

SKILLS FRAMEWORK FOR AEROSPACE			
SKILLS MAP - Quality Manager (Manufacturing)			
Sector	Aerospace		
Track	Manufacturing		
Occupation	Quality Assurance Manager		
Job Role	Quality Manager (Manufacturing)		
Job Role Description	<p>The Quality Manager (Manufacturing) approves the organisation's quality management system (QMS) including quality assurance, quality control and inspection standards for manufacturing. He/She is accountable for internal and external quality audits, impact analyses and quality investigations to drive conformance of manufacturing tasks to procedures and standards prescribed by original equipment manufacturers (OEM), regulatory authorities and own organisation. He provides technical expertise for corrective and preventive actions for quality issues. He endorses the certificate of conformance (CoC) for first article inspection (FAI) of aircraft components and parts. He approves updates to the technical library and sanctions alternative processes, tools and inspection technologies.</p> <p>He manages compliance with airworthiness and legislative requirements, and contributes to development of the organisation's standard operating procedures (SOPs), management systems, lean and sustainability practices for manufacturing, and data analytics plans for strategic decision-making. He drives team performance to achieve business key performance indicators (KPIs) and leads talent recruitment and development plans.</p> <p>He possesses a quality, safety and risk compliance mindset, and is able to consider issues from multiple perspectives to make well-informed and effective decisions for the organisation.</p>		
Critical Work Functions and Key Tasks / Performance Expectations	Critical Work Functions	Key Tasks	Performance Expectations (For legislated / regulated occupations)*
	Contribute to the manufacturing of components and end products	Provide subject matter expertise in implementing corrective and preventive actions for quality issues	<ul style="list-style-type: none"> 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 <p>*Performance Expectations are non-exhaustive and subject to prevailing regulations</p>
		Review technical library with reference to the regulatory requirements	
	Administer quality control	Approve quality assurance, quality control and inspection standards for the organisation	
		Endorse certificate of conformance (CoC) for first article inspection (FAI)	
		Manage internal, external and vendor audits to ensure compliance with customer requirements and organisation's procedures and standards	
		Authorise certification of aircraft components for release to service	
	Conform to management system requirements	Sanction alternative processes, tools and new inspection technologies	
		Establish new and revised standard operating procedures (SOPs) for quality operations	
		Manage compliance with legislative requirements and airworthiness standards	
		Enhance environment, safety and health systems, policies and procedures	
	Contribute to continuous improvement	Review organisational quality and risk management systems for improvements	
		Develop sustainability practices for manufacturing	
		Lead cross-functional teams in continuous improvement projects	
		Develop lean practices for manufacturing	
Manage people and organisational development	Lead research on market trends and technology applications to drive innovation		
	Develop data analytics plans for strategic decision-making		
	Implement functional plans to achieve business goals		
	Manage adherence to operating budgets for manufacturing		
	Collaborate with internal and external stakeholders to ensure smooth business operations		
	Manage staff performance to achieve business key performance indicators (KPIs)		
	Lead implementation of talent recruitment and development plans		
Technical Skills and Competencies		Generic Skills and Competencies	
Aerodynamics Principles Application	Level 4	Service Orientation	Advanced
Aerospace Materials and Hardware Selection	Level 4	Decision Making	Advanced
Applied Research and Development Management	Level 4	Problem Solving	Advanced
Artificial Intelligence Application	Level 4	Leadership	Advanced
Audit and Review Management	Level 4	Communication	Advanced
Aviation Legislation Compliance	Level 4		
Big Data Analytics	Level 4		
Budgeting	Level 4		
Business Continuity Planning	Level 4		
Business Negotiation	Level 5		
Business Performance Management	Level 4		
Carbon Footprint Management	Level 5		

Skills & Competencies	Change Management	Level 4		
	Condition-based Assets Monitoring Management	Level 5		
	Continuous Process Improvement	Level 4		
	Digital Techniques Application	Level 4		
	Electrical Fundamentals Application	Level 4		
	Electronic Fundamentals Application	Level 4		
	Engineering Drawing Interpretation and Management	Level 4		
	Engineering Problem Solving	Level 5		
	Gas Turbine Engine Principles Application	Level 4		
	Geometric Dimensioning and Tolerancing	Level 4		
	Green Manufacturing Design and Implementation	Level 4		
	Helicopter Aerodynamics, Structures and Systems Principles Application	Level 4		
	Human Factors Application and Error Management	Level 3		
	Image Processing and Industrial Vision Inspection	Level 4		
	Innovation Management	Level 4		
	Internet of Things Implementation	Level 4		
	Knowledge Management	Level 4		
	Lean Manufacturing	Level 4		
	Piston Aeroplane Aerodynamics, Structures and Systems Principles Application	Level 4		
	Piston Engine Principles Application	Level 4		
	Precision Measurement	Level 5		
	Project Management	Level 4		
	Propeller Principles Application	Level 4		
	Propulsion Principles Application	Level 4		
	Quality System Management	Level 4		
	Risk Compliance and Governance	Level 4		
	Robotics and Automation Application	Level 4		
	Stakeholder Management	Level 4		
	Strategy Planning	Level 4		
	Turbine Aeroplane Aerodynamics, Structures and Systems Principles Application	Level 4		
Workplace Safety and Health Framework Development and Implementation	Level 4			
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