SISORAF301A Guide a raft on moving water

Release: 2
SISORAF301A Guide a raft on moving water

Modification History
Not Applicable

Unit Descriptor
This unit describes the performance outcomes, skills and knowledge required to control a raft as a leader, with a crew on moving water, up to and including Grade 2 rapids according to the prescribed trip plan.

Application of the Unit
This unit applies to those working as rafting guides in a range of conditions, up to grade 2 rapids.

This unit applies to leader working for outdoor education or adventure providers; volunteer groups, not-for-profit organisations or government agencies.

Licensing/Regulatory Information
No licensing, regulatory or certification requirements apply to this unit at the time of endorsement.

Pre-Requisites
Nil

Employability Skills Information
This unit contains employability skills.
Elements and Performance Criteria Pre-Content

Elements and Performance Criteria

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
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<tr>
<td>Elements describe the essential outcomes of a unit of competency.</td>
<td>Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the Evidence Guide.</td>
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1. Plan for a rafting activity. | 1.1. Identify and plan food and water requirements according to principles of nutrition and contextual issues. |
| | 1.2. Confirm the chosen location or section of river for the trip is suitable according to participants' abilities, aims and objectives, relevant legislation and organisational policies and procedures. |
| | 1.3. Implement the trip plan as designed by the trip leader according to participant's needs, relevant legislation and organisational policies and procedures. |
| | 1.4. Choose a route or course that minimises damage to the environment. |
| | 1.5. Access relevant sources to interpret weather and environmental information and determine activity plan. |
| | 1.6. Identify hazards and obstacles associated with rafting trip and minimise risks to ensure personal safety of participants. |

2. Select equipment. | 2.1. Select equipment and confirm serviceability according to contextual issues and organisational policies and procedures. |
<p>| | 2.2. Fit and adjust equipment according to manufacturer's specifications to ensure comfort and safety. |
| | 2.3. Assess raft for safety and suitability and check that it is inflated to the required pressure. |
| | 2.4. Select safety and rescue equipment according to the activity location. |
| | 2.5. Waterproof, pack and fasten equipment that is not required on hand to ensure that it is not lost, damaged or a hindrance and prepare raft for |</p>
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| 3. Brief participants | 3.1. Check and confirm participants are properly equipped for the trip.  
3.2. Communicate relevant information and safety procedures effectively.  
3.3. Arrange seating positions that are appropriate to the size and abilities of paddlers. |
| 4. Control raft in moving water. | 4.1. Conduct a crew drill, informing participants of guide commands and strokes that will be used and observe participants use of these strokes  
4.2. Apply strokes and paddling manoeuvres effectively to control the raft.  
4.3. Communicate effectively with crew, other guides, trip leader and other river uses. |
| 5. Plan and run a route through moving water. | 5.1. Scout and assess sections of moving water to identify hydrological features, hazards and impediments.  
5.2. Communicate the selected route to the crew.  
5.3. Negotiate or avoid hazards using a combination of strokes, guide commands and manoeuvres.  
5.4. Apply navigation skills to determine location and follow planned route or course during the activity. |
| 6. Apply capsize procedures. | 6.1. Maintain appropriate body position in the water to minimise injury or entrapment and apply defensive and aggressive swimming techniques if necessary.  
6.2. Maintain a position upstream of the raft and recover paddles, where possible.  
6.3. Manage capsize response of crew and equipment. |
| 7. Complete post trip responsibilities | 7.1. Retrieve, inspect, repair and store equipment according to organisational policies and procedures  
7.2. Evaluate relevant aspects of rafting trip and complete trip reports according to organisational policies and procedures.  
7.3. Review own performance and identify potential areas of improvement for future rafting trips |
Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

**Required skills**

- planning and organising skills to select and allocate rafting equipment according to the trip plan
- teamwork skills to:
  - paddle and maintain control of the raft
  - assist others in capsizing and rescue procedures
- communication skills to interact with trip leader, other guides and participants to negotiate hazards, paddling technique, route or course
- listening skills to follow instructions and directions
- problem-solving skills to:
  - read river features, speed of flow, currents, eddies and avoid hazards
  - apply a range of strokes and paddling manoeuvres to control the raft in a range of different river conditions
  - apply defensive and aggressive swimming to remove self from danger after a capsize
  - manage capsize response
- first aid and emergency response skills appropriate to the location to enable initial response to emergencies and personal health care.

**Required knowledge**

- legislation and organisational policies and procedures to enable safe conduct of all rafting activities
- equipment and raft types, including their characteristics and safety features, advantages and disadvantages and care and maintenance to enable appropriate selection and use
- Selection of personal flotation devices and rescue equipment to ensure safety of self and raft crew
- crew
- clothing requirements for rafting to protect and minimise injury from environmental conditions
- importance of a Personal Flotation Device in keeping a person afloat and their head above water
- stroke, directing and signalling techniques to control and manoeuvre the raft
- principles of nutrition to maintain health during activity
- weather and environmental information to identify forecast conditions and their affect on the activity
- hydrology and river features such as currents, banks, change in gradient and volume, and how these might impact on the rafting experience
- international river grading system to understand conditions and appropriateness of the river to the level of participants
• knots used to secure raft and perform rescues
• defensive and aggressive swimming techniques to swim out of trouble
• emergency and rescue procedures appropriate for the raft and location to ensure risk minimisation to self and group.
Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

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

Evidence of the following is essential:

- executes trip plan, including confident delivery of safety briefing and crew drill
- applies knowledge of rivers and hydrology to manoeuvre and control a raft according to conditions on multiple occasions
- monitors and maintains the safety of clients and rafting equipment
- negotiates rapids and hazards using efficient strokes on fast currents and applies capsizing techniques and rescue procedures on multiple occasions
- implements contingency plans and procedures as required
- seeks advice and feedback from leader to improve skills and techniques and evaluates and reflects on own rafting performance to identify strengths, weaknesses and areas that need improvement.

Context of and specific resources for assessment

Assessment must ensure participation as a guide in rafting activities on moving water up to grade 2 rapids that of sufficient depth and breadth of duration to demonstrate competency and consistency of performance.

Assessment must also ensure access to:

- resources and information to plan and select equipment for the rafting activity
- suitable inland rivers with moving water, up to and including Grade 2 rapids
- suitable crew
- rafting, navigation, safety, rescue and communication equipment
- a safe method of transport, if required to drive raft to and from activity location.

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- oral or written questioning to assess knowledge of
stroke techniques used to control and manoeuvre the raft through rapids
- observation of safe participation and demonstration of rafting skills, such as communicating with crew members and controlling the raft with paddles to move in and out of eddies
- third-party reports from a supervisor detailing performance.

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:
- SISOWWR201A Demonstrate self rescue skills in white water.
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, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

**Food and water requirements** may include:
- menu planning and preparation
- range of foods
- food safety and storage.

**Principles of nutrition** may include:
- food groups
- dietary guidelines
- individual food requirements and allergies.

**Contextual issues** may include:
- weather conditions, including times
- season
- transport
- location
- trip distance and duration
- group objectives
- group size.

**Aims and objectives** may include:
- self improvement
- social
- fitness targets
- adventure and recreation
- outdoor education
- wilderness therapy

**Relevant legislation** may include:
- occupational health and safety
- permits or permission for access
- environmental regulations
- marine regulations

**Organisational policies and procedures** may include:
- occupational health and safety
- use and maintenance of equipment
- communication protocols
- emergency procedures
- code of ethics.

**Trip plan** must include:
- aims and objectives
- date, time and duration
- location, equipment and resources
- safety and emergency requirements
- river level and sectors
- contingencies
Relevant sources may include:
- Bureau of Meteorology
- media
- land managers or agencies
- coastal patrol or coastguard
- volunteer marine rescue
- local knowledge.

Weather and environmental information may include:
- satellite images
- daily and weekly forecasts
- maximum and minimum temperatures
- weather warnings
- event warnings
- river level
- synoptic charts
- high and low tide predictions.

Hazards may include:
- holes or stoppers
- strainers
- rocks
- waterfalls
- manmade objects
- weirs
- sieves
- cold water
- undercuts.

Obstacles may include:
- rocks
- piers
- submerged items
- other crafts
- change in river conditions

Risks may include:
- hypothermia
- heat exhaustion
- injuries
- exhaustion
- lost party or party member
- equipment failure.

Equipment may include:
- rafting equipment
- navigation equipment
- safety and rescue equipment
- communication equipment.

Safety and rescue equipment may include:
- pumps
- bailers
- repair kits
- first aid
- rescue rope
- karabiners
- Prusik loops
- pulleys
- tape slings
- throw bags
- knife
- flip line
- whistle.

**Safety procedures** may include
- T grip
- throw bag information
- hold on instructions
- getting back into raft
- selecting safe line through rapids
- seating positions to maximise raft stability
- managing safe portages and river running
- conducting raft repairs
- aggressive and defensive swimming techniques
- responsible and safe behaviour
- signals and communication systems
- raft capsize procedures
- location of safety and rescue equipment

**Guide commands** may include
- forward paddle
- back paddle
- left and right turn
- over left and right
- hold on
- high side
- on the job
- stop

**Strokes** may include:
- forwards
- backwards
- draws
- sweeps
- prys
- turns

**Paddling manoeuvres** may include:
- forward and reverse ferry glides
- breaking in and out of eddies
- eddy hopping
- weight shifting.
- rapid
- pool
- eddy
- eddy line
- current
- stoppers or holes - smiling and frowning
- weir stoppers
- boils
- waves
- sieves
- undercut
- strainers
- downstream V
- upstream V
- waterfalls
- pour overs.

**Hydrological features** may include:

**Defensive and aggressive swimming techniques** may include:

- defensive swimming:
  - floating passively on back, looking downstream
  - riding with the river current
  - pointing feet downstream, toes out of water
  - using arms and legs to fend off obstacles

- aggressive swimming:
  - swimming freestyle to stomach
  - stroking hard to move across the current.

**Capsize response** may include:

- head count
- flip raft
- re-entry of raft
- take raft to shore

**Relevant aspects** may include:

- objectives
- planning process
- activity site
- weather
- equipment selection
- clothing selection
- food selection
- instructional content
- instructional technique
- assessment technique
- group feedback
• directing techniques
• rescue techniques employed.

Unit Sector(s)
Outdoor Recreation

Competency Field
Rafting