R20.104AS16   AS9100D/AS9120B Aerospace Standard Supplement

PRI Certification
PERFORMANCE REVIEW INSTITUTE

1.0 **Scope** - This R20.104AS16 applies to aerospace (aviation, space, defense) companies requiring assessment and/or registration of their management system in accordance with AS9104/1, current edition. Organizations that do not have aviation, space or defense products or services within the scope of their documented management systems may apply for and be certified to one or more of the AQMS standards (9100/9110/9120) provided they are operating within the scope of application of the applicable AQMS standard and comply with all the applicable provisions of the ICOP scheme. **Note: Reference to any standard in this procedure is a reference to the most current revision of the standard, i.e., AS 9101 Rev. F, AS9100 Rev. D, AS9120 Rev. B, etc.**

The following steps represent additions/clarifications to those defined in PRI Procedures QP 4.0 through QP 8.0 with relevant documents (R20.xx) as indicated. The management system requirements specified in AS9100/AS9120 are complementary (not alternative) to the technical specified requirements and applicable law and regulatory requirements.

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 management systems. It also provides requirements for auditing organizations to AS9100/AS9120.

2.0 **Definitions**

2.1 AAQG - Americas Aerospace Quality Group – 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 management improvement.

2.2 Aerospace - The business of design, manufacture, maintenance, distribution, or support of aviation, space, and defense vehicles or engines, accessories, or component parts; and all ancillary and allied businesses, including vehicle maintenance and parts distribution operations.

2.3 Aerospace Product - "Aerospace Product" shall mean an aircraft, rotorcraft, guided weapon, launches, 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.

2.4 Aerospace Quality Management System Standards (AQMS) - Standards developed for and by the aerospace industry to define minimum management system requirements for the aerospace industry supply chain.

2.5 Qualified Auditor - A "Qualified Auditor" shall refer to an auditor that has met the requirements for Aerospace Industry Auditors identified in this document (see ICOP's 126). 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.

2.6 Aerospace Quality Management System (AQMS) Auditor- A person with the demonstrated attributes (i.e., training, audit experience, industry experience) and competence to conduct an audit on aviation, space, and defense organizations. An AQMS auditor is defined as either an Aerospace Experienced Auditor (AEA) or an Aerospace Auditor (AA), and shall have met the requirements set forth in 9104/3 and section 6 of this document.

2.7 <u>Authorities/Civil Aviation Authority (CAA)</u> - 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]

2.8 <u>Certification/Registration Body (CB)</u> - An organization that audits and certifies/ registers the management system of customer organizations with respect to AQMS standards and any supplementary documentation required under the system.

2.9 <u>International Aerospace Quality Group (IAQG)</u> - A body of prime aviation, space, and defense OEMs. This group is chartered to develop common requirements and guidelines for use by the aviation, space, and defense industry for quality improvement.

2.10 <u>Containment</u> - Action to control and mitigate the impact of a nonconformity and protect the customer's operation (stop the problem from getting worse); includes correction, immediate corrective action, immediate communication, and verification that the nonconforming situation does not further degrade.

2.11 <u>Key Performance Indicator (KPI)</u> - Measures associated with goals or targets showing how well an organization is achieving its objectives or critical success factors for a particular project. KPIs are used to objectively define a quantifiable and measurable indication of the organization's progress towards achieving its goals.

NOTE: KPIs relating to an organization's financial performance are not in the scope of the 9101 standard; however, economic measures (e.g., sales quotas, scrap value reduction) can be considered acceptable measures for process improvement.

2.12 <u>Major (Hold) Nonconformity</u> - The absence of or total breakdown of a system to meet a 9100-series standard requirement, a customer QMS requirement, or documented information defined by the organization; a nonconformity where the effect is judged to be detrimental to the integrity of the product or service; any nonconformity that can result in the probable delivery of nonconforming product or service; and a condition that can result in the failure or reduce the usability of the product or service and its intended purpose.

2.13 <u>Minor Nonconformity</u> - A single system failure or lapse in conformance to meet 9100 series standard, SR procedure relating to the applicable standard and/or contract, customer QMS requirement or documented information defined by the organization.

2.14 <u>Nonconformity Report (NCR)</u> - A document stating results and providing objective evidence of nonconformity against audit criteria, including the following information: containment, correction, root cause, corrective action implementation, and closure.

2.15 <u>Online Aerospace Supplier Information System (OASIS)</u> - Web-based IAQG database containing information on participating IAQG member companies, National Aerospace Industry Associations (NAIA), National Accreditation Bodies (NAB), accredited CBs, authenticated Aerospace Experience Auditors (AEAs), Aerospace Auditors (AAs) certified suppliers, certificates, and audit results.

2.16   Planned Activities - The means, methods, and internal requirements by which the organization intends to achieve planned results of a given process to meet customer requirements. Planned activities include conformity to process requirements and maintained documented information.

2.17   Planned Results - The intended performance of a process as determined and measured by the organization. Planned results include product and service conformity and On-time Delivery (OTD) to meet customer requirements, and may include other elements related to the process, as defined by the organization.

2.18   Process Effectiveness Assessment Report (PEAR) - A document stating process evaluation results; providing evidence of conformity to requirements and process effectiveness.

2.19   Registration Management Committee (RMC) - An industry group charged with the oversight and management of the registration/certification program and supporting processes, systems and documentation.

2.20   Single Site - An organization having one location. The organization may be operating under one large building or several buildings at that location. The organization may have one or multiple products or product families flowing though one or multiple processes.

2.21   Multiple Site - An organization having an identified central function (the central office, but not necessarily the headquarters of the organization) at which certain activities are planned, controlled, or managed and a network of sites at which such activities are fully or partially carried out. With the exception of the central office the processes within each of the sites are substantially the same and are operated to the same methods and procedures (see AS9104 Multiple Site definition and eligibility requirements).

2.22   Campus - An organization having an identified central function (the central office, but not necessarily the headquarters of the organization) at which certain activities are planned, controlled, or managed; and that has a decentralized, sequential, linked product realization process. For the purposes of this standard, it is referred to as a value stream where the outputs from one site are an input to another site, which ultimately results in the final product or service.

2.23   Several Sites - An organization having an identified central function (the central office, but not necessarily the headquarters of the organization) at which certain activities are planned, controlled, or managed and a network of sites, that do not meet the criteria for either a multiple site or a campus organization.

2.24   Complex - An organization having an identified central function (the central office, but not necessarily the headquarters of the organization) at which certain activities are planned, controlled, or managed and a network of locations that are any combination of multiple site, campus, several sites, or more than one campus. This type of structure must be submitted to IAQG OPMT Certification Structure Review Sub-Team prior to the Stage 2 audit.

2.25   Integrated Audit - An audit of an organization's management system(s) against two or more AQMS standards conducted at the same time (e.g., AS9100 and AS9120).
- Combined Audit- An audit of an organization's management system against and AQMS standard and another standard, such as ISO 9001. The combined audit takes place a single event, with a single audit plan. The AQMS audit is calculated based on the approved on-line tool and the ISO has time added, as needed, to address scope differences and or ISO specific contracts.
- Separate Audits- When the organization has an audit against an AQMS standard, then a second full audit of any other standard. These audits take place on their own

schedule, with two separate audit plans and two calculations of full audit days per the applicable tables / calculators.

2.26   Central Office - (also referred to as Central Function) The organization location/activity that controls the 'common' quality management system for the organization under a single AQMS standard certificate.

2.27   Special Processes – Processes where the resulting output cannot be verified by subsequent monitoring or measurement, see the R20.48AS *AS9100/9120 Planning Special Process Audit*

3.0   **<u>General</u>**

3.1   Aerospace additional requirements and supplementation are typically shown in aerospace quality management system (AQMS) documents as boldface items. These items are considered an addition to the ISO 9001 clauses and will be applied in the organization's management system in accordance with the applicable AQMS.

3.2   The audit and reporting process established to assess conformity, including the determination of QMS effectiveness to the 9100-series standards, shall meet the requirements of ISO/IEC 17021-1, as stated in each relevant clause of 9101. Additional audit requirements for the aviation, space, and defense industry are invoked by the 9101 standard. The audit process and associated activities of AS9101 and this procedure shall be followed when auditing and certifying organizations to AQMS standards in the aviation, space, and defense industry. Transition audits are conducted per the requirements of SR-003 including:

- All activities listed on the AS9100D and AS9120B:2016 Transition Plan.
- No initial, surveillance or recertification audit shall be started to the previous version of the AQMS standards after June15, 2017.
- Audit duration from transition audit per 9104-001 requirements (clause 8.2.1.a), included the added time plan as defined in the AS9100D and AS9120B: 2016 Transition Plan (min of + ½ manday for review of document changes, min of + ½ manday for review of implementation of new requirements). Lead auditor to determine if additions beyond the minimum add are needed to conduct an effective audit given the organization's site conditions.
  - **NOTE:** A zero addition for transition on-site audit duration is not permitted.
  - A documented and justified on-site audit duration shall be included in the AuditCalc report or uploaded as a pdf addition to the AuditCalc report and entered into OASIS database.
- Certification data, related to the transition audit, uploaded to OASIS within 30 days of the certification decision.

3.3   The scope of certification shall not include processes that were not audited to sufficient depth to verify an organization's conformity, including the determination of effectiveness. However, they may be included if the processes can be proven to be similar to processes that were assessed and the same QMS documented information and controls are invoked. In the audit report, exclusions for these programs, customers, and/or activities shall be stated with supporting justification provided.

3.4   All documents and data (in the form of questionnaires, approvals or other company specific information) generated is handled as "sensitive" (or proprietary) among the parties generating, collecting, and/or using the documents and 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 PRI on OEMs shall not be shared with OEM competitors. Data relative to nonconformance in the OASIS database shall not be

shared among OEM competitors. However, this data may be subject to audit or review at any time by other parties.

4.0 **Requirements for PRI**

4.1   PRI Certification, is fully accredited by the ANSI-ASQ National Accreditation Board (ANAB) in accordance with ISO/IEC 17021-1 for ISO 9001. PRI's headquarter office, located at 161 Thorn Hill Road, Warrendale, Pennsylvania, 15086, has the overall responsibility for implementation of the AS9104 and AS9101 series of standards. PRI previously completed the application for AS9100/AS9120 and submitted same for review and consideration/approval by ANAB. Aerospace sector qualification consists of an application review, witness audit, and recommendation for the recognition of the CB aerospace sector program to the RMC. PRI is recognized by the RMC and is a signatory to the IAF (International Accreditation Forum) MLA (multi-lateral arrangement).

4.2   PRI prepared an application form for the applicable aerospace AQMS registration. This application provided the AB with confidence that the CB has developed the necessary documented process to meet AS9104/1 and AS9101 requirements for each applicable AQMS.

4.3   PRI recognizes that the AB will perform witness audits and oversight of PRI 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, except it may use an OEM auditor or technical expert in-lieu of an AEA.

4.4   PRI affords AAQG and IAQG member OEMs and applicable Authorities the right of review of records and information related to their AQMS sector qualification program, including PRI activities associated with this document and recognition by the RMC.

5.0 **Requirements for Certification Bodies (CBs)**

5.1   PRI is nationally recognized and qualified to AS9100/AS9120 and ISO 9001. This accreditation is in accordance with ISO/IEC 17021-1 for management systems. PRI was accredited for at least one year prior to submitting initial application for an AQMS accreditation. PRI completed ANAB's application for the applicable AQMS standard and submitted that application, along with necessary auditor applications, for review and approval by the ANAB prior to gaining recognition by the RMC.

5.2   PRI is fully accredited in the Aerospace Sector AS9100 and AS9120 by ANAB. PRI has and/or uses qualified/competent and authenticated full-time or contract auditors and/or technical experts engaged in certification/registration activities.

5.3   PRI's processes and requirements to obtain AQMS sector qualification shall include as a minimum:

A.   Evidence that PRI's certification function has person(s) with sufficient aerospace knowledge to understand the sector specific terminology, processes, practices and products necessary to understand and interpret the output for certification.
- The Certification Director or Designee is responsible to review the IAQG ICOP Resolution Log at least quarterly to assure that identified resolutions do not diminish or increase a currently established requirement.
- PRI's management team and/or committee for safeguarding impartiality has an individual with continuing aviation, space, or defense industry involvement through relevant work experience in the industry.

B.   Documented auditor training program reviewed and approved by the AB during the AQMS sector qualification process that conforms to AS9104/1 and records thereof. Content of the training program as defined by the American Aerospace Quality Group (AAQG) is:

- Applicable AS standard(s) for AQMSs
- The Aerospace Assessment Report and Questionnaires
- The scheme as used in the specific sector for Certification/Registration of AQMS
- Use of nonconformity reports (NCRs)
- Additional sectorial requirements
- Civil Aviation Authority Requirements (such as FAA Title 14, CFR Part 21 or equivalent per the national CAA) and applicable advisory material
- Applicable Space and Defense organization requirements.

C.   PRI utilizes qualified auditors (both competent and authenticated) as defined in Section 7 of AS9104/1, current edition. Each auditor is recognized by the RMC as meeting these requirements. The audit team must meet the requirements of Section 8 of AS9104/1, current edition. All lead auditors for AS9100/AS9120 must be AEA or Aerospace Industry Experienced Auditors (AIEA). Teams may include an aerospace auditor (AA) meeting section 7.1 of AS9104/1, current edition.

D.   PRI has specific procedures, tools and techniques in its system for granting, maintaining, extending, reducing, suspending and withdrawing AQMS certification/registration. This includes audits at aerospace organizations per ANAB and AAQG requirements (standards, questionnaires, briefing notes, reference material, etc.) and per Section 8 and in accordance with AS9101.

- Transfer requirements/audits, including any on-site special audit are conducted according to IAF MD 2, current edition, are met prior to issuance of the certificate.
- Only valid certifications issued, under the 9104-series standards ICOP scheme, by a CB with a valid accreditation are eligible for transfer.
- No certificate transfer between CBs shall occur, when the CB controlling the existing certificate has nonconformities documented that are awaiting corrective action closure and acceptance, unless the current CB has ceased its activities or is unable to close the corrective actions. In cases of open corrective actions, PRI shall ensure closure of corrective actions, prior to certificate issuance.
- Transfer of existing certificates expiring within the next 12 months shall require a Stage 1 and Stage 2 audit.
- PRI shall ensure that, prior to certificate issuance, a special audit (on-site) is carried out by an AEA to confirm the validity of the certification being transferred.
- A new certificate shall not be issued, unless all minor and major nonconformities have been contained and satisfactorily corrected; the root cause analysis completed; and corrective action has been implemented, reviewed, accepted, and verified by the accepting CB. If the closure of nonconformities takes more than 90 days, transfer of the existing certificate is not allowed.
- Review/verification of the corrective action by the accepting CB shall take place on-site (except for corrective actions related to AQMS documentation).
- No transfer shall take place during a transition audit (e.g., from AS9100C to AS9100D).

E.   A full system witness audit from a recognized AB of an RMC aerospace audit.

F.   PRI agrees to periodic surveillance and witness audits by ANAB and AAQG member OEMs. AAQG member companies shall perform oversight of CRBs used by their suppliers and report results to the RMC.

G.   No Certificates or approvals to AS9100/AS9120 shall be issued by PRI unless all major and minor nonconformances are closed with root cause analysis and corrective action known and effectiveness of implementation verified. This aspect also applies to issuance of a certificate at a transfer.

H.   PRI leaves copies of (ICOP 171) NCRs, supporting documents, or other correspondence with the audited organization for the purpose of the audited organization sharing this information with their customer(s).

I.   PRI does not provide consulting services. Any independent contractor, who has, in the past two years, provided consulting services to a client, shall have no involvement with the AS9100/AS9120 registration of that client. Where there may appear to be a conflict of interest, either through consulting or the offering of training to a potential client, this shall be disclosed to the ANAB and RMC prior to performing the registration process to determine if there is a conflict of interest.

Note: If PRI conducts training in which an organization attends which later PRI will provide registration services, the training must be conducted and managed separately and in a public forum.

J.   All requests for corrective action are responded to within 30 calendar days from the receipt of the complaint. If a response is requested, the response is to be provided within 30 calendar days from receipt of the complaint. If a short-term audit is required, the audit shall be completed within 90 calendar days from the receipt of the complaint. Effective corrective action process is defined in QP6.0 para 2.2 and includes root cause analysis, corrective action, and completion date for implementation of all corrective actions. PRI is responsible for the resolution of all complaints. Any complaints that cannot be resolved by PRI will be referred to ANAB.

5.4   PRI agrees to the "Right of Access" by IAQG member companies, ANAB and other regulatory or Government Bodies review of all records and information concerning their activities associated with this document and their approval as a CB under this system. This includes information from audits of clients in accordance with AS9104/1, current edition.

5.5   PRI agrees to allow AAQG member OEMs to perform surveillance reviews of PRI's processes and activities associated with this document and their approval as a CB under this system. This access may include the witnessing of PRI audits at client locations.

5.6   PRI shall not perform management system consultancy as part of their organization and shall not offer or provide quality management system or AQMS consultancy or any service to conduct internal audits for clients. For AQMS certification, PRI shall not certify a management system where there is an unacceptable relationship, as defined in ISO/IEC 17021-1, between any management system consultancy organization or any person or organization conducting internal audits and PRI, for a minimum period of two years following the end of the management system associated activities or where there is an unacceptable threat to the impartiality of the certification process.

5.7   Prior to contracting for and conducting aerospace audits, PRI shall ensure that classified material or export control requirements, related to PRI auditor access, are discussed with their aviation, space, and defense clients and included in the service contract and audit planning activities. Records of the discussion and agreements on auditor access are maintained. The scope of certification shall not include processes that were not audited to sufficient depth to verify client conformance. Where processes are not audited and are excluded from the potential scope of certification, any such exclusion shall be limited to those processes that are permissable exclusions within the AQMS standard and that are effectively

documented by the client. PRI shall not certify the client's management system, where the process exclusions do not represent permissable exclusions. PRI shall ensure that any such controls are advised to ABs and Other Party (OP) assessors ahead of any planned witness assessments with sufficient time for AB and OP assessor organizations to review the control restrictions and make necessary arrangements.

5.8   PRI shall not allow requests by clients for auditor changes/substitutions without substantiated evidence of improper activity or contract violations. Conformance to rules concerning export controls, auditor nationalities, and confidentiality/conflict of interest challenges shall be an exception to this requirement. PRI is able to assign and rotate auditors, as available.

6.0   **Requirements for Auditors (refer to ICOP 126)**

6.1   Management System auditors shall, as a minimum, continually meet the education, training, work experience and audit experience of ISO 19011 and continually have the following:

A.   Auditing Experience - To have participated in at least four audits for a minimum of 20 days that cover all the clauses of the ISO 9001 standard or the AS9100 / AS9120 standard within the last three years. Auditors shall have the ability to cover all the clauses as determined by the Certification Director or Designee.

B.   The auditor must be trained in AS9100/AS9120 requirements per AS9104/1 and AS9104/3, current edition. This initial training may be obtained independently. PRI's training program was reviewed and approved by ANAB as part of Scope Sector 21 accreditation approval process.

6.2   **Aerospace Experience Auditors** - Auditors that are to be considered and approved as Aerospace Experienced Auditors (AEA) must have a minimum of four years aerospace industry experience in the last 10 years, and meet the requirements of the above as well as the following requirements:

Requirements for Aerospace Industry AUDITORS

Qualified Auditor	Auditors are to be trained and approved for ISO 9001 auditing per ISO 19011
	General knowledge of AS9100/AS9120 Standard as defined by AS9104/1
	Auditor training in industry standards and current aerospace industry requirements

AEA	4 years of Aerospace work experience in the last 10 years	**or**	Equivalent or current certification to an existing Aerospace Auditor requirement such as SBAC TS 157	**or**	Industry experience & training on Aerospace Industry requirements and two witness audits

All Aerospace Auditors	15 hours of continuing education and 4 audits for auditors within every three-year period

6.2.1   **Work Experience** - Four years full time in the aerospace industry directly involved in Engineering, Design, Manufacturing, Quality or Process Control for a major airframe/ spacecraft/space payload manufacturer, prime supplier, auxiliary equipment supplier and/or appropriate NASA, DOD or FAA organization (the four years shall have been within the prior ten calendar years). The work experience should have included direct involvement or knowledge of the elements noted in AS9104/1, or:

6.2.2   If an auditor holds a current auditor certification under an existing accredited aerospace auditor plan (e.g., certified AS9100/AS9120 AEA, approval to SBAC TS 157, or other equivalent approval recognized by the AAQG) for the initial three years, the requirements for an auditor shall be satisfied with the addition of the required AS9100/AS9120 training, or:

6.2.3   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 of the application) must complete an approved in-depth Aerospace Industry Competency course. This course must be in compliance with AS9104/1 and approved by ANAB, with the approval being recognized by the RMC. PRI or third party may teach the course. ANAB must approve course providers.

6.2.3.1 The aerospace competency course includes the following topics as a minimum:
- Aerospace Industry Quality Perspective
- FAA Roles/Responsibilities/Regulations Overview
- Principals of military aerospace requirements on regulations
- Airworthiness and safety requirements
- Design, development, verification and validation processes
- First Article Inspection
- Aerospace material traceability requirements
- Aerospace subcontractor approval and control requirements
- Key/critical characteristic classification
- Quality requirements flow down
- FOD program requirements
- Use of customer supplier products
- Calibration control and Positive Recall System
- Acceptance authority media
- Nonconforming material, system requirements and operation
- Sampling inspection requirements and limitations
- Special Processes
- Risk management
- Configuration management/requirements control

6.2.3.2 The auditor must have participated in at least two full aerospace industry audits within the last three years and be witnessed by a previously qualified AEA, who himself/herself has not become qualified via training (6.2.3). The two full witness audits must cumulatively cover all clauses of the standard and shall have been conducted at industry or government locations that are predominately aerospace oriented (see 6.2.1 above). The auditor candidate must receive a positive and documented recommendation for qualification on all audits.

Note: Only in exceptional circumstances, will applications for AEAs who have not worked in the Aerospace Industry be considered, providing candidates can demonstrate adequate and relevant Aerospace knowledge and experience as per paragraphs 6.2.1 and 6.2.3.1.

6.2   To maintain their aerospace auditor qualification, all auditors must participate in at least four aerospace audits in three calendar years as well as participate in continuing education in accordance with AS9104/1 (current edition) that requires review of the changes to the industry standards, auditing methods and ISO requirements at a minimum of 15 hours total within every three years.

6.3   When deemed appropriate by an AB, SMS representative, and/or PRI, they may share the results of aerospace witness assessments and associated data of an auditor competency issue with the AAB responsible for the subject auditor's aerospace authentication.

7.0 Requirements for Assessment and Reporting

7.1 Aerospace Audit Teams

A. The assessment team leader must be a qualified lead auditor per ISO/IEC 17021-1 as identified in PRI's accredited system and an approved AEA approved / authenticated / competent per AS9104/1, current edition. The audit team leader shall be present and actively participate in the entire certification cycle (Stage 1 and 2, surveillance, recertification and any special audits. The audit team leader shall ensure that an AEA is on-site during audit activity. The audit team leader is present at one or more sites during all audit activity.

B. The team may include other auditors that are approved per AS9104/1 and PRI.

C. The assessment team must include an auditor qualified for the supplier's commodity(ies) (IAF Scope Category). The commodity requirement may be met by a technical expert in-lieu of an auditor (per ANAB guidelines) who is additional to the team membership.

D. An auditor shall inform the Auditor Authentication Body (AAB) of a previous rejection, suspension or withdrawal in another Sector Management Structure (SMS). Failure to inform shall be cause for withdrawal.

7.1.1 PRI shall ensure that all members of the team are aware of the requirements of AS9104/1 as may affect the scope of their assessment activity. The AEAs shall provide guidance to the assessment team throughout the assessment on the interpretation of aerospace requirements and, when requested, the significance of any issues identified.

7.1.2 Regulatory (FAA) or Customer representatives or the American Aerospace Quality Group (AAQG) OEM's may accompany the assessment team as observers of the assessment process at any time with due notice. When Customer or Government representatives are participating in the audit, the team leader shall have the option of including (or not) in the assessment report any findings brought forward by these representatives.

7.1.3 The same audit team leader shall be limited to a maximum of two consecutive certification cycles at the client organization. Rotation of supporting AEAs and auditors after each certification cycle is recommended.

7.1.4 ABs, OP assessors (see ICOP 138), regulatory agencies, or customer representatives may accompany the audit team as observers of the audit process at any time. When customer or government representatives are accompanying as observers in the audit, the audit team leader shall have the option of including in the audit report any comments/concerns brought forward by these representatives.

7.2 Duration of Assessment

7.2.1 Table 2 of AS9104/1 is utilized as the baseline for audits. The audit days indicated in Table 2 of AS9104/1 are not permitted to be reduced. For aviation, space, and defense organizations, the required audit duration from Table 2 shall be increased, as appropriate, taking into account:

7.2.1.A Audit Time in Table 2 (AS9104/1, same as 9104-001 Audit Calc Tool results) is a starting point and includes initial, annual surveillance and recertification on-site audit activities only. It DOES NOT INCLUDE

corrective action verification, follow-up on discrepancies (corrective action), interpreter translation, breaks, meals, travel, planning, report writing, completion of any of the 9101 Forms and, for aviation, space, and defense organizations, increase for complexity of the QMS and number and/or vaiety of activities. Additional time must be added. Note that rounding is to the nearest ½ (0.5) day and occurs after all audit duration calcluations are complete. CAN follow up verification time can be added in hourly increments after the calculation / rounding (see ICOP 134).

7.2.1.B   Increases to the audit duration days are allowed and expected for areas with identified risk (Component or Part for Flight Worthiness, Flight Control Surfaces, Engine Components, Structure, Safety Related, Navigation, Security, Combat Critical or Life Sustaining Purposes), complexity (several site or complex organization, complexity of the QMS and the number and variety of activities) or increased scope.

7.2.1.C   Audit days shall be rounded to the nearest half day and may include - report writing and consideration for the complexity of the QMS and the number and variety of activities. All on-site audit activities and added time are part of the calculation. Rounding up to the nearest ½ day is done when all audit duration calculations are complete (see ICOP 134). The audit calculation tool shall be used for all audit events and for any changes applied to verify the audit day calculation meets the specified requirements. The audit calcuation tool shall include justification for the additional time/mandays.

7.2.1.D   Sampling of sites in not permitted for AS9100. For AS9120, Sampling is performed per IAF MD 1 and is limited to sites in the same country.

7.2.1.E   Use of translators and audit activity conducted for corrective action verification shall incur added audit time.

7.2.1.F   Audit time in Table 2 includes Stage 1 and Stage 2 activities. Table 2 represents minimum on-site audit time from the opening meeting to the closing meeting.
- Table 2 audit time does not include non-audit time (e.g., travel, meals, extended break times).
- Table 2 is for on-site audit time only. Table 2 does not include auditor time used for planning, report writing, and/or completion of the AS9101 documents.
- Audit duration calculations are rounded up to the nearest half day.
- Stage 2 audits are never less than one audit day.
- An audit day is a normal working day of eight hours. The number of audit days cannot be reduced by programming longer hours per workday (e.g., five audit days of eight hours cannot be executed as four audit days of ten hours).
- Corrective Action verification and use of translators will increase on-site audit time.
- Auditing of the entire AQMS standard on all shifts is required for initial and recertification. For surveillance audits, the planning shall include coverage of all shifts.
- Audit duration justification is documented and records maintained in the Proposal database.
- Shift auditing, whereby a longer day is planned, cannot reduce required audit days.
- PRI shall assess the client's certification structure, site locations and value streams. Both PRI and the client shall agree upon the type of certification structure.

- Evidence of review is documented on PRI's R20.107 – AS Readiness Review Form.

7.2.1.G Certification of Integrated Management Systems including Aerospace Quality Management System – combined and integrated audits: For AQMS audits, where there is a difference between an organization's 9100 series and ISO 9001 scope (scope statement, scope of certification or scope of the audit, technical or geographic), PRI shall:
- Calculate the audit duration for the 9100 series using 9104-001:2012/2013 clause 8.2 and Table 2 and allocate this duration to the 9100 series scope;
- Separately determine the audit duration for ISO 9001 and allocate this duration to the ISO 9001 scope.

7.2.1.H For 9100 series audits integrated with another management system standard (e.g., ISO 14001, ISO/IEC 27001, ISO 45001):
- IAF MD 11 applies;
- PRI shall calculate the audit duration for the 9100 series audit using 9104:001:2012/2013, clause 8.2 and table 2 and the audit duration shall be allocated to the 9100 series scope;
- Separately calculate the audit duration for each of the other management system standard requirements in accordance with IAF MD 11:2013 or IAF MD 11:2019 (using the standard audit approach) and allocate these audit durations to the other management systems standard scopes.

7.2.2 <u>Conducting Audits</u> – PRI shall only conduct AQMS standard(s) audits at the same time as an ISO 9001 audit and subsequently issue a certification containing both AQMS standard(s) and ISO 9001, when the scopes of certification (scope statement, scope of the audit, technical and geographic subjects of certification) are identical for all standards listed on the certification document.

The audit of QMS standards shall be conducted independently from the audits for all other standards or ISO 9001 with a different scope. In such cases, the QMS certification document issued by PRI shall only contain AQMS standard.

For AQMS audits, where there is a difference between an organization's 9100 series and ISO 9001 scope (scope statement, scope of certification or scope of the audit, technical or geographic) PRI shall:
- Utilize separate reporting (e.g., 9101 used for the 9100 series audit and PRI forms for ISO 9001) for the audit including clear identification in a single combined audit plan of the non-common or different ISO activities.

Organizations can deny auditors access to proprietary or classified information, and/or areas due to the competitive sensitivity or national security regulations invoked in customer contracts. The CB shall require the organization to provide information if any activities, programs, specifications, and/or areas are not accessible because of restrictive or confidential nature.

A full assessment of all AQMS requirements is mandated for any organization transitioning from an already existing ISO 9001 conforming system to an AQMS that was not previously assessed using AEAs and the requirements of this document. Existing and valid AS9100 registrations may be extended to AS9120 during surveillance events by assessing the requirements of the other standard that are not covered by the existing certificate.

PRI will appoint an audit team leader that has sufficient knowledge of the activities and the intended scope of certification to determine auditor required competences and/or whether

technical experts are needed. When appointing the audit team, PRI will consider any additional requirements/requests from the organization and/or the organization's customer(s), if they are not in conflict with the provisions of ISO/IEC 17021-1, to optimize the benefit of the certification audit program; and ensure that audit time is identified in accordance with 9104/1 and, if applicable, ASRP and/or ICT (Information and Communication Technology) criteria defined in IAF MD 4.

Pre-Audit Activities - PRI should conduct pre-audit activities with and/or in consultation with the audit team leader, if appointed at the time of the pre-audit, pre audit activities that may include: and information exchange between PRI and the client on certification activities, audit program and requirements. Additionally, all activities to be included in the scope of certification shall be relevant to the scope of the applicable AS9100-series standards (see 9100-series standards clause 4.3). Note: The scope of certification shall not include processes that were not audited to sufficient depth to verify an organization's conformity, including the determination of effectiveness. However, they may be included if the processes can be proven to be similar to processes that were assessed and the same QMS documented information and controls are invoked. In the audit report, exclusions for these programs, customers, and/or activities shall be stated with supporting justification provided.

The Organization shall provide to PRI the following information:
- the desired scope of the certification;
- relevant details of the applicant organization as required by the specific certification scheme, including its name and the address(es) of its site(s), its processes and operations, human and technical resources, functions, relationships and any relevant legal obligations;
- identification of outsourced processes used by the organization that will affect conformity to requirements;
- the standards or other requirements for which the applicant organization is seeking certification;
- whether consultancy relating to the management system to be certified has been provided and, if so, by whom;
- percentage of revenue for aviation, space, and defense industry business, as a proportion of the organization's total revenue;
- number of employees associated to aviation, space, and defense business (i.e., full time, part time, temporary) and percentage of the total workforce; and
- identification of the key (e.g., top five) aviation, space, and defense customers.

Before the Stage 1 audit, the audit team leader shall be confirmed and possible audit team members shall be identified. After the Stage 1 audit, the audit team for the Stage 2 audit shall be verified based on information received and observed during the Stage 1 audit; prior to final appointment of the team members.

Before scheduling the Stage 1 audit, the audit team leader shall determine if information received during the pre-audit phase is sufficient to proceed to the Stage 1 audit; and verify the audit duration for the Stage 1 and Stage 2 audits.

Stage 1 and Stage 2 audits shall not be performed back-to-back on the same or consecutive days. For AS9120 the Stage 1 audit can be conducted off-site based on consideration of various organization factors (e.g., size, location, risk, previous audit team knowledge).
- For organizations with more than one site that have a single QMS, the Stage 1 audit shall also include an evaluation of the identified central function with the authority for administration, control, audit, review, and maintenance of the QMS. Additionally, a relevant number of representative sites, including all sites with different technologies and dissimilar activities, shall be included.

Recertification audit should be planned a minimum of three months before the expiry date of the current certificate. The 'scope of certification' shall be verified prior to each recertification audit.

Surveillance audits shall be at a minimum of one surveillance audit during a year. Additionally, all clauses of the applicable AQMS standard (except requirements determined as not applicable within the determined scope) and the organization's processes that are part of the QMS shall be audited, during the surveillance audits within one certification cycle. The audit method(s) to be used (e.g., audits on specific problems, areas, products, or sub-processes) shall be based on the outcome of the audit team's review of QMS performance data, including product conformity and OTD.

7.2.2.1   Stage 1 Audit, Audit Pre-Planning Requirements (as applicable to the audit event):
- Tour the site facilities;
- Confirm the audit program;
- Confirm the certification structure;
- Review the need for technical experts and/or auditors to compose a competent team;
- Review the percentage of revenue for aviation, space, and defense industry business, as a proportion of the organization's total revenue (as declared by the organization, during the pre-audit/application review phase)
- Confirm the number of employees associated to aviation, space, and defense industry business (i.e., full time, part time, temporary) and percentage of total work force (as declared by the organization, during the pre-audit/application review phase);
- Review the key (e.g., top five) aviation, space, and/or defense customers (as declared by the organization, during the pre-audit/application review phase);
- Confirm other customers requiring AS9100-series standards compliance, together with any customer specific QMS requirements (if applicable);
- Determine any additional audit activities;
- Schedule the Stage 2 audit;
- Require the organization to provide the management system manual;
- Provide a description of the processes showing sequence and interaction and any outsourced processes;
- KPIs and performance trends for the previous 12 months;
- Evidence of performance data for each key customer; including product or service conformity and OTD trends,
- Export limitations/controls (if applicable) [e.g., International Traffic in Arms Regulations (ITAR), Export Administration Regulation (EAR)]
- Customer delegated inspection and/or authorized direct ship / direct delivery (if applicable);
- Where applicable, level of QMS integration;
- Evidence all requirements of the cited standard are addressed by the organization (manual reference or cross reference matrix);
- Interactions with support functions, on-site or remote;
- Evidence of a complete internal audit;
- Latest management review results;
- The accepted proposal is the agreement from the client on final determination;
- Evidence of customer complaint summaries;
- The PRI agreement R20.4 mandates that the client notify PRI of any material changes;
- Any significant changes that would affect audit days are requested from the organization prior to each audit event by the Audit Operations Department (formerly Customer Care) when the audit plan is sent out, and confirmed on-site by the auditor at the event. Audit days are adjusted as needed/required.

7.2.2.2 During the Stage 1 audit, in addition to the above, the following items must be addressed as applicable:
- Number of employees;
- Shifts, shift patterns specific to production and maintenance;
- Evaluation of multi-site eligibility for determination of audit time and sampling;
- Identification of high risk associated with processes and product;
- Risk management (FMEA);
- Identification of special processes;
- Regulatory requirements and authority approvals;
- Requirements on configuration management;
- Project/program management;
- Continual improvement activities;
- OTD and quality performance metrics;
- Identification of special/critical items, including key characteristics;
- Production process verification (production readiness, planning, FAI requirements) as per contract;
- Prevention program;
- Special work environments;
- Customer presence at the organization;
- Customer satisfaction and complaints status, including customer reports and scorecards;
- Customer specific organization approval statuses (e.g., limited approval, probation, suspension, withdrawal);
- Customer restricted areas or proprietary information/confidentiality;
- Any customer special QMS/approved supplier list;
- Exclusions;
- Export limitations/controls;
- Customer delegated verifications and MRB authority;
- Customer authorized direct ship/direct delivery;
- Identify campus or multiple site remote support process(es) providing support to the organization or another organization's management system.

The audit team leader shall use the results of the Stage 1 audit and/or organizational review and additional information obtained from the site tour to develop a plan for the audit. The audit team leader shall use the organization's customer feedback requests, including those received through the OASIS database, to assist with audit planning for stage 2, surveillance and recertification audits. The audit activities shall be prioritized based upon performance data for business risks that could impact the customer (i.e., customer concerns, customer special statuses) and on processes that are not achieving planned results. In situations where the organization seeks an ISO 9001 certificate related to the AS9100 certificate, a combined audit is conducted, and a single audit plan is issued. If there are certificate scope differences between the AS9100 and ISO 9001, required added time should be clearly identified within the audit plan. This time is for sampling and auditing the contracts and activities that are specific to only the ISO 9001 certificate.

In addition, the audit plan shall be based on the process names identified by the organization's System Manual, Procedures, Map(s), and/or Turtle Diagrams. All the audit documents and forms, Audit Plan, Form 2, and any PEARs must be identical in identifying the process names. These process names shall be documented in the QMS Process Matrix Report, Form 2, PEARs Form 3, and take

into account as appropriate the following that are applicable to the audit phase (Stage 2, Surveillance, Recertification, Special):

- the sequence and interactions of the organization's processes;
- the criticality of products and services and processes, including special processes;
- the risks associated with QMS, product, service, and process maturity (e.g., new product or service introduction, new process equipment or facilities);
- product related safety issues (e.g., airworthiness issues, reporting to customer and/or authorities);
- results of internal audits;
- previous audit findings (e.g., CBs, customers, regulatory authorities);
- performance measures and trends for quality and OTD (e.g., KPIs, scorecards, dashboards);
- previous management review results;
- customer requirements;
- statutory/regulatory requirements;
- customer satisfaction/performance data;
- certification structure [i.e., single site, multiple site, campus, several sites, complex organization (see 9104/1)];
- integrated and/or combined audits (see 9104/1 clause 8.2.3);
- use of Advanced Surveillance and Recertification Procedures (ASRP);
- use of ICT (see 9104/1 clause 8.10); and
- the proportion of aviation, space, and defense business each customer represents.

NOTE: The audit team leader should ensure that the amount of audit time planned on auditing any one customer's specific QMS requirements is consistent (approximately) with the proportion of aviation, space, and defense business each customer represents (e.g., if customer A has 30% of the business, the audit team should not spend 70% of their time verifying customer A's specific QMS requirements).

- verify the proposed scope of certification and its applicability to the IAQG scheme and, where necessary, while on-site communicate to the organization why the proposed scope should be modified;
- verify the information used for audit day calculation and recommend/revise, as needed;
- review the audit time for the Stage 2 audit and update the audit plan accordingly;
- adjust the composition of the audit team for the Stage 2 audit, including the addition of any technical experts or translators that are needed;
- verify the information used for determination of the certification structure;
- identify any changes required to the contract and communicate those revisions to the organization and PRI.
- PRI shall review the status of the areas of concerns to determine preparedness for the Stage 2 audit.
- A manager in PRI's Audit Operations Department (formerly Customer Care) shall review the auditor's final audit plan prior to release to the customer. The review will confirm continuity with the prior event and any changes (CAN reference vs. prior event Form 4, CAN validation-added time, changes reported between event - head count, scope, complaints, etc.)

7.2.2.3   <u>During the on-site activities</u> for the Stage 2 audit and Recertification Audits, all clauses of the QMS and all processes that are needed for the QMS shall be audited for conformity, including determination of effectiveness. Detailed audit findings, including reference to the audited processes, process documentation, and associated records, shall be documented (refer to ICOP 145).

AEA shall conduct site specific opening meetings; or a central opening meeting shall be conducted with representatives from all sites, either physically or by means of electronic/distance meeting methods (e.g., net-meeting, WebEx, Meet-me). During the opening meeting, the team leader shall reconfirm any issues identified during the Stage 1 audit and/or Audit Pre-Planning Phase. Following the opening, the audit team leader may conduct a site tour to address any changes in scope or facilities, since the last visit, or to familiarize audit team members with the organization's activities. The audit team leader shall revise the audit plan as needed, due to organization changes since the Stage 1 audit (e.g., personnel changes, department/ business unit reorganization, new customer complaint) or any objections from the organization that impact the audit.

During the audit, information relative to the objectives, scope and criteria, (including information relating to interfaces between functions, activities and processes) shall be obtained by appropriate sampling and verified to become audit evidence [WA-2020-0150-NC1 and NC2]. An audit of AS9100 and customer requirements, the organization's requirements and processes, including their performance and effectiveness, shall be conducted. The audit team shall pursue relevant audit trails to assist in the determination of QMS conformity and effectiveness. In addition each on-site audit, except for nonconformity follow-up and special audits shall include the following, as applicable:

- a review of the changes to the QMS and certification structure since the last audit;
- a review of requirements from new aviation, space, and defense customers, since the last audit;
- a review of customer satisfaction information;
- a review of internal audits and management reviews -
  Note: During the assessment of the internal audit process and/or review of internal audit records, the auditor must ensure that internal audit records identify objective evidence (e.g., actual records, part numbers, drawing numbers, purchase order numbers, etc.) for the processes audit by the organization.
- a review of requested corrective actions and associated responses;
- an interview with top management;
- an audit of the continual improvement of the QMS;
- an audit of follow-up actions from previous audits; and
- an audit of the control of externally provided processes, product and services (purchasing) process.

NOTE: If there is more than one surveillance audit during a year (e.g., every six months), some activities (e.g., interview with top management) may be spread over these audits.

When special processes are included in the audit plan, the audit team shall review and evaluate process validation, as well as, the monitoring, measuring, and control of these processes, including the following (see the R20.48AS *AS9100/9120 Planning Special Process Audit* for planning special process audits):

- review of documented information relating to each special process scheduled for the audit, including the requirements and/or criteria and a comparison between actual and planned results;

- a sample of special processes, including those defined by the customer. For the selected special processes, the audit team shall audit the monitoring and measuring equipment used (e.g., calibration, accuracy) and the method for recording the results. If required, the traceability between the process (e.g., batch or load charge identification) and the resulting product or service shall be verified; and

- in the case of outsourced special processes, the audit team shall verify that the organization's external provider control process addresses these items accordingly. In addition, the audit team shall review the use of customer-designated sources, as required.

  NOTE 1: Special processes are managed by using personnel qualified, as required by organization and/or customer requirements, and by controlling physical or chemical process characteristics [e.g., temperature, time (process duration), pressure, chemical composition of product, process treatment material (surface treatment solution)].

  NOTE 2: If an audit(s) has been performed by a customer or by a specialized independent 3rd party, the audit team can take the audit by these organizations into account. This can include audit results, sampling of the findings, and verification of any reported nonconformities to determine adequate resolution (i.e., no recurrence).

  For regulatory requirement and authority approvals, good audit practices to confirm effective QMS planning and implementation related to a regulatory / statutory requirement include: Investigating the organization's QMS planning related to applicable regulations in order to get a general overview. Then, using a process approach to follow audit trails as applicable.
    - Planning Risk and Opportunities, Operational Planning, Changes,
    - Roles, Responsibility and authority,
    - Communication regarding the importance of fulfilling regulatory requirements / QMS effectiveness,
    - Operations,
    - Design and Development of Products and Services,
    - Control of Externally Provided Processes, Products and Services,
    - Requirements for Products and Services,
    - Evaluating how the organization's internal audit process confirms effective implementation of controls related to applicable regulatory requirements.

- This standard supports the engagement and evaluation of an organization's QMS process approach, as required by the 9100-series standards. When evaluating an organization's QMS, there are basic questions that should be asked of every process, for example:
    - Is the process identified and appropriately defined?
    - Are responsibilities assigned?
    - Are the processes adequately implemented and maintained?
    - Is the process effective in achieving the desired results?
- The collective answers to these and other associated questions will contribute to the evaluation results.
- In addition, product quality (as delivered), customer satisfaction, and QMS effectiveness can be considered as interrelated. This relationship should be reflected in the audit process and associated results.
- Any campus or multiple site remote support process(es) providing support to the organization or another organization's management system must be

audited. Identification of the interactions shall be identified in the PEAR Interactions/Interfaces. The description of the interactions and samples audited should be identified in PEAR Summary of audit trails and sources of evidence. Where a PEAR does not exist for the support. Identification of the interactions, the description of the interactions and samples audited shall be identified in the QMS Process MATRIX and/or Audit Summary.

As always, the expectation is that PRI auditors direct their activities toward drawing conclusion on the conformance of the quality management system to the AS9100 and QMS requirements, and its effectiveness at addressing related inputs such, regulatory requirements, contract requirements, OEM customer requirements, etc.

7.3 <u>Audit Reporting</u> - Detailed audit findings, including reference to the audited processes, process documentation, and associated records shall be documented (refer to ICOP 145 for documents uploaded to OASIS). At the conclusion of the Stage 1 audit, the Stage 1 Audit Report (see AS9101 Form 1) shall be compiled and issued. At the conclusion of each certification, surveillance, recertification, and special audit, the audit results shall be recorded and issued using the standard forms (see AS 9101 Forms 2, 3,4, 5). The Supplemental Audit Report (see AS9101 Form 6) shall be used to record results for individual sites, if the Audit Report (see AS9101 Form 5) does not include audit details of the individual sites. The auditor shall use the most current OASIS Next Generation 9101 Form 5, audit report instructions to complete Form 5, including document confirmation that the audit objectives have been fulfilled [OA-2020-NC2].

- Any campus or multiple site remote support process(es) providing support to the organization or another organization's management system must be audited. The audit report for the organization providing the support shall specifically identify the evidence and the interactions between the organizations. The audit report for the organization receiving the support shall specifically identify the evidence and the interactions between the organizations. Identification of the interactions shall be identified in the PEAR Interactions/Interfaces. The description of the interactions and the samples audited should be identified in PEAR Summary of audit trails and sources of evidence.

7.3.1   Where ICT (CAAT) is used to fulfill part of the audit, the auditor shall document the following on the Form 5 [OA-2020-NC3]:
   a.   The use of ICT is to be recorded as off-site audit time in section 20 of the OASIS Form 5 audit report. The lead auditor will need to record the on-site time less the time allocated to using ICT in the block for on-site audit days.
   b.   Identifying the extent to which ICT was utilized in carrying out the audit.
   c.   Identify whether or not there were deviations or issues during the use of ICT.
   d.   Identify whether or not there were activities that could not be evaluated during the ICT audit and how this will be resolved.
   e.   Identify the effectiveness of ICT in achieving the audit objectives.
   f.   Where ICT is applied to a campus certification structure, ICOP Resolution 113 shall be applied.

   In addition to the above requirements, the PRI auditor shall follow the applicable requirements identified in PRI Rform R20.22 Computer Assisted Auditing Techniques (CAAT) Procedure [OA-2020-NC3].

7.3.2   The audit team shall complete the QMS Process Matrix Report (AS9101 see Form 2) to demonstrate which QMS processes and requirements of the AS9100 standard

have been audited, including a summary of objective evidence related to each 9100-series standards clauses 4, 5, 6, 7, 9 and 10. The audit team shall record a summary of audit trails and audit evidence related to each audited operational process (see AS9100 clause 8) on the PEAR (AS9101 Form 3). The audit team shall record measures, targets, and values of KPIs related to each audited operational process (see AS9100 clause 8) on the PEAR, taking into account the confidentiality of information (see ICOP 145). The process effectiveness level derived from the evaluation shall be recorded in the PEAR (see AS9101 Form 3) and documented on the QMS Process Matrix Report (see AS9101 Form 2). An effectiveness level of "5" shall only be determined, if the audited process is delivering the planned results and planned activities are fully realized with no nonconformities identified. The audit team shall record all nonconformances identified during an assessment (see AS9101 NCR Form 4). For combined and integrated audits, where a nonconformity has been determined in a common process, a single NCR shall be issued referencing the requirements for each AQMS standard. NCRs issued on common processes shall be referenced in both reports.

NOTE: Soft grading of nonconformities and/or identifying them as an observation or opportunity for improvement does not benefit the organization, its customers, or the CB. Furthermore, there is risk that the nonconformity would be given a lower priority for correction and/or corrective action, or that no action would be taken and the conditions will expand and/or continue to exist.

At the closing meeting, the audit team leader shall provide the organization with the applicable NCRs (AS9101 Form 4 NCR) (ICOP 171) documented in accordance with the AS9101 standard. The team leader shall assign a nonconformance to the aerospace categories of "Major" (Hold) or "Minor". These are defined in section 2. Verification shall be carried out on-site, if the verification of the corrective action cannot be carried out based on a review of the documentation and supporting objective evidence provided by the organization.

NOTE: Soft grading of nonconformities and/or identifying them as an observation or opportunity for improvement does not benefit the organization, its customers, or the CB. Furthermore, there is risk that the nonconformity would be given a lower priority for correction and/or corrective action, or that no action would be taken and the conditions will expand and/or continue to exist.

- For Major "Hold", or when the nature of the nonconformity needs immediate containment action, the audit team leader shall require the organization to: report within 7 calendar days, after the audit, the specific containment actions, including correction, and reach agreement on those actions with the audit team leader within the next 14 calendar days.   NOTE: Containment action and correction can be reviewed during the audit.

- Major nonconformance must be closed within 90 days from issuance of the nonconformance report for surveillance and special audits. All nonconformance reports (Major or Minor) issued at an initial or renewal event must be properly closed prior to issuance of a certificate and/or prior to certificate expiration.
  - The OASIS database shall be updated within 14 days of the decision and/or certificate expiration.

- PRI shall initiate the client certification suspension process when a Minor or Major "Hold" is identified and the organization does not demonstrate conformance to the applicable standard and/or has not been re-established within 60 days from the issuance of a nonconformance report.
  - Suspension shall be for a maximum of 110 days from the last day of the audit

event.
- ▪ The certification function shall make a decision to re-instate or withdraw the certificate within 10 days from the last day of the suspension.
- ▪ PRI will lift suspension after successful documented compliance is provided by the client, verified and determined to be effectively closed by an PRI Auditor.
- ▪ The OASIS database shall be updated within 14 days from the decision date to suspend or withdraw an organization's certificate.

- When a recurring nonconformity is identified in consecutive audits (as defined in AS9101) an additional (major) nonconformity shall be raised, citing the same or similar nonconformity found as a repeat in consecutive audits, against the corrective action process.

  The recurring nonconformity shall be classified (i.e., major or minor) in accordance with the PRI process, see the definitions, without defaulting to a classification of major.

  Note: If the previous nonconformity remains open, PRI's process shall be followed as to continuing with the previous nonconformity or issuing a new nonconformity.

- An audit team may identify Opportunities for Improvement (OFI) in addition to recording conformity and nonconformity. However, the OFI cannot be issued when the process is not at goal and not fully functioning. **Soft grading and/or identifying nonconformities as OFI's is not acceptable and is of no benefit to the organization.** Auditors are not permitted to soft grade or to issue OFI's in lieu of nonconformities. Violation of this rule will impact the auditors' future with PRI.

- The corrective action responses are forwarded to the lead auditor for review, acceptance or rejection. The lead auditor will document results of review in accordance with AS9101. The *Corrective Action Responses - Lead Auditor Approval* (R20.53), or e-mail noting any comments or additional information may be used in addition to AS9101 Form 4. Back-up documentation/evidence must be provided to PRI for record purposes. Closure of any cited nonconformance must be documented in accordance with AS9101. Auditor must ensure that customer notification is addressed as applicable in the certified organization's containment and corrective action process.

- A competent individual in the office will review the acceptance or the closure documents and associated documentation/materials and confirm conformance to PRI practice after acceptance or closure by the assigned lead. All nonconformance reports issued at an initial or renewal event must be properly closed prior to issuance of a certificate. At surveillance, once the team lead accepts the corrective action responses, the PRI office (competent individual) will review the status and proper review of the NCRs and send a transmittal letter to the client indicating acceptance, closure, or need for more information.

- Failure by any auditor to properly review, accept and close cited NCRs will result in the auditor being removed from the schedule, mandatory face to face training and witness of one of the first 3 events after successful training is completed. Failure after training and/or at the internal witness event may result in the contract with the auditor being cancelled.

- The PRI audit program shall ensure that the organization's purchasing process is audited at least annually.

- The Lead auditor will submit a draft audit plan for the next event.

- A manager in PRI's Audit Operations Department (formerly Customer Care) shall review the auditor's final audit plan prior to release to the customer. The review will confirm continuity with the prior event and any changes (CAN reference vs. prior event Form 4, CAN validation-added time, changes reported between event - head count, scope, complaints, etc.)

7.3.1 Combined and Integrated audits

- PRI shall only conduct AQMS standard(s) audits at the same time as an ISO 9001 audit (i.e., combined audit) and subsequently issue a certification containing both AQMS standard(s) and ISO 9001, when the scopes of certification (scope statement, scope of the audit, technical or geographic subjects of the certification) are identical for all standards listed on the certification document. If the scopes are different between AQMS and ISO 9001, time will be added to the audit plan review those differences and two separate certificates are issued.

- If the audit is integrated (two or more AQMS standards), the audit plan shall ensure that all areas and activities applicable to each AQMS are covered by the scope of the visit and assessed by a competent authenticated AQMS auditor.

- The audit team as a whole will satisfy competence requirements. If the lead does not exhibit the competence for all standards covered by the combined audit, individual auditors will be appointed as the lead auditor and are responsible for any recommendations that fall outside the competence of the audit team leader.

- All applicable elements of each AQMS standard shall be adequately addressed. In some instances, it may be appropriate for AQMS auditors to audit aspects of an AQMS for which they are not formally qualified.

- The audit and reporting process established to assess conformity, including the determination of QMS effectiveness to the 9100-series standards, shall meet the requirements of ISO/IEC 17021-1, as stated in each relevant clause of this standard. Additional audit requirements for the aviation, space, and defense industry are invoked by this standard.

- For combined and integrated audits, the requirements of 9104/1 clause 8.2.3 apply. PRI will utilize separate reporting (e.g., 9101 used for the 9100 series audit and PRI forms for ISO 9001, ISO 14001, ISO/IEC 27001, ISO 45001) for the audit including clear identification in an audit plan of non-common or different ISO activities).

7.3.2 Special Audits can be performed anytime during the certification cycle in response to one of the following situations:
- in response to a customer or other interested party request, when a serious issue (supported by objective evidence) has been identified; NOTE: In this case, the requester shall be notified in advance of the audit dates and made aware of the audit results.

- in response to an organization's request to change their scope of certification (commonly known as extensions to scope) or revise the listing of certified sites; or
- when transferring certification from one CB to another. NOTE: In this case, the pre-transfer review of the existing certification (see IAF MD 2) shall include an audit of the prospective organization site(s) by an AEA. Items listed for audit planning shall be evaluated, including a review of previous certification audits performed by their prior CB.
  - These audits shall be coordinated with the organization prior to the visit. The organization shall be given information about the specific reason and subject of the visit.
  - An audit plan shall be completed and submitted to the organization prior to arrival.
  - The results for special audits shall be documented on the applicable documents in accordance with AS9101.

7.4 <u>Audit Team Conclusions and Reporting</u>

7.4.1   Prior to documenting the audit report, the PRI Lead Auditor will review the certificate scope statement. The criteria for reviewing the adequacy of the scope is:
   a. that it should describe the type of activities, products, and services, as applicable at each site, without being misleading or ambiguous.
   b. For multi-site, the scope shall clearly describe the activities at each location.
   c. For campus, the activities at each address within the campus is clearly defined. The controlling address is the first address listed on the certificate.
   d. For both Multi Site and Campus, the location(s) that include central function shall be identified by describing those central functions performed at the address within the certificate scope statement.
   Regardless of audit the type, each report shall include the Lead Auditor's conclusion regarding the appropriateness of the organization's certificate scope statement.

7.4.2   PRI/audit team leader shall present to the client the audit report and associated AS9101 forms within two weeks of the on-site assessment. Nonconformance reports (ICOP 171) are provided to the client at the conclusion of the audit. When requested by the organization, the audit team shall communicate any preliminary applicable PEAR Scores (ICO 171). The audit team shall provide at a minimum, stating its conclusions on conformance and effectiveness of the management system overall to the AS9100/AS9120 requirements. The assessment shall be documented in accordance with AS9101. The team leader shall advise whether recorded nonconformance(s) jeopardize an existing certificate. In the event that registration is denied or suspended, an appropriate course of action shall be agreed on between the client and PRI. Where there is a failure to agree on a course of action, the appropriate appeals procedure (QP 8.0) of PRI may be invoked.

For combined and integrated audits, the requirements of 9104/1 clause 8.2.3 apply. PRI will utilize separate reporting (e.g., 9101 used for the 9100 series audit and PRI forms for ISO 9001, ISO 14001, ISO/IEC 27001, ISO 45001) for the audit including clear identification in an audit plan of non-common or different ISO activities)

Certified organizations are required to provide copies of the audit report and associated documents/records to their customers and potential customers, upon request, unless justification can be provided. The organization must provide access to the data through OASIS or directly to the customer.
- Upon receipt of the audit report and associated documentation the certification function shall review the report and documentation for completeness and accuracy, and approve the report for issuance.

- Prior to input into the OASIS database a second competent person will review the report and documentation for completeness.

7.4.3 Summary results involving a certification decision shall be input into the OASIS database in conformance with AS9104/1, within 1 month after the certification issue date. For all other audits, PRI will submit the required data into OASIS within 90 days after the on-site visit.

7.4.4 PRI shall submit to SAE via the OASIS database the results of the assessments performed (refer to ICOP 145 for documents uploaded to OASIS). SAE shall make this information available to members of AAQG in accordance with database requirements including restrictions of access to competitor information. The information shall include as a minimum the items specified in the appropriate appendix of AS9104/1, current edition.
- PRI typically performs quarterly checks of the OASIS database to ensure accuracy of data.
- PRI shall ensure that our clients have established an OASIS administrator for the purposes of managing: the organization data, access to organization audit results data in OASIS, organization OASIS users, and feedback data.
- PRI nominated the Certification Director/designee as the contact person(s) who will receive feedback requests.
- The certified organization receives a copy of all feedback requests.
- Depending on the nature of the request, the initiator can ask for a response to be provided. When requested, PRI will investigate the feedback received and respond within one month.
- After a satisfactory response by PRI, the user who initiated the request shall close the feedback request. Unsatisfactory responses shall be resolved using the escalation process.

7.5 PRI conducts surveillance audits and re-assessments in accordance with ISO/IEC 17021-1. These organizations may also be subject to witness audits as previously described.

A. Initial assessments shall cover the entire AQMS standard.
B. Surveillance shall be conducted, as a minimum, once per year.
C. During a three-year period the entire AQMS standard must be completely assessed with important/critical areas covered during surveillance.

7.6 **Certification/Registration**

7.6.1 PRI is responsible for ensuring the continued integrity and validity of the certificates it issues and for drawing up and implementing a procedure to enable it to carry out this responsibility. PRI will follow standard procedure (QP 6.0 Post-Audit Registration) for certification decision, and will make no transition decisions after 9/15/18. Transition certification decisions during surveillance or special result in a re-issued certificate with the current 3-year cycle maintained.

7.6.2 For the AQMS Sector qualification program, accredited registration documents shall be in the form of a certificate. Letters of conformance and unaccredited assessment statements shall be clearly distinguishable from accredited certificates. Unaccredited certificates shall not be issued.
- Certificates shall be issued only after closure of cited corrective actions and the formal decision on certification.

7.6.3 The certificate(s) at a minimum shall contain statements that address the requirements referenced in AS9104/1 Appendix B and the following concepts:

A. Conformance of the organization QMS to the appropriate revision level of the AQMS standard;
B. Identify the CB is accredited under the ICOP scheme;
C. The audit was performed in accordance with the requirements of AS9104/1, latest version, including the revision level of the standard;
D. Certificate issue date;
E. Effective and Expiration dates, with a maximum period of three years. Extensions are not permitted.
F. Identify an address and scope for each site;
G. The scope of certification for the certified organization shall clearly describe the organizations activities with respect to design, product (including services), process, etc.;
H. The certificate may show the logos or symbols; the applicable accrediting AB symbol shall be included on the AQMS certification document. Other symbols may include the logos and symbols of either the NAIA or SMS. As an alternative to either the NAIA or the SMS logo the IAQG logo may be used;
I. Details of the certification structure, except for single sites;
J. For organizations with more than one site or campus, the certificate shall indicate the site that contains the central function;
K. For multiple site organizations, the scope of certification shall clearly describe the activities applicable to each site;
L. For campus organizations, a controlling address shall be established for each campus and the scope of activity for that campus declared. Each site within a campus shall have an address and scope of activity declared;
M. The text of the certificated posted in the OASIS database shall be in English.
N. No mixed editions (AS9100D paired only with ISO 9001:2015, AS9120B paired only with ISO 9001:2015)

7.6.3.1 To implement the requirements shown above, certificate is produced per the following:
- "Quality management" is included in the scope of all locations designated as the central office, to describe those activities covered by the approved definition of a central office.
- The title of PEARs will be added to the scope of each applicable location.
- If key manufacturing processes (stamping, machining, assembly) are not specified within the title of PEARs, they will be added to the scope of each applicable location.
- The location of design (as applicable) and purchasing will be added to the scope of each applicable location.

7.6.4 If desired, separate certificates for the applicable AQMS and ISO 9001 may be issued. For AQMS audits, where there is a difference between an organization's 9100 series and ISO 9001 scope (Scope statement, scope of certification or scope of the audit, technical, or geographic), PRI shall issue 9100 series certificate with the associated scope, but does not include a reference to ISO 9001 nor the ISO 9001 scope. The AQMS certificate shall not reference any other standards or their scopes, e.g., ISO 14001, ISO/IEC 27001, ISO 45001.

7.6.5 Certificates shall not contain mixed or non-aligned editions of standards e.g., ISO 9001:2015 and AS9100C (technically equivalent to EN 9100:2009 or JISQ 9100:2009).

7.6.6 All certificates shall be specific in terms of the scope of product and the standard(s) being covered and clearly describe the organizations' activities with respect to design, product, processes, etc.

7.6.7 The certificate(s) shall have marks in accordance with the ANAB requirements and may show the National Aerospace Industry Association or RMC logos. In case of misuse of the

marks or logos by PRI or when IAQG detects systemic findings, the accreditation may be suspended or withdrawn.

7.6.8   PRI shall arrange for the OASIS database to be updated when suppliers lose or lapse their AQMS certificates. The OASIS database will be updated within 14 days to reflect any change in certification status when a certificate is suspended or withdrawn.

8.0   Authentication and Oversight of Accreditation Bodies, Certification/Registration Bodies, and Auditors

8.1   The RMC shall have primary responsibility to oversee the activities of all recognized organization under this system. The RMC has identified and documented the specific methods that will be used to perform this oversight.

8.2   The RMC has evaluated and recognized that PRI may participate in the AQMS Sector qualification program.

8.3   AQMS sector qualification of PRI shall be approved by the ANAB and be conducted in accordance with procedures and the requirements of AS9104/1, current edition. This includes an annual RMC review to evaluate the effectiveness of the process for recognition of PRI. The review shall be in accordance with ANAB procedures and RMC recognition.

8.4   PRI's Audit Management Program has been approved to meet requirements of AS9104/1 via ANAB oversight. Only individual PRI locations are approved by the RMC. PRI activity can be conducted at any location contingent on local regulations/requirements. All assessments shall be in accordance with the approved office/program management and requirements.

8.5   Oversight performed by AAQG member companies on ANAB or PRI, including witness audit results, shall be used by the RMC in ANAB and PRI assessment. Any issues resulting from OEM oversight should be relayed to PRI for action and follow-up.

8.6   PRI's internal appeals/complaint process is to be used before other actions are taken. If any client/OEM cannot resolve issues with PRI then the matter shall be referred to ANAB. If the problem is related to PRI performance and cannot be resolved to the satisfaction of the organization or the OEM(s) involved, and when all levels of appeal have been exhausted, the matter shall be referred to the RMC.

8.7   ANAB may suspend or withdraw the AQMS sector qualification of PRI. ANAB notifies the RMC immediately when the accreditation status or AQMS qualification status of PRI has changed. The RMC notifies the AAQG voting members of the change.

8.8   Exemplar Global (formerly RABQSA) and or other IAQG recognized AABs shall individually approve auditor credentials and that approval shall be recognized by the RMC in accordance with AS9104/1, current edition. Results from the approvals shall be submitted by Exemplar Global to the RMC for recognition and will be maintained by Exemplar Global in the auditor database.

8.9   Auditor credentials are valid for three years and may be renewed based on the proof of continuing education and performance of required assessment per paragraph 6.3 above. Exemplar Global will handle renewals.

9.0   Requirements for Shared Audits by OEMS

9.1   OEMs may use the requirements set forth in AS9104/1, current edition, as a means to share audits within the industry. Reporting of results to SAE is not mandatory, but documentation

shall be left with the organization and the organization can determine if it should be made available to its other customers.

9.2   Reporting shall be in accordance with AS9104/1 and be made available. Auditor credentials shall be made available to companies upon request.

10.0 **Transfer of Certification**

10.1   IAF MD 2 is applicable in full, with the following additional requirements:
- Only valid certifications issued under the 9104-series standards ICOP scheme by a CB with a valid accreditation are eligible for transfer.
- A transfer cannot occur during a transition audit from AS9100C to AS9100D or AS9120A to AS9120B. The transfer process, including certification decision, to the previous version must be complete prior to the start of the transition process.
- No certificate transfer between CBs shall occur when the CB with the existing certificate has nonconformities documented that are awaiting corrective action closure and current CB acceptance, unless the current CB has ceased its activities.
- Transfer of existing certificates expiring within the next 12 months shall require a Stage 1 and Stage 2 audit.
- PRI shall ensure that prior to certificate issuance, a special audit (on-site) is carried out by an AEA to confirm the validity of the transferred certification.
- A new certificate shall not be issued, unless all minor and major nonconformities have been contained and satisfactorily corrected; the root cause analysis completed; and corrective action has been implemented, reviewed, accepted, and verified by the accepting CB. If the closure of nonconformities takes more than 90 days, transfer is not allowed.
- Review/verification of the corrective action by PRI shall take place on-site (except for corrective actions related to AQMS documentation).

11.0 **Records**

11.1   Supporting evidence of PRI's qualification to an AQMS shall be maintained at the offices of the ANAB. The RMC OEM members shall have access to records regarding recognition of PRI. ANAB and PRI shall also retain records of auditor qualifications. Records shall be retained for a period of at least six years (refer to ICOP 145 for documents uploaded to OASIS).

12.0 **Reference**

12.1   International Aerospace Quality Group (IAQG) Other Party Management Team (OPMT) Supplemental Rule 003 – Rules for 9100/9110/9120:2016 and 9101:2016 Transition Dated: October 12, 2016, ISW made part of this procedure until superseded at which time the procedure shall be revised.

12.2   PRI Rform R20.22 Computer Assisted Auditing Techniques (CAAT) Procedure [OA-2020-NC3]