

<b>Title</b>	<b>Demonstrate knowledge of working within an aerospace engineering workplace</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>10</b>

<b>Purpose</b>	People credited with this unit standard are able to, within an aerospace engineering workplace: describe operational structures, hazardous materials, procedures and handling, company and customer launch vehicle and spacecraft operations, and enterprise policies, procedures and documentation; and demonstrate knowledge of fire and chemical safety.
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<b>Classification</b>	Aeronautical Engineering > Aerospace Engineering
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<b>Available grade</b>	Achieved
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### Guidance Information

#### 1 Definitions

*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.

CAANZ refers to Civil Aviation Authority New Zealand.

FAA (US) refers to Federal Aviation Administration.

MSDS refers to Material Safety Data Sheets.

NASA refers to National Aeronautics and Space Administration.

SMC (US) refers to Space and Missile Systems Center.

#### 2 Enactments and regulations relevant to this unit standard include but are not limited to – the Civil Aviation Act 1990; Hazardous Substances and New Organisms Act 1996; Resource Management Act 1991; Health and Safety at Work Act 2015.

#### 3 The following apply to all outcomes of this unit standard:

- a all activities are to be completed and reported in accordance with enterprise procedures;
- b all work practices must meet worksite's documented quality management requirements;
- c all activities must comply with policies, procedures and requirements of the enterprises involved; and any relevant legislative and/or regulatory requirements, which include, but are not limited to, the Health and Safety at Work Act 2015.

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## Outcomes and performance criteria

### Outcome 1

Describe operational structures within an aerospace engineering workplace.

#### Performance criteria

- 1.1 Human resource services in the company are described.
- Range may include but is not limited to – general company information; personal skills record; remuneration; work unions, support services; grievance, harassment, and disciplinary procedures; training systems.
- 1.2 Company structure is described.
- Range may include but is not limited to – organisation structure, incumbents.
- 1.3 Security and health and safety requirements are described.
- Range may include but is not limited to – responsibilities, incident reporting, emergency procedures, security systems.
- 1.4 Business systems are described.
- Range may include but is not limited to – overview, time capture.

### Outcome 2

Demonstrate knowledge of fire and chemical safety within an aerospace engineering workplace.

#### Performance criteria

- 2.1 Extinguishers are described and related to types of fires.
- Range water, foam, dry powder, carbon dioxide.
- 2.2 Operation methods of portable firefighting equipment are identified and described.
- 2.3 Procedures for the containment of chemical spills are described.
- 2.4 Enterprise emergency procedures are described in accordance with company manuals.
- Range may include but is not limited to – evacuation, equipment shut-down procedures, chemical spills, personal responsibilities.

**Outcome 3**

Describe hazardous materials, procedures and handling within an aerospace engineering workplace.

**Performance criteria**

3.1 Hazardous materials and procedures are described.

Range may include but is not limited to – warnings/labels and classes of substance, storage labelling, storage facilities and locations, MSDS (contents and uses).

3.2 Handling of hazardous materials is described.

Range may include but is not limited to – exposure standards, exposure, absorption, potential health effects for groups of chemicals, emergency treatment, minimising harm.

3.3 Supply and use of personal protective equipment are described.

**Outcome 4**

Describe company and customer launch vehicle and spacecraft operations within an aerospace engineering workplace.

**Performance criteria**

4.1 Procedures relating to company and customer launch vehicle operations are described.

Range may include but is not limited to – FAA, NASA, SMC, CAANZ rules.

4.2 Customer procedural and/or quality requirements are described.

Range may include but is not limited to – FAA, NASA, SMC, CAANZ rules.

**Outcome 5**

Describe enterprise policies, procedures and documentation within an aerospace engineering workplace.

## Performance criteria

5.1 Enterprise policies, procedures and documentation that govern launch vehicle or spacecraft hardware manufacture and/or maintenance activities are described.

Range may include but is not limited to – defect reporting procedures, documentation and authorisations, work records, signatory responsibilities.

5.2 Enterprise quality assurance is described.

Range may include but is not limited to – Quality Management System, regulations, standards, compliance.

<b>Planned review date</b>	31 December 2027
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### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	30 March 2023	N/A
Rollover and Revision	2	27 June 2024	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	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](mailto:qualifications@ringahora.nz) if you wish to suggest changes to the content of this unit standard.