INTRODUCTION

SPI acknowledges the critical function of the Supplier in its supply chain and in the company vision to establish a procurement process that will perform at an acceptable rating for product and service to ensure and maintain a world-class competitive edge in customer satisfaction. In this endeavor, SPI has created the SQAR-740 document as the communication tool to flow-down SPI special quality requirements that apply to each purchase and/or contract with its Suppliers.

In addition to the part number, quantity and other information in the Purchase Order/Contract, SPI will incorporate applicable quality clauses as additional requirements. The Supplier is required to review all SPI purchase orders and establish a quality plan that will ensure compliance with the purchase order requirements that include the quality clause(s). Please contact the SPI buyer if you have any questions on the subject.

1.0 PURPOSE

1.1 This document establishes the quality requirements for Suppliers doing business with Safran Passenger Innovations (SPI). The applicable requirement clause(s) of this document will be flowed down to Suppliers in the purchase order and/or contract issued by SPI. Please contact the SPI buyer if assistance is required with this document. By accepting a SPI purchase order and/or contract, the Supplier agrees to comply with the applicable SQAR clause.

1.2 The requirements specified herein will be included on the Purchase Order, Contract or other formal agreement (hereafter, referred to as the Contract) between a Supplier and SPI. The purpose of this document is to clearly define for each purchase of products or services, all the necessary and applicable technical and quality requirements with which the Supplier must comply to meet the requirements of SPI, its customers and/or regulatory authorities.

2.0 APPLICATION

2.1 F101 “SPI Supplier Requirements Compliance Matrix”.

2.2 SQAR-740 establishes supplementary requirements specific to SPI which apply in addition to the requirements defined in F101.

2.3 Unless expressly excluded by the Contract, clause Q010, Section 3 herein applies to all Contracts. The “Q” clauses listed in Section 4, apply only when the specific clause number is included on the Contract.

3.0 RESPONSIBILITIES – GENERAL SUPPLIER (Q010)

3.1 General Requirements

3.1.1 The Supplier shall comply with F101 SPI Supplier Requirements Compliance Matrix.

3.2 Supplier Approval

3.2.1 Depending on the Supplier’s category assigned by SPI, an onsite audit may be performed to assess the Supplier’s ability to comply with applicable Quality Management System (QMS) requirements.

3.2.2 Class 1 designated Supplier’s will require an onsite audit to be approved to the SPI Approved Vendor List unless the Supplier’s QMS has been certified to AS9100 or ISO9001 by a recognized third-party certification body.

3.2.3 Class 1 designated Suppliers will be re-evaluated for a QMS audit every two years. The audit may be foregone if the Supplier has maintained an acceptable quality and delivery rating for the previous assessment period and a third-party certificate is still valid.

3.3 Root-Cause and Corrective Action

3.3.1 SPI may issue a corrective action to the Supplier because of a specific incident or trends in Supplier performance.
3.3.2 When a corrective action is requested, the Supplier shall document the response using a SPI provided form or a format approved by SPI. The Supplier is responsible for responding to the corrective action within the established due date or requesting an extension prior to the corrective action becoming past due.

3.3.3 SPI has the right to reject any corrective action response and may request further investigation and corrective action.

3.4 Quality (SNCR) and Delivery (SOTD) Performance

3.4.1 SPI Key Performance Indicator (KPI) targets for acceptable Supplier Quality and Delivery performance are defined in the table below.

<table>
<thead>
<tr>
<th>Metric</th>
<th>KPI</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality</td>
<td>SNCR &lt; ppm</td>
<td>2500 ppm</td>
</tr>
<tr>
<td>Delivery</td>
<td>SOTD &gt; % delivered on time</td>
<td>98%</td>
</tr>
</tbody>
</table>

3.4.2 Supplier performance against Quality and Delivery Metrics are monitored and reported monthly by SPI.

3.4.3 Suppliers whose ratings drop below the target KPI three months in a row or have one drop in a target KPI rating 20% below the target in one month will be required to provide an improvement plan. The improvement plan may be in the form of a SPI Corrective Action Request or in a format agreed upon by the SPI and the Supplier.

3.5 Certificate of Conformance

3.5.1 With each delivery of products on the Contract, the Supplier shall include on the packing list/shipper or on a separate attached document, a written statement titled “Certificate of Conformance” or equivalent which meets the minimum statement of conformity requirements defined in F101 and acceptance authority media requirements defined in Section 3.6.

3.5.2 The Certificate of Conformance and/or Packing List shall contain the Supplier’s name and address as defined on the Purchase Order or Contract.

3.6 Supplier Initiated Changes

3.6.1 The Supplier may not make any changes in product design, drawings, performance specifications, materials or processes that will result in a Class I change (as defined by MIL-STD-973) without specific approval by SPI in writing prior to making such changes in products or data. When applicable, the Supplier shall flow-down this requirement to the Supplier’s sub-tier sources.

3.6.2 Suppliers providing product in accordance to a SPI Source/Control Drawing (SCD) may not make any changes which will result in a change to an SCD requirement, including specified Vendor Drawing/MOD revisions, without approval by SPI.

3.6.3 The Supplier may make changes on products under Supplier’s proprietary engineering design control that result in a Class II change (as defined by MIL-STD-973). The Supplier shall notify SPI of Class II changes.

3.6.4 Class II changes made by Suppliers providing product designated as an Off the Shelf Item (e.g. where SPI is purchasing the Supplier’s part number) which result in a change to the Supplier part number revision specified on the Purchase Order require SPI acknowledgment of the change prior to shipment.

3.7 Application of Acceptance Authority Media (AAM)

3.7.1 The Supplier shall clearly define and establish controls for the use of AAM within its Quality Management System (QMS). Controls shall be established, at a minimum, to address the following:

3.7.1.1 Altering Data on Documents:
3.7.1.1 The use of any method that causes the original data on documents to be obliterated or eligible (i.e., the use of correction fluids, correction tape, write-over, or other methods) to correct, modify or otherwise alter the data and/or entries on any certifications, test reports or other documents required by the Contract, is strictly prohibited.

3.7.1.2 Corrections may be made on inspection reports such providing it is clearly obvious that a correction was made by lining through the error one time and either initializing the error or stamping by an authorized individual.

3.7.1.2 Acceptable & Authorized Signatures:

3.7.1.2.1 All certifications and test reports shall include the title and acceptable signature of the authorizing company official.

3.7.1.2.2 When quality or inspection stamps are used in lieu of actual signatures, such stamps shall clearly identify the issuing organization and the authorized individual to whom the stamp is assigned.

3.7.1.3 Electronic Signatures

3.7.1.3.1 When the Supplier elects to use electronic signatures on electronic documents, the following rules apply:

3.7.1.3.1.1 Application of electronic signature must be under the direct control of the person whose name appears on the document.

3.7.1.3.1.2 Electronic signature may only be applied at the location or facility where the individual is located.

3.7.1.3.1.3 The preparation of electronic documents and application of electronic signatures is governed by documented procedures in the Supplier’s Quality Management System.

3.7.2 The Supplier shall maintain compliance to AAM requirements by assessing its process and supply chain as part of internal audit activities. The areas of focus of this assessment shall include but not limited to:

- Authority Media Application Errors (i.e. Omission, Typos, Legibility, etc.)
- Authority Media Application Untimely Use (i.e. Documentation is not completed as planned, “Stamp/Sign as you go”, etc.)
- Authority Media Application Misrepresentation (i.e., uncertified personnel, Falsification of documentation, Work not performed as planned, etc.)
- Authority Media Application Training Deficiencies (i.e. Ethics, Culture awareness, Proper Use of authority media, etc.)

3.8 Request for Deviation or Waiver

3.8.1 A Supplier identifying a need to deviate from the scope of requirements delineated in a SPI purchase order will be required to document the specific deviation or waiver using SPI Form F740-011 or equivalent format approved by SPI. The Supplier shall identify if a drawing change is required along with the request.

3.8.2 The Supplier shall submit the request for Deviation or Waiver to the SPI buyer and must receive SPI approval prior to the shipment of affected product.

3.8.3 After review and disposition of a Deviation or Waiver, a dispositioned copy of the form or communication with the MRB disposition will be returned to the Supplier by the SPI buyer.

3.8.4 If the Deviation or Waiver has been accepted, the Supplier shall note the approval on the Purchase Order and include a copy of the SPI approved Deviation or Waiver with the shipment.

3.8.5 Deviation or waiver approval by SPI does not relieve the Supplier of providing root cause and corrective action, or the legal responsibility and liability for such products.

3.9 Returned Product
3.9.1 Product returned by SPI (RTV) to the Supplier that is reworkable shall only be reworked in the Supplier’s Production Quality Management System (e.g. FAA Part 21). Reworked product shipped back to SPI shall only be certified as “NEW” Product in accordance with Section 3.5.

3.10 Supplier Notification of Escape Process

3.10.1 When the Supplier has determined that nonconforming product(s) have been delivered to SPI, the Supplier shall notify the SPI Buyer within one business day of initial discovery if the escape jeopardizes product flight safety or three business days of initial discovery for non-safety related escapes. The Supplier shall use receipt acknowledged e-mail or other positive notification method. The notification shall include the following information:

- Supplier name
- The SPI PO number
- Part number and description
- Affected quantity and serial numbers (if known)
- Dates delivered (if known)
- A brief description of the nonconforming condition

3.10.2 The initial notification shall be followed by a formal Notification of Escape delivered to the SPI Buyer within ten days of the initial notification. The Notification of Escape shall include the following information:

1. Complete description of the nonconforming condition(s).
2. The affected quantity of products (including serial numbers when applicable) and dates delivered to SPI.
3. Potential effect of the nonconformance on the performance, reliability, safety and/or usability of the product(s) if known.
4. Recommendations for SPI action including for products that SPI may have already delivered to its customers.
5. Immediate action taken by Supplier to contain the nonconformance and nonconforming products.
6. Root cause analysis of the nonconforming condition.
7. Root cause corrective action plan and schedule.
8. The plan and schedule for verifying the effectiveness of the corrective action.

3.10.3 In those cases where (1) through (8) above are under investigation and incomplete, the Supplier may request, from the SPI Buyer, authority to submit an interim disclosure letter and identify a due date for completion of the investigation.

3.10.4 SPI reserves the right to participate in the nonconforming product investigation at the facilities of the Supplier or its sub-tier sources.

3.11 Counterfeit Prevention

3.11.1 Suppliers providing electronic assemblies, components or assemblies containing electronic components shall implement an Anti-Counterfeit Policy to eliminate the impact of counterfeit products to SPI and its customers. This is a zero tolerance Policy against knowingly and intentionally trafficking in counterfeit goods.

3.11.2 The Supplier shall maintain processes to ensure purchases are only made directly from the Manufacturer or Manufacturer approved sources and shall be compliant with SAE AS6496 Fraudulent/Counterfeit Electronic Parts: Avoidance, Detection, Mitigation, and Disposition – Authorized/Franchised Distribution. Should a suspect counterfeit or counterfeit product be found, the Supplier shall quarantine such material and report the finding to the Supplier and appropriate authorities. This policy shall be communicated, understood, implemented, and maintained at all levels of the Organization.

3.11.3 The Supplier is responsible for implementing and managing a program to assure proper counterfeit prevention and assuring that the same requirement is flowed-down to its sub-tier Suppliers and through the supply chain involved in processing purchase orders as issued by SPI.

3.12 Product Safety and Conformity
3.12.1 The Supplier is responsible to assure that the compliance and controls over any product and/or service provided or manufactured for SPI, is processed, inspected, controlled and shipped in such a manner to assure the conformity and safety is properly controlled per the defined SPI requirements.

3.12.2 The Supplier shall ensure that appropriate persons in the organization are aware of their contribution to product and/or service conformity and safety.

3.13 Ethical Behavior

3.13.1 The Supplier shall comply with the Code of Ethics of the Safran Passenger Innovations as well as ensure that all persons in the organization are aware of the importance of ethical behavior.

3.13.2 The Safran Ethical Guidelines can be found at:
https://www.safran-group.com/media/433819/download

3.14 Product Serialization Requirements

3.14.1 When product serialization is required, and serial numbers are assigned by SPI, serial numbers will be defined in the Contract or reference documents. The Supplier shall apply the specified serial numbers on all products and record the serial numbers on all applicable documentation. The assigned serial numbers may not be altered or replaced without written authorization from SPI.

3.14.2 When product serialization is required, and the serialization scheme is selected by the Supplier, the Supplier’s serialization scheme shall include provisions to ensure that serial numbers are not duplicated on products with the same part number. The product serial numbers shall appear on all certifications and data sheets provided by the Supplier.

4.0 QUALITY ASSURANCE PURCHASE ORDER CLAUSES

NOTE: “Q” Clauses from Section 4, apply only when included on the Contract

4.1 Supplier Inspection & Quality System Requirements

Q030 Quality Management System – Distributors per SAE AS9120 – The Supplier shall establish and maintain a Quality Management System in compliance with the current requirements of SAE AS9120 – “Quality Management Systems – Aerospace – Requirements for Distributors.” Supplier’s Quality Management System is subject to audit, verification and approval and/or disapproval by the SPI designated representative(s).

Q035 Inspection System – FAA-PMA Holder – When the Contract is for products for which the Supplier has received Federal Aviation Administration (FAA) Parts Manufacturer Approval (PMA), the Supplier shall establish and maintain an Inspection System in compliance with the current requirements of 14 CFR 21 (Title 14, Code of Federal Regulations, Part 21), Subpart “K” – Approval of Materials, Parts, Processes and Appliances. The Supplier’s Inspection System is subject to audit, verification and approval and/or disapproval by SPI designated representative(s). A copy of the current FAA PMA approval letter or “Certificate” shall be furnished to SPI with the initial delivery of products on the Contract.

Q055 SQA Program Requirements per ISO 9001–3 and RTCA/DO – 178 – The Supplier shall establish and maintain a Design Assurance Management and Development Program for aviation electronic hardware in compliance with the requirements of Radio Technical Commission for Aeronautics document RTCA/DO-254 – “Design Assurance Guidance for Airborne Electronic Hardware.” The Supplier’s electronic hardware Design Assurance Management and Development Program is subject to audit, verification and approval/disapproval by SPI designated representative(s).

Q057 Deliverable Software Supplement SAE AS9100 / AS9006 – This Contract is for deliverable software or products containing deliverable software. Supplier’s Software Quality Assurance (SQA) program shall meet the requirements of the current revision of SAE AS9100 – “Quality Management Systems – Requirements for Aviation, Space and Defense Organizations,” and SAE AS9006 – “Deliverable Aerospace Software Supplement for AS9100.” Supplier’s SQA program is subject to audit, verification and approval and/or disapproval by SPI designated representative(s).
Q060 Inspection & Test System per SAE AS9003 or Equivalent – The Supplier shall establish and maintain an Inspection & Test System in compliance with the current requirements of SAE AS9003 – “Inspection and Test System.” Supplier’s Inspection & Test System is subject to audit, verification and approval and/or disapproval by SPI designated representative(s).

Q080 Inspection System - Title 14 CFR 145 – The Supplier shall establish and maintain an Inspection system that is in compliance with the requirements of the current revision of 14 CFR 145 (title 14, United States Code of Federal Regulations, Part 145) – “Repair Stations; Inspection System Requirements.” The Supplier’s Inspection System must be approved by the Federal Aviation Administration (FAA) with a rating applicable to the item called out on the SPI Contract. A copy of the current FAA issued approval letter or “Certificate” shall be furnished to SPI concurrent with the initial delivery of products on the Contract.

Q085 Inspection System for Maintenance Organization per EASA Part 145 – The Supplier shall establish and maintain an Inspection System in the Suppliers Maintenance Organization that is in compliance with the current revision of European Aviation Safety Agency, (EASA) Regulation, Part 145 – “Approved Maintenance Organization; Inspection System Requirements.” The Supplier’s Inspection System must be approved by EASA, and/or the National Civil Aviation Authority (NCAA) of the country in which the Supplier’s facilities are located with a rating applicable to the item on the Contract. A copy of the current approval letter or “Certificate” shall be furnished to SPI concurrent with the initial delivery of products on the Contract.

Q091 Quality Management System per SAE AS9100 – The Supplier shall establish and maintain a Quality Management System that is in compliance with the current revision of the requirements of SAE AS9100 – “Quality Management Systems – Requirements for Aviation, Space and Defense Organizations.” The Supplier’s Quality Management System is subject to audit, verification and approval and/or disapproval by SPI designated representative(s).

Q105 Statistical Products Acceptance Requirements - When the Supplier elects to use statistical methods for product acceptance, unless otherwise specified by the Contract, the Supplier’s statistical acceptance method(s) shall be in accordance with SAE ARP013 with minimum protection levels meeting SAE ARP9013 Figure B1. The Supplier shall use statistical methods for product acceptance that apply C=0 for acceptance criteria.

Q145 Requirements for Calibration Laboratories – ISO 17025 – The Supplier shall establish, document and maintain a system that is in compliance with the current revision of ISO 17025. The Supplier’s calibration system is subject to audit, verification and approval and/or disapproval by SPI designated representative(s).

Q155 Limited Material Review Authority – Refer to F101

Q160 Full Material Review Authority – Refer to F101

4.2 Source Inspection Requirements

Q180 In-Process Source Inspection - Deleted

Q185 Third Party Source Inspection at Supplier's Expense – The requirement for the Supplier to contract with SPI approved third party Supplier to perform source inspection (in-process or final) at the Supplier’s facilities may be invoked by SPI any time during Contract performance.

- The Supplier will be notified in writing when this requirement is invoked by SPI.

Q190 Source Inspection – Products to be delivered on this Contract require source inspection tests or both by a SPI Quality Assurance representative, prior to delivery to SPI. If in-process inspection is required, the manufacturing sequence at which source inspection is required will be specified in the Contract.

- The Supplier shall notify SPI at least forty-eight (48) hours in advance of the time the products will be ready for source acceptance. Upon request, the Supplier shall make available to the SPI representative any measuring and test equipment, facilities, records and personnel to facilitate the final source inspection.

Q195 Delegated Source Inspection – Supplier is authorized to perform delegated source inspection in accordance with SPI work instruction WI065 “Supplier Delegated Source Inspection”, or WI046 “Source Insp. At Contracted MRF Facility”, for products or services delivered on this Contract.

- Such inspection and/or tests shall be accomplished prior to delivery of products to SPI and may be accomplished at your facilities and/or the facilities of your sub-tier sources.
Q196  Supplier Self Release Authority – Deleted

Q197  Drop Ship Authorization - Supplier has been delegated “Direct Shipment Authorization" to a customer on behalf of SPI. Direct Ship Authorization is only granted to those suppliers that have obtained delegated source inspection privileges through 'Contract Manufacturing Source Inspection as defined in SPI Work Instruction WI046.

- Quality Management at SPI shall be responsible to ensure the implementation and maintenance requirements of this Quality code are strictly adhered to by the supplier.

Q198  Dock-To-Stock Program – A supplier who has met all the requirements of Work Instruction (WI) 096, Dock-To-Stock (DTS) Program. The DTS Program is a term used to describe how a supplier can ship product from their dock directly to SPI Stock, without incoming inspection activities taking place at SPI.

4.3 Supplier Statements of Quality (Certifications & Test Reports)

Q230  Airworthiness Approval Tag (FAA Form 8130-3) – Authorization by Federal Aviation Administration (FAA), or by an authorized representative of the FAA, is required prior to delivery of products to SPI. A completed FAA Form 8130-3, signed by the FAA, or a duly authorized representative of the FAA, and attached to the products, is required with each delivery and upon receipt at SPI. A separate 8130-3 tag is required for each part number and/or serial number delivered. If the Supplier is unable to furnish an 8130-3 tag, the Supplier shall notify the SPI Buyer immediately.

Q231  Authorized Release Certificate (EASA Form 1) - Authorization by European Aviation Safety Agency EASA), or by an authorized representative of the EASA, is required prior to delivery of products to SPI. A completed Authorized Release Certificate – EASA Form 1, signed by a duly authorized representative of EASA or by the National Civil Aviation Authority of the supplier’s country, and attached to the products, is required with each delivery and upon receipt at SPI. If the Supplier is unable to furnish an EASA Form 1, the Supplier shall notify the SPI Buyer immediately.

Q233  Maintenance Record and Release Certificate – All work performed on parts or components by a Federal Aviation Administration (FAA) approved repair station, shall be documented on a Maintenance Record and Release Certificate for that component or part in compliance with United States Code of Federal Regulations 14 CFR Part 43.9, and include the following information:

- Description of work performed,
- The date of completion of the work performed,
- The name of the person performing the work if other than the person specified in (d), and
- If the work performed on the appliance or component part has been performed satisfactorily, the signature, the certificate number, and the kind of certificate held by the person approving the work. The signature constitutes the approval for return to service only for the work performed.

Q240  Certificate of Conformance (C of C) – Moved to Section 3 - Q010 General Supplier Responsibilities

Q250  Certificate of Traceability (C of T) - Deleted

Q255  Supplier Proprietary Design Products – Deleted

Q260  Statement of Conformity (FAA Form 8130-9) – The Supplier shall provide documentation to support the Supplier’s conformity inspection, including a completed FAA Form 8130-9 with each 1st Article product furnished on the Contract.

- With each delivery of products on this Contract, the Supplier shall include on the packing list/shipper or on a separate attached document a written “Statement of Conformity” which, is signed by an authorized FAA inspector, Designated Manufacturing Inspection Representative (DMIR) or other authorized FAA representative and contains their company name, address, Title of Authorized Individual along with their Signature/Stamp and date and a statement certifying that the products delivered on this Contract (number) and packing list/shipper (number) have been inspected in accordance with applicable Federal Aviation Administration (FAA) Regulations, and are: (a) authorized for installation and use on FAA certified aircraft systems produced by SPI; (b) are new and in unused condition; and (c) are in compliance with all requirements of the Contract.

Q265  Production Certificate – Deleted
Q270  Source Control Drawing (SCD) Certification – Deleted

4.4 Control of Raw Material

Q300  Raw Material Verification Program – The Supplier shall develop, document and implement a raw material (sheet, plate, bar, rod, etc.) verification program that will ensure that material received from the Supplier’s sub-tier sources meets all applicable technical and quality requirements.

- The Supplier’s verification program shall include provisions for monitoring and periodic testing of raw material upon receipt to ensure that such material meets all applicable requirements and implement appropriate storage and controls to preclude commingling of different heat/lots or batches of material.
- Raw material testing shall be in accordance with specification requirements and may be performed by the Supplier or a recognized testing laboratory. Supplier’s verification program shall document the frequency of such tests and the test results. Records showing the results of the Supplier’s material verification program and its effectiveness shall be available to SPI for review upon request.

Q310  SPI Furnished Material – Refer to F101

Q320  Material Certification and Test Report – With each delivery of raw material or products on this Contract, all purchased raw material shall include a Material Certification and Test Report.

- The Material Certification shall include name of the company that furnished the material and the following information and data:
  A. Material description, including, as applicable, name or designation, size or weight, alloy, type, class, grade or condition,
  B. Lot batch or heat number, and
  C. The applicable specification and revision to which the material complies.
- When the material furnished or used to fabricate products, is one of the types listed below, the Material Test Report shall include the following information and data:
  A. FERROUS MATERIALS: The Certification/Material Test Report shall include data that shows the actual test results obtained from the lot or heat of material versus the values required by the applicable material specifications for:
    a. Chemical composition, and
    b. Physical properties
  B. NON-FERROUS MATERIALS: Unless otherwise required by the material specification or Contract, the Certification/Material Test Report shall show:
    a. The typical or range of values of the chemical composition of the material,
    b. The range of physical properties of the material, and
    c. Include a statement that the material conforms to the applicable material specification.
  C. NON-METALLIC MATERIALS: The Certification/Test Report, issued by the manufacturer of the material, shall show:
    a. The specification and revision to which the material conforms,
    b. The lot/batch number (if applicable),
    c. The date manufactured,
    d. Any other technical data (material test results, composition, chemical or physical properties, etc.) required by the applicable material specification or Contract.

Q330  Traceability of Products to Raw Material – Refer to F101

4.5 Control of Special Processes
Q340  **Process Certifications and Test Report** - For all special processes required by the Contract and/or reference documents, the Supplier shall furnish to SPI, with the delivery of products, the certification/test report issued by company that performed the process.

- All certifications/test reports shall as a minimum include a complete description of the special process performed, including:
  a. Process name, applicable specification and revision, type, class, grade, etc.,
  b. When applicable, a statement that the process was performed by certified operator(s), and
  c. When applicable, that the process was performed in accordance with SPI approved process control document.
  d. REWORK – In those cases where products have been subjected to SPI approved rework processes the certifications shall define "rework to specification".

Q341  **Priority Process** – Deleted

Q342  **NADCAP Accreditation** – Deleted

Q350  **Heat Treat Certifications** – With each delivery of products on this Contract, the Supplier shall furnish a time/temperature certification that includes the following data:

- Part number and revision
- Quantity heat treated
- Heat treatment cycle – the actual temperature range & duration (hrs.) of each heat treat circle

Q365  **First Article Destructive Metallurgical Test Report (DMTR)** – Deleted

Q370  **Test Samples** – When specifically required by contract, the Supplier shall furnish for verification testing by SPI; one (1) additional product or suitable test sample produced from the same material lot and processed simultaneously with the lot of products delivered. When more than one lot of material was used, a sample is required for each lot of material. The sample shall be marked or tagged to identify the process that it represents and noted on the packing list/shipper.

Q376  **Process Control Data** – Deleted

Q380  **Nondestructive Test (NDT) Reports** – Deleted

Q390  **SPI Approval of NDT Techniques** – Deleted

4.6 Control of Castings

Q410  **Foundry Control** – Deleted

Q420  **Production Castings** – Deleted

4.7 Control of Limited Shelf Life Materials

Q430  **Pre-Production Controls** – Deleted

Q452  **Cure Date Marking** – Refer to F101

Q460  **Limited Shelf Life Materials** - Refer to F101

Q465  **Long Life Storage Materials** – Refer to F101

4.8 Control of Electronic Devises & Components

Q470  **Electrostatic Discharge (ESD) Control Program** – Refer to F101

Q480  **Protection of Electrostatic (ESD) Sensitive Devices** - Refer to F101

Q485  **Aerospace Electronic Products – General Requirements** – Deleted

Q486  **Industrial Electronic Products – General Requirements** – Deleted

Q490  **Certifications & Test Reports – Electronic Devices** - Deleted

Q500  **Identification of Electronic Devices** – Refer to F101

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4.9 Control of Contamination & Foreign Object Damage (FOD)

Q520 FOD Control Program – The Supplier shall establish, document and maintain a program to control and eliminate Foreign Object Damage (FOD) and/or contamination during the Supplier’s manufacturing, assembly, test and inspection operations. When applicable, the Supplier’s FOD control program shall include controls to preclude FOD or contamination at the Supplier’s sub-tier sources.

- D6-85622, "Foreign Object Debris/Foreign Object Damage (FOD) Prevention Requirements for Boeing Suppliers" may be used as a guide to establish and implement the Supplier’s FOD program. The Supplier’s FOD program is subject to on-site review and approval by SPI.

Q530 FOD Certification – Deleted

Q532 Fungus resistant products and Materials – Deleted

4.10 Inspection & Test Reports & Documentation

Q540 First Article Inspection Approval at Source – Inspection and/or testing and acceptance of First Article product by SPI at the Supplier is required prior to delivery of any products on this Contract. The 1st Article product shall be complete, documented and ready for delivery to SPI.

- The Supplier shall notify SPI at least forty-eight (48) hours in advance so that the inspection and/or testing of the First Article product as well as review of supporting documentation can be scheduled and completed prior to the required product delivery date. Upon request, the Supplier shall make available to SPI representatives any measuring and test equipment, facilities and/or personnel to facilitate the First Article inspection.

Q550 First Article Inspection Approval at SPI – The Supplier shall submit a 1st Article product and supporting documentation for inspection and/or testing and acceptance by SPI prior to delivery of products on this Contract.

Q560 First Article Inspection Requirements (FAIR) – Refer to F101

Q565 Controlled Planning – The products on this Contract are considered critical for aerospace applications and require strict control of manufacturing and processing operations. The Supplier shall furnish a complete First Article Inspection Report (FAIR) in accordance with the requirements, accompanied by copies of Supplier’s manufacturing and processing routing sheets to be used during production.

- After the SPI review and approval of the First Article and planning documentation, the Supplier’s manufacturing and process planning shall be considered as ‘frozen.’ Any changes proposed by the Supplier to the approved ‘frozen’ planning shall be submitted to SPI for review and approval prior to implementation.

- The Supplier shall furnish a revised FAIR, reflecting the changes in product because of changes in planning approved by SPI, with the next delivery of products on the Contract.

Q570 100% Inspection – The Supplier shall perform 100% inspection of all characteristics on all products delivered on this Contract. The Supplier shall provide copies of inspection and/or control data to SPI upon request.

Q575 Dimensional Inspection Certification (DIC) – Deleted

Q578 Supplier Certification Requirements – Deleted

Q580 Supplier Inspection Report (SIR) – Deleted

Q585 Supplier Inspection Report of Key Characteristics – Deleted

Q590 Final Article Inspection Report (FAIR) – Refer to F101

Q600 Product Serialization Requirements – Moved to Section 3 - Q010 General Supplier Responsibilities

Q605 Product Serialization by the Supplier – Moved to Section 3 - Q010 General Supplier Responsibilities
Q607 ATA SPEC 2000 Serial Number Formatting – Deleted
Q609 Weight reporting requirements - Deleted
Q610 Acceptance Test Procedure (ATP) Approval – Refer to F101
Q620 Functional Test Data Record – With each delivery of products on this Contract, the Supplier shall furnish to SPI a functional test data sheet, which shows the actual results (values) obtained during the functional tests performed on each unit of product versus the requirements specified in SPI approved Acceptance Test Procedure (ATP) or specification.
Q630 Functional Test Certificate (FTC) - Deleted
Q650 Qualified Parts Certificate (QPC) – Deleted

4.11 Miscellaneous Requirements
Q660 Manufacturers Catalogs, Drawings, etc.- Deleted
Q665 Repaired & Overhauled Products - Deleted
Q667 Alcohol and Drug Prevention Program – All Employees performing maintenance or inspection of products scheduled for delivery to SPI shall be included and part of a Federal Aviation Administration (FAA) approved.
- Anti-drug and Alcohol Misuse Prevention Program. This requirement applies both to pre-employment and random testing of current employees in accordance with the requirements of Title 14 CFR Part 121, Appendix “I” and Appendix “J.” Evidence of compliance with this requirement shall be made available to SPI for review upon request.
Q710 Component Traceability Requirements - Refer to F101
Q750 FMEA (PFMEA) Requirements – The Supplier shall implement Failure Mode & Effects Analysis (FMEA) / Process Failure Mode & Effects Analysis (PFMEA) or a similar tool to use for identifying variation in product/process characteristics, their effects and causes, and to develop solutions that will minimize/eliminate the effects of variation in products delivered on this Contract.
- The Supplier's product FMEA/PFMEA program shall be submitted to SPI for review and approval prior to start of work on the Contract.
Q755 Process FMEA Requirements - Deleted
Q765 Alternate Materials and/or Process Specifications – Deleted
Q770 Ship to Stock (STS) – Deleted
Q780 Pre-Production Review – Deleted
Q800 UID Marking – Deleted
Q900 PEP Product – Deleted
Q950 Advanced Product Quality Planning (APQP) – APQP is required for part numbers being sold for the first time by a supplier. Purchase order holder (supplier) shall comply with AS9145 – REQUIREMENTS FOR ADVANCED PRODUCT QUALITY PLANNING AND PRODUCTION PART APPROVAL PROCESS. APQP/PPAP activity shall begin immediately upon receipt of a purchase order for a part number being made for the first time by the supplier.
5.0 REVISION HISTORY

<table>
<thead>
<tr>
<th>Revision</th>
<th>Date</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>22-FEB-2011</td>
<td>Initial Release</td>
</tr>
<tr>
<td>B</td>
<td>13-APR-2011</td>
<td>CPAR #0042 and Supplier dispute</td>
</tr>
<tr>
<td>C</td>
<td>15-APR-2011</td>
<td>3.6 new add. Section 4.8, Q470 deleted reference(s) to military standards</td>
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<td>D</td>
<td>16-APR-2012</td>
<td>Added Q-clause Q900</td>
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<td>E</td>
<td>01-JUL-2013</td>
<td>Incorporated name change from IMS to SPI throughout document. Revised section 3.4.3 Incorporated Deviation Waiver process. Revised Q105, sampling inspection now in accordance with ANSI Z1.4, updated to align with current industry standard. Deleted Q265 Not applicable to IFE Commodities Deleted Q341 &amp; Q342. Not applicable to IFE Commodities Deleted Q365. Not applicable to IFE Commodities Deleted Q380 &amp; Q390. Not applicable to IFE Commodities Deleted Q410 &amp; Q420. Not applicable to IFE Commodities Deleted Q430. Not applicable to IFE Commodities Deleted Q580. Not applicable to IFE Commodities Deleted Q607 &amp; Q650. Not applicable to IFE Commodities Deleted Q800. Not applicable to IFE Commodities</td>
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<td>F</td>
<td>18-JUN-2014</td>
<td>Quality clauses Q532, Fungus resistant products and Materials &amp; Q609, Weight reporting requirements have been added to Pages #33 &amp; 36 respectively. Quality Clauses Q105 &amp; Q585 Key Characteristics have been added to Pages #19 &amp; 35 respectively. Minor reformatting and corrections of document.</td>
</tr>
<tr>
<td>G</td>
<td>25-FEB-2015</td>
<td>Minor wording changes to clarify intent on the following Quality Clauses: Q240, Q250, Q255, Q270, Q310, Q320, Q530, Q565, Q575, Q630 &amp; Q665</td>
</tr>
<tr>
<td>H</td>
<td>29-JAN-2016</td>
<td>Added Q465 Long Life Storage Materials, page 29 &amp; Q578 Supplier Certification Requirements page 34. Added new Head of Quality</td>
</tr>
<tr>
<td>J</td>
<td>29-JAN-2017</td>
<td>Updated to include the following: - Counterfeit - Product Safety - Flowdown requirements Ethical Behavior</td>
</tr>
<tr>
<td>K</td>
<td>22-NOV-2017</td>
<td>Extensive re-write - document revised to: - Better align the SQAR with ZA-Q-1030 (remove duplicate or conflicting requirements) - Add / revise requirements due to internal audit findings, customer requirements and business need. Changes described above are delineated by <em>italics</em> throughout the document.</td>
</tr>
<tr>
<td>M</td>
<td>09-JAN-2023</td>
<td>All quality clauses with reference to ZA-Q-1030 have been replaced with F101. Replaced the Zodiac Aerospace Code of Ethics to Safran Ethical Guidelines in quality clause Q010 - 3.13. Added PFMEA to quality clause Q750. Updated template, realigned Introduction and Purpose sections, removed Table of Contents</td>
</tr>
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