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AUSTRALASIAN MARINE PILOTS INSTITUTE

SAFE Passage

WINTER 2021

In this issue

- Feature Article – Threat and Error Management
- Presidents Report
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COVER IMAGE:
Port of Newcastle arrival
with Pilot Boat Henry Newton.

Contents

Ramblings
of the Editor

Here we are with another edition of Safe Passage. It's hard to believe that it's almost two years since I was coerced over a few glasses of red into taking on the role of Editor by our immediate past President Neil Farmer (thanks Neil…). The last few years have been a steep learning curve and I'll be the first to admit that I completely underestimated the sheer number of volunteer hours that our members put into our organisation.

Pilot Boarding Life Ring on the Hoegh Trident

Last year, during the lockdown, my wife also agreed to join the AMPI team to help out as Administrator after Helen retired, this has given me an insight into the amount of work our Director's take on. One of those roles is regular interaction with government departments to represent the best interests of our members and industry, so I felt it would be a good opportunity for us to present a few of the supportive letters we have received of late.

Also, since taking on the magazine I have set a few goals including encouraging new and diverse content, improving the quality and size of the print, expanding the readership and also bringing in additional funding for the magazine through advertising. The advertising allows us to provide a better-quality magazine without using AMPI funds, those funds can now be used elsewhere to support the interests of AMPI's members.

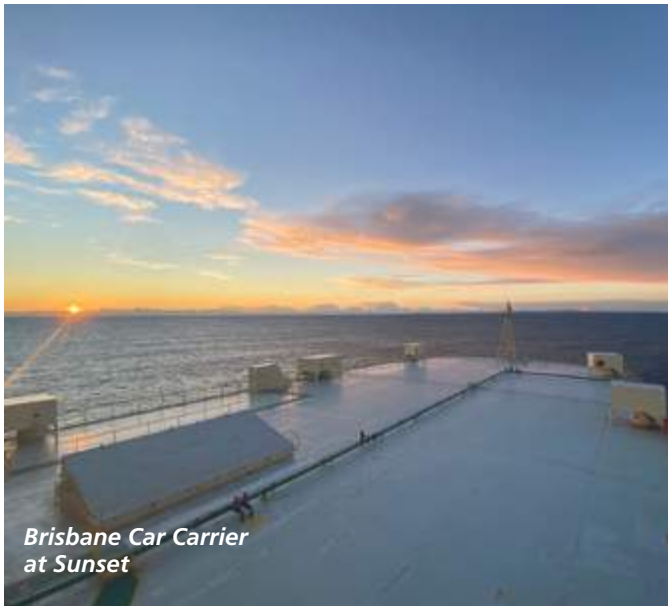
In this edition we are presented with articles from three Australian pilot boat manufacturers showing their newest boats. It's amazing to see the continual development and improvements that occur year on year to make our transfers better and safer.

I am always looking for new content; if you have ideas, articles or photos that you'd like to present, please email them to editor@ampi.org.au .

Finally, once you are finished with this magazine, please pass it around. You can leave it in your pilot office to encourage more of your colleagues to join up, or perhaps leave it onboard a ship where it might be read by an aspiring pilot during an anchor watch.

Safe piloting,

Editor / Newcastle Pilot
Captain Ricky Rouse



Brisbane Car Carrier at Sunset

Port of Newcastle, Heavy Weather Arrival

Presidents Report

Welcome all to the Winter Edition of Safe Passage.

I am writing this in isolation after a ship I piloted nine days previously had three crew members test positive to coronavirus after the ship's arrival at their discharge port. The ship had prior to that done a crew change in Manila, and then passed our risk assessment processes. In the ensuing five days that I was required to isolate myself, I had two negative tests (I also had a negative test two days prior to going into isolation) and had just been fully vaccinated. Just playing it safe I guess.

This time in isolation gave me cause to think that besides the obvious benefits of getting the vaccine in regards to the continued fight against coronavirus, will it make our working lives better, for example, if you have been fully vaccinated, will that enable you to avoid isolation if a States borders are closed? We just don't know. Perhaps it is time to now start being proactive instead of reactive and start asking these questions.

COVID-19 is still causing angst out in the community with Victoria again being plunged into lockdown. This must be having a devastating effect on not only businesses but also on the mental well being of many of our population. Again the problem looks to have evolved from glitches in the hotel quarantine system and again the politicians through a lack of collective and political will are unable to fix the problems. Hopefully the stand alone quarantine message will soon sink in and these glitches will disappear.

One bright spot in all of this darkness is the continued uptake of the vaccine which will hopefully one day allow us all to go back to a relatively normal life. I hope so anyway.

AMPI became concerned during the latter part of last year over proposals to change marine pilotage training requirements particularly in regards to the use of simulation to replace on-water training and assessments. This concern has led to lobbying Government Ministers, Parliamentary Advisors, AMSA, The ATSB and various state transport departments to try and encourage engaging with AMPI in a consultative manner when considering changes via innovative training methods. AMPI fully supports training methodologies designed to enhance marine pilot skills that are driven by technology, automation and an improved understanding of human factors based safety management systems. This lobbying has met with generally positive support and there appears to be no appetite at present to change the status quo in regards to changing training standards particularly in regards to replacing in-water training with simulation training.

A further area of concern for AMPI at the moment is to do with the use of non-pilotage experts in an expert world. This has been seen recently in one port where an attempt was made to reduce tug numbers for very large ships without the use of a proper risk management process, without proper simulation to see if it was in fact feasible and then having no standard operating procedures in place for the change.

Tug usage is a complex part of the overall pilotage evolution and it is only when the pilot, Ships Captain and tug team are fully aware of the capabilities and limitations of the tugs in use, in that particular port, including the effects on the piloted ship, that the tugs are able to be utilised in the safest and most effective way.

Simulation, whether it be for training or research, should be used with caution as there is still a requirement for an in-depth knowledge of a tugs capabilities and limitations. It is only when this knowledge is combined with simulator based training that it becomes possible to use the results to contribute to safer ship handling.

It is perhaps unfortunate that the advent of more powerful tugs has brought about the general idea that a reduction in tug numbers is possible. In some cases a reduction in tug numbers may be possible but many ships still have bollards and fairleads that are not strong enough to cope with the high towline forces that can be generated especially in an emergency situation. Ships have also become much larger and thus safety margins have subsequently been reduced. Low risk-high consequence types of events such as main engine failures can also occur.

Adequate tug assistance therefore must be maintained to deal with these situations as it is when things are not quite going to plan that having sufficient tug power to assist becomes a key plank of the pilots ability to successfully deal with what may be becoming a rapidly deteriorating situation.

Now for some good news.

AMPI in collaboration with The Company of Master Mariners of Australia and The Nautical Institute has recently started an Australian Maritime Mentoring Program. This program is intended to help Merchant Navy Cadets and junior maritime officers to progress in their careers and is a concept of which we should all be fully supportive. It is hoped that this program will not only help the mentee but also the mentor in developing both of their skills and help to introduce a level of empathy which is sometimes missing in the maritime industry. Safe Passage Editor, Ricky Rouse, has been instrumental in setting up this scheme and is to be congratulated for all his efforts in this regard.

AMPI hopes to continue to provide support in the many areas that make up the pilotage landscape, such as those above, to not only its members but also to the maritime community in general. Whether this be through consultation or collaboration we are here to help.

Safe Piloting
Peter Dann

TasPorts

10 May 2021

Captain Peter Dann
President
Australasian Marine Pilots Institute
PO Box 860
NEWCASTLE NSW 2300

Dear Captain Peter Dann,

Thank you for your letter dated 3 February 2021, addressed to Michael Ferguson, Minister for Infrastructure and Transport. Due to the Tasmanian election, I have been asked to respond directly to you on this matter.

I can advise that TasPorts is not looking at changing its Marine Pilotage Code training requirements, however as an organisation, we have expressed their support of simulator training to complement existing on-water training.

TasPorts has a range of important responsibilities regarding the operation of Tasmanian ports and plays a critical role in ensuring marine safety and environmental management in Tasmanian waters.

Competency based training using simulators as the primary tool has been proven in other safety critical industries as a successful training methodology. Strong evidence from aviation, nuclear and rail industries indicate the use of competency-based training program with suitably qualified instructors is a successful way to obtain consistent, measurable results, whilst enabling the assessment of an operator's competency in the chosen safety critical field.

TasPorts has noted the value of simulators, however, has expressed that this should not override time spent training on-water. Simulator training enables standardisation of manoeuvres, whereby a trainee is taught standard manoeuvres by a qualified instructor in a simulated environment, where they can identify areas for improvement and repeatedly focus on those areas, until competency is gained.

TasPorts has noted from an operational perspective, on-water training enables the development of bridge management skills. These skills are critical for pilots, as these interactions enable the effective interaction and integration of teams, when undertaking operations.

Yours sincerely

Anthony Donald
Chief Executive Officer

AMPI

AMPI Admin <admin@ampi.org.au>

Concerns regarding proposed changes to marine pilotage training requirements

Brown, Carol (Senator) <Senator.Carol.Brown@aph.gov.au> 23 March 2021 at 14:52
To: "admin@ampi.org.au" <admin@ampi.org.au>

Dear Captain Dann

Thank you for your correspondence to Catherine King last month about the lack of Federal Government support for on-water training. Catherine has asked me to respond on behalf of the Federal Parliamentary Labor Party.

The lack of federal support for training and skills development in the maritime sector is truly alarming. I attempted to raise this issue with the Department of Infrastructure at Senate Estimates last night. The Department indicated that they do not have the funding or capacity to support any training or skills development. In fact, if organisations or businesses approach them seeking support they refer them to individual port authorities or to the Federal Department of Education.

The recent listing of seafarers and other maritime workers on the skilled migration list is also extremely troubling.

I will continue to pursue this issue with the Education Department.

I'll be in touch once I get a response from the Department. In the meantime, if there is anything else I can be of assistance with please do not hesitate to get in touch.

Regards

Carol Brown
Labor Senator for Tasmania
Shadow Assistant Minister for Infrastructure and Regional Tourism
Shadow Assistant Minister for Tasmania

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Threat and Error Management

by Captain John Clarke

Defensive driving for pilots

In aviation training there is a well known saying:

"A superior pilot uses superior judgement to avoid situations that would require superior skills."

The UK's Civil Aviation Authority quotes this when describing the concept of *Threat and Error Management* to people who may not be familiar with it.

If you are a mariner and you've never heard the term Threat and Error Management used before, you are not alone. Threat and Error Management (TEM) is not a widely recognised term in the maritime industry, but it probably will be heard more in coming years.

The subject caught my interest when I first encountered an overview of it on a BRM course and it was mentioned again later at a safety seminar. I began to think that I should find out a little more about Threat and Error Management and whether or not there was any relevance to my work as a marine pilot. After an initial internet search, I found that virtually all of the TEM literature presently available online was specifically related to aviation or emergency/operating room medicine. There were only a few references to maritime TEM but nothing more detailed than one or two BRM syllabuses listing TEM as a topic heading.

After researching a reasonable number of available articles and discussing the concept with some human-factors experts including Ravi Nijjer (Marine Consultancy Group) and Bob Hubble (Wrightway Training) I was able to get a better grasp on the subject and it is clear to me now that Threat and Error Management is something that pilots will need to become familiar with in future.

WHERE DID TEM COME FROM?

The origin of TEM lies in the aviation industry in the mid-nineties. It had been noted that despite high levels of human factors awareness and crew resource management (CRM) training in the industry, errors continued to be made in the cockpit. There followed a realisation and acceptance that it was impossible to entirely eliminate human error, so it would be better to put the focus on training aviators to *use CRM practises to manage the errors*. This was considered in the aviation world to be a breakthrough moment.

Since then TEM theory has rapidly developed until it has now become a part of daily practice among commercial aviators from single-pilot charter flight cabins to wide-body jet cockpits. Even so, among aviation academics, there is still no agreement on whether CRM is part of TEM, or TEM is a part of CRM. Some sources even describe TEM as 6th Generation CRM.

Most of our maritime human factors knowledge devolves directly from the aviation industry. If you compare the topics covered in aviation CRM workbooks with our own BRM texts, they are very similar: leadership, situational awareness, workload management, stress, fatigue, cultural factors, communication, and decision-making. Given that TEM has been progressively introduced into training and line operations in the aviation, railways management, emergency medicine, air traffic control, and firefighting industry sectors since the late nineties, it seems certain that maritime human factors training facilitators will follow suit and indeed a progressive few have been doing so for some years already.

WHAT IS TEM?

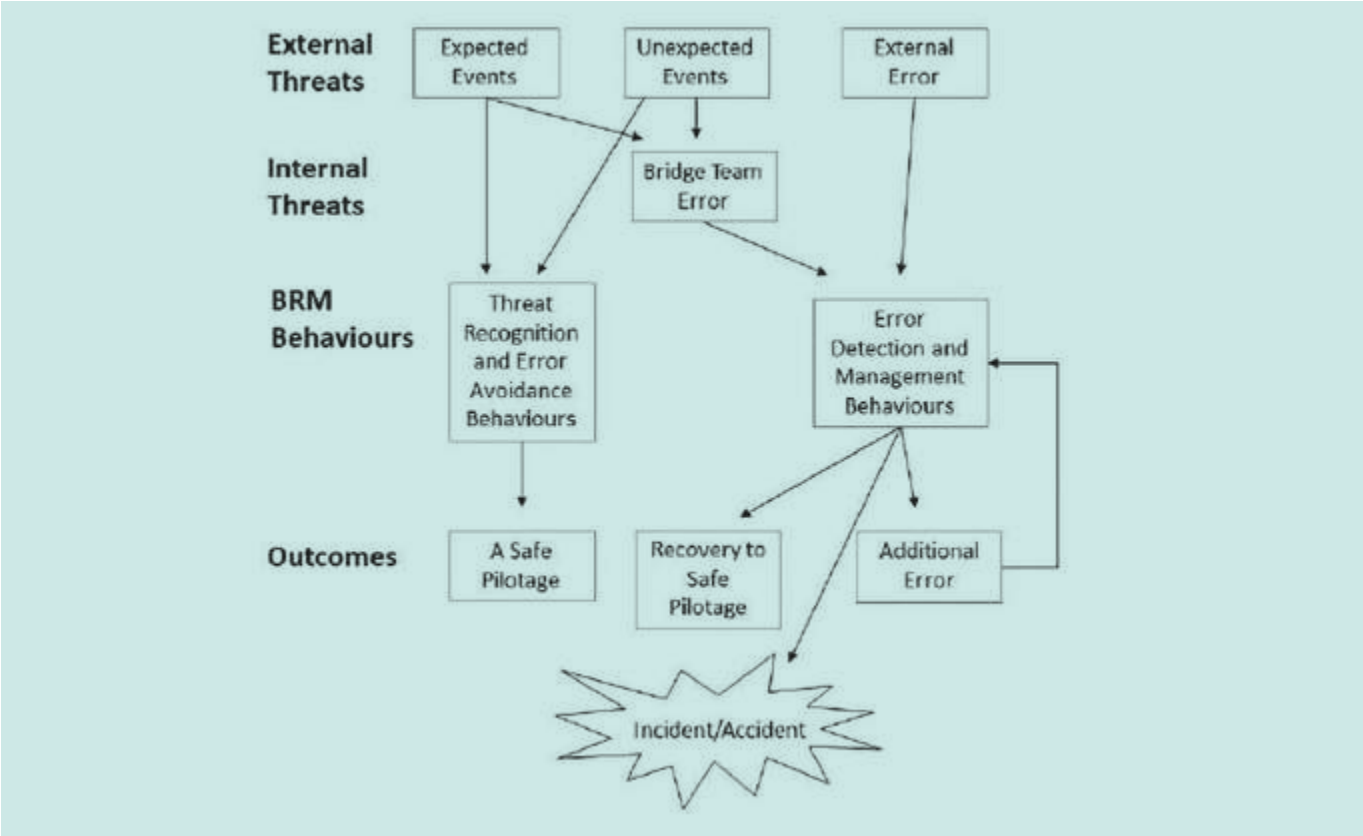
There is no consistent definition of Threat and Error Management. I've seen it referred to variously as:

- An overarching safety concept
- A set of attitudes and behaviours
- A set of practices that support safer operations
- The practical application of CRM theory to operations
- A way to use human factors skills to ensure technical skills are properly applied

This lack of consistency isn't very helpful but fortunately the UK Civil Aviation Authority provides some clarity in their *Flight-crew human factors handbook* (2014). In that publication CAA defines Threat and Error Management as: **"…the practice of thinking ahead in order to predict and avoid errors and operational threats, and manage any that occur (similar to the practice of defensive driving)."** (CAA, 2014).

A critical point to note is that proficient TEM practitioners accept that errors will occur, and understand that they can't ever know what all the errors will be or when they will happen. The aviation industry refers to pilots with a good TEM attitude as operating in 'a state of chronic unease'; they constantly look for and expect threats and errors to arise. The belief is that *anticipation* builds vigilance, *vigilance* is the key to recognizing threats and errors, and *recognition* leads in most cases to *recovery*.

It could be said that TEM is consistent with the vigilant and thorough attitude that good seamen have always displayed. Most mariners would agree that there have always been masters and pilots who seemed to attract less excitement and drama in their working lives than many of their peers. Mariners might even view TEM as simply the practice of good seamanship.



THE TEM MODEL

In an attempt to cut through the jargon and make TEM more user-friendly, academics have developed a visual model to illustrate the relationships between threats and errors and crew actions to manage them. A number of versions of this model can be found with slight variations. The following model is adapted to a maritime context from the original Helmreich et al (1999).

In this TEM model **threats** are categorised as:

- External (mechanical failure, vessel condition, environmental, poor communication, traffic, or external errors etc.)
- Internal (fatigue, distraction, boredom, over/under-confidence, lack of currency, lack of skill, behavioural, stress etc.)

Errors are classified as:

- Internal (bridge team slips, lapses, mistakes, violations)
- External (engine room or deck crew, VTS, other traffic, terminals, tugs etc.).

The model proposes using BRM behaviours as TEM **countermeasures** to:

- Recognise and avoid threats
- Detect and trap errors

TEM COUNTERMEASURES

TEM describes specific practical countermeasures to manage the threats and errors:

- *Planning* countermeasures, including passage planning, briefing, workload delegation, and contingency plans.
- *Execution* countermeasures, including monitoring, cross-checking, closed loop communications, workload and automation management.
- *Review* countermeasures including monitoring and modifying plans as the passage proceeds, thinking aloud, assertiveness and asking "what if" questions.

Mariners will recognise these countermeasures. They are simply the practical application of Bridge Resource Management.

KEY TEM *TAKE-AWAYS*

Nobody can predict which hazards will affect a ship on any given day
Unanticipated external threats and internal errors will occur during every pilotage or navigational watch
Prepare and plan well
Assume nothing
Continue to check the critical things
Stay vigilant
Expect surprises

WHAT IS THE RELATIONSHIP BETWEEN TEM AND RISK MANAGEMENT?

Risk management sits at the heart of our safety management systems. But it is important to remember that no matter how good your SMS is, procedures don't berth ships – pilots do. And like all humans, pilots must be expected to make mistakes.

Risk management and TEM can be considered as two sides of the same safety management coin: risk management is the process of deciding whether or not an operation can be conducted to an acceptable level of risk, whereas TEM is the process of managing the safety of a particular operation once it is already underway (Civil Aviation Safety Authority (CASA) 2017). CASA does qualify that statement by noting that there are overlaps between risk management and TEM in the planning, preparation, and post-operations review stages of an operation.

WHAT DOES GOOD TEM LOOK LIKE IN PRACTICE?

Sometimes it can be easier to show examples than to describe a new concept. We can use an example familiar to all of us: a pilot setting out to sail a ship and adopting sound TEM practices:

Before leaving home, the pilot obtains up-to-date weather and tidal information from official sources. The pilot checks all personal safety equipment, checks the PPU and radio batteries are charged and that they have back-ups for any other essential equipment. At the office the pilot completes all required planning documentation and calculations. The latest information about the pilotage area and the ship is reviewed.

The pilot takes a moment to consider what actions, conditions or events are likely to produce errors on this particular day, leading to the identification of internal and external threats applicable to this pilotage. The pilot asks 'is there anything different about this specific pilotage?' The pilot considers how best these anticipated threats could be avoided. The pilot considers fatigue, stress, and any latent threats to personal performance.

On the ship, the pilot leads a bridge team briefing and follows any pre-departure procedures. The pilot familiarises themself with key navigational aids and assesses the bridge team for indications of stress, fatigue, or dysfunction. The briefing includes all known or anticipated threats such as scheduled traffic or tidal constraints. The briefing discusses proposed countermeasures to anticipated and unanticipated threats. Tasks are delegated and responsibilities defined.

Once the pilotage commences the pilot devotes most of their attention to keeping the ship on track according to the pilotage plan. The pilot's primary source of information is looking out the bridge windows at physical navigation aids and surrounding landscape, cross-checked against secondary sources of PPU or ship's equipment. The pilot takes opportunities to check that the bridge team continues to monitor the ship's progress.

The pilot monitors his or her own situational awareness and prioritises or delegates tasks to manage workload and minimise distraction. As the ship proceeds along the route the pilot continues to look outside the bridge and scans bridge equipment for threats that may not have been anticipated, and monitors critical actions of bridge team members to trap errors.

When confronted by threats and errors, the pilot's first priority is to continue to con the ship. The pilot does not fixate on managing the threat or error to the detriment of the ship's control. The pilot takes immediate actions such as reducing speed or steering away from hazards to allow more time to resolve threats or error. If the ship is entering an unsafe situation, the pilot first recovers the ship to a safe position before dealing with other problems.

In the pilot boat, on the way back to the berth, the pilot takes a moment to reflect on all threats, errors and unsafe states that were encountered during the pilotage, and what could have been done better. Later, the pilot might discuss the threats, errors and unsafe states with other pilots to improve TEM strategies.

That's what Threat and Error Management should look like if it is done right: a combination of practises, attitude and behaviours that minimises opportunities for human-error accidents.

WHERE DO WE GO FROM HERE?

It was Bridge Resource Management that first introduced mariners to human factors theory, and it took many years for BRM to be widely accepted as a valuable contributor to maritime safety. Threat and error management is the logical next step forward, taking the theories from the BRM courses and applying them to the real world of practical pilotage.

Threat and Error Management needs to become a core aspect of training and assessment for both deck officers and pilots. TEM training offers a golden opportunity to replace the traditional way in which seamanship skills are developed (bitter experience of self or others) with exposure to abnormal or emergency situations in a controlled manner such as a classroom, simulator, or mentored bridge operations.

As a newly introduced concept, it will take time for TEM to become widely accepted. Realistically though, the better mariners have always had these sorts of habits – they just didn't use this name for it. TEM endorses good seamanlike practices and provides a more organised way to apply those practices on the bridge. Mariners seeking to elevate their performance from 'competent' to 'superior' should adopt the TEM mindset and use superior judgement to avoid situations that would require the use of superior skills.

Norman Wright Pilot *Boat Review*

by James Dumergue

Designing the ultimate hull is where this project started, a custom pilot boat that ticked the boxes of crew safety and efficiency but thats as far as the thinking inside a box went. The length was the only defined parameter. Expectations set were for a comfortable, safe vessel that can operate in a wide range of conditions very efficiently, focusing on the simplicity of maintenance and serviceability.

The team at Norman R Wright and Sons know that owners of the pilotage business often are or have been pilots themselves. They have an invested interest in vessels that can operate in various conditions, with reduced operating costs, that provide superior crew comfort and result in no injuries and less downtime. A safe boat minimises injury, a comfortable boat minimises fatigue, and a practical boat minimises downtime. Tasking Norman R Wright & Sons with designing a new pilot boat meant approaching each of the pillars of the design requirements and assessing if there was a better way of approaching it.

Like all custom-designed projects at Norman R Wright & Sons, the hull is the foundation for nearly all design decisions. After 1.1 centuries building commercial vessels in Brisbane, they have accumulated a wealth of knowledge and learnings. History and tradition guide rather than dictate the course of any new project they take on. This project pushed their research and development into new areas of hull design and construction techniques. The result enables the construction of custom-built vessels in the same amount of time as a production boat and is competitive on pricing.

The client dictated the length. At 14.2m, a conventional stem would create a much shorter waterline. Still, master boat builder and designer Bill Wright and Adam Evripidou, the naval architect, were determined to maximise as much of the length overall into the running surface to enhance the distribution of weight longitudinally for more neutral buoyancy. What they created is the Extra Long Waterline (XLW) hull. Pilot vessel Master of 30 plus years, Neal Higgs said after running the boat in the sea trials, “What I noticed straight away was that in any chop or swell, how soft riding it is, it carves through the sea.”

The extra-long waterline has created a length equivalent to a boat a metre longer. The extra-long waterline is conventional from the chine down. It adds more buoyancy to the bow and supports the weight better, and minimises the chances of burying the bow. The distribution of weight around the centre of buoyancy keeps both ends of the vessel lighter and reduces slamming loads. The result is a vessel that can better maintain cruising speeds in various sea states cost-effectively.

Engine placement and room

Norman R Wright and Sons place a lot of attention on hull design and always design the optimal hull first. Adam, the naval architect, said, “There’s just no compromise in my eyes on the hull; it is exactly how we wanted it to be.” Once they had their ultimate hull, they planned the weight distribution, optimising running attitude and ride comfort. Positioning the engines further forward to the centre of buoyancy has kept both ends of the vessel light. The machinery space becomes much more accessible, meaning any significant works are easier to complete, including fast changeovers of engines. “We created a hatch/bonnet forward of the pilothouse windows. You can see the little wings that hold the hatch down. The whole

hatch lifts straight up and reveals the engine room below. There are no shimmying or swinging engines around engine bays, no lifting off wheelhouses. “The new design, it’s as simple as disconnecting the engine and straight out through the hatch. It makes it quick and very cost-effective to keep this boat operating,” said Higgs

Weight Distribution

Placing the engines forward also enables shallow shaft angles, running aft through deep tunnels to effectively transfer power to the props. The efficient angle of attack and a shallow draft is a real bonus for operations that require going over a bar. Higgs has crossed the Mooloolaba bar a couple of times in Siabo and found the shallow draft a huge plus. We also took it out to the South Passage bar between Moreton and North Stradbroke Islands. Running in very little water, Higgs aimed for swells and waves; several times, we braced for an impact that never really came. Captured on video, the runs out through South Passage are viewable on the Norman R Wright and Sons Youtube channel and worth a look.

The design is suited to a wide range of commercial applications that spend time in shallow waters affected by tides and short fetch swells. Hull number one is in operation, hull two and five will join it in PNG for Port Operations, but the vessels will also be utilised for patrol operations thanks to their shallow draft and maneuverability.

Construction Evolves

A great deal of the research and development time went into the construction techniques of the new pilot boat design. The challenge for customs boat builders is remaining competitive with production motor yacht builders. Norman R Wright & Sons build custom yachts because they can make designs without the compromises that moulds create.

To build to their exacting standards, they needed to evolve the construction techniques, so they spent many months researching, developing and creating a panelised construction method. All the panels were pre-cut by ATL Composites on the Gold Coast. The composite foam core panels make up every part of the boat for the entire full length of the hull, pre-cut by the CNC machine and bevelled, cut offsite and bought into the factory, ready to lay over a jig and be bonded together. “This advanced building technique allows us to build a custom boat in-house in the same amount of time as it takes to make a production commercial boat. After over 1000 hours of design and development, we’ve come up with a system that allows us to be very competitive,” said Adam Evripidou, the Naval Architect. The only moulded parts are the engine beds that run from the transom to the bow to create longitudinal stiffness. It enables us to create a monocoque construction, which forms a structural hull shell, minimising framing. The transom also cut to shape with extra internal reinforcement, and the bulkheads with all reinforcement patches are a work of art thanks

to the precision of CNC cut panels. Along with supplying the pre-cut panels, the entire boat is engineered by ATL Composites to DNV GL Rules for Classification of High Speed and Light Craft. The hull bottom is designed and approved by DNV GL to withstand a 3g loading and has been awarded a class notation of 1A HSLC R2 CREW.

Power Options

The engine room standardised design allows plenty of scope for engine choices to suit the needs of many different operations. This boat fitted with 400 horsepower Yanmar engines that max rev at 2500 rpm, weighing in at 856 kilos. These are mechanical engines chosen to keep it simple for the intended operational environment. Engine options are aplenty; hull number three and four will operate out of Brisbane. They're going to use 400 horsepower engines too, but ones that rev much lower at a maximum of 1800 rpm the electronic Scania DI 13 that weigh in at 1285kgs.

There's plenty of scope and engine choices to suit operational requirements, thanks to the space available. As Higgs noted, "The engines, they're easily accessible, and if you've got to do any work on them, it's pretty easy to do it. The pipework for all the bilge system is good. The access to all maintenance things that would be very tight is excellent."

The Main Cabin

The main cabin is built as a module and sits on resilient mounts, seven heavy-duty marine superstructure mounts. This method takes out the vibration and noise, which further reduces crew fatigue—asking Higgs if he noticed the difference, he said, "You do notice the difference; you don't feel any vibrations through the boat in the wheelhouse. And you also notice the quietness. It's just so quiet, you can talk to each other without yelling, and that sort of thing makes a huge difference to reducing the fatigue experienced from traditional wheelhouses and engine rooms." A 20 mm air gap separates the cabin and the main deck. This construction technique does add considerable cost but the benefits for crew comfort are outstanding. The great thing is you can build it off the job, fit it out entirely and crane it onto the mounts, further reducing the build time.

The Helm

There is a 360-degree view from the helm, which also allows you to see the engine room access hatch aft of the cabin bulkhead at all times. This means that no one is ever out of sight of the coxswain. You've got a good view of the whole foredeck. With the skylight windows, you've got a good view of the pilot ladder and the gangways. So, from when anyone leaves the safety of the cabin, the

coxswain has eye contact with them the whole time.

"Ergonomically, the layout of everything is excellent. All your switches, radar plotters and that sort of thing have good placement, so you don't have to reach for anything. Compared to some pilot boats, it's nice to have it all at your fingertips. Even under the dash, we've got better access.

They've put quite big hatches or doors that you can get in all under the dash to get to everything quite quickly," said Higgs.

Cabin

Engines forward have allowed the cabin to be positioned aft of midships, making for the most comfortable location for the pilot and crew. The cabin configuration on hull number one is for all-day patrols, equipped with five suspension seats, a small galley and a dinette that seats four to cater to the long stretches out on the water. Because of these long periods out on the water, installing Daikin domestic air conditioning is chosen for simplicity and effectiveness, enabling them to buy another unit from the local supplier and replace the rooftop one when required.

Hulls three and four, destined for Brisbane, the dinette has been replaced with additional suspended pilot seats making nine suspension seats in total. Replacing the galley is a bag rack for the pilot's gear. In either configuration, the vessel can carry seven pilots, the Coxwain and the deck crew member.

The top of the cabin has a mast, which on hull number one is collapsible for operating in PNG as it has the dual purpose of a pilot boat and a patrol boat. Typically, pilot boats That are a few meters longer still carry the same amount of pilots as this 14.2 meter. The positioning of the engines and the extra waterline length allows for a boat built at a better price point. That carries the same number of people. Norman Wright and sons are currently developing a smaller version for other commercial applications designed on the same principles to travel great distances efficiently on smaller engines, greater group comfort for patrolling coastlines, marine parks coast guards, and more.

Deck operations

There's a big emphasis on the safety of the pilots and crew. The decks are flush with no trip hazards. A safety rail runs from the door right to the foredeck. And there's a certified safety rail system with a tether that pilots can hold on to as they navigate the side decks. In the rough stuff, they can hook on their harness and walk forward with the track along with the wide flush 750mm side decks.

SPECIFICATIONS

LENGTH	14.2m
POWER	2 x 400hp Diesel Engines
CREW	2
PILOTS	7
PERFORMANCE	25.8 knots @ 159 L/Hr 20.0 knots @ 92 L/Hr 18.0 knots @ 76 L/Hr
SEATING	5 (Suspension) 4 (Settee)
MAIN PROPULSION	2 x YANMAR 6CXBM-GT (M), 400mhp at 2500rpm (Mechanical) 2 x ZF305-3A
DIESEL	2 X 1200 Litres
BEAM	5.14m (Overall) 4.53m (Moulded)
DRAUGHT	0.92m (HULL) 1.17m (MAX)
CONSTRUCTION	Grp Cored Composite, Epoxy, E-Glass

POB

They are typically running with just two crew. Should the deck crew or anyone fall overboard, the aft control station on the starboard side allows the helmsmen to better position themselves for operating the person overboard equipment. Along the transom is the recovery basket at the back, which is a simple deployment by a hand winch for simplicity and reliability when it counts.

Wrap up

Typically, pilot boats are around 16 meters in length and carry the same number of people as this 14.2-metre XLW Pilot Boat. The smaller footprint, the balance, the extra waterline length and advanced construction techniques allow a renowned custom motor yacht and commercial boat builder to build a better quality boat built at a viable price point in a competitive production manufacturing market. Reducing operating costs significantly and enhancing safety and comfort, the new design from Norman R Wright & Sons looks destined to become a familiar sight.

Keep an eye out for a smaller version in development for other commercial applications designed on the same principles to travel great distances efficiently on smaller engines, in greater crew comfort for patrolling coastlines, marine parks and more.

For more information and to view a video of Siabo visit www.wrightsons.com.au/siabo

The printed version of this article made references to Brisbane Marine Pilots (BMP) and this may have been interpreted as an endorsement by BMP. This is not the case and BMP were not approached for comment. Further, Neal Higgs, who was not acting on behalf of BMP, was erroneously described as a "master pilot". Mr Higgs is a "pilot vessel master".

NORMAN R. WRIGHT & SONS P\L EST. 1909

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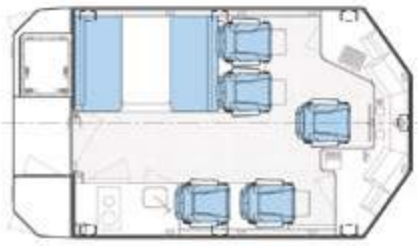
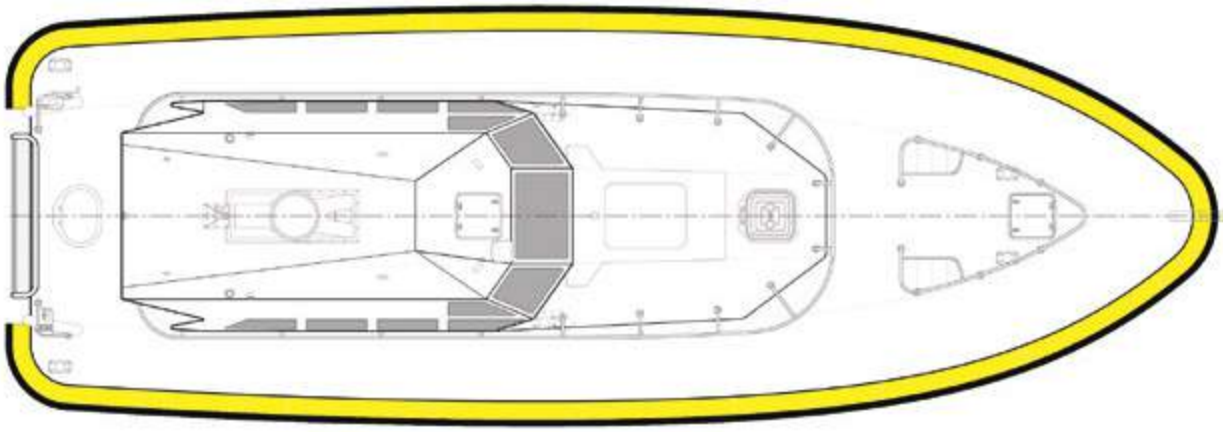
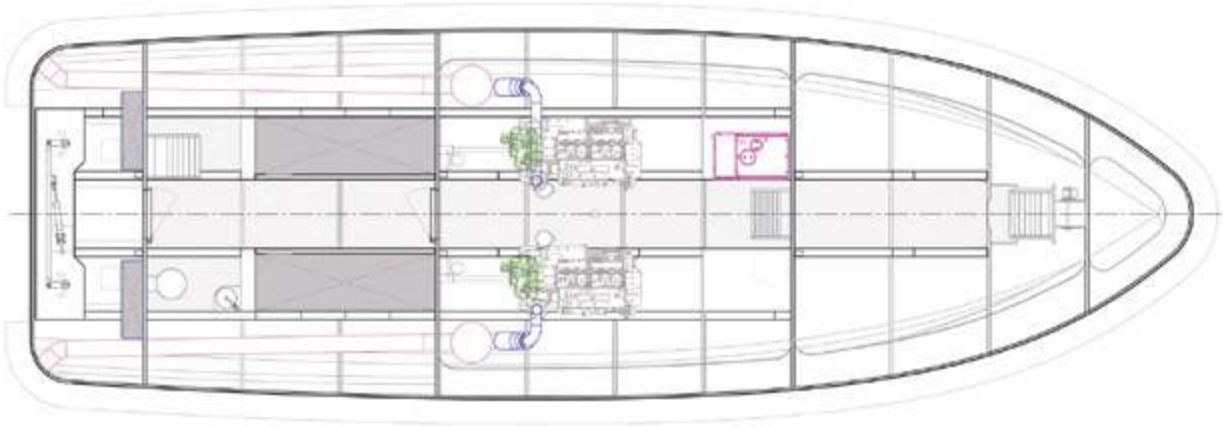
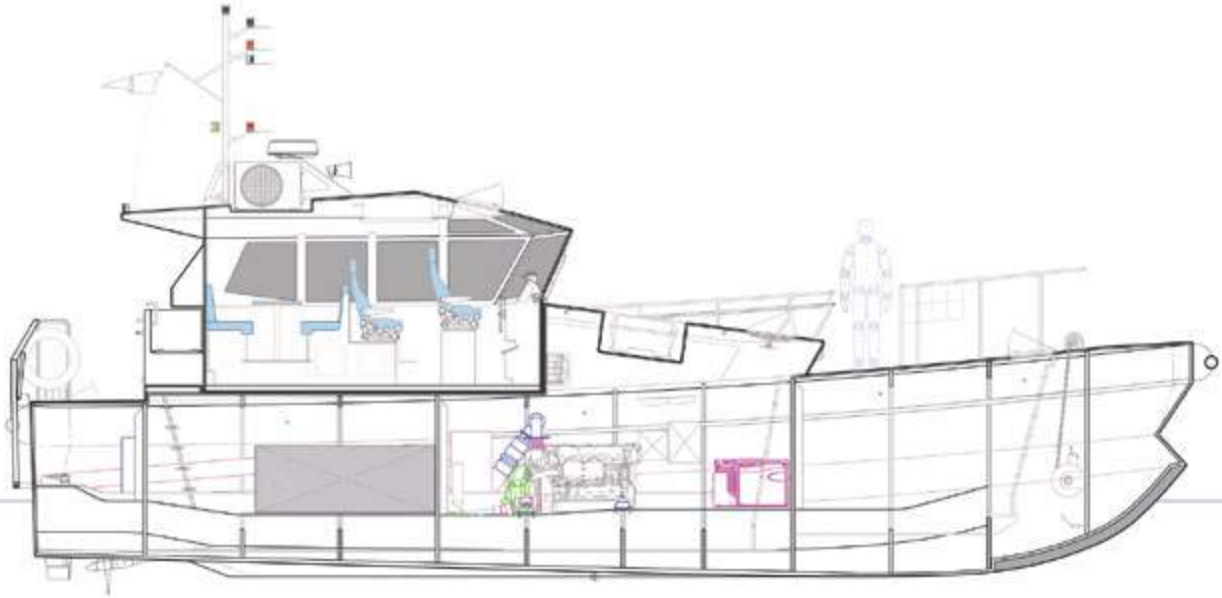
Date:	20.1.21	Title: GENERAL ARRANGEMENT LAYOUTS	
Drawn By:	AE		
Checked By:	TR/KJ/JE	Project: 14.2m PILOT BOAT for PNGPCL (Boats 1 & 2)	Revision: 2
File No.:	5311	Scale: 1:50 A1 Drawing Number: 5311-1/2	

Revision:	Date:	Nature of Revision:	Approved:
2	20.1.21	AS-BUILT LAYOUT	AE









When your conditions demand the best

Dongara Marine

QUALITY SYSTEM CERTIFICATION DNV·GL ISO 9001

Berkeley Class
Pilot Boats

Berkeley^{XVI}
16 metre

Berkeley^{XVII}
17 metre

Berkeley^{XIX}
19 metre

dongaramarine.com.au

Tangelo Creative

Dongara Pilot *Boat Review*

Pilot boat range expands to meet variety of operational and commercial requirements

Dongara Marine says market interest spurred by the in-service success of its flagship 19.2 metre Berkeley Class has led it to expand its pilot boat range.

Three of the 19.2 metre aluminium and composite boats have entered service since mid-2015. Dongara Marine's Managing Director, Rohan Warr, says this underlines the success of its market-entry strategy.

"Design and construction of the first Berkeley Class pilot launch was financed and overseen by our Founding Director John Fitzhardinge with the goal of producing the best pilot boat in Australia," he said.

"It has since been described by Marine Pilots as the 'Rolls-Royce of pilot boats', and we have delivered two more of the same 19.2 metre design. Receiving that recognition from the end users has been very gratifying," Warr said.

The two additional pilot boats – Argonaut Marine Group's AMG Winyama and HSA Marine's Genesis – were both customised to their owner's requirements, including having different main engine packages.

The diversity of ports and pilotage operations both in Australia and overseas has meant that Dongara Marine has fielded interest for pilot boats covering a range of technical and commercial expectations.

"Not everyone can justify a Rolls-Royce," Warr noted, adding that as a custom boatbuilder the company was well equipped to deliver on a range of requirements.

Demonstrating this Dongara Marine has built a variety of other custom vessels since the delivery of Fremantle Pilots' Berkeley in 2015. In addition to pilot boats these have included lines boats, harbour work craft, commercial fishing boats, a catamaran ferry and rescue RIBs.

EXPANDED PRODUCT RANGE

As a result of market interest Warr said Dongara Marine's core pilot boat product range now includes three vessel sizes:

- The 16 metre Berkeley^{XVI}
- The 17 metre Berkeley^{XVII}
- The 19 metre Berkeley^{XIX}

"To further cater for specific operator requirements and preferences we are able to customise virtually any aspect of these core designs," Warr noted.

"This includes a range of options for engines, propulsion types, and layout."

Variants featuring waterjet, propeller, and steerable IPS drives propulsion have already been developed.

"Working with our design partner Southerly Designs, Dongara Marine also offers completely bespoke vessel solutions to specific pilotage operation requirements, all drawing on the same outstanding heritage as the Berkeley Class," he added.

CORE BERKELEY CLASS MODELS

MODEL NAME	BERKELEY^{XVI}	BERKELEY^{XVII}		BERKELEY^{XIX}	
Dimensions (LxBxd)	16.0m x 5.6m x 1.3m	17.2m x 5.9m x 1.6m	17.2m x 5.9m x 1.1m	19.2m x 6.1m x 1.7m	20.3m x 6.1m x 0.9m
Capacity	7 pilots	8 pilots	8 pilots	8 pilots	8 pilots
Main engines	2 x 331kW Scania	2 x 552kW Scania	2 x 515kW Volvo Penta	2 x 809kW Scania	2 x 747kW Caterpillar
Propulsion	Fixed pitch props	Fixed pitch props	Steerable props	Fixed pitch props	Waterjets
Speed	18.0 knots	25.0 knots	31.5 knots	31.0 knots	33.0 knots

PILOTAGE INDUSTRY PARTNER

Warr said Dongara Marine recognised the specialised nature of marine pilotage and would continue to adopt a partnership approach to developing pilot boats.

"While we are, of course, seeking to sell more boats, we view publicising our recent pilot launch development efforts as a catalyst for ongoing dialogue between pilots, pilot boat operators, and industry (ourselves) with respect various pilot vessel requirements and solutions," he said.

"Dongara Marine views expanding our knowledge of specific user expectations as an important part of continually improving our technical solutions, something we believe we have done with our pilot boats to date.

"In parallel we see increased knowledge of industry and vessel capability and considerations as important in refining and defining buyer requirements for future pilot boat acquisitions.

"We love talking about boats, and always welcome comments and questions from pilots and pilot boat operators any aspect of pilot boat design and construction. That's true regardless of whether they are currently planning to acquire new vessels," Warr concluded.

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Hart Marine Pantocarene ORC
Pilot Boat Review

Building six new pilot boats for the port of Jebel Ali, the 9th largest port in the world, isn't an easy challenge.

The climate in the UAE is unforgiving, with temperatures ranging from 2 °C (36 °F) to 49.0 °C (120 °F), high humidity and regular dust storms.

A special kind of boat is required and Hart Marine rose to the challenge with a custom version of its Panocarene ORC self righting pilot boat.

"DP World was looking to procure a vessel that could cover various requirements, it needed to be able to achieve 6,000 hours of operation a year. It also needed to be a high-speed and fuel-efficient vessel that could safely deliver pilots to ships that operate out of the ports of Jebel Ali and Rashid in Dubai, and to do so in a timely manner to reduce fatigue."

In the midst of the COVID-19 pandemic Hart Marine was able to build and deliver the first of the six boats named 'Al-Dairah'.

"DP World required a high speed vessel which had a focus on safety, fuel economy and seakeeping capability. Through extensive virtual meetings with DP World, Hart Marine was able to customise a Pilot Boat with all the specific needs of DP World. The vessel was fitted with twin 500kw engines which produced a speed of 26 knots. Fuel efficiency was achieved by an optimised hull shape and driveline configuration. Hart Marine included additional air filters to shield from desert sands as well as twin gensets and redundant air conditioning to deal with harsh temperatures."

Extra air conditioning wasn't the only modification for the high temperatures in Dubai, additional air flow to the engines was included which required the specialist input of Marine Air Flow International to develop a custom ventilation system.

DP World had another requirement for Hart Marine, they wanted to maximise the operational use of the boat without refuelling by adding larger fuel tanks resulting in a total fuel capacity of 3700 litres.

PILOT COMFORT
The Pantocarene ORC's suspended wheelhouse reduces the transmission of noise and vibration, making for a significantly more comfortable transfer. Pilots arrive at their vessel less fatigued and ready for action.

PILOT SAFETY
Continuous railings and a big open deck space add to the safety features for pilots, clipped on to prevent falls into the water whilst walking to the bow and a safer space to land in the unlikely event of a fall from a ladder.

PROPULSION
Fitted with twin Scania DI16 070M 552kw engines connected to fixed screw veem propellors, variable pitch interceptors and Bennetts dual actuating trim tabs, the Panocarene ORC means business.

SITUATIONAL AWARENESS
Al Dairah is fitted with a RayMarine Axium Pro, a multifunction display capable of providing radar, electronic charts, AIS input and FLIR.

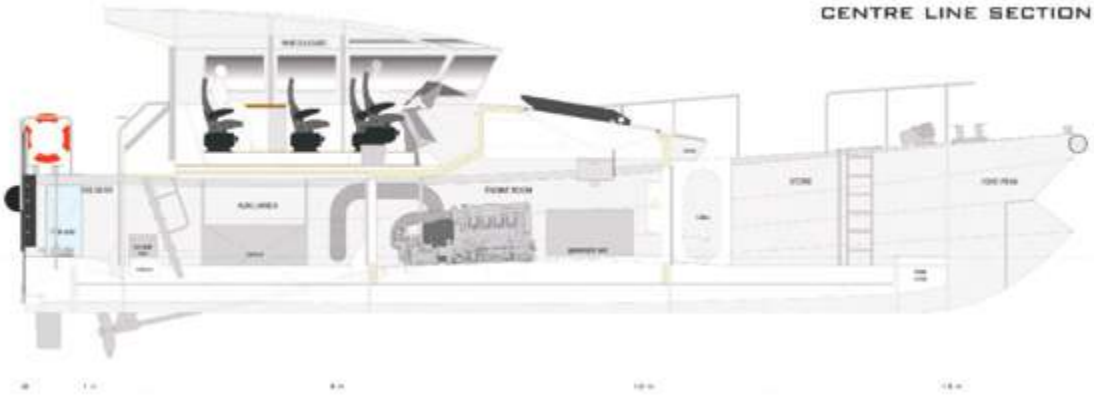
SELF-RIGHTING
Pilot boats can be exposed to dangerous conditions such as those that resulted in the capsizing of a pilot boat in 2017. The following features assist in the Panocarene ORC's ability to function during and following a capsize:

- Dampers on the ventilation ducts
- Engine mounts specially designed for complete roll-over
- Safety belts for crew and pilots
- Fuel tanks and other components all designed for inversion
- Capstan to hold the anchor chain and warp to prevent damage from roll-over or large seas.

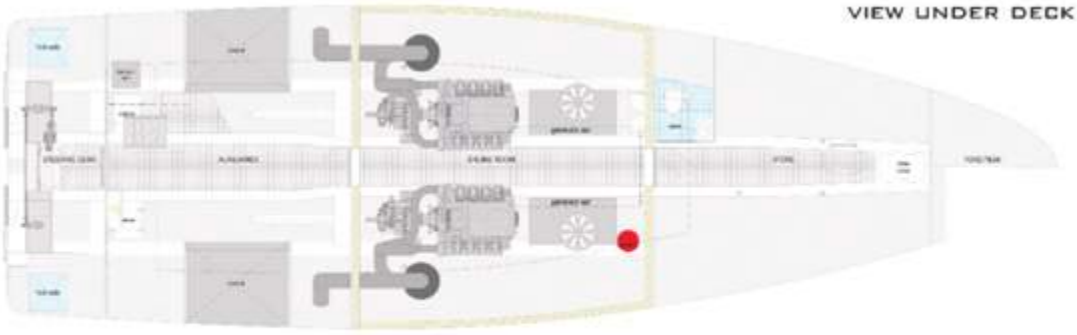
MSA surveyor who James Nolan completed the Commissioning and Initial Commercial Survey for the vessel which included assessing and approving its design and construction against the requirements of the National Standard for Commercial Vessels (NSCV) said "During recent sea trials, the vessel displayed superior seakeeping performance and comfortably achieved a top speed of 27 knots at 2130rpm thanks to two 671kW Cat C18 engines."

MAIN DECK

CENTRE LINE SECTION



VIEW UNDER DECK



Al-Dairah

SPECIFICATIONS

Type of vessel:	Pilot boat
Classification:	NSCV 2C
Flag:	UAE
Owner:	DP World, UAE
Operator:	P&O Maritime Logistics, UAE
Designer:	Pantocarene Naval Architects, France
Builder:	Hart Marine, Australia
Hull construction material:	FRP
Length overall:	17.1 metres
Length waterline:	16.57 metres
Beam:	5.24 metres
Depth:	2.15 metres
Gross tonnage:	27
Main engines:	2 x Caterpillar C18, each 500 kW
Gearboxes:	2 x ZF 510-1A
Propulsion:	2 x VEEM fixed-screw propellers
Generators:	2 x Caterpillar C2.2
Maximum speed:	26 knots
Electronics supplied by:	Olectrics Systems
Radar:	Raymarine RD418D
Radios:	Sailor 6222 VHF
Sonar:	Raynet CP570
Autopilot:	NAC-2 computer
GPS:	Sailor 6280
Cameras/night vision:	FLIR Systems
Fendering:	Ocean 3
Other equipment installed:	Marine Air Flow International engine room ventilation system; engine cooling system; air-conditioning systems
Windows:	Custom toughened glass
Seating:	UES
Safety equipment:	Life jackets; life ring; man overboard system; Ronstan continuous rail
Type of fuel:	Diesel
Fuel capacity:	3,700 litres
Freshwater capacity:	240 litres
Sewage/blackwater capacity:	360 litres
Crew:	2
Passengers:	6

Pilotage and Competition

by Captain Ed Verbeek

Are they compatible?

SSW 7-8. The forecast is that the wind will veer to the W and decrease in the next 6 hrs. The captain of a large carcarrier knows that the ship should lose as little time as possible in Amsterdam as it is wanted urgently in Bremerhaven. The pilot is boarded by helicopter. In the present situation the pilot will advise the captain to wait until the wind has turned to a more favorable direction for the lockpassage. Ninety-nine out of a hundred times the captain will say:" you are right, it is just taking too much risk".

The same scenario with direct competition. Autoliners is a very good contract for a pilot organization, one you definitely do not want to lose. The contract is up for renewal within a short period and you know that other pilot organizations would like to have it. Will the pilot still say: "better not" or will he say: "acceptable risk"?

In discussing an optimal pilot regime, it is important to determine the purpose of pilotage within the port's infrastructure. In the Netherlands the law states that the purpose of pilotage is to bring ships in port "speedily and safely". The big question is: is the job of a pilot first of all to bring in the ship speedily, as safe as possible; or is the job of a pilot first of all to bring the ship in safely, as speedily as possible, so:

Is pilotage a safety requirement with commercial aspects

or

Is pilotage a commercial enterprise with safety aspects

If pilotage is primarily a commercial enterprise, then competition backed up with sufficient checks and balances would be the most efficient system.

If pilotage is a safety requirement then direct competition would ask for so much control, that most likely competition is not the most efficient way. A (controversial) example: Flagstates are the primary safety net. I think we can all agree that, no matter how you think about open registers, competition between flagstates has not improved safety.

I will mention a number of aspects, which will be affected by the choice about this fundamental aspect

- The primary asset of a pilot organization is local and manoeuvring "Know-how". If a pilot organization has a safety function it is the duty of the pilot organization to make that know how available to other parties for safety's sake. So pilots can participate in investigations to accidents and incidents, they are free to explain to the captain strategies that have been developed to meet some of the complications that are met on the voyage etc. Near miss information, which is considered to be an important tool to improve operations, can be spread under all pilots.

In a free market situation it gives a competitive advantage over other pilot organizations to come in port with more current, wind etc. A new strategy is developed, possibly at great expenses (time used by senior pilots, simulators etc). If this strategy is explained to the captain of a ship, and next trip he comes in with the competition, he might give away this strategy. So it is tempting to give as little pertinent information as possible to prevent this.

This does not only influence communication on board, but in general. Pilots might become less willing to participate in trialruns for other parties, to publish new developments etc. This will hinder the development of pilotage in general.

These effects are not hypothetical. In research aimed at safety in pilotage on the W. coast of USA and Canada it is mentioned that in that region of Alaska where direct competition between pilots exist, it is difficult to exchange Near Miss information, probably because of competition.

- If pilotage is a safety requirement then it should be possible for a pilot to exercise his best judgement without fear for financial repercussions. Shipping is only there to facilitate trade (and make money), and so purely a commercial enterprise. There is nothing wrong with that. The captain is always under commercial pressure, that is part of his job. A pilot, who has the trust of the captain, and who is independent of the commercially interested parties (e.g. owner, charterer, port authorities) can assist the captain to come to a considered decision, balancing the risk taken versus the commercial benefits. An independent pilot is better suited than the captain to balance the interest of the single ship versus the risks taken with respect to the infrastructure of the port (locks, berths, cranes), other ships and the safety and wellbeing of the environment and the public in general.

With direct competition the pilot will be dependent on one of the parties for his job. In the port where I am working that will generally be the charterer via his agent. For the charterer it is important that e.g. the ship will be moored at the expected time to make sure no gangs are left idle. A charterer pays for the tugs, if there is damage the owner pay for the damage. This is not to say that the average charterer will insist on taking unreasonable risks. But a charterer might be willing to take a small increase in the risk, if this will lead to great commercial gain.. So if the ships which use pilot organization A use comparatively more tugboats than those of pilot organization B, or do not come in with as much current, or wind etc, pilot organization A either has to lower the pilotage fee, or try to do the same as B or they are out of business. I do not expect that pilots will try the impossible, but the pressure will be there to make the margins as small as possible. At present pilots see the captain as their direct customer. With direct competition the pilots will see the agent as their direct customer. With compulsory pilotage and only one pilot organization, the pilots are independent. With direct competition they will be under (if not real then anyway

perceived) pressure to give more weight to the commercial pressures. As the captain is usually under commercial pressure too, it will be more difficult then now to give safety the correct priority. As captain, how do you explain it, that you refused to come in under certain circumstances, while the pilot thought it "an acceptable risk"?

-If pilotage is a commercial enterprise then the relation between price and quality has to be optimal according to the market. This is also the case if the quality goes down, as long as the price goes down more. This will generally be the case, as it always takes a lot of effort and investment to move up from good to better. To aim for quality costs.

If pilotage is a safety requirement, then the aim should be to provide the best quality within reasonable limits of investment.

To illustrate the difference:

When the Dutch Pilots Association heard about the concept of Bridge Resource Management the importance for safety was understood. Right from the beginning Dutch pilots participated in the development.

In a recent verdict the Inspector of Shipping remarked that it would important for a company that it's officers would follow a B.R.M. course. Two training institutes approached this company.

The reply was that as long as B.R.M. was not compulsory, no B.R.M. would be given to its officers, pointing to the extra costs compared to other companies. (by the way, this is one of the companies, which thinks about starting a pilot organization)

Although the present training for pilots in the Netherlands is considered to be one of the better ones in the world, the present Dutch Pilot Organization has already decided that if direct competition will materialize, it will compete on the basis of "cost-leadership", being the cheapest. In the present freight market it is unrealistic to expect that, even in pilotage, quality is paid for. This means that the training will be limited to only that which is legally required. This means that there has to come a supervisory organization, which will have to make sure that new development will be introduced.

- If pilotage is a safety requirement then it is reasonable that the fee is a levy, with the strongest shoulders carrying the heaviest burden. In competition the pilot organizations can ask no more then the cost plus a little profit. Because of this they can also not ask for less. With the present Dutch tariff a large bulkcarrier on long hauls spends about 0.1 % of it's running cost on pilotage fee. Compared to the costs of piloting such a vessel, the ship pays too much. In future this might go down to 0.05 %. A coaster with 12-15 port a month now can pay up to 20 % of it's running cost to pilotage. This will not cover the cost. The pilotage fee's for small ships might go up with as much as 150%.

It is clear that pilotage with direct competition will lead to a fee structure in which it is commercially impossible for small ships to take a pilot (a commercial "pilot prohibition")

- If pilotage is a safety requirement, it is defendable that there is compulsory pilotage.

If pilotage is a commercial enterprise with safety aspects, then it will be hard to defend that pilotage is compulsory. After all, the large majority of shipping companies/ charterers have an interest in the safe arrival of ship and cargo. So for those ships where it is expected that they really need a pilot, a pilot will be ordered, whether pilotage is compulsory or not. Only in those cases where there are special risks involved compulsory pilotage might be accepted.

And yet there is a clear difference in perception for the need of a pilot between owners/charterers and captains. In a recent research captains of ships shorter then 90 m expected that in 45 % of the trips they would like to make use of a pilot. Owners/charters thought that would only be the case in 10 %. Owners can influence the captains. An example is the grounding of a Dutch ship in the Japan Inner Sea. The captain had received a cargo telex stating a.o. that pilots were not compulsory for this ship, and expensive. A good listener understands that the company would be disappointed if a pilot would be ordered. The vessel ran aground because of insufficient insight in planning and executing a curve in restricted waters, combined with taking a sub-optimal route compounded by insufficient teamwork on the bridge. All should be pilot's expertise.

This all touches on the item compulsory pilotage, which in itself warrants an article. I will mention some items connected with it.

Pilots with the same training and trainers have a certain way of doing things. If a sufficient large proportion of vessels in an area sail with pilot, then the movements of the ships becomes predictable. This predictability is lost if only a minority of the ships has a pilot, and/or if different pilots are trained by different institutes.

Captains are general managers of a unit, sailing the ship is only part of that. Ports mean a lot of work, administration, cargo problems, crew relief, and inspections. Because of this in can happen that sailing the ship does not have the top priority. The Swedish Club discovered a trend that the number of accidents occurring in restricted waters, because of a crew distracted by the work connected with the next port, is increasing.

A lot of work means there is the possibility for fatigue for the captain and other officers. Recently I was on a small tanker (eatable oils). The captain told me he had only slept for 4 hours in the past 36 hours, because of cargo problems, shifting berths, visits of inspectors (also of his own office). Now he was busy getting his pilot exemption. There have

been a number of small ships testing the hardness of British seafront, because of OOW falling asleep.

Most accidents/incidents take place because of the Human Factor. The best protection against accident/incidents is a "pilot/co-pilot" system. In this system it is possible to consult a second person, and the second person can assist in discovering error/misjudgments before these become accidents. With minimal crews and maximal hours this second person, with the proper qualifications (that is: able to do the manoeuvre himself) is generally not available.

When things go unexpected or wrong, such as unexpected blockage of the canal; main-engine or rudder failure, up to petty problems as bowthruster failure etc, suddenly a lot of extra local knowledge is required. How wide is it here, how deep there, are there any cables, which VHF channel, etc. A lot of communication is required. A pilot has the local knowledge ready and can take the external communications. Under such conditions he is a very valuable addition to the bridge "team". The more so when the regular bridge team consist of one person, either a captain or a mate, which is not unusual on the more modern ships, even if they are quite large. Fortunately this is rare occasion for most ships, so that there is a tendency to disregard the possibility, and not take a pilot for this reason. But out of the about 270 trips a year I take, it will happen at least 10 times. I am involved in simulator training. It is striking to see the difference in the way a Rotterdam pilot handles an unexpected problem in Rotterdam versus a similar problem in Hong Kong. In Rotterdam he can handle the problem with a smile on his face, keeping the bridge team informed, and not making any major mistakes. In Hong Kong the same man on the same ship is under high tension, needs a lot of time to get the necessary information to come to decisions (which are not always right), finds it hard to communicate with the bridge team. It shows how much it helps to have an intimate local knowledge so that you can concentrate on the problem only.

If pilotage is a commercial service, then it is up to the customer to decide if he wants to make use of these services **for his own ship**, under some minimal requirement of the authorities. If pilotage is a safety requirement then **the safety of shipping in general** should be the governing principle.

- Shore Based Pilotage has a special role in this story. With SBP and other forms of navigational support navigational information and advice is passed to the ships via VHF. In direct competition this means that several organizations, most likely from different locations and on different VHF frequencies have to pass coordinated information and advice to different ships in proximity of each other.

An example:

One large and two small ships are leaving the North lock. Two small ships are leaving the middle lock.

There are barges both waiting for the locks and proceeding to and from berths near the lock. A large and a small ship are waiting for the lock. An other medium size ship leaves a berth nearby so that it is necessary to change the locking allocation.

Both large ships and the barges get their information from the VTS run by the authorities in Dutch. One of the small ships does not make use of any commercial navigation support and also gets it's information from the VTS (English). One small ship gets its information from a navigational support organization not connected with the pilots. The other small ships are supported by SBP by two different pilot organizations.

The change in locking now has to be communicated to the VTS operator, the navigational support provider and two SBP pilots, then to the ships. The navigational supporter and the two SBP pilots have to check with each other which advice's they will give to the ships they are dealing with to make sure the ships do not get too close to each other or confused (Aren't you confused already?) Then there is the possibility that one of these ships wants to use another solution that the advice offered to him, so that this whole process has to be done all over.

I think that is clear that this way of operating is asking for misunderstandings, which is not a nice thing for a place where passenger ships with 3000 people on board routinely meet chemical tankers with all kind of poisonous and explosive cargo, passing each other on 40-50m distance, sometimes in bad visibility.

- If pilotage is a safety requirement then a pilot should be available for every ship that is required to take a pilot or even for each ship that just asks for a pilot.

In a commercial service it is commercially impossible to have more pilots then those required to take the average load.

The smaller a pilot organization is, the more difficult it is to deal with peak loads. This means that there will be insufficient pilots available in e.g. storm periods and fogperiods. The pilot organization will no doubt try to cover the financially good contracts. This means that the less financially interesting ships will have difficulty in getting a pilot. It is not necessarily so that the best contracts are also the ships that need the pilot most for safety. There is a real possibility that some of the worst contract might cover ships that need pilots most for safety sake. Small pilot organizations will have great difficulty in releasing pilots for training purposes. The Dutch Pilot association now has one pilot halftime working on the Royal Naval Training Institute. This represents 1/1200 of DPA's capacity. But the knowledge permeates throughout the organization. I do not think that the Dutch navy wants a score of pilot's halftime on their institute, but for a pilot organization with just 20 members this arrangement would be a too large strain on their resources.

Direct competition might seem an interesting proposition commercially, although it has to be proven that in smaller ports the loss in economy of scale will offset the reduction in costs. Anyway it might help in relaxing the rules for compulsory pilotage.

One independent pilot organization seems to me to have a great advantage in inherent safety, that is: if it does not become complacent. It might be needed to build in safeguards that force the pilot organization to stay sharp and alert and ready to accept new technology. (May be the threat to introduce competition if the pilot organization is not performing well is useful in that respect.)

Some experiences are: In Hong Kong several competing pilot organization have been amalgamated with a claimed improvement of safety and ,(may be not so) surprisingly, efficiency. In Hawaii and Connecticut I understand that former competing pilot organizations are now forces to work together for the same reasons.

In Alaska the Marine Pilot Coordinator estimated that he and his pilotage committee spent as much time on the region with direct competition as on the other three regions combined. In Florida the law explains clearly why direct competition in pilotage is not allowed.

In the end it is the authorities which decide if pilotage is a safety instrument with commercial aspects, or a commercial service with safety aspect. I think that pilots will be able to work with both regimes. But each regime has its consequences.

As chief officer for a long time, and captain for a short spell I have experienced the operational pressures involved in shipping. To promote safety has always been one of my driving forces. I have felt it as a positive factor of pilotage that I was free to give safety top priority, and assist the captain in maintaining the balance. For me introducing direct competition in pilotage would be another indication that we like to talk about safety in shipping, but in real life are only interested in cutting the cost, trying to keep the safety to the minimum accepted by society.

Literature a.o.
Competition in Pilotage, J.Sparks
Improving the safety of Marine Pilotage on the US/Canadian W Coast, J.R. Cameron
The role of pilotage in risk management, G.A. Quick
Risk management in pilotage waters, W.A. Norman
All from the conference papers Quality Pilotage, Charting the future 11-13 March '98
Conference report of this conference, Seaways October '98
Work hours, sleepiness and the underlying mechanisms, Torbjorn Akerstedt
Chronic fatigue endangers lives, Safety at Sea June '97
Navigational Errors raise Swedish Club Concerns,
Lloyds List 23-12-'97
Roll up for the pilotage sale, Michael Grey Lloyds List 29-04-'98
Tug wars, editorial Lloyds List 08-01-'99

Port of Newcastle passing Nobby's Head

Rotor Tug

News from AMC

Advanced Rotor Tug Simulator Model Installed at Australian Maritime College

AMC Search, the training and consultancy division of the Australian Mariitme College (AMC), is experiencing a significant increase in demand for its maritime simulation capability.

Over the past six months, AMC Search has been conducting extensive levels of pilot training, commissioned to undertake maritime simulations studies for the development of new ports and to advise companies on the impact of the introduction of new infrastructure in existing ports.

A further area of significant demand is in the production of maritime simulation models of new vessels and port areas using the AMC Search in-house modelling service.

This in-house modelling service is unique in Australia and has halved the cost to business to produce vessel and area models as there is no requirement to outsource to third parties or simulator OEMs.

AMC Search has also taken delivery of a Rotor Tug model for use in the Centre for Maritime Simulations (CMS) in Launceston, Tasmania.

The new Rotor Tug model was installed for training current tugmasters employed by Tasports in the intricacies of handling a rotor tug, and gaining experience, before Tasports took delivery of the new tugs.

To enhance the training, area models of the tugmaster's home port were also created and models of familiar ships were accessed from AMCs extensive library of ship models for the towage trials.

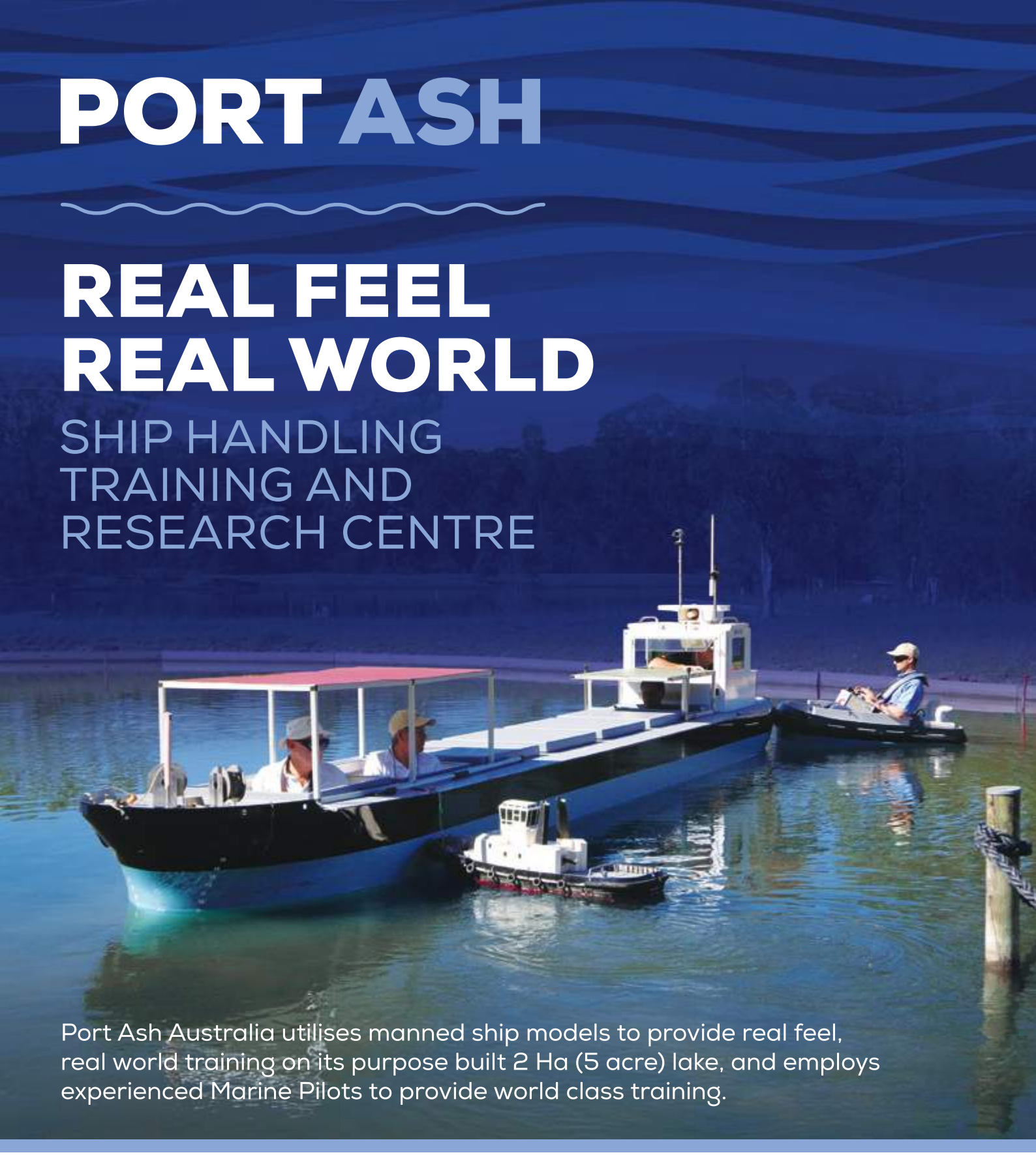
The training on the new Rotor Tug simulator model was part of a suite of programmes undertaken by the TasPorts team to ensure a safe and swift transition to the new tug type.

For more information about the AMC Search maritime simulation capability email Capt. Richard Dunham, Manage of Commercial Simulations r.dunham@amc.edu.au.

PORT ASH

REAL FEEL REAL WORLD

SHIP HANDLING TRAINING AND RESEARCH CENTRE



Port Ash Australia utilises manned ship models to provide real feel, real world training on its purpose built 2 Ha (5 acre) lake, and employs experienced Marine Pilots to provide world class training.

Providing specialised training for:

- Masters
- Officers
- Marine Pilots
- Naval Officers

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News from Port Ash – May 2021

As predicted by our Met Bureau we had a fairly wet summer with floods up the coast but fortunately not here. Floods elsewhere keep us on our toes and serve as a reminder of the vagaries of the weather and implications for outdoor activity in our mostly agreeable Hunter comfort zone. Autumn has been very pleasant so far with warm days and little wind.

With the trans-Tasman travel bubble open, training schedules are quietly being resumed with fingers crossed. The first to book were RNZN whose departure was delayed a day or so when flights were stopped briefly out of Sydney at very short notice. Luckily the problems were solved quickly.

The new year started with very few courses, but more were booked as the year progressed and borders stayed open. The three-day Refresher, Emergency and Contingency CPD course was attended by pilots from Queensland, NSW and Geraldton with Napier and Taranaki booked to attend shortly. Most others have been local RAN regular courses for frigate navigators, command, and bridge teams.

As forecasted, junior navigators of RAN patrol boats are now being trained using manned models in addition to simulation. We use our generic twin-screw model and will shortly build a small dedicated OPV for them.

Training has changed hugely in the past forty years! We of a 'certain age' remember that sea training schools and colleges had a small/medium size training vessel as the centre of activity for hands-on manoeuvring. But with changing times, rising costs and the advent of simulation, we – merchant and military alike - were told that our future was in simulation. Training vessels largely disappeared, and the practical training of yore was replaced by advanced theory during and after the '70s age of privatisation.

Well-intended advanced education is a mixed bag and it is interesting to recall that traditionally and pre-simulation, training was exclusively on the job. It was in fact self-training with a bit of guidance from interested senior pilots and undoubtedly the method was largely successful. Where it wasn't, the trainee went back to sea by arrangement between the (then) Merchant Service Guild and shipping companies, but that didn't happen in Newcastle where I piloted for 27 years. When I joined, the training regime was 50 jobs in and out, half in the hours of darkness followed by a check trip.

In our first year, we piloted small ships up to 185m loa. and there were many of them to practise on. By today's standards they were strongly built and an awkward landing or the brief touch of a sandy bottom went largely unremarked if it was an exempt master, but frowned upon in a junior pilot.

NSW pilots used the AMC simulator from its inception in the mid-eighties. We found that the first simulator courses had little to teach us about ship handling or our port and were labelled 'self-development' courses. The

simulator instructors had never actually handled a ship, but their input into our procedures proved valuable – as was BRM. For the most part we listened and were grateful for it. I also recall that some early digital models were simplistic and very easy to manoeuvre; doubtless they have improved in accuracy.

One thing they did well was to inspire confidence in emergency and contingency exercises which I for one appreciated. As the 80' progressed, trained European crews disappeared and with new crews, emergencies and contingencies became a regular feature of piloting.

Despite simulation, four new manned model centres have been built around the world since 2000 – Australia, two in USA and one in Panama. We conclude it is an attempt to rediscover the analogue world of real water and real ships – albeit scaled ones. Rightly or wrongly, I see this is an economical and valuable return to discarded training ships with the added advantage that while a full-size training ship can become a full-size casualty, ship-models are mostly immune from damage.

Work on the new ship-model Supply's deckhouses has progressed – a lengthy process with everything hand built. For those who know the models here, it will be a bit smaller than Mentor but with a fine-lined 20-knot hull. The Spanish-built ship herself was delivered by Teekay and is currently in Sydney undergoing trials. We expect that some of the results will be used to perfect the model when completed.

A major weed-dredging maintenance program is about to start in our waterway's deep section and is the first necessary dredging since the lake was built over twenty years ago. Our grounds are being kept maintained on a regular basis with future bushfires in mind and someone commented last year that with floods in 2015, fire in 2016 and plague in 2020, the Old Testament continuum is indeed still with us!

There has been some interesting speculation on the Ever Given incident in the Suez Canal. A contact sent me a link in which one reporter had discovered bank effect and blamed it for the grounding. I wondered why we don't consult reporters more often on piloting ships as they seem to know so much more than we do. But out of curiosity, we did some runs through our canal with a similarly low block coefficient hull and concluded subjectively that the larger length – breadth ratio provided better directional stability and heading control than the shorter handymax model. As to the Ever Given we may never know but the latest media reports call into question the size of the rudder and excessive speed.

From our living room window, the view onto a sunny lake is one of constant beauty. But outside there is a thin southerly wind. I am reminded of first thoughts about building a manned model centre while attending the simulator in Launceston. When I floated the concept with AMC, they were very supportive having costed one themselves and decided that while running training ship Wyuna, it could not be supported. But – they said – you should build it down here near the AMC. The thin southerly wind outside the living room window tells me why we stuck to the comfort belt of the Hunter!

But it's all relative - somewhere I have a picture of a first Spring course at Port Revel with a thin coating of snow on the deck.

Wishing you smooth seas, safe ladders, a good lee, virus-free ships and safe piloting from us all at Port Ash.

Cliff Beazley & the Team

GENERAL NEWS

New Pilot Boat for Townsville

The Port of Townsville has welcomed the newest addition to its fleet of pilot boats with the arrival of the newly built *Mantaray*. The $3.3 million, custom-built vessel utilises high-tech equipment and design to maximise safety and efficiency for pilot transfers.

Port of Townsville Chief Operating Officer Drew Penny said the *Mantaray* had been specifically designed to handle open sea conditions at Abbot Point, where the vessel will be based.

"The Port of Townsville employs 11 marine pilots who are responsible for ensuring vessels safely navigate their way to and from ports in Townsville, Lucinda and Abbot Point. The conditions our pilots face in Abbot Point can be slightly more challenging due to the open nature of the harbour," said Mr Penny.

Last financial year, the Port of Townsville's pilots completed 789 pilotage movements at Abbot Point. The journey for the pilot commences from Bowen where the pilot boat is moored.

"As our marine pilots are responsible for safely guiding the large vessels through the compulsory pilotage area of Abbot Point, it is vital that we continuously look for ways to improve their safety at work and ensure continuous service delivery for visiting vessels. The purchase of this new pilot vessel offers the latest in safety technology and allows its predecessor, The John Rogers, to join the fleet based at the Townsville Port," Mr Penny said.

The *Mantaray* measures 17.3m long and its design features include:

- The ability to right itself if it capsizes in heavy seas
- Over-sized rudders for improved manoeuvrability
- Wide side-decks for safer pilot transfers
- Wave-piercing beak bow to improve performance and safety; and
- A suspended wheelhouse that reduces noise and vibration.

Member for Townsville Scott Stewart said it was important to continue to invest in the region's port.

"Ports are critical pieces of infrastructure, not just for Townsville but for the whole of North Queensland," he said.

"They provide a vital connection for so many companies to get their product to the rest of the world.

"Pilot boats provide an essential service, ensuring ships are able to navigate out of our ports, so it's important we continue to invest in them."

The *Mantaray* is the second new pilot vessel purchased by the Port of Townsville since 2017.

"With four pilot vessels now stationed at the Townsville Port, we are well-placed to meet growing trade demands, implement a more rigorous maintenance schedule, and minimise disruption to our pilotage services," said Mr Penny.

The *Mantaray* is currently stationed at the Townsville Port for several weeks of tests and training, before it makes its way to Bowen.

Situational Awareness With or Without GNSS

In tactical-grade navigation and targeting systems, a new inertial technology has proved itself under the most demanding conditions, showing the precision required for assured positioning, navigation, and timing (A-PNT) solutions.

KVH Industries photonic integrated chip (PIC) makes a dramatic breakthrough in fiber-optic gyro (FOG) design, replacing individual fiber components with an integrated planar optic chip for superior reliability. With discrete components now contained within a single PIC - no splices, no handbuilt parts, - it offers increased reliability, longer lifetime and decreases optical loss.

Its robust, reliable highly accurate performance suit it for a range of demanding applications from autonomous navigation to subsurface missions. Its principal role to date has been in tandem with an external DAGR (Defense Advanced GPS Receiver) in a military ground vehicle scenario. For targeting applications, it provides an interface to turret angle encoders and laser range finders. It also supports an optional chip-scale atomic clock (CSAC).

The technology is particularly useful when GPS/GNSS is pulled out of the solution, as in a jamming or spoofing scenario, or operations in deep urban environments. The new PIC inertial measurement unit (IMU) continues to provide accuracy within 0.2% of distance travel under GPS-denied conditions. On a recent 360 kilometer drive on paved roads, it had a final dead-reckoning position error of 65 meters, for a phenomenal 0.02% rate. On a 14-kilometer off-road journey in very muddy terrain, its error was 0.12% of distance travelled.

The PIC also eliminates problems associated with wheel-slips in muddy, sandy and loose terrain, and continues to perform in high-altitude situations.

Guide to Helicopter/Ship Operations, Fifth Edition

The International Chamber of Shipping has released it's newest edition of the Guide to Helicopter/Ship Operations. AMPI has provided input via IMPA for these changes. The fifth edition provides the latest guidance on standardised procedures and facilities for helicopter/ship operations worldwide, and encourages safe and efficient performance in the field. The Guide has been fully updated to reflect the most up-to-date advice from industry experts in both the maritime and aviation sectors. For ships to which the International Safety Management (ISM) Code applies, this Guide may also help in developing shipboard operating

procedures and requirements for the various helicopter operations that may be undertaken on board.

- Updated guidance on transferring marine pilots directly to the bridge wing by winch, including associated risk assessments.
- A detailed list of abbreviations and definitions from the maritime and aviation industry.
- Expanded information on the requirements specific to different ship types.
- Revised layout and checklists to better reflect human factors.

New GAJT-410MS protects against RF interference and jamming in marine environments

With the increase of interference and jamming in marine environments worldwide, Hexagon | NovAtel is proud to release GAJT-410MS, the latest addition to their proven GPS Anti-Jam Technology (GAJT), into the commercial and defense marine markets. This low size, weight and power (SWaP) variant protects civil and military operations from interference and jamming, with jammer direction-finding capabilities for enhanced situation awareness in the marine environment.

Interference, both benign and malicious, is a challenge facing civilian and military operations. Commercial marine applications like shipping, tankers and bulk carriers are under threat from interference targeting their navigation and cybersecurity. Without assured positioning, these vessels can drift off-course and place the vessel, crew and cargo at risk. Nearshore marine applications like survey, construction and piloting require reliable positioning for uninterrupted operations in crowded waterways and RF environments. Interference mitigation and jammer direction-finding for advanced situation awareness ensure users acquire assured positioning, navigating and timing (PNT) while identifying and limiting risk from interference sources.

The GAJT-410MS provides dynamic protection on both GPS L1 and L2 bands, as well as Galileo E1, QZSS L1 and L2 and SBAS L1 to combat intentional and unintentional interference. If a vessel experiences jamming, the device's direction-finding capabilities provide improved situation awareness of their RF environment to identify and locate the source of the jamming signals. This commercial off-the-shelf, non-ITAR solution is easy to install or retrofit onto existing fleets, enabling assured PNT for continuous operations, cybersecurity and safe navigation at sea.

"Assured navigation and cybersecurity defenses are growing priorities for marine users as global threats from interference and jamming increase," said Dr. David Russell, marine segment portfolio manager for Hexagon's Autonomy & Positioning division. "The GAJT-410MS is an anti-jam solution protecting vessels from interference and jamming disruptions to ensure continuous operations wherever your application takes you. With GAJT, your position, navigation and timing are protected and assured."

The GAJT-410MS is the latest iteration of proven, high-performance anti-jam products from NovAtel. It includes flexible mounting options, jammer presence and direction-finding capabilities for advanced situation awareness.

Australian Maritime Mentoring Program

The Australian Maritime Mentoring Program is an exciting new joint initiative between the Australasian Marine Pilots Institute, the Nautical Institute and the Company of Master Mariners of Australia.

The program has been developed to bridge the gap between new entrants to the maritime industry and the senior maritime professionals who are already established in their careers. It can be difficult for someone new to the industry to understand the numerous pathways for career development, for instance how does one become a Harbour Pilot, a VTS Operator, a Maritime Claims Investigator or a Shipping Company Operations Manager? These are questions that an experienced maritime professional can easily answer. A significant number of Maritime events are held throughout Australia every year and it would be great to see mentors bringing their mentees to these events and helping them to network whilst supporting them in that next step towards achieving greatness. We can grow our industry by preparing the next generation of leaders.

We also hope that the Australian Maritime Mentoring Program will allow those new entrants to the industry to educate us and help our member organisations better understand the challenges and issues that they face, especially in relation to training. If we can understand those issues, we can better provide relevant guidance to government and industry on how to prepare for the future.

Our mentoring program has been in development for around 8 months with particular support from the President of The Nautical Institute, Jillian Carson-Jackson, Captain Jeanine Drummond and Captain Patrick Walsh. We have taken inspiration from the highly successful Honourable Company of Master Mariners mentoring scheme in the United Kingdom where Captain Brian Cushing has kindly provided guidance on the issues that they have faced and methods to overcome them.

We have purposely elected to have only one prerequisite to become a mentee and that is to be a member of one of the participating organisations - The Nautical Institute (member, associate member or student member), Company of Master Mariners of Australia or the Australasian Marine Pilots Institute (associate member). Our program is completely free, all that we ask is for motivation and dedication from both parties.

The program launched on the 31st May 2021, mentees and mentors alike will be able to register using the online registration form on the AMPI website. Our first intake will be open for 2 months before we commence the process of matching the mentor-mentee pairs.

News from SMARTSHIP

Changes at Smartship Australia

In late March 2021, Smartship achieved practical completion of the project to expand its world-class training facilities at Boronia Road, Brisbane Airport.

The expanded facilities add just under 500m2 of space to the existing facilities and provide for:

- Enhanced and expanded lecture and meeting facilities to better manage course demand and provide for enhanced debriefing of simulations.
- Expanded office facilities to provide for additional staff and contractor resources.
- Provision to address future expansion of simulator facilities (for example, including provision for additional space for a second tug simulator or extension into VTS training).

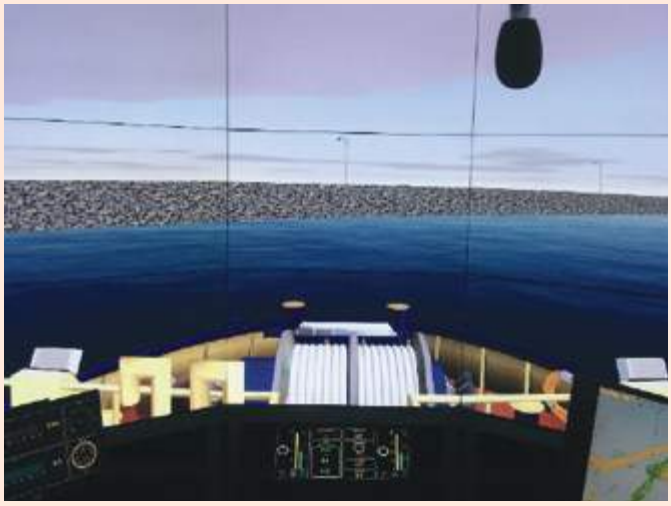
The expansion also modernises the support facilities to ensure that these areas remain fit for purpose including:

- The provision of enhanced access to and egress from level 1 for fire safety and for people with disabilities.
- Improved ablution facilities on both levels of the building.
- Improvements to food handling facilities on level 1.

Peter Listrup, Director and Principal Instructor noted that the new spaces add greater capacity and provide greater flexibility to Smartship's service provision.

During the COVID-19 pandemic, Smartship also took the opportunity to commence the refresh of its key simulator technologies. The first project to progress was the upgrade of its tug display array.

The display quality improvement is illustrated in the photographs below (old screens on the left).



A number of customers have already provided positive feedback on the project and we look forward to working and utilising the new technology over the coming years.

Brisbane Pilot Boat

Passing Coal Loaders in Newcastle

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AMPI WORKSHOP 2021

Port Kembla Pilotage & Logistics Workshop 2021

WE'RE COVID SAFE

Where: Novotel Wollongong Northbeach Hotel
When: 3rd - 4th November 2021

We are pleased to announce that we will be holding our first AMPI Workshop of 2021 in Port Kembla, NSW.

Registration will open in July and we have a COVID refund policy in place should government restrictions prevent travel. Visit www.ampi.org.au for more information.

AUSTRALASIAN MARINE PILOTS INSTITUTE

NOTICE OF ANNUAL GENERAL MEETING

Australasian Marine Pilots Institute

ACN 139 920 335

Notice is hereby given that the Annual General Meeting of members of the Australasian Marine Pilots Institute Ltd will be held at the Novotel Northbeach Hotel in Wollongong, NSW on Thursday 4th November 2021 commencing at 16:00 for the following purposes:

ITEMS OF BUSINESS

1. Attendance

2. Presidents Report

3. Financial Reports

   To receive and consider the Financial Report for AMPI for the period ended 30th June 2021, together with the Auditor's Report as set out in the Annual Report.

4. Election and/or re-election of directors

   As required by the Companies' constitution, a count of the nominations for the election will be held to appoint Directors to the board of AMPI. Where nomination of Directors exceeds the number of positions vacated, the results of a local constituent ballot will be announced.

   To consider and, if thought fit, pass the following:

   a. Appointment of directors

   b. Retirement by rotation, the following areas will be eligible for re-election as follows:
      WA x 2
      VIC/TAS x 2
      SA/NT x 2
      NSW x 2

5. As the retiring Directors are also retiring by rotation from the Executive Council, a vote by show of hands and or verbally, amongst the encumbered Directors will determine the vacated Executive Council positions.

6. Other Business:

Voting Proxy Forms will be sent out closer to the date and must be received by the Secretary before 25th October 2021.

PAN PEER ASSISTANCE NETWORK

Caring for Marine Pilots and their families

WHAT IS PAN

AMPI established and continues to finance a Peer Assistance Network to give support to Marine Pilots and their families.

PAN Members are Marine Pilots who come from a variety of ports around Australia we are trained and committed to supporting the well-being of our peers.

SUPPORT NETWORK

PAN is designed to provide support over the phone. Initial contact can be made to a Marine Pilot peer who is on our list of trained PAN Members.

PAN Members are trained to listen and offer support in a non-judgemental way, AMPI also has retained the services of a professional counsellor who you may also wish to contact.

WHAT CAN I CONTACT PAN ABOUT?

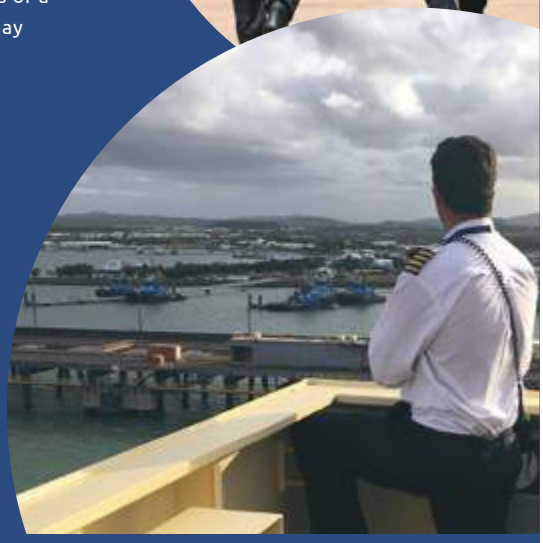
Any issue at work or home that may be causing you difficulty. Common issues we see are relationships, problems at work, training and/or assessment problems, health, stress, fatigue and financial issues.

If you have ANY issue causing you concern you can talk to a PAN Member.

PAN IS CONFIDENTIAL

All PAN members sign a deed of confidentiality and they know that this is the main principle that ensures PAN continues to to work effectively.

The PAN network provides an independent confidential place for you to freely discuss your problems.



PAN MEMBERS

Neil Farmer
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Kirk Whitman
Sydney - 0410 475 006

Neil McKenzie
Sydney - 0437 704 571

Lyndon Clark
Sydney - 0404 042 591

Jacqui Kenyon
Sydney - 0405 443 483

Jon Dicker
Melbourne - 0427 378 911

Bruce McMinn
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Doug Dow
Adelaide - 0417 834 910

John Ball
Fremantle - 0418 939 236

Rory Main
Fremantle - 0437 870 007

Julian Thomas
Fremantle - 0418 949 817

Shannon Nicholson
Mid-West Ports - 0409 171 482

Ross Halsall
Mid-West Ports - 0478 011 372

Adam McPhail
Cape Cuvier - 0407 089 967

Peter Dann
Woodside - 0448 842 218

Glenn Attril
Woodside - 0407 948 735

Elliot Bibby
Woodside - 0459 979 758

Craig Eastaugh
Port Hedland - 0438 500 570

Matt Shirley
Port Hedland - 0427 197 272

Mick Wall
Port Hedland - 0400 085 988

David Murgatroyd
MSWA - 0437 288 300

Ben Ranson
Mackay - 0438 121 584

Peter Liley
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Chris Kline
Brisbane - 0409 548 412

Geoff Dawson
Brisbane - 0418 714 058

Sean Liley
Brisbane - 0408 558 486

Jake Pattison
Newcastle - 0448 107 311

Scott Clinton
Newcastle - 0419 808 668

PROFESSIONAL COUNSELLOR

Marcus Romanic
0419 382 352
mromanic@bigpond.com

EXTERNAL SERVICES WHICH MAY BE OF ASSISTANCE

Beyond Blue - beyondblue.org.au
Black Dog Institute - blackdoginstitute.org.au

Photo: Tauri Minogue Photography

Why I am a member of AMPI

Like any professional organisation, AMPI requires a sound membership base and volunteers to operate effectively, basically AMPI is only as good as its membership.

While members are entitled to expect us to advocate the professional interests of pilots, AMPI relies on its members to give us direction. The Executive recognises that strong membership is the key to the success of AMPI, and will enable us to continue to be a respected voice in the Maritime industry.

We are often asked by pilots "what do I get for my AMPI membership" so below is a summary of 'the value of an AMPI membership'

- As an AMPI member you are part of an association that has the professional interests of marine pilots as its number one priority, working with other industry stakeholders, domestically and internationally, to ensure high standards are maintained in our profession.
- As a member of AMPI you automatically become a member of IMPA. AMPI has strong representation at IMPA which can lead to changes industry wide.
- An AMPI executive member is currently representing IMPA at the ISO committee, revising ISO 799:2004 Pilot Ladder standards.
- All AMPI members currently benefit from the recently revised IMO standards for rigging pilot ladders which was influenced largely by submissions from AMPI.
- AMPI has a good relationship with AMSA with mutual support with many endeavours to improve marine pilot safety.
- As the nationally recognised professional body, AMPI is able to develop best practice policies, set national standards, and influence international standards, on relevant aspects of pilotage. For example, PPU operations, pilot ladder hull magnets, helicopter hatch access, pilot boat design, competition in pilotage, pilot training (initial and ongoing), simulator use, PPE requirements, etc
- With its vast pool of maritime knowledge and experience, AMPI, with members input, has the ability to provide expert advice to industry on all pilotage related matters and many port operations and design issues.
- AMPI has developed an online Continuous Professional Development (CPD) program, that was recently launched in Queensland, and available to any pilotage jurisdiction that wish to participate. This program was developed to enable all pilots to be able to maintain minimum standards in all aspects of training that are relevant to pilotage.
- AMPI is host to the Pilot Training Advisory Board. This board is represented by many industry organisations and considers current and future issues relevant to pilot recruitment and training.
- AMPI has a peer support program available to all pilots. This program is supported by psychologists that understand our industry and are independent of any employers. A number of pilots from around Australia have undergone Peer Support training to enable them to further assist pilots at a local level.
- AMPI conduct two workshops every year at various ports around the country that are organised by local AMPI members. These workshops are reasonably priced thanks to industry sponsorship. At these two day events industry stakeholders and pilots hear from a variety of speakers that are experts in their field, enabling participants to keep up with industry trends and network with stakeholders.
- AMPI has also hosted two major international Pilotage and Port Logistics Conferences and one IMPA Congress. These major events have attracted stakeholders and decision makers at the highest international level and are an opportunity maintain the high profile of our profession while listening to the challenges of other stakeholders.
- AMPI members are entitled to discounts for registration at our workshops and conferences.
- The AMPI website www.ampi.org is becoming a valuable tool for members to stay connected with the Institute and have their say on any issues that concern them. The website is still being developed but currently contains:

  Information on workshops and conferences
  - Papers from workshops and conferences
  - Incident reports
  - AMPI position papers
  - Access to the CPD program
  - Chat forum (Voice)
  - IMPA notices
  - Memberships forms
- AMPI has a social media presence, members can stay connected with the AMPI Facebook page.
- Safe Passage is AMPI's quarterly magazine which includes news, views and articles on pilotage, shipping and port related topics, member input is most welcome.
- AMPI membership, as a professional organisation, may be tax deductable.
- An AMPI membership enables pilots to feel connected with a group of likeminded professionals and perhaps stay in touch with old shipmates and meet new ones.
- As an AMPI member you are represented by an enthusiastic executive who commit considerable time and energy to the profession. We need your support enable us to maintain the momentum.

AMPI EXECUTIVE

NAME	POSITION	TIME ZONE(S)	EMAIL	MOBILE
Peter Dann	President	Dampier & Gold Coast	president@ampi.org.au	0448 842 218
Ben Ranson	Deputy President	Mackay	Dep.pres@ampi.org.au	0438 121 584
Bernardo Obando	Treasurer/Vice President	Darwin	vp@ampi.org.au	0419 500 927
Nic Fischer	Vice President	Brisbane	vp2@ampi.org.au	0418 149 157
Marvie Rouse	Acting Admin & Secretary	Newcastle	admin@ampi.org.au	0458 014 660
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Welcome new AMPI Members

A warm welcome to our new AMPI members, we look forward to seeing you at our next workshop or conference.

Captain Peter Manthorpe, Tasports
Captain Matthew Arnup, Argonaut Marine Group
Captain Matthew Barrenger, Port Hedland Pilots
Captain Mark Tett, Argonaut Marine Group
Captain Teong Tan, Darwin Ports Corporation
Captain Terrence Coombes, Argonaut Marine Group
Jeremy McMullan, Associate Member
Levi Moore, Associate Member
Captain James Luke, Associate Member
Gene Lowry, Associate Member

Congratulations

We also wish to congratulate the following pilots on their retirement:
Captain Malcolm Goodfellow, Port of Newcastle

Please submit your photos to editor@ampi.org.au

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