

# SUPPLIER QUALITY ASSURANCE REQUIREMENTS MANUAL

“SQAR”

Revision: AK

Dec 12, 2023

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Approved By:

Date:

VP Global Quality  
Rhea Antoine

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SQM Statement:

Panasonic Avionics is committed to continual improvement in quality, cost, delivery, and service.

Panasonic Avionics, a division of Panasonic North America strives to satisfy customers with quality products and services delivered on time that conform to world-class quality levels. The need and total satisfaction of our customers is our primary goal. We continually seek out competitive suppliers to enhance our ability to manufacture more effectively in order to maintain our leadership in our selected avionics marketplace. We are committed to developing long-term supplier relationships with suppliers that will ensure continual success and growth of both companies.

Supply Chain Policy:

x Implementation of Global Procurement Activities

The Company globally establishes partnerships with suppliers to respond to production activities on a global scale and works to create the functions and values our customers demand based on relationships of mutual trust and through diligent studies and cooperation.

x Implementation of CSR (Corporate Social Resp) Procurement

Complying with laws and regulations, social norms, and corporate ethics, the Company promotes procurement activities together with suppliers that fulfill their social responsibilities, such as human rights, labor, safety and health, global environmental conservation, information security.

## Introduction

For nearly a century, the Matsushita name has been synonymous with superb manufacturing quality. Matsushita began its expansion into the field of avionics in 1979, quickly establishing itself as a market leader by being one of the first companies to market video equipment and offer passenger control units (PCUs) to the airline industry.

Matsushita Avionics Systems Corporation was established in 1979 as a wholly-owned subsidiary to the Panasonic Corporation, and in 2005 became Panasonic Avionics Corporation. Today, we are the world's leading supplier of inflight entertainment and communications (IFEC) solutions.

## Our Technology

The avionics technology that now distinguishes our IFEC solutions was inspired, in part, by the development of an ultra-thin radio that launched portable electronics. Matsushita's interest in avionics was raised when the use of surface-mount technology made it possible to build an incredibly reliable, wafer-thin radio.

The idea was to develop it as a product for use in a market where reliability, compactness, and light weight would be particularly valuable. This beginning was the impetus for Panasonic's vision of providing IFEC solutions.

## Our Basic Business Principles

In 1929, our founder Konosuke Matsushita penned his Seven Basic Business Principles, based on his belief that success can only be achieved if all employees understand what they are doing and why. It was his desire that everyone in the organization have a sense of purpose, a clear direction, and a firm basis for tackling problems in an ever-changing world. He believed that these principles, based on a philosophy that respects nature and society, are applicable to any country in the world, at any time.

More than eight decades later, Panasonic employees around the world find these principles as relevant in our age of digital and wireless technologies as

Courtesy and Humility: We will always be cordial and modest, respecting the rights and needs of others in order to strengthen healthy social relationships and improve the quality of life in our communities.

Adaptability: We will continually adapt our thinking and behavior to meet the ever-changing conditions around us, taking care to act in harmony with nature to ensure progress and success in our endeavors.

Gratitude: We will act out of a sense of gratitude for all the benefits we have received, confident that this attitude will be a source of unbounded joy and vitality, enabling us to overcome any obstacles we encounter.

This manual defines the quality requirements of Panasonic Avionics, commonly referred to by division acronyms names such as PAC or ABU. This manual applies to all current and future suppliers of material, parts, assemblies and services. The manual serves as an outline of minimal quality system activities and quality performance expectations required in the delivery of supplier parts and services. This manual shall also convey to the supplier a broader understanding in how to become an approved supplier, and additionally provides guidance for continual improvement to become preferred suppliers.

The goals of this manual are as follows:

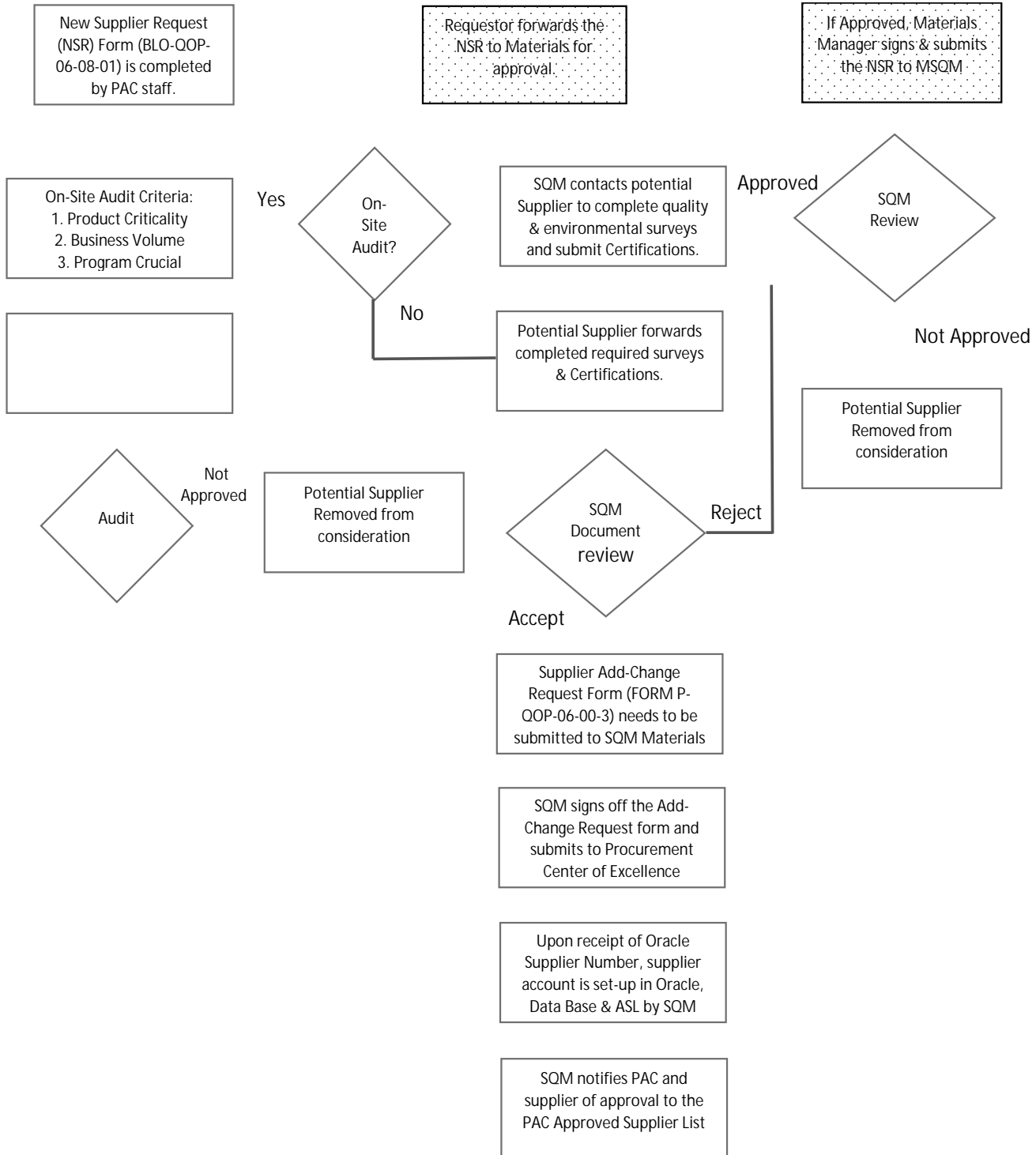
- 1) Communicate Panasonic Avionics (ABU & PAC) expectations, common goals, and minimum requirements to all suppliers to assure the quality of the supplied parts, products or services.
- 2) Based on effective planning and communication, develop an overall plan to assure smooth production of supplied parts.
- 3) Define procedures and documents that suppliers must follow and use to assure the effectiveness of the quality system.

Manual Administration Responsibilities

Panasonic Avionics (ABU & PAC)	Supplier
<p>Supplier Quality Representative:</p> <ul style="list-style-type: none"> <li>z Implementing appropriate aspects of this manual.</li> <li>z Keeping the integrity and maintenance of the manual.</li> <li>z Managing the revision process and assuring that the latest revision is on the system.</li> <li>z Educating suppliers on the applications of this manual.</li> </ul>	<ul style="list-style-type: none"> <li>z Maintain a Quality System that meets the general intent, as applicable, of the Panasonic Avionics SQAR</li> <li>z Controlling any internal release copies of the manual and ensuring appropriate flow down requirements to sub tier providers.</li> <li>z Understanding the content and requirements of this manual as applicable to your business.</li> <li>z Assuring all related departments or sub-suppliers are trained in regard to its guidelines and requirements.</li> </ul>
<p>Procurement Representative (ABU Procurement &amp; PAC Materials):</p> <ul style="list-style-type: none"> <li>z Ensuring Suppliers are aware of location to find latest revision of this manual.</li> <li>z Support in the education of supplier on the application of this manual.</li> </ul>	



Supplier Approval Process  
(PAC Only)



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- 3.6 Sellers and their Sub-Tier Suppliers shall comply with all Purchase Order requirements and its referenced documents. Seller shall flow down the requirements of this document to their sub-tier suppliers. Required clause (**Flow Downs**) are identified.
- 3.7 \*\* Software suppliers shall follow the release procedures, as detailed in the BL-WI-51-00-05 External Component SRR (ECSRR) Procedures document.
- 3.8 \*\* Software suppliers shall document product defects, as described in BL-WI-51-00-10 Internal Issues Tracker Procedure for Third-Party Users.
- 3.9 \*\* Software practitioners (e.g., engineering, quality, testers) shall be qualified by education, experience, and training appropriate for the criticality, complexity, customer and regulatory requirements, and other relevant attributes of the associated software product and activities.
- 3.10 Seller shall have a Quality Manual that shall include a description of the Quality Manual system (QMS) and contain, or reference associated industry and/or aviation standards requirements. (**Flow Down**)
- 3.10.1 Suppliers must ensure that all the control activities listed within the QMS are applicable and addressed within the suppliers' processes for control of documented information.

#### 4.0 Prohibited Practices

- 4.1 Seller shall not make design and product changes, substitutions, or repairs, regardless of design being controlled by Buyer or the Seller, unless ap01 Tc 3.404 0 T1.7 (i)-1.1 (t)bins, r7 (52 -1.1



5.0 References

Seller is responsible to obtain all industry relevant documents at own cost.

Document ID#

Document Name

ISO/IEC 17025



- x Providing an audit agenda and conducting an audit.
- x Issuing the final audit report and requesting corrective actions (where applicable).
- x Verifying the effectiveness of corrective actions.
- x Performing follow-up audits (where applicable).

Responsibilities (Supplier):

- x Providing resources needed by the audit team.
- x Developing and submitting corrective actions responses within 30 days of the conclusion of the audit, or as defined by the PAC corrective action report.
- x Closing all findings discovered from the audit.

Panasonic Avionics may accept, as proof of a compliant quality system, a recent satisfactory survey or an audit by a mutually recognized authority. Therefore, a holder of an applicable quality system certification may not be subjected to an on-site audit provided their certificate of authorization covers the scope of material being procured.

Should corrective action be required, the supplier must develop and submit their plan for corrective action plan within the define time period specified in the corrective action request. The auditor will review the supplier corrective action plan for acceptability. Panasonic Avionics may perform a follow-up audit, if necessary, within a specified time appropriate to the corrective action commitment. If needed, a request for the extension of time must be submitted in writing to the attention of the auditor. The request for extension will be reviewed and approved at the discretion of the auditor. All findings discovered during the audit must be closed and must receive auditor approval prior to final supplier approval.

**Note:** A supplier score as "Conditional" on the PAC QMS Assessment shall not preclude a supplier from being considered as an approved source. Conditional means the supplier had one of more area of deficiencies according to the assessment but does not represent the supplier's capabilities as a whole. Conditional scores only signify open actions exist.

- 7.4 Seller shall notify Panasonic of any significant changes to their Quality Management System such as changes of third-party registration, and/or probationary status of third-party Quality System registration(s).
- 7.5 No awarded part contract may be moved, relocated, outsourced from the intended facility without prior written authorization from the Panasonic Material department. *Reference paragraph 4.2,*
- 7.5.1 The supplier will need to notify Panasonic if any significant changes are made in the manufacturing processes such as equipment, methods, inspection techniques, etc. (including special processes such as heat treat, plating, welding, coating, etc.); any changes in the sub-tier suppliers used to produce or service the product; any changes of location used to produce or service the product; and if so required, obtain Panasonic's approval*
- 7.6 Unless specified in a written agreement between Buyer and Seller, the Seller shall have an English language translation of their Quality Manual and top-level Procedures. In addition, the Quality Manual must include a description of the quality management system and contain or make reference to the documented information and associated aviation, space, and defense industry requirements contained within QMS. **(Flow Down)**
- 7.7 Buyer reserves the right to request from Seller to translate additional documents and records as deemed necessary by Buyer's customers and Buyer's regulatory agencies.
- 7.8 All Quality System Data (i.e., Certificate of Conformance, Inspection/Test/QA Design records, etc.) requested and/or submitted shall be in English. **(Flow Down)**
- 7.9 \*\* Software supplier shall ensure that they communicate at a minimum compliant to the PAC SOW requirements. This may include specified formats and durations.
- 7.10 The Supplier is responsible for ensuring that all persons are aware of Panasonic



**Order of precedence:** *if a requirement of an applicable drawing or specification is in conflict with a requirement specified herein, the applicable engineering drawing or specification shall prevail.*

## 8.1 Key or Critical to Quality (CTQ) Characteristics & Process Capability

Key Characteristics or CTQs are the key measurable characteristics of a product or process whose performance standards or specification limits must be met in order to satisfy the end customer. They align design or improvement efforts with end customer requirements, and therefore may require application of statistical measures for capability assessment and control. Special emphasis must be given to KC or CTQs and supplier quality documentation (control plan, process documentation, etc.) must consider KC or CTQs. The supplier documentation regarding KC or CTQs must be subject to review and approval by Panasonic Avionics Quality Representative.

Due to the additional control requirements (capability studies, repeatability and reproducibility, process control, etc.), KC or CTQ designations are applied selectively to ensure proper focus of supplier resources. Panasonic Avionics may specify key and/or critical characteristics, which are defined below as:

### 8.1.1 *Key Characteristics or Critical Characteristics (Typically noted the Engineering Drawing, SOW)*

Critical characteristics are dimensions for which reasonably anticipated variation could significantly affect the product's safety or compliance with agency regulations. The Panasonic Avionics Quality and/or Engineering Representatives may define critical characteristics.

- 1) Supplier shall review Panasonic Avionics the requirements for Supplier of Safety/Critical Components, for more clarification on requirements.

The drawings and/or documentation shall specifically identify critical features of the component. The engineering drawing identification may include ONE of these symbols, but is not limited to:

KC

- 2) Process Control methods shall be deployed such as SPC techniques on normal production, where applicable.
- 3) Process capability study (if required) must be approved in the Pre-production/ 1<sup>st</sup> Article stage by the Panasonic Avionics Supplier Quality Representative and maintained on an on-going basis for continual improvement.

Panasonic Avionics requires that suppliers must maintain process capability L Q G L F H V & S • D Q G & S N • and long term R S N d t - t e r m C a p a b i l i t y studies are based on measurements collected from one operating run. Long-term capability studies consist of measurements, which are collected over a longer period of time. However, the data is analyzed with a control chart for evidence



As appropriate, Industry Workmanship standards for manufacturing performance shall be deployed in effort to meet the above Acceptability Standards. The Panasonic Avionics will use the above industry standards for inspection/acceptance of all electrical and electronic component assemblies unless otherwise specified in the Engineering drawing or SOW.

### 8.3 Shelf Life of Non-metallic Raw Materials and Parts

Supplier must indicate any applicable shelf life, manufacturing/cure date, or expiry date limitation on their certificate of conformance, and on all containers and packages according to applicable standards AS9100 requirements.

8.3.1 As applicable to Seller's products, Seller shall systematically control time, temperature, environmentally sensitive and hazardous Materials within a defined acceptable range that will include any "special" storage or handling conditions, when required.

8.3.2 For materials with limited shelf-life, Seller shall show on each container and also on the certificate, the cure or manufacturing date, expiration date or shelf life and lot's batch number.

8.3.3 It is Seller's responsibility to assure that upon delivery of age sensitive materials to Buyer, the materials will have 80% of their remaining shelf life as a minimum, unless otherwise specified.

8.3.3.1 Seller shall be responsible to apply the above requirements to any in-house Vendor Managed Inventory or pre-kitted inventory.

### 8.4 Supplier Welding Requirements

*This section is not applied if the drawing, spec sheet, SOW or other documents do not request.*

Welding of supplied components shall be performed and documented in accordance with the requirements of American Welding Society (AWS). The supplier shall comply with the appropriate standard, practices and guidelines which have been written in accordance with the American National Standards Institute (ANSI). Supplier shall reference NADCAP Requirements as applicable.

### 8.5 Certifications:

*This section is not applied if the drawing, spec sheet, SOW or other documents do not request.*

#### Metallic Material & Process Certification

Material Inspection Certificates from Original Raw Material Manufacturers are required to be provided for each individual heat code and must accompany each shipment from Suppliers. It is acceptable for EN10204 Inspection Certificates to have either handwritten or electronic signatures. The responsible person(s) name and position (title) must be on the Inspection Certificate. Copies of those Material Inspection Certificates shall be kept on file at the supplier's facility and are required to be retained for 20 years.

Finished Part Certificates of Conformance

EN 10204 Type 3.1 Inspection Certificate of Conformance shall, as a minimum :

- a) Be issued by an authority, which is independent of manufacturing (QA Department).
- b) Details specific results of inspection and testing necessary to meet the requirements of the order. This means that the products referred to as being inspected and tested are the actual items supplied and is a verification of the products and the process.
- c) Must be signed by the person responsible for document validation (QA Department).
- d) Shall identify Manufacturing location and/or place of origin
- e) Shall be in English

Certifications: Test Equipment -Safety

Seller shall provide evidence of product certification for assuring public safety and protecting the safety of consumers as defined by:

Underwriters Laboratories "UL" (USA) Certification and UL 61010-1 or UL 60950-1.

European Conformity "CE" (EU/EEA) Declaration and/or Equipment Tag to EN 61010-1 or EN 60950-1.

Seller shall contact the appropriate agency to obtain the documents which will specify proper safety procedures.

Test Reports and Certifications

- 8.5.1 Seller shall furnish all certifications, test reports and samples issued by Seller or Seller's sub-

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Supplier Nadcap Requirement Note: *Nadcap recognizes AS9001 Quality system approval performed by certification body approved by the IAQG and listed on the IAQG.ORG. Where no existing quality system approval exists, Nadcap accreditation would require a AC7004 assessment. The above is a requirement prior to the process certification by Nadcap.*

## 12.0 Customer Owned Production Tooling, Gages, and Test Equipment

### 12.1 Production Tooling, Test Fixtures (In-Circuit, Functional) Approval and Maintenance



## 12.2 Tool Design Changes

Approved tool designs must be maintained by the supplier to the current configuration of the tools and within the requirements of the applicable design specifications. Major modifications or refurbishments must be authorized and approved by Panasonic Avionics. At contract completion, Panasonic Avionics Material group shall provide the supplier with tooling and tooling design disposition instructions. Original tool designs are considered the property of Panasonic Avionics and suppliers must provide copies of the designs upon request.

Suppliers shall notify Panasonic Avionics Materials representative when tool design modification is required. All significant tool modifications, such as rebuilds, require notification to Panasonic Materials team. Such major modifications will be required sample submission (1<sup>st</sup> Article) per section 15.0 of this manual.

## 12.3 Control of Inspection and Test Equipment:

The supplier shall assume responsibility for all required calibration needs of any tools and/or equipment. The supplier shall assign and track gauges and equipment per a structured and documented gage calibration and maintenance program. The supplier is responsible, at all times, for the care, maintenance, safekeeping, and proper use of any Panasonic issued tools and equipment, if applicable. Supplier responsibilities include the prompt reporting of any loss, damage or destruction of gages and test equipment if Panasonic issued.

12.3.1 Unless purchased or leased by Recipient, the loaned equipment shall at all times remain the sole property of PAC.

12.3.2 Recipient shall not permit any third party to obtain possession of the loaned equipment.

12.3.3 Recipient agrees to indemnify and hold PAC harmless from and against any

- 13.4 \*\* Prototype, incremental, or experimental software should be uniquely identified and distinguished from formally released production software.
- 13.5 \*\* The software supplier shall establish and maintain configuration status accounting documented information to review, record, manage, and conduct product configuration audit on:

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14.5 If Seller is certified to EASA / FAA PART 145 and/or EASA / FAA PART 21 and/or similar regulatory approval, Seller shall establish and maintain an inspection system according to the requirements of its applicable agency.

14.6 The Supplier must retain documented information that provides evidence of monitoring and measurement equipment calibration. The retained documented information must include the required calibration register elements defined within the QMS standard and the results of calibration. Seller shall keep all inspections and calibration records available for evaluation (Audit) by Panasonic's customers and Panasonic's regulatory agencies.  
*(Flow Down)*

14.7 Recipient agrees that it will not permit equipment loaned for software services to be serviced by non-PAC personnel without the prior written consent of PAC. In the event the loaned equipment requires calibration services, Recipient shall send the loaned equipment to a PAC FAA-certified airworthiness repair station at Recipient's sole cost and expense.

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15.1 Submission Levels

The supplier shall submit the items and/or records according to Panasonic Avionics specified submission levels. Panasonic Avionics Supplier Quality and/or specifications 1-1.7 (ni)

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15.5 Full Layout of First Article (n t1)

Supplier shall provide evidence that dimensional verifications, which are required by the design and the control plan, have been completed and results indicate compliance with specified requirements.

15.5.1 The supplier shall record all actual measurements and indicate evaluation judgment on a First Article Inspection Report. Typically, this will include full layout of 1 sample minimum with strict reference to the drawing and/or specification. The layout must include all drawing notes and dimensions.

15.5.2 All dimensional characteristics and special notes from the drawings shall be identified with sequential numbers (1, 2, 3...) which corresponds to the columns on the Inspection Report. Panasonic prefers that features shall be identified starting in the top left corner of the drawing and proceed from left to right and from top to bottom, ~~however alternative logic shall be permitted with INPR-198186 (see) Td: 93673~~

15.532 Allecrca-1 (o)(c)-1.7 (h)5.1 (dr)0.7 (ec)-1.7 (e(r)0.6

15.542 d, t r sli ic)vca-1 (oue s)3.7  
ampl( s)-109pfie(i)-1 (s)-184  
of2ction 8..A5-09p(1, w)1.7





# Global Procurement Management

16.4 \*\* Software Acceptance Criteria

- 16.4.1 All software-related deliverables listed in the deliverables section of the project requirements shall be addressed and approved by the PAC Project Manager.
- 16.4.2 All technical documentations deliverables shall be reviewed and approved by the PAC Project Manager.
- 16.4.3 The Supplier to provide QA/final test results for each software drop as defined in SOW.
- 16.4.3

x





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For Sellers whose product is shipped directly to Boeing - Seller shall label all units, intermediate and shipping containers as follows (when applicable):

- Suppliers Name
- Part number shown on Purchase Order
- Part Nomenclature
- Customer Purchase Order Number
- Quantity of Part in container
- Unit of Measure
- Serial number
- Precautionary Handling, Label or Marking as required for Safety.
- Country of Origin
- Name and Address of Consignee
- Name and address of Consigner
- Box Number
- Total boxes in shipment

18.0 Foreign Object Debris, Contamination, Preservation and Cleanliness

Panasonic requires supplier to have an active housekeeping program in place to prevent any risk of FOD or Product Contamination. While we subscribe to known methodologies such as 5S, we also acknowledge other programs exist that can achieve the same objective. However, the supplier is expected to have a structured, active and effective program in place to reduce the risk of FOD and/or product contamination that meets a minimum of AS9146. (*Flow Down*)

In order to mitigate product stock degradation, Panasonic requires organizations to ensure appropriate considerations have been taken in effort to maintain all original OEM product properties. Stored product should be assessed for product condition at appropriate intervals, and FIFO methodologies shall be considered. Organizations should consider an appropriate inventory management system to optimize stock rotation.

19.0 Supplier Performance Feedback

Panasonic Avionics suppliers will be monitored continuously based on lot/product quality, on-time delivery, and other attributes as defined by the specific division. Panasonic Avionics will periodically issue a report to “Core” suppliers that will include an overall rating of their performance. If an adverse trend in performance is detected, then actions will be taken to review the supplier's status. If warranted, the Materials Supplier Quality department will contact the supplier to request a plan for corrective actions; such actions may include the request for suppliers to disclose internal performance data and improvement initiatives to resolve issue (s). The diagram below outlines the general process. (Next page)



- x 100% inspection at supplier's cost.
- x Return to supplier for rework at supplier's cost.
  - o Rework – Suppliers shall only rework material that hold primary manufacturing responsibility. Parts shall be restored





- x Fire
- x Smoke emanating from, in, or on a product.
- x Electrical shock
- x Visible sparking from or in a product
- x Explosion or implosion of a product
- x Leakage of any chemical substances from a product
- x Unusual wearing of, deterioration of, or stress upon a product or any component of a product
- x Accumulation or circulation of toxic or noxious gases
- x Emission of X-ray radiation, Ultraviolet Rays, Infrared Rays and Radio Frequency Energy
- x Evidence of burnt or charred components
- x A condition which, in the opinion of the person initially receiving a report or learning of the incident or potential defect leads to the belief that there could be an event or defect that could involve a safety problem.

19.2.3.3



# Global Procurement Management

23.0 Right of Entry

23.1 The Seller and its sub-tier suppliers shall allow representatives of Panasonic, the Federal Aviation Administration (FAA), European Aviation Safety Agency (EASA), National Aviation Authority (NAA), other applicable regulatory agencies, and Panasonic's customers to conduct audits and verify the quality of work, records, and materials at the Seller and its sub-tier suppliers' location(s).

23.2 Use of Panasonic specified sub-tier sources does not relieve the Seller of compliance to all applicable Terms, Conditions, and Specifications (TCS) of the Buyer's contract. The Seller shall ensure that all sub-tier sources used are approved by the Buyer. The Seller shall provide the Buyer with a list of all sub-tier sources used for the Buyer's contract. The Seller shall ensure that all sub-tier sources used are approved by the Buyer. The Seller shall ensure that all sub-tier sources used are approved by the Buyer.



- 25.4 When deemed necessary by the Panasonic, the Seller shall provide a Corrective and Preventive Action (CAPA) report with verifiable documents that include implementation and target dates, for nonconformities reported by the Panasonic to Seller.
- 25.4.1 If a seller receives formal request for a correction actions response (SCAR); the supplier is expected to utilize basic problem-solving methodologies to determine root cause. Quality tools are expected to be deployed to resolve issues. Methods such as 5 Why's is expected to find root cause, and an 8D methodology is encouraged to track CAPA progress.
- 25.5 Per request of Panasonic, Seller shall take immediate action to implement and document below requirements on CAPA report:
- 25.5.1 Detailed Description of Nonconformity
- 25.5.2 100% Containment of suspect parts/products/raw materials at all locations and in-transit
- 25.5.3 Immediate Recovery Plan
- 25.5.4 Root Cause Analysis of Non-Conformities / Determination of Failure Modes

Note: Supplier is strongly encouraged to deploy industry accepted Quality tools to find root cause. Evidence of such techniques shall accompany CAPA report.

- 25.5.5 Corrective Action Measures
- 25.5.6 Preventive Action Plans
- Note: Poke-Yoke plans and/or preventative actions shall be noted
- 25.5.7 Verification Method(s)/Technique(s) to Confirm Effectiveness of Corrective and Preventive Action(s)
- 25.6 Product(s) rejected by Panasonic and resubmitted by Seller shall be clearly identified as re-submitted product(s) and must also be docu.066 0 Td [(Co2/pr)0.7 (od)5.1 (uc)-1.7 (ts)-1.7 (/r)0.7 (

25.7 Collaboration Model of Purchasing/CAPA process (Fig. 1)

Note: Suppliers to ABU must follow ABU's requirements.

Figure 1

25.8 \*\* Software Impact Definitions & Response Time

Service requests for problems received by the service provider will be given a Severity Code based on how critical the problem is. The Impact Code will be the basis for scheduling work on the backlog and assigning resources to the request.

The impact code is determined as per the table below based on Frequency and Severity:

		Severity		
		High	Medium	Low
Frequency of Occurrence	High	Critical	High	Medium
	Medium	High	Medium	Low
	Low	Medium	Low	Planning





30.0 Environmental Health and Safety Management System

- 30.1 Seller shall have an Environmental Management System (EMS) according to, or as a minimum, to be in compliance with Local, State, and Federal requirements. Programs are preferred to be structured and comply with the following requirements:
  - 30.1 Seller shall have an Environmental Management System (EMS) according to, or as a minimum, to be in compliance with Local, State, and Federal requirements. Programs are preferred to be structured and comply with the following requirements:
    - 30.1 Seller shall have an Environmental Management System (EMS) according to, or as a minimum, to be in compliance with Local, State, and Federal requirements. Programs are preferred to be structured and comply with the following requirements:

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- 31.7 Sellers should have in place a Conflict Minerals policy when applicable. Sellers should have available to the Panasonic the EICC/Gesi template or equivalent when requested. Sellers should, when possible, only buy 3TG minerals that are conflict free.
- 31.8 Sellers shall meet the requirements of the European Union Waste Framework Directive and where applicable register parts or complex objects into the Substance



### 36.0 Revision History

REV	DATE	DESCRIPTION	SECTION/PAGE	AUTHOR	MANAGER
NEW	03-Jul-06	Initial Release (Replacing SQAR-2 and -3)	N/A	Peter Shaybani	Sandra Stipp
A	11-Aug-06	Added EN to AS9100; Added note about suppliers outside of USA.	Sec. 3/P. 4	Peter Shaybani	Sandra Stipp
	11-Aug-06	Modified Paragraph to include EASA requirements.	Sec. 10/P. 5	Peter Shaybani	Sandra Stipp
	11-Aug-06	Added paragraph for non-USA seller may provide EASA form1 instead of C of C as long as it contains all required data.	Sec. 20/P. 7	Peter Shaybani	Sandra Stipp

11-Aug-06

Added All USA based Panasonic Avionics Suppliers instead of All Panasonic

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**Global Procurement Management  
Supplier Quality Assurance Requirements Manual**

Number: SQAR  
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L	17-Oct-08	Added "corporate quality management" name, Added 4.2: Quality right to contact Sellers Added 6.6: Advance notice of escape to PAC	Title pages Sec. 4/P. 6 Sec. 6/P. 7	Peter Shaybani	Stefan Suri
M	3-Mar-09	Added 29.3: Gp-Web Added 23.4: Supplier Green ranking Added Revised table 30	Sec. 29/P. 15 Sec. 29/P. 16 Sec. 30/P. 16	John Hernandez	Peter Shaybani
N	23-Jul-09	Added 6.7, Special Processes per customer request, CAPA# B-09-777	Sec. 6/P. 7	Chris Pruett	Peter Shaybani
P	02-Feb-10	Added 6.8, Supplier requirements for reporting safety incidents with definitions	Sec. 6/P. 7	Chris Pruett	Peter Shaybani
Q	14-Sep-10	Added 29.6 <del>Revised table 30</del>	Sec 29/P. 15 <del>Sec 30/P. 16</del>	John <del>Hernandez</del>	Peter <del>Shaybani</del>
R	23-Feb-				

Global Procurement Management  
Supplier Quality Assurance Requirements Manual

Number: SQAR  
Revision: A

Added process capability expectations: Added  
Workmanship default requirements; Revised shelf life  
requirements. Added Welding default standard.  
Define Certification criteria.

Section 10.0: Added PMI section

Section 11: Merges Special process call-out into Sub-

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		<p>Added 4.10-11 Software Suppliers</p> <p>Corrected Number typo in Section 4.7.1</p> <p>Section 5.0; Added Ref. to AS9162 and AS5553</p> <p>Updated Section 6.1 to call out IAQG Certification</p> <p>Added 7.5.1 on Special Process transfers</p> <p>Move Statement from MRB Authority to Section 7.5.1</p> <p>Added Section 7.9 on Software SOW compliance</p> <p>Added Note 7.10 addressing AS9100 8.4.3 (M)</p> <p>Revised Section 8.1 to include "KC" Designation</p> <p>Updated Section 8.2 to include workmanship compliance to IPC-640, and ANSI/ESD 2020</p> <p>Added 8.6 Software</p> <p>Added Section 9.6 Software requirements and Safety</p> <p>Added Reference in Section 10. To AS5553</p> <p>Updated Section 11.0; Special Processes</p> <p>Added Section 12.3.1-12.3.3 on PAC loaned Equip.</p> <p>Added Software Traceability Requirement in Section 13.3-13.8</p> <p>Added in Section 14.7 on PAC loaned equip.</p> <p>Clarified "First Model or Delta" reference in section 15.4.2</p> <p>Removed Section 15.4.7 on FAIR signature due to Net Inspect requirement</p> <p>Allowed flexibility on FAIR bubble callout diagram sequence on 15.5.2</p> <p>Added 16.4 Software Acceptance Criteria</p> <p>Revised Section 17.3 to clarify test report deliverable requirements within ATP</p> <p>Updated Supplier Performance Model in Section 19.0</p> <p>Update 19.2.1.1; Added Comac specific requirement on NOE notification</p> <p>Revised Section 19.2.2 (Moved to Section to 7.4)</p> <p>Added clarification on NOE duration in section 19.2.1</p> <p>Added Failure Analysis callout in Section 19.2.4</p> <p>Added PPAP/APQP as part of production record retention requirements Section 22.0</p> <p>Added Operator Self-Inspection in Section 24.0 (24.4)</p> <p>Updated graph in Section 25.7</p> <p>Added 25.8 Software Impact &amp; Response time</p> <p>Added clarification on Change of Charge submission in Section 26</p> <p>Updated Section 31.6 on Environmental policy</p> <p>Added Section 31.8 for European Union Waste framework directive</p>		
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Add 14 CFR Part 21.2 reference to Section 5.0

Page Reference omitted

Add Rework guidance to section 19.2

