QARBON AEROSPACE

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Subject:

Program Specific Requirements – Supplement to QA-MAN-0002

Program Specific Requirements



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1. General Information

In addition to the QMS requirements identified in Table 1 of QA-MAN-0002- Supplier Quality Assurance Manual (SQAM), the following additional program specific requirements apply to all POs.

2. Airbus

The seller shall assure that all goods supplied are supplied in conformance with the quality requirements of Airbus. Airbus work associated with Qarbon Aerospace POs is in furtherance of Airbus Projects.

Sellers approved for the Airbus program must also comply with relevant Airbus requirements as distributed by Airbus.

Seller shall only utilize Airbus approved sources for externally procured material or processes, as defined in the QSPL.

2.1. Certificate of Conformance

All deliveries must be accompanied by a legible Certificate of Conformity, which states the seller's Airbus approval number and a statement of conformance such as:

- 1. Manufacturers "(Seller) certifies that the whole of the supplies detailed hereon have been manufactured, inspected, tested and unless otherwise stated above conform in all respects to specification(s), drawing(s), and contract/order relative thereto and the requirements of Airbus"
- 2. Distributors "(Seller) certifies that the whole of the materials and/or parts covered by this certificate have been received under cover of the release certificates quoted hereon, are in the same condition as when received and are re-issued in accordance with Airbus requirements." A copy of the manufacturers original release documentation should be included with the delivery when seller is a distributor. The original manufacturers approval number is not required on their release documents, unless the manufacturer's product is produced to a specific Airbus specification.

2.2. Special Processing

When an Airbus approved technique, sheet is required for processing of a part, the technique sheet must be submitted to Qarbon Aerospace for review and approval prior to submittal to Airbus. Qarbon Aerospace will advise the supplier of approval and authorize submittal to Airbus. Upon receipt of Airbus approval, Supplier must submit a



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copy of their approval to Qarbon Aerospace for our records. Any changes to the technique sheet must be submitted to Qarbon Aerospace prior to submittal to Airbus for approval.

2.3. "As Planned" Part Numbers

In the case that the part number on the PO differs from that shown on the engineering (Aside from part issue suffix), the change in identification indicates an "As Planned" or "Condition of Supply Information" applies. The condition of supply information will be noted in the PO text or in Qarbon Aerospace provided planning (referenced in the PO).

2.4. Measurement and Inspection

Airbus articles procured under Qarbon Aerospace POs shall be inspected utilizing inspection equipment manufactured and designed to measure in the same measurement system defined by the engineering drawing. The use of conversion factors cannot be used as an alternative.

3. Boeing

3.1. Boeing Commercial and Military Programs - Common Requirements

3.1.1. First Article Inspection (FAI):

The Qarbon Aerospace commercial contract flow down from Boeing requires all AS9102 compliant First articles be loaded into Net Inspect. The Supplier is responsible to load all new baseline FAI's into Net Inspect as of October 1, 2014. The original baseline FAI's prior to October 1, 2014 need to be available but are not required as an attachment. A baseline FAI refers to the last "Full Approved FAI" for that part number. The Supplier is responsible for all FAI's to be loaded into Net Inspect. This includes all PO line items and the details that feed into them.

- Note 1: If Qarbon Aerospace is purchasing a small sub-assembly/ kit at the PO line-item level, then the subassembly/ kit FAI and all of the associated detail FAI's that make the subassembly / kit shall be loaded into Net Inspect. The detail FAI's shall be linked to the PO Line Item in Net Inspect. Net Inspect is available for training if required.
- Note 2: All requirements for FAI approval prior to Shipment shall remain in effect at the PO line-Item level per the site level requirements defined in the FAI Section of this document. This does not include prior approval in Net Inspect of the detail FAI"s that feed the Sub assembly. All FAI's must be identified and linked within Net Inspect.



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It is mandatory that Form 1 be completed within Net Inspect. Qarbon Aerospace's FAI requirements are delineated in SC-PRO-00.00.SQR11 Supplier Quality Requirements for First Article Inspection. All Qarbon Aerospace suppliers will be assessed to SC-PRO-00.00.SQR11.

Validation of Raw Material Test Reports: When the seller utilizes test reports to accept seller purchased raw material, the following requirements apply.

Test reports shall be checked 100% against seller's requirements and applicable Specifications.

Validation test requirement: Seller shall periodically validate test reports for raw material accepted on the basis of test reports. That validation shall be accomplished by seller or other independent party through periodic, scheduled tests of raw material samples. Schedules for frequency of tests will be established by seller based on historical performance of the raw material supplier.

- Seller shall retain test reports provided by the raw material supplier, as well
 as seller's validation test results as quality records traceable to the
 conformance of goods, as specified elsewhere in this contract. Seller shall
 have implemented process and procedures for "Validation of Raw Material
 Test Reports".
- 2. Seller shall implement process and procedures for "Validation of Raw Material Test Reports".

3.1.2. FOD Risk Assessment

The supplier shall perform a documented risk assessment for the impact of FOD to product(s) that they provide to Qarbon Aerospace and The Boeing Companies, per D6-85622.

Note: See Supply Chain Management Handbook (SCMH) FOD Program Robustness Assessment Tool for future guidance.

The risk assessment shall have documented results that at a minimum include the following:

- Product/ process family characteristics.
- Product/ process family sensitivity to FOD.
- Foreign object (FO) detectability.



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The supplier shall implement, manage, and execute an effective FOD prevention program based on the results of the risk assessment. Program requirements shall be progressively more stringent based on the risk level defined.

3.1.3. Procurement

This procurement is under Boeing's Federal Aviation Administration (FAA) issued Production Certificate 700 quality system supplier control program. Unless explicit contractual direction is given to the contrary, no articles (or constituent parts thereof) ordered by Boeing Commercial Airplanes shall contain any Federal Aviation Administration- Parts Manufacturer Approval (FAAPMA) markings and the accompanying paperwork (e.g., packages, shippers, etc.) shall not contain any FAA-PMA markings.

The seller will place the following statement on the shipping documentation of all shipments to Qarbon Aerospace for Boeing programs:

"Seller hereby acknowledges that the parts and/or materials being shipped under this order is intended for use under Boeing's Federal Aviation Administration (FAA) issued Production Certificate 700 and no articles (or constituent parts thereof) or the accompanying paperwork (e.g., packages, shippers, etc.) contain any Federal Aviation Administration- Parts Manufacturer Approval (FAA-PMA) markings."

Delegated Product Release Supplier Delegated for Product Release must meet the requirements of AS9117

3.2. Boeing Military (V-22 & T-7A Programs)- Additional Requirements

ITAR Controls/Requirements apply on the noted programs.

3.2.1. First Article Inspection (FAI):

Seller shall perform First Article Inspections (FAI) in accordance with AS/EN/SJAC 9102 Aerospace First Article Inspection Requirement.

FAI is required for unique single run production orders not intended for on-going production, regardless of exclusion in AS9102 (section 1.3 Applicability)

Boeing reserves the right to conduct surveillance of the Sellers FAI, referred to as Boeing First Article Inspection (BFAI). BFAI may include in-process inspections to be accomplished during performance of the Seller's FAI. When a BFAI is required, the Seller will be notified by Qarbon Aerospace to schedule the BFAI prior to the start of related manufacturing and/or processing.



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In the event a BFAI is scheduled, the supplier shall make available to Qarbon Aerospace and Boeing's Supplier Quality Representatives (SQR) the following:

- 1. Applicable purchase document, material/process certifications, manufacturing and inspection records; including inspection plans developed to identify progressive inspection checkpoints for the FAI as a result of coordination and planning with SQR's.
- 2. Applicable Design Data
- 3. Applicable material review actions
- 4. Applicable acceptance and qualification test results
- 5. Applicable record(s) of Boeing approval for non-Boeing drawing and test procedures.

3.2.2. Validation of Raw Material Test Reports:

When the Seller utilizes test reports to accept Seller purchased raw material, the following requirements apply:

- 1. Test reports shall be checked 100% against Seller's requirements and applicable specifications.
- 2. Validation test requirement: Seller shall periodically validate test reports for raw material accepted on the basis of test reports. That validation shall be accomplished by Seller or other independent party through periodic, scheduled test of raw material samples. Schedules for frequency of test will be established by Seller based on historical performance of the raw material supplier.
- 3. Seller shall retain test reports provided by the raw material supplier, as well as Seller's validation test results as a quality records traceable to the conformance of Goods, as specified elsewhere int the Contract.
- 4. Buyer and Customer furnished raw material is not subject to the validation test requirement.
- 5. Seller shall implement processes and procedures in support of this clause.

3.2.3. Digital Product Definition (DPD) / Model Based Definition (MBD):

Seller shall conform to Boeing's document D6-51991 "Quality Assurance Standard for Digital Product Definition at Boeing Suppliers" and the following shall apply:



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1. If Seller receives Buyer's DPD geometry in MBD format, Seller is required to obtain Buyer's approval as MBD-capable.

- 2. If Seller provides Buyer's DPD geometry to Seller's subcontractors in any format, Seller shall impose Boeings document D6-51991 as a requirement and is responsible for its subcontractor's conformance.
- 3. If Seller provides Buyer's DPD geometry in any format to Seller's subcontractors, Seller shall comply with all applicable export laws.
- 4. Supplier's CMM/CMS Report must be created in an acceptable format that meets ALL requirement(s) of D6-51991. The report must provide sufficient information and properly present the necessary data that effectively demonstrates full compliance to D6-51991 as well as acceptability to the authoritative engineering. This acceptable format will be provided in a template developed by the buyer (Qarbon).
- 5. Supplier must provide an acceptable Inspection Plan that will accompany every CMS/CMM Report. This acceptable format will be provided in a template developed by the buyer (Qarbon).

3.2.4. Additional T-7A Program Specific Requirements

When manufacturing parts to BAC5114 (Enhanced Process Control for CNC Machining):

- Part-specific machining CNC programs must be programmed to nominal engineering requirements. Any deviations from nominal engineering requirements must be approved by Qarbon Aerospace's technical organization.
- 2. Final part inspection must be performed using engineering datums per GD&T rules specific to the geometry type of Datum.

NOTE: IF BEST FIT ALIGNMENT IS NECESSARY, THE ENGINEERING DATUMS MUST BE USED WITH THE PROPER APPLICATION OF THE GD&T RULES SPECIFIC TO THE GEOMETRY TYPE OF DATUM.

When manufacturing parts to PS20722 (Hole Masking for Enhanced Process Controlled Metallic Parts):

1. 9M1084 plugs may only be used once (ONLY NEW PLUGS) and upon removal, discard accordingly.



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*****NO REUSAGE OF 9M1084 PLUGS IS ALLOWED. AFTER ONE USE, ALL PLUGS MUST BE SEGREGATED AND DISCARDED. *****

- 1. Evidence of proper plug insertion for each operation is required. When both pickling and anodizing are performed on the same part or groups of parts, there shall be two separate hole masking operations. Hence, two different sets of objective evidence.
- 2. A digital date/time stamped photograph shall be taken of each part or group of parts.
- 3. The photographic Objective Evidence shall specify (or be clearly linked to) the following:
 - Date and time stamp
 - The manufacturing/process record (e.g., work order, shop traveler, etc....)
 - The related process (e.g., pickling, anodize)
- 4. The supplier shall retain the digital photo(s) in the manufacturing/processing record. Note: These records will be made available to Qarbon upon request(s).

100% Inspection Criteria:

1. Qarbon requires 100% inspection for all characteristics.

3.3. Applicable Boeing Quality Clauses and Notes

The following Quality Clauses are applicable to all T-7A Purchase Orders issued to suppliers and subsequently sub-tier suppliers:

- Q004 Boeing QMS Requirements for Suppliers
- Q011S Supplemental Quality Requirements
- Q020 D1-4426 Approved Process Source
- Q029 DPD (Digital Product Definition / MBD (Model Based Definition)
- Q033 BAC5114 NC Programming and Machine Controls Specifications-Contractual and Process Control Requirements
- Q053 Buyer's Source Inspection Required
- Q074 First Article Inspection and Boeing BFAI



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- Q091W Certification of Conformance
- Q132 Counterfeit Parts
- Q227 Record Retention
- Q300 Corrective Action
- Q186 FOD Prevention Program
- Q320 Seller's NOE
- Q831 Validation of Raw Material Test Reports
- Q836S Instructions for Submittal and Handling of External Nonconformance **Documents**
- Q927 AS9117 Requirement for Delegated Product Release Verification Copies of the above noted Quality Clauses may be obtained from the assigned Qarbon Aerospace Buyer.
- GTA NO. G1700007 GTA No. G1700007 Applicable Modified GP7 Terms
- GP7 Fixed Price Goods Contract Under U.S. Government Prime Contract

3.3.1. Audits

The following audits will be performed by Qarbon Aerospace (or a delegated 3rd party). Audits may be invoked on-site and/or remote. Note: Audits will continue until acceptable level of proficiency is achieved. Proficiency will be determined based on supplier performance as defined in QA-MAN-0002 - Supplier Quality Assurance Manual.

- BAC5114 will be conducted every 3 years.
- PS20722 will be conducted every 2 years

3.3.2. Tooling

All jigs and tools provided to Seller and those manufactured by Seller in support of work carried out shall be inspected by Seller prior to use for completeness, freedom from damage and evidence of inspection.

3.4. C-17 Program

The following requirements are unique to the C17 Program and the supplier should pay particular attention to these areas to ensure compliance:



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1. Fracture Critical parts and the requirement for traceability are controlled by Boeing book form drawings 17P9M2004 and 17P9M2005.

- 2. Assignment of serial numbers is handled by Qarbon Aerospace for Category A parts there are no exceptions.
- 3. Where a Government or Industry Standard is shown on an engineering drawing in addition to the Boeing DPS/DMS standards, the use of the Boeing standards is mandatory for suppliers fabricating or assembling parts per Boeing design requirements.
- 4. When DPS 4.747 is invoked per the drawing, NDI procedures must be submitted and approved by Qarbon Aerospace NDI Level 3 in the applicable method prior to performing NDI.
- 5. Supplier Delegated for Product Release must meet the requirements of AS9117

4. Embraer Program

In addition to the Quality System requirements identified in Table 1, the following Embraer documents and appendices shall apply to all Purchase Orders.

- 1. Embraer Quality Requirements for Suppliers (EQRS)
- 2. Embraer Production Part Approval Process (EPPAP)

These documents can be found at: http://www.embraer.com/EQRS/index.html Special Processing for the Embraer program shall be performed by processors approved listed on Embraer ASL, and Qarbon Aerospace Embraer ASPL - Embraer Qualify Supplier.

Supplier shall ensure process controls are established and required process control tests are accomplished at required intervals to ensure continued compliance to process specifications.

Records for all process control tests, e.g. monthly or lot and inspection of special processed items shall be maintained. Records for special controlled parts, software and serialized parts shall be maintained for at least fifty (50) years. Records for all other parts shall be maintained for ten (10) years.

Note: If the requirements in this SQAM and the requirements in the documents referenced in the paragraphs above conflict, the requirements in the referenced documents take precedence.

First Article Inspection (FAI): The Supplier is responsible for all FAI's to be loaded into Net Inspect. This includes all PO line items and the details that feed into them.



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Note 1: If Qarbon Aerospace is purchasing a small sub-assembly/ kit at the PO line item level, then the subassembly/ kit FAI and all of the associated detail FAI's that make the subassembly / kit shall be loaded into Net Inspect. The detail FAI's shall be linked to the PO Line Item in Net Inspect. Net Inspect is available for training if required.

Note 2: All requirements for FAI approval prior to Shipment shall remain in effect at the PO line Item level per the site level requirements defined in the FAI Section of this document. This doesnot include prior approval in Net Inspect of the detail FAI's that feed the Sub assembly. All FAI's must be identified and linked within Net Inspect.

It is mandatory that Form 1 be completed within Net Inspect. Qarbon Aerospace's FAI requirements are delineated in SC-PRO-00.00.SQR11 Supplier Quality Requirements for First Article Inspection. All Qarbon Aerospace suppliers will be assessed to SC-PRO-00.00.SQR11.

5. Gulf Stream

5.1. G280 Program

In addition to the Quality System requirements identified in Table 1, the following requirements and appendices shall apply to all PO's for the G280 Program.

 Each packing sheet accompanying a shipment against this purchase order must contain the following statement: "THIS MATERIAL IS PROVIDED FOR USE ON THE G280 PROGRAM."

5.1.1. Required Specification and Approved Source Listings.

When specifications and/or processes are listed within the detail design, specification control or envelope drawing, incorporated by this Purchase Order that are copy controlled by organizations other than the Product Design Authority (e.g. AS, AMS, ASME, NASM, etc.), Seller shall be responsible for obtaining these documents from the issuing organization or appropriate distribution source. Seller must adhere to the latest revision of Qarbon Aerospace or Qarbon Aerospace 's customer specification and/or process, unless otherwise specified within the Purchase Order.

5.1.2. Tooling

All jigs and tools provided to Seller and those manufactured by Seller in support of work carried out shall be inspected by Seller prior to use for completeness, freedom from damage and evidence of inspection. All tooling is to be manufactured per Gulfstream Aerospace Corporation (GAC) Tooling Design Manual, Tooling and Planning Manual for Subcontractors and Detail Tool SD020



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Tooling Manual Standards, as applicable. Seller is responsible for establishing cyclic inspection (where applicable) and verification procedures (with GAC approval) of all tooling. To avoid damage and degradation, tools shall be safely stored and shall not be exposed to external environment. Tools shall only be used to fulfill contractual obligations to Qarbon Aerospace and shall not be sold, leased or disposed of without written approval from Qarbon Aerospace.

5.1.3. Israel Aerospace Industries Commercial Aircraft Group (IAI/CAG) Certification for Special Processes

All Special Processes performed by Seller or Seller's Sub-tier suppliers shall be certified by IAI/CAG or GAC as applicable, prior to starting the implementation of any Special Process. For Special Processes not currently certified by IAI/CAG, an audit must be conducted by IAI/CAG or GAC at the performing sites. Upon successful completion of all audit tasks, certification may be given to the Seller and Seller's Sub-tier suppliers for the applicable Special Processes.

5.1.4. Process Control

Seller and its Sub-tier suppliers shall ensure that all appropriate personnel are familiar with IAI/CAG and/or GAC engineering's drawing and Process Specification (PS) for the Program and that controlled copies of the engineering are made available at the place of operation. Upon receipt of Purchase Orders and prior to planning the work, Seller shall verify thatall processes are within the approved scope of work. Seller shall incorporate the engineering within its route cards, travelers or job instructions and only qualified equipment and/or operators shall perform the process.

5.1.5. Seller's Inspection and Test

Seller shall prepare an appropriate Inspection Plan in order to ensure all its production processes, parts and assemblies comply with the drawings/engineering data. Seller, which performs acceptance sampling in lieu of one hundred percent (100%) inspection, shall develop such Inspection Plan from recognized industry standards (SAE ARP9103) with C = 0.

Qarbon Aerospace reserves the right to review and approve Seller's acceptance/ verification test plans, software and procedures. Revisions to approved software/documents must be coordinated with Qarbon Aerospace prior to use.

When statistical process control is used as an option for either in-process or final inspection, Seller must satisfy the provisions for Variation Management.



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In all cases, inspection and test requirements identified by engineering drawing/ model or specification take precedence over the inspection options described herein. Qarbon Aerospace reserves the right to require 100% inspection for selected characteristics.

Or,

For a period no less than the duration the Seller is listed in the Qualifying entities approval documents, (Qualified Products List, Approved Processors List, etc.), as being qualified / approved for such items / processes.

The prevailing retention period shall be the greater of the two listed conditions.

5.1.6. Identification Marking and Traceability of Parts and Assemblies

Identification marking for noncritical metallic and non-metallic parts shall be compliant with **PS500100 IDENTIFICATION OF AIRCRAFT PARTS**.

Non-Critical Part traceability does not require serialization; however, traceability to original raw material Batch/Lot numbers, special processing, and inspection/test shall be documented and maintained.

Traceability is required on all Critical Parts. Critical Parts shall be identified on the drawings bymeans of a flag note linked to the Critical Part and recorded in the drawing parts list. The flag note to be used must be the unchanged standard note MA03 which reads as follows: MA03: CRITICAL PART – PROCESSING, HANDLING, AND INSPECTION PER IAI PS 901500.

Critical Part traceability shall be compliant with IAI procedure PS901501

Identification, Marking, Handling, Processing and Inspection of Critical Parts shall be compliantwith **IAI procedure PS901500.**

The preferred format for serialization is two (2) alpha characters followed by four (4) numeric characters (i.e. XX0001) the first two (2) characters being the alpha code utilized for identifying the part fabricator. All serial number numeric values shall be issued in ascending order and shallbe non-repetitive.

Alternatively, Seller may use its system for part identification (serial number equivalent) provided that definite traceability can be determined from raw stock to finished item. The alternate system shall be approved by Qarbon Aerospace prior to manufacture. Once a serial number is assigned it shall never be changed or reused for that part number. If a part is rejected and scrapped or it is lost, the



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serial number shall go out of existence with the part. The replacement part shall be assigned a new serial number. All serialnumbers delivered and scrapped shall be accounted for in Seller's Quality Records.

Prior to fabrication, raw material batch number shall be documented on router/ traveler to ensure documented traceability of raw material batch number to fabricated part serial number.

Given any conflict or question exist, regarding identification, consult the engineering. **Regrading Material**. The disposition "regrade" shall not be used on products of Qarbon Aerospace and Qarbon Aerospace customer's proprietary design.

5.1.7. Procurement of Raw Materials and Hardware

Seller or its Sub-tier supplier shall provide objective evidence of the conformance of all procured supplies and services. The objective evidence shall be maintained on file by Seller and/or Seller's Sub-tier suppliers and made available for review to Qarbon Aerospace, its customers or involved authorities (CAAI and FAA).

- a. Raw material and hardware shall be procured from any Seller approved source. If IAI sources, approved to an IAI 1E category, are used; conducting periodic independent lab verification inspections is not required. A list of IAI/CAG approved 1E suppliers can be provided upon request.
- b. Raw material and hardware provided against this purchase order shall be physically identified with the following: "G280 PROGRAM." It is acceptable for this marking to be applied to the hardware packaging.
- c. For raw materials that have an associated heat or lot number, each piece shall also be identified with heat and /or lot number.
- d. Raw material and fastener chemical/physical test reports shall be verified by a third party laboratory a minimum of once every twelve (12) months for each manufacturer.
- e. In case procurement is not made from an IAI frame work agreement supplier (1E), the frequency and sampling plan of incoming laboratory testing will be per PS850110 for Fasteners and PS850100 for Raw Material.
- f. Laboratory tests shall be performed by A2LA accredited laboratories. A2LA accredited laboratories can be viewed at www.A2LA.org.



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g. Qarbon Aerospace approved substitute hardware is identified in the latest version of P30 Alternative Fasteners 30P045-060926.

5.1.8. Control and Storage of Inventory.

Seller shall strictly control all inventory of Qarbon Aerospace and Qarbon Aerospace 's customer's proprietary Product that is in excess of Purchase Order quantity in order to prevent Product from being sold or provided to any third party without prior written authorization from Qarbon Aerospace. Seller shall physically separate and clearly identify raw materials, hardware and parts stored for Qarbon Aerospace Programs. Products shall be shipped according to Purchase Order requirements.

Notification shall include above information at a minimum. Seller shall notify the Qarbon Aerospace Procurement Agent who manages the Purchase Order and the Qarbon Aerospace Quality Assurance organization. Nonconforming structures or systems, which require disassembly to support a failure or cause analysis investigation, will require a documented report. Documented reports will be made available for Qarbon Aerospace and/or IAI-CAG review upon request.

5.1.9. Supplier Quality Performance

Seller shall be responsible for achieving and maintaining a minimum quality performance level of either:

A Qarbon Aerospace Supplier Quality Acceptance Rating of 99.5% as calculated by taking the ratio of acceptable units delivered for the prior twelve (12) month period. This calculation may be based on a composite performance score from all Purchase Orders between Seller and the Qarbon Aerospace contracting site, or specific by Program to which the Master Order Agreement applies; or If Seller fails to achieve and maintain the acceptable performance criteria above, Seller shall be responsible for one or more of the following as directed by Qarbon Aerospace at no additional coststo Qarbon Aerospace:

- a. At its own expense, Seller shall obtain source inspection from a Qarbon Aerospace qualified contractor.
- b. Seller shall reimburse Qarbon Aerospace contracting site(s) for reasonable Qarbon Aerospace costs incurred at the point of manufacture. Such costs shall include travel, lodging and Qarbon Aerospace labor costs.



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5.1.10. Flow Down to Sub-tier Suppliers.

For articles, processes and raw materials purchased from Subtier suppliers in support of this Purchase Order, Seller shall ensure that all Purchasing Documents include all Quality and Technical Requirements required, including key characteristics as applicable.

NOTE: Per CAG9000 Section 14.3-2, the supplier shall indicate on his purchase order to subcontractors a statement "The goods are designated for IAI-CAG"

The following quality requirements are applicable only to those purchase orders with sellers that are classified by IAI as a Framework Agreement Supplier (1E):

- 1. The goods in this P.O. are designated for IAI products.
- 2. The Quality Assurance Plan between IAI and the seller applies to this P.O.
- 3. The goods in this P.O. shall be inspected and tested by the seller in accordance with the Quality Assurance Plan.
- 4. Each shipment must be accompanied with a shipper and a Certificate of Conformance (COC) stating that goods are in compliance to the approved Quality Assurance Plan.
- 5. The A/M certificate (COC) shall be signed by the seller's inspector and the IAI delegate inspector at the seller's site.

5.2. G650 Program

In addition to the Quality System requirements identified in Table 1, the following requirements and appendices shall apply to all PO's for the G650 Program.

5.2.1. Required Specification and Approved Source Listings

All applicable process specifications, tooling specifications and Approved Source Listings shall be provided by Qarbon Aerospace to the responsible supplier. When specifications and/or processes are listed within the detail design, specification control or envelope drawing, incorporated by this Purchase Order that are copy controlled by organizations other than the Product Design Authority (e.g. AS, AMS, ASME, NASM, etc.), Seller shall be responsible for obtaining these documents from the issuing organization or appropriate distribution source. Seller must adhere to the latest revision of Qarbon Aerospace or Qarbon Aerospace 's customer specification and/or process, unless otherwise specified within the Purchase Order.



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5.2.2. Tooling

All jigs and tools provided to Seller and those manufactured by Seller in support of work carried out shall be inspected by Seller prior to use for completeness, freedom from damage and evidence of tooling acceptance. All tooling is to be manufactured, maintained and validated per Qarbon Aerospace Tooling Procedure STM (mentioned in this document Section 2.12 Tooling Requirements) as applicable with the following exception, the tooling must be properly identified in accordance with Gulfstream Tooling and Planning Manual for Subcontractors, revision B, dated May 7, 2003 to indicate its ownership by Gulfstream.

Omni Part Knowledge Base Environment External Supplier Revision Management Application Set. Supplier shall maintain CATIA and Adobe Acrobat revision in accordance with GER 7818.

5.2.3. Gulfstream Aerospace Corporation (GAC) Special Process Sources

All Special Processes performed by Seller or Seller's Sub-tier suppliers shall be approved by GAC as applicable, prior to performing any Special Process. Reference document: GAC Approved Process Sources.

For those shipments including parts which have undergone a First Article Inspection, a statement that the FAI has been accomplished, including the FAI number must be included in the COC.

5.2.4. Process Control

Seller and its Sub-tier suppliers shall ensure that all appropriate personnel are familiar with engineering drawings and Gulfstream Manufacturing Standards (GMS) for the Program and that controlled copies of engineering and GMS are made available at the place of operation. Upon receipt of Purchase Orders and prior to planning the work, Seller shall verify that all processes are within the approved scope of work. Seller shall incorporate the engineering within its route cards, travelers or job instructions and only qualified equipment and/or operators shall perform the process.

5.2.5. Seller's Inspection and Test

Seller shall prepare an appropriate Inspection Plan in order to ensure all its production processes, parts and assemblies comply with the drawings/engineering data. Seller which performs acceptance sampling in lieu of one hundred percent (100%) inspection shall develop such Inspection Plan from recognized industry



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standards with C = 0.

Qarbon Aerospace reserves the right to review and approve Seller's acceptance /verification test plans, software and procedures. Revisions to approved software/documents must be coordinated with Qarbon Aerospace prior to use.

When statistical process control is used as an option for either in-process or final inspection, Seller must satisfy the provisions for Variation Management as defined in this Flysheet. In all cases, inspection and test requirements identified by engineering drawing/model or specification take precedence over the inspection options described herein. Qarbon Aerospace reserves the right to require 100% inspection for selected characteristics.

5.2.6. Identification Marking and Traceability of Parts and Assemblies

Traceability classification shall be defined by engineering. Traceability and serialization shall be compliant to GAC14D Control, Serialization, and Traceability Requirements for Parts.

- Identification marking for non-critical metallic parts shall be compliant with GAMPS 1105 Identification Marking of Fabricated Metallic Part and Assemblies.
- Identification marking for non-critical non-metallic parts shall be compliant with GAMPS 1106 Identification Marking of Fabricated Non-metallic Parts and Assemblies.

Once a serial number is assigned it shall never be changed or reused for that part number. If a part is rejected and scrapped or it is lost, the serial number shall go out of existence with the part. The replacement part shall be assigned a new serial number. All serial numbers delivered and scrapped shall be accounted for in Seller's Quality Records.

Prior to fabrication, raw material batch number shall be documented on router/traveler to ensure documented traceability of raw material batch number to fabricated part serial number. Given any conflict or question exist, regarding identification, consult the engineering.

5.2.7. Regrading Material

The disposition "regrade" shall not be used on products of Qarbon Aerospace, and Qarbon Aerospace customer's proprietary design.



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5.2.8. Procurement of Raw Materials and Hardware.

- 1. Seller or its Sub-tier supplier shall provide objective evidence of the conformance of all procured supplies and services. The objective evidence shall be maintained on file by Seller and/or Seller's Sub-tier suppliers and made available for review by Qarbon Aerospace, its customers or involved authorities (FAA).
- 2. Raw material and fastener chemical/ physical test reports shall be verified by a third-party laboratory a minimum of once every 12 months for each manufacturer.
- 3. For material substitution direction refer to the following Gulfstream standards: GAS30BF Material Substitution List, GAS30TV Material Thickness Substitution, and GAS30J Substitution of Fasteners and Related Hardware.
- 4. Ultrasonic inspection shall be performed in accordance with GAMPS 9101 (Aluminum), GAMPS 9102 (Steel), and GAMPS 9103 (Titanium).
- 5. Laboratory tests shall be performed by GAC approved or NADCAP accredited laboratories. NADCAP accredited laboratories can be viewed at:

www.sae.org/servlets/index?PORTAL CODE=PRI

5.2.9. Control and Storage of Inventory

Seller shall strictly control all inventory of Qarbon Aerospace and Qarbon Aerospace 's customer's proprietary Product that is in excess of Purchase Order quantity in order to prevent Product from being sold or provided to any third party without prior written authorization from Qarbon Aerospace. Seller shall physically separate and clearly identify raw materials, hardware and parts stored for Qarbon Aerospace Programs. Products will be shipped according to Purchase Order requirements.

5.2.10. Supplier Quality Performance

Seller shall be responsible for achieving and maintaining a minimum quality performance level of either:

A Qarbon Aerospace Supplier Quality Acceptance Rating of ninety-eight percent (99.5%) as calculated by taking the ratio of acceptable units delivered for the prior twelve (12) month period. This calculation may be based on a composite performance score from all Purchase Orders between Seller and the Qarbon



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Aerospace contracting site, or specific by Program to which the Master Order Agreement applies.

If Seller fails to achieve and maintain the acceptable performance criteria above, Seller shall be responsible for one or more of the following as directed by Qarbon Aerospace at no additional costs to Qarbon Aerospace:

- a. Seller shall at its own expense obtain source inspection from a Qarbon Aerospace qualified contractor.
- b. Seller shall reimburse Qarbon Aerospace contracting site(s) for reasonable Qarbon Aerospace costs incurred at the point of manufacture. Such costs shall include travel, lodging and Qarbon Aerospace labor costs.

5.2.11. Flow Down to Sub-tier Suppliers

For articles, processes and raw materials purchased from Subtier suppliers in support of this Purchase Order, Seller shall ensure that all Purchasing Documents include all Quality and Technical Requirements required, including key characteristics as applicable.

6. Northop Grumman

6.1. E-2D Program

- 1. QOS-0033 Inspection Guidelines
- 2. QOS-0021A Seller Requirements for Temper Inspection by Electrical
- 3. QOS-0040 Prime Mission Equipment
- 4. QOS-0042 Inspection Guidelines for Composite Parts & Assemblies

7. Pratt and Whitney

7.1. F-135 Program

The requirements of United Technologies document ASQR-01 is applicable in its entirety with the following exceptions:

- 1. All of Section 2. Normative References. Configuration of all documents in support of Qarbon Aerospace product/deliveries will be defined by Qarbon Aerospace.
- 2. All elements of ASQR-01, Section 7.2. All communications/requests for information associated with the F-135 program shall be to Qarbon Aerospace via SIR.



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3. ASQR-01, Section 8.2.4 (2). Requests for approval/use of an Operator Certification Program shall be submitted to Qarbon Aerospace via SIR.

The latest revision of ASQR-01 is available from Qarbon Aerospace and may be obtained by request via the Portal. Copies of Approved Processor Listings shall also be provided via the Qarbon Aerospace Supplier Portal.

F-135 Suppliers are required to provide an updated QPP in accordance with Appendix 1 for each new revision of the QA-MAN-0002 - Supplier Quality Assurance Manual (SQAM) document to demonstrate compliance with this section.

Note: "All hardware must be LCS certified to MCL F-17 in accordance with PWA 300."

8. Sikorsky

8.1. CH-60 Program

The requirements of Sikorsky Aircraft document ASQR-01 is applicable in its entirety. The latest revision posted by Sikorsky at the time of PO acceptance will apply. The supplier may request a copy of the ASQR through the SIR process. The document is available at the following URL: http://www.sikorsky.com/Pages/Home.aspx

9. Revision History

Rev.	Date	Summary of change	Authorized by
Original	09/23/2022	Initial Issue	Head of Process Engineering