



Australian Government

PUASAR002 Undertake swiftwater and floodwater rescue and recovery

Release: 1

PUASAR002 Undertake swiftwater and floodwater rescue and recovery

Modification History

Release 1. This is the first release of this unit of competency in the PUA Public Safety Training Package.

Application

This unit of competency involves the skills and knowledge required to undertake swiftwater and floodwater rescues and recoveries as a member of a specialist team.

Swiftwater and floodwater recovery involves the rescue of persons from fast moving water in areas such as stormwater drains, canals, rivers and/or creeks. It involves the use of a variety of rescue techniques with suitably equipped and responders entering the water.

The unit applies to personnel who are skilled operators who may be required to use a range of rescue techniques within a swiftwater and floodwater environment. They may provide technical advice and support to a team and may adopt a leadership role during a rescue. A person operating at this level will not be performing under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

PUASAR001 Perform land based swiftwater and floodwater rescue and recovery

Competency Field

Search and Rescue

Unit Sector

Not applicable

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- | | |
|---|---|
| 1 Prepare and respond to the rescue | 1.1 Operation and task information is obtained from communications centre or briefing from supervisor |
| | 1.2 Rescue equipment and/or resources are identified and selected based on incident information received |
| | 1.3 Personal protective clothing and equipment is selected based on the nature of the rescue operation |
| | 1.4 Any further details on the nature of the rescue received en route is assessed with rescue team members |
| | 1.5 Anticipated situational and environmental hazards are discussed with rescue team members while on approach and are used as the basis for the development of a rescue plan |
| 2 Assess the rescue scene | 2.1 Information is collected from relevant persons at scene and observations are made to determine the location, number, condition and position of trapped casualties |
| | 2.2 Changes in casualty condition and position are monitored and impact on rescue is assessed |
| | 2.3 Risk assessment on situational and environmental hazards is conducted and control measures to ensure safety of self and others are developed |
| | 2.4 Communication with team members is maintained during rescue |
| | 2.5 Requests for additional personnel and/or specialist equipment based on risk assessment is reported to supervisor, in accordance with organisational procedures and the recognised chain of command |
| | 2.6 Personal capabilities and limitations of self and other team members are identified and referred to supervisor |
| 3 Develop primary and secondary rescue plans | 3.1 Rescue and recovery techniques suitable to trapped casualty and vehicles in swiftwater and floodwater conditions are identified |
| | 3.2 Primary and secondary rescue plans are developed based on risk assessment, identification of appropriate rescue and recovery techniques and in consultation with team members and other organisations/agencies |
| | 3.3 Equipment and resources are selected to perform rescues |

- and recoveries, as identified in the rescue plan
- 3.4** Roles and equipment are allocated to other team members, in accordance with organisational procedures
 - 3.5** In conjunction with the primary plan deployment of secondary rescue plan downstream is implemented
- 4 Use rope and mechanical advantage systems**
- 4.1** Rescue and recovery situations requiring the use of rope and mechanical advantage systems are identified
 - 4.2** Suitable rope and mechanical advantage systems are established to perform rescue and recovery
 - 4.3** Rope and mechanical advantage system equipment is used, in accordance with organisational policies and procedures and manufacturers' recommendations, to ensure design limits are not exceeded
 - 4.4** Rope and mechanical advantage system is modified to increase efficiency, where necessary, while maintaining communication with team members
- 5 Gain access and perform casualty rescue**
- 5.1** Defensive and aggressive swimming techniques are used to gain access to casualty when water entry is required, in accordance with organisational procedures
 - 5.2** Isolation techniques are used to stabilise positioning of casualty and vehicle to assist in extrication
 - 5.3** Craft is tethered to perform a rescue or recovery, as required, in accordance with the rescue plan
 - 5.4** Rescue plan is implemented and trapped casualty is extricated or secured using appropriate rescue and recovery techniques and equipment
- 6 Remove casualty from swiftwater and floodwater**
- 6.1** Casualty is retrieved from swiftwater and floodwater using techniques for removal, in accordance with organisational policies and procedures
 - 6.2** Casualty is packaged and handled, in accordance with organisational emergency care procedures or as directed by first aid or medical personnel
- 7 Conclude swiftwater and floodwater rescue**
- 7.1** Prior to leaving the scene equipment is recovered, cleaned and maintained, in accordance with organisational procedures and manufacturers' guidelines
 - 7.2** During cleaning of rescue equipment and personal

protective equipment, hygiene precautions are followed, in accordance with organisational procedures

- 7.3 Signs and symptoms of operational stress in self and others is recognised and reported to appropriate personnel
- 7.4 Operational debriefing is participated in or conducted, in accordance with organisational procedures
- 7.5 Documentation is completed, in accordance with organisational procedures

Foundation Skills

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

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to PUASAR034 Undertake swiftwater and floodwater rescue and recovery.

Links

PUA Training Package Companion Volume Implementation Guide is found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=3eca5672-6d5a-410b-8942-810d0ba05bbf>

Assessment Requirements for PUASAR002 Undertake swiftwater and floodwater rescue and recovery

Modification History

Release 1. This is the first release of this unit of competency in the PUA Public Safety Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements and performance criteria on at least one occasion and includes

- anticipating, identifying and mitigating hazards and risks
- applying basic first aid
- applying wading, aggressive, manoeuvring and defensive swimming techniques to escape hazards
- applying Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) requirements
- assessing a rescue scene
- completing documentation
- concluding swiftwater and floodwater rescue
- constructing and using rope and mechanical advantage systems
- developing primary and secondary rescue plans
- extricating a casualty from entrapment including alternate entries, controlled release or immediate release
- gaining access and performing casualty rescue
- handling and packaging casualties
- handling and tethering non-powered boat/craft safely
- identifying and selecting equipment and resources based on incident information
- identifying changes in water flow, currents, eddies and other hydrological features, and operating in a range of conditions
- identifying suitable rescue and recovery techniques
- implementing isolation techniques
- implementing organisational policies and procedures relating to swiftwater and floodwater rescues and recoveries
- implementing search techniques and management procedures using wading techniques
- informing appropriate personnel of progress
- interacting with other members of the rescue team and casualties
- packaging and handling a casualty
- preparing and responding to swiftwater and floodwater rescues
- recognising and identifying changes in casualty condition and position
- removing casualty from swiftwater and floodwater using recognised extrication techniques,

- including manual handling, stretcher and packaging
- selecting and using personal protective clothing and equipment based on nature of rescue operation
- selecting swiftwater and floodwater rescue and recovery equipment and resources
- swimming aggressively and defensively
- taking part in operational briefings and contributing to debriefings
- tethering craft
- using communication techniques including hand signals, radio, whistle, talking and yelling
- using knots, anchors and mechanical advantage systems to conduct rescues or recoveries
- using removal techniques including manual carry and stretcher
- utilising rescue techniques for entrapment and/or vehicle rescue from swiftwater or floodwater
- working as part of a team and supporting others in a rescue operation

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements and performance criteria and includes knowledge of

- behaviour and vehicles trapped in swiftwater and floodwater
- characteristics and limitations of rescue and recovery equipment including its care and maintenance
- communication methods and techniques
- environmental considerations based on whether operating in an urban or rural context
- facility emergency response plan
- first aid or medical personnel on scene
- hazards and risks associated with rescues and recoveries from swiftwater and floodwater
- isolation techniques
- mechanical advantage systems
- operational briefing and debriefing processes
- organisational documentation, policies and procedures
- other organisations, agencies and personnel
- personal protective clothing and equipment
- principles of risk assessment including hierarchy of control and risk control methods
- psychological considerations of swiftwater and floodwater rescue and the potential need for support resources for the rescuer, casualty and onlookers
- rescue and recovery techniques
- rescue equipment and resources
- roles and responsibilities of team members
- signs and symptoms of operational stress
- situational and environmental hazards
- suitability and operation of water based crafts
- swiftwater and floodwater hydrology and impact of weather on water flow

- types of entrapment
- water contaminants and their potential impact on rescuer and casualties
- Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) requirements

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

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Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in organisationally approved simulated operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to

- a range of relevant exercises, case studies and/or simulations
- relevant and appropriate materials, equipment, tools and personal protective clothing and equipment used in industry including
 - personnel for team based rescues
 - rescue, recovery, safety, first aid and activity specific equipment and resources
 - simulated swiftwater and floodwater location
- applicable documentation including organisational procedures, industry standards, equipment specifications, regulations, codes of practice and operations manuals.

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