

SKILLS FRAMEWORK FOR AEROSPACE			
SKILLS MAP - Technical Service Engineer (Fleet Management)			
Sector	Aerospace		
Track	Fleet Management		
Occupation	Engineer		
Job Role	Technical Service Engineer (Fleet Management)		
Job Role Description	<p>The Technical Service Engineer (Fleet Management) is responsible for providing timely technical liaison on engineering issues to customers, suppliers and maintenance teams. He/She provides technical support in the areas of structural, avionics, powerplant, system, interiors and defect analysis. He proposes engineering solutions and verifies technical reports and documentation in accordance with regulatory requirements. He is responsible for following up on engineering evaluations and recommendations, and liaising with various stakeholders for further technical advice and resolution as needed. He also participates in aircraft lifecycle planning activities and contributes to asset performance management.</p> <p>He ensures compliance with airworthiness and legislative requirements and organisation's safety, health and quality systems. He identifies opportunities for continuous improvement through data analytics, research and innovation, and implements lean and sustainability practices in fleet management to achieve schedule reliability and cost efficiency, improving aircraft performance and availability. He monitors staff performance and is expected to provide technical guidance to technicians.</p> <p>He is required to work in an office environment and provide troubleshooting assistance on site when necessary. He should possess strong technical know-how, analytical and problem-solving skills, and should be adaptable to changing customer requirements.</p>		
Critical Work Functions and Key Tasks / Performance Expectations	Critical Work Functions	Key Tasks	Performance Expectations (For legislated / regulated occupations)*
	Manage aircraft fleet services	Participate in aircraft lifecycle planning activities	In accordance with: <ul style="list-style-type: none"> International Civil Aviation Organisation (ICAO) legislation Air Navigation Order (ANO) Singapore Airworthiness Requirements (SAR) Relevant foreign aviation legislations Workplace Safety and Health (WSH) Act Environmental standards Aerospace quality management system standards ISO, AN, MS, NAS and MIL standards Air Transport Association of America (ATA) standards Special process standards *Performance Expectations are non-exhaustive and subject to prevailing regulations
		Coordinate aircraft, engine and parts modifications and redeployment for asset management	
		Participate in technical and programme reviews with customers and suppliers	
	Coordinate aircraft, engine and component maintenance	Analyse original equipment manufacturer (OEM) and customer requirements to support maintenance planning	
		Conduct post-maintenance inspections and functional checks for conformance to technical specifications and airworthiness directives	
		Propose engineering solutions to resolve technical issues	
		Verify technical reports and documentation for fleet maintenance	
	Conform to management system requirements	Ensure adherence of fleet management operations to standard operating procedures (SOPs)	
		Ensure compliance with legislative requirements and airworthiness standards	
		Enforce conformance to environment, safety and health systems, policies and procedures	
		Implement organisational quality and risk management systems	
	Contribute to continuous improvement	Implement sustainability practices for fleet management	
		Identify opportunities for continuous improvement projects	
		Implement lean practices for fleet management	
Contribute to research on market trends and technology applications to drive innovation			
Manage people and organisational development	Analyse data for identification of operational and business insights		
	Communicate with team members and customers to ensure smooth day-to-day operations		
	Provide technical guidance to peers and junior team members		
Technical Skills and Competencies		Generic Skills and Competencies	
Aerodynamics Principles Application	Level 3	Sense-Making	Advanced
Aerospace Materials and Hardware Selection	Level 3	Decision Making	Basic
Aviation Legislation Compliance	Level 3	Problem Solving	Intermediate
Business Negotiation	Level 3	Interpersonal Skills	Intermediate
Business Opportunities Development	Level 2	Teamwork	Advanced
Condition-based Assets Monitoring Management	Level 3		
Continuous Process Improvement	Level 3		
Digital Techniques Application	Level 3		
Electrical Fundamentals Application	Level 3		
Electronic Fundamentals Application	Level 3		
Engineering Drawing Interpretation and Management	Level 3		
Engineering Problem Solving	Level 4		
Gas Turbine Engine Principles Application	Level 3		

Skills & Competencies	Helicopter Aerodynamics, Structures and Systems Principles Application	Level 3		
	Human Factors Application and Error Management	Level 3		
	Internet of Things Implementation	Level 3		
	Knowledge Management	Level 3		
	Lean Manufacturing	Level 2		
	Maintenance Coordination	Level 3		
	Mathematical Concepts Application	Level 3		
	Physics Concepts Application	Level 3		
	Piston Aeroplane Aerodynamics, Structures and Systems Principles Application	Level 3		
	Piston Engine Principles Application	Level 3		
	Propeller Principles Application	Level 3		
	Propulsion Principles Application	Level 3		
	Quality System Management	Level 3		
	Robotics and Automation Application	Level 3		
	Turbine Aeroplane Aerodynamics, Structures and Systems Principles Application	Level 3		
	Workplace Safety and Health Framework Development and Implementation	Level 3		
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.