

1. Title	Aircraft gearboxes and/or transmissions maintenance
2. Code	EMAMBG415A
3. Range	Tasks that work on transmission systems including gears, belts & pulleys, chains & sprockets etc. in an aircraft hangar or workshop during the aircraft grounded time.
4. Level	4
5. Credit	9
6. Competency	<p style="text-align: center;"><u>Performance Requirement</u></p> <p>6.1 Operating principles</p> <ul style="list-style-type: none"> ◆ Understand the operating principles and applications of different transmission systems, including : <ul style="list-style-type: none"> • gears : gear ratios, mesh patterns • belts and pulleys : tension and construction of different types e.g. flatbelts and powerbelts • chains and sprockets : tooth profile • screw jacks, lever devices and push-pull rod systems <p>6.2 Methods and procedures</p> <ul style="list-style-type: none"> ◆ 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.

	<ul style="list-style-type: none"> ◆ Able to prepare the 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 aircraft gearboxes and/or transmissions maintenance activities in accordance with the procedures. ◆ 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, lubricate. ◆ 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 aircraft gearboxes and/or transmissions to verify their serviceability in accordance with the procedures. ◆ Able to perform inspections in accordance with the procedures. <p>6.3 Professional approach</p> <ul style="list-style-type: none"> ◆ Able to follow manufacturers' instruction or work manuals to perform the work. ◆ Able to adopt safety precautions according to the nature of the work.
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	<ul style="list-style-type: none"> ◆ Able to complete the task within the stipulated duration. ◆ Able to complete the task in the work area in accordance with the procedures, e.g. tool control, cleanliness, tidiness, return of publications, systems and aircraft left for next activity. ◆ Able to check the resources for serviceability and returned to service or storage in accordance with the procedures, e.g. tools, equipment, safety equipment. ◆ 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.
<p>7. Assessment Criteria</p>	<p>The integral outcome requirement of this UoC are:</p> <ul style="list-style-type: none"> (i) Able to make preparation for the maintenance of aircraft gearboxes and/or transmissions. (ii) Able locate the defects in gearboxes and/or transmissions. (iii) Able to restore the airworthiness of gearboxes and/or transmissions. (iv) Able to complete all the requirements associated with the task.
<p>8. Remarks</p>	<p>(Ref: HKAR-66 Module 6.9 & 7.12)</p> <p>The Credit in this UoC is on the assumption of the person already possessed basic knowledge in the manipulation of common tools.</p> <p>Ref: NZQA - 3408</p>