



AQMS AUDITOR AUTHENTICATION BODY

AS9100
AQMS AUDITOR
APPLICATION GUIDE

PROBITAS AUTHENTICATION
4-7-2021

INTRODUCTION

In December 1998, the Aerospace Industry established the International Aerospace Quality Group (IAQG) with the purpose of achieving significant improvements in quality and reductions in cost throughout the value stream.

The IAQG developed 9104, a global scheme for the use of assessment results performed by Certification Bodies (CBs), based on the 9100-series standards (9100, 9110, and 9120) and taking into account the schemes already in use or under development in the various IAQG sectors.

The 9104/3 document supplements the existing international requirements for the accreditation of personnel CBs, accreditation of CBs and auditor certification programs.

Confidence and reliance in the audit process depends on the competence of those conducting the audit, making certification and registration decisions and supporting an audit program. Competence is based on the demonstration of personal attributes, and the ability to apply Aerospace Quality Management System (AQMS) knowledge and skills gained through education, work experience, auditor training and audit experience (reference ISO 19011, section 7.1).

The IAF Guidance on the Application of ISO/IEC Guide 62 requires personnel operating in a specific technical field to have competence for the functions they perform, be they management, technical, administrative, or other. This means that an organization operating an aerospace auditing program should have adequate personnel with required knowledge of aerospace processes, product, and system requirements to ensure their audit program is able to operate effectively and in accordance with Aerospace Industry requirements.

This document provides guidance on the minimum requirements (Body of Knowledge) for AQMS auditors who will participate in AQMS certification and registration activities, including the auditor authentication process. It is applicable to auditors seeking formal certification to conduct AQMS audits in support of the IAQG.

For the Americas, the IAQG has established the Registration Management Committee (RMC) to manage the application and oversight of the AQMS certification scheme in the Americas. The RMC approves, as appropriate, Auditor Authentication Body(s) (AABs) that authenticate AQMS auditors. The authentication of auditors to AQMS standards is granted by the AAB in accordance with the requirements of 9104/1 and 9104/3.

Probitas Authentication is an RMC recognized Auditor Authentication Body and has been approved by the RMC to authenticate AQMS auditors in accordance with the certification scheme requirements.

2 CERTIFICATION SCHEMES

2.1

The following categories of Aerospace Auditors have been established:

AQMS Standard AS9100	AQMS Standard AS9110	AQMS Standard AS9120
<ul style="list-style-type: none">• AA: AS9100• AEA: AS9100	<ul style="list-style-type: none">• AA: AS9110• AEA: AS9110	<ul style="list-style-type: none">• AA: AS9120• AEA: AS9120

2.2

The available AQMS certification schemes are:

- 9100: Quality Management Systems - Requirements for Aviation, Space and Defense Organizations
- 9110: Quality Management Systems - Requirements for Aviation Maintenance Organizations
- 9120: Quality Management Systems - Requirements for Aviation, Space and Defense Distributors

3 CERTIFICATION GRADES

3.1

Aerospace auditor grades can be defined as:

- Aerospace Auditor (AA) recognizes the individual has met the requirements to participate in an Aerospace Audit to the qualified scheme as part of an audit team and under the guidance of an Aerospace Experienced Auditor.
- Aerospace Experience Auditor (AEA) recognizes the individual has met the requirements to lead an Aerospace Audit to the qualified scheme as the lead auditor.
-

3.2

For AEA, two different sets of criteria can be applied, depending on the amount of aerospace industry work experience the auditor holds.

- Direct aerospace industry work experience of 4 years in the previous 10 years

or

- Combination of 2 years aerospace industry experience in the previous 15 years, industry specific training, and 2 full aerospace industry witnessed audits in the previous years.

4 CERTIFICATION REQUIREMENTS

4.1

The AS9100 AQMS Auditor requirements are contained in the tables below. Auditors are authenticated independently in each scheme and can only conduct audits to the identified standard (e.g., AEA AS9100 auditors cannot perform audits to AS9110 and 9120). However, auditors can be recognized for more than one scheme.

Table 1: 9100 AA Requirements

9100 Aerospace Auditor (AA)				
AUDITOR RECOGNITION	Quality Management System (QMS) auditor by nationally-recognized AAB or meet the education, training, work experience, and audit experience of ISO 19011			
AQMS TRAINING	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 40%;"><u>AS9100 Aerospace Auditor Transition Training (AATT)</u></td> <td style="text-align: center; width: 10%;">and</td> <td style="text-align: center; width: 50%;"> <u>QMS (ISO 9001) Auditor Training Course</u> or <u>AQMS AS9100 Standard Auditor Course</u> </td> </tr> </table>	<u>AS9100 Aerospace Auditor Transition Training (AATT)</u>	and	<u>QMS (ISO 9001) Auditor Training Course</u> or <u>AQMS AS9100 Standard Auditor Course</u>
<u>AS9100 Aerospace Auditor Transition Training (AATT)</u>	and	<u>QMS (ISO 9001) Auditor Training Course</u> or <u>AQMS AS9100 Standard Auditor Course</u>		
INDUSTRY SPECIFIC TRAINING	Not Required			
AUDIT EXPERIENCE	4 full QMS or AQMS (9100) audits conducted for a total of 20 audit days within the past 3 years. Only 2nd or 3rd party audits will be considered.			
WITNESSED AUDIT EVALUATION	Not Required			
AQMS WORK EXPERIENCE	Not Required			

Table 2: 9100 AEA Requirements – Qualification through Training

9100 Aerospace Experience Auditor (AEA) Qualification Through Training				
AUDITOR RECOGNITION	Quality Management System (QMS) auditor by nationally-recognized AAB or meet the education, training, work experience, and audit experience of ISO 19011			
AQMS TRAINING	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 40%;"><u>AS9100 Aerospace Auditor Transition Training (AATT)</u></td> <td style="text-align: center; width: 10%;">and</td> <td style="text-align: center; width: 50%;"> <u>QMS (ISO 9001) Auditor Training Course</u> or <u>AQMS AS9100 Standard Auditor Course</u> </td> </tr> </table>	<u>AS9100 Aerospace Auditor Transition Training (AATT)</u>	and	<u>QMS (ISO 9001) Auditor Training Course</u> or <u>AQMS AS9100 Standard Auditor Course</u>
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INDUSTRY SPECIFIC TRAINING	Successful completion of an approved Aerospace Industry Specific Course: AS9100/9110			
AUDIT EXPERIENCE	<p style="text-align: center;">4 full QMS or AQMS (AS9100) audits conducted for a total of 20 audit days within the past 3 years. Only 2nd or 3rd party audits will be considered.</p>			
WITNESSED AUDIT EVALUATION	Successful completion of 2 full AS9100 audits witnessed* by a certified AEA.			
AQMS WORK EXPERIENCE	2 years of full-time AQMS industry work experience within the past 15 years.			

* If during a witness audit, the candidate shows insufficient knowledge of aerospace requirements, as defined by Appendix A, section A.3.1 (9100) or section A.4.1 (9110) industry specific training course, additional training and/or practical experience will be required. Witness shall be performed by authenticated AEA who themselves have not become qualified via an industry specific training. The witness AEA shall not perform the audit as a member of the assessment team.

Table 3: 9100 AEA Requirements – Qualification through Aerospace Industry Work Experience

9100 Aerospace Experience Auditor (AEA) Qualification Through Industry Work Experience				
AUDITOR RECOGNITION	Quality Management System (QMS) auditor by nationally-recognized AAB or meet the education, training, work experience, and audit experience of ISO 19011			
AQMS TRAINING	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 45%; text-align: center;"><u>AS9100 Aerospace Auditor Transition Training (AATT)</u></td> <td style="width: 5%; text-align: center;">and</td> <td style="width: 50%; text-align: center;"> <u>QMS (ISO 9001) Auditor Training Course</u> or <u>AQMS AS9100 Standard Auditor Course</u> </td> </tr> </table>	<u>AS9100 Aerospace Auditor Transition Training (AATT)</u>	and	<u>QMS (ISO 9001) Auditor Training Course</u> or <u>AQMS AS9100 Standard Auditor Course</u>
<u>AS9100 Aerospace Auditor Transition Training (AATT)</u>	and	<u>QMS (ISO 9001) Auditor Training Course</u> or <u>AQMS AS9100 Standard Auditor Course</u>		
INDUSTRY SPECIFIC TRAINING	Not Required			
AUDIT EXPERIENCE	<p style="text-align: center;">4 full QMS or AQMS (AS9100) audits conducted for a total of 20 audit days within the past 3 years. Only 2nd or 3rd party audits will be considered.</p>			
WITNESSED AUDIT EVALUATION	Not Required			
AQMS WORK EXPERIENCE	4 years of full-time AQMS work experience within the past 10 years.			

5 GENERAL GUIDANCE ON TRAINING REQUIREMENTS

All AQMS auditor applicants must provide evidence that they have successfully completed AQMS training courses that support aerospace auditor authentication. These courses must be approved and recognized by the IAQG. Auditor applicants must upload course certificates to provide evidence of the following:

- The Auditor must be trained in the AQMS Standard requirements relevant to the AQMS being performed
- The course has been officially approved by a IAQG recognized Training Provider Approval Body (TPAB)
- The course was offered by a IAQG recognized Training Provider
- The auditor has successfully completed the course
- Certificate number and training dates

6 GENERAL GUIDANCE ON AUDITING EXPERIENCE

All AQMS auditor applicants must provide evidence that they have participated in at least four audits for a minimum of 20 days that covered the full ISO 9001 standard or applicable AQMS Standards. These audits must have been completed within the previous three years.

7 GENERAL GUIDANCE FOR EVALUATING WORK EXPERIENCE FOR AEA

7.1

To assist you in evaluating your credentials and experience as it relates to an application for Aerospace Experience Auditor (AEA), the following guidelines may be applied.

7.2 Aerospace Experience Auditors (AEA) for 9100: Work Experience Requirements

Auditors that are to be considered, as Aerospace Experience Auditors must have four years aerospace industry experience within the prior 10 calendar years, meet the training and auditing experience requirements listed above, and the following:

7.2.1

Four years full time in the aerospace industry directly involved in Engineering, Design, Manufacturing, Quality or Process Control for a major airframe manufacturer, prime supplier, auxiliary equipment supplier and/or appropriate official civil, military or space organization, such as National Aviation Authorities (NAA), European Space Agency (ESA)/NASA, Ministry of Defense (MoD). The aerospace industry work experience should have included direct involvement or knowledge of the elements as defined in 7.2.2 below and include the following, at a minimum:

- Aerospace industry quality perspective
- CAA requirements
- Principles of military aerospace requirements and regulations
- First Article Inspection (9102)
- Airworthiness and safety requirements
- Design, development, verification and validation
- Aerospace material traceability requirements
- Aerospace subcontractor approval and control requirements
- Variation management of key characteristics (9103)
- Flow down of Quality requirements
- Foreign Object Damage (FOD) prevention program requirements
- Use of Customer supplied products
- Calibration controls and positive recall system
- Acceptance authority media

- Nonconforming material, system requirements and operation

OR

7.2.2

If less than four years aerospace industry experience in the last 10 (or more than six consecutive years since last industry work experience from date the of application), the completion of an in-depth **Aerospace Industry Competency Course** developed by the CRB or an independent organization **and two years aerospace industry experience in the last 15** is required. Both the course and the training organization must be approved and recognized by the IAQG RMC. The course must have included the following topics at a minimum:

- Aerospace industry quality perspective.
- CAA requirements.
- Principles of military aerospace requirements and regulations.
- First Article Inspection (9102).
- Airworthiness and safety requirements.
- Design, development, verification and validation.
- Aerospace material traceability requirements.
- Aerospace subcontractor approval and control requirements.
- Variation management of key characteristics (9103).
- Flow down of Quality requirements.
- Foreign Object Damage (FOD) prevention program requirements.
- Use of Customer supplied products.
- Calibration controls and positive recall system.
- Acceptance authority media.
- Nonconforming material, system requirements and operation.
- Sampling inspection requirements and limitations.
- Special processes.
- Configuration management/requirements control.

AND

7.2.3

In addition to 7.2.2 above, the auditor must have participated in at least **two full 9100 aerospace industry audits within the past three years and have been witnessed by a currently qualified Aerospace Experienced Auditor**, who themselves did not become qualified via training. The audits shall cover all elements of the standard and shall have been conducted at organizations that are predominately aerospace oriented. The auditor candidate shall receive a positive and documented recommendation for qualification on all audits.

8 RECERTIFICATION

8.1

AQMS auditors must renew their authentication every three years. The re-authentication (recertification) process includes:

- Six months prior to expiration the auditor should begin submitting the evidence that the requirements for re-authentication are met including an Audit Log, Continuing Professional Development (CPD) (using the optional CPD Log), and any other objective evidence to support re-authentication.
- AQMS auditors must formally apply for re-authentication at least three months prior to the current authentication expiration date and provide documented evidence of the required CPD and audit experience to Probitas Authentication.

8.2

To maintain qualification, all auditors (AA) and aerospace experience auditors (AEA) must participate in at least:

- **Four aerospace audits within the previous three years**
- **Continuing education in accordance with sectorial training requirements (15 hours)** that requires review of the changes to the aerospace industry standards, auditing methods and ISO requirements at a minimum of 15 hours total within three years.

9 AQMS AUDITOR APPLICATION PROCESS

9.1

To begin the application process, AQMS auditor applicants at Probitas Authentication are required to create their personal account at www.sae-itc.org/probitas. Completing and submitting all the requested information will assist in the authentication process.

9.2

When the auditor applicant is ready to begin the application, please select “Begin Application” and follow the instructions. Probitas Authentication requires the completion of an application, signed by the applicant seeking certification, and includes at a minimum the following:

- Information required to identify the applicant, such as name, address and other information required by the certification scheme
- The scope of the desired certification
- A statement that the applicant agrees to comply with the certification requirements and to supply any information needed for the assessment
- Any supporting information to demonstrate objective compliance with the scheme requirements
- Notice to the applicant of his/her opportunity to declare, within reason, a request for accommodation of special needs.
- Unless prohibited by law, electronic signatures are acceptable.

9.3

The following information is required in the auditor application:

- Personal information including name, address, phone, and email
- General education
- Work experience including company, company contact for verification, type of company
- Job experience including title, position, and information regarding specific work skills
- Resume and other supporting information
- Professional training related to specific auditor requirements
- Audit experience including audit logs

9.4

When Probitas Authentication conducts the auditor authentication review, the information collected in the application is compared against the criteria established in the certification scheme for which the auditor has created the application. The decision to grant authentication, or re-authenticate an AA or AEA applicant, will be based primarily on the information and objective evidence the auditor has provided in the application.

9.5

The general auditor authentication process that Probitas Authentication will follow is:

- Probitas Authentication reviews the application to confirm that the applicant complies with the application requirements of the certification scheme.
- If approved, Probitas Authentication will submit the auditor application to the IAQG RMS for recognition.
- Once approved, Probitas Authentication will ask applicant to read and sign the Code of Conduct.
- An OASIS auditor number will be assigned to the auditor along with effective and expiration dates.

9.6

If the auditor application is rejected due to not meeting the certification scheme requirements, Probitas Authentication will:

- Notify applicant that they do not meet the requirements of the certification scheme and provide the rationale the decision was based on
- Notify applicant that another certification may be available, if applicable (i.e. AA instead of AEA)
- Provide information regarding the auditor's option of resubmitting the application for review
- Provide information about the appeals process Probitas Authentication

9.7

An example of the full auditor application can be found in the auditor resources tab at sae-itc.org/probitas.

10 CLOSING

10.1

The overall purpose of certification of persons is to recognize an individual's competence to perform a task or job.

10.2

The certification body has a responsibility to ensure that only those persons who demonstrate competence are awarded certification.

10.3

Certification of persons provides value through public confidence and trust. Public confidence relies on a valid assessment of competence, by a third party, and reconfirmed at defined intervals.

10.4

Probitas Authentication strives to provide superior service to all of our customers, including those customers with disabilities and special needs. Probitas Authentication recognizes the needs of persons with disabilities, as defined by the Americans with Disabilities Act (ADA). In the event you would like to make a request for accommodation of special needs, please contact us.

10.5

You may contact Probitas Authentication at:

- Email us at probitas@sae-itc.org.
- Call us at 724-776-4970
- Our mailing address is:
 - Probitas Authentication
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Warrendale, PA 15096