

Title	Apply aeronautical engineering work and safety practices		
Level	3	Credits	10

Purpose	<p>This is an entry-level unit standard for people entering the aeronautical engineering industry.</p> <p>People credited with this unit standard are able to apply aeronautical engineering: work practices; housekeeping practices; and occupational health and safety practices.</p>
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Classification	Aeronautical Engineering > Aeronautical Engineering - Core
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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

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.

Manual handling refers to any activity requiring a person to lift, lower, push, pull, carry, throw, move, restrain, hold or otherwise handle an object.

Working at height refers to any work activity where there is a risk of a fall from any height, which may result in minor or major injury. If there is a risk of a fall in excess of 3 metres, fall protection/prevention measures must be used.

Confined spaces refer to an enclosed or partially enclosed space that is not intended for human occupancy. It is liable to have an atmosphere that contains harmful contaminants or not contain a safe oxygen level and may have contents that could cause engulfment. It may have restricted means for entry and exit.
- 3 Legislation relevant to this unit standard includes but is not limited to – Civil Aviation Act 1990; Hazardous Substances and New Organisms Act 1996; Resource Management Act 1991; Health and Safety at Work Act 2015; Spray Coating Regulations 1962; Approved Code of Practice for the Safe Use of Isocyanates 1994.
- 4 This standard may be assessed against either on or off-job in a real or simulated aeronautical engineering environment.
- 5 Safety related publications relative to this unit standard are available from the WorkSafe New Zealand website <http://www.business.govt.nz/worksafe/>.

Outcomes and performance criteria

Outcome 1

Apply aeronautical engineering work practices.

Performance criteria

- 1.1 The location of fire extinguishers and first aid kits are identified.
- 1.2 Different types of portable fire extinguishers are identified, and their applications stated.
- 1.3 Safe work practices are described.
- Range may include but are not limited to – manual handling, working at height, confined spaces, lighting, ventilation.
- 1.4 Instructions for using or working with materials, tools and equipment are identified and complied with.
- Range materials may include but is not limited to – fuels, chemicals, flammable materials, lubricants, paints, acids, asbestos, compressed air;
tools and equipment include – hand tools, machine tools and equipment.
- 1.5 Personal jewellery and accessory items are protected or removed to avoid injury in the workplace.
- 1.6 Protective clothing and safety equipment suitable for the job are selected and worn.
- Range may include but is not limited to – for the protection of body, head, hair, eyes, ears, lungs, limbs.
- 1.7 Personal actions are undertaken to promote and safe conditions in the workplace.
- Range may include but are not limited to – behaviour, language, working alone, use of tools and equipment, working with and near flammable materials, working with and near fellow workers.
- 1.8 Time management is undertaken.
- Range includes but is not limited to – start and finish times, tea breaks, meal times, regular work attendance, tasks carried out on time.

1.9 Work practices are undertaken to prevent damage through abuse or neglect.

Range may include but is not limited to – tools, workplace equipment and facilities, aircraft, property.

Outcome 2

Apply aeronautical engineering housekeeping practices.

Performance criteria

2.1 Hazardous objects are cleared from floors and/or stairs and platforms and stored.

2.2 Dirty, slippery, and wet surfaces are cleaned and dried so that potential slip hazards are removed.

2.3 Flammable materials are identified, and safe working practices observed when storing and disposing of them.

Range may include but are not limited to –paints and solvents, oil and solvent soaked rags, masking materials, cleaning material, oils, fuel, gas, liquid oxygen.

Outcome 3

Apply aeronautical engineering occupational health and safety practices.

Performance criteria

3.1 Workplace hazards are identified and enterprise procedures for safety are complied with when working on and around aircraft or an aviation environment.

Range workplace hazards may include but are not limited to – equipment, tools, machinery, electrical, chemical, fire, gas, fumes, compressed air, noise, confined spaces, height, rotating components, weights;
specific workplace hazards may include but are not limited to – propellers and/or rotors, engine intakes and exhausts, hazardous materials, high-energy ignition systems, forms of radiation (Visual Display Units, radio frequencies, radioactive materials, microwaves, X-rays), high-pressure hydraulic and pneumatic systems, electrical systems.

3.2 Workplace hazards are reported.

3.3 Aeronautical safety signs, symbols and instructions are interpreted and complied with.

Range may include but are not limited to – radiation (radio, microwave and X-ray), servicing, isolated systems, painting, chemical use.

- 3.4 Systems to be worked on are isolated and/or deactivated.
- 3.5 Procedures for reporting injuries, accidents and near misses are described.
- 3.6 Emergency escape routes are identified in work areas.

Planned review date	31 December 2024
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Last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	19 September 2013	31 December 2017
Revision	2	15 September 2016	31 December 2021
Review	3	26 March 2020	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 ServiceIQ qualifications@serviceiq.org.nz if you wish to suggest changes to the content of this unit standard.