

<b>Title</b>	<b>Repair or fabricate aeronautical components using milling machines</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>20</b>

<b>Purpose</b>	People credited with this unit standard are able to: prepare to repair or fabricate aeronautical components using milling machines; set up milling machines; mill aeronautical components; prepare aeronautical components; and carry out task completion activities.
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<b>Classification</b>	Aeronautical Engineering > Aeronautical Machining
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 All tasks must be carried out in accordance with enterprise procedures.
- 2 Definition  
*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 May include – cams, racks, gears.

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### Outcomes and performance criteria

#### Outcome 1

Prepare to repair or fabricate aeronautical components using milling machines.

#### Performance criteria

- 1.1 Component identity is confirmed with documentation by comparing serial and part numbers.
- 1.2 Task is established and documented.
- 1.3 Work area is prepared, and resources are obtained.

Range may include but is not limited to – publications, materials, tooling, equipment, spares, safety equipment, environmental conditions.

**Outcome 2**

Set up milling machines.

**Performance criteria**

2.1 Machines are prepared.

Range condition checked, set up, adjusted, made safe to use.

2.2 Sequence of operations is planned and verified.

**Outcome 3**

Mill aeronautical components.

**Performance criteria**

3.1 Components are milled to shape.

3.2 Components are measured and checked for conformity with specifications.

3.3 Serviceability of component parts is assessed.

Range dimensional and angular accuracy, profile, surface finish, mismatch of cuts.

3.4 Any defects are reported, recorded, and rectified.

3.5 Inspections are obtained.

**Outcome 4**

Prepare aeronautical components.

**Performance criteria**

4.1 Components are prepared.

Range may include but is not limited to – use, storage, transit, surface protection, packing.

4.2 Documentation is completed.

**Outcome 5**

Carry out task completion activities.

**Performance criteria**

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

Range may include but are not limited to – tool control, cleanliness, tidiness, return of publications, preparation for next activity, return of aircraft and systems to normal.

5.2 Leftover items, parts, and materials are disposed of.

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

<b>Planned review date</b>	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	19 June 1995	31 December 2016
Revision	2	7 August 1997	31 December 2016
Revision	3	8 May 2001	31 December 2016
Review	4	26 March 2007	31 December 2016
Review	5	24 October 2014	31 December 2021
Review	6	26 March 2020	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 ServiceIQ [qualifications@serviceiq.org.nz](mailto:qualifications@serviceiq.org.nz) if you wish to suggest changes to the content of this unit standard.