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The search for *Berserk* – International effort

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SafeSEAS CleanSEAS



*Catherine Taylor on
Wellington's waterfront.*

Welcome to the June issue of *Safe Seas Clean Seas*.

As we go to print, Maritime New Zealand (MNZ) has just released its statement of intent (SOI), which sets out our strategic focus and goals for the next 4 years.

In this SOI, we have shifted our focus to reflect a major change in the way we think about safety in the maritime environment. The outcome we are looking for is "A maritime community that embraces a safety culture". This recognises that to be effective, a regulator such as MNZ cannot improve safety and marine environment protection outcomes on its own.

This change will see MNZ moving away from the current model of highly prescriptive rules and standards, to a model that allows standards to be developed and changed more rapidly, with input from the sectors to which they relate.

Under this new model, we will be striving to work cooperatively and consultatively with industry and operators to ensure that standards, safe operating practices and vessel and equipment standards are appropriate to the needs of their operation.

But we cannot do it alone. As I listen to feedback from the maritime community, I am particularly aware that both MNZ and industry have important parts to play in generating the 'right culture' to ensure a safe, clean, viable and modern maritime sector – and that means we will all need to make some changes to how we do things.

Two fundamental building blocks of MNZ's 'new' approach are the qualifications and operational limits (QOL) review and the proposed maritime operator safety system (MOSS). There are updates on the progress of both projects in this issue.

These projects have demonstrated the critical importance of both the industry and the regulator engaging in dialogue, to ensure we will end up with a qualifications and a vessel safety framework that is robust and workable and will make life at sea safer. That is what we all want.

In other developments, MNZ has also been undergoing a series of reviews to make sure we are continuing to provide the right services to the right people at the right cost – while also ensuring that we have the 'right people doing the right job' to make it happen. This is part of a culture of continuous improvement, with the goal of making us even more effective and efficient in what we do.

Inside this issue, we also profile a number of significant events, activities and initiatives that highlight the diversity of our organisation and the depth of talent of our people. This includes outstanding work on challenging search and rescue operations, as well as a profile of the important work of our maritime safety inspectors and a feature on the impact of the Canterbury earthquake on the Port of Lyttelton and key MNZ staff.

We also pay tribute to our 'face' of recreational boating, Jim Lott, who retires this month after more than 10 years with MNZ. Jim has been an integral part of MNZ's efforts to reduce recreational boating accidents and fatalities over many years and will be sorely missed. We wish Jim all the best for his retirement as he sets sail for new shores on board his yacht.

I hope you enjoy this issue.

Catherine Taylor

Director of Maritime New Zealand



Cover story

The Norwegian yacht **Berserk**, missing inside the extreme southern boundary of New Zealand's search and rescue region.

Photo: Barbara Veiga

The search for *Berserk*

A tattered black and orange liferaft, found drifting alone and unoccupied on an icy sea ... this was the only trace of a yacht and its three crew, missing during an expedition into the freezing waters of the Antarctic.

Late on the afternoon of Tuesday, 22 February, as the nation was reeling with the news of earthquake devastation in Canterbury, a search was beginning hundreds of miles away for the Norwegian yacht **Berserk**, missing inside the extreme southern boundary of New Zealand's search and rescue region.

Well known in Norway for undertaking extreme and challenging voyages, the five-man crew of the 48 foot (14 metre) steel-hulled sailboat were part of an expedition aiming to be the first to cross the ice to the South Pole on quad bikes.

The skipper and expedition leader, Jarle Andhoy, and crewman Samuel Massie, both from Norway, were successfully dropped off onto the ice. Then, 8 days later, something went terribly wrong on board **Berserk**. An alert from the yacht's distress beacon, located about 27 nautical miles (50 kilometres) north of Scott Base in the Ross Sea,

was picked up at the Rescue Coordination Centre New Zealand (RCCNZ) back in Wellington.

The vessel's three remaining crew, Norwegians Tom Bellika and Robert Skanes and a British man, Leonard Banks, were in trouble.

Faced with a remote location and fearsome weather, rescuers began putting out the call for help to assist in the search to nearby vessels of opportunity. Among the first to answer was the crew of HMNZS **Wellington**, who were nearby on assignment and had, ironically, spoken with the crew of **Berserk** just a day earlier.

After steaming through the night to reach the beacon's position, **Wellington** arrived in the early hours of the next morning, only to be beaten back by winds raging in excess of 60 knots (110kmh) and ferocious 6–8 metre swells.

What followed was a week-long international search effort covering vast areas of ocean and ice at the bottom of New Zealand's 30 million square kilometre search and rescue region. It was the southern-most search and rescue effort ever coordinated by RCCNZ.

*The crew of the HMNZS **Wellington** had made contact with **Berserk** one day earlier. Photo: Royal New Zealand Navy*



Braving extreme weather conditions, including the worst blizzard experienced in the summer season in the area for many years, the vessels **Professor Khromov** (also operating as **Spirit of Enderby**) and **Steve Irwin** answered the call from RCCNZ. They joined the search, combing the area for any trace of **Berserk**.

Thankfully, improved weather conditions allowed crews in smaller boats and a helicopter crew from **Steve Irwin** to continue to search, with refuelling and logistical support from nearby McMurdo and Scott bases. Help also came from the Norwegian Joint Rescue Coordination Centre (JRCC).

The general manager of MNZ Safety Services, Nigel Clifford, says despite these dedicated efforts, the only trace of **Berserk**'s presence was a small, round battered liferaft found almost 3 days later, drifting 45 nautical miles (83km) north of the original beacon alert position.

"Inside, the first aid kit and survival knife were missing, but, unfortunately, there was no sign of anyone or any evidence the raft had ever been occupied," Nigel says. "This was supported by further evidence that indicated the raft had floated free from the vessel by itself."

Finally, after 7 days of searching with no further sign of **Berserk** or the three missing men, the difficult decision was made to formally suspend the search.

"Sadly, given the absence of any further sign of the vessel or crew, combined with the extreme weather conditions and near-freezing temperatures experienced in the Ross Sea at the time, it had gone beyond the point where we could reasonably expect anyone to be found alive," Nigel says. "Our deepest sympathies are with the families of the three men."

He also paid tribute to those who had helped in the search. "This was a truly international search and rescue effort, with people and agencies from a host of different countries banding together to try to find **Berserk** and its crew. We particularly want to acknowledge the courageous and dedicated efforts of crews from the three search vessels and helicopter involved, who selflessly put themselves on the line to help out. Tragically, our best efforts were in vain."

The calculated search area covered more than 25,000 square kilometres, and the three vessels and helicopter put in 141 hours of combined search time over 7 days, making it one of the most extensive searches conducted in the area.



Left: **Steve Irwin** near Franklin Island in the Ross Sea. Photo: Barbara Veiga

Top left: HMNZS **Wellington** was the first to join the search but faced extreme conditions and winds. Photo: Royal New Zealand Navy

Search details



Top right: A helicopter from **Steve Irwin** locates the **Berserk** liferaft in the Ross Sea. Photo: Barbara Veiga

Above: Crew of **Steve Irwin** put the **Zeppelin** in the water to recover the **Berserk** liferaft. Photo: Barbara Veiga

- **Area covered:** The calculated search area covered an estimated 25,600km² (note that exact figures are difficult to assess because of extensive ice in the area).
- **Resources involved:** Vessels **Steve Irwin**, **Professor Khromov (Spirit of Enderby)** and HMNZS **Wellington**; helicopter and sea boats from **Steve Irwin**; helicopter refuelling support from McMurdo Station.
- **Total time searched:** 141 hours over 7 days: HMNZS **Wellington** 12 hours (until turned back by weather); **Steve Irwin** 84 hours; **Steve Irwin** helicopter 21 hours; **Professor Khromov (Spirit of Enderby)** 24 hours.
- **Search technology:** Search mapping software (plots tide, weather and wave conditions for moving or floating objects). **Berserk**'s liferaft was located in the centre of the area predicted by the mapping software used by RCCNZ search and rescue officers.
- **Communications:** Emergency position indicating radio beacon (EPIRB) activated at 5pm (NZDT) on Tuesday, 22 February, from a position 27 nautical miles (50 kilometres) north of Scott Base in the Ross Sea. The beacon's signal stopped after about 45 minutes. No other communication was received from **Berserk**, despite all efforts. Satellite phone contact was eventually made with the ground party.
- **Coordinating agency:** RCCNZ, staffed round the clock by professional search and rescue responders.
- **Supporting agencies:** JRCC Norway, New Zealand Defence Force, Sea Shepherd Conservation Society, Heritage Expeditions, New Zealand/United States Command at McMurdo Station, Ministry of Foreign Affairs and Trade, Antarctica New Zealand.
- **Weather:** Extreme, with searching hampered in early stages by severe storms, including winds exceeding 110km/h and 6–8 metre swells. Weather later eased, with good visibility and sea conditions for searching.
- **Vessel details:** **Berserk**, 48ft (14m) steel-hulled sailboat.
- **Crew:** Tom Bellika and Robert Skanes (both of Norway) and Leonard Banks (of the United Kingdom) were missing. Jarle Andhoy (expedition leader) and Samuel Massie (both of Norway) were not on board at the time of the distress beacon activation and were recovered safely from the mainland.
- **Survival time in water:** Up to 90 minutes with immersion suit, less than 30 minutes without immersion suit.

Picking up after the quake – Lyttelton Port

Lyttelton Port of Christchurch was close to the epicentre of February's earthquake and its facilities suffered significant damage. It continues to be affected by ongoing earthquakes and aftershocks.

Keeping the port running

Although operations at the port were suspended right away so that the damage could be assessed, it was also imperative to restore key services as quickly as possible to ensure food, medical and other essential supplies could be unloaded and distributed.

HMNZS **Canterbury**, in port at the time the quake struck, provided a vital communications link in the first hours while the devastated city was cut off from the outside world. Military personnel were immediately mobilised to provide assistance, including helping to clear Dyers Pass Road, which was the only artery in and out of Lyttelton. The wharf where **Canterbury** was tied up was also damaged in the quake.

Within 96 hours, core services were back up and running at the port and on 15 March its emergency status was lifted, with the departure that day of the first coal shipment. However, the task of planning for the rehabilitation of port facilities and repairing the structural damage is ongoing.

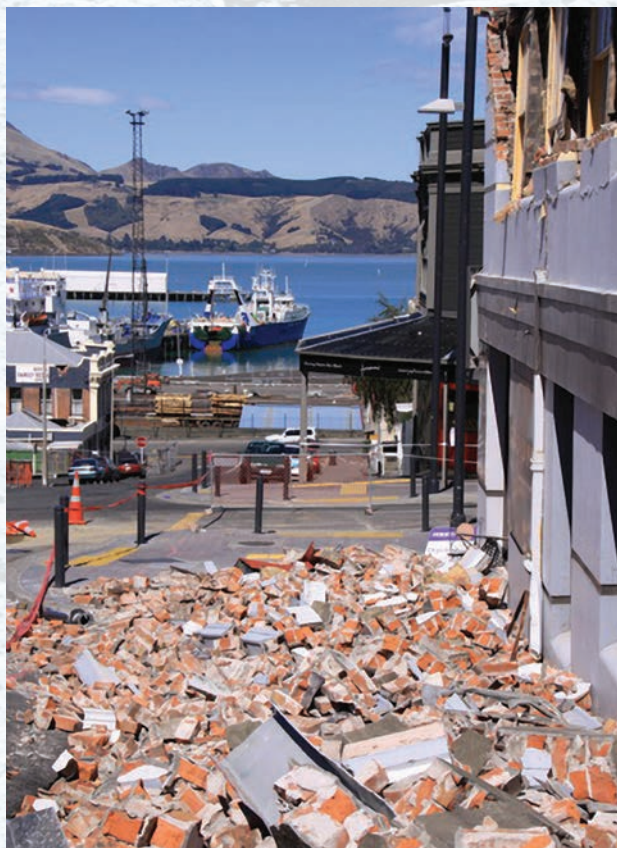
Further significant aftershocks, such as the 5.3 magnitude quake that struck on 16 April, continue to disrupt port services. On each of these occasions, operations must be suspended to allow a full assessment of the port's facilities to be undertaken.

The container and tanker terminals are functional. Coal shipments are having to be loaded from a fixed point, which requires the ships to be physically moved. There are also limits on berths for car carriers at CQ2.

The Independent Fisheries-owned coolstore on Z-Berth, which was badly damaged in the September quake, has recently been demolished. A replacement coolstore and wharf will be located on the site of the old cattle jetty in the southwest corner of the inner harbour.

Regional harbourmaster Tony Whiteley says it's taken many long, hard hours to get things running again and keep them running, but overall the port appears to have escaped reasonably lightly. The situation would have been much more serious, he says, if the container trains had been impacted.

While port operations have largely resumed, the scale of devastation around Lyttelton is overwhelming.



MNZ's office and staff

MNZ's offices at the port were badly damaged and it is expected to be at least a year before the upper storey can be demolished and rebuilt and the building reoccupied. A shortage of space in Lyttelton means that MNZ's operations are being run from temporary premises in Rangiora.

In the immediate aftermath of the quake, affected MNZ staff were given time to support their families and deal with their homes before returning to work.

MNZ put port state control matters on hold, to give operators time to deal with their immediate concerns. The requirement for SSM inspections was also eased. With transport and communications now fully restored, it's mostly business as usual again for SSM fishing boats.

Maritime safety inspector Jim Lilley says the liquefaction and rubble have been cleared and the worst-hit buildings demolished, but Lyttelton remains in a bad way. Many frames of reference are no longer in their expected place,

Note: recent earthquakes have affected the port's operating status.



Left: MNZ's offices at the port were badly damaged, with one employee having to make a dash for it.

Below left: Dave Billington in the new MNZ office in Rangiora with a brick he salvaged from the Lyttelton office.

Below right: Many frames of reference are gone or severely damaged.



replaced by flat, empty sections, and much of the port's character and charm has gone. Land has slumped around the wharves and containers are stacked up as barricades in case of cliffs collapsing. Jim says the focus now for the community is on trying to make the new 'normal' as close to the old normal as possible.

Dave Pollard, an MSI based in Bluff, was in a hotel room in Christchurch's CBD when the quake struck. Guests were evacuated to Latimer Park, where Dave spent some hours helping reassure injured and distressed people before he and others were bussed to Burnside Rugby Club for the night. He was expecting to be finally reunited with the bags from his hotel room in mid-May, and curious as to the state of the burgers and buns that had been in one of his bags back in February.

Richard Lough, who works for MNZ in Wellington, was talking on the phone to Lyttelton-based colleague Dave Billington when there was "an almighty explosion" on the other end of the phone and Dave was cut off mid-sentence. For the next 6 minutes until the phone went dead, Richard could hear crackling and rubble falling, but did not hear Dave at all and spent the next 4 hours not knowing whether he was still alive.

Dave, who had only recently moved to Canterbury, says he heard a noise like a freight train coming through and was catapulted out of his chair. He assumed it was just an aftershock rolling through and no cause for alarm, then realised as plaster rained down and bricks popped out of walls around him that he needed to get outside. "It was like a giant was holding the building and shaking it in every direction," he recalls.

Dave Billington says everyone he speaks to during the course of his work talks about how the quake has affected them. He sees a distinct difference in the people he encounters, saying they are open and friendly and have more time for each other, as if they've become family. Even in the marine environment, he sees men he describes as "big, burly blokes" showing genuine concern and compassion.

Many people refer to themselves as lucky, says Dave. They say it's been a life-changing event, but they are having to actively work to stay positive. "I'm amazed at the strength of people in Lyttelton and how positive they are on the surface of things.

"That's the kind of spirit people are showing. It shouldn't take an earthquake to do that, but it has."

MNZ people profile



MSIs like Tauranga's Ian Clarke (left) and Hei Cheung play a vital role in helping to ensure ships visiting our ports conduct their business without mishap, spillage or injury. Photo: Bay of Plenty Times

New Zealand has a diverse maritime community that involves more than 3,400 commercial vessels, half a million pleasure craft, and some 800 foreign vessels making almost 6,000 New Zealand port visits each year. MNZ's staff have a critical role to play in ensuring that all these maritime activities are carried out safely, and with minimal impact on the environment or threat to the nation's security.

MNZ's wide-reaching mandate includes responsibility for all maritime concerns, ranging from seafarer qualifications and licensing, to search and rescue and oil spill response. Our work touches the lives of many New Zealanders, as well as international visitors and sea-borne traffic, on a daily basis.

Maintaining standards – our maritime safety inspectors (MSIs)

The job of ensuring New Zealand's commercial vessels and any visiting foreign vessels meet the appropriate domestic and international maritime safety and environmental protection standards falls on the shoulders of MNZ's team of MSIs, located at major ports.

In this issue, we profile two of our maritime safety inspectors based in Tauranga*.

Over the last two years, 10 ships were detained at the Port of Tauranga while serious deficiencies on board were put

right – highlighting the vital role the MSIs play in helping to ensure ships visiting our ports conduct their business without mishap, spillage or injury.

There are two inspectors at the Port of Tauranga, Ian Clarke and Hei Cheung – men carefully chosen for a role with much responsibility. Maritime safety inspectors must have served at sea themselves, possess a wide knowledge of marine matters and be well acquainted with all relevant national and international laws and regulations.

They need excellent people skills and a reasonable attitude, albeit one tempered with the ability to come down hard when appropriate. In the interests of safety, security and protecting New Zealand's marine environment, they have the power to detain any ship which breaks the rules.

Ian, who was born in India, did his maritime training in England, gaining his Master's ticket in 1972 and later a degree in Nautical Studies. Hei, a native of Hong Kong, served at sea as an engineer through most of the 1970s. Coincidentally, both men previously taught at the then Hong Kong Polytechnic. Both have worked within New Zealand as ship's surveyors, with Hei also having worked as an engineer in the Waikato and Ian previously teaching nautical studies in Auckland.

Port state control (PSC) inspections of foreign ships visiting the Port of Tauranga are only one part of the job, but probably the area where most is at stake. A PSC inspection involves boarding a visiting ship, meeting officers and crew and conducting various spot inspections.

Inspectors check for anything that can endanger life or put the marine environment at risk. This includes looking for unacceptable deterioration of the ship's structure and checking crew qualifications, operating practices, lifesaving and firefighting equipment.

Every visiting foreign ship will receive such an inspection at some stage, with complaints or a previous poor record pushing a vessel higher up on the priority list.

There were 565 PSC inspections across the country (July 2009 to June 2010), slightly under a third of them at Tauranga.

A PSC inspection represents the third and final catch-point in a larger and more complex international safety system. This relies firstly upon the marine survey each ship must undergo and secondly upon standards laid down by the country from which the vessel is flagged. But failing a PSC inspection is a mighty serious matter.

From the owner or charterer's perspective, 'detention' is to be avoided at all costs, for it stops a ship dead in its tracks till the 'serious deficiencies' have been rectified. News of a detention is likely to get corporate telephone and email lines running hot around the world. Hence, in most cases, the serious deficiencies identified will be put right within hours, rather than days.

A detention also increases the vessel's future risk rating, which will have a bearing on all future inspections.

Such deficiencies might not seem too serious to some people but enormous importance is placed on such safety standards internationally. Without shipping companies being held to account, problems at sea would quickly become more serious.

Regulations visiting ships conform to were developed by the International Maritime Organization (IMO), a United Nations appointed body of 160 nations, whose purpose it is to ensure ships around the globe meet common safety, security and environmental protection standards.

In addition to membership of the IMO, New Zealand is part of the Asia/Pacific Memorandum of Understanding on Port State Control (known as the Tokyo MOU), which 17 other countries around Asia and the Pacific are signatories to.

These international conventions and agreements provide the platform for maritime safety inspectors like Ian and Hei to carry out PSC inspections.

"International shipping is the one business which gets as close as you can to pure competition," says Ian. "The market forces involved are intense and the pressure is on owners to save every dollar they can in order to optimise their competitiveness. For example, when I first went to sea

every ship had a spare anchor, but somewhere along the line the accountants must have got into the act, calculating what it costs to lug one of these around the world versus how often they are deployed. Now it's relatively uncommon to see a spare anchor aboard a ship."

Crane rigging wires are another example of an area where the constant temptation is to save money. Ships need to carry in the vicinity of 2 kilometres of these, with spare wires representing a huge cost.

"If this equalled \$100,000 tied up in spare wires, you can see the temptation to delay replacement as long as possible."

Hei has seen it all, including some dodgy operators who look to be trying to save hundreds of thousands of dollars in maintenance and send ships to sea without sufficient spare parts.

He well recalls testing the batteries for one ship's emergency generator, and was very glad he did. Both the No. 1 and the spare were flat; the ship was detained and new batteries ordered. He relishes the challenge of investigating accidents, mindful that a thorough investigation can help to prevent future injuries or even tragedies.

And while things can get tense when cargoes have to be discharged and schedules have to be met, oddly enough the 'aggro' doesn't generally come from the sailors and officers.

"Many of them see us as their friends," says Ian. "They may be only too well aware about defects aboard, and just how hard it has been to get them rectified."

PSC inspections are not just about equipment and machinery. Ian and Hei learn a lot by interacting with the men aboard visiting ships, for example getting them to explain or demonstrate safety procedures.

The best results can be gained by working with visiting mariners, rather than against them. The good thing, the men say, is that by and large the message is hitting home. Figures show that the number of detentions in recent years has been trending lower.

Maritime safety inspectors also routinely inspect New Zealand commercial vessels, of which there are around 3,400 operating around the country. And for members of the public, they are on hand to help with information and advice. For example on marine laws, vessel registration and occasionally even arbitrating between disgruntled boaties.*

*Story courtesy of Paul Charman, *Bay of Plenty Times*.

Note: Ian Clarke is retiring in August – we wish him all the best.



Weighing anchor on a proud career

When Jim Lott weighs anchor and retires in June, he leaves an enduring legacy for New Zealand's entire boating community.

As recreational boating manager at MNZ for the past 11 years, Jim has been a passionate and tireless campaigner to make our waterways safer and ensure more boaties come home alive. Under his watch, we've seen compulsory carriage and increased wearing of lifejackets, and more people carrying communications and checking the weather before they head out.

While Jim counts his role in reducing recreational fatalities as the most significant and satisfying outcome of his 11-year tenure, it is far from being the only one.

Jim joined what was the Maritime Safety Authority (now MNZ) in May 2000, from Yachting New Zealand where he'd been safety officer since 1996.

During earlier roles as a tutor and examiner with Coastguard and the New Zealand Maritime School in the 1970s and 80s, he built boats after hours, drawing on 15 years' experience as a commercial boat builder. He chose the kauri tree for his current yacht, **Victoria**, and built it himself in his backyard in Howick over seven years. Already he's sailed 100,000 miles in the 51 foot ketch, including twice to Japan and extending one of those voyages to sail on to Norway.

Jim says he was drawn to the role at MNZ through his professional involvement with principal maritime advisor John Mansell. He had also attended meetings of the Pleasure Boat Safety Action Group (the forerunner to the National Pleasure Boat Safety Forum), which was the first collaborative body to look closely at boating safety. He was aware there were gaps in knowledge about what was happening on the water, particularly in relation to fatalities. "New Zealand had plenty of 'experts' around, with strongly held opinions about what was needed to fix the problems that existed," recalls Jim. "So there was a real need for

evidence as opposed to opinion before we went down a track that was not likely to be very effective."

He was also attracted by the opportunity to extend his decades-long involvement with boating safety and training to a national level.

Bruce Birnie, who employed Jim as a tutor at Manukau Institute of Technology in the late 1970s, was on board **Victoria** for the first Auckland-Fukuoka Yamaha Cup race in 1989 and says it was a great credit to Jim that all eight crew parted as friends at the end of the 6,120-mile voyage. Bruce says the priority for Jim, "was all about compatibility, getting there safely and having fun along the way". He says Jim has been an ideal person for the role he's held at MNZ and the industry recognises the amazing job he's done: "Jim is highly credible because he's walked the talk. I'd go anywhere with him."

MetService weather ambassador Bob McDavitt first became involved with Jim during forecasting for the Fukuoka race committee. Jim was a founding member of the Yacht Navigators Society, set up to ensure the availability of qualified celestial navigators for sailing events. Although that need has been overcome with the advent of satellite navigation and GPS, the organisation continues as the Cruising and Navigation Association of New Zealand. Jim is its patron and Bob is president.

Bob says Jim has been his main contact at MNZ, and credits him with almost singlehandedly extending MetService's two-day marine forecast to include an outlook for three days. The five-day forecasts that mariners and others can use to plan their journeys is, he says, an important legacy of Jim's.

Alan Haddock QSO, a director of Coastguard Boating Education (CBES), has known and worked alongside Jim for many years. Jim has been a director at CBES since 1995 and Alan says, "Jim's practical sailing experience and knowledge was of tremendous assistance in the early

preparation of syllabi and examinations. And during Jim's time at MNZ, "he has been instrumental in keeping CBES up to date with changes in maritime regulations".

Although the number of people out on recreational vessels has increased each year, there has been a marked reduction in the annual average number of recreational boating fatalities, with 2006 and 2007 being single-digits (7 and 9 fatalities). As well as contributing to this reduction through his work at MNZ and the forum, Jim retires from MNZ confident that the National Pleasure Boat Safety Forum has become a truly representative body. He had a pivotal role in putting into effect the strategy developed from the forum, which has been widely recognised for its effectiveness in promoting boating safety.

From the head of MNZ to his managers and the colleagues he worked alongside, Jim is held in singularly high regard for his considerable knowledge of the maritime world and his passion for making it safer.

Director of MNZ, Catherine Taylor, says Jim has been notable for his absolute enthusiasm and commitment to recreational boating, and his willingness to go the extra mile to support safety initiatives.

John Mansell says Jim's unique background in maritime education, safety and actual boating experience makes him almost irreplaceable to the organisation. He says Jim's wonderful personality and credibility have earned him great mana within the maritime community. "He is an absolute guru when it comes to yachting and we were very lucky to get him on board in the first place."

Lindsay Sturt, Jim's manager for eight years, says he has been a fantastic resource for the organisation: "He has been a tower of strength in so many different ways – even down to being able to give advice on search and rescue options for places where he has sailed.

"No one else in New Zealand would have the span of knowledge and experience in recreational boating safety. He understands maritime law inside out, as a teacher, a user and developer of regulations. I've never yet been able to catch him out on the regulations – and I've tried."

Colleague Jim Lilley agrees, saying Jim Lott has a mind like an encyclopedia. "While you're expected to have institutional and professional knowledge, with some stuff it's just easier to phone Jim."

While Jim Lilley says Jim has spent his life dedicated to seeing people return safely home from their boat trips, his heart is the biggest part of him. During a time of immense personal turmoil several years ago, he says Jim was the spearhead for enormous support that came from the organisation. "That's a measure of him. Every support he could offer, he did."

He says Jim has been a strong mentor for him. Both former teachers, they have talked at length not just about boating safety, but about how best to get the messages across.

Jim Lilley once spent a morning in Bluff on board ***Spirit of New Zealand***, which Jim Lott has been involved with since 1976, as first mate, master and director. He was struck by the enormous respect the young people showed for Jim Lott, and their obvious enjoyment of the time they'd spent together.

Captain Paul Leppington, marine director/senior master, says as well as attending board meetings and providing senior direction, Jim sails on 10-day and day-long voyages "and also heads up our safety and training task group – essentially, he does everything". Captain Leppington says the organisation values him highly: "He's had almost all of the accolades it's possible for us to give."

For the past five or six years, Jim has also had a spot on "THE Fishing Show" on LiveSPORT each Saturday morning. Producer and presenter Geoff Thomas says he was instrumental in putting together the educational segments on his last television series, "Rheem Outdoors". He describes Jim as a mine of information, who talks about safety "in a very chatty sort of a way", always emphasising that education is the way to go rather than taking the big-stick approach of regulation. "Listeners will miss his cheerful voice at quarter to seven when they wake up on a freezing cold Saturday morning," says Geoff.

Jim will launch his retirement with a return to sea aboard ***Victoria***. He and his wife intend to set sail later this year for Chile, an area they have always wanted to explore. "With more time now available, we will have the luxury of being able to linger a while in places we like," he says. Friends and supporters will be able to follow the couple's progress through articles Jim intends writing for *Professional Skipper*, and some of his colleagues are happily anticipating joining them as crew for some legs of their journey.



Jim will set sail in his 51 foot ketch, ***Victoria***, which he built in his backyard.

Workshop keeps National Response Team up to speed

The NRT had the opportunity to fully immerse itself in the requirements of oil spill response work during a three-day workshop in Auckland in May.

The National Response Team (NRT) is made up of 60 specialists, trained in all aspects of oil spill response. The team includes MNZ staff members and other experts from around the country. The NRT sits above a broader team of about 400 trained oil spill responders based around New Zealand's 16 regions.

More than 50 members of the NRT attended the workshop, which featured briefings, training and an extended exercise that tested both management and operational aspects of oil spill response.

Marine Pollution Response Service (MPRS) manager Andrew Berry says the intensive workshop gave NRT members the chance to immerse themselves in oil spill response planning for a few days.

One of the presentations was an afternoon session on lessons learned from the Gulf of Mexico oil spill, presented by members of the NRT who had been deployed to assist with that response effort. In total, 11 members of the NRT were deployed to the Gulf, some of them on multiple rotations.

Exercise Peregrine was the focus of the second part of the workshop and included both desktop and practical components. The command, logistics and planning teams worked from a simulated incident command centre, while the operations team worked in the Auckland Harbour, completing four successful deployments of equipment from the national stockpile.

Capability and NRT reviews

The NRT was also briefed on two important reviews of New Zealand's preparedness for oil spills – the capability review and the NRT review.

The capability review, which is being finalised now, focuses on New Zealand's overall capability to respond to oil spills in its marine waters and will assist MPRS in drawing up an action plan to build capability over the next few years.

"The capability review is going to be an immensely useful tool in developing our national strategy for the next five years," says Andrew. "The independent review has found we have the capability to respond to the current risks

New Zealand faces. It also identifies ways we can grow our capability to meet changing risks."

Andrew says the full review, and an action plan identifying how MPRS intends to implement the review's recommendations, will be publicly available mid-year.

The second review has only just begun and will look at the composition, availability, command and control, and development of the NRT. It is due to be complete by September.

Andrew says this review will look at the team make-up and identify whether there is a need for extra recruitment in particular areas.

"The NRT includes oil spill response experts ranging from those experienced in command and control to field staff who are experts in operational techniques. The team also includes other personnel who would be indispensable in the running of an incident command centre, such as administrators, IT experts and finance staff.

"All have been involved in oil spill response at either a national or regional level, and many have been involved in international oil spill response. Many also have civil defence experience, which is hugely relevant in terms of understanding how emergency incident management works," says Andrew.

"The review is going to look at what we have in place now and what we may need in the future – and how best we can coordinate and manage that team to ensure our preparedness."



James Harvey (left) and Mike Swords, both from Northland, Hans Wetendorf (MNZ), Grant Finlayson, from Timaru, and Jeff Donaldson, from Otago, form the operations team in the incident command centre during Exercise Peregrine.

Right: The National Response Team at the Marine Rescue Centre, Auckland.

Below left: The operations group deploys the NOFI Current Buster boom in Auckland Harbour, using a barge, tugboat and ARC pollution response barge. This boom is designed to recover oil in strong currents.

Below right: Recovery of the NOFI boom.



Pete Thomas, from Northland, stands on the MNZ oil recovery vessel. Two booms have been attached to the collection arms to increase the recovery area. The harbourmaster's vessel is towing one boom and another vessel will tow the other.



MOSS

implementation date moved

Full implementation of the new maritime operator safety system (MOSS) is now planned to start early in 2013, rather than October 2011, as originally envisaged.

As MNZ has worked through the constructive and extensive submissions made on the draft maritime rules for MOSS, it has become very clear that both MNZ and the industry will require considerable lead time to put in place the services and processes needed to support the new system.

While industry is supportive of MOSS, vessel operators will need time to get to grips with the new system, and develop the tools and processes needed to implement it.

The October 2011 date was based on a high-level understanding of the changes needed under MOSS. The original high-level view during the first consultation phase was that complexity in the rules was being removed and the base safety management system would not differ substantially from SSM. This governed early estimates of implementation tasks, workload and timelines.

The expected implementation date was also based on an assumption that key policy decisions would be achieved earlier than has occurred.

"It is very important that when introducing MOSS, MNZ ensures that sufficient time is provided to all parties to make these changes," says Catherine Taylor, Director of MNZ. "If we don't, there is a real risk that MOSS will not succeed."

Feedback from industry forums has made it clear that the maritime community wants MNZ to take the time to get this right.

"We really appreciate the efforts made by all parties – particularly the response from industry – in developing a system that will efficiently and effectively deliver safety outcomes for many years to come," says Catherine Taylor.

While the implementation date for MOSS has been extended to 2013, it is anticipated that the maritime rules for MOSS can be signed into law during the first half of 2012. Having the rules finalised well in advance of the implementation date will help provide clarity and certainty to industry about what will be required.

Next steps

Further work is being done to respond to feedback received during consultation. In particular, the project team is currently examining issues around the delivery of survey services.

As industry feedback on this aspect indicated that the consultation proposal needs to be modified if it is to work effectively, further policy work has been undertaken, which requires the approval of the Authority and the Minister.

"We will be working more extensively with vessel operators, surveyors and SSM companies throughout the next phases of the project," says Catherine Taylor. "We are very keen to ensure that all those involved have a chance to input into the development of MOSS to ensure its success."

Work continues on the implementation planning project, developing the framework, operational policies and processes, IT changes and supporting documents with internal and external stakeholders. Some systems, processes and documents are likely to be delivered before the implementation date.

This timing will be firmed up and the industry advised as soon as the MOSS package has been finalised. This will ensure MNZ is not revising dates regularly, causing uncertainty for the industry.



SOI released

The statement of intent (SOI) setting out MNZ's strategic direction for the next four years will be released in early July. While the organisation's strategic direction has not significantly changed, MNZ has reviewed its outcomes to reflect a major change in the way we think about safety in a maritime environment.

Read MNZ's *Statement of Intent 2011–2014* on our website, or order a copy by emailing publications@maritimenz.govt.nz.



Public provide valuable clues in search

Members of the public provided important clues for rescuers trying to find an 86-year-old microlight pilot missing in rugged bush at the top of the South Island.

The Rescue Coordination Centre New Zealand (RCCNZ) began the search for pilot and former Olympic yachtsman Geoff Smale, after he was reported overdue on a flight between Auckland and Ashburton in April.

The two-day search for Mr Smale's high-performance microlight covered hundreds of square kilometres and involved multiple aircraft, including a plane and civil and military helicopters.

While Mr Smale was well prepared and his aircraft in good condition, rescuers had few clues about his location because he had not filed a formal flight plan or checked in with air traffic controllers when crossing Cook Strait, as he normally did.

"Although we had basic information about Mr Smale's departure time and previous flight plans, there was still a lot we didn't know at the time of beginning the search," says search and rescue officer Neville Blakemore.

"With so little information to go on, the challenge for us was to try to piece together the jigsaw puzzle of Mr Smale's movements and figure out where he had gone or was likely to go. All the while, the clock was ticking."

As part of the search, rescuers asked Airways Corporation, which tracks aircraft traffic movements, to review its historic radar data for the period following Mr Smale's departure from Auckland. The data showed a small aircraft leaving at the same time as Mr Smale's and moving south, dipping in and out of radar coverage between Auckland, Waikato, Taranaki and the Marlborough Sounds, with a last recorded position over the Bryant Range, east of Nelson.

"Thanks to the radar data, we were able to piece together Mr Smale's likely movements and begin focusing the search on an area at the top of the South Island," says Neville.

"While this information provided important clues as to Mr Smale's location, there was still a massive search area

to be covered, much of it over very steep and bush-clad terrain."

With a search area of approximately 1,300 square kilometres, centred over mountainous terrain between Nelson and Blenheim, rescuers put out the call to members of the public for sightings or hearing reports of the aircraft. Pilots, air traffic controllers and other aviation experts also provided information.

"Thanks to the information provided by the public and others, we were able to match this against the radar tracking data and either confirm or eliminate it as relevant to the search. While not all of the information was pertinent, there were a number of important leads that came through and gave us valuable clues that helped narrow down the search."

Then, at about 2pm on the second day of the search, a Royal New Zealand Air Force Iroquois flying over Mt Duppa in the Bryant Range, 20km east of Nelson, spotted a burnt patch of foliage on the side of the mountain that had been illuminated by the sun. Trained observers had covered the spot earlier that day, but, with the bush then covered in shadow, it could not be seen.

"This was one of the lessons learnt from previous searches of this type – as the position of the sun and shadows affects the ability to spot things from the air, it's always useful to go back over the area in different light conditions," Neville says.

A crewman from the helicopter was winched down beneath the bush canopy and confirmed it was the site of Mr Smale's crashed aircraft.

"Tragically, Mr Smale had died at the scene. Our deepest sympathies go to his family and friends," says Neville.

"We also thank everyone who helped in the search. This includes the Smale family and friends, members of the public and aviation experts, who provided valuable information, along with Airways Corporation, Police, the Air Force and rescue helicopter crews from around the country."

Beacon pinpoints location in dense bush

High-viz orange guides helicopter: *The injured hunter aided rescuers by dragging himself on his arms to a clearing and laying out an inflatable orange mattress.* ▼



An injured hunter activated his personal locator beacon (PLB) in the Waioeka Gorge, south of Opotiki in April.

The man, who had broken his ankle and injured his back after a fall, spent a cold night in the bush before he was rescued by the Youthtown Trust Rescue Helicopter in Taupo, in a mission coordinated by RCCNZ. As well as carrying a PLB, the man was well equipped for survival in the bush.

Beacon registration data compiled by RCCNZ shows that the use of PLBs by trampers, hunters and other outdoors people continues to grow. There were 10,612 PLBs registered as of April this year, compared with 8,662 at the same time last year and 5,460 in 2009.

Pinpointing the location: *Dense bush can make locating an injured person difficult. GPS-enabled beacons are recommended because they can quickly provide an accurate position and reduce the response time for a rescue.*





Ready for lift-off: *The Youthtown Trust Rescue Helicopter paramedic prepares the injured hunter to be uplifted.*

Register your beacon

Overall, more than 25,000 distress beacons (including aircraft and marine beacons) are now registered with RCCNZ – which is a legal requirement for every beacon and a free service.

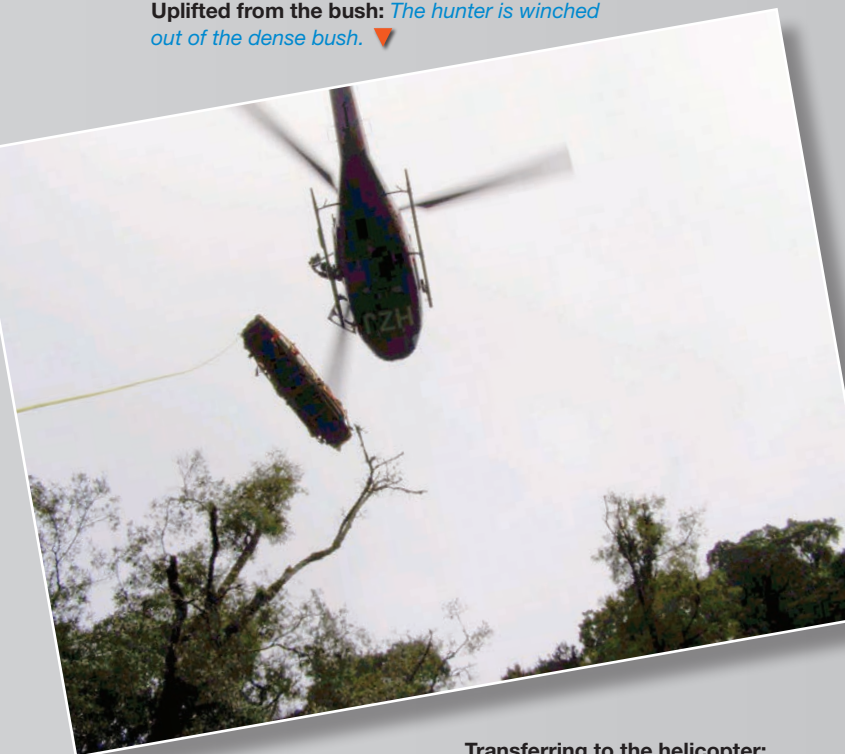
Registration ensures that up-to-date ownership information and emergency contacts are available to rescuers in the event of a beacon being activated.

This important information can save time and be a lifesaver for anyone in trouble on land, sea, or air. It can also avoid a costly search in the event of accidental activation.

For more information about distress beacons, including how to register your beacon, go to:

▶ www.maritimenz.govt.nz/beacon

Uplifted from the bush: *The hunter is winched out of the dense bush.* ▼



Transferring to the helicopter: *The hunter is reloaded back into the helicopter for the trip to hospital.* ▶



Photos: Youthtown Trust Rescue Helicopter

Survey shows safety messages getting through

The recreational boat ramp survey, carried out in late January and early February, found most people continuing to follow the safe boating practices recommended by MNZ.

The annual survey, conducted by MNZ's volunteer safe boating advisors, Coastguard volunteers and regional council personnel, provides a 'snapshot' of boating behaviour at boat ramps around the country. The surveyors interview the skippers and occupants of vessels, which are generally less than 6 metres in length and include powerboats, kayaks, canoes, personal watercraft, small yachts, dinghies and inflatable tenders.

Overview of results from 2011 survey

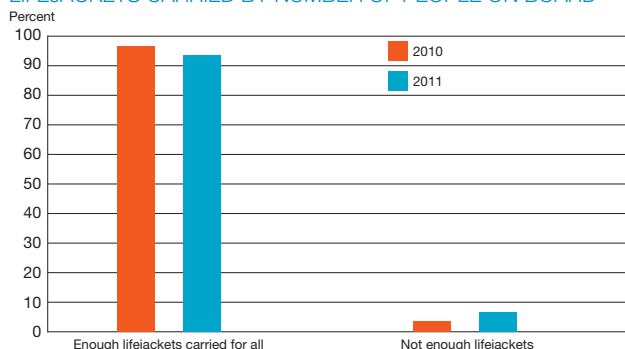
- 1,423 vessels/skippers were surveyed
- 73% of vessels had all (67%) or some (6%) of people wearing lifejackets (no comparable data from 2010)
- 93% of vessels carried enough lifejackets or PFDs for all on board (96% in 2010)
- 67% of vessels carried a VHF radio (68% in 2010)
- 18% of vessels carried an emergency beacon (16% had an EPIRB and 2% a PLB) (no change from 2010)
- 93% of vessels carried a cellphone (92% in 2010)
- 58% of those carried the cellphone in a sealed bag (54% in 2010)
- 85% of skippers had checked the weather before they left (95% in 2010.)

Lifejackets – useless unless worn

It is a legal requirement in New Zealand to carry a correctly sized, serviceable lifejacket or PFD of the right type for each person on board a pleasure boat. This rule applies to all boats, including tenders and larger craft.

It is the skipper's legal responsibility to ensure that lifejackets are worn in situations of heightened risk, such as when crossing a bar, in rough water and during an emergency, and by non-swimmers.

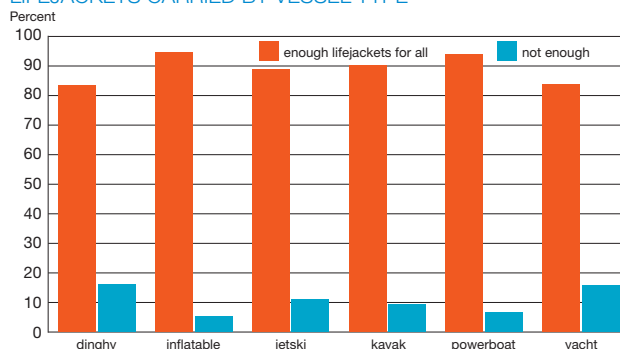
LIFEJACKETS CARRIED BY NUMBER OF PEOPLE ON BOARD



The survey found that 93.2% of vessels met the legal requirement to carry enough lifejackets or PFDs for all people on board (96.4% in 2010).

On 72.9% of the vessels surveyed, some or all of the occupants were wearing lifejackets or PFDs at the time of the survey. All of the occupants were wearing lifejackets on 66.6% of the vessels and some of the occupants were wearing lifejackets on 6.3% of vessels. On 27.1% of the vessels, no one on board was wearing a lifejacket at the time of the survey.

LIFEJACKETS CARRIED BY VESSEL TYPE



Skippers of inflatable craft were the most likely to carry enough lifejackets for all on board (94.6%), followed by skippers of powerboats (94.4%), kayaks (90.2%), jetskis (89.1%), yachts (84.2%) and dinghies (83.3%).

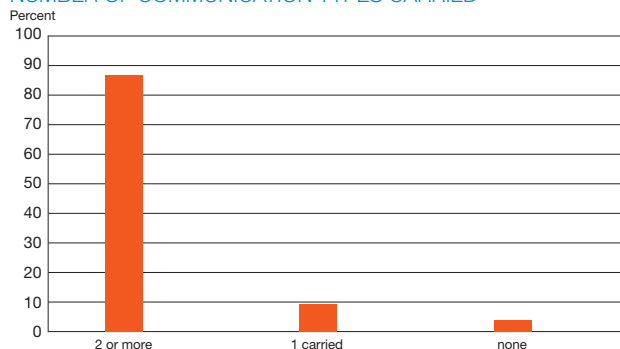
Detailed information about lifejackets is available on MNZ's website:

www.maritimenz.govt.nz/lifejackets

Communications equipment – if you can't contact us, we can't rescue you

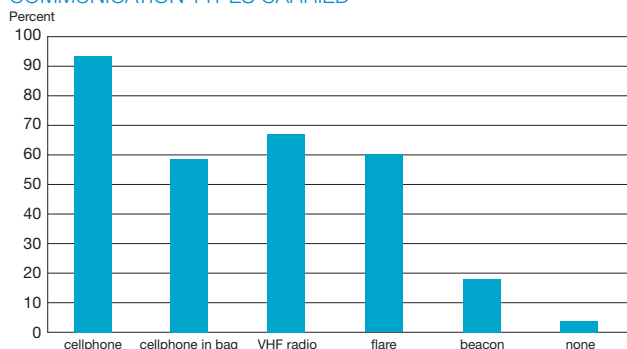
The survey found that 86.7% of vessels were carrying the recommended two or more types of emergency communications equipment, and 9.5% of vessels had one item of communications equipment. No emergency communications equipment was carried on 3.8% of vessels.

NUMBER OF COMMUNICATION TYPES CARRIED



Emergency communications equipment includes VHF radios, distress beacons (PLBs or EPIRBs), distress flares and cellphones.

COMMUNICATION TYPES CARRIED



The survey found that the most common type of communications equipment carried was cellphones, with 93.1% of vessels carrying one. Of these, 58.1% of skippers had sealed their cellphones in a plastic bag. The next most common types were VHF radios (carried by 67.2% of vessels), flares (60.1%) and distress beacons (18.1%).

Skippers of powerboats were found to be the most likely to carry two or more items of communications equipment (92.5%), followed by skippers of kayaks (77%), yachts (71.1%), inflatable craft (59.5%), jetskis (54.3%) and dinghies (42.4%).

It is recommended that vessels carry at least two types of emergency communications that will work even when wet. Each communication equipment type has strengths and weaknesses.

Detailed information about emergency communications equipment is available on MNZ's website:

▶ www.maritimenz.govt.nz/communications

Weather – if in doubt, don't go out

The number of skippers checking the weather conditions before departure dropped in 2011, down to 85.4% from 95% in 2010.

Marine weather forecasts are readily available on VHF radio channels, the internet, local and national radio and in newspapers.

General information about marine weather is available on MNZ's website:

▶ www.maritimenz.govt.nz/weather



Boat ramp survey prize winners Ken and Viv Eastwood admire their new GPS-enabled personal locator beacon in front of their boat **Habibi**.

Boaties win beacon

Each year, participants in the national boat ramp survey are entered into a draw to win a range of safe boating prizes. These include lifejackets, emergency distress beacons, hand-held VHF radios and Coastguard Boating Education courses.

This year, Wellington resident Ken Eastwood won a personal locator beacon with GPS, currently valued at about \$650. He and his wife Viv own a 5.5 metre runabout called **Habibi**. Ken says they were thrilled to win the beacon, which they will carry on board along with their VHF radio.

"We're very aware of the need to have good communications on board and always take at least one cellphone and have a VHF radio and GPS attached to the boat. We're well equipped with safety gear and have been looking at getting a beacon for a while."

The beacon is very small, almost cellphone-sized, and can be clipped onto a lifejacket or kept in the skipper's pocket. This means in a rapid sinking situation in which a boat's occupants find themselves unexpectedly in the water and their fixed VHF radio out of reach, they can still communicate their distress.

The beacon's small size also means it can be used for tramping or hunting or for any other activity that requires emergency communications equipment.

MNZ recommends all boaties heading out on the water should take at least two types of reliable communications equipment that will work when wet.

QOL framework now available

The new proposed qualifications and operational limits (QOL) framework is now available on the MNZ website, following approval from the MNZ Authority.

"Key changes have been made to the QOL framework as a result of extensive feedback on the version presented last year," says QOL programme manager Andrew Clapham. "Feedback included formal submissions and discussions with industry, and internal consultation with subject matter experts."

"This is a major milestone for MNZ and for the maritime community – the culmination of two years' hard work by many people."

Changes

A number of changes have been made from the draft framework consulted on last year, the most significant change of which is the exclusion of vessels under 24 metres in length from the full application of STCW-10 within near-coastal waters (coastal and offshore).

A proposed suite of STCW near-coastal qualifications for vessels 500–3,000GT and 750–3,000kW is no longer included.

Also gone is the proposal that non-passenger vessels be granted the same privileges relating to the inshore limit as fishing vessels – enabling non-passenger vessels to transit the entire New Zealand coast within the 12nm territorial limit.

Where to next?

MNZ is now considering the appropriate rules framework to give effect to the QOL framework. We are planning to undertake formal consultation in 2012, with a view to implementation of the new regime in 2013.

"Consultation will include any proposed amendments to other rules such as those relating to minimum safe crewing or medical standards," says Andrew, "and everyone will have a chance to make submissions on any proposed changes."

A new blog (qolon-line.blogspot.com) is also available for comments and questions on the new framework.

Funding principles developed for review

The MNZ funding review has developed a set of principles that will guide the way in which the review considers funding options for the organisation.

The funding principles, based on guidelines set out by Treasury and the Office of the Auditor General, were developed in consultation with the sector reference group (SRG) that is providing input and information to the review.

The SRG has an important role to play in giving the MNZ and Ministry of Transport officials involved in the review insight into sectoral perspectives and helping them understand the likely impacts of implementing the options detailed in the review, particularly in relation to:

- the funding principles
- current challenges
- the development and analysis of options for the paper to be delivered to the Minister for consideration later this year.

The funding principles are on MNZ's website:
▶ www.maritimenz.govt.nz

8

Maritime fatalities 2011

From 1 January to 31 March there were **8** fatalities – **2 in the commercial sector and 6 in the recreational sector.**

This compares with 0 commercial and 5 recreational fatalities for the same period in 2010.

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