TugeZine

all about tugs

ITS ...
New ...
Green ...

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Front page
In Canada the new environmentally friendly fleet of escort and ship-handling tugs (HAISEA WAMIS seen here) ordered from Turkey is now complete. Tug designs took into consideration the operating windows, the surrounding environment, fuel availability and history
photo: courtesy Robert Allan

ITS 2024 (2)

Of lately we see an increasing amount of investment in all kind of green techniques. Make no mistake – exploring the possibilities is a good thing – especially when some of the 'inventions' really do what they are supposed to do. Nevertheless you can be opposed to something while at the same time you know that the existing methods have a limited future. A problem I have in general, however, is that – especially from government bodies - exaggeration and half-truths are painting an unrealistic picture.

In the Netherlands a lot of experimentation is ongoing with remote controlled or even unmanned sailing. True, not one such vessel actually sails unmanned at the time but the intention is there. The latest announcement involves a number of commercial (inland waters) vessels that will actually be operationally run from shore – although the vessels are still manned – but the vessels involved will not be recognisable as such in order to imitate reality.

One wonders whether introduction of AI into navigation applications will not ultimately become a threat to safe navigation unless it is limited to serve warnings to the people in control of a vessel. What comes to mind is the past cases of crewmembers being killed when the single night watchman fell asleep with the controls set to automatic (will the last remaining crewmembers become slack out of sheer boredom) or when the survey vessel I was on ran a pre-set automated track and suddenly turned toward an oncoming inland waterways cruise ship. We were fully manned and quick thinking by the Master had both engines on full astern at the same time dropping both anchors. But what if there had no-one been sitting at the controls or had not had been constantly aware of the surroundings?

I am sure these kind of questions will come up at ITS 2024. I am keen to learn the answers!

Job van Eijk (editor)

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Dubai Tugs

SHADEED is one of a series of standard tugs built by the now defunct Bodewes yard at Millingen aan de Rijn, The Netherlands. SHADEED is one of the last being delivered in 1987. Still active in Dubai albeit these days in the colours of P&O Maritime Logistics. Dimensions are 28,5 x 5,8 x 3,3 m. Twin Caterpillar 3516-TA main engines totalling 3.142 bhp. 36 tbp

photo: G. Fiebiger via Hans Hoffmann

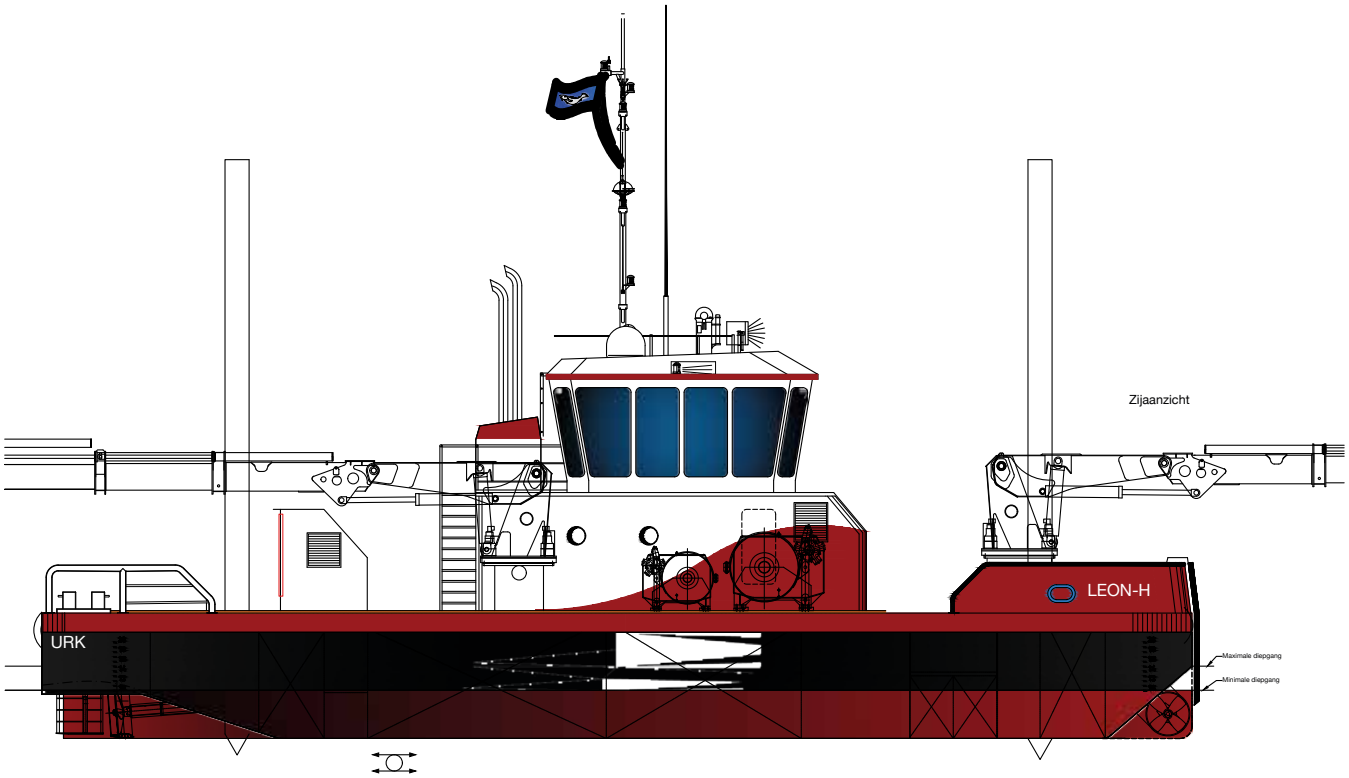
AL MUTWAKAL 1 (38 tbp) is one of a series of four built by Dubai Drydocks for account of Dubai Ports Authority. This tug was delivered in July, 1999. Sistership AL WASL was delivered in October, 1997, MIHAIZ in June, 1988 and RAHEEB I in November 2000 *photo: G. Fiebiger via Hans Hoffmann*

RAHEEB I is a sister to AL MUTWAKAL. These tugs are fitted with two Wärtsilä 9L20 main engines. Bollard pull is 50 tonnes. P&O Logistics has since taken over the management of the tugs for account of Dubai ports Authority. Dimensions: 30,0 x 10,0 x 3,8 m. Main engines 2x Nohab 6R25. Schottel azimuthing thrusters. 42 tbp

photo: G. Fiebiger via Hans Hoffmann

BASSI - seen here in Dubai in 2002 - was one of large fleet of tugs operated by Abu Dhabi Petroleum Ports Operating Co (ADPPOC). The 1982-built 512 GT tug was sold in 2016 but is still active in the Gulf area as ALSADIQ 7 for Iktra Shipping and Sea Transport LLC. 3.400 bhp. 43 tbp

photo: Roger Hurcombe via Hans Hoffmann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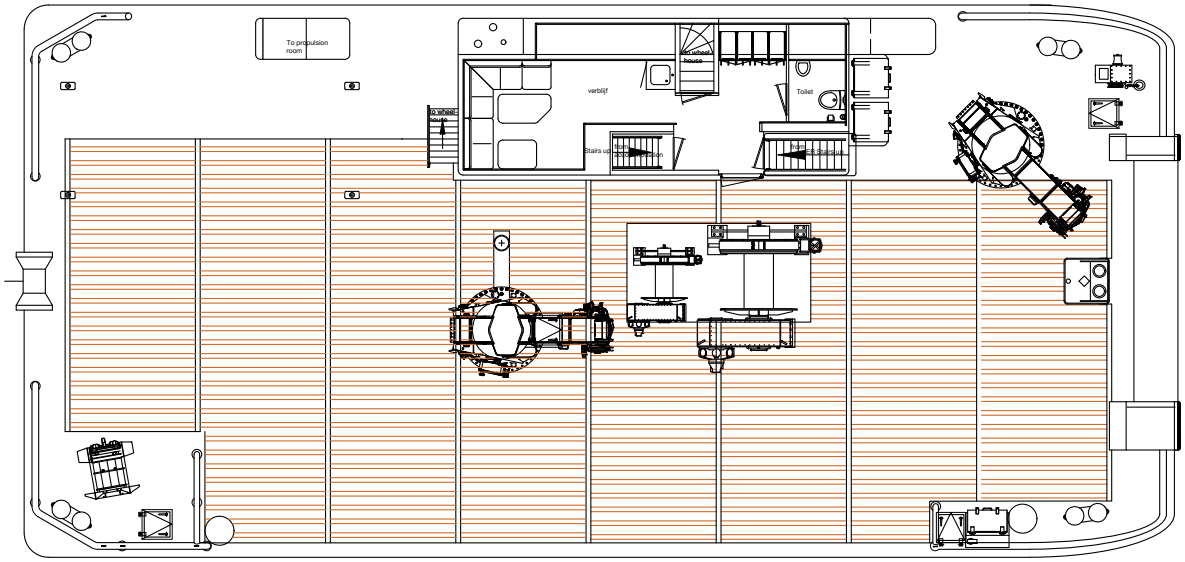
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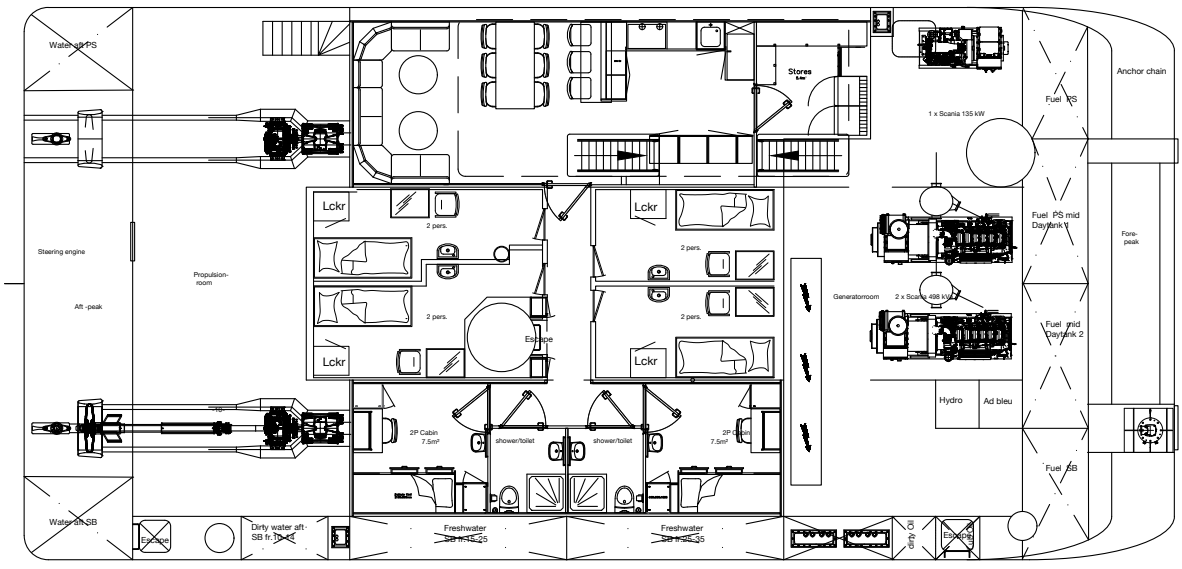
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“Leon-H”- all-electric workboat

Recently Werft Shipyard, Urk, The Netherlands, delivered the hybrid / all-electric workboat “Leon-H” to its owners, TB Workboats – a subsidiary of TB Waterwerk - also based at Urk. The design is typified as Werft Hybrid Cat 2411e.

by Job van Eijk

The workboat was designed with all-electric operations in mind. Based on the expected operating profile of the workboat all-electric offered many advantages. This type of vessel is often in stand-by mode that requires little power. Even in diesel-electric propulsion the gen sets although running at constant rpm, consuming traditional fuel. With the new set-up *Leon-H* is estimated to burn 5.000 litres of fuel per week (7 days) compared to the traditional set-up with main engines and gen sets which will consume some 30.000 to 35.000 litres per week. In *Leon-H* everything is driven either electric or electric / hydraulic.

Leon-H actually was yard number 1. **Werft Shipyard** was responsible for the construction of the hull and acted as system integrator for the various disciplines. **Gaastmeer Naval Architects** were responsible for the ultimate design which was reached through cooperation of the varied parties involved. The majority of the installation work was done by suppliers from the Urk Maritme sector, such as the **VCU** (the Visserij Cooperatie Urk – Fishery Cooperation Urk), **De Flux Scheepsbetimmering** (interior), **De Boer Marine** (navigation equipment) and **Piet Brouwer Electro** (electrics and electronic integration).

Piet Pruiksma, general manager of Werft Shipyard, is convinced of this shift to all-electric. While construction of such a vessel is obviously more expensive – battery banks are costly, bio-based fuels are not cheap either – there are obvious savings. There is no need for traditional but inefficient running main engines in workboats, far less engine hours – and less fuel - due to running electric and last but least: with ever stricter regulations as to emissions an all-electric vessel can go where no traditional workboat is allowed anymore.

At the time of writing *Leon-H* is marketed by Landfall Marine Contractors, Ridderkerk, The Netherlands.

Hull

Dimensions are 23,95 (oa) x 11,45 (mld) x 2,60 m. Draft 1,05 m (minimum) / 1,50 m (max). Frame spacing is 0,45 m. Minimum air draft is 9,05 m. Gross tonnage is 186. At the bow push knees have been fitted. The vessel is classed with Bureau Veritas as a multi-purpose ship. Class is up to 30 nm offshore. The vessel is prepared for the optional installation of two spud poles with a diameter of 610 mm, and the installation of an aft portal A-frame suitable for ploughing operations.

LEON-H

photo: courtesy Werft Shipyard

Heila crane aft *photo: courtesy Werft Shipyard*

Crew cabin *photo: De Flux Scheepsbetimmering*

Stern with fendering *photo: courtesy Werft Shipyard*

Leon H off Urk *photo: courtesy Werft Shipyard*

Engine room
The vessel has no traditional main engines but takes its power from the generators. The two main gen sets are Scania type DI-33 with stage V, IMO Tier 3 motors. Total output of the main gen sets is 930 kW (498 kVA, 50 Hz). Fuel for these gen sets is HVO-100 bio fuel. Port side aft a battery-container can be fitted if and when required. With this plug-and-play solution *Leon-H* can sail fully electric with no emission at all. These batteries can also be re-charged from the on-board power grid or via a shore connection. To facilitate manoeuvring a hydraulic driven 200 kW ZF-TT2001P type bow thruster is fitted in the starboard push knee.

The Danfoss e-motors each have a capacity of 450 kW. These are situated in the propulsion room aft.

Tank capacity
is 60.000 litres of fuel oil, fresh water 35.000 litres. Transfer rates for both fuel and water is 40 m^3 / hr.

Main deck
Clear deck area is 167 m^2. Deck load is 5 ts / m^2.. Containerised cargo can be carried by four 10 or 20 feet containers / two 40 feet containers. Forward a set of towing pins and a chain stopper were fitted. The bow roller measures 4,85 m with a diameter of 914 mm. SWL is 100 tonnes. The forward hydraulic crane sits port side. The **Heila** HLRM 170-4SL crane has a capacity of 7,7 tonnes at 16,39 m reach. The aft crane is a Heila HLRM 140-4S with a capacity of 7,85 tonnes at a reach of 14,42 m. This crane is fitted with a 5-tonne winch. The pedestal for this crane is integrated with the H-type towing bollard / wire guide. At the aft end of the main a stern roller is fitted. Dimensions are 0,85 m in length with a diameter of 711 mm. SWL is 60 tonnes. Starboard aft a tugger winch has been fitted.

LEON-H running trials *photo: courtesy Werft Shipyard*

Two **winches** were fitted adjacent to the superstructure. The forward winch is a **Kraaijeveld** anchor-handling winch with a pull of 100 tonnes / brake 150 tonnes. The anchor-handling wire has a length of 150 m with a diameter of 26 mm. The Kraaijeveld 20-H-TR towing winch has a pull of 60 tonnes. The drum has a capacity of 600 m x 26 mm diameter towing wire. Brake is 90 tonnes.

The **superstructure** at this level is fitted with a day / recreation area, the access to the accommodation, generator room and wheelhouse as well as a toilet.

Below main deck
The **generator room** takes up the forward part of hull. Here the two main 498 kVA generators are seated as well as a smaller 135 kVA, 50 Hz unit and the main switchboard. Forward of the generator room are the four fuel tanks two of which are fitted as day tanks.

Aft of the generator room is the **accommodation**. This consists of six 2-person cabins. All are fitted with lockers, wash basin and seating. The two starboard cabins are fitted with extra lockers and a desk. All cabins are fitted with a wash basin, Also to starboard two sanitary spaces were fitted with toilets and shower. To port is the combined day / recreation / mess / galley with a store room next tot he galley.

Aft of the accommodation is the **propulsion room** with the e-motors and clutches. The aft peak contains the steering engine and water tanks to port and starboard.

Bunkering at sea from the Americans *photo: coll. Kees Pronk*

Bunkering at sea from the Americans *photo: coll. Kees Pronk*

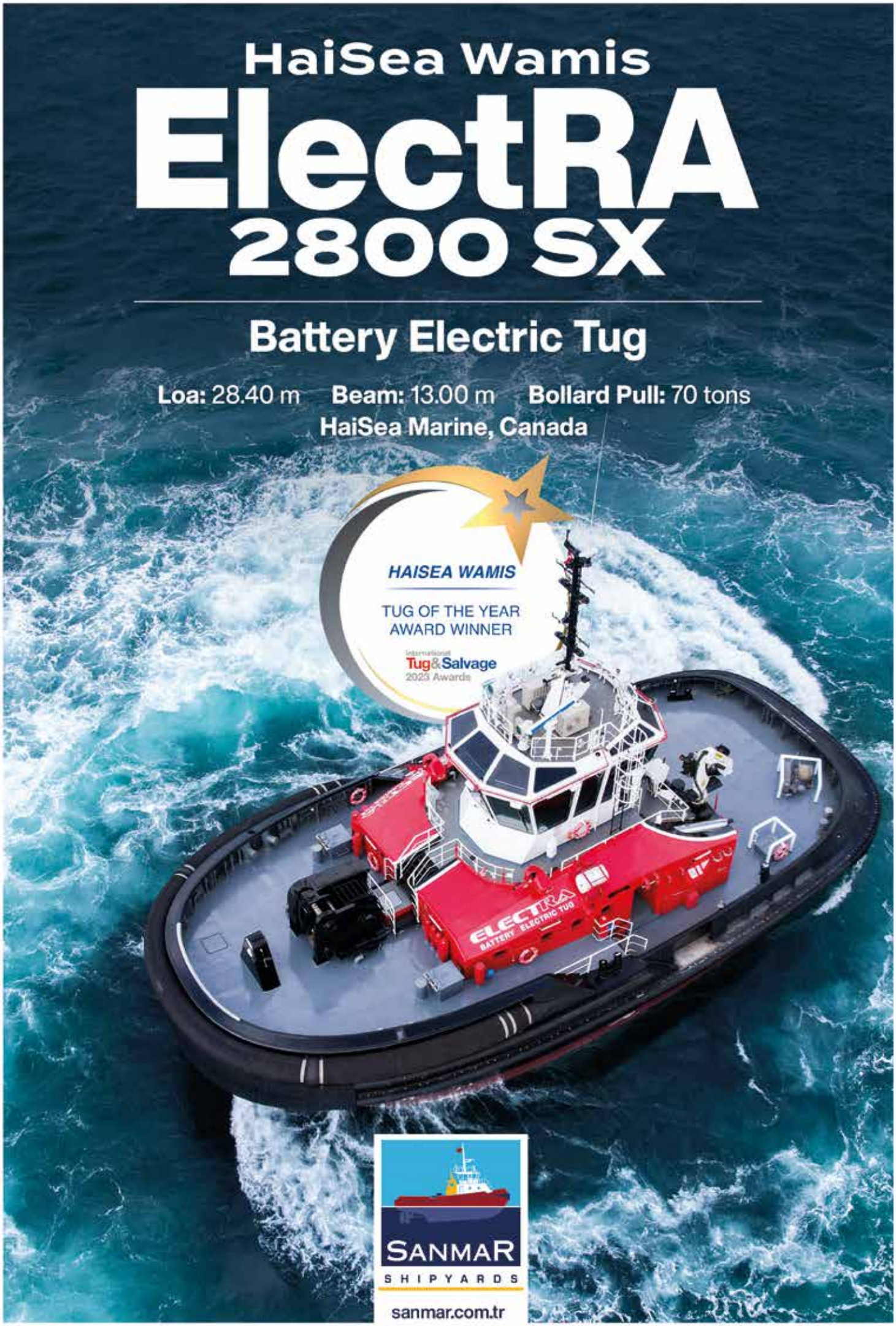
HaiSea Wamis

ElectRA 2800 SX

Battery Electric Tug

Loa: 28.40 m **Beam:** 13.00 m **Bollard Pull:** 70 tons

HaiSea Marine, Canada



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Tug News – New Tugs

A selection of news from the world-wide tugboat industry and its suppliers. Your press releases and additional info are welcome at tugdoc@upcmail.nl

by TDI Tugboat Publications

SVITZER ESTELLE is one of a series of tugs delivered to Sviter by the Turkish Uzmar Shipyard *photo: Uzmar Shipyard*

In the previous months several mergers, take-overs mergers / demergers have happened or are about to happen. The biggest of these no doubt is that of Svitzer, which leaves the Maersk fold to run the show on their own.

Towage and marine services company **Svitzer** has published its 2023 annual report, showing that total revenue grew 6% driven by, among other things, a record number of harbour towage tug jobs: more than 150.000. Adjusted for foreign exchange impact, total revenue grew 9.5%. Operating profit (EBITDA) was up 4%, corresponding to an EBITDA margin of 29.2%.

In the past five years, total revenue has on average grown by almost 6% annually with an average EBITDA margin of 30%. The development has been supported by the underlying market showing consistent long-term growth driven by larger vessels and increase global trade, which leads to an increase in tug activity. On the environmental front Svitzer is aiming for **carbon-neutral operations by 2040**. In 2023, the company made significant progress, achieving a 24% reduction in CO2 intensity compared to 2020.

Svitzer, founded in 1833, has been part of A.P. Møller – Mærsk A/S (APMM) for the past almost 45 years. On 8 February, 2024, APMM announced its decision to initiate a separation of Svitzer through

SVITZER ELIZABEH is another recent delivery by Uzmar *photo: Uzmar Shipyard*

A triplet of pushboats being named at the same time by Ingram Barge Company; PATRICK L. MORTON nearest camera

photo: Ingram Marine

a demerger, subject to approval at an APMM extraordinary general meeting with a subsequent listing of the new parent company, **Svitzer Group A/S**, on Nasdaq Copenhagen and an anticipated first day of trading on April 30, 2024. "As part of A.P. Møller – Mærsk A/S, we have grown to become a leader in the global towage and marine services industry. A separate listing gives us the opportunity to further strengthen our market position and the Svitzer brand, which we have carried for more than 190 years. Operating in a growing towage market, we have an attractive financial profile with solid margins and a predictable cash flow. We are organisationally, financially, and operationally ready for a future as a stand-alone listed company," Svitzer CEO Kasper Nilaus said.

Ingram Marine Group

a Tennessee-based inland shipping company better known as **Ingram Barge Company** has named three recently delivered pusher boats. Builder was Main Iron Works, Houma, which also did the design work jointly with Ingram. The three sisters *Patrick L. Morton*, *Teresa Sprouse*, and *Gary L. Holman* have dimensions of 21x 9.1 m and are fitted with two Caterpillar EPA Tier III 800 bhp (596 kW) main engines. The Michigan Wheel propellers are driven via Reintjes gearboxes. Electrical power is supplied by two John Deere generators. Tank capacities are 45.420 litres for fuel oil and 17.410 litres for potable water. The new push boats were built in compliance to US Coast Guard Subchapter M regulations. The three newbuilds belong to a series of 10 pusboats ordered by Ingram Marine. The three were named after Ingram Marine employees who each have each been working with the company for over 25 years.

Damen Middle East

at the beginning of 2024 signed a contract with the National Marine Dredging Co (NMDC) fort he delivery of three Damen Multicats. One was built in The Netherlands (see elsewhere in this issue). On 5 March this year the Albwardy Damen Sharjah cut the first steel for a MultiCat 2712. The second Multicat to be constructed by Albwardy Damen is a 3313 shallow-draught type.

Uzmar Shipyard

On 27 February, 2024, the world's first **Voith Tractor** with LNG dual fuel propulsion was successfully launched by Uzmar Shipyard in Istanbul. *Sultanhani* is the first of two hulls being built for Turkish tug operator **BOTAS** to Robert Allan Ltd's TRAktor V3900-DF design. When operating on diesel oil alone emissions are reduced with an IMO Tier III after-treatment installation. Due to the forward location of the VSP units the LNG tank hold is located aft of the engine room, providing separation of the gas system and any associated hazardous areas from the accommodation block. Dimensions are 39,0 (oa) x 15,0 (mld) x 6,0 m. LNG capacity: 40 m^3, diesel oil capacity: 164 m^3 Main engine output is 2x 3000 kW resulting in a predicted bollard pull of 80 tonnes.

Greener and lighter tug fendering

The recently delivered tug *Signet Sirius*, a Signet Maritime built and Robert Allan designed ART 92-32W has a number of unique features. One in particular is its' **fendering system** designed and manufactured by UK based **Buoyant Works**.

Buoyant Works are manufacturers of high performance polyurethane fender and impact protection systems for the renewable and marine industries. With over 20 years of experience manufacturing bespoke fender solutions for crew transfer vessels in the offshore wind industry, BW has developed a complete range of fendering to suit the unique demands of tugs.

At the core of what they do, is a green focus. Unlike rubber, polyurethane does not crumb and is non-marking. They adopt a low carbon manufacturing approach using a unique waste-free low labour content production process. Product wear rates are very low. The adoption of a modular approach enables any parts that need replacing to be done cost effectively and easily. Why replace 12m of product if only 1m is damaged? If a product is reaching its' end of life, it can either be resurfaced or recycled.
A process of being able to manufacture a replacement product with a percentage of recycled content has been developed. BW fenders feature a unique internal cavity design generating low reaction forces, high energy absorption and what they term as 'progressive compression'. **Long term performance** is predictable and consistent. Compression tests after more than 100.000 compressions show very little performance change. BW fenders don't follow a catalogue approach to supply. Tailorisation is at the heart of the design process and combined with the very latest processing

technology, fenders are optimised for their particular operational requirements – varying material hardness, size, shape, colour etc as needed.

The **weight** of a tug fender system is not always a high priority, however this is one area that the BW fenders excel. Any fender solution we offer is typically 30% lighter than an equivalent rubber arrangement. Reduction in topside weight and fuel consumption have both environmental and operational benefits. BW operates in industries where time pressures are acute. They are used to turning around urgent customer requirements (even when bespoke) in days rather than weeks or months. A combination of an efficient process and inhouse manufacture of all key components gives accurate production control. A highly skilled and agile workforce coupled with a real desire to support and service their customers is key to their ongoing success.

Great Lakes Towing into fire-fighting
This moves follows on the signing of an early 2022 of an exclusive agreement with Resolve Marine **to provide OPA 90 salvage** and marine firefighting services in U.S. Coast Guard District 9, which includes the five Great Lakes, Saint Lawrence Seaway and parts of the surrounding states. The joint arrangement ensures continuity of service for all **Resolve Marine** clients in Buffalo, Detroit, Lake Michigan, Sault Saint Marie. Ships with vessel response plans for the Great Lakes COTP zones, even if they are not Resolve Marine clients, can also be served under the agreement.

continue at page 61

Kees Muller (1944 – 2024)

On 24 April, 2024, mr. C.L. (Kees) Muller passed away at home in Terneuzen, The Netherlands, at the age of 79. He had been ill for some time.

Kees Muller was well-known in the world of towage and salvage. He was born into a family-owned towage business started by his great-grandfather Leendert Muller who in 1909 acquired his first tug.

Kees Muller was the co-founder of Multraship and his career in towage and salvage spanned six decades, having started in the family shipping business in the early 1960s. Over the years he was involved in hundreds, if not thousands, of salvage and rescue operations and, together with his wife for 57 years, Heleen Muller-Ribbens, was pivotal not only in developing Multraship, but also the wider towage, salvage and shipping industry.

Kees was always a creative thinker and as well as his operational experience he was the driving force behind the development of the revolutionary Carrousel Rave Tug (CRT). He was a passionate and important maritime ambassador and he was honoured with a knighthood in 2011 - Ridder in de Orde van Oranje Nassau - in recognition of his efforts to promote the Dutch maritime sector and of his charitable work.

Besides his exceptional entrepreneurial and specialist tug and salvage skills, he was widely known for his charismatic personality, a true “people’s person” with a love of sailing, music and entertaining; many will remember him livening up the room wherever a piano was available.

The Green Fleet

In May, 2021, it was announced that the world's greenest tug fleet had been ordered from Turkish Sanmar Shipyard. The fleet was to be operated in Canada at a new LNG export facility. Now, in 2024, the order has turned into the real deal on the water.

compiled by Job van Eijk

The first weld of the first of a 5-series HaiSea tugs at Sanmar *photo: Sanmar*

Engine control room for the electric power supply *photo: Sanmar*

One of the electric tugs on hand-over trials
photo: Sanmar

The fleet will be operated by **HaiSea Marine Limited Partnership**. This company is majority owned by the **Haisla Nation** in partnership with **Seaspan ULC**. The fleet will serve the Kitimat LNG export facility in the traditional territory of the Haisla Nation.

This being an environmental sensitive area was the basis for the decision to go 'green'. As it is an ample supply of hydro-electric power is available in the Kitimat area so the decision for **all-electric tugs** for shiphandling at the terminal was an easy one. On the other hand the fairway from the sea to Kitimat is a long one which takes many hours of escorting. For this purpose two of the most powerful escort tugs in the world were ordered, powered by **dual-fuel (LNG / diesel)** engines. Obviously the tugs would be able to bunker LNG at the Kitimat plant.

Designer of the tug fleet is **Robert Allan Ltd**, of Vancouver, BC. The Turkish **Sanmar Shipyards** was selected for the construction contract. Sanmar is one of the largest tugboat builders in the world. They also have built a variety of green and greener tugs, amongst which the world's first LNG-powered tugs.

The **RAstar 4000-DF escort tugs** measure 40 metres in length, and with 100 tonnes of bollard pull are the west coast of Canada's most powerful escort tugs. They have the ability to generate – when necessary - indirect forces in escort of up to 200 tonnes. The escort tugs also feature an exhaust after-treatment system in full compliance with IMO Tier III emissions standards, the most stringent emissions standards for the international marine industry.

The **ElectRA 2800 harbour tugs** are battery-electric tugs designed to perform regular ship-berthing and unberthing missions using only battery electric power. With 28 metres of length and approximately 70 tonnes of bollard pull they are fitted with 5.240 kWh of battery capacity.

At the time Crystal Smith, Haisla Chief Councillor, said, "On behalf of Haisla Nation Council we are happy to see this moment reached through the work of our joint venture. The HaiSea Marine joint venture will lead to many opportunities for Haisla members, and reaching this stage with Sanmar Shipyards brings us a step closer to realizing these benefits for our members." Frank Butzelaar, CEO, Seaspan Marine Transportation said, "The start of the Robert Allan designed Sanmar build program brings HaiSea one step closer to delivering on the promise

made to the Haisla Nation when this partnership was conceived over a decade ago. These dual fuel environmentally friendly vessels represent the future – they are revolutionary in both their technology and their ability to create opportunity for the Haisla people. This remains HaiSea's promise."

Various marine and land-based positions will be created as a result, providing long-term employment to community members interested in a maritime career. As a fleet, these new tugs are expected to reduce carbon dioxide emissions by up to 10.000 tonnes per annum compared to diesel-powered alternatives, with major reductions of nitrogen oxides, sulphur oxides, carbon monoxide and particulate matter. "Seaspan and the Haisla have hundreds of years of combined experience in these waterways," said Captain Jordan Pechie, Senior Project Manager, HaiSea. "Our mandate is to operate at the highest level of safety and environmental standards, which will allow this legacy to thrive for generations to come."

When production began on the first of the five tugs, Sanmar Shipyards, along with HaiSea employees, celebrated the first cut of steel. "Some of our team started working toward this moment 10 years ago — this is a huge moment for HaiSea," said Captain Jordan Pechie. "Physical construction is the ultimate commitment, and it brings us one step closer to delivering our promise to our Haisla Nation Partners. After years of detailed planning and design, we can finally watch the vessels become a reality."

A joyful naming of one of the HaiSea tugs *photo: Sanmar*

Haisea Kermode was the **first of the escort tugs** to arrive in Vancouver. Her sister is *HaiSea Warrior*. The emission reductions compared to conventional diesel tugs are significant. Though they feature an exhaust after-treatment system in full compliance with IMO Tier III emissions standards, they can perform the entirety of the regular escort missions using LNG as their fuel. When operating in this mode on their 159 nautical mile escort route in each direction from Kitimat to the pilot station near Triple Island, British Columbia, emissions, particularly of CO_2, will be dramatically cut compared to even Tier III standards.
Measuring 40,2 m (oa) excluding fenders, with a moulded breadth of 16 m and a depth of 6 m, the 996 GT tugs can achieve a speed of 14,5 knots. They have a design life of 40 years. The tugs are among the first vessels of their type to ever receive ABS ENVIRO+ notation. The tugs' emergency response capabilities are augmented by significant oil recovery tankage and a Fire-Fighting 1 off-ship fire-fighting system. The vessels are also fitted with DP0 controls, allowing for station keeping. This is a new development for tugs of this type and provides the navigating crew with flexibility when approaching new jobs. The enclosed Markey tow winches, which are custom-built for the tugs, are of full render-recover design, utilising synthetic tow lines. The accommodation is out-fitted to a high standard with spacious dedicated cabins and en suite toilets for all regular crew. The interiors also benefit from natural light, and well in excess of regulatory standards. Particular attention has been paid to minimise onboard noise and vibration, enhancing crew comfort during periods of sustained operations. The tugs were designed to have near continuous internet connectivity, even in the remote areas of Douglas Channel. Also, the systems are integrated in a way that will provide real-time streaming of operational data to the shore support team.

HAISEA WARRIOR, the second of the dual-fuel escort tugs arriving at Vancouver, 19 April, 2024

photo: Robert Etchell

Specifications Escort tugs
Dimensions are 40,2 m (oa) x 16 m x 6,0 m with a draft of 7,1 m. GT 996. Main engines: 2 x 3.000 kw (4.023 bhp). Propulsion by 2x Schottel SRP 610 controllable-pitch propellers. 2x Schottel STT 170 side thrusters. Maximum speed 14.3 knots. Bollard pull: 100 tonnes. Dynamic positioning: Schottel. Winches: Markey DESF-52UL-AGILE and Markey TES-52UL-100HP. Capstans: Markey CEP-60 and 2x Markey VEPA-16. Crane: Palfinger PK 50002M. Karmøy tow pins. Samson Rope EVATS emergency vessel attachment and towing system. Firefighting: 2x FFS monitors; FFS fire pump. Fuel capacity 324 m^3, fresh water 47 m^3. Accommodation for a crew of 8.

In July, 2023, Riviera Maritime's International Tug & Salvage 'Tug of the Year for 2023' Award-winning *HaiSea Wamis* arrived in Canada. This is the first in a series of three *ElectRA 2800* battery-electric tugs for HaiSea Marine. After crossing the Atlantic Ocean under its own power, *HaiSea Wamis* became the first battery-electric tug to pass through the Panama Canal, after which she sailed north along the Pacific coast of North America. She was stationed in Vancouver operating there before relocating to its permanent home base in Kitimat, BC.

Designed to operate on battery power alone during terminal operations, with charging from the local hydroelectric power grid, the delivery voyage using the tug's backup generators demonstrated the versatility and redundancy of power systems. The battery power will save some 1.700 tonnes of CO_2 annually. With its sisters *HaiSea Wee'git* and *HaiSea Brave*, the battery-electric tugs will combine to save over 5.000 tonnes of CO_2 emissions per year - roughly the equivalent of 1.000 cars.

Specifications ell-electric tugs

Dimensions of the three tugs are 28,40 (oa, excluding fenders) x 13,00 (mld) x 5,56 m with a maximum navigational draft of 5,90 m. GT 472. Battery capacity (installed) 5.288 kWh; (maximum) 6.102 kWh. Accommodation: 4x single cabins with ensuite facilities, two with Pullman bunks for maximum complement of 6 persons. Corvus Orca energy storage and battery management systems. DMT electric deck machinery package includes a HW-010-E 70kN ship-handling hawser winch with water-cooled air-applied slip brake and an AW-100-E-19c anchor winch. Propulsion by 2x Schottel SCD 460 Combi Drives with 2.100 kW electric motors and 2,6m diameter fixed-pitch propellers in SDV-45XPA high efficiency nozzles. Two CAT C32 gensets, 940 kW each, IMO Tier III compliant. Elkon E-drive system with 1.000 VDC multi-drive switchboards with power management system. FFS fire-fighting system to FF-1 standard with waterspray, 2 monitors with 2.400 m^3 / hr total output from electrically driven dedicated Fi-Fi pump. Palfinger PK 18500 deck crane, 975 kg SWL at 10,3 m reach. Bollard pull ahead 68 tonnes, astern 65 tonnes. Speed 12 knots.

In **March, 2024,** HaiSea Marine celebrated the official naming and blessing of its new **floating operations facility** which will be the home base for the world's greenest tugboat fleet. At Kitimat it will support HaiSea's operations. *Zewén* is the Haisla word for Coho and is now also the name of HaiSea's operations and maintenance facility. The location where the *Zewén* is secured in Kitimat inspired the name from Haisla Nation Hereditary Chief, Basil Grant. His family has been fishing for Coho in that exact spot for generations. The floating operations and maintenance building was purpose-built and designed to withstand the extreme tidal range in the Kitimat region. It was also designed to be welcoming and inclusive of all genders with a focus on comfort, privacy, and overall well-being. It features a large workshop, common areas, a gym, and will also accommodate up to eight shore-based personnel to use during working hours. The *Zewén* facility was built by Pacific Marine Construction on Wei Wai Kum territory in Campbell River, BC.

HaiSea Marine has celebrated the completion of the greenest tugboat fleet in the world following the delivery to Vancouver, Canada, of the fifth and last of the tugs ordered. The operator celebrated its arrival by sailing the fleet through Vancouver Harbour, Deep Cove and up Indian Arm to test various formations, and put the five tugs on show for local kayakers, paddleboarders, and boaters. The picture shows the tugs lined up during their journey.

Ali Gürün, Chairman of Sanmar Shipyards, said: "The completion of the HaiSea fleet is a major milestone on our industry's drive towards a sustainable future. It has been a pleasure for us to work on this important project, proving that protecting the environment does not come at the cost of commercial success."

Cem Seven, Vice Chairman of Sanmar Shipyards, said: "At Sanmar we are proud to be leading the way to a new sustainable environmentally-friendly era for the tug and towing industry based on low and no-emissions tugboats. We believe that this will be achieved through innovation, technological advance, and the use of alternative fuels. The ElectRA Series of harbour tugs are the first of a new generation of tugboats that will change our world."

Sources: Robert Allan, Sanmar, files TugDoc International, various news clippings

The five-fleet HaiSea order completed *photo: courtesy Robert Allan Ltd*

“Al Aliah” for Middle East

In March, 2024, Damen Shipyards completed a MultiCat 3013 for Middle East account.

by TDI Tugboat Publications

This newbuild MultiCat started in life as a stock vessel constructed at Safe Shipyards, Gdansk, Poland, as yard number 571822. After being finished to clients specification by Damen Shipyards Gorinchem the vessel set sail for Abu Dhabi on 2 March, 2024.

Owner is the NMDC – the National Marine Dredging Company based at Abu Dhabi. The MultiCat’s basic functions are anchor-handling, dredger support, supply work, towing, hose handling and survey work – all functions typically required during dredging support operations.

Hull

Dimensions are 30,15 (oa) / 28,00 (mld) x 13,40 / 12,50 x 3,79 m with a draft of 2,60 max m. Deck area is 170 m^2 with a permissible deck load of 12 t/m^2. Gross tonnage is 341 GT, Deadweight is 220 tonnes. At the bow two push knees have been fitted. The hull is protected by fendering all round with the side fenders consisting of car tyres. The vessel is classed with Bureau Veritas with the notation Tug and unrestricted navigation. Emission complies with IMO regulations tier II certified.

Main deck

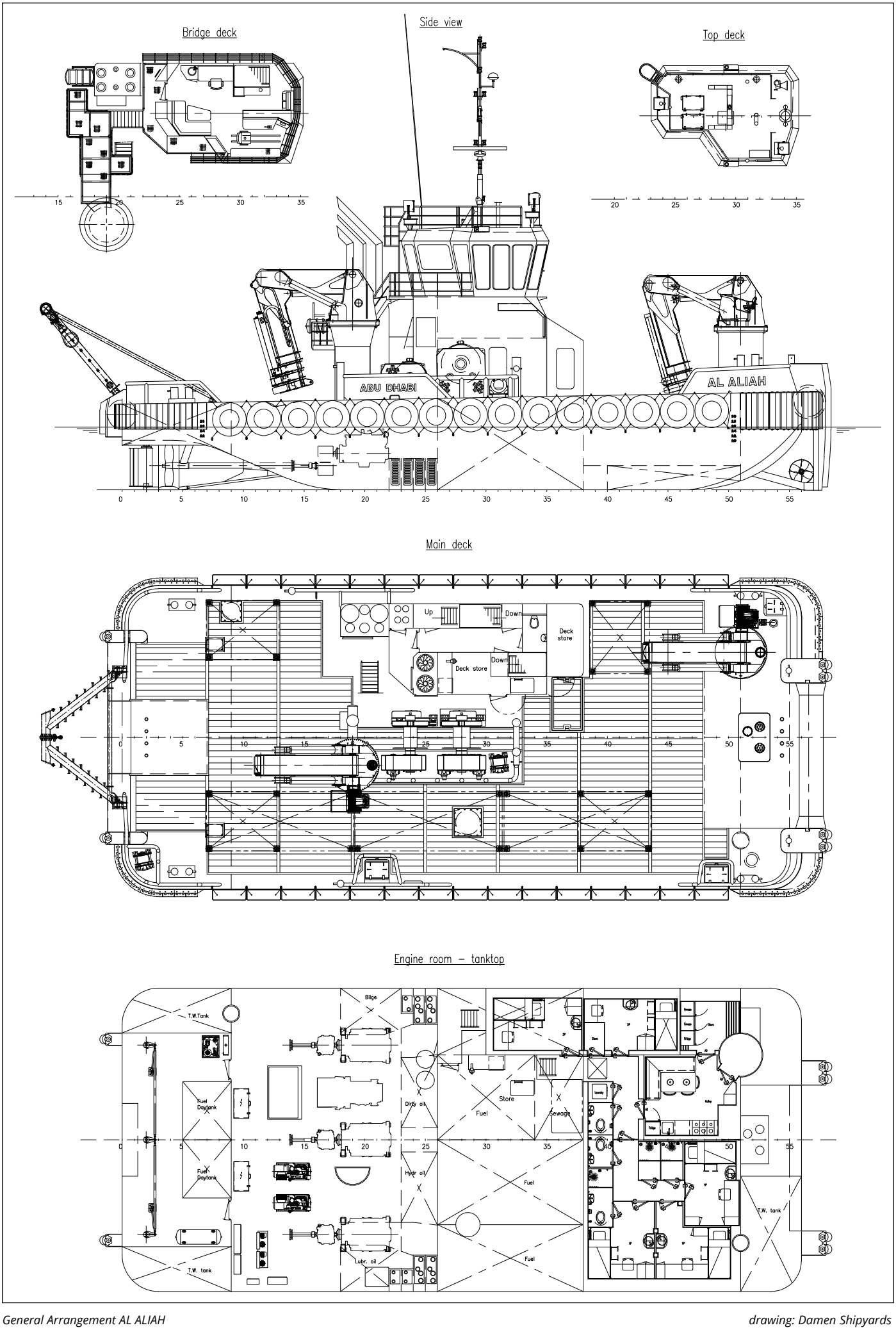
At the forward end of the main deck a bow roller with a length of 6 meters and a diameter of 1,20 m has been fitted. SWL is 170 tonnes. A roller of identical diameter but with a length of 3,00m was fitted at the stern. SWL of the aft roller is 100 tonnes. Anchor handling forward is facilitated by the installed **DMC** double towing pins and chain stopper. Port side forward sits the single anchor winch, a hydraulic **Kraaijeveld** KAB-1-H-19-D. The anchor weighs 360 kg and of the HHP type. SB forward and Port Side aft spudholes with a diameter of 0,7 m have been fitted. For survey work a 1,0 metre diameter moonpool has been fitted starboard approximately midships.

The forward hydraulic crane is situated to port. The pedestal mounted crane is a **HS Marine** AKC-410 HE-2 foldable knuckle and telescopic boom crane with a capacity of 22,8 tonnes at a reach of 13,1 m. (54 tonnes at 5,74 m reach). The aft crane is pedestal mounted near the centre line aft of the superstructure. The pedestal is integrated with the H-type towing bollard / wire guide. This crane is of the HS Marine AKC 410 -15.5 HE3 type with a capacity of 17,1 tonnes at 15,5 m reach. An additional A-frame with an SWL of 25 tonnes can be fitted aft.

Bow and side fendering, push knees and bow roller photo: Kloet / courtesy Damen Shipyards

AL ALIAH. Note position of winches photo: Kloet / courtesy Damen Shipyards

The two winches are make **Kraaijeveld**. The forward winch is the anchor-handling one, type KA-30/2-H-TR. The drum has a capacity of 600 m x 40 mm diameter wire. Pull is 150 tonnes at 8 m / min; 25 tonnes at a speed of 32 m / min. Holding power is 170 tonnes on the first layer. The second winch is intended for towing. The type is KA-20/2-H-TR with a single drum with a capacity of 900 m x



General Arrangement AL ALIAH *drawing: Damen Shipyards*

40 mm diameter wire. Pull is 40 tonnes at 12 m / min; 12 tonnes at speed of 5 m / min. Brake is 100 tonnes at the first layer. In addition to these winches two **Dromec** HPV-12000 tugger winches were fitted. One of those is fitted starboard aft, the other one forward of the anchor-handling winch.

The **superstructure**'s lower section is given over to deck stores, toilet, engine-room fans and the exhausts. The upper part is the wheelhouse with the control desk with sliding helmsman's seat, a desk to port and a crew seating starboard aft.

The top deck is fitted with the usual array of navcom antennae. Two 2.000 Watt **Pesch** searchlights have been fitted at the forward and aft end of the top deck.

Accommodation
is fitted below main deck, forward. The three single berth officer's cabins are situated to starboard. Two double berth crew cabins are situated to port. All cabins are fitted with wash basins, locker and desk. The Master's cabin is fitted with a private sanitary space with toilet and shower. Otherwise two showers and two toilets are situated here. The accommodation also houses a laundry space, store rooms with freezers and fridge and the galley annex messroom.

AL ALIAH running trials, 6 February, 2024 *photo: R. & F. van der Hoek*

Engine room
The main engines are 3 Caterpillar C32-TTA-ACERT each with an output of 746 kW. Total output 2.238 kW / 3.043 bhp. Three **Reintjes** WAF563L gearboxes with a reduction of 5.947:1 connect to three **Promarin** fixed-pitch propellers with a diameter of 1.700 mm are rotating within Optima nozzles. Resulting bollard pull of the drive train is 39,8 tonnes. Speed is 10,8 knots. To facilitate manoeuvring a hydraulic driven 294 kW (400 hp) bow thruster was fitted.

Two **Caterpillar** 86 kW C04.4 gensets deliver 107 kVA, 50 Hz each.
Hydraulic power is served by a Caterpillar C32-TTA motor delivering 634 kW at 1.800 rpm. A fuel transfer pump as well as a fresh water transfer pump were fitted, each with a capacity of 50 m^3/ hr at 4,75 Bar. Cooling is by boxcoolers.

Tank capacity
Fuel oil 180,0 m^3, fresh water 53,0 m^3, sewage 6,8 m^3, dirty oil 4,4 m^3, lube oil 2,8 m^3, bilge water 2,8 m^3, hydraulic oil 4,4 m^3, technical water aft 25,0 m^3, technical water forward 30,0 m^3.

AL ALIAH seen from aft at the start of her delivery trip, 2 March, 2024 *photo: Nico Giltay*

SIGNET SIRIUS with Buoyantworks fenders photo: courtesy Buoyantworks Ltd

continued from page 51

For this purpose Great Lakes Towing Company (GLT) announced it has acquired a 62-year-old fireboat from the city of Cleveland, Ohio. *Anthony J. Celebrezze* was constructed in 1961 by Paach Marine in Erie, Pa. and was used by the Cleveland Fire Department until she was replaced with a new vessel - *Garret A. Morgan* - in June 2023 and put up for auction. Auction data shows the vessel was sold on 14 November, 2023, for just over USD 41.000, including a 12,5% buyer's premium. GLT said its Great Lakes Shipyard division is very familiar with *Anthony J. Celebrezze*'s systems and operation, having provided drydocking, maintenance and repair services to the vessel for decades. The 61-foot twin screw, 600 hp tug is fitted with two fire pumps and five monitors with a total capacity of 6.000 gallons of water per minute. According to GLT the vessel will act as a firefighting platform for response to shipboard or shoreside fires.

Onorato Group

It is likely that the towage arm of **Moby** (Onorato) will be sold to the **MSC Group**. This reportedly has to do with the repayment of a Euro 315 million loan which allowed the Onorato family group to emerge from insolvency proceedings which began a few years ago and were completed last year. Creditor is Shipping Agencies Services, a subsidiary of MSC Holding the latter holding already 49% of the shares in Moby. Apparently a condition of the loan was the stipulation that repayment had to be done by selling assets, preferently the towage division. The concession for port towage in ports covered by Rimorchiatori Sardi (Mobi) also is coming up for renewal.

Rimorchiatori Sardi id operating in the ports of Cagliari, Olbia, Oristano, Arbatax, Porto Torres, Sarroch, Portovesme, Portoscuso and Sant'Antioco.

Marine Towing of Tampa

has acquired Seabulk towing assets from Bisso. With this deal the company extends its shiphandling operations to Florida's east coast. Seacor Holdings subsidiary Seabulk in September 2023 had sold its U.S. shiphandling business to **E.N. Bisso & Son**. That involved 12 tugs across ports in Florida and Alabama.

Marine Towing of Tampa now acquired the Port Canaveral operations and assets out of the Seacor-Bisso deal. They will operate them through their subsidiary **Marine Towing of Port Canaveral**. Marine Towing provides shiphandling at Port Tampa Bay, SeaPort Manatee and other facilities throughout the Tampa Bay area and west coast of Florida, including Key West. The new acquisitions extends the Marine Towing operational area beyond Florida's west coast.

"We are excited to broaden our operations to Florida's Space Coast," said Steve Swindal, Marine Towing's principal owner and chairman. Port Canaveral is visited by some of the world's biggest and most popular cruise vessels. It also is a growing hub for petroleum products, bulk and breakbulk cargo. Furthermore, the port plays a vital role in the aerospace industry with its close proximity to the Cape Canaveral Space Force Station and NASA's Kennedy Space Center. Marine Towing also is USCG approved Maritime Training Centre offering courses for CPR, Able Seaman, Vessel Security officer and many more.

ALESSANDRO ONORATO (1977) is one of the tugs involved in the possible sale of Rimorchiatori Sardi to MSC

photo: coll. Job van Eijk

ST. JOHNS seen here in the colours of Seabulk is currently on charter to Marine Towing of Tampa
photo: Hans Hoffmann

RESOLVE HERCULES at work in Gibraltar. The local Resolve fleet was sold to Boluda *photo: coll. Job van Eijk*

The fleet up to the new acquisition consisted of the 2017-built *Independent* (70 tbp), *Patriot* (2013 – 75 tbp), *Liberty* (2007 – 60 tbp), *Freedom* (2005 – 60 tbp) and *Endeavor* (2000 – 55 tbp) and the chartered *St. Johns*. All are azimuthing stern drive tugs except the last two which are SDMs (Ship Docking Modules) with its azimuthing propellers mounted more or less in-line forward and aft.

Moran Towing Corp.
in December, 2023, has been awarded a USD 17.667.600 firm-fixed-price contract with reimbursable elements for eight time-chartered, U.S. flagged and Jones Act compliant tugs to provide harbour support services and shiphandling at Norfolk, Va. The contract with **Military Sealift Command** includes one firm period of 366 days with three 365-day option periods and one 336-day option period. The contract was competitively procured with two offers received.

Boluda
in February, 2024, acquired **Resolve Marine**'s Gibraltar operations, known as Resolve Salvage and Fire (Gibraltar) Ltd. Resolve Salvage and Fire, owned by Resolve Marine Group, provides towing and marine salvage services as well as in engineering and maintenance projects for marine installations and construction. Two divisions are part of the sale: the company's harbour towing operations and fleet were sold to Boluda Towage Europe, and the marine services business, to Elias Tapiero of ORC Marine. The latter company handles emergency response and marine salvage, spill clean-up and diving services. ORC Marine is also active in the sphere of civil works.

Joseph Farrell III, Deputy CEO of Resolve Marine, said, "The Port of Gibraltar operations have been part of the Resolve Marine family since 2015. We are excited that Boluda Towage Europe saw the enormous value of a business that serves the Port of Gibraltar, adding to its portfolio of towage services in major global ports." Boluda Towage has been operating shiphandling services for many years on both sides of the strait; in Cadiz, Algeciras, and Gibraltar - on the European side - and in Ceuta and Tangier - on the North African coast - assisting with manoeuvres in all these important ports. With this acquisition, Boluda Towage adds the tugs *Eliott* (Twin Voith – 35 tbp - 3.441 bhp / 2.566 kW Mirrlees-Blackstone – built 1992 by McTay – ex *Cluain Tarbh*), *Resolve Hercules* (Twin Niigata Z-Peller - 4.436 bhp / 3.261 kW Niigata – built 2011 by Keppel Singmarine – ex *Hercules*, ex *Bimini Maikara* ex *Maikara*), *Rooke* (Twin Voith – 28 tbp - 2.640 bhp / 1.969 kW Ruston – built 1981 by Cochrane – ex *Svitzer Elizabeth*, ex *HT Sabre*, ex *Adsteam Elizabeth*, ex *Lady Elizabeth*) and *Wellington* (Twin Voith – 33 tbp - 2.640 bhp / 1.969 kW Ruston – built 1980 by McTay – ex *Smit Canada*, ex *Canada*) to its fleet.

Resolve's Gibraltar came about when in 2015 Resolve Marine Group acquired **Steel Mac Ltd**., a Gibraltar-based diving, salvage and marine services provider, and **TP Towage**, which was the only provider of harbour towage in and around the Port of Gibraltar. These acquisitions were made on the back of Resolve's continual investment into their global response and client-focused attitude in maritime services. For Resolve Gibraltar was a geographical strategic salvage station for Gibraltar and surrounding areas.

In addition to Gibraltar, Resolve maintains response depots in Singapore, Mumbai, Shanghai, Cork, Ireland, and Dutch Harbour, Alaska. The company also maintains fully stocked response depots across the United States and offices in Fort Lauderdale, Florida; Mobile, Alabama; New Orleans, Louisiana, as well as Anchorage and Dutch Harbour, Alaska. Resolve at the time positioned its 144 tbp salvage tug *Resolve Blizzard* in Gibraltar to provide firefighting, oil pollution control and emergency response services for the maritime industry across the Mediterranean, Africa, and Europe. **SteelMac** has served the region with a wide range of support services including vessel emergency response, diving and R.O.V services, oil pollution response, marine/cargo surveying, waste handling, and plant hire. **T.P. Towage Company** was established in 1998, as a continuation of **Howard Smith Towage** and its predecessor **Alexandra Towing Company.**

"San Vitale"

This newbuilding was delivered to **Rimorchiatori Mediterranei** in March, 2024. The Sanmar-built tug was delivered to Sicily in the port of Milazzo. Yard number 316.was taken up in the fleet of **Rimorchiatori Augusta Srl** company which operates in the Sicilian areas of Augusta, Syracuse, Catania, Pozzallo, Milazzo and Messina.

Vernicos-Scafi

SVS Maritime - a subsidiary of the Greek Vernicos Scafi Group - has awarded Turkish shipbuilder **Med Marine** a contract for the construction of a new harbour tug of the RAmparts 2500W design. The tug will be designed by Canadian naval architecture firm Robert Allan Ltd. The vessel will have a length of 25,2 m, a beam of 12 m, a draught of 5,75 m and a depth of 4,6 m. The tug will have accommodation for up to eight crewmembers. Gross Tonnage is just under 400 tonnes. Speed is specified as 12 knots while bollard pull is expected to be about 75 tonnes.

SALVICEROY - seen here in the colours of POSH - is now part of the Kim Heng fleet

photo: Maasmond Maritime (Piet Sinke)

VERNICOS SCAFI III is one of a number of tugs recently delivered to the Group by Turkish tug builder MedMarine Shipyard

photo: coll. Job van Eijk

Kim Heng

The company subsidiary Kim Heng Agency has joined forces with Malaysia's **RUHM Holdings** and Wardatul Wahdah Binti Ahmad Nokman to establish a new company known as **Mazu Offshore**. RUHM operates marine service vessels that support offshore exploration, drilling, construction and other activities in Malaysia. The company is also a shareholder in RUHM Marine, with whom Kim Heng's KH Mazu Offshore & Marine formed another Malaysian jv in 2017.

Mazu Offshore will carry out the vessel agency business in Malaysia and other activities, including integrated logistics services. Kim Heng will own 49% of the company while RUHM will have a 31% stake.

Kim Heng at the moment lists 5 tugs and 3 shallow-water fast response vessels while under Kim Heng / Bridgewater / RuhmMazu are listed 2 deepsea anchorhandling salvage tugs and 7 anchorhandling tug / supply vessels. *Bridgewater 161* and *Bridgewater 168* are

The DRIFT RIVER / ALULAQ combination is designed by Coastwise Engineering. Brice Marine uses the ATB to service remote rural Alaskan communities. The ATB is fitted with a Finnish Beacon pin system

photo: Coastwise Engineering

continue at page 77

Towing the Americans

During World War 2 thousands of standard merchant ships were constructed by the American war industry. By the end of the war, in 1945, it had become clear that a large merchant fleet was a necessity in times of trouble.

by Capt. Kees Pronk

The ghost fleet at Suisan Bay *photo: coll. Kees Pronk*

Fisherman Wharf San Francisco *photo: coll. Kees Pronk*

To achieve this the US government moored a large number of these (standard) ships in strategic locations in America. This was the 'reserve fleet'. The agency responsible for these ships was the National Defense Reserve Fleet. In cases like the Korean and Vietnam wars many of these laid-up merchant vessels were successfully reactivated, saving considerable time and money. The usual fate of the ships in the reserve fleet was, however, to age and eventually becoming too old to be of any use. The end station was the scrap yard. Capt. Kees Pronk tells the story of one such tow.

"At the beginning of **June 1991** Smit Fleet Services' crewing department assigned me to *Smit London*. The tug had been contracted tow three vessels from the National Defense Reserve Fleet from San Francisco, California, USA, to Thailand. The vessels had been for sold for scrap. This meant a non-stop tow across the North Pacific with a multiple tow. This was interesting but logistically challenging. Big powerful tugs like *Smit London*, *Smit Singapore* and *Smit Rotterdam*, are designed to carry out distance tows with heavy objects. But at the time the ocean towage market was weak and getting weaker. To cover the running costs of these tugs it had been decided that it was necessary to tow – whenever possible - multiple objects at the same time.

Anyway, *Smit London* is on its way from Singapore to San Francisco with an ETA for the first week of July. In the third week of June myself and a nautical inspector from Smit Fleet Services arrive in An Francisco. We intend to start preparations for the towing of the scrap vessels and the departure so Smit London can make a fast departure. **Time is money!**

Not so. Upon arrival in San Francisco the shipping agent informs us that the authorities forbid us to visit the three vessels in Suisun Bay. The vessels have not yet been officially transferred to their new owners and are still the property of the US government. A setback for Smit, an unexpected windfall for us. We stay in a beautiful hotel on Fisherman's Wharf, right in the middle of San Francisco's lively entertainment centre. With a rented car we do several nice trips through California, around San Francisco. In the evening we find ourselves a good and pleasant restaurant. We have no complains at all about the compulsory holiday paid for by Smit International.

The Americans we will be towing moored in Suisan Bay *photo: coll. Kees Pronk*

SMIT LONDON seen on 7-7-1995 already in SmitWijs colours *photo: Jan v/d Klooster*

On 7 July ***Smit London*** **arrives** in Long Beach, California, for bunkering. I've now done enough sightseeing in and around San Francisco and am eager to go on board. I fly to Los Angeles to relieve my colleague and take the tug to San Francisco. This will be my first trip as Master of *Smit London* since I sailed on her as Chief Officer in 1979. A good opportunity to get to know the tug prior to embarking on this challenging tow.

On 10 July I arrive in San Francisco Bay with *Smit London* and the pilot takes us directly to Alameda Island. The day before the *American Monarch*, *American Spitfire* and *American Titan* have finally been released by the National Defense Reserve Fleet and brought over from Suisun Bay to Alameda Island by local tugs. A busy time begins for me. Preparing the three Americans for departure, planning the departure procedure, drawing up a voyage plan and fitting out *Smit London* for the long tow. The preparations for towing and seaworthiness must be carried out by the crew of *Smit London*. This is a lot of work. On advice of the shipping agent a local company is hired to help prepare the Americans for sea. This company also owns a number of harbour tugs that will assist the transport during departure.

During the preliminary discussions the unsympathetic owner of the company brags a bit too much about how he is going to make a fortune in US dollars when *Smit London* and her triple tow leave. He has been involved in this type of departures before and knows exactly how it works. According to him, *Smit London* will leave with one of the Americans, wait in deep water about 50 miles offshore. Over the next few days his tugs will bring the other two Americans one by one. He is already calculating his profits. I decide to let him build this air castle in his mind but to make my own plan for the departure.

A week before we intend to leave **a meeting is held** with the harbourmaster

SMIT LONDON at Alameda. Preparing the tow

photo: coll. Kees Pronk

Golden Gate Bridge *photo: coll. Kees Pronk*

Departing Alameda with double tow; harbour tugs keeping the tow in line photo: coll. Kees Pronk

Alcatraz Island photo: coll. Kees Pronk

of San Francisco, a representative of the pilots, the US Coast Guard and the owner of the harbour towage company. During the meeting I ask the harbour master if he has any objection to *Smit London* departing with the three Americans connected. The owner of the harbour towage company protests that this is not possible and that it is also against his procedure. The harbour master ignores him, asks me a few more questions, listens to how I intend to do it and says that at first sight he has no objection. He will discuss it internally with the senior pilot and get back to me with an official decision. We leave the meeting - me with a veiled sense of gloat and the owner of the harbour towage company grouchy.

The next day the harbour master visits me and informs that I cannot leave Alameda Island with three tows connected. The channel from Alameda to San Francisco Bay is not wide enough for the three Americans side by side, plus harbour tugs on either side to assist. I present him with my plan B. 'Can *Smit London* depart with two Americans side by side, anchor in San Francisco Bay near Alcatraz Island and hook up the third American there?'. 'No problem captain, you can do that,' is the reply.

The last days before departure are hectic. There are many arguments and disputes to be settled with the harbour towage company whose owner is seeing his imagined fortune in US dollars go up in smoke. Now that he knows that we will be leaving San Francisco Bay with three tows, his cooperation has turned to obstruction.

As the voyage will be non-stop and to ensure we have enough fuel *American Spitfire* receives 300 tonnes of fuel into a forward deep tank. On 17 July, after an extensive inspection by the US Coast Guard we are ready for departure, which I have scheduled for 18 July.

Early in the morning of **18 July** the ship's agent and I drive to the entrance of San Francisco Bay. On the beach at the foot of the Golden Gate Bridge I see that there is no wind, no sea and no significant swell. Perfect weather for departure. The moment of departure has finally arrived and with a healthy dose of stress I return to *Smit London*. In order to thwart the owner of the harbour towage company I have put myself in a difficult situation. It would have been easier to leave with one tow and have the other two brought to us separately. But I dislike to be put under pressure by the arrogant manager of the harbour towage company and to play his game. I have prepared everything well and discussed it with my crew so that everyone knows what is expected of them. As soon as I am back on board, I have the agent ordering the pilots and harbour tugs.

The two main engines of *Smit London* - with a combined output of 13.500 hp - are started. The chief officer and part of the crew boards the Americans and around 10.00 hrs *Smit London* moves away from Alameda Island towing *American Monarch* and *American Spitfire,* side by side. The transport passes under the Oakland Bay Bridge into San Francisco Bay. Near Alcatraz Island *Smit London* anchors while harbour tugs keep

Veering the wire(s) photo: coll. Kees Pronk

The tow at sea as seen from the workboat . . . photo: coll. Kees Pronk

. . . and from the tow photo: coll. Kees Pronk

the two Americans in check. *American Titan* arrives towed by the harbour tugs of the grumpy tug owner. *American Titan* is hooked up and *Smit London* weighs anchor and heads out to sea with the three Americans close behind.

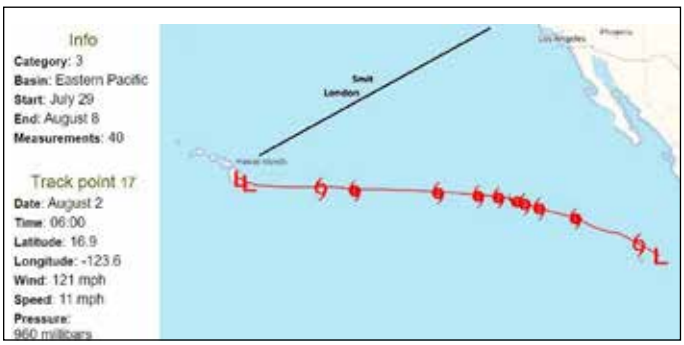
The weather is still fine, hardly any wind and no sea. Due to the relatively shallow water in the approach route to San Francisco Bay the tow wires must remain short for the time being. The harbour tugs hang behind the Americans to counterbalance and keep the tow wires tight. It is an unpleasant surprise when the transport passes under the Golden Gate Bridge and into the fairway. A long, low swell is moving the vessels. From the two forward tows, the chief officer reports that *American Monarch* and *American Spitfire* are beginning to roll in the swell and are bumping into each other. I tell him not to worry, the ships will be scrapped anyway and a few dents more or less will not matter. A few moments later two of the stern tugs report that their towing lines broke and their owner is not allowing the tug skippers to reconnect again. Another setback. Soon thereafter the chief officer reports that the rolling is getting worse. The two Americans are bumping harder and windows are breaking.

As I still have the San Francisco pilot on board I ask him about **the situation in the fairway**, especially the seabed conditions and possible wrecks. He assures me that there are no wrecks in the fairway and the seabed consist of sand and mud. Dredging is carried out regularly to maintain the depth of the fairway. This is reassuring, but in the meantime my mind is racing with various options. As a tug captain, you have to be flexible and able to react quickly to a suddenly changing situation. I order the chief officer to release the mooring lines between *American Monarch* and *American Spitfire* and begin to veer *American Titan*'s tow wire. When she is on sufficient length, I begin to veer *American Monarch*'s tow wire. I keep *American Spitfire* short for the time being.

The planned route for the tow *map: coll. Kees Pronk*

In the relatively shallow water we are dragging the tow wires of *American Monarch* and *American Titan* through the mud and sand of the fairway. These are exciting hours for me. Normally a tug captain would do everything in his power to keep the tow wire clear of the seabed but this is not possible now. As soon as the Americans are clear of each other and at the desired length the last harbour tug takes the chief officer and his men off the Americans and brings them back to *Smit London*. It is a great relief for me when four hours later the transport is out of the fairway in deep water and the tow wires can be set to full

The tow with the hurrican approaching *photo: coll. Kees Pronk*



The hurricane track versus the tow track *photo: coll. Kees Pronk*

Aft deck in bad weather *photo: coll. Kees Pronk*

Bunkering at sea from the Americans *photo: coll. Kees Pronk*

The best things come in small packages.

Pictured here:
ASD Tug 1810

Damen's compact ASD Tug 1810 represents the latest in multi-purpose harbour towage. With 30 tonnes of bollard pull it has the power to confidently handle ships of all sizes, and the combination of Damen's patented twin fin skeg and twin Azimuth thrusters ensures excellent manoeuvrability. The double drum winch is positioned inside the deck house, allowing the single winch to operate over both the bow and stern. As the latest in tug technology, the ASD Tug 1810 comes prepared for full compliance with IMO Tier III regulation.

Find out more on **Damen.com**

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The Sulu Sea *map: coll. Kees Pronk*

towing length. **The long 8.500 nautical miles tow to Thailand has begun**. According to my voyage plan, it will take us about two months.

When planning the voyage I decided not to take the usual route north of the Philippines because of the typhoon season in the Northwest Pacific but to take the southern route through the Sulu Sea. This route is at a lower northern latitude just above the equator where typhoons are very rare. The route chosen is not the shortest but it is certainly the safest for a tug and her tow. The usual and shortest route for most vessels crossing the North Pacific is via the Great Circle. For us this would mean crossing the North Pacific at a relatively high northern latitude. At higher latitudes you can expect bad weather earlier and more often - in our case - unfavourable currents as well. Whenever possible you want to avoid sailing at high latitudes with a low-speed tow. With high speed vessels, Great Circle navigation is not a problem and bad weather areas can be easily avoided or circumnavigated.

Due to the long distance to Thailand and the amount of bunkers on board the tow will be carried out with reduced power and a fuel consumption of 25 tonnes per day. With this consumption an average towing speed of 6 knots is achieved. The Americans follow nicely and we prepare ourselves for a long and quiet tow. The only distraction between the round-the-clock watches and the never-ending ship maintenance is the regular inspection of the three unmanned tows. In the old days almost always runners were carried aboard the towed objects. They would stand watches to monitor the towing connection, check for leaks and so on. Due to increasing and stricter regulations and cost-cutting nowadays more often than not a tow is carried out without a riding crew. To check that everything is still in order on the unmanned tows *Smit London*'s workboat is put overboard every ten days or so and the chief officer with a few men goes to check on the Americans.

During the tow our radio operator receives weather reports from various weather stations several times a day. This is particularly important for us as it is **hurricane and typhoon season** in the North Pacific. On 29 July - after about eleven days of towing - a tropical depression (TD) is formed ESE of our position. With the necessary suspicion, I follow the development of the TD through the weather reports from the US National Hurricane Centre (NHC). The NHC predicts that the wind speed will increase in the short term with the potential for hurricane force winds. The track of the TD is towards and over the Hawaiian Islands. Our planned course is between the islands of Kauai and Oahu. The next day, the TD is upgraded to a Tropical Storm (TS). The progress of the TS is now significantly faster than our towing speed. If this development continues *Smit London* and the tow will end up in the unfavourable NW quadrant of the rapidly approaching TS. On 1 August the NHC upgraded the TS to a **category 1 hurricane named Fefa.**

Action had to be taken. The weather is still fine but the closer Fefa gets the worse it will get. I change course to the south and increase the towing speed to full power to cross ahead of Fefa and get into the less unfavourable SW quadrant. On 2 August Fefa is upgraded to a Category 3 hurricane by the NHC with winds of up to 120 knots. *Smit London* crosses Fefa's predicted path. The weather is still fine, but the swell is starting to build up - a prelude to very bad weather. We manage to get into the SW quadrant in time. Nevertheless, we get a good dose of heavy rain, wind, sea and swell from hurricane Fefa as she passes behind us. In retrospect, the route we took turned out to be the right one. During the time we were towing there were a couple of major typhoons

Colourful fishing vessels at work *photo: coll. Kees Pronk*

A lone fisherman in the Sulu Sea *photo: coll. Kees Pronk*

raging in the Northwest Pacific, north of our transport. Had I taken the shortest route we would certainly have had to deal with them.

Early on the morning of **1 September** - three days before the transport is due to enter the Sulu Sea via the Surigao Strait - the tow length between *Smit London* and *American Spitfire* is shortened. A bunker operation is scheduled for that day. Most of the preparations for this operation have already been made in San Francisco. The hydraulic pump has been installed in the cargo hold above the deep tank containing the fuel oil. The diesel generator and hydraulic unit are on deck, hooked up and ready to go. The bunker hoses are laid out on deck. At 06.00 hrs the workboat with six men on board is launched. Four men board *American Spitfire*. The 300-metre bunker hose is transferred to *Smit London* by the workboat.

When the bunker tank is opened to start the bunker operation to everyone's surprise **the tank is empty**. After investigation the fuel is found in the aft ship of *American Spitfire*. The cause: the valve of the forward bunker tank did not seal the tank for 100% and the fuel oil had gradually leaked into the aft bunker tanks. Our clever second engineer quickly figures out *American Spitfire*'s fuel transfer system. After putting the necessary valves in the right position and starting the emergency diesel generator, he uses the fuel transfer pump to pump the thick fuel oil back into the forward bunker tank. This takes several hours, and it is not until around midday that the actual pumping of fuel oil to *Smit London* can begin. At around 23.00 hrs I decide that it has taken long enough and stop the operation. So far we have received about 200 tonnes of fuel oil. The people on board *American Spitfire* and *Smit London* have had a long day and need to rest as they have to stand their regular watches on board the tug during the night.

The workboat with three men on board motors back to *American Spitfire* to collect our colleagues. But after 100 metres the workboat's engine stalls and it can neither go ahead nor astern. A dangerous situation especially in the dark of the night. At that moment there is little I can do with *Smit London*. I feel

The battleship FUSO *photo: coll. Kees Pronk*

The Battle of Surigao Strait
was part of the operations of the Allied Forces, predominantly American, in the Leyte Gulf. The action at Surigao Strait was one of the few naval battles of the Pacific War in which aircraft did not play a significant role.

In the early hours of 25 October, 1944, a Japanese force entered the Surigao Strait. In a confrontation with destroyers and battleships of the U.S. Seventh Fleet and the cruisers and destroyers of the Royal Australian Navy Task Force 74. The narrow strait limited the movements of the Japanese fleet sailing North. During the transit American PT boats and destroyers launched torpedo attacks sinking the battleship *FUSO* and the destroyers *Asagumo*, *Michishio*, and *Yamagumo*. Nevertheless the Japanese continued their course. But the end of the strait was sealed by the battleships *USS California*, *USS Maryland*, *USS Mississippi*, *USS Pennsylvania*, *USS Tennessee* and *USS West Virginia*. The geographical situation formed a trap for the Japanese as it allowed the American battleships to execute the "crossing the T" manoeuvre allowing to fire full broadsides on the Japanese vessels which were limited to using only their forward guns. While the Japanese were thus engaged they were attacked on the flanks by U.S. Navy and Royal Australian Navy cruisers and destroyers. The battleship *Yamashiro* sank and the cruiser *Mogami* was heavily damaged. As this was going on a second group of Japanese warships was entering the strait but decided against pressing on and withdrew. Despite this the fleeing Japanese cruiser *Mogami* collided with the flagship of this second group – the cruiser *Nachi*.

The Leyte Gulf operations involved landings from sea on various islands in the Philippines to drive the Japanese out and wreck the Japanese supply lines. The Japanese send a large naval force to counteract. But during the battle of the Philippine Sea they had lost no less than three aircraft carriers with most of their warplanes – a severe loss they could not make good. In the ensuing naval encounters in the Battle of the Sibyuan and Sulu Seas as well as the Battle off Samar most of the remaining Japanese was destroyed. Japan's total losses in the Battle of Leyte Gulf amounted to 3 battleships, 1 large carrier, 3 light carriers, 6 heavy cruisers, 4 light cruisers, and 11 destroyers. The United States lost 1 light carrier, 2 escort carriers, and several other vessels - **JvE**.

USS CALIFORNIA BB-44
photo: coll. Kees Pronk

powerless and quickly think about what to do next as the workboat is in the path of the approaching *American Spitfire*. I point the tug's searchlight at *American Spitfire*'s rope ladder hanging overboard and call the workboat's second officer on the VHF. I tell him to try and grab the ladder as *American Spitfire* passes. The trick works perfectly and a little later the workboat is hanging alongside *American Spitfire*. Meanwhile the crew on board *Smit London* are busy preparing the second workboat to pick up the disabled workboat and the pump crew. The second workboat is launched around midnight. More than half of the crew - ten men - are no longer on board the tug. By 02.00 hrs both workboats and the entire crew are back on board. The operation which was planned to take about six hours took more than twenty hours in total.

5 September. It is necessary to shorten the tow wires before entering the Sulu Sea as in some places in the Surigao Strait the water depth is less than 50 metres. At full towing length, *American Titan*'s tow wire has a catenary of more than 100 metres below the surface. It is unthinkable to repeat what I did when we left San Francisco Bay. The main reason is that the Surigao Strait is littered with shipwrecks many of which are not on the charts.

During World War 2, in October 1944, Surigao Strait was the scene of a historic naval battle between the US and Japanese naval forces - the last known major battle in the history of naval warfare: **the Battle of Surigao Strait**. The biggest battleships in the world at the time confronted each other. The Japanese fleet was defeated in this naval battle and lost its flagship – the battleship *Fuso*. Several smaller warships on both the Japanese and American sides were also lost. As a remnant of this historic naval battle, there are many shipwrecks in the Surigao Strait.

Early in the morning the tow wires of all three tows are shortened until the catenary of the last vessel - *American Titan* - is less than 50 metres. The transport passes Surigao Strait without any problems. The echo sounder is on all the time and nowhere is the water depth less than 50 metres. In the afternoon after passing the port of Surigao on the northern tip of Mindanao island the transport is in deeper water. The Americans can thus be veered to full towing length.

SMIT NEW YORK arriving to take one of the Americans to India *photo: coll. Kees Pronk*

SMIT NEW YORK seen here as SmitWijs New York *photo: Ian Edwards*

This is not going as smoothly as expected. First I lengthen the tow wire of *American Titan*. But she does not want to distance herself from *American Monarch*. The tow wire is pointing straight up from under the stern of *American Monarch* straight up to the bow of *American Titan*. This is not right and after some thought I conclude that the tow wire of *American Titan* is caught in the propeller of *American Monarch*. With darkness approaching and sailing so close to the coast of Mindanao it is not an encouraging thought to carry on like this into the night. *American Titan*'s tow wire is shortened. After several very hard and fast course changes the tow wire finally slips off the propeller blade and I can veer the three Americans to normal tow length.

After weeks of solitary towing across the lonely North Pacific **the Sulu Sea** is bustling with large and small colourful local fishing boats. There is also a lot of local shipping between the Philippine islands. Filipino fishermen look on in amazement at the unusual transport passing through the Sulu Sea. Some fishing boats come closer out of curiosity. There is a lot of waving and shouting between the fishermen and our Filipino crew. My fisherman's blood is stirring and the chance to obtain fresh fish is too good to pass up. I call the Filipino bosun to the bridge. I tell him to call one of the nearby fishing boats and ask if we can barter with them for fresh fish. Meanwhile, I take the power back and reduce our speed. A fishing boat comes alongside and our Filipino bosun arranges a trade. A few cartons of cigarettes and a bottle of whisky for a large basket of freshly caught fish. For two days we feast on the delicious fresh fish.

The transport leaves the Sulu Sea and enters the **South China Sea** via the Balabac Strait. Since the near-confrontation with hurricane Fefa the tow has gone smoothly and without major problems. On 14 September when

South of Vietnam we are expecting visitors. Just before crossing the 100-metre depth mark and into the South China Sea, *Smit London* makes a rendezvous with *Smit New York*. *Smit London*'s workboat takes the chief officer and a couple of sailors over to American Titan. With *Smit London* moving at very slow speed we disconnect and release the towing connection on the bow of *American Titan*. *Smit New York* connects to the spare towing connection of *American Titan* - which had already been prepared in San Francisco - and departs with her in the direction of Singapore. With the released towing connection pulled back on board the two tow wires of the remaining Americans are shortened. The reason for this is the shallow water in the Gulf of Thailand. With a relatively short distance to the two Americans and reduced power *Smit London* starts the final leg of the voyage in the Gulf of Thailand to Thap Sakae.

18 September. At the crack of dawn we arrive with the two Americans off the coast of Thap Sakae. There is no harbour, no authorities to report our arrival and no tug assistance. I have, however, worked out a plan to anchor the two Americans without assistance. Once again the chief officer and a few sailors are taken by workboat to *American Monarch*. They are to prepare the towing connection for a quick disconnect and the anchor winch for releasing the anchor. The intended anchorage spot is approached at a very slow speed and at my signal on the VHF the chief officer drops the *American Monarch*'s anchor and slowly pays out the anchor chain as it comes under strain. When enough chain has been paid out, the chief officer releases the towing connection and the first American is anchored. Slowly moving forward to keep *American Spitfire* behind us the disconnected towline is hauled back on board. The same manoeuvre is performed with *American Spitfire* and within four hours both Americans are safely anchored. Smit London comes alongside American Monarch to retrieve our material - the spare towing gear and navigation lights are dismantled and taken back on board the tug. *Smit London* then moves alongside *American Spitfire*. The bunker hose is reconnected and our second engineer again pumps leaked fuel oil from the aft bunker tank to the forward bunker deep tank. The fuel oil is then pumped from *American Monarch*'s deep tank into our bunker tanks. The fuel oil pumped back apparently also contains old fuel oil from *American Spitfire*. In San Francisco 300 tonnes of fuel oil was loaded and we received 350 tonnes back. The spare towing gear, navigation lights and pumping equipment are also taken back on board *Smit London*. All work is completed by 20.00 hours. **The long tow has been successfully completed**. We leave the Americans behind and depart full speed for Singapore.

After informing SmitWijs Towage that the Americans had been delivered we receive a message back stating that both *American Monarch* and *American Spitfire* had also been sold to a scrap dealer in India. Had this sale taken place a few days earlier we would have had to tow the two Americans via the Singapore Strait onwards to India. But now they have been delivered this means a new tow with a new contract. SmitWijs Towage's quotation for onward towing is, however, too high for the buyers. I have no regrets that this tow will not be carried out by *Smit London*. While in the South China Sea on our way to Singapore we pass the two Russian tugs that will pick up the two Americans separately and tow them to India.

Smit London arrives in Singapore in the morning of **22 September**. She anchors at the Eastern Working Anchorage. In the course of the day my relieve comes on board. After the change of command I go ashore in a launch and check into a hotel. The following evening I fly back to Holland arriving back home from a trip around the world in three months."

Kees Pronk first went to sea at the age of 14 when he joined the Scheveningen-based fishing vessel SCH 46 – Frank. After three years of fishing he changed over to deepsea shipping.. After two more trips a friend pointed him to the tugs. So in 1965 Kees started his towage career with the famous Dutch Wijsmuller company. His first tug was TITAN, a 1.200 hp tug employed in Wijsmuller's harbour service as well as on coastal towing and salvage. In 1971 he changed over to Smit. In 1976 after completing his studies he re-joined Smit as 2nd Mate, two years later he was promoted to Chief Officer. In 1988 he was promoted to full-time Master. At the end of 2007 Kees Pronk retired. The next couple of years were spend on and off as Tow Master and relief Master for various operators. In 2016 he finally retired from the sea.

In 2023 Kees Pronk published "Bergen Slepen op Zee" in which he told a number of stories about his life at sea as a tug master. See 'Books' elsewhere in this issue for details. One of those stories, about the tow of the *FPSO BONGA*, was published in TugeZine 18. Subscribers can download that issue - or read the story on line - from our website TugeZine.com.

Capt. Kees Pronk in the wheelhouse of SMIT LONDON 17 July 1991 prior to departing San Francisco with a triple tow *newspaper photo: Wendy Lamm / The Tribune - coll. Kees Pronk*

Regional

The preserved salvage vessel BRUINVISCH seen here 7 February, 2024, in the Oude Maas. En route for her home port Maassluis where she is part of the Maassluis Tugboat Port collection. The vessel was built for account of Tak's Berging (W.A. van den Tak Salvage), a subsidiary of L. Smit & Co's Internationale Sleepdienst. She worked numerous salvage cases, performed diving support and - in the early days of North Sea offshore - carried out seismic surveys. In 1990 she was sold to Spain to return to Maassluis in 2005 *photo: Nico Giltay*

DÜNE was built in 2024 by Neptune Marine as NP 633. Seen here 31 March, 2024, while running trials. Owner of the Eurocarrier 2408 is the German Eggers Kampfmittelbergung, a subsidiary of the Eggers Group which is active in construction, recycling of building materials, as sand and gravel trader, environmental protection and the salvage of munition from the seabed *photo: R. & F. van der Hoek*

The tug UNION ONYX is seen here in the Oude Maas en route IJmuiden to Moerdijk on 12 May, 2024. The tug was constructed for account of the Belgian U.R.S. - a Smit subsidiary - as a seagoing / coastal tug but on take-over of Smit by Boskalis reconstructed as a 'pin' boat for mating with barges involved in dredging operations. Here she is pushing the barge TERRAFERRE 501 *photo: Nico Giltay*

OCEAN ENERGY - seen here outbound Rotterdam for Ireland on 8 April, 2024, is a Damen MultiCat 2309. Owner is Atlantic Towage & Marine Ltd, Ireland *photo: Nico Giltay*

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Biglift's HAPPY STAR with a full load of Damen tugs from the yards in China and Vietnam en route to The Netherlands *photo: Damen Shipyards*

continued from page 63

the former *Salvigilant* resp *Salviceroy* operated by POSH-Terasea. The smaller Kim Heng 1300 (2012 - 1.300 bhp), 1301 (2014 – 1.300 bhp), 1302 (2012 – 1.300 bhp),1630 (2013 – 1.630 bhp) and 3203 (2009 – 3.200 bhp) are mainly used with the company's15 barges, 9 of which are deck cargo barges, 4 are platform barges and 3 are crane barges.

SVS Maritime

a subsidiary company of the Greek towage provider Vernicos Scafi Group, has awarded Turkish shipbuilder Med Marine a contract for the construction of a new harbour tug. The tug – a Robert Allan Ltd design - has a length of 25,2 metres, a beam of 12 m, a draught of 5,75 metres, and a depth of 4,6 m. Accommodation for up to eight crewmembers. The propulsion system will deliver a speed of 12 knots and a bollard pull of approximately 75 tonnes.

Design take-over

In February, 2024, **Elliott Bay Design Group** of Seattle, Washington, entered into a strategic partnership with Anchorage, Alaska-based naval architecture and marine engineering firm **Coastwise Corporation** wherein the latter will become a new division under Elliott Bay. Coastwise Corporation has been rebranded as **Coastwise Engineering**. This division will continue to provide naval architecture services to both public and private clients.

As part of the agreement, Elliott Bay will acquire Coastwise Corporation's assets, including the addition of Coastwise owner and principal, Patrick Eberhardt, who will join Elliott Bay serving as the Alaska representative seeking opprtunities in the passenger vessel, remote arctic workboat, law enforcement, and fishing sectors.

One of the projects carried out was that of the design of a shallow draft

CÉLADON is one of the proposed 20-tug series for the French Navy, production of which has now been halted and may be even abandoned *photo: coll. Job van Eijk*

Jiangsu Zhenjiang recently delivered the first Chinese domestic hybrid diesel-electric tug - YONGGANG TUO 80 - to the owners Ningbo Oil Handling *photo: Jiangsu Zhenjiang Shipyard*

articulated tug and barge set. Owned by **Brice Marine**, Fairbanks, Alaska, the ATB is designed to serve remote rural Alaskan communities and construction sites with shallow rivers or bays and unimproved beaches. The 70-foot steel shallow draft tug, *Alulaq*, is designed to meet the proposed USCG subchapter M regulations. The tug design includes a Beacon Finland Ltd 11,75" pneumatic pin coupling system which connects with the barge. *Alulaq* has three propellers and a total main engine output of 1.500 hp. Operating draft is 3'-9" (1,14 m).

The barge part of the ATB is the 180-foot (54,86 m) *Drift River*. This is a USCG certified subchapter I cargo barge with a stern notch and a Beacon Finland socket plate to fit the *Alulaq*'s pin coupling system. The barge is capable of carrying approximately 1.000 long tons of cargo, which can include up to 28.000 gallons of fuel oil for use by the tug during long voyages. *Drift River* includes a bow ramp for roll on / roll off equipment loading at unimproved beaches. Brice Marine contacted Coastwise for an all new tug and barge design when no existing ATB design was found with the desired shallow draft.

Schottel for Chinese etug

Guangzhou Port Group's latest (e) tug will be fitted with two azimuthing thrusters type SRP 360-LE. According to Schottel each SRP has an input power of 1.500 kilowatts and a propeller diameter of 2,2 m. The embedded L-Drive reduces the installation height of the thrusters. Guangzhou Marine Engineering Corporation did the design work and the tug will be built by Lianyungang Hongyun. Dimensions of the tug are 37,9 m x 10,5 m. **Guangzhou Port Group** currently has more than 20 tugs with Schottel propulsion systems in operation or under construction.

SEAWAY SWAN loaded with a fleet of Bourbon offshore support vessels seen here 25 January, 2014, in Batam Anchorage. The load consists of BOURBON HIMALAYA and BOURBON ASTYANAX (first two) and BOURBON LIBERTY 221, 239, 217, 207, 233, 225, 240 and 223 *photo: Maasmond Maritime (Piet Sinke)*

Multraship ordered three azimuth stern drive tugs from Damen Shipyards constructed in Vietnam to be delivered 2024. *Multratug 34*– an ASD 2813 tug with 85 tonnes bollard pull – has already been delivered and is in service in Oman. *Multratug 35* and *Multratug 36* will be taken delivery of later in 2024. These will be 32-m tugs built to ASD 3212 design with a bollard pull of 88 tonnes, for deepsea and coastal towage, salvage and other operations.

French Navy

Chantiers Piriou at Concarneau was the French yard that won a big contract for the delivery to the Marine Nationale of 15 stern drive harbour tugs of the RP-30 and 5 of the RPC-30 coastal tug design. These tugs are intended to replace a number of less powerful tugs: the three 30 tbp Bélier class (*Bélier*, *Buffle*, *Bison*), the three 12 tbp Maito class (*Maito*, *Maroa* et *Manini*) and 16 units of the 12 tbp Fréhel class (*Fréhel* and *Saire* at Cherbourg, *Armen*, *La Houssaye*, *Kéréon*, *Taunoa*, *Mengam*, *Nividic* and *Le Four* at Brest and *Sicié*, *Lardier*, *Giens*, *Balaguier*, *Taillat*, *Port Cros* and *Rascas* at Toulon. entered the fleet between 1989 and 2003.. The RP's are effectively day boats but the RPC's will have the capacity to operate offshore for several days. Ultimately, 6 RP's and 1 RPC will be based at Brest, 7 RP's and 1 RPC in Toulon, two RP's and 1 RPC will go to Cherbourg. The other two RPC's will go to Papeete and Toulon. That was the plan in April 2020. Of the twenty tugs, the first four were a firm order after which another four optional batches of four tugs each were to follow. Faced with increased costs – soaring material costs and high inflation - Piriou halted continuation of the program after the first four were delivered. It has been suggested the yard lost Euro 1 million per boat. The delivery of the first boats had already been delayed due to the Covid Crisis so a 6-month overrun was granted by the Directorate General of Armaments (DGA) - the official Government buyer - later extended to a year – the delivery dates for the first batch were contracted for 2022 initially. The entire program was to run for a few years with the last one to be delivered in 2027.

Dimensions of the tugs are 26 x 8,4 m with a displacement of 275 tonnes. Winches are fitted both forward and aft. They w\ill have diesel-electric propulsion. Main engines are two Baudouin diesels delivering 1.044 kW each (total output 2.088 kW / 2.839 bhp resulting in a bollard pull of 35 tonnes and a speed of 12 knots, achieved via Schottel azimuthing thrusters. A tunnel-type bow thruster (4 tonnes of thrust) powered by a 354 kW Nidec Leroy-Somer electric motor. is also fitted. Crew will be 5-strong (6 on the RPC's). The RPC's are identical but have increased seaworthiness, greater range and will be able to stay at sea for five days up to 200 nm offshore.

The first to be delivered was *Céladon*. She was accepted by the buyers on 28 February, 2023. After several months of testing the tug was transferred to its base, Toulon. The second tug - sister *Zinzolin*, an RPC, was delivered to the Brest Naval Base. The third unit in the series, *Turquin*, was initially to be assigned to Cherbourg but will ultimately have Brest as its home port.

The fourth, *Azur*, again was assigned to the Toulon Naval Base. While the program has stopped for the time being – it has even been suggested it was abandoned altogether - names and bases had already been allocated: *Céleste* – the fifth tug in the series was also assigned to Cherbourg, where the 6th RP 30 – *Viride* – was also to be based. So if ever delivered, there may be a shift across bases. The next tugs will be named *Safre*, to be based at Fort-de-France, *Amarante* (Papeete), *Ocre* (Toulon), *Nacarat* (Brest), *Sepia* (Toulon), *Vermeil* (Brest), *Corail* (Toulon), *Indigo* (Brest), *Grenat* (Toulon), *Ponceau* (Brest), *Grège* (Toulon), *Carmin* (Cherbourg), *Bistre* (Toulon) and *Cobalt* (Brest).

Med Marine

has so far seen a busy year. In January the tug *VB Ahmose* was delivered to the owner **Boluda**. This is a Med-A2575 design based on the RAmparts 2500-W. On 16 Februari, this delivery was followed by that of a sistership – the 75 tbp *VB Lusitania*. In March another RAmparts was delivered, this time the tug *Gea* for account of Scafi subsidiary **Jadranska Pomorski Servis**. Another delivery was *Dias Z* for account of **Nemeca Z**. And on 17 May, the Med-A2565 *Monterrico* was delivered to Guatamala owner **Arrendadora Continental S.A.** Dimensions of this tug are 25,2 x 12 x 4,60 m with a draft of 5,75 m. Bollard pull is 72 tonnes. The tug is fitted according to FiFi-1 standard. Earlier, in 29023, Med Marine delivered a Med-A2360 tug with a bollard pull of 60 tonnes to the same owner. The newbuild tugboat was named *Motagua* and currently operates at Puerto Santo Tomas de Castilla.

Books

by TDI Tugboat Publications

Bergen Slepen op Zee:
In TugeZine 17 we announced captain Kees Pronk's book **Bergen Slepen op Zee,** subtitled 'Lotgevallen van een sleepbootkapitein'. **In this issue** we have an article on a triple tow.

Several of Kees Pronk's memorable voyages and salvage operations are described in his book. The stories are easy to read and factual. They are illustrated with a lot of photographs, weather charts, navigational charts, etc. Some of the more intricate problems are explained in detail. Amongst the stories are two chapters on the Golfoorlog (Gulf War), salvage of the Hyundai Fortune, a piracy attack, de Bonga tow from South Korea to the U.K., salvage of the Surf City, a triple tow with scrap vessels and several other towage jobs. The book is published **in the Dutch language only** and for non-native Dutch speakers the text requires a good understanding of the Dutch language. The book is a great read and well recommended. **JvE**

Bergen Slepen op Zee – Lotgevallen van een sleepbootkapitein. Author: Kees Pronk. Published: 2023. Publisher: Kees Pronk. 210 pages, fully illustrated. Dutch language. Available as hardback only. ISBN-13: 979-8364076595. Costs are Euro 30,00 excluding postage and packing. To order, send an e-mail to: voorloper@outlook.com, mentioning name, postal address, postal code and residence.

Zeevaart en scheepsberging in de 21e eeuw.
This is a Dutch-language book by Capt. Jan ter Haar. In this book Capt. Ter Haar shares his opinions about a large number of maritime casualties. His opinions do matter since he is an experienced ship Master and Salvage Master.

The trigger for this book was the case of the *Ever Given* blocking the Suez Canal. Publicity-wise this was excellent for everyone involved - except for the unlucky crew and the Master of the boxboat. And of course for those who were presented with the bill. Basically it was about a boat that grounded in a sandy canal and because of its mass had wedged itself between the banks of the canal. Even in the Suez Canal groundings happened more often than once a year, but these cases were quickly solved by some Canal tugs or otherwise. They never made the headlines. But this case was blown out of all proportion by the media, by some of the interested parties, by self-proclaimed specialists, etc. It most certainly raised the costs. But what was the root cause of this grounding?

This is a different look at shipping casualties and its root causes. An interesting read!

Zeevaart en scheepsberging in de 21e eeuw – meningen van een zeeman. Author: Jan ter Haar. Published: 2024. Publisher: Walburg Pers / Lanasta. 150 pages, fully illustrated in b&w. Size: 24 x 17 cm. Dutch language. Hardback. ISBN 978-94-6456-188-3. Price: Euro 22,99 from any bookshop in The Netherlands. Excluding postage where applicable.

The money is good and the marriage is bad – Varen op Zee
Beware: the English title is just about the only English text in this Dutch-language book! And that is a pity because Capt. Ter Haar's story would be enlightening for readers outside The Netherlands as well.

Basically the book relates Captain Ter Haar's life at sea from the earliest beginnings as an apprentice Mate in 1960 until today as a Salvage Master / Consultant. The text is interspersed with anecdotes and specialised comment. An index of ship's names is provided. This is a very interesting book telling about seafaring, tugs, towage, salvage and all that comes with it providing an insight not usually provided by the maritime community. Highly recommended reading!!! Price is around Euro 27, 95 with slight fluctuations depending on the seller. Repeat, this is a Dutch language book for which you must be a fairly fluent Dutch reader.

The money is good and the marriage is bad – Varen op Zee - published 2017 by Lanasta, Emmen, The Netherlands - Author: Jan ter Haar – Dutch language - 336 pages - over 125 illustrations in b&w – index of ships names - size 24,7 x 17,4 cm – hard cover - ISBN 978-90-8616-265-9 – price: around Euro 27,95 plus postage – can be ordered through regular bookshops or via internet sellers.

Other book by Jan ter Haar:
The Towing Manual (in English), published in 2010. ISBN: 978-90-810900-2-5. Price: Euro 44,00. Available from the publisher, Polestar Publishing, (website www.polestar-publishing.com; check out the catalogue.

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The Teunis Muller heritage

Multraship's Kees Muller was one of a long line of family members active in shipping. The first documented Muller to change over to shipping was a Teunis Muller. In 1779 the shopkeeper changed into a ferryman on the route to Dordrecht and Rotterdam.

by Job van Eijk

With the Kanaal door Voorne (the Voorne Channel) and later the Nieuwe Waterweg changed the trade routes. Dordrecht became the pivot and became an important crossroad of waterways. It was here that tugs were exchanged. On the north-south route the inland waters tugs were exchanged for more powerful and seaworthy tugs for the tow through Zeeland. And for the eastgoing tows a tug with high horsepower and considerable bunker capacity took over the tow up the river Rhine. Around 1900 no less than 100 tugs were domiciled at Dordrecht. By 1931 this number had grown to no less than 330. In 1918 no less than 30 tug operators had their seat in Dordrecht as did 7 towage agencies.

The steam tug SCHELDE - ex ROTTERDAM, ex WESTERSCHELDE ex CLARA ELIZABETH dates from 1892. Bought 1950 - Scrapped 1972 - 260 ihp *photo: coll. L.M. Kruik*

Skipping a few generations it was **Leendert (Leen) Muller** – Kees Muller's great-grandfather - who in 1909 acquired his **first tug** which was to be the foundation of what today is Multraship. Leen had operated a sailing ship but when this vessel became unprofitable he became a coal trader. At the time it was custom that every capable son was helped by his parents in the acquisition of a ship. Leendert , however, lacked the necessary capital – he had six sons. He was then persuaded to go into tugs. This first tug – now named *En Avant* (French for 'full ahead') - was manned by three of his sons: Willem (as Master), Jan was the Engineer and Teun served as Mate and Deckhand.

In 1911 **Willem Muller** – the eldest son and the grandfather of Kees Muller - became more or less independent when he and his father established the **NV Sleepmaatschappij 'En Avant I'**. Willem had made many trips to Zeeland when he worked on his father's cargo clipper. At Terneuzen he had become enamoured with a young lady he married in 1913. The Muller couple **settled in Terneuzen**. In 1922 Willem made the change from captain-owner to owner when he established **Sleepdienst Muller, Rederij 'En Avant'.** The same year the newbuild 130 ihp *En Avant V* entered the 'fleet'. The company also started shiphandling at the port of Terneuzen and the assistance to vessels destined for Ghent. This in addition to the North-South trade.

HOLLAND - ex CALAISIEN, ex LAUENBURG, ex PORT DE BEYROUTH was purchased in 1961 - former 900 ihp steam tug. Reconstructed as motor tug by Terneuzensche Scheepsbouw in 1962.1.170 hp. 1987 extensively rebuilt and re-engined - 1.600 bhp - 1991 sold to Jan Zwagerman - 1993 in lay-up, 1996 auctioned. Photo shows the tug in her first appearance as motor tug *photo: J.W.F. Smallegange*

Rapid expansion followed and in 1924 the fleet consisted of five owned and four chartered tugs. The charter boats were better suited for work in the Westerscheldt. In 1927 the first motor tug was acquired second hand: the second *En Avant I*. A mistake that was soon sold.

The Westerscheldt with its shifting shallows was a heaven to salvors. The Belgian operators Gerling and Letzer were not pleased to see an 'intruder' in the form of Willem Muller entering in what they considered to be their territory – salvage was a lucrative business. A

SCHOTLAND was built in 1978 by Jonker & Stans. 4.460 hp.1985 via the Ship Finance Bank.to Goliath Towage & Salvage, same name. 1987 to Kuwait Oil as HILAL II. 1990 Scheldt Towage as SCALDIA. 1993 Al-Jazeera Shipping, Bahrain as SAMSON. 1995 Klyne Tugs as ANGLIAN WARRIOR II. 1997 Union Shipping, New Zealand as FREDERICK BROWN. 1998 Ocean Bulk, New Zealand as KARAMEA. 2003 sold to Kuwait as ABDULLATIF ALGHANIM 10 *photo: Hans Hoffmann*

MULTRATUG 4 was the former URAG tug MIDLUM. Purchased by Multraship in 1985. 14 tbp. In 2001 sold to the Jonas Foundation, Den Dolder, for 1 Euro. The Jonas Foundation concerns itself with training of juvenile former delinquents *photo: coll. Job van Eijk*

period of **severe competition** followed, not only in salvage but also for the shiphandling jobs. This lasted until 1938 when the operators in the Scheldt area came to an agreement to cooperate for the next 40 years.

Willem Muller's only son, **Leendert Muller**, entered the business in 1930. It was he that was to expand the business and reconstructed the company into a multi-faceted towage and salvage company. Leendert's marriage also resulted in two sons (Willem and Kees) and three daughters.

When Holland was invaded by the Germans the Willem Muller fleet consisted of nine tugs. Willem Muller at the time was in the Navy where he served in guard ships. He succeeded in reaching England via Dunkirk where he entered the Dutch army. Leendert was now the only manager left in Holland. The company survived the war relatively unscathed although their tugs were requisitioned near the end of 1944 by the retreating Germans.

In 1948 the **Sleepdienst Willem Muller** (Terneuzen Tugboat Company) was established by Willem and Leendert Muller. The latter became sole director in the early 1950s. Modernisation of the fleet was necessary since they were all steam tugs. In 1954 and 1955 two motor launch tugs were added to the fleet, the 120 hp *Kees M* and the 160 hp *Cobi M*. Reportedly the latter was the tug in which the young **Kees Muller** gained his first experience in towing. At the end of the 1950s / start of the 1960s Leendert's two sons entered the management of the company. In those years two steamers were acquired that were reconstructed as seagoing motor tugs. In 1973 Leendert Muller suddenly passed away and henceforth the company was run by the brothers Willem (Wim) and Cornelis Levinus (Kees).

In 1961 the company acquired its first **seagoing tug**, the twin screw steam tug *Port de Beyrouth* which was transformed into the twin screw 1.170 hp motor tug *Holland*. In 1966 another seagoing tug was added, the steamer *Winston Churchill* which was reconstructed as the 1.900 hp motor tug *Zeeland*. Further shiphandling tugs were acquired second-hand and upgraded. The first Voith Tractor tug in the fleet was *Kamperland*, acquired from the U.K.

The 1970s were the years of the **North Sea offshore oil boom**. On the back of this development the company invested in second-hand tonnage and eventually in newbuild deepsea tugs. At one time Willem Muller was the third largest deepsea tug operator in The Netherlands.

By the end of the 1970s Willem Muller was confronted with the ever bigger car carriers entering the locks. Several times one of the bridges across the locks was put out of order when hit by a carrier. An engineer hired by the Ghent Port Authority came up with an idea for *Octopus*. This 'platform' had a large beam with a slot in the stern to accommodate the bow of the carrier which was then clamped by suction cups mounted

Kees Muller (left) engaging with visitors of a Multraship event at Terneuzen *photo: Job van Eijk*

From L to R: Mijndert Wiesenakker (Damen Shipyards), Pepijn Nuijten (Multraship), Kees Muller, Arnout Damen and Leendert Muller signing the contract for two Carrousel RAVE tugs with Damen Shipyards

photo: Damen Shipyards

MULTRATUG 18 - built 2009 - 4.894 bhp / 3.600 kW - 70 tbp

photo: Richard Wisse

The Carrousel RAVE tugs MULTRATUG 33 and MULTRATUG 32 demonstrating capabilities at Rotterdam, 8 September 2019

photo: Maasmond Maritime / Piet Sinke

1990: Heleen (l) and Kees Muller (r) watching a fleet parade on the occasion of the 15th anniversary of Lekko International Tug Enthusiasts Society

photo: Job van Eijk

MULTRATUG 17 arriving with sheerlegs CORMORANT at IJmuiden, 3 September 2018, with a salvaged vessel in the slings

photo: Joop Marechal

on hydraulic arms. Four azimuthing thrusters were to take care of very precise manoeuvring. While technically feasible the idea was dropped for a cheaper less complicated and costly solution: The Muller tug *Betsy* was to serve as a buffer to keep the carrier form the bridge. After being hit several times she was replaced by a barge fitted with the appropriate fendering which seemed to do the trick.

In the 1980s the offshore boom imploded with grave consequences for the supporting towage market. The Willem Muller business was sold to **Wijsmuller**. Kees Muller was prohibited from re-entering the Dutch towage market for a number of years due to a contractual agreement when Willem Muller was sold. The Muller family's entrepreneurial genes came to the fore, however, when in 1985 Heleen Muller-Ribbens registered **Multraship Towage & Salvage** / Multraship Trading and Shipping with the Chamber of Commerce. The company started with small chartered tonnage one of which was put on salvage station. Kees and Heleen Muller's son Leendert was the first of the next generation to join the company. Leendert started on board the tugs where he worked himself up from deck into the wheelhouse as Master. He also gained experience as Salvage Master. His two sisters somewhat later also joined the company.

MULTRATUG 5 (ex FAIRPLAY XI, ex ARO - 1.630 hp - bought 1990, sold 2005 to Africa), 6 (ex GATCOMBE - Red Funnel - 42 tbp - bought 1997) and 7 (ex LADY MOIRA - Humber Tugs - 52 tbp - bought 1997. Sold 2011 as MTS VISCOUNT. 2022 sold as SHINKEI, currently Palau-flagged *photo: Job van Eijk*

A Belgian branch of the Muller family was set up when Heleen and Kees registered **Kees Muller Marine** at Gent. In that year, 1985, three ex German shiphandling tugs were added to the fleet. The first seagoing tug was acquired in 1987 – the 42 tbp *Barracuda*. Expansion of Multraship was rapid. By 2000 the company operated 11 tugs and a big salvage sheerlegs.

Around 2000 Multraship got involved with IMC Corporate Licensing and the development of a new tug design, the **Carrousel Tug**. In this design the towing winch is mounted on a full-circle radial track with a diameter almost equal to the tug's beam. This significantly reduces the tug's heel due to transverse towline force. With the carrousel mounted above the lateral centre of pressure for a crosswise water flow it eliminates girting and allows the tug to turn freely with respect to the direction of the towline. A bold step was taken when in 2002 the combi-tug *Multratug 12*– a conventional tug fitted with a retractable azimuthing thruster forward – was reconstructed with a carousel system for full scale operational testing. A further development were the powerful Voith in-line fore and aft RAVE-type tugs *Multratug 32* and *Multratug 33* which were designed around the carrousel system.

Kees Muller at the controls performing the official opening of an expo at the Dutch National Towage Museum in 2005 by executing a lift with a scale model of RAMBIZ *photo: Job van Eijk*

The history of Muller came full circle when in 2001 the family re-acquired the rights to the Willem Muller company brand. In 2003 the Muller businesses came under the umbrella of **Muller Maritime Holding** with Leendert Muller as Managing Director. Today the company operates 30 tugs in the shiphandling, terminal, offshore and sea towage markets. Furthermore the fleet numbers 3 powerful ETV's, 4 salvage vessels / workboats, 1 sheerlegs, a number of fast tenders and rescue vessels and several line-handling vessels. The company is also active in Romania and Bulgaria. Tugs may also operate on specific projects elsewhere in the world. Through an association with the German Fairplay company they also have access to additional tonnage when necessary.

Sources: Schippers-Slepers-Reders – 225 jaar scheepvaartgeschiedenis van de familie Muller (2006 – Frederik Muller); Delpher newspaper clippings; files Job van Eijk; issues of Willem Muller Digest; editions of Lekko and Lekko International magazine and internet sources.

Regional

The Shoalbuster 2308 MTS VALOUR (owner Seacontractors) outbound Rotterdam for Gravesend on 13 February, 2024 . . . . *photo: Nico Giltay*

. . . . returning on 20 February, 2024 as MTS VALOUR (owner Thamescraft Marine Contractors, Falmouth). Built 2006, total main engine output 1,695 bhp. 22,6 tbp, Ridderinkhof towing winch *photo: R. & F. van der Hoek*

ODV 1 is a Dutch patrolboat / guard ship with towing capability. Built as RHD 63, later V-63 for DGSM Amsterdam. 1944 as Havendienst (HD) 2 to Port of Amsterdam), 2013 changed to Port of Amsterdam (PA) 2. 2018 to ODV. The vessel was built in 1981 by Akerboom, Leiden (yn 584). 16,65 x 5,02 x 1,65 m. 340 hp Mecedes Benz diesel *photo: Nico Giltay*

TSM KERMOR was built in 2014 by Neptune, Aalst, as INGE W . Current owner is Thomas Marine Services (TSM). Dimensions 32,30 x 10,00 x 3,55 m. Minimum operational draft 2,90 m. Main engine output 2.850 kW total. 48 tbp. Towing / anchor-handling winch with two drums with a pull of 100 respectively 50 tonnes. Brake force 125 tonnes. Fitted with towing pins and chain stopper. The tug is seen here on 31 March, 2024 en route the shipyard for maintenance *photo: Nico Giltay*

KAMPERLAND was acquired by Willem Muller, Terneuzen, on 11 August, 1970. The Voith Tractor was built in 1958 by Scott & Sons, Bowling, United Kingdom, as yard number 417. The tug was delivered to the owners on 24 March, 1958. Owner was Tees Towing Co., Middlesborough. HUTTON CROSS was named by Mrs. Alice Fairweather. Mr Caude Fairweather was one of the Directors of the company and acting Secretary. HUTTON CROSS was the second tug of that name to enter the fleet. The tug is named after Hutton Lowcross, a hamlet near Guisborough. She was fitted with a single six-blade Voith-Schneider propeller driven by a 750 bhp Crossley diesel. Willem Muller modernised the tug and fitted a.o. an enclosed wheelhouse. In 1972 the tug was re-registered with Sleepdienst Willem Muller (Belgie) S.A., Ghent. KAMPERLAND in 1981 ran aground and was severely damaged. Wheelhouse and navmast were removed for use on the tug WAASLAND. The latter was the former Tees Towing MARTON CROSS. The wreck of KAMPERLAND was sold for scrap to Heuvelman Staal BV, 's-Gravendeel. The hull was finally dismantled by Van Heyghen Frères, Ghent.

HUTTON CROSS and sister BANBURY CROSS were the first Voith Tractors in the U.K. The open bridge was unusual as it was a return to the old days. A third, some 1,5 m longer, near sister was the 1961-built DANBY CROSS. She, however, was fitted with a Kort nozzle rudder. DANBY CROSS was sold to Willem Muller in 1976. As FINLAND she lasted until 1994 when she was sold. She re-emerged as tour boat. Willem Muller was obviously pleased with the former Tees Towing tugs as they also purchased the 1953-built CAEDMON CROSS. She was bought I 1971. A new engine was fitted – a Brons with an output of 1.500 hp. Renamed RILLAND she was sold in 1989 to J. Koek, Dordrecht. On 22 November, 1989 on a voyage from Dordrecht to Oporto the tug foundered in the Bay of Biscay. The crew of three were saved by the Philippine bulker GENERAL VALERIANO