Name of Assessed Person: **Registration:**

UNIT MEA339: Inspect, repair and maintain aircraft structures					
1. Inspect aircraft structure.	a. Non-ferrous and ferrous alloys and composite (FRP) materials used in aircraft construction	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	b. Structural fastening and attachment hardware and/or devices	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	c. Seals and sealants	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	d. Glass and moulded plastics	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

1.1 Relevant maintenance documentation is used to identify specific inspection requirements.
1.2 Appropriate preparation and access to the aircraft structure is undertaken to allow for proper inspection in accordance with maintenance documentation.
1.3 Aircraft structure is visually or physically checked for signs of deformation defects or damage in accordance with maintenance documentation and approved procedures while observing all relevant work health and safety (WHS) requirements, including the use of material safety data sheets (MSDS) and items of personal protective equipment (PPE).
1.4 Damage or defects are assessed against damage or wear limits specified by structural repair manual or other approved data to determine if repair or replacement is required.
1.5 Maintenance documentation is completed and processed in accordance with standard enterprise procedures.

Name of Assessed Person: **Registration:**

UNIT MEA339: Inspect, repair and maintain aircraft structures

1. Cont'd Inspect aircraft structure.	e. Application of NDT techniques	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	f. Doors, hinges and locking mechanisms for damage/misalignment	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	g. Inspections applicable to each of safe life, damage tolerant and fail safe structure relevant to enterprise	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	h. Ageing aircraft inspection programs	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

1.1 Relevant maintenance documentation is used to identify specific inspection requirements.
1.2 Appropriate preparation and access to the aircraft structure is undertaken to allow for proper inspection in accordance with maintenance documentation.
1.3 Aircraft structure is visually or physically checked for signs of deformation defects or damage in accordance with maintenance documentation and approved procedures while observing all relevant work health and safety (WHS) requirements, including the use of material safety data sheets (MSDS) and items of personal protective equipment (PPE).
1.4 Damage or defects are assessed against damage or wear limits specified by structural repair manual or other approved data to determine if repair or replacement is required.
1.5 Maintenance documentation is completed and processed in accordance with standard enterprise procedures.

Name of Assessed Person: **Registration:**

UNIT MEA339: Inspect, repair and maintain aircraft structures					
1. Cont'd **Inspect aircraft structure.**	i. Recognition of impact damage, fatigue cracking and corrosion	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	j. Delamination of composites and bonded structures	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

1.1 Relevant maintenance documentation is used to identify specific inspection requirements.
1.2 Appropriate preparation and access to the aircraft structure is undertaken to allow for proper inspection in accordance with maintenance documentation.
1.3 Aircraft structure is visually or physically checked for signs of deformation defects or damage in accordance with maintenance documentation and approved procedures while observing all relevant work health and safety (WHS) requirements, including the use of material safety data sheets (MSDS) and items of personal protective equipment (PPE).
1.4 Damage or defects are assessed against damage or wear limits specified by structural repair manual or other approved data to determine if repair or replacement is required.
1.5 Maintenance documentation is completed and processed in accordance with standard enterprise procedures.

Name of Assessed Person: **Registration:**

UNIT MEA339: Inspect, repair and maintain aircraft structures					
2. Prepare to undertake repair.	k. Remove corrosion by chemical and mechanical methods	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	l. Restore protective coatings	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	m. Apply sealants and joining compounds	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	n. Freehand precision hole generation	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

2.1 Extent of damage is correctly assessed to assist in determining repair procedure.
2.2 Appropriate repair scheme is identified in accordance with structural repair manual and/or approved data.
2.3 Specialist advice is obtained in establishing an approved repair scheme where a standard repair scheme cannot be identified or damage is out of limits.
2.4 All materials and equipment required are organised.

Name of Assessed Person: **Registration:**

UNIT MEA339: Inspect, repair and maintain aircraft structures

2. Cont'd Prepare to undertake repair.	o. Remove and install structural hardware and fastening devices	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	p. Remove and replace bushes, bearings and bearing surfaces	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	q. Metal scab patch, flush, splice, lap and formed section repair	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	r. Composite external patch, scarf, stepped and bolted repairs	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

2.1 Extent of damage is correctly assessed to assist in determining repair procedure.
2.2 Appropriate repair scheme is identified in accordance with structural repair manual and/or approved data.
2.3 Specialist advice is obtained in establishing an approved repair scheme where a standard repair scheme cannot be identified or damage is out of limits.
2.4 All materials and equipment required are organised.

Name of Assessed Person: **Registration:**

UNIT MEA339: Inspect, repair and maintain aircraft structures					
3. Repair and Maintain Aircraft Structures.	k. Remove corrosion by chemical and mechanical methods	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	l. Restore protective coatings	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	m. Apply sealants and joining compounds	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	n. Freehand precision hole generation	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

3.1 Structural repairs are performed in accordance with approved repair scheme ensuring that aircraft standard practices are used and process requirements are carried out while observing all relevant WHS requirements, including the use of MSDS and items of PPE.
3.2 Preventative maintenance techniques are employed to preserve the integrity of aircraft structure.
3.3 Work area is cleaned of all waste material or contaminants.
3.4 Required maintenance documentation is completed and processed in accordance with standard enterprise procedures.

Name of Assessed Person: **Registration:**

UNIT MEA339: Inspect, repair and maintain aircraft structures

3. Cont'd **Repair and Maintain Aircraft Structures.**	o. Remove and install structural hardware and fastening devices	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	p. Remove and replace bushes, bearings and bearing surfaces	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	q. Metal scab patch, flush, splice, lap and formed section repair	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	r. Composite external patch, scarf, stepped and bolted repairs	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

3.1 Structural repairs are performed in accordance with approved repair scheme ensuring that aircraft standard practices are used and process requirements are carried out while observing all relevant WHS requirements, including the use of MSDS and items of PPE.
3.2 Preventative maintenance techniques are employed to preserve the integrity of aircraft structure.
3.3 Work area is cleaned of all waste material or contaminants.
3.4 Required maintenance documentation is completed and processed in accordance with standard enterprise procedures.

Name of Assessed Person: **Registration:**

Certification of Underpinning Knowledge and Skills to Perform Inspect, repair and maintain aircraft structures

A person cannot be assessed as competent until it can be demonstrated to the satisfaction of the workplace assessor that the relevant elements of this unit of competency are being achieved under routine supervision across the variables in each group listed in the assessment conditions a) to j) that are 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 Assessment Guidelines).

UNIT MEA339: Inspect, repair and maintain aircraft structures	**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). **304 OR 317**	
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:** _____