

SLSNSW IRBD & RWC - Pre Course

# Power Craft Workbook 1

Navigation & Preparing for Boat Operations





# Surf Life Saving NSW

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## PowerCraft Workbook 1

Version 4 – 30th July 2015 - Steve Allan, Academy Support Officer, SLSNSW

### Candidate Details:

Name: \_\_\_\_\_ D.O.B.    /    /

Club/Branch: \_\_\_\_\_

Assessor Name: \_\_\_\_\_ Signature: \_\_\_\_\_

Date of Assessment:    /    /

### Competent / Not Yet Competent

NOTE: This page to be submitted with IRBD or RWC Assessment Portfolio

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## Introduction

Welcome to the Powercraft Workbook 1 - Navigation and Preparing for Boat Operations for the Silver Medallion Inflatable Rescue Boat Driver (SMIRB Driver) and Rescue Water Craft (RWC) certificates.

This workbook must be completed successfully (80% correct), and signed off by an endorsed Assessor or Facilitator prior to commencing any PowerCraft training in the water.

**IRB Driver participants to complete Questions 1 to 40**  
**RWC Operator participants to complete Questions 1 to 55**

The Assessment consists of a series of short answer and multiple choice questions. They are designed to reflect the knowledge and skills required to demonstrate competency in Navigation and Preparing for Boat Operations, as deemed by SLSNSW and NSW Maritime.

NOTE: If a member already holds a NSW Maritime General Boat/PWC Licence, there is no need to complete the Powercraft Workbook 1 prior to commencing IRB or RWC training in the water.

## NSW Maritime General Boat Licence & SLSNSW Powercraft Licence

Participants are not required to do the Waterways Boating Safety Course or General Boat/PWC licence prior to the commencement of SMIRBD or RWC training. SLSNSW will issue you with a Powercraft License on successful completion of the SMIRBD and/or RWC certificate. This licence allows you to drive an IRB or RWC for Surf Life Saving activities only, and is an exemption agreement between SLSNSW and NSW Maritime.

The trainee driver **MUST** be under the direct supervision of someone who holds a proficient SLSA SMIRBD or RWC award **AND** is a currently endorsed SMIRBD Training Officer or RWC Facilitator (depending on which award is being trained). The completed workbook must be on the beach during all SMIRB Driver and RWC training.

If a SLSNSW member would like to upgrade their Surf Life Saving SMIRB Driver or RWC award to NSW Maritime General Boat Licence or PWC Licence, they will need to take their IRBD or RWC Certificate into a NSW Maritime office and pay the normal fees.

## Prerequisites for the SM IRB Driver and Rescue Water Craft Certificate

Powercraft Workbook 1 - **MUST** be completed and signed off by an Assessor or Facilitator before a participant begins driver training in the water OR already hold a NSW Maritime General Boat/PWC Licence

- See the SLSA “Silver Medallion IRB Driver Learner Guide” for more prerequisite information
- See the SLSA “Rescue Water Craft (RWC) Learner Guide” for more prerequisite information.

## Suggested Supporting Resources

- The Surf Life Saving Powercraft Manual – 7th Edition This manual is a resource for candidates, trainers and assessors and contains information on skills and knowledge relating to IRB, RWC & Boat Operations.
- NSW Maritime – Boating Handbook This handbook outlines the essential and general boating information required to safely operate a vessel in your State / Territory Waters.
- Powercraft Owner’s Manual This document comes with your powercraft and contains specific information relevant to set up procedures, maintenance & servicing, etc.
- SLSA SMIRB Driver Learner Guide is used throughout the SM IRB Driver training and contains the Assessment Portfolio (Gathering all assessment documentation will assist an endorsed Trainers & Assessors with the evidence needed to successfully record and deem the participant competent).
- SLSA – Rescue Water Craft (RWC) Learner Guide is used throughout the RWC Driver training and contains the Assessment Portfolio (Gathering all assessment documentation will assist an endorsed Facilitators with the evidence needed to successfully record and deem the participant competent).



# Assessment

(Where applicable circle the correct answer)

## Navigation Section

1. Navigational maps and charts are fundamental tools available for emergency response. List the four main areas where they will assist lifesavers, provide examples.

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

2. The basic measure of distance in all nautical navigation is called the

- A. Nautical kilometer
- B. Nano mile
- C. Nautical Mile
- D. Rule of thumb

3. A Nautical chart depth with metric measurements has a depth mark of 48. What does 48 stand for?

\_\_\_\_\_

4. The purpose of GPS for search and rescue is to

- A. Help retrieve lost sailors at sea
- B. Figure out where you will be at a certain time
- C. Provide and obtain coordinates to locate missing craft or patients
- D. Help find the best fishing locations

5. What is an EPIRB and when would it be used?

\_\_\_\_\_

6. What is the minimum distance a Powercraft may travel from shore before an EPIRB must be carried by law in your State / Territory? \_\_\_\_\_

7. In Surf Life Saving what important information should be passed on to the Surf Command when planning a navigational course?

\_\_\_\_\_

\_\_\_\_\_

8. Why is knowledge of local conditions important to lifesavers involved in search and rescue operations?

\_\_\_\_\_

\_\_\_\_\_

9. Why is it important to have alternative route strategies when performing a SAR operation?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



## Preparing for Boat Operations Section

10. Relevant state marine authorities should be notified:

- A. As soon as possible following a boating or marine incident.
- B. Within 24 - 48 hours of a boating or marine incident.
- C. Only if there is a fatality.
- D. Within 3 working days of a boating or marine incident.

11. Power driven boats have right of way over sailing craft and rowing boats.

True / False

12. When two power driven craft are meeting head on, to what direction must each craft alter each course?

- A. Port
- B. Starboard
- C. Largest powercraft continues in a straight direction while smaller craft alters course to starboard.
- D. Smallest powercraft continues in a straight direction while larger

13. Port-hand marks are painted \_\_\_\_\_ and have a \_\_\_\_\_ shaped top mark or buoy.

14. Starboard-hand marks are painted \_\_\_\_\_ and have a \_\_\_\_\_ shaped buoy or top mark.

15. What is a cardinal mark?

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16. What distance can craft approach a whale or dolphin up to?

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17. When stowing equipment for transport, items can be placed anywhere on the powercraft so long as there is space.

True / False

18. Write down the PPE that is applicable to Lifesavers whilst operating a power craft (RWC / IRB)

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19. The responsibility of the master (driver) is to:

- A. Maintain a proper lookout and avoid collision.
- B. Ensure the safety of those onboard the vessel.
- C. Ensure that all safety equipment is accessible and stored onboard correctly.
- D. All of the above.

20. Where should you drive a vessel in a channel?

- A. On the port (left-hand) side.
- B. In the middle of the channel.
- C. On the starboard (right-hand) side.
- D. On any side – it does not matter as long as a collision does not occur.

21. When crossing a coastal bar it is **COMPULSORY** to:

- A. Ensure that everyone onboard is wearing an approved lifejacket Type 3.
- B. Notify a coastal radio station of your intention.
- C. Ensure that everyone onboard is wearing an approved lifejacket Type 1.
- D. Proceed only if the bar is flat.



- 22. All vessels are required to travel at a safe speed at all times. Which of the following IS considered safe?**
- A. A vessel travelling at speed in poor visibility.
  - B. A vessel travelling at a speed at which sudden danger can be avoided.
  - C. A vessel travelling at speed towards background shore lights at night.
  - D. A vessel travelling at speed in unfamiliar waters.
- 23. When driving a power vessel at 10 knots or more or towing a person, what is the MINIMUM distance both the vessel and the towed person MUST keep from a non-powered vessel or a person in the water?**
- A. 60 metres or if not possible a safe distance.
  - B. 30 metres or if not possible a safe distance.
  - C. 100 metres or if not possible a safe distance.
  - D. Any distance which you consider safe.
- 24. For environmental reasons, where should you avoid driving your boat?**
- A. Deep river channels.
  - B. Shallow weedy areas, which may contain endangered seagrasses.
  - C. Boundaries between murky and clear water.
  - D. Bar crossings.
- 25. What MUST you do when driving your vessel within a No Wash Zone?**
- A. Travel at a speed which creates minimal wash to ensure that your wash does not affect other people or vessels.
  - B. Travel at no more than 8 knots.
  - C. Always travelling at the speed shown on a speed restriction sign.
  - D. Not tow a waterskier or an aquaplaner.
- 26. Which of the following vessels are required to have or display lights at night?**
- A. Power driven vessels.
  - B. Canoes and rowboats.
  - C. Sailing vessels.
  - D. All vessels need to have or display lights at night.
- 27. You are driving a vessel at high speed and your vision is suddenly affected by sun or spray. Your immediate reaction should be:**
- A. Slow down or stop.
  - B. Continue driving at speed in anticipation that you will regain your vision.
  - C. Increase speed & manoeuvre vessel to find a direction to minimise spray & the effect of the sun.
  - D. Alter course to port and continue at speed.
- 28. An efficient sound signalling device is required to be carried:**
- A. Only by vessels proceeding to open waters.
  - B. Only by power driven vessels over 8 metres in length.
  - C. On all vessels.
  - D. Only vessels operating after sunset.
- 29. When is it COMPULSORY to carry an EPIRB (Emergency Position Indicating Radio Beacon)?**
- A. When crossing a coastal bar.
  - B. When operating a vessel less than 5 metres in length on enclosed waters.
  - C. At all times.
  - D. When operating a vessel, 2 or more nautical miles off the coast.
- 30. How often should you check your vessel's safety equipment and fittings?**
- A. Before every long journey.
  - B. Before every journey regardless of duration.
  - C. Before every journey out of sight of land.
  - D. At the conclusion of each journey.

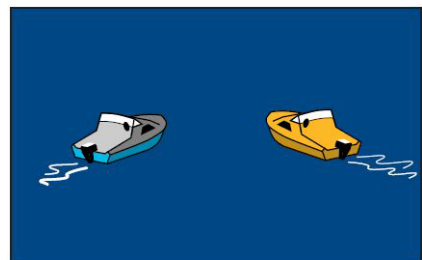
31. In this picture is the powercraft entering the harbour or leaving the harbour to the open sea?

Entering / Leaving



32. You are driving the blue vessel (on the left side of picture) and there is a risk of collision with the yellow vessel. What must you do to avoid a collision?

- A. Give way.
- B. Keep your current course and speed.
- C. Increase speed to pass ahead of the other vessel.
- D. Alter course to port and maintain your speed.



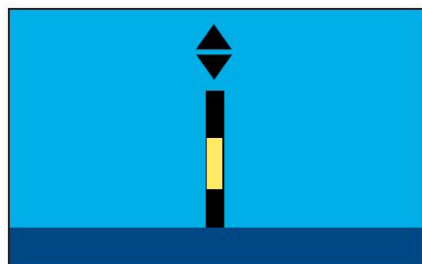
33. You are driving this vessel between sunset and sunrise. What navigation lights MUST be displayed?

- A. Red and green sidelights with an all-round white light.
- B. Red and green sidelights only.
- C. A white masthead light only.
- D. No lights are required.



34. What does this navigation mark indicate? Deeper water lies to the:

- A. North.
- B. East.
- C. South.
- D. West.



35. What kind of navigation mark is this?

- A. A port lateral mark.
- B. A channel blocked mark.
- C. A special mark.
- D. An isolated danger mark.





36. When travelling **UPSTREAM** (away from the sea) on which side should you keep this type of navigation mark to stay in the channel?

- A. Your port (left hand side).
- B. Your starboard (right hand) side.
- C. Either side (it does not matter).
- D. Stay in the middle of the channel regardless of the mark.



37. What do these signs mean?

- A. 4 kilometres to the next hazard.
- B. Water depth is below 4 metres in this direction.
- C. Keep 4 metres from the banks in this area.
- D. Maximum speed 4 nautical miles per hour (knots).



38. When is the **MOST DANGEROUS** time to cross a coastal bar?

- A. On an incoming tide (flood tide).
- B. On an outgoing tide (ebb tide).
- C. Slack water (top or bottom of the tide).
- D. All of the above.



39. When a vessel displays this signal what does it mean?

- A. The vessel is fishing.
- B. There are divers working below.
- C. The vessel is a commercial vessel. Keep clear.
- D. Assistance is required.



40. When returning over a coastal bar or travelling with a large 'following sea' offshore, the **SAFEST** option is to:

- A. Maintain a position behind a wave, but not too close.
- B. Maintain a position just in front of a wave.
- C. Proceed at speed through the waves.
- D. Maintain a position on top of a wave.

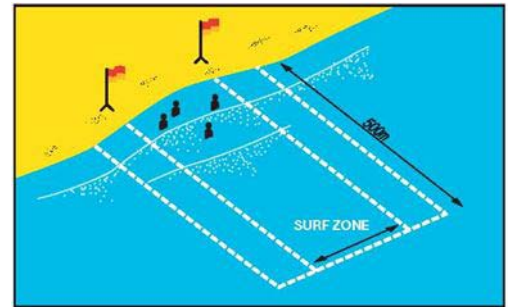


# RWC Questions

**NOTE:** These questions only need to be completed by members who are about to start RWC training and do not have a NSW Maritime PWC Licence. A minimum of 12 out of 15 questions must be answered correctly. References below to PWC (Personal Water Craft) can be interchanged with RWC (Rescue Water Craft)

**41. Which of the following conditions apply to the entry of a PWC driver at the sides of a designated surf zone?**

- A. Entry is permitted when travelling at less than 10 knots.
- B. Entry is permitted if there are no swimmers inside the area.
- C. Entry is only permitted when an observer can be carried to watch for swimmers.
- D. PWC must remain at least 60 metres from the boundaries at all times unless performing a bona fide rescue.



**42. Which of the following meets the requirements for a lifejacket worn by PWC riders on enclosed waters?**

- A. No lifejacket is required on enclosed waters.
- B. Must be a wetsuit.
- C. Must be either a Lifejacket Type 1, Type 2 or Type 3.
- D. Must be a Lifejacket Type 1 only.



**43. The minimum distance that a PWC being driven at 10 knots or more (approx 18 kph) MUST keep from another powercraft is:**

- A. 10 metres.
- B. 30 metres.
- C. 60 metres.
- D. 100 metres.



**44. OFFENSIVE BEHAVIOUR by a PWC driver is:**

- A. Driving a PWC that causes nuisance, annoyance or danger around people.
- B. Driving a PWC without a licence.
- C. Driving an unregistered PWC.
- D. Driving a PWC without a Ride Smart behaviour sticker affixed.

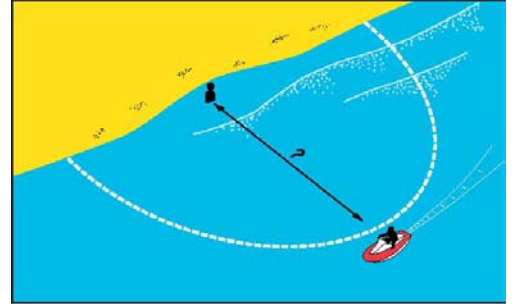


**45. When is an unlicensed person able to legally drive a PWC on NSW navigable waters?**

- A. When travelling at less than 10 knots.
- B. When travelling in offshore waters only.
- C. The rider must always hold a valid PWC licence.
- D. When learning to ride and a licensed person sits behind the learner.

**46. The MINIMUM distance a PWC driver travelling at 10 knots or more MUST keep from a person in the water in a non-designated surf zone or swimming area is:**

- A. 100 metres.
- B. 60 metres.
- C. 30 metres.
- D. 10 metres.



**47. Which of the following activities is classed as 'irregular driving' for PWC users?**

- A. Driving otherwise than generally in a straight line.
- B. Towing a skier over wash.
- C. Towing an aquaplaner after sunset.
- D. Driving through a PWC 'no go' zone.



**48. The registration numbers on a PWC must be a minimum size of 100mm and be:**

- A. Clearly distinguishable from the decals and striping.
- B. Displayed on the central arm or stern of the craft.
- C. Located below the spray rail.
- D. Displayed on the port side of the craft only.

**49. How far must a PWC, when driven at a speed greater than 10 knots, keep away from moored or anchored vessels?**

- A. 30 metres.
- B. 300 metres.
- C. 60 metres.
- D. 100 metres.

**50. When is a PWC able to tow a water skier on navigable waters without an observer?**

- A. When travelling at less than 10 knots.
- B. Never. An observer must be used when towing a water skier.
- C. When towing on dams or lakes.
- D. When towing in a surf break.



**51. Who is responsible if an unlicensed person is driving a PWC?**

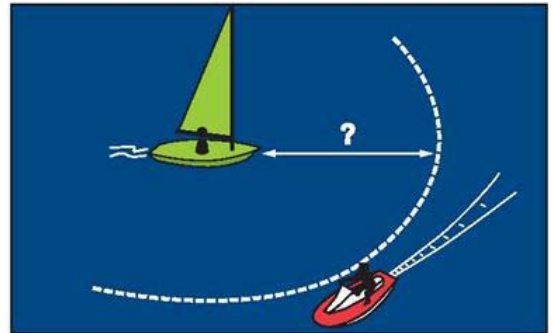
- A. The driver.
- B. The owner.
- C. The passenger.
- D. Both A and B.

**52. When is 'irregular driving' on navigable waters in front of dwellings allowed?**

- A. When 150 metres from the shore.
- B. Never.
- C. When 200 metres from the shore.
- D. Between sunrise and sunset.

**53. The MINIMUM distance that a PWC being driven at 10 knots or more MUST keep from a non-motorised craft (such as a canoe, bodyboard, surfboard, rowing shell, kayak, sailing dinghy, etc) is:**

- A. 100 metres.
- B. 60 metres.
- C. 30 metres.
- D. 10 metres.



**54. Which of the following are PWC Exclusion Zones?**

- A. Sydney Harbour, including the waters of all tidal bays, rivers and their tributaries (includes the Parramatta River, Middle Harbour and Lane Cove River).
- B. Darook Park at Port Hacking.
- C. La Perouse at Botany Bay.
- D. All of the above.

**55. You are about to alter course at speed. To do so safely you should:**

- A. Look for other vessels before changing direction.
- B. Maintain throttle to steer the PWC effectively.
- C. Give an appropriate hand signal.
- D. A and B.