



Australian Government

Australian Maritime Safety Authority

WORKING BOATS

Winter 2015 Issue 6

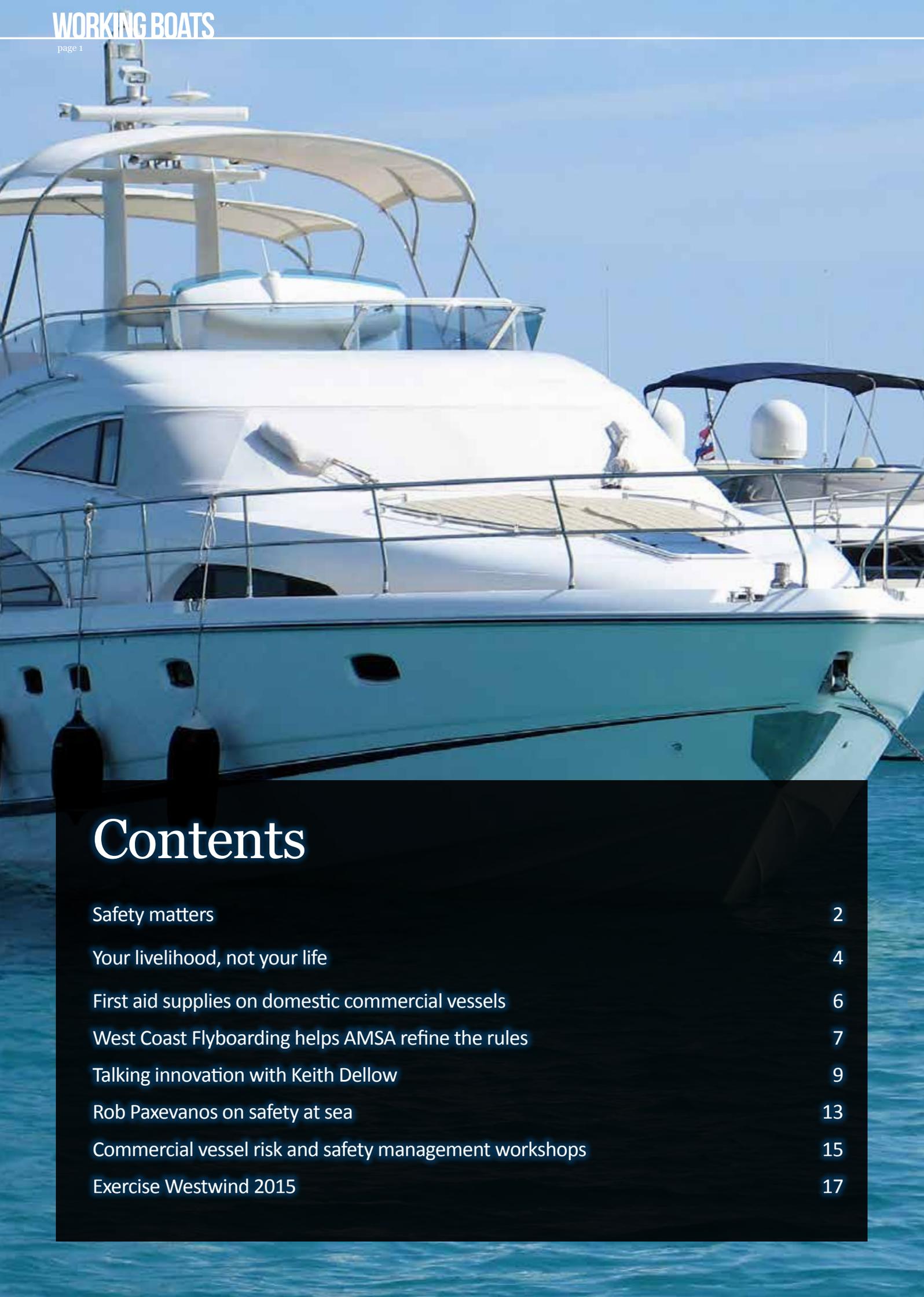
In this issue

**ROB PAXEVANOS
ON SAFETY AT SEA**

**YOUR LIVELIHOOD,
NOT YOUR LIFE**

**TALKING INNOVATION
WITH KEITH DELLOW**





Contents

Safety matters	2
Your livelihood, not your life	4
First aid supplies on domestic commercial vessels	6
West Coast Flyboarding helps AMSA refine the rules	7
Talking innovation with Keith Dellow	9
Rob Paxevanos on safety at sea	13
Commercial vessel risk and safety management workshops	15
Exercise Westwind 2015	17

Safety matters

Welcome to the Winter 2015 edition of *Working Boats*.

1 July marked two years of the National System for Domestic Commercial Vessel Safety (National System). It also means AMSA has 2 more years to prepare for the delivery of services and funding in July 2017.

In the lead up to this date we are committed to working with you to create a simple, manageable regulatory scheme that promotes safety and industry sustainability for the various sectors.

A national approach to service delivery will simplify how the regulatory framework is applied and ensure fairness and consistency, regardless of where you are located. Together, we are making progress and I'm excited about the future of the National System.

In this edition of *Working Boats* you can read up on the safety requirements in *Your livelihood, not your life*. With the recent deaths in the industry, this article highlights the requirements to ensure on-board safety. You can also find a range of resources on safety by going to amsa.gov.au > Domestic Commercial Vessels > Operation.

First aid supplies on domestic commercial vessels talks about welcomed changes brought on by amendments to regulations for first aid supplies. You can now develop your first aid kit to suit your operation type and geographical location and this is resulting in financial savings and less wastage.

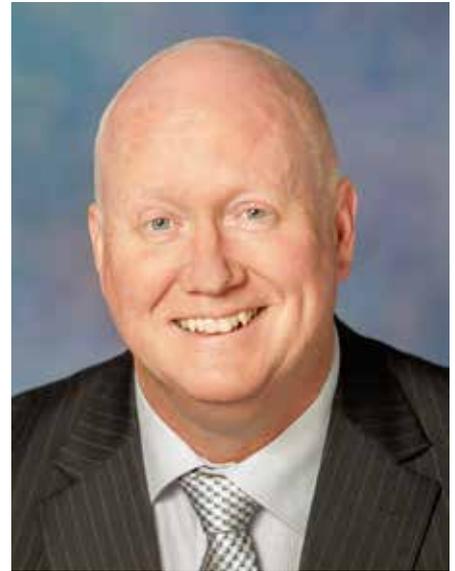
In this issue we also hear from celebrity fisherman Rob Paxevanos, who talks to us about his close call and top things to think about before spending a day out on the water, whether you are going out for work or for recreational purposes.

Our work with industry continues to make the new regulations as streamlined as possible. In this issue we tell you the story of how AMSA worked with Helen and Gerard of West Coast Flyboarding to come up with an exemption that now provides consistent treatment nationally.

And don't miss the one-on-one with spanish mackerel fisherman Keith Dellow, who talks to us about the hydrogen fuel cell that he installed on his boat.

I hope you enjoy reading this edition.

Mick Kinley
AMSA Chief Executive Officer



Mick Kinley

“We are committed to working with you to create a simple, manageable regulatory scheme that promotes safety and industry sustainability for the various sectors.”

DID YOU KNOW?

From 15 September 2015, AMSA is replacing beacon registration stickers with four new options for you to prove beacon registration. Choose what works best for you!



SMS

- Save your SMS registration confirmation on your mobile phone



EMAIL

- Save your email registration confirmation on your mobile phone



PRINT

- Print your registration confirmation, or if you have no email, request a printed copy be sent via mail.



ONLINE

- Check Beacon Registration – Online function to look up the registration status

Stickers with current registration dates will also remain a valid proof of registration.

Remember – it is important to keep your registration details up to date, they will be used in case of an emergency. Renew your details every two years and ensure you carry your proof of registration with you while out on the water.

For more information visit www.amsa.gov.au/beacons

or call the beacon registration helpline;

 1800 406 406 (business hours)

 +61 2 6279 5766 (international callers)

For accidental beacon activation call AMSA Search and Rescue on 1800 641 792.

Your livelihood, not your life

Recent and unfortunate deaths in the fishing industry hit home just how important it is to have a safety management system in place.

These fishermen — one off the coast of South-Eastern Tasmania, and another off the coast of South Australia — were experienced fishermen simply earning a living, but it cost them their lives.

Safety management systems (SMS) are not new to the maritime industry, but now vessel owners and operators are required to show that they have one in place.

As of 1 July 2015, operators of all passenger and hire-and-drive vessels (Classes 1 and 4) must have an SMS and be able to show their SMS documentation upon request. Operators of non-passenger and fishing vessels (Classes 2 and 3) will have to show their SMS documentation from 1 July 2016.

The vessel owner is responsible for implementing and maintaining a safety management system suitable for their vessel's operation. This includes providing safety training to vessel operators and crew, and making rules and procedures to help those on board maintain safety by identifying and preparing for known risks.

And since 1 July 2015 Class 1 and 4 vessel owners have had to do their own risk assessments and base their safety management systems on these risks.

One safety measure that all vessel owners need to consider having on board at all times, is a 406 MHz distress beacon coded with an Australian code.

For AMSA to be able to properly manage signals coming from your distress beacon, it is really important that you register your beacon with AMSA. You can do this online at amsa.gov.au/beacons

AMSA has a range of resources to help the development of an SMS for different types of operations, along with a list of common questions and answers. Find these resources by going to amsa.gov.au > Domestic Commercial Vessels > Vessels and operations > Operation.

Alternatively, you can call our helpline on 6279 5000 for more information.

“Recent and unfortunate deaths in the fishing industry hit home just how important it is to have a safety management system in place.”



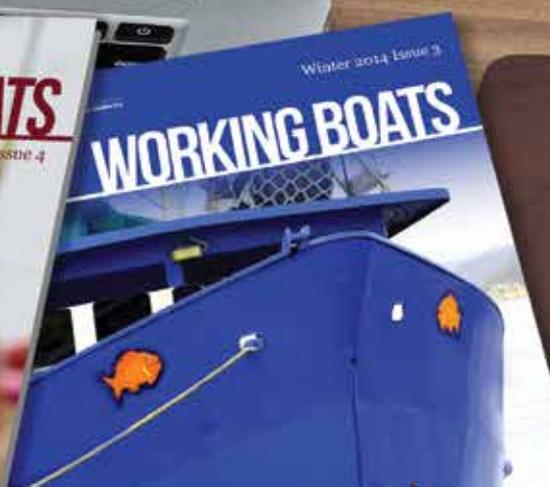
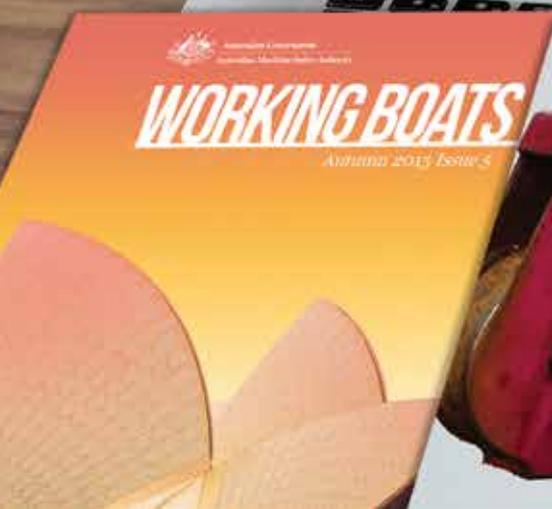
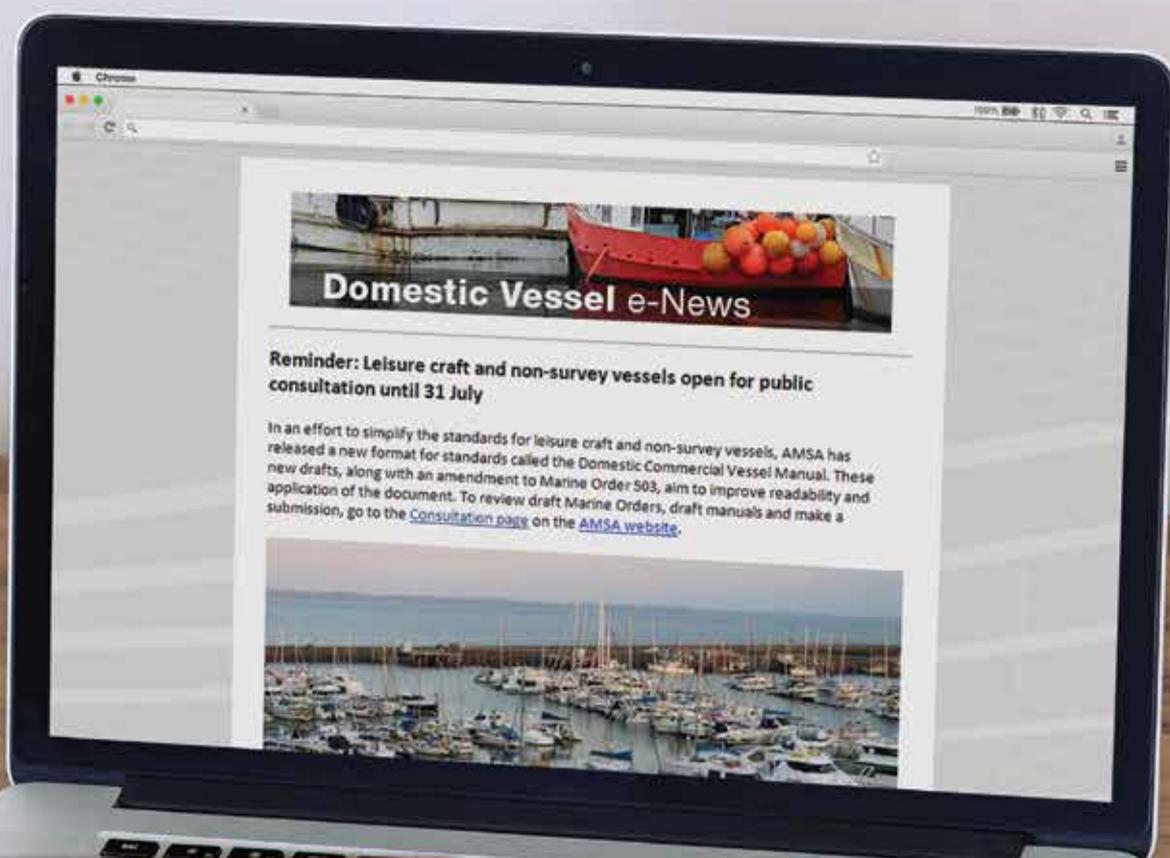
TELL US WHAT YOU THINK

Help us improve the way we communicate with you.
Take part in our online communication survey.

amsa.gov.au/survey

Your feedback will guide us on what information you need and how you prefer us to communicate with you.

We value your feedback — it takes just 2 minutes.



First aid supplies on domestic commercial vessels

Changes to rules allow a common-sense approach.

If you are operating in Class C, C Restricted, D or E waters, and are required to meet National Standard for Domestic Commercial Vessels Part C7A (Safety Equipment), you now have the flexibility to decide the type and quantity of first aid supplies needed for your operation.

“No longer are vessels heading to the southern ocean needing to carry anti-malarial tablets,” says Marine Surveyor and Manager of Technical Standards, Adam Brancher.

“Having had this in place for some months, we are receiving very positive feedback at this aligned common-sense approach,” says Adam.

As well as aligning with national work health and safety requirements, this change helps you save money and reduce waste because you will only need to carry first aid supplies that are appropriate to the risks associated with your operation type.

“Major cost savings are being reported, as is a reduction in waste — people aren’t having to throw out perfectly good stock to meet the standard,” says Adam.

The change followed the introduction of a generic equivalent solution earlier this year—*Carriage of First Aid Supplies on Domestic Commercial Vessels* (GES 2015/01—AMSA637).

This allows you to decide whether to carry a ‘scale’ medical kit or ‘cabinet’ as prescribed in Part C7A, or risk assess your operation and customise your first aid kit to suit your risks. It’s important to note that your kit must also comply with the Work Health and Safety Code of Practice.

You can read *Carriage of First Aid Supplies on Domestic Commercial Vessels* by going to amsa.gov.au > Domestic Commercial Vessels > Standards and legislation > Technical interpretations and equivalent solutions.

We have also published a resource — *Are you considering your first aid kit and medical equipment requirements?* — to help you work out what your first aid kit should include. This is available at amsa.gov.au > Forms and publications > Guidance (under ‘Vessels’).

This change helps you save money and reduce waste because you will only need to carry first aid supplies that are appropriate to the risks associated with your operation type.



West Coast Flyboarding helps AMSA refine the rules

Industry has an important role to play in the streamlining process, and Broome-based operator West Coast Flyboarding rises to the challenge.

When future operators of West Coast Flyboarding attended the streamlining meeting in Broome seeking direction on a national setting from AMSA, we took the opportunity to work together to develop a regulation that ensures safety, without restricting operation.

The AMSA team met with Helen and Gerard of West Coast Flyboarding the following morning to understand how their operation works and to determine how the rules should be applied to flyboarding.

“Helen and Gerard’s flyboarding business didn’t fit any of the regulatory settings we had in place, but it was definitely a domestic commercial vessel operation. While the person doing the flyboarding is not a passenger, the flyboarding apparatus connects to a Jet Ski ridden by a qualified operator at all times,” says Adam Brancher, Marine Surveyor and Manager of Technical Standards at AMSA.

In case you’re wondering, flyboarding

is a relatively new sport where the participant riding the flyboard is thrust skyward under water propulsion, provided by a Jet Ski, via a big hose. It was invented in 2012 by French watercraft rider Franky Zapata, and has rapidly taken hold around the globe. There’s even an annual Flyboard World Cup, as well as other Pro Flyboarding events around the world.

“We learned that lots of different approaches were being taken around the country, so we really needed to develop a solution that would bring consistency,” says Adam.

“From when we visited Helen and Gerard to learn about the nature of the operation, it took about two months to draft and implement a rule change which allows flyboarding businesses to operate in a safe and sustainable manner nationally.”

You can find the *Marine Safety (Flyboards) Exemption 2014* at [amsa.gov.au > Domestic Commercial Vessels > The National Law, Marine Orders and Exemptions](https://www.amsa.gov.au/~/media/AMSA/Files/2014/06/06/Flyboards-Exemption-2014.pdf).

Now Helen and Gerard have flyboarding operations in both Broome and Darwin.

“We want to express our gratitude for

how AMSA worked with us to develop and move forward with producing these guidelines to the benefit of all operators Australia wide,” says Helen.

“It’s a true credit to AMSA as a whole, with the massive task undertaken to have regulations under a common national body.”

AMSA encourages people to bring concerns about regulations directly to us.

“That’s what we want — our work is about collaborating with industry to come up with the best solution for everybody,” says Adam.

“The flyboard exemption is an example of how we work with industry to come up with simple but safe ways of covering the risks different operations pose.”

“That’s what we want — our work is about collaborating with industry to come up with the best solution for everybody.”



Gerard flyboarding off Broome

Talking innovation with Keith Dellow

Queensland fisherman Keith Dellow talks about his vessel's alternative fuel system that reduces costs and is better for the environment.

What kind of operation do you run, Keith?

We are Spanish mackerel fisher people based out of Innisfail. We fish the Queensland side of the Gulf of Carpentaria and the Torres Strait, with some east coast work. We catch our fish by trolling lines from the boat.

We usually start fishing in April through to mid-January the next year, depending on the seasons. Just myself, my wife and our Silky Terrier 'Chippy' fish most of the time. We do sometimes employ crew, but find it very hard to get experienced people to work with us.

Tell us a bit about your vessel, the *Mary Jane*.

We have had the vessel for five years. She is 16.9 metres and is constructed of timber. We trawled with her for one year then converted her to be a full-time mackerel vessel.

We are interested to learn about the hydrogen fuel cell that you installed on your vessel. How does it work?

The fuel cell converts water to hydrogen gas. Distilled water is added to the header tank, which in turn flows into the cell to produce hydrogen gas. The gas is then piped down to the engines and used as fuel.

What are the benefits of the hydrogen fuel cell unit?

We run the hydrogen system mainly on the generator set 6081 Iveco with a 56 kVA and this saves 25 per cent on our fuel usage. It also keeps the oil cleaner for longer, which saves oil costs. When we used it on the main motor, it saved 25 per cent on fuel and saved on oil as well. The turbo also ran cooler.

Hydrogen gas is lighter than air and it rises quickly and is easily vented. We have sensors in the engine room and at the hydrogen cell unit to detect any leakage, but it is very safe if installed correctly.

It also greatly reduces carbon emissions.

How did you come up with the idea of installing the hydrogen fuel cell?

I have been looking at the hydrogen cell idea for the past 20 years. However four years ago I came across hydrogen units with power width modulator (PWM) drivers and decided this was the time to purchase one and install it.

The hydrogen fuel cell has been successful due to the support from Mike, who we purchased the system from in the United States. Over the last 3 years, we have refined the pulse width modulator units to drive the hydrogen fuel cell, which runs 24 hours a day.

“The fuel cell converts water to hydrogen gas. Distilled water is added to the header tank, which in turn flows into the cell to produce hydrogen gas. The gas is then piped down to the engines and used as fuel.”



The PWM and digital controller



The Mary Jane
Photos courtesy of Keith Dellow

What process did you have to follow to have it surveyed? Did you have to make any adjustments before it was approved?

My son-in-law is an electrician and marine engineer on tugs and he led the way on the installation. He installed many safety features and devices and integrated the hydrogen cell unit with our fire system.

A Queensland ship surveyor then surveyed the *Mary Jane* and approved the hydrogen system with Maritime Safety Queensland. We only had to install the oxyhydrogen (HHO) gas detectors before he could approve the changes on the vessel.

Have you made any other innovative changes to your vessel?

We have taken all the heavy trawl booms and gallows out and replaced them with aluminium ones, which are maintenance free. No more paints or the need for grit blasting every five years.

We have also installed a complete duplication of the electronics, steering system, radios etc. on the back deck so that when we are trolling for mackerel I am in complete control of the boat whilst working with other vessels. This is a much safer way to be working.

Do you get a lot of interest from other vessel owners who are interested in doing the same thing to their vessels?

Yes and no. Installation costs put some people off, as it has to be done correctly.

What are your thoughts on how the National System will impact the domestic commercial vessel industry?

It's about time that the whole country is under the same rules. Costs will be the same around the country and that's a good thing.

“It's about time that the whole country is under the same rules. Costs will be the same around the country and that's a good thing.”



Keith Dellow



The hydrogen cell aboard the *Mary Jane*

Rob Paxevanos on safety at sea

Fishing personality Rob Paxevanos chats with us about safety and the close call that rocked his boat.

What are your thoughts on the changes introduced as part of the National System for Domestic Commercial Vessels?

In the course of my work filming *Fishing Australia* I am regularly on commercial vessels (particularly fishing charter vessels) in various territories and states around Australia, and I have noticed over the years that boats, captains and deck hands in this industry often move across borders when they relocate.

Some will even move across borders during a day's fishing! So while there are always going to be some teething problems with any new system, I think it makes sense to bring some consistency to safety regulation across Australia. It sounds like it'll be a simpler system, and that'll be good. It'll hopefully let operators spend more time fishing and less time filling in forms!

What are the most common safety issues that you see on vessels at sea?

It's rare, but very occasionally people (including captains, customers or private operators) get too excited or complacent about the day's fishing and don't take the time to check gear and conditions. Experience has taught me that when things go wrong at sea they go wrong quickly. You need to think about the worst, like capsizing (especially at speed) or slipping overboard at night, and how today's modern safety measures can often help if there is an accident.

Can you tell us about a safety-related close call that you have had?

Because of the wide variety of locations and conditions I've been exposed to there have been a few close calls, but this question really makes me realise how much safer we are able to be these days thanks to evolving regulations and safety gear.

The scariest incident I had was when my father and three brothers were fishing for kingfish and salmon in Port Phillip Heads in the early eighties. The fish were schooled up near a surf break, and they were bigger and hungrier than we had ever experienced, and we were in just as big a frenzy as we excitedly fought them in.

While our attention was elsewhere, a big breaking surf wave snuck up behind us. It towered over our 21 ft. runabout and looking up at the wall of water I thought we were goners for sure! Somehow the boat didn't capsize and we powered off 50 metres away to safety. No one spoke for a while, and we did no more fishing that day. It was a haunting experience.

While we were good swimmers, I think that had we survived the boat capsizing, none of us were good enough to swim around the reef to shore, and what's worse is that my dad is a poor swimmer... I shudder to think if any of us would have made it.

There are several things that are different now. We have much more experience and are very careful near the surf/reef breaks. But even then, there are unforeseen dangers that could tip us in seemingly safe areas, like hitting submerged shipping containers in transit, freak waves, whales, boat-hull malfunctions etc. The list is huge. Regardless of where I travel, modern slim-fitting, water-activated lifejackets are now compulsory in my family, in case we get knocked in. A water-activated Emergency Position Indicating Radio Beacon (EPIRB) is also a must-have, whether it's required by law or not. It's about minimising the risk.

What do you think about the changes to beacon registration?

AMSA's replacing registration stickers with electronic or paper-proof of registration. I've seen this happen in fishing licences for years; when you apply you can often print your own licence. Now most states don't issue rego stickers for your car. It's a more modern and flexible system. If you change your details you don't have to wait for the snail mail to deliver a new sticker.

“While there are always going to be some teething problems with any new system, I think it makes sense to bring some consistency to safety regulations across Australia.”

What are your top tips for a day on the water?

If you are going on a charter boat, go with an experienced operator because local knowledge of weather and conditions is hugely important, so you'll be safer and probably catch more fish too.

Also, I still check the weather myself because I want to know if it's going to be calm or if it's going to be a bit rougher and more testing physically and mentally. Being prepared is also a good way to avoid seasickness. Also pay careful attention to the skipper's brief, there is always room to learn from them.

If you're taking your own boat or heading out with a friend:

- always check the forecast on several different web sites and then compare notes with others on board. You need to clearly understand how wind, sea, swell, depth and tides can change during the day and make conditions dangerous

- always check through your safety gear and have a contingency plan
- think about how the heat or cold may slowly wear you down and pack accordingly. Staying comfortable, protected and hydrated makes for a safe and enjoyable day.

The nature of this interview has brought out some scary topics, but by and large with a little bit of caution, preparation and common sense, going to sea is a magical experience that many of us in this industry enjoy daily. In fact I find being safety conscious makes for a more enjoyable day for everybody.



Rob Paxevanos showing off the day's catch
image courtesy of Rob Paxevanos

Commercial vessel risk and safety management workshops

Free one-day workshops about how to identify risk and develop an effective safety management system (SMS) are well received by industry.

Workshops have been taking place around Australia — in conjunction with marine safety agencies, industry peak bodies and associations — to help domestic commercial vessel owners, masters and crew get a SMS in place to meet their obligations under the National Law.

New requirements came into effect on 1 July 2015. Existing Class 1 (passenger) and 4 (Leisure Craft) operations must now comply with the *National Standard Commercial Vessels (NSCV) Part E – Operations*, and have a SMS that identifies and appropriately manages the risk associated with the operation of the vessel.

Existing operators of Class 2 (non-passenger) and 3 (fishing) operations have until 1 July 2016 before they must comply with the revised NSCV Part E. Any pre-existing state and territory requirements continue to apply in the interim.

The workshop activities and materials cater to all types of vessel operators, ranging from large passenger operations, workboats, fishing and hire operators, and have had a positive reception.

“What a great, well-planned workshop. Information presented was simple and easy to understand,” said one workshop attendee. This view is shared by many workshop attendees who also welcomed the cooperative work taking place between industry, community bodies and AMSA.

“We are keen to reach all parts of the domestic commercial vessel community and we encourage community members to let us know if we can tailor a workshop to suit their needs. For example, on 31 August we will provide an SMS workshop in Newcastle with the assistance of a Vietnamese interpreter,” says workshop presenter Wes Oswin.

Industry peak bodies and associations can now also deliver workshops independently to their members using an SMS workshop resource kit developed by AMSA and the Australian Maritime College.

AMSA is organising further safety management workshops and will announce dates and locations soon.

The next round of workshops will target Western Australia, New South Wales and South Australia. Keep reading *Domestic Vessels e-News* for an update on when and where the next workshops are being run.

For more information about the workshops, to attend, or to hold a safety management workshop for operators in your area, please email operationalafety@amsa.gov.au.

“We are keen to reach all parts of the domestic commercial vessel community and we encourage community members to let us know if we can tailor a workshop to suit their needs.”



Safety management workshops conducted in Queensland

Exercise Westwind 2015

Oil spill responders were put to the test during this year's annual exercise of the National Plan for Maritime Environmental Emergencies, held in Western Australia from 8–11 June.

This year's operation, called Exercise Westwind, simulated its first-ever response to an offshore petroleum industry incident — a level-three maritime environmental emergency.

Exercise Westwind was a joint operation by AMSA, the Australian Marine Oil Spill Centre Pty Ltd (AMOSC), the Department of Industry and Science, the Western Australian Department of Transport, the Department of Infrastructure and Regional Development, and the offshore oil and gas industry.

The exercise was held in two locations, the Incident Control Centre (ICC) based in Perth and the Tactical Operations Group (TOG), which operated out of Exmouth. These two groups were staffed with representatives from state and federal government agencies and industry.

The exercise simulated an uncontrolled release of oil from a rig off the coast of Exmouth in WA, operated by the fictional ACME oil company.

At the ICC in Perth, AMSA's role in the exercise was to establish a liaison officer to provide support and direction throughout the incident. AMSA also provided logistics, planning, Geographic Information System and environmental support.

For the practical part of the exercise AMSA deployed the national response team and marine pollution response equipment from its two stockpiles within Western Australia to the tactical operations group at Exmouth. AMSA staff also participated in the forward operating base, air attack operations, logistics, and welfare sections.

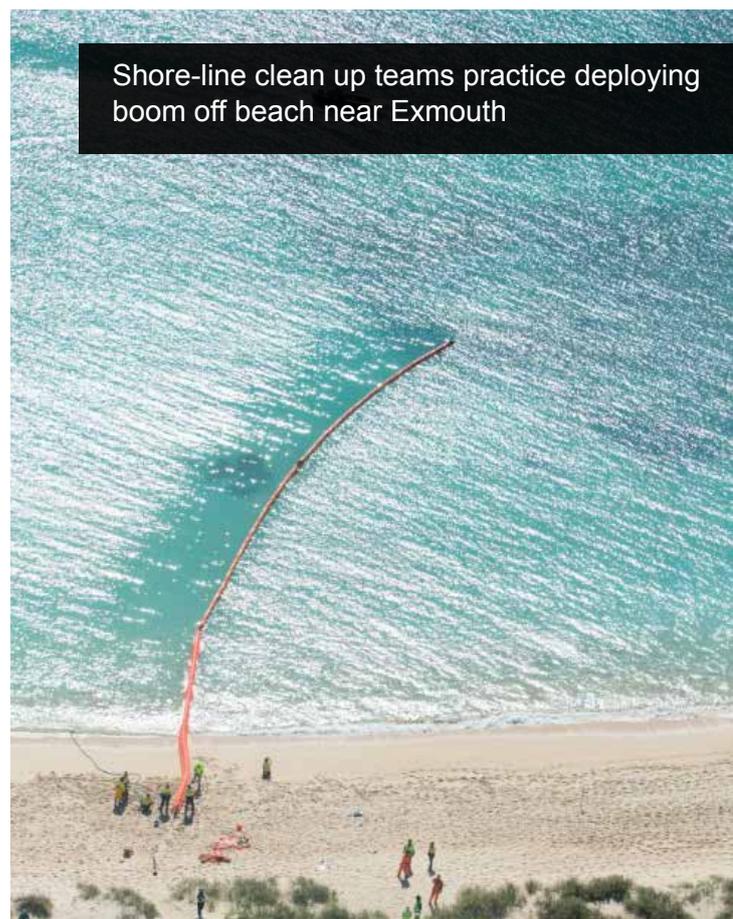
Over the four days the exercise teams participated in a number of simulated activities including oiled wildlife response, shore-line clean up, aerial observation, simulated aerial dispersant application, open-ocean containment, and clean up.

The exercise was considered a success and provided a valuable opportunity for all National Plan stakeholders to practice their incident management skills and the use of specialist equipment in a controlled environment.

AMSA would like to thank all the participants of the exercise — particularly AMOSC — who played a key role in coordinating this year's scenario.

Read more about the National Plan for Maritime Environmental Emergencies at amsa.gov.au > [Environment](#) > [Maritime environmental emergencies](#) > [National Plan](#).

The exercise was considered a success and provided a valuable opportunity for all National Plan stakeholders to practice their incident management skills and the use of specialist equipment in a controlled environment.



Shore-line clean up teams practice deploying boom off beach near Exmouth



A fixed wing aerial dispersant aircraft conducts a flyover



AMSA staff member conducts briefing before the day's exercise



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To ensure you continue to receive *Working Boats*, AMSA news and updates on the National System, remember to update your details.

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02 6279 5000 (option 3)

