

Melbourne Branch

The Log
The Monthly Newsletter of the Melbourne Branch of
The Company of Master Mariners of Australia Limited

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NEXT MEETING

Mail Exchange Hotel

Thurs 25th March 2021 @ 1800 hrs

Speaker Dr. Jackie Watts

Melbourne Maritime Heritage Network

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From the Branch Master

At the end of February the Federal Court held a meeting to make arrangements for the Federal AGM. The original intention was to hold the meeting in Melbourne but the Directors had no confidence in the way the Victorian Government handles outbreaks of COVID-19 so it was decided to hold the AGM in Sydney on 17th April. Amongst the matters to be discussed at the AGM are proposed changes to our constitution. At this stage we are asking for members thoughts on the proposals. The most contentious matters are the proposed change to the definition of “Retired Member” and the expulsion of members for failing to pay membership fees or for other reasons.

This year Melbourne Branch has 39 retired members and 50 ordinary/associate members. Fees are Retired \$55 and others \$115. If the proposed changes were adopted we would have 57 retired members and only 32 ordinary/associate members. To make up for the shortfall in revenue the retired fee would have to increase to \$74. Alternatively we could charge everybody the same at \$89.

The reason given for the proposed change suggests that the full fee is a burden on members once they leave the workforce. Is that True? The full fee this year of \$115 is the equivalent of 2 cups of coffee a month.

Twice in recent years we have been threatened with legal action over our attempts to expel members. We certainly need enforceable rules but to draft them I think we need the assistance of someone with expertise in these matters.

Your thoughts on the proposed amendments will add to the discussion at the AGM. Latter in the year members will get to vote on the proposals.

We are looking for nominations for the Outstanding Achievement award. The award which will be decided at the AGM is open to anyone for outstanding achievement in any section of the shipping industry.

This months’ meeting is the Branch AGM and it is not too late to nominate for a position on the Branch Court.

Decarbonisation in the Shipping Industry

Decarbonisation is the reduction of carbon dioxide emissions produced by burning fossil fuels with the long term goal to achieve carbon neutrality which was the level of CO₂ in the atmosphere prior to human intervention.

International shipping transports about 90% of global trade and to do this it uses 4 million barrels of oil a day which is about 4% of global oil production.

The shipping industry is under increasing pressure to decarbonise its operations and reduce its greenhouse gas emissions and play its part in limiting global warming as set out in the Paris Agreement.

In April 2018 the IMO voluntarily adopted an initial strategy to reduce greenhouse gas emissions from ships. The aim is to reduce the carbon intensity (CO₂ per tonne-mile) of international shipping compared to 2008 levels by 40% by 2030 and to increase that reduction to 70% by 2050 and to reduce greenhouse gas emissions compared to 2008 levels by at least 50% by 2050 and zero emissions by 2100.

The initial strategy will be revised in 2023 and reviewed again every 5 years thereafter. There are currently only two mandatory requirements which both come under MARPOL Annex V1 Regulations on Energy Efficiency for Ships.

Existing ships are required to have a Ship Energy Efficiency Management Plan (SEEMP) for improving the ships energy efficiency by operational means. This may include matters such as the frequency of propeller polishing, dry docking schedule, optimising vessels speed and weather routing and adopting new technology and practices at every stage of the operation of the vessel.

New ships must comply with the Energy Efficiency Design Index (EEDI) which sets minimum energy efficiency improvements for ships based on average efficiency of ships built between 2000 and 2010.

It means that ships built in 2025 will be required to be 30% more carbon efficient than those built in 2000-2010.

These measures should be enough to reach the 2030 goals but more stringent measures will be required to meet the 2050 requirements.

Carbon neutral fuel will be required in the future and research and development work has started on the manufacture, storage and use of a number of potential zero carbon marine fuels.

Until these fuels are developed LNG is the current bridging fuel. It is readily available and gives a 21% carbon reduction over oil based marine fuels. 13% of the current new build order book are LNG fuelled vessels. The introduction of bio LNG and possibly synthetic LNG will decarbonise shipping to achieve IMO's 2050 targets.

Bio LNG is produced from waste and agricultural and forestry residues and does not compete with other agricultural products or contribute to deforestation. Because it is chemically the same as fossil LNG it can use the same engines, storage systems and bunkering infrastructure and so offers a future proof investment for ship owners.

Another fuel available in limited quantities is biofuel which is made from waste and other materials such as used cooking oils and can be used with existing propulsion systems. Its disadvantages are a 10% higher fuel consumption due to its lower calorific value and higher nitrogen oxide emissions. Biofuels are considered to be carbon neutral because the CO₂ that is absorbed by the source of the biomass is equal to the CO₂ released when the fuel is burned. MSC has begun trials of biofuels and Volkswagen and BMW announced that car carriers transporting their vehicles would start using biofuels.

LPG is another fuel that is clean, energy efficient and affordable. It provides about 17% greenhouse gas savings and is easier to handle than LNG.

Other fuels that will become available in the future are ammonia and hydrogen but they require development of their production and storage.

In 2019 the UK Government launched Maritime 2050 which is a long term strategy for Britain's Maritime Sector. Maritime 2050 will enhance UK's strength on maritime innovation and low carbon technologies and include plans for the transition to zero emissions shipping.

All new ships from 2025 will be designed with zero emission capable technology.

Under the "Clean Maritime Plan" the aim is to achieve zero emissions by 2050 which is a much higher standard than the IMO target of 50% reduction by 2050.

In Europe many critics believe the IMO Initial Strategy 2018 is a step in the right direction but it lags far behind the target for greenhouse gas neutrality by 2050 promoted under the Paris Agreement.

Some point out that given its size and procedures the IMO is simply too slow to react and that regulations will take considerable time to be agreed upon and implemented. A survey by Lloyds found that mandatory regulations constitute the single biggest incentive causing owners and operators to begin, accelerate and intensify decarbonisation activities.

With an estimated cost of US\$ 1.65 trillion by 2050 and with many issues still to be resolved decarbonisation is the shipping industry's greatest challenge.

Membership Applications

The following applications for membership have been received

Leon GILBY Ordinary Melbourne Branch
Leon is a Marine Surveyor/Auditor with Maritime Survey Australia

Leonard FERNANDO Ordinary Melbourne Branch
Leonard is Master with Toll Shipping

ns “SAVANNAH”



The US Maritime Administration (MARAD) is seeking public input on the future of the worlds' first nuclear powered merchant ship.

ns “Savannah” was built to a modified C-3 cargo ship design and had accommodation for 60 passengers and 109 crew. The ship was launched in 1959 and was fuelled for the first time in November 1960. In April 1962 the reactor was taken up to full power and a speed of 23 kts was recorded.

The next two years were spent on demonstration voyages and visiting ports in the USA and Europe. Savannah entered commercial service in 1965 but was not a success because she was built as a demonstration ship and to an outdated design. She was withdrawn from service in 1970 and the nuclear core was removed from the reactor. She became a tourist attraction in her namesake city and later went into the US Reserve Fleet

MARAD is currently removing the remaining parts of Savannah’s nuclear power plant and is considering a number of options for the ship’s future. Suggestions include conversion into a museum ship, donating the ship to a state maritime academy for training purposes, dismantling the ship or scuttling it as an artificial reef.

News Items

TAFE Queensland to Train Patrol Boat Crews

The Government contract worth \$36 Million to train crews for the Guardian Class Patrol Boats as part of the Pacific Maritime Security Program has been won by TAFE Queensland. The Patrol Boat training program had been delivered by the Australian Maritime College since 1992 but TAFE Queensland's modern and innovative training approach and because Cairns is closer to where the boats will operate made it the preferred choice. Australia will replace the existing Pacific Class Patrol Boats which are operated by 12 Pacific Islands Nations and Timor-Leste with 21 of the new Guardian Class.

Fined for dumping garbage in Great Barrier Reef Marine Park

The Chief Officer and operators of the bulk carrier "Iron Gate" were fined a total of \$6,600 for dumping the equivalent of a 120 litre garbage bin of food waste into the sea within the Great Barrier Reef Marine Park.

The Brisbane Magistrates Court convicted them under the Protection of the Sea (Prevention of Pollution from Ships) Act 1983 which prohibits the discharge of food waste within 12 miles of the seaward boundary of the Marine Park.

World Record Charter Rate

BP has chartered the ship LNG Abalamabie for US\$ 350,000 per day making it the most expensive cargo ship charter in history, surpassing the \$300,000 per day previous record for a very large crude carrier (VLCC). The cost of LNG in Asia is so much higher than the cost in the US that massive profits can be made by transporting LNG from the Atlantic to the Pacific Basin. Commentators say there is plenty of room for rates to rise and for shippers and traders to still profit on the cargo move. The cause of the high rates is supply and demand. There are not enough LNG ships to handle the demand.