



Australian Government

Department of Education, Employment and Workplace Relations

PUASES016A Apply snowcraft skills when performing search operations

Revision Number: 2

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Modification History

Release	TP version	Comments
2	PUA12 V1	Layout adjusted.
1	PUA00 V8.1	First release in TGA.

Unit Descriptor

This unit covers the competency required to operate safely, perform search operations and apply survival techniques for self and others in an alpine environment.

Application of the Unit

The application of this unit applies to persons who will be performing operational search activities/tasks in an alpine environment and in all weather conditions.

Roles to which this unit may apply could include emergency services personnel and other agencies/organisations involved in searches.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

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 Range Statement. Assessment of performance is to be consistent with the Evidence Guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for operation in alpine environments	1.1 Operational and task information is obtained from search coordinator or delegate 1.2 Specific hazards and equipment requirements for environment and operational requirements are identified 1.3 Personal protective equipment (PPE) is selected and used 1.4 Food and water requirements for environment, operations and physical activity as outlined by organisational procedures are identified and selected 1.5 Environment/weather conditions and effects for anticipated period of operational response are determined 1.6 Own ability to meet anticipated physical and psychological requirements of operation is evaluated and any issues anticipated are reported to team leader
2. Undertake operations in an alpine environment	2.1 Deployment to operational response area is undertaken using transportation in a safe and timely manner 2.2 Specified team role and functions are carried out safely as directed by team leader 2.3 Search safety is maintained as required by organisational procedures 2.4 Search formation and spacings are undertaken and maintained as outlined by team leader and organisational procedures 2.5 Search boundaries are marked in line with task requirements under the direction of team leader 2.6 Observation skills are applied and any clues or objects located are immediately reported in accordance with organisational procedures 2.7 Communication within the team is maintained 2.8 Safety and well being of self and others is monitored and any concerns are reported to team leader 2.9 Hazards are continually monitored, and any concerns are identified and reported as required by organisational procedures
3. Perform survival techniques	3.1 Emergency shelter is constructed that is appropriate for current and future factors and conditions 3.2 Weather conditions and/or information is interpreted and actions are taken to minimise effects of weather on self and others 3.3 First aid is applied to self and others as required

ELEMENT	PERFORMANCE CRITERIA
	3.4 Lost searcher drills are conducted as required by organisational procedures
	3.5 Welfare of self and others is <i>sustained</i>
	3.6 Situational awareness is maintained and changing environment and weather conditions are responded to in a timely manner
4. Complete recall and stand down procedures	4.1 Search equipment is recovered, cleaned and maintained in accordance with manufacturer's guidelines and organisational procedures
	4.2 Operational debriefing is participated in and required documentation is completed to organisational standards
	4.3 Symptoms of operational stress in self and others are recognised and reported

Required Skills and Knowledge

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

Required Skills

- apply hazard identification and risk management
- construct temporary emergency shelters
- travel in an alpine environment over snow
- work safely, in accordance with organisational policies and procedures

Required Knowledge

- factors impacting on avalanches
- factors impacting on snow conditions
- minimising impact on environments
- organisational procedures for cleaning and discarding equipment in terms of environmental management and sustainability
- relevant MOUs, agreements, codes of practice as applicable
- signs, symptoms and treatment of hypothermia
- snow shelter construction techniques
- sources of information on weather and snow conditions

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for this Training Package.

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

Assessment must confirm the ability to:

- participate in a search in an alpine environment in a safe and effective manner
- apply survival techniques (for self and/or others) in an alpine environment.

Consistency in performance

Competency should be demonstrated in a simulated operational situation under varying conditions.

Context of and specific resources for assessment

Context of assessment

Competency must be assessed covering a variety of hazards which are reflective of the workplace environment and context and are applicable to taking part in activities in variable weather and conditions.

Specific resources for assessment

Access is required to:

- incidents, exercise, or series of assessment activities
- equipment used in alpine operations

Method of assessment

In a public safety environment assessment is usually conducted via direct observation in a training environment or in the workplace via subject matter supervision and/or mentoring, which is typically recorded in a competency workbook.

Assessment is completed using appropriately qualified assessors who select the most appropriate method of assessment.

Assessment may occur in an operational environment or in an industry-approved simulated work environment.

Forms of assessment that are typically used include:

- direct observation
- interviewing the candidate
- journals and workplace documentation
- third party reports from supervisors
- written or oral questions

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.

Hazards may include:

- avalanches
- blizzards
- bold wet conditions
- cornices
- extreme wind
- hidden vegetation
- human structures e.g. culverts, drain pipes, weirs, star
- pickets
- ice
- partially frozen waterways
- recreational users
- rising water
- rock wells
- snow bridges
- snow drifts
- steep, slippery or unstable terrain
- UV radiation e.g. sunburn, snow blindness
- vegetation debris
- white outs
- wind chill

Equipment may include:

- activity specific equipment e.g. snowshoes
- alpine specific PPE
- communication devices
- cordage
- EPIRB/PLB
- first aid kit
- global positioning system
- head lamp
- map and compass
- matches or equivalent
- sleeping bag
- snow shovel
- space blanket/ground sheet
- stove
- tent/bivi
- whistle

- Food and water requirements*** may include:
- additional personal food requirements e.g. cultural, dietary
 - appropriate energy foods
 - drinking water e.g. carried, field sourced
 - emergency ration packs Sufficient for the potential duration of the operation
- Physical and psychological requirements*** may include:
- being sufficiently rested
 - current capacity to fulfil operational requirement
 - fitness level sufficient for the task and environment
 - hydration and nutritional levels
 - illness
 - personal fears and phobias
 - stress level
- Communication within the team*** may include:
- hand signals
 - mobile/satellite telephone
 - radios
 - torches/flashlights
 - verbal and non-verbal
 - whistles
- Emergency shelters*** may include:
- dugout
 - igloo
 - improvised shelter e.g. tarp
 - snow cave
 - snow mound/quin-zhee
 - storm shelter - fabric shell
 - tent/bivi
 - trench
- Current and future factors and conditions*** may include:
- availability of time
 - available resources
 - construction time
 - environmental conditions
 - factors affecting people e.g. physical and mental states
 - location
 - potential moving snow drift
 - prevailing winds
 - suitability of snow and location
 - timeframe for survival
 - visibility
- Interpreting weather conditions and/or***
- air temperature
 - barometric pressure
 - barometric pressure changes

information may include:

- cloud formation and patterns
- electrical storms
- meteorological data such as:
 - daily and four day forecasts
 - maximum and minimum temperatures
 - rainfall
 - satellite images
 - synoptic charts
- personal observation
- rain/hail/snow/freezing rain
- snowfall
- storm
- UV levels
- warnings
- wind
- wind direction and velocity
- Sourcing, preparing and monitoring intake of food and water, which includes:
 - cooking food in the field
 - dehydrated foods
 - field sourced water
 - fresh foods
 - high energy foods
 - prepared meals
 - water/energy drinks

Sustaining welfare of self and others includes:

Unit Sector(s)

Not applicable.