, molds, patterns, etc., including additional or replacement tooling,
- Production following any refurbishment or rearrangement of existing tooling or equipment,
- Production from tooling and equipment transferred from another manufacturing site,
- Change of a supplier for parts or services (e.g. heat treating, plating, welding),
- Break in production or product produced after tooling has been inactive for volume production for **12 months** or more,
- Any change in material, including not only raw material but also chemical compounds or processes (i.e. paints, adhesives, sealers, lubricants, plating, heat treat processes, etc.) which become part of the finished product; this includes changing to an engineering approved alternative material or any change in the sequence of operations,
- Upon request of BAE Systems' Purchasing or Quality representative.

Changes to CDRs cont'

Rev 04:

059 PPAP-Level 4-Predefined Requirements

The Supplier shall complete a PPAP in accordance with Level 4 of the Production Part Approval Process (PPAP) manual and shall submit the following to BAE Systems for approval:

Dimensional Results with ballooned drawing (all characteristics, including drawing notes, numbered)
Photograph of the part marking
Process Certifications
Material, Performance Test Results
Part Submission Warrant (PSW)

All other requirements of the PPAP are waived for this order and do not need to be completed.

The Supplier shall not ship product to BAE Systems prior to receipt of a signed/approved PSW. Product shipped in advance of PPAP approval shall be subject to rejection.

Process or product changes require PPAP resubmission. Notification to BAE Systems prior to changes is essential as additional audits or supplier identification may be required prior to resubmission; such changes are to be communicated to your BAE Systems Procurement or Quality contact via the Product/Process Change Request (Form 1310). Process or product changes are defined as changes in the processing of the product that could affect its ability to meet design, durability, and reliability requirements, including:

- Use of a process or material other than those which were previously approved,
- Production from new or modified tools (except perishable tools), dies, molds, patterns, etc., including additional or replacement tooling,
- Production following any refurbishment or rearrangement of existing tooling or equipment,
- Production from tooling and equipment transferred from another manufacturing site,
- Change of a supplier for parts or services (e.g. heat treating, plating, welding),
- Break in production or product produced after tooling has been inactive for volume production for **12 months** or more,
- Any change in material, including not only raw material but also chemical compounds or processes (i.e. paints, adhesives, sealers, lubricants, plating, heat treat processes, etc.) which become part of the finished product; this includes changing to an engineering approved alternative material or any change in the sequence of operations,
- Upon request of BAE Systems' Purchasing or Quality representative.

The only thing that changed in Rev 05 is 12 months changed to 24 months

Changes to CDRs cont'

Rev 04:

060 PPAP-Level 4-Unique Requirements

The Supplier shall complete a PPAP in accordance with Level 4 of the Production Part Approval Process (PPAP) manual and shall submit requirements as specified in the PPAP Requirements Checklist included as part of the Purchasing Agreement. All other requirements of the PPAP shall be completed, retained on file, and made available to BAE Systems upon request. Inspection data shall be accompanied by a ballooned drawing (all characteristics, including drawing notes, numbered) and a photograph of the part marking.

The Supplier shall not ship product to BAE Systems prior to receipt of a signed/approved PSW. Product shipped in advance of PPAP approval shall be subject to rejection.

Process or product changes require PPAP resubmission. Notification to BAE Systems prior to changes is essential as additional audits or supplier identification may be required prior to resubmission; such changes are to be communicated to your BAE Systems Procurement or Quality contact via the Product/Process Change Request (Form 1310). Process or product changes are defined as changes in the processing of the product that could affect its ability to meet design, durability, and reliability requirements, including:

- Use of a process or material other than those which were previously approved,
- Production from new or modified tools (except perishable tools), dies, molds, patterns, etc., including additional or replacement tooling,
- Production following any refurbishment or rearrangement of existing tooling or equipment,
- Production from tooling and equipment transferred from another manufacturing site,
- Change of a supplier for parts or services (e.g. heat treating, plating, welding),
- Break in production or product produced after tooling has been inactive for volume production for **12 months** or more,
- Any change in material, including not only raw material but also chemical compounds or processes (i.e. paints, adhesives, sealers, lubricants, plating, heat treat processes, etc.) which become part of the finished product; this includes changing to an engineering approved alternative material or any change in the sequence of operations,
- Upon request of BAE Systems' Purchasing or Quality representative.

The only thing that changed in Rev 05 is 12 months changed to 24 months

Changes to CDRs cont'

Rev 04:

081 Counterfeit Electronic Parts Prevention Plan

A Counterfeit Electronic Part is an Electronic Part that is: (1) an unauthorized copy or substitute that has been identified, marked, and/or altered by a source other than the Original Component Manufacturer (OCM) or Authorized Distribution Chain and has been misrepresented to be an OCM's authorized Electronic Part; and/or (2) previously used Electronic Parts that are misrepresented as being "new" when provided. The Supplier is responsible to prevent counterfeit materials from being provided to BAE Systems. To that end, the Supplier shall:

- Obtain Electronic Parts only from the OCM or their Authorized Distribution Chain
- Obtain written authorization from BAE Systems prior to purchasing parts from any source other than the OCM or their Authorized Distribution Chain (i.e. Independent Distributors)
- Verify parts obtained from Independent Distributors through in-house or third-party testing/inspection or through supplied certificates of authenticity/origin to determine authenticity; documentation must be retained on file and provided upon request to BAE Systems
- Quarantine all suspect/identified Counterfeit Electronic Parts to ensure that they cannot reenter the market; **do not return counterfeit/suspect counterfeit parts to the supplier**
- Notify the BAE Systems APR in writing in the event that Counterfeit/Suspect Counterfeit Parts are found

SEE NEXT SLIDE FOR REV 05

Changes to CDRs cont'

Rev 05:

081 Counterfeit Electronic Parts Prevention Plan

A Counterfeit Electronic Part is an Electronic Part that is: (1) an unauthorized copy or substitute that has been identified, marked, and/or altered by a source other than the Original Component Manufacturer (OCM) or Authorized Distribution Chain and has been misrepresented to be an OCM's authorized Electronic Part; and/or (2) previously used Electronic Parts that are misrepresented as being "new" when provided. The Supplier is responsible to prevent counterfeit materials from being provided to BAE Systems. To that end, the Supplier shall:

- Obtain Electronic Parts only from the OCM or their Authorized Distribution Chain
- Obtain written authorization from BAE Systems prior to purchasing parts from any source other than the OCM or their Authorized Distribution Chain (i.e. Independent Distributors)
- Verify parts obtained from Independent Distributors through in-house or third-party testing/inspection or through supplied certificates of authenticity/origin to determine authenticity; documentation must be retained on file and provided upon request to BAE Systems
- Quarantine all suspect/identified Counterfeit Electronic Parts to ensure that they cannot reenter the market; **do not return counterfeit/suspect counterfeit parts to the supplier**
- Notify the BAE Systems APR in writing in the event that Counterfeit/Suspect Counterfeit Parts are found
- **Supplier must have processes for maintaining electronic part traceability (e.g., item unique identification) that enable tracking of the supply chain back to the original manufacturer, whether the electronic parts are supplied as discrete electronic parts or are contained in assemblies. This traceability process shall include certification and traceability documentation developed by manufacturers in accordance with Government and industry standards; clear identification of the name and location of supply chain intermediaries from the manufacturer to the direct source of the product for the seller; and, where available, the manufacturer's batch identification for the electronic part(s), such as date codes, lot codes, or serial numbers. If IUID marking is selected as a traceability mechanism, its usage shall comply with the item marking requirements of DFAR [252.211-7003](#), Item Unique Identification and Valuation.**

The verbiage in **green** was added