



**SURF LIFE SAVING®**  
NEW ZEALAND



## **IRB Crewperson Module Senior Lifeguard Award – IRB Driver**

# **Instructor Award Resource**

Updated: October 2024

*In it for life*



## Contents

Introduction.....	1
IRB Crewpersons Training Process .....	2
SLA IRB Driver Training process .....	3
Instructor Training Process .....	4
Exam Components.....	5
IRB Crewperson Module (IRBCM).....	5
Senior Lifeguard Award - IRB Driver (SLA-IRBD) .....	7
IRB Crewperson Exam Task Details .....	10
IRB Hull Setup .....	10
Crewing Skills .....	10
Single Patient Rescue .....	11
IRB Hull Closedown .....	12
IRB Driver Exam Task Details .....	13
IRB Engine Setup .....	13
Engine Reinstatement.....	13
Driving Skills .....	15
Single Patient Rescue .....	16
Multiple Patient Rescue .....	17
Crewperson recovery & solo driving .....	17
IRB Engine Closedown .....	18
Readiness for Assessment .....	19
Adult learning.....	23
BLOOMS Taxonomy .....	25
Instructional techniques .....	28
Whanaungatanga .....	28
Learner centered approaches.....	29
Planning.....	31
Instructional skills .....	34
Creating safe learning environments.....	34
Questioning .....	36
Feedback .....	37
Evaluating the Lesson .....	38
Engine .....	52



# Introduction

These resources have been designed to inform instructors of their responsibilities when taking candidates through the IRB Crew Module (IRBCM) and Senior Lifeguard Award – IRB (SLA-IRB). If you are a trainee instructor wishing to gain your instructors award, please use the IRB Drivers Instructors Workbook in conjunction with these resources.

The following resources have been created for instructor use:

- Exam task details (in this document)
- Lesson plans
- Online IRB Crewperson pre-learning module (optional)
- IRB Video modules

The IRB Crewperson Module and IRB Drivers Award involves competency based training and assessment. This means that each candidate needs to be deemed competent in the units for each qualification to be able to complete them. To be able to show competency, evidence must be gathered by the instructor, during instruction and the examiner, at the exam. The way in which evidence is gathered is through completion of the workbook, tasks during instruction and tasks during the exam.

## The IRB Training Manual

The IRB Training Manual is a resource that has been designed to support instructors and candidates to gain the knowledge and skills required to teach or complete the IRB Crewpersons Module, and the Senior Lifeguard IRB Drivers Award. This manual should be kept as a reference for all club members at any time.

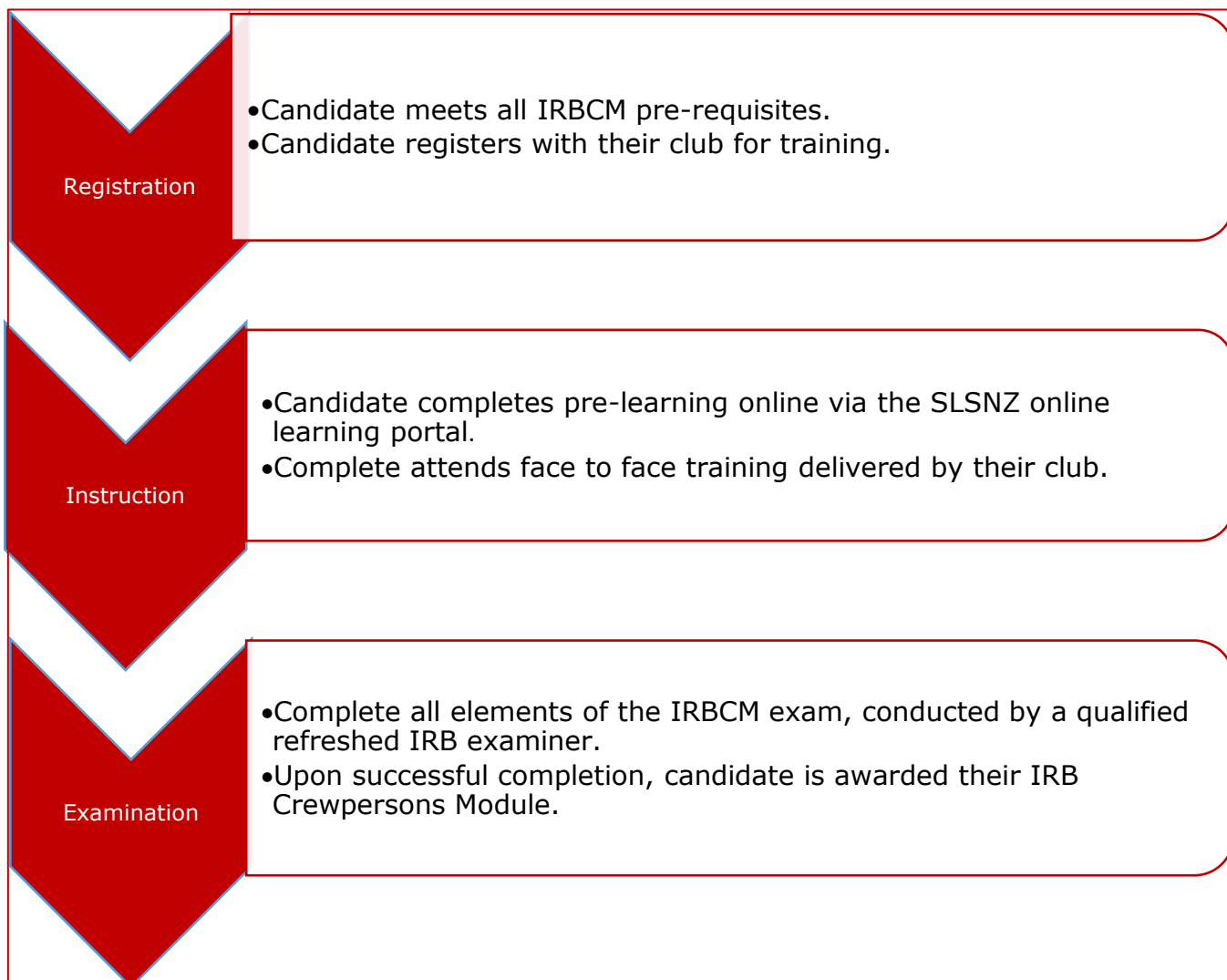
## Development

All resources have been written by Surf Life Saving New Zealand and will be reviewed and updated when required. Feedback can be supplied via email to: [member.education@surflifeaving.org.nz](mailto:member.education@surflifeaving.org.nz)



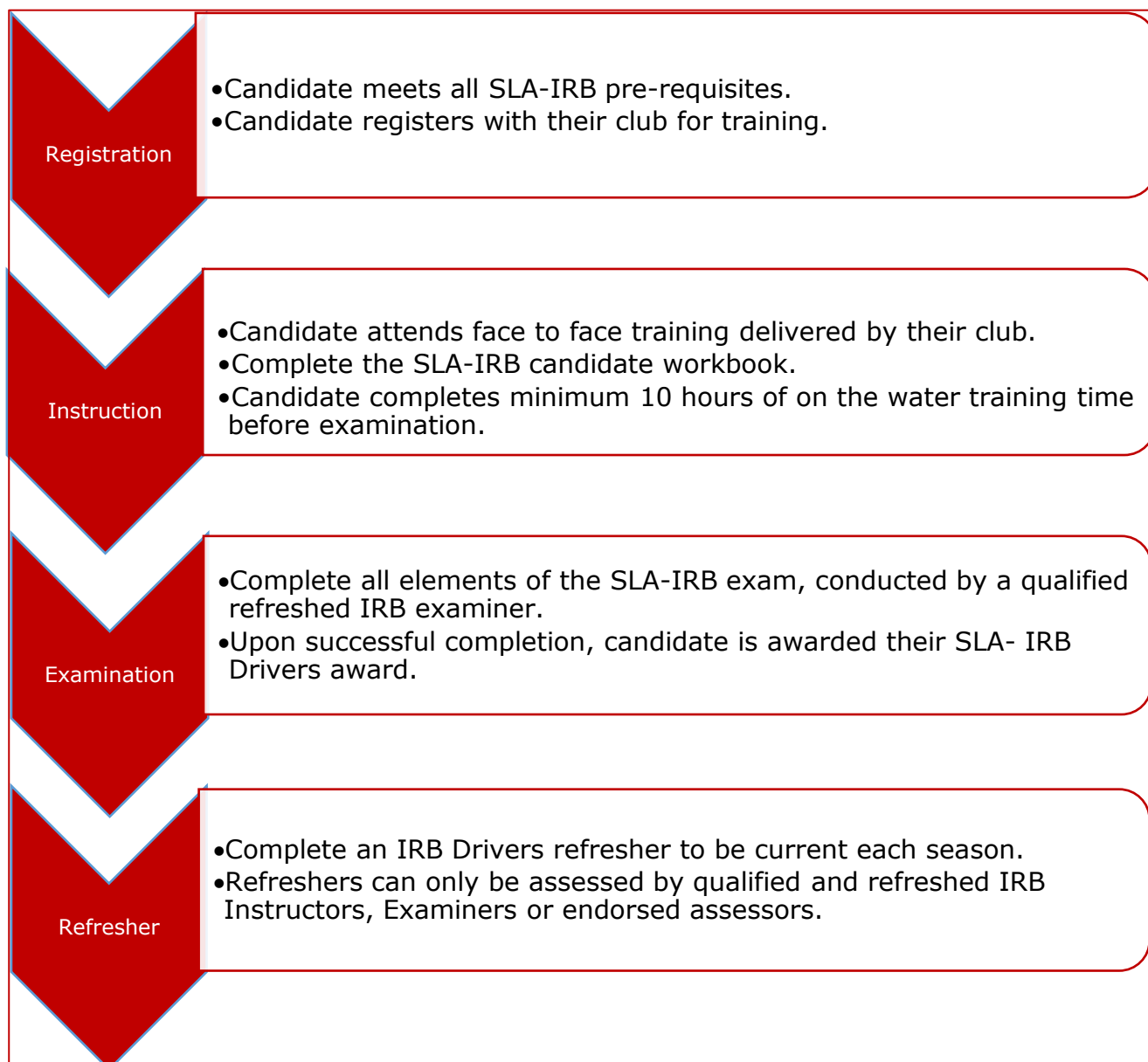


## IRB Crewpersons Training Process





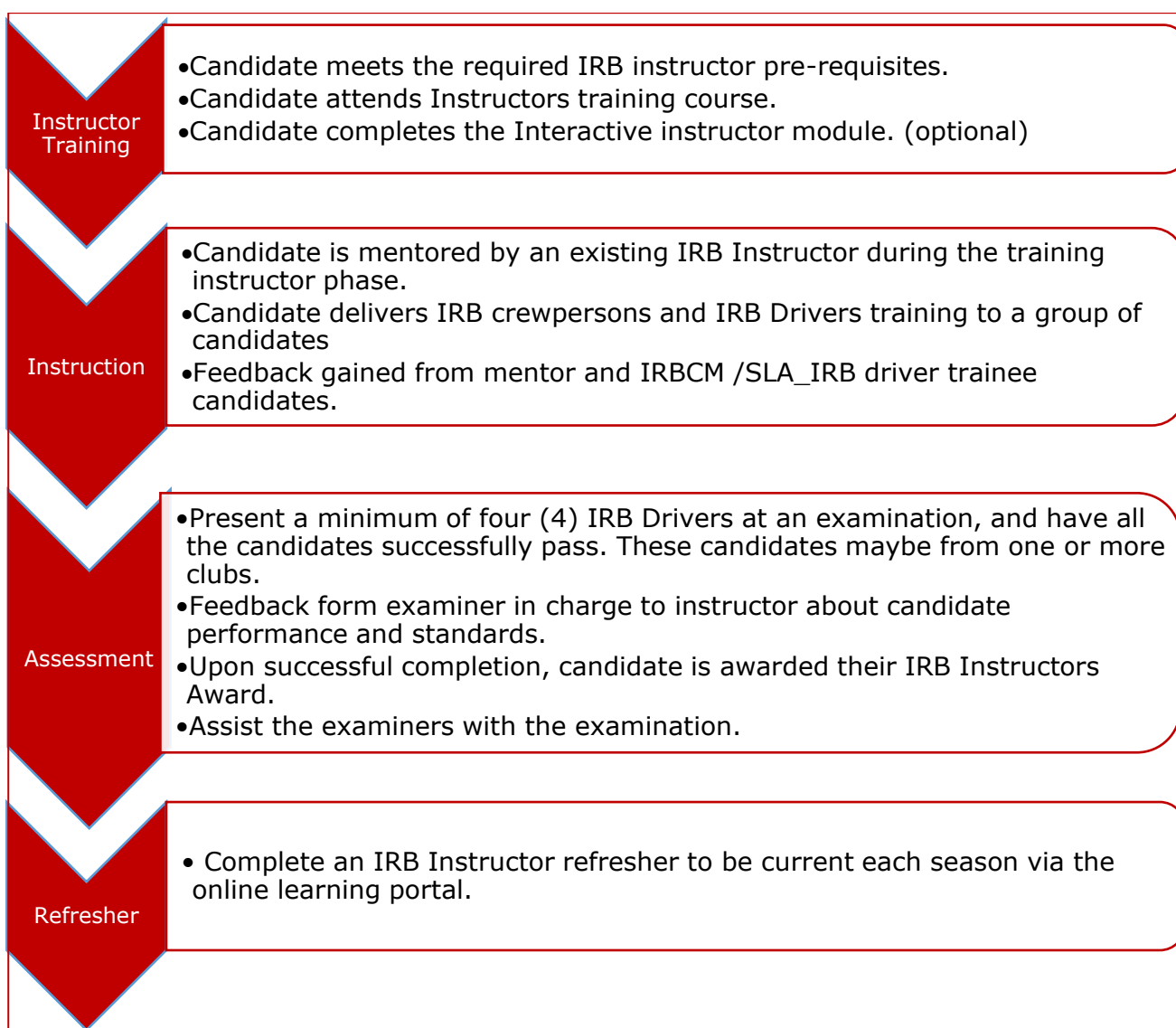
## SLA IRB Driver Training process





# Instructor Training Process

The main role of the instructor is to effectively prepare candidates for assessment – essentially setting each candidate up for success in the required Crewpersons and Drivers award assessments. Looking past these assessments, instructors play a crucial role in setting candidates up for success as an IRB crewperson and driver, having an impact on all those that partake in recreational activities at patrolled beaches around New Zealand.







# Exam Components

## IRB Crewperson Module (IRBCM)

**The IRB Crewperson Module is made up of the following theory and practical components:**

1. Demonstrate the knowledge and application of health, safety, and risk management.
2. Apply knowledge of hull equipment.
3. Show and understand the procedures for filling a fuel bladder using all required PPE and equipment.
4. Show and understand the procedures of IRB hull preparation.
5. Understand and use correct IRB launching procedures.
6. Use and apply crewing techniques.
7. Perform a single person rescue.
8. Perform a crewperson recovery utilizing reboarding techniques.
9. Use and apply roll over techniques.
10. Show and understand the procedures for IRB hull closedown.

### 1. Candidate workbook

Note: There is no workbook component for the IRB Crewperson module.

### 2. Theory test

The theory test assesses candidate's:

- **Knowledge and Understanding:** Assesses the candidates grasp of IRB content, concepts, and facts.
- **Critical Thinking:** Assesses the candidates ability to analyze, evaluate, and process information.
- **Memory:** Assesses the candidates recall of specific information or definitions.
- **Written or Oral Communication:** Evaluates how well the candidates can express their knowledge and understanding by writing or using a reader/writer if required.

The candidate must correctly answer questions on the following content sections.

- Health & Safety
- IRB Hull
- Fuel
- IRB Hull set up
- Crewperson Skills and Techniques
- Rescues
- IRB Hull close down



### 3. Practical Test

The practical test assesses candidate's:

- **Application of Skills:** Assesses the candidates ability to apply theoretical knowledge with IRB crewperson roles and responsibilities.
- **Hands-On Tasks:** Assesses the candidates ability to perform specific IRB hull tasks, procedures, and specific crewperson skills and techniques.
- **Problem-Solving:** Assesses the candidates ability to troubleshoot and solve practical IRB problems.

The following practical test components must be covered:

- **IRB Hull**  
Apply knowledge of hull equipment.
- **Fuel**  
Show and understand the procedures for filling a fuel bladder using all required PPE and equipment.
- **IRB Hull Set-up**  
Show and understand the procedures of IRB hull preparation.
- **Crewperson Skills and Techniques**  
Understand and use correct IRB hull launching procedures.  
Use and apply crewing techniques.  
Perform a single person rescue.  
Perform a crewperson recovery utilizing reboarding techniques.  
Use and apply roll over techniques.
- **IRB Hull Closedown**  
Show and understand the procedures for IRB hull closedown.

Evidence for the above components is gathered during instruction and at the examination.





## Senior Lifeguard Award - IRB Driver (SLA-IRBD)

The Senior Lifeguard – IRB Driver Award is made up of the following theory and practical components:

1. Demonstrate the knowledge and application of health, safety, and risk management.
2. Apply knowledge of Maritime NZ rules and regulations.
3. Show and understand the procedures of IRB engine preparation.
4. Understand fuel compliance and use PPE when following IRB refuelling procedures.
5. Show and understand the procedures of an engine reinstatement.
6. Understand and use correct prelaunch and launching procedures.
7. Use and apply driving techniques and returning to shore procedures.
8. Perform a crewperson recovery utilising solo driving technique.
9. Perform a single patient pickup, and a multiple patient rescue.
10. Provide patient care.
11. Perform a patient lift and carry.
12. Show and understand the procedures for IRB engine closedown.

### 1. Candidate Workbook

The candidate workbook assesses several key areas before a theory component of an exam:

- **Understanding of content and concepts:** It ensures that candidates have a solid grasp of fundamental IRB concepts and content that will be built upon in the theory component of the exam.
- **Application of Knowledge:** Workbooks often include exercises that require students to apply what they've learned in theory, and practical trainings, helping to reinforce their understanding.
- **Problem-Solving Skills:** Workbooks assess students' ability to solve problems and think critically, which is crucial for tackling more complex theoretical questions.
- **Preparation and Practice:** Workbooks provide practice questions similar to those that might appear in the theory test, helping students become familiar with the format and types of questions they will encounter.

These assessments help ensure that candidates are well-prepared and confident when they approach the theory component of their exam.

The candidate workbook check **MUST** be completed satisfactorily, if not, the candidate must not complete the exam and all other candidate workbooks from the club must also be checked. The candidate must complete and have passed the workbook to move onto section 2 or 3 of the exam.

Note: The workbook must be assessed as per the order below. If a candidate has chosen to complete the online writable version a hard copy must be presented. The theory test and the practical test may be done in any order following the workbook's completion.

### Candidate Workbook

One randomly picked candidate workbook must be checked from each attending club.



## Theory Test

The SLA - IRB drivers theory paper assesses candidate's:

- **Knowledge and Understanding:** Assesses the candidates grasp of IRB content, concepts and facts.
- **Critical Thinking:** Assesses the candidates ability to analyze, evaluate, and synthesize information.
- **Memory:** Assesses the candidates recall of specific information or definitions.
- **Written or Oral Communication:** Evaluates how well the candidates can express their knowledge and understanding by writing or using a reader/writer if required.

The candidate must correctly answer questions on the following content sections.

- Health & Safety and Operations
- Maritime Regulations
- IRB Engine
- Fuel
- IRB Engine Set up
- Driver Skills and Techniques
- Rescues
- Engine Reinstatement
- IRB Engine Close down

### 3. Practical Test

The practical test assesses candidate's:

- **Application of Skills:** Assess the candidate's ability to apply theoretical knowledge with SLA- IRB drivers roles and responsibilities.
- **Hands-On Tasks:** Assess the candidates ability to perform specific IRB hull tasks, procedures, and specific SLA- IRB driver skills and techniques.
- **Problem-Solving:** Assesses the candidate's ability to troubleshoot and solve practical IRB problems.
- **Technical Proficiency:** Assesses the candidate's competency in using IRB engine tools, machinery, and equipment.

All of the workbook, theory and practical exam components are important as they test different aspects of the candidates learning and readiness to achieve the SLA-IRB driver award.

The following practical test components must be covered:

#### **Fuel**

Understand fuel compliance and use PPE when following IRB procedures.

#### **Engine Reinstatement**

Show and understand the procedures of an engine reinstatement.



### **Driver Skills and Techniques**

Understand and use correct prelaunch and launching procedures.  
Use and apply driving techniques and returning to shore procedures.  
Perform a crewperson recovery utilising solo driving techniques.

### **Rescues**

Perform a single patient pickup, and a multiple patient rescue.  
Provide patient care.  
Perform a patient lift and carry.

### **IRB Engine closedown**

Show and understand the procedures for IRB engine closedown.

The majority of evidence for the components is gathered by the instructor during instruction of the candidate. All evidence gathered in the instructional phase is done so in the IRB Driver candidate workbook. The workbook must be checked and signed off by the instructor. This could be done after each lesson or at the end of the instruction phase for the specific task.

**The workbook must be handed over to the examiner prior to the commencement of the exam.**

*Note: The Chief Examiner can apply to SLSNZ for candidate workbook completion flexibility. This must be made in writing to the National Education Manager, SLSNZ.*



## The next section explains how each exam task will be conducted and assessed.

### IRB Crewperson Exam Task Details

This section explains in detail how each exam task will be assessed. Each task within the exam will be marked in a way set out by SLSNZ. It is essential to teach all candidates:

- The components of each assessment task.
- The criteria that they will be marked against.

It is essential that when you take your candidates through the tasks that it is done so in the same way as it will during the exam.

#### IRB Hull Setup

Candidates will assist the driver to prepare their IRB's ready for use. Candidates can complete these tasks in a small group.

- Inflatable compartments are inflated in correct order.
- IRB inflated to the correct pressure: pontoons and keelson.
- Inflation valve bungs are refitted.
- Fuel bladder is filled following the correct procedure, using required PPE and equipment.
- Fuel bladder secured correctly.
- All equipment carried in the appropriate place: Rescue tube (secured to the IRB), two paddles, blunt ended knife, two personal flotation devices (PDFs), two helmets, and a radio.

Each candidate must complete each task in the above list.  
All tasks must be completed with accuracy to pass this section.

#### Crewing Skills

Candidates will be asked to crew an IRB in and out through the surf.

The tasks cover the following components.

#### Launching the IRB

- Correct removal of IRB from trailer.
- Crewperson demonstrates correct positioning inside the IRB before it is launched.
- The crewperson holds the IRB secure facing the oncoming waves.
- The crewperson uses correct boarding technique using the crewpersons boarding handgrip, and bow rope.
- The crewperson enters the IRB in good time, when instructed by the IRB driver.
- The crewperson ensures three points of contact with the IRB for position and balance.



### **General crewing ability**

- The crewperson demonstrates correct positioning when going over large green or broken waves.
- The crewperson maintains correct positioning with their left and right hand, while their left foot is secured in the foot strap. The left hand should hold the bow rope on impact.
- The crewperson balances correctly especially during parallel running, while scanning the sea to avoid swimmers or surfers moving out through the surf line.
- The crewperson can recover capsized IRB with driver.

### **Crewperson Recovery**

- The crewperson lets go of all connections of the IRB and form their body into a ball and signals the 'OK' signal.
- The crewperson when in the water is able to re-board the IRB unassisted on the driver's side.

### **Returning to shore**

- The crewperson directs the IRB using hand signals and verbal signals.
- The crewperson scans the sea to avoid swimmers, surfers or seaweed and stands if directed by the driver to gain a clear view.
- The crewperson shifts their weight to the back sliding along the pontoon, if IRB goes over a wave while returning to shore.
- The crewperson waits for the command of the driver to exit the IRB.

Each candidate must complete each task in the above list.

All tasks must be completed with accuracy to pass this section.

## **Single Patient Rescue**

The candidate will demonstrate their ability to perform a single rescue with a patient **within the surf zone**.

The Driver will drop the patient off at a predetermined location within the surf zone. The Driver will then return 'almost' to the shore before heading back out to sea to make the pick-up.

After the first pick-up the Driver shall drop the patient back in a similar location and repeat the pick-up process. The second pick up will simulate an unconscious patient pick up. On the successful completion of the second pick-up the Driver shall return to shore giving the Assistance required signal.

On the return other members of the group may hold the IRB while the patient is lifted out.

**Note: patients may not adopt any competition style pick-up techniques.**

The tasks cover the following components:

### **Patient Pickup**

- The crewperson assists in locating the patient
- The crewperson moves across the IRB to the port pontoon, at the appropriate time in preparation for pick up.



- The crewperson adopts the correct positioning to lift the patient aboard.
- The crewperson grasps the patient in the correct manner (under the arm pits or by gripping outstretched arms, lifting the patient as high as possible)

### **Care of the patient**

- The crewperson positions the patient between legs, reclined against their body in the bow, leaning against the pontoon.
- Maximum head tilt is maintained by the crewperson.

### **Patient lift and carry from IRB**

- The crewperson lifts the patient from the IRB under their armpits.
- The crewperson controls the patient lift and carry.
- Patient is carried up the beach with crewperson supporting the patients chin to support their head.
- Patient is handled carefully, and appropriate care is administered.
- For an unconscious patient the crewperson must show and maintain an open airway (pistol grip) during the patient lift and carry.

Each candidate must complete each task in the above list.  
All tasks must be completed with accuracy to pass this section.

## **IRB Hull Closedown**

Candidates are broken into groups of 3- 4. Candidates will demonstrate the correct IRB hull closedown procedure, re-fueling the bladder and deflation of IRB.  
The following components need to be demonstrated by the candidate:

- The IRB is positioned correctly on the trailer.
- The fuel bladder is removed, washed, and stored on a flat dry surface inside a fuel storage cabinet (not in the IRB).
- The IRB hull is washed starting at the bow and working towards the stern, including a light spray of the engine with the cover on.
- The IRB is checked for damage, rips or tears including the propeller and guard.
- All sand is removed and flushed out of the auto bailers.
- The IRB hull is slightly deflated for storage. (approximately 3.5 kPa)
- The trailer is washed including wheels and hubs. PFD's, rescue tube, helmets, and ATV washed and stored.
- The front of the trailer is elevated to allow the IRB to drain when stored if required.

Each candidate must complete each task in the above list.  
All tasks must be completed with accuracy to pass this section.  
Each candidate in the group must show proficiency with each task in this section.



## **IRB Driver Exam Task Details**

This section explains in detail how each exam task will be assessed. Each task within the exam will be marked in a way set out by SLSNZ. It is essential to teach all candidates:

- The components of each assessment task.
- The criteria that they will be marked against.

It is essential that when you take your candidates through the tasks, that it is done so in the same way as it will during the exam.

### **IRB Engine Setup**

Candidates will prepare their IRB engine ready for use. This can be completed in a small group situation.

The following components need to be demonstrated by all candidates:

- The driver checks previous IRB operations logbook.
- The driver checks the IRB engine is fitted securely to the centre of the transom plate, making sure that the clamp screws are tight.
- The driver carries out engine checks including prop and guard.
- The driver makes sure that the cowling cover is secured correctly.
- The driver ensures that the engine safety stop is attached.
- The driver checks that the fuel line is attached to the engine using a clean fuel bayonet.
- The driver makes sure that fuel is pumped through the primer bulb until firm.
- The driver makes sure that the engine is started in the flush tank and checks the tell tale.
- The driver checks the throttle return spring is functioning correctly.
- The driver checks the engine tilt.

Each candidate must complete each task in the above list.

All tasks must be completed with accuracy to pass this section.

Each candidate in the group must show proficiency with each task in this section.

### **Engine Reinstatement**

Candidates are broken into small groups. (3-4 candidates). The candidate will demonstrate a simulated engine reinstatement. Extreme care must be taken to avoid the possibility of water entering the carburettor air intake as the 30 minute run under load is not part of the reinstatement assessment. Engines are not to be submerged on purpose for this section.

The following components need to be demonstrated by all candidates in the group:

- The candidate has the following items to complete the reinstatement.
- Dewatering agent
- Foot pump
- Fuel and fuel absorbent spill mat
- Fuel bladder
- Fire extinguisher – ABE dry powder
- Fuel safe glove
- Fuel safe wrap around glasses





- 10mm ring spanner
- Spare spark plugs and spark plug remover
- Flush tank
  
- The driver drains the carburettor. The candidate must loosen the drain plug from the carburettor, but not remove it to allow water and field drain from the carburettor.
- The driver demonstrates flushing the carburettor by connecting the fuel line bayonet and pumping fuel through the carburettor to ensure no water remains. The candidate must then retighten the drain plug.
- The driver removes both spark plugs using a spark plug remover.
- The candidate demonstrates pumping water from the power head by tilting the engine so that the spark plug holes are facing down. The candidate must make sure that the kill switch is in OFF position and then pull start the engine 20 times. This process must be completed in a manner that captures all the fuel contain and contaminates, for example using a fuel absorbent fuel mat.
- The candidate demonstrates flushing the cylinders with fuel by tilting the engine so that the spark plug holes are facing up and pouring about half a cup of fuel mix into each cylinder. The candidate holds the engine vertically and shakes vigorously back and forth and side to side. The candidate then places the engine in a horizontal position making sure spark plug holes are facing down, and the kill switch is in off position. The candidate pull starts the engine 10 times.
- The candidate must replace the spark plugs in lubricate the power head making sure they are clean, dry, and replaced with new spark plugs if concerned with condition. The candidate sprays inside cap slightly with the ordering agent in reef it's the spark plugs. The candidate must spray the power head lightly with dewatering agent targeting the correct areas.
- The candidate places the engine in the flash tank and starts the engine checking the tell tale and running in the tank for 10 minutes.

The candidate needs to be familiar with the last step in the reinstatement process, which is fitting the engine to the IRB, launching the IRB and running the engine under load for at least 30 minutes.

Candidates must be able to explain this procedure.

Note: this is not examined.

Each candidate must complete each task in the above list.

All tasks must be completed with accuracy to pass this section.

Each candidate in the group must show proficiency with each task in this section.



## Driving Skills

A pre-determined course will be set up by the examiner. Candidates will be asked to drive an IRB in and out through the surf at least two times. Each 'in and out' should be started with the crewperson standing and holding the IRB ready for launch.

The following skills need to be demonstrated by all candidates:

### Launching

- The driver needs to carry out a prelaunch briefing with their crewperson.
- The driver selects the adequate depth of water for a start.
- The driver boards the IRB prior to starting the engine or the driver may wish to start the engine from a standing position.
- The engine is started as per the correct procedures by the driver.
- Prior to engaging the gear, when the engine is running the driver must have and the driver must have and maintain control of the throttle arm tiller.
- The driver must engage forward gear with their left arm and instruct the crewperson aboard.
- The driver must not waste time during launching procedure and can adopt other procedures to launch the IRB depending on surf conditions.

### General driving ability

- The driver has the correct body positioning. The drivers right foot is secured into the drivers foot strap.
- The driver is able to take on large broken waves head on.
- The driver is assertive and moves quickly from one line of broken surf to be in the best position to take on the next line of broken surf.
- The driver eases the throttle back just before hitting the wave.
- During parallel running the driver is able to keep a constant speed and turns slightly into waves before impact.
- The driver shows control of the IRB.
- The driver and crewperson demonstrate that they look comfortable, working as a team and shows good communication with crewperson and on shore lifeguards.
- The driver is able to pick a good course through the surf.
- The driver shows consideration of their crewperson when negotiating the surf.

### Returning to shore

- The driver has good communication with the crewperson as they direct the IRB using hand signals and verbal signals.
- The driver demonstrates the ability to scan the sea to avoid swimmers, surfers, seaweed, fishing lines and other hazards.
- The driver maintains the position of the IRB between waves without slipping back into the wave behind or allowing a following wave to catch up to the IRB.
- The driver instructs the crewperson to shift weight to the back, if the IRB goes over a wave while returning to shore.
- After the engine has stopped the kill switch returned to the 'run' position by the driver.
- The driver places the gear lever in the 'neutral position'.
- The driver negotiates engine shut down complete in a water depth that is not too deep or too shallow.
- The driver tilts engine before it hits the sand.
- The driver is able to demonstrate beaching the IRB at a designated Launch area.



Each candidate must complete each task in the above list.  
All tasks must be completed with accuracy to pass this section.

## Single Patient Rescue

The candidates will demonstrate their ability to perform a single rescue (patients of reasonable size) **within** the surf zone.

The Driver will drop the patient off at a predetermined location within the surf zone. The Driver will then return 'almost' to the shore before heading back out to sea to make the pick-up.

After the first pick-up the Driver shall drop the patient back in a similar location and repeat the pick-up process.

On the successful completion of the second pick-up the Driver shall return to shore giving the Assistance Required signal. On the return other members of the group may hold the IRB while the patient is lifted out. **Note: patients may not adopt any competition style pick-up techniques.**

The following skills need to be demonstrated by all candidates:

### Patient pickup

- The driver has good communication with the crew person in locating the patient.
- The driver has good speed and route to the area of the patient.
- The driver stops short and assesses the patient and the checking the surf conditions and for any hazards.
- The driver positions the patient alongside the port pontoon.
- The driver idles the engine in gear when reaching the patient.
- The driver accelerates slightly forward to allow the patients legs to rise to the surface, the driver then lifts the patients legs aboard while commencing a port turn.
- The driver demonstrates good timing during pickup (picked up after the wave hits the patient)
- The driver shows good teamwork.
- The driver starts the pickup with the IRB facing into oncoming waves.

### Care for the patient

- The driver uses the assistant required signal on return to shore.
- Driver ensures a safe return to the beach for the patient, making sure that no unnecessary risks are taken.

### Patient lift and carry from IRB

- The driver lifts the patient from the IRB holding their legs.
- The patient is carried up the beach.
- The driver demonstrates appropriate care to the patient.

Each candidate must complete each task in the above list.  
All tasks must be completed with accuracy to pass this section.



## Multiple Patient Rescue

This task can be completed in conjunction with the conscious and unconscious patient pickups for the crewperson tasks. For the multipole patient rescue there needs to be at least two patients picked up.

The candidates will demonstrate their ability to perform a multiple rescue (patients of reasonable size) within the surf zone. The Driver will drop the patients off at a predetermined location within the surf zone.

The Driver will then return 'almost' to the shore before heading back out to sea to make the pick-up. After the first pick-up the Driver shall drop the patients back in a similar location and repeat the pick-up process.

The following skills need to be demonstrated by all candidates:

### Patient pickup

- The driver locates the patients.
- The driver communicates with the patients telling them what to do. The driver instructs them to grasp the pontoon ropes if safe to do so.
- The driver instructs the crew person to lift the patients at most risk first.
- Where possible the driver instructs the crewperson to throw a rescue tube to other patients that are not picked up immediately.

**Note: Patients may not adopt any competition style pick-up techniques.**

Each candidate must complete each task in the above list.  
All tasks must be completed with accuracy to pass this section.

## Crewperson recovery & solo driving

**NOTE: Solo driving is not a recommended practice under normal circumstances. The IRB should not be put to sea without a crewperson and driver. However, should the crewperson fall out at sea, the driver needs the necessary skills to drive the IRB solo and recover the crewperson.**

The driver will drop their crewperson off within the surf zone, then demonstrate as directed by the examiner:

- Negotiating surf
- Controlled turns

Within the series of practical skills directed by the examiner, the driver will need to demonstrate the following.

- The driver is confident with the stability of the IRB when the crewperson has fallen overboard and shows good control of speed and steering.
- The driver moves their body forward in the IRB and approaches waves at a correct angle.
- The driver is confident driving in the surf and is aware of what is happening around them.



- The driver can navigate the IRB safely for a quick person recovery or get a new crewperson. The driver must show the 'assistance required' signal or radio in requesting a new crew person.

Each candidate must complete each task in the above list.  
All tasks must be completed with accuracy to pass this section.

## **IRB Engine Closedown**

Candidates are broken into small groups. (3-4 candidates). All candidates will demonstrate the correct IRB engine close down procedures.

The following procedures need to be demonstrated by all candidates:

- The driver gives the engine with the cover on, a light spray with the hose including the prop guard.
- The driver makes sure the gear lever is neutral position. The driver starts the engine, checks the tell tale and runs the engine until it stops.
- The driver removes the engine cover and lightly rinses the power head avoiding the carburettor.
- The driver removes remaining water from the power head using a cleaning rag or blow dries the power head with a foot pump.
- The driver removes the engine from the flush tank.
- The driver removes any grime or oil stains with a clean rag (and cleaning agent if required) while completing a systematic check of the engine from top to bottom.
- The driver sits the engine cover loosely on the engine so that the air can get in and around the power head. The driver places a dry towel over the power head and then places the engine cover loosely on top.

Each candidate must complete each task in the above list.  
All tasks must be completed with accuracy to pass this section.  
Each candidate in the group must show proficiency with each task in this section.



## Readiness for Assessment

During delivery of training, instructors will need to monitor the progress of all candidates. We will be assessing them to see if they are ready for assessment. Throughout the lesson the skills and knowledge of the candidates gradually increase and develop. At some point following the training the instructor needs to make a judgement as to whether the candidates are ready for assessment.

To make this judgement the instructor needs to know that the candidates have achieved all of the training objectives. In order for this to occur competence has to be demonstrated.

This can be achieved by:

- Observing candidates during training and using checklist to record the development of the candidates.
- Asking another Instructor to observe the candidates to gain their feedback.
- Discussing their workplace performance with their supervisor.
- Seeking follow-up sessions to discuss performance.

Ways we can check performance:

- Observing candidates.
- Peer evaluation.
- Discussing their performance.
- Seeking follow-up sessions to check/increase performance.
- Self-assessment.

At some point during the training the instructor needs to make a judgement as to whether the candidates are ready for the examination. To make this judgement the instructor needs to know that the candidates are competent in all of the necessary tasks to the required standard.

### Self-assessment

Encouraging learners to assess their own performance (self-evaluation)

Giving feedback is very helpful and necessary for your learners to know how they are progressing during their training. However, it is just as important that the learners learn how to assess their own progress. This will also allow themselves to gauge how ready for assessment they are.

Some techniques that candidates can use for self-assessment are:

- Asking other learners for feedback.
- Asking colleagues about specific aspects of their performance.
- Seeking follow up sessions with the instructor to discuss their performance.
- Keeping notes about the things that they did well and ways they could improve.
- Reflecting on their own progress during and after the sessions.
- Setting goals for improving at certain tasks.
- Finding someone to talk to about ways to improve.
- Learning from mistakes.
- Receiving and analysing feedback from the instructor.

Where possible give candidates the opportunity to use self-assessment.



# The Teaching Toolbox

This section of The IRB Crewperson and IRB Driver Instructors resource has been developed by Surf Life Saving New Zealand to help Instructors deliver and implement an effective training programme for the IRB crewpersons and IRB drivers award.

An effective instructor will encourage learning and create an environment which facilitates learning. Whether you are training one-on-one or a small group the first step is to develop a sense of mutual respect and trust.

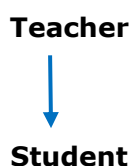
Recognising that while the instructor has certain skills and knowledge, so do each of the learners. So this can create a sense of mutual respect between the instructor and learners. If the individual abilities of each person are valued and used in a supportive way the whole group benefits from the learning experience and it is enriched for everyone. This two-way approach respects the contributions that each person in the training group can make and acknowledges that everyone has something from which others can learn.

## Instructional concepts

### Tuakana-Teina

Tuakana refers to a person who is older or has more knowledge in a specific area than another person. This can also be referred to as the teacher, facilitator, instructor or subject matter expert.

Teina refers to a person who is younger or holds less knowledge in a specific area than another person. This can also be referred to as the learner, student or candidate. Traditional teaching methods have relied on a monologue or one-way system where the teacher and the student share a relationship where the teacher imparts knowledge and the student takes the knowledge.



A Tuakana-Teina approach is somewhat different where the relationship between the tuakana and the teina is flatter and reciprocal in nature. These are relationships where each participant in the relationship learns from the other. It is truly learner-centered.



This approach recognises that the tuakana can learn from the teina, and the teina can learn from the tuakana.

It describes:

- Peer to peer interactions: where teina teaches teina or tuakana teaches tuakana
- Younger to older – where the teina teaches the tuakana. Technology based learning is a good example of younger to older tuakana-teina relationships.
- Older to younger – where the tuakana teaches the teina. This is representative of teacher and student.





- Able to less able – where a more abled person is able to teach a less abled person.

In this approach, while we have explained that the Tuakana is the teacher, the teacher could be any learner in the class with specific subject matter and the teina, the rest of the students including the facilitator. For example, Adam has specific knowledge and skills in the area of risk management as this is what he does for a paid job. Adam teaches the others in the classroom about risk management, with assistance from the teacher in order to cover all required points. The next session, Lauren has specific knowledge on radio procedures, Adam becomes a learner with the rest of the classroom and Lauren teaches the others for this session. The tuakana, teacher or facilitator takes all other sessions as they have knowledge on Surf Lifesaving New Zealand policies, procedures, and guidelines.

The approach shifts the dynamic from a teacher led model, to a learner led model. This allows learners to take responsibility over their own learning and in some cases teaching of themselves and others.

A Tuakana-Teina approach is an approach that is drawn for Te Ao Maori but provides a basis of mutual trust and respect for many learners from different cultures. In a Surf Lifesaving New Zealand, this approach is about recognizing that while the instructor has certain skills and knowledge, so do each of the learners. This can create a sense of mutual respect and trust between the instructor and learners. If the individual abilities of each person are valued and used in a supportive way, the whole group benefit from the learning experience and it is enriched for everyone. This two-way approach respects the contributions that each person in the group can make and acknowledges that everyone has something from which others can learn.

### **Kaitiakitanga**

Kaitiakitanga is another Te Ao Maori approach that can be related to all cultures in the learning environment.

In a traditional sense, Kaitiakitanga is an understanding and respect for care and conservation of the land and such resources. It places a focus on relationships and responsibility. Essentially, its goal is to bring balance to relationships and bonds between people and places as ensures activities are mana-enhancing.

Mana-enhancing activities are those activities that are respectful and they protect a person's identity and self-worth. It does not reflect activities that trigger insecurities or activities that do not reflect individuals and the vast cultures and experiences they bring. In an educational setting, Kaitiakitanga refers to concepts related to leadership, mentoring, coaching, care, guidance, nurturing, sharing, responsibilities and external consultation. It places each individual in a role of kaitiaki (guardian) of knowledge and learning. With this comes six elements:

1. Te Tiaki – to care
2. Te Pupuri – to hold (holder of knowledge)
3. Te Tuku – to transmit
4. Te Arataki – to guide
5. Te Tuatoko – to support
6. Te Tohutohu – to instruct or correct



In other words, as a holder of knowledge and instructors in the Surf Lifeguard Award area, sessions should show a passion and care for the work that Surf Lifeguards do, as well as care for the learner and their needs and preferences. As an instructor, that knowledge that is held by you should be transmitted to learners within the group. Instruction, guidance, and support while learners are learning are essential. Positivity, encouragement, and motivation are key to these concepts.

A good reading to learn more about Kaitiakitanga in education is found here: [How to "Undertake Kaitiakitanga" For Learner Success: 3 Solid Principles You Need To Know - \(thisisgraeme.me\)](https://thisisgraeme.me)

### **The concept of ako**

To teach and to learn. The concept of ako recognises the knowledge that both instructors and learners bring to learning interactions. It acknowledges the way that new knowledge and understandings can grow out of shared learning experiences. It fosters the partnership between instructors and candidates and among candidates, where everyone is empowered to learn with and from each other.

### **Adult learning theories and principles**

As an instructor, you will be working with candidates of various ages. This means you should have knowledge of their characteristics and how they learn so you are able to vary your approach as needed depending on the learners in your group.

<b>Younger learner characteristics</b>	<b>Adult learner characteristics</b>
Pedagogical approach – teaching younger learners who are more dependent on the facilitator.	Andragogical approach – facilitating learning for adults who are self-directed learners.
Learners focus is on gaining a required award or accomplishment in the curriculum.	Relies on past experiences to solve complex problems
Learning resources often need to be supplied by the facilitator/tutor.	The 'why' and 'how' of what they are learning is imperative. Why is the learning required, and how can it be applied to their roles.
Subject-focused and have less experience to relate concepts to.	Conversations and activities which allow for incorporation of past experience in different fields and sectors is helpful.
Motivation is external – it comes from parents, facilitators, rewards etc.	Many have moved from dependence to independence. They are usually self-aware and have autonomy.
The teacher or facilitator acts as an expert and imparts knowledge and skills to the learner.	Learning needs to be flexible and available to fit around their other life roles.



	Adult learners often don't need hypotheticals but instead prefer a 'problem and solution' approach.
	Often self-motivated.

For all learners, the following concepts are important:

- Learning and experience are connected for meaning.
- Candidates need to know why they are learning.
- Self-evaluation is an effective tool.
- Candidates have different learning preferences.

While each learner type has some common characteristics, each learner is an individual. A large part of being an effective instructor is getting to know your learners and their needs, wants and preferences in the learning environment. This will allow tailoring of activities and support to ensure success for all learners.

Given the vast differences between younger learners and adult learners, the instructor needs to be skilled at balancing the needs of both learner types in the sessions. Activities and learning strategies that are being utilized will need to appeal to both the younger learner and the adult learner.

### Adult learning

A learning theory is used to describe how learners learn. They are used to inform how learning events and curriculums are managed and taught. Essentially, they provide comprehensive learning strategies that are adaptable to the learners and meet the needs of each learner.

Common theories include:

<b>Behaviorism</b>	Behaviorism is about changes in behavior based on stimulus-response associations. Essentially, changes in behavior that come about by positively or negatively reinforcing behaviors. In the education space, this looks like modelling appropriate behaviors and cueing learners.
<b>Constructivism</b>	The learner builds upon their current knowledge and gains a new understanding or meaning of concepts. This is done through active engagement with activities that lend itself to problem solving.
<b>Connectivism</b>	This is like connecting the dots. It is focused on identifying gaps in knowledge and bridging them. It also has a focus on assisting learners to find the answers for themselves – knowing where to gain information is as important as the information itself.
<b>Cognitivism</b>	Cognitivism is a theory that looks at how information is received, organized, stored and retrieved by individual minds. It concludes that learners should be actively involved in the learning process to gain knowledge, memory recall and problem solving abilities.



<b>Transformational</b>	New knowledge that is gained can change our perspectives. There is a large focus on critical reflection.
<b>Social</b>	There are a couple of different social aspects to learning including social learning theory and social constructivism.  Social learning theory is learning through observing, modelling and imitating behavior.  Social constructivism is the importance of collaborative learning. It acknowledges that people learn from interacting with each other, the community and the environment.
<b>Experimental</b>	This is about learning through experiences and doing something. This may be simulations or real-world experiences.

From these theories, the learning environment needs to capture:

- Activities that allow learners to try different techniques and perspectives in a safe manner.
- Activities where learners are able to use problem solving skills with new and existing knowledge.
- An opportunity to identify current knowledge and where the gaps in knowledge exist. Individualised learning plans developed and knowledge transfer to ensure all gaps are covered in the learning material.
- Activities that are engaging and allow the learners to take part, rather than lecture style or pure 'PowerPoint' presentation style. While these hold a place, they should not be relied on as the sole learning strategy. Other strategies that should be included are allowing learners the opportunity to ask questions, case studies, simulations, and group discussions.
- Allow learners the opportunity to critically reflect on their performance.
- Encourage collaboration between learners in discussions and case based learning.

Each learner is an individual and will have different learning preferences. It is therefore imperative to take the time to get to know your learners and plan strategies accordingly. This means that while one strategy might work for one group of learners, it may not work for another.

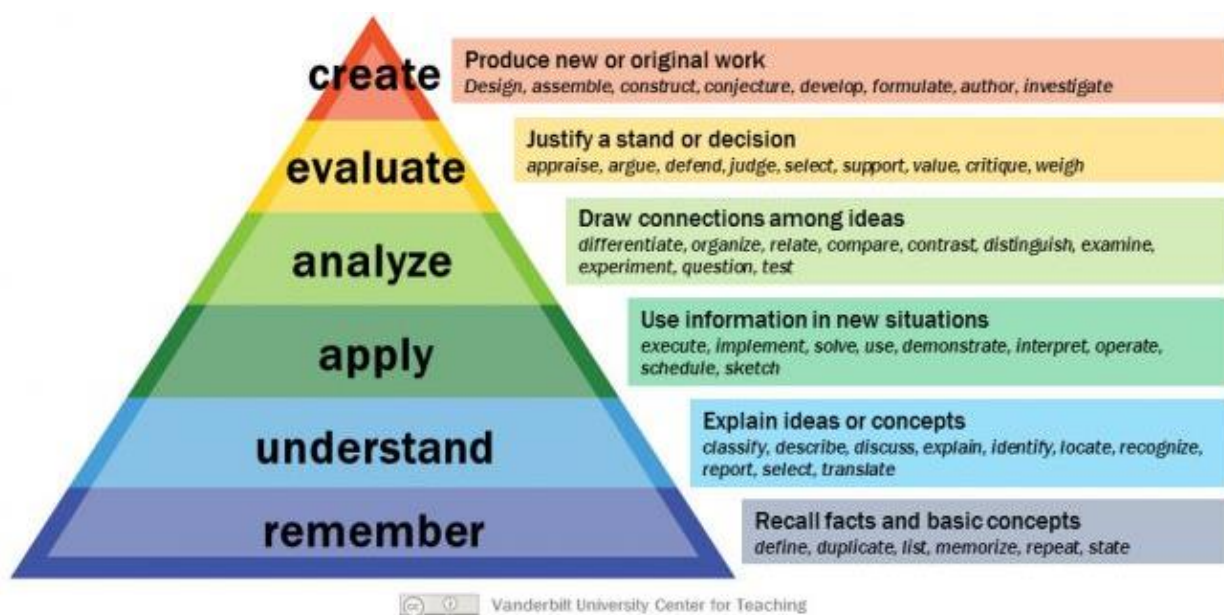
In the past, the visual, auditory, read-write and kinesthetic (VARK) was the largest used learning theory. However, it has been shown in recent years that learners often do not sit within one preference and for a meaningful learning experience, multiple preferences need to be addressed at any one time.

This concept is still around, however is not as widely used. There are many aspects of the **VARK** theory that can still be utilized, in particular when planning and delivering learning events. By making sure all learning preferences are addressed, a well-rounded learning experience can be provided.

Some activities that you may choose to utilize in accordance with VARK are shown below:

<p><b>Visual</b></p> <p>Stimulate visual preferences by:</p> <ul style="list-style-type: none"> <li>• Using charts, posters, and graphics.</li> <li>• Creating visual displays.</li> <li>• Giving the learner booklets, brochures, and handouts.</li> <li>• Using a variety of colours and shapes.</li> <li>• Visual aids such as videos.</li> </ul>	<p><b>Auditory</b></p> <p>Stimulate auditory preferences by:</p> <ul style="list-style-type: none"> <li>• Question and answer sessions.</li> <li>• Audio tapes and stories.</li> <li>• Discussions in groups or pairs.</li> <li>• Music, slogans, or algorithms.</li> </ul>
<p><b>Reading/writing</b></p> <p>Stimulate reading/writing preferences by:</p> <ul style="list-style-type: none"> <li>• Creating lists and dictionaries.</li> <li>• Giving handouts, booklets, and brochures.</li> <li>• Giving time and space to make notes.</li> </ul>	<p><b>Kinesthetic</b></p> <p>Stimulate kinesthetic preferences by:</p> <ul style="list-style-type: none"> <li>• Encouraging team activities.</li> <li>• Allowing hands on experience.</li> <li>• Role playing and simulations.</li> <li>• Discussions in groups or pairs.</li> <li>• Changing activities regularly.</li> </ul>

**BLOOMS Taxonomy**



Blooms taxonomy is a way of categorising and ordering thinking skills and is a way of defining lower order thinking skills from higher order thinking skills. It can be used to help facilitators understand learning objectives, create lessons plans and learning activities. Each level is a foundation for the next – i.e., a learner must meet the elements below it in order to move onto the next level.



### **How can this be used in lesson plans and when lesson planning?**

This concept helps to offer a structure about how people learn. In this structure, a scaffolding approach is recommended so that remembering and understanding components feature near the start of the course and any higher level thinking occurs after this. A good grasp of content needs to be held before moving on to higher levels.

### **How can Blooms Taxonomy be used within the IRB Crewperson and Drivers learning activities/ experiences?**

Blooms taxonomy has been used to create learning activities for the level of learning that is taking place. For example, creating an activity that involves analysis or creation may be unsuitable for a course that focusses on knowledge recall or remembering.

#### **Activities relevant to each level:**

##### **Remember:**

- Question and answer sessions
- Multiple choice questions
- Quote information

##### **Understand:**

- Getting learners to provide analogies or examples
- Telling a story
- Explaining a concept to others

##### **Apply:**

- Practical skills in action
- Mirroring real-life activities

##### **Analyse:**

- Debates
- Reasoning activities

##### **Evaluate**

- Justifying a decision
- Reflection

##### **Creating**

- Design and produce a product
- Writing a report
- Creating a manual / policy/ procedure

Blooms Taxonomy is used within the IRB Crewperson module, and SLA IRB Drivers lesson plans, workbooks, videos, and the assessment tools used to evaluate learners knowledge, and skills.

## MASLOW Hierarchy of needs



## Maslow's hierarchy of needs

Applying Abraham Maslow's theory of a pyramid-shaped hierarchy to instructional lessons is an ideal way to assess lesson plans, and instructional sessions. Like the rungs of a ladder, each need has to be met before progressing to the next level. Students may move back and forth on the hierarchy, so it is important to have ongoing check ins with candidates to ensure that their needs are being met.

### Ways to support candidates physiological needs

- Allow students to take regular water and toilet breaks, if in-person.
- Provide breaks for food - and offer nutritious snacking options.
- Ensure adequate lighting and ventilation.
- Monitor temperature so that candidates do not feel too hot or cold.

### Ways to support candidates safety needs-

- Have well-defined routines or plans to your sessions.
- Follow all health and safety guidelines effectively.
- Develop an environment that allows for healthy discussion and non-judgmental conversation.
- Monitor the environment of your sessions to identify any areas where candidates maybe feeling overwhelmed and in a "learning pit."

### Ways to support candidates love and belonging needs

- Establish ground rules about being respectful towards one another.
- Create a sense of team by engaging candidates in team-building and bonding activities.





- Encourage group work and other inclusive learning techniques.
- Make conscious seating arrangements and groups. Place candidates where they can be best supported and aided.

### **Ways to support candidates self-esteem needs**

- Show your candidates that their efforts and hard work are noticed and appreciated. Provide powerful affirmative feedback. A simple "Good job!" or a "Well done!" can go a long way in boosting someone's self-esteem and self-worth.
- Create opportunities for candidates to share positive feedback with their peers.

### **Ways to support candidates self-actualization needs**

- Encourage and support candidates to explore different pathways with SLSNZ.
- Provide opportunities for candidates to lead others.

## **Instructional techniques**

### **Whanaungatanga**

Whanaungatanga is focused on building and maintaining relationships between individuals and communities. These relationships are built through shared experiences and creating a sense of belonging.

In an educational context, whanaungatanga creates a learner-centered environment where each learner feels connected and have a common expectation, vision and goal.

It is an environment where each learner is respected and encouraged to celebrate their diverse abilities, excellence and successes. This is created by:

- Encouraging learners to be the best that they can be while learning.
- Look for opportunities to incorporate learners life experiences as part of learning.
- Getting to know learners.
- Having a genuine desire to help the learner to succeed.
- Provide individualized support to enable all learners to succeed.

Whakawhanaungatanga is the art of getting to know one another. This is an important part of whanaungatanga. Without whakawhanaungatanga, it is difficult to build strong whanaungatanga in the classroom environment. Whakawhanaungatanga is done through taking the time to provide activities in the

beginning of the session – these could be introductions or even team building activities.

While time is often of the essence in many educational situations, whakawhanaungatanga should not be under-estimated.

### **Connecting learning experience to create meaning**

As learners need to connect learning and experience, and understand the 'why' and 'how' of the learning, the instructor needs to create an environment and activities that allow learners to make these connections.



Techniques that are often used for this purpose are:

- Group discussions
- Storytelling
- Simulation exercises
- Problem-solving activities
- Case studies
- Other interactive strategies.

An instructor can be described as the conductor, mentor, motivator, and role model.

### **The importance of the 'why' and 'how'**

Adult learners need to know why they are learning something before undertaking to learn it. They also need to know it benefits them, the role that they are in and the people that they serve in their role.

Learning new skills and knowledge is a considerable task and consumes a lot of energy. Many adults have to make many sacrifices in order to take the time to learn the skills and knowledge required for a particular role. This may be taking time out from work, family or other community responsibilities. Determining the benefits, the why and the how of learning will enable a learner to get behind the cause and place the required energy into the learning process. Failure to describe the why and how may result in learners that do not feel connected to the learning and learners who do not place an emphasis on the learning therefore resulting in unmotivated and difficult classroom environments.

Consequently, one of the first tasks of the instructor is to help candidates understand the why and how behind the learning that lies ahead. This is both for the Crewpersons Module and the Senior lifeguard Award – IRB Drivers Award, as a whole program and each individual session included in the program. In your training you should set aside time to explain how the learning will be conducted and why it is important.

### **Learner centered approaches**

A learner centered approach is designed to put the learners at the forefront of their own learning. It encourages learning through learners actively creating knowledge through collaboration, exploration and activities that enhance their own learning. Learners are actively involved rather than being a passive participant.

In this style of learning and facilitating, the instructor is a facilitator of learning. This means that learning is seen as creative, interactive and a process that is flexible rather than being one size fits all. In this approach:

- Session planning is flexible and based upon learner needs and preferences.
- The instructor will employ a variety of learning strategies including problem solving, interactive discussion, practical applications, hands on experimentation and self and peer evaluations.
- The learners prior experiences are valued as utilized as a rich resource for learning.
- Full participation and self-directed learning is encouraged.
- The learning environment is informal, mutually respectful, collaborative and supportive.
- The group dynamic is engaged and active and balances achievement of tasks with supporting a friendly, safe and enjoyable learning environment.



## **Critical thinking, creative thinking, communicating, collaborating - The 4 C's**

The Four C's help learner's navigate in an ever-changing society. These skills do not stand alone. Including learning experiences using the 4 C's within instructional lessons helps candidates to develop new knowledge and skills.

### **Critical thinking**

Critical thinking is all about helping learners to look at problems in new ways and analysing the "how" and "why". These types of thinking skills examples include the ability to compare evidence, evaluate and consider information to make sensible decisions.

The learner is then able to evaluate a situation in greater depth and explore a range of solutions.

### **Creativity**

Creativity isn't limited to artistic endeavours, it's about innovation and invention, and is available to all learner's. An instructor's innovative and creative approach is essential for all different learners. Critical and creative thinking skills are closely linked – after using critical skills to analyse a situation, creative thinking can be applied to find an original approach to an idea or problem.

### **Collaboration**

Most significant work or achievement is accomplished by people working together. Collaboration is about working together to reach a goal and combining different and complementary skills, expertise and experience. As the world becomes more and more connected, the skill of collaboration becomes more vital when catering for learner's needs. Providing collaborative experiences and building on other's skills, knowledge, and backgrounds, helps to develop quality learning experiences.

### **Communication**

The ability to express thoughts clearly, articulate opinions, give coherent instructions and motivate others through speech is important. Communication is about sharing thoughts, questions, ideas and solutions effectively – understanding that people and groups from different cultures, ages and backgrounds require different communication styles and methods. Learning how to use current and emerging technologies to communicate is important when thinking about providing rich learning experiences.

### **Critical reflection**

Critical reflection when used as a tool in education can help to increase learner's creative abilities, academic success, critical reasoning skills, persistence, patience and perseverance. It also develops personal awareness, strengths and areas for improvement and moving forwards towards learner goals.

Critical self-reflection should have a focus in the classroom and when performing assessment tasks. Intentional time should be put aside for learners to think about how an activity went and how they could improve in the future. Remember that learners often don't set aside their own time for this to occur – you will need to ensure there is allocated time to perform critical reflection.



The ABC approach is an easy way to get learners thinking reflectively and critically about their performances during activities.

- A- Affect: How did you feel during that activity?
- B- Behaviour: What did you do that was successful or perhaps not so successful?
- C- Cognition: What will you do next time you encounter this problem?

When asking learners to critically reflect, remember that the process is designed to view improvements in a positive light. Human nature suggests that when a learner is beginning to critically reflect upon themselves and their performance, they will be their own worst critics. It is important to ensure you assist the learner to see the positives of their performance and use this as a motivator to continue with the activities and critical reflection.

It is through this process that true self-awareness begins to be built. Responses such as “I didn’t do anything well there”, “That was terrible”, “I can’t do this” should be respectfully questioned by the instructor to help the learner see their positive points – **remember, nothing is all bad and everything has good learning!**

### **Planning**

An instructor should spend some time planning two key areas:

1. **Intake planning** – this includes from recruiting the candidates through to their examination as qualified members.
2. **Lesson planning** – this includes documenting how you intend to deliver/provide training to candidates for each lesson within the qualification.

For example, you may wish to use lesson plans for the instructor resources that are available, or you may choose to create your own. In each case you will need:

- a. Decide upon the activities that are going to use during the lesson.
- b. Identify the resources required for the lesson and gather the resources in the appropriate quantities.

### **Intake planning**

#### **Before the intake:**

- Gather information about your candidates
- Complete operational risk assessment before undertaking training.

#### **Gathering information about your candidates:**

The most important person in any training activity is the candidate or the learner. You will need to do your best to support each individual candidate/learner so you will need to take some time to understand your learners needs, preferences and how best to support them. The best way to do this is to have a conversation with the candidate/learner.

You will also need to inform the candidate/learner of the sequence of learning and how the training will be delivered. This may be done over the phone, in person or in writing.

Note that your candidates/learners may have many different experiences and may come from different backgrounds. Candidates/learners may be:

- Current members of the organization attempting a new award.
- New members to the organization.
- Adults.
- Younger learners, as young as 14 years old.



## Lesson planning

A lesson plan is a roadmap of how a lesson will run and the road to candidate/learner success. A lesson plan aids the instructor to understand the learning outcomes of the lesson, gather the resources required for the lesson and ensure a structured approach to learning.

It is important that the instructor understands what is to be delivered, how it is to be delivered and why it is to be delivered. Following a structured path during the lesson will assist the instructor to ensure all elements related to knowledge acquisition and skills are passed on. Inability to ensure all the knowledge and skills required are covered will compromise the assessment and candidate/learner success.

A lesson plan generally has three key components:

- Lesson outcomes
- Teaching and learning activities
- Strategies to check learner understanding.

Each lesson should:

- Give the outcomes of the lesson.
- Refresh the last lesson.
- Explain the topic or skill being taught.
- Summarise the contents of the lesson at the end of the session.
- Allow an opportunity for the learner to provide feedback.
- Provide details on the next lesson.

To prepare a lesson:

### **1. Identify the learning outcomes for the session.**

The first step is to determine what the learning outcomes are for the lesson. This is what the candidate/learner will know or be able to do at the end of the lesson. In each hour lesson, there should be 3-4 learning outcomes. Any more than this and the focus on the lesson is often missed.

If you are developing your lesson, the learning outcomes can be located in the provided lesson plans in this instructor resource.

### **2. Develop the introduction.**

This should stimulate candidate/learner interest and encourage learners to think about a particular topic. It is within the introduction that you want to gain an understanding of the candidate/learners prior knowledge.

To create an engaging introduction:

- Keep the introduction interactive where possible.
- Share a story or other interesting information that is related to the content.
- Summarise content from the previous lesson.
- Discuss any pre-learning material that was used (if applicable).

### **3. Plan activities and their sequence**

Develop and design the content of the lesson. Think about the activities that will be engaged in to meet the requirements of the learning outcomes you identified in the first step.

- How long will these activities take?
- What does the instructor need to do?



- What will the learners do?
- What resources will be required?

A helpful hint here it to vary the activity or strategy every 15 minutes to reduce candidate/learner fatigue and enhance concentration.

#### **4. Plan how to check understanding**

This step is about understanding how the candidates/learners are learning and ensuring they are retaining the knowledge and skills being taught. It also helps to identify any gaps in their knowledge and where to focus in future time or lessons. This might be done by asking questions of the learner or getting them to demonstrate skills.

#### **5. Develop a session conclusion**

Summarising the key points and allowing the candidate/learner to ask any questions they may have remaining is important here. This should be thought provoking and relate back to the outcomes that have been covered during the session.

You may also like to preview the next lesson here and relate the concepts together if appropriate.

The IRB Drivers Award workbook has tasks and questions that are used to fulfill evidence gathering requirements for the units in this qualification. As an instructor you must enable learners and cover all content related to this in order for candidates to complete the qualification. This will need to be incorporated into the lesson plan.



## **Instructional skills**

### **Creating safe learning environments**

Creating safe learning environments help members to grow and develop as people as well as obtain the necessary skills and competencies to be an effective lifeguard. It is the instructors responsibility in conjunction with the club and Surf Life Saving New Zealand (SLSNZ) to help create learning environments that are physically and emotionally safe for members to learn and develop these lifeguarding skills and competencies.

Each learner should feel safe and comfortable to engage in the learning process, for them to be themselves and to bring their own culture, perspectives and life experiences to the lessons.

### **Creating a safe learning environment can be done by:**

- Adopting a tuakana-teina approach
- Incorporating concepts of Kaitiakitanga
- Encouraging whanaungatana and engaging in whakawhanaungatanga.
- Work together with other instructors and candidates/learners to spark new ideas, reflect, converse, and inquire.
- Create a shared vision and values at the beginning of the qualification.
- Encourage discussion between learners and instructors.
- Remain positive and manage the classroom effectively.
- Take the time to provide support to all candidates/learners as a group and as a whole.
- Ask questions to clarify your understanding of candidate/learner perspectives.
- Respect confidentiality.

Part of creating a safe learning environment is risk management. It is the responsibility of the instructor to ensure that activities performed inside and outside of the classroom are safely managed. In addition to this, it is the instructor's responsibility to ensure all candidates/learners are competent in risk assessment and management processes for each task that is required for the various roles that Lifeguards perform in operations and activities – this should be fostered and learnt throughout the lessons.

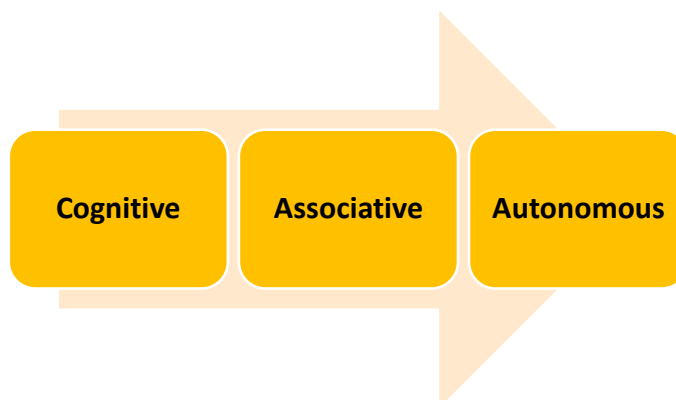
Surf lifeguards choose to operate in inherently hazardous environments. The environmental hazards cannot normally be controlled. Instead, we need to assess these hazards and identify how we can best interact with them to minimize and negate the risk of harm. It is critical that all members develop and apply risk assessment and management procedures to all tasks and duties while lifeguarding. Effective risk management is an essential skill set required of lifeguards.



## Delivering skills and knowledge

There are many skills that you will instruct in a qualification – this could include tube rescue, CPR, IRB patient pick up, engine reinstatement.

Learners move along a continuum of skill acquisition as they progress their skills. Teaching a skill has a goal of moving from the cognitive domain to the associative domain. The autonomous domain comes when a learner continuously practices the skill in the environment.



1. **Cognitive** – in this stage of skill acquisition, the learner is thinking about the skill and may not be fluid in the process. Demonstrations and feedback are required in order for the learner to progress through this phase.
2. **Associative** – the learner in this stage has moved from thinking about the skill to thinking about the end result. The learners efforts become smoother and the learners are able to adjust their approach to achieve the result. Learners are able to critically reflect. Learners need lots of practice in this stage.
3. **Autonomous** – the learner here no longer thinks about the skill and movement and progression come naturally. Learners are able to perform the skills under pressure.

In order to teach learners and elevate their success of moving through the skill acquisition continuum, the following five steps should be followed:

1. Introduce the skill
  - Ensure all the group can see and hear
  - Name the skill
  - Give the reason/rationale as to why the candidates need to know the skill as part of lifeguard training.
  -
2. Demonstrate and briefly explain the skill
  - Talk the group through the steps to execute the skill.
  - 
  - Demonstrate the skill slowly describing each step.
  - Demonstrate the skill again slowly but without description.
3. Demonstrate the skill in real time
  - Demonstrate the skill in real time, allowing learners to visualize what it will look like at the end.



4. Practice the skill
  - Learners/candidates should get an opportunity to practice the skill as soon as possible after the demonstrations.
  - For simple skills, the whole skill should be practiced at once.
  - For multi-step skills, they should be attempted in whole, then practiced in stages/parts and reattempted in whole. This known as the whole-part-whole learning process.
5. Provide feedback to the learner as they practice the skills
  - When a candidate is making several mistakes executing a skill, concentrate your feedback on one aspect at a time.

### **Questioning**

Effective questioning allows imparting of skills and knowledge to the learner. It is a skill that all instructors should develop and become comfortable in using. At the beginning of the lesson, questioning allows instructors to assess what learners already know and what they need to learn. At the end of a lesson, questioning can be used to evaluate a learners' learning and the concepts that they have understood versus the concepts that might need more attention.

Reasons for asking questions during training include:

- To focus attention on a certain topic.
- To encourage interest.
- To promote activity.
- To check for understanding.
- To encourage candidates to think about a particular point.
- To get learners to evaluate their own skills and knowledge.

Question may be thought of prior to the lesson, in which case you should ensure that you know the answers, or they may arise during the course of training.

There are many types of questions that you can use to ensure understanding and involve learners. It is often best to use a variety of different question types throughout the lesson to keep learners engaged and to ensure questioning is effective.

### **Direct**

These are aimed at one person to check their understanding. You will need to take into account that focusing on one person can make them feel uncomfortable, especially if they do not know the answer. Providing them with the opportunity to "pass" if they do not know the answer can reduce the pressure to respond.

You may consider to only ask direct questions when you are dealing with the candidate on an individual level, rather than risking embarrassing them in front of the group.

This type of questioning can also be used if the learners are not engaging or providing discussion. While being mindful of people feeling uncomfortable, activities that question the learner, for example post-it note activities where learners write and post thoughts, ideas and knowledge can be used to question learners. It is even more effective if each learner has a different coloured post-it note or different coloured pen to write in. This allows identification of the learners contribution to the instructor. This approach is much less confronting than typical direct questions.



*Note that some learners from some cultures, such as Pacific Cultures do not always engage with answering questions. This is not because they are not engaged, it is often because of previous classroom experiences where it has been very much facilitator led. It is seen as a sign of respect to listen to those in a position of knowing more on a particular subject.*

### **Indirect**

Indirect questions are presented to the whole group. They are used to check group understanding. One difficulty that may arise is that the group does not respond. If this occurs you might need to turn it into a direct question by nominating a particular candidate who you think might know the answer.

### **Factual or closed**

These are closed questions, which are usually answered with a very short statement or a 'yes' or 'no'. These tend not to encourage discussion and are generally used simply to check for progress.

### **Open**

Open-ended questions request more information from the candidate and generally require more time to answer. They usually start with a 'what', 'when', 'who', 'where' or 'how'. Open-ended questions are a good way of starting a group discussion.

### **Attitude**

Attitude questions are used to check the feeling or attitudes of the group. As there are no right, or wrong answers they can be useful for facilitating group discussions.

### **Hypothetical**

These pose a theoretical situation in the future. For example, "What would you do if...?" These can be used to get candidates to think of how to adapt what is known to new situations.

### **Reflective**

Confirming questions are used to check candidates' understanding by rephrasing responses. If the answer or response is not clear then alternate questions can be used for clarification.

Some tips for developing effective questioning:

- Allow the learners time to think about their response to the question – silence is ok. Avoid answering the question for the learners.
- Ask one question at a time. Avoid asking a number of questions at the same time – do not make them double-ended. For example you might ask the learner to identify a specific type of wave. You would ask the one question – you wouldn't ask 'what type of wave is this and what are the consequences that wave brings' in one question.
- Keep questions clear and not too wordy. Keep them short and simple.
- Ensure questions are unambiguous.

### **Feedback**

During our training we need to ensure that learners are encouraged and provided with feedback that lets them know what they are doing is correct and how well they are progressing. Feedback can be verbal or non-verbal and has a significant effect on how well candidates learn and perform.

Just like learning, each learner will have a different preference for feedback and will react differently to different forms of feedback. As an instructor, it is important to ensure an understanding of learner preferences as this will have a considerable impact on the learner



taking on board the feedback that is being given. Giving feedback in a manner that the learner is offended by or does not relate to will reduce the feedback's effectiveness.

Consider the following:

- Choose an appropriate time and place to give feedback.
- Ensure that you are in a positive frame of mind prior to giving feedback. (your attitude affects your behaviour, your behaviour affects my attitude and my behaviour) suggests if you're in a negative mindset, the feedback may be given in a negative manner.
- Check that the learner understands what you mean. Have the learner acknowledge and recall the feedback. Allow the learner to ask any questions.
- Be constructive in the feedback that you give. Help the learner come to a solution to ensure the learner feels supported and sees they are able to achieve tasks with modifications.
- Focus on things that the candidate did rather than how you feel about them. Don't make it personal.
- Show the learner respect and give feedback in an appropriate manner.
- Keep it short – don't overload the learner with too much information.
- Encourage the learner to self-reflect.

The feedback sandwich is a positive structure to provide feedback.

1. Begin with a positive about the learner's performance.
2. Then give constructive points for improvement.
3. Finally, finish on a positive note about the learners performance.

It can also be a good idea to ask the learner how they thought they performed. Just remember, you need to ensure the learner sees the positive in their performance. It is human nature to focus on the points to improve or the negative points. This does not instill confidence in the learner and the positives need to be expressed.

**Remember, nothing is all bad and everything has good learning .**

### **Evaluating the Lesson**

Evaluation is the process of reflecting on and analyzing the training session in order to validate the methods or identify areas for improvement.

When evaluating your training sessions you need to gather information about:

- The content of your training session.
- Your skills as instructor.
- The progress of candidates.
- Results of training.

You can gather information about these areas from a number of sources:

- Candidates.
- Supervisors (Chief instructors/examiners).
- Colleagues (other instructors).
- Yourself.

In order to evaluate your training session, you will give your candidates

Evaluation Sheets that will identify:

How the course was presented,

- Whether the course met the candidate's needs.



- How the candidate's felt about your training skills etc.

This process is essential for continuous improvement and self-development for you as an instructor; you will not always receive positive feedback from your candidates.

Negative feedback needs to be viewed to enhance the performance of the instructor as well as the course and in this way can be turned into a positive.

### **Instructor self-evaluation**

An important part of the evaluation process is self-evaluation. Self-evaluation can take place during your training session as you reflect on how well things are going. This will help you make any instant changes to your plan in response to the situation.

Self-evaluation can also take place after your training session when you ask yourself more in-depth questions about whether there are things you need to change or problems you need to solve.

The following strategies can be used for evaluating your own training and help you improve:

- Video yourself and look for ways to improve.
- Ask for feedback from colleagues and other instructors.
- Compare your methods and techniques with other instructor

# IRB Driver Candidate Workbook

## START

1. Explain why we use a risk management process?

A risk management process is used to identify and assess hazards and risks, to guide our decisions and actions at all times for all lifeguard duties and tasks.

2. Explain what is risk management, and why SLSNZ does risk assessment?

Risk management is what we do to keep ourselves and other people from physical or mental harm.

SLSNZ does risk assessment to:

- Prevent harm to people.
- Inform our procedures.
- Record the evidence in support of our legal requirement to do 'at risk assessments' under the Health and Safety at Work Act 2015.

3. List three different assessment tools that SLSNZ uses to record risk assessment.

- 1.SAFER
- 2.General risk assessment
- 3.Operational risk assessment

- 4 As the driver of an IRB, explain what your responsibilities are as a driver.

As the driver of the IRB, I am responsible for the safety of my crew. When conditions are too dangerous, I must decide whether a rescue can take place without exposing myself and my crew to harm or loss of life. As an IRB Driver I must find solutions find to performing a rescue if necessary.

- 5 List 5 things an IRB driver should do at the start of patrol.

1. Inform the patrol captain that the IRB is ready for patrol.
2. Check surf conditions, rips, channels, and location of swimmers.
3. Check the tide timetable for the day.
4. Decide the best place to launch the IRB and place the Power craft Launching Area sign in the appropriate area.
5. Identify who the IRB crewperson/people are and have a detailed conversation prior to launching the IRB in the water.

1. Summarize what needs to be talked about in a pre-launch briefing between an IRB driver and crewperson?

The conversation should focus on the skills and competence of the driver and crewperson, confidence levels, including a shared understanding on where and how they will operate the IRB together, current conditions and any risks or hazards identified.

2. What precautions must be taken before any IRB Lifeguard training takes place?

There must be safety signs, flags, cones, and buoys that shows the training zone. Clubs must clearly identify both sides of the IRB training zone. The training zone area may have to be limited to accommodate other beach or water users. Care must be taken to make sure that Maritime Regulations are always adhered to.

3. Describe the safest way to lift and move an IRB engine.

The safest way to lift and move an IRB engine is by using a trolley. A minimum of two people are required to lift the engine.

4. During an IRB training session, if a crewperson falls out of the IRB or the IRB rolls over, does the IRB driver need to report the incident. If so, how?

Reporting is through the Patrol App. Anytime an IRB rolls, a crew member falls out of an IRB, or the IRB collides with another craft, or the IRB is unintentionally grounded, incidents must be reported under Section 31 of the Maritime Act. Reporting IRB Rollovers, persons falling out of IRBs, groundings, and collisions with other vessels should be done through the Patrol App by filling out the Vessel Notification Form. Once completed, these forms are shared with Maritime NZ.

## **ABIDE**

1. No person may without reasonable excuse, propel or navigate a vessel (including a vessel towing a person or an object) at a proper speed exceeding 5knots (9km/h) in these circumstances.

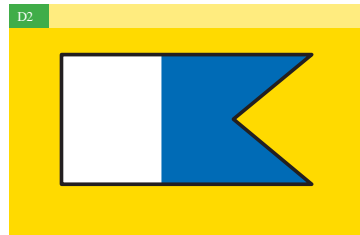
What are the three areas where the 5 knots speed limit applies?

1. Within 50 metres of any other vessel, raft, or person in the water.
2. Within 200m of the shore or of any structure.
3. Within 200m of any vessel that is flying the flag of the International Code of Signals (divers flag).

2. Describe three situations which are acceptable as 'reasonable excuse' to exceed the 5 knots speed limit?

Where the IRB is being operated to:

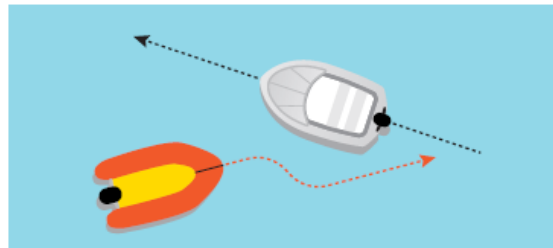
- Rescue a person.
- Assess that person's safety in the water.
- Prevent immediate danger to a craft, including the rescue craft from capsizing within the surf zone.



3. Draw and label the international blue and white flag below and explain what it used for?

The international divers flag is used on the water to indicate that there is a diver below and that other vessels should keep well clear and slow their speed.

4. Describe what action boat must take to avoid collision?



Give way to vessels to the right.

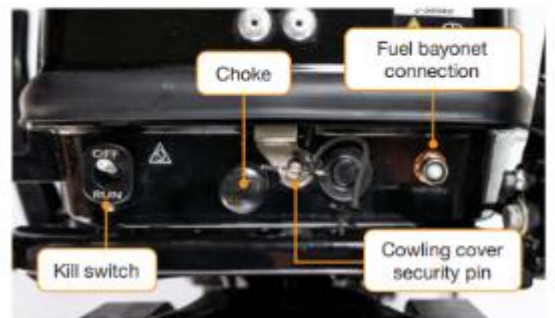
5. When operating an IRB in a harbour, what side of a red marker should you travel?  
Keep to the right-hand side.
6. List the internationally recognised distress signals that IRB drivers and crew should be able to recognise and respond to?
1. Orange smoke flare
  2. Red flare, handheld parachute
  3. Radio signal:
    - a. "Mayday – Mayday – Mayday" used in a life threatening situation
    - b. "Pan-Pan" used to indicate assistance required
  4. Waving arms to attract attention.
  5. Continuing sound of a whistle or similar



## POWER

1. Complete the diagrams by labelling the features of an IRB engine.





2. When engine maintenance and regular checks on an IRB engine are taking place, there are key factors to remember about the following engine parts. Write a brief summary on what these are.

**Compression Tube:**

The compression tube is designed to strengthen the 'steering bracket' and is also used to adjust steering tension. The lock nut should be tightened until reasonable resistance is felt in the steering (moving tiller arm from side to side.) Care should be taken to not overtighten this nut.

**Engine mounts and engine mount nuts:**

Engine mount nuts should be checked using a 17mm ring spanner or socket, to ensure they are tight.

**Cup washer screws:**

Using a 5mm Allen key, fitted into the screw head, make sure the screw is tight. The cup washer should still rotate freely when the screw is tight.

**Carburettor:**

Keep both sides of the choke shaft lubricated to avoid seizure. When engaging and disengaging the choke shaft lever, you need to visually sight that the choke shaft mechanism on the carburettor is functioning correctly.

**Spark plug leads:**

Keep spark plug leads to the left-hand side to avoid contact or damage when removing or attaching the cowling cover.

**Water pump:**

A steady stream of water through the tell-tale indicates that the water pump is working.

It is not recommended to 'dry start' the engine out of water unless special circumstances require this. For example: launching the IRB in a shore break.

**Lubrication and dewatering:**

It is important to protect and lubricate moving parts and fixtures of the powerhead which can be subject to corrosion and seizure, by using a dewatering agent such as WD40.

**Propeller:**

The propeller blades and replaceable rubber shock absorbers should be checked regularly.

**Propeller Guard:**

The key areas of the propeller guard to check are:

- The tightness of the nuts and bolts.
- Damaged or broken vanes.
- Damaged or a bent ring guard.
- The clearance between propeller and guard.

**Spark Plugs:**

Spark plugs are an inexpensive item and should be replaced regularly. This may help to reduce many starting and running problems.

3. What are the three main components to run a two-stroke engine?

- 1.FUEL
2. SPARK
- 3.COMPRESSION

## ENERGY

1. What is the correct ratio for a mixture of petrol and two stroke outboard engine oil.  
50:1
2. List the required PPE when handling fuel and filling the IRB bladder.



3. What needs be done with the fuel bladder and canisters after a patrol or training?

All IRB fuel bladders, and fuel canisters, whether they are full or empty, must always be securely stored in an approved storage cabinet. These are typically a large yellow cabinet located in the IRB shed.

4. As a driver, you and your crew person are about to fill the fuel bladder. Write the important steps you should take to make sure the fuel bladder is filled safely.
  1. Remove the bladder from the IRB when it is being filled.
  2. Find a place to fill the fuel bladder. Outside is best. Most clubs have a designated area for fueling.
  3. Make sure there is a fire extinguisher 5metres away.
  4. Gather all equipment needed. A fuel absorbent spill mat, fuel safe gloves and goggles jerry can with nozzle or funnel, fuel bladder and a fire extinguisher.
  5. Use a fuel absorbent mat. Make sure there are no naked flames or people smoking around you.
  6. Make sure you have the correct fuel ratio, 50:1.



7. One person should open the fuel bladder and hold the bladder in an upright position, while the opening is kept elevated.
8. The second person should open and prepare the fuel canister by attaching the nozzle or arranging the funnel in the correct position.
9. Slowly fill the bladder.
10. Remove any air from the bladder before putting on the cap. Keep the opening slightly elevated and gently push any air out.
11. Wipe off or wash away any minor fuel spills from the bladder thinking carefully *where any contaminated water is flowing to and make that this is kept contained. (a fuel absorbent spill mat is handy here).*
12. Check the bladder for leaks.
13. Place the bladder in the IRB. Check the bayonet is clean and there is no sand on it before connecting it to the engine.

## PREPARE

1. Write the important steps to set up an IRB engine.

1. Check the previous IRB Operations logbook.
2. A minimum of two people are required to move the engine.
3. Fit and secure the engine to IRB. Make sure the clamp screws are fully wound out before lifting and centering on the transom. Then lift under the back of the cowling tray while tightening the clamp screws.
4. Carry out engine checks including the prop and guard:  
*Make sure:*
  - Split pin is in good condition
  - No broken vanes on prop guard.
  - All nuts & bolts on prop guard are secure and none are missing.
  - Good clearance between prop and prop guard.
  - Tilt pin setting is on the 2<sup>nd</sup> hole out from the transom side.
5. Attach the engine safety stop.
6. Attach the fuel line to the engine, making sure that the bayonet fitting is clean, free of sand and not damaged.
7. Fill out the IRB Operations logbook.
8. The engine should be able to hold the tilted position. A fully tilted engine should only require a slight push on the cowling cover for the engine to drop down to its normal position.

2. Write the steps you should follow when you are getting ready to start the engine.

- Place the engine in the flush tank (ensure the auto bailers are not damaged by contact with the flush tank).
- The water level in the flush tank must be 150mm (15cm) above the engine cavitation plate for safe function of the water pump.
- With the engine cowling cover removed fully, engage & disengage choke (visually check the choke shaft mechanism on the carburettor is functioning correctly).
- Check the throttle return spring is functioning. When the throttle grip is released from full throttle the return spring will activate and then returns the throttle setting to idle.
- Fit engine cowling cover and secure locking lever on the rear and the 'R-Clip' on the

front.

- Ensure the gear lever is in neutral position.
  - Pump fuel through until the primer bulb is firm (approximately 4-5 pumps) and check no fuel leaks around bayonet connection.
3. How do you know if the water pump is circulating water through the powerhead?  
The tell tale would be producing water.
4. When starting an engine ergonomic body position is essential for safety and efficiency. You are about to start the engine, what body position techniques do you need to consider?

Stance and balance:

- Stand with one foot slightly forward and the other foot back. (a staggered stance)
- Stand with your feet shoulder-width apart to maintain stability.
- Distribute your weight evenly between both legs.
- Keep your knees slightly bent to absorb any sudden movements.

Grip and leverage:

- Hold the pull cord handle with a firm but relaxed grip.
- Use the designated handles on the engine to pull it.
- Maintain a firm grip.
- Position your body so that you can pull the cord comfortably without straining your arms or back.
- Use your body weight to generate force rather than relying solely on arm strength.

Body alignment:

- Face the engine squarely.
  - Align your shoulders, hips, and feet with the direction of the pull cord.
  - Engage your core: Tighten your abdominal muscles to support your back.
  - Avoid twisting your torso excessively during the pull. Pull a straight line.
5. What are the benefits of engaging the tilt lock mechanism?
- The IRB is easier to drag on the sand.
  - It avoids damage to the prop guard especially when on a trailer.
  - It reduces impact on the transom.

## SKILL

1. You are launching an IRB. Describe the steps you must take to do this safely.

In a basic starting procedure, the driver should:

Board the IRB while the crew person holds the IRB secure facing the oncoming waves

Start the engine as per procedures – start the engine in the IRB or start the engine in the standing position.

Before engaging the gear, when the engine is running the driver must maintain control of the throttle arm tiller.

The driver must engage forward gear with their left hand and instruct the crewperson to board.

Once in forward gear, the driver MUST not take their hand off the tiller arm.

The drive then proceeds out to sea, ordering the crewperson to stay in position until such a time a break may appear.

2. What should you do if the crewperson is having difficulty holding the IRB prior to boarding due to waves pushing it around?

Move forward to the bow and assist the crew person to lift the IRB over waves.

3. Explain the basic driving position in an IRB for a driver.

The driver will be seated on the port (left) pontoon, gripping the engine throttle in the right hand, and holding on to the driver's handgrip (side rope) with the left hand.

The driver's left foot should be positioned comfortably in line with the pontoon.

The driver's right foot is secured into the driver's foot strap.

Care should be taken to make sure the foot strap fits the individual.

It needs to fit snug over the forefoot, while allowing the foot to flex during impact.

4. When approaching the beach, what does the driver need to do, and at what point?

Be aware of sand bars. When the IRB is approaching a situation where the propeller guard is about to hit the sand, the driver should switch off the engine, tilt the engine inboard and place the gear lever in neutral.

5. What should you do if a wave catches up to you from behind?

Call the crew person back, keeping the weight in the back of the IRB.

Drive the IRB at full throttle over the wave ahead and down the face, maintaining speed.

Do not allow the following wave to catch the rear of the IRB as it may result in capsizing.

When going down the face of a large green or broken wave, always steer the IRB straight.

6. When returning to shore, which is the best zone you should remain in? Circle the correct letter, and explain your answer.

B

As a driver you must select a suitable wave to follow and move in behind it. You must make sure that they remain in zone B, between the waves, without slipping back into the wave behind.

7. How should you attempt to negotiate large broken waves?

Large broken waves should be negotiated head on.

8. What should you do as a driver if your crewperson falls out?

If a crewperson falls overboard, the stability of the IRB is affected.

As a driver you should practice getting the feel of driving the IRB solo so you can safely move the IRB in the surf zone and return to a position where the crewperson can reboard.

When driving solo, move your body physically forward more than the normal position. This takes weight away from the back of the IRB, helps it to get it on the plane faster and moving through the surf.

If as a driver you are uncomfortable with the surf conditions. You can return to shore and collect another crewperson to return and make the recovery.

9. Solo driving is not recommended practice under normal circumstances, but if a crewperson falls overboard, you need the necessary skills to recover your crew. Write in detail below the body positions and techniques you would need to adopt when solo driving.



Parallel running:

Move to the middle of the IRB, and transfer weight around when necessary.

Driving in the surf:

Keep body weight towards the middle of the IRB.

Approaching waves:

Hit the waves on an angle going to the right where possible. This keeps the weight on your side of the IRB and prevents capsize.

It is important to never let go of the throttle arm. Do not hit waves too hard. Choose your lines carefully, and always be aware of what is happening around you.

## PERFORM

1. Fill the gaps using the words in the box below (and complete the sentence).

**IRB driver risk Speed emergency rescue sound judgement**

*Speed is the essence in an emergency rescue, and calculated risk may be necessary.*

*However, the risk should be alleviated by sound judgement from the IRB driver.*

2. What side of the IRB should the patient be on when you approach for a single patient rescue?

The port (left) side.

3. Explain how an IRB driver can assist the crewperson to bring an unconscious patient onboard the IRB?

When the crewperson has secured the patient under the arms, accelerate slightly forward so the patients legs rise to the surface, then grasp their legs with the left hand while commencing a port (left) turn. This will assist to roll the patient into the IRB.

4. What options do you have when confronted with a multiple patient rescue?

Lift most at risk on board first, throw tubes out to the others

Leave your crewperson in the water with the others.

Instruct all to grab the loop ropes and drive them out further to a safer spot.

5. When returning to shore with an unconscious patient what should you do?

Signal for assistance required and use verbal communication via the on-board radio to patrollers on the shore.

## FIX

1. List the equipment you would need to gather to reinstate an IRB engine after a roll over. This is **STEP 1** in the IRB manual.

- Dewatering agent
  - Foot pump
  - Fuel and fuel absorbent spill mat
  - 10mm ring spanner
  - Spare spark plugs
  - Fuel bladder
  - Flush tank
  - Fire extinguisher – ABE dry powder
  - Fuel safe gloves
  - Fuel safe wrap around glasses
2. **Wash the engine.** Hose inside cover with fresh water.
3. **Drain Carburettor:**  
Remove the engine from the IRB and place onto an engine trolley. Loosen the drain plug from the carburettor, but do not remove, allowing water and fuel to drain from carburettor.
4. **Flush carburettor:**  
Connect the fuel line bayonet  
Pump fuel through the carburettor to ensure no water remains.  
Retighten the drain plug
5. **Remove spark plugs:**  
Remove both spark plugs using a spark plug spanner.
6. **Pump water from powerhead:**  
Tilt the engine so that the spark plug holes are facing down.  
Ensure kill switch is in OFF position and pull start the engine twenty times.  
This process needs to be completed in a manner that captures all fuel contaminates.  
E.g., using a fuel absorbent spill mat.
7. **Flush the cylinders with fuel:**
- Tilt the engine so that the spark plug holes are facing up and pour about half a cup of fuel mix into each cylinder.
  - Hold the engine vertically and shake vigorously back and forth and side to side.
  - Place the engine in a horizontal position on a fuel mat (spark plug holes facing down).
  - Ensure the kill switch is in OFF position.
  - Pull start the engine ten times.
8. **Replace spark plugs and lubricate powerhead:**
- Clean, dry and replace spark plugs, or substitute with new spark plugs if concerned with condition.
  - Spray inside spark plug caps lightly with dewatering agent and refit to plugs.
  - Spray powerhead lightly with dewatering agent.
9. **Run the engine in the flush tank:**
- Place the engine in the flush tank and start engine.
  - Check the tell tale and run in tank for ten minutes.
10. **Run engine at sea:**
- Fit the engine to the IRB, launch and run under load for at least 30 minutes.

It is important that the powerhead generates sufficient heat to remove any water vapour. Failure to achieve this will result in early bearing failure.

11. After capsizing, if the engine will not start after repeated attempts what must be done?

If the engine will not start.

- Empty and re fill flush tank with fresh water
- remove the coiling cover
- remove the spark plugs
- preferably remove the tiller arm using a 10mm ring spanner.
- totally immerse the engine powerhead in fresh water until a qualified service person is consulted and service arrangements are made.

## COMPLETE

1. List some keys steps you and your crew need to take to load an IRB onto a trailer.

- To load the IRB on to the trailer the crew should work together to lift the nose of the IRB. Once lifted one of the crew brings the trailer in under the hull. The IRB can then be gently lowered onto the trailer.
- If you are not physically strong enough to hold the IRB before loading the trailer under the boat a third person will be required to assist.
- Correct placement of the IRB on the trailer is essential to avoid damage to the auto bailers.

2. List the steps you need to follow to close down the fuel bladder and engine.

### Fuel Bladder

- Remove the fuel bladder and wash it down with water, ensuring you remove all sand and salt water from bladder.
- Refill the fuel bladder following the correct fueling procedure and store on a flat dry surface inside a fuel storage cabinet. Not in the IRB.
- If there is evidence of any fuel bladder leakage the IRB must be deflated, and the floorboard removed, then re-inflated and both the hull and floorboard washed with soapy water.

### Engine

- While attached to the hull, lightly hose the entire engine with the cover on, including the prop guard.
- Before placing the engine in the flush tank ensure the gear lever is in neutral position.

Start engine, check tell tale for water emission and run until the engine stops (this is when the carburettor runs out of fuel). Do not rev the engine when running out the fuel.

- Remove the engine cover and very lightly rinse the powerhead, to remove possible salt or sand deposits. Keep water away from the carburettor. Remove remaining water from the powerhead using a cleaning rag or blow dry with the foot pump.
- Remove the engine from the flush tank.
- Lightly spray the powerhead with dewatering agent and wipe dry with a clean rag.
- Remove any grime or oil stains with a clean rag.
- Sit the engine cover loosely on the engine so that air can get in and around the powerhead. Place a dry towel over the powerhead and then place the engine cover loosely on top
- Store the engine on an engine trolley or engine rack.
- Record driver/crewperson time in IRB Operations logbook.

**Record any problems in logbook and advise the Club Powercraft Officer**

## Risk and Incident Management

Examiners sit under 'Level 3' of the operational health and safety approach.

Use these two links to access the Risk and Incident Management resources relevant to this manual and level 3.

<https://www.surflifesaving.org.nz/club-management/health-safety/our-approach>

<https://www.surflifesaving.org.nz/club-management/health-safety/emergencyincident-management>

**Ensure you read all relevant information on these website links.**

## The SAFER Model

At the heart of our Health and Safety Management System is our SAFER approach to risk management. SAFER helps guide and reinforce the fundamental concept of risk management, which even our youngest lifeguards should be familiar with and be able to implement for regular lifeguard tasks and duties.

SAFER is an easy to remember approach to identifying hazards and risks and encourages users to consider control measures to fix the problem in order to prevent harm to people. Risk management and assessment, are essential components of what we do as lifeguards. Understanding, remembering and utilising a SAFER approach to risk management is an important first step to providing for your safety as well as the safety of others.



## Operational Risk Assessment (ORA)

Operational Risk Assessment must be completed for all Surf Lifeguard Award practical examination components via the SLSNZ Patrol App. Refer to the Operational Risk Assessment NSOP for more information.

[https://www.surflifesaving.org.nz/media/993734/operational-risk-assessment-nsop\\_final-1.pdf](https://www.surflifesaving.org.nz/media/993734/operational-risk-assessment-nsop_final-1.pdf)