Name of Assessed Person: **Registration:**

UNIT MEA228: Test and Troubleshoot Aircraft Instrument Systems and Components						
1. Prepare for Troubleshooting	a. Flight Instruments:– Pitot / Static Systems, Airspeed Indicators (ASIS) Machmeters, Air Data Systems and Instruments, Vertical Speed Indicators (VSIS), Altimeters, Altitude Alerting and Reporting, Turn and Bank, Directional Gyros (DGS), Artificial Horizons (AHS), Angle of Attack, Stall Warning / Avoidance, Ground Proximity Warning System (GPWS), Flight Data Recorders (FDR's)	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	b. Engine Instruments:– Engine Speed, Pressure, Temperature, Performance, Vibration, Torque	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	c. Instrument Navigation Systems: – Inertial Navigation Systems (INS), Inertial Reference Systems, Compasses, Attitude Heading Reference System (AHRS)	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 and modification status, including systems defect reports, where relevant, are used to identify unserviceability.

Name of Assessed Person: **Registration:**

UNIT MEA228:	**Test and Troubleshoot Aircraft Instrument Systems and Components**					
1. Cont'd **Prepare for Troubleshooting**	d. Miscellaneous: – Pressure, Fuel Quantity, Fuel Flow, Position, Voltage, Frequency, Current and Power	No. of Entries	1	2	3	
		Tail / Job No.				
		LAME Sign.				
		Date				
		Simulated	Yes No	Yes No	Yes No	
	e. Display Systems: - Electronic Flight Instrument Systems (EFIS), Engine Indicating and Crew Alerting Systems (EICAS), Flight Management Computer Systems (FMCS), Electronic Centralised Aircraft Monitor (ECAM) and Head-Up Display (HUD). **(may be omitted where not applicable to the enterprise)**	No. of Entries	1	2	3	
		Tail / Job No.				
		LAME Sign.				
		Date				
		Simulated	Yes No	Yes No	Yes No	
	f. Integrated Modular Avionics. **(may be omitted where not 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 Relevant maintenance documentation and modification status, including systems defect reports, where relevant, are used to identify unserviceability.

Name of Assessed Person: **Registration:**

UNIT MEA228: Test and Troubleshoot Aircraft Instrument Systems and Components						
2. **Test / Adjust Instrument and Display Systems**	a. Flight Instruments:– Pitot / Static Systems, Airspeed Indicators (ASIS) Machmeters, Air Data Systems and Instruments, Vertical Speed Indicators (VSIS), Altimeters, Altitude Alerting and Reporting, Turn and Bank, Directional Gyros (DGS), Artificial Horizons (AHS), Angle of Attack, Stall Warning / Avoidance, Ground Proximity Warning System (GPWS), Flight Data Recorders (FDR's)	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	b. Engine Instruments:– Engine Speed, Pressure, Temperature, Performance, Vibration, Torque	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	c. Instrument Navigation Systems: – Inertial Navigation Systems (INS), Inertial Reference Systems, Compasses, Attitude Heading Reference System (AHRS)	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

2.1 The aircraft and systems are correctly prepared, in accordance with specified procedures, for the application of power and system operation.
2.2 Instrument or display system is functionally tested, in accordance with specified procedures, for evidence of serviceability or malfunction while observing all relevant work health and safety (WHS) requirements.
2.3 System calibration or adjustments are performed in accordance with specified procedures.

Name of Assessed Person: **Registration:**

UNIT MEA228:	**Test and Troubleshoot Aircraft Instrument Systems and Components**				
2. Cont'd **Test / Adjust Instrument and Display Systems**	d. Miscellaneous: – Pressure, Fuel Quantity, Fuel Flow, Position, Voltage, Frequency, Current and Power	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	e. Display Systems: - Electronic Flight Instrument Systems (EFIS), Engine Indicating and Crew Alerting Systems (EICAS), Flight Management Computer Systems (FMCS), Electronic Centralised Aircraft Monitor (ECAM) and Head-Up Display (HUD). **(may be omitted where not applicable to the enterprise)**	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	f. Integrated Modular Avionics. **(may be omitted where not 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 The aircraft and systems are correctly prepared, in accordance with specified procedures, for the application of power and system operation.
2.2 Instrument or display system is functionally tested, in accordance with specified procedures, for evidence of serviceability or malfunction while observing all relevant work health and safety (WHS) requirements.
2.3 System calibration or adjustments are performed in accordance with specified procedures.

Name of Assessed Person: **Registration:**

UNIT MEA228: Test and Troubleshoot Aircraft Instrument Systems and Components						
3. Troubleshoot Instrument and Display Systems	a. Flight Instruments:– Pitot / Static Systems, Airspeed Indicators (ASIS) Machmeters, Air Data Systems and Instruments, Vertical Speed Indicators (VSIS), Altimeters, Altitude Alerting and Reporting, Turn and Bank, Directional Gyros (DGS), Artificial Horizons (AHS), Angle of Attack, Stall Warning / Avoidance, Ground Proximity Warning System (GPWS), Flight Data Recorders (FDR's)	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	b. Engine Instruments:– Engine Speed, Pressure, Temperature, Performance, Vibration, Torque	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	c. Instrument Navigation Systems: – Inertial Navigation Systems (INS), Inertial Reference Systems, Compasses, Attitude Heading Reference System (AHRS)	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

3.1 Available information from maintenance documentation and inspection and test results is used, where necessary, to assist in fault determination.
3.2 Maintenance manual fault diagnosis guides and logic processes are used to ensure efficient and accurate ***Troubleshooting*** to line replacement level**.**
3.3 Specialist advice is obtained, where required, to assist with the troubleshooting process.
3.4 Instrument or display system faults are located and the causes of the faults are clearly identified and correctly recorded in maintenance documentation, where required.
3.5 Fault rectification requirements are determined to assist in planning the repair or adjustment.

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

UNIT MEA228:	**Test and Troubleshoot Aircraft Instrument Systems and Components**					
3. Cont'd **Troubleshoot Instrument and Display Systems**	d. Miscellaneous: – Pressure, Fuel Quantity, Fuel Flow, Position, Voltage, Frequency, Current and Power	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	e. Display Systems: - Electronic Flight Instrument Systems (EFIS), Engine Indicating and Crew Alerting Systems (EICAS), Flight Management Computer Systems (FMCS), Electronic Centralised Aircraft Monitor (ECAM) and Head-Up Display (HUD). **(may be omitted where not applicable to the enterprise)**	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	f. Integrated Modular Avionics. **(may be omitted where not 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 Available information from maintenance documentation and inspection and test results is used, where necessary, to assist in fault determination.
3.2 Maintenance manual fault diagnosis guides and logic processes are used to ensure efficient and accurate ***Troubleshooting.***
3.3 Specialist advice is obtained, where required, to assist with the troubleshooting process.
3.4 Instrument or display system faults are located and the causes of the faults are clearly identified and correctly recorded in maintenance documentation, where required.
3.5 Fault rectification requirements are determined to assist in planning the repair or adjustment.

**** 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 Test and Troubleshoot Aircraft Instrument 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 this unit of competency are being achieved under routine supervision on a system and on at least one (1) item from each of groups a) to f), ***(Groups e) and f) may be omitted where they are not applicable to the enterprise)*** in the range statement and at least one major system component for each listed system type. This shall be established via the records in the Journal of Experience or, where appropriate, an equivalent Industry Evidence Guide (for details refer to the Companion Volume Assessment Guidelines).

UNIT MEA228: Test and Troubleshoot Aircraft Instrument 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). **224, 226**	
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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