Title: Repair aircraft instrument landing system components

Level: 4  
Credits: 25

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

Classification: Aeronautical Engineering > Avionic Radio Repair

Available grade: Achieved

Explanatory notes:

1. All tasks are to be carried out in accordance with enterprise procedures, the enterprise being the organisation carrying out the work. Enterprise procedures referred to in this unit standard are the applicable procedures found in the following: enterprise exposition; manufacturer publications; Government and local body legislation; airworthiness authority requirements.

2. 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.

3. Range may include but is not limited to – controllers.

Outcomes and evidence requirements

Outcome 1

Prepare to repair aircraft instrument landing system components.

Evidence requirements

1.1 Task is determined by reviewing documentation and enterprise procedures.  
Range confirm fault, repair, modify.

1.2 Work area is prepared and resources obtained and checked for serviceability or status in accordance with enterprise procedures. 
Range publications, materials, tools, equipment, safety equipment, environmental conditions established.

1.3 Component identity is matched with documentation.
1.4 Component is prepared for repair in accordance with enterprise procedures.
   Range clean, inspect, assess economics of carrying out repair.

1.5 Next task is determined and documented in accordance with enterprise procedures.
   Range locate defects, repair, test, adjust, complete the task.

**Outcome 2**

Locate defects.

**Evidence requirements**

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

2.2 Defects are reported and documented in accordance with enterprise procedures.

**Outcome 3**

Repair components.

**Evidence requirements**

3.1 Component is disassembled in accordance with enterprise procedures.
   Range clean, label, preserve, segregate, store.

3.2 Rectification action is determined and documented in accordance with enterprise procedures.

3.3 Parts are procured and verified as authentic and serviceable in accordance with enterprise procedures.
   Range identify, inspect.

3.4 Defects are rectified in accordance with enterprise procedures.
   Range repair, replace, modify, adjust.

3.5 Component is assembled in accordance with enterprise procedures.

3.6 Inspections are obtained in accordance with enterprise procedures.
   Range independent, progressive.
Outcome 4
Test and adjust components.

Evidence requirements

4.1 Component is prepared for testing in accordance with enterprise procedures.

4.2 Component is tested and adjusted in accordance with enterprise procedures.
   Range troubleshoot, functionally test, calibrate, adjust, document adjustments and performance.

4.3 Inspections are obtained in accordance with enterprise procedures.
   Range independent, progressive.

Outcome 5
Complete the repair task.

Evidence requirements

5.1 Component is prepared for use, storage, or transit in accordance with enterprise procedures.
   Range locking, blanking, packing, shelf-life requirement.

5.2 Resources are checked for serviceability and returned to service or storage in accordance with enterprise procedures.
   Range tools, equipment, safety equipment, publications.

5.3 Leftover parts and materials are disposed of in accordance with enterprise procedures.
   Range may include but is not limited to – serviceable, unserviceable, surplus, waste, scrap, hazardous.

5.4 Documentation is completed in accordance with enterprise procedures.
   Range may include but is not limited to – labels, work cards, release notes.

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

Replacement information
This unit standard, unit standard 22574, and unit standard 22576 replaced unit standard 3990.
Planned review date

31 December 2018

Status information and last date for assessment for superseded versions

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Consent and Moderation Requirements (CMR) reference

0028


Please note

Providers must be granted consent to assess against standards (accredited) by NZQA, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be granted consent to assess against standards by NZQA before they can register credits from assessment against unit standards.

Providers and Industry Training Organisations, which have been granted consent and which are assessing against unit standards must engage with the moderation system that applies to those standards.

Requirements for consent to assess and an outline of the moderation system that applies to this standard are outlined in the Consent and Moderation Requirements (CMR). The CMR also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact ServiceIQ qualifications@serviceiq.org.nz if you wish to suggest changes to the content of this unit standard.