



Gulfstream Aerospace Corporation  
A GENERAL DYNAMICS COMPANY

# Supplier Quality Assurance Requirements Under an AS9100 Quality System SQAR-9100

**Date Written:** February 7, 2005

**Written By:** \_\_\_\_\_

David Trucksis  
Senior Manager, Procurement Quality & Material Review

**Reviewed By:** \_\_\_\_\_

Donald Strickland  
Procurement Quality Engineer

**Approved By:** \_\_\_\_\_

D. Max Mills  
Director, Quality and Product Safety

**Approved By:** \_\_\_\_\_

James McQueeney  
Vice President, Materials

## Signatures on File

### REVISIONS

| DATE    | REV | REVISION & ADDED PAGES   | REMARKS   |
|---------|-----|--|---|
| 8/19/05 | A   | Edited Paragraphs 1.4, 2.2, 4.1, 7.1, 7.2, removed 8.1 and added a definition appendix | Revision made for clarifications and editorial requirements |
|         |     |  |   |
|         |     |  |   |

**This document specifies the Quality requirements that are additive to a procurement contract in order to provide guidance for suppliers and other organizations in the control and delivery requirements of products, goods and services; and to provide the assurance of the supplier's conformity to Gulfstream and applicable regulatory requirements.**

**NOTE: The provisions herein do not negate any other contractual Quality Requirement as applied to specific Part Number(s) or Purchase Order(s).**

**1) Compliance to AS 9100:**

- 1.1 The supplier shall have a quality program that complies with Society of Automotive Engineers (SAE), AS9100 - Model for Quality Assurance in Design/Development, Production, Installation, and Servicing. Third party certification / registration is required.
- 1.2 A copy of the current certificate must be kept on file at Gulfstream Procurement Quality.
- 1.3 A supplier that is certified / registered to AS9100 via a third party and subsequently changes certification / registration bodies (CRB), loses its registration status, or is put on notice of losing its registration status, shall notify the Gulfstream Procurement Quality within three days of receiving such notice from its CRB.
- 1.4 The supplier shall maintain records of all inspections and tests for seven (7) years. These records shall be available to Gulfstream and/or Regulatory Agencies upon request, and shall include but are not limited to, such items as: Receiving/ Receiving Inspection, First Article Inspections, In-Process and Final Inspection results, Traceability and Serialization, Calibrations, completed Manufacturing Plans, actual Material Test Reports (for materials used to fabricate priority parts), Process Certifications, actual test data of all qualification, functional, interchangeability and acceptance tests performed, and any other applicable inspection documents. Records of serialization and traceability shall be maintained for ten (10) years as designated in the Gulfstream Standard GAC14D.

## **2) Configuration Control:**

- 2.1 The Supplier shall be responsible for controlling / tracking the actual configuration of the parts and components to the approved engineering and changes to ensure that the end product meets specified functional and physical requirements of the contract. This includes any part or component manufactured to customers' or suppliers' drawings, specifications, or special process procedures. The supplier and the customer shall document agreements as to the extent of customer involvement in configuration management to be applied to this contract / purchase order.
- 2.2 An item that is identified as a "Bad Actor" (reference definition in Appendix) by Gulfstream shall not be returned to Gulfstream.

## **3) Surveillance under the Contract:**

- 3.1 Work under this purchase order/contract is subject to government or customer surveillance/inspection at the supplier's facilities and sub-tier supplier's facility. If a surveillance / inspection is to be conducted by the government or customer the supplier will be notified prior to this event.
  - 3.1.1 If Customer source inspection is required, notify the customer's Procurement Quality Assurance Representative (PQAR) prior to shipment of articles from the supplier's facility. Upon receipt of this order and prior to commencing work, promptly notify the customer's Procurement Quality Assurance Representative (PQAR) assigned to the supplier's facility so the appropriate inspection plan can be coordinated.
  - 3.1.2 In the event that a PQAR does not normally service the supplier's facility, immediately notify the customer procurement representative to obtain a point of contact for the appropriate PQAR assignment. Source inspection shall be conducted by the customer at the supplier's facility or where designated in the order. The supplier shall notify PQAR office a minimum of seven (7) working days in advance of the time the articles or materials are ready for inspection or test.
  - 3.1.3 The Supplier shall make available to the PQAR all applicable drawings, specifications, procedures, statements of work, Customer's Order, test software, and changes thereto, related inspection and/or test equipment, and such other information as may be required to satisfactorily perform the inspections and tests required under this Order.

#### **4) Identification:**

- 4.1 Each article delivered under this Purchase Order must be identified with a part number or other identification in agreement with the article ordered. All purchased materials and services are subject to inspection for compliance to this purchase order and all applicable quality codes/clauses. No material or process substitutions, quantity variations or splits from the purchase order may be made without prior written authorization from the Customer.

#### **5) Packaging:**

- 5.1 The supplier shall be responsible for ensuring that items provided under this Contract/Purchase Order are packaged in such a manner that the product integrity is preserved, contamination and corrosion are prevented, no physical damage occurs and it prevents damage, deterioration or loss in transit.
  - 5.1.1 Packaging, when specified, shall be in accordance with the customer-specified requirement. The supplier shall label the exterior of the package to ensure adequate identification needed to ensure the identity of the product being shipped. The supplier must ensure the handling and shipping methods for a proper and on-time delivery without damage to the product. The supplier shall ensure that any special labeling requirements shall also be listed in the appropriate shipping documents and on each package.

#### **6) First Article Inspection:**

- 6.1 The supplier may be required to perform first article inspection (FAI) on the items in this contract / purchase order. First article inspections / provisions shall be in accordance with SAE AS9102. The inspection records and data shall be per AS9102 and shall identify each characteristic and feature required by design data, the allowable tolerance limits, and the actual dimension measured as objective evidence that each characteristic and feature has been inspected and accepted by the supplier's quality and/or inspection function. When testing is required, the parameters and results of the test shall be recorded in the same manner.

- 6.2 The first article inspection report must show evidence of acceptance by the supplier's quality assurance representative. The first article(s) shall be produced on production equipment and using processes which will be utilized on production runs.
- 6.3 When requested by the customer, the first article(s) may be performed on prototype articles to determine conformance status to available data.
- 6.4 Additionally, the supplier shall perform subsequent FAI(s) per the requirements of AS9102 (i.e.: following every major tooling or design change, and subsequent to any evident quality degradation for a specified part or article).
- 6.5 Records of all first article activity will be documented as required in AS9102, treated as quality / acceptance records, and made available to the customer if requested.

## **7) Certification of Special Process - Approved by Supplier or Customer**

- 7.1 Fulfillment of this contract may require performance of special processes. In the case of Gulfstream design, special processes shall be performed only by sources that have been audited and qualified / approved, by the formally "Delegated Supplier" (see definition in the Appendix) or by Gulfstream Procurement Quality. The Delegated Supplier may be requested to provide the customer the documentation showing evidence of qualification of special processes and/or certification to perform special manufacturing, assembling, and test processing as required by the contract.
- 7.2 When affecting special processes upon Gulfstream designed products, a certification shall be provided with each shipment of item(s) delivered on this contract. Special Process Certifications may be in supplier format, unless a GA 802 "Supplier Certificate of Compliance" has been requested, shall include the following:
  - Customer's Order number
  - Part number(s)
  - Serial and/or lot numbers, of the hardware processed (if applicable,)
  - Objective evidence demonstrating compliance with the applicable process shall be made available upon request
  - Hardness test results for heat treatment, destructive test results, etc.....
  - A certification stating the special process was performed per the applicable Drawing/Material process specification with revision level.

- Supplier 's name and address
- When special processor is other than the Supplier, provide a certification of compliance from the special processor stating the special process was performed per the applicable drawing/specification requirements. Certifications must include the processor's name, address and be signed and dated by a company official.
- Each certification must be signed and dated by a company official of the Supplier and/or Processor attesting to the acceptance of the processes performed to the required specification(s).

7.3 The supplier shall retain all records associated with the selection and approval of supplier approved special process providers. Per contract or regulatory agency requirements, these records shall be made available to the Customer and/or regulatory agencies upon request. The supplier shall notify the Customer prior to destruction of records relative to this contract.

## **8) Certificate of Compliance**

8.1 Supplier shall provide a certification with each shipment to attest that the parts, assemblies, subassemblies, or detail parts conform to the order requirements. Certification must contain the following:

- Customer's order number
- Line number
- Part number
- Name and address of manufacturing or processing location
- Manufacturer's lot, heat, batch, date code, and/or serial number (if applicable)
- Quantity and unit of measurement (each, box, case, gallons, etc.)
- Be signed and dated by an official of the company.

8.2 The following statement shall be included on the certificate:

**“The applicable material test results, process certifications and inspection records are available upon customer's request. Inspections necessary to determine the acceptability of all articles under this order were completed. All articles submitted in this order are subject to final acceptance by the customer.”**

## APPENDIX

### DEFINITIONS:

The following is a list of selected terms and their meaning as related to the requirements of this procedure:

|                                 |   |
|---------------------------------|---|
| <b>Bad Actor</b>                | Any component which fails at a Gulfstream facility and has been returned to the supplier three (3) times for the same failure, or five (5) times for different failures.  |
| <b>Certification</b>            | A supplier's Certificate of Compliance attesting that the Gulfstream purchased material and parts are manufactured in accordance with, and meets the requirements of, the drawing and specifications.   |
| <b>Delegated Duty Suppliers</b> | Those suppliers, when specifically authorized by Gulfstream Quality Assurance that shall perform as an extension of Gulfstream's Inspection. This will include actual inspection duties as well as authorization to approve and control their Process Subcontractors.   |
| <b>Design or Design Control</b> | The scope of design control is limited to the extent of the Gulfstream specified requirements, i.e., the procurement of supplies to Gulfstream design drawing, or a design control specification which is identified by a Gulfstream part, drawing or specification number. The use of the words "design control" shall also be interpreted to cover Purchase Orders for electronic systems, equipment, components, and parts wherein Gulfstream retains "performance control." |
| <b>First Article</b>            | The validation process to assure that tools, processes and planning are capable of producing product or services in accordance with engineering requirements. The Gulfstream requirement is for performance to the SAE AS9102   |