

Title	Maintain aircraft electrical fly-by-wire flight control systems		
Level	4	Credits	10

Purpose	People credited with this unit standard are able to: prepare to maintain aircraft electrical flight control systems; locate defects in electrical flight control systems; restore airworthiness of electrical flight control systems; and complete finishing activities related to maintaining electrical flight control systems.
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Classification	Aeronautical Engineering > Aircraft Mechanical Maintenance
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Available grade	Achieved
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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 Aircraft electrical fly-by-wire flight control systems are from the cockpit control to the control surfaces which may include leading edge devices, flaps, ailerons, elevators or rudder, fixed and adjustable trimming devices.
- 4 The maintenance activities referred to in this unit standard are those normally carried out on an aircraft in a hangar.
- 5 The scope of the system that this unit standard relates to is described in ATA iSpec 2200, chapter 27 and/or chapter 67.

Outcomes and performance criteria

Outcome 1

Prepare to maintain aircraft electrical flight control systems.

Performance criteria

- 1.1 Task is determined by reviewing maintenance documentation.

- 1.2 Resources are obtained and checked for serviceability or status.
- Range may include but is not limited to – publications, tools, equipment, safety equipment, materials.
- 1.3 Aircraft registration and system to be maintained are matched with documentation.
- 1.4 Aircraft and system are prepared for the application of power and for system operation.
- Range may include but is not limited to – cockpit controls match component positions, clearances obtained, isolation tags, warning signs.
- 1.5 Ground and/or support equipment is positioned ready for system operation.

Outcome 2

Locate defects in electrical flight control systems.

Performance criteria

- 2.1 Serviceability is determined.
- Range inspect, assess, test.
- 2.2 Defects are reported and documented.

Outcome 3

Restore airworthiness of electrical flight control systems.

Performance criteria

- 3.1 Methods of rectifying defects are determined.
- 3.2 Replacement parts are procured and verified as authentic and serviceable.
- Range identify, inspect.
- 3.3 Defects are rectified.
- Range may include but is not limited to – repair, replace, modify, adjust.
- 3.4 System is tested to verify serviceability.
- 3.5 Inspections are obtained.

Outcome 4

Complete finishing activities related to maintaining electrical flight control systems.

Performance criteria

4.1 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, return of system and/or aircraft to normal, preparation for next activity.

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

Range tools, equipment, safety equipment.

4.3 Leftover parts and materials are disposed of.

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

4.4 Documentation is completed.

Planned review date	31 December 2027
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	23 November 2017	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
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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.