

1. Title	Avionic printed circuit boards repair
2. Code	EMAMAV462A
3. Range	Avionic printed circuit boards repair activity is usually carried out in a specialist bay or workshop on components that have been removed from the aircraft.
4. Level	4
5. Credit	9
6. Competency	<p style="text-align: center;"><u>Performance Requirement</u></p> <p>6.1 Working principles</p> <ul style="list-style-type: none"> ◆ Understand the working principles for the avionic printed circuit boards. <p>6.2 Methods and procedures</p> <ul style="list-style-type: none"> ◆ Able to review the maintenance documents and procedures to decide on maintenance task,e.g. confirm fault, repair, modify ◆ Able to prepare the work area, obtain and check the resources for serviceability or status in accordance with the procedures,e.g. publications, materials, tools, equipment, safety equipment, environmental conditions established. ◆ Able to confirm the component identification is matched with the documentation. ◆ Able to prepare the component for repair in accordance with the procedures,e.g. clean, inspect, assess economics of carrying out repair. ◆ Able to determine and record the next task in accordance with the procedures,e.g. locate defects, repair, test, adjust, complete the task.

6.3 Professional approach

- ◆ Able to locate the defects using troubleshooting techniques and inspection procedures appropriate to the defects indications in accordance with the procedures.
- ◆ Able to inspect the circuit board for damage in accordance with the procedures, e.g. burns, track damage, pad damage
- ◆ Able to report and record the defects in accordance with the procedures.
- ◆ Able to prevent electro-static damage in accordance with the procedures.
- ◆ Able to remove and apply the conformal coatings in accordance with the procedures.
- ◆ Able to procure the replacement parts and verify their authenticity and serviceability in accordance with the procedures, e.g. identify, inspect.
- ◆ Able to replace parts in accordance with the procedures.
- ◆ Able to test the repaired printed circuit board in accordance with the procedures.
- ◆ Able to understand the legislative 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, shelf-life requirement.

	<ul style="list-style-type: none"> ◆ Able to check the resources for serviceability and return them to service or storage in accordance with the procedures, e.g. tools, equipment, safety equipment, publications. ◆ Able to handle the unused parts and materials in accordance with the procedures, e.g. serviceable, unserviceable, surplus, waste, scrap, hazardous. ◆ Able to complete the documentation in accordance with the procedures, e.g. labels, work cards, release notes, log books, certification. ◆ Able to return the work area in a state which enables the next task to begin in accordance with the procedures.
7. Assessment Criteria	<p>The integral outcome requirement of this UoC is:</p> <p>(i) Able to return the avionic printed circuit boards to a serviceable condition by checking for and reporting damage, repairing or replacing parts, testing and documenting the work.</p>
8. Remarks	Ref: NZQA - 3999