Name of Assessed Person: **Registration:**

UNIT MEAAVI0047: Maintain twin engine aircraft electrical systems and components					
1. **Inspect twin engine aircraft electrical systems and components**	a. DC multi-generator and alternator/rectifier generator regulation and distribution systems and components	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	b. Electrical propeller control systems, such as feathering systems **(where applicable to the enterprise)**	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	c. Batteries in dual battery installations and associated mounting equipment, including related anti-vibration aids (competency may be demonstrated through the performance of a battery check)	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	d. Fire warning and extinguishing systems, including handling of halogen fire extinguishers **(where applicable to the enterprise)**	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

1.1 Identify specific inspection requirements using maintenance documentation and modification status, including relevant system defect reports.
1.2 Check isolation tags and configure aircraft for safe system inspection and operation in accordance with maintenance manual while observing all relevant work health and safety (WHS) requirements.
1.3 Visually or physically check direct current (DC) electrical systems for external signs of defects in accordance with maintenance manual.
1.4 Identify and report defects in accordance with standard enterprise procedures.

Name of Assessed Person: **Registration:**

UNIT MEAAVI0047: Maintain twin engine aircraft electrical systems and components

1. Cont'd **Inspect twin engine aircraft electrical systems and components**	e. Combustion heating systems **(where applicable to the enterprise)**	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	f. Equipment cooling and ventilation	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	g. Fuel storage and distribution systems	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	h. Master and central warning systems **(where applicable to the enterprise)**	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

1.1 Identify specific inspection requirements using maintenance documentation and modification status, including relevant system defect reports.
1.2 Check isolation tags and configure aircraft for safe system inspection and operation in accordance with maintenance manual while observing all relevant work health and safety (WHS) requirements.
1.3 Visually or physically check direct current (DC) electrical systems for external signs of defects in accordance with maintenance manual.
1.4 Identify and report defects in accordance with standard enterprise procedures.

Name of Assessed Person: **Registration:**

UNIT MEAAVI0047: Maintain twin engine aircraft electrical systems and components					
2. **Test or adjust twin engine aircraft electrical systems**	a. DC multi-generator and alternator/rectifier generator regulation and distribution systems and components	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	b. Electrical propeller control systems, such as feathering systems **(where applicable to the enterprise)**	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	c. Batteries in dual battery installations and associated mounting equipment, including related anti-vibration aids (competency may be demonstrated through the performance of a battery check)	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	d. Fire warning and extinguishing systems, including handling of halogen fire extinguishers **(where applicable to the enterprise)**	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

2.1 Prepare aircraft and system for application of power or system operation in accordance with maintenance manual.
2.2 Perform functional testing on electrical system for evidence of serviceability or malfunction in accordance with maintenance manual.
2.3 Perform required calibration or adjustments to system in accordance with maintenance manual.

UNIT MEAAVI0047: Maintain twin engine aircraft electrical systems and components

2. Cont'd **Test or adjust twin engine aircraft electrical systems**	e. Combustion heating systems **(where applicable to the enterprise)**	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	f. Equipment cooling and ventilation	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	g. Fuel storage and distribution systems	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	h. Master and central warning systems **(where applicable to the enterprise)**	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

2.1 Prepare aircraft and system for application of power or system operation in accordance with maintenance manual.
2.2 Perform functional testing on electrical system for evidence of serviceability or malfunction in accordance with maintenance manual.
2.3 Perform required calibration or adjustments to system in accordance with maintenance manual.

Name of Assessed Person: **Registration:**

UNIT MEAAVI0047: Maintain twin engine aircraft electrical systems and components					
3. **Troubleshoot twin engine aircraft electrical systems**	a. DC multi-generator and alternator/rectifier generator regulation and distribution systems and components	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	b. Electrical propeller control systems, such as feathering systems **(where applicable to the enterprise)**	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	c. Batteries in dual battery installations and associated mounting equipment, including related anti-vibration aids (competency may be demonstrated through the performance of a battery check)	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	d. Fire warning and extinguishing systems, including handling of halogen fire extinguishers **(where applicable to the enterprise)**	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

3.1 Use available information from maintenance documentation and inspection and test results to assist in fault determination of identified issues.
3.2 Troubleshoot to line replacement level using maintenance manual fault diagnosis guides and logic processes.
3.3 Obtain required specialist or supervisory advice to assist with the troubleshooting process.
3.4 Locate electrical system faults and identify and record causes of faults in required maintenance documentation.
3.5 Determine requirements for rectification of faults.

Name of Assessed Person: **Registration:**

UNIT MEAAVI0047: Maintain twin engine aircraft electrical systems and components					
3. Cont'd **Troubleshoot twin engine aircraft electrical systems**	e. Combustion heating systems **(where applicable to the enterprise)**	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	f. Equipment cooling and ventilation	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	g. Fuel storage and distribution systems	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	h. Master and central warning systems **(where applicable to the enterprise)**	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

3.1 Use available information from maintenance documentation and inspection and test results to assist in fault determination of identified issues.
3.2 Troubleshoot to line replacement level using maintenance manual fault diagnosis guides and logic processes.
3.3 Obtain required specialist or supervisory advice to assist with the troubleshooting process.
3.4 Locate electrical system faults and identify and record causes of faults in required maintenance documentation.
3.5 Determine requirements for rectification of faults.

Name of Assessed Person: **Registration:**

UNIT MEAAVI0047: Maintain twin engine aircraft electrical systems and components					
4. **Remove and install twin engine aircraft electrical system components**	a. Multi-generator regulation and distribution systems	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	b. Blectrical propeller control system components **(where applicable to the enterprise)**	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	c. Batteries in dual battery installations and associated mounting equipment, including related anti-vibration aids	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

4.1 Render system safe and prepare it in accordance with maintenance manual, fitting required isolation tags, to ensure personnel safety.
4.2 Remove electrical components in accordance with maintenance manual while observing all relevant WHS requirements.
4.3 Complete and process required maintenance documentation relating to removal in accordance with standard enterprise procedures.
4.4 Tag and pack removed components in accordance with specified procedures.
4.5 Confirm correct part numbers, modification status, serviceability and shelf life of electrical components to be installed against maintenance manual.
4.6 Perform physical installation including connections of electrical components in accordance with the applicable maintenance manual, and ensure appropriate adjustment or alignment with mechanical interface is carried out.
4.7 Reinstate system to operational condition in preparation for testing, as necessary, and in accordance with maintenance manual.
4.8 Complete and process required maintenance documentation relating to installation in accordance with standard enterprise procedures.

Name of Assessed Person: **Registration:**

UNIT MEAAVI0047: Maintain twin engine aircraft electrical systems and components					
4. Cont'd **Remove and install twin engine aircraft electrical system components**	d. Fire warning and extinguishing system **(where applicable to the enterprise)**	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	e. Combustion heaters and associated components **(where applicable to the enterprise)**	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	f. Equipment cooling and ventilation components	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

4.1 Render system safe and prepare it in accordance with maintenance manual, fitting required isolation tags, to ensure personnel safety.
4.2 Remove electrical components in accordance with maintenance manual while observing all relevant WHS requirements.
4.3 Complete and process required maintenance documentation relating to removal in accordance with standard enterprise procedures.
4.4 Tag and pack removed components in accordance with specified procedures.
4.5 Confirm correct part numbers, modification status, serviceability and shelf life of electrical components to be installed against maintenance manual.
4.6 Perform physical installation including connections of electrical components in accordance with the applicable maintenance manual, and ensure appropriate adjustment or alignment with mechanical interface is carried out.
4.7 Reinstate system to operational condition in preparation for testing, as necessary, and in accordance with maintenance manual.
4.8 Complete and process required maintenance documentation relating to installation in accordance with standard enterprise procedures.

Name of Assessed Person: **Registration:**

UNIT MEAAVI0047: Maintain twin engine aircraft electrical systems and components					
4. Cont'd **Remove and install twin engine aircraft electrical system components**	g. Fuel storage and distribution system electrical components	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	h. Master and central warning system components **(where applicable to the enterprise)**	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

4.1 Render system safe and prepare it in accordance with maintenance manual, fitting required isolation tags, to ensure personnel safety.
4.2 Remove electrical components in accordance with maintenance manual while observing all relevant WHS requirements.
4.3 Complete and process required maintenance documentation relating to removal in accordance with standard enterprise procedures.
4.4 Tag and pack removed components in accordance with specified procedures.
4.5 Confirm correct part numbers, modification status, serviceability and shelf life of electrical components to be installed against maintenance manual.
4.6 Perform physical installation including connections of electrical components in accordance with the applicable maintenance manual, and ensure appropriate adjustment or alignment with mechanical interface is carried out.
4.7 Reinstate system to operational condition in preparation for testing, as necessary, and in accordance with maintenance manual.
4.8 Complete and process required maintenance documentation relating to installation in accordance with standard enterprise procedures.

Name of Assessed Person: **Registration:**

Certification of Underpinning Knowledge and Skills to Maintain twin engine aircraft electrical systems and components

A person cannot be assessed as competent until it can be demonstrated to the satisfaction of the workplace assessor that the relevant elements and performance criteria of the unit of competency are being achieved under routine supervision on electrical looms, cables and connection hardware, and on each following system and on at least one (1) major component/line replaceable unit (LRU) listed in the assessment conditions a) to h). ***(Groups b) d) g) and h) may be omitted where not applicable to the enterprise).*** This shall be established via the records in the Log of Industrial Experience and Achievement or, where appropriate, an equivalent Industry Evidence Guide (for details refer to the Companion Volume Implementation Guide).

UNIT MEAAVI0047: Maintain twin engine aircraft electrical systems and components	
Evidence has been confirmed of the attainment of the following pre-requisite units of competency (as they are related to attainment of the elements of competency specified in this unit). **AVI0002, AVI0008**	
Evidence has been confirmed of the knowledge requirements for this unit as delivered by a CASR 147 Approved Organisation. **OR** Assessment has been conducted to determine that the underpinning knowledge and skills have been achieved in accordance with the Competency Unit.	

Certification of Unit Completion

I certify that I have reviewed the certification of the elements for this competency unit and that all of the competency unit requirements have been met.

Signed: _____ **Assessor No.** _____ **MTO:** _____ **Date:** _____