



Australian Government

SISORAF003 Guide a raft on grade 4 rivers

Release: 1

SISORAF003 Guide a raft on grade 4 rivers

Modification History

Not applicable.

Application

This unit describes the performance outcomes, skills and knowledge required to control a raft as a leader, with participants on board, on rivers with grade 4 rapids, and according to planned and scouted courses. It requires the ability to implement rescue processes for ejected swimmers and self, and to manage capsized responses. Other rescue skills are covered in complementary units.

Grade 4 refers to the International River Grading System which provides a broad indication of a river's rapid features, and the degree of difficulty in negotiating these. This unit provides skills to raft on rivers with difficult rapids which have high irregular waves, difficult broken water, strong powerful and confused currents, and often boiling or strongly recirculating eddies. These rivers have significant and often constant obstacles, including exposed rocks, ledges, large drops and stoppers that require precise and sequential manoeuvring. Passages through rapids are difficult to recognise from the river, and scouting would be required.

This unit applies to any type of organisation that delivers outdoor recreation activities including commercial, not-for-profit and government organisations.

It applies to leaders who work independently in the field using discretion and judgement to manage operational logistics, risk, problems and emergencies when they arise. Other leadership skills are provided in complementary units.

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

Pre-requisite Unit

Nil

Competency Field

Rafting

Unit Sector

Outdoor Recreation

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

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

- | | |
|---|---|
| <p>1. Prepare for the rafting activity.</p> | <p>1.1. Select clothing, footwear, personal protective, rescue and other equipment suitable for the trip conditions, and check for safe working condition.</p> <p>1.2. Prepare craft and complete safety and serviceability checks, including pressure checks on inflation.</p> <p>1.3. Waterproof, pack and stow clothing, personal resources, and food according to access requirements during trip.</p> <p>1.4. Interpret planned course from activity plans and maps to assist in following the course.</p> <p>1.5. Confirm activity safety and emergency response procedures to ensure compliance during activities.</p> <p>1.6. Confirm protocols for communications between team members.</p> <p>1.7. Fit and adjust personal protective equipment to ensure comfort and safety.</p> |
| <p>2. Launch raft and complete participant drill.</p> | <p>2.1. Select launch site according to river conditions and participant abilities.</p> <p>2.2. Board participants in seating positions appropriate to their paddling, swimming and physical abilities.</p> <p>2.3. Launch raft using technique suitable for river conditions and participant abilities.</p> <p>2.4. Inform participants of guide commands and strokes to be used.</p> <p>2.5. Demonstrate and explain correct stroke technique, and engage participants in practice.</p> <p>2.6. Check and confirm participant stroke abilities and understanding of communication protocols.</p> |
| <p>3. Manoeuvre rafts on grade 4 rivers.</p> | <p>3.1. Identify hydrological features from the water and utilise favourably to control and manoeuvre raft.</p> <p>3.2. Control direction of raft forward, in reverse and sideways using a range of appropriate strokes and combinations.</p> <p>3.3. Maintain appropriate posture, use of trunk rotation, paddle and blade to efficiently paddle the raft.</p> <p>3.4. Utilise appropriate padding strokes and techniques to cross currents and break into and out of eddies.</p> <p>3.5. Avoid or negotiate obstacles and hazards using a combination of strokes, paddling techniques and weight shifts.</p> <p>3.6. Maintain control over participant paddling, providing prompt and clear commands.</p> |

- 3.7. Maintain visual contact and effective communication with participants, other rafts and guides in party throughout all activities.
- 3.8. Monitor party formation paddling pace and space between rafts and make required adjustments.
- 4. Plan and run routes through grade 4 rapids.
 - 4.1. Scout rapids from the water and shore to identify hydrological features, hazards and impediments.
 - 4.2. Assess features and hazards to determine a safe route through rapids.
 - 4.3. Plan route through rapids accounting for participant abilities; communicate route, strokes and manoeuvres.
 - 4.4. Identify reference points to guide chosen passage through rapids.
 - 4.5. Run predetermined route using avoidance techniques and commands to safely negotiate river hazards.
 - 4.6. Use efficient paddling techniques and strokes and utilise hydrological features to assist in turning and crossing currents.
- 5. Perform swimmer and capsize rescues.
 - 5.1. Assist ejected participants in moving water using reach techniques and assist to re-enter raft.
 - 5.2. Rescue self in water, maintaining position upstream of raft, retrieve paddle and re-enter craft.
 - 5.3. Promptly reach and recover capsized raft using techniques to re-establish upright raft.
 - 5.4. Manage capsize response of participants and take actions appropriate to situation.
- 6. Land and secure rafts.
 - 6.1. Select a suitable location to exit the river, and to allow for any subsequent re-entries.
 - 6.2. Land and disembark raft using techniques suitable for river conditions and participant abilities.
 - 6.3. Select a secure bank feature and secure raft using appropriate knots.
 - 6.4. Secure raft for road transport, on activity conclusion, using suitable methods.

Foundation Skills

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed here, along with a brief context statement.

SKILLS

DESCRIPTION

- | | |
|------------------------------------|---|
| Reading skills to: | <ul style="list-style-type: none">• interpret detailed and familiar organisational safety and emergency response procedures• interpret straightforward but potentially unfamiliar information on maps• interpret factual activity plan information in familiar formats. |
| Oral communications skills to: | <ul style="list-style-type: none">• use clear and unambiguous verbal and non-verbal communications to make intent known. |
| Numeracy skills to: | <ul style="list-style-type: none">• interpret and calculate numerical data involving river gradients, distances, times and speed of currents. |
| Teamwork skills to: | <ul style="list-style-type: none">• pro-actively and cooperatively work within teams of guides and operational staff to organise activity logistics, solve operational problems and deliver a quality experience to participants. |
| Planning and organising skills to: | <ul style="list-style-type: none">• manage own timing to complete activities within planned timeframes. |

Unit Mapping Information

No equivalent unit.

Links

Companion Volume Implementation Guides -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1ca50016-24d2-4161-a044-d3faa200268b>

Assessment Requirements for SISORAF003 Guide a raft on grade 4 rivers

Modification History

Not applicable.

Performance Evidence

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the job role, and:

- complete three rafting trips on different rivers or different sections of the same river
- during each trip:
 - consistently follow safety procedures and safely negotiate hazards
 - use different locations to launch and land rafts to include:
 - the bank in moving water
 - ledges
 - eddies
 - run routes through at least four rapids
 - consistently control direction of rafts forward, in reverse and sideways using this range of strokes:
 - forward and reverse paddle
 - forward and reverse sweeps
 - draw stroke
 - Pry
 - emergency stop
 - utilise the following techniques while consistently controlling the raft:
 - combining strokes to effectively manoeuvre the raft
 - breaking in and out of eddies and currents
 - forward and reverse ferry gliding
 - eddy hopping
 - weight shifting
 - paddling through holes
 - paddling over drops
 - using rocks to stop
 - using hydrological features to assist with paddling, controlling the raft and negotiating rapids
- participate in simulations to:
 - complete two self-rescues in moving water and re-enter the raft
 - complete two rescues of an ejected person, one at any given time, and assist re-entry to raft

- compete two capsize rescues, re-establish the upright raft, assist a minimum of three swimmers simultaneously in the water to re-enter or reach the shore, and take the raft to the shore on at least one occasion.

Knowledge Evidence

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

- organisational safety and emergency response procedures for rafting activities
- suitable clothing and footwear for rafting activities:
 - types of clothing and fabrics that protect against the effects of weather and water conditions including sun, temperatures, winds, and precipitation of different levels and extremes
 - reasons for layering clothes
 - effective design and construction features of waterproof gear and exposure suits
 - types of footwear suitable for rafting including specialist sandals, river or paddling shoes and their advantages over other types of footwear
 - features and uses of gloves and mittens, and advantages and disadvantages
- features and functions of lifejackets and helmets suitable for grade 4 river conditions and how to fit and adjust these for comfort and safety
- types of white water rafts suitable for use in grade 4 river conditions and:
 - location and function of different parts of the raft
 - different construction materials, effects on performance, advantages and disadvantages
 - design features including size, handling characteristics and limitations: manoeuvrability, stability and speed
 - pressure requirements and factors which affect different levels of inflation
- types of paddles suitable for use with rafts used in grade 4 river conditions, different construction materials and designs, effects on performance, advantages and disadvantages
- techniques used to effectively stow items:
 - for ease of access and maximum usage of space
 - for stability of craft and minimal effect on trim
 - to waterproof clothing, food and resources
- safe manual handling techniques used to lift and carry rafts
- equipment features and techniques used to secure rafts to the bank and for transportation
- communication protocols for group rafting activities to include:
 - guide commands:
 - forward paddle
 - back paddle
 - left and right turn
 - over left and right
 - hold on
 - lean in

- high side
 - on the job
 - stop
- calls
- hand and paddle signals
- whistles
- the International River Grading system:
 - strengths and limitations of the grading system; what is covered and not covered in classifications
 - specifications for grade 4 rivers
 - examples of local rivers attributed as grade 4
- typical hydrology features and hazards for grade 4 rivers, how to recognise features from the shore and water, and techniques used to safely negotiate hazards:
 - currents
 - eddies
 - waves
 - strainers
 - holes
 - stoppers
 - sieves
 - rocks, including undercut rocks
 - waterfalls
 - downstream and upstream Vs
 - boils
 - pour overs
 - built objects – weirs, piers
 - steep or slippery banks or shore
 - overhanging trees
 - fallen trees on waterway
 - submerged logs, rocks and vegetation
 - sections of dark, deep or cold water
 - other boating traffic
 - exposure to lightning, storms and strong winds
 - prolonged emersion in cold water
- different locations that can be used to embark, launch, land and disembark rafts in grade 4 waters including:
 - the bank in moving water
 - ledges
 - eddies
- for each of the above locations:

- factors that affect selection
- advantages and disadvantages of use
- techniques used to embark groups of participants, launch and land
- a range of strokes used in grade 4 river conditions to direct rafts forward, in reverse and sideways:
 - forward and reverse paddle
 - forward and reverse sweeps
 - draw stroke
 - Pry
 - emergency stop
- for each of the above strokes:
 - how to use them when paddling as the raft guide
 - correct posture and trunk rotation
 - correct hand placement on paddle and movement of top hand through the stroke
 - wrist movement required to enable correct blade placement in water
 - correct paddle entry and exit points in relation to craft and body position
 - appropriate paddle depth in water to achieve effective stroke
 - correct paddle blade angle throughout stroke
- a range of techniques used to manoeuvre rafts in grade 4 water:
 - combining strokes and which combinations are effective
 - breaking in and out of eddies and currents
 - forward and reverse ferry gliding
 - eddy hopping
 - weight shifting
 - paddling through holes
 - paddling over drops
 - using rocks to stop
- how certain types of hydrological features can be used to assist with paddling, controlling the raft and negotiating rapids
- for rescues of ejected persons:
 - appropriate swimming strokes and techniques to use while in paddling gear in grade 4 river conditions
 - techniques used to re-enter raft from water and to assist swimmers to re-enter raft
 - aids used in rescues and how to use these effectively as rescuer and rescuee:
 - reach equipment, including improvised use of equipment on hand
 - craft and paddle as a flotation device
- for capsized rescues:
 - methods used to re-establish an upright raft, guide multiple swimmers and their re-entry to raft and importance of head count
 - methods for taking a raft to shore

- when different knots are used, advantages and disadvantages, and how to tie them:
 - knots for tying on
 - rope joining knots
 - quick release knots.

Assessment Conditions

Skills must be demonstrated on different rivers or different sections of the same grade 4 rivers which must feature the following:

- difficult rapids which have high irregular waves
- difficult broken water, strong powerful and confused currents, boiling or strongly recirculating eddies
- significant obstacles, including exposed rocks, ledges, large drops and stoppers that require precise and sequential manoeuvring
- passages through rapids are difficult to recognise from the river and scouting would be required

The following resources must be available to replicate industry conditions of operation:

- first aid equipment
- communication equipment for emergency response.

Assessment must ensure use of:

- a group of participants whom the individual guides during rafting activities
- clothing and footwear suitable for the conditions
- Australian Standard, or equivalent, compliant lifejackets of a grade that meets maritime regulator requirements for grade 4 river conditions
- helmets
- pea-less whistles not affected by water
- white water rafts suitable for grade 4 river conditions
- raft paddles
- ropes and tie down straps
- rescue equipment:
 - reach equipment
 - fliplines
 - towlines
 - carabiners, Prusik cords and tape sling
 - knives
- activity plans to include details of planned route
- template safety checklists
- information about the International River Grading System
- organisational safety and emergency response procedures for rafting activities.

Assessors must satisfy the Standards for Registered Training Organisations requirements for assessors, and:

- have a collective period of at least three years' experience as a white water rafting leader, guide or instructor, where they have applied the skills and knowledge covered in this unit of competency; the three years' experience can incorporate full and or part time experience.

Links

Companion Volume Implementation Guides -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1ca50016-24d2-4161-a044-d3faa200268b>