Appendix QX Supplier Quality Requirements REVISION RECORD

The latest issue to this document is the version that is available on the Lockheed Martin Aero website: http://www.lockheedmartin.com/aeronautics/materialmanagement.

Revision		Date Changes
Original Issue	03/28/2002	Completely revised / replaced QR to separate and clarify Program, Commodity, and General application of Quality Requirements based on Program application. This serves as a "pilot" version for other procurements. Adds Revision Record, Table of Contents, and Tables to enable supplier to identify the LM Program and understand which quality system and quality requirements apply based on his product (commodity) type.
Revision A	5/31/2002	Added definition of "Item or Items" in Document Overview paragraph; clarified First Article Inspection (FAI) requirements in paragraphs 2.3.1, 3.3, & 3.4; added the words "as applicable" to paragraph 2.3.6.1.8
Revision 2	8/11/2003	Changed revision scheme to numbers to align with LM AeroCode guidelines. Removed references to all other Programs to dedicate QX to F-35 JSF suppliers only. Added COTS to Table 2. Added Service Providers to Table 1. Added Test Items to Table 1 and incorporate self-deleting requirements for Test Items. Refined Deliverable Software requirements in Table 1. Enhanced FAI requirements in Para. 3.3 to include instructions for FAI in 3D Model Environment. Incorporated tooling quality requirements. Added Para. 3.5.4 prohibiting use of freeware, shareware, etc. without IPT approval. Aligned NCM control & QCS-001 sections with Appendix QR changes. Added F-35 JSF Critical Part categories to Para. 4.13. Added additional calibration references to Para. 4.19. Renumbered paragraphs and tables to align with changes. Updated web links to coincide with new websites.
Revision 3	2/13/2006	Removed references which limited the entire Appendix QX to F-35 (JSF) suppliers only – Appendix QX replaces Appendix QR in its entirety. Major re-alignment of paragraphs to enhance flow of quality requirements. Revised tables to include industry standards and program specific requirements. Added AS9100 requirement for F-35 (by 1 Jan 2010) and AS9120 for Distributors (by 1 Jan 2008). Added Service Centers to listing of "Commodity/Product" in Table 1. Re-worded and re-named section on "Selection, Control and Contract Flow Down to Quality Control Specification (QCS)-001 Sources" to flow requirements of Appendix QJ, where applicable.
Revision 4	3/30/2007	Deleted: (1) Table 2, its Notes and any references within the document; (2) Requirement for a copy of written correspondence addressing QX requirements to be provided to Buyer's PQA representative; (3) Para. 1.4.1, 1.12, 1.13.3, 2.04, 2.05, 2.8.1, 2.8.3 & 2.9 (4) 3 rd and 4 th bullets from 2.0 (5) Note 5 in Table 1 referencing F35 (6) Bullets from 2.1.2; (7) The word "segregation" from 2.3.1; Clarified: (1) 1.0 Quality Requirements; (2) 1.7 Records – added "tooling controlled per TMS-MC-015"; 1.10 Calibration – added "MIL-STD-45662"; (3) 1.11 Tooling as a Media of Acceptance – added requirement for Seller to periodically validate their manufactured/owned tooling used as a media of acceptance; (4) Table 1 – Added "buyer-approved Distributors" to last item; Table 1 Notes – revised Note 1 to address Buyer-approved distributors; (5) Table 1, Note 1, added "Buyer-approved distributors must either meet ISO, AS, Military equivalent or QCS-122 Quality System; (6) Table 1, Note 5; (7) 2.01 changed "not less than 5 days" to "not more than 5 days; (8) 2.2 added "Industry" to standards; (9) 2.3.1 added "Repair" to disposition (10) 2.3.2 added "or Items in transit to Buyer"; (11) 2.3.4 changed "returned" to "rejected" (12) MRB 2.6.3 & 2.6.4 Re-Written: (1) 1.1 Quality System Changes; (2) Table 1, Note 5 "Service Centers; (3) 2.01 & 2.02 to incorporate 2.05; (4) Bulleted lines in 2.0 "Point of Acceptance" made sub-paragraphs; (5) 2.6.4 Seller corrective action plans Added: (1) 1.1 Notification requirement for Supplier relocations (2) Table 1, Note 6 for Buyer-approved Distributors and AS9210 compliance (3) 2.3.4 Requirement for Seller to identify true root cause findings and corrective actions (4) 2.7.2 Note for Sellers providing perishable tooling and Tool Service Requirements List

LOCKHEED MARTIN Aeronautics Company

Appendix QX Revision: 6 Date: March 18, 2010

	40/0/	latter (A) O of the control of the c
Revision 5		Added: (1) Section 1.0 requirement of a 3 rd party registered quality system; (2) Section 1.5 Counterfeit Parts Prevention; (3) Section 1.9 GIDEP Membership; (4) Section 2.0 Periodic surveillance of quality system, manufacturing processes or physical Item, possible full-time oversight, Buyer notification of shipment from a location other than the contracted PO address; (5) New Section 2.6 for Material Review Authority and Reporting of Nonconformances on Buyer-Furnished Equipment/Items; (6) Section 2.8 Compliance with DFARS 252.246-7003 on reporting nonconformances on CSI; (7) Section 2.11 Compliance with LMA-D0010 for composite or bonded products. Revised: (1) Table 1 – In heading for "QMS", added "6" to the applicable notes – Reads "See Note 1 and 6". Removed specific note reference from section on "Engineering Test Units, Brass Boards, Lab-Use-Units, Non-Production Hardware Buyer-Approved Distributors" – QMS column heading contains all applicable note references. (2) Note 1 for Table 1 – Compliance with a currently published and maintained consensus industry standard quality system; (3) Sections 2.03 and 2.04 Added verbiage to reflect these paragraphs apply when Buyer has not provided Seller with prior written authorization to act on Buyer's behalf; (4) Revised 2.3.5 Removed verbiage related to completion of a SCAR form (5) Section 2.4.1 & 2.5.2 Added MRA exception for on Scritical Sefety Items (CSI) (6) Section 2.5.1 Added limitations when Seller continues
		Critical Safety Items (CSI); (6) Section 2.5.1 Added limitations when Seller continues processing nonconforming product prior to Buyer's MRB disposition; (7) Revised references
		of Field Engineers to Supplier Quality Engineers (SQE). Removed: 2.1.2 - Requirement for
		Seller to provide Buyer's SQE with high speed internet access
Revision 6		REVISED: (1) Changed all Material Management references to Supply Chain Management; (2) Changed all Procurement Quality Assurance (PQA) references to Supplier Quality Management (SQM); (3) Section 1.0 Reworded to indicate Seller is to meet the requirements of the latest revision of Appendix QX – removed reference to Table; (4) Section 1.1 – Removed first reference to "adverse"; (5) Section 1.2 – Removed "Unless otherwise authorized by Buyer in writing"; (6) Section 1.4 – Enhanced language on Counterfeit Parts; (7) Section 1.5 – Removed "Buyer-identified" wording; (8) Section 1.6 – Removed "Seller shall provide Items under this PO that meet all applicable requirements of this PO" and reworded to require Seller to ship Items that are in total compliance with all applicable requirements of this PO; (9) Section 1.7 – Added "unless otherwise stated in this PO" to first sentence; Also added paragraph stating that upon Buyer's request, Seller shall forward specific records to Buyer at no additional cost, price or fee to Buyer; (10) Section 1.8 Added specific date for GIDEP membership requirement; (11) Revised Table 1 – Combined Q30 and X99103 requirement for F35 under "Variability Reduction"; (12) Revised ISO9001:2000 to reflect ISO9001:2008 in Table 1 and Note 3; (13) NOTES - #3 – Clarified by added "Suppliers with F35 Commodities"; #5 – added "If Seller is a Service Center acting as a Distributor, Seller shall company with AS9120"; #6 – added "A Distributor cannot act as a Service Center unless the Distributor has a license in place"; (14) Para. 2.0.a,b,c. Added "and/or manufacturing site" to list of information required from Seller when Items manufactured, accepted or shipped from a location other than the contracted PO address; (15) Section 2.0.1 and 2.0.2 – Added Seller actions to take when Buyer has delegated enditem acceptance to Seller; (16) Para. 2.1 Added "Regardless of Buyer's or Buyer's Customer Point of Acceptance on this PO or whether Buyer's Customer has issued a delegation for this PO" to requirement o
		control its processing sources including in-house processes."

ADDED:

- 1) Section 1.7 New sentence "Upon Buyer's request, Seller shall forward specific records
- to Buyer at no additional cost, price or fee to Buyer"; (2) Table 1 Distributors Impose QMS Notes 1/6, Q2A "FAI" and Q4R "FOD"; Maintenance & Overhaul Centers – Impose QMS Notes 1/6; Service Centers – Impose Q4R "FOD"; added Note 7 – "A Contract Service Agency is considered to be a Distributor and shall comply with AS9120"; added Note 8 for Maintenance and Overhaul Centers;
- (3) Section 2.1.2 Seller shall provide Buyer's SQM SQE with high speed internet access DSL or wireless):
- 4) Sections 2.4 MRA for Seller-designed Items is not applicable to Buyer-Furnished Equipment/Items; Seller shall submit all material review dispositions for Buyer related work to the on-site Government representative for concurrence when oversight/surveillance delegated to an on-site Government representative at Seller's facility; Seller shall provide MRB disposition information upon request by Buyer.
- 5) Section 2.4 MRA for Buyer-Designed Items Buyer and Buyer's customers have the right to refuse to accept and all Seller nonconformances. When Buyer's customer has delegated oversight/surveillance of Buyer's work to an on-site Government representative at Seller's facility, Seller shall submit all material dispositions for Buyer related work to the onsite Government representative for concurrence. When requested, Seller shall provide MRB disposition information related to Buyer's Item(s)...
- (6) Section 2.4 If Buyer has delegated MRA to Seller on Buyer-designed Items, that MRA delegation is not applicable to Buyer-Furnished Equipment/Items.

DELETED: (1) "Section 1.4 Supplier Control - Seller shall ensure all Items procured from its suppliers for this PO conform to all requirements of this PO" – redundant language; (2) Section 2.11 LMA D0010 Compliance on Composite/Bonded Products.

* Revised

** Added

*** Removed

TABLE OF CONTENTS

TITLE	PAGE
Revision Record	1
Table of Contents	4
1.0 Quality Requirements	4
1.1 Quality System Changes & Relocation	5
1.2 Language	5
1.3 Reference Documents	5
1.4 Counterfeit Parts Prevention	5
1.5 Outsourcing Critical Items	6
1.6 Certificate of Conformance	6
1.7 Records	6
1.8 Government-Industry Data Exchange Program (GIDEP)	6
Membership	
1.9 Notification	6
1.10 Certified Materials	6
1.11 Calibration	6
1.12 Tooling as a Media of Inspection	6
1.13 Buyer-Furnished, Seller-Manufactured, or Seller-Owned Tooling	7
Table 1 – Quality System Requirements by Commodity	8
2.0 Point of Acceptance	9
2.1 Facility Access	11
2.2 Sampling	11
2.3 Control & Processing Nonconforming Material & Corrective Action	11
2.4 Material Review Authority, Requests and Reporting	12
2.5 QCS-001 Requirements for Buyer-Designed Items	13
2.6 QCS-001 Requirements for Seller-Designed Items	13

The terms "Item(s)", "PO", "Seller", and "Buyer" as used herein, have the same meaning as the terms "Work", "Contract", "SELLER", and "LOCKHEED MARTIN", respectively.

- * Questions regarding this Appendix QX or the applicability of this Appendix QX shall be addressed to Buyer's Supply Chain Management representative who administers this PO.
- * 1.0 Quality Requirements: Seller shall meet the requirements of the latest revision of Appendix QX and all applicable requirements therein in effect as of the date of this PO. Seller shall ensure all applicable quality requirements are imposed upon sub-tier suppliers and manufacturing facilities. Seller shall have and maintain Internet access for obtaining requirements of this PO.

Seller shall ensure its quality system is third party registered by an International Aerospace Quality Group / Americas Aerospace Quality Group approved registrar no later than January 1, 2011. Seller shall ensure its quality system is compliant with a currently maintained and published consensus industry standard quality system specification as appropriate to the Seller's activities.

1.1 Quality System Changes & Relocation: Seller shall notify Buyer, in writing, within 10 days of any (1) change in its quality system status resulting in the loss of 3rd party registrar's certification status; or (2) adverse action taken by Seller's customer, the Government, the Federal Aviation Agency ("FAA"), or the Civil Aviation Agency ("CAA"); or (3) change in Seller's quality organization, process or procedures that affects conformity of any Item.

Seller shall also notify Buyer, in writing, at least 90 days in advance of any sale, relocation, or transfer of Seller's manufacturing operations.

- * **1.2** <u>Language:</u> Upon request by Buyer, Seller shall provide all Seller records, reports, specifications, drawings, inspection and test results and other documentation in English.
- * 1.3 <u>Reference Documents:</u> Seller may obtain Buyer-unique documents (e.g., Q2A, Q30, TMS-MC-015, etc.) referenced in this PO from Buyer's Supply Chain Management representative or Buyer's website at: http://www.lockheedmartin.com/aeronautics/materialmanagement. Seller may obtain copies of Aerospace Standards (AS/EN documents) from the Society of Automotive Engineers at: www.sae.org.

** 1.4 Counterfeit Parts Prevention:

- a) For purposes of this clause, Work consists of those parts delivered under this Contract that are the lowest level of separately identifiable items (e.g., articles, components, goods, and assemblies).
 "Counterfeit Work" means Work that is or contains items misrepresented as having been designed and/or produced under an approved system or other acceptable method. The term also includes approved Work that has reached a design life limit or has been damaged beyond possible repair, but is altered and misrepresented as acceptable.
- (b) SELLER agrees and shall ensure that Counterfeit Work is not delivered to LOCKHEED MARTIN.
- (c) SELLER shall only purchase products to be delivered or incorporated as Work to LOCKHEED MARTIN directly from the Original Component Manufacturer (OCM)/Original Equipment Manufacturer (OEM), or through an OCM/OEM authorized distributor chain. Work shall not be acquired from independent distributors or brokers unless approved in advance in writing by LOCKHEED MARTIN.
- (d) SELLER shall immediately notify LOCKHEED MARTIN with the pertinent facts if SELLER becomes aware or suspects that it has furnished Counterfeit Work. When requested by LOCKHEED MARTIN, SELLER shall provide OCM/OEM documentation that authenticates traceability of the affected items to the applicable OCM/OEM.
- (e) In the event that Work delivered under this Contract constitutes or includes Counterfeit Work, SELLER shall, at its expense, promptly replace such Counterfeit Work with genuine Work conforming to the requirements of this Contract. Notwithstanding any other provision in this Contract, SELLER shall be liable for all costs relating to the removal and replacement of Counterfeit Work, including without limitation LOCKHEED MARTIN's costs of removing Counterfeit Work, of reinserting replacement Work and of any testing necessitated by the reinstallation of Work after Counterfeit Work has been exchanged. The remedies contained in this paragraph are in addition to any remedies LOCKHEED MARTIN may have at law, equity or under other provisions of this Contract.
- (f) This clause applies in addition to any quality provision, specification, statement of work or other provision included in this Contract addressing the authenticity of Work. To the extent such provisions conflict with this clause, this clause prevails.
- (g) SELLER shall include paragraphs (a) through (d) of this clause or equivalent provisions in lower tier subcontracts for the delivery of items that will be included in or furnished as Work to LOCKHEED MARTIN.

Seller shall establish and maintain a Counterfeit Parts Prevention and Control Plan using Industry Standard AS-5553 as a guideline. The purpose of this document shall be to prevent the delivery of counterfeit parts and control parts identified as counterfeit.

Sellers eligible for utilization of the Government-Industry Data Exchange Program ("GIDEP") shall utilize the GIDEP process to alert the industry of encountered counterfeit parts.

- * 1.5 <u>Outsourcing of Critical Items:</u> Seller shall notify Buyer, in writing, when any key characteristic, interchangeable-replaceable features, fracture critical features, durability critical features, maintenance critical features, safety critical features, critical safety hardware/features, mission abort critical features, or Seller changes affecting fit, form or function are to be subcontracted.
- * 1.6 <u>Certificate of Conformance:</u> Seller shall prepare a certificate of conformance ("CoC") asserting that the Items contained with the shipment are in total compliance with all applicable requirements of this PO. Seller shall annotate in the delivery package any exceptions, e.g. variances, Supplier Quality Assurance Report ("SQAR"), Advanced Engineering Authorization ("AEA"), etc. Seller shall include a copy of the CoC inside the Seller's shipping container.
- * 1.7 <u>Records:</u> Seller shall maintain complete records of all manufacturing, process capability (if applicable), tooling controlled per TMS-MC-015, and inspection and test, including copy of CoC, unless otherwise stated in this PO. Upon Buyer's request, Seller shall make records available to Buyer for at least three (3) years after completion of this PO and for longer periods as may be specified elsewhere in this PO. Seller shall maintain records of all QCS-001 process control tests performed by Seller and inspection records of processed Items for at least seven (7) years after completion of this PO. Upon Buyer's request, Seller shall provide records of inspection tests of processed Items and process control tests to Buyer.
- ** Upon Buyer's request, Seller shall forward specific records to Buyer at no additional cost, price, or fee to Buyer.
- * **1.8** Government/Industry Data Exchange Program ("GIDEP") Membership If Seller is eligible for GIDEP membership, effective January 1, 2009 Seller is required to be a member of GIDEP.
 - **1.9 Notification:** Seller shall notify Buyer when Seller or Seller's sub-tiers are found to be non-compliant to Buyer specifications, Seller is disapproved by a Government agency, or GIDEP Alert is required or received affecting Buyer Items.
 - **1.10** <u>Certified Materials:</u> Seller shall establish and maintain controls to prevent the use of non-certified materials when certified materials are required.
 - **1.11 Calibration:** Seller shall maintain a documented calibration system for the calibration and maintenance of tools, jigs, inspection and test equipment. Seller shall have and maintain a calibration system that is compliant to prevailing industry requirements in accordance with either ISO 17025, ISO10012-1, or ANSI Z540.
 - **1.12** <u>Tooling as a Media of Acceptance:</u> Seller shall utilize mandatory/required tooling provided by Buyer and designated as production type tooling to be utilized for Item manufacture as Seller's media of inspection and for Buyer source acceptance for those part features created by, or depicted by, such tooling, e.g., contours, hole locations, and profiles.

Seller shall periodically validate Seller manufactured and/or owned tooling that is used as a media of acceptance to its control media.

LOCKHEED MARTIN Aeronautics Company

Appendix QX Revision: 6 Date: March 18, 2010

- 1.13 <u>Buyer-Furnished, Seller-Manufactured or Seller-Owned Tooling</u>: Seller shall include in its documented quality system written procedures for the control, maintenance, and calibration of special tooling, jigs, inspection and test equipment, and other devices used in manufacturing processes.
 - **1.13.1** <u>Buyer Furnished Tooling for Buyer or Seller-Design Items:</u> Seller shall comply with the requirements of Buyer's tooling manual (TMS-MC-015) concerning Buyer-furnished controlled tooling, tooling tools, and production tools.
 - **1.13.2** <u>Seller-Manufactured or Owned Tooling for Buyer-Designed Items</u>: Where Seller manufactures and/or owns tooling for Buyer-Designed Items, Seller shall comply with the requirements of Buyer's tooling manual (TMS-MC-015) concerning Seller-manufactured and/or owned tooling that is used in the production of Item(s) for this PO.

* TABLE 1 – Quality System Requirements by Commodity

Commodity / Product	Quality Management System					Fit Check	Software	FAI	FOD	Variability Reduction
	QMS See Notes 1,6 *Service Center/ Provider – See Notes 2, 5 & 6)	AS/EN 9100 F-35 (See Note 3)	** AS9120 Stockist Distributors	ISO9001: 2008 F-35	AS9110 (See Note 8)	Q3R (F-16 and C-130 Only)	Q6R	O2A and AS/EN 9102	Q4R	Q30 (Measuremen t Plan) AS9103 (Variability Reduction) (F-35)
LM Aero Build-to-Print Metallic and Non-Metallic Parts, Castings & Forgings (including finished castings and forgings), Sheet Metal, Machined Parts, Structural Assemblies/Details, Honeycomb Core, Composite Parts	X	Х		Х		X	X	Х	X	Q30 and AS9103
Metallic Raw Materials (Bar, Rod, Plate, Sheet, Extrusions, etc.), including Cut-to-Size	Х									
Non-Metallic Raw Materials (Chemicals, Paints, Adhesives, Lubricants, Tapes), Composite Materials	X								X	
Electrical Hardware/Components, Mil-Spec Standard Hardware, LM Aero Special Hardware, or Miscellaneous Hardware and Bearing, Detail Parts Controlled Under Manufacturer's Part Number, Support Equipment (SE) and Details of SE	X								X	
Ground Support Equipment	Х								Χ	
Electrical, Mechanical, Avionics (equipment, assemblies, sub- assemblies, details, and major components), including jet engines and propellers	X	Х		X			X	X	Х	AS9103
Aviation Fuel/Oil	Х								Χ	
Perishable Tooling	Х									
Tooling	Х	Х		Х					Х	
Electrical Harnesses	Х	Х		Х				Х	Χ	AS9103
Software	Х	Х		Х			See Note 4			
Service Providers (See Note 2)	Х						Х		Х	
Maintenance and Overhaul Centers (See Note 8)	Х				Х				Х	
* Service Centers (See Note 5 & 6)	Х		Х						Χ	
** Distributors (See Note 7)	Х		Х					Х	Χ	
Engineering Test Units, Brass Boards, Lab-Use-Units, Non- Production Hardware Buyer- Approved Distributors	X	Х		X			X		Х	

NOTES - TABLE 1

- (1) Seller shall maintain an ISO, AS or Military Standard equivalent quality system acceptable to Buyer. Third party registration ISO/AS/EN Quality Management Systems ("QMS") from an ANSI-ASQ National Accreditation Board (www.anab.org) approved registrar is preferred. In the event (1) this PO is entered into on or after January 1, 2009, and (2) Seller was not in buyer's supplier database immediately prior to the date of this PO, then, through December 31, 2010, or until this PO is no longer in effect, whichever is sooner, Seller, at a minimum, shall have and maintain a quality system that is compliant with a currently published and maintained consensus industry standard quality system specification to Seller's activities. Provided this PO is still in effect as of January 1, 2011, Seller, effective as of January 1, 2011, shall have and maintain a quality system that is third party registered in accordance with the requirements of paragraph 1.0 of this Appendix QX.
- (2) Supply Service Provider A company whose specialty and core business is integration and management of supply chain operations. Services may include, without limitation, kitting, transportation, distribution and warehouse management, inventory management tasks such as tactical inventory forecasting and optimization, supplier management for selected classes of supplies, and global material deployment and distribution.
- (3) Suppliers with F-35 Commodities, as indicated in Table 1, requiring an AS/EN9100 QMS shall comply with AS/EN 9100 no later than 01 January 2010. Until that date, Seller, at a minimum, shall meet the requirements of ISO 9001:2008.
 - (4) Buyer's quality clause Q6R applies to both deliverable and non-deliverable software.
- (5) A Service Center acts on behalf of Buyer as a Licensee. A Licensee shall have the right to provide spare(s) Item(s) or perform repair and/or rework of Buyer Items. If Seller is a Service Center acting as a Distributor, Seller shall comply with AS9120.
- (6) Buyer-approved Distributors shall be compliant to AS9120, as a minimum quality system level. "Distributor" is defined as any Seller that is buying Items from other suppliers and selling them to Buyer without adding value to Items. A Distributor cannot act as a Service Center unless the Distributor has a license in place. Repackaging shall not be considered a value-added task for the purpose of this definition.
- (7) A Contract Service Agency is considered to be a Distributor and shall comply with AS9120.
- ** (8) Maintenance and Overhaul Centers perform the overhaul, repair, inspection, replacement, modification, or defect rectification of an aircraft or an aircraft component that is performed after completion of manufacturing and initial airworthiness certification by the applicable Authority.
- * 2.0 <u>Point of Acceptance:</u> The point of acceptance is indicated on each PO issued. The point of contact for Buyer's Supplier Quality Management ("SQM") Supplier Quality Engineer ("SQE") is located at: http://www.lockheedmartin.com/aeronautics/materialmanagement > Quality Requirements > Information. Seller shall ensure that all requirements of this PO have been met.

When this PO requires Buyer Acceptance @ Source, Buyer Acceptance can involve periodic surveillance by Buyer of Seller's quality system, manufacturing processes or physical Item, including work at all Seller's sub-tiers. Based on Seller's performance, Buyer Acceptance activities may result in the requirement for full-time oversight of Seller's and/or Seller's sub-tier suppliers.

- * The location of performance of Buyer end-item acceptance, prior to shipment, shall be the Seller's facility address referenced on Buyer's PO. If Seller's Item manufacture, acceptance or shipment will be at or from a location other than the contracted PO address, Seller shall:
 - a. provide Buyer with Seller's written plan that, as a minimum, contains the following:
 - name and location of Seller's sub-tier and/or manufacturing site.
 - how Seller will approve and control its sub-tier and/or manufacturing site,
 - how Seller will be performing acceptance of product from a sub-tier location and/or manufacturing site,
 - example of Seller's purchase order to validate appropriate flow down of Buyer's requirements, and
 - date that manufacturing activity will begin
 - b. obtain Buyer's written acknowledgement and concurrence from Buyer's Supplier Quality Management, prior to any manufacturing activity,
 - c. apply Buyer's Right of Access defined in this PO to Seller's sub-tier and/or manufacturing site
 - d. reflect Seller's contracted Supplier name and location, regardless of the point of final acceptance or delivery, in Seller's shipping document
- * 2.0.1 Prior to shipment of Items designated "BUYER ACCEPT AT SOURCE", Seller shall obtain final acceptance (signature or stamp), at Seller's facility, of Seller's shipping document by Buyer's SQE or Seller's quality assurance personnel, when Buyer has provided Seller with prior written authorization to act on Buyer's behalf. When Buyer has delegated end item acceptance to Seller, Seller's Quality representative shall sign and/or stamp and date Seller's shipping document on behalf of Buyer to indicate acceptance of Item(s) being shipped. This acceptance shall be referenced in Buyer's block/section of Seller's shipping document, where applicable.
- * 2.0.2 Prior to shipment of Items designated "GOVT & BUYER ACCEPT AT SOURCE", Seller shall obtain final acceptance (signature or stamp), at Seller's facility, of Seller's shipping document by Buyer's SQE or Seller's quality assurance personnel, when Buyer has provided Seller with prior written authorization to act on Buyer's behalf, as well as the assigned Government representative. When Buyer has delegated end item acceptance to Seller, Seller's Quality representative shall sign and/or stamp and date Seller's shipping document on behalf of Buyer to indicate acceptance of Item(s) being shipped. This acceptance shall be referenced in Buyer's block/section of Seller's shipping document, where applicable.
 - **2.0.3** When Buyer has not provided Seller with prior written authorization to act on Buyer's behalf, Seller shall notify Buyer's SQE normally servicing Seller's facility, not more than five (5) days after receipt of this PO, when PO calls for "BUYER ACCEPT AT SOURCE" or "GOVT & BUYER ACCEPT AT SOURCE". Seller's notification shall include PO number, date of scheduled shipment and any special security clearance required to perform Buyer activities. If Seller does not know Buyer's SQE assigned to this facility, Seller may request this information from Buyer.

- * 2.0.4 When Buyer has not provided Seller with prior written authorization and/or electronic notification to act on Buyer's behalf, Seller shall notify Buyer's SQE 48 hours prior to Items being ready for shipment, when this PO calls for "BUYER ACCEPT AT SOURCE" unless Seller has received Buyer's prior written authorization to accept Items on behalf of Buyer.
 - **2.0.5** Seller shall not claim entitlement to an increase in the PO price, cost, or fee based upon an assertion that "BUYER ACCEPT AT SOURCE" or "GOVT & BUYER ACCEPT AT SOURCE" imposes additional cost(s) or task(s) on Seller.
- **Facility Access**: Regardless of Buyer's or Buyer's Customer Point of Acceptance on this PO or whether Buyer's Customer has issued a delegation for this PO, Seller shall provide or obtain for Buyer, Buyer's customers and regulatory agency personnel, access to any and all facilities where work is being performed or is scheduled to be performed, including those facilities of Seller's subcontractors, in order to perform Item inspections, surveys or system/process surveillance as part of verification of conformance to the requirements of this PO. Seller's denial of any such access may result in inactivation of Seller's approval. Seller shall include the provisions of this facility access requirement in its POs with its subcontractors.
 - **2.1.1** Seller shall provide, at no increase in price, cost or fee to Buyer, Buyer's customers or regulatory agencies, suitable facilities at Seller and Seller's subcontractors' manufacturing locations for Buyer, Buyer's customer and regulatory agency representatives to perform Item inspections, surveys or system surveillance.
- ** **2.1.2** Seller shall provide Buyer's SQM SQE with high speed internet access (DSL or wireless).
 - **Sampling:** Seller shall have the right to use sampling plans, provided the sampling plans are in accordance with existing industry, military or Government standards, or have been prior approved in writing by Buyer.

2.3 Control and Processing Nonconforming Material and Corrective Action:

- **2.3.1 -** Seller shall implement and maintain a documented quality system that provides for identification, documentation, and disposition of nonconforming material. Seller shall ensure effective corrective and preventive action is taken (including repetitive nonconformances dispositioned "Use-As-Is" or "Repair" by Buyer's or Seller's Material Review Board ["MRB"] actions) to prevent, minimize, or eliminate nonconformances. Seller's quality management system shall ensure that non-conforming material is not used for production purposes.
- **2.3.2 -** Seller shall maintain records of all nonconforming material, dispositions, assignable causes, corrective and preventive actions, and effectiveness of corrective actions for the period specified in this PO.
- * 2.3.3 Seller shall evaluate each nonconformance for its potential to exist in previously produced or delivered Items, or Items in transit to Buyer. If a nonconformance exists, Seller shall notify Buyer, in writing, within 24 hours for issues impacting flight safety or for Items in transit to Buyer, and, in writing, within 5 working days for all other issues. Seller shall utilize the on-line system located at http://www.lockheedmartin.com/aeronautics/materialmanagement under Quality Requirements > Corrective Action to make this notification. Instructions are also available at this website.
- * **2.3.4** Seller shall provide effective corrective and preventive action upon request by Buyer. When requested by Buyer, Seller shall provide trend data and findings. Seller shall identify true

root cause findings and corrective and preventive action(s) to preclude recurrence by utilizing tools such as cause mapping, cause and effect analysis, 5 why's etc.

2.3.5 - Seller shall assess all Buyer-identified nonconformances, whether or not Item(s) was/were returned to Seller, and take appropriate actions to ensure causes of nonconformance are corrected.

* 2.4 Material Review Authority, Requests and Reporting:

- **2.4.1** Buyer and Buyer's customers shall each have the right to refuse to accept any and all Seller nonconformances.
- ** **2.4.2** Buyer has the right to remove Material Review Authority ("MRA").
- ** 2.4.3 MRA for Seller designed or Buyer-designed Items is not applicable to Buyer-Furnished Equipment/Items. If Seller has identified nonconforming Buyer-Furnished Equipment ("BFE") material, Seller shall follow instructions located at:

 http://www.lockheedmartin.com/aeronautics/materialmanagement > Quality Requirements > Corrective Action > User Guide. Seller's continued processing, prior to obtaining Buyer's MR disposition, of any Buyer-Furnished Equipment/items containing a nonconformance shall be at Seller's risk.
- ** **2.4.4** When Buyer's customer has delegated oversight/surveillance of Buyer's work to an onsite Government representative at Seller's facility, Seller shall submit all material review dispositions for Buyer-related work to the on-site Government representative for concurrence.
 - **2.4.5** For Seller-designed Items, Seller has Material Review Authority, except for one or more nonconformances that affect a parameter controlled by Buyer drawing or specification, where form, fit or function, interchangeability, Critical Safety Characteristic ("CSC") related to Critical Safety Item ("CSI") service life or reliability is affected. Seller shall submit dispositions of nonconformances, if any, affecting any such parameter(s) to Buyer through the Major Variance process approval.
 - **2.4.6** For Buyer-designed Items, Seller disposition authority is limited to scrapping of Items, eliminating the nonconformance by rework to engineering, or returning to vendor. On Items of Buyer design, Seller shall document nonconformances for submittal to Buyer's MRB for dispositions as required by this PO. Seller shall not continue processing Item(s) or incorporating any nonconformances into any Item, process, procedure or data that affects a parameter controlled by Buyer drawing or specification or affects form, fit or function, interchangeability, service life or reliability unless and until Seller has received prior written approval from Buyer. Upon prior written approval from Buyer, Seller's continued processing shall be limited to subsequent operations that do not hide, alter or limit the ability to inspect, disposition or repair Item. When Buyer has delegated MRA to Seller for Buyer-designed Items, Seller shall exercise such MRA except for one or more nonconformances of a parameter that affects form, fit, function, interchangeability, CSC related to CSI, service life or reliability.
 - 2.4.7 Seller's request for Buyer MR disposition of Seller or Buyer-designed Items shall be submitted in accordance with Buyer instructions located at:

 http://www.lockheedmartin.com/aeronautics/materialmanagement > Quality Requirements > Corrective Action. Seller shall ensure that root cause analysis and corrective and preventive action plans for all discrepancies exist and/or have been implemented based on corrective and preventive action(s) effectivity, prior to delivering Items that have Buyer MR dispositions. Seller shall

submit corrective and preventive action plans to Buyer or Buyer's representative with final acceptance paperwork.

- ** **2.4.8** When requested by Buyer, Seller shall provide Buyer's Supplier Quality Engineer with Seller's MRB disposition information related to Buyer's Item(s).
 - **2.4.9** Seller shall ensure Seller's quality system has capability to report nonconformance(s) on CSI in full compliance with Defense Federal Acquisition Regulation Supplement ("DFARS") 252.246-7003.

2.5 QCS-001 Requirements for Buyer-Designed Items:

- **2.5.1 -** QCS-001 sets forth both the process sources and the processes that require Buyer approval, prior to use for Items delivered to Buyer. A controlled process is an operation performed on an Item where the operation cannot be readily verified subsequent to its conclusion. Controlled processes have verifiable controls inherent to the process, e.g. heat treat, plating, nondestructive testing, etc.
- **2.5.2 -** Seller and Seller's sub-tiers shall meet all requirements of the latest version of Appendix QJ when Seller or Seller's sub-tiers are performing any Buyer-controlled process identified in QCS-001.

NOTE: Sellers providing perishable tooling and Tool Service Requirements List ("TSRL") Items are not required to use QCS-001 approved process sources or provide QCS-001 Quarterly Usage Reports.

* **2.6 QCS-001 Requirements for Seller-Designed Items:** Seller has the authority and responsibility to approve and control its processing sources including in-house processes.

Buyer shall have the right to review and maintain surveillance of Seller's quality system for approval and control of any processes listed in QCS-001, including those performed in-house. Buyer shall have the right to withdraw Seller's authority to approve and control processes listed in QCS-001 if Buyer determines Seller's system has failed to control processing or testing. Buyer shall have the right to direct Seller, at no increase in price, cost or fee to Buyer, to use Buyer-approved sources listed in QCS-001 and meet the requirements of Appendix QJ, in the event of withdrawal of such authority.
