



# 9104-001 REVISION

Tim Lee – 9104/1 IDR  
The Boeing Company

# International Aerospace Quality Group – Revision Progress



## 9104-001 Revision

Project Leader:

Tim Lee (IDR)

Date of last report:

Oct 2019

Date of this report:

April 2020

Current Status:



Strategy Stream Leader:

Alan Daniels

Sector Document Reps:

Darrell Taylor

Katsuji Fukumoto

Marie-Laurence Petit

Initial Planned  
Completion Date:  
(From IAQG 105.1 App B)

April 2020

Current Estimated  
Completion Date:

Dec 2020

### Project description / benefits:

Development of a revised 9104-001 standard within the parameters of the approved design specification and IAQG Procedure 105.3 including:  
Conduct a Process Analysis on the ICOP certification process.  
Utilize the results of the analysis to identify 9104-001 changes needed, via a revision design specification and submit to the IAQG for approval for a 9104-001 revision initiative by April 2018.  
Generation of deployment support materials.

### Recent accomplishments (since last report):

- Virtual meetings continue
- Complete Coordination Draft (CD) – August 2019
- CD ballot – Sept – Oct 2019
- Comments assimilated
- 100% dispositioned (808+ Received)

### Unresolved issues & decisions needed (if any):

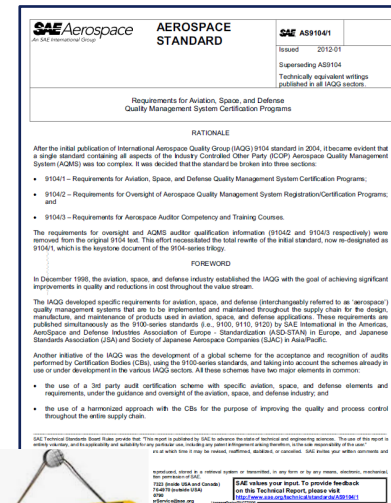
- Current or future OASIS utilization
  - Funding for OASIS changes to support implementation
  - Synchronize 9101 and 9104/1 OASIS changes

### Next steps (30-60-90 day look ahead):

- Coordination with 9101 team
- Complete Ballot Draft – April 2020
- IAQG Editor Update – April 2020
- First Ballot – May 2020

# Core Team Members

- IDR & Project Lead – Tim Lee
- Administrator – Ian Folland
- Americas SDR – Darrell Taylor
- Americas 9104/3 - IDR – Eric Jefferies
- European SDR – Marie-Laurence Petit
- Asia Pacific SDR – Katsuji Fukumoto
- Certification Body Representatives
  - Americas – Bob Parsons (NQA)
  - Europe – Brendon Hill (BSi)
  - Asia Pacific – Shunsuke Yano
- Accreditation Body Representative – Dale Gordon



# Rationale for change

– Align with ISO/IEC 17021-1:2015, ISO/IEC 17011:2017 criteria and IAF Mandatory Documents

» ISO as Supplemented by Aviation, Space & Defence industry unique Industry Controller Other Party (ICOP) sector scheme requirements

**INTERNATIONAL STANDARD**      **ISO/IEC 17021-1**

First edition  
2015-06-15

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**Conformity assessment – Requirements for bodies providing audit and certification of management systems – Part 1: Requirements**

*Évaluation de la conformité – Exigences pour les organismes procédant à l'audit et à la certification des systèmes de management – Partie 1: Exigences*



**IAF Mandatory Documents (MD Series)**

IAF publishes Mandatory Documents which are required to be used by accreditation bodies when accrediting certification/registration bodies to assure that they operate their programs in a consistent and equivalent manner. IAF Mandatory documents are not intended to establish, interpret, subtract from or add to the requirements of any ISO/IEC Guide or Standard, but simply to assure consistent application of those Guides or Standards.

Copies of all published IAF Mandatory Documents are available below.

**IAF MD 1-2018 IAF Mandatory Document for the Audit and Certification of a Management System Operated by a Multi-Site Organization**  
(Issue 2, issued on 29 January 2018; application from 20 January 2018)  
This document is for the audit and, if appropriate, the certification of management systems of organizations with a number of sites with a single management system.

**IAF MD 2-2017 IAF Mandatory Document for the Transfer of Accredited Certification of Management Systems**  
(Issue 2, issued on 15 June 2017; application from 15 June 2018)  
This document provides normative criteria on the transfer of accredited management system certification between certification bodies. The criteria may also be applicable in the case of acquisitions of certification bodies accredited by an IAF or Regional MLA signatory.

**IAF MD 3-2008 Advanced Surveillance and Recertification Procedures (ASRP)**  
(Issue 1, Version 2, issued on 1 February 2008; Application from 15 September 2008)  
This document provides normative criteria for advanced surveillance and recertification procedures (ASRP) for consistent application of clause 9.1.1 of ISO/IEC 17021:2008 for determining subsequent adjustments to the audit program. This document addresses Quality Management Systems (QMS) and Environmental Management Systems (EMS). In which IAF members have had experience of implementing ASRP or its predecessor methodologies. The use of ASRP is not mandatory, but if an accreditation body wishes to permit their accredited certification body and its client(s) to opt for the use of ASRP, it is a requirement of IAF that the certification body and its client(s) conform to this document and be able to demonstrate conformity to the accreditation body.

**IAF MD 4-2018 IAF Mandatory Document for the Use of Information and Communication Technology (ICT) for Auditing/Assessment Purposes**  
(Issue 2, Issued 04 July 2018; application from 04 July 2019)  
The scope of this document is for the auditing/assessment of management systems, persons and product and is applicable to conformity assessment bodies and accreditation bodies. The use of ICT is not mandatory and may be used for other types of conformity assessment activities, but if used as part of the audit/assessment methodology, it is mandatory to conform to this document.

**IAF MD 5-2010 Determination of Audit Time of Quality, Environmental, and Occupational Health & Safety Management Systems**  
(Issue 4, Issued 07 May 2010; application from 07 May 2020)  
This document is mandatory for the consistent application of the relevant clauses of ISO/IEC 17021-1 for audits of quality, environmental, and occupational health and safety management systems. All clauses of ISO/IEC 17021-1 continue to apply and this document does not supersede any of the requirements in that standard.

**IAF MD 5-2015 Determination of Audit Time of Quality and Environmental Management Systems**  
(Issue 3, issued on 09 June 2015; Application from 08 June 2016) [SUPERSEDED BY IAF MD 5-2019]



<b>SAE Aerospace</b> <small>an ISO International Group</small>	<b>AEROSPACE STANDARD</b>	<b>SAE AS91041</b>
		Issued: 2012-01
		Superseding AS9104 Technically equivalent entries published in all ISOG sections
Requirements for Aviation, Space, and Defense Quality Management System Certification Programs		
RATIONALE		
After the initial publication of International Aerospace Quality Group (IAQG) 9104 standard in 2004, it became evident that a single standard containing all aspects of the Industry Controlled Other Party (ICOP) Aerospace Quality Management System (AQMS) was too complex. It was decided that the standard be broken into three sections:		
<ul style="list-style-type: none"> <li>• 91041 – Requirements for Aviation, Space, and Defense Quality Management System Certification Programs;</li> <li>• 91042 – Requirements for Oversight of Aerospace Quality Management System Registration/Certification Programs; and</li> <li>• 91043 – Requirements for Aerospace Auditor Competency and Training Courses.</li> </ul>		
The requirements for oversight and AQMS auditor qualification information (91042 and 91043 respectively) were removed from the original 9104 text. This effort necessitated the total rewrite of the initial standard, now re-designated as 91041, which is the keystone document of the 9104-series 9104.		
FORERWORD		
In December 1998, the aviation, space, and defense industry established the IAQG with the goal of achieving significant improvements in quality and reductions in cost throughout the value stream.		
<b>ICOP Management Process</b>		
Auditor Training, & Authentication		ICOP Industry Control & Oversight

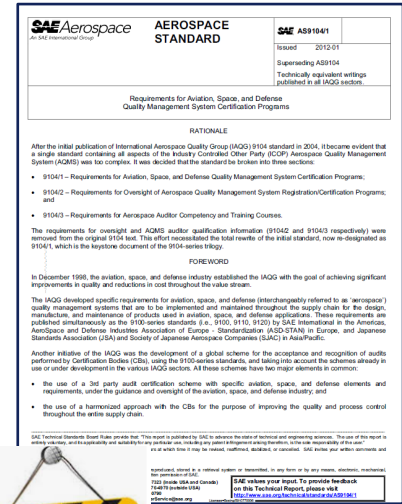
**Robust, Conforming & Valued Output**



**Competent auditor + appropriate location + sufficient time = value added audit & report**

# IAQG 9104-1 Rewrite

- This is a **COMPREHENSIVE** revision to the 2012 version of the standard in keeping with the current schedule of the ICOP Scheme updates
- Update is “going back to basics...”
  - More emphasis on IAF and ISO/IEC requirements as the baseline for the scheme
  - Builds on ISO/IEC 17011 & 17021-1 and MD requirements
  - **Will NOT** restate any already stated requirements
  - Eliminates a lot of “unique” scheme requirements
- Also affects 9104-2 and 9101 – in revision also.



# Key Changes

## — Certification Program:

- The organization context, certification structure and audit time calculation shall be revised to include a new Organization Certification Analysis Process (OCAP):
  - Single site and multiple site structures only
  - Aligned with ISO and IAF MDs  
9104/1 Table 2 plus 20% (planning & reporting) as a starting point  
Non-applicable processes shall result in audit duration reduction from the established minimum baseline.  
OCAP will be used to drive audit duration increases or allow for decreases, with limitations

# Key Changes

## — CB Certification Program: RISK ANALYSIS

- Data to be supplied by the Client / Organization to the CB
  - On-time delivery of the organization’s product or service to the customer
  - Product or service conformity to customers requirements.
  - Customer complaints or feedback
  - Organizational and process performance (KPIs).
  - PEAR results from the last completed AQMS annual audit.

RISK ANALYSIS	% CHANGE
Low	- ≤10%
Medium	No Change
High	+ ≥10%

Risk is “BY SITE” and adds or subtracts from AUDIT DURATION by SITE

# Key Changes



## — Client Participation:

- The CB shall require client participation in the audit planning process by submitting QMS performance and change data in advance of any audit. The CB process shall also include a review of the submitted data, by the lead auditor, prior to starting the audit. Documented information shall be retained
- Client must identify supporting IAQG standards they have implemented in their AQMS

Standard Utilization Assessment						
Aerospace Standards	Number	Release Date	Contractually Flowed Down & Compliant	Voluntarily Compliant	Voluntarily Partially Compliant	List Equivalent Industry Standard(s)
Aerospace Series - Root Cause Analysis and Problem Solving (9S Methodology)	ARP9136	8-Nov-16				
Guidance for the Application of AQAP 2110 within a 9100 Quality Management System	ARP9137	6-May-10				
Aerospace Series - Notice of Change						



# Key Changes

- **CB Certification Program: PBS/RP** (replaces IAF MD3)
  - Performance Based Surveillance/Recertification Program (PBS/RP)
    - High Hurdle for Use / Entry into Program
      - Robust Internal Audit Program / AEA for Internal Auditors
      - Low / no Complaints / Meet KPIs consistently
      - Good results / No NCRs from CB audits / only after 1 cert. cycle
    - Methodology – All sites Initial
      - One-Third each surveillance + Central Function
      - One-Third at Recertification + Central Function
- NOTE: Central Function can be a virtual site



# Transition

- Team has had preliminary discussions regarding transition. The following concepts discussed:
  - ABs to transition within 12 months from publication
  - CB accreditation 18 months from publication
  - Initial certification mandate upon CB re-accreditation
  - Existing certificates transition to be linked to re-certification



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