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SafeSEAS CleanSEAS



Catherine Taylor on
Wellington's waterfront.

Welcome to the first issue of *Safe Seas Clean Seas* for 2010. I hope all of you had a happy and relaxing holiday season.

This year is shaping up as another very busy one for Maritime New Zealand (MNZ), as we build on our two major reviews and continue to roll out various other initiatives. This will present both challenges and exciting opportunities.

As we move ahead to improve safety standards, it is perhaps timely to reflect on the question of 'just how safe are we?'.

Overall, New Zealand's maritime industry has a very strong and healthy safety culture. The vast majority of operators are meeting and, in many cases, exceeding safety standards. There are many excellent operators who are leading by example and continue to demonstrate a strong commitment to improving safety.

However, there are also some valid concerns. In recent years, various independent reviews and reports have highlighted issues concerning the delivery of the commercial vessel safety system.

MNZ must address these issues to ensure the system is improved so that it is simpler for operators to follow, is more consistent, and works fairly for all – while providing the necessary leadership and support to help achieve this. But as with any regulatory system, it is important that we do not hesitate to take appropriate and direct action to address unsafe practices or operations that may put vessels or lives at risk, and this will continue.

It is with these important principles in mind that MNZ has two wide-ranging and important reviews underway. One is directed at ensuring we have a world-class seafarer qualifications framework, and the other is aimed at strengthening our commercial vessel safety system.

Early in February, MNZ issued the report "*Key Issues from the Community Engagement Programme*", arising from the qualifications and operational limits review. Thanks to the contribution of the many people across the industry who gave up their time to give us their feedback – we now have an excellent platform to build on.

We will also be releasing consultation documents relating to the review of the safe ship management system, and we will be actively seeking industry review and comment as part of that process.

I am confident that at the end of these comprehensive and important reviews, we will have a system that is simpler, safer and fairer for all.

In other developments, I am pleased to welcome our new MNZ Authority Chairman, David Ledson, who replaces outgoing Chair Susie Staley. Susie has made a fantastic contribution to MNZ over the past 11 years, and we wish her all the best for the future.

Catherine Taylor

Director of Maritime New Zealand

A new approach to vessel and operator safety

MNZ is developing a new framework to improve safety and regulatory processes in the commercial maritime industry.

The proposed changes relate to the rules that guide what is currently known as the safe ship management (SSM) system: Maritime Rules 21 and 46.

The SSM system was introduced in 1998 and since then MNZ has made minor adjustments to it. Over the years there have been several reviews that have identified weaknesses with the system, and it's time to make some changes to simplify it and improve safety.

Getting the regulatory system right

The current system was derived from a framework designed overseas for regulating large international shipping operations. From its inception, the system was poorly aligned with the realities of New Zealand's domestic shipping industry, which was (and still is) dominated by small owner / operators working along New Zealand's coast and in our inland waterways.

A review of the system in 2002 by Thompson Clarke concluded that the system was too complex for most operations. The review also found that the system did not provide MNZ with sufficient regulatory oversight. A report by the Transport Accident Investigation Commission found similar concerns.

And ultimately, the system is not improving our safety performance. It has been more than a decade since the system was introduced, yet we have seen no reduction in fatalities and an increase in serious harm incidents in the maritime industry.

MNZ's proposed changes

MNZ has identified a preferred approach to changes to the system, and has drafted new rules based on this approach, which we will be consulting on in the first half of this year.

The principles that have guided MNZ's preferred approach are:

- **Clarifying and simplifying the rules:** The Maritime Transport Act states that owners and operators are responsible for safety. The proposed rule changes will make it easier for operators to understand their responsibilities and meet relevant safety and marine protection standards.

■ Putting a greater focus on safe operations:

Most fatalities and serious harm accidents over the past 10 years have been caused by human error, so MNZ's proposed approach will focus on vessel owners and operators operating safely.

MNZ will be consulting widely

MNZ has been discussing the best way to improve operational safety with the maritime industry for the past year. We expect to be ready to begin our formal consultation process in April.

We will mail a consultation pack to all operators, surveyors, SSM companies and naval architects. The pack will include information on our preferred approach, the draft rules, draft advisory circulars, and invitations to comment.

We will hold meetings at town and city centres around the country during the consultation process to discuss the proposed changes with the maritime community, and answer any questions you may have about our proposed approach.

Everyone will have 3 months to consider the proposed changes and make a submission before consultation closes. We will allow a further month for those who wish to make oral submissions on the draft rules.

When all submissions have been received, we will review the proposed rule changes in light of these. We'll provide submitters with an analysis of the submissions received and how we have responded to those submissions.

We'll provide more updates in our publications, on our website, and via the news media as we go through the process.

Please look out for the information pack, so that you can contribute to our consultation process.



See page 20 for information on receiving consultation updates via email or visit:

www.maritimenz.govt.nz/rss

Key issues released

On 1 February MNZ released a report on the key issues identified in the first stage of its qualifications and operational limits review (QOL Review). A summary of these issues is outlined on page 5.

This information will be used to help direct the design of an improved qualifications and operational limits framework, along with other key inputs including international standards and maritime obligations.

The outcome will be relevant qualifications and appropriate operational limits that meet the needs of New Zealand's commercial maritime industry – while ensuring the safety of vessels, their crew, passengers and cargo, and protection of the marine environment.

Community engagement programme

Between July and November 2009, QOL Review Project Manager Bridget Carter and Principal Maritime Advisor John Mansell interviewed 434 representatives from the maritime community, asking them what works and doesn't work with the current qualifications and associated operational limits, and how they could be improved. More than 1,150 comments were recorded and 30 written submissions were also received.

"The free and frank views shared by so many people will help ensure the new framework is firmly anchored to the needs of New Zealand's commercial maritime businesses," says Bridget.

"In addition to gaining a clear understanding of the business and operational requirements of the various industry sectors, the discussions provided MNZ with valuable insight into the environment in which certificates are obtained, how MNZ syllabuses are delivered, access to training, availability of funding, and consistency of standards in the current examination process."

Overview of key issues

The community engagement programme confirmed the breadth and diversity of maritime operations in New Zealand and highlighted a number of concerns with existing qualifications and operational limits. It also identified what is working well. There was strong support for maintaining the quality of New Zealand maritime qualifications to ensure they are recognised internationally. Most of the key issues relate to domestic qualifications (LLO, ILM, NZOW and NZOM) and vessels operating within coastal, inshore and enclosed limits.



Bluff representatives of the maritime community interviewed by MNZ. Back row: Dave Henigan (left), Bob Hawkless, Paul Pascoe, Graham Denny, Dave Pollard (MNZ), John Mansell (MNZ). Front row: Graham Anderson, Bridget Carter (MNZ), Warren Crighton.

"While many operators are happy with the operational limits they work within, there is an overwhelming demand from commercial fishermen for a return of a 100 nautical mile limit, to more closely align with commercial fisheries," says Bridget.

"We found that commercial operators are doing their best to comply with the rules and respect the need for them. However, it is apparent that there is a lot of misunderstanding or misinterpretation of maritime rules owing to their complexity and the way information is presented."

For people progressing up the career path or operators required to hold higher qualifications because of crewing requirements, the biggest operational issue is the need for, and ability to obtain, coastal sea time. The validity of sea time as a measure of competence was raised as an issue consistently across all industry sectors.

Following wider industry comment on these key issues received during February, MNZ is ready to commence detailed design work on the framework. It is intended that the first draft of the new framework and a proposed approach to the transition of existing qualifications to the new framework will be released for consultation later this year.

MNZ is planning a roadshow throughout October 2010, visiting all major ports and regions to present the proposal. Following this extensive industry consultation, the framework will be fine-tuned and the final proposal will be reviewed with representatives from each type of maritime operation. The new qualifications and operational limits framework is due to be delivered in March 2011.

Following is a summary of the key issues:

Barriers to entry

- » Entry to the commercial maritime sector is constrained by the lack of recognition given to experience and skills gained in both the commercial and recreational sectors.

Career progression

- » It is not easy to plan a career that spans multiple industry sectors and know from the outset what experience or qualifications will be required at each stage.
- » The current qualifications framework makes it difficult to transfer between sectors.
- » The current qualifications framework does not recognise a separate and specific “inshore industry” or provide a career path for it.

Qualifications

- » Quality of qualifications must be retained.
- » Current qualifications and operational limits are focused on sea time rather than experience and competence.
- » Qualifications and syllabuses have not kept up to date with technology advances in engineering, navigation and communications.
- » There are problems with getting domestic and super yacht qualifications recognised overseas.
- » There is no appropriate qualification for small work boats operating in either very restricted or multiple areas.

Engineering

- » The current link between distance offshore and level of engineer required is not appropriate, and is at a high cost to operators.
- » The engineering syllabus for MEC 4, MEC 5 and MEC 6 is out of date and not appropriate for smaller vessels and modern engines.

Endorsements

- » Endorsements should be used as a means of demonstrating competence for specific skills, experience and types of operation.
- » ILM is the core qualification at the heart of commercial operations in the industry in New Zealand, but does not provide sufficient competence for the higher-end privileges of the ILM qualification.

Sea time

- » The current method of calculating sea time is open to abuse and does not ensure ‘quality sea time’ is obtained.
- » Coastal sea time is hard to get and is a barrier to obtaining the NZOM qualification, in particular when required for inshore operators.

Operational limits

- » There is a high demand for a 100 nautical mile fishing limit to be reintroduced to align more appropriately with fishing areas, for example the 200 metre contour.
- » The current 12 nautical mile inshore limit is based on the territorial limit and does not allow for practical transit routes between locations.
- » The inshore limit does not take into account increases in vessel speed and technological advances in navigation and engineering that make it possible to travel further from the coast and still be able to access a safe haven.
- » There is no flexibility to allow vessels to operate beyond the limits of their qualification for specified periods to suit certain fisheries or other activities.

- » Passenger/non-passenger and fishing operators wish to operate within the offshore limit to the extent of New Zealand’s exclusive economic zone (EEZ).

Revalidation

- » Any changes regarding revalidation must consider the impact, costs and benefits, and demonstrate that there is a safety benefit.

Syllabuses

- » Syllabuses are out of date, too theoretical and do not reflect modern technology in engineering and navigation, for example chart plotters, GPS, computerised engines, modern outboard motors.
- » There is too much large merchant shipping influence on syllabuses for lower-grade qualifications.
- » There is a lot of repetition between the syllabus and courses for LLO, ILM and NZOW.

Training

- » Training is repetitive and does not recognise prior learning.
- » Individuals are required to repeat training unnecessarily as they progress through different certificates. This makes training long and expensive.
- » People find it hard to get on training courses at suitable times owing to the limited number of courses.
- » Courses are believed to be unnecessarily long – to suit schools and government funding mechanisms rather than candidates.
- » There is limited uptake of unit standards owing to lack of understanding and misalignment of MNZ and NZQA qualifications.

Industry-specific training under Part 35

- » Although Part 35 is well regarded, it imposes management overheads on participating organisations.
- » There have been no regular audits of Part 35 by MNZ to ensure compliance and competence of trained candidates.

Examinations

- » There is no practical component to the examination process and therefore candidates don’t have to demonstrate competence.
- » Qualifications and syllabuses have not kept up to date with new technology advances in engineering and navigation, and examinations reflect this.
- » Examination questions are sometimes theoretical and not relevant for domestic qualifications.

Application of STCW

- » The STCW basic safety training course, which requires full fire training with breathing apparatus, is excessive, expensive and provides no lasting benefit for operators of smaller vessels.

Other

- » Communication on previous changes to qualifications and operational limits has not been effective or adequate.
- » Interaction between the maritime community and the MNZ Licensing Team is not always satisfactory.

For a copy of the full report on the QOL Review key issues or more information about the review, visit the MNZ website:

 www.maritimenz.govt.nz/quals-limits



Submissions in on lifejacket rule change

A proposed law change to strengthen the requirement to wear lifejackets in small craft has attracted a wide range of submissions.

The National Pleasure Boat Safety Forum, a group made up of 16 water safety agencies including MNZ, has recommended a law change that would require people in recreational craft under 6 metres to wear their lifejacket at all times – unless the skipper says it is safe to take it off.

Jim Lott, MNZ Manager of Recreational Boating and forum member, says the proposed change to Maritime Rules Part 91 changes the focus of the current rule, which requires someone to put their lifejacket on only if told to do so by the skipper at times of increased risk.

Consultation on the law change was launched last October to coincide with the traditional start of the summer boating season, along with a public education campaign encouraging more people to wear their lifejackets.

Jim says a key driver behind the campaign and the proposed law change is that the last few years have been marred by far too many boating fatalities and accidents, largely caused by people not following common-sense

safety precautions. “This is backed by hard evidence which shows that the biggest cause of recreational boating deaths is a failure to wear lifejackets, followed by failure to carry reliable means of communicating distress, failure to check the weather, and alcohol consumption – with those in vessels under 6 metres over-represented in the figures,” he says.

Wearing your lifejacket on a boat should be as automatic as wearing your seatbelt when you get in a car. “It’s a flawed sort of logic when people who don’t think twice about putting on their seatbelt when getting into a car won’t then take a few moments to put on their lifejacket when getting into a boat. It’s that attitude we need to change,” says Jim.

About two-thirds of recreational boating fatalities in recent years could likely have been prevented had the victims taken a few moments to put their lifejacket on before going out. In many cases, by the time they ended up in the water, it was too late to do anything.

“Although we can’t be in every boat making sure that people are wearing their lifejackets, the proposed law change is aimed at getting people to take greater responsibility for their own safety, so that they are well



Above: MNZ's public awareness campaign encourages boaties to make wearing a lifejacket as automatic as wearing a seatbelt.

Left: About 70 percent of submitters support a proposed maritime rule change that would make the wearing of lifejackets compulsory in craft under 6 metres.

prepared if and when something does go wrong, rather than thinking 'this will never happen to me' and getting caught out," says Jim.

This still allows the skipper some discretion over when lifejackets are required – but shifts the focus to deciding when it is safe for those on board to take their lifejacket off, rather than when it is necessary to put it on, which can often be too late when an emergency strikes.

Consultation on the proposed rule change, which closed in December, attracted 58 submissions. About 70 percent of respondents were in favour of toughening the law around lifejacket wearing and about 30 percent don't support it. Almost 30 percent of those in favour of the rule change advocated for even stricter regulations.

Jim says all the submissions will now be considered as part of the final rule-drafting process, which is now underway. The draft rule will then be submitted to the Ministry of Transport for consideration, prior to going to Cabinet for final approval – hopefully by late 2010.



MNZ welcomes Authority Chair

MNZ last month welcomed its new Authority Chairman, **David Ledson**, who replaces outgoing Chair **Susie Staley**.

David recently retired after 42 years' service in the Navy, including the last 5 years as Chief of Navy. He spent 13 years at sea in various types of naval ships, both around New Zealand and offshore, including commanding HMNZS **Waikato**.

He has also had specialist navigation training and is recognised as having developed strong working relationships within New Zealand government departments and with other naval chiefs. He was instrumental in the Navy adopting the Baldrige criteria for performance excellence as part of its continuous improvement framework.



MNZ's new Authority Chairman, David Ledson.

Outgoing Chair farewelled

Susie said that during her 11-year tenure with the Authority – 7 of them as Chair – there has been a significant amount of change within MNZ as the organisation's role has grown. This has included an increased maritime security role in the wake of the 11 September terrorist attacks, a wider focus on health and safety on board vessels, and the establishment and maintenance of a professional 24/7 rescue co-ordination centre. A further significant achievement was New Zealand's election to the International Maritime Organization (IMO) Council in 2007, building on its long-standing membership of the IMO.

"My time as Chair of the MNZ Authority has presented many challenges and opportunities, and I would like to thank everyone who has helped and supported me in my role," says Susie. "I have continually been impressed with the skill and dedication of the many people who work within the organisation and across the industry to make the maritime sector a safer one, and I look forward to seeing it continue to go from strength to strength.

"It has been a privilege to serve MNZ, and I wish David all the best as he leads the organisation forward," she said.

Garbage survey nets interesting results

A survey of fishing operators has netted valuable information about the impact of garbage in marine environments.

In 2009, MNZ undertook an extensive survey of operators to better understand the challenges they face in dealing with garbage on board their vessels and the realities of garbage management at sea.

MNZ Environmental Analyst Dr Alison Lane says “the many responses have helped MNZ to gain a better picture of what is a serious threat to the marine environment both in New Zealand and around the world”.

Alison, who is leading the project, says the project will be extended to other types of vessels, including recreational and commercial boats operating in our waters. “While there are many sources of marine debris, garbage from all kinds of vessels is potentially a significant contribution to the problem,” she says.

In some cases, garbage is discarded deliberately, although there is also a high risk of garbage being accidentally lost at sea. But regardless of how garbage is lost, the result is the same. Garbage, particularly plastics, metal, glass and

synthetic materials, can last in the ocean for hundreds of years.

Alison says an alarming result from the survey was that more than 70 percent of respondents reported finding plastic debris while they were at sea.

“Plastic bags are a major component of the marine debris observed by our fishers, and this also reflects international findings. Some of this plastic is clearly coming off the land, but the data suggests that much of it is coming off vessels as well.

“Plastics are particularly harmful because they break down into small pieces that are mistaken by birds, fish and other marine species as food. The average lifespan of a plastic bottle in the ocean is 300 to 500 years. So every piece of plastic has the potential to impact on the environment today and for many generations to come.”

She says marine debris is also a serious hazard for boats. Fouled gear and propellers are dangerous, and can lead to huge costs in lost time and repairs.

Fishers were also asked about the type of garbage they produced on board their boats. Unsurprisingly, plastic

Left: Plastics break down into small pieces that are mistaken by birds, fish and other marine species as food. Waste collected during a clean-up showed a high proportion of plastic.

Right: Refuse barge, moored off Moturua Island over the holiday season.

topped the list, with plastic bags and wrapping making up the bulk of it. Other types of plastic included bottles, strapping, bait packaging and fishing-related items like nylon lines, netting and rope.

"It was interesting to see the difference in the amount of garbage boats produced per person per day," Alison says. It is clear from the results that, by removing all excess packaging on shore and limiting what is taken on board, it is possible to greatly reduce the volume of garbage that has to be dealt with and the amount of space it will take up on the boat.

"We were also interested in how garbage was stored on the boat. Nearly three-quarters of respondents said they stored their garbage in plastic bags, and well over half store their garbage on the deck of the boat. So, even if people



are careful to collect all of their garbage, with the intention of bringing it ashore, there is a real risk of bags breaking or being washed overboard," she says.

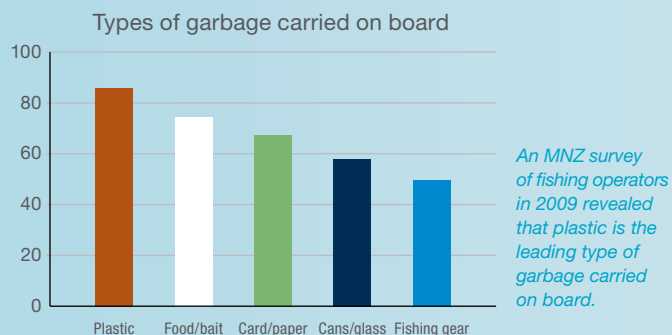
There were a number of barriers identified to bringing waste ashore, although most of those surveyed believed that it wasn't really a big problem. Some of the difficulties cited included problems with port reception facilities, space on board the boat, and time. "We also got the clear impression that there is a need for more information about the rules for garbage disposal. MNZ is continuing to work closely with industry and other agencies to look at how these issues can best be addressed," Alison says.

Top tips for garbage management at sea

- **Reduce waste before you sail** – remove all extra packaging and plastic, and buy provisions with less packaging where possible. This will reduce time spent dealing with garbage and space taken up by packaging when at sea, and greatly reduce the risk of plastic going overboard.
- **Use a solid container for storing waste** – sealed fish bins or oyster sacks are much less likely to be damaged and spill their contents.
- **Keep all garbage in secure locations on the boat** – where it won't get washed overboard.
- **Be tidy.** All rubbish should go straight into the storage container to prevent anything left on deck being blown or washed overboard before it can be picked up. Rope ends and scraps of line and netting are common culprits that escape out the scuppers.
- **Create a culture of awareness and good practice.** Even tiny items like cigarette butts and bottle tops will stay around for generations to come. It is up to every person on board to take responsibility for their actions.

Garbage rules for all vessels

Garbage discharge at sea is regulated under the Resource Management (Marine Pollution) Regulations, the Maritime Transport Act 1994, and the Marine Protection Rules Part 170.



If you have any questions about garbage management on vessels please call **Alison Lane** on (04) 473 0111.

A summary of the current rules:

- » Plastics, including items that have any plastic component, and synthetic fishing gear may not be discharged into the ocean anywhere, at any time.
- » No garbage may be discharged at sea within 3 nautical miles of the nearest land or in the Antarctic area below 60 degrees south.
- » Outside 12 nautical miles it is permitted to dump food, paper products, rags (as long as they are non-synthetic and not contaminated with oil or chemicals), glass, metal and similar items. However, discharging these garbage items is not desirable and may become illegal in the next few years.
- » Between 3 and 12 nautical miles from land garbage in the categories above may be discharged only if its constituents are ground to less than 25mm.
- » Items that are likely to float, such as wood, may only be discharged beyond 25 nautical miles from land.

Maritime news making waves in 2009

Last year was a big one for news in the maritime sector, with tragedy in the islands, a hoax mayday call, icebergs and a 'flying carrot' among the stories that caught the media's attention.

Here are a few of the stories that dominated headlines in 2009...

The year got off to a busy start for water safety and search and rescue agencies for all the wrong reasons, with an alarming number of recreational boating deaths and numerous rescue call-outs – many due to ill-prepared boaties. This put the spotlight on New Zealand's maritime safety record and fuelled calls for more controls on recreational boating activity.

Analysis of the various incidents and accidents highlighted that a lack of basic safety precautions, such as failure to keep a proper lookout, failure to wear lifejackets, not checking the weather, a lack of reliable communications, and alcohol continued to be the prime factors leading to recreational boating deaths.

Thousands 'make the switch'



On 1 February, the satellite system monitoring the older 121.5 and 243.0MHz emergency beacons was switched off. These beacons were responsible for more than 90 percent of all false

beacon alerts detected by the Rescue Coordination Centre New Zealand (RCCNZ) and its counterparts around the world. The older-style beacons were gradually phased out and replaced by the more modern and accurate 406MHz variety. Since the switch off almost 8,000 people have 'made the switch to 406' and taken advantage of RCCNZ's free beacon registration.

DIY danger

The dangers of 'do-it-yourself' dinghy repairs were highlighted following the tragic deaths of two fishermen off the Horowhenua coast in March. A subsequent MNZ accident report found that the 4.5 metre aluminium dinghy **Viper 1** sank as a result of a series of DIY repairs, maintenance and modifications, which allowed water to flow unseen into the bottom of the vessel, causing it to sink rapidly.



Coroner's call

An inquest into another boating tragedy, in which a young man died off the coast of Wanganui in February 2008, prompted a series of recommendations by a Palmerston North coroner, including a call for all recreational boaties to compulsorily carry 406MHz emergency distress beacons. Several recommendations for improving Police and other agencies' search and rescue procedures were adopted and MNZ launched a campaign promoting carriage of emergency communications equipment.

A boating tragedy prompted a coroner to call for compulsory carrying of 406MHz distress beacons.



Dramatic rescues

There was an international flavour to some of the dramatic rescues co-ordinated by RCCNZ during the year, including the successful recovery of two Italian sailors 2,000 nautical miles east of New Zealand, and the rescue of a family north of North Cape by the French Navy.

Italian father and son sailors Giovanni and Vittorio Fresi were plucked from their stricken yacht **Onitron**, in April, after breaking down in rough seas 2,000 nautical miles east of New Zealand – just inside our search and rescue boundary.



Stranded Italian yachtsmen were plucked to safety by the crew of an oil tanker.

A mayday call relayed by Italian authorities to RCCNZ saw the centre swing into action, co-ordinating with the skipper of the tanker **Hellespont Trooper** to divert his course by 800 nautical miles to rescue the sailors. The successful mission earned RCCNZ the praise of the Italian Ambassador in Wellington for their skill in guiding the response.

In late June, a RCCNZ-co-ordinated search for the dismantled yacht **Carenza** had a happy outcome for Auckland's Bradfield family. After being battered by a storm 200 nautical miles off North Cape, the family of eight was successfully rescued by the passing French Navy patrol boat **La Glorieuse**, which was en route to New Zealand.

Tragedy in the islands



July and August were dominated by maritime tragedy in the Pacific, with the loss of many lives in two separate ferry accidents within weeks of each other.

The first accident occurred on 13 July, when a ferry carrying some 55 people capsized while sailing from Tarawa to Maiana in the tiny island nation of Kiribati. Up to 40 people are believed to have died in the accident. RCCNZ provided assistance to the Fijian search and rescue authorities co-ordinating the response.

Tragedy struck again on 5 August, when the Tongan ferry **Princess Ashika** sank with more than 140 people on board while travelling from the capital, Nuku'alofa, to Ha'afeva, in the Ha'apai group of islands.

The accident sparked the largest-ever international rescue mission co-ordinated by RCCNZ, involving civil and military maritime and aviation resources from New Zealand, Tonga and Australia.

An intensive search over several days recovered 53 survivors. The vessel was later located by the Royal New Zealand Navy resting on the sea floor in 105 metres of water.

Calls to the MNZ media line seeking information, interviews and comment on the search for survivors numbered in the hundreds and lasted more than a week, with local, national and international press interest in the tragedy. The MNZ media team fielded calls from as far afield as the BBC in the United Kingdom, CNN in the United States, and Al Jazeera in Malaysia – in addition to media organisations across Australia and New Zealand.

Above: Sonar image of the Princess Ashika on the sea floor. Photo courtesy of the Royal New Zealand Navy.

White water wake-up call

The conviction in August of the Queenstown river boarding company Black Sheep Adventures Ltd on Health and Safety in Employment Act (HSEA) charges attracted national and international media attention. It followed the tragic death of English tourist Emily Jordan, aged 21, on the Kawarau River in April 2008.

The company was ordered to pay fines and reparation totalling \$146,000 after admitting two charges brought by MNZ under the Act. MNZ described the case as a 'wake-up call' for the previously little-known river boarding industry.

The New Zealand Government later announced a wider review of the adventure tourism sector in response to concerns raised by Emily's father, Chris Jordan.



A wider review of the adventure tourism sector, led by the Department of Labour, is underway.

Other convictions

In addition to the Black Sheep conviction, investigations into a number of other serious commercial and recreational boating accidents led to successful prosecutions by MNZ during the year.

In February, an ill-equipped fishing trip that sparked a costly search off the Hawke's Bay coast led to the skipper being convicted and sentenced to 50 hours community service. Then, in July, New Zealand King Salmon Ltd was convicted on HSEA and Maritime Transport Act (MTA) charges following the deaths of two workers and injuries to four others in an accident near Picton in June 2008, attracting fines and reparation totalling \$266,000.

In other cases, two companies working on Christchurch's ocean outfall project – McConnell Dowell Constructors and Heron Construction Ltd – were ordered to pay \$115,000 in fines and \$213,000 in reparation and fines, respectively, in December after admitting serious safety lapses on the project.

High-profile fatal jet boat accidents on the Kawarau River near Queenstown in September 2008 and on the Matukituki River in Central Otago on Boxing Day 2008 also saw MTA charges laid by MNZ against both jet boat drivers, with both matters to be heard by courts later this year.

And in the North Island, Taihape-based commercial rafting operator River Valley Ventures Ltd, its director and a senior guide were found guilty in late December of health and safety charges, following the October 2007 death of a Norwegian guide, Tor Prestmo.

Mayday mystery

An apparent hoax call from a vessel called the **East Coaster**, claiming to be in trouble near the Hen and Chicken Islands east of Whangarei in August, prompted a large and costly search and rescue mission that found no trace of any vessel in distress. Despite investigations by Police and widespread calls to the public for information, the perpetrators were never caught.

Flying solo

Last year was also the year of the solo adventurer, with headlines generated by a British man's attempt to circumnavigate Antarctica, and plans by two teen sailors to circumnavigate the globe.

Safety concerns – particularly the likelihood of almost certain need for outside assistance – prompted MNZ to step in and decline permission for the English solo adventurer Oliver Hicks to depart from New Zealand waters as part of an attempt to circumnavigate Antarctica in a 7.3 metre rowing boat, called the **Flying Carrot**.

The vessel subsequently departed from Australia in January, despite similar safety warnings from Australian authorities. Hicks changed his plans to aim for a Stewart Island finish part way through the attempt. The voyage ended just shy of his goal, with the **Flying Carrot** towed into Bluff in early April.

Dual New Zealand/Dutch citizen Laura Dekker, aged 13, created a media storm when a Dutch court banned her from attempting to become the youngest person to sail solo around the world. The teenager, who was born on a yacht off the coast of New Zealand, was hoping to gain residency and a New Zealand passport to bypass Dutch authorities and make the solo trip from New Zealand.

Meanwhile, across the Tasman, a bid by 16-year-old sailor Jessica Watson to become the youngest person to circumnavigate the globe got underway in October, after an earlier false start.



RNZAF Orions provided on-scene co-ordination for several search and rescue operations in 2009. Photo courtesy of RNZAF.

The Swiss skipper attempting a solo round-the-world voyage in the 52-foot yacht **Horizons** reported steering problems in rough conditions off the bottom of the South Island. RCCNZ tasked an RNZAF Orion to assess the situation and then diverted a cruise liner to rescue the skipper.

Lifejacket campaign launched



The traditional start of the summer boating season at Labour Weekend saw a new lifejacket-wearing campaign launched by MNZ, in response to a growing number of recreational boating accidents and

fatalities. The campaign coincided with the beginning of public consultation on a proposed law change that would require all people in vessels under 6 metres to wear their lifejacket by default at all times – unless the skipper says it is safe to take them off. Sadly, the season opened with a triple recreational boating fatality on Lake Tekapo, when three men unexpectedly ended up in the water.

Above: A mass media campaign urges boaties to wear their lifejackets at all times.

You want ice with that?

The sighting of icebergs drifting towards New Zealand near the Auckland Islands, 400 kilometres south of Bluff, in November, prompted widespread media interest and MNZ to circulate navigational warnings to shipping in the area. The icebergs later drifted back towards Australia and then eventually broke up.

A better 2010?

Just as it had begun, 2009 ended on a tragic note, with the recreational boating toll reaching 24 – the second-highest ever recorded by MNZ. A further four people lost their lives in the commercial sector. Water safety figures were also marred by a record number of drownings on our seas, rivers and lakes.

All agencies will be hoping for a much safer 2010.

Snapshot of media activity in 2009

- Total press and broadcast (television, radio and internet) coverage for 2009: 4,827 clippings
- Total press activity: 2,091 clippings
- Total broadcast activity: 2,736 clippings
- Average monthly combined media volume: 402 clippings
- Quietest month: June – total 118 clippings
- Busiest month: August – total 992 clippings
- The heavy media activity in August resulted from a number of significant events, including: the sinking of the Tongan ferry **Princess Ashika** on 5 August; the search for the **East Coaster** in response to a mayday call; and the Mad Dog river boarding prosecution.

Maritime and Antarctic experts discuss ways to protect region

A group of experts from around the world recently met in Wellington to discuss ways to improve the safety of passenger ships in the Antarctic, as shipping activity in the region increases.

Over the past 3 years there have been a number of serious incidents involving passenger ships, including groundings and, most seriously, the sinking of the MS **Explorer** in 2007. Incredibly, they caused no loss of life or serious pollution, but it was widely acknowledged that any of these incidents could easily have had a much worse outcome.

“The harshness and remoteness of the Antarctic environment means that people in the water or even in lifeboats are at great risk while they wait for rescue – which may be up to several days sailing away, depending on the location,” says MNZ Environmental Analyst and Antarctic specialist Dr Alison Lane.

“Also, huge numbers of vulnerable wildlife are confined to limited areas, so an oil spill in the region could potentially have a very large impact, and the challenges to mounting an effective oil spill response in the Antarctic are almost insurmountable.”

In response to these risks, the Antarctic Treaty Consultative Meeting (ATCM) accepted New Zealand’s offer to host a

meeting of experts on Antarctic and maritime issues. As well as parties to the Antarctic Treaty, the meeting included representatives of the International Maritime Organization (IMO), the International Hydrographic Organization, and the Antarctic tourism industry.

“Over 3 days, this group discussed in detail the many challenges facing shipping in the area, and looked at what was needed to minimise the risk of a humanitarian or environmental disaster in the Antarctic,” Alison explains.

“As a result of the meeting, a detailed report on the issues has been prepared by New Zealand, and this will be used to guide the work of the ATCM to develop better ways to manage shipping activities in the area. In addition, strong bonds were built between the various international organisations with responsibilities for shipping in the Antarctic, which will greatly improve how they work together in the future,” she says.

“Of particular value are a number of proposals now being developed to ensure that the proposed IMO Mandatory Polar Code for shipping is strongly supported, and that the code takes account of the unique conditions and risks to ships in the Antarctic.”



Maritime and Antarctic experts from around the world met in Wellington to discuss ways of protecting the unique region from risks arising from increased shipping activity.

Inset: Large numbers of vulnerable wildlife are confined to limited areas, so an oil spill in the region could have a very large impact. The tallest and heaviest of all penguin species, Emperor Penguins are endemic to Antarctica.

Thousands 'make the switch to 406'

A year on from the worldwide decommissioning of the 121.5 and 243.0 Megahertz (MHz) emergency distress beacon network, more than 7,751 New Zealanders have 'made the switch' to the new 406MHz type of beacon.

On 1 February 2009, the global satellite system used to detect all 121.5 and 243.0MHz distress beacon alerts was switched off, bringing to an end the hundreds of false alarms received by the Rescue Coordination Centre New Zealand (RCCNZ) each year.

Prior to their phase-out, 121.5 and 243.0MHz distress beacons were responsible for 93 percent of all false alarms in New Zealand, and 97 percent of false alarms worldwide, often resulting in costly and unnecessary searches by response agencies.

RCCNZ is responsible for responding to all 406MHz distress beacon alerts within New Zealand's search and rescue region, and maintains the database for all beacon registrations – a free, confidential service provided to all beacon owners.

Last year it responded to 381 beacon incidents – an average of over seven each week – with 91 of these for real distress situations. These figures include 68 alerts from now-defunct beacons in January 2009, with only one of these for real distress and 11 known to be false alerts. By contrast from 1 February 2009 to 1 February 2010 (with only 406MHz alerts being recorded) there were 319 alerts, with 98 of these for real distress situations.

RCCNZ's General Manager Safety Services, Nigel Clifford, says the changeover has resulted in a greatly reduced number of false alerts – with the beacon registration database allowing RCCNZ to contact a beacon's owner or their emergency contacts to verify their situation, before mounting a potentially costly and unnecessary search.

"The other thing we are noticing, in addition to the greatly reduced number of false beacon alerts, is a much quicker general response time for those who are in trouble and need help," says Nigel.

"This is because of the more accurate positional data provided by the 406MHz type of beacon, and the ability to link each beacon with a registered owner and confirm their status, which greatly assists us in our response. Of course, the system only works if the beacon contact details are up to date," he says.

Response times can also be enhanced even further when the beacon is a model fitted with GPS, which provides accurate positional information to within about a 120 metre radius.



A year after the old distress beacon satellite network was switched off, more than 20,000 406MHz beacons were registered with RCCNZ.

There has been a growing number of RCCNZ-co-ordinated rescues in which people in distress have been able to be rescued very quickly – sometimes within 90 minutes – because they have been carrying a registered beacon with up-to-date contact details and have left behind accurate trip details.

"While there is no question that carrying a beacon could save your life, it is no replacement for careful planning and preparation, including carrying the right equipment, and letting someone know where you're going and when you're likely to be back," says Nigel.

Figures at the first anniversary of the switch show more than 20,000 beacons are now registered in New Zealand – an increase of 7,751 on a year ago. Nigel says a number of factors appear to be behind the growing number of people carrying beacons when undertaking outdoor activities.

"In particular, we are noticing more outdoors people buying and using personal locator beacons. These are light and compact, and are coming down in price all the time as the technology improves and becomes more readily available. More positive publicity about the safety benefits of carrying a beacon is also having an impact."

He says a downside of the beacon switch has been some people incorrectly disposing of their old beacons. These may still be picked up by passing aircraft, generating a number of wasteful searches of landfills.

"If people have an old 121.5 or 243.0MHz beacon they wish to dispose of, it's vital that the battery is disconnected so its signal cannot be accidentally transmitted and picked up by passing aircraft," says Nigel. If people are unsure how to dispose of their beacon, they can take it to a local beacon retailer, Police station, Coastguard unit, or call RCCNZ on 0800 406 111 for assistance.

Oiled wildlife responders prepared

New Zealand is one of several nations leading the world in developing a comprehensive system to deal with the effects of marine oil spills on wildlife.

MNZ is responsible for maintaining a nationwide capability to respond to oil spills of any size. This capability is a collaborative system, involving partnerships between MNZ, regional councils, the oil industry, and overseas agencies.

When wildlife is involved in an oil spill, the National Oiled Wildlife Response Team (NOWRT) may be mobilised.

This team, with members from around the country, is trained, managed and co-ordinated by specialists at Massey University's New Zealand Wildlife Health Centre, under contract to MNZ.

Four NOWRT members recently attended and presented papers or posters at the 10th international Effects of Oil on Wildlife Conference in Tallinn, Estonia.

MNZ's Jim Lilley, a NOWRT member, says the conference addressed a wide array of issues relating to oiled wildlife response, with sessions including hands-on practical workshops and discussions on management and government liaison.



Jim says New Zealand is punching well above its weight in terms of its response preparedness.

A database set up by the Netherlands-based Sea Alarm Foundation shows New Zealand's response system ranks among the best in the world.

The Sea Alarm Foundation is an organisation that works with governments, non-government organisations, and the



Above and left: Delegates attempt to catch 'Roboduck' during one of the conference workshops. Roboduck provides a genuine element of unpredictability when learning to capture wildlife, without actually harassing live birds.

maritime and oil industries to improve oiled wildlife response systems around the globe. As part of its work, Sea Alarm has been developing the Country Wildlife Response Profiles database since 2005, to assess and record how prepared countries are for an oiled wildlife incident.

The preparedness of 78 coastal countries has been examined, with 70 countries still to be measured.

To assess a country's preparedness, the foundation considers factors such as a country's at-risk wildlife and habitats, the response systems that are in place, and the country's capacity in terms of responders, facilities and co-operation. Country profiles are formed based on interviews, questionnaires, visits to the country, and input from international organisations.

Countries are ranked in four main categories of preparedness. These categories range from 1A (the best) through 1B, 2A and B, to 3 and 4 (with 4 the least prepared).

New Zealand is one of only four countries that have attained the 1A ranking. The others are South Africa, Belgium and the Netherlands.

Jim adds that, of the 78 countries measured, only 11 are well prepared to respond to an oiled wildlife incident – according to conclusions drawn from database results.

"This ranking reflects the commitment and hard work put in by the many New Zealanders involved in oiled wildlife response. We have an excellent network of responders in New Zealand and a fantastic team at Massey," says Jim.

"We can be proud that we are among world leaders in our preparedness for an oiled wildlife response."



‘Aqua Have a Go Day’ hits the spot

The West Coast turned on a stunning summer’s day for the annual Lake Brunner Aqua Have a Go Day in late January.

Jim Lilley, MNZ’s South Island-based Small Craft Safety Advisor, says the purpose of the day is to allow people to try out various water-based activities in a safe environment, while gaining an appreciation of the lake’s many different recreational opportunities.

He says conditions on the day were perfect, with hardly a cloud in the sky and so little wind that those who tried the yachting did not have a very exhilarating time at all.

The theme this year was ‘supervision without distraction’. The foreshore of Moana/Lake Brunner was divided into sections, each under the direction of local experts, to allow all who turned up a chance to ‘have a go’, with different types of activity and skill levels catered for.

“Everyone going out on the lake for the day was given a map so that they could avoid the allocated areas, particularly



There was a good turn-out, with people lining up for repeat rides. The most popular activities were those involving speed.

those covered by a temporary speed uplifting approved by MNZ. No one was allowed to participate in any activity without first being correctly fitted with a lifejacket,” Jim says.



Kayaking instruction and supervision were provided, with children encouraged to have a go.

A huge range of supervised activities were available for people to try. At one end of the Moana foreshore was yachting, with a range of P class, lasers, hobi-cats and trailer-sailers for people to enjoy. The next area was set aside for kayaking.

Participants were given a briefing about the kayak they wanted to try, and then let loose in the assigned area. This area was patrolled by two experienced paddlers who acted as safety vessels and provided additional tuition to those on the water.

Along the foreshore were those who were more inclined towards passive pursuits, including some more interested in filling up the lake with dirt and stones! There were also those who just wanted to swim or simply walk or play near the water, while others either swung off the tree rope or leapt from the swing bridge – all supervised activities.



Wind-powered activities lacked the x-factor in the calm conditions.



Tree rope swinging and bridge jumping (both supervised) were popular as well.

However, Jim says the most popular activities were those involving speed, and lots of it! "People had to queue up to be fitted with a lifejacket and wait their turn to go for a ride on a jet boat or a biscuit. It seemed that every time you turned around, the queue got longer. Some would come off one ride then join the next queue, but when they had tried both, they would queue again and go for another ride.

"Judging by the smiles and thumbs up all around, everyone enjoyed their introduction to the various activities that make Lake Brunner the special place that it is. It was a well-organised and safe fun day, and we look forward to next year's event," says Jim.

News and updates

Maritime Rules Part 42B: Safety Equipment – Fire Appliance Performance Standards

The rules for the inspection, testing and maintenance of portable fire extinguishers are being amended. The amendment will allow a person designated by the owner, operator or master of a ship to carry out routine inspections of portable fire extinguishers as specified in the vessel's maintenance plan.

Testing and maintenance of portable fire extinguishers must still be undertaken by a competent person. A competent person is a person with relevant industry training and experience or qualification from an applicable industry training programme, which is recognised by the New Zealand Qualifications Authority.

This amendment is expected to come into force in April 2010.

For more information email:
rules.coordinator@maritimenz.govt.nz.

Progress on dangerous goods rule amendment

A long-awaited amendment to *Maritime Rules Part 24A Carriage of Cargoes – Dangerous Goods* is a step closer to being finalised.

The next step is for the proposed rule amendment to go to the Ministry of Transport for pre-consultation review, prior to formal consultation with industry.

Once the Ministry has reviewed the proposals, MNZ will undertake the formal consultation at the first opportunity. Due to the detailed and technical nature of the proposed amendment, this is most likely to occur in the second half of 2010.

Update on rules relating to semi-trailer lashing points

The Ministry of Transport has recently co-ordinated moves to develop changes to both the maritime and land transport legislation relating to truck semi-trailer lashing and securing points for use on ferries.

Discussions between MNZ and the agencies involved has led to a plan to co-ordinate rule amendment proposals to both *Maritime Rules Part 24B – Carriage of Cargoes – Stowage and Securing*, the *Land Transport Rule: Heavy Vehicles 2004*, and the *Land Transport Rule: Vehicle Standards Compliance 2002*.

The objective of this co-ordination is to introduce and support the requirements of Part 2 of the New Zealand Standard NZS 5444:2005 in a way that assists the owners of both semi-trailers and shipping operators to ensure semi-trailers have certified lashing and securing points.

A meeting is planned with industry groups from both land and sea to gain their input and outline the proposed approach.

Marine protection rules publication update

MNZ is to publish a revised version of *Your Guide to the Marine Protection Rules*, to update the 2003 version of the guide with information on new rules and amendments to rules made over the past 7 years.

It will include a new section on upcoming marine protection rules, and more explanation about the consultation process used in rules development. The basic aim of the guide is unchanged – to help you quickly identify the scope and purpose of various marine protection rules, and their potential relevance to your business or leisure activities.

Production of the guide is currently underway and it will be published before the June issue of *Safe Seas Clean Seas*. The guide will be available from the MNZ website and in hard copy free of charge by emailing publications@maritimenz.govt.nz.

Get the latest safety updates

Seven guidance notices were issued in the last quarter of 2009, along with one safety bulletin. These are available on the MNZ website at www.maritimenz.govt.nz/safety-updates.

You can subscribe to safety updates and receive the latest bulletins and guidance notices via email from the above address.

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 **MARITIME**
NEW ZEALAND

In this issue of *Safe Seas Clean Seas*, we continue our occasional series “Keeping the lights on”, which focuses on some of our most iconic and historically significant landmarks – the classic lighthouses of New Zealand.

Waipapa Point

It was a tragic accident at Waipapa Point that prompted the development of some of the most significant safety procedures in New Zealand’s maritime history.

Located near the southern-most point of the South Island 40km east of Bluff, the area marks the scene of New Zealand’s worst civilian shipwreck. On 29 April 1881, 131 people were lost when the passenger steamer **Tararua** was wrecked on a reef off the point. The **Tararua** was on one of its regular trips between Otago and Melbourne, via Bluff.

A subsequent court of inquiry recommended that a light be erected on the point. A light was ordered from England immediately, and work began on building the wooden tower and houses for three keepers and their families. It was the second-to-last large wooden lighthouse tower built in New Zealand, and its light was lit for the first time on New Year’s Day in 1884.

Two other significant recommendations by the court marked an important turning point in New Zealand’s maritime safety procedures. From 1882, lifebelts had to be provided for every person on board a ship, and crews were to regularly practise lifeboat evacuation procedures.

Not far from the tower is a small plot of land known as the Tararua Acre. It is here that many of the bodies recovered from the wreck are buried.

Despite the light station being close to the port town of Fortrose, which meant keepers’ families were able to get supplies, attend church, and send their children to the local school, Waipapa Point was still a remote place.

Above: Waipapa Point lighthouse marks the site of New Zealand’s worst civilian shipwreck, the loss of the steamer Tararua in 1881.

Today the lighthouse is automated and monitored remotely from MNZ’s Wellington office. Waipapa Point is accessible to the public, although the lighthouse itself is not. The lighthouse is all that remains of the original light station. The keepers’ houses and associated buildings have been removed.

In recent years the lighthouse has been restored to make it weatherproof and secure from vandalism, to help ensure its historic character is retained.

Waipapa Point lighthouse at a glance

Location	latitude 46°40’ south, longitude 168°51’ east
Elevation	21 metres above sea level
Construction	wooden tower
Tower height	13 metres
Light configuration	flashing LED beacon
Light flash character	white light flashing five times every 20 seconds
Power source	batteries charged via solar panels
Range	9 nautical miles (16 kilometres)
Date light first lit	1884
Automated	1975
Demanned	1975

More on this and other lighthouses is available on our website: www.maritimenz.govt.nz

Cape Jackson Rock tower upgrade



MNZ has upgraded the light beacon tower at Cape Jackson Rock at the entrance to Queen Charlotte Sound.

MNZ Lighthouse Engineer Jim Foye says the aim of the upgrade was to remove the corroded top steel section of the tower, to improve safety on site and reduce maintenance costs.

The project took a day to complete. "It involved cutting the steel into manageable sections, installing a new beacon pedestal, and repainting the top section white to improve the tower's visibility during the day. The light remained fully operational during the upgrade and the improvements will make one of MNZ's more difficult sites to access a lot safer to maintain," says Jim.



Above: MNZ recently upgraded its difficult-to-access light beacon tower at Cape Jackson Rock to improve on-site maintenance costs.

Left: Cape Jackson Rock Beacon.

Sign up for consultation updates

We are looking at better ways of keeping you informed about consultation through our website's online services.

MNZ has launched an RSS feed that promotes new consultation or public engagement programmes as they become current.



For information on how to subscribe to the email service and on how RSS feeds work visit:



www.maritimenz.govt.nz/rss

28

Maritime fatalities 2009

From 1 January to 31 December 2009 there were 28 fatalities – 4 in the commercial sector and 24 in the recreational sector.

This compares with 11 commercial and 16 recreational fatalities in 2008.



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ISSN: 1175-7736