# ASA-100 ACCREDITATION

## LET'S GET STARTED

ASA
AVIATION SUPPLIERS ASSOCIATION

# SOME HISTORY

- 1993 - ASA was formed
- 1996 - September AC 00-56 was released
- 2005 - AC 00-56 Rev B released
- 2019 - EASA recognized ASA-100 as acceptable for supplier evaluation:
  - *EASA AMC1 145.A.42(b)(i)* provides that the procedures for the acceptance of components, standard parts and materials should include supplier evaluation procedures;
  - *EASA GM2 145.A.42(b)(i)* explains what a supplier is, in order to assess who must be controlled (find out more in our earlier article on supplier definition);
  - *EASA GM3 145.A.42(b)(i)* describes the elements that should be considered when evaluating a supplier's quality system, and it explains that suppliers accredited to ASA-100 an AC 00-56 are acceptable;
- 2020 - 787 facilities accredited
  - ASA-100 accredited companies – 48%
  - ISO 9001 certified companies – 29%

- Very few countries regulate distributors

- Both US and EASA rely on third party audit systems rather than regulations
- Worldwide distributor accreditation is embraced by air carriers, MROs, Original Equipment Manufacturers, manufacturers, distributors and government operators
- Proven history of providing acceptable oversight of distributor quality systems

# WHY ACCREDITATION?

# WHY ACCREDITATION? (CONTINUED)

**FAA AC 00-56 establishes acceptable:**

| Third-Part Accreditation Audit Program | Quality System Standards | Quality System Standard Organization | Minimum Criteria | Filing Procedures |
|---|---|---|---|---|

**ASA offers compliance to FAA AC-0056 through ASA-100, ISO 9001 and AS9000 series standards. The Aviation Suppliers Association is the only organization that offers audits to all these standards**

**Aviation Suppliers Association is the Database Manager for the FAA**


# THREE LOGO'S

- ASA-100
- ASA member
- ASACB ISO Based Audit

# WHY ACCREDITATION? (CONTINUED)

ASA-100 was revised to revision 5.0 on January 1, 2020.

- All new ASA-100 Accreditations are conducted to revision 5.0
- Existing ASA-100 Accredited companies have until July 1, 2020 to meet the requirements of Revision 5.0
- ASA-100 revision 4.0 and 5.0 addresses all requirements of the FAA's Advisory Circular 0056B
- It is a robust standard that goes beyond the Advisory Circular and forms a solid foundation for a distributors quality management system

# OVERSIGHT OF ASA-100

- ASA-100 Standard is owned by ASA
- Regularly reviewed by staff and ASA Quality Committee
  - These discussions may result in a proposed revision to the standard, issuance of a letter of interpretation (LI) or the need for a best practices document
  - There is one active LI (100-009)
  - Two Best Practice documents have been issued, Disposition of Unsalvageable Aircraft Parts and ESD
  - Involvement of ASA auditors, quality committee members and accredited organizations is vital to the success of this oversight and a strength of this program
- Board of Directors has final approval of changes
- Easy to participate-- just come to a Quality Committee

# OVERSIGHT OF ASA-100 (CONTINUED)

**For over 25 years ASA has represented the industry with the focus on driving and ensuring safety and integrity are the tenants of the aviation aftermarket distribution industry. ASA offers a multitude of services/support ranging from but not limited to:**

- **A robust and well-respected Quality Management and Controls standard in ASA-100**
- **QM Template and support documents**
- **Comprehensive and robust auditing**
- **Automatic conformance to FAA AC 00-56 upon ASA-100 accreditation**
- **Experienced and knowledgeable auditors and support team**
- **Recognized and robust Advocacy capabilities**

# ONLINE SUPPORT DOCUMENTS TO ASSIST DISTRIBUTORS

ASA has a complete program to assist companies. This includes:

- Steps for Accreditation
- ASA-100 Documents
  - Best practices for ESD and Disposition of Unsalvageable Parts
  - Self-Audit Checklist
  - NCR sample forms
  - ASA-100 Test
  - QM Template
  - Training Tools
    - Training Webinars

# ASA-100 ADDRESSES ALL THE REQUIREMENTS OF AC 00-56

- Receiving Inspection
- Personnel Training
- Identification and qualification of QA decision makers
- Incoming Discrepant
- Measuring Equipment
- Shelf-Life Controls
- Technical/Reference Data
- Inspection Stamp Control
- Packaging Controls
- Preservation Controls
- Documentation Control
- Documentation Retention
- Self Evaluation Program
- Recall Controls
- Notification of Significant Changes
- Hazmat Control and Shipping
- Counterfeit Parts and Suspected Unapproved Parts

# THE REQUIREMENTS OF ASA-100

Quality System and Quality Manual:

- The distributor shall have an established quality system that ensures a product will be provided that complies with customer specification.
- ASA-100 accredited distributors must address all elements 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.
    - The quality system, including procedures and operations, shall be described in detail in a quality manual, or other appropriate documents.

# THE ELEMENTS OF THE ASA-100 STANDARD (CONTINUED)

- The organization may deem an element of the standard as “Not Applicable”, however in doing so the organization must justify this determination within its quality manual. This will be reviewed, and final acceptance or rejection of the Not Applicability will be determined by ASA
- Quality System Documents shall be readily available to at least first line supervisors responsible for the activities described.
  - The system shall contain all 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.
- 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.

# 15 REQUIREMENTS IN THE ASA-100

**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.**
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**

# 15 REQUIREMENTS IN THE ASA-100 (continued)

9. Tooling and testing equipment calibration
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
15. The corrective action process
16. The system for hazmat control and transport

# SELF-AUDIT/EVALUATION & ACCREDITATION PROGRAMS

**Self-Audit/Evaluation:**

The distributor shall have in place a self-audit/evaluation program to ensure that the ASA-100 Standard has been implemented and that the quality system as adopted continues to meet the company's needs.

**ASA-100 Self-Audit Checklist**

# SELF –AUDITS – WHAT WILL THE AUDITOR BE LOOKING FOR?

- A completed Self-Audit Checklist-- All questions and Sections in the Self-Audit must be fully completed
- The self-audit should be able to tell a story of what was reviewed to make a determination of system effectiveness for the area audited
- All objective evidence must be available for review
- Objective evidence includes:
  - Names of employees who's training records were reviewed
  - Roster of Authorized Inspectors
  - Part numbers sampled etc.

# FACILITIES

- Part Storage
- Detailed description of the storage facility with applicable specifications
- Distributors that engage in aircraft/component maintenance, as well as part sales, shall secure the storage area to prevent unauthorized access.
- Segregation of parts
  - Serviceable and unserviceable parts
  - Non aircraft part segregation

# FACILITIES – WHAT WILL THE AUDITOR BE LOOKING FOR?

- Proper part storage and identification
- Proper part segregation
- Security
- Part sampling
- Designated areas for:
  - Receiving and Shipping
  - ESD workstation
  - Quarantine areas

# TRAINING

- 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.

- 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.

# TRAINING (CONTINUED)

- 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.
- The distributor shall maintain a roster of the personnel and their alternates authorized to perform inspection functions and identify the inspection function(s) that each person is authorized to perform.

# TRAINING (CONTINUED)--SUSPECTED UNAPPROVED AND COUNTERFEIT PARTS

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.

# TRAINING - WHAT WILL THE AUDITOR BE LOOKING FOR?

- Training Records for all employees related to purchasing, sales, inspections, material handling, record keeping and hazmat.
- Roster of authorized Inspectors
- How is recurrent training conducted?

# PROCUREMENT

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. This shall include Drop Shipments.

# PROCUREMENT (CONTINUED)

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.

The distributor shall maintain a list of its approved suppliers and a quality history for each approved supplier. The distributor shall describe the criteria for supplier approval.

# PROCUREMENT – WHAT WILL THE AUDITOR BE LOOKING FOR?

- The auditor should be able to look at a list and identify your approved suppliers
  - Does the list need to be printed? No it can be digital
- The auditor should be able to tell the quality history for your suppliers
  - There may be no details to pull if the supplier has never had an error in shipment to you. But if there are errors, then you need to know it
  - You can determine what is tracked for quality history, but it must include supplier errors, even ones that can be corrected quickly
  - The Auditors are not here to tell you what to track but they will not accept tracking nothing
- The auditor should be able to identify your criteria for supplier approval such as,
  - Meeting defined quality requirements
  - Meeting defined business requirements
  - Completing organization survey
  - Supplying evidence of accreditation and/or certification
- Can the initial quality approval criteria be they are approved if they are AC 00-56?
  - Yes, but you should still consider factors like legal impediments (denied parties), accounting review, etc.
  - You should consider how you will verify their AC 00-56 status
  - Continued approval should be subject to your quality criteria
  - You determine the criteria; we verify that you followed your criteria
- Now the supplier is approved what is next
  - How often will suppliers be re-evaluated to ensure they are performing to your requirements to remain on the approved supplier list
  - What is the criteria they will be measured against performance wise, quality, delivery, price
  - What happens when an approved supplier no longer meets the criteria (how does a supplier become unapproved)

# PROCUREMENT – WHAT WILL THE AUDITOR LOOK FOR?

- Sampling purchases against the approved supplier list.
- Sampling parts purchased for trace to a prior source.
- Review Purchase Orders and Repair orders for terms and conditions.

# DROP SHIPMENTS

**A Drop Shipment occurs when a distributor causes an article to be shipped from the distributor's supplier to the distributor's customer.**

## What will the auditor be looking for?

**The Distributor must:**

- **Follow its own purchasing requirements;**
- **Flow-down to the shipper any purchase requirement for shipping; and**
- **Follow-through on documentation review and approval.**
- **Drop shipments must  be approved in writing – this will be verified during the audit.**

# RECEIVING INSPECTION

**Inspectors shall conduct a visual inspection of all incoming parts and materials. The inspection shall include, if applicable:**

1. **A check for any obvious physical damage.**
2. **Verification that all appropriate plugs and caps are installed.**
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.**
5. **Verification that all appropriate required documentation (maintenance release, material certification, traceability documents, etc.) is at hand, and is properly completed, and signed.**

# RECEIVING INSPECTION (CONTINUED)

## What will the auditor be looking for?

- Demonstration of a receiving inspection
- How are receiving discrepancies documented to track supplier performance
- Documentation protocols during the receiving inspection.
- How is part information entered into the ERP system.

# TOOLING AND TESTING EQUIPMENT

- If used by the distributor for inspection, then test and measuring equipment shall be maintained under an effective calibration program
- The distributor shall have procedures which provide for appropriate storage, usage, and calibration traceable to an international or national measurement standard for all measuring and test equipment (when applicable)
- If not applicable, then this should be noted on the Quality Manual

# MATERIAL CONTROL

- **Material Handling: Material shall be handled in an appropriate manner and shall be protected from damage and deterioration**
- **Special packaging shall be maintained as necessary. The storage area for aircraft parts should be periodically checked for overall effectiveness of storage and identification methods**
- **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**
- **Recall Control: The distributor shall maintain records for parts and the quantities sold to each customer, to facilitate a recall notification**

# MATERIAL CONTROL (CONTINUED)

- 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

The distributor shall use ATA Specification 300 packaging or equivalent, or customer- specified packaging when appropriate

- 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. For additional information see ASA Best Practice – ESD Best Practice

# MATERIAL CONTROL (CONTINUED)

- 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.

- Part Numbering:  The distributor shall ensure that no part number ambiguity exists. Parts shall not be labelled with multiple part numbers if such labelling could cause confusion as to the part's manufacturer or applicable specification environment.

- Non-Conforming Materials:  The distributor quality system shall have a procedure for identifying and controlling suspect or non-conforming material that is identified.

# MATERIAL CONTROL– SCRAPPED PARTS

- There shall be a documented procedure in place to mutilate scrapped parts by drilling, grinding, or other appropriate means. When the distributor chooses to scrap a part, the part shall be mutilated to the extent necessary to preclude the possibility of it being restored and returned to service.
- For additional information see ASA Best Practice – Disposition of Unsalvageable Aircraft Parts.
- The distributor shall maintain a record of all serialized and/or life-limited parts scrapped out. The record shall contain a description of the part, its part number, serial number (if applicable), and the date the part was scrapped. The distributor shall retain this record for at least seven years. Retaining any other records for the scrapped parts shall be at the discretion of the distributor.
- The procedure shall identify, by title or position, the individual responsible for verifying that parts were adequately mutilated before being discarded. 3) The distributor shall impose these same requirements on their subcontractors and/or repair facilities that scrap parts as agents of the distributor.

# MATERIAL CONTROL (CONTINUED)

## What will the Auditor be looking for?

- Demonstrate how parts are identified
- Demonstrate how each batch/lot is tracked
- Demonstrate how ESD related parts are handled.
- Review copy of ATA Spec 300.
- Review part scrapping procedures and scrapped parts records.
- Demonstrate how non-conforming parts are handled.

# SHELF LIFE CONTROL

- 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

# SHELF LIFE CONTROL – WHAT WILL THE AUDITOR BE LOOKING FOR?

- Demonstrate how shelf life information is maintained and tracked.
- Shelf life parts will be sampled to check for correct shelf life information.

# CERTIFICATION AND RELEASE OF MATERIALS

- 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.

- 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.

- 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.

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

# CERTIFICATION AND RELEASE OF MATERIALS

## What will the auditor be looking for?

- Review Material Certification Procedures and Forms.
- Demonstrate how Certification documents are copied.

# SHIPPING AND PACKAGING

- 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 visual inspection of all items being shipped.

# SHIPPING AND PACKAGING– INSPECTION

Inspection shall include, if applicable:

- A check for any obvious physical damage,
- Verification that all appropriate plugs and caps are installed
- 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
- 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,
- Verification that packing slips contain all information required by the customer,
- Verification that the shipping container and packing are appropriate for the items being shipped, and
- Verification that all appropriate required documentation (maintenance release, material certification, traceability documents, etc.) is at hand, and is properly completed, and signed.

# SHIPPING INSPECTION

## What will the auditor be looking for?

- Demonstrate the shipping procedures in accordance with the description in the Quality Manual
- Review documents sent with the parts shipped
- Demonstrate how parts are packaged
- Review Drop shipments for compliance with the drop shipment procedures

# RECORDS

- 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.

- 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.
- Records confirming fastener integrity, including physical and chemical test reports, shall be maintained for a minimum of seven years.
- 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.
- Records shall be protected against damage, alteration, deterioration and loss.

# RECORDS

## What will the auditor be looking for?

- **Records of past transactions sampled for trace documentation and certification**
- **Review procedures for maintaining documents for seven years from date of sale to the customer.**

# TECHNICAL DATA

- 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.
- If technical data is not maintained, this should be noted in the Quality Manual as ‘not applicable.’

# CORRECTIVE ACTION

- A. The quality manual shall include a written process describing when and how the organization performs corrective action.
- B. The process for addressing corrective actions shall include the procedures that accomplish the following requirements:
  - 1) The distributor shall identify the root cause of the discrepancy;
  - 2) Describe how the distributor corrects the immediate discrepancy when correction is identified as necessary;
  - 3) The process shall include procedures designed to ensure corrective action is appropriate and prompt;
  - 4) The distributor shall select a containment method that is appropriate to the discrepancy;
  - 5) The distributor shall locate and correct similar discrepancies, if they exist, in other areas; and
  - 6) Describe how the distributor implements follow-up action(s) to prevent recurrence of the discrepancy; the intent of the follow-up is to verify the effectiveness of the corrective action, to ensure that the distributor does not experience a recurrence.
- C. The quality manual shall describe the forms used to document the corrective actions

# CORRECTIVE ACTION

## What will the auditor be looking for?

- Review past corrective actions issued and how the corrective actions were closed out.
- Review corrective action forms in use.

# HAZMAT CONTROL AND TRANSPORT

- The distributor shall have a system in place governing the control of hazardous material and transport of hazardous material that meets Title 49 of the Code of Federal Regulations (49 CFR).

# WHAT IS "CONTROL AND TRANSPORT"?

In addition to transport functions, it also includes pre-transportation functions like (this is only a partial list): Aviation Suppliers Association Tutorial For ASA-100 Revision 5.0:

- (1) Determining the hazard class of a hazardous material.
- (2) Selecting a hazardous materials packaging.
- (3) Filling a hazardous materials packaging.
- (4) Securing a closure on a filled or partially filled hazardous materials package or container or on a package or container containing a residue of a hazardous material.
- (5) Marking a package to indicate that it contains a hazardous material.
- (6) Labelling a package to indicate that it contains a hazardous material.
- (7) Preparing a shipping paper.
- (8) Providing and maintaining emergency response information.
- (9) Reviewing a shipping paper to verify compliance with the US or international requirements.

# HAZMAT

## What will the auditor be looking for?

- If Distributor takes N/A to the section, then auditors will be looking for positive controls to prevent the inadvertent shipping of hazmat
- Companies can handle it differently, but the questions on the previous slide may help you to develop such controls. Shipping and receiving personnel should typically have hazmat identification training so they can recognize and control HazMat (ASA offers this sort of training, periodically).
- Typically, auditors will be looking for training that meets 49 C.F.R. Subpart H.
- Record of training can be for IATA-based class if also fully trained on U.S. state variations.

# HAZMAT

## What will the auditor be looking for? (Continued)

**Oxygen Generators are an example of a difference between Title 49 Hazmat and IATA Dangerous Goods training. Note that Title 49 requires training every 3 years.**

**If Distributor is part of an operator's system, or ships internationally, then the requirement is every 2 years. The company is responsible for ensuring that the employees are trained and remain current.**

**Where the company provides the training, the Record of Training needs to specifically detail the employee Hazmat subject training.**

# QUESTIONS?

# ACCREDITATION@AVIATIONSUPPLIERS.ORG

Thank you to Kelly Lyon for the presentation.