Losing to BOOZE

A SKIPPER HAS HIS CERTIFICATE REVOKED AFTER MIXING ALCOHOL WITH BOATING

Switch it OFF!

A CREW MEMBER'S LEG IS TRAPPED IN A MUSSEL TUMBLER
Losing to booze
- A skipper has his certificate revoked after mixing alcohol with boating.

Life jacket on but not fastened
- A skipper decides to risk it with catastrophic consequences.

Switch it off!
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Welcome again to *Lookout!* - the final issue for the year and the last issue under my Directorship of Maritime New Zealand.

I look back with a sense of pride over my time at the helm of Maritime NZ, and its predecessor Maritime Safety Authority. The changes that have occurred in the past 13 years have been many – both great and small. We have come a long way yet there is still much to achieve.

We all work in a diverse and constantly changing environment and have to adapt to meet these changes. *Lookout!* touches on the changes – great and small – that we can all make to ensure that not only ourselves, but those we work with are safe, from the fatality on page 8, to the injury on page 18, to the collision on page 20. These decisions, like many others, are made often in a moment – but they all have an impact which in some cases can be life changing.

Often all that is required is a moment’s consideration of the options available – just because we’ve always done it this way – Is it safe? Is it wise? Will it work? Can I make a change? I hope that the stories in *Lookout!* encourage you to consider the changes you can make.

As for Maritime NZ – can we do better? We’d like to know. Included with this issue is a feedback form on *Lookout!* Take the time to fill it out and tell us what you think. Are we on track? Is this publication of use? What changes, if any, would you like to see? At the end of the day we stand by our vision – of a maritime environment with minimal deaths, accidents, incidents and pollution.

Fair winds and following seas.

Russell Kilvington
Director of Maritime New Zealand
Raising the bar

For the 11 years that I have been part of the accidents team Russell Kilvington has brought a level of dynamism, professionalism and integrity to not only my team, but to the wider organisation as a whole. It is with some reflection that I write this editorial and pay tribute to him on his retirement.

I first met Russell on a bright autumnal day in 1994 at Kings Cross Station, London. Russell was on his way to get first hand experience of UK fast ferry operations, as these were about to start across Cook Strait. I had just returned from holiday in NZ where I had also been looking for job opportunities. Over a cup of coffee he extolled the virtues of New Zealand and his plans, amongst other things, for expanding accident investigation by the then Maritime Safety Authority. He must have been pretty convincing because by March 1995, I had obtained my residents visa and had shifted family and home to New Zealand.

Russell has played a pivotal role in raising the bar on marine accident investigation in New Zealand. His involvement and commitment to the investigation process has contributed to our having a robust investigation arm to our organisation. Russell’s tenacity and drive has enabled us to maintain the highest level of integrity and balance in all areas even when our conflicting roles of investigator and regulator have challenged this.

The scrutiny we can come under as an organisation, in particular our investigations and accident reports, can be enormous. An example of this is the Jody F Millennium casualty on Waitangi day in 2002, which drew extensive attention both here and overseas. On a personal level this really brought home to me the massive public and media interest in the work we do – from Government down to the man on the street. Russell’s ability to take the helm and steer our organisation through at times such as this, as well as during our more day to day operations has been truly exceptional.

As an organisation, we have come a long way from our early days and have been exceptionally lucky to have someone of Russell’s calibre and standing as our Director. Working with him has always been interesting and at times a challenge yet with his wealth of experience, integrity and vision it has always been a privilege.

Russell has left us well placed and ready for the challenges of the future. I wish him all the very best for a long and happy retirement.

Mike Eno
Chief Investigator of Accidents
A 15m fishing trawler burnt to the water line and then sank after its crew could not stop a blaze on board.

The skipper and two crew had spent the day at sea and had shot away for a third trawl. The skipper then made a final check of the engine room before heading to bed. One crew member also headed for bed, leaving the second crew member on watch through the final day’s trawl.

After about an hour and a half, the crew member on watch smelled smoke and noticed a haze in the wheelhouse. He immediately woke the skipper, and they both saw smoke in the wheelhouse. The skipper lifted the hatch cover to the engine room and saw flames licking across the deckhead below. After shutting the hatch the skipper saw flames through a small crack in the bulkhead at the after end of the wheelhouse.

Suddenly a 3-4m jet of flame burst from the engine exhaust above the wheelhouse. The skipper discharged three portable extinguishers through a vent into the exhaust space at the back of the wheelhouse, and reduced the engine revolutions to idle, hoping to lessen the exhaust heat.

He attempted to uncoil the deck hose, but soon realised with the engines running at idle water flow would be very low, so he abandoned this attempt.

The skipper was just able to relay a distress call via channel 16 before the wheelhouse windows started cracking in the heat, and it became almost impossible to see and to breathe inside.

The crew abandoned the vessel into the life raft and tried to paddle toward the stern of the vessel to see whether they could do anything else. However, exploding LPG bottles forced them to paddle away to a safe distance.

The crew were rescued within an hour by another trawler in the area.

The fierce heat and ongoing small explosions made further attempts at controlling the fire impossible. The trawler burnt to the water line and sank completely.

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1. This represents the third engine room fire in the past year on under 24m vessels where the crew were unable to get close enough to fight the source of the fire.

2. The time from when the crew became aware of the fire to the time they abandoned the vessel was no more than five minutes. As such there was little time to mount an organised and effective attack on the fire. One crew member who had been able to get into the engine room at the early stages of the fire could not see very much because of the amount of smoke. He did however see some sparking or flames along the after bulkhead of the engine room where the main fuel lines from each wing fuel tank led into the primary filters and the main engine fuel system. Some of these fuel lines had been replaced about five months earlier because of signs of cracking on the outer cover. No leakages however had been observed at that time.

3. This 1960s, wooden trawler had no fixed fire fighting system. Although these are not currently required on vessels under 24m, the benefits of such a system are clear. The skipper had just five minutes to attack the fire before being forced to abandon the vessel. If the vessel had at least been fitted with swage lock connections through bulkheads and engine box covers, extinguishers could be snap-locked in place, allowing the crew to fight the fire from outside small areas, such as the engine room.

4. Maritime NZ is currently considering an amendment to Rule Parts 40C and 40D – Design, Construction and Equipment – Non-SOLAS, Non-Passenger Vessels and Fishing Vessels. This would require vessels of less than 24m to be fitted with either a fixed fire fighting system in enclosed engine rooms, or systems to allow extinguishers to be discharged into engine rooms without having to enter them.

5. The main fuel lines could not be shut off without entering the engine room, which was not possible due to heat, smoke and flames. A remote shut off valve would have reduced the amount of fuel feeding the fire.
Sling your hook!

Twenty tonnes of heavy machinery smashed on to a 17,000 gross tonnage general cargo ship’s wing tank and then into its lower hold, causing heavy fuel oil to flood the hold.

The load was being discharged using two flat web strops after some lengthy debate among stevedores as to the best means to lift the load. The awkward, top heavy machinery had been loaded in the Far East and was stowed hard up against the spar ceiling of the hold. This prevented 32mm wire slings, the preferred means of discharge, from being used. The machinery was encased in plywood and attached by several steel securing bolts to a wooden pallet.

After some difficulty, the two web strops, one at each end of the load, were placed around the plywood casing and beneath the base of the wooden pallet. The load was then lifted by one of ship’s cranes, about 15cm off the wing tank top. It was then slewed towards the centre of the hold in preparation for lifting it out of the hatch. At this point the forward web strop suddenly appeared to slip and the load became unbalanced. It then toppled several metres onto the tank top in the lower hold which, upon impact ruptured, causing heavy oil from the double tank below to flood into the hold.

Fortunately, the four stevedores working in the lower hold at the time were all standing clear and were not harmed.

Inspection later showed the forward strop had been completely severed, and there were cuts to the others. Protruding steel screw bolts that secured the machinery to the base of the wooden pallet, which were largely obscured by the plywood casing, were believed to be the probable cause of the cuts to the web strops.

View the full report online at: www.maritimenz.govt.nz

1. Stevedores would not normally use flat web strops to shift a top heavy piece of cargo. In this case they were forced to do so because of the cargo’s stowed position, hard up against the spar ceiling. If such cargo must be stowed in this way, the sling arrangement at the load port should be left in place to assist stevedores at the discharging port.

2. The Safe Working Load (SWL) of the flat web strops was 20 tonnes. The manifested and listed weight of the cargo was 19.5 tonnes. However, investigation after the accident showed it weighed 20.92 tonnes, in excess of the strops SWL.

3. The machinery’s plywood casing and outer tarpaulin obscured substantial lifting lugs that had been fitted by the shipper.

4. The weight of the cargo had not been marked by the shipper as required by existing legislation and customary practice.
A skipper had his inshore launch master certificate of competency revoked after members of the boating community brought a number of incidents to the attention of Maritime NZ.

The skipper of the 11.5m commercial charter vessel had on several occasions been seen mixing alcohol with boating and, as a result, creating a danger to others.

His launch master certificate was revoked after his charter vessel grounded in shallows with two passengers on board. The passengers witnessed the skipper drinking alcohol both before and after the vessel grounded, and said he had been behaving strangely throughout the trip.

On the day of the grounding, the passengers were able to wade safely to shore, and were returned to port by another vessel. The charter vessel remained aground until the flood tide lifted her later that day.

This was not the first time the skipper’s drinking had caused a problem. His certificate had previously been suspended owing to a conviction under the Misuse of Drugs Act 1975. Members of the maritime community had raised concerns about his reckless activities when he had been drinking.

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“THIS WAS NOT THE FIRST TIME THE SKIPPER’S DRINKING HAD CAUSED A PROBLEM.”

1. The skipper’s continued use of alcohol has rendered him not fit and proper to hold maritime certification, impacting on his life and career. He has also lost respect and standing among many in his boating community. This grounding did not result in injury to himself or anyone else. The question must be asked – would that have remained the case if he had been allowed to continue operating?

2. The decision to revoke a mariner’s certificate of competency is one of the strongest measures that can be taken, and it is not taken lightly. However, as this investigation shows, revocation is sometimes necessary in the interests of maritime safety and for the protection of other members of the maritime community.
Life jacket on but not fastened

Had the chest strap on a 13-year-old boy’s life jacket been fastened, his life would have been saved.

The boy, his two friends and the skipper of an aluminium runabout launched just after lunch, with plans to head out of the bay through a channel to open sea.

The decision to go had been debateable. The skipper, who was the father of one of the boys, spent some time on the shore side of the channel assessing the conditions and counting wave sets. He had crossed this channel over 100 times before in various weather conditions, but on this day the waves were estimated to be reaching between 2 and 3m.

The skipper decided to risk it, despite there being more suitable places to launch just a few minutes drive away.

He checked that all three boys were wearing well-fitting life jackets and before entering the channel, he again called out to the boys to check they were wearing them. All three replied that they were, but the skipper did not physically confirm this.

The four started through the channel. About 50m through, they met two large waves.

The runabout rode up through the first and the skipper applied more throttle intending to punch through the second. At that moment he lost his balance, and control of the helm. The vessel turned quickly toward a shoal area, where shallow waters were creating larger and more turbulent waves.

The runabout was flipped over backwards, and all four on board were flung into the channel.

The skipper surfaced to see his son holding on to the vessel’s upturned bow. A second boy then surfaced nearby, and the skipper dragged him to the bow. The skipper immediately took off his lifejacket and started diving repeatedly under the vessel, searching for the missing boy – but to no avail. The boy’s life jacket popped up a short distance away, but an organised search for him failed. The skipper and various people in other vessels and along the shore immediately carried out a search.

The boy’s body was recovered from rocks on the west side of the bay two days later.

“THE SKIPPER SURFACED TO SEE HIS SON HOLDING ON TO THE VESSEL’S UPTURNED BOW.”

Looking out for the opportunity to swim this is the life jacket on, but not fastened in the water.
1. The boy had zipped up his life jacket, but had not used the clips to secure it across his chest. The skipper had called out to the boys to check they had their life jackets on, but had not physically checked them himself. Skippers are personally responsible under Maritime Rule Part 91.5(6) to ensure life jackets are correctly fitted and fastened.

2. The skipper took a risk in departing at all that day. He incorrectly assessed the conditions and chose a poor launch site when better ones were available. It is always advisable to err on the side of caution.

3. The skipper was travelling too fast for the prevailing conditions, with regard to the size of the waves and the weight of the vessel.

4. Maritime NZ prosecuted the skipper of the vessel on two charges under section 65(1) of the Maritime Transport Act 1994. The skipper was convicted following a defended hearing. He was sentenced to 150 hours community service on each section 65 charge, to be served concurrently.
Knowing more about how and why accidents happen means more can be done to prevent them. Call our 24hr accident line to report all accidents 0508 222 433.
A wooden dinghy capsized and its crew of two were injured after it was hit by a water taxi travelling at 20 knots within a harbour.

The collision occurred in darkness, although a full moon had risen and visibility was good. Conditions were calm. The dinghy’s crew of two was made up of the skipper, who was an experienced boatsman and his friend who had no boating experience. The dinghy was being steered under power from an outboard motor, but no navigational lights were fitted. The passenger was holding a powerful torch, which he shone over his shoulder occasionally.

Meanwhile, the water taxi with four passengers on board was approaching the dinghy from the opposite direction. The two skippers noticed each other at about the same time. Both immediately attempted to turn to starboard, but collided seconds later. The crew of the dinghy were thrown into the water as the dinghy capsized. Neither was wearing life jackets. They were rescued by the skipper of the water taxi, but both sustained serious injuries.

The skipper suffered a cracked left shoulder blade and lacerations to his neck, head and other areas, as well as a ruptured tendon. The passenger suffered contusions to his spine and neck, two possible broken ribs, deep tissue bruising and numerous lacerations and scrapes. The water taxi skipper and passengers were unharmed.

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“THE CREW OF THE DINGHY WERE THROWN INTO THE WATER AS THE DINGHY CAPSIZED.”

1. Neither skipper noticed the presence of the other vessel until just before the collision. Maritime Rule 22.5 requires every vessel to maintain a proper look out.

2. The dinghy would have been very difficult to see. Its passenger shone a torch light only intermittently and not in all directions. A dinghy being operated under power should display an all round white light and navigational lights wherever possible. Detachable red and green navigational lights greatly increase the safety margin for small boats operating at night.

3. This collision occurred within a small harbour. There is some debate as to the exact location of the collision. This is relevant as the water taxi may have been exceeding local bylaws that require vessels to stick to 5 knots when operating within 200m of shore, and 50m of another vessel. At the very least, Maritime Rule 22.6 requires all vessels to operate at a safe speed to avoid collision given the conditions and traffic density.
Collision in full knowledge

Two offshore limits fishing trawlers managed to collide in an otherwise traffic free bay, despite being fully aware of each other.

Poor watch keeping by both vessels saw a series of errors unfold.

The first skipper was keeping watch while trawling in a broadly South East direction. The vessel was on auto pilot. An uncertificated deckhand was on watch on the other vessel, which was trawling in a broadly North North West direction while its skipper slept. The two skippers had spoken via radio the evening before and outlined their intentions for the following 12 hours, as they were trawling the same area.

Before retiring, the second skipper told the watch keeping deckhand to wake him up if any vessel came within one nautical mile of his trawler.

He first saw a green over white over green combination of navigation lights when the other vessel was about 1.8 nautical miles distant and took these to be the vessel’s trawling lights and green sidelight. He assumed, as her bearing was opening, that she would pass clear down his starboard side. A little later he saw she was about one nautical mile distant bearing about 20 degrees on the starboard bow. Believing the bearing of the other trawler would continue to open and she would pass clear, he reset his stand alone watch keeping alarm and went below to the engine room.

Meanwhile, the deckhand spotted the echo of the first skipper’s trawler on radar, when it too was about six nautical miles distant and bearing fine on the port side of the heading marker. He decided to correct his course to port by 10 degrees on the auto pilot. At about this time the deckhand saw the white over red trawling lights of the other vessel and a partly obscured green sidelight.

When the two vessels were about two miles apart the deckhand noticed the echo of the other vessel was bearing fine to starboard of the heading marker. About ten minutes later when the trawlers were about 1 nautical mile apart with the echo of the other vessel still fine to starboard of the heading marker, the deckhand made three consecutive port turns of 20 degrees each. He did not want to make a sharper turn as this would activate the autopilot off course alarm. He attempted to contact the first skipper by radio, but received no reply.

When the vessels were about 0.7 nautical miles apart, the deckhand yelled out to try and wake his own skipper, making yet another 20 degree port turn as he did so. Receiving no reply, he headed below to get his skipper. At that time, the two trawlers were just 200m apart.

Just as the pair returned to the wheelhouse, the starboard stabiliser arm of their vessel struck the aerial ‘A’ frame on the monkey island, damaging the VHF, SSB and cell phone aerials. In turn, the starboard stabiliser arm of the first skipper’s vessel struck the handrail and then the stabiliser arm of the other. The speed of each vessel on impact was about 3 knots.

The first skipper was just returning from the engine room to the wheelhouse as the impact occurred. His watch keeping alarm had sounded and he was heading to turn it off.

The skippers extricated their vessels, hauled back on their trawl warps to clear the fishing gear and returned to port for repairs.

1. Both vessels were correctly manned in accordance with Maritime Rule Part 31C.
2. At the time of the collision the sea conditions were calm and the visibility was good.
3. Neither the first skipper, nor the deckhand communicated their intentions to the other, despite both being fully aware of the presence of the other. The deckhand attempted to contact the first skipper via VHF radio, but used the channel that was preset from the conversation the evening before, rather than the international distress and calling frequency – channel 16.
4. Neither the first skipper nor the deckhand followed good watch keeping practice. The first skipper left the wheelhouse knowing the other trawler was just 1 nautical mile distant and only returned later because his watch keeping alarm had activated. This was in breach of Maritime Rules Part 31.16 Watchkeeping Standards and Part 22.5 Look out. The deckhand failed to wake his skipper, as instructed, as soon as the vessels were 1 nautical mile apart.
5. This was a crossing situation under Maritime Rule Part 22.15. The second skipper’s vessel was the stand on vessel under Part 22.17 and the deckhand should initially have maintained his course and speed. Instead, he altered course to port when the two vessels were less than 5 miles apart. Reference to the vessel's chart plotter showed that when the two vessels had closed to about 2½ miles, the deckhand altered course to starboard and then back to port again when the two vessels were under 1 mile apart.
A crew member had part of her finger amputated by a berthing line in strong winds.

The passenger ferry had unloaded its passengers and returned to port with just the Master and one crew member on board. A strong southerly wind hampered berthing, blowing the vessel off the face of the wharf.

The crew member initially tried to secure the bow spring line to a cleat on the wharf using the vessel’s boat hook. This was not easy as the hook was defective and could not be used at its fully telescoped length. Instead, the crew member was forced to use only half of the shaft attached to the boat hook.

After a series of unsuccessful approaches to make the vessel fast to the wharf with the aid of the boat hook, the crew member finally managed to loop the line over one horn of the cleat using just her hands. As she attempted to secure the rope over the other horn of the wharf cleat another gust of wind began to tension the line.

The Master shouted at the crew member to pull her hand away, but she could not respond quickly enough. The line tensioned fully, trapping two of her fingers between the line and the cleat.

The crew member wrenched her hand away, wrapped it in a towel and secured the line around the cleat. The Master rendered first aid. An ambulance was called and she was taken to hospital, where she underwent surgery. The top joint of her left little finger was fully amputated, and severe lacerations to her left ring finger were dressed.

1. Masters are responsible for ensuring the safety of all crew. Although this crew member had received sound training on the hazards of line handling, she was not yet competent at handling lines in adverse weather conditions. Crew members should be carefully monitored even after initial training to ensure they have the necessary skills to do their jobs safely.

2. The Master maintained good oversight of his crew member during the operation, and called out to her to remove her hand as soon as he saw the line starting to tension. However, the crew member either did not respond quickly enough, or was unable to. This is a timely reminder for all crew to respond immediately to a safety directive from a Master. The Master can often see the bigger picture as events unfold, whereas crew are often focused on the task at hand.

3. Although an in-operational boat hook did not directly cause this accident, had the boat hook telescoped correctly, these injuries would probably not have occurred. The Health and Safety in Employment Act 1992 requires employers to ensure tools such as this are safe for employees to use.
A man was killed after he was flung from the jet boat he was driving.

It is thought the boat struck rocks, and then hit the man from behind after he was thrown over board in braided river shallows.

The man had been out for a day’s jet boating and fishing with two friends on a Class One river (suitable for beginners and families), that he had boated before.

After an enjoyable day boating up river, the skipper decided it was time to turn back. About 20 minutes from their starting point, the skipper slowed to set one friend on the banks for a final crack at catching a fish. Intending to return in about 20 minutes, the skipper continued downstream with the remaining friend. However, after about 500m, they became stuck in a narrow channel of water.

The pair tried to free the boat for about 20 minutes before the second friend got out and climbed onto the bank to lighten the load.

The skipper continued to head downstream. After a few minutes the second friend looked down river and could see that the boat had stopped but that the skipper was not in view. He hurried along the bank toward the stricken boat.

Arriving at the scene about five minutes later, he saw the skipper lying face down in the water with the bow rope tangled around his legs.

Attempts to resuscitate the skipper failed, and he was later pronounced dead at the scene by Police.

View the full report online at: www.maritimenz.govt.nz

LOOKOUT POINTS

1. Damage to the boat showed it had struck the rocks at about 50 to 60 kph. At the time, the skipper was in a side channel of the river, looking for a lead back into the main channel. It is more difficult to read the right track when travelling down river and additional speed is needed to manoeuvre the boat. When searching for the correct track, skippers must slow at each pool to check the exit, or decide to move to the next.

2. On this day the skipper missed two opportunities to get back into the main river. His speed of 50 to 60 kph left little time to make appropriate decisions.
A day trip with friends ended with a grounding, sinking and severe injury to the vessel's skipper.

**THE 12.8M STEEL HULL** commercial passenger launch had nine people on board, including three children.

The day trip was to include recreational fishing and sea trials in preparation for the coming commercial tourism season. The skipper also planned to deliver equipment to friends on a nearby island.

After reaching the island, the skipper backed the vessel into an inlet between the breakwater and the shore, mooring with both bow and stern lines. The passengers went ashore, but after about 30 minutes the launch touched the sea bottom in the falling tide and the skipper decided it was time to leave.

He started the engine from the flying bridge, then climbed down a 2m ladder to the cockpit to operate the port side controls. When he engaged the engine, it stalled. He hurried back up to the flying bridge ladder to restart the engine, but slipped and fell on to the after deck, suffering a multiple compound fracture to his left leg.

The injuries were serious. The skipper was losing blood and twice came close to losing consciousness as he telephoned for help.

As a helicopter was diverted to assist, the skipper began to brief his passengers on how to start, stop and operate the launch for its return journey. Only one of the passengers had any boating experience. Not wanting to use the engine until the launch was clear.
of the breakwater, due to the limited depth of water beneath the keel, the skipper arranged for the passengers and some people from the island to take the launch’s anchor outside the breakwater by dinghy. His intention was to pull the launch clear by hauling on the anchor warp until there was sufficient water to be able to run the engine and propeller safely.

After his briefing, the skipper was taken ashore by dinghy and flown to hospital by helicopter. In the meantime, the passengers let go the mooring lines and started hauling on the anchor warp as directed by the skipper. On clearing the breakwater and reaching deeper water, they engaged ahead propulsion, expecting to be able to return to the mainland. However after proceeding about 50m the engine suddenly stalled. Several attempts saw the engine started, but stalled as soon as it was engaged ahead. The passengers did not realise that the propeller had been fouled by the anchor rope.

The launch drifted towards shore, the bow striking rocks and causing serious damage to its forepart. It then turned side on to the rocks and was pounded by heavy waves. The passengers, who were all wearing life jackets, were rescued by an inflatable life raft launched from the island.

The launch was towed off the rocks by tractor, but began taking on water and eventually grounded in sheltered waters. As the tide rose, the hull was immersed with the superstructure still above water.

“THE LAUNCH DRIFTED TOWARDS SHORE, THE BOW STRIKING ROCKS AND CAUSING SERIOUS DAMAGE TO ITS FOREPART.”

“The injuries were serious. The skipper was losing blood and twice came close to losing consciousness as he telephoned for help.”

left: The extent of the corrosion in the hull only became apparent when the vessel was slipped for repair, and the resin coating removed.

above: The vessel.

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LOOKOUT POINTS

1. The vessel sank after water entered the hull in way of a repair, using a bonding steel plate that had been carried out without Safe Ship Management approval.

2. The steel hull of the launch was faired with a coating of resin. Over the years, the thickness of the hull plating had been reduced by corrosion. This was severe in several places including the forepart of the hull and in way of the steering compartment. The extent of this corrosion only became apparent after the vessel was slipped for repair and the resin coating was removed.

3. The practice of coating steel with resin makes it difficult to assess the overall condition of the hull. It has been recommended that Maritime NZ develop guidelines under which such vessel construction may be accepted in commercially operated vessels.

4. The 2m vertical ladder from the flying bridge to the after deck was fitted with handrails, but there was nothing to stop someone falling as they stepped onto the ladder.

5. The skipper had arranged for his passengers to return the vessel to port, although only one of them had any boating experience. They were ill-equipped to handle the vessel, or to diagnose what had fouled the propeller.
A crew member’s leg was trapped inside a mussel tumbler after he climbed on top of it without first switching the machine off.

He could not be freed while the vessel was at sea and remained wedged in the machinery until he could be cut free by an engineering company in port.

The crew member had more than two years’ experience on the 24m vessel, and was aware of the hazards of working on mussel harvesting machinery.

The crew member had been working on the port side of the foredeck, removing a floatation buoy off the backbone rope, from which the mussel growing lines were attached. The other three crew were sewing and stacking the loaded bags of mussels at the after end of the foredeck. The skipper was grading the mussels on the starboard side table.

The crew member noticed one of the growing lines had slipped off the side of the chute and that the mussels were being stripped off the line onto the deck rather than into the tumbler.

He immediately climbed up the chute to the top of the tumbler to try and place the growing line back into the chute. He switched off the sheave winch that was lifting the backbone rope from the sea, but left the tumbler running so as not to interrupt the work of the rest of the crew.

As he stood on top of the tumbler casing, one of the steel turning tines within the tumbler, caught on either his leggings or his boots and his right leg was pulled into the machine. The crew member shouted for help and managed to reach out and switch off the emergency remote tumbler hydraulics control, which stopped the tumbler turning.

Once the crew realised they could not extricate the crew member’s leg themselves, the vessel headed for port at full speed. During the return passage, the crew wrapped him in a blanket and administered paracetamol tablets. Emergency services arrived shortly after the vessel berthed.

A local engineering company used cutting equipment to remove the steel tines trapping the crew member’s leg.

He was airlifted to hospital by helicopter.

The injured crew member suffered a fractured tibia bone and numerous lacerations to his right leg.

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Switch it off!

HE COULD NOT BE FREED WHILE THE VESSEL WAS AT SEA AND REMAINED WEDGED IN THE MACHINERY UNTIL HE COULD BE CUT FREE BY AN ENGINEERING COMPANY IN PORT.”

1. Moving machinery had been identified as one of the hazards on the vessel. As it had not been possible to eliminate or isolate the hazard, warning notices, guards and remote stops had been used to minimise the hazard. However, of the three warning signs on the tumbler stating “Danger Moving Machinery”, two were badly worn due to normal wear and tear and only one could be easily read.

2. Crew must be specifically trained as to the hazards represented by each piece of machinery on board. It is not enough to train crew once or twice and then expect them to remember. To be effective, training should be repetitive and ongoing.

3. Following this accident, sign off checklists for the induction training of new crew have been introduced. This includes reference to crew not to wear loose clothing near rotating machinery and not to reach inside the tumbler when it is operating.

4. Dangerous working practices, such as this one, should be severely reprimanded. This crew member stated he had retrieved lines in this way several times before. On this occasion though, he was caught out. The crew member should have turned off the hydraulics to the tumbler, thereby stopping the machine, before climbing on top of it.

5. Skippers should mitigate the foolish actions of crew as far as possible. Had a suitable guard been fitted to the chute it would have prevented the crew member from reaching the top of the tumbler. Don’t rely on crew to always use common sense.
1. Fatigue can happen to anyone. If your body needs sleep, it will eventually just take it – no matter what you are doing. In this case, two experienced fishermen both fell asleep in the warm, unventilated wheelhouse.

2. Although the vessel was correctly manned on this occasion, no sharing of the watch had been discussed, either formally or informally.

3. No watch keeping alarms had been set on any of the vessel’s equipment. An echo sounder, radar and GPS plotter were all available as aids, as was the vessel’s alarm clock.

4. Awareness is the key to managing fatigue. This vessel’s Safe Ship Management manual contained no mention of fatigue, its recognition or management.

5. The skipper had not been sleeping well at home. It is important for friends and whanau at home to make sure those who go to sea are well rested. Fatigue management is everybody’s responsibility.
Every pilotage is a little different

A 15,000 gross tonnage general cargo ship collided with a SARUS tower fairway beacon, despite there being three crew on the bridge and another stationed on the forecastle.

The Master had the con of the vessel and the Third Officer was plotting its position and movement in the chart room.

The ship had cleared the harbour with pilot assistance and was making way along the fairway at a speed of about 5 knots, increasing gradually towards full speed. Moments later the Bosun, stationed on the forecastle head reported via radio that the vessel appeared to be setting on to the fairway beacon.

The Master visually confirmed the beacon was bearing about 5 degrees off the port bow at a distance of about 75m, and ordered the helmsman to put the wheel hard to starboard. When the beacon was off the midpoint of the vessel at a distance of about 10m, the Master ordered the helmsman to put the wheel hard-to-port, hoping to swing the stern clear of the beacon.

This was unsuccessful and the vessel hit the beacon submerging it. A few seconds later the Master felt a further impact, which he assumed was the beacon’s mooring chain striking the vessel’s propeller.

The vessel’s steering gear and main engine were tested and found to be operating correctly and the vessel continued to its next port.

At the next port the propeller blades were inspected and found to have some scratches with a small indentation on one of the blades. It is not known whether these were caused by the collision with the beacon or were due to a prior unknown contact.

The beacon was later recovered and repaired.

"THE MASTER ORDERED THE HELMSMAN TO PUT THE WHEEL HARD-TO-PORT, HOPING TO SWING THE STERN CLEAR OF THE BEACON."

1. The Master was familiar with the port, having visited several times before, which may have lulled him into a false sense of security.

2. On the day in question he was dealing with 25 to 35 knot gusting winds and 3m swells that was subjecting the vessel to leeway. It was raining. Visibility was further reduced by large gantry cranes on the Foredeck of the vessel that significantly reduced forward visibility from the wheelhouse. However, there were plenty of crew available to ensure a safe passage using Bridge Resource Management techniques of good communication and team work.

3. Although the Master was familiar with the vessel’s outbound track, in attempting to maintain lookout and command of the vessel by himself, he failed to properly account for the likely effects of leeway on his vessel by increasing speed earlier and giving the fairway beacon a wider berth.
Common fault causes major damage

A hydraulic crane’s jib collapsed while loading logs in an accident that has occurred repeatedly with this type of crane.

The Mitsubishi Heavy Industries (MHI) hydraulic deck crane’s jib was seriously damaged when the retaining bolts, which attached the jib to its heel pin broke. The crane driver had just lifted a bundle of logs slightly and was dragging it toward a digger driver who would then reposition the logs within the ship’s hold.

Loose or broken retaining bolts on MHI cranes have caused several similar accidents. Fortunately on this occasion, no one was injured.

1. Jibs on certain MHI cranes built before 1992 are fixed with four 20mm diameter heel pin bolts. These bolts have repeatedly failed. To overcome this, all MHI cranes built after 1992 and some pre-existing ones have now been fitted with six 30mm diameter retaining bolts. But not all. It is vital that those using MHI cranes know what retaining bolts are fitted.

2. Crew had failed to carry out any checks of the heel pin bolts that failed. This inspection was required by MHI Technical Information. The crew was not even aware of the need for this inspection, and were unaware of any ongoing problem with this type of MHI crane. The end plate fittings and retaining bolts for MHI jib heel pin bearings should be inspected every 6 months, and every 3 months on cranes manufactured before 1988.

3. When an accident such as this occurs, all work using remaining cranes on the vessel should be stopped until the cause of the problem has been fully assessed.
Trip reporting

IT’S SIMPLE STUFF AND IT COULD SAVE YOUR LIFE

Regular trip reporting not only provides peace of mind for your family and whanau, it helps us help you. If the trip turns to custard knowing where you are makes it easier to find you, so start thinking about what system might work best for you.

Maritime Operations Centre

The radio network is monitored by a team located at the Maritime Operations Centre (MOC) in Lower Hutt on a 24-7 basis.

You can contact the MOC team by VHF, SSM radio or by free phone 0800 MARITIME (0800 627 484).

The team at MOC say if you wish to organise codes over the phone before you head out to sea, then they’re happy to accommodate this.

Fishermen’s radio

A number of commercial fishermen’s radio stations operate on the New Zealand coast. These stations can receive position reports by both VHF and SSB radio.

Most local radio associations run a repeater channel that can easily be accessed from most places within their fishing area. They also maintain a listening watch on VHF channel 16 and on the big radio (SSB), so that if you can’t get through on the repeater this is another option. If you plan to anchor up for the night, or seek shelter when the weather turns, in an area where radio coverage is dicey a quick call before entering the anchorage is always a good idea. Just let ashore know roughly how long you expect to be out of radio coverage.

Family members/friends

It’s good to give the kids a ring at night. You can tell your ‘significant other’ at home what you are up to. Using a cell phone is a really simple tool and most fishing boats seem to carry one these days. Just let them know what your plans are for the next couple of days and when they could expect another call.

Another simple rule for those left at home is to know who to call if they get worried. That can mean the owner of the boat, another skipper, other vessels you know, local radio associations or MOC on the free phone who can put a call out.

Tell us what you think

We are keen to get your feedback on Lookout! Let us know how we’re doing – fill out the freepost form in this issue and send it back or email us at publications@maritimenz.govt.nz.

Annual statistics round up

Our annual accident statistics will be published shortly – look out for your copy in the post or logon to www.maritimenz.govt.nz.

Reported accidents FROM 1 JUNE 2006 – 31 SEPTEMBER 2006

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