

SKILLS FRAMEWORK FOR AEROSPACE				
SKILLS MAP - Technician (Avionics)				
Sector	Aerospace			
Track	Aircraft Maintenance			
Occupation	Engineering Technician			
Job Role	Technician (Avionics)			
Job Role Description	<p>The Technician (Avionics) performs maintenance tasks for aircraft avionics systems in accordance with relevant technical manuals and standard operating procedures (SOPs). He/She examines parts for maintenance, repair or replacement and checks serviceability of electrical components. He troubleshoots system failures, takes corrective actions to restore aircraft avionics systems and components to performance requirements and documents all completed tasks.</p> <p>He may be authorised by the organisation to perform quality control functions, including inspection of incoming materials and outgoing serviced items and registration of non-conformances. He complies with airworthiness and legislative requirements, and the organisation's safety, health and quality systems. He supports in implementation of continuous improvement initiatives and lean practices.</p> <p>He works in a hangar or workshop and may be required to work in shifts. He should be systematic and detail-oriented, and able to work independently and in a team to accomplish assigned tasks.</p>			
Critical Work Functions and Key Tasks / Performance Expectations	Critical Work Functions	Key Tasks	Performance Expectations (For legislated / regulated occupations)*	
	Conduct aircraft maintenance, repair and overhaul (MRO)	Perform MRO tasks for aircraft avionics systems in accordance with technical specifications	In accordance with: <ul style="list-style-type: none"> • International Civil Aviation Organisation (ICAO) legislation • Air Navigation Order (ANO) • Singapore Airworthiness Requirements (SAR) • Workplace Safety and Health (WSH) Act • Environmental standards • Aerospace quality management system standards *Performance Expectations are non-exhaustive and subject to prevailing regulations	
		Use hand tools based on work requirements		
		Examine parts for maintenance, repair or replacement		
		Perform troubleshooting of aircraft avionics systems		
		Perform electrical measurements, terminations and connections		
		Check serviceability of wires, cables and basic electrical components		
		Document completed aircraft MRO tasks		
	Administer quality control	Operate measuring tools, gauges and equipment for inspection checks		
		Inspect incoming materials, parts and components		
		Perform functional checks and inspections on avionics systems		
		Perform despatch inspection for serviced items		
		Register any non-conformances in non-conformance log		
	Conform to management system requirements	Follow standard operating procedures (SOPs) in performing aircraft maintenance tasks		
		Comply with legislative requirements and airworthiness standards		
		Conform to environment, safety and health systems, policies and procedures		
		Apply organisational quality and risk management systems		
	Contribute to continuous improvement	Support implementation of continuous improvement initiatives		
		Adopt lean practices for assigned tasks		
		Collect data for operational analytics		
Skills & Competencies	Technical Skills and Competencies			Generic Skills and Competencies
	Aerospace Maintenance Practices Application	Level 2	Problem Solving	Basic
	Aircraft Communication Systems Maintenance	Level 1	Service Orientation	Basic
	Aircraft Electrical Systems Maintenance	Level 1	Decision Making	Basic
	Aircraft Instrument Systems Maintenance	Level 1	Sense-Making	Intermediate
	Aircraft Navigation and Automated Flight Systems Maintenance	Level 1	Teamwork	Intermediate
	Augmented Reality Application	Level 1		
	Aviation Legislation Compliance	Level 1		
	Condition-based Assets Monitoring Management	Level 1		
	Continuous Process Improvement	Level 2		
	Electrical Termination, Connection and Measurement	Level 1		
	Electrical Wiring Interconnection Systems Maintenance	Level 1		
	Engineering Drawing Interpretation and Management	Level 1		
	Human Factors Application and Error Management	Level 2		

	Internet of Things Implementation	Level 2		
	Knowledge Management	Level 1		
	Lean Manufacturing	Level 2		
	Mathematical Concepts Application	Level 2		
	Physics Concepts Application	Level 2		
	Precision Measurement	Level 1		
	Quality System Management	Level 2		
	Robotics and Automation Application	Level 2		
	Visual Testing	Level 1		
	Workplace Safety and Health Framework Development and Implementation	Level 1		
	Workshop Practices Application	Level 1		
Programme Listing	For a list of training programmes available for the Aerospace sector, please visit < https://www.skillsfuture.sg/skills-framework/aero >			

The information contained in this document serves as a guide.