

1. Title	Commercial aviation optical system components repair
2. Code	EMAMAV450A
3. Range	Commercial aviation optical system components repair and overhaul activity is usually carried out in a specialist bay or workshop on components that have been removed from the aircraft, e.g. head up displays, cathode ray tube displays, liquid crystal displays, low light television, digital and analogue video cameras and recorders.
4. Level	4
5. Credit	9
6. Competency	<p style="text-align: center;"><u>Performance Requirement</u></p> <p>6.1 Working principles</p> <ul style="list-style-type: none"> <li>◆ Understand the working principles for the commercial aviation optical system.</li> </ul> <p>6.2 Methods and procedures</p> <ul style="list-style-type: none"> <li>◆ Able to review the maintenance documents and procedures to decide on maintenance task, e.g. confirm fault, repair, modify</li> <li>◆ Able to prepare the work area, obtain and check the resources for serviceability or status in accordance with the procedures, e.g. publications, materials, tools, equipment, safety equipment, environmental conditions established.</li> <li>◆ Able to confirm the component identification is matched with the documentation.</li> <li>◆ Able to prepare the component for repair in accordance with the procedures, e.g. clean, inspect, assess economics of carrying out repair.</li> <li>◆ Able to determine and record the next task in accordance with the procedures, e.g. locate defects, repair, test, adjust, complete the task.</li> </ul>

	<ul style="list-style-type: none"><li>◆ Able to locate the defects using troubleshooting techniques and inspection procedures appropriate to the defects indications in accordance with the procedures.</li><li>◆ Able to report and record the defects in accordance with the procedures.</li><li>◆ Able to disassemble the component in accordance with the procedures, e.g. clean, label, preserve, segregate, store.</li><li>◆ Able to determine and record the rectification action in accordance with the procedures.</li><li>◆ Able to procure the replacement parts and verify their authenticity and serviceability in accordance with the procedures, e.g. identify, inspect.</li><li>◆ Able to rectify the defects in accordance with the procedures, e.g. repair, replace, modify, adjust.</li><li>◆ Able to assemble the component in accordance with the procedures.</li><li>◆ Able to perform inspections in accordance with the procedures, e.g. independent, duplicate, progressive.</li><li>◆ Able to prepare the component for test in accordance with the procedures.</li><li>◆ Able to test and adjust the component in accordance with the procedures, e.g. troubleshoot, functionally test, calibrate, adjust, document adjustments and performance.</li></ul>
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6.3 Professional approach

- ◆ Able to perform inspections after test in accordance with the procedures, e.g. independent, duplicate, progressive.
- ◆ Able to understand the legislative requirements, aviation authority requirements, manufacturers' publications and the maintenance organizations' approved maintenance practices and requirements in carrying out the task.
- ◆ Able to complete the task within the stipulated duration.
- ◆ Able to prepare the component for use, storage or transit in accordance with the procedures, e.g. locking, inhibiting, blanking, packing, shelf-life requirement.
- ◆ Able to check the resources for serviceability and return them to service or storage in accordance with the procedures, e.g. tools, equipment, safety equipment, publications.
- ◆ Able to handle the unused parts and materials in accordance with the procedures, e.g. serviceable, unserviceable, surplus, waste, scrap, hazardous.
- ◆ Able to complete the documentation in accordance with the procedures, e.g. labels, work cards, release notes, log books, certification.
- ◆ Able to return the work area in a state which enables the next task to begin in accordance with the procedures.

7. Assessment Criteria	The integral outcome requirement of this UoC is:  (i) Able to return the commercial aviation optical system components to a serviceable condition by disassembling, checking for and reporting damage, repairing, modifying or replacing parts, reassembling, testing and documenting the work.
8. Remarks	Ref: NZQA - 3956