

<b>Title</b>	<b>Repair or overhaul aircraft powerplant turbine sections</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 overhaul aircraft powerplant turbine sections; locate defects in aircraft powerplant turbine sections; repair or overhaul aircraft powerplant turbine section components; and complete the repair or overhaul task for aircraft powerplant turbine sections.
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<b>Classification</b>	Aeronautical Engineering > Aircraft Powerplant Repair and Overhaul
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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 Repair or overhaul activities are those usually carried out in a specialist bay or workshop.
- 4 Turbine sections may include intakes, rotating and stationary assemblies, frames, sumps, seals, bearings.
- 5 Credit for this unit standard may also be gained from tasks assessed on aero-derivative engines, and associated systems and components used for marine or industrial applications.

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### Outcomes and performance criteria

#### Outcome 1

Prepare to repair or overhaul aircraft powerplant turbine sections.

**Performance criteria**

- 1.1 Task is determined by reviewing maintenance documentation and enterprise procedures.
- 1.2 Turbine section identity is confirmed with documentation.
- 1.3 Work area is prepared, and resources are obtained and checked.
- Range may include but is not limited to – publications, materials, tools, equipment, safety equipment, environmental conditions established.
- 1.4 Turbine section is prepared for repair or overhaul.
- Range may include but is not limited to – clean, inspect.
- 1.5 Next task is determined and documented.

**Outcome 2**

Locate defects in aircraft powerplant turbine sections.

**Performance criteria**

- 2.1 Defects are located using troubleshooting techniques appropriate to the defect indications.
- 2.2 Defects found during troubleshooting are reported and documented.

**Outcome 3**

Repair or overhaul aircraft powerplant turbine section components.

**Performance criteria**

- 3.1 Component is disassembled.
- Range may include but is not limited to – clean, label, preserve, segregate, store.
- 3.2 Defects found during disassembly are reported and documented.
- 3.3 Rectification action is determined and documented.
- 3.4 Replacement parts are procured and verified as authentic and serviceable.
- Range identify, inspect.
- 3.5 Defects are rectified.
- Range may include but is not limited to – repair, replace, modify, adjust.

3.6 Component is assembled.

3.7 Inspections are obtained.

#### Outcome 4

Complete the repair or overhaul task for aircraft powerplant turbine sections.

#### Performance criteria

4.1 Turbine section is prepared for use, storage, or transit.

Range may include but is not limited to – locking, inhibiting, blanking, packing, labelling.

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

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

4.3 Leftover parts and materials are disposed of.

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

4.4 Documentation is completed.

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

<b>Replacement information</b>	This unit standard, unit standard 23161, unit standard 23162, and unit standard 23164 replaced unit standard 3423.
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<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	25 September 2006	31 December 2016
Review	2	18 June 2014	31 December 2021
Review	3	26 March 2020	N/A
Rollover and Revision	4	30 May 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>.

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**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.