

## HMNZS NGAPONA ASSOCIATION INC

### LONGCAST

18 December 20 - Ngapona Assn Lunch at Orakei RSA

20 December 20 - HMS Neptune Commemoration Service, St Christopher's Chapel, DNB

15 January 21 - Ngapona Assn Lunch at Swanson RSA

1 February 21 – Auckland Anniversary Day

8 February 21 – Waitangi Day

12 February 21 - Navy Club Lunch – Remuera Club

19 February 21 - Ngapona Assn Lunch at Titirangi RSA

Hi Folks

#### **PRESIDENT'S MESSAGE**

Greetings All

I would like to take this opportunity to wish all our members and friends best wishes and good health for the festive season.

I know 2020 has been a tough year for many of us and we can only hope that 2021 will be far better.

Looking on the positive side, the Ngapona Assn has continued to flourish over the last twelve months in spite of the difficult times. Our monthly lunches have continued throughout the year, with three having to be cancelled. We were particularly disappointed to have to cancel the lunch in Tauranga which was well attended last year. These gatherings ensure there is an on-going interaction between members. Fortunately, Covid-19 did not affect the weekly newsletters which are our main means of communication. Items from members to be included in the newsletter are always welcome. Our AGM, held at Birkenhead RSA was particularly well attended and we auctioned books donated by the family of the late Jim Paltridge which raised over \$300. We lost two other members during the year, Jill Thompson and Richard Simpson.

With the help of technology your committee held their normal meetings via Zoom and I would like to thank them for their input during the year.

I would like to wish all our members and friends a very happy Christmas and hope that the next year is considerably better than the last.

Jerry Payne

President

HMNZS Ngapona Assn

**WE CAN SNEEK A COUPLE MORE IN!**

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## **LAST CALL**

### **HMNZS NGAPONA ASSN – XMAS LUNCH**

Our final lunch for the year is at the Orakei RSA on 18 December. Mark this in your diary now. The Xmas lunch is one of the highlights of the year. The Orakei RSA has new caterers and the meal will again be served by Navy Cadets from TS Achilles. There will be a door prize and of course 'Up Spirits'.

The cost will be \$25.00 per head, to be paid to the RSA on the day.

There are a few places left but filling fast. We need to know numbers for catering. Please advise

We require an indication of numbers for the caterer and also any special dietary requirements. **Please reply to this email if you intend joining us. Please do it now!**

PS – Those travelling from the north should be aware that some roads at the bottom of town will be closed from 15 to 20 Dec due to the America's cup racing. Suggest you take the Greenlane exit to avoid delays.

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### **NEW MEMBER**

A warm welcome to our latest new member, Chris (Jacko) Jackson. Welcome aboard Jacko.

### **ADDITION TO THE LAST NEWSLETTER**

Taupo was the last vessel to open fire in support of operations when in 1977 she was involved in the arrest of the fishing vessel Kin Nan off the Taranaki coast. This incident triggered a whole new rewrite of RoEs for naval vessels. The CO was Sandy Herlihy.

Thanks to Mike Franklin for the up-date.

### **HMNZS AOTEAROA AT MARSDEN POINT**

HMNZS *Aotearoa* calls in at Marsden Point for her first ever fuel embarkation, filling her cargo tanks (8,200 tonnes) and her own bunker tanks (1,500 tonnes), totalling over 11.5 million litres of fuel (9,700 tonnes). Did you know? A full load of *Aotearoa's* marine and aviation cargo fuel can fill HMNZS *Te Kaha* 17 times from empty and a Seasprite helicopter 1,180 times from empty.



The Royal NZ Navy's new Replenishment Tanker HMNZS *Aotearoa* A11 delivered by Hyundai this year on her first call to Marsden Point Refinery to uplift 10000 tonne of diesel fuel . Ship is ice classed to enable her to carry out Antarctic fuel deliveries to McMurdo Station. Photo : Bryan Shankland ©

### **'SPARKY' IS LAUNCHED**

On 4th December, at Song Cam Shipyard in Vietnam, the world's first fully-electric ship-handling tug of 70 tonnes bollard pull – the Damen RSD-E Tug 2513 – was launched into the water. Damen is building the vessel to support its customer, New Zealand's Ports of Auckland, in achieving its ambitious sustainability targets. The RSD-E Tug 2513 takes an already efficient design and optimises it for maximum maritime sustainability. Ports of Auckland has the goal of being a zero emissions organisation by 2040. With this in mind, the organisation approached Damen with the question – was a fully-electric, zero emissions tug a possibility? Damen, with its own goal to become the world's most sustainable shipbuilder, was keen to take up the challenge. With Ports of Auckland already operating a Damen ASD Tug 2411, the shipbuilder was able to assess the potential for a fully electric tug. The idea proved not only to be possible, but economically viable.

Sjoerd de Bruin, Damen sales manager Asia Pacific, said "With 40% of New Zealand's energy being generated from sustainable sources – including 80% of electricity – Sparky offers the chance to complete the sustainable circle in Ports of Auckland's tug operation. "Since receiving the order for this historic vessel, we have been working towards this moment – the introduction of the first fully-electric tug of this capability to the water. We are looking forward to continuing in our task and completing the vessel in the coming months." The next stages of construction will see Damen install the vessel's innovative hardware. The RSD-E Tug 2513 is scheduled to be delivered to Ports of Auckland at the end of 2021. Following a naming competition, Ports of Auckland is planning to name the vessel 'Sparky'.



## DO YOU KNOW?

What all these different units of measurement mean?

- + Displacement Tonnage
- + Standard Displacement Tonnage
- + Deadweight Tonnage
- + Lightweight Tonnage
- + Gross Tonnage
- + Net Tonnage

### 1) Displacement Tonnage:



Displacement tonnage is nothing more than the total weight of the volume of water a ship "displaces" when it is sitting in the water.

### 2) Standard Displacement Tonnage:



Standard displacement tonnage = “displacement tonnage” – ( the weight of any fuel and potable water carried on board the ship )

### 3) Deadweight Tonnage:



Deadweight tonnage is the weight (in tons) of all the cargo, fuel, dry provisions, supplies, etc. carried on board the ship.

In other words:

Deadweight = “displacement tonnage” – “lightweight tonnage”

Deadweight tonnage is a good indication for ship owners and clients of how much revenue the vessel is capable of generating.

### 4) Lightweight Tonnage:



Lightweight tonnage is best described as the weight of the ship when it was built in the shipyard including all framing, machinery, decking, etc.

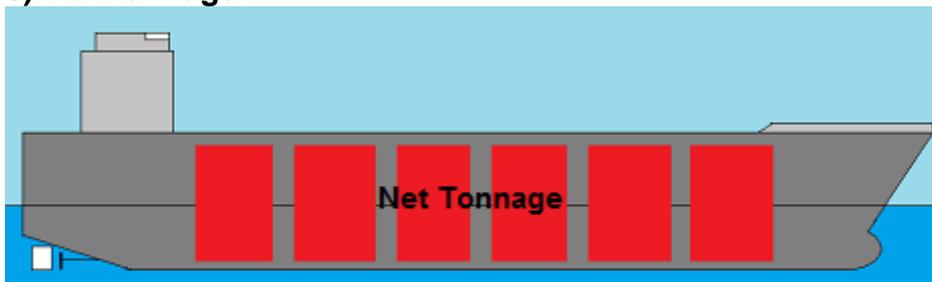
However, lightweight tonnage does not include the weight of any consumable such as fuel, water, oil, or supplies.

### 5) Gross Tonnage:



Gross Tonnage is a measure of the ships total interior volume and is calculated by multiplying the interior volume “V” of the ship in cubic meters by a variable known as “K” (which varies depending on the ships overall volume).

### 6) Net Tonnage:



Similar to Gross Tonnage, Net Tonnage is a measure of the total **interior volume** of a ship's cargo spaces and is calculated in much the same way. The total volume of designated cargo spaces in cubic meters is then multiplied by myriad factors resulting in an official net tonnage value. The actual calculation of Net Tonnage is one of the more complicated tonnages to calculate and beyond the scope of this article but takes into account factors such as moulded draft and the number of passengers a vessel is rated to carry.

### **SHIP OF THE WEEK – HMNZS TAUPO 2008**

Conceived as part of Project Protector, the Ministry of Defence acquisition project to acquire one multi-role vessel, two offshore and four inshore patrol vessels. The Project Protector vessels were to be operated by the RNZN to conduct tasks for and with the New Zealand Customs Service, the Department of Conservation, Ministry of Foreign Affairs and Trade, Ministry of Fisheries, Maritime New Zealand, and New Zealand Police. Duties include maritime surveillance and boarding, support to civilian agencies such as the customs service and search and rescue duties.

The ships were built in Whangarei by BAE Systems Australia (formerly Tenix Shipbuilding), and are based on a modified search and rescue vessel for the Philippine Coast Guard, with a different superstructure design. The cost for the four vessels was planned to be NZ\$100 million. Friction stir welding was used in the construction of the superstructure, and Donovan Group being the first New Zealand company to use the technique, which is credited as having won them the contract for this part of the vessel's construction.

#### **Capabilities and features:**

The IPVs are normally used for inshore tasks within 24 nautical miles (44 km; 28 mi) of the coastline. However, they will have operational ranges of 3,000 nautical miles (5,600 km; 3,500 mi). Together with their improved speed, this will be sufficient to intercept, for example, large off-shore fishing trawlers working illegally in New Zealand waters. Each vessel was intended to achieve 290 available patrol days per year.

The ships were intended to have the ability to patrol (including receiving vertical replenishment) in up to sea state 5 (seas rough, waves 2.5-4 m (8.2-13.1 ft)) and have the ability to survive in conditions of up to sea state 8 (seas very high, waves 9-14 m (30-46 ft)). However, boat deployment and recovery will be limited to sea state 4 (seas moderate, waves 1.25-2.5 m (4.1-8.2 ft)). These parameters are much more capable than the Moa class which they replace. The shipbuilder claims "the vessel is more than capable of extending the Crown's operational envelope to southern ocean patrol duties".

The patrol boats have seen only limited service. Since 2012 the RNZN has only been able to crew two of the ships. In April 2016 it was reported that Pukaki and Taupo had not put to sea since 2012 and late 2013 respectively, and the RNZN's website did not identify any activities conducted by Rotoiti since July 2012.

The IPVs' have fully automated control and navigations system, powerful engines, modern communications and surveillance systems, active stabilisers and comfortable accommodation. Using their two RHIBs (Rigid Hull Inflatable Boats) the IPVs can undertake boarding operations, surveillance and transport personnel. The RHIBs are launched using two automatic davits near the stern of the vessels. The ships are highly manoeuvrable and capable of speeds up to 25 knots (46 kilometres per hour).

The IPVs' have a complement of 24 naval personnel and four Government agency officers. They also have the capacity to host 10 additional personnel on board for general naval training or other duties.

