

Title	Audit an aeronautical engineering maintenance activity		
Level	6	Credits	75

Purpose	<p>This unit standard is intended for people providing quality assurance support for aircraft operating, maintenance, and support activities.</p> <p>People credited with this unit standard are, for an aeronautical engineering maintenance activity, able to: prepare to audit; hold a pre-audit meeting for an aeronautical engineering maintenance activity; carry out an audit of an aeronautical engineering maintenance activity; establish and document audit findings; advise client and auditee on audit findings; produce and promulgate the audit report; and follow up on corrective actions.</p>
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Classification	Aeronautical Engineering > Aeronautical Engineering Quality Assurance
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Available grade	Achieved
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Prerequisites	<p>People seeking assessment against this unit standard must hold the New Zealand Certificate in Aeronautical Engineering (Applied Skills) (Level 4) with strands in Aeronautical Composites, Aeronautical Non Destructive Testing, Aircraft Mechanical, Aircraft Powerplant, Aircraft Structures, Armament, Avionic Electrical Repair, Avionic Instrument Repair, Avionic Radio Repair, Avionic Maintenance, and Rotorcraft [Ref: 2909], or demonstrate equivalent knowledge and skills.</p>
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Guidance Information

- All tasks must be carried out in accordance with enterprise procedures.
- Definitions
 - Auditee* – the organisation or procedures being audited.
 - Accepted audit procedures* – the documented audit procedures employed by the enterprise carrying out the audit, such as AS/NZS ISO 19011:2014.
 - Client* – the person or organisation requesting the audit.
 - Enterprise procedures* – procedures used by the organisation carrying out the work and applicable to the tasks being carried out. Examples are – standard operating procedures, safety procedures, equipment operating procedures, codes of practice, quality management practices and standards, procedures to comply with legislative and local body requirements.

Maintenance activity – types of activity referred to include servicing, maintenance, repair, overhaul, engineering support services, management systems, training, stores, vendors and customer support.

- 3 All tasks are to be completed in accordance with accepted audit procedures.
- 4 Reference
Candidates should satisfy the expected standard of practice of AS/NZS ISO 19011:2014 *Guidelines for quality and/or environmental management systems auditing*; available from Standards New Zealand, <http://www.standards.co.nz/>.

Outcomes and performance criteria

Outcome 1

Prepare to audit an aeronautical engineering maintenance activity.

Performance criteria

- 1.1 Audit criteria are established and are consistent with client's requirements.
- Range reason for and/or objectives of the audit, auditee identification, time constraints, budget constraints, report presentation requirements, specific areas of focus, contract for audit work.
- 1.2 A network of interested personnel which will provide information relevant to the audit team is established in terms of required audit outcomes.
- 1.3 Auditee history is established.
- Range non-compliances, non-conformances, observations from previous audit reports.
- 1.4 Preliminary estimate of auditee operation and performance is made from, and is consistent with, observations and comments from customers and affected parties.
- 1.5 Human resources required by the auditee to complete its function are identified.
- Range specialist skills, basic skills, certification.
- 1.6 Skill levels and authorisations of current staff which define the limits of their work capabilities are identified.
- Range specialist skills, basic skills, certification.
- 1.7 Knowledge level of enterprise procedures necessary to identify non-compliances and non-conformances by auditee, is demonstrated.
- Range organisation structure, organisation procedures, resources, equipment capabilities.

Outcome 2

Hold a pre-audit meeting for an aeronautical engineering maintenance activity.

Performance criteria

- 2.1 Pre-audit meeting arrangements are agreed by client, auditor, and auditee.
Range time, date, place.
- 2.2 Rapport which is positive and assists with the running of the audit is established with the auditee and client.
- 2.3 Areas of concern to client, auditor, and auditee are identified and documented to enable their inclusion in the audit.
- 2.4 Scope, timing, and protocols for the audit are established which are acceptable to the auditor, client, and auditee.

Outcome 3

Carry out an audit of an aeronautical engineering maintenance activity.

Range observation, interview, examination, analysis of enterprise exposition requirements, requirements of manufacturer publications, Government and local body legislation, airworthiness authority requirements.

Performance criteria

- 3.1 Publications and documents used by the auditee are examined to determine whether these meet the needs of the work being carried out.
Range publications and documents – manuals, approved data, drawings, work cards, forms, labels, specifications;
needs – for revision status, completeness, compliance with legal and enterprise requirements.
- 3.2 Facilities are examined and their suitability for work being carried out is determined.
- 3.3 Equipment and tooling are examined and suitability and fitness for purpose for work being carried out is determined.
- 3.4 Staff qualifications and skills are checked and suitability for work being carried out is established.
- 3.5 Safety practices are examined and their suitability for work being carried out is determined.

- 3.6 Environmental conditions are examined and suitability for work being carried out is established.
- Range weather protection, workspace, lighting, humidity, temperature, cleanliness.
- 3.7 Level of auditee morale is determined from, and is consistent with, morale indicators.
- 3.8 Identified non-compliance and non-conformances are checked and addressed.
- 3.9 Auditee work practices are observed to ensure compliance.

Outcome 4

Establish and document audit findings.

Performance criteria

- 4.1 Discrepancies between actual practices and documented enterprise procedures are identified and categorised in accordance with accepted audit procedures.
- Range non-compliance, non-conformance, observation; critical, major, minor, incidental.
- 4.2 Areas where improvement and/or efficiencies could be made are identified in accordance with pre-audit scope and protocols.
- 4.3 Ideas and procedures which could be used by other departments within the enterprise are identified in accordance with pre-audit scope and protocols.
- 4.4 Findings are substantiated by evidence in accordance with pre-audit scope and protocols.
- 4.5 The auditee is notified of critical non-compliances and non-conformances immediately upon discovery, in accordance with pre-audit scope and protocols.
- 4.6 Findings are documented in accordance with accepted audit procedures and client requirements.

Outcome 5

Advise client and auditee on audit findings.

Performance criteria

- 5.1 Post audit meeting is carried out with client and auditee in accordance with accepted audit procedures.

- 5.2 Auditee is notified of audit findings in accordance with accepted audit procedures.
- Range non-compliances, non-conformances, observations, superior performance, recommendations for improvement.
- 5.3 Right of reply is sought from auditee in accordance with pre-audit scope and protocols.

Outcome 6

Produce and promulgate the audit report.

Performance criteria

- 6.1 Audit report is structured to meet client's requirements in accordance with accepted audit procedures and pre-audit scope and protocols.
- 6.2 Audit findings report are reflected in terms of objectivity, balance, and accuracy.
- Range expected value to be gained from the audit; participation and attitude of auditee; encouragement to improve; approach to the audit by auditor, client, and auditee.
- 6.3 Report is published and promulgated in accordance with client's requirements and accepted audit procedures.

Outcome 7

Follow up on corrective actions.

Performance criteria

- 7.1 Corrective actions are monitored for completion against target dates.
- 7.2 Overdue corrective actions are actioned in accordance with accepted audit procedures.
- 7.3 Audit is closed when corrective action requirements are satisfied.
- 7.4 Audit documentation is filed in accordance with accepted audit procedures.
- 7.5 Statistical data for quality improvements is prepared and meets client's requirements.

Planned review date	31 December 2024
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	23 July 1997	31 December 2016
Revision	2	8 May 2001	31 December 2016
Review	3	19 May 2006	31 December 2016
Review	4	22 August 2014	31 December 2021
Review	5	26 March 2020	N/A

Consent and Moderation Requirements (CMR) reference

0028

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact ServiceIQ qualifications@serviceiq.org.nz if you wish to suggest changes to the content of this unit standard.