

HQA	<b>Harlow Aerostructures, LLC</b>	<b>Revision Date:</b>
01	<b>Supplier Quality Clauses</b>	7/20/15

\*\*\*\*\* **GOVERNMENT CONTRACT ORDERS - (Defense Priorities and Allocations System (DPAS))**  
 Provisions of the DPAS regulations 15CFR700.11 is located at [http://edocket.access.gpo.gov/cfr\\_2003/15cfr700.11.htm](http://edocket.access.gpo.gov/cfr_2003/15cfr700.11.htm).  
 Rated orders with DPAS classification when applicable shall be listed on the face of Harlow AeroStructures, LLC purchase orders. **(THIS IS A DO-A1 RATED ORDER)** or **(THIS IS A DX-A1 RATED ORDER)**

\*\*\*\*\* **ITAR/EAR Control**  
 Any technical data furnished by Harlow Aerostructures within the definition of the Export Administration Regulation (EAR) and/or International Traffic in Arms Regulations (ITAR) and is subject to the export control laws of the United States.

Export of this data by any means to unauthorized persons, as defined by these laws, whether in the United States or abroad, without an export license or other approval from the U.S. Department of Commerce or U.S. Department of State is expressly prohibited.

**Q1. QUALITY SYSTEM**  
 Supplier shall maintain a quality system that meets or exceeds ISO 9001, (AS/EN/JISQ) 9100 or (AS/EN/JISQ) 9120. Supplier's quality system is subject to review and approval by Harlow's Quality Assurance, Harlow's Customers, and/or Regulatory Authorities which has oversight authority over Harlow or Harlow's Customers.

**Q2. CERTIFICATE OF COMPLIANCE**  
 Each shipment shall contain a certificate of compliance that the product meets the requirements of the engineering and purchase order. An authorized representative of the supplier's quality organization must sign and date this certificate. When the purchase order does not specify the revision level of the engineering or specification, the latest engineering or specification shall apply.

Supplier shall provide a copy of all certificates of compliance from supplier's subcontractor when the subcontractor's work is controlled by Quality Clause 3, 4, or 5.

Where supplier manufactures parts for Harlow Aerostructures LLC and then applies finishes (plating, painting, etc. either by sub-tier or in-house) the supplier shall perform a 100% Rockwell and/or Conductivity, as applicable, inspection of the parts prior to application of the finishes. Such Rockwell and/or Conductivity inspection shall be performed per specifications required by Harlow's customer. Supplier shall provide written certification of 100% Rockwell and/or Conductivity, including actual upper and lower readings and specification (including revision level) to which Rockwell and/or Conductivity inspection was performed.

Where Harlow Aerostructures LLC supplies the material for this order, the supplier shall certify on each shipment that the supplier has not made any unauthorized substitutions of the material. Harlow's Quality Assurance must approve any substitution of material. Harlow will conduct 100% Rockwell and/or Conductivity inspection, as applicable, on parts directly contracted to thermal processing suppliers. Harlow's inspection shall not be construed as relief to the processing supplier to perform as required to the specification(s).

**Q3. SPECIAL PROCESSING**  
 If this order is for production work that includes special processes, the supplier shall use only those processors approved by Harlow's customer for that process. Supplier should contact Harlow's Quality Assurance for assistance in assuring that supplier uses only approved processors. Original processor certification must be retained on file and traceable to end item products delivered to Harlow Aerostructures, LLC. It is responsibility of Harlow suppliers to validate/verify that all special processes are performed to latest engineering requirements and are approved by the applicable Harlow customer(s) prior to shipping any product to Harlow Aerostructures, LLC.

Note: All items delivered to Harlow Aerostructures, LLC must maintain Job/Lot traceability.

**Q4. RAW MATERIALS**

Where the supplier supplies raw material (e.g., bar, castings, extrusion, forging, plate, sheet, etc.) either directly to Harlow Aerostructures LLC or purchases the material for use in manufacturer of machined or sheet metal products for Harlow Aerostructures LLC (**standard hardware items are specifically excluded from this paragraph**), the supplier shall assure that the material is manufactured and distributed by sources approved by Harlow's customer. It is responsibility of Harlow suppliers to validate/verify that when material is not supplied by Harlow that material shall conformed to the latest engineering /standards / specification and is approved by the applicable Harlow customer(s) prior to shipping any product to Harlow Aerostructures, LLC. Raw material test reports and/or notarized reports, in accordance with all applicable specifications shall be legible and originals of the material certifications shall be sent to Harlow with each shipment and a copy must be kept on file and traceable to end item products delivered to Harlow Aerostructures, LLC.

Harlow's Quality Assurance must approve any substitution of material, size and/or shape.

Note: All items delivered to Harlow Aerostructures, LLC must maintain Job/Lot traceability.

Where our customer does not specifically require approval of the manufacturer and/or distributor of the raw material then:

Where the material is for use on commercial aircraft, the supplier shall assure that the material is manufactured in the United States of America or in a country with which the United States of America has ratified a Bi-Lateral Airworthiness Treaty. For a list of countries with bi-lateral agreements consult FAA AC 21-18 and AC 21-23.

Where the material is for use on military aircraft and the material is considered a specialty metal (as defined in DFARS 252.225-7014), then the supplier shall assure that the materials are melted in the United States of America, its possession, or Puerto Rico unless supplier gains prior written approval through Harlow Aerostructures LLC from our customer for use of other sources.

Certificate of compliance with actual results of physical and chemical test reports must accompany each shipment where supplier furnishes the raw material. Material must be identified by heat lot and/or heat treat load, (if applicable). Test reports must be traceable to the material lots supplied.

Supplier should contact Harlow's Quality Assurance for assistance in assuring the source of raw material supply is acceptable to Harlow's customers.

**Q5. STANDARD HARDWARE ITEMS**

Where the supplier supplies hardware items (e.g., Bolts, Nuts, Nutplates, Rivets, Loc Bolts, Hi-Locs, Collars, etc.) of standard design (whether industry or Harlow's customer standard) and the hardware is controlled by a qualified producer's list (QPL) the supplier shall provide a certificate of source of supply when the direct Harlow's supplier is not on the QPL.

Where Harlow's customer requires the distributor to be approved, then the supplier shall only use and or supply hardware from Harlow's customer approved distributor.

Supplier shall provide a certificate of supplier's source of supply where the product is controlled by a qualified producer's list (QPL) when the supplier is not on the QPL.

Supplier should contact Harlow's Quality Assurance for assistance in assuring the source of standard hardware items is acceptable to Harlow's customers.

**Q6. FIRST ARTICLE INSPECTION REPORT**

For production work done to designs and/or specifications furnished by Harlow Aerostructures LLC, the supplier will provide a First Article Inspection Report in the following situations: (ref HSQR-001, www.harlowair.com)

- A. For the first part on all first production lot. First Article Part shall be clearly marked/tagged F.A.I.
- B. Delta FAIR; First production lot after engineering changes and/or changes to manufacturing processes that may affect conformance to design, (Fit, Form or Function).
- C. Changes in manufacturing source(s), process(es), inspection method(s), location of manufacture, tooling or materials, numerical control program or translation to another media that can potentially affect fit, form or function. . In most cases, the First Article Inspection Report (Delta) need only record those features that may have changed.
- D. A lapse in production for two years warrants a new FAIR.

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At the minimum a First Article inspection report must include the part number, a listing of each engineering feature, a listing of the actual measurement of each engineering feature and a record of the person who inspected that engineering feature. Suppliers are required to use SAE AS9102 First Article Inspection Report Form.

**Q7. NONCONFORMING MATERIAL CONTROL**

Supplier shall submit all nonconforming material to Harlow's Quality Assurance for approval prior to shipping of the product. The supplier may use documents or supplier's documents to identify discrepant material.

Supplier shall investigate the cause of each nonconformance, whether identified by supplier or by Harlow Aerostructures LLC. The supplier shall establish corrective action to preclude the recurrence of the nonconformance. The supplier shall provide a statement of the cause and the corrective action to Harlow's Quality Assurance whenever the supplier is submitting a nonconformance for Harlow's approval. The supplier shall provide a statement of the cause and the corrective action to Harlow's Quality Assurance within ten days whenever Harlow has identified a nonconformance to the supplier.

If any part of this Purchase Order is defective in design or workmanship or otherwise not in conformity with the requirements of this Purchase Order, Harlow Aerostructures, LLC may elect in its sole and reasonable discretion to: (a) return the nonconforming parts for replacement (b) to cause Supplier to rework or repair the nonconforming parts; (c) rework or repair the nonconforming parts and recover reasonable expenses of rework or repair from Supplier, or in the event Supplier is unable to remedy the nonconforming condition, Harlow Aerostructures LLC reserves the right to reject and return the nonconforming parts, not to be replaced and with full refund of all costs paid by Harlow Aerostructures, LLC, Inc. for the parts (without any deductions by Supplier). All nonconforming part(s) returned by Harlow Aerostructures, LLC to the Supplier and all replacement parts shipped to Harlow to replace nonconforming part(s) shall be at Supplier's risk and expense, including transportation charges.

**Counterfeit Parts Prevention:** (ref HSQR-001, [www.harlowair.com](http://www.harlowair.com).)

**Q8. STATISTICAL PROCESS CONTROL (SPC)**

Suppliers (other than distributors) must have SPC fully implemented if applicable and approved by Harlow Aerostructures LLC. Contact Harlow's Quality department to discuss plans and implementation.

If supplier has an SPC plan approved by Harlow's customer, then supplier shall provide evidence of the SPC approval to Harlow's Quality department.

For all shipments made after supplier's SPC plan is approved, supplier shall retain all SPC charts on file for Harlow's review. Supplier shall provide copies of these charts upon request. (e.g. AS9103 - Variation of Key Characteristics)

**Q9. RECORD RETENTION**

Supplier shall retain records on file at a minimum of seven (7) years from the date of shipment.

**Q10. OPTION TO RE-SCHEDULE**

Harlow Aerostructures, LLC shall have the option to re-schedule by written notice, in whole or in part, this order. If Harlow exercises the option to re-schedule, Supplier shall not incur any additional costs in connection with the agreement after receipt of notification. Harlow Aerostructures, LLC agrees that we will promptly negotiate an equitable adjustment with Supplier, including compensation for actual cost completed up to the re-scheduling provided that it receives a claim for adjustment in writing, specifying the amount claimed with supporting cost figures within thirty (30) days from the date of receipt by Supplier of the notification of the exercise of the option. The amount claimed shall not exceed 10% per year herein less Supplier's charges for Supplier's performance to complete. Supplier acknowledges that the amount specified in any claim for adjustment shall, in all cases, constitute the maximum due from Harlow Aerostructures, LLC to Supplier under this agreement.

**Q11. SHIPMENTS, DELIVERIES AND PACKING**

Harlow Aerostructures, LLC reserves the right to reject or return at Supplier's risk and expense shipments "made in advance of requirement schedules", or to defer payment on advance deliveries until scheduled delivery dates. (Harlow's On-Time shipping window is +10 Manufacturing days/-0 days Late.) No over shipments accepted without prior approval in writing. No charge will be paid by Harlow Aerostructures, LLC for packing, boxing, or cartage unless specified on the face hereof. Loss of or damage to any goods not packed in such a manner as to insure proper protection to same shall be borne by Supplier. Each package of goods shipped must contain a memorandum showing supplier's name, contents of package and the purchase order number on the face thereof. Title and risk of loss and damage to material purchased hereunder by Harlow Aerostructures, LLC shall vest to Harlow Aerostructures, LLC when the material has been delivered at the F.O.B. point.

**Q12. RIGHT OF ACCESS AND RIGHT TO INSPECT AT SOURCE**

Harlow Aerostructures, LLC/Harlow Customer, Government (DCMA) and/or Regulatory authorities (FAA) reserve the right of access to suppliers facilities to witness or otherwise monitor progress in completion of this purchase order. This right of access shall include, but not be limited to, the right to inspect any or all work performed under this order. Harlow's Quality Assurance will notify the supplier in advance of shipping date, if Harlow Aerostructures, LLC/Customer/ source inspection is required.

**SPECIAL CLAUSES**

**Qa. LIMITED SHELF LIFE ITEM**

This order is for a limited shelf life item. Supplier shall identify the container, package and packing sheet as follows:

- Governing Specification
- Name of Manufacturer
- Date of manufacture (cure date for elastomers)
- Batch Number/Net Contents (as applicable)
- Storage Requirements (e.g., time sensitive / temperature, etc.)
- Expiration date

**Qb. SOURCE INSPECTION**

1. Harlow's acceptance is required prior to shipment. Notify Harlow's Quality Assurance at least 48 hours before shipment. Call (316) 265-5268 between the hours of 8:00 a.m. and 3:30 p.m., Wichita local time (Central Time Zone), to notify Harlow of items ready for source inspection.
2. Harlow's customer inspection acceptance is required prior to shipment of this order. Upon receipt of this order, supplier shall contact Harlow's Quality Assurance to coordinate and plan our customer's inspection.
3. Government inspection is required prior to shipment from your plant. Upon receipt of this order, promptly notify the Government Representative who normally services your plant so that appropriate planning for Government inspection can be accomplished.
4. On receipt of this order, promptly furnish a copy to the Government Representative who normally services your plant or, if none, to the nearest Army, Navy, Air Force, or Defense Supply Agency Inspection Office. In the event the representative or office cannot be located, Harlow's Quality Assurance should be notified.

**Qc. BOEING D6-1276 APPROVED MANUFACTURING PLANS**

Boeing's D6-1276 document applies to this order. All manufacturing plans for this order must meet the requirements of D6-1276. Supplier must submit the detailed manufacturing plans to Harlow's Quality Assurance. Harlow will submit the manufacturing plan to Boeing for approval. Manufacturing plans must be approved prior to supplier beginning work on this order.

**Qd. FIRST PART APPROVAL REQUIRED**

Supplier shall submit first part to Harlow's Quality Assurance for inspection acceptance prior to running the production of parts on this order. Harlow Aerostructures, LLC will provide supplier with an inspection report stating the findings of our inspector. All nonconforming issues raised by Harlow's Quality Assurance must be corrected before production of parts on this order.

**Qe. CERTIFICATION OF OZONE DEPLETING SUBSTANCES**

Supplier must provide one of the following certifications on each shipping document:

- The supplier certifies these goods were not manufactured with and do not contain ozone depleting substances.
- The Supplier certifies these goods are in compliance with the ozone depleting substances labeling requirements under US law.

If certification to paragraph B is made, precautionary labeling must accompany the statement and must comply with 40 CFT Part 82 Subpart E.

**Qf. APPROVED MANUFACTURING PLAN**

Prior to beginning production on this order supplier must provide and obtain Harlow's Quality Assurance Approval of the manufacturing plan. The plan must include the raw material required for manufacture (by alloy, temper and specification), detail of the manufacturing process, define the special processes and identify the sub-tier suppliers (by name and complete

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address) who are to perform the special process. All specifications noted in the manufacturing plan must be to the current applicable revision level as of the date of placement of this order, unless otherwise specified in the purchase order.

**Qh. CERTIFICATION OF CALIBRATION**

This order is for calibration services. Each gauge calibrated for Harlow Aerostructures, LLC must be accompanied with a Calibration Certification. The following is the minimum information that must be included on the Calibration Certification.

- Harlow Aerostructures, LLC gauge serial number and description.
- Date of the calibration.
- Serial Number of the Master you used for calibration of Harlow's gauge.
- Last calibration date and next calibration due date of the Master used.
- NIST date, trace number or foreign equivalent
- Statement that the calibration meets one of the following calibration system standards; ANSI/NCSL Z540-1, ISO 10012-1, OR MIL-STD-45662A.: ANSI/NCSL Z540-1 is the most preferred calibration system to Harlow Aerostructures LLC. ISO 10012-1 is second preferred. MIL-STD-45662A is least preferred.
- Actual signature or identifying inspection stamp of the person who is certifying the calibration.