

AEROSPACE INFORMATION REPORT

SAE AIR5359

REV.
C

Issued 2000-03
Revised 2003-07
Cancelled 2008-01

Superseded by AS9014

Requirements for Certification/Registration of Aerospace Quality Management Systems

RATIONALE

This standard has been superseded by AS9014 and should be withdrawn.

CANCELLATION NOTICE

This document has been declared "CANCELLED" as of January 2008 and has been superseded by AS9014. By this action, this document will remain listed in the Numerical Section of the Aerospace Standards Index noting that it is superseded by AS9014.

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

Copyright 2008 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

TO PLACE A DOCUMENT ORDER: Tel: 877-606-7323 (inside USA and Canada)
Tel: 724-776-4970 (outside USA)
Fax: 724-776-0790
Email: CustomerService@sae.org
SAE WEB ADDRESS: <http://www.sae.org>

INTRODUCTION

The aerospace industry requires that all elements of the production and supply chain operate to levels of quality and performance that assure safe and reliable products. Quality management systems must be designed to assure that all aspects of the design, manufacture and support of aerospace products meet their intended functions. In parallel with the aerospace industry's development of quality management systems, as a means of ensuring that products comply with exacting requirements, equal importance has been attached to the role of quality systems assessment.

The Americas Aerospace Quality Group (AAQG) in cooperation with many aerospace companies developed specific requirements for quality systems that are to be implemented and maintained by the complete production and supply chain in the manufacture of products used in aviation and space applications. This Aerospace Information Report (AIR) was developed by the aerospace industry to standardize requirements and aid the potential pooling of resources, recognizing the highly professional and effective assessment of quality systems by the aerospace industry with oversight by the regulatory agencies of the Government. These requirements provide for continued integrity and credibility in the registration of those quality systems while recognizing the wealth of experience accrued by aerospace companies over many decades.

SAE AIR5359 Revision C

The processes and requirements herein are intended for use by members of the AAQG, aerospace industry companies, their suppliers, industry recognized Accreditation Bodies (ABs), and AB approved Certification/Registration Bodies (CRBs). This AIR addresses the following:

- a. assessment of quality systems by accredited CRBs,
- b. principles for determining the content and duration of assessments,
- c. reporting and control of nonconformance,
- d. form of registration recommendations,
- e. minimum standards of qualification and experience for aerospace auditors employed by CRBs,
- f. qualifications of auditors by CRBs, ABs and the AAQG Registrar Management Committee (RMC),
- g. sharing of audits between Original Equipment Manufacturers (OEMs) using a 2nd party shared method,
- h. oversight process of CRBs by the ABs, AAQG RMC and AAQG Member Companies,
- i. oversight process of AB's by the AAQG RMC and AAQG Member Companies,
- j. operation of the AAQG RMC.

TABLE OF CONTENTS

1. SCOPE	4
1.1 Purpose.....	4
2. REFERENCES	4
2.1 SAE Publications	4
2.2 ISO Publications	5
2.3 IAF Publications	5
3. DEFINITIONS	5
4. GENERAL.....	7
5. REQUIREMENTS FOR ACCREDITATION BODIES	8
6. REQUIREMENTS FOR CERTIFICATION/REGISTRATION BODIES (CRBS)	8
7. REQUIREMENTS FOR AUDITORS.....	10
8. REQUIREMENTS FOR ASSESSMENT AND REPORTING	13
9. AUTHENTICATION AND OVERSIGHT OF ACCREDITATION BODIES, CERTIFICATION/ REGISTRATION BODIES, AND AUDITORS.....	15
10. REQUIREMENTS FOR SHARED AUDITS BY OEMS	16
11. RECORDS	16
12. FEE	16
13. PROCEDURE RESPONSIBILITY	16
14. NOTES.....	17
APPENDIX A SPECIFIC AEROSPACE QUALITY MANAGEMENT SYSTEMS REQUIREMENTS	18
APPENDIX B REGISTRAR MANAGEMENT COMMITTEE OPERATING PROCEDURES/POLICY ...	24
APPENDIX C CONFIRMATION OF AUDITORS AND AUDITOR CREDENTIALS	26
APPENDIX D SHARED AUDITS BY OEMS.....	27
APPENDIX E CERTIFICATION/REGISTRATION BODY REPORTING REQUIREMENTS	29

1. SCOPE:

The requirements defined in this AIR are applicable to Accreditation Bodies (ABs), Certification/Registration Bodies (CRBs), and Original Equipment Manufacturers (OEMs), during assessment and/or certification/registration to the applicable quality management system standard to meet industry accepted practices.

1.1 Purpose:

The purpose of this document is to outline the process for providing aerospace companies and their suppliers with assessment and registration of their quality management systems, by aerospace industry recognized and AB qualified CRBs. It also details requirements for assessing organizations to the applicable quality management system standard. This document is created to be in conformance with AIR9104.

2. REFERENCES:

(as amended from time to time)

2.1 SAE Publications:

Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001 or www.sae.org

AIR5493	Requirements for Development, Implementation and Control of Aerospace Auditor Training
AS9000	Aerospace Basic Quality System Standard
AS9003	Inspection and Test Quality System
AS9006	Deliverable Aerospace Software Supplement for AS9100
AS9100	Quality Management Systems - Aerospace - Model for Quality Assurance in Design, Development, Production, Installation and Servicing
AS9101	Quality System Assessment
AS9102	Aerospace First Article Inspection Requirement
AS9103	Variation Management of Key Characteristics
AS9104	Requirements for Aerospace Supplier Quality System Certification/Registration Schemes for Use by the IAQG Sectors (DRAFT)
AS9110	Quality Management Systems - Aerospace - Requirements for Maintenance Organizations
AS9111	Quality System Assessment for Maintenance Organizations (DRAFT)
AS9120	Quality Management Systems - Aerospace - Requirements for Stockist/Distributors
AS9121	Quality System Assessment Applicable to Stockist Distributors (DRAFT)

2.2 ISO Publications:

Available from ANSI, 25 West 43rd Street, New York, NY 10036-8002 or www.ansi.org

ISO 9000	Quality management systems - Fundamentals and vocabulary
ISO 9001	Quality management systems requirements
ISO 9004	Quality management systems - Guidelines for performance improvement
ISO 19011	Guidelines on quality and/or environmental management systems auditing (superseding ISO 10011-1, -2 & -3)
ISO/IEC Guide 61	General Requirements for Assessment and Accreditation of Certification/ Registration Bodies
ISO/IEC Guide 62	General Requirements for Bodies Operating Assessments and Certification/ Registration of Quality Management Systems

2.3 IAF Publications:

Available from www.iaf.nu

IAF Guidance on the Application of ISO/IEC Guide 61
IAF Guidance on the Application of ISO/IEC Guide 62

2.4 Other Documents:

Society of British Aerospace Companies (SBAC)

Technical Specification (TS) 157 - Aerospace Sector Certification Scheme Objective, Scope and Application

3. DEFINITIONS:

3.1 AMERICAS AEROSPACE QUALITY GROUP (AAQG):

An SAE Aerospace Council committee (G-14) comprised of individuals from aerospace Original Equipment Manufacturers (OEMs). This group is chartered to develop common requirements for use by the aerospace industry for quality improvement.

3.2 ACCREDITATION BODY (AB):

A body recognized by an IAQG sector that has the responsibility for the sector qualification of CRBs to issue certifications/registrations to aerospace quality management system standards.

3.3 ACCREDITED AUDIT/CERTIFICATE:

An audit conducted in complete accordance with the requirements of this document. An audit performed by an approved or certified Aerospace auditor, working through a CRB, qualified for this sector by an AB, that has been recognized by the RMC of the AAQG or IAQG. A certificate is issued attesting to conformance to the applicable standard(s).

3.4 AEROSPACE:

For the purpose of this document "Aerospace" is defined as the business of design, manufacture, overhaul, distribution and support of aerospace vehicles and engines, accessories and component parts, all ancillary and allied businesses including aerospace vehicle and support operations.

3.5 AEROSPACE EXPERIENCE AUDITOR (AEA):

An "Aerospace Experience Auditor" shall refer to an auditor that has met the requirements set forth in paragraph 7.2 of this document. Auditors conducting audits for OEMs in support of recognized shared audits at suppliers may be referred to as "Aerospace Experience Auditors" provided they meet the OEM's requirements that are to be equivalent to paragraph 7.2.

3.6 AEROSPACE PRODUCT:

"Aerospace Product" shall mean an aircraft, rotorcraft, guided weapon, spacecraft, other product designed to travel through the air, inside or outside the ground effect, or to travel outside the influence of the earth's atmosphere or major components of these products.

3.7 AEROSPACE QUALITY MANAGEMENT SYSTEM STANDARDS (AQMS):

Standards developed for and by the aerospace industry to define minimum quality system requirements for the aerospace industry supply chain. These standards are typically ISO 9001 based documents. For example AS9003, AS9100, AS9110, AS9120 and other similar standards.

3.8 AUDITOR:

An "Auditor" shall refer to an auditor that has met the requirements set forth in paragraph 7.1 of this document. Auditors conducting audits for OEMs in support of recognized shared audits at suppliers may be referred to as "Aerospace Auditors" provided they meet the OEM's requirements that are to be equivalent to paragraph 7.1.

3.9 AUTHORITIES/CIVIL AVIATION AUTHORITY (CAA):

The national authority for aviation, defense and space regulations with jurisdiction within its country of origin. [Federal Aviation Administration (FAA), Department of Defense, NASA in the United States, Department of Civil Aviation (DAC) and Brazilian Space Association (AEB) in Brazil, Transport Canada in Canada]

3.10 CERTIFICATION/REGISTRATION BODY (CRB):

An organization that assesses and registers/certifies the quality management system of customer organizations with respect to published quality management system standards and any supplementary documentation required under the system.

3.11 INTERNATIONAL AEROSPACE QUALITY GROUP (IAQG):

An international assembly of major aerospace companies comprised of three sectors representing companies in the Americas, Europe and Asia-Pacific to harmonize quality requirements and processes on a global scale.

3.12 MAJOR NONCONFORMITY:

The absence of or total systemic breakdown of a quality management system element specified in the applicable standard or any nonconformances where the effect is judged to be detrimental to the integrity of the product, processes, or service.

3.13 MINOR NONCONFORMITY:

A single system failure or lapse in conformance with a procedure relating to the applicable standard.

3.14 REGISTRAR MANAGEMENT COMMITTEE (RMC):

An industry group charged with the oversight and management of the registration/certification program and supporting processes, systems and documentation.

3.15 UNACCREDITED AUDIT:

An audit that is conducted that does not fulfill the requirements set forth herein. This includes, but is not limited to:

- a. use of an unapproved audit checklist
- b. failure to audit the requirements of the applicable standard
- c. audit for conformance to standard with no additional surveillance
- d. an audit performed by an auditor, CRB, or AB that has not conformed to the requirements of this document.

4. GENERAL:

- 4.1 The requirements stated herein shall be based on the latest versions of the documents identified in Section 2.
- 4.2 Aerospace additional requirements and supplementation are typically shown in aerospace quality management system (AQMS) documents as boldface items. These items are in addition to ISO 9001 elements and should be applied to the organization's quality system in accordance with the applicable AQMS.

- 4.3 Data (in the form of checklists, approvals or other company specific information) generated by this document shall be handled as "sensitive" (or proprietary) between the parties generating, collecting, or using the data. Companies using this data shall keep its usage confidential both internally and externally, unless otherwise agreed in writing by the consenting parties. Data resident at the ABs and CRBs on OEMs shall not be shared with OEM competitors. Data relative to nonconformances in the OASIS database shall not be shared among OEM competitors. However, this data may be subject to audit or review at any time (see paragraph 5.4 and 6.4 below) by other parties.

5. REQUIREMENTS FOR ACCREDITATION BODIES:

- 5.1 The responsibilities of the ABs shall be to qualify CRBs against the requirements of this document. Aerospace sector qualification consists of an application review, witness audit, and recommendation for the recognition of the CRB aerospace sector program to the RMC. ABs shall work with the RMC to give assurance that CRBs continue to perform in a manner consistent with the requirements contained herein. The RMC recognizes ABs that demonstrate the capability to operate in accordance with this document. ABs who are recognized by the AAQG will be listed on the AAQG Web site (www.sae.org/aaqg). All ABs who are recognized by the RMC must be signatories to the IAF (International Accreditation Forum) MLA (multi-lateral arrangement) and shall be in conformance with ISO/IEC Guide 61 and IAF Guidance on ISO/IEC Guide 61.
- 5.2 ABs must prepare a CRB Application form for the applicable aerospace AQMS registration. This Application shall provide the AB with confidence that the CRB has developed the necessary documented process to meet AIR5359 requirements for each applicable AQMS. All information required by the CRB Application must be appropriate and acceptable prior to the AB approval and the recognition of that approval by the RMC.
- 5.3 ABs shall perform witness audits and oversight of CRBs in accordance with their internal procedures and ISO/IEC guidelines, including at a minimum of one office audit per year and one ISO 9001 based AQMS witness audit per year. For witness audits the AB audit team shall meet the requirements in paragraph 8.1, except it may use an OEM auditor or technical expert in-lieu of an AEA.
- 5.4 ABs must afford AAQG and IAQG member OEMs and applicable Authorities the right of review of records and information related to their AQMS sector qualification program, including AB activities associated with this document and recognition by the RMC. ABs shall ensure that this right of review is communicated to its AQMS sector qualified CRBs.

6. REQUIREMENTS FOR CERTIFICATION/REGISTRATION BODIES (CRBS):

- 6.1 A nationally recognized AB must first accredit CRBs seeking sector qualification for an AQMS standard to ISO 9001. This accreditation will be in accordance with ISO/IEC Guide 62 and the IAF Guidance on the application of ISO/IEC Guide 62 for ISO 9001. The CRB shall be accredited for at least one year prior to submitting an application for an AQMS accreditation. A CRB must complete the AB's application for the applicable AQMS standard and submit that application, along with necessary auditor applications, for review and approval by the AB prior to gaining recognition by the RMC.