

Title	Test aerospace components		
Level	4	Credits	30

Purpose	People credited with this unit standard are able to: prepare to test aerospace components on a test bed; test and adjust aerospace components; and complete finishing activities related to the testing of aerospace components.
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Classification	Aeronautical Engineering > Aerospace Engineering
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Available grade	Achieved
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Guidance Information

- 1 All tasks must be carried out in accordance with enterprise procedures.
- 2 Definitions
Aerospace components includes components, sub-assemblies, and cable harnesses, which are for use in product assembly elsewhere in the manufacturing process. Typical examples include avionics components, harness assemblies including radio frequency and fibre optic versions, high voltage batteries, electronic sub-assemblies, mechanical and fluidic components, and mechanical sub-assemblies.
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.
- 3 This unit standard can be assessed against using a fixed or a mobile test cell.
- 4 Evidence for performance criterion 2.5 may be gathered under simulated conditions.

Outcomes and performance criteria

Outcome 1

Prepare to test aerospace components on a test bed.

Performance criteria

- 1.1 Task is determined by reviewing maintenance documentation and manuals.
- 1.2 Aerospace components' identity is confirmed with documentation by comparing serial and part numbers.

- 1.3 Work area is prepared, and resources are obtained and checked for serviceability.
- Range may include but is not limited to – publications, tools, equipment, safety equipment, safety devices fitted, hazard symbols displayed, environmental conditions established.
- 1.4 Support equipment is positioned.
- 1.5 Aerospace components are prepared for testing.
- Range may include but is not limited to – clean, inspect, install on test bed.

Outcome 2

Test and adjust aerospace components.

Performance criteria

- 2.1 Aerospace components are tested and adjusted.
- Range may include but is not limited to – record data, determine adjustments, troubleshoot, functionally test, calibrate, adjust, document adjustments and performance.
- 2.2 Defects found during testing are reported and recorded.
- Range may include but is not limited to – out of limits performance parameters, leaks.
- 2.3 Defects are rectified.
- Range may include but is not limited to – out of limits performance parameters, leaks.
- 2.4 Inspections are obtained.
- 2.5 Action to be taken in abnormal and emergency occurrences is demonstrated.

Outcome 3

Complete finishing activities related to the testing of aerospace components.

Performance criteria

- 3.1 Aerospace components are prepared for use, storage, or transit.
- Range may include but is not limited to – locking, inhibiting, blanking, removing from test bed, preparing for transit.

3.2 Completion activities specific to the task and work area are carried out.

Range may include but is not limited to – tool control, cleanliness, tidiness, return of publications.

3.3 Resources are checked for serviceability and returned to service or storage.

Range may include but is not limited to – tools, equipment, safety equipment.

3.4 Leftover parts and materials are disposed of.

Range may include but is not limited to – serviceable, unserviceable, surplus, waste, scrap, hazardous.

3.5 Documentation is completed.

3.6 Work area is left in a state that enables the next task to begin.

Planned review date	31 December 2025
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	23 April 2020	N/A
Revision	2	30 March 2023	N/A

Consent and Moderation Requirements (CMR) reference	0028
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Ringa Hora Services Workforce Development Council qualifications@ringahora.nz if you wish to suggest changes to the content of this unit standard.