

**Police Review  
Into the  
  
Marine  
Search & Rescue  
Operation at  
Wanganui  
  
23rd February 2008**

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## 1. Executive Summary

On Saturday 23 February Wanganui Police conducted a search and rescue operation (Search & Rescue Operation) for the missing vessel "Hard Out 2". The three occupants of the vessel were located by a searching aircraft the following morning, one person was deceased. Issues have been raised into how the search was conducted. A peer review for this Police operation was requested by the Central District Commander.

### Marine Search & Rescue

Search and Rescue in New Zealand has many participants. There are however, only two agencies responsible for ensuring an appropriate Search and Rescue response is activated and concluded as and when the need is brought to their attention.

These two agencies are the Rescue Coordination Centre New Zealand and the New Zealand Police.

The division of responsibility for these two agencies is determined by the nature and scale of the incident.

Most land and inshore marine search and rescue are the responsibility of the New Zealand Police.

Incidents that require resources beyond the ability of police and local resources as well as large scale incidents, including offshore marine, aircraft incidents and responses required as a result of electronic distress beacon activation are the responsibility of the RCCNZ.

In practice both organisations strive to keep each other informed of Search and Rescue responses in an effort to ensure that dual responses are not unnecessarily started.

Search and Rescue is usually a collaborative effort where the capability and resources of many groups are pooled in an effort to produce a more effective response.

It is important that each and every Search & Rescue response will and should have only one coordinating authority.

In the case of this incident "Operation Runabout" the Police were the coordinating authority.

Search & Rescue (Search and Rescue) has many parallels with a criminal investigation with three frequent exceptions.

- What happened to the victim is often unknown at the start of the Search & Rescue investigation
- The Search & Rescue investigation occurs with critical time pressures where the longer it takes to get a resolution; the greater the risk is to the survival of the victim.
- Within reason, the more people that know what is happening, the better.
- As in a criminal investigation, initial information is often sketchy, contradictory and difficult to validate.

It is vital that Search & Rescue Operations (Search and Rescue Operations) start and follow proven best practice. Best practice continues to be developed and refined.

Search & Rescue best practice is taught during training and refinements disseminated after Search & Rescue Operation debriefs and or exercises.

All key personnel from the organisations involved in Operation Runabout have been taught Search & Rescue best practice techniques. The only exception was the independent Marine Advisors who were participating due to their local knowledge.

Best practice in marine Search & Rescue uses the appreciation or similar process as an evaluation analysis and planning tool.

The appreciation system has a structured process of steps where and if undertaken correctly, allow Search & Rescue Operation planners to evaluate information, make decisions and initiate action. Parts of this process are revisited time and time again as each new piece of information is obtained. This is to ensure the Search & Rescue Operation activity is appropriately re directed as required towards the eventual operation conclusion.

## 1.1 Operation Runabout

The crucial appreciation was undertaken at the initial stage of the operation but did not appear to occur again in any effective way during this operation.

This allowed early assumptions and tactics made by the Police Incident Controller to remain unchallenged.

Communication between the Police Incident Controller (Incident Controller), RCCNZ (Rescue Coordination Centre New Zealand) and Coastguard show that early on, a predominate mindset as to the target profile developed. Consideration was being given to PIW (People in Water) but overall the predominate expectation was, that they were searching for a drifting boat.

A mindset also developed early in the operation as to the viability of night time search, using aircraft and additional surface resources. Search area advice was predicated on looking for a drifting vessel as well as People In the Water and this together with the implications of the RCCNZ prepared search area determination plans projected time, not being recognised, a very early decision was made that a daylight fixed wing search in addition to a sole surface asset night search was the appropriate option.

Further critical analysis and or re evaluation of this information did not occur, and as a result no re planning to consider alternative search tactics was undertaken.

No other options were considered by the Incident Controller, other than minor re tasking of that already started with the night single vessel search.

Assumptions were made by the Incident Controller and concurred with by RCCNZ regarding suitability of fixed wing aircraft for night search. This was done without consultation or the confirmation of any Air Liaison specialist.

At an early stage of the operation therefore, efforts turned to arranging for an early daylight search using known and capable local air resources.

If the Defence Air Liaison Officer had been consulted, the availability of the Air Force Helicopter based at Ohakea may have become known

An Air Force Search & Rescue Helicopter is always available 24/7 some where in New Zealand but not necessarily in Ohakea.

For this Air Force helicopter resource to be so locally available and the Search and Rescue Operation environment conditions to coincide so ideally is relatively rare.

Another significant reason that this particular resource was not considered or activated was that its use for a marine operation of this type is rare and not high on the awareness list of resources available for Police and RCCNZ.

Night searching on or over water is always difficult. The effectiveness of vessel and aircraft searching is often over estimated. Erroneous assumptions were made by the Police Incident Controller as to the effectiveness of the Coastguard vessel searching with radar, spotlights and Night Vision Equipment. Any small marine search craft low in the water has very limited capability to comprehensively search a large area at night. This is often not fully comprehended even by those on the search vessel and can lead to an assumption that if a target is not found in an area searched it is not there.

Until a target is found somewhere else, searchers must not assume it is not in the area already searched.

Finally subtle items of information were contributing to mindset and they are identified in the full report. However because an effective ICP (Incident Control Point) with key people as an (IMT) Incident Management Team was not established, these assumptions and the mindset were never challenged. Without the establishment of an Incident Management Team in an ICP the opportunity for this type of input was unquestionably hampered.

It is clear that there were people involved, local Wanganui Coastguard and Marine advisors who to a greater or lesser extent during the Search and Rescue Operation, were either considering and or talking privately about alternative search and target scenarios. These unfortunately were not communicated to the one person who should have been informed, the Police Incident Controller.

The reason these communications did not occur was mainly due to the erroneous assumption by many of these people that they did not have the full picture and therefore should not interfere as they believed the matter was under full control.

Some quarters even suggested, their input would be unwelcome.

There is no evidence to suggest that this input would have been unwelcome by the Incident Controller.

Specifically Operation Runabout did not meet Best practice in the following areas:

1. A functional Incident Control Point with an Incident Management Team was not set up and thereby information evaluation and operation management was severely compromised.
2. Communication systems employed in the Search and Rescue Operation was inappropriate and inadequate. Marine radio should have been the main communication system and this would have kept more people in the picture.
3. Search asset effectiveness monitoring was not appropriately undertaken.

4. An environment of collaborative response had not been fostered to the extent it should be.

The Police Incident Controller was ultimately responsible for the planning and conduct of this Search & Rescue Operation

Opportunities were present for a more robust evaluation of the information received and subsequently for the operation to be conducted in a different manner.

Opportunities were present for additional information or alternative Search & Rescue Operation conduct to be suggested to the Incident Controller by others.

Underlining causes of this Search and Rescue Operation failing to meet best practice standards include

1. Minimal operational experience by local participants, due to the very rare occurrence of this type of event in Wanganui.
2. Failure to undertake multi organisational exercises or training on a regular basis to increase skills and foster trusting working relationships.
3. No clear procedure, agreement or understanding between RCCNZ and Police regarding advice being sought or given including the consulting of independent Air Liaison on search viability options at night.

## 1.2 Police Search and Rescue Administration

Class I and II Search & Rescue in New Zealand is carried out by Police Search & Rescue squads situated in each district. Depending on the district geography, squads may be also being located in different policing sub areas. Due to the nature of local geography squads tend to be busier and therefore more skilled with certain types of Search & Rescue response. It may be alpine, caving, bush or marine as examples. Police Search & Rescue squads as a result naturally tend to focus on the skills required for their greatest demand. Training and or exercise for Search & Rescue that is very rare subsequently does not receive the same level of attention that it could. This in turn creates the situation where skill currency in all aspects of Search & Rescue is difficult to maintain.

The responsibility for district compliance with national standards and best practice lies with PNHQ. Districts are responsible for maintaining those standards locally.

To mitigate the risk of poor skills in areas of low demand (Search & Rescue) many Police districts appoint a full time district Search & Rescue coordinator. The district Search & Rescue coordinators primary role is to ensure a consistency of response, training, exercising and standards across all areas of Search & Rescue in the District. There are currently four full time District Search & Rescue coordinators covering seven districts. Central district is not one of these districts.

### 1.3 Principal recommendation

1. To mitigate the risk caused by the difficulty in maintaining skill currency in all areas of Search & Rescue I recommend that the Central District appoint a full time Search and Rescue Coordinator who in addition to responsibilities outlined in existing job descriptions will be responsible for the following:
  - Ensuring all district Search & Rescue squads, plan and execute regular multi agency training exercises for all types of Search & Rescue.
  - Ensure that all district Search & Rescue squad Incident Controllers are trained to the appropriate skill level and that they maintain skill currency for all types of response.
  - Ensure that all District Search & Rescue plans are appropriate, maintained and consistent.
  - Participate nationally to ensure that RCCNZ and Police interaction is based on best practice.
  - To provide an advice safety net for District Search & Rescue Controllers.

Whether the RCCNZ SARO (Search and Rescue Officer) at the time of this operation understood that his comments and concurrence to and with the Police IC was being seen as "peer review" is a matter of conjecture. The RCCNZ do not see their role as being responsible for checking decisions made by Police Incident Controllers. Regardless of what the RCCNZ SARO understanding and or expectations were, it is clear the Police Incident Controller understood and believed that his search tactics were being confirmed.

Consequently the Police Incident Controller believed that during Operation Runabout his assumptions, decisions and search tactics were correct and appropriate.

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## **2. Report Introduction**

On the 28th of February 2008 the Reviewer was tasked by the Central District Commander to undertake a "Peer Review" of a Police Search & Rescue Operation (Search & Rescue Operation). The Review is of the Search & Rescue Operation "Operation Runabout". This Search & Rescue Operation relates to an overdue vessel reported to Police on the evening of Saturday the 23rd of February 2008.

### **2.1 Report format**

Executive Summary

The full report explains the review format and the Terms of Reference. This is followed with a brief explanation and outline of the New Zealand Marine Search & Rescue system and related matters. This is included to ensure that the context, in which this operation was conducted, is understood.

Later in the report Key success factors, are identified and stepped through with reference to "Operation Runabout"

At the end of the report the reviewer recommendations are summarised.

### **2.2 Review format and Rationale**

This report is compiled in a manner that is intended to identify and clarify key activity and decisions taken or not taken, during "Operation Runabout". The report places this activity within the context of the New Zealand Search & Rescue system as it presently exists.

Additionally and of importance, the report will provide as much clarity as is possible around information exchange, information processes, decisions and resource deployment.

Comment is made with regard to and in the context of what information was available at the particular point in time that the various decisions were made and activity occurred.

At the risk of stating the obvious, it should be noted that at the conclusion of any Search & Rescue Operation, there is a high level of risk that with the benefit of hindsight, erroneous conclusions are drawn about the appropriateness of activity undertaken or not undertaken as the case may be. Post any operation a debrief is usually held to identify by critical analysis the strengths and weaknesses of the operation.

A debrief was held at the Wanganui Police station for "Operation Runabout" on the 3rd of March 2008. Notes made subsequent to this debrief are attached to this report. Unfortunately this debrief was held prior to the availability of some significant documents. These include the draft unverified RCCNZ communication transcripts and the Wanganui Coastguard transcripts which were not prepared until sometime later.

Finally, most decisions made during a Search & Rescue Operation are made with limited, incorrect and in the absence of quickly verifiable facts. They are made with time and resource pressures, particularly in the early phases of the

operation. This report will highlight those occasions, and where appropriate make comment in relation to the context previously mentioned.

## **2.3 Terms of Reference**

The Terms of Reference (TOR) for this review were determined by the District Commander, Central Police District, New Zealand Police.

1. To review the Police Response to the reported overdue boat
2. To review Police Standard Operating Procedures for Marine Search & Rescue Operation in the Wanganui Area and to assess if any amendments are necessary.
3. To provide expert opinion as to the conduct of the search at the inquest into the death that occurred during this incident.
4. To provide a report to the Central District Commander.

## **2.4 Scope of Review**

The scope of this review is outlined in the TOR. The reviewer spoke with key individuals who participated in the operation. Where key persons were not available in the time available to the reviewer, their extent of participation, perspective and activities were assessed by speaking to appropriate representatives from their organisation or agency. As comprehensive transcripts that were available the RCCNZ staff on duty at the time of the incident were not interviewed. One was also unavailable due to overseas travel.

If significant points were unable to be satisfactorily analysed without communication with a key individual, then further attempts were made to contact the individual. If that person was still un-contactable it is noted in this report.

From time to time during the review, points of difference arose and or information obtained from different sources was or appeared to be contradictory.

There are multiple references to time. As these times were recorded from different systems by each individual or organisation they do not always correlate.

Every attempt has been made to either reconcile or explain these contradictions.

Again where this was unable to be explained or reconciled to the satisfaction of the reviewer it is noted in this report.

### **2.4.1 Information gathered.**

Information was gathered through face to face or telephone interviews and by obtaining copies of documents prepared during and or as a result of Operation Runabout. This review also analysed transcripts of recorded audio from both radio and telephone calls, where available. Transcripts were available from the RCCNZ for the whole operation and from the Wanganui Coastguard for the second day of the operation. Additionally paper logs were

prepared by some of the organisations or individuals involved in the incident. Logs from Police, RCCNZ and Coastguard radio operators are also attached. No formal statements were obtained from any person as part of this review.

### **3. General description of marine SAR response in New Zealand.**

The New Zealand approach to marine emergency response is with a multi agency, multi person collaborative approach. No single person, group or agency can have or has the full range of skill sets and or resources that are required for all or most Search & Rescue responses.

Additionally and instrumental to its success is the requirement for a single Coordination Authority responsible for the leadership, management and organisation of individual responses.

The system has evolved to maximise the combined effects of a diverse range of stakeholders and includes:

- New Zealand Police
- RCCNZ (Maritime NZ)
- New Zealand Defence Forces
- New Zealand Coastguard and its affiliate groups.
- Surf Life Saving clubs and groups around New Zealand.
- Harbour Masters
- A variety of Charitable trusts operating a number of Rescue Helicopter Services
- A variety of commercial Air craft operators both fixed wing and rotary.
- Sports fishing clubs
- Commercial vessel operators
- Private vessel operators
- Private Individuals who advise and support Search & Rescue operations (e.g.: Marine Search & Rescue Advisors)
- Vessels of opportunity (Passing vessels)
- Private Coastal radio stations

This list is not exhaustive, but is illustrative of the wide variety of groups and individuals who contribute to Search & Rescue on a regular basis. The present marine emergency response system in New Zealand has multiple strengths including sustainability and general robustness.

This collaborative approach has more benefits than drawbacks for Marine Search & Rescue.

This system is a credit to all the people and agencies involved. The capability and effectiveness is even more remarkable given the size of the geographic Maritime area and the very small and sparse population of New Zealand.

From time to time there are failures in the system. This is currently not systemic in the opinion of the reviewer but due to isolated errors or failures in a challenging, highly complex and variable emergency operating environment.

#### **3.1 Coordination and responsibility**

In Search & Rescue only one organisation can and should be the "Coordinating Authority". The Coordinating Authority will lead and manage all

aspects of the operation. This role or responsibility cannot be shared during an operation but can be transferred.

Two agencies are principally responsible for Search & Rescue in New Zealand. The New Zealand Police and the Rescue Coordination Centre New Zealand.

These two agencies are both responsible and accountable for ensuring an appropriate and effective Search & Rescue response is started, managed and concluded for each and every emergency including marine that is brought to their notice.

At present the classification system for Search & Rescue identifies 3 classes. Class 1 & II for which Police are responsible.

Class 1 is where Police only resources are used. Class II is a Search & Rescue Operation where Police and external resources are used. Police remain however as the lead or Controlling agency.

Class III operations for which the RCCNZ are responsible. Class III response includes; Electronic Position Indicating Radio Beacon (EPIRB) and Electronic Locating Transmitter (ELT) activations, Aircraft accidents, offshore Search & Rescue and any incident where it is agreed that Police are unable to mount an effective response utilising only local resources.

Not being the "Coordinating Authority" however does not prevent each organisation seeking assistance and or advice and in fact is a frequent part of the new Search & Rescue system we now operate.

The marine SAROP at Wanganui was initially notified to Police and was classified throughout the duration of the incident as a class II SAROP.

In recent years Marine Search and Rescue has undergone a significant broad scope review. Additionally marine Search & Rescue has been subject to detailed reviews of a small number of serious incidents. As a result the system is now, in the opinion of the reviewer, in a considerably better state that it has been in recent times.

The system will always continue to evolve and there will always be room for improvement.

Relatively recent changes to the RCCNZ have resulted in the operation of a 24/7 facility. As this new organisation has moved out of its inception phase, a strong working relationship is and continues to be developed and strengthened between the RCCNZ, Police and other key partner organisations..

Incidents may be reclassified at anytime by mutual agreement and a formal hand over process is in place to prevent any confusion as to who is the Coordinating Authority.

From time to time either agency will provide assistance to each other on request. This can range from but not be limited to undertaking enquiries through to acting as an on scene coordinator in the case of Police and to activating resources or undertaking determination of potential search areas in the case of RCCNZ.

## **3.2 Non Activation Risk mitigation**

With parallel responsibilities for different levels of marine Search & Rescue it has been important to mitigate the risk of either multiple agencies mounting independent Search & Rescue responses to the same incident, or worse, neither organisation mounting a response due to information falling into the cracks.

RCCNZ and Police have developed a procedure whereby they advise each other when they are mounting a Search & Rescue Operation. This procedure is aimed to remove the risk of gaps and is working well.

## **3.3 CIMS**

CIMS Coordinated Incident Management System is the back bone of any emergency response. Individuals and organisations are trained to use this system which as the name suggests is a system that provides a common system of terminology and understanding of the various function responsibilities.

This terminology is used through this report. Notably ICP (Incident Control Point) is command and control centre for small and mid level multi agency responses.

IMT (Incident Management Team) is the name given to the group of people who are gathered together in the ICP to manage the incident.

IC (Incident Controller) is the name given to the person from the lead agency who is responsible for "leading" or coordinating the multi agency response. For this operation the Police were the lead agency.

## **3.4 IAMSAR**

IAMSAR manual is a jointly published by the International maritime Organisation. The manual provides guidelines for a common aviation and maritime approach to organising and providing search and rescue services. RCCNZ operates in accordance with the principals of IAMSAR. RCCNZ uses IAMSAR because they are responsible for coordinating search and rescue in New Zealand's internationally designated search and rescue region which extends from the Pacific islands to the South Pole and from halfway to Chile and halfway across the Tasman to Australia.

Like CIMS does with New Zealand only resources, IAMSAR ensures there is an internationally accepted common terminology and operating practices during the interaction with foreign resources.

## **3.5 Other Search & Rescue participants**

All other groups and notably, the Maritime Distress and Safety Radio Service the Defence Forces, Coastguard units and Rescue Helicopter or fixed wing operators are resource service providers. Their expertise is generally related to a specialist resource operation.

The exception would be Coastguard units who in partnership with Police have extended their training to incorporate technical skills in Search & Rescue planning.

#### **4. Wanganui**

Wanganui City is situated on the lower west coast of the North Island. The city has a moderately large river which flows through the city and out to the sea at Castlecliff. The Wanganui coastline is open and generally devoid of bays and harbours which can be used by marine craft for shelter. The coastline faces south and west, the direction from which most of New Zealand's weather arrives.

The entrance to the Wanganui River is dominated by man made breakwaters and a river bar. The bar has a reputation for being very dangerous for marine craft in certain wind and sea conditions.

Even in benign weather, the bar generates waves that can and does cause navigation and safety issues for small craft.

For this reason a small local Volunteer Coastguard unit was formed to provide a sea and river rescue service. A key feature of this service is the marine VHF radio service that the unit runs. This service as part of its contribution to collective safety accepts Trip or Transit reports (TR's) from marine craft as they exit the Wanganui River.

Wanganui Coastguard has modest resources and their facilities essentially consist of a 6.8 metre dedicated rescue vessel and a building which garages the vessel and stores the organisations equipment.

On the second floor of the building there is a small office containing a radio, phone and a computer. Next door in the same building is a very small meeting room.

The radio service run by Coastguard collects information on vessel movement in the area and is operated on a volunteer basis from the homes of members.

A TR typically will convey the following information to the coastguard radio operator. The vessel name, Number of persons on board and where they launched from.

In addition the radio operator requests the vessels destination, intentions and expected time of return.

If the vessel is known or registered with the local coastguard, contact details for people ashore are already recorded and known.

If the vessel is unknown, further details are not normally sought.

This information along with time of departure is recorded in a radio log.

As each vessel returns over the Wanganui River bar they are expected to call the coastguard radio operator and advise that they are safely back over the bar and returning to their launching ramp or berth.

## 4.1 Coastguard Overdue Vessel Common Practice

Failure to report back in by the appointed time, in accordance with Wanganui Coastguard practice, the following action will occur.

- Radio calls will be made to the vessel to check if the failure to report is an oversight.
- If no answer is received, a check may be made at either the vessels berth or at the launching ramp/s to see if the vessel has returned.
- Lastly if the vessel is unable to be located, contact with the nominated persons ashore, if known is attempted.
- When or if the previously identified steps fail to get a satisfactory explanation for the vessels failure to report in, the circumstances and known details are then passed to the local police.

## 4.2 Police General Marine Search & Rescue

The critical first phase of any Search & Rescue plan is the communication phase.

The usual method of emergency communication to police nationally, is by way of a phone call to one of the three New Zealand Police communication centres. This standard communication system is in place to reduce the risk that a call for an emergency response will go unanswered. With significant resources the centre is better able to cope with elasticity of demand than could otherwise occur in a smaller centre.

It is common with marine Search & Rescue incidents that multiple sources report the same incident at the same time. A small limited resource centre would be overwhelmed quickly thereby creating an unacceptable high risk of other incidents not being received and acted on simultaneously.

On receiving a call, the Communications Centre will elicit information, input the information into a computerised recording and dispatch system (CARD) and then utilising an appropriate Mobilisation Standard Operating Plan (MSOP) generate an appropriate response.

MSOP are generated, owned and managed by police in the area where it applies. This ownership ensures that the plan or SOP is workable with the resources that are locally available.

The standard communication centre system is almost fail safe, but does unavoidably have built in inherent delays. This is due to the number of people and processes that the information must pass through, prior to getting to the actual people or groups that are the response.

For this reason, many local police areas have in place, parallel communication and response plans.

These direct communication arrangements with key partner organisations do speed up the communication lines and subsequent response and are appropriate, providing the robust fail safe Communication Centre parallel contact mechanisms are also built in.

## 5. Search & Rescue Key Success factors

Marine Search & Rescue has multiple factors, all critical to a successful operational outcome.

A successful Search & Rescue Operation outcome does not necessarily and in all circumstances mean that no life is lost or injury results.

Serious incidents happen at sea and it is inevitable that from time to time fatalities will occur.

In a Search & Rescue Operation a successful outcome is deemed to occur where and when everything that can reasonably be achieved, is achieved in a timely manner, giving due regard to geography, environmental issues including weather, target profile and resources available. The benchmark used to guide and assess an operation is the currently accepted best practice.

The judgement as to if a Search & Rescue Operation is successful or not, is invariably subjective.

Operation Runabout in my view was not a successful Search & Rescue Operation.

### 5.1 Summary of Key Success Factors for Marine Search & Rescue

1. Appropriate and up to date Search & Rescue plans. (Includes Communication plan)
2. Trained and competent personal available as and when required.
3. Effective evaluation & understanding of pertinent information.
4. Effective management of Search & Rescue Operation planning & execution.

## 6 Key Success Factor 1

*(Appropriate and up to date Search & Rescue plans)*

Search & Rescue plans must be prepared and in place in advance of operations. They must be regularly reviewed, be workable and flexible enough to adapt to the variety of incidents that it is designed to be a plan for.

Search & Rescue plans should include, and are essentially, appropriate prompts or check lists of key actions with communication contacts for resources.

### 6.1 Wanganui Police Marine Search & Rescue Plan Communications

Wanganui Police have a parallel communication plan.

The Central Communications Centre Marine Search & Rescue MSOP is out of date as at the 3rd of March 2008 with incorrect contact numbers and people.

**This plan must be updated.**

The Wanganui Police Search & Rescue plan is up to date and appropriate with one exception

A contact method for Defence resources is not included in the plan and should be added.

The plan was last updated on the 20th of November 2007.

Priorities are clearly outlined and communication details for resources are adequate.

## 6.2 Other agency communications

Information advising of a marine emergency can come from many sources. Frequent receivers of marine emergency information are the Maritime Distress and safety Radio Service (MOC Maritime Operations Centre) Rescue Coordination Centre New Zealand (RCCNZ) and the local Volunteer Coastguard Units.

The primary surface resource used both by Police and the Rescue Coordination Centre New Zealand (RCCNZ) in the local Wanganui area, is the Wanganui Volunteer Coastguard.

For the above reasons communication contact details are held by all three agencies on how to contact each other in a direct and efficient manner.

The Coastguard communication plan outlines how the local coastguard unit can make a direct phone call to a duty Police marine Search & Rescue Incident Controller. The duty Police Search & Rescue Incident Controller is in possession of a duty cell phone which he or she carries at all times. If he or she is unable to be located then the Wanganui Police station is called. Finally if both of the previous communication lines fail a call would then be made to the Police Central Communications Centre.

On receipt of a call the Police Duty Incident Controller or other person as indicated will activate the Wanganui area Police Search & Rescue plan.

This Police Search & Rescue plan, lays out the IA (Immediate Actions) and priorities.

The plan details actions and priorities for a variety of marine related emergencies. It includes contact details for key organisations and persons.

The plan in summary sets priorities as follows:

### Priority One:

If the nature of the emergency indicates immediate assistance is required:

Page or phone Coastguard.

*A good system is in place whereby paging and entering a relevant numerical code, the type of emergency and response required is indicated..*

This communication will result in coastguard responding to man their vessel and a police liaison officer being dispatch to the coastguard premises. The instruction to the Police liaison officer is to remain, at least or until Search & Rescue arrives.

A Duty Marine advisor is to be contacted and given a situation report (sitrep).

Contact details for the Marine Advisors are included in the plan.

A local Air Search Advisor contact details are also included.

Richard HARDING (Wanganui Aero Work)

#### Priority Two:

Contact is to be made with the on call Search & Rescue member.  
The plan states that the on call member will make himself available to take control of the marine operation.

#### Priority Three:

Task a Police member to travel to the Coastguard premises with Police radio communications to act as Liaison.  
A reminder in the plan states: *This type of Search & Rescue incident takes priority over all other incidents not involving life in danger.*

#### Priority Four:

Consult with the Duty Marine Search & Rescue Advisor  
Contact the Marine Duty Officer at the National Rescue Coordination Centre (*Now the RCCNZ, Rescue Coordination Centre New Zealand*) and the Maritime Radio at Wellington to arrange Marine Radio Broadcasts.  
*(The plan is out of date in that the names of the organisations referred to in the plan have now changed. The Marine Duty Officer functions are now undertaken by the RCCNZ SARO's)*

#### Priority Five:

Advise Duty Senior Sergeant or Sergeant

#### Priority Six:

Advise Victim Support

#### Priority Seven:

Print out Communications event record and any other record to attach to a paper file.

It is important not to be too descriptive for Search and Rescue Operations. Because each Search & Rescue incident has infinitely variable factors and time frames there are very few **must do** items that should be mandatory.

This point highlights the challenge of Search & Rescue. Because location, nature and timing of Search & Rescue incidents are so variable, it would be impossible to ensure that prescriptive response plans are prepared for all likely incident scenarios.

Plans should as a minimum include sufficient prompts to ensure that key actions are always considered and initiated if appropriate.

## **7. Key Success Factor 2**

*(Trained and competent personal available as and when required.)*

Training and the availability of competent personal is critical to a Search & Rescue Operation. Without people with the right skills being in the right place at the right time a Search & Rescue Operation will become simply a throw of the dice. Because information is often sketchy or limited it is critical that the information available is evaluated using the best practice method available. This requires training and experience.

## 7.1 Search & Rescue Management Technical Skill

There are three main components or skills required for Marine Search & Rescue Incident Control.

These are

1. Search area determination planning
2. Search tactics planning and execution.
3. Operation Management

Police have developed and deliver a technical course for Marine Search & Rescue Incident Controllers. This course is run at the Royal New Zealand Police College. Most courses have a mix of Police Search & Rescue squad members and Coastguard volunteers.

The course principally covers the technical skills required for Search planning in the marine area.

### Search Area Determination Planning

On attending the course, participants acquire and should be able to demonstrate the technical skills required to calculate and plot a search area. This skill is called Search & Rescue search area determination. Search & Rescue search tactics are also taught and include the calculation of the probability of detection and the determination of the effect a variety of resources will have on the ability to search an area to an acceptable standard.

Search area determination work whether conducted manually or by using a computer aided system requires meticulous attention to detail. It can be time consuming and preferably should be undertaken by a person as their sole task as part of a Search & Rescue Operation ICP.

### Search Tactics & Execution

Having determined the area requiring to be searched, decisions need to be made on how best to search the area. Multiple factors are taken into account when determining search tactics or execution. These factors include as examples, target profile, what search assets are available and their capabilities, time available including the effect of elapsed time, weather and visibility factors that impact on search quality and or any other factor that is relevant to that particular search.

Best practice identifies a variety of search options commonly used when undertaking a marine search. It also provides methods of calculating the effect of using single or multiple SAR resources and calculations to gauge their effectiveness taking into account target profile, environmental conditions, time lapse etc.

The only effective way to maintain these technical skills is to use them on a regular basis. Most participants on the course neither do nor are in the position to use these skills on a regular basis.

The training of Marine SAR Incident Controllers is currently under discussion as part of a range of training issues being looked at by Police, Coastguard and RCCNZ.

This group is also looking at a common training and qualification system for RCCNZ, Police and Coastguard. This will when introduced create a clear understanding of skills attained by each organisation.

#### Operation Management

Lastly training includes the skill sets required for Search and Rescue Operation management.

This skill area requires a overall management ability and is a core competency of all sworn police.

The Incident Controller is a manager of a Search & Rescue Operation and requires to be trained but not necessarily practiced in Search & Rescue Search area determination Planning. This is unless they are the only person who is able to produce Search & Rescue search area determination plans.

It is important that the person undertaking the management role in the Search & Rescue Operation as the Incident Controller is somebody who is trained and practiced in the production and execution of search plan tactics and execution.

## **7.2 Wanganui Marine Search & Rescue Incident Controller competency**

The Wanganui Police Search & Rescue Incident Controller had attended training for Marine Search & Rescue at the Royal New Zealand Police College in 2001.

Since attending initial training the Police Search & Rescue Incident Controller for this operation has had little exposure to Marine Search & Rescue. He has had regular participation in land Search and Rescue Operations. Of particular note though is that he has never had to control an Incident where an offshore Marine search required coordinating.

Historically Wanganui has had few marine Search & Rescue operations where searches were required outside the river. The last marine Search & Rescue Operation recalled by local participants where search plans and the management of an open water search were required appears to have been at least 3 years previously.

On average Wanganui Police are activated for two Marine Search & Rescue Operation's each year.

These Search & Rescue Operations have mainly been for in river person recovery.

No marine activity has been undertaken in recent years where Marine Search & Rescue planning and execution has exercised either by police alone or with local resources.

Without regular operational experience and subsequent debriefs to identify areas requiring improvement it is critical that training by exercise is undertaken

Search area determination plans for Operation Runabout were produced by the RCCNZ at the request of the Police Incident Controller and it was not necessary for the Incident Controller to produce them as well.

What was necessary was for the Incident Controller to understand what he was given and how to use this information in the execution of the Search & Rescue Operation.

The Police Incident Controller was a competent Land SAR incident Controller and he was trained in marine SAR. However due to his lack of experience through either operational experience or exercises he made a basic error in not assembling an Incident Management Team. If he had he would have unquestionably offset his lack of experience.

### **7.3 Marine Search & Rescue advisors**

A Marine Search & Rescue advisor is a person who has intimate knowledge about local geography, and local conditions which can be used to assist during a Search & Rescue Operation. They are generally not formally trained.

Three local Wanganui Marine Search & Rescue advisors were appointed in December 2006. They were selected because of their local knowledge and considerable experience of inshore conditions in the Wanganui area.

Since their appointment minimal contact between Police and the advisors has occurred. No training or exercises have been undertaken with the Search & Rescue advisors.

No exercises have been undertaken with the involving local Police Search & Rescue coordinators and the local Coastguard Unit.

As a result the opportunity to improve let alone maintain, the key skills necessary as a group for a marine Search & Rescue Operation has not occurred for over 12 months.

Because Police have not organised any exercises Search & Rescue Incident controllers have not exercised their core skills so there has not been any opportunity to highlight the benefit of a team acting cooperatively in the ICP (Incident control Point)

### **7.4 Search & Rescue Partnership dynamics**

In Wanganui Inter group and individual rapport between key partners and individuals has not been fostered or given an opportunity to develop. This is a major risk to an effective Marine Search & Rescue response system.

It is noted that some relationship distance exists between various individuals and to a certain level between organisations in Wanganui.

Without holding regular exercises and engaging in regular interaction the distance that has occurred is a natural consequence of very few operational opportunities to work together.

This relationship issue has a major potential to result in a dysfunctional working relationship that could be very destructive. It is of vital importance that exercises and regular contact is initiated to ensure that mutual

understanding and trust develops between all parties who participate in marine Search & Rescue in the Wanganui area.

An opportunity to produce an excellent collaborative, multi organisational Marine Search & Rescue system for Wanganui has been presented providing the lessons learned from this accident are embraced by all parties. It was made clear to the reviewer that there is a strong commitment from all Search & Rescue groups in Wanganui to work towards a effective world class Marine Search & Rescue response system.

## 8 Operation Runabout Execution

### 8.1 Weather conditions

Weather is a significant factor in Search in Rescue. Apart from its role in the incident leading to the Search & Rescue Operation it plays an important part in what resources can be used and how effective they will be if used.

During the afternoon of the 23rd of February 2008 the weather was fine with a wind from the northeast averaging approximately 10 knots. It was noted by the Coastguard radio operator that they had recorded wind of up to 24 knots. This point will be referred to later in the report as being relevant to mindset in regard to how far offshore a drifting vessel would go in the time elapsed during different phases of this operation..

Sea conditions were relatively smooth with a wave height of between .5 and 1 metre.

There was unlimited visibility with a scattered cloud base at 3000 feet (<930 metres).

*(Source NZ Met service)*

At least one advisor was of the opinion though during discussion with a Police Search & Rescue member and based on his experience that the sea conditions were less than ideal and that a surface search with small craft presented some risk.

Sunset occurred at approximately 20:10 NZDT

## 9 Summary of Timeline

The Terms of Reference does not cover the activities that occurred prior to Police notification. However it is important to note some key points.

*RCCNZ times are usually UTC. Universal Time Coordinated due to their international communications. Where RCCNZ times are identified local times also shown. UTC to NZDT is - 13 hrs*

***The following extracts and summary of communications between the various participants is included to understand in what context decisions were made during this Search & Rescue Operation. This context is important as it clearly identifies the correlation between conversation, information, and decisions made in regard to the Search & Rescue plan and its execution.***

***This time line is drawn from logs and transcripts of the only recorded conversations for the 23rd of February 2008. The only log extracts that***

***have been excluded related to the passing of administrative information that is not relevant to decision making by the Police Incident Controller.***

*Full Transcripts are attached to this report.*

## **9.1 Initial activation**

### **12:50 NZDT**

Hard Out 2 leaves Wanganui and gives a TR

### **20:00 NZDT**

The vessel Hard out 2 was due back in the Wanganui River at 20:00 hrs. Enquires had been made by Wanganui Coastguard to the Wanganui Police at 20:45 to have a check made on the details of the registered owner. This was not however used to activate Police Search & Rescue by either a Coastguard request or Police. Police Search & Rescue were notified at 20:55 hrs of the overdue after Coastguard had undertaken their own enquiries.

In the opinion of the reviewer more urgency could have been given to notifying Police Search & Rescue in a timelier manner. It is reasonable that initial attempts be made to contact the overdue vessel and that local enquiries with regard to checking ramps for vehicles and trailers can be initiated. It may have been possible to start the search some 30 minutes or so earlier.

## **9.2 Police Search & Rescue IC activation and initial action**

*(Times are NZDT unless noted)*

On the 23rd of February 2008, Wanganui Coastguard Radio was operated by Coastguard Radio operator 1 from her private residence.

**12:50** Coastguard Radio operator 1 received and recorded the TR from the vessel "Hard Out 2".

"Hard Out 2" was known to Coastguard radio but was not a vessel registered to the Wanganui Coastguard. This Register kept by Wanganui Coastguard had details of 602 vessels that frequently use the Wanganui facilities.

This register keeps extensive details of each vessel, including equipment levels and NOK contact details.

Some 12 or more months previously Coastguard Radio had a discussion with the operator of "Hard Out 2". Coastguard Radio advises that the discussion was over the use of the name "Hard Out" which was a name then used by another vessel that was on the Coastguard register. At that time the operator and Coastguard agreed that the vessel would be called "Hard Out 2". Coastguard Radio advises that the Hard Out 2 operator did not register any further details with the Wanganui Coastguard.

However according to the Hampton family the boat had been registered twice before with Coastguard, but it appears their details had been lost.

***The delay after the vessel was noted overdue, occurred as a result of the necessary enquiries to determine who the owner was. This meant***

***that the notification and subsequent search started later that it may or could have.***

***I have not attempt to reconcile this point with the Victims family.***

Coastguard Radio operator 1 finished her duty at 13.00 and the radio was then operated by a second Coastguard Radio Operator 2 also from her own private residence.

**20.21 CG Log**

When Wanganui Coastguard radio had not heard from "Hard Out 2" Coastguard Radio operator 2 tried calling them on the marine VHF radio.

**20:34 CG Log**

Having not received a reply Coastguard Radio again tried calling the vessel.

**20:34 CG Log**

Again after not receiving a reply as per the standard operating procedure for Coastguard, a call was made to a resident who lived adjacent to the launching ramp identified in the TR made at 12.50 by "Hard Out 2".

This resident confirmed that a vehicle and boat trailer were still at the ramp and passed to Coastguard Radio Operator the registration number details.

**20.45 CG Log**

Coastguard Radio Operator made a further attempt to call "Hard Out 2" without success.

**20:47 CG Log**

An attempt was made to directly contact Wanganui Police Search & Rescue S/Sgt who was not on call or duty. The number called was his personal phone and not the on call Police Search & Rescue coordinators.

***Note: Wanganui Coastguard don't have specific SOPs for overdue vessels.***

**20:49 CG Log**

A call was made to the Wanganui Police Station to check on owner details for the vehicle & Trailer at the launching ramp.

*(20:45) NIA Log time of vehicle query suggests coastguard clock running 4 minutes fast.*

**20:53 CG Log**

Coastguard Radio Operator 1 phones the duty radio operator Coastguard Radio Operator 2 to advise she had received a call from the wife of the owner of the vessel "Hard Out 2"

**20:55 CG Log**

Contact to Wanganui Police Search & Rescue IC, He was the Duty Search & Rescue controller.

**21:00 CG Log**

A call was received about a vessel entering the river. This was identified as another vessel.

**21:02 NZDT (08.02 UTC) Incident Controller to RCCNZ**

***The Police Search & Rescue IC activation and IA (Immediate Actions) were initially appropriate.***

RCCNZ were contacted by the Police Incident Controller and given initial information on the report overdue vessel. He advised the RCCNZ " at this stage I'm (Police IC) looking to put the Coast boat in the general area that they were planned to be fishing in." and added " unless you (RCCNZ) want something else done or have some other thoughts."  
RCCNZ concurred with "No that sounds like pretty logical start I think"

Police IC then comments " Yea Unfortunately its a tad too late to get an aircraft up, otherwise "  
RCCNZ reply " Yea exactly, I was going to say that's a bit bloody dark to be putting an aircraft up, were not going to achieve a lot"

As a result of this initial communication it clear that the Police IC formed the view that he had concurrence from RCCNZ for the two issues raised.  
The correctness of the initial tasking of the coastguard vessel, and the non effectiveness of search aircraft use at night.

The Police Incident controller made an initial decision not to set an ICP up at the police station.

Vehicle and NOK enquiries were initiated to gather more information.

**This view by the Incident Controller on night time search with an aircraft was based on the Incident Controller understanding that aircraft over water at night presents significant risks for the aircraft. His understanding was that due to the lack of visible horizon the aircraft would have to maintain a fairly high altitude and fly on instruments. His understanding was the aircraft would also need to be twin engine for safety reasons.**

**The Incident Controller determined that with these operating restrictions an aircraft was not a viable night time search asset for this operation. Helicopters were not even discussed because of this rationale. This led to an early decision by the Incident Controller that a daylight search was the best option. This was concurred with by the RCCNZ.**

**21:10 Incident Controller to Marine Search & Rescue advisor.**

*This communication substance was ascertained as a result of interviews with both sides of conversation/s.*

Marine Search & Rescue advisor was advised of situation and consulted.  
Advises that drift probably in southerly direction down the coast.

No further conversations occurred between advisor and Incident Controller for the rest of the operation.

No discussion occurred between Advisor and Incident Controller regarding likely target profile being drifting vessel or people in water.

The Search & Rescue advisor himself then consulted with other people including other Marine Search & Rescue advisors. There views ranged from a

target not moving much to having drifted a long way down the coast. There was discussion amongst advisors as to the possibility of the target being people in the water.

The advisor heard on the marine radio channel 85 that there was a policeman on the Coastguard boat. He made an assumption that this was the Incident Controller and that the operation was now being run by another member of the police, The Search & Rescue S/Sgt.

**21:11 CG Log**

A further communication with Coastguard Radio Operator 1 with the name of the "Hard Out 2" owner being passed to the duty Coastguard radio operator.

**21:16 CG Log**

Attempts to call "Hard Out 2" cell phone. No reply.

**21:19 CG Log**

Incident Controller call to set pagers and call out Coastguard Rescue vessel crew.

*The Police log shows this as 21:00 however as the coastguard clock was fast this would account for some of the discrepancy*

**21:23 CG Log**

Crew on way to boat

**21:30 CG Log**

Discussion re possible target noted 7 nautical miles off the coast at 14:00  
*Further discussion re this sighting occurs between RCCNZ and Coastguard Radio Operator 1 later during the operation.*

**21:37 Incident Controller to Coastguard**

Incident Controller task Coastguard boat, advised to report every 15 minutes

**22:17 NZDT (09:17 UTC) Incident Controller to RCCNZ**

*(Police Log 22:04)*

Assistance from the RCCNZ in preparing Search & Rescue area determination plans was requested.

"Coastguard have reminded me, apparently you've got a new whizz bang toy there that can plot a possible drift tide movement for a craft."

Target details were passed and confirmation that the search area determination plan would be faxed to the Wanganui Police Incident Controller.

The Police Incident Controller now confirmed that he was at the Wanganui Police station.

**22:20 NZDT (09:20 UTC) RCCNZ to Coastguard**

RCCNZ was seeking confirmation re the time the vessel Hard Out 2 went over the Wanganui Bar.

A further discussion was held regarding a possible target 7 Nm offshore occurred

This lead to the RCCNZ telling coastguard he would prepare two search area determination plans.

**22:37 NZDT (09:37 UTC) Coastguard to RCCNZ**

Coastguard Radio operator 1 calls with local weather info for RCCNZ. 24 knots @ 1300. Out going tide. Lots of drifting logs.

Coastguard Radio Operator 1 offers opinion that the searching is too close in. Discussion to clear confusion as to report of search target being 3.5 km or 3.5 Nm distance off

RCCNZ advise this only makes a subtle difference. A position at a point 6 nm off the bar is given by the Coastguard vessel (overheard by RCCNZ in background of phone call) where a light has been located.

RCCNZ comments that the area (6 miles) is the highest probability for persons in water is where the coastguard boat is going to.

18 Nm off coast is the highest probability for a boat. Coastguard Radio operator 1 confirms that Coastguard advisors "who are pretty clued up because they fish out of here a lot, --they are saying that they could be quite a way off with that wind of 24 knots"

RCCNZ advises that the furthest he has calculated could be 26 Nm off the bar.

Further discussion occurs around why radio and or cell phone communication is not occurring.

Coastguard suggests that if there is no radio contact and there is no cell phone contact it would suggest they are a long way out.

RCCNZ offers the theory that because the boat is low to the water they could be hearing coastguard but coastguard not hearing them.

RCCNZ then suggests that they should be within cell phone range.

Coastguard Radio operator 1 offers a theory around reflection of the sea and dead patches. RCCNZ agrees that the sea can attenuate the signal, but qualifies this by saying that 25 Nm would not have that much of an effect.

Coastguard Radio operator 1 queries the use of a helicopter with a searchlight.

RCCNZ replies "Yea, but where do you search, that's what we are working on at the moment"

RCCNZ then says "I can tell you right now, I can tell you right now --That I would give them about now would be 25 miles by 25 miles what's that ?

Coastguard replies 625 square miles.

***Although no similar discussions took place with the Police Incident Controller these conversations demonstrate that he (Police Incident Controller) was not alone with his view that he was contending with a large area that required searching..***

Discussion & query from RCCNZ regarding why a target at 7Nm was discounted. The conversation concluded that this vessel perhaps should have not been discounted and if it was the target it would be further out at this time.

***This item of information was confirmed as an unverifiable but not discounted sighting of the target by the RCCNZ.***

***This is likely to have provided more weight to the scenario option that the target was a drifting vessel.***

Coastguard advise the boat [coastguard boat] asked her to call RCCNZ and advise re the 24 knots and asked what RCCNZ would like them to be told.

RCCNZ advise that "at this stage nothing cos I'm not running the search, the police are"

Coastguard Radio operator 1 advise that Incident Controller is onboard the Coastguard boat.

RCCNZ advise that he cannot be, as he is at the Wanganui Police station.

Discussion re radio channels and advise that in the meantime it was on Channel 85. If it got bigger and RCCNZ took over the next day they would move to channel 16.

**22:45 NZDT (09.45 UTC) RCCNZ Manger to RCCNZ SMC # 2**

Manager advised of missing runabout and that police wanted a search plan. SMC confirms to manager that incident is class 11 and they are assisting police with a "search plan".

**22:59 NZDT (09.59 UTC) RCCNZ to Incident Controller**

RCCNZ advises that the first plan gives an area of about 360 square miles. RCCNZ further advises "basically straight out from the coast basically 10 miles either side of the Wanganui Bar and 25 miles out to sea..

RCCNZ says "Yea And They're basically what it's telling me is that they're drifting. Any drift whether it be the boat or people in the water is going to drift from their fishing point 3 1/2 miles off the coast.

"Its going to drift south west".

Police Incident Controller replies "Cool, right that's most helpful"

RCCNZ adds that he is doing a subtly different version of the same plan. "I should be able to tighten it up a wee bit, see you've got the coastguard vessel out there, it might be able to go and have a look out that way tonight"

That would be 18 by 18 wide and 30 Nm long. 560 Sq Nm, comment that maths not too good and reference to being late.

RCCNZ advise the 2nd plan area actually - 25 Nm off the coast and comments that the boat is being pushed south west.

RCCNZ advises Incident Controller re Coastguard call that Coastguard boat was investigating a light close to where target was fishing.

Also counsels that Incident Controller would not be wanting to send Coastguard boat that far out.

RCCNZ advises that only option, that time of night that far out would be Air Force.

RCCNZ advises that they (Air Force P3) would not be there until 02.00 NZDT

RCCNZ advise may be better to wait until daylight when a visual search as well as radar can occur.

RCCNZ advises that it would be just as easy to get local Coastguard flight up at dawn.

Incident Controller advises that he has organised a Local Fixed Wing into air with a couple of extra air observers at 06.30 NZDT.

RCCNZ advises in that case he will prepare search area determination plan and fax through based on 06.30 NZDT search in morning.

***The above and following transcripts extracts are illustrative of the discussions and general thinking that was happening in relation to this search. It demonstrates that there was considerable communication occurring with regard to what may have happened to the target and attempts or theories discussed to explain the lack of communication.***

***The Police Incident Controller had formed the view that he should search with the Coastguard boat during the night by tasking it to the area of what he believed to be the highest probability. This included the reported fishing location identified by the Hard Out 2 when they did their original TR to Coastguard when leaving the Wanganui River. The second probability was based on the scenario of a drifting vessel so the Coastguard boat was tasked to move well offshore down the projected drift line.***

**23:30 Marine Advisor to Police Search & Rescue Senior Sergeant**

*Communication substance ascertained as a result of interviews with both sides of conversation/s.*

The advisor communicated his concerns about the weather which appeared to be less than ideal. This weather information was gleaned from reports he overheard from the Coastguard boat and his and S/Sgt's experience at their own locations. He advised that at least one of the co advisors thought people could be in the water.

***This conversation with the Search & Rescue S/Sgt confirmed the Police S/Sgts view that the Coastguard surface search asset was appropriate and there were risks to sending other vessels out. Subsequently the only communications he had in relation to this Search & Rescue Operation were regarding preparation for the Air Search in the morning, and not to discuss surface vessel deployment.***

**23:17 Coastguard Boat to Incident Controller**

Coastguard boat advises at 8 miles can go to 12 Nm or get extended. Advised by Incident Controller no go to 12 miles then return along ? to coast.

***The Incident Controller was concerned about the safety of searchers in a small boat like the Coastguard vessel going further offshore alone. This concerned had been earlier discussed with the RCCNZ.***

**23:47 NZDT (10:47 UTC) Incident Controller to RCCNZ**  
(After SARO change)

Incident Controller advise re local fixed wing going up at 06:30 NZDT for 2 hours. Asks re Air Force Orion P3 for 09.30 - 09:00 NZDT if first search unsuccessful.

The Police Incident Controller requested that RCCNZ "are you guys able to give them (Air Force) a heads up as to the possibility we may need them in the morning"

Discussion then centred on the time the Air force would be required and the Police Incident Controller advises "That the expected track of the drifting craft. If they're not been successful in that time. I think by then, which brings us to 9.30, say 9 o'clock we'd need to be seriously considering getting an Orion up or something of that nature."

RCCNZ advise they would call Air Force Air Liaison Officer and give them a heads-up re 09:30

***The Incident Controller was looking ahead as to what need to be prepared in the event the first Air Search failed to locate the drifting vessel or PIW.***

Incident Controller confirms that "this is one of those situations that he needed to look at what resources we have."

RCCNZ asks for email address so that search area plans can be sent to the Incident Controller.

**23:57 NZDT (10:57 UTC) RCCNZ to Incident Controller**

Attempt to call Incident Controller. Answer phone.

**Sunday 24th February 2008**

**00:03 NZDT (11:03 UTC) Incident Controller to RCCNZ**

RCCNZ advises that their internal conversation about the Air Force Liaisons would want to know what local resources were being utilized.

RCCNZ advises that the area is now smaller than first envisaged at 140 sq Nm and that local aircraft or Air Patrol out of Paraparaumu could easily do it. Also advised that "if required as well. We just thinking it might be a better option using observers out of those aircraft as well"

RCCNZ advises that it could be a better option than using air force.

Police Incident Controller advises that he has at that stage one twin engine out of Wanganui with pilot and Police are providing two air observers.

RCCNZ advises that 3 search scenarios have been sent by E mail.

Incident Controller agree that search plan ? out of Paraparaumu could be used.

RCCNZ advise of other air resources out of Paraparaumu and Taranaki and local Police Search & Rescue.

RCCNZ pass contact numbers and details.

RCCNZ advise that they highly recommend that local Police Search & Rescue be consulted re aircraft capabilities.  
RCCNZ ask that they be informed when Incident Controller decides what he is doing.

***The Incident Controller understanding was that they were still discussing morning searches. As he had already arranged for a suitable competent local operator to fly early in the morning he decided he did not need to make further enquires about the availability of other aircraft.***

***No Further conversations occurred between RCCNZ and the Incident Controller until the next morning when the victims were located by the Air Craft search.***

**00:13 CG Log**  
Coastguard boat ETA 02:30

**00:33 CG Log**  
Coastguard boat stood down with estimated return @ 01:30 advised plane up @ 06:30

**01:26 CG Log**  
Coastguard boat advise ETA now 02:03

**02:37 CG Log**  
Coastguard boat advise ETA now 03:00 having been stopping to investigate possible items of interest..

**03:06 CG Log**  
Coastguard boat closing down

***The Police Incident Controller made no arrangements to have the Coastguard vessel crew met and debriefed. He heavily relied upon the view that if they had anything of interest to report they would pass it on to him. The lack of a structure that would have eventuated with a full Incident Management Team would or should have identified the desirability of debriefing the search vessel crew and identifying the actual rather than anticipated search area covered.***

**07:00 Police Log**  
(CG Log refers 07:12)  
Advised that aircraft in air

**08:05 CG Log**  
(Police log 08:15)  
People in water sighted from aircraft

**08:15 CG Log**  
Coastguard boat requested

***The Coastguard boat had not been launched for the morning search with the aircraft. At this point in time it was unknown where or if the target would be located and alternative rescue resources from other locations may have been more suitable. Search area determination plans extended well offshore.***

***In the opinion of the reviewer given the relatively short response times for the Wanganui Coastguard boat and the uncertainty of where and when a surface asset may be required this is understandable.***

- 08:22 CG Log**  
Coastguard radio request local boat in scene to assist
- 08:35 Police Log**  
Coastguard Boat on water
- 08:40 Police Log**  
Local boat has victims on board
- 08:47 NZDT (19:47 UTC) Incident Controller to RCCNZ**  
Incident Controller advises that people located. Position given
- 08:52 CG Log**  
Victims with Ambulance at slipway
- 09:06 NZDT (20:06 UTC) Incident Controller to RCCNZ**  
  
Advising re fatality.

### **10 Key Success Factor 3**

Effective evaluation & understanding of pertinent information

The transcript references referred to above are included in this report to highlight how and in what context certain decisions occurred.

#### **10.1 ICP (Incident Control Point)**

An ICP was set up at the Wanganui Police station. The only occupant for most of the operation was the Incident Controller. No Incident Management Team was formed.

***This was not adequate and key persons should have been invited to attend to this location.***

Key people that should have co-located in the ICP were

- Marine Search & Rescue advisor
- Coastguard search planner
- Marine radio communications operator
- Police Incident Controller
- Police support person (for enquiry and logistics activation)

Failure to set up the ICP with an Incident management team had serious implications for the quality of planning and execution of the search.

These implications were

- Restricted communication capability through the use of cell phones all but eliminated the ability for the ICP to undertake effective tasking and resource monitoring

- The opportunity for a robust appreciation process to be undertaken with key advisors did not occur or allow another person to peer review or revisit assumptions and subsequent decisions made by the IC.
- As the sole occupant of the ICP the Incident Controller had to undertake all functions. This led to an overload for the Incident Controller resulting in little inability to disengage and revisit his own assumptions and decisions.

***The decisions made were based on assumptions by the Police Incident Controller. It is appropriate to make assumptions in the absence of readily verifiable facts as this allows urgent activity to be undertaken. But every effort should be made to challenge and validate these assumptions as part of an on going process..***

***Early decisions regarding the deployment of the coastguard vessel and the decision to restrict it to within 12 miles of the coast were correct in the opinion of the reviewer.***

***At the time of the search, no disagreement concerning the search conduct or tactics from either RCCNZ or Coastguard or any other person conveyed to the Police IC.***

***As shown in the transcripts it is clear that the Police Incident Controller was justified in believing that his decisions were correct as they were concurred with by the RCCNZ SARO.***

***Whether the RCCNZ SARO understood that his comments and concurrence to and with the Police IC was being seen as "peer review" is a matter of debate. The RCCNZ do not see their role as being responsible for checking decisions made by Police Incident Controllers. Regardless of what the RCCNZ SARO understanding and or expectations were it is clear the Police Incident Controller understood and believed that his search tactics were being confirmed.***

***The RCCNZ SARO however did not have the benefit of the local knowledge that was available to the Incident Controller if an Incident Management Team had been formed.***

***No real discussion occurred between the Incident Controller or any other person about the possibility that that the victims could be in the water as opposed to on a drifting boat.***

***This worst case scenario was in the opinion of the reviewer not adequately explored.***

***If the worst case scenario had been actively considered, it may have resulted in similar decisions regarding air search options or it may have resulted in a smaller more effective inshore search with the coastguard vessel.***

## **10.2 Additional Police availability**

The Search & Rescue squad in Wanganui is small and the additional availability was limited as two members were at an early stage of the Search & Rescue Operation being pre arranged to participate in the air search being conducted first thing the next morning.

It was a correct decision not to call these members to the station as they were required to be fresh for their part in the operation. Additional trained Police Search & Rescue squad members were not available or necessarily required for the ICP as local non police trained people were available.

A non trained police member could have been utilised in the ICP.

The ICP should be set up at the location with resources that are most appropriate to the Incident and Search & Rescue Operation being conducted.

***In general an ICP should be activated as close to the scene of the Search & Rescue Operation as it practical. The location should be selected on the basis of ensuring local knowledge is practically available, and the centre can be adequately staffed and resourced. Despite this generality the closest location is not necessarily always ideal.***

***The Incident controller must be located at the ICP. The location of an ICP must always be at the discretion of the Incident Controller***

### 10.3 ICP Communications

All communications for Operation Runabout occurred by way of cell phone, land line, and some limited radio VHF radio both marine and Police as well as E mail.

As far as possible, Communications between the Incident Controller and the Coastguard vessel should have occurred on Marine VHF.

This should occur for all marine Search & Rescue unless on the rare occasion sensitive information needs to be passed. At those times cell phone can be appropriate.

***The failure to use marine radio had implications for this Search & Rescue Operation  
It resulted in information being received or conveyed to the Incident Controller and only being heard by the two people involved in the phone call. It provided no opportunity for any third person to form a different opinion, critique and provide further options, corrections to information or assumptions.***

***A narrow and inefficient communication pipeline to the ICP meant no communication could occur with the IC until the previous communication had ceased. (Reference the timeline of attempted call that went to answer phone)***

Radio communications between the sole surface resource that was tasked and its own base radio operator were not heard in the ICP. Important information relating to search environment factors, search progress and related matters were not immediately available to the ICP to assess for search effectiveness evaluation.

Ultimately very little of this information was eventually passed or sought by the ICP.

Marine Search & Rescue should not be conducted in secret. Open communications are vital and as far as possible all participants should use a common communication radio system.

Channel 16 is the VHF international distress and safety frequency that is most widely used worldwide and is monitored continuously in all areas around coastal waters of New Zealand by the Maritime Distress and Safety Radio Network. As a consequence Channel 16 offers a very high probability of detection by vessels at sea who would normally keep a monitoring watch on this channel.

## 10.4 General Communications

***Most communications from and to the Police Incident Controller were by cell phone. This was not appropriate.***

As a result the Police Incident Controller was constrained in his ability to function effectively as he could not be contacted easily. On a number of occasions other people involved in the Search & Rescue Operation could not contact him in a timely and efficient manner.

The use of cell phone as opposed to radio meant that the other Search & Rescue Operation participants were deprived of the opportunity to remain aware of what was happening.

This also reduced the opportunity for participants to provide input into the operation.

The IC did not appoint another person to do radio and phone communications. This resulted in the IC being difficult to contact caused delays in communication and a IC too busy to think strategically.

## 11. Key Success Factor 3

(Effective Evaluation & understanding of pertinent information)

### ICP information process

A Search & Rescue Operation requires the IC to stand back and apply proven processes of analysis to the information being received or sought as well as the activity be initiated.

A commonly used and proven process is the "appreciation" process used through out police and Search & Rescue organisations.

***The ability of the IC to undertake this critical information analysis and planning process was severely compromised in Operation Runabout due to him being alone. This was not conducive to ICP best practice.***

In addition to the evaluation and planning roles the Incident Controller is responsible for the effective tasking of resources and subsequent on going evaluation as to search plan execution effectiveness.

This on going evaluation as to the plan execution effectiveness is vital. By failing to co-locate key people in an ICP the Incident Controller capability was severely compromised.

***Information should be consistently sought by and fed back to the Incident Management Team at the ICP for evaluation using the***

***appreciation process. If all information available is not captured back into the SAROP coordination system there is no ability to continue to assess and refine search tactics.***

During this operation and on the return of the Coastguard boat to its base, at 03:06, no debrief occurred. The effectiveness of the surface search could not be evaluated. The search vessel has a graphical chart plotter which clearly showed what area had been covered.

In the absence of a real time tracking system which was viewable from the ICP there were only two ways to assess with any accuracy to what level a resource had complied with tasking directions.

The first method requires the painstaking frequent recording of positions and times which in turn must then be plotted on a chart in the ICP.

The operation Runabout ICP clearly did not have the resources to do this. Nor was this activity apparently undertaken by the Coastguard Base.

The second method is to view on return of the asset the actual track of the vessel assuming it has a GPS plotter. If this option was available and if it had occurred it may well have caused a rethink on the early decision not to re task the vessel to continue searching until the Air Search started.

***Subsequent to this Search and Rescue Operation Coastguard vessel plotter information shows that the search area coverage was light. A debrief immediately on return of the vessel from the search area should have triggered an evaluation of the option of re deploying the resource. The Coastguard vessel was prepared for re deployment with fuel and fresh crew arrangements having been made.***

## **11.1 Search area and Target Profile**

An early presumption was that the search was required to cover the option of the target profile being a drifting vessel as well as people in the water (PIW) As a result the search area was identified as being very large. This in turned shaped the response that appeared to be possible with the limited resources available prior to daylight the next day.

The possibility of the Target Profile being PIW (people in the water) was not given much more than passing and cursory mention by the Police IC and other key individuals that were communicating during the early stages of the Search & Rescue Operation. The real possibility of this PIW worst case scenario was never fully explored or debated by these key people.

Consequently consideration was not given to prioritising search activity into a smaller area prior to the daylight air search.

Initial search area determination plans were prepared by RCCNZ on behalf of the Incident Controller some two hours into the incident and were predicated on a drifting vessel as well as PIW, thereby generating the early view that a very large area needed to be searched.

The drifting vessel search determination area plans were very large due to the wind and drift conditions and the elapsed time from the start time used

which was when the target vessel initially left the Wanganui Bar through to the time the search area determination plan was predicted for.

***When the search area is calculated as large and resource availability is limited, a search can only be conducted on the basis that you can only do what you can do with what you have. During Operation Runabout, having determined that available resources were limited for the early night time phase of the SAROP re evaluation should have occurred to make better use of the resource.***

***In other words having decided that the Coastguard vessel was the only viable night time searching resource, the option of a more compact search closer inshore for people in the water only, should have been evaluated.***

## 11.2 Erroneous assumption of search area

Early estimations by RCCNZ suggested a large search area of 360 Sq Nm. It was accepted at face value and was a large area to search with limited local resources.

The early search area determination plans were also for a predicted time that was 06:30 the next day. 24th February 2008. This was a 16.5 hours period from the 13:30 NZDT 23rd February 2008 time that was used at the datum for calculation purposes.

At the time the initial search was planned it was also some 7 or 8 hours into the future.

The implications and the understanding of this information were very important. That in the early stage of the operation, the actual search area was considerably smaller does not appear to have been identified or discussed. At least to the extent, that it was considered as a factor in designing the surface search undertaken by the Coastguard vessel. This understanding that the search area determination plan was a prediction was not clearly identified by the Police IC.

The second issue relates to the Splash Point or Last Known Position of the target vessel that is used as the starting point for the search area determination plan.

The time used was 13:30 NZDT which is 1 hour after the vessel Hard Out 2 passed outward bound over the Wanganui Bar. This was used because it was the estimated time that the target would have arrived at the position they reported they were heading to.

The position used was the point that was eventually identified as 3.5 Nm from the bar.

In the opinion of the reviewer these two base items of data were not appropriate to do all the search area determination planning with.

The target vessel Hard Out 2 could have come to grief at any point and anytime after it left the bar at 12.30 NZDT and before it was report overdue.

Search area determination plans should have been prepared using the bar as the datum or Last Known position as well as the ones produced.

This plan subsequently prepared after the operation at the request of the reviewer shows a significantly smaller search area close to shore.

Post victim rescue it is apparent that the crew of Hard Out 2 was in that area through the night and they were just on the southern edge when rescued the next morning.

***These early search area size and the lack of recognition by the Incident Controller of when the area determination plans were valid for in the reviewers opinion caused a tunnel vision view of how best to search the area.***

***It is likely that the RCCNZ SARO who prepared these search area determination plans believed they would be completely understood by the Police Incident Controller. However the view that it was still a large area to search and that a daylight aircraft search was the best option was concurred with by the RCCNZ SARO.***

***The Police were the coordinating authority and the Police Incident Controller was responsible for the conduct of this operation. The Police Incident Controller was however proceeding on the basis that he believed that he had confirmation that the course of action he had decided on was correct.***

***Again if an Incident Management Team had formed in an Incident Control point as per best practice it is possible that this Search & Rescue Operation may have been conducted differently.***

A Search & Rescue Operation requires information. The handling and evaluation of this information is at the heart of all Search and Rescue. Poor execution of these processes using best practice techniques will result in serious failures during a Search & Rescue Operation.

Information Critical points:

- Understanding by all participants of what information or resource assistance is being asked for or provided.
- On receiving information and or resource assistance, understanding its value, content, capability and implications.

Achieving the above is crucial.

There are often subtle levels of understanding and technical expertise that are a product of training, exercising and strong trusting working relationships.

On being contacted to be advised of a Search & Rescue Incident a number of Immediate Actions (IA) in relation to information should occur.

In general the immediate actions would be as follows and in the order of appearance.

- Receipt and recording of information about the incident. Includes circumstances, target profile, timeline and relevant environmental factors.
- Evaluation and analysis of the known factors.

This will allow the Search & Rescue Incident Controller to prioritise and activate time critical activity.

The process will identify what information is missing and what information is required

The process will highlight what immediate resource deployment is required and what notification to Search & Rescue partner organisations and or individuals is necessary.

The process commonly used to undertake this information evaluation or analysis is called the "Appreciation". This process follows a format that should ensure a robust consideration of all relevant points to help the Incident Controller arrive at best practice solutions or activity.

Having identified the appropriate course or courses of activity, a plan of action is devised and implemented.

The Appreciation process is circular. It is a constant on going process of receiving or sourcing information, evaluation of the information, acting on the information and finally re evaluation of the activity and information which in turn leads back to the start of the cycle again.

Conducting an on going appreciation during the Search & Rescue Operation is absolutely vital to its success.

Incident Controllers operate in an environment where the volume and quality of Information received can vary widely. Often Information is misleading, correct or incorrect and unverifiable. Equally the information available is often scarce or non existent.

Either way the only proven and practical way for Incident Controllers to process the information is through a measured and proven method like the appreciation process.

***The appreciation process and information handling is part of Search & Rescue training. Only by practice and through frequent use operationally or exercise will this critical skill be maintained.***

## **12. Key Success Factor 4**

(Effective Management of Search & Rescue Operation planning & Execution)

### **12.1 Surface Resource Search**

The Incident Controller did task the Coastguard vessel. While plans were in place for 15 minute updates these did not occur. Because of workload the Incident Controller did not follow up on these and subsequently resource feedback was sketchy.

No real evaluation of the search effectiveness was carried out at any point. Resources were poorly managed and tasked.

***There was a poor understanding by the Incident Controller of what level of tasking and control he should use with the Coastguard boat. Without an effective Incident Management Team in a ICP and open communication via marine VHF the Incident Controller ability to manage this resource effectively was very low.***

### **12.3 Air Search Option**

The non use of an Air Force Helicopter that was stationed at Ohakea Air Base has generated media and other comment post operation.

The tactic of using air search as a suitable option was arrived at early in the planning stages of the operation.

An air search option was an appropriate tactic to evaluate. The Police Incident Controller using his own experience of air craft use during Search and Rescue operations made some early assumptions about the suitability of light air craft for searching over water at night.

Without an Incident Management Team in place to challenge the validity of this assumption the Police Incident Controller decided that he has two viable options.

1. A night time search using an aircraft with known night capability specifically the Air Force P3 Orion and or
2. a daylight search using a local and experienced SAR fixed wing aircraft.

The availability of a suitable fixed wing aircraft was canvassed by the Police Incident Controller with the RCCNZ SARO. Initially it was agreed between the Police Incident Controller and the RCCNZ SARO that as the search area appeared to be large that a Air Force P3 was a good option and that the earliest it ( P3 Orion) could be on task was 0200 NZDT the next morning.

***After internal RCCNZ reworking on the search area determination the RCCNZ SARO advised to the Police Incident Controller that a P3 Orion was not a viable option and that local air resources should be looked at for a daylight search.***

***This P3 Orion evaluation was done without reference to any external Air Resource specialist by either the Police Incident Controller or the RCCNZ SARO.***

***The Police Incident Controller should have personally consulted with the Air Force Air Liaison Officer. This did not happen because he (Police IC) had requested the RCCNZ to undertake this.***

***There is no RCCNZ SOP outlining action and responsibility where this request is made by Police during a Class II SAROP.***

***In a Class III this request would be normally referred to a duty RCCNZ Manager.***

***This request was not referred to a RCCNZ manager.***

***As a result no contact with the air force occurred so the probability of alternative Air Force asset (Helicopter) immediate search options was never learned.***

The availability and viability of other air craft suitable for night search was also not adequately explored with a suitable qualified Air Liaison Officer.

RCCNZ plans were prepared and covered the scenario option of both PIW (People in the water) and a drifting vessel. This point was identified to the Incident Controller via E Mail when the plans were forwarded by RCCNZ @ 00:04 NZDT.

The graphic search area plans prepared by RCCNZ were as follows.

- Plan IAMSAR & Rescue 1 valid for 06:30 NZDT 24th Feb 2008 covered a drifting vessel identified an area of 133 sq Nm at.
- Plan IAMSAR & Rescue 2 valid for 06:30 NZDT 24th Feb 2008 covered both PIW and a drifting vessel identified and area of 195.9 Sq Nm.
- Plan IMSAR & Rescue 3 valid for 12:30 NZDT 24th Feb 2008 covered both PIW and drifting vessel identified and area of 362.16 square miles.

By the time these search area plans were sighted by the Incident Controller the plan for a first light local resource Air Search was already in place. No re assessment was made of the search plan or assumptions upon which they were based.

***RCCNZ and the Incident Controller discussed air craft availability. Alternative operators were identified by the RCCNZ and contact details were passed to the Police Incident Controller. The understanding by the Police IC from those conversations appears to be that the additional aircraft were being discussed as additional or alternative resources for a morning daylight search.***

As plans had already been formulated and activated to use a local Wanganui fixed wing operator no further action by the Police IC occurred.

There is no doubt that the local operator used was highly competent and experienced. The eventual result speaks for it self.

Finally in the opinion of the reviewer the following factors in addition to those above, were significant in the Police IC and RCCNZ SARO agreement regarding aircraft use in this operation.

Outside the local fixed wing aircraft used the next morning, and the Air Force P3 Orion, the Police IC had limited knowledge of local air craft availability and capability for over water night searches.

It is extremely rare to use an Air Force Iroquois helicopter for any marine Class II or III operation, either day or night. This is due to a combination of factors: the availability of commercial assets and the apparent approach in past years by NZDF that encouraged the use of civilian assets in preference to military.

Helicopter and fixed wing night searching capability (both civilian and military) has evolved significantly in recent years with the advent of new generation night vision goggles and other devices. The capability and or the limitations of these products are not widely understood by many, unless they have been exposed to it operationally or through training.

The fact that this capability had not previously been used or exercised with, explains while it was not high on the awareness list of either the Police IC or even the RCCNZ SARO as a search resource.

## **12.4 Lost Opportunity**

Independently both the Marine Search & Rescue advisors and some Coastguard personal both on shore and in the Coastguard vessel were thinking and or discussing the likely scenario that had occurred with Hard Out 2.

Some of these people were forming a view that there was a higher probability of people in the water as opposed to a drifting vessel.

There was also discussion in at least one of these forums that the search area had been wrongly determined.

If this PIW scenario and or alternative search plan execution had been discussed in an open forum, at the ICP, or brought to the attention of the Police Incident Controller, it is likely that the search conduct and manner could or would have been reassessed and different tactics employed.

It can be concluded this may have resulted in a search concentrated on a closer to shore area. This in turn may have lead to a re examination of the option of an air search being conducted using a helicopter.

## 12.5 Police responsibility

An initial course of action was determined by the Incident Controller.

This course of action was determined before communication and consultation with RCCNZ. The plan did not subsequently change because in the mind of the Police IC, these communications constituted validation of his initial decisions and subsequent search activity.

At the very least the plan was not challenged by people who could and were in a position to do so. This Includes the RCCNZ and Coastguard personnel.

***In the opinion of the reviewer, due to other agency non communication of alternatives, it is understandable that the plan was, in the view of the Police Incident Controller, endorsed.***

***An appropriate ICP as previously identified, if activated as per best practice, would have mitigated the risk of mindset and search tactics being unchallenged. The failure to activate an appropriate Incident Management Team set scene for the subsequent response.***

***This is the responsibility of the Incident Controller.***

## 13. Conclusion

Operation Runabout could have been conducted differently.

A chain of assumptions and decisions that were never challenged set the scene for the Search & Rescue Operation tactics. At the time and In the view of the people that participated, because they only knew what they knew, the course of the operation was logical and appropriate at the time of execution.

The initial operation activation was timely and appropriate. Information was gathered and an initial appreciation was done on the “fly” by the Incident Controller. After consultation with the RCCNZ SARO initial conclusions were drawn in relation to the search area size.

A search area determination plan was made based on an assumption as to the target profile (Hard Out 2) being a drifting vessel and People In the Water. The predominate focus of a target profile being that of a drifting vessel

however was the subject of most communications and thus supported or reinforced the decisions on asset deployment.

It was stated during the review by some participants both Coastguard and others that they were of the view that the more likely scenario was People in the water. However this view or possibility was not raised or discussed with the Incident Controller.

Regardless, at an early stage of the operation, the predominate view that the target was a drifting vessel and in all probability a long way off shore became effectively entrenched.

If an alternative scenario had been raised at anytime or through the appropriate forum of a fully functional Incident Control Point the Incident Controller may have revisited his assumptions and the basis for his search tactics. The Police Incident controller is ultimately responsible for not setting up an Incident Management Team which should have facilitated alternative scenario and search tactics consideration.

Search area determination plans that were prepared by the RCCNZ SMC set the scene for decisions to be made relating to search asset deployment. The Police Incident Controller should have been able to interpret these plans and arrive at a full understanding of what they were telling him. He didn't fully appreciate that they were projections and he did not fully appreciate the priority he should have been giving to the People in the Water worst case scenario.

If an additional search area plan had been prepared using the bar as the datum and the projected time was for only a short period into the future it may well have flagged alternative search tactic requirements.

With the Incident Controller having made assumptions that were not challenged about the target profile, it is then understandable that with the limited surface resource that was available for a night search, the Search & Rescue Operation effort then turned to organizing an Air Search.

Incident Controller knowledge on the availability of suitable night time search aircraft was limited. He had concerns about searcher safety both in the Coastguard boat moving well offshore and for an aerial night search. For these reasons he limited the surface search to closer in shore. The quality of coverage during the inshore search using the coastguard vessel was significantly overestimated.

When the Incident Controller request for the only night capable air search platform known to him, a Air Force P3 Orion was canvassed with RCCNZ, he was led to the understanding that it was being activated. Alternative night search aircraft options were not offered.

After some time the Incident Controller became aware that a P3 was not requested because in the opinion of the RCCNZ SARO the search area had been reduced to a size where again in the view of the RCCNZ SARO the Air Force P3 would be unsuitable. As a consequence the subsequent RCCNZ and Incident Controller communications were then directed to organizing a fixed wing daylight search using local resources.

Also as a consequence the availability of the Search & Rescue helicopter at Ohakea was not discovered. If the Air Liaison officer at the Defence had been consulted about the P3 then the helicopter availability may have become known.

Finally a fully functioning ICP with an Incident Management Team was not activated. Search & Rescue Operation communications were mostly by phone and not radio. If these two practices alone had followed best practice it could or should have triggered a more robust appreciation process, where all assumptions and decisions were able to be challenged.

Participants in Search & Rescue do so because they believe they can make a difference and they are committed to saving peoples lives. When things do not go well in a Search & Rescue Operation nobody is harder on the participants than they are on themselves.

The key people in this Search & Rescue Operation did the best they believed they could do at the time.

As stated previously in this report Search and Rescue is a very complex operating environment. Search & Rescue practitioners rely heavily on their experience and best practice. In this Search & Rescue Operation the importance of best practice was not recognized due to a lack of experience. The Incident Controller did believe he was offsetting this lack of experience by consulting with the RCCNZ.

The RCCNZ in turn did not appreciate the reliance for confirmation of search tactics that was being placed on the communications between the Police IC and the RCCNZ SARO.

In the end the ultimate responsibility for Search & Rescue best practice is ultimately the Incident Controller.

M Paget  
Senior Sergeant

## 14. Recommendation

### Principal recommendation

1. To mitigate the principal risks attached to a lack of skill currency Central District should appoint a full time Search and Rescue Coordinator who in addition to responsibilities outlined in existing job descriptions will be responsible for the following:
  - Ensuring all Police Search & Rescue squads in the district plan and execute regular multi agency training exercises.
  - Ensure that all District Police Search & Rescue squad Incident Controllers are trained to the appropriate skill level and that they maintain skill currency.
  - Ensure that all District Search & Rescue plans are maintained having regard to local resources and or local environment.
  - Participate nationally to ensure that Search & Rescue agency interaction is based on best practice.
  - To provide an advice safety net for District Search & Rescue Controllers during Search & Rescue Operations

### Recommendation 2

The Wanganui Police Search & Rescue plan should have the following prompts added to:

Priority 2

*"With the confirmation of Duty Police Search & Rescue IC (Search and Rescue Incident Controller) advise key Incident management personal to respond to a common location to set up an ICP (Incident Control Point)."*

The plan must list:

To be contacted as a minimum

- Marine Search & Rescue advisor
  - Coastguard representative
  - Marine radio operator
  - Police support for logistics and enquiry
  - Consider and or consult with Air Liaison Officer
    - Helicopter Operators
    - Military
    - Local or other fixed wing operators.
- Contact phone numbers to be included*

### **Recommendation 3**

A working group comprising of Police, Royal New Zealand Coastguard and the RCCNZ continue the work started to provide a common system of Search & Rescue participant certification.

Search & Rescue Controller skill currency to be addressed and information relating to skill sets and currency should be contained in a database accessible at all times.

### **Recommendation 4**

Wanganui Police to plan and conduct a minimum of two marine desktop exercises per year.

Wanganui Police to plan and conduct at least one physical Marine Search & Rescue exercise per year using resources that can reasonably be expected to be available for Search & Rescue Operation use.

### **Recommendation 5**

Wanganui Police to activate an ICP with an Incident Management Team for all Marine Search & Rescue Operation.

IMT to Include:

- Marine Search & Rescue advisor
- Coastguard representative
- Marine radio operator
- Police support for logistics and enquiry
- Police Incident Controller

### **Recommendation 6**

SAR Communications should, when local conditions allow, occur on the international marine distress and calling frequency VHF channel 16

### **Recommendation 7**

Police and the RCCNZ jointly identify a independent Air Resource specialist advisor to advise on the capability and suitability of any air asset military or civilian during the planning and execution stages of Search & Rescue Operations.

## 15. Attachments

RCCNZ Search Plan IAMSearch & Rescue 1.pdf

RCCNZ Search area plan prepared on night of operation  
Search area 133.94 sq Nm  
Time datum: 13:30 23/2/08 NZDT  
Search Last Known Position Datum 3.5 Nm WSW of Bar  
Prediction Time 06:30 Sunday 24/2/08

RCCNZ Search Plan IAMSearch & Rescue 2.pdf

RCCNZ Search area plan prepared on night of operation  
Search Area 195.90 sq Nm  
Time Datum 13:30 23/2/08 NZDT  
Last Known Position Datum 3.5 Nm WSW of Bar  
Prediction Time 06:30 Sunday 24/2/08

RCCNZ Search Plan IAMSearch & Rescue 3.pdf

RCCNZ Search area plan prepared on night of operation  
Search Area 362.16 sq Nm  
Time Datum 13:30 23/2/08 NZDT  
Last Known Position Datum 3.5 Nm WSW of Bar  
Prediction time 12:30 Sunday 24/2/08 NZDT

The following search area plans also attached were prepared by RCCNZ using different LKP (Last Known Position) of the bar as opposed to the indicated fishing spot the Hard Out 2 was reported to be heading to.

RCCNZ Search Plan RCCNZ PIW 2200 NZDT.pdf

Search area plan produced by RCCNZ predicated on:  
Person in water only  
Search Area 101.5 sq Nm  
Time Datum 13:30 23/2/08 NZDT  
Last Known Position Datum: Wanganui Bar  
Prediction time 22:00 Saturday 23/2/08 NZDT

RCCNZ Search Plan Datum Bar RCCNZ Boat-PIW 2200 NZDT.pdf

Search area plan produced by RCCNZ predicated on:  
Person in water and Drifting vessel  
Search Area 166.81 sq Nm  
Time Datum 13:30 23/2/08 NZDT  
Last Known Position Datum: Wanganui Bar  
Prediction time 22:00 Saturday 23/2/08 NZDT

Coastguard Radio traffic Transcript.doc

Debrief Meeting.03.03.08.doc

Weather.pdf

RCCNZ PHONE TRANSCRIPTS WANGANUI.pdf

RCCNZ INCIDENT LOG.pdf

Coastguard Actual Track.pdf

## Glossary

|             |  |
|-------------|--|
| CIMS        | Coordinated Incident Management System. A New Zealand system subscribed to by all emergency services and many other agencies which sets out a common philosophy and terminology for use during multi agency incident management. |
| IAMSAR      | International Aeronautical maritime Search and Rescue. An international maritime Organisation produced manual that des the same as CIMS in that it sets out a common system of practice and terminology for international use.   |
| ICP         | CIMS terminology for Incident Control Point. A location where the Incident management Team will co locate to manage a response to an incident.   |
| IMT         | Incident Management Team. A group of people with specialist skills gathered to manage the response to an incident.   |
| IC          | Incident Controller. A person generally from the lead agency who is responsible for the overall conduct and management of a response to an incident.   |
| MOC         | Maritime Operation Centre (Operated the Maritime Distress and Safety Radio Service)  |
| MSOP        | A Police term which refers to a standard operating plan usually kept electronically at a police communications centre.   |
| RCCNZ       | Rescue Coordination Centre New Zealand (Operated by Maritime New Zealand)  |
| SAR         | Search and Rescue  |
| <b>SARO</b> | Search and Rescue Officer in the Rescue Coordination Centre New Zealand  |
| SOP         | Standard Operating Procedure   |
| SAROP       | Search and Rescue Operation  |