

Exercise Evaluation Report

Operation Rocket - IT

Location: Raglan

Date: 18th November 2017

Report version: Draft 1

Evaluator(s): *Mike Wright*

Contents

Executive Summary	2
1. Recommendations	3
2. Introduction	4
3. Background.....	5
4. Evaluation Methodology	7
5. Findings	9
6. Conclusions	11
7. Appendix.....	12

Executive Summary

The Multi-Agency Marine SAREX, Operation Rock-IT was conducted off the Raglan coastline on Saturday 18th November 2017.

All objectives were met to an acceptable level.

Personnel and procedures across all agencies were tested by the two scenarios.

The Raglan community and assembled exercise participants at the Wainui Reserve , who viewed the Flare Demonstrations are now better informed on the types of flares likely to be used in the maritime environment.

An improvement in the composition of the Incident Management Team has been identified and detailed in Recommendations.

1. Recommendations

All Objectives were met to an acceptable standard.

A limitation was identified in the current SOP's, in that the "Operation Cell" of the Incident Management Team was populated remotely by Coastguard.

Accordingly my recommendation is;

1. Initiate a discussion with Coastguard North and Raglan Coastguard to explore the possibility of a suitably experienced member of the Raglan Volunteer Coastguard, populating the "Operation Cell" of the Incident Management Team.

2. Introduction

The Raglan SAREX occurred on Saturday 18th November 2017.

The planning team addressed a number of considerations concerning the marine activity and mariner behaviour in Raglan, namely;

-steady growth in the permanent, semi-permanent and visitor population continuing to influence the popularity of recreational and maritime activities in the area.

-the demographics of the local boating community crossing the Raglan Bar, ie, larger fishing vessels, therefore travelling longer distances , incurring issues relating to fatigue, compliancy and disorientation.

-the dynamics of the Raglan Bar continuing to present challenges to Surfers / Kite Surfers / Waka Ama crews and the general maritime community.

In order to address these issues the Planning Committee;

- instigated a community awareness program advertising the Marine SAREX. A flare demonstration being of particular interest to the "On Shore" community.

- to test Readiness /Reaction / Recovery of the participating agencies along with interagency relations, two off-shore rescues were staged, both on the outside of the Raglan Bar.

Police were designated Lead Agency with contributing Agencies being the Raglan Volunteer Coastguard and the Raglan Surf Live Saving.

3. Background

3.1 Background to the Exercise

The Raglan Bar continues to provide significant challenges to local mariners, in anything less than ideal conditions.

Increasing population, larger recreational vessels, travelling longer distances, along with Surfers, Kite Surfers and Waka Ama crews utilising the area, has increased the likelihood of Rescue Services being activated.

The Rescue Services are populated by local volunteers with further assistance from Police SAR experts some 40 to 60 minutes away in Hamilton.

Accordingly efficient procedures and relationships are paramount.

3.2 Dates, location, organising agency(s), key people

Saturday 18th November 2017

Raglan Coastline – outside of the Raglan Bar.

NZ Police, Raglan Volunteer Coastguard, Raglan Surf Life Saving.

S/Sgt Vince Ranger (NZP) (SAREX I/C)

Wally Hawken (RVCG) (SAREX Safety Officer) (Media Liaison)

Viv Regnier (RVCG) (Logistics)

Craig Bridgeman (RVCG)

Lee Poolton (RVCG)

James Hawken (RVCG)

Debbie Phillips-Morgan (Raglan Surf Life Saving) (Live Target Manager)

3.3 Participating organisations

NZP – Raglan Police Officer, members of the Waikato Police District SAR Squad

Raglan Volunteer Coastguard

Raglan Surf Life Saving

Local Waka Ama paddlers

3.4 Exercise aim

Heighten the awareness of the community to Distress Flares, test the readiness and response of local volunteer rescue organisations and participating Government agencies to a Maritime emergency

3.5 Exercise objectives

Test;

Event Management, co-ordination and On Scene Command

Asset response and personnel capability

VHF communications – equipment and protocol

Local area knowledge and subject matter expertise

Flare discharge – technique, procedure and public identification.

3.6 Exercise Scenario

Flare demonstration – 0900hrs – offshore from the Wainui Reserve and out beyond the breaker line.

Hand held flares and parachute flares were activated.

A running commentary to the assembled public was provided by the Waikato District SAR Coordinator S/Sgt Vince Ranger.

Scenario 1 – occurred a little north of the flare demonstration with a report of people in distress in the water. Assets responded with appropriate command and control, emanating from Search HQ at the Raglan Volunteer Coastguard Base.

Scenario 2 – occurred approximately 5m NNW of Scenario 1, 2m offshore from Carters Beach, with a report of persons abandoning a vessel into an orange life raft. Assets responded with appropriate command and control emanating from Search HQ at the Raglan Volunteer Coastguard Base. The Coastguard Air Patrol was also activated. This scenario commenced as the first scenario concluded. This created a healthy tension and urgency amongst the responders on the water and within the Search Headquarters.

4. Evaluation Methodology

4.1 The agreed outcomes of the evaluation activity

A forthright report outlining observations of the Marine SAREX's relationship to stated objectives, with particular focus on the conduct / procedures of the Incident Management Team.

(Note – the junior members of the Waikato Police District SAR Squad had been specifically selected to populate the Incident Management Team.)

4.2 Evaluation scope

Access Interagency relationships.

Identify strengths and limitations within current Standard Operating Procedures.

Identify strengths and limitations in personnel training.

Recommend improvements and strategies for future implementation.

4.3 Aspects of the exercise observed, what was not observed

Observed:

Fare discharge

Event Management and Coordination

VHF communications

Local Area knowledge and subject matter expertise

Not Observed:

On Scene Command – physically impossible, however viewed remotely via Real Time Tracking and listened to radio transmissions.

Asset response – vessels and personnel were already on the water, prior to my return to Coastguard Base after the flare demonstration.

4.4 The process followed in preparing and submitting the report

There was no interaction with the exercise planners prior to the SAREX.

The SAREX Event Management and Safety Management Plan had been set and was forwarded some weeks prior.

Instruction from the SAREX I/C was to reflect on the Objectives and KPI's, observe the SAREX activity and submit an evaluation report accordingly.

Activity from the evaluator during the SAREX included;

Observe Flare demonstration from the Wainui Reserve

Attend the pre-exercise briefing to involved personnel.

Observe SAREX Search HQ activity and conduct.

Attend Incident Management Team Hot Debrief

Attend Whole of SAREX Debrief

4.5 Other information

Activity not observed detailed above.

5. Findings

Flare discharge, technique and public information.

This objection was met. The assembled public could clearly see the demonstration which was accompanied by a commentary delivered by the Waikato Police District SAR Coordinator.

Event Management, co-ordination and On Scene Command.

The SAREX ran seamlessly with good interaction demonstrated between agencies involved. On Scene Command as observed remotely by viewing Real Time Tracking and listening to the various skippers radio commentary, suggests this component is at a high level.

Asset Response and personnel capability.

Asset response was timely and application of assets appropriate. Practitioners in the second scenario recognised the "rescue" was out of their area and recovered back to the Surf Club after alerting Search HQ.

VHF Communications:

Were concise however one skipper was of the opinion there was too much radio chatter which tended to manifest itself during exercise. Irrespective of it being an exercise more radio discipline was required.

Local area knowledge and subject matter expertise.

There appeared to be an abundance of local knowledge and maritime experience amongst the members of the Raglan Volunteer Coast Guard members.

Assess Interagency relationships.

Clearly strong, the planning phase and subsequent document generated is one indication.

During the SAREX there was clear evidence of a healthy relationship with participants willing to discuss issues as they arose in a friendly professional manner.

Identify strengths and limitations with Standard Operating Procedures.

Strengths:

Members of the Incident Management Team for both scenarios demonstrated the ability to set up a CIMs structure and populate it with appropriate personnel.

Incident Action plans were formulated and clearly articulated on White Boards.

Limitations:

The Operations Cell of the CIMS structure was populated by Coastguard North. This meant the functioning of the Incident Management Team became disjointed at times, disrupting the flow of critical information. Both Incident Commanders were distracted from their core function when communicating by phone with Coastguard North.

Both Incident Commanders made particular mention of this during the "Hot Debrief" of the Incident Management Team, at the conclusion of the exercise.

The second scenario also highlighted the need for attention to detail and value of On Scene local knowledge.

Assets responded to , persons abandoning a vessel after a Parachute Flare was observed. The initial drift pattern was calculated on 2 person's transferring to an orange lift raft, search instructions were relayed on this basis.

New information was injected indicating the two targets were in the water as opposed to a life raft. New calculations were made with the missing persons being located shortly after.

The initial drift pattern focussed on an area well north of the drop off point. The actual targets were located south of the drop off point.

This generated useful discussion between Police and Raglan Volunteer Coastguard members, regarding the value of local knowledge.

Of particular note – the Box Search Pattern, demonstrated by the skipper of the vessel locating the 2 missing persons was near perfect.

Health & Safety:

SAREX Planning:

The Event Management & Safety Management Plan for the Raglan Multi- Agency Marine SAREX , Operation Rocket-IT, clearly articulates a culture of Health and Safety.

1.7 Maximum Conditions for Event to Proceed – details the conditions which would either cause a scenario to relocate to a contingency location or cause the total cancelation of the exercise.

1.9 Safety Equipment & Communications – details expectations

1.10 Procedural & Safety Calling – details procedures to be followed

Part 2 Safety Management Plan – clearly articulates the expectations of the Planning Team and clearly informs the SAREX I/C, SAREX Safety Officer and the SAREX participating personnel of their responsibilities.

SAREX Briefing – The SAREX I/C clearly instructed those assembled of his expectations. The appointed SAREX Safety Officer reiterated those expectations.

Conduct during Scenarios:

Scenario 1- the Skipper of the rescue vessel sought permission to deviate from the plan and return rescued persons to the Wharf ,as opposed transferring them to Surf Life Saving assets for transit to the beach and the attention of waiting Medic's. The request was made after an On Scene, danger assessment had been made.

Scenario 2 – Surf Life Saving Assets initially responded but when it became apparent it was outside their area of operation and limitations, they returned to base.

6. Conclusions

There was a strong emphasis on Health and Safety throughout the SAREX, as evidenced in the SAREX Plan and demonstrated by SAREX participants during the course of the two scenarios.

The objectives as detailed in paragraph 1.2.1 of the SAREX Plan were all achieved to an acceptable level.

The stated KPI's in Paragraph 1.2.2 of the SAREX Plan , Interagency relationships were strong during the Planning process, with robust , professional dialogue, during the course of the exercise being clear evidence of that relationship transferring into the Operational environment.

In terms of the KPI – Recommend improvements and strategies for future implementation – the composition of the Incident Management Team demands further scrutiny. The cells of Incident Controller, Intell, Planning, and Logistics, were all populated by exercise personnel.

The Operations Cell was populated by "Coastguard North". By virtue of having to make phone calls to Coastguard North , this caused a distraction to the Incident Commanders during the scenarios.

Further it interrupted the flow of information between the other cells, creating a disjointed approach at times.

As this was an exercise the situation was manageable, however the dynamics of a real-time marine rescue would make for an entirely different situation.

It is my view that the Operations Cell would have been better populated by a suitably experienced local member of the Raglan Volunteer Coastguard.

EVENT MANAGEMENT & SAFETY MANAGEMENT PLAN

**Raglan Multi-Agency Marine SAREX
"OPERATION ROCK-IT"**

0800-1600hrs Saturday 18 November 2017

Contents

Part 1. Event Management	3
1.1 Trends	3
1.2 Objectives	3
1.3 SAREX Planning Team 2017	3
1.4 Timings	3
1.5 Areas of Operation	4
1.6 Tides	4
1.7 Maximum Conditions for Event to Proceed	4
1.8 SAREX On-Water Assets	4
1.9 Safety Equipment and Communications	5
1.10 Procedural and Safety Calling	5
1.11 Media	5
1.12 Live Targets	5
1.13 FLARE DEMO	6
1.14 SCENARIO 1	7
1.15 SCENARIO 2	8
Part 2. Safety Management Plan	9
2.1 Overview	9
2.2 Roles and Responsibilities	9
2.3 Risk Analysis & Management	10
Appendix 1 - SAREX Map	13
Appendix 2 - Charted Positions	14
Appendix 3 – MNZ Flare Display Approval	15
Appendix 4 – Raglan Marine SAREX 2017 - Participant Information	16

Part 1. Event Management

1.1 Trends

The SAREX Planning Team 2017 has considered the scope of marine activity and mariner behaviour in Raglan. Steady growth in the permanent, semi-permanent and visitor population continues to influence the popularity of recreational boating and maritime activities in the area.

Varying observations of the local boating demographic suggest an increase in larger recreational fishing vessels >6-7m frequently transiting the Raglan Bar and travelling greater distances offshore, often beyond the 12M territorial limit, to fish. Fatigue, complacency and disorientation may impact these mariners. Any emergency response may be delayed due to required distance to travel.

The Raglan Bar remains an area of high-risk. Surfers and kite surfers continue to utilise the Bar and Harbour Entrance. Recently, a local men's W6 waka ama crew started rough-water training in the Raglan Harbour Entrance. Their trainings include occasional transit of the Raglan Bar, and are sometimes staged on an outgoing tide with moderate swell.

1.2 Objectives

1.2.1 The SAREX will test;

- Event management, coordination and on-scene command
- Asset response and personnel capability
- VHF communications – equipment and protocol
- Local area knowledge and subject matter expertise
- Flare discharge – technique, procedure, and public identification

1.2.2 Key Performance Indicators:

- Assess inter-agency relationships
- Identify strengths and limitations within current Standard Operating Procedures
- Identify strengths and limitations in personnel training
- Recommend improvements, and strategies for future implementation

1.3 SAREX Planning Team 2017

Vince Ranger - SAREX IC	Waikato SAR
Wally Hawken – SAREX Safety Officer, Media Liaison	RVCG
Viv Regnier – Logistics	RVCG
Craig Bridgman	RVCG
Lee Poolton	RVCG
James Hawken	RVCG
Debbie Phillips-Morgan – Live Target Manager	Raglan SLS

1.4 Timings

SAREX Brief	0800hrs		
FLARE DEMO	0900hrs		
SCENARIO 1	1015hrs – 1145hrs		
SCENARIO 2	1115hrs – 1345hrs		
Debrief	1500hrs – 1600hrs	Total time	8-hrs

1.5 Areas of Operation

	Charted Position	Description	Appendices
FLARE DEMO	37° 48.961'S 174° 49.562'E	Position is adjacent to the northern-most carpark Wainui Reserve, and sits behind breaker line	1, 2 & 3
SCENARIO 1	37° 47.756'S 174° 49.766'E	Position on North Spit approximately 1.20M north of Flare Demo and 1M SSW of Mussel Rock.	1 & 2
SCENARIO 2	37° 43.4313'S 174° 46.4834'E	Position approximately 5M NNW of Scenario 1 and 2 M due W of Carters Beach at 24m	1 & 2

1.6 Tides

Raglan Harbour Entrance 37° 48' 11" S 174° 50' 32" E

LT	0409	0.52
HT	1020	3.27
LT	1628	0.58
HT	2234	3.25

1.7 Maximum Conditions for Event to Proceed

Wind speed	>25kn
Swell	2m
Visibility	300m

Where maximum conditions in any combination exceed those stated the event will run at contingency locations inside the Raglan Harbour. The SAREX IC and SAREX Safety Officer will call event contingency or outright cancellation no later than 0630hrs Saturday 18 November 2017.

1.8 SAREX On-Water Assets

Gallagher Rescue	ZMQ9006	Coastguard Rescue Vessel (CRV)
Jim Wright Rescue 1	ZMQ9002	Coastguard Rescue Water Craft (RWC)
Jim Wright Rescue 2	ZMQ9004	Coastguard Rescue Water Craft (RWC)
Raglan Surf Lifesaving		Inflatable Rescue Boat (IRB)

Additional SAREX Vessels:

"CHOW" 6m LOA Viscount hard-top, Blue Hull/White topsides. 150hp Mercury. Fuel 400L petrol. 2 x VHF sets onboard. Gordon Jowsey – Skipper (CLM, CRV Master).

1.13 FLARE DEMO

1.13.1 Strategy:

A flare demonstration will be held as a lead-in to the SAREX. The position is determined as 37° 48.961'S 174° 49.562'E, adjacent to the northern-most carpark Wainui Reserve, and sits behind breaker line.

The flare demonstration will take place onboard Gallagher Rescue, and provide discharge practice for crews and an opportunity for public viewing.

A full brief on the demonstration and safety management, including instructions for discharge, will be provided by IC at SAREX brief 0800hrs.

Gallagher Rescue will head to position approx. 0845hrs and hold station assessing wind and sea state accordingly. Vessel master will repeat instructions for use and safety brief. Crew will wear appropriate PPE e.g. eye wear, gloves. Appropriate safety equipment including buckets of water and fire extinguishers will be ready.

The demonstration will begin on instruction from SAREX IC at approximately 0900hrs. A total of 10 flares will be discharged consecutively. Communication to confirm commencement and clearance for discharge will be made between SAREX IC and Gallagher Rescue for each device.

A public viewing platform will be created at the Northern-most carpark, Wainui Reserve. Running commentary will be provided by Waikato SAR representative.

All exercise communications to run semi-duplex VHF Int. 04. Inter-vessel communications VHF Int. 08.

1.13.2 Contingency:

Where sea conditions deem the exercise hazardous, there is a contingency to run the flare demonstration at an alternative position 37° 47.865'S 174° 51.749'E due North of Putoetuo Pt, Raglan.

A public viewing area will be set up at the Bow Street Jetty.

1.14 SCENARIO 1

1.14.1 Description:

At 1015hrs on Saturday morning, a red hand-held flare is spotted at a position in breaking seas on the North Spit.

A land-based informant sights the flare and calls 111. The informant is calling by cell phone from the seaward entrance of the Raglan Mountain Bike Track. Whilst speaking to Police, she describes the flare, and then a 'log' shaped craft with several heads bobbing around in white-water. She says she's looking North and thinks that the people are close to the Raglan Bar.

The informant continues to describe the situation; people waving out and yelling from the water. She thinks the vessel might be an outrigger canoe, and some of the people are trying to grab hold but keep getting knocked out of the way. She has no idea whether PIW are wearing lifejackets, and says they're really hard to see.

The informant is unable to maintain her position as her kids have taken off down the MTB track. She says she'll be able to come back and help once she's found her children.

1.14.2 Strategy:

This scenario incorporates a flare discharge, and will challenge response from Jim Wright Rescue 2, Gallagher Rescue, and Raglan SLS IRB.

The scenario will use 1 x retired W6 or rowing skiff to resemble capsized Waka, and 6 x live targets being 4 x PIW and 2 x shore-based. Targets to meet with Jim Wright Rescue 1 0930hrs at Wainamu Beach for placement.

When targets are in position, and on call from SAREX IC, Jim Wright Rescue 1 will discharge one hand-held flare nearby scenario position at approx. 1015hrs. SAREX IC to brief Coastguard Ops. Mock page to start exercise. Coastguard Ops to brief responding crew/s accordingly.

Jim Wright Rescue 1 will maintain active watch as safety vessel for the duration of the exercise.

In-water and shore-based live targets will wear full wetsuits, helmets, and high-vis PFD. All targets to be issued with individual hand-held radios and rations. Welfare checks will be conducted every 20-minutes by Live Target Manager on VHF Int. 10.

Live targets will make known various injuries; impact, cuts, hypothermia, some rendering immobile.

The exercise will be communicated on semi-duplex VHF Int. 04. Inter-ship comm's simplex VHF Int. 08.

1.14.3 Contingency:

This scenario will run at position 37° 46.986'S 174° 54.405'E due West of Hauraki Pt, Paritata Peninsula. The informant will provide visual information from a house elevated above Greenslade Road. Scenario set-up will occur from Raglan Wharf.

1.13 FLARE DEMO

1.13.1 Strategy:

A flare demonstration will be held as a lead-in to the SAREX. The position is determined as 37° 48.961'S 174° 49.562'E, adjacent to the northern-most carpark Wainui Reserve, and sits behind breaker line.

The flare demonstration will take place onboard Gallagher Rescue, and provide discharge practice for crews and an opportunity for public viewing.

A full brief on the demonstration and safety management, including instructions for discharge, will be provided by IC at SAREX brief 0800hrs.

Gallagher Rescue will head to position approx. 0845hrs and hold station assessing wind and sea state accordingly. Vessel master will repeat instructions for use and safety brief. Crew will wear appropriate PPE e.g. eye wear, gloves. Appropriate safety equipment including buckets of water and fire extinguishers will be ready.

The demonstration will begin on instruction from SAREX IC at approximately 0900hrs. A total of 10 flares will be discharged consecutively. Communication to confirm commencement and clearance for discharge will be made between SAREX IC and Gallagher Rescue for each device.

A public viewing platform will be created at the Northern-most carpark, Wainui Reserve. Running commentary will be provided by Waikato SAR representative.

All exercise communications to run semi-duplex VHF Int. 04. Inter-vessel communications VHF Int. 08.

1.13.2 Contingency:

Where sea conditions deem the exercise hazardous, there is a contingency to run the flare demonstration at an alternative position 37° 47.865'S 174° 51.749'E due North of Putoetuo Pt, Raglan.

A public viewing area will be set up at the Bow Street Jetty.

1.15 SCENARIO 2

1.15.1 Description:

At 1105hrs a Mayday call is heard by Coastguard Radio on VHF 04. Details are sketchy, but a radio operator gathers that 2 POB vessel "Reel-E-Hott" are abandoning ship. Waikato SAR is advised 1109hrs.

At 1114hrs numerous calls are received by 111 with positive sightings of a red rocket flare north of Raglan Bar. One informant, who states he's a Raglan Coastguard land-based spotter, reports that he is using high-powered binoculars and can also see black smoke rising from the water.

At 1114hrs Raglan Surf Lifesaving routine patrol reports to SurfComm's that they have seen smoke at the waterline some distance off Carters Beach.

1.15.2 Strategy:

This scenario incorporates a flare discharge and will challenge Waikato SAR coordination, and a search and rescue response from Gallagher Rescue.

Cutter vessel, "CHOW", will roleplay distressed vessel, and 2 x Oscars will replicate PIW.

"CHOW" to be in position no later than 1045hrs. 2 x Oscars to be deployed immediately from vessel.

At 1113hrs, and on confirmation from SAREX IC, Gordon will discharge one red rocket flare (NB: denotes final flare discharge for the day). SAREX IC to brief Coastguard Ops. Mock page to start exercise. Coastguard Ops to brief responding crew/s accordingly.

Gallagher Rescue will depart Scenario 1 and head to position as tasked.

All exercise communications on semi-duplex VHF Int. 04. Inter-ship communications VHF Int. 08. Missing person's manager welfare checks with crew onboard "CHOW" every 20-30 minutes simplex VHF Int. 10.

1.15.3 Contingency:

A contingency will be run near position 37° 47.441'S 174° 56.106'E in near Peart's Finger, Raglan Harbour. The flare discharge within this scenario may be eliminated, and RWC will be utilised to respond.

Part 2. Safety Management Plan

2.1 Overview

The SAREX Planning Team 2017 has undertaken due diligence for event safety, and together with affiliated agencies, assumes a primary duty of care to ensure optimum wellbeing and preservation of life throughout the event.

Personnel participating in the SAREX will be encouraged to accept an overlapping duty of care, which considers a shared responsibility for all aspects of safety and safe practice.

Health and Safety parameters will be considered aligned to those usually undertaken by each participating organisation during usual trainings and/or SAR taskings.

2.2 Roles and Responsibilities

2.2.1 The SAREX Planning Team 2017 will:

- Strive to cultivate an ethos that promotes risk reduction and safe practice.
- Implement strategies and controls to minimize known risks and reduce the potential for harm.
- Engage personnel, promote reciprocal communication, and seek commitment to the objectives of this plan.
- Ensure, by all possible means, that HSWA regulations relating to the event and workplace classification are adhered.

2.2.2 The SAREX IC will:

- Ensure the Safety Management Plan and Risk Analysis are well publicised to all participating personnel
- Liaise with SAREX Planning Team 2017 and other personnel any additional safety information or directives appropriate to the SAREX
- Consider and recommend, with the Unit Safety Officer and/or local SME any variables that may impact on SAREX proceedings.

2.2.3 The SAREX Safety Officer will;

- Publicise safety expectations to all participating
- Identify known hazards and mitigation strategies
- Ensure that all safety management and risk assessments are adhered
- Consider and recommend, with the Unit Safety Officer and/or local SME any variables that may impact on SAREX proceedings

2.2.4 All SAREX Personnel will;

- Continually observe, assess, and adjust activity to mitigate risk
- Notify the Safety Officer and/or SAREX IC of any identified safety breaches or hazardous situations
- Consider and recommend to the Safety Officer any variables that may impact on SAREX proceedings

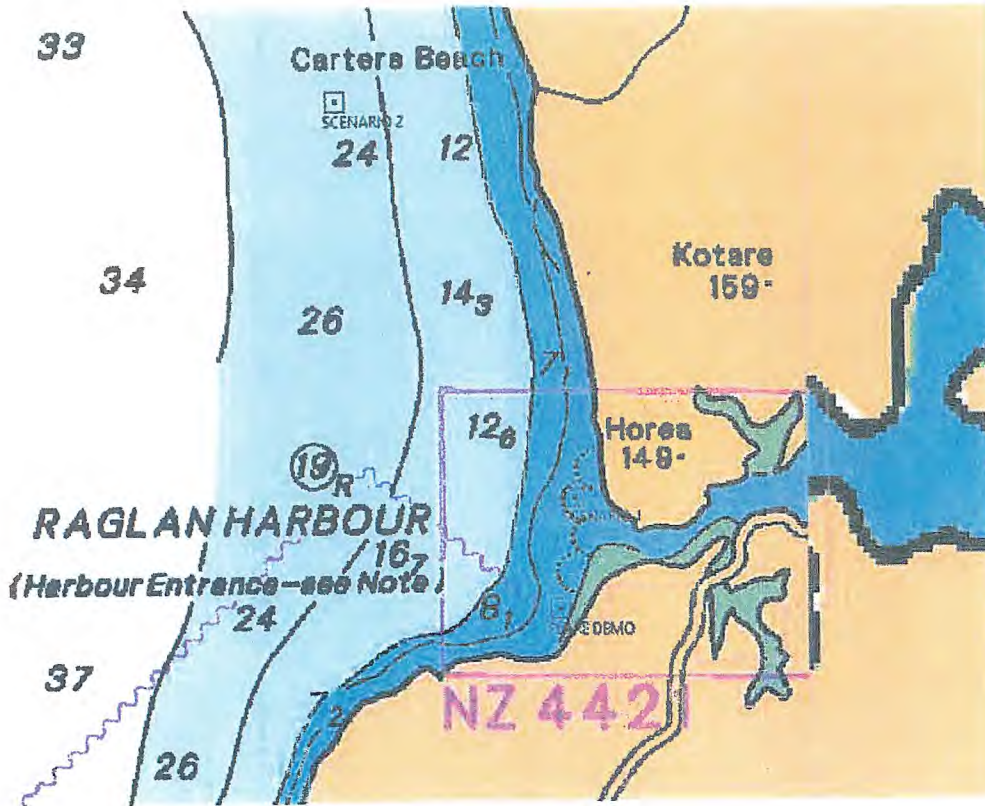
2.3 Risk Analysis & Management

	Causal Factors	Risk Reduction
People Skills, attitudes, age, fitness, ratios, experience, health, etc	Lack of physical fitness/experience	Individual and team responsibility to identify members capabilities/fitness - "IM-SAFE". Early appraisal and appropriate designation by IC or vessel skipper. Remove from exercise.
	Fatigue due to malnourishment	Ensure food and water available. Personal needs met; safety first. Remove from exercise.
	Dehydration	Ensure water available. Encourage teams to carry.
	Abuse from other team and/or agency members	Assess and intervene. Facilitate to overcome. Seek additional support from external parties.
	Incident stress triggered	Identify SAREX leaders and/or go-to people. Seek additional support from external parties.
	Interference from the public/Media	Thorough briefing. Direct all enquiry to Media Liaison. Seek additional and/or Police support where unwarranted behaviour arises.
	Physical injury to crew/s, including burns and/or eye injury	Report immediately "No Duff" x3. Follow usual SOP's for triage and treatment. Request assistance and/or evac.
	Near drowning and/or drowning	Report immediately "No Duff" x3. Follow usual SOP's for triage and treatment. Request assistance and/or evac.

	Hypothermia	Report immediately "No Duff" x3. Follow usual SOP's for triage and treatment. Request assistance and/or evac.
	Collision with other vessel and/or PIW	Assess & report immediately "No Duff" x3. Follow usual SOP's for triage and treatment. Request assistance and/or evac.
Equipment Clothing, shelter, transport, activity specific & safety gear, etc	Inappropriate personal equipment	Safety Officer to appraise all non-SAR personnel. PFD's to be worn by all, at all times. Buddy checks conducted within teams. "Check Check". Remove from exercise.
	Accident while in vessel on route	Assess & report immediately "No Duff" x3. Follow usual SOP's. Request assistance and/or evac.
	Equipment fails in operation	Immediate report to Safety Officer and request assistance. Watch for impact on scenario.
	Sinking	Assess & report immediately "No Duff" x3. Follow usual SOP's for triage and treatment. Request assistance and/or evac.
	Fire	Assess & report immediately "No Duff" x3. Follow usual SOP's for triage and treatment. Request assistance and/or evac.

Environment Weather, terrain, water, season, etc	Adverse weather conditions	Alert Safety Officer. Alternative locations selected if weather/sea conditions are an issue. Final decision to proceed made by Safety Officer and SAREX IC.
	Grounding	Ensure appropriate crew delegation and usual SOP's. Follow usual SOP's and emergency procedures. Signal for assistance.

Appendix 2 - Charted Positions



Appendix 3 – MNZ Flare Display Approval

RCCNZ Ref:

Studios

Cameron Street

Vincent Ranger
Waikato Police SAR Co-ordinator

RCCNZ
Level 1, Avalon

41 Percy

Avalon

PO Box 300500
Lower Hutt

Distress Signal Training Approval

Dear Vincent

Permission is granted under Maritime and CAA Rules to hold a Distress Signal training demonstration or exercise, subject to obtaining permission from Fire Service, Civil Aviation, Local Harbour Master and DOC (where appropriate) for

Coast Guard Training

using:

<u>Number</u>	<u>Description</u>
	White illumination
4	Handheld red distress flares
4	Orange smoke distress flares
4	Red Rocket

In the location of

37 48 06S 174 49 56E outside of Raglan Bar

Between the times of

0900

hrs and

1130

Hrs local time on

18 November 2017

Event Coordinator

Vincent Ranger

Contact number

021 1912445

The applicable Maritime and CAA Rules governing Distress Signals and Pyrotechnics training are on the following page.

Please ensure that the following people and organisations are notified:

- Police
- Fire Service
- Regional Council Harbourmaster
- Adjacent Coastguard
- Local Fishermens Radio
- Local Commercial Radio Stations
- Civil Aviation Authority *Attn:*
Aeronautical Services Unit
(Form CAA 24077/01) *email*
airspace@caa.govt.nz

A copy of this approval has been sent to Maritime Operations Centre (*Maritime Radio*).

It is a requirement of this approval for applicants to notify RCCNZ of any failures of distress signals, using the attached form and entering as much detail as possible.

Note: It is the responsibility of the person conducting the Distress Signal Training to ensure the safety of all persons and the safe conduct of the training. Applicants are reminded that flares can be very dangerous as they burn with extreme heat and can easily start fires if used incorrectly.

Maritime New Zealand does not recommend the use of time expired flares for training exercises

Appendix 4 – Raglan Marine SAREX 2017 - Participant Information

To be completed by non-SAR personnel or public actively engaged in SAR training.

The SAREX Planning Team 2017 has undertaken due diligence for event safety, and along with contributing agencies, assumes a primary duty of care to ensure optimum wellbeing of all participants. All personnel, including rescue crews and volunteer live targets, are expected to adopt an overlapping duty of care, which considers shared responsibility for all aspects of safety and safe practice.

By accepting a role in the Raglan Marine SAREX 2017, the participant understands he or she will be exposed to elements of risk associated with the role and nature of the environment. Further, the participant recognises safe-practice during the exercise is aligned to that usually undertaken by rescue personnel and agency's during regular tasking/s or training.

Conditions of Participation

- The participant will notify the SAREX Safety Officer or nominated representative of any injury that may affect participation, and subsequently withdraw from activity immediately.
- The participant will adhere to risk reduction measures as presented in the SAREX 2017 Safety Management Plan (available on request). The participant will further undertake to observe, assess, and adjust activity to actively mitigate risk, or make known any breach or hazardous situation.
- The participant may be asked to stand-down from the event where senior crew, a vessel Master, SAREX Safety Officer or SAREX IC assesses either deliberate or inadvertent breach of personal safety or undue risk.

I _____ (full name) acknowledge that I have been thoroughly briefed on my role, and recognise that the SAREX 2017 Planning Team and participating agencies cannot be held accountable for personal injury or damage to property where all prescribed measures were not adhered.

Signed

Date

FLARE DEMONSTRATION

Free flare demonstration by Raglan Volunteer Coastguard in conjunction with Waikato Police SAR team.

WHEN: 18 November 2017 at 9 am.

The most suitable viewing is from Wainui Reserve northern most carpark overlooking Raglan Bar entrance. Flares will be deployed at sea from "Gallagher Rescue"

ALL WELCOME