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SAFE SEAS CLEAN SEAS

Welcome to this latest edition of
Safe Seas Clean Seas.

I'm pleased to announce that Maritime New Zealand's Statement of Intent (SOI), which sets out our strategic direction and core priorities until 2010, will be released very soon.

To add clarity to our planning, we have split the SOI into two categories. The first category, strategic priorities, reflects the key areas where we need to make progress to support the Government's goal of driving economic transformation in the transport sector, while also contributing to the New Zealand Transport Strategy.

The strategic priorities include enhancing the sustainability and effectiveness of the Safe Ship Management system, developing a compliance policy that is transparent, fair, consistent and understood by industry and ensuring that our internal strategies support the effective and efficient operation of MNZ.

The second category, core priorities, reflects the activities that MNZ must continue to provide and maintain on behalf of the maritime industry, government and other key stakeholders.

The core priorities will sit above and guide our work programme over the 2007/2008 year and include to:

- enhance the regulatory framework governing the maritime industry, focusing on consistency, safety and sustainability
- enhance our safety and response services, including aids to navigation, distress radio, environmental protection and search and rescue
- complete the review of the National Recreational Boating Strategy and implementation of its recommendations
- contribute to the implementation of new marine environmental pollution prevention measures
- strengthen partnerships with all sectors of the maritime community to promote safety, security and environmental protection, with a focus on education
- enhance MNZ's ability to contribute to New Zealand's ship and port security, particularly in maritime domain awareness.

The SOI will be published on our website by July. I encourage you to have a look at it and I also welcome your feedback.

Catherine Taylor
Director of Maritime
New Zealand



SAFETY

STAYING "BRIGHT ON TOP" Paddling to be seen

"Staying bright on top" is the focus of new kayak safety guidelines being developed by MNZ in collaboration with the paddling community.

The guidelines, which will soon be available as a brochure, on DVD and on the MNZ website, encourage recreational kayakers, canoeists and others using low profile watercraft on New Zealand's lakes, rivers and seas to be safer by making themselves more visible to other boaters.

Jim Lott, MNZ's Manager of Recreational Boating, says the number of accidents and near misses involving kayaks has prompted the development of the resource, which has been strengthened by input from New Zealand sea kayakers.

Jim says while boaters are required by maritime rules to keep a proper "look out" and maintain appropriate speeds around other water users, there are many factors that can prevent them from seeing kayakers and other craft which sit low in the water.

"Conditions such as choppy water, fog, glare, sun strike, rain, wind in the eyes, salt spray on the windshield, poor vision or a combination of any of these can affect a boater's ability to spot a small craft in the water.

"However, there is a lot that kayakers and others using similar craft can do to dramatically improve their visibility – and therefore their own safety – when sharing the water with others."

MNZ Safety Auditor Colin Sonneveld says the first step in the process is for kayakers to assess their current equipment, clothing and behaviour on the water to get an idea of how easy or hard it is for others to see them.

Colin says the best way for kayakers to gauge this is by giving themselves a "visibility impact score or VIS. The higher the VIS rating, the higher the likelihood you will be visible to other boaters.

"The trick to being safe is being seen – and paddling smarter by using the right combination of colour, contrast and movement to maximise your visibility.

"Because sunlight levels change during the day, having a range of bright, contrasting colours on your clothing and equipment means that different parts of you will still be visible, even as the light fades.

"The most visible colours on the water are day glow or fluorescent orange and yellow, as they contrast against all other naturally occurring colours and shades," says Colin. "This contrast is another key component in increasing your VIS potential.

"You can also maximise your VIS potential by displaying contrasting colours from the top down. The higher you can create the colour flow the further you can be seen."

KAYAK VISIBILITY TIPS

Use your head

As your head is your highest point, make it as bright as is possible. Day glow orange or yellow hats are excellent VIS attractants.

Blazing paddles

Motion is another important visibility tool. Because your blades are in constant motion while paddling, you can increase your visibility by using reflective tape on blades or shafts, combined with strips of day glow tape. This combination will allow your paddle to catch and reflect sunlight as well as create flashes of day glow.

Dress to impress

Wearing a day glow orange or yellow paddle jacket or over-shirt offers the highest VIS potential. If your torso is not covered in day glow, consider having a bright coloured paddle jacket which is a different colour to your kayak, personal flotation device (PFD) and paddle blades.

Bright is best

Choose a PFD in a bright colour. To maximise your VIS potential, consider having a PFD that is a different colour to your kayak, paddle blades and paddling jacket. Contrast the colours for maximum affect.

Fly the flag

Day glow orange and yellow chopper flags provide a permanent bright flash at the same height as the rotational arc of your paddle blades. Consider always using a flag if you are fishing from a kayak in a stationary position, as you don't have the additional visibility of your moving paddle blades.

Choose a colourful craft

Choose a kayak in a bright contrasting colour. The highest VIS potential is achieved when your boat contrasts to the sea and surrounding back drops. To increase your kayak's visibility, consider adding flashes of day glow or reflective tape. Multi-coloured bright kayaks provide increased contrast.

Be bright at night

Maritime rules require that as a **minimum**, kayakers must carry a torch to prevent collision. However, holding a torch may prevent you from paddling effectively and therefore being seen!

Wearing a head torch allows your arms to be free to paddle. In addition, mounting an all-round white light (or a red, green and white sector light) on your rear deck above head-height means you will be visible from all directions.

Stick together

If travelling in a group, particularly at night, it is recommended that kayakers carry two light sources, such as a head torch and an all-round white light.

When paddling in a tight pod, if the rear paddler has their all-round light turned on, the group will be visible from behind and other members will not be blinded. The lead kayaker should also have their head torch on and shining forward, which won't affect others' night vision. All paddlers should then only need to use their lights when there is approaching traffic. Don't use flashing strobe lights unless in an emergency.

Attaching reflective tape or strips to your kayak, paddle and clothing will maximise your VIS potential at night. Shining your torch across the strips can also help you to be seen.

COVER STORY



Cover and inside pics: MNZ Safe Boating Adviser, Ian Galhaem, shows how to "stay bright on top".



Record turnout for Spillcon

A record 400 delegates attended Spillcon 2007, the 11th marine environmental protection, prevention and response conference for the Asia Pacific region, recently in Perth.

The week's programme kicked off with a keynote address by Fiona Woods – Australia's leading plastic surgeon, who pioneered the use of "spray-on" technology for burns victims. Her inspiring insight into her life, work and the importance of preparedness through exercising emergency arrangements set the scene for the rest of the conference.

The conference's theme was "Global, Regional, Local". For MNZ Director Catherine Taylor (who attended with an MNZ delegation from around New Zealand) the highlight was the **MSC Napoli** presentation.

"It's one of those maritime incidents that will be around for a long time yet, given the circumstances of this event.

"But the fact that the chosen place of refuge was a world heritage site certainly sets a worldwide precedent for the use of places of refuge. Most commentators have however agreed that environmental damage was minimised as a result."

Among the presentations were those of Nick Quinn and Neil Rowarth from the Marine Pollution Response Service, Nick dealt with Exercise Hard Rock and the need to "burst the traditional bubble" when planning for oil spill response exercises.

Final papers from the conference will be shortly available to download from: www.spillcon.com



Spillcon attendees were treated to an on-water display featuring a helicopter equipped with dispersant spraying equipment.



Nick Quinn (left) chats with UK Maritime and Coastguard Agency Head of Counter Pollution Toby Stone, Catherine Taylor and MNZ Deputy Director Safety and Response Service Peter Williams.

SSM is core business ...

An ongoing commitment to improving marine safety is behind an internal focus on Safe Ship Management (SSM) systems by MNZ.

Introduced in 1998, the SSM system is about having a consistent approach to safety on vessels. As well as focusing on regular vessel and equipment maintenance, it requires operators to ensure that they have good systems in place to protect themselves and their crew from hazards.

This is aligned with the core SSM philosophy that a safe working environment is more likely when the owners, skippers and workers on vessels take responsibility for their own safety. Currently, more than 3200 vessels are covered by the system.

"As Maritime New Zealand is constantly monitoring the SSM system, we are also always looking at areas where improvements can be made, with the ultimate goal of making the sector as safe as possible," says John Mansell, MNZ General Manager of Maritime Operations.



"We will be conducting a formal consultation process on any draft rule amendments and are keen to hear from industry about what its wish list for any amendments might be. Anyone with ideas on this is invited to get in touch with us."

"The renewed focus is an essential part of this ongoing commitment to safety, and is an important tool in responding to issues raised by those working in the sector.

"Reviews of SSM have all found that the philosophy behind the system is sound, and that since it was introduced, safety statistics in all commercial maritime sectors have improved.

"However, while feedback from the industry shows solid support for the intent of the system, it is clear to MNZ that there is still room for improvement in how the system is implemented and delivered by us and SSM companies," says John.

"Following the feedback we've received from the sector, it's clear there are a number of issues we need to look at, such as the complexity of the system for smaller operators, a need for better communication between key players and guidance for operators. We will of course be consulting fully with the maritime sector on proposed solutions to the issues.

"As part of this work, MNZ is revising Maritime Rule Part 21, with the aim of addressing some of the gaps and inconsistencies identified by the sector that exist between the current legislation and the SSM Code of Practice.

"We will be conducting a formal consultation process on any draft rule amendments and are keen to hear from industry about what its wish list for any amendments might be. Anyone with ideas on this is invited to get in touch with us."

More information

Contact John on (04) 473 0111 or email john.mansell@maritimenz.govt.nz

New safety guidelines

A new safety resource, *Safety guidelines for passenger and non-passenger vessels*, is being produced by MNZ.

These guidelines provide information and a best practice approach to the normal hazards and dangers found on small passenger and non-passenger vessels. They were put together by operators of commercial passenger and non-passenger vessels for everyone working on these types of vessels, eg charter water taxis, charter yachts and passenger ferries.

Based on the successful FishSAFE publication (*Safety guidelines for small commercial fishing vessels*) the new guidelines are intended to help operators put in place training, practices and procedures to ensure safe ways of working and reduce losses due to injury, accidents and incidents.

They will help owners, skippers and crew to meet their legal obligations under the Health and Safety in Employment Act 1992 and maritime rules, particularly Safe Ship Management.

MNZ is working with SSM companies on an implementation plan to roll out these guidelines to all operators of passenger and non-passenger vessels before the end of the year.

New freeing port rules explained

MNZ has now clarified the rules around the use of freeing port covers, as part of a review of Rule Part 40D. The review was initiated after inspection of a number of fishing vessels showed that none were 100% compliant.

Following the review, a working group made up of MNZ and industry representatives was formed to look at the rule and produce a clear interpretation of it.

Effective freeing ports are essential for the safety of vessels and crew, as blocked ports retain water on deck. This causes free-surface effect, a reduction in freeboard, and an increase in the centre of gravity, all of which are contributing factors in the capsize of fishing vessels.

As a result, MNZ recently wrote to every fishing vessel owner in the Safe Ship Management (SSM) system highlighting the risks associated with blocked freeing ports, and explaining the rules.

All vessel owners have 3 months, or until the next out-of-water survey (whichever comes first), from the date of the letter to fix their vessels' freeing ports if they do not comply with the rule requirements. This means no sliding covers and no permanent means of closure on the freeing ports.

The rule regarding freeing ports may now be enforced under two circumstances:

- if a Maritime Safety Inspector (MSI) visits a vessel after the 3 months and it is found to be in contravention of the rule, the vessel may be detained by the MSI
- if a SSM surveyor finds a vessel to be in contravention of the rule during its next out-of-water survey, the SSM certificate may be suspended by the SSM company.

For more information about Rule Part 40D:

- see MNZ *Safety Bulletin Issue 7* at: www.maritimenz.govt.nz/publications/safety_bulletins/sb_issue7.pdf
- phone: 0508 22 55 22.

Wake up to fatigue ... guidelines coming soon

Helping prevent accidents on smaller vessels caused by fatigue is the focus of new guidelines to be rolled out shortly by MNZ.

MNZ Human Factors Analyst Wayne Perkins says the guidelines have been developed in conjunction with the industry in response to concerns over the number of accidents on smaller fishing boats caused mainly by lack of sleep.

"While fatigue has always been a feature of life at sea, in the past there has been very little in the way of programmes available to assist seafarers manage the issue effectively," says Wayne.

"We're not about trying to stop people operating, but if fatigue is an issue for them, we want to help them manage it more effectively so that they can still achieve what they want to achieve – while doing it safely."

Research by MNZ shows there have been around 50 accidents in the last 10 years on smaller fishing boats caused by watchkeepers falling asleep, resulting in many of the vessels running aground. The vessels involved were typically between 12–20 m long, and in most cases, the other crewmembers were also asleep.

Wayne says the guidelines have been kept short and are written to be useful to operators of small vessels. They will initially be available for smaller fishing vessels, charter fishing boats, work boats and harbour ferries. Guidelines for port service boats (such as tugs) and aquaculture vessels are to also be developed, while additional information will be available for operators of larger vessels and fleets.



Fatigue is a causal factor of too many accidents.

"The guidelines have come about as a result of us working with the industry to find out what factors drive fatigue, and then coming up with options for managing it. The guidelines have all been written largely by those working in the industry and not by us – so has very much been developed 'by the people for the people'."

"The idea of the guidelines is that they are a very practical resource, which allows individual operators to identify potential hazards on their vessels that might be caused by fatigue and come up with solutions that work for them – without overwhelming them with paper."

In addition to the guidelines, Wayne says MNZ and Safe Ship Management (SSM) staff will be trained to provide assistance and answer questions relating to fatigue prevention.

Once the guidelines have been published and MNZ and SSM staff have been trained, fatigue management plans will be required for vessels where this is an issue. An implementation plan for this is still to be finalised.

FishSAFE initiative to be extended

A successful ground-breaking initiative to improve safety in the fishing industry is to be extended to the aquaculture sector.

Launched by Transport Safety Minister Harry Duynhoven in May last year, the FishSAFE guidelines for small commercial fishing vessels were created in response to the high rate of injuries among those working in the sector.

Since then, almost 500 people have attended FishSAFE training workshops, with fishermen, industry representatives and other key players hailing the initiative's success.

"Following the success of FishSAFE Safety Guidelines for Small Commercial Fishing Vessels, we're now working closely with the Seafood Industry Training Organisation and the aquaculture

industry to develop safety guidelines for aquaculture vessels," says MNZ Manager of Safety Research and Analysis, Sharyn Forsyth.

"These guidelines will provide focused advice on the management of hazards in the aquaculture environment, and will be delivered through a one-day workshop. This will be supplemented by a mentoring scheme, where people with experience in the aquaculture sector support others to implement the guidelines in their operations."

Sharyn says a 10% reduction in their current ACC levy is available to those who complete the workshops, work with an approved mentor, and have their application accepted by ACC. The aquaculture guidelines and associated training will be launched in July.

Safety update – mooring hazards and liferaft maintenance

Safe mooring practice and effective liferaft maintenance are among recent issues highlighted in MNZ's safety bulletins.

The dangers of mooring line hazards such as bights and recoils from broken lines have been focused on following the death of a seaman on board a container ship in May last year. The seaman suffered fatal injuries after he was caught in the bight of a mooring line, which had become snagged underneath the wharf as the ship pulled away from its berth. This caused the rope to unexpectedly tighten around the seaman and he was dragged through one of the ship's mooring bits.

The accident has also highlighted the need for effective bridge resource management procedures during berthing operations, as well as clear communication between pilots and ship masters, particularly when the common language on board is NOT English.

A previous accident occurred in the 1990s at another port, resulting in the death of four seamen when a broken mooring line recoiled onto the foredeck of the ship.

Vessel owners and operators also need to ensure that liferafts and their release mechanisms are properly maintained if they are to work effectively, as a liferaft is still the best means of survival in the event of a capsize and/or sinking.

Common problems with liferafts, however, include:

- being stowed in areas where rigging prevents the raft from being released

- cradles which are too tight to allow release
- lack of protection to prevent accidental inflation
- gear being stowed on the raft that prevents effective deployment
- poor access to the raft when it is stored in a difficult place, such as the wheelhouse roof.

Liferaft release mechanisms, whether hydrostatic or manual, also need to be working properly if the liferaft is to work in an emergency.

Common problems with hydrostatic release units (HRUs) include the painter being connected to the vessel and not the weak link, so when the liferaft inflates, it sinks with the vessel. Other problems include the disposable HRU being out of date or out of service and therefore not functioning, or with no expiry date marked so that it is not known when the unit should be replaced.

Common problems with manual liferaft release mechanisms often include difficulty releasing the raft due to seized parts or lack of maintenance, or problems getting the raft over the side because of guardrails or rigging getting in the way.

More information

- Download *Safety Bulletin Issue 9: Manpower and responsibilities during mooring operations* and *Issue 10: Liferafts and their release mechanisms* at: www.maritimenz.govt.nz/publications/safety_bulletins.asp
- Join our mailing list by contacting us at: enquiries@maritimenz.govt.nz

Amendments to Rules Parts 47 and 91

An amendment to Maritime Rules Part 47 Load Lines was signed by the Minister for Transport Safety in April and came into force on 1 June 2007.

The amendment brings the rule up to date with the latest version of the International Load Line Convention. It also directly incorporates the convention for ships over 24 m in length and will make future amendments simpler and hopefully quicker.

And, an amendment to Maritime Rules Part 91 Navigation Safety Rules has also been signed and will come into force on 28 June 2007.

This amendment requires the International Code of Signal type "A" and "B" flags to be at least 600 mm², provides clarification of the requirement on persons being towed to wear a personal flotation device and requires vessels to keep as near to the starboard side of the river "as safe and practicable".

Copies of the rules

You can:

- download from: www.maritimenz.govt.nz/rules/rules_ legislation.asp
- purchase from Baseline Limited, PO Box 30390, Lower Hutt, ph (04) 576 1686, fax (04) 576 1690, or email baseline@baseline.co.nz

A live example of the prevailing wind on the Chatham Islands!

Chatham Islands maritime radio upgrade

A new and improved maritime radio system for the Chatham Islands is due to be up and running by mid-June.

MNZ Radio Engineer Sean Crawford says the upgrade will bring channel 16 to the Chatham Islands, with 24-hour-7-day-a-week monitoring by the Maritime Operations Centre (MOC).

Sean says this will give local people and visitors the same level of radio service that is offered around the rest of New Zealand.

Since 1993, Chatham Islanders have been using land-based radio monitoring, which has been provided by locals with radios in cars and from houses tuned into repeaters on channels 60 and 62. The MOC has also been using the system to broadcast local weather and navigation information four times a day.

The new system will retrain the repeaters on channels 60 and 62, but using new equipment. There will also be technology in place to monitor the new equipment and trigger an alarm if anything fails.



Construction work at the Rangitihia radio station.

Feedback

Your feedback and ideas on *Safe Seas Clean Seas* are very welcome.

If you'd like a particular topic covered in our next edition, then please contact the publications team by email: publications@maritimenz.govt.nz or phone **0508 22 55 22**.

From 1 January
to 31 May 2007

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MARITIME FATALITIES 2007

From 1 January to 31 May 2007, there were **eight** fatalities – **two** in the **commercial sector** and **six** in the **recreational sector**.



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