PAC-ST003 – Supplier Quality Requirements Manual

Table of Contents

1 Policy

Precision Aerospace Corp. (PAC) will partner with suppliers who demonstrate a commitment to continual improvement of product quality, on time delivery, and responsiveness. It is our intent to develop mutually beneficial long-term alliances with these suppliers. PAC's goal is to ensure that externally provided processes, products and services, and their delivery do not adversely affect our ability to consistently deliver conforming products and services to our customers on time, and to meet applicable statutory and regulatory requirements.

2 Scope

This document applies to all existing PAC suppliers and potential new suppliers of quality-impacting product. It outlines PAC's expectations for our suppliers' quality management systems, product or service quality, on time delivery, and responsiveness to requests for information, containment and corrective action.

Unless otherwise specified in the body of PAC's purchase order (PO), as applicable to the product or service supplied, the requirements of the revision of this manual that is current on the date of the PO applies to each PAC PO/Line that states "Certifications Required", and to each PO/Line for special processes. The current revision of this manual is available at:
http://www.precision- aerospace.com/supply-chain-management

3 References

ANSI Z540 – Requirements for the Calibration of Measuring and Test Equipment
AS6174 – Counterfeit Materiel; Assuring Acquisition of Authentic and Conforming Materiel
AS9146 – FOD Prevention Program
AS9100 – Quality Management Systems – Requirements for Aviation, Space, and Defense Organizations
AS9102 – Aerospace First Article Inspection Requirement
AS9003 – Inspection and Test Quality System
AS9120 – Quality Management Systems - Aerospace - Requirements for Stocklist Distributors
ISO 9001 – Quality management systems - Requirements
PAC-ST006 – Additional Requirements for Noncertified Machining Suppliers
QA-F013 – Supplier Containment Report (SCR) form
QA-F014 – Nonconforming Shipment Authorization Request form
QA-F018 – Supplier Process Change Request (PCR) form

4 Acronyms and Definitions

ASL	Approved Supplier List
CAR	Corrective Action Request
FAI/PPAP	First Article Inspection/Production Part Approval Process – report of verifications performed on an article from an initial production run IAW AS9102 or PAC's customer's requirements.
FOD	Foreign Object Debris/ Damage
IAW	In accordance with
M & ME	Monitoring and measuring equipment used to monitor special process control and/or to measure product acceptability. Includes all types of equipment used to verify materials, products, processes, or other inspection, measuring and test equipment. This includes tooling used as media of inspection, test hardware, test software, automated test equipment (ATE), and plotters used to produce inspection media. Also included is personally owned equipment used for product or process acceptance.
MRB	Material review board – PAC Engineers and Quality Technicians who have authority and responsibility to review and disposition nonconforming product, and to determine subsequent actions to take.

NC	Nonconforming
PAC	Precision Aerospace Corp.
PO	Purchase Order
QMS	Quality Management System
SCR	Supplier Containment Request
WIP	Work in Progress

Hardware – Unless specified this includes both metal/alloy parts manufactured to a design authority's proprietary requirements (proprietary hardware) and hardware produced to a published specification (standard hardware).

NC Report A notification from PAC to the supplier regarding escaped NC product, a late delivery, or a nonconformity involving lot traceability, certification documentation, or some other contract requirement that the supplier's shipment does not meet.

Product - Any product, material, service, or process provided by supplier that is intended to be incorporated into parts and subassemblies PAC sells to Customers. This includes, but is not limited to raw material, proprietary and standard hardware, other materials such as grommets, paint, ink, and adhesive, etc., and special processes.

Special Process - the application of chemical, metallurgical, nondestructive or any other manufacturing, joining, or inspection process that is controlled by government, military, or industry specification, or any other specification called out on PAC's PO.

Stores Completed product approved for shipment at supplier's location.

Shall Indicates a requirement.

Waiver A request from a supplier submitted on PAC's QA-F014 - Nonconforming Shipment Authorization Request form, which after approval by PAC authorizes shipment to PAC of any nonconforming material or product.

5 Supplier Quality Management System (QMS) Requirements

5.1 QMS Requirements

Unless otherwise stated on the face of PAC's PO, as applicable to their activities and design authority, while executing a contract with PAC the supplier shall implement and maintain a Quality Management System (QMS) as detailed in sections below, or maintain Nadcap accreditation to the appropriate special process checklist and processing standards as called out in PAC's PO, as applicable. At their option and at no additional cost to PAC, a supplier who is not required to in the applicable subsection below, may elect to maintain *certification* to the appropriate AS9000-series QMS standard by a third-party registration body. Because such certification can lower PAC's product verification risks, preference may be given to *certified* suppliers.

Where a supplier's QMS systems or certification status does not meet the following requirements, PAC's top management may make an exception regarding the use of such supplier. In that event, the exception will be stated on the face of PAC's PO(s) to the supplier, and it is required to be approved by PAC's President or Quality Manager prior to release to the supplier.

a) **Distributors - suppliers that only procure parts, materials and assemblies, and re-sell these products.** This includes organizations that procure products and repackage/redistribute them into smaller quantities. This does *not* include organizations that perform any work that affects or could affect conformance of any specified part, material or assembly characteristic, or organizations that perform any processing in accordance with a specification called out PAC's PO. Minimum QMS requirements for Distributors are:
   - **Certification to ISO 9001** - Quality management systems – Requirements, and
   - **Compliance to AS9120** - Quality Management Systems – Requirements for Aviation, Space, and Defense Distributors, with respect to requirements flowed down in this document and PAC's PO/Line(s) (drawings, specifications, standards, etc.).

b) **Suppliers that manufacture Standard Hardware, or that *do* have design authority over the product or are legally authorized by the design authority to manufacture the product** – minimum QMS requirements are:
- ***Certification* to AS9100** - Quality Management Systems – Requirements for Aviation, Space, and Defense Organizations by a third-party registration body, and
- **Consistent conformance with requirements flowed down on the face of PAC's POs** (drawings, specifications, standards, etc.).

c) **Suppliers that machine proprietary hardware partially or complete, or manufacture subassemblies for a PAC PO/Line, who *do not* have design authority over the products they provide to PAC** – minimum QMS requirements are:
- **Consistent conformance to requirements flowed down on the face of PAC's POs** (drawings, specifications, standards, etc.), and
- **Compliance with requirements in this document,** and
- **Compliance to visual inspection and deburr standards, and AS9003 requirements as flowed down** in PAC-ST006 – Additional Quality Requirements for Noncertified Machining Suppliers.

d) **Special Process suppliers** shall be:
- **Nadcap accredited for the specific process** to specifications on PAC's PO/Line, or
- **A subcontracting supplier that is directed or approved for the specific process** by PAC's Customer.

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5.2 QMS Changes

A supplier shall communicate to PAC any changes that may affect the scope or effectiveness of the supplier's QMS or Nadcap Accreditation within five business days of occurrence. Examples of changes requiring PAC notification are, but are not limited to the following:
- Ownership
- Senior Management (e.g., President/CEO and Leadership Staff)
- Quality Manager
- Location / address
- Industry focus
- Third Party QMS certification status
- NADCAP accreditation status

5.3 Personnel Competency and Awareness

The supplier's personnel shall be competent and qualified to perform their work, and engaged in the supplier's Quality Objectives. Suppliers shall ensure personnel are aware of:
- Their contribution to product conformity
- Their contribution to product safety
- The importance of ethical behavior

6 Subcontracting (Prohibited Without Written Permission from PAC)

Except for Distributors as defined in section 5.1a) of this document, no supplier shall procure any product, process or service to be delivered on PAC's PO/Line from a third party without PAC's prior written permission. Distributors are hereby permitted to procure product from suppliers that meet QMS requirements of section 5.1a or 5.1b.

In the event any other type of supplier is granted permission in writing from PAC to subcontract, the supplier shall:
- use a PAC Engineering approved subcontractor,

- flow down to the subcontractor all drawings, specifications, and instructions from PAC's PO/Line, and requirements of this manual that are pertinent to the type of product that is subcontracted,
- verify conformity to requirements for which the subcontractor is responsible upon receiving product from the subcontractor, prior to shipping the product to PAC.

7 Responsibility for Property

Unless there is legal transfer of title or other legally binding agreement to the contrary, the supplier shall be financially responsible for loss or damage to any materials, parts, tooling, or any other real property provided to the supplier by PAC for use in executing a contract. Upon completion of the contract the supplier shall return PAC's property, except material consumed in production of parts for the contract, in like condition as received, less reasonable wear and tear.

8 Information Retention:

The supplier (and permitted subcontractors) shall retain information documenting their QMS and its effectiveness, information showing qualification and competency of personnel, and information demonstrating product conformity and traceability for all quality-impacting materials, products and services provided to PAC, and shall provide retained information as required per PAC's PO/Line, sections 9 through 9.3 of this document, and/or IAW PAC-L100 Purchase Order Terms and Conditions. As applicable to the supplier's QMS, products and processes, the supplier's retained information shall include, but is not limited to:

- Supplier's QMS third-party certification, or QMS documentation if supplier is not certified
- Records showing competency and qualification of personnel
- Records of contract reviews
- Lot traceability information from the product manufacturing origin through the supply chain to PAC's PO/Line
- Product inspection and test data
- Process verification records
- Production lot processing and configuration records
- Nonconformity corrections and containment records
- Corrective actions taken, and verification of effectiveness
- Calibration records for M & ME used to inspect product and verify processes
- Information required for the supplier's Certificate of Conformance (See section 9.3)
- FAI/PPAP reports and PAC approvals (See section 16)

9 Counterfeit Material Risk Mitigation

Suppliers shall have an auditable Counterfeit Prevention Process per AS6174 - Counterfeit Materiel; Assuring Acquisition of Authentic and Conforming Materiel, and shall deliver traceability and certification information with each shipment in compliance with subsections below. Failure to provide correct and complete traceability and certification documents with shipment may result in a Quality Administration charge IAW PAC-L100 Purchase Order Terms and Conditions.

9.1 Material Lot Control and Traceability – Mixed Lots Prohibited

Unless otherwise specified in the body of PAC's PO, all raw material or hardware (Proprietary or Standard Hardware), or other material in each shipment shall come from one raw material heat lot, or other applicable material production lot. Even when it is permitted in the PO, different heat lots of material, or product made from different heat lots or material batches shall be segregated and labelled in the packaging, and clearly identified within the shipment's documents.

Product lot traceability documents shall be sent with each shipment for all lots, batches and processes to the extent needed for PAC to ensure lot traceability through the acquisition chain from the manufacturing or process source to PAC's PO/Line and/or Job.

9.2 Raw Material Mill Certification for Raw Material and Hardware Shipments

When applicable to the contract, if any organization other than PAC has procured the raw material from the source, with each shipment of raw material or hardware, PAC's supplier shall include with the shipment's documents, a legible copy, in English, of the actual Mill Certification for the raw material heat lot used in the shipment. The Mill Certification must include the identity and address of the Mill, the Country of Origin, Melt and/or Manufacture, the applicable material specification(s) including the applicable revision level(s), and any chemical, physical and test data required by the applicable material specification(s). When there have been interim processors and/or distributors in the acquisition chain from the raw material source to PAC, there should be evidence that at least one supplier in the chain has verified the chemical, physical, and test data on the Mill Certification to the applicable specification and revision requirements. Acceptance can be indicated with the name and title of the approver, and date of acceptance placed on the face of the document.

9.3 Certificate of Conformance

With each shipment, PAC's supplier must provide a Certificate of Conformance (C of C), or similarly titled document that includes the following information as applicable to the type of product supplied to PAC:

- Supplier's name and address
- PAC's PO/Line number
- PAC's Job number (found on PAC's PO when applicable)
- Part number and revision of applicable drawings on PAC's PO/Line
- Applicable specification(s) and revision(s) on PAC's PO/Line
- Quantity tested when applicable to specification(s)
- Conforming quantity shipped, including serial numbers when applicable
- Batch number, heat lot number, Lot ID, dates of manufacture and expiration, as applicable to the type of product
- Signature and title of authorized person responsible for releasing the product shipment
- Date of release for shipment
- A statement of conformance to drawing(s) and specification(s) in PAC's PO/Line, including their revision(s)
- Acquisition documents with release authorizations, which show traceability through the supply chain from the original material source/manufacturer to PAC.

10 MSDS Required for Hazardous Material

For any hazardous material supplied to PAC, the supplier shall include a current MSDS with each shipment.

11 FOD Control

The supplier shall have a documented plan for the detection, prevention, and removal of Foreign Object Debris/Damage IAW the latest revision of AS9146. The supplier shall apply requirements of the standard to their particular service or product as necessary to protect PAC and PAC's customers from receiving contaminated or damaged product.

PAC's SQE or Quality Manager will contact the supplier with a nonconformance report when parts affected with FOD have been delivered to PAC. Depending on the severity of the contamination or damage, parts may be returned to the supplier for cleaning or rework. A Corrective Action Request may be issued to the supplier. (See section 20.)

12 Packing and Shipping

Supplier shall comply with carrier tariffs, including export shipping requirements. No additional charges will be allowed for containers, crating, boxing, bundling, dunnage, drayage, storage or transportation, unless stated on the face of PAC's PO. Product from each raw material heat lot used must be packaged separately and shipped on a separate packing slip. Container and

purchase order numbers shall be indicated on the supplier's pack list/bill of lading. Each shipping container must be labeled to identify the contents. At least one copy of a pack list showing PAC's PO/Line number(s) shall be attached to package number one in each shipment.

Supplier shall prepare all goods for shipment using PAC-supplied shipping materials and containers when provided. When PAC does not supply packaging, then the supplier's packaging must prevent FOD contamination and part-to-part contact during shipping that could cause nicks, dents or other damage. FOD producing packaging materials such as Styrofoam peanuts and shredded paper are prohibited.

13 Control of Monitoring and Measuring Equipment (M & ME)

The supplier's calibration system should be implemented and maintained in compliance with ANSI-Z540. At minimum, control of M & ME by the supplier shall include the following at all times:

- All M & ME used to verify product and services purchased by PAC shall be periodically recalled and calibrated to NIST standards.
- The supplier's schedules and procedures for calibration shall be documented, and the results of all calibrations, including the "as found" condition, shall be documented and retained.
- Whenever an M & ME item is found to be out of calibration, it is the supplier's responsibility to investigate and determine whether all product accepted with it since the previous calibration does conform to requirements.
- IAW section 18.3 of this document it is the supplier's responsibility to notify PAC's SQE or Quality Manager of suspected NC product that has been delivered when it is determined that an out of calibration M & ME item has been used for its acceptance,
- Gages/Tooling/Fixturing provided to the supplier by PAC shall be controlled and maintained by the supplier in accordance with these M & ME requirements.
- When a PAC supplied M & ME item is damaged or otherwise found to be unsuitable for use, it is the supplier's responsibility to notify PAC's SQE or Quality Manager immediately via email, by submitting a QA-F014 - Nonconforming Shipment Authorization Request form, , available at: http://www.precision- aerospace.com/supply-chain-management , that describes what occurred.
- The supplier shall not continue to use any M & ME item that has possibly been damaged or rendered unsuitable for use, without written authorization that includes justification from PAC.

14 Contract Review

The supplier shall have a process coordinated with applicable functions of their organization to review the documents making up the 'Complete Agreement' (see PAC-L100 Purchase Order Terms and Conditions) prior to contract acceptance. This is to ensure the supplier has the capacity, technical and logistical capabilities to fulfill the contract requirements or can obtain them. Any requirements the supplier is unable to meet shall be resolved with PAC, and mutually acceptable requirements shall be agreed upon via a contract amendment. Verbal instructions or agreements with any PAC personnel that change any part of the contract are not valid. Contract amendments shall also be reviewed by the supplier's organization. The supplier shall retain evidence of contract reviews.

15 Product or Process Changes

15.1 Planning and Notification of Changes

Changes to the supplier's product or process that may affect quality or delivery to PAC should be planned and communicated to PAC in advance.

The supplier shall complete a QA-F018 Supplier Process Change Request (PCR) form and submit it to supplierquality@precision-aerospace.com prior to implementing any of the following changes:

- Manufacturing location
- Machine move/change
- Change to different manufacturing technology

- Outsource approval request
- Outsource change request
- Casting/mold tooling change
- CNC programming change
- Sequence of operations
- Introduction of different cutting tool(s)
- Manufacturing or inspection software change
- Inspection method change
- Key characteristic change
- Fixed or frozen process plan
- Deburring process
- Cleaning process

See Change Definitions and examples at the end of the QA-F018 Supplier Process Change Request (PCR) Form, which is available at:
http://www.precision- aerospace.com/supply-chain-management

NOTE: The supplier should maintain capability to provide uninterrupted delivery of product to PAC under the currently approved process until a proposed change is approved. If a supplier implements any process change(s) before PAC's documented approval on a returned PCR form, then any part(s) are produced at the supplier's own risk.

15.2 Management of Changes

Regardless of the type of change, all changes require validation. The supplier shall fully evaluate all changes to ensure there are no unexpected or adverse effects on the product or service delivered to PAC. Suppliers shall maintain a system to validate changes to products and processes where all changes, planned and unplanned, are:

- clearly defined,
- validated, and
- approved by appropriate supplier personnel.

PAC and PAC's customer reserve the right to participate in process change validation activities, and reserve the right to require additional validation activities including a new First Article Inspection or Production Part Approval Process (FAIPPAP). In situations where a process change has an impact on any element of a previously approved FAI/PPAP, the supplier shall update the affected elements as directed by PAC and/or PAC's customer on the approved PCR form. A Delta-FAI/PPAP for any planned or unplanned change listed in section 16.2 below will typically be required with the first shipment after the change has been made.

The supplier shall include a copy of PAC's approved PCR form, and the results of the change validation activities with the first shipment containing affected product. The Certificate of Conformance supplied with the shipment shall include the PCR number found at the top of the approved PRC form that PAC returns to the supplier.

All process changes, their validations and approvals shall be documented and retained. These records may be audited by PAC and or PAC's customer.

16 First Article Inspection or PPAP (FAI/PPAP)

16.1 Invoking FAI/PPAP

A) When PAC requires a FAI/PPAP for a part number from the supplier, the requirement will be on the face of PAC's PO. Unless otherwise specified in the specific PO/Line the following requirements apply:

- The FAI/PPAP shall comply with the latest revision of AS9102, or with WPQR-9102 when it is flowed down in the purchase order text.
- The FAI/PPAP shall be performed on new article(s) taken from the supplier's first production run.
- The supplier shall use parts manufactured using the methods intended for the normal production process.
- FAI/PPAP information shall be submitted to the following address: supplierquality@precision-aerospace.com
- A FAI/PPAP with any characteristic nonconforming will not be accepted.
- The supplier shall retain each FAI\PPAP submitted to PAC.

B) Once invoked for a part number, the FAI/PPAP requirement shall continue to apply even after initial compliance. A new FAI/PPAP is required:
- after a lapse in production of more than two years from the completion of the last production run to the actual restart of production,
- for a part number revision,
- when requested by PAC.

16.2 Delta-FAI/PPAP

A Delta-FAI/PPAP is required with the first shipment following a change listed below. A Delta-FAI/PPAP shall include the item(s) that changed or were affected by the change.
The supplier shall provide PAC with a Delta-FAI/PPAP when any of the following occur:
- A change in manufacturing or special process source(s), process(es), inspection method(s), location of manufacture, tooling, or CNC programming used to produce parts.
- A natural or man-made event that may adversely affect the manufacturing process.
- The supplier's change in any of the following:
  - Manufacturing location,
  - Processing equipment change,
  - Significant changes to processing or inspection techniques.

16.3 FAI/PPAP Documentation Requirements

FAI/PPAP documentation package shall include all applicable documents assembled in the following order:
- Ballooned drawing and PO
- AS9102 Form 1
- AS9102 Form 2
- All applicable certifications such as raw material, special process(es) certifications
- AS9102 Form 3
- Inspection and test results for required characteristics as listed on Form 3
- Digital picture representing part marking requirements when applicable

16.4 FAI/PPAP Acceptance

Upon review and acceptance by PAC Quality and/or PAC's customer, a signed copy of the FAI/PPAP will be sent to the supplier indicating acceptance or rejection. The supplier shall retain all FAI\PPAP approvals received from PAC in order to maintain a clear quality record of all changes for the life of the part.

17 Nonconforming (NC) Product and Waivers

Product shipped to PAC shall meet all stated PO and engineering requirements, including dimensional, processing, packaging and documentation unless a Waiver request submitted by the supplier on a QA-F014 - Nonconforming Shipment Authorization Request form has been approved by PAC prior to shipment.

Any NC product being delivered to PAC shall include a PAC signed copy of the authorizing waiver, be segregated from conforming product, and be clearly identified on the pack list including serial numbers when applicable.

18 Nonconforming (NC) Product

Except as allowed in section 18.1 below, IAW PAC-L100 – Purchase Order Terms and Conditions, any NC product received at PAC from a supplier without prior authorization via a PAC-approved waiver submitted by the supplier on form QA-F014 - Nonconforming Shipment Authorization Request form will result in a Quality Administration Fee charged to the supplier. The authorization request form is available at:
http://www.precision- aerospace.com/supply-chain-management

18.1 NC Product from Process Set Up

NC product from PAC-supplied material may only be returned from a machining supplier (see 5.1c) or a special process supplier (see 5.1d) to PAC without a waiver, when it is known to be nonconforming as a result of use in setting up the supplier's process. This includes any NC parts that PAC may have provided to the supplier for set up as identified in PAC's PO/Line. The set up piece(s) must be physically segregated from conforming product within the shipment's packaging, clearly labelled, and identified on the supplier's pack list including the quantity, lot traceability number(s), and serial number(s) when applicable.

18.2 Return of PAC-supplied NC Material or Product

PAC suppliers do not have MRB authority over any PAC-supplied material or product. Except for set up pieces as allowed in section 18.1, the supplier shall complete and submit a QA-F014 - Nonconforming Shipment Authorization Request form, and obtain authorization for NC material or NC product made from it to be returned to PAC. NC product must be physically segregated from conforming product within the shipment's packaging, clearly labelled, and identified on the supplier's pack list including the quantity, lot traceability number(s), and serial number(s) when applicable.

18.3 NC Product Notification Required

The supplier shall notify PAC's SQE or Quality Manager within 24 hours of nonconforming product detected after delivery. Notification shall include a clear description of the nonconformity, affected part numbers, quantities, delivery dates, and traceability numbers to include as applicable, heat lot numbers, batch numbers, PO/Line numbers, and pack slip numbers for all shipments of possibly affected product.

19 PAC Verification of Supplied Product

Incoming product will be verified by PAC. At minimum verification will include packaging, count, and review of required traceability and certification documents. Where applicable, inspection and test data will be reviewed, and dimensions verified by inspection. Using XRF technology PAC will verify raw material and hardware when product configuration permits. If product or documents in a shipment are nonconforming, the product will be rejected, and may be returned to the supplier. PAC's SQE or Quality Manager may request correction and/or corrective action from the supplier based on the impact of the nonconformity and the supplier's performance record. IAW PAC-L100 Purchase Order Terms and Conditions, charges may be incurred by the supplier for delivering nonconforming product, and for incorrect or missing traceability and certification documents.

20 Corrective Action Process

When NC product is received at PAC that was *not* identified by the supplier, segregated, and shipped on an approved waiver IAW sections 16 and 17, this is called an 'escape'. PACs SQE will create an NC Report for the escape in the supplier's performance record and send it to the supplier. Late deliveries, mixed material lots, and incomplete or missing traceability, certification and

FAI/PPAP documentation with product shipments are also cause for issuing NC Reports to the supplier.

Correction and containment of the nonconformity are required, and depending on its impact and a review of the supplier's record, PAC's SQE or Quality Manager may issue a corrective action request (CAR) to the supplier.

When a CAR is issued to a supplier, PAC's SQE will review the supplier's NC records and with PAC's MRB will determine any necessary controls to impose over the supplier up to and including removal from PAC's Approved Supplier List (ASL).

The supplier's corrective action process shall include the following activities:

a) **Correction.** Upon receipt of an NC Report from PAC's SQE, the supplier shall work with PAC's SQE to determine immediate steps to correct the nonconformity to the extent possible.
b) **Containment.** If the supplier has any possibly affected product in WIP or stores, within 3 business days the supplier shall complete a purge of all product on hand and report the results to PAC's SQE using a QA-F013 - Supplier Containment Report (SCR) form, available at: http://www.precision- aerospace.com/supply-chain-management
For late deliveries and documentation issues the supplier shall take steps to ensure the nonconformity is corrected in the next shipment(s).
c) **Root Cause Corrective Action.** Within 16 business days of a corrective action request, the supplier is required to respond with the root cause of the nonconformity and a corrective action plan intended to eliminate it or prevent any recurring escapes to PAC by the next shipment of product. The plan must assign responsibility for actions to be taken to specific persons, and include planned implementation dates. Objective evidence of the completed corrective actions shall be submitted to PACs SQE for review and approval as soon as available.
d) **Verification of Effectiveness.** After a supplier escape, the supplier shall perform 100% inspection of the characteristics(s) that were the cause of the rejection on the next five production lots. The supplier's C of C for each of the five lots shall contain a statement that 100% inspection was done on the nonconforming characteristic(s), including the description of the characteristic(s), or PAC's CAR number.

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21 Supplier Performance

21.1 Expectations

The following requirements apply to all suppliers of quality-impacting products and services to PAC:

a) Delivery Performance: PAC expects suppliers to strive for 100% on-time delivery. Corrective action may be requested from a supplier when a late delivery impacts PAC's on-time delivery to its customer. (See section 20.)
b) Quality Performance: PAC expects suppliers to strive for 100% on-quality delivered product. At minimum, PAC will review suppliers' Certificate of Conformance for authenticity, and the Mill Certification for raw material, including raw material used to produce hardware. When applicable, PAC will review the supplier's inspection data, and perform sampling inspection to verify product conformity.
c) Responsiveness: PAC expects suppliers to provide quick and accurate responses to Requests for Quotations (RFQs), and to notifications regarding quality issues such as incomplete or incorrect product certifications, nonconformance containment, and requests for corrective action. (See sections 9.3, 16 and 20). PAC expects prompt communication from the supplier when PAC's order due date cannot be met.

Nonconformance reports may be written against suppliers for late deliveries, delivered nonconforming product, and for not responding in a timely manner to PAC inquiries and notices. Nonconformance reports will figure into the supplier's evaluation and can affect continued business opportunities with PAC.

21.2 Evaluation and Performance Scoring

Key suppliers will be rated for their performance to PAC for:

- OQD - On-Quality Delivery
- OTD - On-Time Delivery
- Responsiveness

As applicable supplier Performance Reports will be provided quarterly per calendar year.

PAC expects 100% on-time delivery for all purchases. It is the supplier's responsibility to communicate to PAC if a delivery date on PAC's PO/Line cannot be met, regardless of the supplier's published lead time. To avoid a late delivery hit, the supplier shall contact PAC before the due date to negotiate an acceptable delivery date at the following email: productioncontrol@precision-aerospace.com

Metrics used for determining supplier performance will be based on number of nonconformance occurrences versus number of PO's issued within the measured time frame.

Other factors such as timely responses to request for expedited order, order status, quality related issues and cooperation with regard to requests for root cause and corrective action will also be included in evaluation of supplier performance.

Suppliers that fall below the threshold are highly encouraged to improve their ranking within the supply base. PAC is motivated to help improve our supplier's performance which in turn helps the entire supply chain.

Revisions and Approvals

Section	Description	Approved	Date
All	Rewritten	NM	22-Mar-18
All 3 5.1.c), bullet 3 11, 1st paragraph 15, 15.1, 15.2 16.1 A), bullet 1 16.1 A), bullet 4 16.4 21.2	Minor grammatical corrections throughout. Added missing reference PAC-ST006, deleted NAS 412, added AS9146 and QA-F018. Added "visual inspection and deburr standards, and". AS9146 was NAS 412. Revised section title, added 15.1 and 15.2 to define process change planning, notification and management requirements, and invoke use of QA-F018 PCR form. Added option of flowing down WPQR9102 in PO text. Revised to require submitting FAI/PPAP information to stated email address. Revised paragraph with option for PAC's customer's approval, and reason for supplier to retain FAI/PPAP approvals. In paragraph 2, "Performance Reports" was scorecards. In paragraph 4 "performance" was "scores".	WA/cw, gls	18-Dec-19