This instruction / checklist is intended for use in upgrading your Quality Management System for the transition from ISO 9001:2015 version to the AS 9110 C revision for Quality management systems used in the aviation, space, and defense distribution industries.

The above Quality Management Systems are compatible with each other and have common requirements.

In the AS 9110 C and ISO 9001:2015 standards the requirements are described in:

- Clause 4 Context of the organization
- Clause 5 Leadership
- Clause 6 Planning
- Clause 7 Support
- Clause 8 Operation
- Clause 9 Performance evaluation
- Clause 10 Improvement

You have the ISO 9001:2015 version in place and now have the objective of upgrading the system to the AS 9110 Rev C revision. The good news is that since you are familiar with formal management systems, this initiative will be relatively straightforward.

Essentially, the documentation package for the management system will contain:

- One condensed Manual to introduce the documented information required for AS 9110 C.
- A group of procedure/system documents in your QMS with updates to reflect a document numbering system related to the new clause numbers and to incorporate the upgrades for AS 9110 C requirements,
- A group of forms and attachments needed for the documented information and systems.

The documentation will need to be reviewed, upgraded, and implemented. The first step is to assign a person responsible for the QMS, such as with a Management Representative to become familiar with the changes for the 2016 version of the AS 9110 C standard. Visit <u>the9110store.com</u> for training materials, resources, and information on quality management systems requirements.

The following table with detailed instructions focuses on the areas of the documentation required for the AS 9110 C quality management system. As you undertake the task of upgrading your quality management system from the ISO version to the AS version, note that the intent of the main clauses is shown in **blue font**. In the first left hand column of the instructions, the clause numbers **highlighted in green** indicate where specific AS 9110 C additions are made to ISO 9001:2015, and the clause numbers **highlighted in yellow** indicate where ISO 9001 requirements are carried over for AS 9110 C.

Keep in mind that while you need to focus on the new requirements of IAQG, your company now has an opportunity to review the carry-over ISO 9001 QMS and improve the system while incorporating the AS 9110 C requirements.

Use a copy of the AS standard along with this instruction to pinpoint for your company the areas that need attention. You may want to make notes and add comments in the space available to the right and the left of the column for reference documentation. Use the upgrade checklist section on the right side of the table to assign the responsibility for the upgrade and to follow up on its completion.

AS 9110	Changes to the existing ISO 9001:2015	Reference	Changes in existing documentation	Upgrade Checklist	
Rev C Clause	Quality System	document		Assigned to:	Date Completed
All	The SAE international Aerospace standard AS 9110 Rev C is restructured and contains 10 sections or clauses numbered 1 through 10. The standard is revised to incorporate the new clause structure and content of ISO 9001:2015. In addition, aviation, space, and defense(ASD) industry requirements, definitions, and notes are included.	AS 9110 C	The requirement clauses of the new standard are the Clause 4 through Clause 10. Your company needs to become familiar with the new structure and the changes and subsequently upgrade the Quality Management System (QMS). Your company now has an opportunity to review the exiting ISO 9001:2015 QMS and improve the system while incorporating the AS 9110 C requirements.		
All	While the specific requirement for a quality manual is not in AS 9110 C and ISO 9001:2015, the standard requires that Documented Information be maintained for the QMS.	Manual	Replace / rework your existing Quality Manual with a condensed version that will introduce the QMS. A quality manual is not included as a requirement in clause 7.5.1 of AS 9110 C; however, documented information is required to be maintained for the QMS.		
		Manual	<ul> <li>In the condensed manual include sections for:</li> <li>Scope of the Quality Management System (QMS)</li> <li>Distribution Control List,</li> <li>Revision Status,</li> <li>Quality Policy and Objective, Strategic Direction,</li> <li>Organization Chart,</li> <li>Company Background - Products and Services,</li> <li>Process Flow Diagram,</li> <li>List of Documented Information,</li> <li>Records Documentation Matrix.</li> </ul>		
	The specific requirement for documented procedures is not in AS 9110 C and ISO 9001:2015; however documented information is required to plan, establish, implement, and maintain the QMS processes.	Documented information	The QMS documented information may be presented in any suitable format such as in a method, an instruction, a system, a process, a procedure, a manual, etc. You will need to add / replace / rework your QMS procedures to incorporate the AS 9110 C requirements. An early consideration is the development of a process for the control of documented information.		

			Replace / rework the documented procedures for Control of Documents and Control of Records with a procedure, (such as P-750) for Documented		
			Information and include it in section 7.5.		
4	This first clause introduces two sub-clauses relating to the context of the organization, (1) understanding the organization and its context and (2) understanding the needs and expectations of interested parties. Together they require that you determine the issues and requirements that can impact on the planning of the Quality Management System (QMS). In addition, the scope of the QMS and the QMS processes along with their applicability and interactions need to be determined.				
4	Clause 4, Context of the Organization is a new requirement in both AS 9110 C and ISO 9001:2015.	Documented information	Your company must determine the issues and requirements that can impact on the planning of the QMS and that can affect the ability to achieve the intended results of the QMS. You may want to develop an organizational context worksheet to identify issues and requirements.		
<mark>4.1</mark>	Documented information for the QMS sets the stage for an understanding of the requirements and of the international standard.	Procedure	Review the information (in a document P-400, Organizational Context) that outlines the process to understand and determine the internal and external issues that are relevant to the QMS.		
<mark>4.2</mark>	A stakeholder approach provides for an understanding of the requirements of interested parties.		Review the process to understand and determine the needs and expectations of interested parties.		
<mark>4.3</mark>	In AS 9110 C, determining the scope of the QMS is in clause 4.3.		Review the process to determine the scope of the QMS. Refer to 4.3 a) thru c) and consider the internal and external issues, the requirements of interested parties, and your products and services.		
<mark>4.3</mark>	In AS 9110 C, the scope of the QMS considers justification for requirements that do not apply.		Review any justifications for requirements of the standard that do not apply to the scope of the QMS. Note that conformity to AS 9110 C can only be claimed if the requirements determined to be not applicable do not affect your ability or responsibility to meet product and service requirements and enhance customer satisfaction.		
<mark>4.4</mark>	In AS 9110 C, clause 4.4 outlines the requirements for the QMS and its processes and their interaction.		Review your system to establish, implement, maintain, and continually improve the QMS. Provide an outline (in a document P-400) of the process to determine the application and interaction of the processes needed for the QMS.		
<mark>4.4.1</mark>	The AS 9110 C QMS must also address customer and applicable statutory and		Document (in P-400) the process to address customer requirements, applicable statutory and		

4.4.2	regulatory QMS requirements. In AS 9110 C, clause 4.4.2 c) requires that documented information as required by the competent authority. In AS 9110 C, clause 4.4.2 specifies new requirements for documented information.		<ul> <li>regulatory QMS requirements including any required approvals, certificates, ratings, capability list, or licenses.</li> <li>Determine the inputs required and the outputs expected from the processes and address risks and opportunities and plan to implement actions to address them. See clause 6.1.</li> <li>For the QMS, refer to 4.4.2 a) thru c) and add the new requirement to establish and maintain documented information as required by the competent authority.</li> <li>Document (in a P-400) the process to establish and maintain the documented information for:</li> <li>General description of relevant interested parties,</li> <li>Scope of the quality management system, including boundaries and applicability,</li> <li>Description of the processes needed for the quality management system and their application throughout the organization,</li> <li>The sequence and interaction of these processes</li> <li>Assignment of the responsibilities and authorities for these processes,</li> <li>Details of the system used to maintain and retain documented information for work done for each article or product.</li> <li>See Documented information, clause 7.5.</li> <li>Outline (in a document P-750) the process for the control of documented information.</li> </ul>		
5	This clause requires that your top management demonstrates leadership and commitment with respect to the QMS. In addition, top management is required to demonstrate leadership and commitment with respect to customer focus. This section also asks top management to establish, implement and maintain both a quality policy and a safety policy that is appropria+te to your company and to ensure that the responsibilities and authorities for relevant roles are assigned, communicated, and understood.				
5	In addition, top management needs to identify responsible persons as the Management Representative, the Accountable Manager, the Quality Manager, and other Appointed Managers as required for operational activities.				
5	Clause 5, leadership is a requirement in both AS 9110 C and ISO 9001:2015.	Procedure	Review your existing document (such as P-500) to incorporate the requirements for leadership and commitment.		
<mark>5.1.1</mark>	In AS 9110 C, clause 5.1.1 a) thru j) outlines the carry-over requirements to		Review the actions to demonstrate the leadership and commitment to the QMS.		

	demonstrate leadership and commitment.			
			Refer to the requirements in clause 5.1.1 a) thru j)	
			dealing with a) accountability for the QMS, to j)	
			support for relevant management roles.	
	In AS 9110 C, clause 5.1.1 k) and I)		In P-500, include the new requirements dealing with	
<b>5.1.1</b>	outlines the new requirements to		k) ensuring that the safety policy and safety	
	demonstrate leadership and commitment.		objectives are established, and I) ensuring that	
			corrective actions, especially from the audits, are	
			promptly implemented.	
	In AS 9110 C, clause 5.1.2 a) thru c)		Review the actions to demonstrate the leadership	
<mark>5.1.2</mark>	covers the carry-over requirements for		and commitment to customer focus. Refer to 5.1.2 a)	
	customer focus.		thru c) requirements dealing with meeting customer	
			and regulatory requirements, addressing risks and	
			opportunities, and customer satisfaction, product	
			conformity, on-time delivery performance, and action	
			taken if planned results are not or will not be met.	
	In AS 9110 C, clause 5.1.2 d), covers a		In P-500, include the requirements for customer	
<b>5.1.2</b>	new requirement for product and service		focus 5.1.2 d) dealing with product conformity, on-	
	conformity and on-time delivery		time delivery performance, and action taken if	
	performance.		planned results are not or will not be met.	
	In AS 9110 C, clause 5.2.1outlines the		Review the process for developing a quality policy	
<mark>5.2.1</mark>	requirements for the quality policy.		that is appropriate to the purpose and context of your	
			company and communicating this quality policy.	
	In AS 9110 C, clause 5.2.2 outlines the		Review the new requirements that the quality policy	
<mark>5.2.2</mark>	requirements for the availability of the		is communicated, is available as documented	
	quality policy.		information and is available to interested parties.	
	In AS 9110 C, clause 5.2.3 outlines the		Include (in document P-500) the process for	
<b>5.2.3</b>	requirements for establishing and		establishing and communicating a safety policy.	
	communicating the safety policy.		Refer to 5.2.3 a) thru c.) dealing with requirements	
	<b>G F F</b>		for the safety policy and safety objectives.	
	In AS 9110 C, clause 5.3 covers		Review the system for ensuring that the	
<mark>5.3</mark>	organizational roles, responsibilities, and	Organization	responsibilities and authorities for relevant roles are	
	authorities.	chart	assigned and communicated.	
	In AS 9110 C, clause 5.3 requires the		Top management is required to appoint a specific	
<mark>5.3</mark>	appointment of a management		member of the team as the management	
	representative.		representative who has the responsibility and	
	In ISO 9001:2015, a specific management		authority to oversee the QMS and ensure that it	
	representative was not required to be		conforms to the requirements of the AS standard.	
	appointed.		This person must have unrestricted access to top	
			management and organizational freedom to deal	
			with quality management issues.	
			Note that the responsibility of the management	
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