

Title	Repair avionic printed circuit boards		
Level	4	Credits	10

Purpose	People credited with this unit standard are able to: prepare to repair printed circuit boards; locate defects in printed circuit boards; repair printed circuit boards; and complete the repair task.
----------------	---

Classification	Aeronautical Engineering > Avionic Electrical Repair
-----------------------	--

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 The repair activities referred to in this unit standard are those usually carried out in a specialist bay or workshop on components that have been removed from the aircraft.

Outcomes and performance criteria

Outcome 1

Prepare to repair printed circuit boards.

Performance criteria

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

Range confirm fault, repair, modify.
- 1.2 Work area is prepared, and resources are obtained and checked for serviceability or status.

Range may include but is not limited to – publications, materials, tools, equipment, safety equipment, environmental conditions established.

- 1.3 Component identification is matched with documentation.
- 1.4 Component is prepared for repair.
Range clean, inspect, assess economics of carrying out repair.
- 1.5 Next task is determined and documented.
Range locate defects, repair, test, adjust, complete the task.

Outcome 2

Locate defects in printed circuit boards.

Performance criteria

- 2.1 Defects are located using troubleshooting techniques and inspection procedures appropriate to the defect indications.
- 2.2 Circuit board is inspected for damage.
Range burns, track damage, pad damage.
- 2.3 Any defects are reported and documented.

Outcome 3

Repair printed circuit boards.

Performance criteria

- 3.1 Electro-static damage is prevented.
- 3.2 Conformal coatings are removed and applied.
- 3.3 Parts are procured and verified as authentic and serviceable.
Range identify, inspect.
- 3.4 Parts are replaced.
- 3.5 Repaired printed circuit board is tested.

Outcome 4

Complete the repair task.

Performance criteria

4.1 Component is prepared.

Range may include but is not limited to – use, storage, transit.

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

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

4.3 Leftover parts and materials are disposed of.

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

4.4 Documentation is completed.

Range may include but is not limited to – labels, work cards, release notes.

4.5 Work area is left in a state that enables the next task to begin.

Planned review date	31 December 2024
----------------------------	------------------

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	19 May 2006	31 December 2016
Revision	5	21 September 2007	31 December 2016
Review	6	24 October 2014	31 December 2021
Review	7	26 March 2020	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 ServicelQ qualifications@serviceiq.org.nz if you wish to suggest changes to the content of this unit standard.