1. Title	Aircraft electrical motors and actuators maintenance
2. Code	EMAMBX410A
3. Range	Aircraft electrical motors and actuators maintenance activity is usually carried out on the aircraft in the hangar.
4. Level	4
5. Credit	7
6. Competency	Performance Requirement
	 ♦ Understand the construction and working principles for motors and generators, including: • different types: AC / DC, series wound / shunt wound / compound motors etc. • applications and uses
	 Able to review the maintenance documents and procedures to decide on maintenance task. Able to obtain and check the resources for serviceability or status 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 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 prepare the ground and/or support equipment for system operation in accordance with the procedures.

- ◆ Able to determine the serviceability of the system, 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.
- ◆ Able to procure the replacement parts and verify their authenticity and serviceability in accordance with the procedures, e.g. identify, inspect
- ◆ Able to rectify the defects in accordance with the procedures, e.g. repair, replace, modify, adjust, calibrate, lubricate.
- ◆ Able to test and verify the system for serviceability.
- 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 system maintenance 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 return the aircraft, system and work area in a state enabling the next task to begin.

	 Able to check and return the resources for serviceability in accordance with the procedures, e.g. tools, equipment, safety equipment, publications. Able to handle 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.
7. Assessment Criteria	The integral outcome requirement of this UoC is: (i) Able to maintain the aircraft electrical motors and actuators by carrying out inspections, troubleshooting, repairs, modifications, component changes, and testing.
8. Remarks	(Ref: HKAR-66 Module 3.12, 3.17 & 3.18) The Credit in this UoC is on the assumption of the person already possessed basic knowledge in electric circuits. Ref: NZQA - 22517