Title	**Visually inspect aircraft composite structures**		
Level	**4**	**Credits**	**5**

Purpose	People credited with this unit standard are able to prepare to carry out visual inspections of aircraft composite structures; and visually inspect aircraft composite structures.

Classification	Aeronautical Engineering > Aircraft Structures

Available grade	Achieved

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 – composite 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 composite structures.

Performance criteria

1.1 Inspection requirements are determined by reviewing maintenance documentation and enterprise procedures.

1.2 Work area is prepared, and resources are 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 composite 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.

Replacement information	This unit standard and unit standard 28140 replaced unit standard 4074.

Planned review date	31 December 2027

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

Consent and Moderation Requirements (CMR) reference	0028

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 if you wish to suggest changes to the content of this unit standard.