



The Horizon Shores marina development site.

The Horizon Shores industrial space has also attracted the attention of fibreglass boat manufacturers expressing a desire to move to a purpose built precinct with travel lift access. With the Environment Protection Authority becoming more vigilant about where certain industries are operated, many are planning a move from their current premises to ensure they operate to the very best environmental standards.

Prices for marina berths throughout Queensland are on the rise as demand increases. For example, the cost of Meridien Marinas Horizon Shores berths has risen 33 per cent in the past 18 months.

With strong demand, there is no doubt Queensland will continue to experience significant marina development like that of Horizon Shores. The proposed Shute Harbour, Abel Point and the Port of Airlie marina developments for example, will offer an additional 1700 berths for recreational and cruising boats.

What does this mean for Maritime Safety Queensland?

Firstly, marina berths help get vessels off the 'street'. There are currently 531 existing buoy moorings on the Gold Coast with little room for expansion without creating further congestion in many of the more confined and sheltered waterways. Demand is high for buoy moorings and there are substantial waiting lists. Already there are 530 entries on the Gold Coast Region's buoy mooring waiting list with the average wait being approximately 2-6 years for a mooring, depending on the area.

In addition, marina developments like Horizon Shores offer dry berth storage allowing boat owners a place to leave their vessel in a secure compound without having to worry about trailering to and from the boat ramp or storing the boat at home. The boat can be launched within the marina, helping to relieve congestion at public boat ramps.

Sewage legislation and responsibilities have been at the forefront over the past few years with

increased requirements for moored vessels to comply with discharge legislation. All Gold Coast and southern Moreton Bay waters north to Peel Island are prohibited discharge areas which means vessels that are required to store waste in holding tanks on board can discharge only by using sewage pump out facilities mainly located at marinas.

Marina developments are essential for industry growth, especially for the larger end of the market. If potential boat owners fear they will not be able to moor the boat they want to buy, sales could be affected. In turn, boat owners also need to be confident they can secure a mooring in other locations if they decide to cruise. From a safety perspective it is vital that cruising boats have sheltered and secure marinas available along the coast as safe havens in the event of adverse weather or to enable repairs to be made.

Marinas play a vital role in the boating landscape, offering essential services which are needed, not only to enhance the industry, but also to ensure boat owners can meet their responsibilities.

The law and you

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Gold Coast speed limit review

Maritime Safety Queensland conducted an extensive review of speed zones throughout the Gold Coast region to improve boating safety and environmental impacts as traffic on the water continues to increase in this region.

Information was gathered from over 250 submissions provided by a wide cross-section of the boating community and general public.

Representatives from Maritime Safety Queensland, Queensland Boating and Fisheries Patrol, Queensland Water Police and Marine Queensland, the Gold Coast Marine Safe Committee and the Gold Coast City Council reviewed the submissions and made recommendations for changes.

As a result of this consultative process some existing speed zones will increase in radius and new speed zones will be established in other sensitive areas. These changes will take place from 1 July 2008. New or extended speed zones include Steiglitz/Cabbage Tree Point, McKenzies Channel, Jacobs Well, Tiplers Passage, Coomera River, Wasp Creek, Labrador Channel, The Broadwater (near Southport), Nerang River, Tiger Mullet Channel and Wavebreak Island.

Adjustment to existing legislation will necessitate the introduction of 'no-wash' zones from 1 January 2009. 'No-wash' zones will be established in areas where the wash from boats has been identified as a cause of safety or environmental risks, such as canals, creeks, lakes, boat harbours, marinas and popular anchorages. These zones will require owners to monitor their speed and the amount of wash their vessel is producing.

Other proposals including new 25 knot zones in some river areas for vessels under 8 metres in length are planned for introduction in January 2009.

Comprehensive information relating to the proposed changes including detailed locality maps can be found on the Maritime Safety Queensland website www.msq.qld.gov.au.

For further information phone Maritime Safety Queensland on the Gold Coast (07) 5539 7300.



Left: Owners of vessels over 4.5 metres have received this information flyer in the mail.

406MHz EPIRB from 1 November 2008

As from 1 November 2008 all vessels (recreational and commercial) must be equipped with a 406MHz Emergency Position Indicating Radio Beacon (EPIRB) if operating beyond smooth and partially smooth waters and greater than 2 nautical miles from land. To comply with the amended regulation, the EPIRB must be registered with the Australian Maritime Safety Authority. If fitted with a hydrostatic release unit, the EPIRB must be activated before the EPIRB reaches a depth of 4 metres. Simply having a 406MHz EPIRB on board will not necessarily ensure compliance.

The changeover date will prepare boat owners for shutdown of the old 121.5MHz EPIRB signal which will not be detected by satellite after 1 February 2009.

Other states and territories are also amending their legislation in advance of the turn-off date.

To comply with the new legislation you must:

- carry a 406MHz EPIRB from 1 November 2008 if you operate beyond smooth or partially smooth waters or more than two nautical miles from land in Queensland (fines will apply)
- ensure that your EPIRB complies with the Australian / New Zealand standard 4280.1:2003
- ensure your new 406MHz beacon is registered with the Australian Maritime Safety Authority (AMSA) – registration is free
- advise AMSA of any change to ownership and vessel details.

Demand for digital 406MHz EPIRBs will increase as the November 1 deadline approaches so don't leave it until the last minute to upgrade.



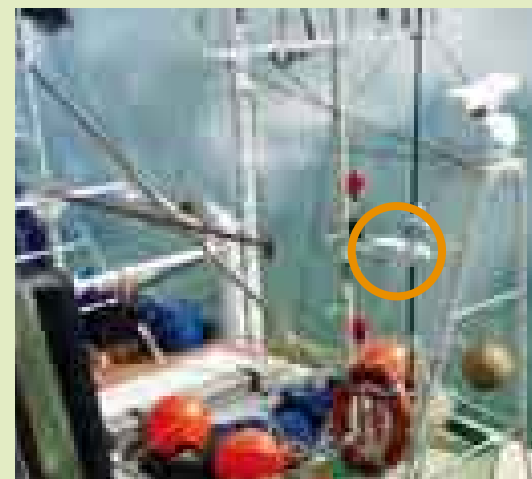
'Float free' EPIRB

One of the problems with locating surviving crew from a sunken vessel is that an EPIRB is not always activated. EPIRBs kept inside the wheelhouse through fear of theft will not provide any assistance whatsoever if they cannot be activated quickly in an emergency.

Mr Bill Henebery, Independent Trawler Association and Mr Michael Wood, Queensland Seafood Industry Association have enlisted the support of MSQ to help communicate messages about the benefits of installing a 'float free' EPIRB to facilitate quicker emergency response times.

'With the high risk nature of fishing operations, installation of a 'float-free' 406MHz EPIRB is a sensible move and recognises the importance of crew safety. The cost is small considering the lives it could save', said Mr Henebery.

Due to the difficulty of mounting a 'float-free' EPIRB on a trawler so that it is reliable and will operate satisfactorily under the most extreme circumstances, industry and MSQ will be showcasing a 'float-free' EPIRB on volunteer



'Float free' EPIRB mounted on trawler mast.

trawlers in each region across the State. These operators have undertaken to encourage discussion about appropriate mounting sites on a trawler as well as inspections of the equipment.

The fear of theft should be reduced because a 406MHz EPIRB can be enclosed in a capsule and must be registered with the Australian Maritime Safety Authority before it is activated.

Progress through industry/MSQ partnership

Hats off to the crew of a prawn trawler – their's is a high risk occupation where the possibility of injury, swimming with sharks, or worse still, being trapped in an upturned sinking trawler is very real – and it is most likely to happen during the hours of darkness.

Nets that prawn trawlers pull along the seabed can easily snag on rocks or debris causing the trawler to roll – in some cases the pressures are so extreme that without appropriate safety guards the trawler is at risk of taking on water, or capsizing. In the worst case this can occur within a few seconds leaving crew vulnerable to injury or death.

Maritime Safety Queensland staff work closely with the fishing industry to develop long term solutions that increase the odds of crew returning home safely. Projects including the trial of personal life saving equipment in 'real-time' conditions, increased industry awareness programs at regional centres and focusing attention on improving safety systems have been carefully guided by fishing industry experts. Prevention as always is the key to reducing marine incidents and MSQ is involved in providing industry with workable solutions. Two recent initiatives include developing and trialling an escape strap system to help crew swim free from an upturned trawler, the other is a proposal to develop and trial a quick release system for hydraulic winches. Addressing faults in the availability and deployment of safety equipment is also a key industry responsibility and MSQ/industry is showcasing modern EPIRBs that are better suited to trawler operations.

Quick release mechanism

Arguably every trawler that rolled over following a hook-up could have been saved if it had a system of quick release. At well over \$10,000 a set, the high cost of replacing trawl equipment means that operators want an opportunity to recover their gear. But there is not a set of equipment out there that is worth more than the life of any crew member. MSQ has prepared information stickers on what to do in the event of a hook-up to be affixed in prominent positions on a trawler following advice from industry experts. The stickers are aimed at promoting discussion between the skipper and crew about each of their responsibilities in the event of a hook-up. However, as a rollover can occur within seconds of a hook-up, a fail safe system is still needed to prevent the trawler rolling over – one that will allow the crew to recover gear safely and in good time.



The escape strap system.

Trawler hook-up response

Steps 1-4: maximum 20 seconds to respond.

- 1 Reduce power
- 2 All crew on deck & close hatches
- 3 Alert other vessels in the area
- 4 Lifesaving equipment in float free position
- 5 Move trawl cables to the side of the vessel
- 6 Be ready to cut the trawl wires
- 7 Move to high side of the vessel
- 8 If the vessel rolls – no matter where you are – hold on to an outer edge until it stops

Do not start winching until steps 1-4 are complete.

Trawler person overboard response

Steps 1-4: maximum 20 seconds to respond.

- 1 Reduce power
- 2 Immediately throw a lifebuoy and light overboard
- 3 Note the time and vessel's location
- 4 Alert all crew – response time is critical
- 5 Release or retrieve trawl wires to get closer to the person
- 6 Notify other vessels in the area
- 7 If you lose sight of the person, immediately release an EPIRB, then lodge an emergency call

"A few seconds of practice could save you a split second"

Response information stickers.

Over the coming season Maritime Safety Queensland is drawing together a range of ideas used by different operators and consulting with industry experts to develop preferred quick release systems. One Townsville operator who uses quick release systems on his nets said, 'I've been hooked-up dozens of times but in 40 years of trawling I've only lost two sets of gear'. There is no reason why the entire commercial fishing fleet cannot match or exceed this record.

Another concept that has just been referred to Maritime Safety Queensland is a quick release valve for hydraulic winches. The design draftsman that came up with the idea is keen to further develop the concept with the assistance of industry. MSQ is happy to support further development of the valve and will ensure interested parties are referred to the designer.

Escape strap system

Picture yourself in a front-loading washing machine with water gushing in at every angle and debris such as a fridge, gas bottle, computer and any other equipment in a wheelhouse that is not tied down and at the same time holding your breath and trying to find a way out in pitch darkness. Welcome to the very real situation of a trawler rollover. In these circumstances the panic and loss of perspective would reduce the odds of the average person getting out alive. If the person managed to find a pocket of air they will still have problems with disorientation and darkness – and may panic even more given they know the dire situation which they now face – Which way is out? How fast am I sinking? Will I have enough air to reach the surface?

The Escape Strap is a concept aimed at providing one last opportunity to get crew out safely when all other preventative measures have failed. The strap is fitted inside the roof of a vessel so it can be used as a hand anchor in rough conditions and leads to each exit. When the vessel rolls over, battery operated lighting in the strap is automatically illuminated via at least three methods (hydrostatic release, engine failure or pitch/roll trigger). The strap also has directional collars so that crew can 'feel' their way out if they can't see. Because of its simplicity the strap has received positive support from industry and trawler operators are needed to develop low cost systems and run sea trials. Maritime Safety Queensland has provided funding to assist with development.



Learning from marine incidents

Idyllic to disaster in moments

In March 2008, the owner of a 15.7 metre aluminium motor cruiser built in 2007, took his family on a cruise along the Queensland coast.

As the vessel was underway in two metre seas, the computer screens on the bridge went blank and power dropped out to the ship. The owner attempted to throttle back the electronic controls and found they were not working. He used the emergency engine stop system to bring the ship to a standstill, then went to investigate the cause of the problem.

He lifted the engine hatch and found that the engine room was full of smoke. He sealed the engine room and mustered the family on deck and fitted them with personal flotation devices. He then activated the EPIRB on board for assistance.

The owner attempted to fight the fire but was driven back by the smoke and decided to abandon ship. He went to the cabin roof to launch the dinghy secured there but found that there was no power to the davit. He managed to release the dinghy manually and it landed upside down in the water.

His wife and two children jumped from the bow into the water but the 8-year-old boy caught his leg on the railing during the jump, fracturing his femur.

The dinghy was righted but could not be bailed out in the heavy seas and remained semi-submerged. The family waited for help in the dinghy for approximately an hour before they spotted a ship. They set off a flare and the vessel came to the family's assistance.

A rescue helicopter and the Coast Guard arrived. The mother and the two children were transported by helicopter to hospital where the boy's broken femur was operated on.

An air search was conducted but could find no trace of the \$1.2 million ship.

Lessons

1. It is essential that owners and masters ensure their vessels are safe before undertaking any type of voyage. Regular checks should be conducted on lengthy voyages to ensure the machinery is functioning correctly and that equipment is secure.
2. The vessel lacked a fixed fire extinguishing system and a functional fire alarm for the engine room. A fire in the engine room of a large ship can prove difficult to extinguish by manual means and may take some time to identify. A fire alarm is invaluable for early detection of a fire and a fixed fire extinguishing system may have proven more effective than the use of a small fire extinguisher.
3. Be aware that re-opening fire-affected spaces will risk worsening an existing fire or reigniting an extinguished fire when fresh oxygen is re-introduced. Where possible such spaces should be left to cool before opening.
4. The vessel should have had a quick release davit enabled for the dinghy, allowing for a quick and safe departure from the ship.
5. Regardless of a master's competency and experience, or age of the ship, unexpected events happen at sea. The master of any ship should consider the risks of the voyage and prepare a contingency plan as necessary.



Pollution prevention initiative for Urangan Boat Harbour

Congratulations are in order to Steve Krebs, Maritime Safety Queensland Maritime Operations Officer, for his initiative in dealing with a pollution problem in Urangan Boat Harbour.

In March Steve noticed increased small pollution incidents, apparently caused by automatic bilge pumps and pumping out of sewage holding tanks at night. Steve approached the local Boat Harbour Controller and Marine Safety Officer with a letter drop strategy to reduce the pollution occurrences.

Three marina operators who were also a frustrated about the pollution actively supported the initiative.

To alert the boat owners to the problem the officers produced and delivered an information flyer, oil absorbent pads and a Maritime Safety Queensland marine pollution pamphlet to every ship in the harbour.

Bob Lowe, Manager Marine Safety Gladstone Region is pleased with the result: there has not been a pollution event reported since the letter drop.