
Aviation Suppliers Association Quality System Standard - ASA-100



Aviation Suppliers Association Quality System Standard

ASA-100 Revision 3.6

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BACKGROUND

I. General

- A. This standard has been developed by the Aviation Suppliers Association. The standard provides distributors with the basic framework to assist them in pursuing voluntary accreditation. It is structured to provide those companies which sell parts, supplies and or material for installation on civil aircraft with a quality system to satisfy the requirements outlined in the FAA Advisory Circular (AC) 00-56A Voluntary Industry Distributor Accreditation Program.
- B. This standard is voluntary and not mandatory. The material contained herein is advisory in nature as it provides the suggested minimum quality program requirements as developed by the Aviation Suppliers Association in cooperation with the industry.
- C. Compliance with this standard does not necessarily indicate that a distributor is an Accredited Distributor. Those distributors seeking accreditation should contact the Aviation Suppliers Association at the following address:

**Aviation Suppliers Association
Distributor Accreditation Program
2233 Wisconsin Avenue, NW, Suite 503
Washington, DC 20007**

**Phone: (202) 347-6899
Fax: (202) 347-6894
E-Mail: accreditation@aviationsuppliers.org**

- D. The content of this standard will be reviewed and revised as necessary to remain in compliance with the FARs as well as other government regulatory requirements. Additionally, the Aviation Suppliers Association will review this document and its related programs to provide the necessary feedback for continuous quality improvement.
- E. Compliance with the ASA Accreditation Program requires an accreditation audit every 36 months and a surveillance audit during the 36 month period.

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II. Definitions

Certified True Copy: An accurate duplication of a document that is certified as such by the distributor. The distributor's certification need not be formal – it can be any statement indicating that the copy is an accurate copy.

Distributors: Any person engaged in the sale or transfer of parts for installation in appliances and type-certificated aircraft, aircraft engines, or propellers.

Distributor Accreditation: An Accreditation Organization's recognition that a distributor's Quality System complies with the standards set forth in a Quality System Standard Organization.

Original Certified Statement: The statement received by the distributor from the party that provided the article to the distributor in accordance with the REQUIRED ON RECEIPT column of the documentation matrix of AC 00-56A.

Quality System: The total network of administrative and technical data and detailed procedures required to maintain the product and parts thereof to specified airworthiness standards. In addition, refers to the distributor's total network of administrative and detailed procedures implemented to ensure that the parts sold by the distributor satisfy the customer's aviation quality requirements and, in particular, that the parts documentation accurately reflects the criteria identified in the purchase order.

Quality System Standards: Criteria developed by various organizations such as the Aviation Suppliers Association, that provide means to ensure that the distributor's quality system provides an acceptable level of control as delineated in AC 00-56A and this standard.

Self-Audit/Evaluation: A program that the distributor applies to its quality system in order to evaluate compliance with ASA-100 as well as with the distributor's own written quality system.

Significant Change is any change to the quality manual that implements or revises an element of the quality system that is required by FAA AC 00-56A or ASA-100. An example of a significant change is a change in facility location because it affects the manner in which the distributor meets ASA-100 section 3(A) and AC 00-56A section 6(d), 6(f) and 6(j). An example of an insignificant change is if the Purchasing Manager's title is changed to 'Vice President of Procurement'. Although the distributor is required to update the references in the manual to the 'Purchasing Manager', the manner in which the distributor complies with AC 00-56A and ASA-100 remains unchanged. The change in revision date to reflect the change in title is also an insignificant change. Note: if in addition to a change in title there was a concurrent change in responsibilities then there could be an impact on AC 00-56A section 6(c) and ASA-100 section 4.

Traceability is the ability via documentation or electronic means to track parts, processes, and materials by lot number or serial number to the original manufacturer or other acceptable source requirements of the installer or in accordance with the Documentation Matrix in Appendix A.

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III. Cancellations

ASA-100 revisions 3.5 and earlier are cancelled as of the effective date of this Revision

ASA Letters of Interpretation (LI) 100-014 through 100-016 are incorporated as necessary in this revision and are therefore cancelled not later than the effective date of this Revision.

1. Quality System and Quality Manual

- A.** The distributor shall have an established quality system adequate to assure a quality product that complies with customer specification.
- 1) The quality system, including procedures and operations, shall be described in detail in a quality manual, or other appropriate documents.
 - 2) ASA-100 accredited distributors must address each and every element of the ASA-100 standard in its manual. To the extent that some elements in the standard are not applicable to the business, and might otherwise be omitted from the manual, the topic area shall be identified to indicate that the element is not applicable.
- B.** These documents shall be readily available to at least first line supervisors responsible for the activities described. The system shall contain all of the elements of the governing specification adopted by the organization and should be described in the manual or supporting documents, e.g., work cards or check sheets, in sufficient detail to be used as operating instructions.
- C.** The quality manual and/or related documents shall be kept current and readily available to employees and to the customer's auditor or designee.
- D.** The distributor shall notify the accreditation organization, in writing, of any significant changes to its quality system and receive written notification of the acceptance of the change prior to implementation.
- E.** For distributors, the quality control manual shall include, but not be limited to a detailed description of:
- 1) the quality control department including an organizational chart showing the relationship of quality control to the rest of the organization,
 - 2) the assignment of personnel by title, responsible for specific functions within the quality system,
 - 3) the distribution and revision control system for the quality documentation and other technical data, where required,
 - 4) the record keeping system to be employed,
 - 5) the organization's training requirements and records,

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- 6) how shelf life-limited parts and supplies will be controlled (if applicable),
- 7) how incoming discrepant parts and supplies will be controlled,
- 8) receiving inspection procedures,
- 9) tool and test equipment calibration program (if applicable),
- 10) the storage facilities and applicable specifications,
- 11) the parts identification system employed,
- 12) the environmental controls used (as appropriate),
- 13) the system employed to control inspection stamps (if applicable),
- 14) the self-audit/evaluation program which specifies an annual review.

2. Self-Audit/Evaluation & Accreditation Programs

A. Self-Audit/Evaluation: The distributor shall have in place a self-audit/evaluation program to insure that the ASA-100 Standard has been implemented and that the quality system as adopted continues to meet the company's needs. The program shall provide the necessary feedback for continuous quality improvement. Self-audit/evaluations shall be conducted, at a minimum, on an annual basis. The distributor shall perform the self-audit/evaluation in accordance with written procedures or checklists that determine the effectiveness of the quality system. Audit results shall be documented, including identifying who conducted the audit, the frequency of the audit, and corrective action of non-compliance.

- 1) The quality manual shall include the procedure for addressing corrective actions as well as describing the forms used to document the self-audit and corrective actions. The procedure shall include the following:
 - a) Corrective action shall be appropriate and prompt;
 - b) Corrective action shall correct the discrepancies reported;
 - c) Corrective action shall locate and correct similar discrepancies, if they exist, in areas not audited;
 - d) Corrective action shall correct the root cause of the problem evidenced by the discrepancies; and
 - e) Corrective action shall implement follow-up action(s) to assure no recurrence.

B. Accreditation: A distributor that is seeking accreditation to the ASA-100 Standard shall contact ASA. ASA-100 is subject to both copyright and trademark protection. ASA is the only entity who is authorized to provide a certification statement certifying compliance to the ASA-100 Standard. In order to participate in the ASA Accreditation program the distributor is required to sign a contract and ASA shall audit the distributor under a

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preset audit plan determined by ASA as stated in the contract. Upon notification by ASA of a successful audit, ASA shall provide the distributor with the appropriate documentation needed to participate in FAA AC 00-56 accreditation. A distributor is not considered accredited until it meets the requirements of FAA AC 00-56. An acceptable audit result does not relieve the distributor from maintaining its quality system.

3. Facilities

- A. Appropriate facilities shall be maintained so as to insure that storage does not damage inventory. Storage areas shall have adequate space and appropriate racks. Parts should be stored in a manner that will preclude damage.
- B. Distributors that engage in aircraft/component maintenance, as well as part sales, shall secure the storage area to prevent unauthorized access.
- C. Distributors that deal in non-aircraft related activities including non-aircraft part sales, shall segregate the aircraft function from other functions in a manner that will preclude supplying unapproved materials for aircraft material.
- D. The distributor shall have a system in place to segregate and identify serviceable from unserviceable parts in a manner that will control the issuance of those parts.

4. Training and Authorized Personnel

- A. The distributor shall have personnel who are properly trained to perform inspection, handling and recordkeeping procedures to support the organization's adopted quality system. This applies to personnel performing the function of supervisor, inspector, shipping and receiving.
- B. Inspection personnel shall be properly trained and authorized. Such persons shall be knowledgeable of inspection techniques, methods and equipment used to determine part quality. Authorization criteria shall be identified in the distributor's manual.
- C. All training, both formal (classroom) and on-the-job training (OJT), shall be documented and the records shall be maintained for all employees who underwent training. Training records shall be retained for at least two years after the employee has left employment with the company. Each training record shall include:
 - A description of the training;
 - Date(s) and length of instruction;
 - Name of the student;
 - Name of the person (instructor) and organization conducting the training (the organization may be the accredited organization itself, such as when OJT is provided);
 - Any additional information required by law or regulation.
- D. The distributor shall maintain a roster of the personnel and their alternates authorized

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- to perform inspection functions and identify the inspection function(s) that each person is authorized to perform.
- E. The distributor shall have a training program that addresses unapproved parts; and counterfeit parts and materials. Personnel involved in procurement, receiving inspection, shipping inspection and material control shall be trained in these topics.

5. Procurement

- A. The distributor shall maintain a procurement system such that materials and components purchased (1) are traceable to a prior source, and, (2) bear acceptable documentation that conforms to at least one of the receipt requirements listed in Appendix A.
- B. A system shall be in place to assure that special requirements are adequately communicated to the distributor's sources, so that parts conform to the customer's purchase request and that deviations are disclosed and approved by the customer.
- C. The distributor shall maintain a list of their approved suppliers and a quality history for each source.
- D. In addition, the distributor of surplus parts should have a procurement system which assures that:
- 1) a part known to have been subjected to conditions of extreme stress, heat or environment are so identified.
 - 2) all Airworthiness Directives (AD's) that are represented as having been accomplished are documented. Certification of compliance shall specify AD number, AD amendment number, date, and method of compliance, i.e., "AD xx-xx-xx terminated (date). Replaced shaft seal with P/N _____ shaft seal (signature)."
 - 3) items identified as overhauled, repaired or modified have the appropriate signed and dated documentation attached to substantiate the condition of the part.

6. Receiving Inspection

- A. Inspectors shall conduct a complete visual inspection of all incoming parts and materials. The inspection shall include, but not be limited to:
- 1) a check for any obvious physical damage,
 - 2) verification that all appropriate plugs and caps are installed, if applicable,

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- 3) verification that part numbers (including dash numbers and letters), model numbers, serial numbers, lot and/or batch numbers, etc., of the items, match the accompanying documentation,
- 4) verification that the quantity, part numbers or noted part number substitutes (including dash numbers and letters), model numbers, etc., of the items match the request/purchase order and agreed upon method between the aircraft operator and supplier for part number substitution,
- 5) verification that all appropriate required documentation (maintenance release, material certification, traceability documents, etc.) is at hand, and is properly completed, and signed.
- B. Receiving inspection for aircraft fasteners shall include a sample visual inspection for general workmanship and presence of certifications from the manufacturer or an FAA regulated source. The distributor shall have a procedure in its quality manual for receiving and retaining Original Certified Statements when those are received.
- C. Unapproved parts should be reported in accordance with Advisory Circular 21-29.
- D. If inspection stamps are used, the distributor shall have an accountability system in place to control stamp issuance, usage and replacement. Inspection stamp identification imprints shall not be re-used for two years after an inspector to whom the imprint was assigned leaves the position; or the stamp with the imprint is lost or stolen.
- E. A distributor of new standard parts purchased from a manufacturer, shall maintain an inspection program which includes periodic verification that standard parts meet the technical specifications applicable to the part number. The distributor shall insure that adequate specifications are available to support the inspection process, and that these specifications are current. The distributor shall maintain a record of inspections used to make this verification.

7. Measuring and Test Equipment

- A. If required by contract for sample inspection, test equipment shall be maintained under an effective calibration program. The distributor shall have procedures which provide for appropriate storage, usage, and calibration traceable to the National Institute of Standards and Technology for all measuring and test equipment (when applicable).
- B. The distributor shall have procedures to prevent tools/equipment which are past due calibration from being used. Each unit in the calibration program shall be traceable to the standard against which it was calibrated. Current documentation of calibration status shall be maintained.

8. Material Control

- A. **Material Handling:** Material shall be handled in an appropriate manner and shall be protected from damage and deterioration. Special packaging shall be maintained as

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necessary. The storage area for aircraft parts should be periodically checked for overall effectiveness of storage and identification methods.

- B. Batch/Lot Control:** Batch segregation shall be maintained for parts so identified by the manufacturer, such as aircraft fasteners. The system shall include procedures for splitting of lots and the documentation of such splitting. Purchases, less sales, should equal inventory, which shall balance on batch/lot numbered inventories.
- C. Recall Control:** The distributor shall maintain records for parts identified by batch number and the quantities sold from each batch to each customer, to facilitate a manufacturer's recall notification, if required, which ensures that parts shipped can be traced and recalled.
- D. Packaging:** Whenever practical, materials shall be stored and delivered in the manufacturer's original packaging. Packaging shall identify the manufacturer, distributor, part number, serial number, lot or batch number (if applicable), and the quantity.
- 1) The distributor shall use ATA Specification 300 packaging or equivalent, or customer specified packaging when appropriate. If practical, environmentally friendly packaging material should be utilized. Flammable, toxic, or volatile materials shall be packaged in a safe manner per manufacturer's recommendations or as specified by local regulations.
- E. Electro-Static Sensitive Devices:** Material subject to damage from electro-static discharge shall be packaged, handled, and protected with necessary precaution and in accordance with requirements for safe handling of electro-static sensitive devices.
- F. Storage of Parts:** The distributor quality system shall assure that serviceable parts/components are adequately protected against the environment and damage by being properly wrapped, packaged, boxed, etc., as appropriate. All fluid passages, lines, or electrical connections shall be capped or plugged. The distributor's quality system shall protect items whose performance will be adversely affected by an "unclean" environment.
- G. Part Numbering:** The distributor shall ensure that no part number ambiguity exists. Parts shall not be labeled with multiple part numbers if such labeling could cause confusion as to the part's manufacturer or applicable specification. A distributor's alteration to or replacement of the data plate or manufacturer's part number is unacceptable, unless authorized by the FAA or an FAA certificate holder.
- H. Non-Conforming Materials:** A closed loop system shall exist to implement corrective action following the detection of substandard or otherwise non-conforming parts. Rejected materials shall be identified as such and segregated from usable stock.
- 1) Aircraft parts, and parts that could be reasonably assumed to be sold for aircraft use, shall be segregated from non-aircraft parts.

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- I. Scrapped Parts:** There shall be a documented procedure in place to mutilate scrapped parts by drilling, grinding, or other appropriate means. Parts shall be mutilated to the extent that will preclude the possibility of their being restored and returned to service. For additional information see ASA Best Practice – Disposition of Unsalvageable Aircraft Parts.
- 1) Records and documents shall be maintained on all serialized scrapped parts. The procedure shall identify by title or position the individual responsible for verifying that parts were adequately mutilated before discard.
 - 2) The distributor shall maintain a record of all life-limited parts scrapped out. The record shall contain a description of the part, its part number and serial number, if applicable, and the date the part was scrapped. The dealer shall retain this record for at least seven years.
 - 3) The distributor shall impose these same requirements on their subcontractors and/or repair facilities with whom they do business.
- J.** The distributor should report suspected unapproved parts to the FAA according to AC 21-29 or to the appropriate CAA.

9. Shelf Life Control

- A.** The distributor shall have a system to adequately identify and control shelf life-limited parts and materials. The program shall specify a system that will assure that no expired material or part will be represented as having remaining shelf life. This program includes component subassemblies containing shelf life-limited parts.

10. Certification and Release of Materials

- A.** The distributor shall provide the customer with documentation in accordance with the “Required for Shipment” column of Appendix A of this Standard. The distributor shall have a procedure in its quality manual detailing how it creates a Certified True Copy when such a copy is required for shipment.
- B.** Additionally, a certified statement disclosing the following should be issued about the material or parts, certifying that they were or were not:
- 1) subjected to conditions of extreme stress, heat or environment,
 - 2) previously installed in a public aircraft, such as a government use aircraft or a military aircraft,
- C.** The distributor shall have a system documented in its quality manual which demonstrates that released material and components are traceable according to the Procurement Requirements of this Standard.

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- D. The distributor shall develop a procedure for accountability when copies are made for redistribution shipments and when the approval tags are copied.

11. Shipping

- A. The distributor quality system shall require components and parts to be shipped in an ATA-300 Specification container or equivalent as appropriate for the unit being shipped, or as specified by the customer. The item should be packed in the container in a manner that will preclude damage from rough handling of the container.
- B. The distributor quality system shall provide for appropriately trained personnel to conduct a complete visual inspection of all items being shipped. Inspection shall include, but not be limited to:
- 1) a check for any obvious physical damage,
 - 2) verification that all appropriate plugs and caps are installed, if applicable,

WARNING

TAPE SHALL NOT BE USED TO COVER ELECTRICAL CONNECTIONS OR FLUID FITTINGS/OPENINGS. ADHESIVE RESIDUE CAN INSULATE ELECTRICAL CONNECTIONS AND CONTAMINATE HYDRAULIC OR FUEL UNITS.

- 3) verification that part numbers, (including dash numbers and letters), model numbers, serial numbers, lot and/or batch numbers, etc., of the items being shipped match the accompanying documentation,
- 4) verification that part numbers, (including dash numbers and letters), model numbers, serial numbers, etc., of the items being shipped match the customer's request/purchase order,
- 5) verification that packing slips contain all information required by the customer,
- 6) verification that the shipping container and packing are appropriate for the items being shipped,
- 7) verification that all appropriate required documentation (maintenance release, material certification, traceability documents, etc.) is at hand, properly completed, and signed.

12. Records

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- A. The distributor shall maintain documentation of traceability for at least 7 years from the date of sale to the customer. Documents shall demonstrate serial number, or lot & batch traceability, when applicable. The distributor shall maintain a filing system such that the data is readily available and identifiable for each customer, each purchase.
- B. The distributor shall have a system in place governing the storage, distribution, and retrieval of documents confirming that the physical and chemical properties of fasteners and raw stock aircraft materials (materials that are installed on and become part of the aircraft) are in conformance with applicable technical specifications.
- C. Records confirming fastener integrity, including physical and chemical test reports, shall be maintained for a minimum of seven years.
- D. All life-limited parts shall have records, traceable to a FAA-certificated source or other acceptable source (in accordance with AC 00-56 para. 4(h)), confirming current life-limited status.
- E. Records shall be protected against damage, alteration, deterioration and loss.

13. Technical Data Control

- A. Technical data, when required, shall be maintained in a manner that ensures such data is up-to-date and accessible as appropriate. Hand entries or corrections to technical data are not acceptable.

APPENDIX A

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APPENDIX A

DOCUMENTATION MATRIX

CLASS OF PART	REQUIRED ON RECEIPT	REQUIRED FOR SHIPMENT
Raw Materials	Physical & chemical properties reports traceable to heat code or lot number	Certification that test reports are on file
Standard parts as in 14 CFR section 21.303(b)(4)	Certificate of Conformity (C of C) from producer	Certification that C of C is on file
New parts, products, and appliances with regulatory airworthiness approval documents	FAA Form 8130-3, JAA Form One, EASA Form One, TC 24-0078, or other regulatory airworthiness approval documents from nations that have signed bilateral agreements with the United States	Certified true copy of the regulatory airworthiness approval document
New parts, products, and appliances without regulatory airworthiness approval documents, including new Parts Manufacturer Approval or Technical Standard Order Authorization parts identified only through markings (in accordance with 14 CFR Part 21 and Part 45)	Certified statement from seller as to identity and condition	Statement as to identity and condition and that original certified statement is on file
Used parts, products, and appliances with approval for return to service	Approval for return to service meeting provisions of 14 CFR sections 43.9, 43.11, or 43.17	Approval for return to service attached to part, product, or appliance
Used parts, products, and appliances without approval for return to service	Certified statement from seller as to identity and condition – must use “as is” or comparable term to describe condition	Statement as to identity and condition and that original certified statement is on file - must use “as is” or comparable term to describe condition

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APPENDIX B

APPENDIX B**RELATED REFERENCE MATERIAL**

The following Advisory Circulars published by the FAA and additional reference documentation mentioned in the body of the Standard are listed here for reference purposes only.

- AC 00-56** **Voluntary Industry Distributor Accreditation Program.**
This AC describes a system for the voluntary accreditation of civil aircraft parts distributors/dealers on the basis of voluntary industry oversight and provides information that may be used for developing accreditation programs.
- AC 20-62** **Eligibility, Quality and Identification of Approved Aeronautical Replacement Parts.**
Contains guidance and information regarding eligibility and traceability of aeronautical parts and materials to be installed on type certificated products.
- AC 20-154** **Guide for Developing a Receiving Inspection System for Aircraft Parts and Material.**
This AC provides useful advice for developing a receiving inspection system that is specifically tailored to the special needs of the aircraft parts industry.
- AC 21-2** **Export Airworthiness Approval Procedures.**
Contains guidance and information on procedures for exporting aeronautical products and related special requirements submitted to the FAA by other governments.
- AC 21-20** **Supplier Surveillance Procedures.**
This AC contains guidance and information on how to establish surveillance procedures over suppliers.
- AC 21-29** **Suspected Unapproved Parts.**
Contains guidance and information regarding the detection and reporting of suspected, unapproved parts.
- AC 43-9** **Maintenance Records.**
This AC provides information regarding maintenance record requirements under FARs Section 43.9, 43.11 and 91.173 and related responsibilities of owners and operators, and persons performing maintenance, preventative maintenance and alterations.
- ASA Best Practice** **Disposition of Scrap or Unsalvageable Aircraft Parts and Materials**
This Best Practice is an ASA published guidance document for the disposition of scrap or salvageable aircraft parts and materials.