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Supplier Requirements Manual

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INTRODUCTION

1. Purpose

It is not a requirement for suppliers to hold formal Quality Management Systems (QMS) certification, for example ISO 9001. However, the fundamental aspects of a QMS must be in place as appropriate to the type of business and operating effectively for the supplier to be approved for use by Percival Aviation Ltd (PAL).

This manual is written to define PAL Supplier Quality Requirements, irrespective of supplier QMS certification status.

2. Scope

These requirements are applicable to all PAL suppliers and sub-contractors and their sub-tiers, as appropriate to the product and services supplied. Should a conflict arise the PAL Terms and Conditions take precedence over these requirements.

3. References

The following documents are referenced by this procedure:

a. ISO 9001:2008, AS9100:2009 (rev C)

b. MPA 1J PAL Design Organisation Handbook

c. MPA 1G PAL Production Organisation Exposition

d. MPA 1B PAL Maintenance Organisation Exposition

e. MPA 1Q PAL Quality Manual

f. PRO-204 - Control of Suppliers

g. PRO-209 – Purchasing and Sub-Contracting

h. FOR-207 Supplier Quality Assurance Survey

i. FOR-216 Supplier Rejection Note

j. FOR-307 Concession Production Permit

SUPPLIER CONTROL REQUIREMENTS

4. Applicable Standards

4.1 The supplier shall provide parts subject to; all reasonably applicable national/international standards, those specified on the purchase order and in approved design and maintenance data.

5. Access for Audit and Source Inspection

5.1 Subject to providing reasonable notice, the supplier shall allow the purchaser and persons authorised by the purchaser access to the supplier's premises, in order to inspect and audit the facilities, processes and procedures used for manufacture and / or repair of supplies.

5.2 The supplier shall allow access to regulatory authorities to all areas and records associated with aviation products.

5.3 Items being supplied may also be subject to inspection/test acceptance at the suppliers premises prior to delivery. Not less than 7 days' notice of availability is required in writing. Applicable process documentation, test and inspection records and certificates shall be provided at the time of the visit.

6. Supplier Evaluation and Monitoring Process

6.1 A Supplier Quality Assurance Survey (ref. FOR-207), is required to be completed prior to initial supplier approval by PAL and subsequently at the request of PAL. Evidence of certification to QMS standards such as ISO 9001 shall be provided to support the survey.

6.2 Suppliers without a formal QMS certification may be subject to on-site QMS audit.

Notes:

1). Suppliers with QMS certificates issued by organisations that are not accredited by UKAS or other national accreditation bodies are considered to be uncertified.

2). Suppliers producing items deemed as high risk by PAL may be subject to on-site process audit and assessment.

6.3 Supplier quality and delivery performance is monitored by PAL. Poor performing suppliers may be selected for more frequent and focussed activity, requiring site visits, monthly evaluation and performance improvement actions.

7. Return of Parts

7.1 Failure of supplied parts to comply with the drawings and specifications defined on purchase orders or the documentation requirements stated in the section "Purchase Order, Documentation and Delivery Requirements", will result in the goods being returned with a corrective action request (FOR-216 - Supplier Rejection Note). Suppliers shall complete the form indicating containment actions, root cause analysis, corrective and preventive actions.

7.2 An initial response detailing immediate containment action is required within 2 days of receiving a notification of failure. This may be before parts are received for verification

7.3 The reject notification form shall be completed and returned to PAL within 30 days of issue. The form should be submitted electronically to the e-mail address quality@percival-aviation.co.uk and copied to the buyer/contact named on the purchase order.

8. Sub-Contracting

8.1 Work related to PAL purchase orders shall not be sub-contracted without written approval by PAL.

8.2 Suppliers shall be responsible for flow-down of these requirements to sub-tier suppliers and sub-contractors.

8.3 Suppliers shall remain responsible for resolution of sub-tier supplier / sub-contractor quality and delivery issues.

8.4 It is a PAL preference that suppliers utilise NADCAP (National Aerospace and Defence Contractors Accreditation Program) approved Sub-contractors for special processes i.e. Plating, Heat Treatment, Welding, NDT etc.

9. PAL Property

9.1 All free issues of materials, parts, tooling and drawings etc., provided to suppliers in support of purchase orders, shall at all times remain the property of PAL. They must be segregated and stored in suitable conditions and handled appropriately.

9.2 Losses or damage sustained to PAL property shall be declared and may require financial re-imbursement (see purchase order terms and conditions). Suppliers shall also provide exact stock levels when requested by PAL.

DESIGN AND PRODUCTION INTERFACE

10. Design and Production Interface Arrangements

10.1 PAL drawings and specifications provided to suppliers shall be stored and controlled to ensure the security of any proprietary data.

10.2 Suppliers shall ensure the correct revision of documents is available to persons performing the work.

Note:
It is the supplier's responsibility to ensure that drawings used match the part revision noted on Purchase Orders.

10.3 Where the supplier is an EASA Part 21G approved production organisation and is required to supply parts with an EASA Form 1 release, PAL and the supplier shall ensure Arrangements and Statements of Approved Design data are in place.

11. Notification of Significant Changes

11.1 Suppliers shall notify PAL prior to implementation of significant changes to the following:

a. Company ownership

b. Senior management personnel

c. Certifications and approvals

d. Location of manufacturing or repair facilities

e. Internal manufacturing and repair processes

f. Sub-contracted manufacturing or repair processes

QUALITY MANAGEMENT SYSTEM REQUIREMENTS

12. The Requirement for a QMS

12.1 It is not mandatory for PAL suppliers to hold formal QMS certification such as ISO 9001. However, suppliers are required to effectively control all activities related to PAL purchase orders. The supplier shall operate a controlled QMS including the processes identified below, as a minimum.

13. Process Requirements

13.1 The supplier shall have processes in operation for:

a. Control of Documents and Records

b. Internal Quality Audits

c. Control of Non-Conforming Product

d. Corrective and Preventive Actions

13.2 In the following paragraphs of this section, the procedural requirement are described in more detail. Additional process requirements are also described and shall be implemented as appropriate to the size and nature of the business. Exemptions may be granted based on the nature of the parts/materials or services supplied and the risk associated with not having QMS elements implemented.

13.3 Records resulting from the QMS requirements shall be maintained as evidence of compliance as per the section on "Document and Record Control".

13.4 The terms verification and validation are used throughout this section and are defined here for clarification:

a. Verification – 'Are you doing the right thing' or 'have you accurately understood and translated the requirement. Examples include contract or design reviews.

b. Validation – 'Are you doing it right' or 'does the process or product actually meet the requirement'. Examples include Qualification testing or First Article Inspection.

14. Management Review of the Effectiveness of the System

14.1 A minimum of annual review of the following:

a. Follow-up of previous review actions

b. Quality policy

c. Quality objectives

d. Results of audits

e. Customer feedback

f. Process performance and product conformity

g. Status of corrective and preventive actions

h. Changes that could affect the QMS

i. Recommendations for improvement

14.2 The review shall result in actions where appropriate to improve the effectiveness of the QMS, to improve product and service relating to customer requirements, and should identify the resources required to achieve this. Records of management review shall be maintained.

15. Procedures for Document and Record Control

15.1 Documents and records required by the QMS shall be controlled to ensure only reviewed and approved versions are available, that they remain legible and are maintained in a condition fit for use.

15.2 Records required by the QMS shall be maintained to provide evidence of conformity to requirements. These shall be stored securely and in appropriate environmental conditions for a minimum of 7 years. Electronic records shall have appropriate measures in place to ensure security and availability in the event of system failure.

16. Assessment of Personnel Competence and Training Needs

16.1 Suppliers shall determine necessary competences for personnel whose work affects conformity to product requirements and provide training where necessary.

16.2 Training shall include awareness of how their activities contribute to the Quality Objectives. Appropriate records of education, training, skills and experience shall be maintained.

17. Determination and Review of Customer Requirements Related to the Product

17.1 Suppliers shall determine the requirements specified by PAL, including specifications, requirements for delivery and post-delivery, statutory and regulatory requirements applicable to the product and any other requirements considered necessary.

17.2 These requirements shall be reviewed to ensure adequate definition, resolution of issues, and to identify any special requirements or risks.

18. Verification and Validation of Design Activity

18.1 This section applies only where the supplier is responsible for design.

18.2 The supplier shall control and define the design and development stages, processes for verification and validation of product at each stage and the responsibilities and authorities for these activities.

18.3 Verification shall be conducted to ensure design and development outputs meet requirements. Validation shall be conducted to ensure the resulting product meets requirements. Records of design verification and validation shall be maintained.

19. Purchasing, Supplier Evaluation and Monitoring

19.1 The organisation shall evaluate and select suppliers on their ability to supply to requirements. Criteria for evaluation and selection shall be established. Therein, suppliers shall continuously monitor sub-tier performance to requirements and perform on-site audits where additional oversight or performance improvement is deemed necessary.

19.2 The supplier shall ensure that purchased product conforms to requirements through implementation of appropriate inspection and/or test processes. This shall include validation of traceability to manufacturing source.

19.3 Records of supplier evaluations, audits and product validation shall be maintained.

20. Verification, Validation and Control of Processes, Associated Equipment and Tooling

20.1 Suppliers shall be responsible for developing, verifying, validating and maintaining adequate process, equipment and tooling controls. Formal written instructions and procedures shall be implemented and should be available at all times to staff operating the applicable process, equipment and tooling as necessary.

20.2 Process, equipment and tooling design/definitions shall be verified to ensure they meet requirements. Validation shall be performed to ensure they operate per requirements.

20.3 Records of process, equipment and tooling verification and validation shall be maintained.

21. Product Identification and Traceability

21.1 Parts purchased or sourced by the supplier shall be traceable to the original manufacturer.

21.2 The supplier shall establish internal processes to ensure identification of product configuration and to control and record unique identification of product in order to provide an appropriate level of traceability. Product configuration and traceability records shall be maintained.

22. Calibration and Verification of Monitoring and Measuring Equipment

22.1 A register of monitoring and measuring equipment shall be maintained. The system shall provide unique identification of the equipment; describe equipment type, location, frequency and method of calibration/performance validation and acceptance criteria.

22.2 A process shall be established to recall and perform the calibration/validation and shall include appropriate mitigating activity in the event that equipment is found outside the defined limits. Calibration records shall be maintained.

23. Procedures for Internal Audit

23.1 Were appropriate to the organisation, the supplier shall implement procedures to plan and conduct internal audits. Audits will establish whether the supplier QMS conforms to planned arrangements (for example, customer requirements) and that it is effectively implemented.

23.2 Non-conformities shall require timely corrective actions, which shall be validated through follow-up. Records of audits and their results shall be maintained.

24. Procedures to Control Non-Conforming Product

24.1 A process shall be established to define the controls and related responsibilities and authorities for dealing with non-conforming product. Processes shall include controls for:

a. Quarantine/segregation of detected non-conforming product.

b. Authorising use or acceptance of non-conforming parts or material.

c. Secure disposal of non-conforming parts or material.

d. Addressing and communicating non-conformity of product already supplied to the customer.

24.2 Records of non-conforming product and subsequent actions shall be maintained.

25. Processes for Corrective and Preventive Action

25.1 The supplier shall implement a process that takes action to understand and eliminate the causes of product and process non-conformities and customer complaints, in order to prevent their recurrence.

25.2 The supplier shall also take action to eliminate causes of potential non-conformities.

25.3 Records of corrective and preventive action shall be maintained.

DOCUMENTATION REQUIREMENTS

26. Purchase Order Acknowledgement

26.1 Suppliers shall acknowledge purchase order requirements. This may be achieved by signing and returning the purchase order document or via e-mail or telephone etc.

26.2 The supplier may annotate the purchase order document or provide additional communications to suggest alternative arrangements. If agreeable, PAL will update the purchase order requirements to reflect the alternative arrangements.

26.3 By acknowledging the purchase order, the supplier acknowledges that they have read, understood and agree to the stated requirements, including the PAL purchasing terms and conditions and this supplier requirements manual.

27. Certificate of Conformity

27.1 Unless otherwise stated on the purchase order, a certificate of conformity certifying compliance with the purchase order and any other requirements is to be delivered with the goods/services. The Certification shall include, as a minimum, the following information:

a. The purchase order number

b. Part identification and revision

c. Lot, batch or serial number as appropriate

d. Quantity supplied

e. Traceability to manufacturing source

27.2 A suitable statement declaring that the products provided meet the requirements of the purchase order in all respects unless stated otherwise.

28. European Aviation Safety Agency (EASA) Form 1

28.1 When stated as a requirement on the purchase order, EASA/NAA approved production and maintenance organisations shall provide an EASA Form 1 or equivalent NAA release document, in accordance with applicable regulations.

28.2 The documentation shall demonstrate manufacture or repair in accordance with approved/ non-approved design data or approved maintenance data.

29. Special Process Records, Material, Inspection and Test Reports

29.1 Where non-destructive inspection and testing is not possible, for example during application of special processes such as welding, plating or heat treatment, the documentation provided shall include the records of the controlled process parameters for the delivered items.

29.2 All deliveries and shipments shall include test result sheets and/or inspection reports, including material certificates and burn test reports as appropriate to the supplied parts or material. Certification shall indicate compliance to EASA Certification Specification CS25.583 Appendix F, Parts 1 and 2 where applicable.

30. Calibration

30.1 A calibration certificate traceable to a National Calibration Standard shall be provided for any items supplied that require on-going calibration.

31. First Article Inspection

31.1 A First Article Inspection (FAI) report shall be submitted by suppliers prior to the first shipment of manufactured parts and materials. An FAI may not be required if parts have been previously supplied or if a previous FAI has been performed. Standard catalogue and 'commercial off the shelf' parts are excluded from this requirement.

31.2 A repeat FAI shall be performed if any of the following applies:

a. One or more significant changes have been made to the parts. 'Significant' here means where there is any effect on the form, fit or function, thus causing a part number or part number/issue increment. A change of material would count as a 'form' change.

b. There has been a significant change to the supplier's manufacturing process. 'Significant' here means a change of key manufacturing equipment and/or personnel or the introduction or removal of process stages which could affect final product quality.

c. There has been a change of manufacturing location.

d. There has been a change of a sub-tier supplier of a critical part or outsourced process.

e. There has been a break in supply of the ordered parts of greater than twenty-four (24) calendar months (e.g. non-contiguous follow-on orders).

31.3 Repeat FAI's may be full or partial, the scope being determined by the purchaser on notification by the supplier of the nature of the change.

31.4 The FAI is to be performed to include, but is not limited to, the recording of actual dimensions, test data results, and traceability to any defined standards, thus ensuring that the parts are fully compliant with the approved design data.

31.5 Advanced copies of the FAI report should be e-mailed to quality@percival-aviation.co.uk to reduce processing delays of parts received. Parts requiring FAI will not be booked in (i.e.

accepted and processed for payment) until an FAI report has been received and deemed acceptable by PAL.

32. Shelf Life

32.1 All items shall be supplied with no more than 20% of shelf life expired at the time of receipt at PAL.

32.2 Certification shall indicate the shelf life where applicable.

33. Production Permits and Concessions

33.1 Non-conforming product may only be supplied with prior consent from PAL. Details of the non-conformity shall be detailed on a PAL FOR-307 - Production Permit or Concession form together with root cause analysis and proposed corrective and preventive actions. The form, obtainable from PAL upon request, should be emailed to quality@percival-aviation.co.uk.

33.2 PAL engineering and Quality functions will determine the disposition and return the signed document if approved.

33.3 Non-conforming product shall not be delivered without the completed and approved production permit or concession attached. Certification shall reference applicable production permit/concession numbers.

34. Packing and Preservation

34.1 Suppliers shall provide packaging and preservation in accordance with the best commercial packaging methods to ensure protection against damage or deterioration of the material or components and for safety in handling during shipment.

AMENDMENT RECORD

DATE	DESCRIPTION	NEW ISSUE	REV
10/01/2016	New format and sample forms removed.	1	0
02/12/2016	Amended to identify new PAL document references.	1	1