Title	**Repair aircraft inertial navigation system components**		
Level	**4**	**Credits**	**30**

Purpose	People credited with this unit standard are able to: prepare to repair aircraft inertial navigation system components; locate defects in aircraft inertial navigation system components; repair aircraft inertial navigation system components; test and adjust aircraft inertial navigation system components; and complete the repair task.

Classification	Aeronautical Engineering > Avionic Instrument 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.

4 Inertial navigation system components may include inertial sensor unit, control display unit.

Outcomes and performance criteria

Outcome 1

Prepare to repair aircraft inertial navigation system components.

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 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 identity 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 aircraft inertial navigation system components.

Performance criteria

2.1 Defects are located using troubleshooting techniques and inspection procedures appropriate to the defect indications.

2.2 Any defects are reported and documented.

Outcome 3

Repair aircraft inertial navigation system components.

Performance criteria

3.1 Component is disassembled.

Range clean, label, preserve, segregate, store.

3.2 Rectification action is determined and documented.

3.3 Parts are procured and verified as authentic and serviceable.

Range identify, inspect.

3.4 Defects are rectified.

Range repair, replace, modify, adjust.

3.5 Component is assembled.

3.6 Inspections are obtained.

Range independent, duplicate, progressive.

Outcome 4

Test and adjust aircraft inertial navigation system components.

Performance criteria

4.1 Component is prepared for testing.

4.2 Component is tested and adjusted.

Range may include but is not limited to – troubleshoot, functionally test, calibrate, adjust, document adjustments and performance.

4.3 Inspections are obtained.

Range independent, duplicate, progressive.

Outcome 5

Complete the repair task.

Performance criteria

5.1 Component is prepared.

Range may include but is not limited to – use, storage, transit, locking, inhibiting, blanking, packing, shelf-life requirement.

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

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

5.3 Leftover parts and materials are disposed of.

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

5.4 Documentation is completed.

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

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

Planned review date	31 December 2027

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 2022
Review	7	23 July 2020	N/A
Rollover and Revision	8	27 June 2024	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 Ringa Hora Services Workforce Development Council qualifications@ringahora.nz if you wish to suggest changes to the content of this unit standard.