Contracts Deliverable Requirements

Rev 10, February 8, 2017

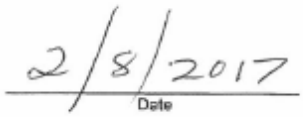
Platforms & Services

BAE SYSTEMS

INSPIRED WORK

Rev	Date	Change Description	Approved By	Change Request #
00	11/27/12	New Document Release		BPMS-00647
01	9/3/13	Added verbiage to CDR 017 , deleted 071	Tom Frazho	BPMS-01446
02	9/20/13	Added verbiage to 001, 032, changed verbiage to 057, 058, 059, 060, 061, 063, and 068	Tom Frazho	BPMS-01476
03	1/15/14	Changes to CDR 006, 053 and 070	Tom Frazho	BPMS-01593
04	3/10/15	Deleted the supplier website link	Tom Frazho	BPMS-02194
05	8/31/15	Revisions to CDR 001, 002, 003, 004, 005, 006, 009, 016, 018, 019, 020,023, 026, 028, 032, 034, 041, 042, 051, 057, 058, 059, 060, 081. Deleted 017, 040, 053, 054, 063, 068, 069, 070, 072, 073, 074, 075, 076, 077, 078, 079, 080. Added 083.; all reference of deleted CDRs have been removed from the body of the document; Consolidated all data submission CDRs into CDR 047; deleted 048, 049, 050, 051, 052	Tom Frazho	BPMS-02450
06	12/16/15	Changes to CDR 034; Changes to CDR 006 for corrective action response to Louisville DCMA	Tom Frazho/Anthony Conley	BPMS-02612
07	1/14/16	Re-instated CDR 017 back onto document	Tom Frazho/Anthony Conley	BPMS-02631
08	4/25/16	Added new San Jose email address, changed any reference of Santa Clara to San Jose; added process approval to CDR 034	Tom Frazho/Anthony Conley	BPMS-02876
09	9/20/2016	Deleted CDR 002, 042, 047, 062, 081; “are located in the Supplier Quality Assurance Manual (SQAM)” added to CDR 001 as well as added verbiage in the 5th and 8th bullets below; verbiage added in CDR 003 and 004; in the 2nd paragraph in 004 “the” was added and “Government” was deleted; CDR 005, 2nd paragraph, verbiage was added and the 3rd paragraph was added; last bullet added to CDR 007; deleted 4th and 5th bullets regarding training and approval prior to use for each individual part number; CDR 009 verbiage was added in the first bullet; CDR 010, “For each shipment” deleted, “(located in the SQAM)” added; “(located in the SQAM)” added to CDRs 011, 013, 015, 017, 018, 025, 026, 027, 032, 034, and 041; reworded verbiage in 2nd paragraph in CDR 014; Changed verbiage of 8th bullet in CDR 016 and 9th bullet in CDR 017; “With each shipment” deleted from CDR 018, 019, 020, and 021; Deleted the 2nd bullet in CDR 023; Added the last sentence in CDR 025;	Tom Frazho/Anthony Conley	BPMS-03124

		Changed/added several things in CDR 034 (please take careful note); Changed verbiage in B. Marking paragraph of CDR 044; Removed "defined in SQAM paragraph 8.3" in CDR 055; Addition of verbiage to last sentence of 3rd paragraph in CDR 057, 058, 059, 060 as well as changes and additions to the 4th paragraph.		
10	2/8/2017	Define document submittal requirements; Added CDR's 084 and 085, corrected several typo's and made minor corrections to the verbiage in the document	Tom Frazho/Anthony Conley	



Contents

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 located in the Supplier Quality Assurance Manual (SQAM) 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 notes/characteristics inspected/tested.
- Actual Inspection/test results
- Date of inspection/test
- Inspector's signature, stamp or initials (electronic or digital signatures are acceptable)
- Indication of First Piece (when applicable)

003 First Piece Inspection Report

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

004 First Article Test (FAT)

The Supplier shall submit a FAT plan in accordance with the Data Submission Instructions (located in the SQAM) 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 the test. BAE Systems and its customer reserve the right to witness FAT testing at any point in the schedule.

Following First Article Test 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 twenty four (24) months, unless otherwise specified.

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 (located in the SQAM) specified for this item. Unauthorized/unapproved 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.

If parts are returned for repair or rework, a resubmission of source is required. Parts are not to be shipped until the resubmission source has been approved and the source form is annotated with: 'Repair or Rework', and lists the NCR number on the form as applicable.

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.

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.

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.

Supplier must notify BAE Systems prior to, or in conjunction with, notification to DCMA so that BAE Systems has the opportunity to schedule and 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 Supplier shall submit the GSS approval document with each shipment.

007 Welding-Combat Vehicles

- Prior to the Supplier's start of fabrication (or repair to raw material, casting, forgings, etc.), the Supplier shall submit procedure(s) and supporting qualification test data in accordance with the applicable specifications (including weld personnel certifications) and Form(s) to the BAE Systems Authorized Purchasing Representative
- 007 Welding-Combat Vehicles **PRIOR** to implementation of the proposed process, procedure approval is required by BAE Systems Weld Engineering
- Supplying product to BAE Systems without an approved Welding Procedure Specifications (WPS) is cause for rejection
- The WPS shall include the Procedure Qualification Record (PQR) for the process
- If the Supplier has completed the BAE Systems Weld Training, they may use the BAE Systems procedures for which they are qualified
- Use of BAE Systems WPS still requires approval prior to use for each individual part number. If the Purchasing Agreement Part Number is changed through configuration, the WPS shall be resubmitted even if nothing is changed within the weld process/procedure
- The Supplier is responsible for the performance and maintenance of all supporting documentation required to demonstrate compliance with Purchasing Agreement requirements
- If other than the Weld Code is invoked, the supplier is responsible for creating their own weld procedures.

Aluminum and Steel Arc Welding; Resistance Welding and Brazing

Procedure submittal requirements for aluminum, steel, resistance, and brazing weldments are addressed on the following forms/ procedures:

Form Number/ Procedure	Document Title
12472301	Ground Combat Vehicle Welding Code - Aluminum
12479550	Ground Combat Vehicle Welding Code - Steel
LAA-5128	Welding Procedure Extension Request

LAA-5130	Brazing or Braze Welding Procedure - Cover Sheet
LAA-51301	Brazing or Braze Welding Procedure
LAA-5131	Recorded Joint Welding Procedure for Resistance Welding - Cover Sheet
LAA-51311	Recorded Joint Welding Procedure for Resistance Welding
LAA-5272	Welding and Brazing Submittal Requirements and Instructions

Forms are available from a BAE Systems Authorized Purchasing Procurement Representative.

Aluminum Welding Code 12472301 replaces these specifications (reference page 4, Table P.1):

- MIL-STD-1946
- MIL-STD-372
- MIL-W-45205
- MIL-W-45206

Steel Welding Code 12479550 replaces these specifications (reference page 4, Table P.1):

- MIL-STD-1261
- MIL-STD-1941
- MIL-STD-1185
- MIL-W-46086

008 Welding-Weapon Systems

- Prior to the Supplier's start of fabrication (or repair to raw material, casting, forgings, etc.), the Supplier shall submit procedure(s) and supporting qualification test data in accordance with the applicable specifications (including weld personnel certifications) and form KA-021 to the BAE Systems Authorized Purchasing Representative
- Supplying product to BAE Systems without an approved Welding Procedure Specifications (WPS) is cause for rejection
- The WPS shall include the Procedure Qualification Record (PQR) for the process when applicable
- The Supplier is responsible for the performance and maintenance of all supporting documentation required to demonstrate compliance with the Purchasing Agreement requirements
- Changes/revisions to previously approved weld procedures must be submitted for re-approval

009 Soldering

- The Supplier shall submit soldering plans in accordance with the applicable specification requirements for this item within (30) days of receipt of the Purchasing Agreement to the BAE Systems Authorized Purchasing Representative
- 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

010 Solderability

Material supplied shall meet the solderability requirements of the product fabrication specification. When no solderability test is specified, the test shall be performed in accordance with MIL-STD-202, Method 208.

Note: One hour steam aging is required for wire.

The Supplier shall provide a written certification stating that the components provided were tested and meet the applicable solderability requirements as stated above. Certification shall be submitted in accordance with the Data Submission Instructions (located in the SQAM) for this item.

011 Printed Wiring Boards (PWB)

The Supplier shall provide for each shipment a written certificate stating that the boards were fabricated to the relevant specifications identified within the TDP. The certification shall be provided in accordance with the Data Submission Instructions (located in the SQAM) for this item. Test coupons and microsections must be maintained for a period of two (2) years and available for examination by BAE Systems.

013 Nondestructive Examination Procedures

When the Purchase Order specifies Nondestructive Examination such as radiography, magnetic particle, liquid penetrant, or ultrasonic inspections, the Supplier shall submit the procedure to BAE Systems in accordance with the Data Submission Instructions (located in the SQAM) for this part for approval. The procedure shall be submitted within thirty (30) days after receipt of the Purchasing Agreement. If the submittal is requested during performance of the Purchasing Agreement, the Supplier shall submit the procedure within three (3) days of receiving the request.

All changes to the approved procedure shall require re-submittal and approval. The revised procedure shall not be implemented until written approval is received from BAE Systems.

014 Nondestructive Examination Inspection Report

The Supplier shall furnish a certified test report stating that Nondestructive Examination(s) required per the TDP have been performed in accordance with an approved test procedure as required by the referenced specification and that the material is acceptable. The certification shall also include:

- Type of test and coverage
- Applicable procedure specification (title, number and revision)
- Applicable acceptance criteria (title, number and revision)
- Actual data as defined in the applicable procedure specification
- Name and address of the company that actually performed the testing
- Certificate of process compliance

The certification/data shall be submitted in accordance with the Data Submission Instructions (located in the SQAM) for this item.

A test plan shall be developed detailing the Nondestructive Examinations parameters to be used in accordance with the applicable specification and shall be made available to BAE Systems upon request.

015 Control Tests

The Supplier shall perform Control Tests at the frequency defined by the specification/QAP. The Supplier is responsible for determining the test schedule based on the production and delivery schedule per the Purchasing Agreement. The Supplier shall submit a control test procedure within thirty (30) days after receipt of the Purchasing Agreement for approval by BAE Systems, in accordance with the Data Submission Instructions (located in the SQAM) for this item, Purchasing Agreement. The Supplier shall notify the BAE Systems Authorized Purchasing Representative of the projected test schedule and any changes as they occur. If any failures occur, either through defect of the test equipment or of the test sample itself, the Supplier shall immediately notify the BAE Systems Authorized Purchasing Representative for further instructions prior to continuance of testing.

Following the completion of testing, a test report shall be submitted in accordance with the Data Submission Instructions (located in the SQAM) for this item for approval.

MIL-HDBK-831 should be used as a guide in developing the test report format. As a minimum, the test report shall include:

- BAE Systems Part Number
- BAE Systems Purchasing Agreement Number
- Prime Contract Number (this is specified on the Purchasing Agreement)
- Applicable drawings/specification and revision level
- Type of test (i.e., Group "C," Group "D," etc.)
- Tests performed and results
- Test completion date
- Sample size

- Sample identification, if applicable
- Production interval (or Purchasing Agreement line number)
- Printed name, signature, and title of Supplier's representative
- Report date
- Any additional data or information required to show full compliance to the control test requirements

016 Plating

The Supplier shall provide written certification documenting that the plating was performed in accordance with all Purchasing Agreement, drawing and Purchasing Agreement specification 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.
The 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
- Printed name, signature, and title of Supplier's representative
- Report date

The certification/data shall be submitted in accordance with the Data Submission Instructions (located in the SQAM) for this item.

017 Paint Certification

The Supplier shall provide a copy of the written certification documenting that painting was performed in accordance with all Purchasing Agreement, drawing, and specification Purchasing Agreement requirements. Certification shall be submitted in accordance with the Data Submission Instructions (located in the SQAM) for this item. The facility actually performing the painting shall prepare the certification, which shall include:

- Name and address of the finisher
- Part number
- Purchasing Agreement number
- List of specifications used in the processing of the paint

- Paint thickness of a sample of actual parts for the primer
- Paint thickness of a sample of actual parts for the top coat
- Material lot/batch number(s)
- Material expiration date(s)
- Printed name, signature, and title of Supplier's representative
- Certification date

All test and inspection documentation shall be available for BAE Systems' review upon request.

Documentation submittal is required for Anniston Spares and for all non-approved paint resources.

BAE Systems Combat Vehicle approved painters are not required to submit any documentation with the parts but are required to maintain all required documentation validating compliance to all requirements and make this documentation available for BAE Systems review upon request.

Items requiring painting in accordance with MIL-STD-1303 shall instead be painted in accordance with NAVSEA Drawing 7250920 and associated paint photographs (if applicable).

018 Physical and Chemical Test Reports

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 (located in the SQAM) for this part.

019 Test Samples – Tensile Testing

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.

020 Heat Treating

The Supplier shall provide a written certification that the heat treatment was performed in accordance with all Purchasing Agreement, drawing and Purchasing Agreement specification requirements.

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

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.

All data shall be provided to BAE Systems in accordance with the Data Submission Instructions (located in the SQAM) for this part with each shipment.

A. Visual Metallographic Inspection

Visual inspection at a magnification of 5X shall be performed on heat treated items. Cracks, seams, laps or other injurious defects shall not be allowed. For steel carburized parts, the heat treat condition prior to carburizing shall be either quench and tempered or normalized and tempered. Heat treat process and atmosphere control shall be such that no decarburization occurs on the surface as detectible by metallographic sectioning under magnification at 100X, method specified on drawing or appropriate specification. Exceptions are stress-proof, fatigue-proof, precipitation hardening grades of steel, margining steels and structural steel such as HY-, HY-100, Cor-ten, etc. This will minimize distortion and assure that proper hardness is achieved.

B. Quench and Temper (Core Hardness Specified)

A test specimen (or additional part) of the same alloy and same size, within 20% of the largest cross section thickness, shall be heat treated with each heat treat lot. The test sample shall have a length at least one inch longer than the section thickness or two times the diameter. The specimen or sample part shall be cross sectioned at mid-length of the largest cross section thickness plus or minus 3/8 inch. The Supplier shall submit a report including the actual surface hardness and core hardness at ½ radius (core hardness measured on cut surface).

C. Quench and Temper (Core Hardness Not Specified)

The report shall include a statement of the surface hardness findings for each heat treat lot. Testing shall be done in areas identified on the drawing or in such a manner as to not damage the critical surface finish as defined by the drawing.

D. Case Hardening - Carburizing

A test specimen of the same alloy and similar configuration as the part shall be processed with each heat treat lot to verify case depth, surface and core hardness requirements, and microstructure. The Supplier shall submit a report with the required case depth hardness actual results obtained and microstructure per specified standard. Certification shall be submitted with each heat treat lot.

E. Case Hardening - Nitriding

A test specimen of the same alloy, same hardness, and similar configuration as the part shall be processed with each heat treat lot to verify case depth, hardness requirements, and to monitor thickness of white layer. The Supplier shall submit a report with required case depth, hardness, process temperature, and actual results obtained. Certification shall be submitted with each heat treat lot.

F. Surface Hardening - Flame or Induction

The Supplier shall provide certification with each lot reporting the actual case depth, surface and core hardness values obtained. First Article proof tests with pattern, equipment power setting, quench media, and other critical process parameters shall be maintained by vendor.

G. Stress Relief

Certification shall report the actual processing time, temperature and number of cycles for each lot as defined in the drawing or specification.

021 Mercury

The Supplier shall certify that the material shipped under this Purchasing Agreement does not contain functional mercury in any form and that no mercury-bearing instruments and/or equipment that might cause contamination have been used in the manufacture, fabrication, assembly, or testing of any material shipped under this Purchasing Agreement. This requirement must be included in all sub-tier Purchase Orders however certification is only required from the BAE Systems tier 1 suppliers when requested.

022 Material Traceability

All finished product lots must be traceable to raw material heat/lots, and the Supplier must maintain material traceability throughout all steps of the manufacturing process including any outside processing.

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 the requirement assigned below.
    a) With a minimum of 50% of the shelf life remaining
    b) With a minimum of 75% of the shelf life remaining.
    c) With a minimum of 85% of the shelf life remaining.
    d) Other as directed by contract.
- All age-sensitive items and their respective shipping containers shall be permanently marked with the cure/manufacture and expiration dates in addition to any other required markings
- 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:
    a) Lot traceability by run, batch, lot, or date of manufacture

b) Shelf life expiration date (as required by specification)
c) Storage conditions to achieve shelf life, if not stated on the material package

024 Non-manufactured Coniferous Wood Products

All wooden pallets and wood containers produced entirely or in part of non-manufactured softwood species shall be constructed from heat-treated coniferous material. This material must be certified accordingly by an accredited agency recognized by the American Lumber Standards Committee (ALSC) in accordance with Non-manufactured Wood Packaging Policy and Non-manufactured Wood Packaging Enforcement Regulations. The Supplier shall maintain on file at their facility, and provide upon request to BAE Systems, a certificate of conformance from the accredited heat treat facility.

025 Special Packaging

Material is to be packaged in accordance with the packaging instructions provided in the body of or attached to this Purchasing Agreement. A statement that the packaging is in accordance with the specified requirements will be included in the Certificate of Compliance (reference SQAM paragraph 8.5). This data shall be provided to BAE Systems in accordance with the Data Submission Instructions (located in the SQAM) for this part.

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 (located in the SQAM) for this part.

027 Certificate of Compliance

The Supplier shall provide with each shipment a copy of their Certificate of Compliance as defined by paragraph 8.5 of the SQAM. Copies shall be delivered as specified by the Data Submission Instructions (located in the SQAM) for this item.

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

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 (located in the SQAM) for this item.

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

034 Ballistic Requirements- Metal and Composite Materials

FIRING RECORDS (Plate and Composite):

The Supplier shall provide a copy of the:

- Physical and Chemical Test Reports
- Government Ballistic Test Certification, including firing number for each heat/lot of ballistic material. Results shall be submitted in accordance with the Data Submission Instructions (located in the SQAM) for this item.

FIRING RECORDS (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. Results shall be submitted in accordance with the Data Submission Instructions (located in the SQAM) for this item.

FIRING RECORDS (ALUMINIM FORGINGS):

- Require ballistic test for each log, including longitudinal and transverse tensile tests per MIL-DTL-45225. Results shall be submitted in accordance with the Data Submission Instructions (located in the SQAM) for this item.

THERMAL CUTTING OF STEEL ARMOR PLATE:
Shall meet the following requirements:

- Parts produced by thermal cutting of plate material shall be subject to process qualification. Submission of parts which are thermally cut, shall meet the following requirements:

APPLICABILITY

- Thermal cutting processes include any methods which rely on, or result in, the generation of temperatures in excess of 1,300 °F at the point of cutting. These processes include (but are not limited to) laser, plasma, and the family of oxy-fuel cutting processes. These processes do not

include abrasive cutting methods such as waterjet, abrasive disk or saw, and machining. Products that are first cut by thermal process (such as plasma) and then finished to final dimension by abrasive method (such as machining or grinding) are still subject to the qualification requirements for thermal cutting processes.

- MIL-DTL-46100 materials, all tempers.
- MIL-DTL-12560 materials, Class 1, Class 2, Class 4a, and Class 4b. Qualification for cutting of Class 1, Class 4a, or Class 4b material shall be applicable to cutting of Class 2 material. Class 3 armor is not intended for use in vehicle applications and is exempt from the requirements of this section.
- MIL-DTL-32332 materials, all tempers.

PROCEDURE:

- Supplier shall have a written and controlled Procedure for cutting steel armor. Documentation of the Procedure shall be made available to BAE Systems on request. A suggested format for this documentation is available and recommended for use.
- Initial Procedure Qualification Test: The supplier shall produce a production quality sample in order to verify that the Procedure is capable of achieving edge qualify in accordance with the applicable material specification. Documentation for this test shall be submitted to BAE Systems representatives for acceptance prior to working on productions parts. The required tests for initial procedure qualification are as follows:
    - Sample coupons shall be cut with process to be qualified. Coupons may be on a production part, a sample attached to a production lot, or an independent sample.
    - Visual inspection, no indications of cracking along cut plate edges is acceptable.
    - Non-destructive testing (NDT) per ASTM E1417 or ASTM E1444 or equivalent. Acceptance criteria in accordance with the applicable material standard.
    - Heat affected zone hardness (HAZ) to be determined by microhardness indentation at the mid-length of the cut edge. 5 measurements shall be taken, equally spaced, from the cut edge to a distance of 1.2T or .625 inches (whichever is less).
- Procedure Documentation: Once the Supplier has completed the evaluations outlined by the Initial Procedure Qualification Test, documentation of the test results shall be submitted to BAE Systems for final review and approval. This report shall contain form 089475 and the following information at minimum:
    - Material documentation: Includes material standard, temper, heat or lot number, and material thickness tested.
    - Process documentation: Includes process type (e.g. plasma, laser, oxy-fuel), method of cutting (manual or automatic), and environment (e.g. ambient condition, water immersion, controlled non-reactive environment).
    - Major Processing Parameters: Includes the primary processing parameters affecting the quality of the cut edge. Some examples are shown below but should not be considered to be an exhaustive list.
        - Laser: Beam source, cutting power, travel speed, primary shielding gas, travel speed, minimum pre-heat & post-heat (if applicable).
        - Plasma: Electrode type, voltage, primary cutting gas, travel speed, minimum pre-heat & post-heat (if applicable).

        - Oxy-Fuel: Cutting gas, gas pressure, travel speed, minimum pre-heat & post-heat (if applicable).
    - Secondary Processing: In some cases, suppliers may elect to use secondary tempering, grinding, or machining processes to ensure the quality of the cut edge and decrease the propensity for cracking. In these cases, suppliers shall submit their secondary processing as part of the qualification for their thermal cutting procedure. This information may include time and temperature of tempering, or method of material removal (grinding or machining) and amount of material removed from the cut edge.
    - Documentation shall be provided with the results of visual inspection and NDT in accordance with the Initial Qualification Test. Supplemental documentation may be attached to support NDT results.
    - Documentation shall be provided with the results of the Initial Qualification Test. Supplemental documentation may be attached to support the results of NDT and microhardness testing.
    - Date, printed name, and electronic or hard-copy signature shall be included to confirm the validity of the test results from the contracted vendor's authorizing authority. In instances where a vendor sub-contracts work to a secondary shop, the authorizing signature shall be provided by the primary vendor. In these cases, the primary vendor will be responsible for maintaining the qualification records and is accountable for products contracted to them, but processed by that secondary shop.

PROCEDURE APPROVAL & PERIOD OF QUALIFICATION

- Supplier shall have the Procedure Qualification for Thermal Cutting of Steel Armor Form number 089475 completed and approved by BAE Systems Materials Engineering prior to shipment of product. This should include all provisions of the Procedure Documentation listed.
- The form shall be submitted per Data Submission instructions (located in the SQAM).
- After final approval, period of qualification shall be indefinite unless there is reason to believe that the Qualified Procedure is no longer capable of meeting the edge quality requirements of the applicable material specification.
- Rejection of a submitted Procedure Documentation for qualification, or revocation of an existing qualification, shall be followed by corrective action for requalification by BAE Systems.

EFFECTIVITY OF QUALIFICATION

- A qualified procedure is applicable to the following ranges. For a given tested material thickness, that process qualification shall be sufficient for the same process used on materials applicable to the qualification test.
    - $.380 < T$
    - $.380 \leq T < .625$
    - $.625 \leq T < 1.000$
    - $T \geq 1.000$
    - Example: Vendor A qualifies a laser cutting process, using a CO_2 beam source at 4,500 Watts, at 100 IPM on .500 on Class 1 MIL-DTL-46100 material. That qualification is

sufficient to cover MIL-DTL-46100 Class 1 materials, to a minimum thickness including .380 and a maximum thickness excluding .625.

- Procedures qualified prior to Rev 09 shall remain in effect under the provisions of this release unless there is reason to believe that the Qualified Procedure is no longer capable of meeting the edge quality requirements of the applicable material specification.

PROCESS INSPECTION:

- Visual inspection performed by qualified personnel in accordance with supplier's procedure. Inspection frequency shall be 100%.
- Inspection personnel shall be certified per a written practice in accordance with ASNT SNT-TC-1A, AWS QCI, CSA W178.2, or comparable.
- Alternatively, an engineer or technician who by training and experience in metals fabrication, inspection, and testing, is competent to perform the inspection of thermally processed material (welding, cutting, and/or heat treating) and maybe be considered qualified inspection personnel for the purposes of visual inspection for this process inspection.
    - Non-destructive testing in accordance with ASTM E1417, ASTM E1444 or equivalent. Frequency shall be inspection level II, AQL 2.5%, SPEC ANSI/ASQ Z1.4. (i.e. for Lot = 50, Inspection Level D = 5 samples rejected)
    - If rejectable indication is found, institute 100% inspection of subject lot.

DEFINITION:

Lot – Shall mean "inspection lot" or "inspection batch" of parts of the same material, the same thickness and processed continuously under one Procedure.
Example – Supplier A cuts 10 Part Numbers, with different quantities, all from the same thickness of high hardness armor. If they are processed (cut) in a constant continuous process, then the collection of parts can be inspected as one Lot.

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. Submission of documentation shall be made in accordance with the Data Submission Instructions (located in the SQAM) for this item.

044 Packaging Instructions for Hardware Kits

All hardware and small components kits shall be packaged, marked, and packed as follows unless other requirements are provided through the Purchasing Agreement.

The contents of this kit shall be packaged, identified, consolidated and packed per the instructions below. The BAE Systems Purchasing Order and/or Engineering Drawing provide the part numbers and quantities required for each kit. Packaging of this kit is to be accomplished through good commercial practices, and is intended to provide adequate protection of the kit(s) and the kit components during transit and handling as well as for short-term storage.

A. Packaging

Cleanliness – Items shall be free of dirt and other contaminants that would contribute to deterioration of the item.

Preservation – Bare steel surfaces shall be provided protection such as preservative coatings. Zinc plating or cadmium plating is not considered bare and will not require preservative protection. Items made from stainless steel material do not require preservative protection. When rubber items are unit packaged in quantities of more than one, the items shall be dusted with talcum (soapstone).

Unit Package – The unit packaging shall consist of an item of the same part number and the specified quantity per kit. Place the required item quantity in a close fitting poly bag as to keep package cube to a minimum. Use multiple bags per part when applicable. The minimum size bag shall be 3 x 4 inches; the bag shall be a minimum of 3-MIL thick. The bag shall be heat-sealed in a manner to keep the items contained within the bag. The trapped air volume in the bag shall be kept to a minimum to reduce package cube.

Consolidation – Consolidate the required unit packages for each specified part number into a poly bag, 6-MIL thick, or a snug fitting fiberboard carton (a fiberboard carton is preferred method). If a poly bag is used for consolidation, the weight shall not exceed 10 lb. A Packing List will be enclosed in each consolidated package detailing the contents, to include; the kit part number, and the part number, description, and quantity for each component included. The bag and/or carton size used for the specified kit shall be identical throughout the contract.

B. Marking

Each package used in this kit, shall identify the contents with the applicable part number, nomenclature, quantity, and kit number. For unit packaging and consolidation packages see Label Example A. The markings for each pack can be printed on a label or applied directly on to the bag or carton. If a label is used it shall meet the requirements as outlined below, and if a label is used to identify a bag, the label may be heat-sealed in the bag along with the item(s). If the label is placed in the bag, the label identification must be able to be read from the exterior of the package. If a Packing List is enclosed in the package, the package is to be marked with "Packing List Enclosed", and is to be located in the same area and adjacent to where the kit identification is applied.

Age Control – Shelf-life markings shall be shown as part of the item identification data on unit packs, intermediate containers, exterior containers, and unpacked items. Shelf-life markings shall include the manufactured, cured, assembled or packed date (apply one date), and the expiration or inspect/test date, as appropriate. This information must appear on the unit package unless it is visible through a clear plastic bag, and on the intermediate and exterior container (only when unit pack is exterior container). When two or more unit packs of identical items are marked with different dates, the earliest date should be shown on the intermediate container. Exterior

containers and multi-packs containing age control items shall be marked “CONTAINS SHELF-LIFE ITEMS).

a. Non-extendable shelf-life items: manufactured (MFD) date, cured date, assembled date, packed date (subsistence only) (apply one date, as appropriate), and expiration (EXP) date. For items that contain rubber or synthetic elastomers, the expiration date shall be calculated from the cured date of the rubber/elastomer.
b. Extendable shelf-life items: manufactured date, cured date, assembled date, packed date (subsistence only) (apply one date, as appropriate), and inspect/test (INSP/TEST) date. For items that contain rubber or synthetic elastomers, the inspect/test date shall be calculated from the cured date of the rubber/elastomer.

EXAMPLE 1	EXAMPLE 2	EXAMPLE 3
(Non-extendable)	(Extendable)	(Extendable)
MFD DATE 10/10	ASSEMBLED DATE 10/10	CURED DATE 4Q09
EXP DATE 10/13	INSP/TEST DATE 10/13	INSP/TEST DATE 4Q11

C. Labels

All labels used shall meet or exceed the following requirements: pressure sensitive, water-resistant, size 2 x 2-1/2 inches (min). The part number, nomenclature, quantity, and kit number shall be in a stacked configuration, font size 12 to 14, black ink on white label, and upper case letters. Direct printing on the bag is also acceptable.

D. Packing

Palletize and/or consolidate required kit quantities per contract schedule. Before stretch wrapping or banding, place fiberboard on four sides and top to further protect cartons from damage. The palletized load(s) shall be marked with the appropriate shipping address as specified in the Purchasing Agreement. Apply special handling marking “Do Not Stack”.

Example A

Unit Pack Label

Example B

Consolidation Pack Label

045 MRB Authority

MRB Authority is granted for the associated item number and the Supplier is authorized to perform repairs or disposition parts use-as-is so long as the disposition does not affect the form, fit, function, performance, or reliability of the part. The Supplier is required to keep records of all MRB activity related to this part for this Purchasing Agreement and shall make those records available to BAE Systems personnel upon request.

The Supplier is **not** authorized to flow this authority to their sub-tier suppliers.

055 AQL 1.0

This item requires inspection at AQL 1.0 to the C=0 Sampling Plan for all major drawing characteristics. Major drawing characteristics are dimensions with a total tolerance of ≤.010 or where the characteristic is identified as a “major” by a drawing note or SQAP/QAP/QAR

056 100% Inspection

This item requires 100% inspection of all critical drawing characteristics. Critical characteristics are any dimensions with a total tolerance of ≤.001 or where the characteristic is identified as a “critical” by a drawing note or SQAP/QAP/QAR.

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)

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 and may be returned at the supplier's expense.

Process or product changes require PPAP resubmission. Notification to BAE Systems prior to changes is essential as additional audits/reviews may be required prior to resubmission; such changes are to be communicated to your BAE Systems Procurement Representative via the Vendor Information Request Form (Form 097908). 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 24 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 Representative.

All data shall be provided to BAE Systems in accordance with the Data Submission Instructions (located in the SQAM) for this part.

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)

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 and may be returned at the supplier's expense.

Process or product changes require PPAP resubmission. Notification to BAE Systems prior to changes is essential as additional audits/reviews may be required prior to resubmission; such changes are to be communicated to your BAE Systems Procurement Representative via the Vendor Information Request Form (Form 097908). 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 24 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 Representative.

All data shall be provided to BAE Systems in accordance with the Data Submission Instructions (located in the SQAM) for this part.

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 and may be returned at the supplier's expense.

Process or product changes require PPAP resubmission. Notification to BAE Systems prior to changes is essential as additional audits/reviews may be required prior to resubmission; such changes are to be communicated to your BAE Systems Procurement Representative via the Vendor Information Request Form (Form 097908). 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 24 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 Representative.

All data shall be provided to BAE Systems in accordance with the Data Submission Instructions (located in the SQAM) for this part.

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 and may be returned at the supplier's expense.

Process or product changes require PPAP resubmission. Notification to BAE Systems prior to changes is essential as additional audits/reviews may be required prior to resubmission; such changes are to be communicated to your BAE Systems Procurement Representative via the Vendor Information Request Form (Form 097908). 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 24 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 Representative.

All data shall be provided to BAE Systems in accordance with the Data Submission Instructions (located in the SQAM) for this part.

061 PPAP-Level 5

The Supplier shall complete a PPAP in accordance with Level 5 of the Production Part Approval Process (PPAP) manual and shall retain all documentation at their facility. Inspection data shall be accompanied by a ballooned drawing (all characteristics, including drawing notes, numbered) and a photograph of the part marking. The documentation shall be made available to BAE Systems upon request.

064 York CAGE Code

The CAGE code to be marked on this part is 06085.

065 San Jose CAGE Code

The CAGE code to be marked on this part is 80212.

066 Anniston CAGE Code-Aftermarket Spares

The CAGE code to be marked on this part is 076M6.

067 Anniston CAGE Code-Forge Facility

The CAGE code to be marked on this part is 05386.

083 Electrostatic Discharge (ESD)

A. *Supplier **shall** have an ESD program in place per ANSI/ESD S20.20.*

B. *Supplier **shall** protect the parts using approved ESD protective packaging per MIL-STD-2073 preservation code GX.*

C. *Labeling **shall** be per MIL-STD-130 and MIL-STD-129.*

084 Process Failure Mode and Effects Analysis (PFMEA) and Control Plans (CP)

A. PFMEA AND CONTROL PLANS PER THE TOP LEVEL DRAWING, AND FLOW DOWN TO ALL SUPPLIERS

The contractor shall develop and implement the use of PFMEA and CPs that ensure compliance with the requirements of this contract. The PFMEA and CP must involve the entire production system and flow down of these requirements to its suppliers.

The contractor shall submit, for BAE Systems approval, an implementation plan which describes in detail: schedule, milestones, exception criteria, submission methodology and Supplier flow down requirements. Specific processes in the manufacturing of the components must be identified that are used to ensure conformance to the requirements. The Implementation plan is to be completed and submitted 30 days following receipt of the contract in accordance with the data submission instructions located in the SQAM.

Control plans shall include outputs from the PFMEA's. Special or key characteristics, whether identified by the Customer or the Supplier, must be used in the development of the control methods. The control methods must also include specific reaction plans when any undesirable measurement results are obtained. The reaction plans, in conjunction with the inspection/test frequency shall effectively mitigate the risk of suspect material being released for shipment from the contractor's/suppliers facility.

The CP and PFMEA documents are to be completed, submitted in accordance with the data submission instructions located in the SQAM and approved prior to shipment of any

product. CPs shall be treated as a living document and shall always reflect the current process. CPs shall be controlled documents and retained for the life of the contract.

The contractor shall use Automotive Industry Action Group 9AIAG) publications "Potential Failure Mode and Effects Analysis" version 4, 2008, and "Advanced Product Quality Planning and Control Plan" version 2, 2008 for development and use of PFMEAs and CPs.

B. PFMEA AND CONTROL PLANS PER THE TOP LEVEL DRAWING, TIER I & II SUPPLIERS

The Contractor shall develop and implement the use of PFMEA and CPs that ensure compliance with the requirements of this contract. The PFMEA and CP must involve the entire production system as defined on the top level drawing.

The Contractor shall submit, for BAE Systems approval, an implementation plan which describes in detail: schedule, milestones, exception criteria, and submission methodology. Specific processes in the manufacture of the components must be identified that are used to ensure conformance to the requirements. The Implementation plan is to be completed and submitted 30 days following receipt of the contract in accordance with the data submission instructions located in the SQAM.

Control plans shall include outputs from the PFMEA's. Special or key characteristics, whether identified by the Customer or the Supplier, must be used in the development of the control methods. The control methods must also include specific reaction plans when any undesirable measurement results are obtained. The reaction plans, in conjunction with the inspection/test frequency shall effectively mitigate the risk of suspect material being released for shipment from the supplier's facility.

The CP and PFMEA documents are to be completed, submitted in accordance with the data submission instructions located in the SQAM and approved prior to shipment of any product. CPs shall be treated as a living document and shall always reflect the current process. CPs shall be controlled documents and retained for the life of the contract.

The Contractor shall use Automotive Industry Action Group 9AIAG) publications "Potential Failure Mode and Effects Analysis" version 4, 2008, and "Advanced product Quality Planning and Control Plan" version 2, 2008 for development and use of PFMEAs and CPs.

085 FIRST ARTICLE INSPECTION

The Contractor shall conduct First Article Inspection (FAI) in accordance with AS9102B for all provided parts and those not previously subjected to First Article Inspection requirements in accordance with the Supplier Quality Assurance Manual, to ensure Supplier product/processes have the capability of meeting design and/or specification requirements.

FAI's shall be conducted, reviewed, submitted in accordance with the data submission instructions located in the SQAM and approved prior to the first shipment of product. Where changes require only a delta FAI, the delta FAI will be limited to the impact of the change only. The customer reserves the right to review any/or all associated FAI documentation at its discretion.