Name of Assessed Person: **Registration:**

UNIT MEA294: Inspect, Test and Troubleshoot Advanced Aircraft Electrical Systems and Components					
1. **Inspect Advanced Aircraft Electrical Systems and Components**	a. DC and AC power generation systems, including regulation, distribution, and control system components	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	b. Transformer rectifier units and rotary and static inverters	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	c. Battery installations, including battery temperature monitoring systems	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	d. Gas turbine or piston engine ignition and starting systems **(may be omitted if not applicable to the organisation)**	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

1.1 Use required maintenance documentation and modification status, including system defect reports where relevant, to identify specific inspection requirements.
1.2 Check isolation tags and configure aircraft for safe system inspection and operation according to applicable maintenance manual.
1.3 Visually or physically check electrical systems for external signs of defects according to applicable maintenance manual while observing work health and safety (WHS) requirements.
1.4 Correctly identify and report defects using organisational reporting processes.

Name of Assessed Person: **Registration:**

UNIT MEA294: Inspect, Test and Troubleshoot Advanced Aircraft Electrical Systems and Components					
1. Cont'd **Inspect Advanced Aircraft Electrical Systems and Components**	e. Motors and actuators	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	f. Internal and external lighting systems, including controls	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	g. Electrical components specific to systems, such as air cycle air conditioning, combustion heating, equipment cooling, anti-icing and de-icing, landing gear, anti-skid, flight control, master and central warning, fuel storage and distribution, fire warning and extinguishing, and engine propeller control	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

1.1 Use required maintenance documentation and modification status, including system defect reports where relevant, to identify specific inspection requirements.
1.2 Check isolation tags and configure aircraft for safe system inspection and operation according to applicable maintenance manual.
1.3 Visually or physically check electrical systems for external signs of defects according to applicable maintenance manual while observing work health and safety (WHS) requirements.
1.4 Correctly identify and report defects using organisational reporting processes.

Name of Assessed Person: **Registration:**

UNIT MEA294:	**Inspect, Test and Troubleshoot Advanced Aircraft Electrical Systems and Components**				
2. **Test and Adjust Advanced Aircraft Electrical Systems**	a. DC and AC power generation systems, including regulation, distribution, and control system components	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	b. Transformer rectifier units and rotary and static inverters	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	c. Battery installations, including battery temperature monitoring systems	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	d. Gas turbine or piston engine ignition and starting systems **(may be omitted if not applicable to the organisation)**	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 according to applicable maintenance manual for the application of power and system operation.
2.2 Functionally test electrical system according to maintenance manual for evidence of serviceability and malfunction.
2.3 Calibrate or adjust system according to maintenance manual, as appropriate.

Name of Assessed Person: **Registration:**

UNIT MEA294:	**Inspect, Test and Troubleshoot Advanced Aircraft Electrical Systems and Components**				
2. Cont'd **Test and Adjust Advanced Aircraft Electrical Systems**	e. Motors and actuators	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	f. Internal and external lighting systems, including controls	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	g. Electrical components specific to systems, such as air cycle air conditioning, combustion heating, equipment cooling, anti-icing and de-icing, landing gear, anti-skid, flight control, master and central warning, fuel storage and distribution, fire warning and extinguishing, and engine propeller control	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 according to applicable maintenance manual for the application of power and system operation.
2.2 Functionally test electrical system according to maintenance manual for evidence of serviceability and malfunction.
2.3 Calibrate or adjust system according to maintenance manual, as appropriate.

Name of Assessed Person: **Registration:**

UNIT MEA294: Inspect, Test and Troubleshoot Advanced Aircraft Electrical Systems and Components					
3. Troubleshoot Advanced Aircraft Electrical Systems	a. DC and AC power generation systems, including regulation, distribution and control system components	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	b. Transformer rectifier units and rotary and static inverters	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	c. Battery installations, including battery temperature monitoring systems	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	d. Gas turbine or piston engine ignition and starting systems **(may be omitted if not applicable to the organisation)**	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.
3.2 Use maintenance manual fault diagnosis guides and logic processes to ensure efficient and accurate troubleshooting to line replacement level.
3.3 Obtain specialist advice, where required, to assist with troubleshooting process.
3.4 Locate system faults and clearly identify and correctly record causes of faults in maintenance documentation, where required, according to standard organisational procedures.
3.5 Determine rectification requirements according to maintenance requirements.

** **Note: Troubleshooting,** involves the use of fault finding charts or similar, to line replacement level.

Name of Assessed Person: **Registration:**

UNIT MEA294: Inspect, Test and Troubleshoot Advanced Aircraft Electrical Systems and Components					
3. Cont'd Troubleshoot Advanced Aircraft Electrical Systems	e. Motors and actuators	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	f. Internal and external lighting systems, including controls	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	g. Electrical components specific to systems, such as air cycle air conditioning, combustion heating, equipment cooling, anti-icing and de-icing, landing gear, anti-skid, flight control, master and central warning, fuel storage and distribution, fire warning and extinguishing, and engine propeller control	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.
3.2 Use maintenance manual fault diagnosis guides and logic processes to ensure efficient and accurate ***troubleshooting to line replacement level.***
3.3 Obtain specialist advice, where required, to assist with troubleshooting process.
3.4 Locate system faults and clearly identify and correctly record causes of faults in maintenance documentation, where required, according to standard organisational procedures.
3.5 Determine rectification requirements according to maintenance requirements.

**** Note: Troubleshooting,** involves the use of fault-finding charts, or similar, to line replacement level.

Name of Assessed Person: **Registration:**

Confirmation of Underpinning Knowledge and Skills to Inspect, Test and Troubleshoot Advanced 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 at least one (1) item from each of Groups a) to g) in the Range Statement. ***(Group d) may be omitted where they are not Applicable to the Organisation).*** Candidate capability of providing the required performance and knowledge evidence must 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 Assessment Guidelines).

UNIT MEA294: Inspect, Test and Troubleshoot Advanced Aircraft Electrical Systems and Components	**Date / MTO Stamp**
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). **203**	
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:** _____

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