

Seascape

Maritime Safety Queensland

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Queensland Government
Maritime Safety Queensland

From the helm



Hon Paul Lucas MP
Member for Lytton
Minister for Transport
and Main Roads

In Queensland, almost one in every 15 people aged 15 years and older owns a boat, and incredibly around one in every five people in the same age group hold some form of marine licence. We also passed the 200,000 mark for registered recreational vessels in January 2006.”

With more and more people using Queensland’s waterways every year, it is important that Maritime Safety Queensland ensures that its marine safety programs are current and assesses trends in boating to ensure a continued high level of marine safety into the future.

Maritime Safety Queensland has implemented a number of safety initiatives in recent years including the introduction of the BoatSafe recreational boat licence training and assessment scheme, the Queensland government’s jet ski management plan, and most recently, the introduction of the Under 12-under 4.8m-underway mandatory lifejacket wearing initiative.

But it doesn’t stop there. A number of important marine safety initiatives are also currently being progressed including the introduction of the Torres Strait Marine Safety Program.

As part of this program, the first 14 participants recently attained their recreational marine drivers licence after successfully participating in a two-day ‘pilot’ BoatSafe delivered on Hammond Island in the Torres Strait. This course is unique because it has been written specifically for Torres Strait communities and addresses their particular boat safety issues.

Students were given practical and theoretical information with an emphasis on specific boat safety concerns identified for the Torres Strait including motor maintenance and breakdown prevention, safety equipment and its use, emergency procedures at sea, vessel stability, and pre-trip planning

Maritime Safety Queensland has also been working to encourage and foster safety as a way of life for operators — as a core boating value within the commercial, fishing and recreational sectors of the boating industry and community.

It is not just Maritime Safety Queensland which carries the responsibility for driving and maintaining Queensland’s marine safety performance. It’s collaboration between a range of stakeholders and partners including port users, vessel manufacturers, the maritime training sector, commercial and recreational vessel operators, enforcement agencies, the insurance industry, the media and others. The challenge for government, industry and the boating community lies in working together to ensure that boating is both safe and enjoyable while meeting Queensland’s maritime transport, tourism and recreational needs.



Captain John Watkinson,
General Manager, Maritime
Safety Queensland

Sanctuary Cove International Boat Show is widely-recognised as the biggest event of its type in the southern hemisphere.

Once again I was amazed and inspired by the diversity of recreational boats and associated products and services on display.

This year’s show again broke attendance records, with visitors exceeding 50,000 for the first time. The number of exhibitors (456) was 33 more than last year, with the expanded marina at the Cove allowing for the biggest display of ‘on water’ boats ever seen in Australia (421 at final count).

I congratulate Barry Jenkins, General Manager of the Sanctuary Cove International Boat Show, and his team for creating an event that showcases the marine industry on such a scale.

The crowds, the boats, the activity and the increasing levels of interest ... this event, I believe, can be seen as a “barometer” by which we can look into the future of Queensland’s burgeoning maritime community.

Ever-increasing vessel numbers, larger vessels, new people becoming interested in boating, associated on-water traffic issues, expanding marine and eco-tourism markets in Queensland, and the development of waterfront residential precincts – these are reality. Growth is inevitable, and with it comes associated challenges.

A cooperative, strategic approach is needed and Maritime Safety Queensland is continuing its work of encouraging and fostering safety as a core value and culture within the commercial, fishing and recreational sectors of the boating community.

Boat shows present an ideal opportunity for public cooperation. If you missed “Sanctuary Cove”, I encourage you to attend the Brisbane International Boat Show at the Brisbane Convention Centre (29 August – 2 September), and visit the Maritime Safety Queensland display. What better place to ask questions about marine safety?

One of the themes for the Maritime Safety Queensland stand this year is the servicing, stowing and wearing of lifejackets and the standards that apply to their manufacture.

It is critical that boaties don’t take their safety equipment for granted, and lifejackets are a good example. Looking at marine incidents that led to fatalities in 2006, the most common cause was person overboard.

There are new lifejacket products on the market, many displayed throughout boat shows. Look for our staff at the Brisbane International Boat Show and ask them about manufacturing standards that apply to lifejackets and the laws introduced last year about when and where to wear them. Safe boating.

BoatSafe island-style

An adapted version of BoatSafe, Maritime Safety Queensland's recreational boat licensing scheme, is set to boost boating safety in the Torres Strait.

Torres Strait islanders rely primarily on marine transport for the supply of goods, access to local services and facilities and connections to mainland centres. The remoteness of the region means that residents have only two transport choices – boat or aeroplane.

Small boats play a vital part in everyday life for the residents of the Torres Strait. The most common boat is an open dinghy which is usually less than six metres in length. Extreme weather can often make boat travel hazardous and at times life-threatening.

Maritime Safety Queensland has recognised the need for competent and safe boating practices and has been working with Torres Strait communities over a long period to improve the safe boating culture in the region through its targeted safety campaigns.

Recent community engagement activities

in the region found Torres Strait communities calling for greater access to marine training and education. In response to this, Maritime Safety Queensland in conjunction with Tropical North Queensland TAFE has developed a Torres Strait-specific BoatSafe training package which will be delivered across the Torres Strait.

Maritime Safety Queensland General Manager, Captain John Watkinson said the Torres Strait BoatSafe training will be rolled out across the Torres Strait communities.

“Traditionally those wanting to attend training courses have had to come to Thursday Island which can be quite an expensive exercise when considering the costs of flights, accommodation and living expenses while away from home.

“Under this new scheme the trainers will be coming to the community rather than the other way around.

“More importantly, the course has been designed to reflect the unique cultural and boating environment of the Torres Strait and to

specifically address safety concerns raised in recent community engagement activities.

“Participants will not only learn about better boat safety but will also learn how to undertake basic motor maintenance and how to manage motor failure at sea.

“Students who successfully complete the two-day BoatSafe training will be eligible for a recreational marine driver's licence which will be issued as part of the training package,” said Captain Watkinson.



Reeling in illegal activity

Customs officers are on the frontline protecting Australia's borders every day, but boaties can also play an important role in helping Customs protect Australia's borders.

In the past six years, more than 30,000 calls to the Customs Hotline, 1800 06 1800, have resulted in significant drug, wildlife and illegal fishing seizures.

You might see some unusual activity on a remote section of the coast, come across a suspicious fishing vessel or notice signs of animal and bird trapping.

Your information could be the missing clue needed for Customs to complete another successful operation.

You can call the Customs Hotline 24 hours a day. All reports are quickly assessed and passed on to Customs operational areas for a response.

What you can do

- report any unlawful, unusual or suspicious border activities
- don't get involved - simply report what you see or hear
- do not disturb or remove anything as this could destroy vital evidence
- act as soon as possible – your prompt action could make a difference.

What to tell Customs

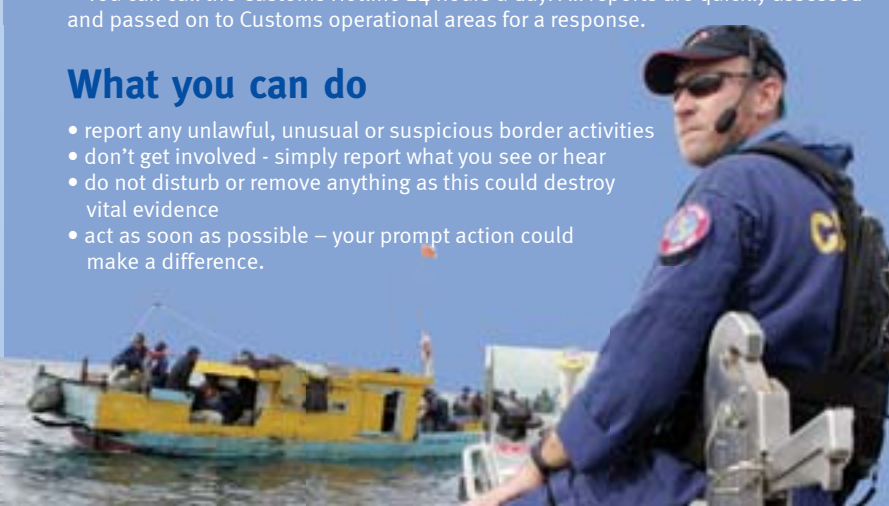
- the time, date and place of the incident
- what you saw or heard
- a description of the people and the transport involved (e.g. planes, boats, trucks)
- registration numbers or call signs you saw or heard.

What to look for at sea

- possible unauthorised landings by foreign vessels
- merchant ships at anchor unusually close to land, islands or other vessels
- vessels outside normal shipping lanes
- ships signaling or being met by small craft
- yachts and pleasure craft in remote or unusual areas
- anyone making landings in remote areas
- unusual objects at sea or ashore (e.g. buoys, rubbish, signaling devices)
- salvage operations on shipwrecks.

Each of these could be a sign that someone is trafficking drugs, weapons, flora, fauna, or other prohibited items.

Be alert and report any suspicious activity to the **Customs Hotline immediately on 1800 06 1800.**



Robin Hansen – member of the Marine Board

Turning the tide for the fishing industry

The Marine Board of Queensland's newest member, Robin Hansen, brings not only a new face, but a new perspective to the Board.

While Board members are appointed as individuals and not as industry representatives, Robin is the first member to have a background in commercial fishing and as such, he brings a different understanding and view of the issues facing the maritime industry in Queensland.

As a new member of the Marine Board, part of Robin's role will be travelling throughout the state, listening to the concerns of Queensland's maritime industry.

As a commercial fisherman with 35 years experience, travelling up and down the Queensland coastline is nothing new to Robin. In fact throughout his career Robin has fished or travelled from the top of Cape York to the Tweed River.

Fishing runs in his blood. As a proud third generation fisherman, Robin's knowledge of the industry – its history, progress and current challenges – is broad and laced with the experience of many days and nights at sea.

Robin first drove a boat at about seven-years-old. As soon as he could start the crank motor of his father's fishing dory, Robin would take it up the local creek, go fishing and play around with mates.

"You wouldn't do that now – but in those days it was the way of learning how to drive a boat," he said.

After dabbling briefly with line fishing in his youth, Robin has worked as a trawlerman for over 30 years. With the thrill of the chase, fishing is more than an occupation for Robin; it's also a source of enjoyment.

"My favourite day on the water would be catching banana prawns," Robin said. "You can spend weeks chasing them, and when you find them you have so much fun because you catch them in such huge quantities.

"When you catch banana prawns there's no fish in the nets – just pure prawn because you're shooting into this dense aggregation of prawns.

"Catching other types of prawns, if you're getting 300-400 kilos a night you're doing well. With banana prawns you can get 2000-3000 kilos in five minutes – and they taste beautiful."

Despite his love for the open water and smell of the catch, Robin's 17-metre fibreglass trawler based in Yeppoon has spent most of the past year tied at the dock. Instead Robin's active concern for the future of Queensland's fishing industry these days keeps him land-locked, often in meetings and offices.

Besides his position on the Marine Board, Robin also serves as trawl chairman and senior vice-president of the Queensland Seafood Industry Association.

Robin suggests that his home port of Yeppoon is a perfect example

of why the fishing industry needs a strong voice, particularly in the government policy development arena, to ensure its future viability.

"When I started fishing in the '70s, in one year we had an exceptional season and probably half of the Australian prawn production came out of Yeppoon.

"There were 80 or 90 trawlers based there and now we have two or three including mine. And one other fella doesn't go out to sea either. This sort of thing is repeated up and down the coast."

Robin said a raft of political issues and environmental factors have combined to decrease the profitability of the fishing industry in the state. Twenty years ago there was almost a 'gold-rush' mentality. Professionally built and home-made boats fished together with minimal restriction. Queensland's generous fish stocks beckoned those looking for quick profit.

"I can remember working on the back deck with two young fellas, thinking that each of us, in one day, would make enough to buy a motorbike each. The average crew member would earn more in a day than the average council worker would in a week.

"Many people assume that its overfishing that has had the biggest impact on fishery resources," said Robin.

"In estuarine based species like prawns, environmental factors and a whole series of water quality issues are major problems. And this hasn't been helped by extensive drought periods."

Robin believes that with a balanced, rational voice within the government decision-making process, the fishing industry can return to a vibrant, sustainable industry. Queensland's seafood consumers will benefit and so will the many families and individuals whose livelihood depends on putting seafood on people's plates in Australia and throughout the world.

In regard to safety outcomes, Robin said the increased competitiveness and regulation of the industry has had some benefits, but commercial fishing by its nature will always have some level of risk.



“If you look at the fishing industry over the past 30-40 years it has evolved from a group of interested individuals into a more professional, focussed operation. Back in the ‘70s there were probably 1600 trawlers – now we have 350 active vessels.

“There will always be safety concerns for commercial fishermen. You’ve got people working on a moving platform, water everywhere and handling heavy equipment.

“At the same time, you have the chance of collisions at sea with larger ships or hook-ups – there’s a range of different issues for different fisheries.



Celebrating 100 years of heroes

This year represents the 100th anniversary of Surf Life Saving in Australia, the first community-based organisation to reach this milestone.

Maritime Safety Queensland congratulates Australia’s major surf rescue authority, which now boasts 305 surf life saving clubs around the Australian coastline and over 113,000 members of all ages. Australia’s surf lifesavers have saved more than 520,000 lives and provided first aid to over one million others.

In 1970 modern motorised equipment began to replace the iconic belt-and-reel as the preferred rescue equipment

Over the years Maritime Safety Queensland has worked proactively with Surf Life Saving Queensland to assist with their transition to the use of powered watercraft for rescues, making access to stranded swimmers safer and faster than ever before.

The inflatable rescue boat (IRB) (*below*) is known as the ‘work-horse’ of the surf lifesaving movement with its speed and maneuverability, and is capable of rescuing multiple patients. Rescue water craft (RWCs), better known as Personal Water Craft (PWCs) are also in heavy use today (*above*).

Queensland’s marine safety legislation is geared to afford the marine industry, including the Surf Life Saving movement, the flexibility to determine the risk and safety management strategies and interventions to best suit each organisation.

Maritime Safety Queensland works closely with Surf Life Saving Queensland to support the unique role of the association and its efforts to improve safety at our beaches within the marine safety legislation framework.

More information about the Surf Life Saving Association and their centenary celebrations is available at www.slsa.com.au.



My favourite day on the water would be catching banana prawns. You can spend weeks chasing them, and when you find them you have so much fun because you catch them in such huge quantities

“But by and large new equipment and stronger, more stable vessels are helping to improve safety, and it’s really the professional operators that are remaining, and are contributing to a safer industry.”

As part of a pro-active approach, Robin said the seafood industry has begun a safety program working with an experienced consultant which, when completed, will suggest wide-ranging initiatives to improve on-board safety for commercial fishing operations.

Together with his role on the Marine Board, he said he can see promising signs for improving the safety outcomes for Queensland’s commercial fishing industry.

“In producing a safety improvement program we are looking to put together a workable plan before we are asked to show cause why we should change,” he said.

“Sometimes decisions are made that are suitable for the recreational sector or the charter industry and may not suit the fishing industry. We are happy to have the opportunity to have direct comment into policy development.

“Almost every month decisions are made that affect some part of the fishing industry and if you are part of the process you can deal with things as they arise rather than being confronted with them as a *fait accompli*.”



Readers' question

Question: The other day I copped a serve while I was talking with a mate on my boat's radio. This guy was telling me to get off Channel 16. We were only having a chat for about five minutes, but this guy reckoned we should have switched to another channel. What are the rules about using Channel 16?



Answer: When chatting to a mate on VHF marine radio, even for two minutes, make sure you tune out from Channel 16 and tune in to another channel. Someone's life could depend on it.

Unfortunately, many boaties who use their VHF radio are unaware that Channel 16 is the international distress channel. It is imperative that it is reserved for this purpose.

Channel 16 is monitored by most vessels as a listening watch. It should be used for initial calling only and then as soon as possible, boat owners should switch immediately to a working frequency for further radio communication.

Boat owners should also be aware that a certificate of competency (licence) is required to operate VHF marine radio.

During weekends and school holiday periods, there is a sharp increase in boating activity and the use of Channel 16 for "chit-chat", particularly in south-east Queensland. In the event of a marine incident, the possibility is high that a vital mayday call will fail to be heard over a friendly conversation.

Inexperienced boaties buying boats with a VHF radio already installed should obtain a radio licence, approved by the Australian Communications and Media Authority before operating the radio. Courses for a Marine Radio Operators Certificate of Proficiency (MROCP) are available at most Coast Guards, Volunteer Marine Rescue squadrons and some TAFEs.

Four standards updated

Licensed to hire?

From 15 June 2007, it became compulsory, under certain conditions, to hold a current marine licence before hiring a boat.

The change takes a common sense approach to promoting safe practices on the water, while preserving the flexibility for people holidaying or wanting to experience boating for themselves.

The updated *Transport Operations (Marine Safety - Hire and Drive Ships)* Standard retains the existing licence exemption for hirers of smaller boats in all but four situations of heightened risk. These include hire boats operating:

- at night
- at speeds greater than 10 knots if unsupervised by the provider
- beyond smooth waters if unsupervised by the provider, and
- when boats are towed away from the point of hire.

The changes are part of an overhaul to four expiring marine safety standards, including those for bareboat ships, examining and

training program approvals, parasailing and hire and drive ships.

Final public comment on the remake of the standard ended in March after several months of broad-based community consultation. Other changes include:

- The Bareboat Ship Standard introduces a licence requirement for operation under power at over 10 knots. In all other situations the current licence exemption continues to apply.
- The Examining and Training Program Approvals Standard outlines ways an entity can qualify to provide training and conduct examination for commercial and fishing licences.
- The Parasailing Standard provides ways of dealing with the operation and equipping of a ship involved with parasailing operations.

A copy of the new standards are available online on the Maritime Safety Queensland website at www.msq.qld.gov.au.





Wunma incident investigated



A Board of Inquiry will investigate the circumstances surrounding a ship abandoned in the Gulf of Carpentaria during a tropical cyclone in February 2007.

On February 7, the 5000 tonne ore barge Wunma was disabled after taking on water during tropical cyclone Nelson. The crew had to be rescued by helicopter, and the ship was later towed safely into the Port of Weipa.

The ship is engaged in transporting zinc ore between Karumba and anchored bulk carriers in the Gulf of Carpentaria.

In early February, when a tropical depression worsened, she was taken fully laden from the Port of Karumba to a position in the Gulf of Carpentaria to ride out the cyclone. Due to water ingress into the ship, propulsion and electrical power were lost. Crew were rescued by helicopter and returned to Karumba via Mornington Island.

With many ships such as the Wunma playing a vital role within Queensland's mining industry, and the regularity of cyclones in the area, the Board of Inquiry will be seeking to ensure the continued safe operation of ships operating in the Port of Karumba as well as other cyclone prone areas across far north Queensland.

The purpose of a Board of Inquiry is to look at the causes and the underlying systemic and operational factors that can contribute to marine incidents.

In announcing the inquiry, the Honourable Minister for Transport and Main Roads, Paul Lucas MP said "while you can't stop cyclones from occurring, it is important that there are stringent procedures and practices for ships that operate in these environments.

"The Board will independently look at all of the facts and make recommendations that will hopefully have safety benefits for the whole of the marine industry operating in far north Queensland."

A report is likely to be made available by the Board in the later part of 2007.

New 'polluter pays' laws introduced

Cleaning up ship-sourced pollution should be the financial responsibility of the polluter. This 'polluter pay' ethos is at the heart of new legislation which was introduced on 18 May 2007.

The new legislation requires all ships 15 m or more in length to have insurance sufficient to pay for potential pollution clean up, salvage and wreck removal.

The insurance policy must meet the following requirements:

- All recreational ships more than 15 m but less than 35 m in length must have an insurance policy that provides A\$250,000 for pollution clean up and A\$10,000,000 for salvage and wreck removal.
- All commercial ships more than 15 m but less than 35 m in length must have an insurance policy that provides A\$500,000 for pollution clean up costs and A\$10,000,000 for salvage and wreck removal.
- All ships 35 m or more in length must have a policy that provides A\$10,000,000 for pollution clean up costs, salvage and wreck removal.

A 12 month transitional period will give ship owners between now and 17 May 2008 to organise appropriate insurance cover. From 18 May 2008 any owner of a boat over 15 m that does not have the appropriate insurance cover could be liable for big fines.

For those ships which cannot reasonably obtain insurance, the ship owner may be able to seek an exemption to the insurance requirement. In such cases the ship owner must apply to Maritime Safety Queensland.

Exemptions will only be granted where the owner cannot legitimately obtain insurance because there is no appropriate form of cover available. Exemptions will not be given because the poor condition of the vessel make it uninsurable.

Maritime Safety Queensland will be writing to the owners of these larger vessels advising them of the new requirements and what they will need to do within the next 12 months to make sure they comply.

For further information contact Maritime Services Branch on +61 7 3120 7428.



Jumpinpin surprise

After enjoying an offshore fishing expedition east of South Stradbroke Island, two gentlemen set for home through the Jumpinpin Bar.

It was a perfect day, with little wind, as they made way in their 5.9 metre bow-rider. The conditions were so calm that donning lifejackets was not considered necessary.

The Jumpinpin Bar, notorious for shifting sands and changing conditions, presented the fishermen with an errant wave which stood up and crashed onto the starboard side. The boat rolled, and both men and a pet dog were thrown into the water.

Luckily some PWC enthusiasts came upon the two men, plucked them from the water and took them safely to shore. The two men received medical attention for minor injuries, but unfortunately their canine friend was lost along with the boat.

Lessons

- A lifejacket is not a life saver unless you're wearing it. Legislation makes it a requirement for all persons in an open boat less than 4.8 metres in length to wear lifejackets when crossing designated coastal bars. However, wearing a lifejacket while crossing coastal bars is highly recommended in all boats.
- Crossing coastal bars can be dangerous. Even in the calmest conditions, expect surprises. Before attempting to cross a coastal bar you should:
 - contact your local marine rescue group for an update on bar conditions including tide and weather information
 - if possible, cross on an incoming tide
 - stand off for a period of time to assess the wave patterns and determine deeper areas more suitable for crossing
 - ensure all deck openings, hatches and doors are securely battened down or closed
 - ensure all loose gear is secured.
- When approaching a bar from the sea, increase power to maintain speed within the set of waves, position the boat on the back of the wave – do not surf down the face of the wave. Adjust the boat's speed to match the speed of the waves but do not attempt to overtake the waves.
- The master of a boat has a responsibility to his passengers to ensure their safety when crossing a bar.
- If you regularly take your dog/pet boating, consider its safety. For example, there are lifejackets for dogs available on the market.

Marine incidents and fatalities up: report

Queensland's Marine Incident Report for 2006 details a significant increase in both reported marine incident numbers and the number of fatalities resulting from these incidents.

While it is hoped that the unusually high number of fatalities and incidents in 2006 represents an aberration only, this is not guaranteed.

For 2006, 701 marine incidents were reported in Queensland – an increase of nearly 8.7% on the number of reported incidents in 2005 and previous four-year average of 646.5.

It remains unclear whether the increase in reported incident numbers is due to a greater awareness among the boating public of the requirement to report marine incidents or is a result of a general increase in incidents occurring.

There were 17 recorded fatalities – four more than in 2005. This fatality outcome is significantly higher than the previous four-year average of 10.5 fatalities per annum. All but one of these fatally injured people ended up in the water as an outcome of the incident.

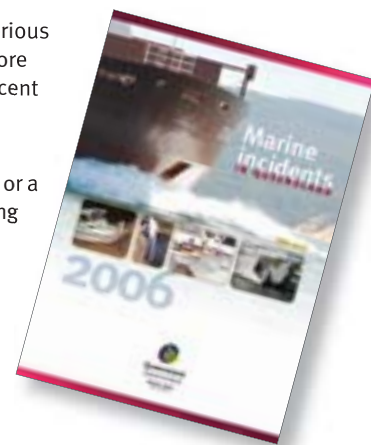
In light of the figures, the General Manager of Maritime Safety Queensland Captain John Watkinson said the onus of responsibility is upon everyone within the state's maritime community to be attentive to opportunities to improve boating safety.

"Maritime Safety Queensland is working closely with industry and interstate marine safety colleagues in developing nationally consistent boating safety policies, standards and initiatives that will deliver safety improvements not just in 2007 but for decades to come," Captain Watkinson said.

Other key findings of this year's report include:

- The most frequently reported types of marine incidents were collisions between ships (134) and unintentional groundings (116).
- 11 people died in incidents involving recreational vessels. These incidents included three double fatalities. A further six people died in incidents involving commercial vessels.
- 20 of the 47 reported fatal and serious injury incidents occurred in offshore waters – up by more than 40 per cent on the four-year average.

A full report can be viewed on the Maritime Safety Queensland website or a copy on CD can be ordered by emailing name and postal address details to: maritime.safety@msq.qld.gov.au



Master Class 5 pilot

Practical approach gains wide approval

In the words of Jeff Osborne, Director and Master at Tangalooma Resort, “Just because they get their ticket doesn’t mean they get the job”. He is one to advocate for the variety of practical experience offered by the recently trialled Master Class 5 pilot, the first of its kind to integrate classroom theory with on-the-job training.

The traditional classroom program of up to nine consecutive weeks followed by an exam has been replaced with 30 theoretical and on-the-job workshops spread over nine months, aimed at broadening students’ knowledge of commercial ship operations.

Candidates are eligible for a licence based on Maritime Safety Queensland examiners reviewing sea time submissions and observing their practical skills during the training process. This aspect, along with other course components, is under review as feedback from various sectors of pilot participants is collated.

Michaela Moss from Maritime Safety Queensland has been working with TAFE assessors, course examiners, managers and the author of the training materials to develop course requirements.

She identifies communicating with industry as a chief issue influencing the program’s success.

“Industry and TAFE have been very willing to participate. With industry showing interest in competency based training, we need to assist the process by being clear about the level of commitment (required) to make it successful,” she said.

“Through communicating across training sectors, we can look at competency based training options such as the traineeship model, which could support industry and the student.”

Michaela said industry partnerships in trainee-style programs were a good workplace strategy that promoted a progression of skills while gaining underpinning knowledge.

As part of the pilot, skills that are not easily gained in some sectors (such as coastal navigation) have been offered by other operators, emphasising the potential for industry partnerships to drive the program.

Michaela is interested in exploring a more formal arrangement for traineeship-style programs and group training options.

Both she and Lee Durkin, Acting Marine Operations Manager at the North Institute of TAFE, agree that the outlook for the industry would be a strengthened workforce as new workers bring better skills and experience.

Tangalooma Resort is one of the commercial operators supporting the program by offering to make vessels available for training. Master Jeff Osborne operates three high speed aluminium catamarans, holding 350, 200 and 120 passengers, and has several soon-to-be skippers in his deckhand ranks.

While he admitted there have been “headaches” along the way, he believes “all in all, it’s going to be a good course”.

With one deckhand going on board Big Cat Cruises dive charter as part of the course, Jeff has full confidence that the experience has helped to thoroughly prepare him for the role of skipper.

The trip on the Big Cat, from Bundaberg to Newport Waterways Marina and to several dedicated dive sites in between, counted toward the week at sea required in the course and gave students a chance to consolidate the knowledge they had gained from the classroom. It also gave participants a taste of skippering a charter vessel complete with fee-paying passengers. Along the way the students were required to tackle the inevitable unexpected challenges of a coastal passage, providing them with a real taste of life at sea.

“We don’t do much coastal or voyage planning for traversing across Moreton Bay to Tangalooma and back,” Jeff said. “Our boats are mostly suitable for guys to learn radar on, whereas Big Cat Cruises are ideal for teaching coastal navigation.”

By formalising industry partnerships, all students are able to gain experience in the broad range of competencies that are required for a Master Class 5 licence.

Representatives from a range of stakeholder groups agree

that fine-tuning of the program will need to consider aspects such as assessment, and ensuring that examiners are satisfied that candidates have proved their competence in all areas.

Some suggestions include giving the examiners more time with students, and maintaining the oral component as an essential part of assessment to ensure they are 100 percent confident in giving students a licence.

Individualising the course to match training and time frames to those students’ level of experience and knowledge is another point for discussion.

A report from an external provider will discuss various aspects of the pilot program and help to form strategies for improvement that Michaela said could guide the future of the course.

“Feedback has been very positive, as a strategy that promotes marine safety. One of the big outcomes is looking at the things we did well, and acknowledging the systems that need change...and to start to address them.”



Profile – Hydrographic Services Branch

The safe operation of commercial shipping in Queensland ports depends on the continual monitoring and subsequent maintenance dredging of the entrance channels and berths (dredge in Gladstone harbour pictured); many of these operations are supported by the Hydrographic Services Branch.

Top: The hydrographic survey vessel, QG Norfolk.



Taking an in-depth view of Queensland waters

Each day, millions of dollars of Queensland's export earnings depend on water depth. Ships laden with minerals or other valuable commodities steam out of our ports, the pilots confident in the course plotted and the amount of clearance under the keel.

Confidence in pilotage and navigation through the state's ports owes much to the behind-the-scenes work of the Hydrographic Services Branch (Pilotage and Hydrographic Services) of Maritime Safety Queensland.

The unit is responsible, among other things, for the mapping and monitoring of the sea bed and surrounding coastal detail of many of the major ports along Queensland's coastline including Gladstone, Port Alma, Hay Point, Abbot Point, Cape Flattery, Weipa and Karumba.

The work of Hydrographic Services is ongoing – without it, the unseen terrain under much of Queensland's waterways would require guesswork.

Water depths shown on charts, so valuable to mariners navigating up and down the Queensland coast, owes much to the highly skilled work of the surveyors, vessel crew and supporting personnel from the unit.

The continual surveying of port and harbour entrances along the Queensland coast is a critical element in the safe navigation of the thousands of shipping movements each year.

The work of hydrographic surveyors also feed into calculations that determine the volume of export material loaded in each ship. By knowing the exact depth of water at a particular point of the tide, ships can be loaded to suit the predicted departure time. The deeper the water at a particular time, the more can be loaded.

During his 21 years working as a hydrographic surveyor with Maritime Safety Queensland, Ray Martin, the Manager of Hydrographic Services, said he has witnessed technology revolutionise the methods used


and the accuracy achieved when surveying underwater terrain.

He said the development of Global Navigation Satellite System (GNSS) such as GPS and sophisticated sonar equipment has cut the manpower and time needed for surveying. And with Queensland's vast waterways, the savings have been significant.

"In the old days, up to as many as 10 people would go out as a survey party for six months to survey an area. The survey party could include two surveyors, vessel master, several deckhands and leadmen - we'd even have a cook on board," he said.

"In places like Weipa, it would take up to a week to set up solar panels for the microwave navigation systems and to establish tide gauge networks before we could even start surveying.

"Now we can arrive on the site and start surveying straight away. Roughly speaking,



productivity has probably improved by about 40% with the technology we have today.”

Mr Martin said that older sonar technology sounded the ocean bottom through a 30 degree arc beneath the boat. Today’s multi-beam sonar technology scans through about a 130 degree arc with sonar coverage very much dependant on water depth.

Computer imaging can transform the processed multibeam data received, into a virtual painting of the ocean floor, down to small seabed detail. If needed, sounding data can be transformed into computer-generated 3D ‘fly-throughs’ that take the viewer on a journey through underwater canyons and hilltops.

“What took us about thirty survey runs to gather soundings in the Weipa South Channel, now takes only six,” said Mr Martin. “And the equipment on board the vessel corrects for the pitch, roll, yaw and heave of the vessel. When you survey offshore with these sonar systems, in relatively rough conditions of a one-and-a-half metre swell, you need this equipment to ensure the quality of the captured data.”

With capabilities to deliver underwater mapping with such accuracy and speed, Hydrographic Services often receive requests to assist in ad hoc or emergency underwater searches.

For example, when two fishing ships were discovered missing from their moorings in Mourilyan Harbour after Cyclone Larry in 2006, Hydrographic Services were despatched. The harbour was closed because of the potential risk presented by collision with the submerged wrecks, while the main channels were scanned with the full array of underwater surveying technology. The search came up empty and the port re-opened. Eventually the two boats were found grounded in mangroves. If large collateral, such as a ship’s anchor or a container, is dropped in a port entrance channel or port approach and presenting a navigation hazard, subsequent delays caused by port closure can cost millions of dollars. Hydrographic Services can determine the location of such hazards quickly so they can be removed.

Occasionally, the branch’s services are

called upon to assist Queensland Police in criminal investigations or to assist emergency service agencies with searches for lost aircraft and sunken vessels.

Surveying history repeats

Hydrographic Services is the custodian of hydrographic survey information dating back to the 1800s.

This information, available in various digital forms, is highly sought after for historical research. It is also an important tool for studies and modelling for vessel simulators, environmental impact studies, and future port development in a number of Queensland ports.

The Royal Australian Navy uses data from Hydrographic Services to supplement its own information to update admiralty charts along the Queensland coastline.

Maritime Safety Queensland’s Spatial Services Unit integrates the data into its Geographic Information Systems (GIS) database, which is used to produce the popular Beacon-to-Beacon Directory and various boating safety charts.

Vessel traffic system turns 10

Ten years ago Queensland launched the world’s first internationally recognised mandatory ship reporting system.

REEFVTS is a joint initiative of the Queensland and Australian governments, which seeks to improve navigational safety in the Torres Strait and Great Barrier Reef, reducing the risk of shipping incidents and associated pollution and environmental damage.

A ceremony to mark the tenth anniversary of the launch of REEFVTS (previously REEPREP) was held at Hay Point in May.

The ceremony was officiated by the Honourable De-Anne Kelly, MP,

Parliamentary Secretary to the Deputy Prime Minister and Minister for Transport and Regional Services, and Mr Bruce Wilson, Director-General of Queensland Transport, who presented certificates of appreciation to Vessel Traffic Service Operators past and present.

“It was great to catch up with all those associated with ReefVTS and discuss its progress since implementation,” said Robyn Newton, a current Vessel Traffic Service Officer at REEFVTS.

In December 2006, the system was significantly upgraded to a Coastal Vessel Traffic Service (REEFVTS) supported by satellite-based position reporting by ships transiting the region.

REEFVTS provides ships with information about potentially conflicting traffic movement, navigational information to assist on-board decision-making and maritime safety information.

The ability of REEFVTS to compile and maintain a near real-time traffic image of ships transiting the region has been instrumental in improving situational awareness for ships in the Great Barrier Reef.

Left: Robyn Newton, a Vessel Traffic Service Officer at REEFVTS, is presented a certificate of recognition of the service’s anniversary by (from left) Hon De-Anne Kelly, Bruce Wilson, and John Watkinson, General Manager for Maritime Safety Queensland.





Spilcon 2007

Conference delegates were offered the best advice and latest information about oil spill prevention and response techniques at the "Spilcon" conference held in Perth recently.

The conference, the 11th of its type and hosted by Western Australia's Department of Planning and Infrastructure, featured an exhibition of response equipment and service providers and a static and on-water display of oil spill response equipment on the Swan River.

The theme for the 2007 conference "Global, Regional, Local", was reflected by the number of international and national delegates who attended.

Maritime Safety Queensland officers assisted in the on-water display, drawing upon experience gained from coordinating the 10th Conference in Brisbane in 2004.

Stop press

Six oil spill response personnel from Maritime Safety Queensland were deployed to Newcastle in early June to assist with the salvage efforts at the scene of the stranded bulk carrier Pasha Bulker. The carrier ran aground during a storm and heavy seas.

At the time of printing, Maritime Safety Queensland personnel were preparing as part of the "first strike response team", ready for the first attempt at refloating the carrier.

The attendance of the Maritime Safety Queensland personnel is provided as part of a coordinated national pollution response plan.

BELOW: Display operators from Maritime Safety Queensland L to R – Gavin Ruffell, Peter Finn, Andy Russell, Ash Titmarsh.



Trailer sailers go bay-to-bay

Over the Labour Day long weekend, trailer sailing enthusiasts once again gathered for the annual Bay-to-Bay Race in the Great Sandy Strait from Tin Can Bay to Urangan.

The race was run in idyllic conditions with a fleet of over 180 yachts of every description participating. As usual, the yachts and crews rested overnight at Garry's Anchorage, on the

western side of Fraser Island, before setting off for the final run to Urangan Boat Harbour.

The event, sponsored by the Hervey Bay Yacht Club, is supported by Maritime Safety Queensland, supplying the launch QG Andrew Petrie as a safety vessel. No incidents were reported, and a great time was had by all.



New Marine Information Bulletins

Marine Information Bulletins cover important information for the maritime industry, and are also available on the MSQ website under 'Publications', or by contacting your local Maritime Safety Queensland office. The latest bulletins include:

- Electrical standards and licenses – Recreational craft
- Electrical standards and licences – Commercial craft
- Passenger Vessel Accommodation Standards

Contacting Maritime Safety Queensland

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Port Alma	07 - 4934 6929

Upcoming events - 2007

JULY

- 11-12 National Marine Safety Committee Marine Skills Industry Forum, Brisbane
- 17-19 Crocfest, Thursday Island

AUGUST

- 20 Maritime Safety Queensland Industry Forum, Cairns
- 29-Sept 2 Brisbane International Boat Show, Brisbane Convention and Exhibition Centre

MarineSafe regional meetings

AIRLIE BEACH

- 23 July
- 3 September

BRISBANE

- 1st Tuesday of every month

Mackay	07 - 4944 3700
Whitsundays	07 - 4946 2200
Townsville	07 - 4726 3400
Cairns	07 - 4052 7400
Weipa	07 - 4069 7165
Karumba	07 - 4745 9284
Thursday Island	07 - 4069 1351