



Australian Government

Department of Education, Employment and Workplace Relations

DEFLS007B Maintain, pack and fit survival inflatable buoyancy vests

Release: 1

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Modification History

Not applicable.

Unit Descriptor

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This unit covers the competency required to maintain, pack and fit survival inflatable buoyancy vests.

This Unit of Competency does not include survival inflatable life rafts or escape slides.

Maintaining survival inflatable buoyancy vests includes inspecting, testing, isolating faults, replacing and cleaning prior to packing.

This Unit of Competency does not include repairing, which is completed by a higher maintenance authority.

This Unit of Competency applies to a person packing a survival inflatable buoyancy vest and requires the survival inflatable buoyancy vest to be inspected by a supervisor (who is competent in this Unit of Competency).

Application of the Unit

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The application of this unit in the workplace - the environments, complexities and situations involved - will be written during Phase II of the Review of the PUA00 Public Safety Training Package.

This text will be useful for the purposes of job descriptions, recruitment advice or job analysis; where possible, it will not be too job specific to allow other industries to import it into other Training Packages, where feasible.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite Unit/s Nil

Employability Skills Information

Employability Skills This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a Unit of Competency.

Performance Criteria describe the required performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the Required Skills and Knowledge and/or the Range Statement. Assessment of performance is to be consistent with the Evidence Guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Maintain survival inflatable buoyancy vests	1.1 Survival inflatable buoyancy vest and associated ancillary equipment are inspected for serviceability in accordance with standard procedures 1.2 Identified faults beyond own authority to rectify are reported to supervisor and faulty survival inflatable buoyancy vest and/or ancillary equipment is quarantined 1.3 Unserviceable parts of the survival inflatable buoyancy vest and/or ancillary equipment are replaced in accordance with standard procedures 1.4 Survival inflatable buoyancy vest is tested for serviceability in accordance with standard procedures and manufacturers' specifications 1.5 Survival inflatable buoyancy vest is cleaned in accordance with standard procedures 1.6 Survival inflatable buoyancy vest is presented for inspection by supervisor and work is not progressed until supervisor has completed inspections in accordance with standard procedures 1.7 Relevant documentation is completed in accordance with standard procedures
2. Pack survival inflatable buoyancy vests	2.1 Survival inflatable buoyancy vest is packed for use in accordance with standard procedures 2.2 Ancillary equipment is packed for use in accordance with standard procedures 2.3 Packed survival inflatable buoyancy vest and ancillary equipment are presented for inspection by supervisor and work is not progressed until the supervisor has completed inspections in accordance with standard procedures 2.4 Relevant documentation is completed in accordance with standard procedures
3. Fit survival inflatable buoyancy vests	3.1 Fitting process is explained to the participant so that optimal fit can be achieved through relevant feedback 3.2 Participant is measured to select appropriate size survival inflatable buoyancy vest 3.3 Survival inflatable buoyancy vest is adjusted to optimise fit

3.4 Survival inflatable buoyancy vest fit is verified through participant feedback and supervisor approval

3.5 Relevant documentation is completed in accordance with standard procedures

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required Skills

- ability to relate to people from a range of social, cultural and ethnic backgrounds, and physical and mental abilities
- deliver briefings to personnel in relation to operating, donning/doffing and fitting of survival inflatable buoyancy vests
- handle, store and organise transport of equipment
- inflate/deflate survival inflatable devices for maintenance
- information technology skills to access and input to documentation
- liaise with outside agencies relating to maintenance activities
- literacy skills for comprehending and interpreting documentation including:
 - aircraft documentation
 - maintenance documentation
 - survival and distress pyrotechnic documentation
 - maintenance and servicing schedules
 - flying schedules
 - technical publications
 - technical drawings
 - Material Safety Data Sheets (MSDS)
- operate and maintain personal protective equipment
- problem solving skills for a limited range of differing procedural circumstances
- raise and complete maintenance documentation
- solder battery terminals on emergency locator transmitters
- tie various types of knots including:
 - reef knot
 - bowline
 - thumb knot
 - half hitch
- use hand sewing techniques
- use relevant hand and power tools
- use testing and measuring equipment in accordance with approved methods
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity

Required Knowledge

- approved cleaning methods for aviation life support equipment
- components of a survival inflation device and their function
- critical nature of maintaining and packing survival inflation devices i.e. risk of death

REQUIRED SKILLS AND KNOWLEDGE

- different aviation trades and how they relate to each other
- environmental conditions that may affect survival inflation devices
- handling, storage and transit procedures relating to survival inflation devices
- legal responsibilities
- methods of operations for a survival inflation device
- modification requirements for survival inflatable buoyancy vests
- operation of emergency locator beacons and emergency locator transmitters
- packing tools and measuring equipment required to pack survival inflation devices
- principles of operation for inflation mechanisms
- priorities of survival and how they relate to survival inflatable buoyancy vests and associated ancillary equipment
- procedures in relation to organisation and aviation industry
- quality systems and standards
- reading and interpreting specifications
- relevant legislation and procedures in relation to aviation industry
- relevant OH&S regulations/requirements, precautions, equipment, material and personal safety requirements
- relevant safety precautions including storage and handling of compressed gas cylinders and survival and distress pyrotechnics
- repair limitations for survival inflatable buoyancy vests
- requirements for a survival inflation device servicing facility
- search and rescue procedures
- tool control procedures
- types of corrosion and contamination that may affect survival inflation devices
- ultraviolet degradation
- use of aviation industry documentation
- use of maintenance documentation
- use of survival inflatable buoyancy vests and associated ancillary equipment

Evidence Guide

EVIDENCE GUIDE

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Critical aspects for assessment and evidence required to demonstrate competency in this unit

Assessment must confirm the ability to:

- test that cylinder weight is within tolerances
- complete a minimum of three inflation tests with no corrective action required by supervisor
- correctly pack a minimum of three survival inflatable buoyancy vests with no corrective action required by supervisor
- correctly fit survival inflatable buoyancy vests to a minimum of three different people with no corrective action required by supervisor
- recognise limit of own authority
- recognise a range of faults and their serviceability limits.

The range of faults must include:

- incorrect manufacture
- verifying expiry date of inflatable buoyancy vest and ancillary equipment.

Consistency in performance

Competency should be demonstrated over time with a range of survival inflatable buoyancy vest packing and maintenance activities.

Context of and specific resources for assessment

Context of assessment

Competency should be assessed in the workplace or in a simulated workplace environment.

Specific resources for assessment

Access to an environmental controlled facility, survival inflatable buoyancy vest, three live participants, tools and equipment for packing and maintaining buoyancy vests.

Range Statement

RANGE STATEMENT

The Range Statement relates to the Unit of Competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised*** wording in the Performance Criteria is detailed below.

Survival inflatable buoyancy vests may include

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Ancillary equipment may include

Electronic locating devices

Lighting devices

Pyrotechnics

Rations

Survival/location aids

Water

Standard procedures may include

Australian Standards

Equipment manufacturers' specifications and procedures

Industry practices

Maintenance schedules

Occupational health and safety requirements

Organisational instructions/journals

Regulatory requirements

Faults may include

Abrasion

Broken stitching

Contamination

Corrosion (e.g. fittings)

Damaged hardware

Delamination/porosity

Expired components or equipment

Holes

Faulty valves

Frayed lines

Incorrect manufacture

Lifting tapes

RANGE STATEMENT

	Ultraviolet degradation
Parts may include	Buoyancy chambers Cylinders Hardware Operating head Valise Valves Zippers
Testing may include	Checking ancillary equipment (e.g. electronic locating devices, survival/location aids) Cylinder weight tolerance Inflation tests
Adjustment to vest may include	Breast height Chest Waist

Unit Sector(s)

Not applicable.

Corequisite Unit/s

Co-requisite Unit/s	Nil
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