SAFESEAS CLEANSEAS

Distress beacon campaign under way

2

Major survey of vessel owners under way

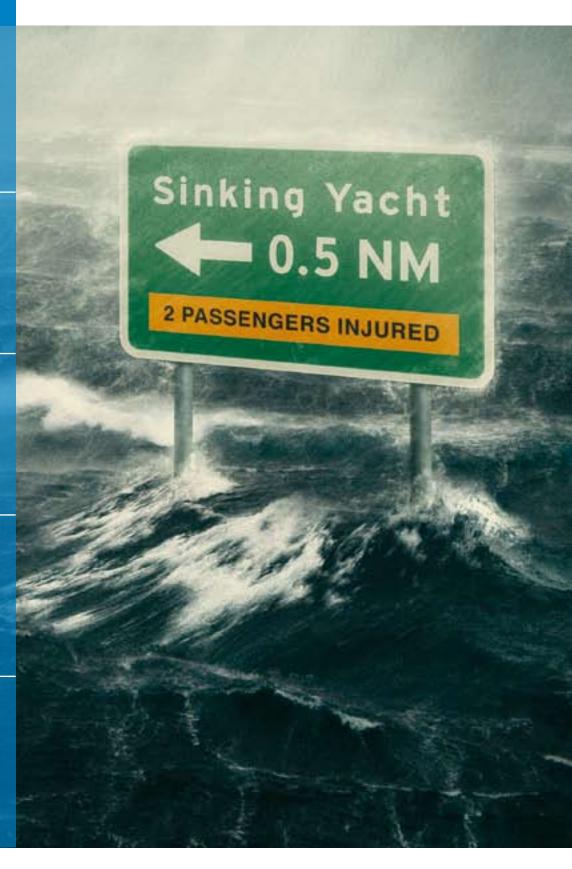
6

Boating campaigns kick summer off around New Zealand

6

Catch the safety lessons from recent accidents

10





Search & Rescue

SAFESEAS CLEANSEAS

Welcome to the final edition of Safe Seas Clean Seas for 2005.

Not surprisingly, there are several articles looking ahead to the summer months of heightened pleasure-boating activity. You will also see from the statistics that fatalities in this area have been falling for some time. It is our sincere hope that this coming summer will keep it that way.

As we approach the year-end, it is also a time to look back upon our activities and the successes we have enjoyed. You will see that life has not been dull! I should like to give special thanks to all relevant people in the New Zealand ports and shipping sectors who have been involved in maritime security matters. The relationships forged with our own staff in this regard have been outstanding and are yet another example of our national characteristic of flexibility and adaptability. We are clearly recognised as world leaders in this area, something we can be very proud of.

Finally, all of us at Maritime New Zealand wish readers and their families the very best for the festive season.

Russell Kilvington Director of Maritime New Zealand

Important information for distress beacon owners

121.5 MHz beacons soon to be obsolete

One of New Zealand's most widelyused types of emergency distress beacons will be obsolete in three years time, prompting the launch of a major campaign last month that encourages owners to switch to new technology.

Distress beacons that operate on the 121.5 Megahertz (MHz) frequency are very popular in New Zealand as a reliable, easy and relatively cheap way of alerting search and rescue services that help is needed.

From February 2009, the monitoring of 121.5 MHz beacons by satellite will cease, meaning owners of these beacons need to upgrade to digital 406 MHz beacons as soon as possible.

Beacon owners throughout the world are affected by the international satellite change. Last month, the New Zealand Search and Rescue Council, which includes Maritime NZ and the Rescue Coordination Centre NZ, launched a three-year educational campaign to warn beacon users of the change, and to advise them to switch to 406 MHz beacons.

Why the change?

The decision to cease monitoring 121.5 MHz beacons by satellite has been made internationally.

Chris Raley, General Manager of the Rescue Coordination Centre NZ, says the primary reason for the international satellite change is that people are much better off with a 406 MHz beacon in an emergency.

"A 406 MHz beacon is vastly superior to a 121.5 MHz beacon. The signal is detected faster, and the area we need to search is cut down by a staggering 97 percent."

"Also, because the details of the 406 MHz beacon owner or operator are registered in a database at RCCNZ, we know within a few minutes who and what we are looking for. That is a huge advantage over the 121.5 MHz beacon technology," he said.

With a 121.5 MHz beacon, an orbiting satellite will take on average 90 minutes to detect the signal — but it can take up to five hours. Once that signal is detected, it will take about 45 minutes to process it. In comparison, a 406 MHz signal may be received within seconds by geostationary satellites, or longer if detected by a polar orbiting satellite (but still sooner than a 121.5 MHz).

The area in which rescuers have to search for the beacon source is also dramatically different. With a 406 MHz beacon, that area has around a 5km radius, and just a 120 metre radius for a 406 MHz beacon that uses Global Positioning System.

In comparison, the position of a 121.5 MHz beacon can only be detected to within 20km, but more information is needed to determine the real location, which usually means at least two satellite passes are required.

Mr Raley says that along with the obvious safety advantages of a 406 MHz beacon, 121.5 MHz beacons are being discontinued because of the large number of false alarms that arise from inadvertent activations.

"Each year valuable hours and money are spent by helicopters in New Zealand searching for beacons that have been accidentally or maliciously activated.

"Even other electronic equipment or unusual atmospheric conditions can cause signals to be detected."

Worldwide, over 97 percent of distress beacon activations are false alarms. In New Zealand, that figure is 93 percent.

Because the New Zealand search and rescue area covers roughly onetwelfth of the world's surface, New Zealand will benefit enormously from a reduction in false alarms and an increase in accuracy.



"All alarms must be tracked to the source, so false alerts waste the valuable time and resources of rescue organisations and volunteers. With a 406 MHz beacon, it's easy for us to find out whether it's a false alarm because you register your beacon with us, so we have all your contact information," he said.

For further information check out the Maritime NZ website: www.maritimenz.govt.nz/rccnz or the 'Switch to 406 MHz' campaign website: www.distressbeacon.org.nz

Ensure your registration information is correct

If you own a 406 MHz beacon, you must register your beacon and ensure your registration information is kept current. This service is free.

Registering your beacon significantly speeds up a search and rescue mission. The Rescue Coordination Centre New Zealand (RCCNZ) can quickly find out who you are, and the vessel you may be in. This information cuts down the time taken to find and rescue you, which is critical when

Registering your beacon also helps eliminate false alarms, which divert search and rescue assets away from genuine emergencies, as RCCNZ can quickly find out whether you are actually in trouble.

A 121.5 MHz frequency beacon cannot be registered.

You must inform RCCNZ if you change any information on your registration (such as your phone number, address, or your vessel), or if you sell your 406 MHz beacon.

If you are unsure whether your beacon is registered, or whether your information is correct, call RCCNZ on 0800 406 111 and ask a search and rescue officer to check.

rccnz@maritimenz.govt.nz

406 Beacon Registration Section, Rescue Coordination Centre New Zealand PO Box 30050, Lower Hutt

0800 406 111

04 914 8388

This summer, mariners and boaties around New Zealand, along with aviators and outdoor enthusiasts, will begin seeing posters, brochures and advertisements, advising them to swap their 121.5 MHz beacons for a 406 MHz beacon. The campaign material features road signs such as this one.

Next major oil spill exercise set for April

Every four years, a major oil spill exercise is held to ensure New Zealand is prepared for the real thing.

Sometimes these exercises can be superseded by experience gained in an actual incident, such as the grounding of the *Jody F Millennium* in Gisborne in 2002.

The next major exercise is set for April. However, two recent events, as detailed below, had the potential to make this exercise redundant too.

Two recent events test oil spill preparedness

Although they didn't result in actual oil spills, two recent events show there is always potential for incidents to happen 'out of the blue' and quickly present a major threat to the environment.

In the first event, a 19-tonne pallet was dropped on a container ship while it was being unloaded at Ports of Auckland in September. The *Tasman Trader* held 230 tonnes of heavy fuel oil in its tank. The crew rapidly transferred 70 tonnes to a separate fuel tank, and 150 tonnes into the cargo hold, which left 10 tonnes in the damaged fuel tank.

Heavy fuel oil has a heating temperature of 50 degrees Celsius, so once cooled it becomes extremely viscous and difficult to remove. The problem with this scenario was that there was no way to reheat the oil once it was released into the hold.

The Maritime NZ Marine Pollution Response Services team was called in due to the unique nature of this event and the equipment that only they could provide.

The team used a weir skimmer and flat-bottomed pump to transfer the oil from the cargo hold into a rotation of seven waste liquid removal trucks with a capacity of 10 tonnes each.

The job was completed in five days and while no oil was released into the marine environment, this exercise was a timely reminder that spills, or risks of spills, can come from a wide variety of sources.

It also provided Marine Pollution Response Services Equipment Technician, Mark Cavanagh, with three days of hard slog to clean the equipment used in the response.





Top: The pallet that caused the *Tasman Trader* tank to rupture. Bottom: The resulting mess in the hull.

In another recent incident

A Sanford fishing vessel began taking on water into her fish-hold just off Ninety Mile Beach in Northland. With 50,000 litres of diesel on board, there were concerns that San Rakino might sink, which would have caused oil to wash up on an environmentally and culturally sensitive stretch of beach.

Maritime NZ assembled a team to prepare for every eventuality, and both the Rescue Coordination Centre New Zealand and the Northland Regional Council were put on alert.

Fortunately, divers patched the hole, pumps controlled the water intake, and the owner's representative on board *San Rakino* handled the situation admirably. The *San Rakino* proceeded to Auckland for repairs under her own steam, and under the watchful eye of the Northland Regional Council and an escort vessel.

Desktop exercises also test skills

Major spills have declined dramatically throughout the world in recent years, largely due to industry-driven initiatives and a vastly improved safety culture.

While the decline in spills is very welcome, opportunities to gain practical experience and learn from real responses are becoming rare. So the importance of desktop and field exercises has increased.

Maritime NZ's oil spill response strategy relies on a strong partnership with local government as well as the coordination of its own teams, which now include the Rescue Coordination Centre NZ and the Maritime NZ security team.

With these partnerships in mind, a floor exercise was held in Wellington recently to deal with a nightmare scenario of a coastal tanker and container ship colliding off the Napier coast.

The two key players in a major oil spill response, the Director of Maritime NZ and his advisory team, and the Maritime NZ National On-Scene Commander and his on-site management team, are used to working together through a combination of exercises and real life incidents. However, this exercise provided an opportunity for old hands to work together with the new kids on the block to learn how to make the best possible use of each other's skills and resources.

The exercise covered areas such as notification procedures, deployment of resources, communications, and provision of specialist advice.



Maritime NZ staff participated in a floor exercise recently, to test oil spill preparedness.

Maritime NZ Marine Pollution Response Service General Manger, Nick Quinn, who organised the exercise, says it achieved all its objectives.

"It was a good test of our organisational effectiveness and will serve us well as a lead up to next year's major national exercise."

"It was a very useful way of bringing together teams of people who are not usually sited together, and to build an understanding of each other's decision-making processes."

Security

Year ends on high for maritime security

By the end of this month, Maritime New Zealand will have fully completed introducing its international maritime security obligations required by the International Ship and Port Security Code.

The process to comply with the international requirements began in mid-2003 when security risk assessments were carried out for 22 ports around the country. Each of these ports then developed security plans to mitigate the security risks identified.

Once Maritime NZ approved these plans, they were implemented in time for the international security compliance deadline of 1 July 2004. Maritime NZ then audited each port to ensure the measures introduced were viable. Adjustments were expected and, in most cases, needed.

During the last few months, each port has completed a security drill, which has allowed further adjustments to be made.

From now on, Maritime NZ will continue to monitor ports for ongoing compliance and all risk assessments will be reviewed every five years.

Maritime NZ Security Manager Bill Blaikie says New Zealand is now recognised internationally as a leader in ship and port security, and that's a reflection on the maritime industry.

"We want to acknowledge the cooperation and support of the maritime industry, and also the communities that reside in the vicinity of ports."





Major survey of vessel owners under way

Maritime NZ is surveying owners of all commercial vessels in New Zealand, to gain a better understanding of trends and the way different sectors of the maritime industry are operating. The survey includes all commercial maritime sectors from rafting and jet boating operators through to shipping and passenger vessels.

The survey kicked off in September when a letter was mailed to 750 vessel owners. A further 750 of the New Zealand's 3,500 commercial vessel owners will receive the survey this month, and the remaining 2,000 owners will receive the survey in March and June next year.

The survey asks owners about their vessel and what it is used for, and includes specific questions about how and when the vessel was used during the previous month, how many crew worked on it and for how long.

Maritime NZ Analyst Dean Colwill, who is managing the survey, says the information will help Maritime NZ make better-informed decisions, and ensure safety issues are being addressed.

"It will help us further understand how different sectors are operating, and ensure we get a good handle on growth areas, changes and trends.

"We'll also be able to compare the number of accidents reported to Maritime NZ with the level of activity in the industry. For example, in the last year to 30 September there have been two fatalities in the commercial fishing industry, which alone doesn't tell us much. This figure needs to be measured against the actual level of activity," he says.

Maritime NZ last surveyed owners of vessels with these same questions from 2000 to 2003. The results of that survey were helpful in directing Maritime NZ's resources and attention to areas of concern.

For example, although raw numbers of accidents showed that the fishing industry had the highest number of reported accidents, it was found that commercial jet boats were more likely to be involved in accidents than in any other sector when operating hours were taken into account.

Since then, Maritime NZ has given more attention to safety in the jet boating sector, with one initiative being to employ a full-time jet boat safety adviser who travels the country visiting operators.

The survey is voluntary, and Maritime NZ has received a 25 percent response rate from the September mailout. The data collected is confidential and is only being used for analysis purposes by the Maritime NZ Strategic Analysis and Planning Team. Identifiable data is not being made available to any person or party external to that team.

Education

Campaigns kick off summer around NZ

This summer dozens of volunteers are helping Maritime NZ promote safe Volunteers are handing out safe boating packs at popular boat ramps and giving quick safety tips to boaties. They are also carrying out water safety checks, and keeping an eye out for boaties breaking any rules such as exceeding the 5 knots speed limit in restricted areas.

This campaign follows a move by Maritime NZ to educate recreational boaties using a more direct, one-on-one approach.

To extend the campaign this summer, Maritime NZ employed two Recreational Boating Advisers, Jim Lilley and Sue Tucker, who have been recruiting more volunteers nationwide.

The North Shore City Council has also come on board by employing a team of four full-time staff to hand out safe boating information from December to Easter.

Keep your communication dry this summer

Maritime New Zealand and WaterSafe Auckland are promoting the use of clear zip-lock bags to keep mobile phones safe and dry while they are on the water.



Maritime NZ Safe Boating Adviser Sue Tucker (right) gives Jen Cook, a keen kayaker, a splashproof zip-lock bag to keep her mobile phone dry and on her body, while she's out on the water. Sue is also discussing the Safe Boating Pack.

Maritime NZ Recreational Boating Manager Jim Lott says that if your boat capsizes or you fall overboard, or if you simply get in to trouble, you need to be able to tell someone — so you must have communications equipment on your body.

"Keeping your mobile phone in a waterproof bag in your pocket, or on a cord around your neck is easy. Using the phone while it is still in the bag does not reduce its performance. Each year, lives are saved by people doing this. Better still, invest in a hand-held waterproof VHF radio and keep it in your pocket."

Maritime NZ and WaterSafe Auckland are giving away 5,000 splashproof mobile phone bags this summer at boat ramps around Auckland.

The bags are also available through Maritime NZ Recreational Boating Advisor Sue Tucker, email: sue.tucker@maritimenz.govt.nz, or phone: 09 306 1086.

Cook Strait safety also under the spotlight

Maritime New Zealand has its eye on safe boating in Cook Strait this summer.

An educational campaign, which is supported by harbourmasters and the Interislander and Strait Shipping ferries, is targeting recreational boaties in Marlborough, Tasman and Wellington.

Three thousand safe boating packs are being handed to boaties who cross Cook Strait on the ferries. These packs include information on local boating rules, and tips on staying safe on the water.

Safe boating advice and information about a day-skipper course is also being promoted on the airwaves throughout Marlborough, Tasman and Wellington.

Maritime NZ Recreational Boating Manager Jim Lott says this area of the country comes alive with boaties each summer, so it's a good opportunity for a reminder about how to stay safe on the water

"The number of boaties who have been getting too close to the ferries has increased, and the risks they are taking is a focus of this campaign," he said.





More people staying on top with a lifejacket

A recent survey shows more boaties are carrying lifejackets on their boats than ever before.

The Maritime NZ survey, conducted by Colmar Brunton in April, found the vast majority of boat owners claim to carry lifejackets on board their vessels (92 percent). This compares to 86 percent of boat owners who carried lifejackets in 2003 (from a previous survey). Better still, almost all these boat owners are carrying other safety equipment as well as lifejackets.

Twelve percent of boat owners say their behaviour has changed as a direct result of Maritime NZ educational campaigns.

The not-so-good findings were that seven percent of dinghy owners do not carry safety equipment. Also, owners of smaller boats, dinghies and kayaks, tend to only carry lifejackets and are significantly less likely to carry any communications equipment

Maritime NZ Jim Lott says it's encouraging to hear more people are taking responsibility for themselves.

"However, it's alarming to realise that seven percent of the total number of dinghy owners in the country — that means more than 10,000 people — may still be indulging in unsafe practices.

"These dinghy owners are probably boaties who should know better. My guess is that they carry lifejackets in their larger craft, but don't bother with dinghies that are used for going to and

"Also important to remember is that while lifejackets greatly extend the time you will survive in the water after an accident,



Recent research suggests Maritime NZ-sponsored advertisements like this one have been a success, as the number of people carrying lifejackets on their boats is on the rise.

if you cannot tell anyone you are in trouble your chances of living are close to zero.'

A total of 1.300 boaties were interviewed over the phone for the survey.

New guidelines for fishermen provide helpful advice

The long-awaited publication called Safety Guidelines for Small Commercial Fishing Boats was released on the FishSAFE website this month. Printed versions will be available in April, and all vessel owners will be contacted about receiving a copy.

The Guidelines were developed by past and present fishermen, representatives from a number of Fishermen's Associations, and by Maritime NZ, ACC and the Seafood Industry Training Organisation.

Maritime NZ Manager Strategic Analysis and Planning, Sharyn Forsyth, says the new Guidelines will greatly support fishermen.

"They're built from the experience of fishermen, and designed to give others practical help in meeting their hazard management responsibilities under the Health and Safety in Employment Act."

"Individual support for vessel owners and skippers using the Guidelines on their boats will be available from April 2006, through networks within each port and with the support of the Seafood Industry Training Organisation."

Check out the guidelines on the new FishSAFE website: www.fishsafe.org.nz.



About FishSAFE

FishSAFE is a group of representatives from across the commercial fishing industry, as well as Maritime NZ, ACC and the Seafood Industry Council. It was established to support and work with the fishing industry, to monitor what's happening within the industry, and to provide helpful safety advice and guidance on safety.

FishSAFE was preceded by a group called FishGroup, which was convened by Maritime NZ and also included representatives working in the fishing industry. FishGroup analysed accident and injury data, debated safety issues, and developed safety initiatives aimed at reducing accidents and fatalities, lost productivity and compliance costs. A substantial number of ways to improve safety at sea came out of this group, and these are now being implemented by FishSAFE.

FishSAFE has initially concentrated its efforts on developing the Safety Guidelines for Small Commercial Fishing Boats.

The Chairperson of FishSAFE is Pete Dawson.

Safety

Number of reported accidents remains steady

The number of accidents and incidents reported to Maritime NZ has remained steady over time, with non-passenger and fishing vessels reporting similar numbers of events during the past quarter.

All skippers of vessels must report any maritime incidents and accidents to Maritime NZ. Further information about reporting accidents is available on the Maritime NZ website: www.maritimenz.govt.nz. To report an accident after it has happened, phone the Rescue Coordination Centre NZ on free phone 0508 222 433, OR contact the Maritime NZ Communications Centre on VHF Channel 16.

Then, as soon as reasonably practicable following that phone call, download and print out the appropriate accident form from the Maritime NZ website, complete it, and send it to RCCNZ.

MARITIME FATALITIES 2005

To 30 September 2005

There were eight commercial and 12 recreational fatalities during the 12-month period ended September 2005. This was an increase of one commercial sector fatality and a decrease of three recreational fatalities, compared with the previous 12-month period.

Environmental

Look after the environment – invest in its protection

If you own an older 2-stroke engine, consider upgrading to a modern low emission two or four stroke alternative.

during normal operation, which often appears as a rainbow release of pollutants. Though more available for boats and personal is still being sold so check efficient before purchasing.

Conventional 2-strokes will be in use for many years to come, so if you own one, limit operation at full throttle and eliminate unnecessary idling as these are the most polluting stages of engine use. Also, make sure you keep the engine properly naintained and tuned.



Catch the safety lessons from recent accidents

Being aware of fatigue danger is not enough

Being aware of the dangers of falling asleep during watchkeeping are not enough to prevent you falling asleep.

This is the message arising from a Maritime New Zealand investigation into the grounding of a fishing vessel in Otago on 20 July, which happened when the 31-year-old skipper fell asleep while on watch.

The skipper and his two crew left Port Chalmers at 4am in the morning in their 11-metre-long fishing vessel, and they hit rocks on Taieri Island at 7am. Attempts to manoeuvre the vessel off the rocks failed, and it broke up and sank. The skipper and his two crew got ashore safely.

Maritime NZ Investigator Zoe Brangwin says that like most fishermen, the skipper was well aware of the dangers of falling asleep while watchkeeping, and he took sensible measures to avoid this, but these alone weren't enough.

"The skipper had slept for about four and a half hours earlier that night, and he'd napped for 30 minutes during the journey while a crewmember was on watch. He'd resumed watch at 5.30am.

"It was sensible to keep short watches and nap in-between. but this wasn't enough. Like most skippers, he was aware of the dangers of fatique, but never thought this would happen to him. And he didn't have a watchkeeping alarm on the vessel because he thought he'd already taken enough precautions.

"There are several things he should have done to avoid falling asleep, which other skippers can learn from. Among these, a watchkeeper's alarm is essential as it'll wake you up because it has to be switched off manually. And an echo sounder alarm will also alert watchkeepers if the vessel is in danger of grounding," she said.

Maritime NZ passed on several recommendations to the skipper, including that he uses an echo sounder in future, and fits a watchkeeping alarm to his next vessel. The skipper will also speak about his experience at a Maritime NZ safety seminar.



The 11-metre-long fishing vessel grounded on rocks, after its skipper fell asleep while on watch

Since early-2004, fatigue has been a causal factor in 10 commercial maritime accidents, and two recreational accidents. Due to concerns about fatigue at sea, Maritime NZ is developing practical guidance material to help those working in the commercial industry to manage fatigue.

Skippers have responsibilities to look after their crew

Skippers have a fundamental responsibility to ensure the safety and wellbeing of their crew.

This is the clear message sent to mariners last month from the sentencing of the skipper of a fishing vessel relating to an accident where a crewmember suffered smoke inhalation

The accident happened on 30 October 2003 when a 33-year-old engineer stopped breathing and required resuscitation following a fire in the galley of a fishing vessel. Although the engineer continued to feel unwell for four days and he asked to be taken ashore, the skipper continued fishing.

The accident was not reported to Maritime NZ, as is required by law. Two weeks later, when the vessel arrived in Wellington, the engineer visited a doctor who reported the accident

Maritime NZ Deputy Director Bruce Maroc says it is inexcusable that the skipper placed the operational and financial consequences of continuing to fish ahead of returning to port to attend to the wellbeing of his crew.

"He failed to seek medical advice and assistance immediately after the accident occurred — and that is simply unacceptable. He then waited around 24 hours before disclosing the accident to the owners of the vessel," he said.

The skipper was convicted under the Maritime Transport Act for placing a crewmember in unnecessary danger, and for failing to report the accident to Maritime NZ. He was ordered to pay fines and costs totalling \$7,000.

In May, the company that owned the vessel was convicted and fined for failing to report the accident and for not taking all practicable steps to ensure the safety of its employees.

New safety information for industry safety bulletins

Maritime New Zealand has recently added safety bulletins to its range of educational material.

Safety bulletins are now sent to relevant people and organisations when some accident investigations are still under way. They do not include the findings or outcome of an investigation, but they do ensure important safety information is released as soon as possible after an incident. This is important, as complex investigation reports can sometimes take months to be released.

The most recent Maritime NZ safety bulletin is included here. All bulletins are available at www.maritimenz.govt.nz (in the Commercial section), and are sent to interested people at the time of their release.

Safety bulletin for barge users

Maritime New Zealand is investigating a serious accident where two truck drivers died when their trucks rolled from the deck of a barge during loading operations.

This accident investigation is continuing, but the safety bulletin contains important safety reminders about the obligations and the responsibilities of operators of floating barges and those operators of road vehicles who use floating barges. This bulletin is available at: www.maritimenz.govt.nz (Commercial section).







Maritime NZ staff receive prestigious awards

Maritime NZ staff took away two of the most prestigious awards at the recent Chartered Institute of Logistics and Transport Annual Conference.

Norman Spencer Memorial Medal

The Norman Spencer Memorial Award for Service to Transport went to Director of Maritime NZ, Russell Kilvington. The award recognises his outstanding contribution over time to the sector, as well as his contribution to the activities of the Institute.

Mr Kilvington has worked in a range of positions in both the public and private sectors, and he has a long history of participation in the activities of the Institute.

Mr Kilvington has a particular interest in education and safety, and has helped establish specialist transport studies qualifications. The award recognises his excellent communication skills and his ability to create and maintain relationships at all levels.

Young Executive of the Year

The CILT Young Executive of the Year Award went to Maritime NZ Manager of Strategic Analysis Planning, Sharyn Forsyth. Ms Forsyth has worked in the transport industry for almost 10 years, principally in the development and implementation of strategic analysis and plans. Her achievements include developing a strategy for recreational activities which has



Russell Kilvington and Sharyn Forsyth

helped reduce maritime fatalities by a third over five years. She has also developed a comprehensive organisational strategic management framework that is recognised as best practice across the Crown transport agencies in New Zealand.

The award also recognises Ms Forsyth's outstanding personal and communications skills.

Important message about low-sulphur diesel fuel

The level of sulphur content in diesel fuel will be significantly reduced, from January. If your vessel has a modern engine, there should be no difference in performance as your engine is designed to use this grade of fuel. However, if your vessel uses older-type fuel injection equipment you need to be prepared for problems that may occur.

For all boat owners, the change in sulphur content brings several benefits. Low-sulphur diesel fuel is faster burning, which in turn leads to cleaner exhausts, less wear and longer lubricating oil life. It also makes engines easier to start on cold winter mornings, with less white smoke.

However, if you own an older-model engine, your equipment may operate under a high-positive pressure, which uses seals to prevent leakage, such as VE-type rotary injection pumps. These seals absorb fuel and swell because of compounds called aromatics, to give a tight seal. However, the reduced sulphur content reduces the aromatics, which can lead to seals shrinking and leaks occurring.

Maritime New Zealand recommends that if you have older-type equipment you should keep a sharp look out for fuel leaks developing around the fuel pumps. You should replace seals when necessary to prevent major problems, especially if you have an older engine in your boat. Ask your engine manufacturer or agent, or your mechanic, for their recommendations.

The sulphur content of diesel has been reduced from 500ppm (parts per million) down to 50ppm, following a worldwide trend and Government regulation.

Further information

The Ministry of Economic Development has information on lowsulphur diesel fuel available on its website, www.med.govt.nz or by calling freephone 0508 33 55 33. While this is aimed at road vehicles, it also applies to marine engines.

BP has a pamphlet called 50ppm Sulphur Diesel: what does it mean for marine users? available on their website, www.bp.co.nz, or by calling freephone 0508 33 55 33.



LEVEL 8, gen-i TOWER 109 FEATHERSTON STREET PO BOX 27006, WELLINGTON NEW ZEALAND

TELEPHONE +64-4-473 0111 FACSIMILE +64-4-494 8901 WWW.MARITIMENZ.GOVT.NZ **Disclaimer:** All care and diligence has been used in extracting, analysing and compiling this information, however, Maritime New Zealand gives no warranty that the information provided is without error.

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