| | | | |
|---|---|---|---|
| **Title** | **Assemble aircraft metal components using fasteners** | | |
| **Level** | **4** | **Credits** | **12** |

| | |
|---|---|
| **Purpose** | People credited with this unit standard are able to: prepare to assemble aircraft metal components; assemble aircraft metal components using fasteners; and carry out completion activities. |

| | |
|---|---|
| **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.

## Outcomes and performance criteria

**Outcome 1**

Prepare to assemble aircraft metal components.

**Performance criteria**

1.1 Task is determined by reviewing maintenance documentation and enterprise procedures.

1.2 Work area is prepared, and resources are obtained and checked for serviceability, status, and set up.

Range may include but is not limited to – publications, materials, fasteners, heat treatment states, tools, safety equipment, jigs, patterns, fixtures, environmental conditions.

1.3 Component parts are prepared for assembly.

Range clean, inspect, mark out, align.

**Outcome 2**

Assemble aircraft metal components using fasteners.

**Performance criteria**

2.1 Fastener holes are prepared.

Range may include but is not limited to – determine physical clearance; drill, ream, countersink, deburr, dimple.

2.2 Surfaces of parts are prepared.

Range may include but is not limited to – clean, chemically convert, apply jointing compound, paint.

2.3 Parts are assembled.

Range may include but is not limited to – adjust to fit, fit skin clamps and/or alignment rivets, align fastener holes.

2.4 Fasteners are installed.

Range may include but is not limited to – blind and solid shank rivets, blind and solid bolts, special fasteners.

2.5 Any defects are rectified.

Range may include but is not limited to – misalignment, deflections, malformed fasteners, stress raisers, foreign objects.

2.6 Sealant is applied.

Range weather proofing, sealing.

2.7 Inspections are obtained.

**Outcome 3**

Carry out completion activities.

**Performance criteria**

3.1 Component is prepared for use, storage, or transit.

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

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

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

3.3 Leftover parts and materials are disposed of.

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

3.4 Documentation is completed.

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

Range may include but is not limited to – tool control, cleanliness, tidiness, return of publications, preparation for next activity.

| | |
|---|---|
| **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 | 19 June 1995 | 31 December 2016 |
| Revision | 2 | 7 August 1997 | 31 December 2016 |
| Revision | 3 | 8 May 2001 | 31 December 2016 |
| Review | 4 | 20 April 2006 | 31 December 2016 |
| Review | 5 | 18 June 2014 | 31 December 2021 |
| Review | 6 | 26 March 2020 | N/A |
| Rollover and Revision | 7 | 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.