

Title	Maintain aircraft Traffic Alert and Collision Avoidance Systems		
Level	4	Credits	5

Purpose	People credited with this unit standard are able to: prepare to maintain aircraft Traffic Alert and Collision Avoidance Systems (TCAS); locate defects in aircraft TCAS; restore airworthiness of aircraft TCAS; and complete the maintenance task for aircraft TCAS.
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Classification	Aeronautical Engineering > Avionic 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 Maintenance activities are those usually carried out on an aircraft in a hangar.
 - 4 The scope of the system that this standard relates to is described in ATA iSpec 2200, chapter 34.
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Outcomes and performance criteria

Outcome 1

Prepare to maintain aircraft TCAS.

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 cockpit controls match component positions, clearances, isolation tags, warning signs.
- 1.5 Ground and/or support equipment is positioned ready for system operation.

Outcome 2

Locate defects in aircraft TCAS.

Performance criteria

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

Outcome 3

Restore airworthiness of aircraft TCAS.

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, calibrate.
- 3.4 System is tested to verify serviceability.
- 3.5 Inspections are obtained.
- Range independent, duplicate, progressive.

Outcome 4

Complete the maintenance task for aircraft TCAS.

Performance criteria

4.1 Aircraft, system, and work area are left in a state that enables the next task to begin.

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

Range may include but is not limited to – publications, 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, hazardous.

4.4 Documentation is completed.

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

Replacement information	This unit standard, unit standard 22524, unit standard 22525, unit standard 22526, and unit standard 22527 replaced unit standard 3950.
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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	19 May 2006	31 December 2016
Review	2	24 October 2014	31 December 2021
Review	3	26 March 2020	N/A
Rollover and Revision	4	27 June 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.