



No. 6 / 2015

THE MEGAPHONE

June Report



The Queen Mary 2 moored at Circular Quay in Sydney today. Photo: James Morgan. March 12th 2015

The next monthly meeting of the Sydney Branch of the CMMA, will be held at 1800 hrs, for 1830 hrs dinner, on Wednesday 8th July, 2015 at the Occidental Hotel, 43 York Street, Sydney.

Guest Speaker

Kevin Keegan

CEO/National Director, Far East Broadcasting Company, Australia

Topic:

Far East Broadcasting Company (FEBC) – uses media to reach out and inspire hope in some of the world's hardest-to-reach communities.

Please confirm your own & spouse / friend's intentions to attend by contacting

Capt. Frank Pickering

fpickering6@bigpond.com

Phone Mobile 0418 499 166 or if urgent 9520 6976, before 1200 hours, Monday 6th July, 2015,

**The Company of Master Mariners - Sydney Branch
PO Box A 2534 Sydney South, NSW, 1235**

**Sydney Branch Court Meeting held at Occidental Hotel, Sydney, on
Wednesday 10th June 2015.**

Meeting opened at 1707 hrs with Capt. Ted van Bronswijk in the Chair.

Attendance: R. Sandeman-Gay, S. Herklots, R. Whittington, M. Bertram, E. Wilson, F. Pickering and J. Bilimoria.

Apologies: R. Arsiwala

Minutes of last meeting as circulated to Court Members:

Acceptance: Proposed – R. Sandeman-Gay

Seconded – M. Bertram

Matters arising: Nil

Correspondence: Branch Master replied to all mail as required.

Hon. Treasurer's Report:

Commonwealth Working A/c		\$ 7554.09
CU Australia		\$ 6616.05
On hand to bank	NIL	
Accounts to be paid	NIL	
TOTAL		<u>\$ 14170.14</u>

Acceptance: Proposed – S. Herklots

Seconded – E. Wilson

Matters arising: 13 members subscriptions remain outstanding. Lloyd's List to pay in August.
Federal levy is still to be paid.

Hon. Registrar's Report:

Readings:

Anurodth Prasad – Ordinary member – Sydney

Laurance Crisp – Ordinary member – Queensland

Mohd Rahman – Associate Member – Queensland

Matters arising – NIL

Federal Business:

1. New Application Fee \$130 from 1st July 2015
2. New Levies (\$70) effective from 1st June 2015 payable in May 2016. The Hon. Treasurer stated that the Federal body should try and cut back on its expenditure – with the new levy from June 2016 all the payment bar \$5.00 of retired members, will be on the Federal levy, leaving only \$5.00 per year for the Branches to service the members and pay for their monthly newsletter – and with the passing years more members will be retired. To answer this the Branch Master proposed that the subscriptions should be raised \$5.00 for all members – this was agreed by the Court – but it was suggested that the Branch Master should write an article in the Megaphone to explain the need for this increase.
3. "Forgotten Book" – Mike Sullivan still working on this. No completion date set. He emailed that it was close to completion on 4th February, 2015. Letter to CMMA board, BM to comment – no further.
4. Mike Tyler – Webmaster – looking for articles and news clippings relevant to Maritime Industry & Master Mariner Website.
5. Francis Castellino has now taken over as Federal treasurer.

General Business:

1. The venue for this branches monthly meeting is Occidental Hotel Restaurant, 43 York Street, Sydney, NSW 2000 (02 9299 2531) a few paces south of Wynyard Station Entrance on York Street.
2. Some outstanding membership's fees for 2015 are still due (13 members). Donations to the Branch are kindly accepted.
3. Submissions for publication in the Megaphone, articles of approximately 500 words are being sought – also articles for the Master Mariner Journal.
4. The last edition of the Merchant Navy Newsletter was shown to the Court – all members are given the contact details of the MNA President Geoff Walls, at PO Box 4181, Shellharbour, NSW 2529.
5. Iain Steverson of the Newcastle Branch gave a 45 minute interview on ABC Radio Newcastle about the Merchant Navy in WW2 – he was scathing about the treatment given to seaman. This interview should be available on podcast.
6. Several messages passed between CMMA Branches regarding payments of Levy's by members transferring from one branch to another. This now appears to be sorted out.
7. "RINA" news was received about Simulating Ship Self-Propulsion with CFD in order to test new vessel designs without model ship testing.

The meeting closed at 1805 Hrs.

Next Branch Meeting at 1830 hrs on Wednesday 8th July 2015

Next Court Meeting at 1700 hrs on Wednesday 8th July 2015.

Dates for your Calendar:

1. **Wednesday 8th July 2015** Master Mariners meeting at the Occidental Hotel, York Street, Sydney. Speaker: **Kevin Keegan**. Topic: **Far East Broadcasting Company (FEBC) – uses media to reach out and inspire hope in some of the world's hardest-to-reach communities.**
2. **Wednesday 12th August 2015, Combined NI SE Aust. and CMMA meeting at Occidental Hotel, York Street Sydney.** Speaker **Professor Chris Rizos** and Topic **Some Developments in Satellite Navigation – The Rise and Rise of GNSS.**
3. **Saturday 15th August 2015 VJ/VP Day** Cenotaph, Martin Place 1100 hrs.
4. **Wednesday 2nd September 2015, Battle for Australia Day,** Cenotaph, Martin Place at 1100 hrs.
5. **Thursday 3rd September 2015, Merchant Navy Day Memorial Service, Mosman War Memorial.** Time to be announced.
6. **Wednesday 9th September 2015 – CMMA meeting at Occidental Hotel, York Street.** Speaker and Topic TBA
7. **Wednesday 14th October 2015 – CMMA Meeting** at Occidental Hotel, York Street. Speaker and Topic TBA.
8. **Saturday 17th October 2015 – Merchant Navy Memorial Dinner in Canberra.** Details TBA.
9. **Sunday 18th October 015 – Merchant Navy Memorial Service at Canberra, Lake Burley Griffin. Guest Speaker: His Excellency General the Honourable Sir Peter Cosgrove AK MC (Retd.)**
10. **Wednesday 11th November 2015 – CMMA and NI SE Aust Combined Meeting** at the Occidental Hotel, York Street, Sydney. Speaker and Topic TBA.
11. **Wednesday 9th December 2015 – CMMA and NI SE Aust Combined Christmas Dinner** at the Occidental Hotel, York Street, Sydney.

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(The views & opinions expressed in this Megaphone are the Hon. Editor's own and do not necessarily reflect the views & opinions of the Company of Master Mariners of Australia.)

Address
Neil Edwards
Principal of Edwards Marine Services
Topic

: 45m Shallow-draft Pusher Tugs Building at Uzmar, Turkey for South America

Neil started his talk by giving a brief introduction to Edwards Marine Services. EMS is a small marine technical consultancy specialising in the new build vessel area, particularly in the tug sector. We provide a range of services from operational advice, design selection, shipyard selection, specification and on site or Owner's Representation. Either earlier as an employee or now as EMS to date we have been involved in the construction of some 42 vessels, harbour & escort tugs, pilot cutters, ferries and pusher tugs.



Brazilian steel maker Vale' owns and operates an iron ore mine at Corumbá in the west Brazilian state of Mato Grosso do Sul. The mine was owned until September 2009 by Rio Tinto and has large deposits of very high grade ore with an iron content of between 54 and 63%. The ore is in a form much desired by smelters.

The only problem is the mine is a long way from the coast and the only viable means of transporting the ore is by barge along 2,500 km's of the Rio Paraguay and Rio Parana river systems to San Nicolás de los Arroyos, a port on the western shore of the lower course of the Paraná River (km 343) in Argentina, located in the jurisdiction of the city of San_Nicolás de los_Arroyos, Buenos Aires Province. It has

a water depth of 34 feet, and is capable of serving large vessels coming upstream from the Atlantic_Ocean_through the Río de la Plata.

Vale have entered into contract with Brazilian logistics company Hidrovias do Brasil for transport of the ore from the mine at Corumbá to Port San Nicolas. The first 8 vessels have been guaranteed work for 25 years. 144 barges have also been constructed in China. There are two barge types, those with a form of bow for the front row of the convoy and the others bluff square ended for the following rows.

There are other operators on the river system but their vessels are much less sophisticated. Hidrovias set out to be the premier operator of high quality vessels providing an efficient, safe and reliable ore transport service. They contracted Robert Allan Ltd of Vancouver, Canada to design a new generation of pusher tugs and barges (and also a floating dock to maintain them) and set a new standard on the river system.

RAL had originally commenced work on this project in 2006 for Rio Tinto and had proposed more conventionally propelled, quadruple screw vessels, but in 2008 the project was shelved and the mine then sold in 2009. The project was actually well advanced with some barges already under construction and some propulsion system equipment already purchased when cancelled. Exit costs were not inconsiderable. EMS had been engaged to oversee construction of many of the pushboats so it is satisfying now to see the project come to fruition.

The project was revived in 2011 by Hidrovias, and RAL were engaged to carry out preliminary concept design work, this encompassed fuel consumption and route analysis, CFD simulations, crash stop and propulsion system review and model testing in Vienna.

These two animations provide both a good view of the pushboats with the barges rafted up and also of the operation on the river system.

Some design parameters were set by the mine owner Vale' rather than Hidrovias or Robert Allan. This is a specialised service where the pusher tugs with barges must traverse an inland waterway with changing characteristics from season to season, varying river depths and navigational hazards. Paramount of course is draft, there is a maximum operating draft to avoid bottom contact and a minimum draft to ensure propeller and side shell mounted grid cooler immersion. Weight control monitored throughout construction, with every variation evaluated in regard to additional mass, inevitably there was some growth but this was kept to a minimum to allow optimisation of bunker loading. Bunkers are available at different places on the river and at different pricing. Bunker capacity is 504 m³ HFO plus 30 m³ MGO and ballast 406 m³, in operation this means as fuel is consumed, ballast must be added. If all three engines are run at full load, consumption can run close to 30 m³ per day. The river also has bridges over it so there is also an air draft limitation and the mast can be lowered.

There is no specific technical reason I am aware of as to why diesel electric propulsion was selected other than I believe Vale' had a preference for this system, as stated earlier when Rio Tinto owned the mine conventional propulsion was selected and I believe from a crew operational perspective this may have been preferable as the vessels have a relatively high degree of electrical system complexity. Crew, particularly engineer training has been a priority. The propulsion system is controlled by a sophisticated power management system. With just one generator running, all three thruster throttles can be set to maximum and within just over two minutes the other two generators will start, come on the board and accelerate the drives to maximum.

Operation on HFO has an obvious advantage in cost and as the vessels will average over 6,000 running hours per annum the savings over operation on MGO are significant. HFO has one other advantage in that it has limited application elsewhere and is not as readily on sold if the crew should decide to do so. Fuel management is somewhat involved and there is more information on that later.

The vessels achieved speeds of over 12 knots on trials, service speeds with laden barges need to be approx 6 knots.

Azimuthing thrusters give the vessels excellent manoeuvrability and the nozzles provide approximately a 10% fuel saving over open propellers. But the service area is a river with lots of logs and other debris floating in it at times so the propulsion system must be able to cope with this and some important considerations were made to limit damage to the system if a log jammed a propeller and to apply a different strategy if log jams became a big issue. There is all the usual overload protection in the propulsion electrical system but it was thought that with the large rotating mass and inertia of the propulsion motor more needed to be done and so a Voith safeset is fitted in the motor to thruster shafting, this is set to release at 1.2 times full load torque, so in the event of the propeller being jammed, the safeset will release and the motor can run down without serious shock. Reset of the safeset is not unlike any other oil injection coupling and with the right kit and experience takes only 30-45 minutes to reset (you still have to remove the log). A comprehensive co-ordination study was also carried out to ensure the electrical propulsion system functions correctly. The propulsion motors are driven by three water cooled ABB variable frequency drives.

The barges are rafted up 4 x 4 with a maximum convoy length of 290 m and deadweight of 41,000 T. The vessels power requirement was primarily driven by local river regulations in South America which dictate that the pusher tugs must be capable of stopping a laden convoy within two convoy

lengths. There is an emergency crash stop function which when activated reduces RPM on the port and starboard units, rotates them and increases speed again. While this is occurring the Master must control the RPM and rotation of the centre thruster to the astern position. This system is interconnected with the GPS and will not engage at speeds below one knot.

Manoeuvrability The river system is in effect all close water navigation

The vessels as usual have echo sounders in the wheelhouse with a transducer fitted in the hull but this does not provide the depth at the front of the barge convoy so the vessels are fitted with two portable sounder transducers with 300 m extension cables that are mounted at the bow of the convoy. Additionally two workboats are fitted which are also fitted with sounders and these can be used also.

Paraguay does not have a sea border but does have marine regulations for the river system – a copy these proved very hard to obtain with several Sao Paulo / Asuncion trips and meetings for Hidrovias, and then only in Spanish. A team from the Paraguayan administration did come to Turkey for the first vessel. The vessels are registered in Asuncion rather than in Brazil mainly for commercial reasons. Brazil has an act similar to the US Jones act, so if registered there the vessels would also have to be built there and crewed with Brazilian nationals.

The ABS river rules are considered the most appropriate for this class of vessel but the builder has a strong preference for BV who have a plan approval office in Istanbul.

Machinery selection was completed prior to our involvement with the project but I believe Wärtsilä engines were selected for their track record / performance running on HFO, personally from a maintenance perspective I would have opted for a larger bore model with fewer cylinders.

Although the type of drive was selected early on there was debate well after the contract was signed as to whether ABB would supply the whole electrical propulsion package or whether ABB components would be used in a system supplied by Elkon the local supplier in Turkey. Owners preferred ABB due to support in South America but the yard persuaded them to use Elkon as they are more familiar with them and agreed to supply Spanish speaking engineer in Paraguay for six months.

The main engines, generators and propulsion motors were all manufactured in China, Owner and shipyard representatives attended factory acceptance tests for the first shipset. Propulsion units were built in Germany. The variable frequency drives were constructed by Elkon at Tuzla near Istanbul in Turkey. Elkon are a part of the very large Dutch electrical company Imtech.



Capt. Dick Whittington thanked Neil for his interesting talk and presented him with a small gift.

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Recordings Missing from *Sage Sagittarius*



Australia's inquest into the mysterious deaths on *Sage Sagittarius*, nicknamed the "death ship," has heard that the ship manager could not find important audio and video data from the vessel. The inquest is examining the death of Cesar Llanto, 42, one of three men from the *Sage Sagittarius* to die in a six weeks between August and October 2012. Llanto disappeared overboard as the vessel approached Australian waters northeast of Cairns.

The scope of the inquest also includes the death of chief engineer Hector Collado, 57, who died as a result of an 11-meter (36 foot) fall on board the bulk carrier. The third death, that of Japanese superintendent Kosaku Monji, who was crushed to death on a conveyor belt, is beyond the scope of the enquiry as it occurred when the ship was docked in Japan.

The court heard that Hachiuma Steamship Company had VDR recordings of the day Cesar Llanto, the chief cook, disappeared from the ship on August 30, reports The Daily Telegraph, but, appearing at the inquest via video link from Japan, general manager Kazuhiro Hayashi could not say whether the important data had been stored on the days of the deaths.

Philip Strickland, counsel assisting the NSW Coroner, asked why critical footage was missing and was told by Hayashi that he tried to locate the footage before the hearing but "couldn't find anything."

Hayashi had been on the ship with Monji as part of a crisis management team conducting an internal investigation into the first two deaths that occurred on board.

Speaking through a translator, he conceded the company did not notify police in Japan or the local transport safety body about the unusual deaths at the time.

One of the crew members has also spoken out at the inquest saying he feared for his life after Llanto's disappearance. The man, who cannot be named, told the inquest he believed Llanto's death was neither an accident nor a suicide.

"I don't believe he accidentally fell overboard," he told Glebe Coroner's Court, reports The Guardian.

The crew member spoke of an argument between the ship's master Venancio Salas and Lianto a week prior to the cook's disappearance. The argument was over the captain's order to give the crew less food, a practice he believed enabled the captain to personally take the money saved.

The inquest has previously heard that Salas was selling guns to the crew and had bullied a kitchen hand.

Australian Customs and Border Protection officials raided the *Sage Sagittarius* 13 times in the three years before the deaths occurred. News agency Four Corners has also established that four of the *Sage Sagittarius'* crew, including Salas, had been flagged on a border protection database.

The inquest continues.

Source: [The Maritime Executive](#). Wendy Laursen 2015-06-23

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Brits nabbed for making piracy film in Malacca Straits

The Indonesian Navy handed over Friday evening to the police two Brits and nine Indonesians for re-enacting a piracy scene in the Malacca Straits without proper papers.

The Brits are Neil Bonner, 31, and Becky Prosser, 30, and the locals are Zamira Lubis (their interpreter), Andi Kusnanto, Ahmadi, Marsel Karel, Indratno, Apon Kakahue, Samsul, Diki and Lamusa.

A naval patrol group from Batam Naval Base led by Capt. Rudi Amirudin arrested the team when they were filming around Belakang Padang Island in Batam, Riau Islands. The arrest was made when they were waiting for a vessel that was set to be robbed for the re-enactment on Thursday evening. After initial questioning, the group was handed over to the Batam, Rempang, and Galang (Barelang) City Police on Friday evening.

Prosser refused to give any statement to The Jakarta Post saying she was still waiting for her lawyer. Rudi said the group did not have the proper documents for re-enacting piracy, thus violating laws on immigration and broadcasting. From the group, the navy confiscated four machetes, four masks, one daylight video camera, one evening video camera, one GoPro camera and one digital camera. According to information gathered by the Post, the Brits are from a production house that plans to sell the finished video program to National Geographic. (nvn)

Source: [thejakartapost](#)

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...and another one bites the dust!!!

Adam Ritchie is the new General Manager - Supply of Caltex Australia, he has just advised that Caltex requests that the current crew of the *Alexander Spirit* be replaced by an international crew.

Caltex argue that "following the closure of the BP Bulwer Island Refinery, production from the Caltex Lytton Refinery is now fully placed in the South East Queensland market, and hence there is no longer a need for Caltex to have a dedicated vessel to perform coastal voyages to other ports around Australia.

Caltex has carefully assessed a number of options with regard to the future use of the *Alexander Spirit* for the remaining term of the Charter party, and determined that the most cost effective option is to deploy the *Alexander Spirit* on international routes....with an international crew".

Adam just joined Caltex in April, he is "responsible for ensuring competitive and reliable product supply for Caltex".. According to the Caltex media release, his role "is of particular importance as we continue to transform our supply chain".

Source: [Courtesy of AMOU](#)

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Letter to the editor: Warning sign raised on new maritime technologies

Dear Sir,

I would like to comment on the article *An old lesson* which appeared in *Lloyd's List Australia*, May 28 edition. The article deals with training and development of the future transport sector workforce with an accompanying photo of a young man holding a sextant. Hopefully, many of your readers still know what a sextant is.

While it is no longer of such vital importance as when I first went to sea (in 1969 at the tender age of 16-years old – so yes you can call me a grumpy old sea dog), I would like to highlight the importance of appropriate training in view of the increased use of information and communications technology (ICT) on board vessels and in the transport sector in general.

Many of you might have heard of the Volvo Ocean Race 2014/15 where seven 65ft yachts race around the world. The race is currently in its final stages, but in November last year one of the yachts (Team Vestas Wind) ran aground at night under sail, at a speed of 19 knots, on the Cargados Carajos Archipelago, an island group in the Indian Ocean about 200 nautical miles north-east of Mauritius.

The yacht was wrecked.

These yachts are equipped with the latest technology, including electronic charts, DGPS and satellite communications. However, Team Vestas still managed to run aground on a 190-sq km reef which had been discovered in the 16th century and is clearly marked on all nautical charts.

It turned out that the navigator and the skipper had discussed the shoals earlier, but had not increased the scale of their electronic chart to a size at which they could identify the reef with some very low lying small islands, so assumed they were passing over 20-metre deep water.

Luckily nobody was hurt and no damage to the environment was caused. However, the yacht was almost a write-off, costing millions of dollars to retrieve and repair, not to mention a loss of prestige and sponsorship money.

The above incident demonstrated that even at a very high professional level, it can be dangerous to rely too much on technology. A generous dose of common sense, as well as appropriate training, is invaluable.

Since we are looking into the future towards self-driving cars on our roads and unmanned vessels sailing around the globe, it is important to ensure that these systems are foolproof.

I suppose one could say that it was human error that caused the above incident. If the yacht had been steered solely by a computer it probably would not have happened.

Alternatively, if hard copy nautical charts had been used it also may not have happened.

Many *Lloyd's List Australia* readers would argue that ICT has become so ingrained in our industry and is being used in our daily lives to such an extent that it is only a natural progression to increased reliance on this technology which should enable us to work smarter.



I do agree, but would like to stress that some basic grounding and training in the principles of how our industry works, combined with a good dose of common sense and good people skills, are still important.

Just relying blindly on what is dished up to you from your computer screen or from the voice of the GPS in your car can lead to some serious mishaps.

Peter van Duyn, master mariner and maritime expert from the Institute for Supply Chain and Logistics at Victoria University.

Source: [Lloyd's List Australia](#). [Letters to the Editor](#). Thursday 25th June 2015.

Australia: Choppy Waters: More Changes To the Coastal Shipping Regime in Australia

The Australian Government has announced that a new permit system for coastal shipping will be introduced. The latest round of changes will include the replacement of the tiered licence system with a single permit system, relaxation of importation rules for certain vessels and new maritime labour requirements. This week, Australia's Deputy Prime Minister for Infrastructure and Regional Development, the Hon Warren Truss MP, announced major changes to the coastal shipping regime in Australia. In recognition of the abject failure of The Coastal Trading (Revitalising Australian Shipping Act) 2012 (Cth) as introduced by the previous Labour Government, the legislation will be significantly amended in an effort to encourage and seek to rejuvenate coastal shipping in Australia. The new regime is intended to deregulate the coastal shipping permit system while at the same time preserve the application of Australian labour laws, maritime safety standards and environmental provisions.

Stemming the decline.

The proposed amendments come in response to the dramatic decline in coastal shipping in Australia. As a percentage of overall freight in Australia, coastal shipping has been in decline even though total freight has been increasing. By 2030, Australia's overall freight task is expected to grow by 80%, but coastal shipping was only forecast to increase by 15% on the current model. Currently only 15 Australian trading vessels continue to operate a general licence and only eight operate with a transitional licence. Recognising that Australian maritime exports account for 99% of exports and Australian ports manage more than AUD 400 billion worth of international cargo, the Deputy MP emphasised that "coastal voyages by international and domestic ships should be growing" and the current system, which imposes a number of unnecessary and costly reporting requirements, must be overhauled.

The new system.

Under the new system, the Government will introduce a single permit system for coastal shipping, replacing the existing tiered licence system. A "Coastal Shipping Permit" will provide unrestricted access to coastal shipping for all vessels (Australian and foreign) for up to 12 months. Vessel owners, or those responsible for the "management" of the vessel, will be eligible to apply for a shipping permit for their vessel. Applications must include details evidencing proof of ownership or responsibility, a copy of the vessel's registration certificate and an application fee. Once granted, a permit holder will be allowed to transfer the permit if the ownership or management of the vessel changes during a 12 month permit period. Under the new regime, reporting obligations will be less onerous with only two reports required each year, one after each six month period. There will be no need to seek variations to cargo types, volumes carried, or travel dates anticipated for each voyage. This compares with the current regime which requires owners to apply for a permit for each voyage that is likely to happen, report on what they anticipate doing and then again report on what actually happened. The amendments will also encourage vessels being dry-docked in Australia. Permit holders will not be subject to the importation regime under the Customs Act 1901 (Cth) and will therefore have greater flexibility to undergo maintenance in Australia. Vessels undertaking the movement of liquid fuel products from offshore various installations like FPSOs and FSUs, including from offshore platforms, will also benefit from these changes and will not require importation.

Maritime labour requirements

One of the most controversial elements of the new proposal is the wage arrangements that will apply. Permit holders on vessels undertaking more than 183 days of coastal trading (to be defined) in a permit period will be required to have two senior Australian crew on board and to pay all crew an Australian wage. However, foreign vessels trading less than 183 days, will be subject to existing international on board arrangements. Already this aspect of the proposal has faced criticism from trade unions, who claim that the new regime will discourage shipowners from basing their ships in Australia in order for them to take advantage of lower pay levels and less stringent regulations around working conditions. Despite these objections the Government continues to assert that the amendments will decrease regulatory costs, increase the volume of Australian

coastal shipping, decrease congestion of road and rail infrastructure, and inevitably increase jobs and enhance the competitiveness of the Australian maritime sector.

Next steps

The new Coastal Shipping Bill is expected to be introduced into the Australian Parliament later this year and the Government has stated its commitment to implement the new regime as soon as practicable after the legislation is passed. A transition period is anticipated whereby application for permits can be made prior to the commencement of the permit system and voyages that have already commenced under a licence issued under the current system will continue until the voyage is completed. The Government's initiative is to be applauded but the "devil is in the detail" and it will be necessary to closely review the eventual Bill to ascertain any wider implications, for example, the myriad possible implications to the offshore oil and gas sector. We will continue to closely monitor these positive developments and provide future updates in due course.

Source: Clyde&Co – Shipping Clippings

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ITF urges Australian senate inquiry into FOC shipping and condemns government attacks on cabotage

The **ITF (International Transport Workers' Federation)** is pushing for an Australian senate inquiry into flag of convenience (FOC) shipping following a damning exposé on Australia's Four Corners television programme into three deaths at sea on board the MV *Sage Sagittarius*. (See the TV report here: <http://goo.gl/vzIDBY>)

The call follows the ITF's recent condemnation (see <http://goo.gl/HrKk0P>) of the conservative Australian government's moves to deregulate its shipping industry by the removal of cabotage, or rules which encourage investment in the local industry. It warned that this would weaken labour and safety standards and regulation and threaten thousands of domestic jobs in the maritime sector. Four Corners focused on the deaths of two Filipino nationals – chief cook Cesar Llanto and chief engineer Hector Collado – and Japanese superintendent Kosaku Monji on board the Panama-flagged coal carrier in 2012.

A coroner's inquest into two of the deaths, which began last week in Sydney, heard that guns were being sold on board and that assaults on and intimidation of the crew was widespread. It also heard that the three crew members most likely met with foul play. ITF Australia national co-ordinator Dean Summers, who is a party to the inquest, said: "Four Corners highlighted the high cost of cheap shipping. We need a senate Inquiry to investigate the real dangers of flag of convenience shipping, as it poses a real and serious threat to Australia's national security, environment and fuel security, as well to the lives and welfare of international seafarers. "This is not a new issue. The Australian Parliament investigated the inhumane treatment of international seafarers through the 1992 Ships of Shame report and, unfortunately, it seems little has changed." Arrangements surrounding crimes committed at sea were also investigated by the House of Representatives Standing Committee on Social Policy and Legal Affairs following the death of Diane Brimble in 2002 on board the cruise ship Pacific Sky.

Committee chair George Christenson MP said in a media release on November 27, 2014 that "Committee members are seriously concerned about the substance of the response" from the government.

ITF president Paddy Crumlin said of the attacks on cabotage: "These changes would lead to domestic job losses and a reduction of standards and conditions for workers as Australia actively embraces a race to the bottom on shipping and aviation. They would dismantle a comprehensive reform package delivered by the previous government three years ago that created a level playing field in domestic shipping. "He added: "It seems deputy Prime Minister Warren Truss wants to make ships of shame the new normal rather than the extreme exception. This could spell disaster on a number of fronts – maritime jobs, skills, fuel security, and maritime security – and pose a threat to the environment. There could also be a significant impact on the offshore oil and gas sector, with the result being limited visa regulations and oversight. "We expect the government to

put up legislation before our parliament in the first half of this year and we're gearing up for a fight."

Paddy Crumlin also pointed out that cabotage is a normal way to deliver domestic freight securely, safely and predictably for many maritime nations including the United States, Japan, China, Indonesia and the Philippines. The *Sage Sagittarius* is not an isolated incident. Just last week, it was reported that a seafarer is presumed dead after falling overboard off the coast of Papua New Guinea on 14 May from another coal ship en route to Newcastle, the Korean-flagged K Pride. In addition, the Great Barrier Reef Marine Park Authority said last week it cannot afford to clean up all the toxic mess from the *Shen Neng One*, a Chinese bulk coal carrier which ran aground on the Great Barrier Reef in 2010.

Source: [Shipping Clippings. 4/6/2015](#)

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Professional development examined in The Navigator's ninth issue

The importance of professional development and lifelong learning, whether in a formal training environment or as part of day-to-day tasks at sea, is the subject of the latest edition of the free, award-winning magazine, **The Navigator**, from **The Nautical Institute**.

Articles in the issue include an analysis of The Nautical Institute's own Continuing Professional Development process, a Captain's experiences of lifelong learning and a discussion on the role that professional bodies can play in helping mariners to develop their skills and career opportunities. The popular letters page offers insight into a number of maritime issues from readers of the magazine.

Editor of The Navigator, Emma Ward, said: "We want to get the message across that professional development doesn't just take place in the classroom. There are so many opportunities to increase knowledge and experience. All it takes is a willingness to seek them out and make the most of them for the benefit of the individuals and everyone they work with." David Patraiko, Director of Projects for The Nautical Institute, added: "Things are changing fast. New technology is developed, new ports are visited. Existing skills can fade if not practised regularly. Professional navigators, which we should all be, care about professional development. It gives us pride, keeps us from being criticised and can prevent accidents, save lives and even keep us out of jail."

The Navigator is produced by The Nautical Institute with support from the Royal Institute of Navigation. It is available free in printed format or as a pdf, digital magazine or App on The Nautical Institute website. The Nautical Institute was named winner of the 2015 Seatrade Investment in People Award in May for publishing **The Navigator**.

This award recognised the work undertaken by an army of volunteers who distribute the magazine to SOLAS vessels around the world. These include surveyors, agents, pilots and others visiting vessels, missions, training centres and ship operators. These distributors are professionals who invest their time and effort to advance the professional development of others.

The Navigator Distributor scheme was launched last year with the aim of getting a printed copy of the magazine on to every SOLAS ship. If you want your organisation to take part, visit

<http://www.nautinst.org/thenavigator>

Source: [Shipping Clippings. 4/6/2015](#)

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By guess and by God

Seafarers have throughout the ages been a deeply religious group of adventurers, motivated no doubt by the high mortality rate found at sea. Navigation was for centuries a black art, inspired by experience, a degree of mathematical skill and an unswerving faith in the Supreme Being. In other words the art of determining one's position was frequently achieved more **by guess and by God** than by any other reliable method. [Source: With a Pinch of Salt - Captain Nick Bates.](#)

(Obviously *Team Vestas Wind* in Volvo Ocean Race hadn't heard of this method of navigating!!!)

Book Review

Title: Winning at Sea - The Story of Women in the RAN

Editor: Lieutenant Tony White

Copyright: Department of Defence, Commonwealth of Australia 2013

Publisher: Defence Publishing Services

ISBN: 978-0-9874958-9-1



I bring this unusual book to your notice because it may easily have escaped your attention that so many women share your love of the sea, in a professional sense and not just as cruising retirees.

Publication purposefully coincided with last year's RAN centenary and the Sydney Harbour *International Fleet Review*.

The title has two parts. While the meaning of *Winning at Sea* eludes me a little, the second part *The Story of Women in the RAN* is absolutely apt – the book is exactly that. Similarly, the graphics of the A4 sized cover are arranged in two parts and the meaning of the white part eludes me while the other fascinates me with its visual clarity of purpose. Research shows the 112 page volume comes in vertical and horizontal versions and mine, unlike the one pictured, is the horizontal.

I suppose one would have to expect it of an RAN publication, but this is a very disciplined book. It is formatted as a double-page spread per woman, whether Officer or Sailor, using words and pictures. The words are first person accounts, written almost as *curriculum vitae* or 'how and why I applied for my job and why I love it'; the pictures are uncaptioned, mostly professional photographs of the women at work. I must agree with the Governor-General Quentin Bryce's observation in her Forward that "Each of the stories told here is unique, yet there are common threads – exhilaration, dedication, a hunger for hard work and the rewards it brings."

Of the fifty-two women profiled, you may be pleased to know that the very first is Captain Jenny Daetz who was guest speaker at a CMMA meeting a couple of years ago. At the time of her talk, Jenny was Deputy Hydrographer of Australia, stationed at Hydrographic Office headquarters in Wollongong. Her story in the book tells of joining the Navy at the age of 17 and of becoming the first woman ever to command a Royal Australian Navy ship, HMAS *Shepparton*, in 1997. She says that in the beginning the male "Officers and Sailors were holding tightly onto the mentality that Navy ships were no place for a woman".

However, every page of this book shows that women find ships **are** places they actually love to be. Each of the women tells of the pleasure of her job whether she be navigator, engineer, mechanic, cook or gunner. Each tells of the wonderful feelings of being part of a team on her ship and at sea. They talk of having been trained exactly the same as 'the boys', so they have the same challenges to meet, difficulties to overcome and the same feelings and joy of achievement. Every page also shows men's growing acceptance of women at sea.

As a reader, I found the disciplined style of the book so objective as to disguise the humanity of the experiences, but I guess that's Navy as opposed to the Merchant Navy. I'd like now to read of women in the Merchant Service to see how they are faring, but I was most impressed with the numbers of women in Navy, the variety of jobs they do, the pleasures they take in working as team members or commanding the whole team. As the book's editor, Lieutenant Tony White, claimed, "Women can not only thrive in the Navy, but ... the navy cannot thrive without them". *Winning at Sea -The Story of Women in the RAN* is a book well worth reading.

Reviewer: Elizabeth Sandeman-Gay

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Seasickness – Ginger has been clinically demonstrated to work twice as well as Dramamine for fighting motion sickness.

A glass or two of port and brandy has been known to settle a churning stomach. Whether this actually alleviates the symptoms or just helps take your mind off the malaise is not clear. Wristbands work for some people, while behind the ear patches work for others.

My favourite cure, attributed to Sir Isaac Newton, is to **sit under a tree**. (I understand oak trees are the most effective.) **Source:** [With a Pinch of Salt](#). [Captain Nick Bates](#)

Lloyds List Daily Commercial News Items June 2015

2. 6. 2015 UNESCO has dropped its recommendation to put the Great Barrier Reef on its endangered list on the condition that new and existing port development and dredge dumping is limited, describing the Federal Government's commitment to protecting the GBR by restricting development within existing port zones as "significant progress." UNESCO noted that the outlook for the GBR is 'poor' and recommended that Canberra submit an update on the implementation of a Long Term Sustainability Plan.

The Port of Newcastle has appointed a new CEO, Mr. G. Crowe, formerly the CFO and Company Secretary of Port Waratah Coal Services. The Port of Newcastle holds a 98 year lease from the NSW Government, the shareholders of which are The Infrastructure Fund (managed by Hastings Funds Management) 50% and China Merchants Group 50%.

5. 6. 2015 A desperate hunt for survivors continues on the Yangtze River after a cruise ferry *Eastern Star* capsized on Monday night in what was described as a tornado. The accident occurred in the Jianli section of the river. There were 456 passenger and crew aboard the ferry at the time and so far there are only 14 survivors. Some 200 divers are working at the site and a 500tonne crane has been brought in to try and right the vessel.

The Australian ship vetting group, Rightship, has created a controversial A – G emissions rating system and claims to have 25 cargo owners using the system to reject vessels with the worst energy efficiency. The scheme is based on vessel design and technological data collated by Rightship. Rightship is owned by BHPB, Rio Tinto and Cargill.

An engineer suffered a broken kneecap when a free fall lifeboat in which he was working unexpectedly launched due to the failure of the release mechanism. The vessel was underway at the time in the Indian Ocean, 450 miles from Dampier. The engineer was recovered from the sea, but there was no mention of the lifeboat.

12. 6. 2015 The ACCC has deferred giving its opinion on whether to approve the purchase proposal by Sea Swift to acquire Toll Marine Logistics Australia's Northern Australia shipping assets, which Toll in turn acquired from Perkins Shipping. Both Sea Swift, a Cairns based company, and Toll deliver scheduled marine freight services to the Northern Territory, Far North Queensland and coastal communities in Torres Strait. ACCC has received a large number of submissions expressing concern about the impact of the proposed acquisition of competition and freight services.

A recent spate of orders for Ultra Large container vessels will see the two largest lines leave their rivals behind. A total of 39 ULC vessels of 18,000 – 21,000 were ordered in the first six months of this year. This included Maersk's order, announced last week, for 11 second-generation Triple E Class vessels of 19,630 teu, with an option for 6 more. Its partner in 2M, MSC, has 2, 19,200 teu vessels in service with 18 more on order due for delivery in the next 2 years. The two carriers will have a capacity of 3.3 million teu. The latest orders bring to 88 the total number of vessels of 18,000 teu or more.

17. 6. 2015 Beijing has punished four senior managers of China Shipping and COSCO for violating China's Anti-corruption code. The managers were variously removed from office or received warnings for banqueting, playing golf and shopping using public funds. President Xi Jinping announced the Eight Point Code of Conduct in 2012 to restrict government officials and state owned company leaders from extravagant behaviour.

A Malaysian product tanker *Orkim Harmony* carrying 6,000 tonnes of petrol is missing in the vicinity of Pulau Aur, the same area that a sister vessel was involved in a similar incident and had 770 tonnes of diesel siphoned off by robbers. As of 31st May, there have been a total of 80 incidents, 7 of which involved fuel siphoning.

AMSA's navigation, safety and international General Manager, Brad Grover will take over as Chairman of IMO's Maritime Safety Committee in 2016.

18. 6. 2015 Asciano Ltd, parent of Patricks Stevedores issued a statement that its Automated Port Botany Terminal has been successfully converted to Automated Straddle carrier operation. Asciano has reportedly been in discussions with China Merchants seeking a wider partnership to expand the technology beyond Australia.

22. 6. 2015 In response to the loss of the containership *MOL Comfort*, the International Association of Classification Societies (IACS) has adopted new unified standards to further improve the safety of large container ships. The standards are incorporated in new longitudinal standards for container ships known as Unified Requirement S11A – UR S34. The Rules apply to vessels over 290 metres and cargo hold analyse for ships with lengths greater than 150 Metres.

The Swire group's, China Navigation Company's 218th newbuilding, cargo vessel *Coral Chief* was officially named at Hutchison's SICTL terminal in Port Botany. The vessel is the first of four 22,000 dwt sister ships which have a capacity of 1,617 teu and will be employed in the Company's Australia / PNG service.

Maersk's APM terminal is upgrading its Mobile terminal in anticipation of the opening of the new locks in the Panama Canal. Mobile already handles 8400 teu vessels and when the new locks open next year the Canal will be able to handle vessels with a capacity of 13,000 teu. Alabama State Port authority has begun construction of a new intermodal transfer facility which will connect APM terminal via rail to the SE and Mid-West.

25. 6. 2015 China has extended its scrap-and-build subsidy plan for a further 2 years. The subsidy scheme is split into two stages, 50% on completion of demolition and 50% on ordering new buildings. The scheme is expected to help the faltering shipbuilding industry by encouraging Chinese owners to place orders with domestic yards, but applies only to new vessels registered under the Chinese flag. COSCO is one of biggest beneficiaries having scrapped 56 vessels and ordered 10 container vessels and 40 bulk carriers.

In a letter to the Editor, Greg Cameron claims that a secret government fee on container shipping at Newcastle port is designed to make a container terminal uneconomic. Apparently if container shipments exceed a 'cap' a fee will be collected and paid to the leaseholder of Port Botany as 'compensation'.

Details of the arrangement were kept secret under contractual "commercial in confidence " terms.

26. 6. 2015 The Port of Melbourne Lease Transaction Bill passed through the Victorian Legislative Assembly despite opposition from the Coalition and Greens and will proceed to the Legislative Council. The Coalition is opposed to the Bill in its current form fearing it will create a long term private port monopoly and 'kill off' development of a second container port for 70 years. The Coalition will move for an inquiry in the Council.

30. 6. 2015 Greek shipowners have a Plan B in the event that Greece exits the European Union. Shipping is to some extent insulated from the crisis as it is a dollar industry, with both income and expenditure in US Dollars and Owners keep the majority of their cash outside Greece.

Captain John Foley, Master Mariner and Great Barrier Reef pilot has died. Foley joined the pilot service in 1975 and made 1500 passages over the next 40 years. He was a Fellow of the Royal Historical Society of Queensland and wrote extensively on Queensland maritime history.

Marine Executive

14. 6. 2015 In a demonstration of Timor L'Este's progress to nationhood, P&O Cruises *Pacific Jewel* made the first call of a cruise ship to Dili, with 2,000 passengers going ashore. The vessel was returning from drydock and a major refurbishment in Singapore and used the call at Dili to test the port's capacity to host a cruise ship visit. A second call by *Pacific Eden* is scheduled for September, 2016.

Cargo News

5. 6. 2015 HHL Hamburg has ordered three monster container cranes from China's ZPMC for the Burchardkai container terminal. The new cranes will be capable of handling 20,000 teu

vessels and will have an outreach of 74 m to handle 24 wide deck stows. The cranes will weigh 2,400 tonnes and have a SWL of 110 t and will be equipped to handle 2 x 40' or 4 x 20' containers in a single lift. The means by which this will be achieved has not been released.

Oslo police have arrested 12 dockworkers who were picketing the use of contract labour by the Turkish port operator, Yilport. Yilport signed a contract last October to operate the Sjursoya terminal and has been trying to change work practices, including the long-standing custom of meal breaks every 4 hours. Yilport has refused to sign an agreement with the Norwegian Transport Workers Union and has brought in contract labour as well as sacking 76 union workers.

6. 6. 2015 A Container Supply Chain Conference in Rotterdam has heard that there is reluctance for container ships to increase beyond 22,000 teu, for while big ships contribute enormously to cost savings at sea for ocean carriers, port infrastructure upgrades push up the costs for everyone else. While there are no technical constraints in building ships up to 28,000 teu (430-450 m in length, rather than 400m currently), these big ships call for terminal operators to 6,500 moves per day, if vessels are not to spend excessive time in port. To achieve this berth and crane productivity levels need to progress, whilst gantry crane technology has changed little since the 1950's.

23. 6. 2015 Strikes and protests by ferry workers have led to chaos on both sides of the Channel as Dover and Eurotunnel services were suspended due to workers blockading the port of Calais and the Eurotunnel rail terminal. The disruption has caused massive tailbacks on both sides of the Channel and has re-ignited a political row between the UK and France over illegal immigrants.

30. 6. 2015 June has been an important month in the Panama Canal expansion project, with the filling of the locks on the Atlantic side and testing of the rolling gates. A similar test was carried out a week earlier on the Pacific side.

A report from the Shanghai International Shipping Centre suggests that the golden age of the Port of Hong Kong may be history. The trend for larger ships has seen trade transferred to the deep water ports of Shanghai, Ningbo and Shenzhen and transshipment of cargo from North Asia has shrunk. Larger ships have been a burden on Hong Kong, creating berth shortages due to limited land and structural problems. [Source: Loyd's List DCN compiled by Capt. Ted Wilson.](#)

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Cabotage Unraveled – Striking Tanker Crew Gains Support in Australia



Part of the *Alexander Spirit* crew lead the rally in Devonport, Tasmania, July 6, 2015. Photo: Maritime Union of Australia

The Bahamas-flagged *Alexander Spirit* began a 10-year time-charter with the Australian oil company Caltex in 2009 and was previously used on a domestic route shipping fuel from Caltex's Lytton refinery to ports along Australia's east coast. However, in a July 3rd statement the oil company said that the closure of BP's Bulwer Island refinery has forced the oil company make changes to its Queensland fuel supply chain – putting the Teekay Shipping Australia-operated tanker and its 36 crew members out of work.



In the statement announcing the changes, Caltex said that “*Alexander Spirit* will be redeployed to the international fuel supply chain, spending most of its time in international waters competing against every other ship importing fuel into Australia.”

“As an Australian company competing against multinational fuel suppliers, Caltex needs to ensure the ship’s operational arrangements, including crewing, are aligned with industry so it is not at a competitive disadvantage,” the statement added. On Monday, union members, local and high profile supporters, and even members of *Alexander Spirit*

hit the streets of Devonport for the rally organized by the Maritime Union of Australia (MUA).

In a statement posted to the union’s website on Monday, MUA Assistant National Secretary Ian Bray, who last week blamed Caltex’s decision on the Australian Government’s intention to unravel the country’s cabotage laws, said that Caltex was misleading the Australian public by insisting that there was not enough trade to sustain the Australian-crewed *Alexander Spirit*.

“I would love for Caltex to explain why the Liberian-flagged *Stolt Kikyo* is alongside in Geelong and what trip Caltex has planned for that vessel they have brought in to replace the *Alexander Spirit*,” he said.

“Why haven’t the soon-to-be redundant crew from the *Alexander Spirit* crew been offered replacement jobs on the vessel?”

“Why is the Government allowing Caltex to run roughshod over the intent of Cabotage laws by allowing this replacement vessel to do what was, up until today, the *Alexander Spirit* run?”

“So many unanswered questions and I think the crew has a right to know why they have been cast aside in the worst way possible,” Bray added.

Australian Council of Trade Unions (ACTU) President Ged Kearney joined the rally and also condemned the actions of the liberal Government under Prime Minister Tony Abbott.

“The fact the Abbott Government is intent on passing legislation that they know will have an impact on local jobs shows how little regard they have for Australian workers,” Ms. Kearney said.

“The seafarers aboard the *Alexander Spirit* are the latest in the litany of workers being thrown on the scrapheap as a result of bad Government decisions,” she said.

In May, the Australian Government announced its new plan for coastal shipping, which included changes that would dismantle a comprehensive reform package delivered by the previous government in 2012, known as the Coastal Trading (Revitalising Australian Shipping Act) 2012, which created a level playing field for Australia’s domestic shipping and protects local Australian ships and crews from foreign Flags of Convenience (FOC).

Independent Tasmanian Senator Jacqui Lambie was also present at Monday’s rally and was given an opportunity to talk to the crew.

“If we’re going to act in our Nation’s best interest and guarantee Australian jobs and the skills base for our entire Maritime industry – it might be time to follow the example of the (others) and put in place policy measures which restrict coastal trade to Australian built, owned, crewed and flagged vessels,” Lambie said in a previous statement.

“If we follow the Liberal / National’s plan and abandon our Maritime industry solely to a free, liberalized market – and the influence of multinational corporations’ insatiable need for bigger profits – then Australia will place our food, fuel, energy and national security in the hands of foreigners.”

On Sunday, Tasmanian Labor Leader Bryan Green threw his support behind the crew members of the *Alexander Spirit* and also questioned the motives of Caltex for the move.

“Tony Abbott appears hell bent on unraveling cabotage arrangements which ensure Australian seafarers are employed on Coastal shipping routes,” Green said. “It won’t just be the 36 men and women aboard the *Alexander Spirit* who lose their jobs, if the Abbott Government gets its way and is able to completely dismantle the Coastal Trading Act, the jobs of all workers on Australian ships will be under threat.”

For now, the *Alexander Spirit* remains in Devonport.

Source: [gCaptain. July 6, 2015 by Mike Schuler](#)

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25th June 2015 – Day of the Seafarer



As has become the case for most of years since its inception in 2011, the Day of The Seafarer did not appear to be anything very different from other days in Sydney, until I received an invitation from Ms Holly Rankin-Smith to attend the Day of The Seafarer function at the MUA (Maritime Union of Australia) offices in Sussex Street, Sydney.

The IMO (International Maritime Organisation) had invited BIGhART’s Blue Angel project to make a film that celebrates Australian Seafarers, and this was produced by Holly, and was going to be shown at the MUA’s Day of The Seafarer which commenced at 1400hrs on 25th June 2015.

Capt. Steve Herklots and Hon. Editor, together with wives Janice and Elizabeth, attended the MUA offices the above time and date. We were soon joined by Geoff Walls, President of the Merchant Navy Association, and his wife Mai, and also David Field of the CMMA Sydney. Holly was there and introduced us to her colleague Cecily from BIGhART. An extremely pleasant and informative afternoon was enjoyed by all.

We were entertained with Holly’s film of Australian seafarers, another video created by the MUA Youth Group, a talk by the MUA member who attended both the *Sage Sagittarius* (the ‘Death Ship’!) in Newcastle and the subsequent investigation in Canberra.

Other speakers followed and there was also a display by an artist of his paintings of various Australian seafarers featured in Holly’s film. At the end of the talks we were all invited to an extensive array of finger food and ample quantities of beer, wine and soft drinks and time to appreciate the paintings of the Australian seafarers, to end a very pleasant occasion.

The direct link to the film is: <https://vimeo.com/131383007>, but you could view it from the official IMO event page which is: <https://www.youtube.com/user/IMOHQ>

For more information on the Blue Angel project and their work with seafarers around the world, check out - <http://blueangel.bighart.org>

The following photos taken of the Day of The Seafarer at the MUA Offices in Sydney are courtesy of Alex Madden.



The above photos are of the speakers, audience, Ms Cecily Hardy and Ms Holly Rankin-Smith of the BIGaRT Blue Angel Project with Capt. Steve Herklots in right background and two of artist with seafarer model and portrait – including Ms Holly Rankin-Smith in one.

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Leatherback sea turtle

The world's largest turtle



The leatherback sea turtle (*Dermochelys coriacea*) is, as its name implies, the only sea turtle without a bony shell. Rather, the carapace is covered by skin and flesh. It is also the largest of the various sea turtles, having an average carapace length of five feet, an overall length of seven feet, and a weight in excess of 1,200 pounds. The front limbs can be up to eight feet in length and can propel the animal at speeds of up to 20 miles per hour.

The leatherback has an estimated lifespan of 50 years, but much remains to be learned about the species. After birth, the male spends its entire life at sea and the female only returns to land to lay its eggs. Eggs are laid in clutches of up to one hundred on sandy beaches fronting on open water and with dark backgrounds. Eggs hatch in 60-70 days, with the hatchlings digging to the surface and then crawling to sea. Eggs are eaten by a number of natural and human predators. The hatchlings are subject to attack by seabirds on the beach and by squid, shark, and large fish at sea.

Adult leatherbacks have few natural predators. They feed almost exclusively on jellyfish and follow populations as they move up and down daily in the water column and as they move laterally with the current. While nesting is mostly in tropical areas, adults can be found in all ocean waters from the southern portion of the Arctic Ocean to the Cape of Good Hope and waters off New Zealand. Three subspecies have been tentatively identified. The Atlantic subspecies can be found in waters of the Atlantic Ocean from north of Norway in the northeast to Labrador in the northwest to south of South Africa in the southeast to Argentina in the southwest. The northern Pacific subspecies ranges from Indonesia and China to the west coast of North America as far south as California. The southern Pacific subspecies is found primarily in waters of the eastern Pacific Ocean from Mexico south to Chile. Leatherbacks are also found in the northern portion of the Indian Ocean, but it is unclear if this constitutes a separate subspecies or an extended range of the northern Pacific group.

This magnificent animal faces two primary threats from humans. The first is habitat loss. The second is pollution, principally plastic pollution. Plastic bags in the ocean resemble jellyfish. Following ingestion, the plastic can block the digestive tract. The species is rated as vulnerable.

Source: [Maritime Musings](#). Dennis Bryant. July 14th, 2015