

<b>Title</b>	<b>Visually inspect aircraft metal structures</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>5</b>

<b>Purpose</b>	People credited with this unit standard are able to prepare to carry out visual inspections of aircraft metal structures; and visually inspect aircraft metal structures.
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<b>Classification</b>	Aeronautical Engineering > Aircraft Structures
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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 Structures may include – metal structures, main frames, auxiliary structures, plates or skin, attached fittings, aerodynamic fairings, flight control surfaces, doors, rigid integral fuel tanks.
- 4 Structural components do not need to be removed from the aircraft to meet the performance criteria of this unit standard.

### Outcomes and performance criteria

#### Outcome 1

Prepare to carry out visual inspections of aircraft metal structures.

#### Performance criteria

- 1.1 Inspection requirements are determined by reviewing maintenance documentation and enterprise procedures.
- 1.2 Work area is prepared, and resources obtained and checked.

Range may include but is not limited to – publications, cleaning materials, tools, safety equipment, illumination, magnifying glass, mirror.

1.3 Structural area to be inspected is cleaned.

## Outcome 2

Visually inspect aircraft metal structures.

### Performance criteria

2.1 Structures are visually inspected.

2.2 Defects are located and identified.

Range may include but is not limited to – cracking, corrosion, distortion, leaks, fretting, stress, scoring, loose fasteners, damage to protective finish, wear delamination.

2.3 Aircraft is inspected after an abnormal occurrence.

Range may include but is not limited to – heavy landing, bird strike, lightning strike, extreme turbulence, foreign object damage, corrosive substance spillage, flap down overspeed; evidence is required for a minimum of three types of occurrence.

2.4 Any defects found during inspection are reported and documented.

2.5 Documentation is completed.

<b>Replacement information</b>	This unit standard and unit standard 28139 replaced unit standard 4074.
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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	17 July 2014	31 December 2021
Review	2	26 March 2020	N/A
Rollover and Revision	3	26 April 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.