1. Title	Aircraft traffic alert and collision avoidance systems maintenance
2. Code	EMAMBX421A
3. Range	Aircraft traffic alert and collision avoidance systems maintenance is usually carried out on the aircraft in the hangar.
4. Level	4
5. Credit	5
6. Competency	Performance Requirement

	6.1 Working principles	♦ Understand the working principles for the aircraft traffic alert and collision avoidance systems.
	6.2 Methods and procedures	♦ Able to review the maintenance documents and procedures to decide on maintenance task.
		♦ Able to obtain and check the resources for serviceability in accordance with the procedures. ,e.g. publications, tools, equipment, safety equipment, materials.
		♦ Able to confirm the system to be maintained is matched with the aircraft registration and documentation.
		♦ Able to prepare the ground and/or support equipment for systems operation in accordance with the procedures.
		♦ Able to prepare the aircraft and systems for the application of power and system operation in accordance with the procedures,e.g. cockpit controls match component positions, clearances, isolation tags, warning signs.

		♦ Able to determine the serviceability in accordance with the procedures,e.g. inspect, troubleshoot, assess, test.
		♦ Able to report and record the defects in accordance with the procedures.
		♦ Able to rectify the defects by the approved method in accordance with the procedures,e.g. repair, replace, modify, adjust, calibrate.
		♦ Able to procure the replacement parts and verify their authenticity and serviceability in accordance with the procedures,e.g. identify, inspect.
		♦ Able to test the systems and to verify their serviceability in accordance with the procedures.
		♦ Able to perform inspections in accordance with the procedures,e.g. independent, duplicate, progressive.
	6.3 Professional approach	♦ 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 leave the aircraft, system and work area in a state which enables the next task to begin in accordance with the procedures.

	♦ Able to check the resources for serviceability and returned 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.
7. Assessment Criteria	The integral outcome requirement of this UoC is: (i) Able to maintain the aircraft Traffic Alert and Collision Avoidance Systems (TCAS) by carrying out inspections, troubleshooting, repairs, modifications, component changes, and testing.
8. Remarks	Ref: NZQA - 22528