



IRB Crew Certificate

Learner Guide

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For permission outside these guidelines, contact:

Surf Life Saving Australia

PO Box 7773

Bondi beach, NSW, 2026

Ph: (02) 9215 8000

info@slsa.asn.au

All resources developed by Surf Life Saving Australia are reviewed regularly and updated as required. Feedback can be supplied at any time directly to SLSA by using the contact details above.

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Course introduction

The purpose of this course is to help you develop skills and knowledge to effectively crew an IRB in surf rescue operations

Course outcomes

By the end of this course you should be able to:

- understand the roles and responsibilities of an IRB Crewperson
 - list the duties of an IRB Crewperson
 - list the safety considerations when crewing an IRB
 - list the different classes of IRBs
- crew an IRB
 - identify the components of an IRB and ancillary equipment
 - contribute to the safe and efficient launching of an IRB
 - demonstrate safe crewing positions while negotiating the surf
 - identify hazards and risks and clearly communicate them to the driver
 - perform rescues, including conscious and unconscious patient pick-ups
 - perform emergency procedures
- maintain an IRB
 - perform pre-operational checks and preventative maintenance of the IRB hull
 - perform post-operational maintenance of the IRB hull
 - complete organisational documentation as required, including reporting major equipment wear or damage or personal injury.

You will also develop knowledge and skills to enable you to demonstrate competency in the nationally recognised unit of competency:

- PUASAR015 Crew small powercraft in a rescue operation.

This unit forms part of the nationally recognised qualification PUA30319 Certificate III in Public Safety (Aquatic Search and Rescue).

Prerequisites

To commence training for the IRB Crew Certificate you must meet the following course prerequisites:

- be at least 15 years of age on the date of final assessment
- hold and be proficient in the SLSA award
 - Bronze Medallion

What you need to complete this course

- A fully-qualified IRB Training Officer (trainer).
- An experienced and qualified IRB Driver (may be the trainer).
- Appropriate personal protective equipment (PPE) (e.g. lifejackets, wetsuit, sunscreen, long-sleeved rash-shirt, high-vis rash-shirt for training, patrol cap).
- *SLSA Powercraft Training Manual* 8th Edition.
- Access to the online component of learning (if using this option).
- Access to IRB standard operating procedures.
- Opportunities to undertake assessment activities, including access to fully-equipped IRB.

Topic 1 –Introduction to working with IRBs

This topic will help you answer the following questions:

1. What is this course about?
2. How will this course be assessed?
3. What are the safety issues when operating an IRB?
4. What is the Powercraft Code of Conduct?
5. What are the roles and responsibilities of IRB personnel?

Most of the content for this topic is in the *SLSA Powercraft Training Manual*, 8th edition. Your trainer will tell you when to refer to the Manual.

Remember this!

Safety is the primary consideration in all IRB Operations. You should be aware of your limitations and communicate these to the IRB Driver accordingly.

The IRB is the single most expensive piece of rescue equipment on our beaches. All qualified drivers and crew are responsible for looking after the equipment and it is expected that all drivers and crew will treat the boat and motor with the utmost care and respect.

The IRB is a high profile piece of equipment – it attracts attention in use – and all crew must be aware of their responsibility to take training seriously and not run the risk of being perceived as skylarking.

Safety is the primary consideration in all IRB operations. Injuries are common for those who do not follow standard operating procedures, so be aware of your own limitations and follow all reasonable instructions exactly and immediately.

IRB safety

Throughout this course, your trainer will emphasise and demonstrate IRB safety relevant to setting up the boat, operating the boat, cleaning, maintaining and moving the boat. You will also learn about the IRB safety equipment.

Particular hazards and risks related to operating the IRB include:

- weight of the IRB, motor and associated equipment – requiring teamwork and manual handling skills
- water in the IRB and the potential for capsize
- propeller hazards such as fouling with debris or risks associated with long hair, loose clothing or cords which may become tangled in the propeller
- risks to swimmers and surfers in the water, surf lines or lines attached to buoys
- hazards in the environment, such as surf conditions, shore/beach breaks, weather conditions, rocks and sandbanks, etc.

Other hazards and risks associated with surf lifesaving that are not specific to IRB operations will also apply, e.g., operational stress, fatigue, sun exposure, dehydration, hypothermia, dangerous surf, etc.

Your Trainer will conduct a risk assessment before the start of any water-based sessions. If you are not confident in your ability in any circumstance, let your trainer know and they will assist you to build your skills.

Remember this!

Operating an IRB is an important responsibility with serious potential dangers. NEVER show off or skylark in an IRB

Powercraft Code of Conduct

Reference: Powercraft Training Manual 8th Ed, p 4

Roles of driver and crew

The IRB Driver is trained to take overall responsibility for the operation of the IRB and to be responsible for the boat, crew and to the community and organisation. The IRB Crewperson/s also has an important role to play in this, under the supervision of the Driver. You will need to follow the instructions of the IRB Driver and be able to work well as part of a small team. The IRB Driver and Crewperson work with their patrol team and at the direction of the Patrol Captain.

Communication skills for IRB operation

When crewing an IRB, you will need to communicate clearly with the Driver and also with other lifesavers on the beach, and with the general public. You will need:

- effective listening skills to understand directions
- good verbal skills with the driver to ask questions and clarify directions, as well as to warn the driver of hazards you have observed, or observations made during rescue operations
- good verbal skills with the general public
- good verbal and listening skills with victims
- good signalling skills to communicate with others on the beach.

Topic 2 – Introduction to IRB equipment

This topic will help you answer the following questions:

1. What types of IRB might I be expected to crew?
2. What IRB equipment will I be working with?
3. What are the key safety issues in the IRB equipment area?
4. How is the IRB prepared for operations?
5. What post-operation procedures do I need to follow?

Most of the content for this topic is in the *SLSA Powercraft Manual 8th Edition*. Your trainer will tell you when to refer to the Manual.

Types of IRB

Reference: Powercraft Training Manual, 8th Ed, p 17

There are three main types of IRB currently operated by surf lifesaving clubs:

- Class 1 – soft hull
- Class 2 – rigid hull
- Class 3 – catamaran

Your club may have one or more of these types of boats which have different strengths and weaknesses in use. Class 1 and 2 boats are very similar, but Class 3 boats should be crewed and driven very differently and most problems experienced with Class 3 boats stem from trying to use them like the Class 1 and 2.

As a qualified crew person you may be expected to operate in all three types of boats. You should ensure you receive appropriate training and induction to crew in any model – especially Class 3 – if you are unfamiliar with the boat.

Pre-operational procedures

Reference: Powercraft Training Manual, 8th Ed, p 18-27

Practical activities

This session will involve you in a number of practical activities. Your trainer will explain and demonstrate the following tasks, which you will then have the opportunity to practice:

Activity 1

Familiarisation with the IRB area. Name the equipment and its storage areas; discuss safety precautions such as safe storage of fuel procedures.

Activity 2

Using Personal Protective Equipment (PPE) – Demonstrate correct use of safety helmets, wetsuits, booties, gloves, mask, spray jackets and personal flotation device (PFD) (as required in your state/territory) and stinger PPE in tropical regions.

Activity 3

Preparing the IRB for use – this will include checking log books, preparing auxiliary equipment, assisting with refuelling and assisting with assembling the motor.

Post-operational procedures

Reference: Powercraft Training Manual, 8th Ed, p 27-29

Depending on the timings of your course, you may move on to the next topic before returning to the pack-down activities listed here.

Practical activities

This session will involve you in a number of practical activities. Your trainer will explain and demonstrate the following tasks, which you will then have the opportunity to practice:

Activity 1

Basic maintenance of the IRB after activities involves:

1. Wash down the IRB, ensuring that you remove all sand and debris from inside the IRB.
2. Inspect the IRB for damage and record it in the logbook.
3. Clean and restow any auxiliary equipment used in the IRB
4. Assist the Driver with motor maintenance activities as required.

Activity 2

Discuss and practice disassembly of the IRB (where practical), including:

1. Fully deflating the IRB.
2. Inserting and removal of floorboards (where relevant to your vessel type).
3. Review manufacturer's operating manual and instructions for basic maintenance.
4. Rolling up and storing IRBs (where relevant to your vessel types).

Topic 3 – Introduction to crewing an IRB

This topic will help you answer the following questions:

1. Acknowledging your own limitations.
2. How should I warm up for IRB activities?
3. How is the IRB carried safely?
4. What roles does an IRB Crewperson have?
5. What crewing positions do I use during IRB operations?

Most of the content for this topic is in the *Powercraft Training Manual*, 8th edition. Your trainer will tell you when to refer to the manual.

Warming up for IRB personnel

At the start of any practical training session and prior to routine operations IRB personnel should warm-up physically to minimise the risk of injury. Your trainer will supervise you to perform a 10-15 minute warm-up that includes a heart-rate raising activity such as jogging, followed by stretching.

Manual handling of the IRB

Reference: Powercraft Training Manual 8th Ed p.6-7

Practical activities

This session will involve you in practical activities. Your trainer will explain and demonstrate the following tasks, which you will then have the opportunity to practice.

Activity 1

Practice correct manual handling procedures with IRB and equipment:

- in the IRB storage area
- on the beach.

Discuss and practice correct transportation of IRBs using trailers, ATVs or beach vehicles

Introduction to crewing techniques

Reference: *Powercraft Training Manual 8th Ed Ch3 and Appendix 1 (knots and lashings)*

Initially you will practice crewing techniques in an unladen IRB on land, before progressing to practicing in the water.

Practical activities

This session will involve you in practical activities. Your trainer will explain and demonstrate the following tasks, which you will then have the opportunity to practice:

- launching – entry to the boat
- sitting positions for the type of IRB you are likely to use in your club
- hand and foot positions
- crew position techniques when turning, parallel runs and trimming the boat
- crew positions when negotiating the break and punching a wave
- hazards to watch out for
- IRB capsize - roll over procedure including surfing an IRB to shore
- emergency drills
- patient pick-up techniques on conscious and unconscious patients
- return to shore
- transporting and lifting patients out of the boat
- search and rescue techniques
- common knots and lashings used in boating (see Appendix 1 of the *Powercraft Training Manual*, 8th ed.).

Topic 4 – Basic crewing of the IRB

This topic will help you answer the following questions:

1. How do I enter the IRB safely?
2. How do I safely negotiate the break as a Crewperson?
3. What are the different crewing positions I need to use?

Most of the content for this topic is in the *SLSA Powercraft Training Manual* 8th Edition. Your trainer will tell you when to refer to the manual.

Launching and boarding an IRB

Reference: Powercraft Training Manual, 8th Ed, Ch 3

Practical activities

This session will involve you in a number of practical activities. Your trainer will explain and demonstrate the following tasks, which you will then have the opportunity to practice:

Activity 1

Simulate launching the IRB – run through the steps on the beach.

Activity 2

Simulate boarding the IRB – practice jump entry and hip and body roll entries on the beach.

Activity 3

Choose a suitable launch site, taking into account hazards and surf conditions, then launch and board the IRB in the water.

Basic crewing of an IRB in various conditions

Reference: Powercraft Training Manual, 8th Ed, Ch 3

Practical activities

This session will involve you in a number of practical activities under the supervision of your trainer and with an IRB Driver. Your trainer will explain and demonstrate the following tasks, which you will then have the opportunity to practice. You should expect to practice some of these tasks many times in developing your skills.

Activity 1

Taking up correct crewing position and balancing (trimming) the boat post-launch, including proceeding through the surf. Where possible you will practice this in still water, calm or small surf initially before attempting more challenging conditions. Next practice proceeding through unbroken and broken waves while maintaining the balance (trim) of the boat, i.e. changing positions, shifting weight, using foot straps, bow rope and handle.

Activity 2

Practice trimming the boat while the driver takes the boat through various basic manoeuvres, including port and starboard turns, figure eight turns, negotiating waves, parallel running, punching through waves.

Activity 3

Practice returning to shore, giving associated signal, and using hand signals and verbal communication with the driver, and following driver's instructions about when/how to alight from the IRB and lift the IRB above the water line.

Activity 4

Practice entering the IRB from the water, as if you had fallen out. Practice this in deep water and in chest depth water.

Activity 5

Practice re-righting the IRB after capsize and surfing the IRB back to shore.

Topic 5 – Perform rescues in an IRB as a crewperson

This topic will help you answer the following questions:

1. How are rescues performed? Including:
 - a. observation and lookout procedures
 - b. patient pick-up and transport.

Practical activities

This session will involve you in a number of practical activities under the supervision of your trainer and with an experienced IRB Driver. Your trainer will explain and demonstrate the following tasks, which you will then have the opportunity to practice. You should expect to practice some of these tasks many times in developing your skills:

Activity 1

Practice rescuing single patients and then more than one patient in clear open water. Include different rescue techniques suitable for conscious and unconscious patients of various sizes and weights. Practice single and dual lifts.

Activity 2

Practice rescuing single patients and then more than one patient in broken water, using a range of suitable techniques.

Activity 3

Practice participating in mass rescues. Include use of appropriate signals.

Activity 4

Practice returning patients to the shore and carrying them from the IRB.

Activity 5 (optional – depending on conditions prevailing at your location)

Practice rescuing single patients and then more than one patient in challenging conditions, e.g., extreme broken surf, near rocks.

Topic 6 – Search and Rescue (SAR) operations

This topic will help you answer the following questions:

1. What role do Powercraft play in a SAR operation?
2. How can SLS personnel work effectively with other agencies during a SAR operation?

Theory session

This session will involve learning the following:

- The role of SAR team members, including:
 - Incident Coordinator
 - Incident Controller
- The procedure for an Initial Response in search operation, including:
 - Information gathering
 - Initial search and marking of location
 - Notification to authorities
- What to do once a patient is identified as missing, including
 - SMEAC plans (see Chapter 7 in the *Powercraft Training Manual*, 8th ed.)
 - Factors affecting SAR operations, such as wind, weather, ocean currents and tides, water clarity and rip currents
 - Search patterns
 - SLS policies surrounding body retrieval and media protocols

Topic 7 – IRB Towing

This topic will help you answer the following questions:

1. What State/Territory marine laws affect towing?
2. How to attach/remove a tow rope

Most of the content for this topic is in the SLSA *Powercraft Training Manual* 8th Edition. Your trainer will tell you when to refer to the Manual.

Practical activities

Reference: Powercraft Training Manual 8th Ed, p.49-51

This session will involve you in a number of practical activities. Your trainer will explain and demonstrate the following tasks, which you will then have the opportunity to practice:

Activity 1

Discuss and practice correct towing procedures. You will cover state marine laws regarding towing and attaching/removing tow ropes.

Assessment Information

There are four assessment tasks required to complete the IRB Crew Certificate course. Below is a description of the assessment tasks required to demonstrate competence in this course. This section is for information only. All evidence should be collected in your Assessment Portfolio.

Assessment task 1: Log of training hours

Candidates must demonstrate that they have completed their practical training in a variety of local surf conditions and record this training in the log of training hours presented for assessment. This training must be supervised by an IRB Training Officer.

If local surf conditions do not provide a full range of training opportunities, candidates should undertake additional training if they wish to crew in another area after attaining their IRB Crew Certificate.

Assessment task 2: Theory Questions

This task is to assess your knowledge of your duties as an IRB Crew. Depending on your State/Territory options, you may be able to complete this component online. Ask your Trainer for further details.

If you are not able to complete this assessment online, you will need to complete the questions on the paper based version, this can be downloaded from the SLS Members Area, search for *IRB Crew Assessment 2: Theory Questions* or ask your Trainer for a copy. Please write your answers in the spaces provided.

Assessment task 3: Observation 1 – Pre & Post Operation Requirements

Observation is to be carried out using an IRB and equipment in the beach environment during completion of training activities. Tasks are to be performed under the supervision of an IRB Driver. A checklist is provided in your Assessment Portfolio. This checklist can be completed by your Trainer. It must be sighted by your Assessor.

Crew are to perform basic maintenance only to the IRB and not to the motor. Tasks are to be performed under the direction of the IRB Driver.

Assessment task 4: Observation 2 – Crewing and Rescues

Observation is to be carried out in an IRB in the beach environment during at least two simulated activities. Tasks are to be performed under the supervision of the IRB Driver. A checklist is provided in your Assessment Portfolio. This checklist can be completed by your Trainer. It must be sighted by your Assessor.

Candidates are to perform a minimum of two rescues. One of the rescues must be on an unconscious patient.

- Rescue 1- Beyond the break.
- Rescue 2- In white-water (as per state requirements).