

Vital community link Marine Rescue Ulladulla Mallacoota fires Relief via water Solstad responds A call from a community



Australian Government
Australian Maritime Safety Authority

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Front cover illustration Scott Kimber Message from the CEO

### Message from the CEO

While we all strive for individual success, it's the communities we come home to at the end of the day that give us vital support.

This edition of *Working Boats* celebrates those ties—whether they be family and friends, your local co-op, or the wider community. Supportive networks help create resilient people and businesses to weather tough times and grow when conditions are good.

We start off by speaking to Flora Warrior of Mabuig Island in the Torres Strait, who last year won the People Development Award at the National Seafood Industry Awards. Flora is the definition of a modern community leader and her work to develop the seafood industry on Mabuig Island and the prosperity of her people is truly inspiring.

We also feature Mark Raff, who turned a personal battle with mental health into a mission to connect with, and help others through his *Life's Good* charity fundraising charter for Beyond Blue on the Gold Coast, Queensland.

Woven into the fabric of our working boats communities are the industry associations and co-operatives, which continue to offer support and representation to their members out on the water. Dennis Sten from the Northern Territory Guided Fishing Industry Association talks to *Working Boats* about their mission to keep members abreast of regulatory change and their passengers in safe hands.

They say that disaster brings out the best in community spirit and that has certainly been the case in communities across Australia, impacted by devastating events in recent months. Bushfires, floods and now COVID-19 are directly impacting the livelihoods of operators around the country. The persistence and resilience of these communities is remarkable.

We hear from some of the operators who came to the aid of their communities when fires ripped through the Mallacoota township and surrounding areas over the New Year. We also feature abalone operators who are rebuilding their local industry after losing their factory and co-op in the fires, and now face market pressures as a result of COVID-19.

Recovery will take time and the value of strong, resilient and supportive communities cannot be understated. This edition of *Working Boats* is dedicated to the people and organisations who unite us in tough times; who make us safer and stronger.

Mick Kinley Chief Executive Officer

*Working Boats* May 2020

# Contents



19

Safely from sea to sashimi Australia Tuna Fisheries' top five operational risks.

Safety



Bushfire support on land and sea

Shared response in Mallacoota.



Managing sharks in the workplace



Marine Rescue Ulladulla Vital community link.



Trap to treasure Indigenous Rangers transforming ghost nets to art.

COVID-19 and the Australian commercial vessel industry	1
A warrior for Mabuiag	6
Bushfire support on land and sea	8
Teaming up with the community	13
Managing sharks in the workplace	15
Environmental conditions: waves	17
Safely from sea to sashimi	19
Marine Rescue Ulladulla: vital community link	23
Float-free EPIRBs on their way	24
Trap to treasure	25

Life rafts—correct installation	29
Trawlers uphold oldest seafaring tradition	31
Chartering a course to mental wellbeing	33
MIAL future leaders program	36
Northern Territory Guided Fishing Industry Association	37
What are we hearing from you?	40
Mersey Bluff Lighthouse	41
What's the one piece of safety advice you would pass on to the next generation?	43
Community events	44

# COVID-19 and the Australian commercial vessel industry

As our understanding of COVID-19 builds with continuing research and experience, so do the strategies and tactics we use to prevent its spread. What's the advice for Australia's commercial vessel industry?

By Mick Bishop

Domestic commercial vessel (DCV) operations vary widely across Australia, so the impact of COVID-19 and advice will differ between different operations and in different regions. For oneperson, short-trip operations like some inshore crab and net fishing, COVID-19 may present a minor risk. But operations involving multiple crew will have new COVID-19 risks to manage particularly with extended trips.

#### Check port access in your state

Owners and operators should be aware of what restrictions apply to port access in their state and or territory. Some states and territory governments are also restricting access to vessels from other regions. Some restrictions apply for travel within a region such as to remote indigenous communities.

These regulations and directions are continuously changing as governments adapt strategies to best deal with COVID-19.

### COVID-19 measures in the workplace

The Department of Health's social distancing and hygiene requirements for workplaces apply to DCVs.

Steps for social distancing in the workplace include:

- don't shake hands to greet others
- promote good hand, sneeze and cough hygiene
- provide alcohol-based hand rub for all crew
- if possible, eat meals in a separate area from others
- regularly clean and disinfect surfaces that many people touch
- open windows or adjust air conditioning for more ventilation
- limit food handling and sharing of food on board vessels
- avoid non-essential travel
- promote strict hygiene among food preparation (canteen) staff and their close contacts

- consider cancelling non-essential meetings
- put off large meetings to a later date
- hold essential meetings outside in the open air if possible.

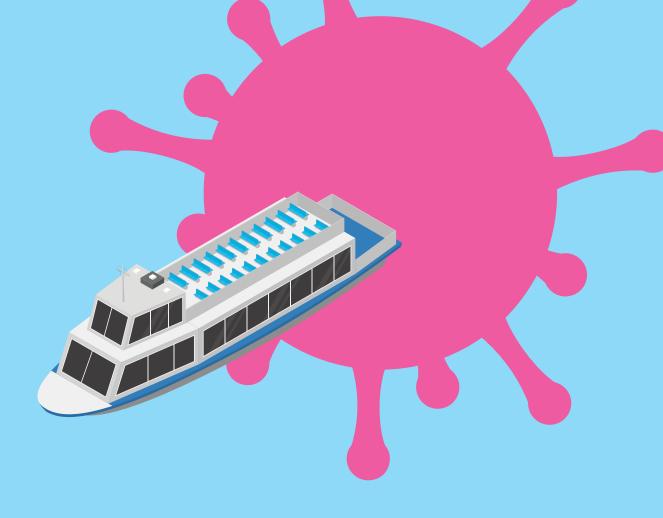
These requirements are being enforced by state and territory authorities.

### Managing the risks

Our advice to operators and crew is to take a risk assessment approach, implementing control measures suitable for your operation while taking into consideration state and federal government health advice.

Review the risk register for your vessel's safety management system in light of COVID-19. This will help to weigh up potential risks and—where needed modify procedures for the vessel's operation (i.e., induction procedures, meetings, mealtime planning – using health advice to develop COVID-19 procedures on your vessel).

As an example, for a large vessel on a day trip in calm weather, it might be possible to maximise the 1.5-metre



social distancing rule by spreading crew apart. But factors such as extended trips, rough weather and fishing techniques may make such an approach impractical and unsafe.

### Pre-departure measures

COVID-19 procedures should be a key part of vessel induction and pre-departure briefings to crew and passengers. Include the following elements.

- Assess people before boarding to make sure they have no COVID-19 symptoms and are well
- Reinforce the importance of following the Australian, state and territory measures to reduce exposure to COVID-19
- Reinforce the importance of hand washing and respiratory hygiene (ie when coughing and sneezing)
- Make sure you have enough soap, hand sanitiser and tissues available on the vessel prior to departure.
- Follow appropriate waste disposal procedures.

### **Cleaning your vessel**

As well as through direct personal contact, COVID-19 can also spread by people touching shared work objects or surfaces (such as handles or railings) contaminated from a cough or sneeze by someone infected with COVID-19, and then touching their mouth or face.

The Department of Health has developed useful detailed guidance on cleaning and disinfection (see link to the side). Cleaning reduces the amount of dirt and organic matter on surfaces, which reduces the effectiveness of disinfectants. For this reason cleaning surfaces is recommended before disinfecting.

### Voyages of 14 days and longer

If a vessel has been at sea for 14 days, had no contact with other people, and no crew member has shown COVID-19 symptoms, the crew is considered clear of COVID-19 infection. The COVID-19 procedures can be relaxed until their next encounter with others.

The same 14-day protocol is used for crew on international vessels coming

into Australian ports. However, we suggest you continue to monitor state and or territory port entry requirements.

### Interactions with other vessels

In some sectors including some fisheries, it is common practice for vessels on extended voyages to have social contact with other vessels anchored in the same location. These interactions should be avoided or conducted with appropriate COVID-19 precautions in place (ie bringing a tender alongside without boarding).

### Short port visits

When a vessel makes a short port visit during a voyage to offload catch or take aboard stores, the vessel crew should try to avoid or minimise contact with other people to reduce the risk of spread of COVID-19 and return to the vessel immediately after completing the task.



# If a crew or passenger displays COVID-19 symptoms

If a crew or passenger displays COVID-19 symptoms, isolate that person and keep contact to a minimum.

Symptoms include fever, coughing, sore throat, fatigue and shortness of breath.

The Health Direct COVID-19 Symptom Checker (see below) helps you to decide whether you need a doctor and what to do next.



You can also phone the National Coronavirus Helpline for advice.

The person should be allocated their own linen, plates, cutlery etc. Keep their washing separate from the rest of the crew.

Surgical masks and gloves should be worn by the person displaying symptoms and carer when in the same room.

## AMSA resources

Information for owners, operators, masters and crew of domestic commercial vessels amsa.gov.au/covid-19

Australian Governmer

# COVID-19 resources

National Coronavirus Helpline 1800 020 080

Health Direct COVID-19 Symptom Checker healthdirect.gov.au/symptom-checker

# Department of Health—social distancing for coronavirus (COVID-19)

health.gov.au > News > Health alerts > Coronavirus (COVID-19) health alert > How to protect yourself and others from coronavirus

# Mental health and wellbeing

It is important that crew supported during the current crisis.

ROUK? ruok.org.au Beyond Blue beyondblue.org.au

Stay Afloat (Tasmania) tsic.org.au/stayafloat

Smiling Mind smilingmind.com.au

### Sustainable Fishing Families Managing Stress for Fishing Businesses Handbook womeninseafood.org.au > Resources > Sustainable fishing families

# Dive operations

The Australian Dive Accreditation Scheme recommends the following resources.

Association of Diving Contractors International advice on COVID-19 and sanitization of commercial diving life support equipment

underwatermagazine.com

International Marine Contractors Association COVID-19 guidance for diving contractors imca-int.com

# 1. How do I get a replacement for one of my vessel's certificates?

To replace or obtain an additional copy of a vessel's certificate, submit the AMSA 758 'miscellaneous' form, available on our website. On the form, simply state:

- you are applying for a copy of a certificate
- the certificate type (ie certificate of survey, certificate of operation)
- vessel name and identifying number
- certificate number and expiry/issue dates (if known).

Once you have completed the form, submit to: DCVApplications@amsa.gov.au

There is currently a fee of \$37 associated with obtaining a replacement copy of a vessel's certificate. AMSA will contact you to arrange payment once the application has been received.

### 2. Can AMSA assess my sea service before I enrol in a course for a Near Coastal certificate of competency?

We are unable to undertake standalone sea service assessments for near coastal certificates of competency (CoC). However, training organisations do not require you to have already completed the sea service for the AMSA certificate, before you enrol in the course. Once you meet all of the requirements for a CoC, your sea service will be assessed as part of your complete application.

# Your questions answered

### Are there any exemptions available to help me if I can't operate as normal due to COVID-19?

r operators and seafarers that find selves unable to comply with nal law due to COVID-19, g exemptions may be of

> q permits—these temporarily ving the vessel uptions

4. I am unable to undertake surveys or get my vessel surveyed due to social distancing, travel restrictions and financial impacts. What will happen to the vessel?

At this stage, if a survey cannot be completed due to the current restrictions or financial hardship and the certificate of survey (CoS) will lapse as a consequence, you can lodge an Exemption application for temporary operations (AMSA 777 form). AMSA will assess these applications on a case-bycase basis.

Periodic surveys (those not occurring at the expiry of the CoS) can be completed within the three months fore or after the date listed for the r on a vessel's survey schedule. unable to complete your rey within this timeframe, n Application to rvey due date or 'AMSA 776 form), 'SA website.

'e to

### 5. Do I need to keep my vessel's equipment serviced if I am not operating due to COVID-19?

Your vessel's equipment should be checked, serviced, and maintained in line with national standards and the manufacturer's requirements. However if this is not possible due to COVID-19 you may obtain a permit under Exemption 06 (Periodic survey, equipment certification and compass adjustment) to keep operating while waiting for the equipment to be serviced.

### 6. I am unable to obtain a valid First Aid certificate due to COVID-19, in order to revalidate my near coastal certificate. What can I do?

We understand that during this time, there may be disruption to businesses involved in certification for DCVs and near coastal certificates of competency (CoC).

Due to the restrictions, we are providing a temporary six-month extension for the renewal of CoC for certificates expiring between 26 March and 1 October 2020. If your CoC xpires in this period, it is effectively nded by six months, and you can the to operate in line with the of the certificate.

> te expired before this re unable to renew re contact AMSA 184 or email

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2019 winner: Flora Warrior received the National Seafood Industry People development award. Pictured with Johnny Kris.

# A warrior for Mabuiag

Flora Warrior is determined to open doors for the local community on Mabuiag Island in the Torres Strait. Armed with an MBA and life experience, Flora's focus has been to create a sustainable fishing industry for a stronger economy on Mabuiag Island.

Mabuiag Island is home to the Goemulgal people, who have fished the local tropical rock lobster as far back as they can remember on a subsistence level. Today the tropical rock lobster is commercially fished and local community advocates such as Flora are exploring direct export options to boost the economy of Mabuiag Island and ensure that fishing dollars remain locally.

Before Flora took on a Master of Business Administration (MBA) at James Cook University, she already had extensive experience in the government sector and a degree in linguistics. Her work experience had given her management expertise and an insight into systems and structures that could support her local community.

### By Becca Posterino

The community on Mabuiag Island traditionally functions on social capital—networks of people working together to get things done—rather than currency.

The MBA was a way to develop the local economy back home through self-sustaining enterprises that ensured the dollars remained in the community,' Flora said.

'I also saw the MBA as a tool to explore our value system in economic terms,' Flora explained.

In Flora's last semester, she returned to Mabuiag to do her final project, which looked into the direct export of locally caught rock lobster to foreign markets.

The fishermen do a dangerous job but are at the poor end of the supply chain. They might be getting \$20 a kilo for a product that could potentially sell for \$160 a kilo,' Flora said.

'Now we are looking at developing a more profitable fishing industry on our island by creating a direct-export supply chain, and putting the money into the community to create employment and a more sustainable sector,' she said.

Flora also founded a local communityrun microfinance program to enable low income families on Mabuiag to purchase basic household assets such as whitegoods. This program uses the Good Shepherd 'No Interest Loans' (NILS) framework—based on good-faith loan repayments.

Today, eligible fishers can also use the program to purchase fishing and boat equipment as well as safety items needed to comply with laws for commercial boat safety. 'Through my studies and my own experience as a small business owner, I found that Indigenous business start-ups faced tremendous challenges, many of which were centred around being isolated from services and capital,' Flora said.

Alternative finance through microfinance is one way of purchasing small capital items, not just for community members, but for those who are in small business as well such as fishers who are sole traders.

Flora has also taken steps to create pathways for local fishers to access much-needed training and development, and she also helps by interpreting forms and information and explaining relevant changes in the broader fishing sector.

The locals know what is going on in their own backyard because they yarn to each other, but not more broadly or even regionally,' she said.

The Mabuiag community has a history of poor connectivity with external communities. Flora shares her story from her veranda on Mabuiag Island thanks to the repeater on her roof, which was installed with funding received for her community microfinance project. Her landline is also an asset Flora willingly shares with her village community.

Flora's story has both a personal and broader dimension—the networks she established in her career and her ability to navigate complex government structures on her community's behalf, were skills she built as a working mum. Flora discovered early on that people networks were the key to success. She also acknowledges her journey with the people she met while working in Indigenous Health—especially those in the Aboriginal Medical Sector (AMS).

I was inspired by the AMS sector, the idea Indigenous people could independently run their health services. I was also lucky enough to meet some original founders of the AMS sector and



**Recognition:** Flora recieving her People Development award from Dr Michelle Grech, at Seafood Directions in Melbourne – *Image by Damian Brierty* 



Now we are looking at developing a more profitable fishing industry on our island by creating a directexport supply chain, and putting the money into the community to create employment and a more sustainable sector. — Flora Warrior

I'm grateful for their activism, wisdom and insight. They taught me that having vision, passion and determination can lead to great outcomes,' Flora said.

Last year, Flora was recognised for her volunteer advocacy work with local fishers when she won the National People Development Award at Seafood Directions 2019, the National Seafood Industry Awards. AMSA had the pleasure of sponsoring this award.

The People Development Award is the tip of the iceberg for Flora—her community leadership, advocacy and practical initiatives to support and empower the Mabuiag community are all part of her personal ethos. For Flora, social capital is part of everyday life on Mabuiag but when harnessed effectively, can lead to even greater outcomes.

The rising concern for local fishers and the community today is striking a balance between sustainability and commercial fishing. Like other Mabuiag Islanders, Flora also sees environmental stewardship as an important aspect of fishing, and part of everyday life.

Flora continues her work and is looking at taking her people to see what the broader fishing industry looks like on the mainland so that Mabuiag can aspire to provide a world-class service.

What we try to do is use the social capital that we have, to bring people together. We recognise that we have the skills but we need to organise ourselves better ... our aspiration is for 100 per cent community ownership of our local businesses,' she said.

And to that end, Flora's role as a hub in her community network will ensure she can continue to develop practical business solutions, as well as honour environmental stewardship to build a vibrant and sustainable seafood industry on Mabuiag Island.

# Bushfire support on land and sea

When a devastating bushfire struck the Victorian town of Mallacoota on New Year's Eve, local commercial marine operators and maritime agencies played a vital role in providing relief for those affected.

By Simon Enticknap and Sarah Cameron

Code red: Dense smoke surrounds the people taking refuge in Peter York's boats – Image supplied by Peter York

One of the enduring symbols of this year's horror bushfire season was the sight of hundreds of people being evacuated from Mallacoota by HMAS *Choules*. The ship is specially designed for use in humanitarian crises but perhaps nobody expected it to be used for the task of rescuing Australians trapped by bushfire. In this role it provided a valuable lifeline to the East Gippsland town when land access was cut-off in the wake of the huge fire there.

While the Royal Australian Navy was one of the more dramatic examples of the bushfire response, many government agencies and commercial vessel operators were involved in providing support where it was needed.

One of the first vessels to arrive at the town was the off-shore supply vessel *Far Saracen* (read more on page 13).

Other agencies providing support during the bushfire emergency and as part of the recovery effort included: Parks Victoria; the Country Fire Authority; Victorian Fisheries Authority; Gippsland Water Police; East Gippsland Catchment Management Authority; the Department of Environment, Land, Water and Planning Gippsland; as well as volunteer coastguards and marine rescue.

Darryl Burns, a Divisional Commander for Forrest Fire Management Victoria who lives in Mallacoota, was part of the incident control team working to protect lives and properties as fire charged through the area.

'All those in Mallacoota were encouraged to leave and go north before the fire hit. The town has a permanent population of just over a thousand people and in peak season that extends to about ten thousand people,' he said. 'Residents and a number of visitors in the town heeded that advice until there came a point where the road had to be closed because it had become compromised by the fire. Those that hadn't left before that point were in Mallacoota for the ride.'

Darryl described that particularly busy time for the incident response team, focused on fighting a fire and protecting life and property to the best of its ability.

We were also coordinating the relief response with the Australian Defence Force to get people out and food in, while keeping the town watered, sewerage treatment plants working, keeping power and comms on and managing medical-related incidents.'

Darryl said that in an emergency like the fires, people will do what they can to help themselves and others, but he always encourages people to act safely and—even if he can see people are acting with the best intentions—he will strongly advise people against actions that will put lives at risk.

'I briefed the community and asked them to do particular things and stay away from certain areas. We had power lines down and trees on fire falling around the place,' he said.

Local commercial boat operators at Mallacoota were actively involved in helping the community in the face of the approaching fires.

Those that were unable to evacuate gathered on the lake foreshore and jetties, prepared if necessary, to shelter in the water.

Peter York, who runs Buckland's Jetty Boat Hire just out of Mallacoota, moved several of his boats into the town and tied them up at a jetty to provide shelter for dozens of people with nowhere else to go. As smoke filled the air and the sky turned dark red,



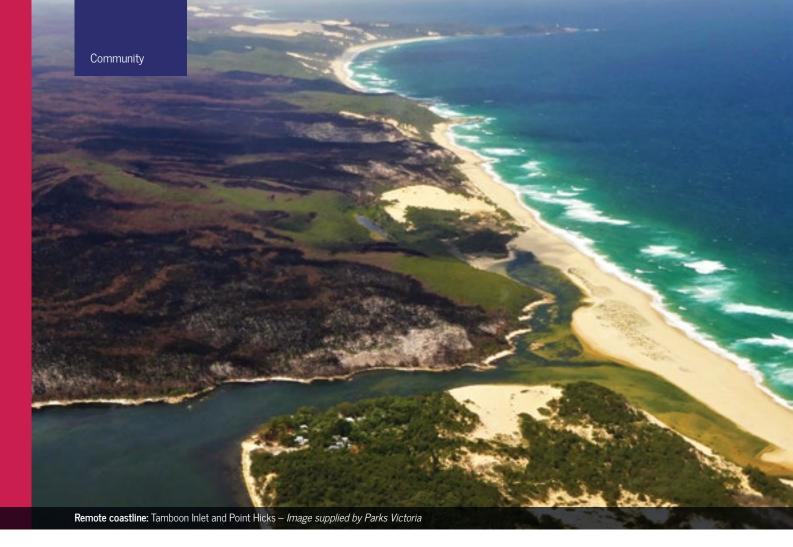




As smoke filled the air and the sky turned dark red, the boats provided a temporary refuge and—if worse came to worse—a possible escape route.







# In the immediate aftermath of the fire, many local fishermen, abalone divers and coastguards made their boats available for running supplies or helping to evacuate people.

the boats provided a temporary refuge and—if worse came to worse—a possible escape route.

In the end everybody was able to sit out the fire at the jetty, which was fortunate given that several other boats which Peter had positioned out of harm's way on the lake dragged their anchors and drifted off. Another got destroyed by the fire.

His house survived though, and even more remarkably, the historic wooden boathouse—home to the boat-hire business and one of the oldest buildings in the town.

'We were very lucky for that to survive,' he said. 'As soon as we got the opportunity, we made our way back to the shed by water—we couldn't get there by road—as there was still fire encroaching on it. We then spent a couple of hours bucketing water to put it out.' In the immediate aftermath of the fire, many local fishermen, abalone divers and coastguards made their boats available for running supplies or helping to evacuate people. Abalone diver Jason York evacuated his family to Merimbula in New South Wales, but then returned via sea, bringing in a doctor and local tradespeople to help out with the relief effort.

When a natural disaster like this happens, everyone does what they can,' said Jason. 'It brings people together short-term and hopefully that's maintained. We're a pretty resilient community to start with.'

The local abalone processing plant was gutted by the fire but, even so, any equipment which survived was put to good use. With power cut off, the plant's generator was used to run the town's bakery, a forklift was used to unload supply vessels at the boat ramp, and the refrigerated trucks became a temporary cold storage room for bulk goods.

The fire destroyed about 150 homes in the town and the surrounding region. Afterwards the town was isolated with no power for several weeks and limited road access. Recovery will take months if not years, but Darryl said the fires could have been worse.

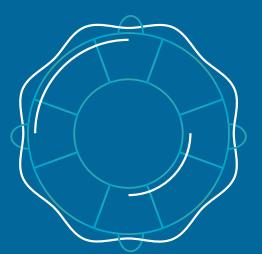
'There was significant risk with the fires that hit Mallacoota and the outcome could have been very different, but no one was hurt or worse. I'm really thankful about that. I've been determined all the way through,' he said.

Locals are hopeful that after COVID-19 tourism will return and give a muchneeded boost to the local economy. Plans are also underway to rebuild the abalone processing plant.

We hope to have a complete new factory, and come out of this bigger and better and stronger than ever with added processes,' said Jason.



Report maritime incidents directly to AMSA in two simple steps



# 1. Alert AMSA\* as soon as practicable when a serious incident has occured

Serious marine incidents include:

- death or serious injury to a person
- loss of a person overboard
- loss of, or significant damage to, a vessel.

\* You can submit an incident alert by phone, email or online.

#### $\sim \sim \sim$

### 2. Submit an incident report – within 72 hours

This gives us detailed information about the incident and mitigation measures.

### Form 19 – Incident report

Other types of marine incidents you need to report:

- fire
- loss of stability
- fouling of a vessel
- a close quarters situation
- any event that could impact the safety of a vessel, those on board or nearby.

Submit forms at amsa.gov.au or email completed forms to reports@amsa.gov.au



Call AMSA CONNECT 1800 627 484



Visit amsa.gov.au/ incident-reporting

# Teaming up with the community

A bushfire emergency call at 9.30 in the morning diverted Solstad Offshore ASA vessel *Far Saracen* at full steam from moving and mooring a Bass Strait oil rig to help the Mallacoota community. By the time *Far Saracen* arrived, its crew had only that day to mentally compose themselves and physically prepare the ships facilities.

By Ron Aggs

Emergency response: Far Saracen arrived in Mallacoota to help with the bushfire emergency – Image supplied by Solstad Offshore ASA



Help when needed: Lowering supplies to be taken ashore; Dave Phillipson and Steve Young on the bridge – Images supplied by Solstad Offshore ASA

In the following days, they provided food, fire-fighting resources, medical help, moral support and some respite from the debilitating smoke.

'Through an extensive brief on the way to Mallacoota, we talked about how we would handle the trauma when we got there,' said Steve Young, *Far Saracen's* Master.

The 87-metre, 6107-metric-tonne vessel arrived at five o'clock, the first commercial vessel to get to Mallacoota. Later the Royal Australian Navy would also anchor off the beach to provide passage for thousands of holidaymakers and some residents fleeing the town.

With poor visibility caused by the fire, *Far Saracen* was unable to reach the shore, so the crew turned all ship lights on to notify people they were there. After making contact with the Mallacoota township and doing a couple of runs with their fast rescue craft, a local charter fishing boat started coming alongside regularly.

In the first delivery, the cook made 100 toasted sandwiches for crew members to take ashore.

With cases of water and three 200-litre drums of diesel, they arrived on the wharf and started introducing themselves.

We got the drums off and hand pumped them into containers to fill the fire trucks,' Steve said.

'We transferred fuel and food via the fishing vessel and others,' said Chief Officer Dave Phillipson.

Steve said the whole time all hands were on deck.

'We had electrical technical officers driving fast rescue craft, cooks operating winches and mates folding sheets,' he said.

On 4 January a sister ship—*Far Senator*—arrived and transferred thirty Foodbank pallets to *Far Saracen*.

Locals with fishing boats helped ferry the goods ashore where it was hand carried to the local hall for distribution to families.

The smaller tenders also enabled two-way traffic to the ship's makeshift hospital, where highest-risk evacuees, the elderly and the young, gained respite and the most vital commodity—clean air.

Several paramedics came aboard to attend to the sick.

'On the busiest night, mattresses in the hallways and all over the place, accommodated fifty evacuees,' Steve said.

Crew members were most affected by seeing distressed children, including a baby girl who came aboard blue with asthma, but thanks to the ship's capacity to recirculate clean air, she recovered within a few hours.

Well prepared by their vessel's routine safety briefs and drills, their greatest challenge was managing the air conditioning to recirculate every eight to 12 hours to neutralise rising carbon dioxide.

In a final community-spirited act before departing on 6 January, the crew passed around the hat and delivered \$1900 to local wildlife rescuers, inundated with suffering animals.

solstad.com

# MANAGING SHARKS IN THE WORKPLACE

Abalone diving has a reputation for being one of the most dangerous occupations on land or sea. The reality, however, is very different says John Minehan, an abalone diver and leading advocate for safer working practices in the industry.

By Simon Enticknap

Another day at the office: Mallacoota diver Wade Bowerman removing sea urchins – Photograph by Holly Baird

Commercial fishing in open waters to collect abalone has many inherent dangers. Often the divers work alone underwater with a single deckhand on board a support vessel. Diving in dense kelp forests in cold water, the work is physically and mentally demanding. The divers are at risk of exhaustion and disorientation underwater as well as the very real threat of shark encounters.

However, John Minehan said that compared to other high-risk workplace activities, abalone diving should be seen as a low-risk occupation.

'Most operators would regard their job as relatively low-risk,' he said.

'The reason for that is we have an exceptional safety record. There has been very little serious injury or death in the abalone industry, particularly in Eastern Victoria. It compares very favourably with the risks you might face, for example, working on a construction site.' John harvests abalone in Victoria's eastern fishery for about six months of the year between April and November. He operates out of Mallacoota, NSW along with several other abalone divers who collectively run AFCOL Australia Limited (previously known as the Abalone Fishermen's Co-operative).

Managed by a strict quota system, abalone caught in the East Gippsland waters are processed in Mallacoota at the AFCOL Australia plant, with the majority of product being exported to Asia.

According to John, a key risk that abalone divers have to manage is the remoteness of their operations.

John and the other local abalone operators manage this in a number of different ways. Before heading out, all divers must log their destination with the processing plant and sign off again on their return. They also share their locations with other divers and, if more than one is operating in the same area, they maintain contact with each other while on the water.

'We're all aware that as a group we have

to look after one another so we do check in with each other regularly,' said John.

While emergency drills are the responsibility of the individual divers as part of their safety management systems, the industry also runs first aid courses with local paramedics and emergency services to give divers and their deckhands the skills needed to respond to an emergency situation.

John said safety awareness among divers is as much a habit as it is a list of do's and don'ts. Regular inspection routines help to make safety second nature, always checking and doublechecking to ensure equipment is working properly.

Boat construction has also contributed to improved safety in recent years, with all boats now having to meet commercial survey specifications and be inspected every five years.

Weather forecasting has advanced immeasurably with information available through the official Bureau of Meteorology channels or a range of weather apps providing real-time data about conditions.



We're all aware that as a group we have to look after one another so we do check in with each other regularly.

— John Minehan



Destroyed by fire: AFCOL abalone processing plant before and after the fire – Image supplied

There are also protocols for handling what, for many people, is perhaps the most alarming aspect of abalone diving—coming face-to-face with a shark.

'We've been fortunate in Eastern Victoria in that we've not had a shark attack since the early 1960s when diving first started, despite some encounters,' said John. 'So the risk is very, very low.'

'Having said that, the number of sightings does seem to be increasing and if there were an attack, the outcome would likely be fatal, so it is something we take seriously.'

The safety protocols vary according to where the shark is encountered (on the bottom, mid-water or on the surface) and where the diver is in relation to the surface vessel.

Maintaining good communication between the diver and the surface vessel is important in all cases. For instance, when the shark is near the bottom, the diver can take cover on the reef and signal for the boat to be positioned above him. When it is safe to do so, the diver can then surface and be quickly extracted from the water.

Divers also use electronic shark deterrents which are designed to cause discomfort to the sharks without harming them.

Alongside safety, environmental awareness is an important aspect of the divers' activities. Ensuring the ongoing health of the abalone's eco-system is vital for the long-term survival of the fishery. Quotas play a key role in managing sustainability but the divers also undertake other conservation measures.

In recent years, the Victorian kelp forests, which are home to the abalone, have seen a massive decline partly due to over-grazing by sea urchins, which can reduce a healthy reef to a barren wasteland.

As a result, divers have been teaming up to carry out sea urchin eradication programs in a bid to restore the reefs to full health.

'It's been a collaborative effort with pairs of divers working together

and that's helped to develop the organisational culture and the glue that holds it together,' said John. 'It provides that informal forum for the sharing of information about dive practices.'

It's been a tough few months for the Mallacoota abalone divers. The bushfire which tore through the town over New Year (page 8) destroyed most of the processing plant, the town's largest single employer. Road closures impacted on deliveries and then—just as recovery efforts were starting to get underway—the outbreak of COVID-19 effectively closed down the region's biggest export markets for abalone.

John Minehan acknowledges it's going to be a long road back for the local industry to return to anything like business as usual.

'It means a lot of hard work for the industry to find a way forward,' he said. 'It's just a matter of us working together to do the legwork.'

AFCOL Australia Ltd https://ex1191.com.au

# Environmental conditions:

# WAVES

Waves are an inherent part of work on the water. But while you and your crew may have good sea legs, it's still important to keep an eye on wave and weather forecasts and be prepared for the possibility of finding yourself in bigger waves than you bargained for.

The National Standard for Domestic Commercial Vessels (NSCV) outlines the environmental conditions that vessels working in different operational areas must be able to withstand, including types of weather, wave height and wind speed. For example, smooth-water operations (vessels operating in service category E) must be designed to operate in wave heights of up to 0.6 metres, but extended offshore operations (service category B extended) must be built to operate in wave heights of over six metres.

In addition to these design and construction requirements, all operators must address the risks associated with encountering bigger waves than normal in their safety management system. Common ways of being prepared in unusually big waves include wearing suitable lifejackets, and securing equipment to stop it from moving around and causing damage, injury or resulting in reduced stability. Checking weather forecasts before you head out is the most effective way of avoiding unsafe conditions.

The Bureau of Meteorology (BOM)— Australia's official weather source —provides forecasts for sea waves and swell waves, and they provide some recommendations to make the most of these forecasts to safely plan your trip.

The first thing to remember is to expect waves twice the height than the forecast height. This is because wave heights in forecasts and warnings are averages, based on the average height of the highest one-third of waves. The Bureau also provides forecasts for total wave height, which is the combined height of the sea and swell waves.

In addition, forecasts and warnings cover a broad area of the coast, but local coastal orientation, sandbars, and headlands can make local wave conditions better or worse, so it's still important to continually assess the conditions and act accordingly to keep the people aboard and the vessel safe.

# Wave terms

**Sea waves**—also known as 'wind waves' or 'chop'—are determined by the speed, duration and fetch of the wind blowing at the time.

**Swell waves** have travelled into the area after being generated by previous winds in other areas.

**Total wave height** also referred to as 'significant wave height'—is the combined height of the sea waves and swell waves.

Read more about the operational restrictions associated with different environmental conditions for each service category in the NSCV Part B—General requirements, p 11.

Read more about waves and terminology used by the Bureau of Meteorology to explain waves bom.gov.au/marine/knowledge-centre/ reference/waves



Waves: Knowing how to operate in different wave states maintains vessel stability – Image by iStock.com/Jon Blomfield

Wave length is the average distance between crests (or troughs) of waves.

Wave period or swell period are the average time between crests (or troughs) of waves. The larger the time difference, the greater the amount of energy associated with the waves or swells.

**Cross seas** (also referred to as a confused sea state) are caused by waves that are more than

45 degrees apart, coming from different directions, causing uncomfortable or unpredictable wave motion.

**Opposing currents** is a result of fast-flowing currents opposing the dominant wave direction, causing waves to become steeper, and conditions rougher.

Rogue waves (or king waves) are very large waves—greater than twice the average wave height caused by complex interactions between multiple waves. It's normal for these waves to occur three-to-four times a day at any given place.

YOU'RE THE SKIPPER

YOU'RE RESPONSIBLE!

# 

More info: www.bom.gov.au/marine

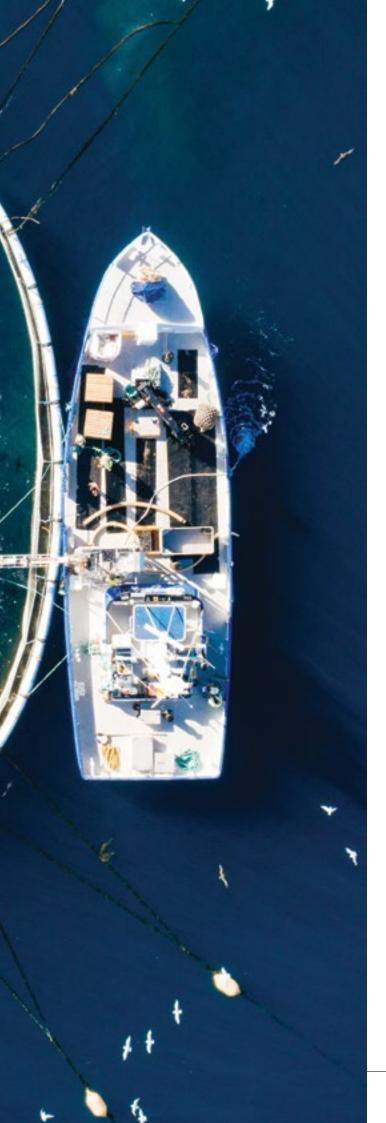


# Safely from sea to sashimi

Southern bluefin tuna caught in the waters of the Great Australian Bight typically ends up as sashimi in some of Japan's most renowned sushi restaurants, but catching and harvesting the tuna poses some unique safety challenges for the Port Lincoln fishing fleet. Ben Belling talks to *Working Boats* about how they manage the top five risks.

By Simon Enticknap and Sarah Cameron

Photography by Robert Lang



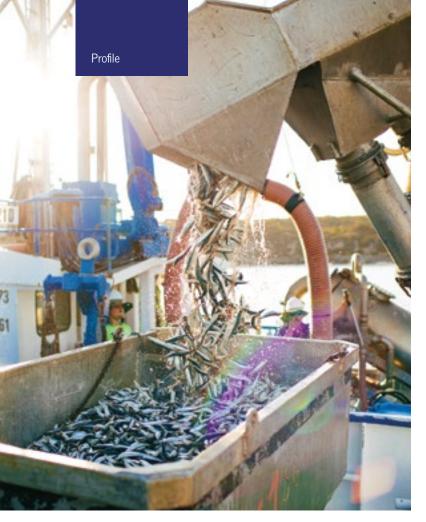


Between December and February each year, the fishing vessels of the Port Lincoln tuna fleet head out into the Bight to intercept the migrating schools of tuna. The tuna spawn in the ocean off Western Australia and then head south through the Bight. Finding the schools is a challenge in itself but, once located, it's not just a matter of hauling them out.

Chumming boats release bait in the water to lure the tuna into a tightly packed shoal on the surface, where they are driven into a purse seine net and then transferred to travelling cages. Moving at very slow speeds—typically about one knot operators tow the cages all the way back to more sheltered waters in South Australia's Spencer Gulf, where they herd the tuna into holding pens.

Over the next few months, the fish grow on a diet of sardines and high-protein seafood until they reach optimum size and condition. Then, from May through to August, the fish are harvested and either transported immediately to the destination market as fresh fish—the highest quality tuna sell for thousands of dollars at the Tsukiji fish market in Tokyo—or frozen at minus 60 degrees Celsius.

The various stages, from capture to dispatch, call for a diverse approach to operational safety. Marine Operations Manager at Australian Tuna Fisheries, Ben Belling, said everything the workers do—from stepping onto the vessel, loading and unloading, tying up the vessel—is all covered in the safety management system, and practiced through safety protocols, crew inductions, drills, maintenance, qualifications and training.





# 1 – Slips, trips and falls

Ben said that in particular, vessels that are tied up alongside the pens to feed or harvest tuna, pose a significant risk of slips leading to injury.

'If someone were to fall overboard here, they could potentially get caught up against the side of the pen and sustain crush injuries,' Ben explained.

When it comes to the process of feeding and harvesting the tuna, the industry has adopted new systems to make the process safer.

Previously, the catchers would stand on a floating platform in the pen to catch the fish, putting them at risk of slipping or getting caught up against the side of the pen. Now, most vessels use metal slides with conveyor belts that deliver the fish straight onto the boat.

'As well as increasing safety, it also makes it faster and simpler, increasing productivity,' Ben said.

# 2 – Heavy lifting

Tuna ranching also involves a lot of heavy lifting using hydraulic cranes—a high-risk activity at the best of times, but even more so on a moving platform at sea.

'In the peak season we'll be offloading 50 tonnes of feed a day, which has to be loaded onto the vessels from a supply vessel and then offloaded into the pens,' Ben said.

Ben explained that if the gears are incorrectly hooked up or if the safety catches aren't in place, cables can break, causing loads to fall, posing serious risk to surrounding workers.

'We are very strict about things being lifted correctly. The crane operators are all qualified and experienced doggers and riggers ensure the loads are lifted safely,' he said.

Factoring in the movement of the boat comes down to experience and training.

# 3 – Tender vessel safety

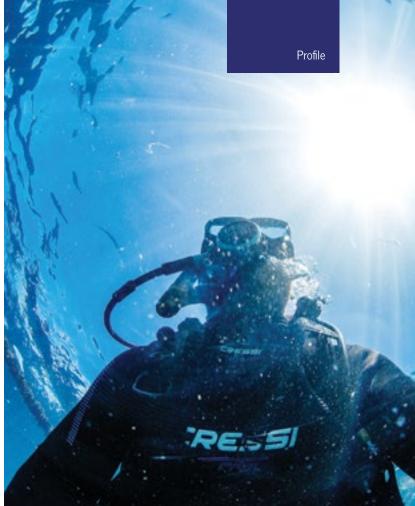
Tender vessels are used for numerous tasks in the operation, such as deploying nets or working on the pens. These smaller vessels are high risk, particularly when they are out at sea where the weather can be a factor.

'We always keep the vessels in line of sight and all of them are fitted with a VHF radio, and safety equipment,' he said.

Several years ago somebody fell out of a tender and was injured, prompting the company to introduce a requirement to wear a self-inflating personal flotation device (PFD) when working in the tenders.

'Now every time someone is in a tender vessel—even if it's just in the marina—a PFD is mandatory,' Ben said.







Those new to the task go through a rigorous training and assessment alongside the experienced operators. They are slowly introduced until we are confident they know what they are doing.

— Ben Belling

### 4 – Diver safety

Commercial divers also play an important role in ranching operations. They are used to monitor the size and condition of the tuna in the pens and carry out repairs on the nets which come under attack from hungry sharks looking for a free feed. The divers can even be called upon to remove sharks, which get tangled in the nets or make it into the pens.

As required for all commercial dive operations, the dives are strictly controlled to manage the possibility of divers getting the bends, or entangled in the net, for example.

'We conduct recces [sic] using an ROV prior to sending divers down, so that we can plan properly for what needs to be done,' he said.

'All the divers must be fully-trained and accredited. Dive times and depths are carefully monitored, and every dive is overseen by a dive supervisor,' Ben said.

'Rescue divers are also on hand ready to intervene if required and every vessel carries a trained diver medic on board.'

## 5 – Vessel maintenance

Managing the risk of mechanical failure—from vessels to the equipment used in the operation—is also high on the list of safety priorities.

'We wouldn't want a breakdown at any time, especially when we are conducting a purse seine operation and towing tuna back to the pens,' Ben said.

'We keep the five vessels up to survey,' he said, 'and we have daily logs prior to start up and at the change of shifts.'

We go through checklists to look for things like leaks anywhere on the belt, and that everything in the engine room is up to scratch—in fact the engine rooms get checked 24/7.

The operation also relies on a range of other equipment, from cranes to conveyor belts, which Ben said they maintain through scheduled maintenance and regular checks.

stehrgroup.net

Marine Rescue Ulladulla: vital community link



Often the first to be called on, Marine Rescue (MR) organisations in municipalities around Australia form a vital safety network along our coastlines. This story about the actions of Marine Rescue Ulladulla during the widespread fires, is just one example of their versatility.

Originally published in Marine Rescue NSW Soundings magazine.

As the fierce Currowan fire bore down on the coastline around the New South Wales villages of Bawley Point and Kioloa on 5 December, a volunteer crew from Marine Rescue Ulladulla navigated choking smoke and poor visibility on the water to evacuate five children whose families had taken refuge at the beach.

MR Ulladulla Unit Commander David Hall and Allan Brook were on their way to deliver water and medical supplies to NSW Rural Fire Service firefighters at Bawley Point when they were alerted to the five children.

Unit Commander Hall said the smoke made it difficult to breathe and significantly limited their visibility on the water as rescue vessel, *Ulladulla 20* headed south.

'We were only half a mile off Bawley Point and we couldn't see land,' he said. He said the children—three younger girls and two older boys—were between six and 14 years of age.

After the crew unloaded the supplies for the firefighters, the children were taken on board, fitted with lifejackets and placed in the cabin for the return journey to Ulladulla. The mother of four—who was also the aunt of the fifth—made the trip with the children.

When they arrived at Ulladulla, NSW Ambulance checked the group's condition before they headed for a local evacuation centre.

Deputy Commissioner Dean Storey applauded the crew's actions to take the children to safety from the stressful environment at Bawley Point.

'Our crew members, along with radio operator Deb Talty in the MR Ulladulla radio base, deserve our thanks for their swift and professional response to assist people who needed help quickly. Navigational skill and situational awareness is needed when the smoke is heavy enough to cut visibility on the open water to this extent.'

Barely a month later on 2 January, Unit Commander Hall and Training Officer David Lindley joined relief efforts to support the isolated village of Lake Conjola, ferrying essential food, water and baby supplies donated by Shoalhaven group Tread Lightly, to the devastated community.

About two dozen people had assembled on Conjola Beach to meet the Marine Rescue vessel *Ulladulla 20*, with a jet ski and a conga line of people ferrying the supplies to shore through the surf.

Unit Commander Hall said the Ulladulla volunteers stood ready to help communities in any way they could.

marinerescuensw.com.au

# Float-free EPIRBs on their way

A reminder that from 1 January 2021, float-free emergency position-indicating radio beacons (EPIRBs) will be mandatory on certain types of domestic commercial vessels. By Desiree Caira

This change to safety requirements has come about in response to tragic incidents where commercial vessels have sunk too quickly for the master and crew to deploy their EPIRB in time. After consultation with industry in early 2019, it was agreed that these new requirements would be introduced with a two-year transition period.

## The new requirements

# Class 1, 2 and 3 vessels must have a float-free EPIRB if they are:

- equal to, or greater than 12 metres and operating beyond two nautical miles from land, or
- less than 12 metres and operating in B or C waters without level flotation.

# Class 4 vessels must have a float-free EPIRB if they are:

- equal to or greater than 12 metres and operating in C waters
- less than 12 metres and operating in C waters without level flotation.

If your vessel is less than 7.5 metres long (all classes) and does not have level flotation, you can carry a GPS-equipped, manual, or water-activated EPIRB in a manual bracket, instead of carrying a float-free EPIRB. However, this option is only valid if everyone on board is wearing a lifejacket or PFD.

These new requirements don't affect those required to carry an EPIRB in their manually activated life raft.

# Fitting of float-free EPIRBs

A float-free EPIRB is fitted in a bracket with a hydrostatic release unit and a water-activated switch.

It automatically activates and floats free to the water's surface when a vessel capsizes to a depth of between one and four metres.

Float-free EPIRBs can also be removed from the bracket and manually activated without being submerged in water.

The EPIRB bracket must be fixed to your vessel where it has less risk of getting caught up in rigging or other parts of your vessel when it floats free.

It's important that you follow the manufacturer's instructions when fitting your float-free EPIRB. An incorrectly fitted device can accidently activate if the EPIRB and bracket aren't properly aligned and mounted.

# Make sure you register your EPIRB

All EPIRBs and personal locator beacons (PLBs) must be registered with AMSA every two years.

Keep your registration details current. If you activate your emergency beacon the AMSA Response Centre (ARC) will refer to your registration details to find out what kind of vessel they are looking for and who may be on board. They will also call your emergency contacts to verify whether the activation is inadvertent or a real emergency. The more information the ARC has in a search and rescue situation, the better.



## Don't bin your EPIRB

When you upgrade to a float-free EPIRB, don't get rid of your old EPIRB if it still has battery life. Keep it as an additional safety device in your grab bag, in your life-raft or tender vessel.

If your EPIRB has expired, properly dispose of it by following the manufacturer's instructions to disconnect the battery and then dispose of it appropriately.

Each year accidental EPIRB activations cost our search and rescue agencies a lot of time and money, including searching rubbish tips for EPIRBs that have been thrown in the garbage incorrectly.

Learn more about the new float-free EPIRB requirements amsa.gov.au/float-free

You can easily update your registration details or add trip details at any time. Registration is free.

To register your beacon or update your details call 1800 406 406 or visit beacons.amsa.gov.au

# Purchase your float-free EPIRB sooner rather than later

- Don't leave it to the last minute to purchase your float-free EPIRB, as your local stockist may have to order it in.
- You must have the right EPIRB on board come 1 January 2021.











Elliot Koonutta; (above) Ghost net art by Sid, Bruce, Joe and Mundna - Images supplied by the Australian Museum

# Trap to treasure

Ghost nets found by Indigenous rangers are being recycled into beautiful works of art. Some of these intricately designed works are now the focus of museum exhibits, drawing attention to the extensive damage they cause in their original form when left to drift in our oceans.

By Peter Strachan

The nets—some more than six kilometres long when abandoned or lost at sea-are known to trap and kill marine animals and birds. Those collected by rangers in the Gulf of Carpentaria, Torres Strait and on beaches, frequently require heavy lifting equipment to move them.

While some may come from Australian fishing boats, most of the ghost nets discovered in our northern waters are believed to originate from trawlers

operating in the Arafura Sea and parts of south-east Asia. Some of the nets recovered are consistent with those generally used on large commercial vessels and others from small subsistence fishers.

The nets frequently drift for thousands of kilometres on tides and currents and are most prevalent onshore after a monsoon.

Initially, the destructive nets brought or washed ashore were dumped or burned, until Indigenous communities started putting them to a far better use-developing the nets into art forms and useful household items with a message about this growing problem in our oceans.

Spearheading this effort are creative groups like the one at Darnley Island Arts Centre, in Torres Strait.

Artists at this and other centres now use the old nets and fittings, not only to create their trademark sculptures, but colourful bags, hair clips, baskets and jewellery.



Not only is it an arresting way of drawing attention to a major environmental issue, but the work is truly beautiful. — Diccon Loxton



**On display:** Ghost net art at the Australian Museum – *Images supplied by the Australian Museum* 

Some of this work is funded through the Patricia Porritt Bequest at the Australian Museum Foundation, where a few of the most outstanding examples so far produced are on permanent display, in William St, Sydney.

Australian Museum Foundation Chairman Diccon Loxton, said the exhibits played a vital role in drawing visitors' attention to the challenge faced in protecting marine ecosystems.

'We are delighted to be supporting this project. It celebrates and records Torres Strait Islander culture as it continues to thrive and develop in the current world,' Mr Loxton said.

'Not only is it an arresting way of drawing attention to a major environmental issue, but the work is truly beautiful.' The museum acquired its first ghost net artwork from Darnley Island in 2012 and has steadily added to its collection since.

Mr Loxton said the community is now just one of a growing number turning these destructive materials into stunning works of art, reflecting each community's struggle to protect its marine environment.

australianmuseum.net.au/learn/cultures/atsi-collection/ghost-net-art

# Are you complying with Sulphur 2020?

# All vessels must use fuel with a sulphur content of no more than 0.50 per cent.

This requirement started on 1 January 2020. To help reinforce this requirement, since 1 March 2020, vessels have also been prohibited from carrying fuel with a sulphur content of more than 0.50 per cent. The prohibition does not apply to fuel carried as cargo. Most diesel and petrol sold in Australia as marine fuel already contains less than 0.50 per cent sulphur.

# Why has the sulphur content of marine fuel been reduced?

Sulphur oxides are released when fuel containing sulphur is burnt. In high concentrations, sulphur oxides can result in serious conditions, such as respiratory and cardiovascular disease.

Sulphur oxides can also lead to acid rain—causing damage to crops, forests and buildings and acidification of soil and freshwater aquatic environments.

The new sulphur limit will help improve air quality, particularly in coastal areas, and help to protect human health and the environment.

# How do I check the sulphur content of my fuel?

If you are uncertain about the sulphur content of your fuel, you should check with your supplier.

If your vessel is 400 gross tonnage or above, your fuel supplier must give you a bunker delivery note with each fuel delivery that includes the sulphur content of the fuel supplied. AMSA maintains a national register of fuel oil suppliers that you can use to find contact details of your local supplier.



Australian Government Australian Maritime Safety Authority For more information visit amsa.gov.au/air-pollution Phone 1800 627 484

Image source: iStock.com/EAGiven

P200322

# Life rafts correct installation

If the hydrostatic release unit (HRU) securing your life raft is not installed correctly, it will not activate properly. Your life raft may be your means of survival if your vessel sinks—make sure it is installed correctly.

By Sarah Cameron

AMSA accredited surveyors and marine inspectors continue to find life raft HRUs incorrectly installed.

Whatever mounting system your life raft uses, there are a few things you need to know.

HRUs are purchased separately to your life raft. When installing the new HRU, follow the instructions provided with the HRU and the life raft.

As part of your planned maintenance schedule, visually check that the HRU is in date and in sound condition at least every 12 months, or as recommended by manufacturer's instructions.

Most HRUs have an expiry date, and must be periodically replaced (usually every two years). There are also serviceable types, which must be serviced and recertified by an approved service agent.

During crew training explain the HRU's operation and how to carry out a controlled abandon-ship procedure. Document these procedures in your safety management system and put them into practice through regular drills.

#### Float-free and automatic inflation

Life raft canisters are buoyant and designed to float. If the canister submerges, the HRU enables the life raft's securing mechanism to break free. When the life raft submerges to a depth of about four metres, the water pressure acts on the HRU's diaphragm, releasing a spring-loaded knife or chisel to cut through the rope and release the life raft. If there are no obstacles the life raft canister will float free to the surface (similar to the mechanism in float-free EPIRBs).

The life raft canister floats to the surface, pulling out the painter, which remains connected by a weak link to the vessel.

When the painter is pulled to the end, the gas cylinder in the life raft is activated and inflates the life raft.

At this point, the buoyancy of the inflated life raft is enough to break the weak link connecting the painter line to the vessel, allowing the life raft to float to the surface, fully inflated and ready for boarding.

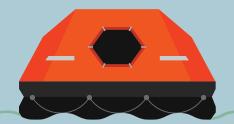
#### Manual release

Manual release occurs where passengers and crew are required to abandon the vessel in a more controlled manner.

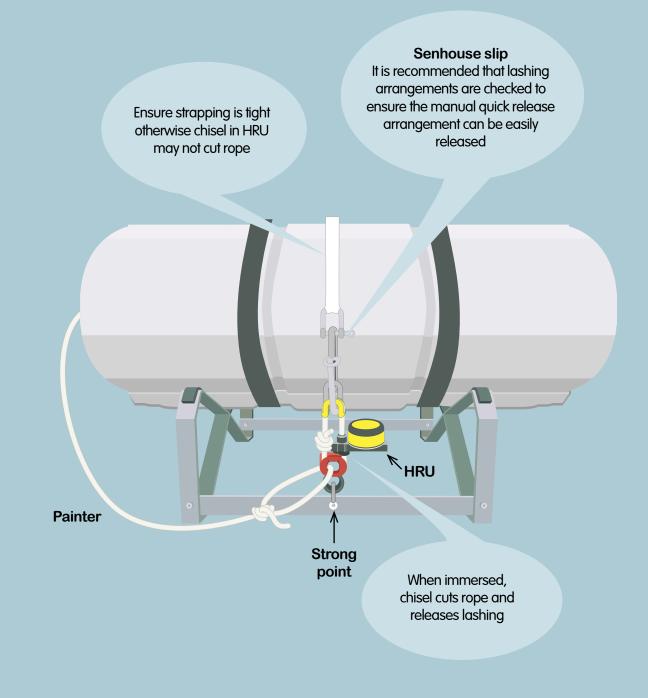
The strap securing the life raft must be capable of being released quickly and easily—for example, by a senhouse slip or pelican hook.

Someone must then physically throw the life raft over the side and pull the painter line to inflate the life raft.

For this system to work, the painter must be fastened to a strong point and the person manually inflating the raft must have a knife to cut the painter to release the life raft from the vessel once everyone is on board.



# Hydrostatic release unit fitted to a life raft capsule



amanda Jane

# Trawlers uphold oldest seafaring tradition

FVSC

On a wild and windy January night, ten nautical miles southeast of Cape Moreton, Queensland, the skipper of prawn trawler *Amanda Jane* answered a call from an unknown number.

By Lauren Smit

Cameron Courtman had spent the last 30 years of his life on boats, witnessing the beauty and at times, brutality, of the ocean. But all his years out on the water did not prepare him for that call.

On the other end of the line was Nathan Johnson, a Senior Search and Rescue Officer at the AMSA Response Centre (ARC), based in Canberra.

Nathan relayed the situation to Cameron.

A light plane with two people on board, a husband and wife, had reported a mayday around sunset as they flew over Moreton Island on a sightseeing tour from Caloundra that afternoon.

Attempts to contact the husband—the pilot for this journey—by Brisbane Air Traffic Control and AMSA had failed, with nothing but radio silence from the light plane.

Flight tracking technology revealed the plane had plummeted moments before it disappeared from radar. AMSA launched a search and rescue operation. Queensland Water Police, AMSA's Challenger jet, Redcliffe Coast Guard, Bribie Island Volunteer Marine Rescue and two helicopters were tasked with searching an area near Flinders Reef, northeast of Cape Moreton. All available data indicated the plane had gone down there.

More help was needed and the clock was ticking. A monster storm that had just lashed Brisbane City was making its way towards the search area as well. The swell was picking up and last light was fading.

'I was sitting in the wheelhouse getting ready for the night's work when I got the call,' Cameron recalled.

'I got the anchor up straight away and started steaming toward the search area while I was still on the phone.'

Amanda Jane was one of seven trawlers that answered the call for help from AMSA that night, upholding the oldest seafaring tradition—coming to the aid of those in need.

'I was tracking the other boats on automatic identification system,'

Cameron said, adding that he knew he could always rely on the other trawler crews for help in tough times, just like that fateful January night.

'You've got no-one else out here, we always rely on each other,' he said.

'Once I had a crew member fall off the board sled and into the water. I got on the radio straight away and all my mates who were around came steaming. We got him back.'

Side by side with the other trawlers, Cameron and his crew of two deckhands searched into the night. At about 8 pm, they began to spot debris. The plane had impacted the water, there was no doubt about it.

While their hearts sank at the tragic outcome of the plane crash, search and rescue crews became single-minded in their efforts to locate the wreckage of the plane and hopefully recover the bodies of the couple. While it wouldn't bring them back, it would at least give closure to their family.

Search operations for the couple continued until the following afternoon.



Moreton Bay: where the incident occurred; Amanda Jane Trawler operators received recognition for their assistance from AMSA – Images supplied

These trawler crews know those waters like the back of their hands. They know their vessels, they work that area and they were invaluable during the search and rescue."

--- Nathan Johnson

The sheer amount of debris recovered by the trawlers and by search and rescue parties along Moreton Island left no doubt in anyone's mind. The crash was not survivable.

Several days later, police located the wreckage of the plane, resting on the seafloor 36 metres under the surface. near Flinders Reef.

Back in the ARC and months later, Nathan reflects on that night and the willingness of the trawler fleet to respond to the emergency.

'They didn't hesitate to put aside their night's work-their income-to help with the search. Cameron even provided us with the contact details of the other trawlers in the area to maximise resources out on the water,' Nathan said.

There was a large weather system coming through the area that was going to severely limit our ability to search with aircraft safely. We needed more assets that could weather the storm,' he said.

These trawler crews know those waters like the back of their hands. They know their vessels, they work that area and they were invaluable during the search and rescue.'

Despite the tragic outcome of the plane crash, Nathan said it was heartening to see all the search and rescue crews-from the volunteer marine rescue and coastguard boats, to the police, helicopters and trawler men-uniting for a common purpose.

We do this job to help people and that motivation was mirrored in the willingness of the many crews who helped that night,' Nathan said.

'It's the unwritten rules of the sea that also speaks so clearly to our culture of mateship here in Australia. You help those in need, no questions asked.'

We turn up to work for the many thousands of people who are boating or flying around the country every day. We turn up to work for their families, so they can be reunited with their loved ones or at the very least, so that they might have some closure after a terrible tragedy.'

We take our strength from the good days and that carries us through the bad ones,' he said.

Special thanks also to the fishing trawlers Ali-Star, Jo-Anne, KCD, Lady Beatrice, Miss Anita and Proteus.



# Chartering a course to mental wellbeing

Gold Coast skipper and cruise-boat operator Mark Raff is a local ambassador for mental health and wellbeing. Mark started a free monthly Sunset Charity Cruise on the Gold Coast in 2018 to raise awareness and money for a number of organisations including Beyond Blue. For Mark, helping others and sharing his story was a turning point for his own mental health—but it wasn't easy.

### By Becca Posterino

Mark's story came to a head fifteen years ago. At the time he had very little awareness of his anxiety disorder. Returning to university in his 30s to study marketing and management and then to become a certified financial planner, he found himself juggling study, raising a young family and working full-time in his financial-planning company.

It was when his business partner started noticing errors that Mark discovered he had undiagnosed dyslexia, attention deficit hyperactivity disorder (ADHD) and an anxiety disorder. It was a confronting experience for Mark and his anxiety intensified to a new level.

'At the age of 45 when I became aware of my mental illness and other conditions—although I had always struggled—the diagnosis was shattering,' he said.

Mark explained he had often found life tough but always soldiered on with a positive mindset, winning hearts with a strong work ethic and well-honed people skills.

When he was diagnosed, Mark confided in his wife at the time, but chose not to tell his children or anyone else. He feared others would meet him with judgement and prejudice. But his anxiety became debilitating—he came to understand a pounding heart and sweaty palms were symptoms of a panic attack that would often leave him shaking, fearful and breathless.

'I constantly felt overwhelmed and almost immobilised,' he said.

Eventually Mark agreed to get professional help, which set his course back to health. He connected with a psychologist, who helped him recognise and respond to each experience with awareness. Mark's life transformed and what was once a source of confusion, became his



resolute mission to connect with others. He was very driven and was certainly not going to allow this to get in the way of his lifelong ambitions.

#### Transforming a passion into a pursuit

A couple of years after the diagnosis, Mark sold his financial planning business and joined the Gold Coast Volunteer Marine Rescue (VMR) Queensland to keep active and maintain his pride. What began as an act of reconnection became the source of inspiration for a new business.

After a couple of years volunteering with VMR, combined with seeing a psychologist, Mark purchased his charter boat *Life's Good.* Mark's psychologist recognised the positive effect of owning his own business again, and the effect the water was having on Mark, so he suggested Mark start a cruise experience with a focus on mental health and wellbeing. Mark started offering his monthly sunset charity cruise, with all the proceeds going to Beyond Blue and the Australian Anti-Ice Campaign.

Mark also partnered with his psychologist to offer cruises for people

suffering from anxiety and depression. They created a space for a couple of hours once a month for passengers to enjoy the Gold Coast waterways and share their stories as they chose.

When I started to do the sunset cruise towards the end of 2018, it was at this point that I told the world about my experience with anxiety, and learning and behavioural difficulties. As a result of sharing my personal history, I was able to invite others to share their stories,' Mark said.

Mark's purpose in the world was rediscovered on the water and he is ever grateful for his time with the VMR. Mark's experience with mental illness has been a long and challenging personal journey, but with support he has managed to discover that life really is good. Mental health and wellbeing rather than mental illness, is now his driving force.

cruisegc.com beyondblue.com.au australianantiicecampaign.org.au

#### Dr Grant Blashki, Lead Clinical Advisor for Beyond Blue

Dr Grant Blashki, Lead Clinical Advisor for Beyond Blue and Melbourne-based GP, believes the workplace has a critical role to play when it comes to fostering mental health and wellbeing in the workplace.

Beyond Blue is very passionate about helping workplaces become mentally healthy—this is good for workers and their business, even from a purely economical perspective, Dr Blashki said.

A 2014 report by Price Waterhouse Coopers (PwC) revealed that mental health issues end up costing Australian businesses around \$10.9 billion dollars a year in lost productivity. PwC also discovered that on average, for every one dollar invested in mental health initiatives, there is a return of \$2.30—even greater in some industries.

How do we promote mental health and wellbeing in Australia workplaces?

Dr Blashki said positive leadership is essential. Mental health first-aid training for senior management is an effective measure to build a culture of support and awareness.

Inviting prominent speakers to share personal stories with staff can help to normalise mental illness and creates opportunities for staff to access support as needed.

Many other factors also contribute to mental health and wellbeing, including work-life balance.

Dr Blashki explains this is particularly relevant in the maritime industry where seafarers are often vulnerable because of shift work, isolation and loneliness. He explained that these factors are all part of the job, but having access to a reliable internet connection and promoting self-managed mental wellbeing can promote mental health.

## **STOW IT, DON'T THROW IT** STICKER NOW AVAILABLE

All waste is particularly harmful in the marine environment. You can help by sorting and separating all types of waste on board your boat, so that each type of waste can be recycled or disposed of appropriately.

Contact your local marina, boat harbour, port or terminal office to find out what waste collection and disposal facilities are available.

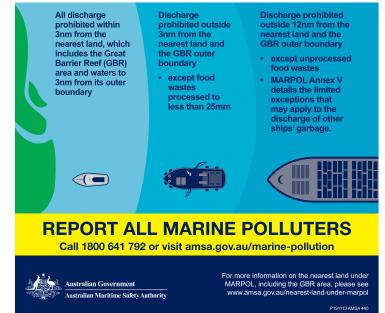
Don't forget to report any marine pollution incident to help minimise damage to the environment. If you witness a vessel or seafarer polluting, or see pollution in the marine environment that you think might be from a vessel, you can make a general marine pollution report.

Call 1800 641 792 or visit amsa.gov.au/marine-pollution

### STOW IT, DON'T THROW IT

DISCHARGE OF GARBAGE INTO AUSTRALIAN WATERS IS PROHIBITED

#### KEEP GARBAGE ON BOARD UNTIL YOU REACH THE SHORE VIOLATIONS MAY RESULT IN PENALTIES





Australian Government Australian Maritime Safety Authority Order your free sticker online amsa.gov.au/publications-order-form or visit an AMSA shopfront near you



## MIAL Future Leaders Program

Maritime Industry Australia Ltd (MIAL) has commenced an inaugural program to develop leadership potential in young professionals ashore.

Pictured at Parliament House, Canberra are the 2020 MIAL Future Leaders: (from L to R Front row), Brendan Curtis, Katherine Langworthy, Tayissa Popowicz, Rachel Horne, Ewen McCarroll. (from L to R Back Row), Emilie Donovan, Laura Allen and Mike Merrutia – Image supplied

The first MIAL Future Leaders Program started in January 2020 and will run until August 2020, offering a mix of experiential training, residential workshops and networking opportunities designed to enhance industry knowledge.

Anyone working in the maritime industry can be nominated by their manager to be considered for the program.

The first eight participants—from vastly different backgrounds—will receive exposure to aspects of the industry that they wouldn't otherwise experience in their day-to-day roles.

In March, all the participants enjoyed their first immersive experience with three days in Canberra visiting Parliament House, meeting with senators, watching question time and learning about government process. And those who have never been on a working ship, will experience a 3–5 day sea rider experience. One of the first eight participants who works for the Australian Maritime College—Emilie Donovan—found that the parliament experience offered more than the opportunity to learn about government processes and protocols and how to identify issues that impact the maritime industry.

'It provided an invaluable opportunity to share my experiences and thoughts about the importance of the maritime industry in Australia with senators,' she said.

The program came about after a seafaring skills census that MIAL conducted in 2019 revealed a possible leadership void in the future.

The census gathered responses from many different Australian maritime industries operating at sea and ashore. It highlighted that if a shortage of seafarers does eventuate, it will impact vessels operating in Australia, and critical shore-side infrastructure, projects and services. It provided an invaluable opportunity to share my experiences and thoughts about the importance of the maritime industry in Australia with senators.

— Emilie Donovan

Program participant, MMA Offshore's Mike Merrutia, said that in addition to the invaluable experience gained, another huge benefit of the program is the lasting business relationships formed.

Nominations for the 2021 MIAL Future Leaders Program will open in October 2020.

Register your interest mial.com.au 03 9647 6000 Northern Territory Guided Fishing Industry Association



The Northern Territory Guided Fishing Industry Association (NTGFIA) represents a significant number of the Territory's fishing tour operators—a hefty \$34 million industry. The association's Vice-Chair Dennis Sten spoke with Becca Posterino about some of the challenges faced by the sector.

The Northern Territory's selling points are iconic—Barramundi, crocs, sunsets, a laid-back attitude and plenty of fish to be caught from coastal fishing lodges, to billabongs, rivers and reefs. Bringing customers safely up close with this natural beauty involves a fair amount of safety planning.

Dennis' active work to promote safety and compliance practices in the guided fishing sector has seen the NTGFIA membership grow rapidly into a large and loyal network.

He explained that many of the association members are family operators who—when not conducting remote fishing tours—are busy doing their paperwork and getting ready for the next day's activities. He sees his role as assisting members to find out what regulations and requirements apply to them so they can make sure By Becca Posterino and Sarah Cameron

they are safe and compliant while offering a top-rate service.

When the association and AMSA Liaison Officer Steve Whitesmith met with operators across the Territory to identify what information and guidance the sector required, operators openly discussed issues they faced.

Of particular concern for operators is the location of boat ramps open to the sea.

Some vessel operators have to travel 150 kilometres per day just to go fishing, which gives rise to other risks,' Dennis said.

The obvious issue for operators doing this day after day is fatigue.

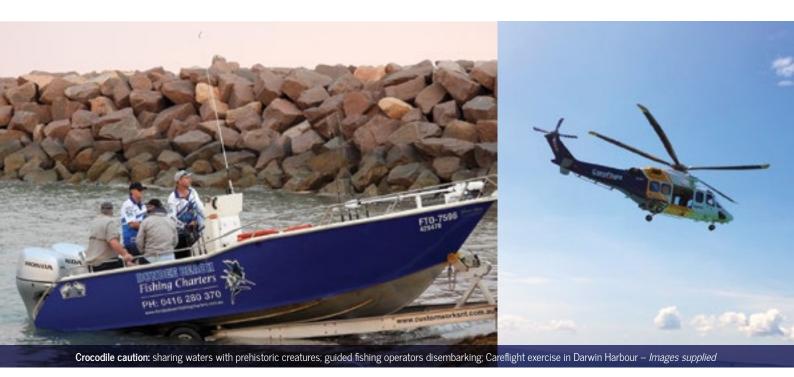
'For example, Darwin to Shady Camp is just over a two-hour drive each way. Add to that, eight hours of fishing that's a long day considering four of those hours are spent traveling on a remote highway,' Dennis explained.

Another concern for operators is passengers who underestimate the potential dangers in and on the water.

As Dennis explained, operators provide clear safety briefings before tours start so passengers are aware of the risks, rules and safety requirements. Despite this, passengers forget or underestimate the risk, so operators take other precautionary measures to reduce the chance of passengers coming into direct contact with crocodiles.

Currently there's a move across the Northern Territory to install pontoons with safety railing at all boat ramps to remove any risk of people coming into contact with crocodiles when embarking and disembarking vessels.

Dennis also told us that when he ran his own operation, after dark he would take the tour group near the water, and



However iconic, laid back, and beautiful the Northern Territory may be, local guided fishing operators understand well that they can't afford to take a laid-back attitude to safety.

point big search lights at the crocodiles to emphasise the clear and present danger of these prehistoric reptiles.

'The looming red eyes would glow in the night and I would warn them "no swimming tonight fellas",' he said.

The process of fileting fish off the back of the boat is also risky. Safety measures are implemented to ensure the back of the boat is secure so the passengers can't access or exit the back of the boat where they could come face to face with the feeding reptiles.

'Passengers can watch from a safe distance, but we don't allow them anywhere near the back of the boat where the crocs might sneak up to feed off the parts entering the water,' Dennis said.

Dennis explained another key risk for operators, is clients who don't disclose their medical history. 'Often passengers don't disclose their medical issues—their motivation to do the tour often trumps the safety and logic of disclosing important medical information that could mean the difference between life and death in certain situations,' he said.

Under the general safety duties, operators are required to make sure their vessel and the people on board are safe. They do this by assessing and preparing for all the possible risks associated with the operation in their safety management system.

Risk assessment means being aware of what procedures are to be followed in the event of a medical emergency. Typically, measures would include first aid training, reliable communication equipment, medical supplies, and care flight plans.

In October 2017, fishing tour operators took part in a CareFlight exercise in Darwin Harbour, to practice extracting a patient off the back of a mothership.

'We set up a dingy from the back of the mothership and CareFlight observed how effective it would be to remove the patient from the dinghy in an actual rescue operation,' he explained.

We found that for the patient to be successfully winched up, the dinghy had to be in a specific position in relation to the mothership, so now we know exactly what manoeuvres to do in an emergency.'

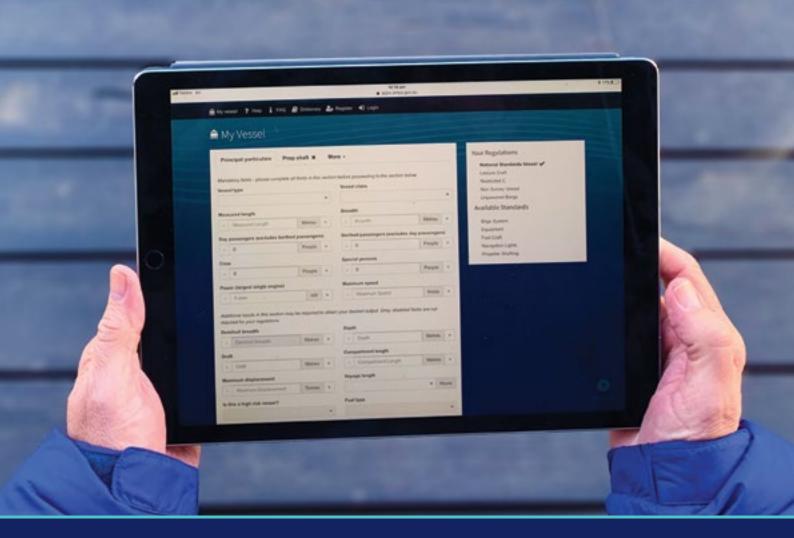
However iconic, laid back, and beautiful the Northern Territory may be, local guided fishing operators understand well that they can't afford to take a laid-back attitude to safety. The Territory may feel like the last frontier, but its multi-million dollar guided fishing industry has it covered.

ntgfia.com.au

# My Boat online system

Enter details about your boat to find out what safety requirements, legislation and standards you have to comply with.

Useful for vessel designers, builders, surveyors, owners and operators.





Australian Government

 Australian Maritime Safety Authority

It's easy to do. Simply visit amsa.gov.au/myboat

## What are we hearing from you?

Your questions help us to provide better information about meeting safety requirements and how to access our services. Here are some of the questions received at industry events and through AMSA Connect over the last few months.

#### 1. How often do I need to have my vessel surveyed?

There are three survey frequency categories for vessels with a certificate of survey (CoS)—low, medium, and high. This category determines how often the vessel must be surveyed and is shown on your CoS.

Vessels with a load-line certificate should also be surveyed in line with the survey schedule as shown on the vessel's load-line certificate. This will be the same frequency as the CoS.

Vessels with a Class C restricted operation (exemption 40) approval should be reinspected five years from the date mentioned on the approval, and every five years thereafter. You will receive a reminder letter ahead of any surveys shown on these certificates.

If your vessel holds a CoS but you have not received a CoS issued by AMSA, please notify us by emailing dataverification@amsa.gov.au as the survey frequency shown on a stateissued certificate of survey will not reflect your current requirements under the national system. You can also use this email address to contact AMSA if you believe the frequency shown on your AMSA-issued certificate of survey is not correct.

Read more at amsa.gov.au/ certificates-survey

#### 2. How do I document my near coastal sea service?

You can maintain a personal record of the time you spend on vessels however you choose, but when you provide evidence of sea service for an application with AMSA, you will need either a *Record of sea service* (AMSA 771) form, signed by your supervisor, or sea-service letters from your employer.

If you are unable to obtain sea-service letters or have your *Record of sea service* form signed by a supervisor due to circumstances out of your control, contact AMSA Connect (1800 627 484) to discuss any available alternate options for providing evidence.

Read more at amsa.gov.au/qualifyingnear-coastal-sea-service

#### 3. I'm worried I won't get my renewed certificate of competency in time to keep operating. What can I do?

If you need to operate when applying to renew your certificate of competency (CoC), and you are concerned your application will not be approved before your previous certificate expires, you can apply for a temporary service exemption using Exemption 8. A temporary service exemption approval allows you to operate for up to 30 days without a valid certificate, provided AMSA determines you are competent to perform the relevant duties.

To apply for this exemption complete the *Application for temporary service* 

form (AMSA 778), available on the AMSA website. When you submit your application to the email address on the form, include a copy of the receipt from your renewal application. To avoid needing to apply for an exemption, apply to renew your CoC early (30–60 days before your CoC expiry date).

### Read more at amsa.gov.au/forms/ application-temporary-service

#### 4. I have a safety concern involving a commercial vessel. Can I report it to AMSA?

If you observe a commercial vessel with substandard build conditions, unsafe working conditions, or operating in a way that could endanger the safety of other vessels or people, report this to AMSA using the online *Report of marine safety concern* form (AMSA 355).

Once you have submitted the form, AMSA will follow up and determine whether further action is required.

In an emergency involving a commercial or recreational vessel, call triple zero.

#### Read more at amsa.gov.au/reportmarine-safety-concern

## 5. Where can I find information about COVID-19 in relation to the DCV industry?

We are regularly updating our advice for the maritime industry as information about the novel coronavirus becomes available. Go to amsa.gov.au/covid-19

# Mersey Bluff Lighthouse

Iconic: In 1915, the Commonwealth assumed responsibility for the lighthouse under the Commonwealth Lighthouse Act. - Image by Greg Close

Far from the usual remoteness characterised by lighthouses, the Mersey Bluff Lighthouse at the mouth of the Mersey River, Devonport, Tasmania, has a history ingrained in the development of the local Mersey District.

By Peter Strachan

The Mersey Bluff Lighthouse replaced a succession of far less effective beacons and obelisks earlier erected on and near the bluff as a navigational aid for vessels heading towards the busy port. Now the white brick tower with four red vertical stripes make this lighthouse one of the most easily recognised in Australia and a common focal point for passengers on the ferry traversing Bass Strait.

Completed in 1889, the Mersey Bluff Lighthouse was constructed of locally made bricks mounted on a plinth of solid basalt. Perhaps related to the fact that the lighthouse was designed by prominent architectural and engineering firm Huckson and Hutchison of Hobart, the lighthouse features a balcony of white sandstone quarried from Bellerive now a Hobart suburb.

In 1901, after the twin settlements of Torquay and Formby had amalgamated into the estuary town of Devonport, the lighthouse was connected to town water. Connection to town amenities is an unusual feature in lighthouses, which are usually self-sustaining structures erected in remote areas.

The lighthouse's original kerosenefuelled lamp was converted to acetylene gas from a Colt seven-day generator in 1910 and then to a DC-electric unit in 1920—the year the light went into remote operation. In 1978 the light was connected to Devonport's mains power.

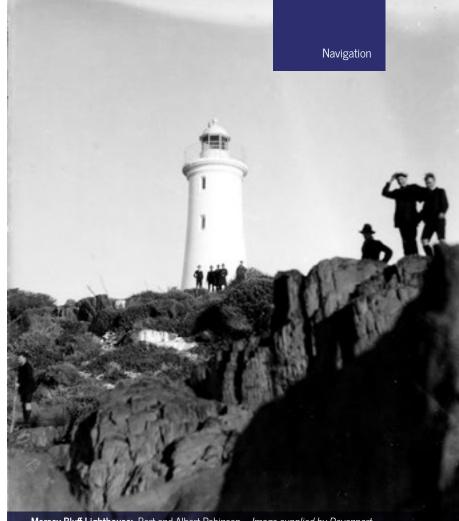
While the Mersey Bluff Lighthouse has strong links with the development of Devonport and the Mersey District during the late nineteenth century as a river port, the site and its surrounds is also home to many significant sites of the Tasmanian Aboriginals, from middens, to tea-tree living grounds.

A series of petroglyphs—images created by carving into a rock surface—also adorn the rocks around the bluff and are thought to have held cultural significance for people in the past. The petroglyphs, which continue to draw visitors, include carvings of abalone, crayfish, periwinkles, an emu and a seal.

The site's popularity as a tourist attraction is also due to other natural drawcards including an extensive range of wildlife, Indigenous plant foods and weaving materials, beaches and the attractions of the impressive Mersey River.



**Apology:** Working Boats Issue 10, January 2020, p 32 Image credit: Photograph by Paul Van Den Boom



**Mersey Bluff Lighthouse:** Bert and Albert Robinson – *Image supplied by Devonport Regional Gallery, Robinson Collection* 



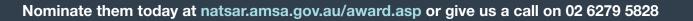
### 2020 Australian Search and Rescue Awards NOMINATE NOW!

Do you know an individual, group, or organisation that should be recognised for their efforts in search and rescue?

Nominations are now open for the 2020 Australian Search and Rescue Awards.

Help us recognise outstanding contributions to search and rescue in Australia.

Nominations close 10 July 2020.





Peter York, Mallacoota, VIC

'Use common sense and obey the rules.'



Jason York, Mallacoota, VIC

'Maintain your boats. Oil and grease are cheap engines and boats are not.'



Dennis Sten, Darwin Waterfront, NT

'Be safe and respect others on the water. Remember if you can't save yourself, you can't save others.'



Dave Phillipson, South Island, NZ

'Electronic aids are well and good, but remember that your best navigational tool is your Mark 1 eyeball!'

## What's the one piece of safety advice you would pass on to the next generation?

We asked some of the people we interviewed in this edition what key piece of safety advice they would share to the younger generation. Here's what they said...



Darryl Burns, Mallacoota, VIC

'Maintain your situational awareness, have an appreciation of what's going on in the landscape and the risks.'



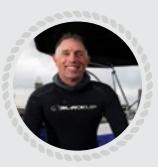
Ben Belling, Port Lincoln, SA

'Be aware of your surroundings, pay attention and don't be complacent. That applies to every industry.'



Mark Raff, Southport, QLD

'Being a responsible person on a boat starts with the skipper and crew, who must be across all regulations. Once the safety boundaries have been communicated, everyone can be responsible for upholding them.'



John Minehan, Mallacoota, VIC

'Avoid complacency. In this industry, the moment you think nothing is going to happen, you really need to be vigilant and always strive for improvement in the way you operate and the systems you use. That's part and parcel of what we're trying to do continually improve the way we do things.'





# Community events

This summer, prior to the COVID-19 outbreak, we went to Tunarama in South Australia, the Hawkesbury River festival in New South Wales and a host of other locations across Queensland, offering safety management system workshops.

With events cancelled or postponed over the next few months, we will be relying on our virtual communities through Facebook, Twitter and LinkedIn.

We look forward to getting back on the event trail to continue meeting our valuable stakeholders in person.







## Are you ready to head out on the water?

### Make sure your beacon is registered with AMSA

To update your registration details or to learn more about beacons visit amsa.gov.au/beacons or phone 1800 406 406



Beacons

Register or update your distress

beacon/MMSI

Australian Government
Australian Maritime Safety Authority

**Registering your beacon is free and easy.** In some cases it's required by law. Your registration information helps search and rescue authorities respond in an emergency. **Help us help you.**