1. Title	Aeronautical metal components assembly by bonding
2. Code	EMAMWS468A
3. Range	Aeronautical metal components bonding are performed in an aircraft hangar or workshop by using appropriate tools or machines.
4. Level	4
5. Credit	9
6. Competency	Performance Requirement
	6.1 Knowledge • Understand the characteristic of the aeronautical metal components.
	<ul> <li>6.2 Methods and procedures</li> <li>Able to review the maintenance documents and procedures to decide on maintenance task.</li> <li>Able to make preparation for the work area, and obtain and check the resources for serviceability or status in accordance with the procedures, e.g. publications, materials, heat treatment state, tools, safety equipment, jigs, patterns, fixtures, environmental conditions established.</li> <li>Able to prepare the component parts and test pieces for assembly in accordance with the procedures, e.g. clean, inspect, mark out, align.</li> <li>Able to prepare the fastener holes in accordance with the procedures, countersink, deburr, dimple.</li> <li>Able to assemble and bond the component parts and test pieces are in accordance with the procedures, e.g. surfaces prepared, fit alignment fasteners, apply bonding agent, adjust to fit.</li> </ul>

- Able to apply the pressure and/or temperature to parts in accordance with the procedures, e.g. clamp, vacuum bag, heat source, thermocouples.
- Able to rectify the non-conformities in accordance with the procedures, e.g. test piece peel strength, damage, misalignment, foreign objects, stress raisers, continuity.
- Able to apply sealant in accordance with the procedures, e.g. for weatherproofing, tank sealing, pressure sealing.
- Able to perform inspections in accordance with the procedures, e.g. independent, duplicate, progressive.
- 6.3 Professional ♦ Able to understand the legislative approach requirements, aviation authority requirements, manufacturers' publications and the maintenance organizations' approved maintenance practices and requirements in carrying out the task.
  - Able to complete the task within the stipulated duration.
  - Able to prepare the component for use, storage or transit in accordance with the procedures, e.g. locking, inhibiting, blanking, packing.

	<ul> <li>Able to check the resources for serviceability and return the resources in accordance with the procedures, e.g. tools, equipment, safety equipment, publications.</li> <li>Able to handle the unused items, parts and materials in accordance with the procedures, e.g. serviceable, unserviceable, surplus, waste, scrap, hazardous.</li> <li>Able to complete the documentation in accordance with the procedures, e.g. labels, work cards, release notes, log books, certification.</li> <li>Able to return the work area in a state which enables the next task to begin, in accordance with the procedures</li> </ul>
7. Assessment Criteria	<ul> <li>The integral outcome requirement of this UoC is:</li> <li>(i) Able to assemble the aeronautical metal components by bonding parts together using bonding agents.</li> </ul>
8. Remarks	Ref: NZQA - 4080