



Australian Government

MEALSU0006 Maintain, pack and fit survival inflatable buoyancy vests

Release: 1

MEALSU0006 Maintain, pack and fit survival inflatable buoyancy vests

Modification History

Release 1. Application changed. Elements and Performance Criteria changed. Foundation Skills made explicit. Range of Conditions removed, and relevant information moved to Assessment Requirements. Assessment Requirements clarified. Supersedes and is equivalent to MEA507 Maintain, pack and fit survival inflatable buoyancy vests.

Application

This unit describes the skills and knowledge required to maintain, pack and fit survival inflatable buoyancy vests. Maintenance includes inspecting, testing, isolating faults, replacing components and cleaning prior to packing, during the performance of scheduled or unscheduled maintenance. Work may be performed individually or as part of a team.

The unit does not include repairing buoyancy vests.

The unit is used in workplaces that operate under the airworthiness regulatory systems of the Civil Aviation Safety Authority (CASA) and the Defence Aviation Safety Authority (DASA).

Any other relevant legislation, industry standards and codes of practice within Australia must be applied.

Pre-requisite Unit

MEA107 Interpret and use aviation maintenance industry manuals and specifications

MEA118 Conduct self in the aviation maintenance environment

MEA154 Apply work health and safety practices in aviation maintenance

MEA155 Plan and organise aviation maintenance work activities

MEA156 Apply quality standards during aviation maintenance activities

MEA157 Complete aviation maintenance industry documentation

MEA158 Perform basic hand skills, standard trade practices and fundamentals in aviation maintenance

Competency Field

Aircraft life support

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Maintain survival inflatable buoyancy vests	1.1 Inspect survival inflatable buoyancy vests and associated ancillary equipment for serviceability in accordance with standard procedures 1.2 Report identified faults beyond own authority to rectify to supervisor and quarantine faulty survival inflatable buoyancy vest or ancillary equipment 1.3 Prepare vest for maintenance and replace unserviceable parts of survival inflatable buoyancy vest or ancillary equipment in accordance with standard procedures while observing all relevant work health and safety (WHS) requirements, including the use of material safety data sheets (MSDSs) and items of personal protective equipment (PPE) 1.4 Test survival inflatable buoyancy vest for serviceability in accordance with standard procedures and manufacturer's specifications 1.5 Clean survival inflatable buoyancy vest in accordance with standard procedures 1.6 Present survival inflatable buoyancy vest for inspection by supervisor in accordance with standard procedures 1.7 Complete and process maintenance documentation in accordance with standard enterprise procedures 1.8 Clean and perform required maintenance on equipment and tools used, and dispose safely of hazardous materials, in accordance with standard enterprise procedures
2. Pack survival inflatable buoyancy vests	2.1 Pack survival inflatable buoyancy vest for use in accordance with standard procedures 2.2 Pack ancillary equipment for use in accordance with standard procedures 2.3 Present survival inflatable buoyancy vest for inspection by supervisor in accordance with standard enterprise procedures 2.4 Complete and process packing documentation in accordance with standard enterprise procedures
3. Fit survival inflatable buoyancy vests	3.1 Explain fitting process to participant to achieve optimal fit through relevant feedback 3.2 Measure participant to select appropriate size survival inflatable buoyancy vest 3.3 Adjust survival inflatable buoyancy vest to optimise fit 3.4 Verify survival inflatable buoyancy vest fit participant feedback and

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
	supervisor approval 3.5 Deliver briefing to personnel in relation to operating, donning and doffing and fitting survival inflatable buoyancy vests 3.6 Complete and process fitting documentation in accordance with standard enterprise procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

- Reading skills to interpret a wide range of procedures and manuals.
- Numeracy skills to interpret technical information including drawings.
- Writing and oral communication skills to explain the fitting process and complete documentation.

Other foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEA507 Maintain, pack and fit survival inflatable buoyancy vests.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ce216c9c-04d5-4b3b-9bcf-4e81d0950371>

Assessment Requirements for MEALSU0006 Maintain, pack and fit survival inflatable buoyancy vests

Modification History

Release 1. Application changed. Elements and Performance Criteria changed. Foundation Skills made explicit. Range of Conditions removed, and relevant information moved to Assessment Requirements. Assessment Requirements clarified. Supersedes and is equivalent to MEA507 Maintain, pack and fit survival inflatable buoyancy vests

Performance Evidence

There must be evidence the candidate has completed all the tasks outlined in the elements and performance criteria of this unit, and demonstrated the ability to:

- maintain, pack and fit survival inflatable buoyancy vests during scheduled or unscheduled maintenance using applicable testing and measuring equipment, tools and maintenance documentation on the following range of tasks:
 - complete a minimum of three inflation tests without the need for corrective action by the supervisor
 - correctly pack a minimum of three survival inflatable buoyancy vests without the need for corrective action by the supervisor
 - correctly fit survival inflatable buoyancy vests to a minimum of three different people without supervisor intervention, showing adjustment techniques for each of:
 - breast height
 - chest
 - waist
 - recognise a range of faults and their serviceability limits (faults must include incorrect manufacture and verifying expiry date of inflatable buoyancy vest and ancillary equipment)
 - soldering battery terminals on emergency locator transmitters
- perform testing for the vests being worked on, covering each of:
 - checking ancillary equipment (e.g. electronic locating devices and survival/location aids)
 - cylinder weight tolerance
 - inflation and deflation tests
 - light and battery test
- handle, store and organise transport of equipment as part of packing procedure
- inflate and deflate survival inflatable devices for maintenance
- use applicable testing and measuring equipment, tools and maintenance documentation
- while adjusting vest-fitting, tie each type of knot from the list below:
 - reef knot
 - bowline

- thumb knot
- half hitch
- use hand sewing during parts replacement
- apply procedures, cleanliness requirements and safety precautions at all times and as relevant to the tasks above.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- relevant enterprise procedures and maintenance publications, including:
 - equipment manufacturers' specifications and procedures
 - industry practices
 - safety manuals
 - maintenance schedules
 - work instructions
 - maintenance organisation manuals
 - standing instructions
- Commonwealth, state and territory work health and safety (WHS) legislation, regulations, codes and procedures for survival inflatable buoyancy vest maintenance, including selecting and using personal protective equipment (PPE)
- Australian Standards for oxygen masks
- relevant Defence Aviation Safety Authority (DASA) and Civil Aviation Safety Authority (CASA) regulations and instructions
- how to obtain and use material safety data sheets (MSDSs)
- relevant safety precautions including storage and handling of compressed gas cylinders and survival and distress pyrotechnics
- critical nature of maintaining and packing survival inflation devices, i.e. risk of death
- search and rescue procedures
- priorities of survival and how they relate to survival inflatable buoyancy vests and associated ancillary equipment
- electrical principles
- approved cleaning methods for aviation life support equipment
- environmental conditions that may affect survival inflation devices, including ultraviolet (UV) degradation
- typical faults that may affect survival inflation devices. Including:
 - abrasion
 - broken stitching
 - contamination
 - corrosion of metal parts
 - damaged hardware
 - delamination/porosity
 - expired components or equipment

- faulty valves
- frayed lines
- holes
- incorrect manufacture
- lifting tapes
- ultraviolet (UV) degradation
- handling, storage and transit procedures relating to survival inflation devices
- survival inflation devices and methods of operation
- operation of emergency locator beacons and emergency locator transmitters
- principles of operation of inflation mechanisms
- components of a survival inflation device and their function, including:
 - buoyancy chambers
 - cylinders
 - hardware
 - operating head
 - valves
 - valise
 - zippers
- repair limitations for survival inflatable buoyancy vests
- modification requirements for survival inflatable buoyancy vests
- requirements for a survival inflation device servicing facility
- packing tools and measuring equipment required to pack survival inflatable devices
- use of survival inflatable buoyancy vests, including associated ancillary equipment.
- types of ancillary equipment and their function, including:
 - electronic locating devices
 - lighting devices
 - pyrotechnics
 - rations
 - survival/location aids
 - water.
 -

Assessment Conditions

The following conditions of assessment represent the requirements of the regulators (DASA and CASA) and maintenance stakeholders and must be rigorously observed.

Skills must have been demonstrated under routine supervision in the workplace or in a simulated environment that reflects workplace conditions and contingencies encountered in maintaining, packing and fitting survival inflatable buoyancy vests. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:

- workplace procedures, manufacturing specifications, codes, standards, manuals, and reference materials relevant to maintaining, packing and fitting survival inflatable buoyancy vests
- materials, tools and equipment specified in the maintenance manuals and applicable procedures
- general- and special-purpose tools and items of ground support equipment.

Evidence of tasks demonstrating competency must be recorded in a log of industrial experience and achievement.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ce216c9c-04d5-4b3b-9bcf-4e81d0950371>