### AS9100 Rev D All-in-One Certification Package Contents

- Package Includes:
  - AS9100D Quality Manual \*
  - AS9100D Procedures 30 \*
  - AS9100 D Forms 75 \*
  - AS9100D Gap Checklist \*
  - o AS9100D Online Employee Training
  - AS9100D Intro. PowerPoint Training
  - AS9100 Rev D Internal Audit Checklist \*
  - Internal Auditor Training Materials \*
  - Employee Newsletters
  - Risk Management Exercise
  - Requirements Training Guide \*
  - Bonus PowerPoints
  - Technical Support

The All in One Package Includes everything else you need for certification.

- 30 Procedures to cover every AS9100D requirement
- 75 Forms
- Quality Manual

### **Training**

- Online training includes administrative function to assign and track users for record keeping
- Online AS9100D Employee Training (50 people)
- Risk Management Exercise
- Introduction to AS9100D PowerPoint Training Package
- Internal Auditor Training Materials
  - Guide to Internal Auditing PowerPoint (24 slides)
  - o Requirements of the Standard PowerPoint (148 slides)
  - Steps of an Internal Audit PowerPoint (33 slides)
  - o Comprehensive Trainer's Guide (154 pages)
  - Student Manual (89 pages)
  - Manufacturing Company Case Study Materials (48 pages)
  - Internal Audit Forms to conduct the practice audit
  - Customizable Certificate of Completion

### Checklists

- Gap Checklist
- Internal Audit Checklist

Set of Employee Newsletters

**Bonus PowerPoints** 

Technical Support throughout your project

### **AS 9100 D**

### **Quality Management Systems**

**Quality Manual / Documented Information** 

Document No. QM-9100-D

Blue text throughout the manual highlight areas for customization.

**Street Address** 

City, State, Zip

**Telephone:** 

Email:

Web Site:

Documents are in Microsoft Word for ease of editing.

Instructions:



This manual is used as a template in developing your AS 9100 D Quality Management System.

Methods and systems used in the development and operation of the QMS vary widely from company to company.

The blue text and suggestions displayed in the manual are intended to offer some options and to highlight the areas that need attention / update / replacement.

Review the text and suggestions and at a minimum replace or update them to reflect the unique / customized information of your quality system requirements.

Delete the blue text after each task is completed.



Use replace function – enter "Your Company" in find space, enter your company name in replace space – system should make changes throughout the entire document.

Additional details and instructions in the use of the QM-9100-D manual template are included in a separate file "QMS-Template-Instructions".

### Additional documentation review.

Similarly, the blue text and suggestions displayed in the QMS documentation (that will follow) for the procedures, instructions, attachments, forms, and flow diagrams are intended to offer some options and to highlight the areas that require update or replacement.

### Section A Scope or the Quality Management System

Replace the name and logo with your own.

General

To determine and establish the scope of the QMS, Your Company determined the boundaries and applicability of the QMS and considered the external and internal issues, the requirements of relevant interested parties, and the products and services of the company.

The scope is available and maintained as documented information stating the products and services covered by the QMS.

Your Company applies all the requirements of AS 9100 D when they are applicable within the determined scope of the QMS.

As developed with procedure P-400 for Organizational context, include the scope of your QMS here:

For example, if you are a manufacturer of tires, the scope of your QMS may be:

The scope of the Quality Management System includes the major product and service categories associated with the primary functions of manufacturing landing gear tires at the Main Street location and distributing the product to international markets.



Blue text gives guidance for customization.

Conformity to AS 9100 D may only be claimed if the requirements determined as not being applicable do not affect the organization's ability or responsibility to ensure the conformity of its products and services and the enhancement of customer satisfaction.

In the event that any requirement is not applicable at Your Company, justification for any instance where a requirement cannot be applied is documented.

Any text may be edited. Blue text provides examples of what you may want to use. Black text is text that describes the QMS developed by the AS9100 Store.

Your Company has determined that the following requirement(s) is/are not applicable to the operations at this site:

As determined with procedure P-400, identify the requirement(s) that do not apply and document the justification here:

For example, if you are a manufacturer of aircraft tires, a requirement that does not apply may be: Clause 8.3 for design and development of products and services does not apply to the company because the customers using the landing gear tires provide the design information and the tires are manufactured to their requirements.

**Section C** Document information

The manual is divided into sections for ease of review and edit of your Quality Manual.

a. Distribution control list

As required w	vith procedure P-750 for Control of documented information.	Related documents are referenced.
Quality Manua	al latest revision: Letter:	
Date of Issue:	Issued by:	
The status of t manual.	the quality manual and/or description of changes are provided	in the revision status page of this
Controlled cop	pies are issued to:	
Copy No. 1	President Vice President	
Copy No 2	Treasurer / Bookkeeper / Accountant Administrative Officer	
Copy No. 3	Quality Manager  Management representative / Quality team leader	
Copy No. 4	Operations Manager Technical Manager Materials Manager	
Copy No. 5	Human Resources Manager Education/training Officer	
The master co	ppy is held by the Management representative / Quality team le	eader.

This manual is issued and controlled by the Management representative / Quality team leader.

All matters or inquiries relating to its contents or usage are to be referred to that individual.

It is the responsibility of all holders of the above controlled copies to:

### Section D Document information – Form F-750-001

This list of Documented Information covers the AS 9100 D standard clauses 4 through 10 and provides the responsibility, approval date, and revision status for the documents.

The QM designation indicates a Quality Management System Manual.

The P designation indicates Procedures.

The WI designation indicates Work Instructions.

The number following the document numbers listed in the Document column below identifies the clause of the standard that the document is associated.

Additional documented information relevant to procedures and instructions is outlined in the spreadsheets of Master Documentation Lists, form F-750-003.

Doc.#	Description	Responsibility	Approve date	Revise date	Re- vise date
Quality Managemen	nt System				
QM-9100-D	QMS Manual	President			
Clause 4 - Context	of the Organization				
P-400	Organizational context	President			
Clause 5 – Leadersl	hip				
P-500	Leadership	President			
Clause 6 - Planning	Į.				
P-600	Planning for the QMS	Management Representative			
P-612	Risk management pro- cess	Management Representative			
Clause 7 – Support					
P-710	Resource management	Operations manager			
P-715	Control of monitoring and measuring equipment	Management representative			
P-720	Competence and aware- ness	H R manager			
P-740	Communication	Management representative			
P-750	Control of documented information	Management representative			
WI-750-001	Document numbering system	Management representative			

### **INSERT YOUR COMPANY LOGO/NAME HERE**

P-720-A vareness

### **Competence and Awareness**

### 1.0 Purpose/Scope

**Documents are all numbered to comply with document control requirements.** 

- 1.1 This procedure describes the process for ensuring that employees have the training, are aware and are competent for the work that affects quality at Your Company.
- 1.2 The procedure applies to personnel whose work affects quality performance.

### 2.0 Responsibilities and Authorities

- 2.1 The Human resources manager has the prime responsibility and approval authority for this procedure.
- 2.2 In support of the Human resources manager, the Quality team / AS steering committee is responsible for identifying requirements for each position that affects product quality.
- 2.3 Additional responsibilities for the Quality team leader / AS management representative, the human resources staff, the supervisors, and employees are detailed in relevant paragraphs of section 5.0 below.

### 3.0 References and Definitions

- 3.1 Reference
  - 3.1.1 This document covers clause 7.2, Competence, and clause 7.3, Awareness, of the AS 9100 D standard.
- 3.2 Definition
  - 3.2.1 Competence: Ability to apply knowledge and skills to achieve intended results.

### 4.0 Resources

4.1 None

### Requirements of the standard are all addressed.

### 5.0 Instructions

- 5.1 The Quality team / AS steering committee determines the competence of person(s) required for the work that affects quality performance.
  - 5.1.1 In support of the planning procedures P-600 for Planning of the QMS and P-810 for Operational planning and control, this procedure addresses the competence issues dealing with:
    - Ensuring that employees are competent on the basis of appropriate education, training, or experience.
    - Taking actions to acquire the necessary competence and evaluating the effectiveness of the actions taken.
    - Retaining documented information as evidence of competence.
  - 5.1.2 In support of the planning procedures, awareness issues are addressed with new employees. They attend orientation training and made aware of:

### **INSERT YOUR COMPANY LOGO/NAME HERE**

### Document is in MS Word for easy Editing.

P-720-A

### **Competence and Awareness**

- The relevant QMS documented information and subsequent changes
- The quality policy
- The relevant quality objectives
- Their contribution to an effective QMS
- The benefits of improved quality performance
- The implications of not conforming to requirements of the QMS
- The importance of meeting customer requirements and the need for ensuring customer satisfaction
- The importance of meeting regulatory, statutory requirements
- Their contribution to product safety, and conformity to products or service
- The importance of ethical behavior

Recommendations for customization are included in blue type.

The prevention and detection of counterfeit parts

- 5.1.3 Awareness training is repeated for all employees as supervisors or management or the Quality team / AS steering committee identifies the need to retrain employees.
- 5.1.4 Additional awareness and communication methods are used as defined in the procedure P-740 for communication.
- 5.2 Human Resources staff maintains records of employee qualifications and documents the education, experience and skills required for each position and iob. A iob description form such as F-720-003 is used for this purpose.
  - 5.2.1 In support of the planning procedures, the level of knowledge needed to achieve product and service conformity to requirements is considered.
    - Knowledge is maintained and made available through planned training. Organizational knowledge can include information such as intellectual property and lessons learned.
    - When addressing changing needs and trends, the current knowledge is assessed to determine how to acquire new needed knowledge.
       Knowledge is obtained as defined in procedure P-710 for Resource management.
  - 5.2.2 The Quality team leader / Management representative is on alert for opportunities to improve organizational knowledge. An information center / library is maintained to collect and make available information that can enhance knowledge.

Each supervisor is responsible for identifying job specific training requirements for each position in their area and to maintain the employee training summaries on spreadsheet, form F-720-004 or in a training database.

Related forms, records and documents are referenced to comply with document control requirements.

5.3

### **Example** of completed worksheet

This worksheet is used to identify the processes required for the Quality Management System. It is designed to ensure that all the requirements of the AS 9100 D standard are addressed and documented information available. In addition, the worksheet can be used as a training tool to help interested parties, such as employees, customers, auditors, and registrar understand your QMS.

PROCESS INPUTS – AS 9100 D	PROCESS OUTPUTS Key Processes	DOCUMENTED INFORMATION for Processes	RESPONSIBILITY for Processes	Related / Interacting Processes
Quality management systems - Requirements 1 Scope 2 Normative references 3 Terms and definitions	QMS-Manual	QM-9100-D Manual p.5 Manual p.6	President	
4 Context of the organization	Context of the organization	QMS-Section D		P-500
4.1 Understanding the organization and its context	Organizational context	P-400	President	P-600 P-710 P-750
	Context	P-400 par 5.1		P-810 P-820
4.2 Understanding the needs and expectations of interested parties	Needs and expectations	P-400 par 5.2		P-910 P-930
4.3 Determining the scope of the quality management system	Scope of the QMS	P-400 par 5.4		P-1010
4.4 Quality management system and its processes	Process interactions	P-400 par 5.5		
	Flow diagram	FD-440-001		
4.4.1 The organization	QMS Process Identification, this form	F-440-001	Management representative	
4.4.2 To the extent	Process support, confidence and documented information	P-400, par 5.7		
5 Leadership	Leadership	QMS-Section D		P-600 P-810
5.1 Leadership and commitment	Leadership	P-500	President	P-930
5.1.1 General	Leadership and commitment	P-500, par 5.1		

## Requirements of AS9100D



### Trainer's Guide

### **Requirements of AS9100D**

### **Materials**

This course is designed to train employees on the requirements of AS9100. The course covers the structure, emphasis and requirements of the standard.

The course is approximately two hours long; the length may be changed by covering less detail, or by adding the suggested group exercises.

To begin preparing for the training session:

- Print the Notes pages of the Power Point presentation. (Open the PowerPoint presentation, select "Print", and select "Notes Pages").
- Print a copy of the Student Manual. You will then be able to prepare for the presentation using this guide and reviewing the speaker notes and student manual.

The content of the student manual matches the information in the PowerPoint slides. Let students know this at the beginning of the presentation to make it easier for them to take notes. The speaker notes provide additional detail.

You will need one copy of the standard for the trainer, and you may want copies for each student to refer to for details. Standards are available electronically from <a href="http://as9100store.com/buy-standards/">http://as9100store.com/buy-standards/</a>

Additional Information: http://www.as9100store.com



### Questions covered

- What is AS 9100 D?
- What is needed for registration to AS 9100 D?
- What are the requirements of AS 9100 D?
  - Section 4 Context of the Organization
  - Section 5 Leadership
  - Section 6 Planning
  - Section 7 Support
  - Section 8 Operation
  - Section 9 Performance Evaluation
  - Section 10 Improvement
- What are the next steps?

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The requirements of AS 9100 D are described in 7 clauses or sections

Section 4 - Context of the Organization

Section 5 - Leadership

Section 6 - Planning

Section 7 - Support

Section 8 - Operation

Section 9 - Performance Evaluation

Section 10 -Improvement

### AS 9100 Rev D - Quality Management Systems - The Gap Analysis Checklist

This gap analysis checklist is prepared for use in evaluating a Quality Management System (QMS) against the requirements of the new Aerospace standard. The AS 9100 Rev D standard includes the requirements of ISO 9001:2015 and specifies additional aviation, space, and defense (ASD) industry requirements.

In the checklist, each requirement is expressed as a question that the user (auditor / assessor) can use to evaluate your QMS capabilities. You will need to have copies of the AS 9100 D and ISO 9001:2015 standards to use along with this checklist so that, if required, you can refer to the requirements and the clarification sections of Annex A.

While the structure of the AS and ISO standards are the same when comparing the contents, the additional ASD requirements are highlighted in yellow in the relevant sections of the checklist and the intent of the main clauses of the new standard is shown in blue font.

After you have prepared an audit schedule, and assigned responsibility to your auditors for different areas or processes to audit, copy each section of the checklist for the auditors working with that section. As you work through the checklist take notes on what is in place, and what needs to be developed.

In the space for 'currently in place', list or reference the procedures or other documents, or evidence that you have reviewed and that will provide information for the new QMS. Take notes on the status of the documents, that is, will they need to be revised for the new system, or can they be used as is? Also note where processes are in place, but documentation is needed. Focus on what is in place, and what needs to be developed.

While you do want to know if documented information is in place and if procedures and processes are being complied with, compliance is not your main focus for this audit. Remember that the final outcome of this audit should be a list of things that your company needs to do to comply with AS 9100 Rev D.

.....

	QUALITY MANAGEMENT SYSTEMS REQUIREMENTS	Currently in Place	Compliant YES / NO?	If No - % Completed	Items Needed
4	CONTEXT OF THE ORGANIZATION				
Intend of clause	This first clause introduces two sub-clauses relating to the context and (2) understanding the needs and expectation and requirements that can impact on the planning of the the QMS processes along with their applicability and interesting to the context and the transfer of the transfer	s of interested parties Quality Management S	. Together they System (QMS).	require that you	u determine the issues

IAQG-Oct-2016 - Audit conducted by:	Date:	to	Copyright © AS9100Store	Page 1 of 76

### AS 9100 Rev D - Quality Management Systems - The Gap Analysis Checklist

	<ul> <li>Do you compile the above items of the QMS in a single source of documented information and referred to as a quality manual?</li> </ul>				
5	LEADERSHIP				
Intent of clause	This clause requires that your top management demonstr management is required to demonstrate leadership and of management to establish, implement and maintain a qual responsibilities and authorities for relevant roles are assign	ommitment with respe ity policy that is appropriate the comment of	ct to customer oriate to your c	focus. This sec ompany and to	tion also asks top
5.1	Leadership and commitment				
5.1.1	General				
	Does top management demonstrate leadership and commitment with respect to the QMS by:				
	Taking accountability for the effectiveness of the QMS?				
	<ul> <li>Ensuring that the quality policy and quality objectives are established for the QMS and are compatible with the strategic direction and the context of the organization?</li> </ul>				
	Ensuring that the quality policy is communicated, understood and applied within the company?				
	Ensuring the integration of the QMS requirements into the company's business processes?				

### AS 9100 Rev D Quality Management Systems - The Internal Audit Checklist

4.3	Determining the scope of the quality management sys	item	
	To establish the scope of the QMS, does your company determine the boundaries and applicability of the QMS?		
	When determining the scope of the QMS, do you consider the:		
	External and internal issues (per above clause 4.1)?		
	Requirements of relevant interested parties (per above clause 4.2)?		
	The products and services of your company?		
	When a requirement of AS 9100 D can be applied, is the requirement applied by your company?		
	When requirements cannot be applied, and in order to claim conformity to AS 9100 D, how do you determine if your ability or responsibility to ensure conformity of products and services are not affected?		
	Is the scope of the QMS available and maintained as documented information?		
	Does the scope state the products and services covered by the QMS?		

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### AS 9100 Rev D Quality Management Systems - The Internal Audit Checklist

5.3	Organizational roles, responsibilities and authorities	
	Does the top management ensure that the responsibilities and authorities for relevant roles are assigned, communicated and understood within the company?	
	Does top management assign the responsibility and authority for:	
	Ensuring that the QMS conforms to the requirements of AS 9100 D standards?	
	Ensuring that the processes are delivering their intended outputs?	
	Reporting on the performance of the QMS on opportunities for improvement and for reporting to top management?	
	Ensuring the promotion of customer focus throughout your company?	
	Ensuring that the integrity of the QMS is maintained when changes to the QMS are planned and implemented?	
	Has the top management appointed a specific member of management, identified as the management representative, who will have the responsibility and authority for oversight of the above requirements?	

Date: \_\_\_\_\_ to \_\_\_\_ to Copyright © AS9100Store

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Audit conducted by:

### AS 9100 Rev D Quality Management Systems - The Internal Audit Checklist

	Do you consider protection from loss, unauthorized changes, unintended alteration, corruption, & physical damage?	
	NOTE: Access can imply a decision regarding the permission to view the documented information only, or the permission and authority to view and change the documented information.	
	Additional Questions	
8	OPERATION	
8.1	Operational planning and control	
	Does your company plan, implement and control the processes needed to meet requirements for the provision of products and services and to implement the actions to address risks and opportunities by:	
	processes needed to meet requirements for the provision of products and services and to implement	
	processes needed to meet requirements for the provision of products and services and to implement the actions to address risks and opportunities by:  • Determining requirements for the product and	
	processes needed to meet requirements for the provision of products and services and to implement the actions to address risks and opportunities by:  • Determining requirements for the product and services?  When determining the requirements for products and	
	processes needed to meet requirements for the provision of products and services and to implement the actions to address risks and opportunities by:  • Determining requirements for the product and services?  When determining the requirements for products and services do you consider:	
	processes needed to meet requirements for the provision of products and services and to implement the actions to address risks and opportunities by:  • Determining requirements for the product and services?  When determining the requirements for products and services do you consider:  • Personal and product safety?	

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Audit conducted by: \_\_\_\_\_\_ Date: \_\_\_\_\_ to \_\_\_\_\_ to \_\_\_\_ Copyright © AS9100Store

## AS 9100 Rev D Internal Auditor Training



Trainer's Guide



### **Overview**

These course materials are meant to train people to conduct internal quality audits within your organization, which are necessary to meet the internal audit requirements of the AS 9100 REV D standard.

The course is divided into two sections:

- 1. The first section will familiarize the students with the AS 9100 REV D requirements for quality management system.
  - Allow 4 hours for this section.
- 2. The second section is devoted to the auditing process. The students will go through all the steps required for an audit, with hands on involvement in performing each step by conducting a mock audit of a fictitious company.
  - Allow 8 hours for this section.

We recommend that you print this guide as you'll need the PowerPoint speaker notes to lead the class. This guide contains everything the instructor needs to lead the class.

### Notes:

- It is assumed that the instructor has certified Lead Auditor credentials or equivalent experience. This is not meant as a self study course.
- It is recommended that the first audit the student is involved with be under the leadership of a lead auditor who has audit experience.



### **AGENDA**

# Introduction to Auditing 0:15 Presentation: Guide to Internal Auditing AS 9100 REV D 0:15 Review Document: AS 9100 REV D 0:30 Exercise: Is it a Requirement? 2:00 Presentation: Requirements of AS 9100 REV D 0:45 Exercise: Find the Requirement 0:15 Questions

### II. The Audit

0:30	Scheduling the Audit
0:30	Planning the Audit
0:45	Opening Meeting
0:45	Audit 5.2 Quality Policy
0:45	Audit 8.1 Operational planning and control
0:45	Audit 8.2 Customer Related Processes
0:45	Audit 8.4 Control of External providers
0:45	Audit 10.2 Nonconformity and Corrective Action
0:30	Audit 9.3 Management Review
0:30	Auditors Document Findings
0:30	Final Audit Report
0:30	Closing Meeting
0:30	Creating the Audit File



### **AS 9100 REV D Requirements**

Now that the students are familiar with the organization of the standard, this section will outline **the requirements** of each section – what it is really asking them to do.

### Requirements of AS 9100 REV D Power Point presentation

### The Requirements of AS 9100 Rev D

1

First, there is a brief 12-page introduction to serve as a review:

- What is AS 9100 REV D?
- What are the steps for Registration?
- Benefits of Registration
- The Process Model

Second, the rest of this presentation outlines the requirements of AS 9100 REV D.

- AS 9100 REV D: Clause by Clause Review
  - o What does AS 9100 Require?
  - o What are key points of clauses?
  - o What should Auditors look for?
- What are the next steps?
- Appendix: Summary of Key AS 9100 REV D Requirements

If you use the speaker's notes this review could take about 2+ hours.

- Students can take notes in their manual.
- We've included the presentation in this Trainer's Guide so you can review the notes while presenting.



### The Audit

The second section is devoted to the auditing process. Normally the class size will vary from 4 to 12, and it is recommended that you divide the class into teams of 2-3. It works best to have an even number of teams for holding opening and closing meetings.

### >>>Allow 8 hours for this section.

The students will go through all the steps required for an audit, with hands on involvement in performing each step by conducting an audit of a fictitious company, Aero~Tech Inc or (ATI) including:

- Scheduling the Audit
- Planning the Audit
- Opening Meeting
- Audit sections of the Aero~Tech Inc Company's QMS:
  - 5.2 Quality Policy
  - 8.1 Operational Planning and Control
  - 8.2 Customer Related Processes
  - 8.4 Control of External Providers
  - 10.2 Nonconformity and Corrective Action
  - 9.3 Management Review
- Auditors Document Findings
- Final Audit Report
- Closing Meeting
- Creating the Audit File

You will lead this section using the <u>Steps of AS 9100 REV D Internal Audit</u> Power Point presentation the entire time, using the materials in this package. The Speaker Notes in the PowerPoint (beginning on the next page) will guide you along as an outline.

**Note:** The trainer plays the part of "Joe Sample, the ATI Quality Manager and other ATI personnel as required.

### Each team should have:

- 1. A copy of the AS 9100 REV D Standard.
- 2. A copy of the Aero~Tech Inc (ATI) Documented Information.
- The Student Manual which allows them to:
  - Follow the presentation and take notes
  - View sample forms (which are presented in the PowerPoint)
  - Use blank forms (CAR, etc.) to conduct their audit.



### **Conclusion**

After the students have completed their presentations, you can:

- 1. Show them the final slides in the <u>Steps of AS 9100 REV D Internal Audit</u> Power Point presentation outlining the nonconformances for the audit.
  - Remember, there is often more than one way to look at a situation, especially in a fictitious setting like Aero~Tech Inc. Therefore, encourage open discussion on why they consider items a nonconformance.
  - You may want to add their suggestions to the course material for next time.
- 2. If you feel that the student has satisfactorily understood the material, you may issue them a certificate (this is a separate MS Word file in your package). Use your judgment to issue this based upon:
  - Participation
  - Ideas
  - Leadership
  - Approach
  - Etc.



You will need to customize the certificate to your company, name, etc.

3. Schedule an audit of your facility to reinforce the material.