



NSW Sea Kayak Club Inc.

Sea Skills Study Guide

Reviewed in Sep 2018

About This Guide

This study guide is to compliment material provided by Paddle Australia. It clarifies instances where the NSWSKC builds on Paddle Australia evidence guidelines to further reflect Sea Kayaking in NSW.

There are two sections to this Sea Skills Study Guide:

- Part One being the study material.
- Part Two a few questions to test your knowledge.

Once you are enrolled for Sea Skills, by the NSWSKC Training coordinator, you can access various written training material published by Paddle Australia. This material is continually being reviewed and updated.

Sea Skills

Sea Skills is not just about being recognised as an active participant on the club trip. It is also a recognition that you have skills and knowledge to act independently outside of club trips.

Skill is a function of technique and fitness. Starting with a good foundation of stroke execution is best achieved with a qualified instructor. Then develop your skills by increasing on your paddling fitness through getting out paddling and applying techniques. Technique review and development is ongoing even for more experienced paddlers.

You do not need a perfect technique for sea skills, Those that move onto instructor qualifications need to be able to provide clear demonstrations and break down strokes for teaching purposes.

Use the Paddle Australia Sea Skills Evidence guide to identify areas you need to learn. Most of all, get time on the water with a group of skilled paddlers, preferably qualified instructors or leaders.

Focused Training

Attending focused training sessions to help you develop a safe paddling technique. Within the club, refer to the club event list or contact the training coordinator for training events.

You can find other Paddle Australia NTPs, Instructors and courses from the Paddle Australia Education site <https://education.canoe.org.au/> or other commercial instructors listed in the links section of the club website if club sessions are not convenient for you.

PART ONE: STUDY MATERIAL

Paddling Skills

Paddle Australia has written material that covers most skills.

Most paddling skills are “basic skills” but applied in a different environment. For sea skills, it is fresh wind conditions at sea. See **NSWSKC Basic Skills videos**.

<http://nswseakayaker.asn.au/index.php/homepage/basic-skills>

Additional skills required by NSWSKC include you to perform a kayak roll in a surf environment and a reenter and roll in fresh conditions at sea.

For surf skills, you should aim to be safe regards yourself and others. You need to demonstrate holding a brace using both sides of the blade (at different times!). Shoulder protection is particularly crucial in the surf. Paddle Australia refers to **back surf**, which means having a bit of control or balance if your kayak is propelled backwards in surf

Being able to brace effectively and rolling skills are related. Those with proper rolling technique have more confidence to lean their kayak and brace.

Rolling Your Kayak

This is a practical skill and it is best to start with a good instructor to ensure you do not develop bad habits. Development of a reliable roll can take dedication but the results will boost your confidence and add to your safety at sea.

For self-study “The Kayak Roll” Tips and Techniques is generally felt by our instructors to be the best one.

http://www.performancevideo.com/the_kayak_roll There are a number of website and social media videos out there. Videos for free on the internet and plenty of different rolling techniques. Don’t overthink it.

Any club sea or senior sea instructor is qualified to teach rolling.

Buddy Rescues

The club's Basic Skills videos approximate the PA wedge rescue description.

A **T-rescue**, or swimmer assisted T-rescue, is where the rescuer lifts the bow of an upturned sea kayak with a swimmer putting weight on the stern. The club does not recommend it due to the presence of rudders on many sea kayaks. You will therefore not be requested to demonstrate it for sea skills. However, you should be aware as a rescuer, that you may need to manage assisted rescues with sea kayakers who have learnt different ways of executing rescues.

If you are a Sea Guide or Instructor you should have practised a T-Rescue and Instructors should be able to teach it.

Flip and pump assisted rescues, if performed during your assessment by choice; you need to be able to explain why you have used this technique.

Contact Rescues are rescues without a line or rope. It is a raft where the towee holds onto the rescuer's kayaks stern or bow decklines and the tower paddles across the two kayaks moving the raft forwards or backwards. Here is an article from a club trip that demonstrates its usefulness in an assisted rescue

situation. <http://nswseakayaker.asn.au/index.php/component/jdownloads/viewdownload/11-other-documents/446-contact-tows-salt-91-page-12?Itemid=818>

Scoop rescues are demonstrated well in this video <https://www.youtube.com/watch?v=KS56yhJBKUc>

A key point is that the rescuee's bum is in the seat before you flip. In choppy conditions, the rescuee's head may become briefly submerged.

Having the rescuee lean forward or backwards aids flipping upright immensely.

For wider kayaks and smaller paddlers, holding the kayak at the narrower parts can make it easier.

In the case of a shoulder injury, grabbing the lifejacket shoulder can create more pain.

Paddle float rescue is a self-rescue recovery aided by a paddle float. It is not an alternative for a reenter and roll. It is a backup in case you are tired, injured or exhausted.

Navigation

Rules of the Sea Article, see link

– <http://nswseakayaker.asn.au/index.php/component/jdownloads/viewdownload/11-other-documents/428-rules-of-the-sea-salt-106?Itemid=818>

Boating Handbook, by Maritime NSW <http://www.rms.nsw.gov.au/documents/maritime/licence/boating-handbook.pdf>

Note that the busier the waterway, the more critical it is that you understand and abide by boating rules, or understand them to keep yourself safe and demonstrate that sea kayakers are responsible to other waterway users.

Applied Navigation

The NSWSKC has conducted an annual Navigation weekend training event covering theory and practical application, often in winter. Keep your eye out on the calendar to hassle the training coordinator. You may also pick up a lot from trips, ask leaders to share with you're their planning and navigation process especially when in unfamiliar waters.

Online learning resources include:

'Sea Kayak Videos' **Episode 2: Navigation** <https://www.youtube.com/watch?v=0Kv-ckC5U4s>

is a 50 minute Youtube video. It is Not a demonstration on paddling forwards.

A little old but contains excellent information on Sea Kayak navigation.

Be aware of US terminology:

“Ranges” = “Transits”.

“Chart number 1” = “Chart 5011”.

https://www.ukseakayakguidebook.co.uk/short_articles/tidal_planning.pdf

For an understanding of the **Rule of 1/12ths and the 50/90 Rule**, see **Tidal Planning for Sea Kayakers by the UK Rivers Guidebook** http://www.ukseakayakguidebook.co.uk/short_articles/tide_simplified.pdf

the last page has a great jargon buster.

Rope Work

As per the PA evidence guide with demonstration conducted on land. A useful phone app and website is Animated Knots. <https://www.animatedknots.com/>

You should focus on the bowline and, a figure of 8.

Float Plan

Link to club copy is here:

<http://nswseakayaker.asn.au/index.php/component/jdownloads/viewdownload/10-forms/281-float-plan-2016?Itemid=815>

Other Resources

Paddle Safe Video by Paddle NSW

<http://maritimemanagement.transport.nsw.gov.au/resources/you-tube-paddle-safe.html>

Bureau of Meteorology Marine Knowledge

<http://www.bom.gov.au/marine/knowledge-centre/index.shtml>

Check Marine Weather Definitions such as swell, sea, combined sea and swell, wave height, wind warnings, wind direction, Significant Wave Period,

Surf Glossary

https://www.surflines.com/surfology/surfology_glossary_index.cfm

Understand the following terms and how they relate to Sea Kayaking:

Bathymetry, Blown out, Bombora, Choppy, Closeout, Crest, Eddy, Face, Impact Zone, Isobars, Left, Lip, Lull, Mushy, Offshore, Over the falls, Peak, Plunging Waves, Primary swell, Right, Rip, Sea state, Set, Shoaling, Shorepound/shore break, Shoulder, Significant Wave Height, Soup, Spilling Waves, Steep, Surf zone, Swell, Trough, Wave decay, Wave Period, Wedge, Wind Waves.

PART 2 RESEARCH QUESTIONS

ENVIRONMENTAL

The beach area includes a shore area and back to the dunes. What are some ways in which Sea Kayakers can avoid damaging this fragile area?

National Parks do not allow you to gather firewood – why?

SEAWAYS AND BOATING RULES

Explain cardinal markers:

- What do they indicate?
- How are they used?
- What shape is each type?
- What are the colour band combinations for each type?
- Why are they relevant to Sea Kayakers?

On what side of a channel should you paddle?

If you have an emergency when do you use your flares?

MARINE VHF BASICS

If you hear a ‘mayday’ call on the radio and Marine Rescue fails to respond, what should you do?

What does the word ‘securite’ indicate when said three times at the start of a message?

GENERAL SEA KAYAKING TERMS

What is broaching?

Indicate the following parts of a Sea Kayak and state their purpose:

- Deck
- Deck lines
- Hull
- Chines
- Rocker
- Keel
- Deck Bungees
- Cockpit
- Coming
- Thigh Braces
- Bulkheads

- Hatch Covers
- Foot Pegs/Rests
- End Toggle
- Bow
- Waterline
- Gunwale
- Stern
- Skeg

Explain the difference between Swede and Fish form.

WEATHER

What is the average sea level air pressure on the Earth? (In millibars)

What direction does a low-pressure system rotate over NSW?

Explain the following terms:

- Fetch
- Clapotis
- Overfall
- Rebound

What is a "Following Sea"?

What is a 'Quartering Sea'?

Different aspects of the Weather, such as temperature, wind, tides, rain, air pressure, humidity and swell can be measured and predicted. Which aspects of the weather are most important to a Sea Kayaker?

How many sources of weather information can you list? Which is your primary source at home and on an expedition?

"Dress for the swim or dress for the paddle", explain this term and how it relates to Sea Kayaking in NSW.

What is a "southerly buster"?

In which Coastal Forecast Area do you paddle in most of the time?

What is an isobar?

What is an East Coast Low?

What is your threshold for forecasted wind and swell?

Would you paddle near or in an Electrical Storm?

What is a cold front?

How often does Sydney get Sea Fog?

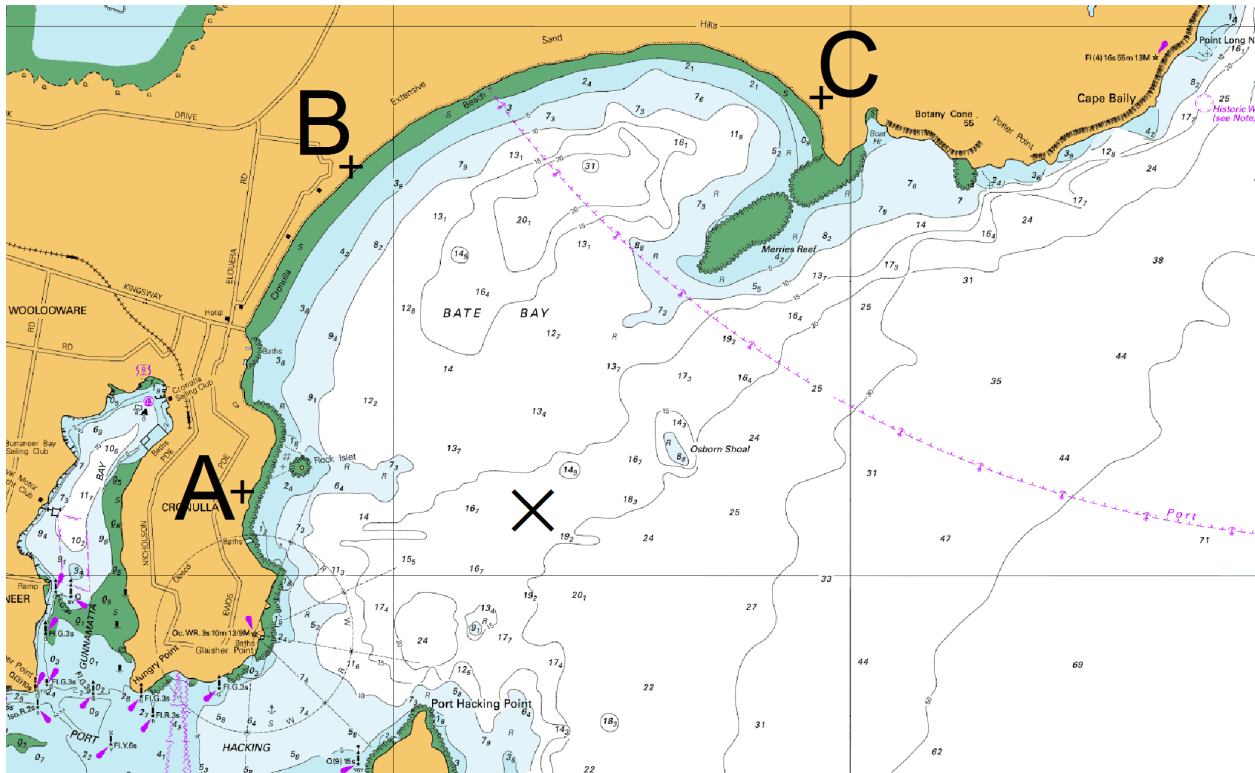
What is katabatic wind?

SURF

How would you identify a rip on a surf beach? Why is it essential for Sea Kayakers to identify rips?

When do waves break? How shallow does the water need to get before waves break?

The chart below shows Bate Bay and Cronulla, just south of Sydney. You are located at the X and are considering where to land. There is a 1.5-metre swell with a 15 second period from the SE, and it is high tide. There is no significant wind. Discuss the three sites marked concerning the type of surf you would expect and any other hazards you would consider. Provide a justification on which one would be the safest landing.



TIDES & CURRENTS

Explain the following terms:

- Semi-diurnal Tide
- Tidal Range
- High Tide
- Spring Tide

- Neap Tide
- Ebb and flood
- Tidal Stream
- Ferry Glide

What type of tides occurs along the NSW coast, Semi-diurnal or Diurnal?

What is the tidal range for 25 April of this year ?

What time and how high is High Tide for 25 April of this year?

What is the origin of the word "Spring" concerning "Spring Tide"?

Explain the 50/90 rule. How is it useful to Sea Kayakers?

What is the difference between Tidal Streams and Ocean Currents?

Which well-known Ocean Current is prevalent off the NSW coast? Which direction does it flow and what effect does it have on the NSW water temperature?

NAVIGATION

Explain the following terms:

- Map Setting
- Handrail
- Magnetic Bearing
- Magnetic Variation
- Aiming Off
- Transits
- Nautical Mile
- Knot
- Small scale and large scale
- Latitude and Longitude

How many paddle strokes on one side do you do to cover 100m (go and find out, most people are between 25-35 strokes)?

What is your normal paddling speed? Knots and Kph. (go and find out)

What is the difference between Course and Bearing?

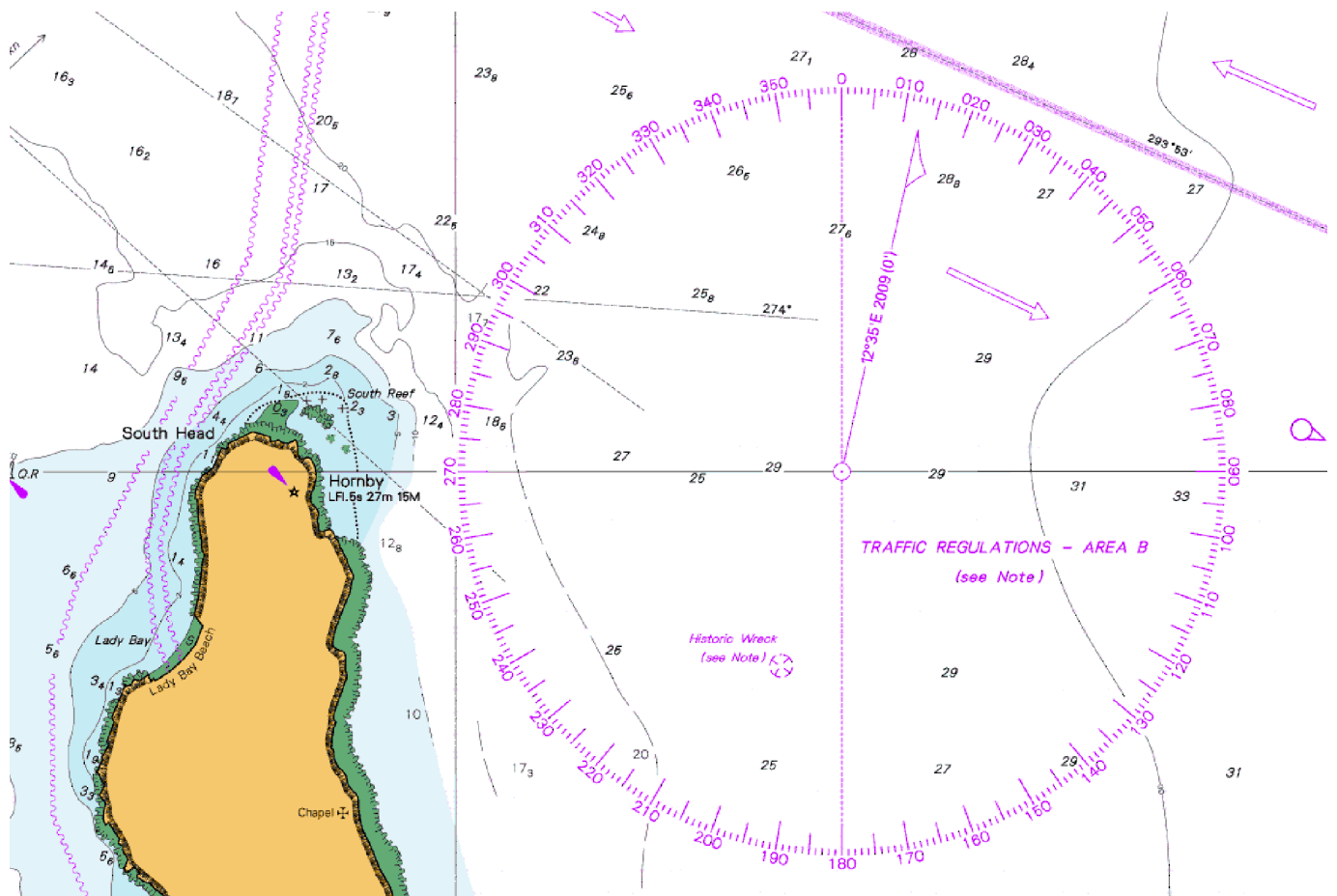
Explain some different ways of locating your position on a chart or map.

What is the difference between Piloting and Dead (or Deduced) Reckoning?

See Chart Below

You have drawn a course on your chart and measured as 220° using a protractor. After looking at the compass rose below what bearing do you follow on your deck compass?

- What does the green area around South Head denote?
- What are the purple squiggly lines to the west of South Head and are they a concern for Sea Kayakers?
- What is “Hornby” and what does LR. 5s 27m 15M mean?



NIGHT PADDLING

- What is night vision?
- By NSW Maritime law what lights does a Sea Kayak need at night or in time of low visibility?
- What are some considerations with paddling at night?
- What are some precautions you should take when paddling at night?