

1. Title	Aircraft gas turbine engine fuel system components repair and/or overhaul
2. Code	EMAMWS447A
3. Range	The repair and/or overhaul activity is usually carried out in a specialist bay or workshop, e.g. pumps, filters, actuators, valves, burners, nozzles, atomizers.
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"> ◆ Understand the working principles for the fuel systems of gas turbine engines, including : <ul style="list-style-type: none"> • properties and specifications of fuels • fuel additives • operation of engine control and fuel metering systems • lay-out of the systems and their components <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, e.g. confirm fault, repair, overhaul, modify. ◆ Able to confirm the component identity with documentation. ◆ Able to make preparation for the work area and obtain and check the resources in accordance with the procedures, e.g. publications, materials, tools, equipment, safety equipment, environmental conditions established.

- ◆ Able to make preparation for the combustion section for repair and/or overhaul in accordance with the procedures,e.g. clean, inspect, assess economics of carrying out repair or overhaul.
- ◆ Able to determine and record the next task in accordance with the procedures,e.g. locate defects, repair, overhaul, test, adjust, complete the task.
- ◆ Able to make preparation for the combustion section for repair and/or overhaul in accordance with the procedures,e.g. clean, inspect, assess economics of carrying out repair or overhaul.
- ◆ Able to locate defects using troubleshooting techniques appropriate to the defects indications in accordance with the procedures.
- ◆ Able to determine and record the next task in accordance with the procedures,e.g. locate defects, repair, overhaul, test, adjust, complete the task.
- ◆ Able to report and record defects found during troubleshooting in accordance with the procedures.
- ◆ Able to disassemble the propeller in accordance with the procedures,e.g. clean, label, preserve, segregate.
- ◆ Able to report and record the defects found during disassembly in accordance with the procedures,e.g. dimensions, damage, corrosion, blade angles, surface finish, contouring.

	<ul style="list-style-type: none"> ◆ Able to determine and record the rectification action in accordance with the procedures. ◆ Able to procure the spare 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. replace parts, modify, blend, scurf, contour, adjust angles and/or dimensions, balance, polish, straighten bent or twisted blades. ◆ Able to assemble the component in accordance with the procedures. ◆ Able to perform inspections in accordance with the procedures. ◆ Able to prepare the propeller for testing in accordance with the procedures. ◆ Able to test and adjust the propeller in accordance with the procedures,e.g. troubleshoot, functionally test, calibrate, adjust, document adjustments and performance. ◆ Able to perform inspections after the test in accordance with the procedures.
6.3 Professional approach	<ul style="list-style-type: none"> ◆ Able to prepare the propeller for use, storage or transit in accordance with the procedures,e.g. locking, inhibiting, blanking, packing ◆ 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.

	<ul style="list-style-type: none"> ◆ 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. ◆ Able to leave the work area in a state which enables the next task to begin 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 repair and/or overhaul of aircraft gas turbine engine fuel system components. (ii) Able locate the defects. (iii) Able to repair and/or overhaul the components. (iv) Able to test and adjust the components. (v) Able to complete all the requirements associated with the task.
<p>8. Remarks</p>	<p>(Ref: HKAR-66 Module 14, 15.9 & 15.11)</p> <p>The Credit in this UoC is on the assumption of the person already possessed foundation knowledge in the constructional arrangement and operation of gas turbine engines.</p> <p>Ref: NZQA - 3415</p>