Australian Government

Department of Education, Employment and Workplace Relations

MEA40910 Certificate IV in Aircraft Surface Finishing

Revision Number: 1

MEA40910 Certificate IV in Aircraft Surface Finishing

Modification History

Not applicable.

Description

The qualification may apply to employees of aircraft repair and overhaul organisations or members of the Australian Defence Force engaged in either the supervision of aircraft surface finishing activities or working in an environment where a significant degree of multi-skilling is required in component removal and installation and/or the performance of a specified range of repair tasks.
The qualification consists of:

- Common and imported units that apply to all Aeroskills specialist streams at Certificate III and IV levels
- Mandatory surface finishing technical stream and imported units that also apply at Certificate III level
- Elective units to be selected according to employment need from listed common units, mechanical and structures technical stream units and an imported unit.

The qualification also provides credits towards the MEA50410 Diploma of Aviation Maintenance Management (Mechanical) and the MEA60110 Advanced Diploma of Aviation Maintenance Management (Mechanical). A limited number of credits are also provided towards the MEA50210 Diploma of Aeroskills (Mechanical).

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
Employability Skill	**Industry/enterprise requirements for this qualification include**:
Communication	• Understanding work and organisational instructions • Understanding input from specialist personnel and technical representatives • Negotiating with other team members or supervisors regarding timing and progress of work activities and access to sections of the aircraft, or to equipment • Understanding and interpreting regulations, procedures, instructions and maintenance publications • Completing maintenance documentation • Reading drawings relating to surface finishing schemes and maintenance activities • Using computers to obtain maintenance data and complete documentation • Networking with other team members regarding work planning and execution
Teamwork	• Performing tasks as an individual while being responsive to supervisors and allowing for relevant human factors • Working effectively with others who may be of different ages, gender, race, religion and political persuasion • Assisting team members with task definition and providing advice on work processes and troubleshooting • Providing leadership and development of team commitment and dynamics • Monitoring and assessing team performance and providing mentoring and performance feedback • Gaining the trust and confidence of team members and resolving conflict within the team • Providing team members with the opportunity for ongoing competency development
Problem-solving	• Identifying problems in a timely manner and applying a range of strategies to develop practical solutions to problems not fully covered by maintenance data • Proposing solutions to problems as modifications or a amendments to specified maintenance processes • Constantly reviewing problem solving skills and ability to effectively apply competencies to solve individual and team-related problems within the limits permitted by regulatory and organisational guidelines

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• Responding to emergencies or accidents in accordance with regulatory and organisational requirements • Using mathematical techniques to apply finishing schemes and to convert values between systems of measurement
Initiative and enterprise	• Adapting to new situations that arise as a consequence of regulatory changes, revised maintenance data, practices and procedures • Varying work practices and behaviour as a result of performance feedback from peers and supervisors • Evaluating ideas to ensure that technical and regulatory aspects have been fully covered before proposing action that may result in modifications or changes to work processes • Applying human factors to avoid maintenance errors and maintain quality standards • Identifying and analysing alternative approaches to managing workplace issues and problems • Adapting competencies to the performance of a wide range of maintenance tasks • Contributing to a process of continuous improvement and a willingness to support and participate in the effective introduction of new work practices
Planning and organising	• Clarifying task objectives and required outcomes through discussion with supervisors and other team members • Monitoring the time taken to complete tasks against team requirements or targets provided by supervisors • Collecting, analysing and organising information relating to assigned tasks and confirming the purpose and required work outcomes • Identifying the extent of impact on assigned work of changes in procedures, work instructions or regulatory requirements • Allocating personnel and resources to tasks
Self-management	• Accepting responsibility for managing individual workload to meet target completion times or fit in with team milestones • Assessing personal knowledge and skills with the aid of the self-assessment work sheets in the Log of Industrial Experience and Achievement and preparing for competency assessments • Actively seeking opportunities to develop competencies and to apply them across a range of tasks and monitoring performance using indicators such as the extent of oversight exercised by supervisors • Identifying career paths and training opportunities that will assist in attaining career goals

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
Learning	• Taking advantage of learning opportunities that arise through training courses provided by the organisation or external providers and through mentoring and on-job training • Adapting competencies to accommodate new ideas and techniques • Using feedback from supervisors and peers to identify ways in which competence can be improved • Mentoring new or more junior personnel • Interpreting units of competency and applying them to attainment of identified career goals
Technology	• Operating PPE and surface finishing equipment and ground support equipment and troubleshooting equipment faults • Testing the performance and calibration of surface finishing equipment • Storing and caring for surface finishing equipment, PPE and support equipment • Amending various forms of maintenance data • Using computers and microfiche to obtain maintenance data and using computers to complete documentation

Packaging Rules

Packaging Rules

To be awarded Certificate IV in Aircraft Surface Finishing, competency must be demonstrated in 21 units of competency. These units must be chosen as specified under the following conditions:

- 17 Core units consisting of common, technical stream and imported units
- 4 Elective units chosen from the technical stream and imported units in Group A

Core Units

Unit Code	Unit Title	Prerequisite
MEA101B	Interpret occupational health and safety practices in aviation maintenance	Nil
MEA103B	Plan and organise aviation maintenance	MEA101B, 105B, 107B, 108B

Unit Code	Unit Title	Prerequisite
	work activities	
MEA105B	Apply quality standards applicable to aviation maintenance processes	MEA101B, 107B
MEA107B	Interpret and use aviation maintenance industry manuals and specifications	Nil
MEA108B	Complete aviation maintenance industry documentation	MEA105B
MEA109B	Perform basic hand skills, standard trade practices and fundamentals in aviation maintenance	MEA105B, 108B
MEA118A	Conduct self in the aviation maintenance environment	Nil
MSAENV472B	Implement and monitor environmentally sustainable work practices	Nil
MEA411A	Remove surface coatings from aircraft or aircraft components	MEA101B, 103B, 105B, 107B, 108B, 109B
MEA412A	Pre-treat aluminium alloy surfaces	MEA101B, 103B, 105B, 107B, 108B, 109B
MEA413A	Seal aircraft and aircraft component structural seams	MEA101B, 103B, 105B, 107B, 108B, 109B
MEA414A	Remove light	MEA101B, 103B, 105B, 107B,

Unit Code	Unit Title	Prerequisite
	corrosion	108B, 109B
AURV229749A	Prepare spray painting materials and equipment	
AURV329603DA	Apply air dry and polyurethane enamel refinishing materials	
MEA415A	Paint aircraft surfaces	MEA101B, 103B, 105B, 107B, 108B, 109B
MEA416A	Apply aircraft identification markings, graphics and decals	MEA101B, 103B, 105B, 107B, 108B, 109B
MEA417A	Apply specialty coatings to aircraft	MEA101B, 103B, 105B, 107B, 108B, 109B

Elective Units Group A

At least four of the following units selected in accordance with the unit selection guidelines in column four.

Unit Code	Unit Title	Prerequisite	Unit selection guidelines
MEA113B	Supervise civil aircraft maintenance activities and manage human resources in the workplace	Completion of applicable Certificate IV units	
MEA116B	Apply occupational health and safety procedures at supervisor level in aviation maintenance		Must be taken if MEA113B or 140A selected
MEA140A	Supervise maintenance teams and perform maintenance quality inspections (this unit applicable to the ADF regulatory environment)	Appointment as an Independent Inspector or Maintenance Quality Inspector	
MEA240B	Use electrical test equipment to perform basic electrical tests		

Unit Code	Unit Title	Prerequisite	Unit selection guidelines
MEA302C	Remove and install aircraft hydro-mechanical and landing gear system components	MEA101B, 103B, 105B, 107B, 108B, 109B	Take with MEA305C
MEA305C	Remove and install aircraft fixed wing flight control system components	MEA302B	
MEA405B	Repair/modify aircraft composite material structure/components	MEA401B	
MEM08013B	Prepare surfaces by abrasive blasting (advanced)		