

# Exercise Evaluation Report

## Exercise Eventide



**Location:** Wellington Harbour

**Date:** 23 May 2024

**Report version:** Final

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## 1. Executive Summary

The Wellington Police District marine SAREX was conducted over a 3 hour period on the 23 May 2024.

The exercise was attended by the Wellington Police Maritime Unit and the Wellington Volunteer Coastguard. The Wellington Police Search and Rescue Coordinator was the exercise controller.

Both agencies were tested in a partly full scale exercise and three vessels were deployed to the Wellington Harbour during the hours of darkness.

The aim of the exercise was to test the search capability of the Wellington Police Maritime Unit and Wellington Volunteers Coastguard search assets (vessels) to perform a search for a person in the water in darkness.

By evaluating the SAREX against objectives, some insights have been made that should support improvements in deploying vessels hastily in a time critical emergency involving a person in the water at night and working together to achieve a common purpose.

The aim of the exercise was achieved and a success for all agencies.

## 2. Recommendations

**2.1** Rescue vessels should be reviewing their spot light systems to see if technology has improved and look at upgrading their systems to improve night time searches. Also investigate other technological advances in searching, such as thermal or night vision systems.

**2.2** Skippers and On Scene Coordinators should be reminded that night time searches requires more trained crew to be onboard vessels to search. Automatically two crew will be dealing with the management of the safe keeping of the rescue boat (helmsman and radio operator). There should be at least two crew designated to searching.

**2.3** Look at conducting a future night time search exercise starting from when both units are at their respective berths so information has to be passed over the Marine VHF or cell phone or other communication methods while on route to the scene.

### 3. Introduction

Search and Rescue (SAR) incidents on the water in the Wellington Police District requires cooperation and partnership approach across several organisations beyond New Zealand Police.

Operation Eventide was a water based SAREX that took place in the Wellington Harbour on Tuesday 23 May 2024. This exercise was a partly a full scale exercise designed to test the Wellington Maritime Unit and Wellington Volunteer Coastguard to search for a missing person in the water at night time during the hours of darkness during a 3 hour period.

Specifically there is a need for both rescue units to test their capabilities to perform a coordinated approach to search for a missing person in the water during the hours of darkness.

The objectives of the exercise were:

- To measure the effectiveness of the on water search assets.
- Search crews and teams refresh and practice search skills at night

## 4. Background

### Background to the Exercise

There has been numerous events involving missing persons in the water around the Wellington region where a search normally requires a fast response and requires a coordinated search. It is recognised that searching at night can be very challenging and that the more practice that emergency responders conduct, the better their skills will become for future searches at night.

**Date:** 23 May 2024

**Location:** Wellington Harbour

### Organisation Key People:

- Sergeant - Jonno Westrupp - NZ Police
- Sergeant Richard Kennedy – NZ Police
- James Groombridge – Wellington Volunteers Coastguard

### Participating organisations:

- Wellington Police Maritime Unit
- Wellington Volunteer Coastguard

### Exercise Aim

To test the search capability of the Wellington Police Maritime Unit and Wellington Volunteers Coastguard search assets (vessels) to perform a search for a person in the water in darkness.

### Exercise objectives

To measure the effectiveness of the on water search assets.

Search crews and teams refresh and practice search skills at night

### Exercise Scenario

The subject launched his boat from Seaview marina and went fishing alone. He anchored off the south west side of Somes / Matiu Island. He called a friend at 4.00pm to advise that he was about to pull his anchor up and return to Seaview Marina. His friend subsequently went out on his own boat and located the dinghy at 4.30pm still anchored but without the subject onboard. The subject's cell phone and lifejacket were still onboard, along with his fishing gear. The friend called 111 and advised Police. The subject had a heart condition and can't swim. His vehicle and trailer were still at the boat ramp and he was not home.

To simulate a missing person drifting at sea, a dummy was placed in the water at 4.00pm by the exercise controller in the same location.

There would be no Incident Control Team established and any instructions or information would come from the exercise controller who would be the incident controller.

At 5.30pm exercise control would advise the Wellington Police Maritime Unit to be the on scene coordinator and start a search of the area.

## 5. Evaluation Methodology

### 5.1 The agreed outcomes of the evaluation activity

The evaluator was asked to observe the SAREX activity and produce evidence based report comparing objectives to what was observed

### 5.2 Evaluation scope

It was agreed that the exercise would commence from the time of the first briefing on the water started when all vessels would be rafted up to each other in Wellington harbour.

**Objective One:** To measure the effectiveness of the on water search assets.

Assets utilise appropriate search methods

The search is conducted safely

The search is well coordinated with good tactics and effective equipment for night time searches

The search is well coordinated with clear briefings and instructions to crews.

**Objective Two:** Search crews and teams refresh and practice search skills at night

search teams understand their roles and taskings

Aspects of the exercise observed, what was not observed

### 5.3 Aspects of the exercise observed, what was not observed

The evaluator Observed: The start of the exercise when the Wellington Coastguard were advised of the scenario and then being onboard on the Coastguard Vessels (Spirit of Wellington) for the duration of the search

Not observed: When the Wellington Police Maritime Unit were advised of the scenario and the planning of search area determination and search area coverage drift models of the missing person.

### 5.4 Other:

The evaluator found it difficult to keep notes onboard the Coastguard vessel due to the limited lighting as not to impair navigation for the crew.

### 5.5 The process followed in preparing and submitting the report

The evaluator and exercise controller agreed on the evaluation role and what objectives would be tested prior to the SAR exercise.

At the conclusion of the exercise a hot debrief was held and any issues were addressed amongst the participants.

A report was prepared and submitted in draft form to the Exercise Controller before a final copy would be submitted.

## 6. Findings

### Summary of Exercise

It was ideal conditions for a night time search. There was a full moon, calm sea conditions and little wind for the exercise.

At 5.30pm the Exercise began and the Exercise Controller rang the Wellington Police Maritime Unit and advised them of the situation.

At 6.10pm the Wellington Police Maritime Unit rang the Wellington Volunteer Coastguard and told both crews from the vessels Spirit of Wellington and Reremoana to meet the Police launch Lady Elizabeth IV at the top of Evans Bay for a briefing. Both Coastguard crews then held their own briefing at the Coastguard meeting room prior to the SAREX starting.

*Nick from the Wellington Police Maritime Unit advised them to raft up alongside Lady Elizabeth IV at Evans Bay*

*Weather 12 knots from Airport and forecast was to drop. It was an ebbing tide*

*There was risk of debris such as logs in the water from heavy rain. Additional risks being rocks and darkness*

*The Harbour Master reported there was unlit surf skis in the harbour.*

*Comms channel 16 and 14 Harbour and Coastguard 61*

At 6.31pm both vessels departed Wellington Coastguard berth and headed north on Evans Bay and met Lady Elizabeth IV. Both Coastguards rafted up alongside and a briefing was held by the On Scene Coordinator on the aft deck.

Briefing:

*Missing person was suppose to leave Somes Island at 1600hrs and due back at Seaview at 1630hrs. He never made it and his boat was located unaccompanied in position 41 15.817S 174 51.382E SW of Somes Island.*

*Mission: to safely locate the missing person*

*Execution: creeping line search ; bearing will be in true 100 metres; between vessels: Reremona would do a coastline search of Somes Island*

*Each Skipper of the rescue vessels was responsible for safety of the their boat*

*Channels 3 would be the working channel*

*Lady Liz was the on-scene command*

At 7.08pm the search starts

Lady Elizabeth IV and Spirit of Wellington starts a creeping line search on the western side of Somes Island with 100 metre track spacing between both vessels.

Reremoana coastline search of Somes Island.

At 8.22pm the Reremoana located the missing person

At 8.30pm the exercise concluded and all boats returned to the Wellington Coastguard base for a hot debrief



## **Objective One: To measure the effectiveness of the on water search assets.**

### Assets utilise appropriate search methods

Survival time for a person in water during late Autumn would have been hours making it a time critical incident and assets would need to be searching in the highest probability area to be effective

- The last known point was established being the dinghy at anchor.
- The search area was determined and planned from the last known point. The search area determined was suitable for the scenario being the west side of Some Island.
- All vessels were being tracked and recorded on all the vessels navigation gear namely the plotters and this information could be seen on the Marine Traffic system. All the search tracks were able to be obtained at the conclusion of the exercise.
- Searching the Coastline of Somes Island was a good decision in the event the missing person had attempted to swim to shore.
- The search tracks had taken into the account the comfort of the crew for any possible sea conditions, which was a north to south direction.
- Interesting that the dummy placed in the water had drifted north west from last known position and then turned and headed south. Essentially indicating tidal currents have an effect on persons in the water in Wellington Harbour

### The search is conducted safely

The Police launch crew identified themselves as the on-scene coordinator to establish a command structure for the search.

- Boat crews were asked during the search if they were happy with the boat speed and distance between boats. No issues.
- All skippers were advised they were still responsibly for the safety of their vessels
- During the main briefing at Evans Bay risks were identified as being darkness and underwater rocks near the new cycle track near the Hutt Road; the harbour Master also reported unlit surf skis in the harbour. And also due to the heavy rain there maybe debris such as logs floating in the water.
- Prior to the exercise the Evaluator was given a thorough safety briefing before getting onboard the Coastguard vessel Spirit of Wellington. Due to being a night time search each crew member had to wear a strobe on their arm including the evaluator.
- Skipper on Spirit of Wellington swapped crew around to avoid fatigue in certain positions such as the helm.

### The search is well coordinated with good tactics and effective equipment for night time searches

- The search assets boat speed and track spacing of 100 metres was ideal for the search.
- The turns at the end of each search leg was well coordinated and worked well to get all vessels onto the next leg of the search.
- The search tracks appear well coordinated. (See Appendix A)

- Search lights on the vessels were struggling to light the distance between vessels. It was lucky that it was perfect search conditions and there was a reliance on the moon light. If there had been any weather it may be a struggle to search and vessels would have to close the gap even more. At the debrief it was highlighted that the spot lights were inadequate for the search.
- The crew onboard Spirit of Wellington had two Simrad plotters set up with a good combination for searching.
  - One plotter had the radar with a 100 metre range ring and was able to keep Lady Elizabeth IV within the ring to ensure the track spacing was correct. They could also see other targets not associated with the search in keeping with safe navigation
  - The second plotter was showing the LKP and leaving a track on the screen to show where the vessel had travelled. Reremoana crew turned off its engines during their coastline search to listen for any shouting, which was a good tactic.
- The missing person was located inside the search area.

The search is well coordinated with clear briefings and instructions to crews.

The Wellington Maritime Police rang the Wellington Volunteer Coastguard and advised the crew to meet at top of Evans Bay for a briefing. The Coastguard held their own briefing at their base and they later departed in two boats and met the police launch.

A briefing was held onboard the Police launch at the northern end of Evans Bay. During the briefing the engines onboard remained on, to hold station for navigation purposes and this made it noisy. Information was passed onto all crews about the scenario in the GSMEAC presentation. It was clear what the situation was and all risks identified.

Communication between crews on the water was very good.

**Objective Two: Search crews and teams refresh and practice search skills at night**

Search teams understand their roles and taskings

Overall a good exercise and there was lots of positive comments about the training for a night time search.

Communication amongst the crew onboard Spirit of Wellington was very good.

Crews were being rotated around to practice different roles and also avoid fatigue, such as:

- helming
  - searching on deck
  - radios
  - navigation.
- There was three crew onboard lady Elizabeth IV and during the briefing they asked if there was any spare crew onboard the Coastguard vessels to assist with searching as they effectively would only have 1 person searching and not ideal for night time searching. Unfortunately there was no one available. Ideally the more crew the better for searching and especially at night.
    - Helmsman is focused on driving and navigating the boat safely

- Radio person – focused on conducting the search such as: marine radios; answering cell phones; police radios; coordinating the search and rescue by ensuring other search assets are searching; log taking; ensuring search area is continually being reassessed with the new information; chartwork; chart plotter and radar and additionally actioning any requests from the helmsman and proving extra eyes for navigation.
- Having two searching would be a minimum, as one would search on the port side of the vessel while the other do the starboard side.
- It was noticed onboard Spirt Of Wellington the helmsman was concentrating on driving and navigating the boat. The radio operator was focused on the navigation equipment and answering radio. One other was the skipper overseeing the training and another was searching.
- During the hot debrief it was recognised that crews needed to be aware of not blinding each other with spot lights while searching.

## 7. Conclusions

The Wellington marine SAREX was a success with both search units working together to search for a missing person during the hours of darkness.

The overall aim of the exercise was achieved which was to test the search capability of the Wellington Police Maritime Unit and Wellington Volunteers Coastguard search assets (vessels) to perform a search for a person in the water in darkness.

### **Achieved: To measure the effectiveness of the on water search assets.**

A proper search area was determined by working out a drift pattern from the last known position. The Police Maritime Unit and Volunteer Coastguard then used a creeping line technique to search that area and also checked the coastline. As a result the missing person was located in the search area during the hours of darkness.

The search was conducted safely and all risks were identified.

Communication amongst the vessels was very good and this can be demonstrated by looking at the actual search tracks collected at the end of the exercise showing a methodical search.

### **Achieved: Search crews and teams refresh and practice search skills at night**

Any night time search is very challenging and especially looking for a person in the water. Crews got to practice different roles such as on scene coordinator; or skippering a vessel at night; or helming; or searching with spot lights; or radios and or navigation.

Even though it was ideal search conditions for a night time search, it became apparent to crews on how limited spot lights could illuminate the search area and or the dangers of shining it other vessels. Extra crew onboard makes it easier to search an area.

The On Scene Coordinator only had 3 crew and ideally should have had at least 4. This would have meant have two crews searching for the missing person. One search port side and the other starboard side.

## 8. Appendix

### Appendix A

BLUE Lady Elizabeth IV track

ORANGE: Reremoana

GREEN: Spirit of Wellington

RED: Dummy (missing person) track

