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WorldHorizon

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BIANNUAL MAGAZINE OF THE BW GROUP

MCI(P)023/11/2018





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02 CHAIRMAN'S MESSAGE



04 SUPPORTING ONE OF THE WORLD'S LARGEST GREENFIELD LNG TO POWER PROJECTS

BW Magna will undergo retrofitting works in Singapore before sailing off to Brazil for a 23-year contract at Port Açu

08 FURTHER, DEEPER, BIGGER

BW Offshore announces an investment decision for Tortue Phase 2 development, and acquires Maromba oil field in offshore Brazil



12 HAFNIA A YEAR ON

Busy times ahead for the new Hafnia



14 WELCOMING MIKAEL SKOV TO BW GROUP

16 OPEN AND ABOVE BOARD

Putting our anti-bribery and anti-corruption policy into practice in every vessel and at every port and office

18 DIGITAL STARS

Data is fast becoming the new tool for tech-savvy ship owners and seafarers, and Alpha Ori has front row seat in this brave new world



20 A CASE STUDY IN COLLABORATION

BW LNG taps into BW Offshore's vessel conversion expertise as LNG Carrier BW Paris is converted into a Floating Storage and Regasification Unit

25 "ZERO HARM BEGINS WITH ME" ZERO HARM ART COMPETITION

Into its second year, BW continues its search for the next batch of budding artists

26 WINNING AT WELLNESS

Crew receives Mission to Seafarers' award for promoting a healthy lifestyle onboard BW Yarra

28 AROUND THE WORLD

34 SPECIAL THANKS TO ...

Chairman's Message



My recent visit to Rio, where BW has a significant and growing presence, reminded me of the quality of our people around the world. Strong leadership by an individual who has been with the company for a long time, strong managerial calibre in an entirely local team, new talent providing additional bench strength - this is what I saw, and this is a hallmark of what I see in our teams around the world.

The smooth management transition at BW Offshore is another indication of this, with Marco Beenen and Ståle Andreassen taking over as CEO and CFO on 1 July; and former CEO/CFO Carl Arnet and Knut Saethre taking on the equivalent roles in BW Energy, our recently established business in upstream oil and gas exploration. We wish them well in their new positions.

Strong teams are of course only meaningful when energies are channeled into productive outcomes. First and foremost is preserving a laser focus on

servicing our customers with solutions that they need and value. All too often, growth brings with it complacency or self-serving bureaucracy. In BW, we have so far managed to avoid this by keeping business units relatively small and agile, but we must never forget our purpose is to add value for our customers. In airline parlance, this is to remember to 'fly the plane' and not to be distracted by lots of dials and flashing lights.

There are of course other things we need to think about. ESG (Environmental, Social and Governance) outcomes have become an increasingly visible and important topic, especially in the context of climate change, and also in terms of anti-corruption efforts, equality, and sustainability. As mentioned in previous issues, BW will strive to make a positive impact for the future while delivering the energy the world needs today. I am proud of our record on this score, and pleased to see energy across the group going into initiatives from clean propulsion (LPG and batteries) to

technological efficiencies (IoT/ big data) to policy measures (CO₂ mitigation).

Good things are happening across the group: progress on our latest FSRUs, new LNG charters with BP, successful integration of two tanker platforms in Hafnia, upstream oil developments, leveraging the group at Epic Gas, improvements in the VLGC and dry bulk markets just to name a few.

But above all, it is strong teams, customer focus, and attention on our global impact that will serve as the foundation for future success.

Sincerely,
Andreas Sohlen-Pao
Chairman

Supporting one of the world's largest greenfield LNG to power projects

BW Magna will undergo retrofitting works in Singapore before sailing off to Brazil for a 23-year contract at Port Açu

Naming of BW's Third Floating Storage and Regasification Unit (FSRU)

BW LNG's third FSRU, HN2488, was named BW Magna at a ceremony in January this year at Daewoo Shipbuilding & Marine Engineering (DSME) Shipyard in Geosje, South Korea. Despite the snow and cold weather, guests were treated to a fitting ceremony to celebrate the naming of a grand vessel.





(Above) Sponsor of BW Magna Ms Tatiana Perseke together with spouse Bernardo Perseke (CEO, GNA)

On a cold winter's day with the first snowfall of the new year, the spouse of Bernardo Perseke (CEO of GNA), Ms Tatiana Perseke, gave her blessing to one of BW's latest significant investments, BW Magna. Present at the event were Ambassador of Brazil H.E. Luis Henrique Sobreira Lopes and Ambassador of Norway H.E. Frode Solberg, as well as leading members of the industry.

Supporting the world's largest greenfield LNG to Power project

In December 2019, after several months of trading and retrofitting, BW Magna will sail to Port Açu in Brazil where she is committed on a 23-year contract to Gás Natural Açu (GNA), a joint venture formed by Prumo Logistica, BP and Siemens. This will be BW LNG's third FSRU project, with BW Singapore (built 2015) in operation for Egyptian Natural Gas Holding Co at Ain Sukhna since 2015, and BW Integrity (built 2017) in operation for the Pakistan GasPort consortium in Port Qasim.

Having been given a name that translates as "great" in Latin, it is fitting that BW LNG's latest FSRU will go into service by supporting the Brazilian Port Açu project, one of the largest greenfield LNG to Power projects in the world and with the second phase, the largest gas fired power development in Latin America. Says Yngvil Åsheim, "It is a privilege for BW LNG to play a key role in the supply of LNG for power plants in the region. We will leverage our deep maritime experience in gas transportation, and our successful fast-track projects delivered in recent years. BW LNG is fortunate to enjoy the support and expertise of our colleagues in other BW affiliates, and we are confident that we will deliver on our promise to be a reliable and trusted partner to Brazil for the next 23 years and beyond".

Turning a green ship blue

BW Magna has a carrying capacity of 173,400 cubic meters and a regasification capacity of one billion standard cubic feet per day (scfd), more than a standard FSRU. She will be undergoing



(Above) Seated (From Left to Right) Mr Hyung-Gun Park, Executive Vice President, Head of Ship Business Management Division, DSME; Mr Jeremy Dawson, Head of Market Development, Siemens; Mr Jonty Shepard, Head of LNG Trading, BP; H.E. Luis Henrique Sobreira Lopes, Brazil Ambassador to South Korea; Mrs Dora Sobreira Lopes, Spouse of Brazil Ambassador to South Korea; Mr Bernardo Perseke, Chief Executive Officer, GNA; Mr Sung-Geun Lee, President & CEO, DSME; Ms Tatiana Perseke, Godmother of BW Magna; Mr Andreas Sohlen-Pao, Chairman, BW Group; Mrs Yngvil Åsheim, Managing Director, BW LNG; Mr Kevin Lowder, Senior Vice President, International Investment Team, EIG; Mr Flavio Valle, Executive Officer/Executive Vice President, Prumo Logistica; Mr Dae-Seong Jeong, Executive Vice President, Head of Production Business Unit, DSME; Mr Sang-Hwan Park, Vice President, Head of Ship Production Operation Division, DSME.

retrofitting works at Sembawang Shipyard in Singapore from August, where she will be fitted with ship-to-ship marine loading arms, a full reliquefaction plant and a full LNG sampling system.

Her colors will be changed from the current green hull and green deck, to a blue hull and gray deck. Explains Andrew Nunn, Site and Construction Manager, "BW's gas vessels are traditionally in our corporate green. However, for BW Magna, we have agreed to a color change because it has been observed that wildlife, including endangered species of turtles found in the Port Açu area, are attracted to shades of green, putting them at potential risk

from vessel operations. BW Magna will be moored alongside the Port Açu jetty in a pristine area of Brazil, and we are committed to do our part to minimize our environmental impact."

Delivering energy to the community

The Port Açu Gas Hub consists of two power plants, with the first scheduled for start-up in 2021 and the second scheduled for start-up in 2023. Strategically located 350km north of Rio de Janeiro, the project has 6.4GW in environmental licenses for natural gas-fired thermal power plants, which allows for the possibility of expansion or further thermal power station projects in the future. **wh**

Further, Deeper, Bigger

BW Offshore announces an investment decision for Tortue Phase 2 development, and acquires Maromba oil field in offshore Brazil



By any definition of the term, colleagues at BW Offshore have been busy. Following a decision to participate directly in field developments in late 2016, BW Energy Holdings Pte. Ltd. was formed. BW Energy Dussafu BV, a wholly owned subsidiary of BW Energy Holdings, acquired the Ruche Exclusive Exploitation Area (EEA) located in offshore southern Gabon in April 2017. The project achieved First Oil in September 2018 on the Tortue field, one of five proven discoveries in the Dussafu license. This was accomplished just 18 months after acquisition, following a fast-track initial development (Tortue Phase 1) which included the drilling of two subsea horizontal producing wells which are tied back to Floating Production Storage and Offloading unit (FPSO) BW Adolo.

The BW Adolo is a converted VLCC with a production capacity of 40,000 barrels of oil per day (bopd). The vessel had undergone life extension at Keppel Shipyard in Singapore, enabling an extended production profile on the back of positive reserve developments. In Q1 2019, the Dussafu block had 12,500 bopd gross average production with 99% field uptime. Says Carl Arnet, BW Offshore CEO, "The execution of the Dussafu project confirms the attractiveness of our model."

The team at Dussafu will commence Tortue Phase 2, where four additional production wells are planned, with plans for the wells to come on stream in 1Q 2020. This will bring the total production figure to 20,000 bopd with a production cost estimated at USD 15/bbl. The internal estimated recoverable reserves now stand at 80 million barrels of oil equivalent (MMBOE) gross including both Tortue and the Ruche discoveries, up more than five times from the sanctioning of the first

phase. In addition, a rich inventory of exploration and appraisal opportunities represents further material upside potential.

From Gabon to Maromba

On the back of BW's success in Gabon, BW Offshore in March 2019 entered into an agreement to acquire the Maromba field offshore Brazil from Petrobras and Chevron for a total acquisition cost of USD 115 million. Maromba is located off the Brazilian coast in the Campos Basin in approximately 160 metres of water depth. Internal estimates show potential recoverable resources of 100-150 million barrels of low-sulphur 16 API oil in Maastrichtian sandstone reservoirs. Eight of nine exploration and appraisal wells drilled to date have been successful and have found oil in multiple reservoirs.

"Maromba meets many of the criteria that our exploration and production (E&P) strategy is founded on: proven resources, high upside potential, located in a country where we currently operate, phased development and the use of one of our own FPSOs", said Carl. "We will pay approximately USD 1 per barrel of recoverable resources in an area we know well, and we are currently evaluating several development options within our phased development strategy that range from USD 3 to 7 of capital cost per recoverable barrel plus FPSO lease. Maromba has the potential to create significant value for the shareholders of BW Offshore."

Says Chris Boyers, Principle Geoscientist at BW Offshore, "The field is located close to the Peregrino, Papa Terra and Polvo oil fields where BW Offshore currently has or has had operations in. The shallow water depths of 160m reduces the complexity and cost exposure of development compared to those in the deeper pre-salt plays. He adds, "FPSO Berge Helene is being considered as a candidate



Polvo Heavy Oil Field

- PetroRio
- First Oil - 2007
- BWO owned and operated FPSO



Peregrino Heavy Oil Field

- Equinor
- First Oil - 2011
- > 1 billion barrels in-place
- BWO operated FPSO



Papa-Terra Heavy Oil Field

- Petrobras
- First Oil - 2013
- > 1 billion barrels in-place
- BWO built and operated FPSO



(Above) Maromba oil field, offshore Brazil, and current or recent BWO-operated FPSOs

FPSO for the development, where a wellhead platform is also being evaluated as part of a later phase of the development following initial subsea wells." First oil at Maromba is targeted for 2022.

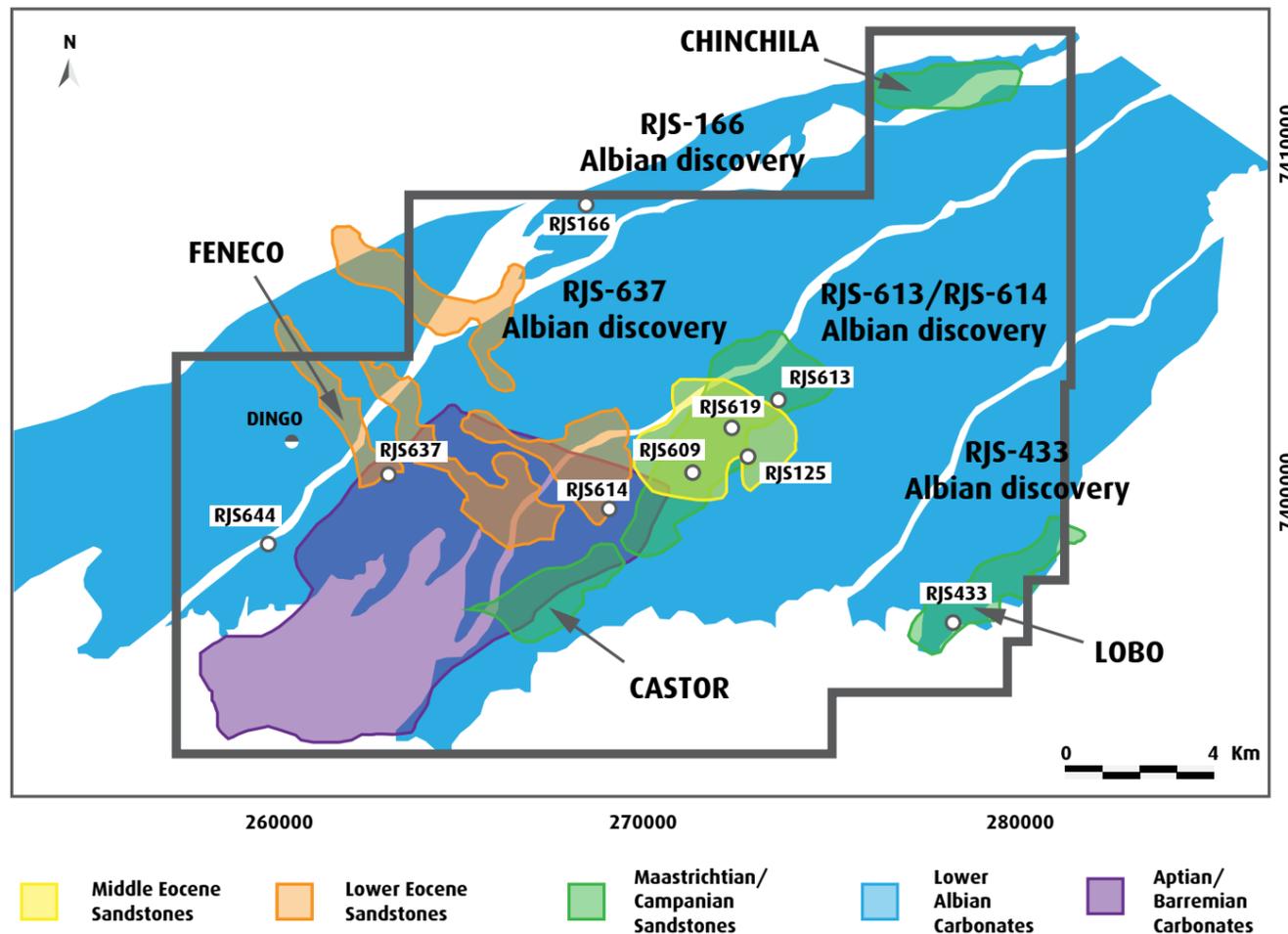
Successfully navigational cultural and technical challenges

The negotiation process was complex as it involved three different parties with diverse backgrounds – BW Offshore, Petrobras and

Chevron's Brazilian team. Fortunately, BW Offshore's Legal team has two team members with deep E&P experience who worked closely with the Commercial team to help bridge the differences between all parties involved and assisted the Commercial team in interpreting and understanding the local legal and regulatory framework.

Overview - Known Oil in Maastrichtian, Eocene and Cretaceous reservoirs with additional exploration targets throughout the Maromba block

Maastrichtian Field	Discovered heavy oil field in turbiditic sandstones reservoir, excellent porosities and permeabilities, four-way structural trap
Albian Discoveries	Discovered heavy oil accumulations in Albian carbonate reservoirs by the wells RJS-166, RJS-433, RJS-613/614 and RJS-637/614
Other Maastrichtian Discovery	Discovered heavy oil accumulation in Maastrichtian reservoir by the well RJS-433
Prospects	Multiple prospects targeting several plays: Castor and Chinchila (Maastrichtian sandstones), Dingo (Albian carbonates), Castor pre-Salt (Aptian coquinas) and Feneco (Eocene sandstones)



Location of Fields and Prospects - Known Oil in Maastrichtian, Eocene and Cretaceous reservoirs with additional exploration targets throughout the block



(Above) FPSO Berge Helene. She is currently undergoing life-extension and retrofits before field deployment.

Apart from legal intricacies, there was also pressure to complete within a stipulated deadline the required due diligence, negotiate the sales agreement with both Chevron and Petrobras, obtain the approval of local anti-trust authorities and submit a request for assignment of the Maromba concession rights.

Reflecting on the entire process, Cristiane Selbach and Beatriz Souto, BW Offshore Legal Counsels said, "the engagement of the legal department in the very early stages alongside the Commercial team allowed us to properly structure the transaction, make important edits and propose mitigating actions in a timely manner so that BW can avoid or minimize risks. Secondly, having a local organization in Brazil with specific knowledge of the local legal framework was crucial, especially as the deal involved buying such an important asset in a heavily regulated business environment."

From the fields to the stock exchange

BW Energy has demonstrated, in Gabon and Brazil, its

ability to move the threshold for commercial development of discovered resources through use of existing FPSOs, fast-track project execution and properly scaled development concepts. In May 2019, BW Offshore announced its plans to establish BW Energy as a separate E&P company, and to explore inviting external investors to finance development of the Maromba field and Dussafu Marin Permit. Carl explains, "BW has proven the attractiveness of our field development strategy with the Dussafu development. Our E&P activities now have a scale where it is natural to invite external investors to add to BW Energy's project execution capacity and growth potential".

BW Energy has assembled an experienced E&P organisation, with strong technical and operational capabilities. BW Energy will be led by a management team consisting of CEO Carl K. Arnet, COO Lin G. Espey and CFO Knut R. Sæthre with effect from 1 July 2019. Energy is reviewing a listing on Oslo Stock Exchange in the second half of 2019 and has retained DNB Markets and Pareto Securities as financial advisers. **wh**

Hafnia a year on

Busy times ahead for the new Hafnia

Just one year ago, BW Group and Hafnia Tankers announced an exciting milestone – that BW Group had acquired a significant stake in one of the world’s leading product tanker companies.



Following the acquisition, BW embarked on discussions with other shareholders about the future strategy for Hafnia Tankers. There was a good cultural fit between BW Tankers and Hafnia Tankers, and the opportunity to integrate the fleets and provide a more comprehensive service to customers in the refined oil market.

The push for merger

The merger of BW Tankers and Hafnia Tankers would result in an attractive and high quality fleet active across all relevant segments, and the combined company would be one of the largest pure-play product tanker businesses in the world with a fleet of 86 vessels (including newbuilds and excluding sale and leaseback vessels). Also, there would be important synergies to be achieved. The combined platform would achieve improved terms for financing, a global commercial platform run from Copenhagen, Singapore, and Houston, and increased efficiency combining in-house and third party ship management.

Following an Extraordinary General Meeting on 10 January 2019, where all votes were in favour of the merger, BW Tankers and Hafnia Tankers were combined to form Hafnia.

Busy times post-merger

Since then, colleagues have been busy on many fronts – from making sure IT systems work together, to moving colleagues across offices to ensure collaboration, and overseeing the more strategic pieces to take advantage of expanded scale

to seize all opportunities the markets can offer, including the reorganization of pool companies. Hafnia’s finance and technical departments are based in Singapore, and its commercial management is headquartered in Copenhagen. The company has a strong operational structure including representatives and expertise from Hafnia and BW – Mikael Skov as CEO and Perry Van Echtelt as CFO. The board of directors of Hafnia are Andreas Sohmen-Pao (Chairman), Chris Gradel, Alexis Atteslis, Gregory Feldman, Erik Bartnes, John Ridgway and Peter Read.

Says Mikael Skov, CEO of Hafnia, “We are working hard to unify our already strong culture and values, which will benefit both internal and external stakeholders”. He adds, “I am very proud of the energy and commitment shown by colleagues to continue to deliver synergies and good performance. Operating 182 vessels in the Hafnia pools, of which 86 are owned, and with a strong balance sheet, Hafnia is well-positioned to capture market opportunities.” Adds Ralph Juhl, EVP and Head of Technical, “there has been significant commercial, financial, technical and operational synergies. The large fleet allows us to utilize the data generated to further optimize vessel operation and planning.”

A listing on the Horizon?

The Oslo Stock Exchange offers an efficient route to the public markets, and the Oslo Stock Exchange has a long-standing history of shipping related IPOs which international investors are familiar with. When the time is right, Hafnia aspires towards a listing in Oslo. **wh**

In the Spotlight

Welcoming Mikael Skov to BW Group



World Horizon speaks with Mikael Skov, CEO of Hafnia.

World Horizon [WH]: Welcome to the BW family! Tell us a little about yourself.

Mikael Skov [MS]: Thank you – it is a pleasure to be part of the larger BW Group. I am married to Daisy for the past 27 years and we have three children; two boys and a girl. I entered the shipping industry through the traditional trainee education route in Denmark, and spent 26 years at Torm before leaving as CEO in 2010. I am one of few Danish shipping executives who have never worked for A.P. Møller – Mærsk. During my tenure, I have mainly held commercial and chartering roles, and have worked within containers, dry bulk and tanker businesses.

WH: What have been some of the more memorable moments for you, having the front row seat in the merger of BW Tankers and Hafnia Tankers?

MS: The strategic considerations leading to the establishment of the best product tanker company out there. The negotiations of the merger, keeping a constructive dialogue going, since most parties involved would continue to be partners after the merger, the positive feedback from peers and industry following the merger, and realizing the similarities of culture and values between Hafnia Tankers and BW Tankers. I know this sounds like a lot, but I have never been more impressed by the people I've worked with.

The integration process has been hectic, but also very educational for myself and my colleagues. It is an honour to drive the integration process between two distinct yet very compatible teams. It became apparent to all of us as the days progressed that Hafnia is a special company, because we have highly skilled people with a "can do" attitude and a passion for our company.

WH: What are your priorities for the next 12 months?

MS: Well, we have been a year into the process and I am pleased to say that the larger pieces of the puzzle, which are the legal and financial fronts, have all fallen into place very neatly. Over the next 12 months, we will finalize the more operational aspects of the integration, which means the fundamental integration of IT systems, platform alignment, and preparing the strategy for the business in more detail. We want to ensure that we focus on Hafnia as an international organization, so that we embrace our diversity across geographies and cultures. Of course, we will also keep at the back of our minds the possibility of an IPO should the opportunity arise.

WH: What would you consider as critical skills for your role as CEO of one of the world's largest product tanker company in the world?

MS: To be transparent and approachable, and to set a strategic direction using a deep knowledge of the drivers of the business (which is one of most volatile in the world), to embrace and live our company values. To create a workplace and culture which enables us to attract and hire the best people in the industry.

WH: Finally, tell us a little-known fact about yourself.

MS: I am a very keen sportsman. I used to play soccer for many years and played with Peter Schmeichel and Michael Laudrup who would go on to become professionals. I also became a grandfather last year, to Hector. **wh**

Open and Above board

Putting our anti-bribery and anti-corruption policy into practice on every vessel and at every port and office

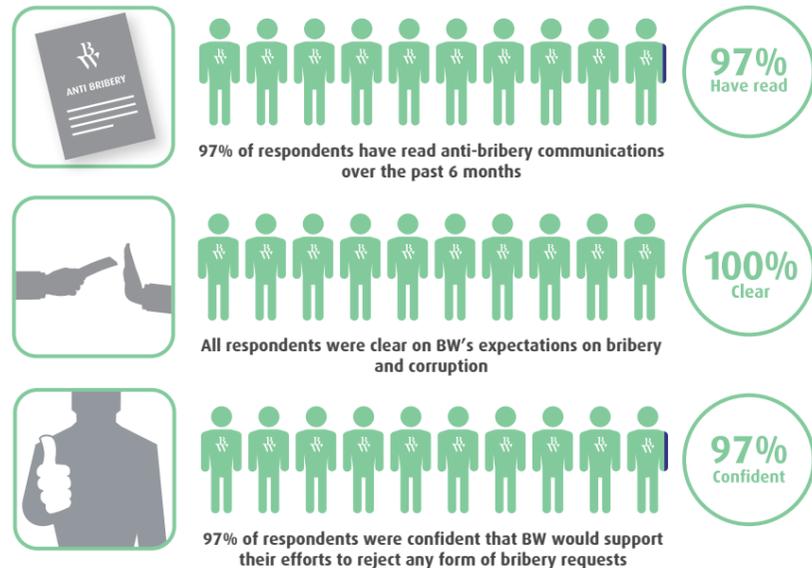
The previous issue of World Horizon covered BW's Anti-Bribery and Anti-Corruption policy that applies to all employees ashore and on-board. The aim of the policy is to achieve best practice with respect to prevention of bribery and corruption and in particular, to follow the principles set out in the well-known and commonly followed UK Bribery Act 2010.

A fleet-wide climate survey

A fleet-wide survey was conducted in the first half of 2019 to assess how well crew understood BW's policy, and the results were reassuring. A good response rate meant that a representative

understanding of our crew could be reasonably gleaned from survey responses. Crew have a good understanding of BW's policy against bribery and corruption. To a query on what one must do when faced with a demand for facilitation payment, one crew member commented, "Politely refuse to pay. Payment can be made only after consultation with the office and BW's Anti Bribery Representative. If we feel that our safety or the safety of others is at risk – and only in this situation – payments can be made and an official receipt must be obtained, and the incident reported to the BW Anti-Bribery department."

BW Anti-Bribery Survey Results



Frequency of bribery requests in the past six months



↓ - Decreased; ↑ - Increased; ± - About the Same; ? - Not Sure

An example at sea

World Horizon spoke with Captain K. Kalia, who provided a recent and positive example of BW's visible anti-bribery and anti-corruption policy at work. He says, "During a recent voyage, my vessel sailed to a port twice for the loading of propane and butane. During the first visit, the terminal information and passage planning guidance provided by the port authorities was precise and accurate. However, during the inward clearance process, I was made aware of requests for facilitation on payments to hasten the clearance process. My crew and I did not give out any form of gifts to the authorities, and instead we pointed to the numerous warning posters displayed on prominent parts of the ship. I am pleased to comment that at the second visit, with support from our Port Agent, the inward clearance proceeded smoothly without any complication".

More can be done; and BW is doing more

There is still much that can be done to reinforce our position, such as ensuring that all port agents are aligned with BW's stand. BW has also introduced new channels to report wrong-doings. In

July 2019, BW launched a new platform to better guarantee the anonymity of whistle-blowers, and to ensure that BW protects its reputation for open and honest business transactions. The platform is hosted by NAVEX Global, a company which allows for the reporting of issues and concerns in a straightforward and uncomplicated way, through a variety of channels such as a multi-lingual contact centre and an anonymous web reporting portal. BW can take corrective actions swiftly, and address employee reports and incidents in a consistent and documented manner. This helps create a culture of trust and respect with internal and external stakeholders, and allows BW to handle and resolve all concerns in a consistent and fair process.

At BW, we value our company's reputation for ethical behavior and fair dealing with suppliers, customers, competitors and employees. We expect our employees to conduct themselves with the highest standard of integrity. BW will support any employee who passes up an opportunity or advantage that would compromise our standards. **wh**

(Below) BW's online platform for secure and anonymous reporting of anti-bribery and anti-corruption concerns and issues.

MAKE A REPORT / FOLLOW-UP ON A REPORT / CODE OF CONDUCT / FAQs

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Our Commitment

Confidentiality and Action

At BW, our reputation as a reliable provider of maritime energy transportation services is one of our most important assets. Our stakeholders, both internal and external, should speak up where they have concerns about breaches of ethics at BW. Your confidentiality is assured, you will be protected from reprisals or victimization for reporting such concerns, and you have our commitment for action.



Data is fast becoming the new tool for tech-savvy ship owners and seafarers, and Alpha Ori has front row seat in shaping technology in this next frontier

Ensuring that vessels are maintained to industry-leading standards takes a lot of hard work from teams of colleagues with deep technical and operational knowledge. And being in the industry for close to 90 years, a formidable amount of data would be available to anyone at BW, for the brave or the foolhardy, to mine for insights into enhancing vessel voyage optimization and yield.

Developments on the digital front have been breathtaking on many fronts, most importantly in spheres that save lives or enhance its quality. The ubiquitous mobile phone, for example, is a fitting symbol of telecommunications technology advancing rapidly to bring even greater convenience to modern living. The maritime industry is not usually the quickest to adopt or nurture technological advancements, but there are companies willing to take the lead. One such company is Alpha Ori, led by co-CEOs Captain Rajesh Unni and Bala Sankaran.

Data as digital stars

The name of the company gives a clue to the seafaring heritage of its founders. Spending years at sea meant a deep appreciation

of navigation by the stars. The Orion constellations have been used by generations of seafarers as a guiding light, and when a decision was made to set up a technology company to change the landscape of the maritime sector, Alpha Ori, the brightest star in Orion constellation, seemed appropriate.

Says Sanjeev Namath, Chief Business Officer at Alpha Ori, “the vision of the company is to digitally enable all floating enterprises with cutting-edge technology (i.e. Internet of Things (IoT), Machine Learning and Cloud-based Big Data science) to drive remote operations, enhance operational efficiency and achieve highest levels of safety on board ships”.

He adds, “simply put, our aim is to transform ships to a digital enterprise. Despite the critical service that the shipping industry provides to the global economy, it has been largely untouched by technology compared to the terrestrial industries. A ship out in the ocean is completely isolated and the thousands of data points that are generated from day to day operations are not sufficiently utilised for decision making. Our mission is to digitally connect the entire ecosystem within the ship, plug this ship into a digital

cloud that connects with other ships and the environmental data that affects operation. Then to create value out of the data lake by leveraging on IoT (Internet of Things) and data analytics to drive economic value to the business, through fuel savings, predictive maintenance, enhanced asset utilization, and reduction of losses”.

A proactive, not reactive, approach to technological advancements

The key is to introduce, adopt and implement new technologies gradually and at the right pace rather than waiting to be disrupted by external forces. BW has taken a big step in harnessing years of data, in collaboration with Alpha Ori. An exciting development is the roll-out of Ship Palm to all vessels this year.

Explains Patric Desanti-Fettkenheuer, General Manager, Head of Applications & Digitalisation at BW Group and heading the NGFM Project, “this year, 43 experts and programmers working in four different time zones between San Francisco and Singapore aim to create and implement a next-generation fleet management platform (NGFM) based on modern technologies. We aspire for NGFM to shift our perception of data as simply supporting smart decision-making to being something that helps to simplify daily tasks for thousands of users on board and in the office. With NGFM, we will be able to replace multiple disparate legacy systems, many of which are reaching end of

life, with one single platform called ShipPalm. It is one of the most complex software projects in the company, with more than 86 replicated databases and 50 million migrated records”.

ShipPalm is an Enterprise Resource Planning (ERP) tool for streamlining the processes of Ship management. This involves manual data gathering from Shore as well as Ship. The various modules available with ShipPalm include MMS (Maintenance Management System), Inventory, Certificates, HSEQ, and Purchase.

Adds Patric, “As one of the world’s largest owners of vessels, and with such a long history in the industry, the amount of data we have is tremendous. Imagine being able to harness all these data, consolidating them into one platform that can talk across multiple digital systems that we have onboard on different types of vessels. We will be able to correlate data, produce logical conclusions and generate appropriate action. ShipPalm promises to give BW a new software landscape, being flexible, scalable and adaptable to our current and future business needs”.

In the current version of SMARTShip where the value creation is through Decision Support to Crew & Shore Staff, it is important to recognise that technology cannot be relied upon to bring the value by itself. Process and People also have to be managed to realise the full potential. **wh**



(Above) Patric introducing ShipPalm to an Officers' Conference in Oslo.

A Case Study in Collaboration

BW LNG taps into BW Offshore's vessel conversion expertise as LNG Carrier BW Paris is converted into a Floating Storage and Regasification Unit

A key benefit of being a part of the BW Group is that an Affiliate can tap on the expertise of other Affiliates. This benefit can be as practical as leveraging office space across geographies and vendor relationships to negotiate for better terms in contracts, to more significant advantages such as leveraging the good experience a customer has had with one BW Affiliate to open doors and secure business for another Affiliate, based on shared values and trust across the group.



(Above) Members of the conversion team onboard BW Paris

BW LNG manages one of the world's largest fleet of LNG carriers, but it is a milestone for BW LNG to convert an existing LNG carrier into a Floating Storage and Regasification Unit (FSRU). BW Offshore, in comparison, has been converting vessels for use in upstream projects for many years, and BW LNG is leveraging on the expertise of BW Offshore for this conversion project.

From LNG Carrier to LNG FSRU

LNG carrier BW Paris arrived at Keppel Shipyard in Singapore in March 2019 for conversion activities. Tom Ringstad, Project Manager, leads a diverse team of 12 colleagues based at the Keppel site office – seven from BW Offshore and five from BW LNG. Each colleague brings with him or her specialized skills, and many skills are needed to manage a project and deliver the vessel on time and within budget. Comfortable at the helm, Tom is aware of the technical challenges in this project. He says, "every conversion project has its complexities – for BW Paris, the challenge is to ensure that visibility at the bow area is not compromised as we need to preserve her flexibility to be chartered

in the spot market as an LNG carrier, even if she has regasification abilities. We thus needed to design the regasification modules such that all equipment can physically fit into the vessel, operate safely and efficiently, and not obscure visibility during sailing."

The conversion team worked closely with BW LNG's newbuilding team and engineering partner Wärtsilä and eventually came up with a solution for the module design and location which was approved by Class DNV-GL. Translating these plans into steel on the ground, Tom emphasizes the importance of control and deep engineering knowledge. He comments, "during the conversion process, one should always expect that things do not go according to the most meticulous of plans. As new parts are brought in and installed onto the vessel, we will have to cut into existing deck areas and tanks and install platforms and steel reinforcements. During the design phase, we drew detailed engineering plans and prepared extensive 3D modelling, and augmented these efforts with visits onboard BW Paris. We are now reaping the benefits of these earlier efforts – we have good control over installation, and if we foresee



(Above) BW Group Chairman Andreas Sohlen-Pao (4th from right) visiting BW Paris to keep his pulse on the project, and to emphasize the company's commitment to Zero Harm

any issues, we have an experienced site team with a variety of engineering expertise to back up on-the-ground decisions”.

Converting an FPSO versus an FSRU – same same but different?

A fair question would be to ask about the differences in converting a vessel for life as a Floating Production Storage and Offloading (FPSO) unit, which is used in the offshore oil and gas industry for the production and processing of hydrocarbons, and a FSRU. Strategically, Tom is of the view that there are more similarities than differences. He says, “Big-picture speaking, for any conversion project, we are repairing existing parts, installing and integrating new equipment into an available vessel. Work progresses in modules, and the same sharp focus on Zero Harm is the common thread binding all projects we take on at BW. One key difference is

the timeline – BW Paris is a fast track project, with only 90 days for the conversion period and 30 days for testing and commissioning, setting up new and existing systems onboard and making the ship ready for sailing again as a LNG carrier. A typical FPSO conversion schedule in a shipyard can take nine to 15 months, and of course with a much bigger scope, but with a longer schedule you have more flexibility and time if something crops up. For a project with a 90-day schedule, we need to hit the ground running from Day One”.

Final Figures

Once the conversion is complete, the 2009-built BW Paris will be capable of carrying approximately 162,400 cubic meters of LNG, and regasifying at a nominal rate of 550 million metric standard cubic feet per day (MMSCFD). BW Paris will be the fourth FSRU for BW LNG. **wh**

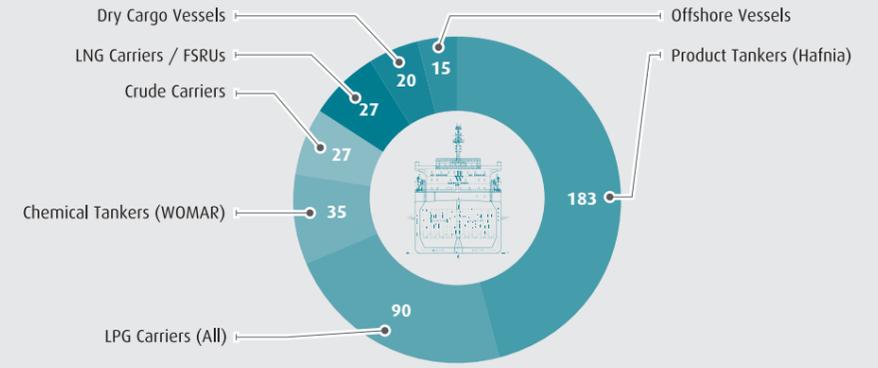


(Above) A milestone reached – lifting of regasification modules onto the vessel

Removable Page (tear along perforation)



Group Fleet Composition



LNG Fleet			Dry Cargo Fleet			LPG Fleet			Hafnia Fleet (MR)			Hafnia Fleet (LR1)			Epic Gas Fleet		
Vessel Name	Built	CBM	Vessel Name	Built	DWT	Vessel Name	Built	CBM	Vessel Name	Built	DWT	Vessel Name	Built	DWT	Vessel Name	Built	CBM
Berge Arzew	2004	135,300	BW Acorn	2010	82,589	Berge Nantong	2006	80,599	Aegean Star	2019	50,506	Bluebird	2016	74,074	Epic Baltia	2000	6,300
BW Boston	2003	135,298	BW Barley	2010	83,369	Berge Ningbo	2006	80,607	Andes	2011	49,962	Bow Pioneer	2013	81,305	Epic Baluan	2017	7,500
BW Everett	2003	135,267	BW Canola	2014	81,344	Berge Summit	1990	76,919	Basset	2019	50,000	Breezy Victoria	2007	74,998	Epic Barnes	2002	7,200
BW Brussels	2009	159,264	BW Einkorn	2010	81,502	BW Aries	2014	82,512	Beagle	2019	49,999	BW Amazon	2006	76,565	Epic Bolivar	2002	7,500
BW Integrity	2017	173,400	BW Flax	2010	58,096	BW Austria	2009	82,911	Boxer	2000	49,999	BW Clyde	2004	73,400	Epic Bonaire	2016	7,500
BW Lilac	2018	171,793	BW Hazel	2013	81,510	BW Balder	2016	83,301	BWL Elsa	2009	51,747	BW Columbia	2007	76,604	Epic Boracay	2009	7,500
BW Magna	2019	173,400	BW Japan	2019	81,586	BW Birch	2007	80,657	BW Bobcat	2014	49,999	BW Danube	2007	76,543	Epic Borinquen	2016	7,500
BW Paris	2009	159,274	BW Kobe	2019	81,703	BW Boss	2001	82,615	BW Cheetah	2014	49,999	BW Hudson	2007	76,573	Epic Borkum	2000	7,200
BW Pavilion Leeara	2015	158,629	BW Rye	2019	81,564	BW Brage	2016	83,272	BW Cougar	2014	49,999	BW Kallang	2007	74,189	Epic Burano	2002	7,500
BW Pavilion Vanda	2015	158,646	Berge Weissshorn	2004	171,075	BW Carina	2015	82,471	BW Eagle	2015	49,999	BW Kronborg	2007	73,708	Epic Caledonia	2014	3,500
BW Singapore	2015	166,756	Berge Nyangani	2010	185,237	BW Cedar	2007	80,614	BW Egret	2014	49,999	BW Lara	2007	73,496	Epic Catalina	2007	3,500
BW Tulip	2018	170,799	Navigare Boieas	2016	61,492	BW Confidence	2006	81,605	BW Falcon	2015	49,999	BW Lena	2007	76,577	Epic Cordova	2009	3,500
LNG Benue	2006	143,033	NB 10974 OSHIMA	2020	61,800	BW Cnn	2007	80,645	BW Hawk	2015	49,999	BW Nile	2017	74,189	Epic Curacao	2014	3,500
LNG Enugu	2005	143,007	NB 10975 OSHIMA	2020	61,800	BW Empress	2005	77,330	BW Jaguar	2014	49,999	BW Orinoco	2007	76,577	Epic Madeira	2006	9,500
LNG Imo	2008	145,486	NB 10976 OSHIMA	2021	61,800	BW Kestrel	2002	80,898	BW Kestrel	2015	49,999	BW Rhine	2008	76,587	Epic Manhattan	2007	9,500
LNG Kano	2007	145,594	NB 10977 OSHIMA	2021	61,800	BW Leopold	2016	83,301	BW Leopold	2014	49,999	BW Seine	2008	76,580	Epic Salina	2017	11,000
LNG Loknja	2006	145,557	NB 10848 OSHIMA	2020	81,190	BW Lioness	2016	83,294	BW Lioness	2014	49,999	BW Shinano	2008	76,593	Epic Samos	2016	11,000
LNG Ondo	2007	145,484	NB SC331 TSLC	2020	81,600	BW Lynx	2015	82,471	BW Lynx	2013	49,999	BW Tagus	2017	74,189	Epic Sentosa	2016	11,000
LNG Oyo	2005	142,924	NB SC339 TSLC	2019	81,600	BW Kyoto	2010	81,633	BW Merlin	2015	49,999	BW Thames	2008	76,587	Epic Shikoku	2016	11,000
LNG River Orashi	2004	142,996	NB SC343 TSLC	2020	81,600	BW Leo	2015	82,511	BW Myna	2015	49,999	BW Yangtze	2008	76,593	Epic Sicily	2015	11,000
NB 2489 DSME	2019	173,400				BW Liberty	2007	82,905	BW Osprey	2015	49,999	BW Yarra	2017	74,189	Epic St. Agnes	2015	5,000
NB 2490 DSME	2019	173,400	No. of vessels	20	1,704,257	BW Libra	2015	82,512	BW Panther	2014	49,999	BW Zambesi	2010	76,000	Epic St. Ivan	2015	5,000
NB 2491 DSME	2020	173,400				BW Lord	2008	82,922	BW Petrel	2014	49,999	Compass	2008	72,934	Epic St. Lucia	2008	5,000
NB 2496 DSME	2021	173,400				BW Loyalty	2013	49,999	BW Puma	2013	49,999	Compassion	2006	72,782	Epic St. Martin	2008	5,000
NB 2497 DSME	2021	173,400				BW Magellan	2016	82,487	BW Raven	2015	49,999	Estia	2007	73,711	Epic St. Vincent	2008	5,000
Pan Africa	2019	174,000				BW Swift	2016	82,423	BW Swift	2016	49,999	Evriddi	2008	73,740	Epic Bali	2010	7,200
Pan Europe	2018	174,000				BW Messina	2017	82,493	BW Tiger	2014	49,999	FPMC P Eagle	2009	74,834	Epic Barbados	2001	7,200
						BW Mindoro	2017	82,496	BW Wren	2016	49,999	Grace Victoria	2007	74,998	Epic Bell	2014	7,200
						BW Namtes	2003	58,211	Celsius Palermo	2010	49,998	Hafnia Africa	2010	74,938	Epic Bermuda	2001	7,200
						BW Nice	2003	58,187	Celsius Porto	2009	49,999	Hafnia America	2006	74,999	Epic Bird	2014	7,200
						BW Njord	2016	82,425	Chios Star	2018	50,506	Hafnia Arctic	2010	74,910	Epic Borneo	2010	7,200
						BW Oak	2008	80,607	FSL Osaka	2007	45,998	Hafnia Asia	2010	74,490	Epic Cobrador	2009	3,500
						BW Odin	2009	80,793	FSL SGP	2006	47,470	Hafnia Australia	2010	74,539	Epic Corsica	2009	3,500
						BW Orion	2015	82,512	Hafnia Andromeda	2011	49,999	Hafnia Beijing	2019	75,000	Epic Sardinia	2017	11,000
						BW Pine	2011	78,553	Hafnia Ane	2015	49,999	Hafnia Europe	2009	74,977	Epic St. Croix	2014	5,000
						BW Prince	2007	80,735	Hafnia Atlantic	2004	45,667	Hafnia Guangzhou	2016	74,999	Epic St. George	2007	5,000
						BW Princess	2008	80,735	Hafnia Crux	2012	52,500	Hafnia Hong Kong	2019	74,999	Epic St. Kitts	2008	5,000
						BW Sakura	2010	77,323	Hafnia Daisy	2016	49,999	Hafnia Shanghai	2019	74,999	Epic St. Thomas	2014	5,000
						BW Thor	2008	80,677	Hafnia Henriette	2016	49,999	Iris Victoria	2010	74,905	Emmanuel	2011	7,500
						BW Tokyo	2009	81,605	Hafnia Kirsten	2015	49,999	Jo Redwood	2013	74,847	Westminister	2011	9,500
						BW Trader	2006	77,058	Hafnia Lene	2010	49,999	Justice Victoria	2010	74,902			
						BW Tucana	2016	82,431	Hafnia Leo	2013	49,999	kamome Victoria	2011	74,908	No. of vessels	40	276,900
						BW Tyr	2008	80,657	Hafnia Libra	2013	49,999	LiAc Victoria	2011	74,913			
						BW Var	2016	83,000	Hafnia Lise	2016	49,999	Magic Victoria	2012	74,902			
						BW Volans	2016	82,451	Hafnia Lotte	2017	49,999	Mani Ugland	2008	74,997			
						NB 2335 MHI	2020	82,320	Hafnia Lupus	2013	52,500	Marians	2008	74,992			
						NB 2336 MHI	2020	82,320	Hafnia Mikala	2017	49,999	Maribel	2007	74,999			
						Oriental King	2017	82,417	Hafnia Nordica	2010	49,999	Marika	2008	74,996			
						Yuricosmos	2010	77,330	Hafnia Pegasus	2010	49,999	Marilee	2006	74,998			
									Hafnia Phoenix	2013	52,340	Marinor	2008	74,997			
									Hafnia Taurus	2011	50,385	Marina	2006	74,993			
									Himalaya	2010	49,936	Mindoro Star	2009	73,676			
									HSL Anna	2009	51,747	New Century	2005	73,901			
									Ionian Star	2019	50,506	New Challenge	2005	73,964			
									Kouros	2008	49,999	New Champion	2005	73,911			
									Lysias	2008	49,999	New Confidence	2005	73,896			
									MP MR Tanker 1	2011	51,745	Nexus Victoria	2015	74,910			
									Orient Challenge	2017	49,972	Nord Lavender	2017	74,197			
									Orient Innovation	2017	49,946	Nordic Anne	2009	73,774			
									Orient Star	2010	45,994	Nordmars	2004	74,999			
									Overseas Santorini	2010	51,622	Nordmekur	2004	74,999			
									Sanmar Santoor	2002	47,141	Nordneptun	2004	74,999			
									Sanmar Songbird	2003	47,094	Norvenus	2004	74,999			
									Scameridian	2011	49,999	Norstar Integrity	2006	74,065			
									Star Eagle	2007	51,202	Norstar Intrepid	2006	74,034			
									Star Merlin	2007	53,755	Norstar Invictus	2007	73,611			
									Orange Victoria	2019	74,430	Norstar Victoria	2019	74,430			
									Palawan Star	2008	73,796	Plouton	2006	73,711			
									Red Eagle	2011	74,996	Red Star	2011	74,996			
									Starling	2016	74,032	Summit Africa	2009	73,394			
									Sunda	2019	79,999	Sunda	2020	75,000			
									BW Triton	2019	115,000	TBN 2	2020	75,000			
									BW Despina	2019	109,990	TBN 7	2020	75,000			
									BW Galatea	2019	109,990	Tectus	2009	73,962			
									BW Latissa	2019	109,990	Two Million Ways	2008	73,965			



ZERO HARM ART COMPETITION

Contest Details

Theme	Zero Harm begins with me
Closing Date	30 September 2019
Eligibility	Children or siblings aged 15 years or below of current BW staff (onboard and onshore), of all Affiliates including 3rd party managed ships
Age Category	A - 7 years old and younger B - 8 to 11 years old C - 12 to 15 years old
What can I use	Any standard drawing medium such as coloring pencils, crayons, water colors or markers. Only restriction is that <u>no digital tools</u> should be used.
Prizes for each category	First Prize: US\$500 Second Prize: US\$350 Third Prize: US\$150 Seven Encouragement Prizes (Bag and stationery) per category

How to enter

1. Prepare artwork according to the requirements. Recommended size of paper: A3 - 297 mm x 420 mm (11.69 inches x 16.53 inches). Maximum size: 400 mm x 550 mm (15.7 inches x 21.7 inches). Please note that submission on paper of a size larger than the maximum may lead to exclusion of the submission.
2. Fill in the entry slip below and paste it at the back of the artwork.
3. Mail completed artwork to any BW Office worldwide.

Zero Harm Poster Art Competition Entry Slip

Name of Child (Age) _____ ()

Category **A** (under 7 years)
 B (8 - 11 years)
 C (12-15 years)

Address _____

Telephone No. _____

Name of BW Staff _____

BW Affiliate _____

Description of Artwork _____

Notes

- All artwork submissions must be the original creation of the participant.
- Copyright of all artwork submitted in this competition will belong to BW.
- Open to all staff from all Affiliates.
- Please give your entry sufficient time to be posted to the various BW offices, well before the submission deadline of 30 September 2019.
- Multiple entries are allowed, subject to a maximum of three entries, but a participant can only win one prize.
- Any postage costs incurred in each submission is the responsibility of the respective participant.
- BW will not be held responsible for lost mail.
- Judges' decision is final and winning entries will be contacted by phone. Should the prize be unclaimed by 30 November 2019, the prize will be donated to charity.
- For questions related to this art competition, please email lisa.lim@bw-group.com.
- For the addresses of BW Offices, please visit www.bw-group.com/www.bwoffshore.com.

Removable Page (Tear along perforation)

“Zero Harm Begins with Me”

Zero Harm Art Competition

Into its second year, BW continues its search for the next batch of budding artists



(Above) Winning entries from the 2018 Zero Harm Art Competition.

Zero Harm continues to be a critical anchor for BW, influencing how everyone delivers great solutions to our customers. Be it at sea or on shore, the reality facing every employee is the same – we must commit to taking personal responsibility for safety, communicate safety concerns, and actively share best practices and learn from near-miss incidents, so that we can go home safely to our families and friends.

In 2018, a Zero Harm art competition was organized around the theme of “Zero Harm at Work”. Many entries were received around the world, and after multiple rounds of considerations, which the Editor candidly reports involved relationships between colleagues that may never return to normal after intense discussions over crayon and colours, BW is pleased to hold another art competition in 2019, with the theme “Zero Harm begins with me”.

This theme resonates with our belief that injuries and ill-health at work are preventable, and we must focus on finding solutions to prevent their occurrence. Entries can focus on prevention of work accidents or injuries, or creating safety and health awareness. We are looking for entries that convey

a strong belief in the importance of safety and health in workplaces and compelling works that illustrate the theme.

As per previous year, this competition is open to the children and siblings, aged 15 years and below, of all employees of BW and all Affiliates, including crew onboard third party managed vessels.

All original entries are warmly encouraged, and there are two important requirements to be mindful of. First, any medium can be used, but no digitally-created content will be allowed. So, you can use pencils, chalk, charcoal, water-colour, crayons, acrylic or oil paints for your artwork. Second, please take note of the paper size restrictions, with a maximum size of a standard A3 paper. More details are available on the competition poster.

All entries must be mailed to reach any BW office by 31 September 2019, and must have the entry slip pasted on the back. Queries can be written to lisa.lim@bw-group.com.

Good luck and happy colouring! **wh**

Winning at Wellness

BW Crew receives Mission to Seafarers' award

At the Mission to Seafarers Awards Dinner held on 10 May 2019 at InterContinental Hotel Singapore, Second Engineer Giovanni Pagador Lauron was awarded the Outstanding Seafarer Award in the category "The seafarer who has contributed significantly to the welfare of fellow crew onboard" for his efforts in promoting and implementing the BW Wellness Program onboard Oil Tanker (Aframax) BW Yarra.

A Great Role Model

While all nominees were deserving of the award, Giovanni stood out for his instrumental role in making the BW Wellness Program a great success onboard BW Yarra during the six-month pilot phase. His enthusiasm and dedication to implement the program content,

set up challenges and organize team activities motivated all Crew to get actively involved and committed to the Wellness Program.

Feedback received from various Crew onboard BW Yarra were resoundingly positive. One said, "the kind of environment this program molded on this ship gives me or most of us enough comfort to talk about problems, may it be personal or work-related, serious or petty". Another said, "personally, I was able to quit my smoking habit and found the time to visit the gym". These inspiring anecdotes proved that the Wellness Program had resulted in a unique team spirit onboard and many individuals achieving their personal health goals.



(Above) Second Engineer Giovanni Pagador Lauron with Rashpal Bhatti, Vice President, Marketing Freight, BHP Billiton



(Above) Crew embracing wellness at sea.

The Wellness Program aims to tackle various aspects of health holistically, by increasing the engagement, mental resilience, physical fitness and socialization of crew while using a gamified online platform, as well as Wellness Workbooks that include mindfulness-based cognitive techniques. The platform injects fun into the program through gamification like, leaderboards, badges, competitions, etc., and enables colleagues to challenge each other individually, across departments or ships.

Crew members can access the internet and mobile enabled platform to view personal health risk assessment, track overall progress on their wellness journey and claim rewards based on level of participation.

Future Plans

The pilot program on 20 ships covering over 400 crew had success stories similar to BW Yarra. It was thus decided that the pilot was a success, and the Program was launched fleet-wide on 10 June 2019. The pilot phase provided one key insight, namely that the program can mean different things to different people. Says Dennis Hansen, VP and Head of Global Manning, "Wherein one person may want to focus on physical activities, another may focus on diet, mental health or solely enjoy the social activities the program encourages and it is this diversity in the program that makes it accessible and relevant to all".

He added, "through the program, we gathered stories of individuals who could make honest commitments to improving their health. This individual ownership was key in creating a ripple effect across the wider crew community. Feedback such as 'I meditate before going to bed and it helps me to relax my body and my mind, and gives me a better sleep' or 'What I really enjoyed in this program is the nap time challenge, once I have this 10 to 15 minutes of nap, I feel recharged', shows the diversity of the program and that success takes many forms".

Dennis continued, "it is the feedback from crew that convinced us that this Wellness Program can bring back social life onboard our ships. My favorite email came from a Master, saying, 'Twice a month on Sundays, we will prepare breakfast on deck near the basketball area. The idea is to recreate the experience of a family going to the park, do stretching and recommended exercises, play basketball and talk about life and experiences that younger crew can learn and apply for themselves. It is nice to see that some crew who are normally quiet and reserved are actively participating.'"

Through this Wellness Program, we hope that it will result in not just healthier Seafarers, but also happier seafarers and greater teamwork. This will eventually translate into a more productive and safer teams onboard." **wh**

Around the World

1. **7th SEA Asia**
 BW Group Chairman Andreas Sohmen-Pao (11th from Left) attends the 7th SEA Asia event in his capacity as Chairman of the Singapore Maritime Foundation (SMF) and Co-Chair of SEA Asia 2019 Steering Committee. With him are representatives from the event's international pavilion organizers, as well as Dr Janil Puthucheary (Senior Minister of State, Ministry of Transport & Ministry of Communications and Information; 10th from Left), Charlie McCurdy (President and CEO, Informa Markets; 9th from Left), Niam Chiang Meng (Chairman of the Maritime and Port Authority of Singapore, 8th from Left), and Chris Hayman (Co-Chair of SEA Asia 2019 Steering Committee and Chairman, Seatrade; 12th from Left).

2. **40-year service medal**
 Two veterans: former Group Chairman Dr Helmut Sohmen presents a 40-year service medal to Simon Wong of World-Wide Shipping Ltd in Hong Kong (February 2019).

3. **Visit to Brazil, Rio**
 Andreas Sohmen-Pao on a visit to Rio in July with Jon Harald Kilde, (CEO of BW Offshore Brazil) right rear, Ricardo Mucci, (Head of E&P) front right, and Larissa Sigiliano (Commercial Manager) front left.



4. **13th Singapore Maritime Lecture**
 BW Group Chairman Andreas Sohmen-Pao attending the Singapore Maritime Lecture on 8 April. From Left to Right: Andreas Sohmen-Pao, Edith Yeung (Partner, 500 Startups), Chan Chun Sing (Minister for Trade and Industry), SS Teo (Managing Director, Pacific International Lines) and Samuel Tsien (Group Chief Executive Officer, OCBC Bank).

5. **NTNU visits BW Offshore Singapore**
 BW Offshore hosted a group of Norwegian University of Science and Technology (NTNU) students at its Singapore office. BW Group Chairman Andreas Sohmen-Pao and BW Offshore CEO Carl Arnet, an NTNU alumnus himself, gave the students an overview of BW Group and BW Offshore respectively and engaged the enthusiastic students in a discussion about BW and the shipping industry during the Q&A.



6. **Asian Marine Casualty Forum 2019**
 Stephen Harper, Head of Legal-Shipping of BW Group was a panel speaker at the Asian Marine Casualty Forum 2019 held in Singapore, where he discussed the challenges of bribery and corruption in the maritime industry.

7. **Lunch and Learn**
 7a. The Legal team hosted two lawyers from law firm Dentons Rodyk at the Singapore office in April 2019, to speak on the topic "Potential Pitfalls in Contract Negotiation". Senior Partner Lawrence Teh and Partner Loh Jen Wei represented the firm and spoke in detail on terms in contracts that colleagues should be mindful of.
 7b. BW Group Executive Vice President, Corporate Services and General Counsel Nicholas Fell hosted two lawyers from Cleary Gottlieb to speak on the "Top 10 Mistakes Made in Preparing for and Managing a Crisis." Partners Sebastian Sperber and Matt Solomon provided valuable insights on the pitfalls companies may encounter and how to avoid them.



8. **BW Offshore 2018 I LEAD awards**
 BW Offshore appreciates the dedication of all personnel to our I LEAD principles and recognises outstanding behavior that epitomize our I LEAD principles in 2018.
 8a. Drilling Manager Gordon Mutch (left) receiving the Europe and Africa award on behalf of the E&P Drilling department from Head of Operational Integrity Mike McAreavey.
 8b. Asset Manager Vijay Mahindran receiving the Asia Pacific award on behalf of FPSO Joko Tole from CEO Carl Arnet and COO Marco Beenen. Marco Beenen took over as CEO of BW offshore on 1 July 2019

9. **Long Service Awardees**
 9a. Executive Vice President - Technical Ralph Juhl of Hafnia presenting Chief Officer Wu Yu Qing a long service award for 15 years of service to the company.
 9b. Technical Superintendents Kunal Chakraborty (left) and Iqbal Khan (right) presenting Master Catalin Sharpe (centre) with a long service award for 10 years of service during the sea trial of BW Despina.

Not pictured - Cidade de São Vicente FPSO receives the I LEAD award for the Americas.



10. **Officers Conference in Oslo**
 Attentive senior officers listening to sharings and company updates over three days at our Oslo Office.

11. **Colorful Celebration**
 In April, a Nigerian Officer and Ratings Conference was organized in Lagos, and sporting colleagues were decked out in colourful attire to celebrate their achievements as a team.

10



11



12a-d. **BW Energy Gabon S.A. provided civic support to the community**
 On 19 June 2019, colleagues from BW Energy Gabon S.A. visited a junior high school - Lycée Public Jean Baptiste MOANDAT - in Mayumba and provided civic support to the community. Mayumba is a town of about 4,000 people on the Atlantic Ocean coast of Gabon. There are seven primary schools in the area, and one junior high school of about 770 students.

Through fund raising activity, BW Energy sponsored tutorial lessons to the students at the high school and transportation to an exam center at Tchibanga.

Thanks to those who participated in the activities and for their generosity in donation. The commitment to help is appreciated by many students in the Mayumba community.

13. **Happy Retirement**
 At the Officers' Conference held in Oslo in May, retiring colleagues were thanked for many years of excellent service to the company. From L-R: Captain Gwilym Wyn Williams, Chief Engineer Rolf Kristian Johansen, Captain Juan Rafael Menendez Castasno, Captain Juan Ramon Arenaza Zaldumbide, Chief Engineer Stanley Burnett, with VP/ Special Advisor Olav Angelo Lyngstad.

12a



12b



12c



12d



13



Special Thanks To . . .

30
Years

February

Pamaong Alejandro Jr. Tejano, Bosun
Bauno Aquino Malinao, Able Seaman

March

Cabatingan Albert Junio, Fitter

April

Modak Naushad Mahmood, Bosun
Moon Steven John, Master

May

Rosilah Hussein, Assistant Manager, Procurement
Sharma Ashok Kumar Hansraj, Reeferman

25
Years

February

Alterado Armando Boveda, Chief Cook
Arcallo Jessielito Juayong, Pumpman
Digao Mark Jan Kazzen Moraga, Chief Officer
Karl Jensen, Financial Controller Accounting

March

Alaras Aladin Rodriguez, Able Seaman
Hiteroza Rolando Camacho, Chief Cook

April

Esclamado Rolando Ampo, Able Seaman

May

Baculo Elecito Bautista, Able Seaman
Vinod Janardhanan Pillai,
Maintenance Superintendent

25
Years

June

Brimon Noli Simbre, 3rd Engineer
Coyoca Enrico Falcon, Chief Officer
Iurii Derechin, Chief Engineer
Pradeep Bhart, Technical Superintendent
Radjendirane Candamarane, Bosun
Velasco Bienvenido Jr Buce, Messman

20
Years

January

Caberte Yolando Magallanes, 2nd Cook
Clint Bout, General Manager,
Head of Marine, Alternate DPA
Panganiban Elmer Malabanan, Chief Cook
Panizales Tyrone Darroca, Cargo Engineer
Quejado Luis Ii Labrador, Bosun
Tiburcio Daniel Ramos, Motorman

February

Dennis Velez Monasterio, Junior
Maintenance Technician Engineer
Morten Conrad Paulsen, E&I Supervisor
Tizon Melvin Villamar, 2nd Officer

March

Buton Pat Sulon, Messman
Elevado Jofren Allin, Motorman
Enriquez Rex Isaac Cortez, 2nd Engineer
Kai Erik Karlsen, Supply Chain Manager
Pagar Samuel Difuntorum, Chief Officer
Pelagio Edmer Preter, Master

April

Babol Jaybee Jeett Combong, 2nd Engineer
Fontillas Reynald Llanera, 2nd Officer

May

Damle Sagar Sudhakar, Master
Mangubat Joseph Abula, Messman
Sanjay Collin Lewis, Marine Supervisor

June

Bhatt Neeraj Gopaldutt, Master
Christopher Soriano Danguilan,
Maintenance Superintendent
Cruz Gilbert Caluag, 2nd Engineer
Don Erick John Rendaje, 2nd Engineer
Guevarra Pepito Enriquez, Able Seaman
Jimmy Roel Asis Delima, GP Marine

20
Years

Joseph Bayna Ceballo,
Maintenance Superintendent
Pactor Julito Nierves, Fitter
Reyes Santiago III Pujante, Electro Tech Officer
Tajo Armando Tagong, Chief Officer

15
Years

January

Banes Ericson Cabalintang, 2nd Officer
Deepu Kishinchandani,
Vice President of BW Maritime India Office
Gursharn Singh, Chief Officer
Juzer Vasi, Head, Business Solutions - Fleet
Mallada Carmelo Mogato, Fitter
Manasvee Dhotre, Manager
Pagar Christian Harold Difuntorum, Able Seaman
Sakshi Gianchandani, MPO
Tubera Romeo De Guzman, Pumpman

February

Abraham Xavier Raja Peter Koildas,
Senior Production Operator

March

Benny Mullankuzhiyil Chacko, Cook
Rabacca Bryan Jesus Cortez, Chief Engineer
Tionko Calvin Victor Rojo, Chief Officer

April

Bar Rex Peter, Chief Engineer
Rajappan Hari Raj, Pumpman
Ramanujam Govindan,
Technical and Maintenance Manager
Shejul Deepak Ramesh, 2nd Engineer

May

Chen Fuzhan, 2nd Engineer
Wei Wanbin, Chief Officer
Xu Yuan Long, 2nd Engineer

June

Babaji Parte, Office Assistant
Fritz Ekløff, SVP IT & Systems
Ginez Ernesto Jr. Cabatic, Chief Officer
Inong Philip Albert Franci Villasor, Chief Officer
Vishnu Vichare, Office Assistant
Yambao Chester Granada, 2nd Engineer

10
Years

January

Abhuluimhen Okojiabulu, Able Seaman
Akindele Akintunde, 2nd Officer

10
Years

Angus Dulcesimo Jr. Duba, Oiler
Anthony Adeyemi, Chief Officer
Arikpo Okoj, Able Seaman
Ashish Nwaimo, 3rd Engineer
Bastasa Richard Halasan, Electro Tech Officer
Benjamin Athelege Ronald Edgar, Master
Blake Thomas Ponthieux,
Operations Superintendent
Cervantes Charlie Ricon, Able Seaman
Chee Inn Chau, Executive Assistant
Chintamani Anil Marathe,
Preservation Coordinator
Daniel Johnson, 3rd Engineer
Emediong Ukpong, 3rd Engineer
Esequias Neves Goncalves, Mechanical Technician
Felix Osuegbue, 2nd Cook
Graeme Trevor Welsh, Construction Supervisor
Idongesit Ekong, Cargo Engineer
Ifeanyichukwu Egbulefu, Able Seaman
Ikhsan, Production Superintendent
Iwarifaa Jack, Able Seaman
Lawrence Briseimo, Able Seaman
Marcelo Soares Teixeira, Crane Operator
Mark Benstowe, Able Seaman
Mfonobong Archibong, Chief Officer
Moleta Mark Sotero, Chief Cook
Nonyelum Chife, 3rd Engineer
Pacquing Jose Antonio Manulat, Able Seaman
Palas Patrick Suarez, Motorman
Pavino Brighamson Abuel, Able Seaman
Pioquid Ric Rabe, Pumpman
Rajiv Ranjan Singh, Able Seaman
Richard Udofia, 3rd Engineer
Ruiz Ed Bryan Curia, Able Seaman
Sonkar Deepak, Messman
Sukhwinder Singh, Electro Technical Officer
Tiwari Abhay Kumar, Able Seaman

February

Ambi Dominador Enelo, Pumpman
Abraham Mammen, Electro Technical Officer
Canaan Nwangwa, Motorman
Chauhan Shailendra, Engine Fitter
Dpenha Leon Francis, Electro Technical Officer
Emmanuel Nelson Arthur, 2nd Cook
Ganguly Avilash, Chief Officer
Juliette Adiahenot, HC Coordinator
Julius Odey, Able Seaman
Kamath Gurudat, 2nd Officer

10 Years

Kooranthodi Prajith, Able Seaman
 Levi Harry, Able Seaman
 Macuja Ronald Conta, Able Seaman
 Malik Rahul Anand, Chief Officer
 Manas Venkataramani, 2nd Engineer
 Mylapilli Uday Kumar, Cook
 Shetty Arjun Dinkar, 3rd Engineer
 Shetty Dayanand Doddaya, Messman
 Silva Gardner Sejismundo, Electro Technical Officer
 Sylvester Ortwav, Able Seaman
 Venkadesan Raj, Production Supervisor

March

Bernardez Diven Jan Ventoza, 3rd Engineer
 Calesterio John Vincent Calapardo, 2nd Officer
 Corlinus Banigo, Able Seaman
 Cyril Nwogu, 2nd Cook
 Daniel Ojie, Able Seaman
 Gica Henry Jr. Agura, Electro Tech Officer
 Jean Nestor Aboghe, Cook
 Kingsley Kengiokwueme, 2nd Cook
 Lasado Mark Rainer Midilo, Able Seaman
 Matthew Joshua, Ordinary Seaman
 Obinna Ogbuehi, Able Seaman
 Romualdo Aristotle Cagaanan,
 Electro Technical Officer
 Satheesh Anand, 2nd Engineer
 Sibbaluca Gabriel Jr. Furigay, Electrical Officer
 Stephen James, Able Seaman
 Tajudeen Bello, Able Seaman
 Tamunoiyowuna Green, 3rd Officer
 Tunde Owuru, 2nd Cook
 Uchenna Uka, 2nd Cook
 Vargas Nordan Hipolito, Messman
 Vengayil Anil Kumar, Cook

April

Edidiong Philip, Able Seaman
 Jeffrey Plaza Pasok, Marine Operator
 Keekan Sohan, Cook
 Leigh Arnel Mallare Biscarra, Senior
 Mechanical Technician
 Obayomi Aderogba,
 Accountant-General Accounting
 Rendon Ryan Palomo, Able Seaman
 Reyes Roderick Arban, Electrical Officer
 Rutagines Louie Ilagan, Messman

10 Years

Theadeus Onuoha, Able Seaman
 Wang Kezhi, Chief Officer

May

Arnulfo Magaña Salvador, GP Marine
 Casibang Levy Arayon, Fitter
 Denosta Robson Vidal, Fitter
 Edson Luiz Pereira, GP Marine
 Gutierrez Luisito Jr. Ariola, 2nd Engineer
 Hans De Vries, Project Manager
 Ismael Tavares Filho, Production Operator
 Ituriaga Don Dela Cruz, Messman
 Jimmy Melican, IT Senior Analyst, Global
 Infrastructure - Cloud, Storage, Database
 Jose Ili Monfero Arnisto, Senior Utility Operator
 Li Anxian, Chief Officer
 Mahesh Chandra Katiyar, Electrician
 Peng Dewei, 3rd Engineer
 Raja Kumudam Samidurai, Inventory Expert
 Roman Belyakov, Chief Officer
 Said Pereira Rangel Junior,
 Production Superintendent
 Salathiel Cordova Vazquez, Fitter
 Santhosh Krishnan, Messman

June

Amarjit Singh, Marine Operator
 Balbaira Roweland Hutalla, Motorman
 Bhombal Altaf Musa, Oiler
 Efrain Torres Cruz, Assistant Manager HC
 Eliane Rodrigues Leite, Radio Operator
 Gilson Machado Rocha, GP Marine
 Glauca Soares Ferraz, Medic
 Kathrine Stenberg, Corporate Controller
 Konstantin Esipov, 2nd Officer
 Marcelo Ribeiro Dos Santos,
 Control Room Operator
 Melquiades Flores Tugab, Utility Operator
 Roderick San Pedro Rojas,
 Offshore Material Coordinator



H E R I T A G E

Dr Sohmen attending daily meetings at the World-Wide Shipping
office at Wheelock House. Hong Kong, 1988

Published by



Retired

Bains Arvinder Singh, Master

Basheer Pazhariyil Meerakutty, Chief Engineer

Christopher Walmsley, Master

Dhanjal Dalip Singh, Master

Digra Dadié, Utility Operator

Ehiman Bilé Antoine, Fitter

Gauda Govind Chandra, Motorman

Kanji Mansukhlal, Bosun

Kodia Alexis, GP Maintenance

Rolf Harald Bjørnø, Chief Elect Officer

Tandel Govindbhai Athembhai, Motorman

Timothy Pereira, E&I Supervisor

Vaz Jose, Motorman