




# SUPPLIER QUALITY MANUAL

This document contains the general Quality Management System Requirements for Governors America Corporation suppliers. The requirements within this document apply to all Governors America Corporation purchases of product and services associated with the assembly of Governors America Corporation products. Requirements that cannot be applied due to the nature of an organization and its product(s) will be considered for exclusion, providing such exclusions do not affect the organization's ability or responsibility to provide products, materials, or services that meet Governors America Corporation and regulatory requirements. All requirements of this specification are generalized, and are intended to support part specific fabrication and packaging, and/or servicing requirements, as detailed in supplied technical drawings and specifications.

## Revision History

Revision	Date	Author	Description of Change
A	01/04/16	P. Sargenski	Initial Release DCN#34384
B	12/12/2017	N. Wayand	Updated Section 3.6
C	7/19/2019	A. Mourad	Added information security policies and the non-disclosure agreement section. Added section 3.1.3.
D	2021-01-05	D. Morrissette	Filtered in aerospace requirements for AS9100. Section 1.2 was Approved Supplier Evaluations. Section 8.5 was Containment Before Shipping. Added section 6.3 for Certificate of Conformance. Added Section 10.0 Aerospace Supplier Quality Requirements (ASQR). Removed specified revision for ES1035 and ES1038.

<b>KEY</b>	Applicable Clause 	GACDCP – Governors America Corporation Design Controlled Products	C/SSP – Catalogue / Standard Stock Products
		TS/C – Test Services / Calibration	AS – Aerospace Supplier

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## Introduction



Governors America Corporation (GAC) has prided itself as a committed small family business that provides high end solutions to our customers. Over the past thirty years, we have established a world-wide presence and are readily identified as an exceptional solution provider. We have worked with some of the biggest and recognized global OEM's. From our humble beginnings in a rented warehouse space, to our current 68,000 square foot location in Agawam, our mission has not changed. GAC has built a reputation as a premier vertically integrated organization with a global impact. The current location in Agawam's Industrial Park resides on eight-acre parcel that has undergone three major building expansions since 1991, with the most recent in 2008. The last addition included five new state of the art engine test cells, EMI controlled testing chamber and a major enhancement to our machining center.

GAC compliments its innovative designs with a vertically integrated state of the art manufacturing facility with significant acquisition and logistics experience. The ability to manufacture GAC's products internally allows for stringent quality control and monitoring, allowing for rapid response to our customer's requirements. A small sample of applications include generator sets, material handling, marine propulsion, mining, compression, irrigation, oil and gas, welders, fire pumps, generators, light towers, compressors, ECUs, locomotives, and off-highway equipment. In-house capabilities include build to print, complete generator and engine overhaul, panels / harnesses, machining, PCB fabrication, software development and much more.

In supporting our passion for manufacturing in the USA (and specifically in Massachusetts), GAC serves on an advisory manufacturing board at Agawam High School; working closely with the superintendent and staff to bring industrial career opportunities back into the high school and garner student interest. Recently, we have had some of the largest groups of co-op students in all areas of our facility, machining, quality manufacturing, marketing, and business. We have supported the regional robotics team with engineering and productions support resources. Our core belief is to facilitate the success of built in America and providing American jobs, especially in our youth. We have a robust university intern program for our professional positions. Our investments are not stagnant and have recently invested in an in-house server farm to host our internal IP, enhanced building security, quality training, and incorporated additive printing to our production arsenal. As a closely held small business, we have prided ourselves in our financial discipline and execution to our long-term plans of financial health. GAC holds no debt and owns all manufacturing equipment, building and land.

Through the GAC supply chain, we hope to develop deep, mutually beneficial relationships over the long-term to lessen risk and cultivate true supply chain excellence.



**G**ive customers a reliable quality product.

**A**chieve advancements within the engine controls industry by providing an atmosphere that fosters creativity and innovation.

**C**omply with the GAC Business Management System and continually improve its effectiveness.

All information provided by GAC is considered company confidential and shall not be disseminated without prior approval. A non-disclosure between supplier and GAC may be required. Supplier is required to have information security protocols to prevent incidents of industrial espionage.

## 1.0 Quality Management System

As a partner with Governors America Corporation, approved suppliers are expected to deliver high quality service, maintain appropriate inventory, demonstrate technical knowledge, and make continuous improvements. Ideal suppliers are flexible, committed to growing the relationship, and focused on the end user. In return, Governors America Corporation provides the support and information needed to assist suppliers to meet expectations of jointly achieving the goal of total customer satisfaction.

Supplier shall provide and maintain a quality system that complies with the requirements of **ISO9001** or **AS9100**, unless otherwise directed by GAC.

### 1.1 Accreditation and Evaluation

1.1.1 All potential suppliers shall be evaluated through Governors America Corporation supplier assessment process. The depth of assessment will be based on 3<sup>rd</sup> Party Quality Management System accreditation and the complexity risk of product / services to be purchased.

1.1.1.1 Recognized accreditations include:

- 1.1.1.1.1 ISO9001:(latest revision)
- 1.1.1.1.2 AS9100: (latest revision)
- 1.1.1.1.3 TS16949:(latest revision)
- 1.1.1.1.4 ISO17025:(latest revision)
- 1.1.1.1.5 A2LA Accreditation
- 1.1.1.1.6 ISO 27001

1.1.2 Immediate notification is required in case of non-compliance to Quality System Requirements, e.g. loss of third-party certification.

1.1.3 If the supplier does not have 3<sup>rd</sup> Party accreditation, a risk assessment will be performed with alternate methods of supplier approval identified. Along with 3<sup>rd</sup> Party accreditation, suppliers may also be approved on a combination of the following:

- 1.1.3.1 Evaluation of first shipment – see Sections 7.0 and 6.6.
- 1.1.3.2 On-site audit.
- 1.1.3.3 Established reputation for the product / service to be purchased.
- 1.1.3.4 Alternate source availability.

### 1.2 Surveillance

1.2.1 GAC reserves the right to conduct periodic audits of Seller's and at any level of the supply chain Quality Assurance inspection system, and to witness and/or conduct inspections and tests to assure materials or supplies satisfactorily meet procurement document requirements; review corrective action activities and other records that reflect on hardware or service quality.

1.2.2 All approved suppliers are subject to on-going supplier surveillance. In events of nonconforming material or poor performance, a Quality Alert Notification will be issued to the supplier and the supplier is to follow the steps outlined in Section 8.0.

- 1.2.2.1 In instances of poor quality and high risk, Release Authorization samples (see Sections 7 and 6.6) will be required prior to shipment release until the supplier's corrective/preventive actions are proven effective.
- 1.2.3 Annual supplier reviews are also performed that take into consideration the purchase dates, quantities and dollar value, quality of product received, and timely delivery.
- 1.2.4 Suppliers who repeatedly fail to deliver satisfactory product or services may be disqualified from the Approved Vendor List. The decision to do this will be made by the Governors America Corporation Purchasing representative and/or Quality Manager.

### 1.3 Documents and Records

- 1.3.1 The supplier shall have procedure(s) in place defining document and record management. All information considered company confidential shall have information security protocols to protect all information.
- 1.3.2 Documents and records covered shall include and are not limited to:
  - 1.3.2.1 Catalogue / Standard Stock Products.
    - 1.3.2.1.1 Order Entry Record.
    - 1.3.2.1.2 Packaging / shipment documentation.
  - 1.3.2.2 Governors America Corporation Design Controlled Products.
    - 1.3.2.2.1 Contract review records and design documents.
    - 1.3.2.2.2 Incoming material records.
    - 1.3.2.2.3 Product work orders / travelers / set-up sheets / technical plans.
    - 1.3.2.2.4 Inspection reports.
    - 1.3.2.2.5 Non-conforming material dispositions.
    - 1.3.2.2.6 Packaging / shipment documentation.
    - 1.3.2.2.7 Ethical and environmental records.
  - 1.3.2.3 Test Services / Calibration.
    - 1.3.2.3.1 Order Entry Record.
    - 1.3.2.3.2 Service Record / Test Results.
- 1.3.3 Supplier shall retain all records pertaining to material, manufacturing processes, special processes, testing, and inspection for a minimum of five (5) years as applicable. Supplier shall notify GAC prior to destruction. Supplier shall provide GAC, our Customers, and regulatory authority access to all applicable records. Documents and records shall be managed in such a manner that they can be accessed and presented within **48 hours of request**.
- 1.3.4 All documents must be archived in a secure location.

### 1.4 Notification of Change

- 1.4.1 Supplier shall not accept verbal changes to the Specifications, Drawings or

- Purchase Order Requirements without supporting documents from GAC.
- 1.4.2 The Supplier shall make no Changes to Work under this Purchase Order or Contract including any change in design, manufacturing process, materials, or otherwise which may affect form, fit, or function of the Work without prior notification to and approval by GAC. Such notification shall consist of detailed drawings clearly defining such Changes and the date such changes are proposed to be effective. Such notification shall not constitute approval of the proposed change nor relieve the Supplier of the obligation to comply with requirements contained in the Purchase Order or Contract. If the proposed Change is approved, the Change Approval shall be documented.
  - 1.4.3 The supplier is responsible to notify Governors America Corporation of any Quality Management System, organizational, operational, and/or location changes **within 5 business days of the event.**
    - 1.4.3.1 This includes notification of:
      - 1.4.3.1.1 Staffing changes on Governors America Corporation focused projects.
      - 1.4.3.1.2 Staffing changes in the Quality Team supporting Governors America Corporation projects and products.

#### 1.5 Supplier Facility Access

- 1.5.1 Governors America Corporation, our Customers and/or regulatory agencies shall have the right to conduct surveys and perform surveillance and have access of supplier facilities and at any level of the supply chain to evaluate their capability to comply with contractual requirements.
- 1.5.2 Governors America Corporation shall work with the supplier to identify mutually accommodating times to schedule supplier visits. However, in urgent situations the supplier shall accommodate visits **with a 24-hour notification.**
  - 1.5.2.1 The supplier shall provide resources to effectively support the visitation.
  - 1.5.2.2 The supplier shall provide full access to:
    - 1.5.2.2.1 All locations Governors America Corporation product is fabricated and stored.
    - 1.5.2.2.2 All Governors America Corporation tooling and storage locations.
    - 1.5.2.2.3 All Governors America Corporation related documents and records.
    - 1.5.2.2.4 All facility ethical and environmental records.
  - 1.5.2.3 Access shall be provided to all Governors America Corporation employees and delegates representing Governors America Corporation.
  - 1.5.2.4 For Asian suppliers: ethical and environmental audits can be conducted without notice.

## 2.0 Nondisclosure Agreement

2.1 All information provided by GAC is considered company confidential and shall not be disseminated without prior approval. A non-disclosure between supplier and GAC may be required. Supplier is required to have information security protocols to prevent incidents of industrial espionage.

## 3.0 Contract Review

### 3.1 Supplier Terms and Conditions (QA40610)

3.1.1 The supplier agrees to the guidelines presented in this Supplier Quality Manual. Any exclusion to the content must be approved by Governors America Corporation prior to the supplier's acceptance of PO.

3.1.2 The supplier agrees to the content of the PO(s) received. Any exclusion to PO content must be approved by Governors America Corporation prior to the supplier's acceptance of PO.

#### 3.1.3 CSR (Corporate Social Responsibility)

- Encouraging our business partners to implement CSR.
- Continually improving our performance and meeting all applicable legislation.
- Informing our staff to be mindful of the effect of their actions on non-renewable resources.
- Introducing procedures to assist with implementing CSR
- An action plan shall be executed to ensure continuous improvement is implemented in all areas: Environment, Human Rights, and Sustainability for procurement of services, Ethics and ethical trading.

### 3.2 Language of Precedence

3.2.1 English is the language of precedence in the event of translation conflict when reviewing any Governors America Corporation documentation or correspondence.

### 3.3 Configuration Management and Fixed Processes

#### 3.3.1 Catalogue / Standard Stock Products.

3.3.1.1 It is the distributor's / supplier's responsibility to ensure products meet published dimensional, performance, and cosmetic specifications.

#### 3.3.2 Governors America Corporation Design Controlled Products.

3.3.2.1 The supplier is responsible for developing a documented fixed process for fabrication (master traveler) that should include process flow, materials, equipment, machine set-up, specified fixtures and tooling, and defined in-process and final release inspection criteria.

3.3.2.2 When product is approved, the fabrication process is considered by Governors America Corporation as a Fixed Process. Any



changes to the process require Governors America Corporation re-approval. Reference Section 9 Default Inspection Specification for finish criteria if not specified in the print package.

**3.3.3 Test Services / Calibration.**

3.3.3.1 Not applicable.

**3.4 Restriction of Substance Directives**

3.4.1 Governors America Corporation is committed to supplying products worldwide that meet the requirements of a diverse customer base and complies with all applicable governmental regulations. The supplier agrees to comply to the applicable following requirements:

**3.4.1.1 RoHS – Restriction of Hazardous Substances Directive (Current Revision)**

3.4.1.1.1 This is a European Union (EU) directive that restricts usage of six hazardous materials in electrical and electronic equipment.

3.4.1.1.2 The maximum RoHS concentration values are:

Restricted Material	PPM	By Weight
Lead (Pb)	< 1000 ppm	0.1 %
Mercury (Hg)	< 1000 ppm	0.1 %
Cadmium (Cd)	< 100 ppm	0.01 %
Hexavalent Chromium (Cr <sup>6+</sup> )	< 1000 ppm	0.1 %
Polybrominated Biphenyls (PBB)	< 1000 ppm	0.1 %
Polybrominated Diphenyl Ether (PBDE)	< 1000 ppm	0.1 %
Bis(2-Ethylhexyl) phthalate (DEHP)	< 1000 ppm	0.1 %
Benzyl butyl phthalate (BBP)	< 1000 ppm	0.1 %
Dibutyl phthalate (DBP)	< 1000 ppm	0.1 %
Diisobutyl phthalate (DIBP)	< 1000 ppm	0.1 %

**3.4.1.2 WEEE – Waste Electrical and Electronic Equipment (Current Revision)**

3.4.1.2.1 This is a European Union (EU) directive focused on the prevention of waste electrical and electronic equipment.

3.4.1.2.2 This directive covers application of the WEEE symbol to products supplied to European Markets.

**3.4.1.3 REACH – Registration, Evaluation, Authorization, and Restriction of Chemicals (Current Revision)**

3.4.1.3.1 This is a European Union (EU) directive focused on making manufacturers and importers of chemicals responsible for producing data to define the hazards and risks.

3.4.1.3.2 Chemical status should be verified for REACH off the market chemical status or SIN (substitute it now) listing.

**3.4.1.4 Dodd-Frank Wall Street Reform and Consumer Protection Act**

3.4.1.4.1 This is a United States law requiring US Stock Exchange listed companies to provide disclosure if Conflict Minerals originating from the Democratic Republic of Congo region (DRC Zone) are used in their products.

3.4.1.4.2 The Conflict Minerals are:

Conflict Minerals
Tin
Tantalum
Tungsten
Gold

3.4.1.5 **The cfsi Conflict Minerals Reporting Template (CMRT)** is the standard format requested by Governors America Corporation for annual disclosure.

3.4.1.6 **California Proposition 65** requires businesses to arrange for a warning to the people in the state of California, in regards to certain hazardous chemicals that cause cancer or other reproductive harm.

**3.5 Production Approval**

**3.5.1 Catalogue / Standard Stock Products.**

3.5.1.1 Governors America Corporation will request samples and perform the qualification.

3.5.1.2 The distributor / supplier is responsible for providing resources for timely technical and application support.

**3.5.2 Governors America Corporation Design Controlled Products.**

3.5.2.1 Governors America Corporation follows a 3-step qualification process that includes 1) Prototype, 2) Manufacturing/Pre-production, and 3) Production Release.

3.5.2.2 New Design - The supplier may be asked to participate in all 3 qualification steps and provide samples following the guidelines in Sections 7 and 6.5.

3.5.2.3 Legacy Designs – samples will be requested following the guidelines in Section 7 and 6.5 before shipments are released.

3.5.2.4 Based on part complexity risk, the Supplier may be required to provide Process Flow Diagram, Control Plan, Cpk Process Data, and/or Inspection guides as part of the Product Approval.

3.5.2.5 After approval, the supplier is responsible for maintaining the process as fixed.

**3.5.3 Test Services / Calibration.**

3.5.3.1 Not applicable.

**3.6 Continuous Improvement**

- 3.6.1 Governors America Corporation is a strong supporter of supplier continuous improvement, lean and six sigma initiatives that focus on:
  - 3.6.1.1 Cost reduction through improved efficiency or scrap / rework reduction.
  - 3.6.1.2 Reduced lead times.
  - 3.6.1.3 Improved quality.
- 3.6.2 For projects with potential positive impact to Governors America Corporation products, Governors America Corporation welcomes an invitation for team participation.
- 3.6.3 Any material or process changes will require re-approval and Governors America Corporation will assist to expedite the re-approval.
- 3.6.4 Interactions for evaluation
  - 3.6.4.1 Customer Surveys
  - 3.6.4.2 First Article Inspections
  - 3.6.4.3 Verbal Feedback

#### **4.0 Assembly and Part Traceability**

##### **4.1 Supplier Control**

- 4.1.1 The supplier shall maintain a supplier approval program for all raw materials, components, and services used for Governors America Corporation purchase orders.
- 4.1.2 Governors America Corporation Design Controlled Products.
  - 4.1.2.1 The supplier is responsible for flow down of Governors America Corporation specifications to the sub-tier level through their PO agreements.
    - 4.1.2.1.1 The supplier is responsible to ensure sub-tier supplied materials are purchased to and meet/exceed Governors America Corporation specification.
    - 4.1.2.1.2 The supplier shall have in place a receiving program to effectively verify and document incoming materials meet Governors America Corporation specification.
    - 4.1.2.1.3 The supplier shall maintain sub-tier agreements to permit Governors America Corporation visitation and auditing access as referenced in Section 1.5
  - 4.1.2.2 When specified by Governors America Corporation, the supplier is required to purchase from only Governors America Corporation approved source(s).
  - 4.1.2.3 The supplier is required to meet the requirements of sections 4.1.2.1.1, 4.1.2.1.2, and 4.1.2.1.3.

##### **4.2 Part Identification and Traceability**

- 4.2.1 The supplier shall have in place procedure(s) defining the methods of part

traceability from raw material/sub-component level through released finished product.

- 4.2.2 All Governors America Corporation part specific identification and traceability marking directives are to be followed by the supplier.

#### 4.3 Part Cleanliness

- 4.3.1 The supplier shall incorporate processing steps to ensure machined surfaces and enclosed areas are clean and free of contaminants such as chips, burrs, and oil.
- 4.3.2 The supplier shall ensure electronic components are managed in appropriate ESD environment to prevent damage.

#### 4.4 Inspection Operation

- 4.4.1 The in-process and final inspection are to be defined by the approved product fixed fabrication process.
- 4.4.2 The supplier can add interim inspection operations if beneficial to product reliability.
- 4.4.3 Inspection operations cannot be removed unless approved by Governors America Corporation and may require production re-approval.
- 4.4.4 Fixtures, static gages, and variable gages used for any inspection activity are to be controlled through the supplier's calibration program.
- 4.4.5 Recommended lighting at inspection: 100 lux minimum.

#### 4.5 Calibration

- 4.5.1 A system for the maintenance and calibration of inspection, measuring, and test equipment shall be maintained. ANSI/NCSL Z540-1 applicable to calibration activities. Acceptable alternative: MIL-STD-45662A "Calibration System Requirements" All calibration standards must be traceable back to NIST (National Institute of Standards and Technology) and the NIST test number shall be included on the certificate of conformance. If any measuring equipment is found to be out of tolerance, "As Found, As Left" data shall be included.
  - 4.5.1.1 The supplier shall have in place procedure(s) defining their calibration program.
  - 4.5.1.2 The supplier shall maintain records and results of calibration and verification activities.
  - 4.5.1.3 All fixtures, static gages, and variable gages used for inspecting Governors America Corporation product shall be identified with calibration status.
  - 4.5.1.4 Recommended outside service calibration accreditation: ISO17025: (latest revision) or equivalent.
  - 4.5.1.5 It is the responsibility of the supplier to maintain calibration for Governors America Corporation purchased inspection fixtures and gages.
- 4.5.2 If an inspection fixture or gage is found out of calibration and the gage was used

to release Governors America Corporation product, Governors America Corporation is to be notified **within 48 hours of the event.**

#### 4.6 Work Environment

4.6.1 The supplier shall maintain a work environment that is compliant to all government regulations covering, health and safety, ethical, and environmental regulations.

4.6.2 Product shall be handled and stored in a manner to prevent storage damage, in-process transportation damage, damage during assembly, and damage during finished product packaging.

4.6.2.1 For electronic components, a documented ESD control program shall be established. The supplier shall maintain employee training records to support implementation of this program.

4.6.3 The supplier shall maintain organized work stations so that before operation and after operation product cannot be mixed.

4.6.4 Work stations shall be well lit to accommodate operator visual inspection.

4.6.4.1 Recommended lighting: 100 lux minimum.

4.6.5 The supplier shall have a documented preventive maintenance program.

#### 4.7 Governors America Corporation Purchased Tooling, Fixtures, and Gauges

4.7.1 All Governors America Corporation purchased tooling shall be identified with serialization and/or Governors America Corporation name identification affixed to the tooling.

4.7.2 When not in operation, Governors America Corporation shall be stored in an identified secure location that precludes physical and environmental damage.

4.7.3 If Governors America Corporation purchased tooling is damaged, Governors America Corporation is to be notified **within 48 hours of the event.**

4.7.4 It is the responsibility of the supplier to notify Governors America Corporation when tooling is approaching end of life. Upon notification, Governors America Corporation will provide tooling directives based on impact to product critical to quality characteristics.

### 5.0 Training and Awareness

5.1 GAC reserves the right to require and request evidence that Suppliers ensure their personnel are aware of: (a) Their contribution to product or service conformity; (b) Their contribution to product safety; (c) The importance of ethical behavior.

5.2 The supplier shall maintain training records for all employees performing receiving inspection, first-piece, in-process, final inspection, and verification/compliance testing activities for all Governors America Corporation products.

### 6.0 Packaging and Shipment

6.1 Reference the PO for any special packaging requirements.

6.2 The Packing List shall be placed in pouch in visible location on shipment. The Pack List must:

- 6.2.1 Cross reference to the PO.
  - 6.2.2 List all part numbers and quantities in the shipment.
  - 6.2.3 Identify if a line item is a partial shipment.
- 6.3 A certificate of conformance shall accompany each shipment signed by its Quality Assurance Manager, or authorized designee, stating the product supplied is in full conformance with all physical configuration and functional test specifications; that all raw material used conforms to applicable specifications. Inspection and test data, physical and chemical analysis, and in-process inspection data are on file subject to review by GAC upon request. The certificate of conformance shall be legible and include:
- 6.3.1 GAC Purchase Order number, part number, and revision letter (unless otherwise specified on the purchase order), quantity and if applicable, serial numbers.
  - 6.3.2 GAC Job Order number and the mill heat number when supplier supplied material, at a minimum.
  - 6.3.3 When multiple lots of material are used in completing a shipment, parts shall not be mixed, and all material lot numbers, or mill heat numbers shall be reported.
  - 6.3.4 When processing is performed against a GAC job order, parts shall not be mixed, and traceability shall be maintained to the work order.
  - 6.3.5 Material or process specifications
  - 6.3.6 Manufacturer's name, address, Country of Origin, and Date.
- 6.4 Part Packaging:
- 6.4.1 Unless special packaging requirements are referenced in the Purchase Order, the supplier shall use best commercial practices for preservation and packaging of articles supplied to GAC.
  - 6.4.2 Packing shall hold parts secure to prevent functional and cosmetic damage.
  - 6.4.3 For electronics, ESD shielding bags and/or ESD bubble shall be used. ESD labeling to be applied to the packaging.
  - 6.4.4 All packaging shall be clean.
  - 6.4.5 Product packaging / carton labeling shall legibly identify product held within.
- 6.5 For pallet shipments, only structurally sound pallets shall be used for shipping product to Governors America Corporation.
- 6.5.1 Boxes shall be stacked within the profile of the pallet and secured with either banding or shrink wrap.
- 6.6 Release Authorization, if specified on the PO:
- 6.6.1 Reference Section 7.0.
  - 6.6.2 Include a copy of the completed final inspection report inside the box containing the parts.
  - 6.6.3 On the exterior of the carton identify final inspect report enclosed.
- 6.7 C-TPAT (Customs-Trade Partnership Against Terrorism), if specified on the PO:

- 6.7.1 LTL (less than truckload) shipments - security tape and serialized labels to be applied to cartons to identify a pilfering/breach incident.
- 6.7.2 For dedicated truckload/container shipments – seal(s) to be applied to the truck/container doors.
- 6.7.3 All serialized label and seal numbers to be written on the Packing Slip. A copy of the Packing Slip to be faxed/mailed to the Governors America Corporation Purchasing Dept at time of departure for our verification at time of receipt.
- 6.7.4 When the PO is ready to ship, Governors America Corporation is to be notified to arrange carrier pickup.
  - 6.7.4.1 The Supplier is responsible for maintaining a record of the carrier, driver's name, and verifying the transportation is good condition and secure at departure.
- 6.8 NIST (National Institute of Standards and Technology) Traceable
  - 6.8.1 Certificates of work completed to include traceable to NIST standards.

## 7.0 Release Authorization

- 7.1 For new orders, design changes, process changes, and/or instances of non-conformance, Governors America Corporation Purchasing or Engineering Dept, may request qualification samples with a copy of the completed final inspection report before approving release of a shipment.
- 7.2 The Governors America Corporation Purchasing or Engineering Dept will specify the sample size quantity and reporting requirements.
- 7.3 The supplier shall provide a samples representative of the production processes and production lot, including a first article inspection report.
- 7.4 The supplier shall number the samples to cross reference to the submitted inspection report(s).
- 7.5 Reference Section 6.0 for shipment requirements.

## 8.0 Corrective Action Requirements for Suppliers

- 8.1 Governors America Corporation will notify suppliers of problems regarding quality, delivery, packaging, and/or servicing in writing. The format used by Governors America Corporation is a Quality Alert Notification. Based on the risk associated with the finding, Governors America Corporation will identify if:
  - 8.1.1 the completion of a formal **Supplier Corrective Action Request (SCAR)** is required to address the finding.
  - 8.1.2 or, the supplier in their own accord appropriately update their internal quality plans to address the finding.
- 8.2 Initial Supplier **acknowledgement is required with 24 hours.**
- 8.3 Corrective Actions may be issued for reasons including, but not limited to:
  - 8.3.1 Non-conforming Material.
  - 8.3.2 Delivery.

- 8.3.3 Packaging.
- 8.3.4 Slow Responsiveness.
- 8.3.5 Quality Management System Non-compliance.

#### 8.4 Requirements.

- 8.4.1 The supplier shall have in place procedure(s) defining the management of non-conforming product. The procedure(s) shall include the processes for containment, segregation, identification, and disposition.
- 8.4.2 The supplier shall have a procedure to clearly identify suspect and/or non-conforming product.
- 8.4.3 The supplier shall have a secure location to isolate suspect and/or non-conforming product awaiting disposition.
- 8.4.4 A written report shall be furnished, within a stipulated time period, which is specific and conclusive to prevent a recurrence of the discrepancy.
  - 8.4.4.1 The usage of Cause and Effect (Ishikawa) Analysis, or 8D methodology is encouraged by Governors America Corporation for root cause, corrective action, and to prevent re-occurrence.
- 8.4.5 Governors America Corporation will provide a Supplier Corrective Action Request (SCAR) template if reporting back is required.

#### 8.5 Discrepancies

- 8.5.1 Any deviations from established drawing or specifications intended for shipment must be reported to the GAC Buyer immediately. No deviations will be considered approved without written confirmation from the buyer. Repairs are not to be undertaken without prior written approval from the buyer. Unless otherwise specified in this Purchase Order, the Supplier and/or any of their Suppliers/Subcontractors DO NOT have authority to process "USE-AS-IS", "REPAIR", "STANDARD REPAIR PROCEDURES (SRPS)" or "NON-SRPS" via their Material Review Board (MRB). These dispositions, as well as deviations and request for waivers, requiring MRB disposition shall be submitted to GAC for approval. This does not include REWORK or SCRAP. The Supplier/Subcontractor shall utilize its appropriate nonconforming material disposition form and submit it to the Buyer for GAC approval.
- 8.5.2 If non-conforming product is identified before shipment, the supplier may submit for Governors America Corporation approval, a Deviation Request to propose rework/repair or request use as is.
- 8.5.3 The Deviation Request shall include the following:
  - 8.5.3.1 Part Number and Revision.
  - 8.5.3.2 Total Quantity affected.
  - 8.5.3.3 Reason for deviation (with data) cross referenced to the print dimension or note not meeting specification.
  - 8.5.3.4 Any applicable lot marking on the product.
  - 8.5.3.5 Proposed plan to verify rework/repair meets design requirements.



8.5.3.6 Preliminary actions being taken to prevent re-occurrence.

8.5.4 If approved, Governors America Corporation will provide required methods for product shipment traceability.

8.6 Potential Escape

8.6.1 In the event non-conforming product is suspect of leaving the supplier’s facility, Governor’s America Corporation is to be notified **within 48 hours of the event**.

8.6.2 The supplier shall present to Governors America Corporation their Corrective Action proposal **within 24 hours of notification**.

8.6.3 The supplier shall complete Corrective Actions(s) and actions to Prevent Re-occurrence **within 10 days of the notification**. The usage of Cause and Effect (Ishikawa) Analysis, or 8D methodology is encouraged by Governors America Corporation for root cause, corrective action, and to prevent re-occurrence.

8.6.4 Templates are available from Governors America Corporation if needed.

8.7 Non-conforming product received at Governors America Corporation

8.7.1 In the event non-conforming product is identified at Governors America Corporation facility or identified/returned from the field, reference sections 8.1, 8.2, 8.4.5.

**9.0 Default Inspection Specifications**

9.1 The following specifications and critical inspection criteria are considered as default if criteria is not specified in the print package.

9.2 If process capabilities cannot meet the print package requirements or the default inspection specifications, Governor’s America Corporation is to be notified via submitted deviation request.

**Specifications**

Commodity	Specification	Title
Printed Circuit Boards	IPC-A-600(latest revision) – Class2	Acceptability of Printed Circuit Boards
Plastic Molded Parts	ES1038 (latest revision)	Acceptance Criteria for Plastic Molded Parts and Other Surface Finishes
Castings and Machined Surfaces	ES1035 (latest revision)	Actuator Component(s) Finish Specifications

**Critical Inspection Criteria**

<b>Dimensional</b>	Three Places	X.XXX = +/- 0.005 in (+/-0.13 mm)
	Two Places	X.XX = +/- 0.010 in (+/-0.25 mm)
	Angles	+/- 1 Degree
	Break Edges	0.005 - 0.015 in
	Surface texture	Ra 125 µin (3.2 µm) uniform finish
<b>Finish*</b>	General	Clean, no debris, no spotting or rust on finish.
		Uniform finish. Cosmetic blemishes visible at ½ arm’s length in 100 lux are subject to rejection.
	Electronic Displays	Uniform and complete character segments. Backlight fully functional.

		No cosmetic blemishes visible when display is powered.
	Wire Harnesses	Harness colors and print match specification. No damage to insulation. Connections exhibit no damage, discoloration, or rust.
	Edges – External and Internal	No Burrs Permitted.
	Threaded Holes	Pass Go / No-Go Thread Gauge Inspection. Uniform Thread Finish with no chipped edges or machining debris in threads.
	Machined Diameters	Any variation cannot exceed assigned tolerance.
	Tumble Debur	Uniform finish across all surfaces.
	Anodize / Plated Finish	Uniform finish and color on all surfaces. Adhesion – pass tape test.
	Silkscreen	Uniform print with no smears. No double print, no heavy print with fill ins. No incomplete or missing print. Print registration and alignment to surface features. Adhesion – pass tape test.

**10.0 Aerospace Supplier Quality Requirements (ASQR)**

The following requirements only apply to qualified aerospace suppliers or as specified on the Governors America Corporation purchase order.

- 10.1 GOVERNMENT SOURCE INSPECTION (SQR-1)- Government Inspection is required prior to shipment from your facility. Upon receipt of this order, promptly notify the Government Representative normally servicing your facility so that the appropriate planning can be accomplished. If a government representative does not service the Suppliers’ facility, notify the nearest Defense Contract Administrative Office for direction, or GAC.
- 10.2 SOURCE INSPECTION (SQR-2)- Source Inspection shall be conducted by GAC at the Supplier’s facility or where designated in the Purchase Order prior to shipment. Inspection/test of the items shall be performed by the Seller and shall be subjected to witness by GAC. GAC shall elect to do 100% or sample of the units. If sample is elected, the sample will be selected by GAC Engineering. Seller shall have available and present upon request, documented evidence of in-process and/or final inspection/test data. Required documentation for shipment must be completed and signed by its Quality Assurance Manager, or authorized designee, and available for GAC review.
- 10.3 CHEMICAL AND PHYSICAL TEST REPORTS (SQR-3)- For raw material shipments, or where material was supplied by the supplier, physical and chemical test report certifications shall be supplied with each shipment. Test reports shall be legible and include the material designation, specification and revision letter (material must be certified to the latest revision in effect at the time of shipment), results of all specified testing requirements, the mill heat number, and any other requirements specified on the Purchase Order and must be traceable to the material.
- 10.4 INSPECTION SHEETS AND TEST REPORTS (SQR-4)- With each shipment the supplier shall submit inspection reports, data sheets, test reports, etc.... as applicable. Reports shall be

identified with the applicable drawing / specification number, revision, GAC Purchase Order number, and the Supplier's lot identification number. Further details below:

- 10.4.1 Inspection Reports shall cover all physical and dimensional characteristics for the item as called out on the drawing, or in the applicable specification. The Supplier shall report the actual dimensions of each part inspected. The inspection results shall be traceable by serial number or other identification method to the actual part inspected.
  - 10.4.2 Inspection Reports shall cover all physical and dimensional characteristics for the item as called out on the drawing, or in the applicable specification. The Supplier shall report the dimensional range and average of parts inspected. The inspection results shall be traceable to the lot of parts inspected.
  - 10.4.3 Inspection reports shall list the physical and dimensional characteristics of the items. Sample inspection shall be performed to verify critical dimensional characteristics of the lot of parts are within drawing specification limits. Actual dimensions do not have to be reported except where specific dimensions are requested.
  - 10.4.4 Test reports for special tests such as vibration, shock, rain, sand and dust, pressure, environmental, EMI, ATP and others shall be supplied by the Seller.
  - 10.4.5 Destructive Testing Analysis (DTA) report is required. The Supplier is to permanently identify the parts that have gone through DTA and are no longer suitable for intended use. The tested parts shall be delivered to GAC.
  - 10.4.6 **NOTE:** Out of tolerance dimensions shall be identified on an inspection report. The Supplier shall not deliver parts that are out of tolerance to GAC without approval from GAC.
- 10.5 RECORD RETENTION AND RIGHT OF ACCESS – AEROSPACE (SQR-5)- Supplier shall retain all records pertaining to material, manufacturing processes, special processes, testing, and inspection for a minimum of ten (10) years as applicable. Supplier shall notify GAC prior to destruction. Supplier shall provide GAC, our customers, and regulatory authority access to all applicable records.
- 10.6 FIRST ARTICLE INSPECTION (SQR-6)- Supplier shall perform and document a comprehensive inspection and test of the article to assure the items conform to all specification requirements. First Article Inspections shall be performed in accordance with Aerospace Standard AS9102. First Article Inspection is required on a part representative of the production process used in the manufacture of the parts. The First Article Inspection Report (FAIR) must accompany the first shipment of parts. If two years have elapsed since the last shipment of this part number, a new First Article Inspection is required.
- 10.6.1 If an AS9102-compliant FAIR is not required, an equivalent supplier form may be used and shall include the following:
    - 10.6.1.1 GAC part number, revision level
    - 10.6.1.2 All print requirements including, Notes, Feature, Tolerance
    - 10.6.1.3 Actual measured value, Method of Gauging, Accept/Reject

indication

- 10.6.2 Where physical testing is required, the results of the test must be recorded. Where special processes are required, verification of each special process must be recorded, applicable certifications retained, and available for review (or submitted with the FAIR if requested by GAC). The signature and title of the person performing the inspection and date of inspection must also be included.
- 10.7 SPECIAL PROCESS APPROVAL (SQR-7)- Heat treating, welding, electroplating, laser cutting, EDM, ECM, Non-Destructive Testing, etc. are considered special processes and require approval by GAC prior to use. The Certificate of Conformance shall include the specification number and revision of all special processing performed. Special processes, once approved, may not be changed without GAC approval of the changes.
- 10.8 APPROVED INSPECTION PLAN (SQR-8)- When requested; suppliers shall submit a detailed inspection plan to GAC Facility for approval before manufacturing begins. Supplier inspection shall be in accordance with the GAC approved inspection plan for the part number ordered.
- 10.9 APPROVED SOURCE OF MATERIALS (SQR-9)- All material used in fulfilling this in writing to the contrary.
- 10.10 SHELF LIFE DATA (SQR-10)- The Supplier shall furnish the date of manufacturer, useable shelf life, expiration date of useable shelf life, any special storage conditions, and any safety warnings for each item shipped. Material Safety Data Sheet must be included with each shipment. Items will not be accepted by GAC where shelf life remaining is less than 75% of total shelf life.
- 10.11 IDENTIFICATION AND CONTROL BY LOT (SQR-11)- Traceability of items shall be by lot number rather than individual serial number. Seller shall assign a common lot number to all items in a specific manufactured lot.
- 10.12 IDENTIFICATION AND CONTROL BY SERIAL NUMBER (SQR-12)- Seller shall identify individual serial numbers, to all items shipped to GAC and shall appear on the certification. Serial numbers shall be assigned by GAC. The method of marking will be specified in the Purchase Order or on a furnished manufacturing drawing. The Seller shall maintain traceability of each serialized item to raw materials used in its manufacturing processes.
- 10.13 TEST AND INSPECTION REPORTS (SQR -13)- Test and inspection reports, with measured data as required by the applicable procurement specification, must accompany each shipment.
- 10.14 SPECIALTY METALS (SQR-14)- DFARS 252.225-7014 Preference for Domestic Specialty Metals (Apr 2003) applies to this order if specialty metals are being furnished. Contact GAC Purchasing for clarification or applicability if necessary.
- 10.15 BUYER FURNISHED MATERIAL (SQR- 15)- When GAC furnishes material, the Seller's System shall provide for the following:
- 10.15.1 Examination upon receipt for transit damage
  - 10.15.2 Verification of quantity
  - 10.15.3 Storage against damage

10.15.4 Improper use or disposition

10.15.5 The Seller must furnish certification that the parts used were those furnished by the Buyer and no un-authorized substitution was made.

10.16 APPROVED SUPPLIERS (SQR-16)- As required, GAC "Approved Suppliers" are responsible for maintaining a list of their approved suppliers and shall have it available upon request for review by GAC. Information shall include name, address, nomenclature of parts or services provided, part numbers and other pertinent information requested by GAC. Suppliers shall only purchase aircraft related parts from their suppliers which are controlled by GAC by approval or inspection.

10.17 MOVEMENT OF WORK (SQR-17)- The Supplier agrees that the manufacturing and/or fabrication of Work being delivered under this Purchase Order will not be moved to another production facility without the express written approval of GAC.

10.18 FOREIGN OBJECT DEBRIS (FOD) (SQR-18)- Supplier shall comply with NAS412 to prevent Foreign Object Damage (FOD) to manufactured products. Supplier shall establish and maintain an effective FOD prevention program through a Continual Improvement approach that proactively addresses and controls the events (conditions and actions) leading to FOD.

10.19 EXPORT/IMPORT CONTROLS (ITAR) (SQR-19)- Supplier shall control the disclosure of, and access to, technical data, information, and other items including hardware received under this purchase order in accordance with U.S. export control laws and regulations, including but not limited to the International Traffic in Arms (ITAR) and the U.S. Department of Commerce, Bureau of Industry and Security (BIS), and Export Administration Regulations. Contact GAC Purchasing for clarification or applicability if necessary.

*10.19.1 15 CFR §758.6 of the EAR: "These commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to US Law prohibited".*

*10.19.2 22 CFR §123.9(b) of the ITAR: "These commodities are authorized by the US Government for export only to (country of ultimate destination) for use by (end user). They may not be transferred, trans-shipped on a non-continuous voyage, or otherwise be disposed of in any other country, either in their original form or after being incorporated into other end-items, without the prior written approval of the US Department of State."*

10.20 COUNTERFEIT PARTS AVOIDANCE (SQR-20)- Supplier shall ensure that controls are in place to reduce and mitigate the risk of counterfeit components and/or assemblies from GAC in compliance of AS5553 and their Quality Management System. This Procedure outlines the process of procuring parts from reliable sources, assure authenticity and conformance of procured parts, to control parts identified as counterfeit and report counterfeit parts to GAC and Government Investigative authorities. Any questionable items should be referred to GAC.

*\*Governors America Corporation strives to provide a product final finish that complements a reliable product that always performs to the standard, therefore cosmetic defects are treated equally as physical non-conformances.*