

Marcon International, Inc.

Vessels and Barges for Sale or Charter Worldwide

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March 2023

Offshore Supply Market Report

Of the 13,370 vessels and 3,747 barges Marcon tracked as of mid-March 2023, 2,937 are supply and tug supply boats, with 245 officially on the market for sale. 64.34% of foreign and 80.39% of U.S. flag supply / tug supply boats Marcon has officially listed for sale are direct from Owners. In addition to those for sale, Marcon has 59 straight supply and tug supply vessels listed for charter worldwide.

1,154 of the vessels tracked by Marcon as of mid-March 2023 are crew, fast supply & pilot boats with 180 officially on the market for sale, plus 48 boats are available for charter worldwide. 40.0% of the boats officially for sale are U.S. flag. 38 crew boats for sale worldwide were built within the last 10 years. 59 boats, or 32.78%, are 25 years of age or older. The oldest boat listed is a 40', 240BHP 1957 built and located U.S. West Coast. This vessel is counterbalanced by a 170.6' LOA foreign 2022 built crew boat in Southeast Asia.

Market Overview

Tug supply boats officially on the market for sale listed with Marcon in total is 77, 79 fewer than March 2022 and 80 fewer than February 2018. Composition in the last year has changed with dropping 83 AHTSs in the 3,000BHP to 9,000BHP and 10,000BHP to 12,000BHP ranges, while gaining seven in the over 12,000BHP category. February 2018, the average age of all AHTSs for sale was 15 years old, where U.S.-flag vessels averaged 26 years and foreign-flag AHTSs averaged 15 years. Today, the average age is 16 years old, with U.S.-flag AHTSs averaging 25 years and foreign-flag averaging 14 years old. At the time of this report, 20 tug supply boats officially for sale were either built within the last 10 years, including four newbuilding re-sales. Only 15.58%, or 12, of tug supply boats are 25 years of age, compared to five years ago, when 19.23% of AHTSs for sale were at least 25 years old; and one year ago, 13.33% were at least 25 years old. At March 2023, the oldest AHTS available from Marcon was built in 1973.



At 168 platform supply vessels listed for sale mid-March 2023, we have 31 fewer PSVs listed for sale compared to one year ago, but three more listed than five years ago. Looking at change in vessel size composition over the past year, the biggest decreases were in the 150' to 160' LOA and over 240' LOA ranges, though there was a fairly consistent decline in all other sizes tracked. PSVs now being offered are slightly newer than those offered back in February 2018 with the average age of all available for sale at 20 years old compared to 22 years old then. U.S.-flagged PSVs decreased from 23 years to 21 years, while foreign flagged decreased from 20 to 17 years old. As of this report, Marcon officially has available 30 supply boats built within the last ten years, with one newbuilding listed. 39 PSVs, or 23.21%, are 25 years of age or older, with the oldest PSV listed built in 1971 - compared to one year ago when 43 PSVs (21.61%) were older than 25 years. Five years ago, 41 PSVs (28.47%) were older than 25 years, but 9 or 6.25% were newbuilds.

In today's market many additional vessels, probably equal to or greater than the number "officially" listed can be developed on a private & confidential basis – just a phone call or e-mail away. In general, serious buyers can pick up relatively newer vessels now than in the past.

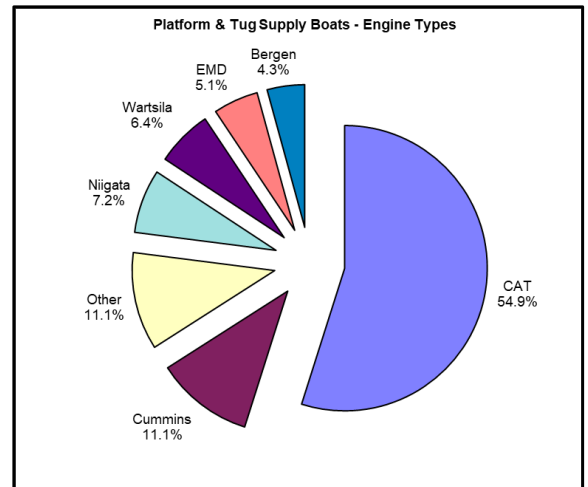
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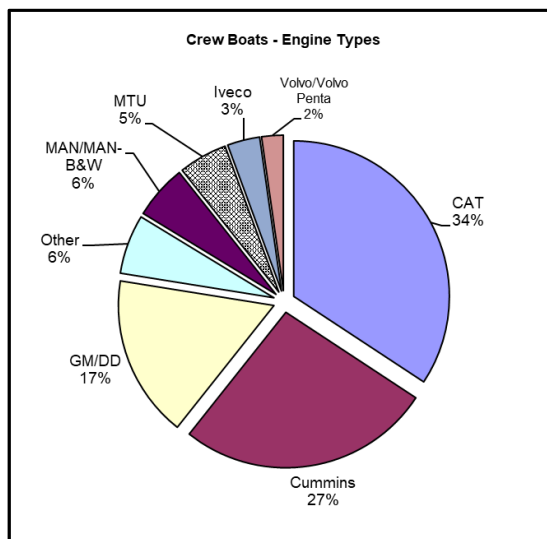
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The dominant location for second-hand tonnage on the market March 2023 is the U.S. with 46.8% (up from 43.1% one year ago and 31.2% five years ago) followed by Southeast Asia with 14.3% (down from 17.1% one year ago and from 23.1% five years ago), Far East with 12.7% (compared to 9.2% last year and 12.8% in 2018), Mid-East with 7.6% (8.2% in 2022 and 12.8% in 2018), Caribbean and Europe with 3.9% each (compared to 3.0% and 4.6% one year ago and 4.0% and 2.5% five years ago, respectively) and Africa 3.0% (down from 5.3% last year and 6.9% in 2018). Where location is unknown is 3.0%. The rest of the globe makes up the final 5.1% of locations. CAT is the principal main engine supplier to this sector powering 129 (54.9%) of the supply & tug supply vessels listed for sale, followed by Cummins in 26 (11.1%), 17 (7.2%) with Niigata, 15 (6.4%) with Wartsila, 12 with EMD (5.1%) and 10 with Bergen (4.3%). 26 (11.1%) units are powered by various other manufacturers. Compared to five years ago, the percentage of available for sale PSVs and AHTSs powered by CATs increased by 20.6 percentage points, while those powered by EMD dropped by 4.2 percentage points, Wartsila decreased 2.7 percentage points and Cummins fell 1.4 percentage points.



Crew boats officially on the market now are down 45 and 34 from one year and five years ago, respectively. In terms of vessel size by LOA available compared to five years ago, we saw the most significant declines in crew boats of 100' – 110' and over 130' LOA. As of this report, 21.11% of the crew boats available are less than 10 years old, down from the 23.56% and 24.30% reported one and five years ago, respectively. Conversely, 32.78% today compared to 31.11% last year and 37.85% five years ago are 25 years or older. Five years ago, the average age of all on the market through Marcon was 23 years, compared to 20 years one year ago and as of this report. Older U.S.-flagged vessels remain on the market, though decreasing in age from 34 years in 2018 to 28 years in 2022 but increasing to 29 now. Foreign flagged crew boats' age remained fairly steady at 16 years one year ago and 18 years five years ago compared to 15 years today, but are still almost half the age of U.S. vessels.



The dominant location for second-hand tonnage on the market March 2023 is the U.S. with 41.1% (up from 37.3% one year ago and 39.3% five years ago) followed by Southeast Asia with 15.0% (down from 16.9% one year ago and up from 14.0% five years ago), Mid East with 12.2% (compared to 10.7% last year and 10.3% February 2018), Europe with 11.1% (versus 10.7% last year and 12.1% five years ago), and the Mediterranean with 7.2% (up from 7.1% last year and 3.7% five years ago). Where location is unknown is 0.6%. The rest of the globe makes up the final 12.8% of locations. Of the crew, pilot boats and launches listed, the most popular engine is CAT in 61 of 180 boats where engines are given, followed by 47 Cummins, 30 GM/DD, MAN-B&W with 10, 9 with MTU, 6 with Iveco, 4 with Volvo/Volvo Penta and 11 under other types, ranging from Baudouin to Yanmar. Compared to one and five years ago, as a percentage of vessels available for sale, there was a significant increase in those powered by CATs and MAN/MAN-B&Ws, offset by decreases in those powered by Cummins and GM/DDs.

The pandemic severely stalled sales activity from the second quarter of 2020 through the end of 2021. In 2021, we completed ten sales, primarily under "best offer" conditions, and one charter. As the world has reopened, we have seen a corresponding increase in demand for tonnage, therefore in 2022, we completed 18 sales and one charter. The 2022 sales and the ten to date in 2023 are at prices reflecting the increased demand, though for some older or rougher condition vessels, we saw prices adjust to what the market would bear. Of our sales to date in 2023, seven sales were US to US parties, one was US to Caribbean buyer and two were between foreign parties into the Caribbean and South America. In 2022, 13 of our 18 sales were US seller to US buyer, one was US seller to foreign buyer, one was foreign to US buyer and three were foreign to foreign sales. Vessels were sold into the Africa, Canada and Europe.

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Marcon Broker's Comments

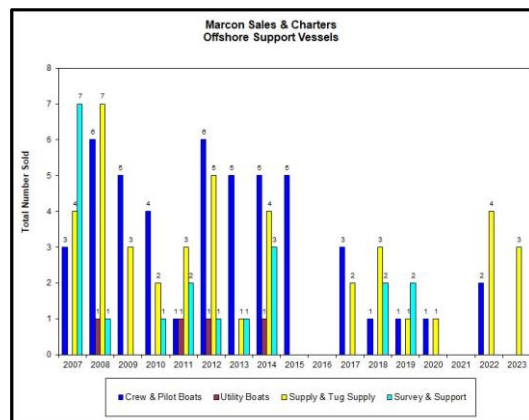
The offshore oilfield market has continued to make marked improvement since our last offshore supply market report published in November 2022, and shows no signs of abeyance looking into the future. Rates continue to strengthen and vessel sales into and out of the oilfield market continue to move at a rapid pace. There are recent reports of continuing consolidation, including the March 7th, 2023 Solstad Offshore press release of Tidewater Marine's recent purchase announcement of Solstad's PSV fleet. The purchase includes the entirety of Solstad Offshore's PSV fleet - some 37 - for upwards of US \$577 million in cash and new debt on hand. These sort of deals, coupled with continued retirement and disposal of last generation's PSVs will continue to tighten up available vessels in the market and these actions, which have been ongoing for the past several years, will continue to strengthen daily hire rates and utilization rates domestically in the US and worldwide. It's interesting to note that reportedly 14 of the Solstad Offshore vessels were identified as 'battery hybrids', which also shows a continuing direction that the industry leaders are taking in an effort to try and trim greenhouse gas emissions from their fleet's services. Along with alternatively powered vessels, ammonia for one, and even all electric tonnage coming into the markets are also being noted in maritime fleets and intentions worldwide. This should continue to strengthen new technology developments on many fronts. Coupled with renewed and strengthening demand for reliable hydrocarbon sources for post-Covid reopening and emerging economies, and the lack of investment in new sources over the past several years, post 2016 oil price collapse, and earlier demand drops should continue to strengthen demand for tonnage as we move forward through 2023. Hydrocarbon demand production is expected to remain strong for the foreseeable future, despite the opening of new alternative energy markets and expanding production in other sectors.

Marcon was involved in several sales since our last report including a pair of 265' AHTS vessels into alternative services. Marcon was not involved in this sale, but Northstar Marine Inc. of Clermont, New Jersey recently announced the purchase of the 265' AHTS vessel "Northstar Navigator" (ex-Keith Cowan) for continued service in the US Northeast offshore wind farm market, which is really taking hold after years of preparation and stuttered starts. Despite newbuilding announcements for purpose built and dedicated offshore wind service vessels being announced, we expect that these sorts of sale events will continue as there is a dedicated effort for transition to new and alternative energy sources. This will require the combined services of large offshore players to support continued developments in this sector. Along these lines, Fincantieri, through its U.S. subsidiary Fincantieri Marine Group in Sturgeon Bay, Wisconsin announced the newbuild contract for a purpose built Service Operation Vessel (SOV) on January 18, 2023 with CREST Wind, a joint venture between Crowley and ESVAGT. The 288' LOA vessel is expected to go into service in 2026, and is to be dedicated to the Dominion Energy Coastal Virginia Offshore Wind project under long-term charter. The expected increase in offshore wind production capacities in the US will continue to drive major developments as this specific segment comes online and grows, playing catch up with Europe and Asia in this rapidly developing and expanding market. The US Department of Interior announced on February 22, 2023 that it is proposing the first-ever offshore wind lease sale in the Gulf of Mexico. This proposed sale was made in an effort to support the stated goal of increasing offshore wind for the goal of increasing the capacity and deployment of some 30GW of offshore wind energy capacity by 2030. The date of the lease sale has not yet been set, but is reported to include a 102,480-acre area offshore Lake Charles, Louisiana, and two areas offshore Galveston, Texas, one comprising 102,480 acres and the other comprising 96,786 acres.

Recent Marcon Offshore Sales

Marcon has completed ten sales to date in 2023 with several more pending, following 18 sales and one charter completed in 2022. Since 1983, we have sold or chartered 1,556 vessels and barges, including 86 PSVs, 84 AHTS totaling 417,541BHP, 112 crew / pilot boats, 34 research / survey vessels, 20 utility boats, 19 seismic vessels and nine dive vessels.

Besides the below noted sale of the PSV "Titan", Marcon has sold on a private and confidential basis two additional offshore support vessels to date in 2023.



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In February, Marcon closed on the sale of the 145' LOA x 30' beam x 10.5' depth supply vessel "Titan". She was sold on a private and confidential basis between Caribbean clients. The vessel was originally built in 1981 by Moss Point Marine in Mississippi, lengthened 30' in 1994, repowered in the 2000s with Cummins KTA-19 M3 main engines and subsequently refurbished/rebuilt in 2021. Marcon acted as sole broker in the transaction.

In December, Marcon completed a private and confidential sale of a 5,000BHP anchor handling tug supply vessel.

Featured Offshore Vessels Available for Sale (Sorted by Descending LOA)

File: SU28869 Supply Boat - AHTS: 288.0' loa x 66.0' beam x 29.6' depth x 23.00' loaded draft. Built in 2007 by North American Shipbuilding; Larose, LA USA. U.S. flag. GRT: 4,918. ABS +A1, (E), +AMS, +DPS-2, Unrestricted. Special Survey expired Nov 2022. Dwt: 4,457lt. Light Disp.: 4,256mt. FO: 457,990g. Liq. Mud: 7,900bbl. Main Engines: 2 x CAT 3616TA total 16,400BHP. Bowthruster. Bollard Pull: 177mt. Gensets: 3 - 500kW. DP-2 anchor handling tug supplier. Offered for outright sale strictly "as is, where is" without any warranties or representations except as to ownership. **U.S. Gulf Coast.**



File: SU28055 Supply Boat: 280.0' loa x 60.0' beam x 24.0' depth x 7.25' light draft x 19.24' loaded draft. Built in 2008 by North American Fab.; Houma, LA. Rebuilt: 2019. U.S. flag. GRT: 2,998. ABS +A1, FiFi-1, (E), +AMS, +DPS-2, Unrestricted. SOLAS. Special & Docking Surveys overdue Aug 2018. Dwt: 4,824mt. Light Disp.: 2,349mt. Deck Cargo: 2,700LT on 225.0' x 50.5' clear deck. FO: 375,994g. FW: 34,820. BW: 326,404g. Dry Bulk: 11,303ft3. Liq. Mud: 13,460bbl. Crane: 1 - 3.0T SWL. 30' fixed boom. Winch: 2 - 6T tuggers. Main Engines: 2 x CAT C280-8 total 7,200BHP. 2 - FP props. 1,100HP drop-down bow & 1,350kW tunnel stern thrusters. Bowthruster 1,350kW. Gensets: 2 - 910kW & 1 - 175kW emergency. Quarters: 29 berths total. AirCon. Galley.

DP-2 platform supply vessel. 11,363ft2 clear deck. Two passive anti-roll tanks and bilge keels. Marine Technologies positioning system. 3 - wind trackers. Approved for carriage of ten 500bbl on deck. 8 tanks capable of carrying hazardous material. All 10 tanks approved for pollution material. 4 - 25 & 1 - 10-person inflatable life rafts. Narwhal 6-person rescue boat. Copy of owner's brochure available on request. Several similar / sister 280 - 300' candidates for conversion to alternate trade. Offered for outright sale strictly "as is, where is" without any warranties or representations except as to ownership. **U.S. Gulf Coast.**

File: SU28057 Supply Boat: 280.0' loa x 60.0' beam x 24.0' depth x 7.25' light draft x 19.44' loaded draft. Built in 2009 by North American Fab.; Houma, LA. U.S. flag. GRT: 2,998. ABS +A1, FiFi-1, +AMS, +ACCU, +DPS-2, Unrestricted. SOLAS. Special Survey due Apr 2027. Dwt: 4,812mt. Light Disp.: 2,406mt. Deck Cargo: 2,600LT on 201.0' x 50.5' clear deck. FO: 375,994g. FW: 41,335g. DW: 90,430g. BW: 304,254g. Liq. Mud: 13,322bbl. Crane: 1 - 3.0LT. 30' fixed boom. Winch: 2 - 12,000lb. Tulsa tuggers. Main Engines: 2 x CAT C280-8 total 7,200BHP. 1,350kW Ulstein stern & 1,100HP Rolls Royce drop down bow thrusters. Bowthruster 1,350kW. Speed about 13kn. Pumps: Fire: 2 - 7,705gpm Jason Eureka. Gensets: 2 - 910kW / CAT C32 ACERT, 2 - 2,050kW / shaft, 1 - 175kW. Firefighting: FiFi-1. 2 - 1,200m3/hr Jason Eureka monitors. Quarters: 29 in 12 cabins. AirCon. Galley. DP-2 platform supply vessel. Two passive anti-roll tanks & bilge keels. High-lift type rudders. Approved for carriage of six 500bbl hazardous or pollution materials on deck. 4 - 25 & 2 - 10-person inflatable life rafts. 1 - 6-person fast rescue boat with davit. Several similar / sister 280 - 300' candidates for conversion to alternate trade. Offered for outright sale strictly "as is, where is" without any warranties or representations except as to ownership. **U.S. Gulf Coast.**



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File: SU28058 Supply Boat: 280.0' loa x 60.0' beam x 24.0' depth x 7.25' lt draft x 19.24' load draft. Built in 2008 by North American Fab.; Houma, LA. U.S. flag. GRT: 2,998. ABS +A1, FiFi-1, +AMS, +DPS-2, Unrestricted. SOLAS. S/S & D/D overdue Nov 2018. Dwt: 4,798mt. Light Disp.: 2,430mt. 2,700LT on 201.0' x 50.5' clear deck. FO: 263,104g. FW: 34,824g. DW: 105,414g. BW: 311,870g. Dry Bulk: 11,422ft3. Liq. Mud: 13,322bbl. Crane: 1 - 3,100lb capacity. Winch: 2 - 4T tuggers. Main Engines: 2 x CAT C280-2 total 7,200BHP. 2 - FP props. Brunvoll stern tunnel thruster. Bowthruster 2 - 1,250kW. Gensets: 2 - 910kW / CAT C32 ACERT, 2 - 2,050kW / shaft, 1 - 166kW. Firefighting: 2 - 8,000gpm monitors. Quarters: 29 persons. AirCon. DP-2 PSV. Methanol capacity: 1,534.6bbl. Two passive anti-roll tanks and bilge keels. Approved for carriage of eight 500bbl hazardous and pollution material tanks on deck. Marine Technologies positioning system. 3 - wind trackers. 4 - 25 & 1 - 10-person inflatable life rafts. RSQ 450A SOLAS rescue boat with davit. Sale strictly "as is, where is". **U.S. Gulf Coast.**

File: SU28066 Supply Boat: 280.0' loa x 60.0' beam x 24.0' depth x 7.25' lt draft x 19.24' load draft. Built in 2007 by North American Fabricators; LA USA. U.S. flag. GRT: 2,996. ABS +A1, (E) +AMS +DPS-2, FiFi-1, Unrestricted Service. Special Survey overdue. Dwt: 4,696lt. Light Disp.: 2,340mt. 2,700LT on 201.0' x 50.5' clear deck. FO: 334,527g. DW: 246,549g. Dry Bulk: 12,000cft. Liq. Mud: 15,390bbl. Crane: 1 - 3,100lbs. SWL with 30' boom. Winch: 2 - 4T tuggers. Main Engines: 2 x CAT C280-8 total 6,598BHP. 2 - FP props. Retractable 1,200HP azimuthing bow & Brunvoll tunnel stern thrusters. Bowthruster 1,050kW. Speed about 13kn service. Gensets: 2 - 910kW / aux., 2 - 2,050kW / shaft, 1 - 215kW 60Hz AC. FiFi-1. 2 - 5,283gpm monitors. Quarters: 29 persons. AirCon. Galley. 280', DP-2 platform supply vessel for sale direct from Owners. Methanol capacity: 781.7bbl. Approved for carriage of eight 500bbl hazardous or pollution materials on aft deck. Marine Technologies positioning system. 2 - MRUs, 2 - DGPS, VSAT, CyScan, 2 - MRU, 3 - wind trackers. Two passive anti-roll tanks & bilge keels. 4 - 25-person & 2 - 10-person inflatable life rafts. Narwhal SV-400 SOLAS rescue boat with davit. May be candidate for conversion to alternate service. Sale "as is" subject to Owner's Board of Director's approval. **U.S. Gulf Coast.**



File: SU28068 Supply Boat: 280.0' loa x 60.0' beam x 24.0' depth x 7.25' light draft x 19.44' loaded draft. Built in 2010 by Tampa Ship LLC; Tampa, FL USA. U.S. flag. GRT: 2,998. ABS + A1, FiFi 1, (E), + AMS, + DPS-2, UWILD. Dwt: 4,750lt. Deck Cargo: 2,525LT on 201.0' x 50.5' clear deck. FO: 379,993g. FW: 41,335g. DW: 90,430g. BW: 310,257g. Dry Bulk: 12,000ft3 in 5 tanks. Liq. Mud: 13,322BBL. Crane: 1 - 3T SWL North Pacific. Winch: 2 - 12,000lb. Tulsa tuggers. Main Engines: 2 x CAT C280-8 total 6,690BHP. 2 props. 1,200HP Rolls Royce drop down bow & 1,250kW tunnel stern thrusters. Bowthruster 1,250kW. Speed about 13kn service. Pumps: Fire: 2 - 1,750m3/hr Jason Eureka. Gensets: 2 - 910kW; 1 - 175kW 60Hz AC. FiFi-1. 2 - 1,200m3/hr Jason Eureka monitors. Quarters: 29 persons. AirCon. Galley. DP-2 platform supply vessel. Marine Technologies positioning system. 3 - Wind trackers, CyScan, RadaScan, 2 VRU. Fitted with two passive anti-roll tanks and bilge keels. Approved for carriage if eight 500bbl hazardous & pollution material tanks on back deck. Four 25-person & 2 ten-person inflatable life rafts. Fast rescue boat with davit. Potential candidate for conversion to alternate trades. Sale "as is, where is" subject to Owner's BOD approval. **U.S. Gulf Coast.**

File: SU28071 Supply Boat: 280.0' loa x 60.0' beam x 24.0' depth x 7.25' light draft x 19.31' loaded draft. Built in 2006 by North American Fabricators; LA USA. U.S. flag. GRT: 2,994. ABS +A1, FiFi-1, (E), +AMS +DPS-2, Unrestricted Service. S/S expired Jan 2021. Dwt: 4,759lt. Light Disp.: 2,334mt. 2,700LT on 203' x 50.5' clear deck. FO: 371,141g. FW: 34,820g. BW: 1,061m3. Dry Bulk: 11,440cft. Liq. Mud: 15,415bbl. Crane: 1 - 3,100lb. SWL. Winch: 2 - 4T tuggers. Main Engines: 2 x CAT 3608 total 7,200BHP. 2 - Schottel CP props. 1,200HP Rolls Royce swing-up bow & 1,700HP tunnel stern thrusters. Bowthruster 1,700HP. Speed about 13kn. Gensets: 2 - 910kW / CAT 3508, 2 - 2,000kW / shaft, & 1 - 910kW AC. Quarters: 29 persons. AirCon. Galley. 280', DP-2 PSV. Approved for carriage of eight 500bbl tanks hazardous or pollution material on back deck. Marine Technologies DP-2 system. 2 - wind trackers. 2 - VRU. CyScan. 2 - MRUs. 2 - DPGS. Two passive anti-roll tanks and bilge keels. 4 - 25-person & 2 - 10-person inflatable life rafts. SOLAS fast rescue boat with davit. Possible candidate for conversion. Sale "as is", subject to Owner's BOD approval. **U.S. Gulf Coast.**



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File: SU28073 Supply Boat: 280.0' loa x 60.0' beam x 24.0' depth x 7.25' light draft x 19.50' loaded draft. Built in 2004 by North American Fabricators; LA USA. U.S. flag. GRT: 3,045. ABS +A1, Oil Recovery Class 1, +AMS, +DPS-2. Sub Ch. L & I. Special Survey expired Mar 2019. Dwt: 4,888mt. 203.5' x 50.6' clear deck. FO: 303,093g. FW: 32,998g. BW: 295,937g. Dry Bulk: 11,440ft3. Liq. Mud: 15,644BBL. Crane: 1 - 3,100 lbs. capacity. Winch: 2 - 4T tuggers. Main Engines: 2 x CAT 3608 total 6,600BHP. 2 - Rolls Royce CP props. 1 - 1,200HP swing-up bow & 1 - 1,300HP stern tunnel thruster. Bowthruster 1,300HP. Speed about 13kn. Gensets: 2 - 910kW; 1 - 190kW. Quarters: 29 persons. AirCon. Galley. DP-2 platform supply vessel. Methanol capacity: 1,836bbl. Two passive anti-roll tanks & bilge keels. 2 - wind trackers, VSAT system, CyScan, 2 - VRU & WAIS FA-150 transponder. 2 - 25-person, 2 - 20-person & 2 - 10-person inflatable life rafts. Seaforce 490 SOLAS O/B rescue boat. For sale "as is, where is". **U.S. Gulf Coast.**

File: SU28074 Supply Boat: 280.0' loa x 60.0' beam x 24.0' depth x 7.76' light draft x 19.10' loaded draft. Built in 2003 by North American Fabricators. U.S. flag. GRT: 3,045. ABS +A1, Oil Recovery Capability Class 1, +AMS, +DPS-2. Sub Ch. L & I. Dwt: 4,792lt. 223.0' x 50.6' clear deck. FO: 295,937g. FW: 32,998g. BW: 321,265g. Dry Bulk: 11,440ft3. Liq. Mud: 15,644BBL. Crane: 1 - 3,100lbs. Capacity. Winch: 2 - 4T tuggers. Main Engines: 2 x CAT 3608 total 6,600BHP. 1 - 1,100HP swing-up & 1 - 1,300HP stern tunnel thrusters. Bowthruster 1,300HP. Speed about 12kn. Gensets: 2 - 910kW; 1 - 190kW. Quarters: 29 persons. 300', DP-2 platform supply / methanol carrier vessel. Methanol capacity: 1,836bbl. Two passive anti-roll tanks & bilge keels. Approved for carriage of twelve 500bbl tanks on aft deck - 8 for hazardous material (4,000bbl). All twelve tanks capable of carrying pollution materials. For sale "as is, where is". **U.S. Gulf Coast.**



File: SU28075 Supply Boat: 280.0' loa x 60.0' beam x 24.0' depth x 7.25' light draft x 19.24' loaded draft. Built in 2004 by North American Fabricators; Houma, LA USA. U.S. flag. GRT: 3,045. ABS +A1, Oil Recovery Capability Class 1, +AMS, +DPS-2. Sub Ch. L & I. Special Survey due Jun 2024. Dwt: 4,811T. 203.5' x 50.6' clear deck. FO: 299,672g. FW: 32,998g. BW: 295,937g. Dry Bulk: 11,440ft3 in 5 tanks. Liq. Mud: 15,644BBL. Crane: 1 - 3,100lb. SWL. Winch: 2 - 4T tuggers. Main Engines: 2 x CAT 3608 total 7,200BHP. ,200HP swing-up bow & 1,700HP tunnel stern thrusters. Bowthruster 1,700HP. Speed about 13kn. Gensets: 2 - 910kW; 1 - 190kW. Quarters: 29 persons. DP-2 platform supply vessel.

Methanol capacity: 1,836bbl. Two passive anti-roll tanks & bilge keels. Four 25-persons & one 10-person inflatable life rafts. SOLAS rescue boat. Presently working. Copy of Owner's brochure on request. Offered for outright sale strictly "as is, where is" without any warranties or representations except as to ownership. **U.S. Gulf Coast.**

File: SU26867 Supply Boat - Azimuthing: 267.7' loa x 60.4' beam x 27.6' depth x 22.31' loaded draft. Built in 2013 by Nam Cheong Dockyard Sdn Bhd.; Malaysia. Malaysia flag. GRT: 3,963. ABS (IACS) (+)A1, FiFi1, OSV, Oil Rec. Vessel Class 1, (+)AMS, (+)DP2, CRC, Unrestricted Service. SS due Jul 2023. Dwt: 4,250mt. 820ft2 clear deck. FO: 376.8m3. BW: 1,520m3. Crane: 1 - 20mt SWL / cargo. Main Engines: 4 x Wartsila 9L20 total 8,920BHP. 2 - Azi thrusters props. 2 - tunnel thrusters. Bowthruster. Speed about 12kn on 12T/day @ 12kn. Quarters: 42 berths. Bulbous bow. 81.6m DP2 platform supply vessel. Diesel Electric. Specifically built for Shell to operating in their field off the coast of Labuan, Malaysia, where vessel has worked since 2013. Fitted to store and support oilfield operations with methanol. Reportedly in top condition. Owner taking offers for handover after end of current charter in May. For sale "as is, where is". **Southeast Asia. June 2023.**



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File: SU25661 Supply Boat - AHTS: 256.9' loa x 56.4' beam x 27.2' depth x 19.68' light draft x 23.00' loaded draft. Built in 2007 by Kleven Verft AS; Ulsteinvik, Norway. Norway flag. GRT: 3,107. DNV +1A1, ICE-C, Tug/Supply Vessel, OILREC,E0, DYNPOS-AUTR, SF, Comf-(3). Laid-up. Dwt: 3,060mt. Light Disp.: 3,182mt. 510m2 clear deck. FO: 1,011m3. FW: 861.9m3. DW: 1,230m3. BW: 1,230m3. Dry Bulk: 230m3. Liq. Mud: 549m3. Calcium Chloride / Brine: 400m3. Crane: 2 - 3mt SWL. Winch: Double drum 500T brake; 2 - 12T tuggers. Line Pull: 400T. Stern Roller. Main Engines: 2 x Bergen B32:40V12P total 16,092BHP. 2 - CP props. 1- 883kW CP (f) thruster; 2- CP (a) thruster.

Bowthruster 883kW. Bollard Pull: 190mt. Speed about 15-17kn. Gensets: 2 - 3,000kVA shaft; 1 - 1,668kVA aux; 1 - 488kVA emer. Quarters: 28 (12-1, 2-4, 4-2). AirCon. Galley. UT 712L design. AHTS. 16 marine crew. 114.8' (35.0m) air draft. Three mess/rec rooms. 4 - 98m3 rig chain lockers. Two roll reduction tanks. RR ICON DP 2 positioning system. Currently in lay-up. For sale "as is, where is". **Europe Northern.**

File: SU25664 Supply Boat - AHTS: 256.8' loa x 56.4' beam x 27.2' depth x 22.92' loaded draft. Built in 2008 by STX RO Offshore Braila SA; Brazil. Norway flag. GRT: 3,089. DNV +1A1, SF, E0, DK(+) HL(2.5), Supply Vessel, Tug, Clean, DYNPOS-AUTR, TMON, FiFi-1. Laid-up. Dwt: 2,913mt. Deck Cargo: 900mt on 540m2 clear deck. FO: 1,062m3. FW: 741m3. DW: 1,231m3. BW: 1230.7m3. Dry Bulk: 225m3 in 4 tanks. Liq. Mud: 538m3. Calcium Chloride / Brine: 414m3. Crane: 2 - SWL 3mt @ 15m. Winch: 2 - 12mt tugger. Stern Roller. Main Engines: 4 x Bergen C25:33L9P total 15,950BHP. 2 - CP props. 1 - 1,200BHP stern thruster. 1 - 1,200BHP azimuth thruster. Bowthruster 1,200BHP. Bollard Pull: 183mt. Speed about 12-16kn on 21-44mt/day. Gensets: 2 - 3,000kVA 440V shaft; 1 - 930kW aux; 1 - 410kW emer. Firefighting: FiFi-1. 1 - 3,600m3/h. 2 - booms. Dispersant: 12m3. Quarters: 28 (12-1, 4-2, 2-4) persons. AirCon. Galley. UT712 L design AHTS. Tow pins: 4 - 250mt MWL Karm. Shark jaws: 2 - 750mt MWL Karm. Stern roller: 2 - 3m x 3.5m MWL 500mt. Two roll reduction tanks. Chain lockers: 4 - 98m3. DP 2 positioning system. Hospital, lounge and office. Currently in layup. Available for sale "as is, where is". **Southeast Asia.**



File: SU25666 Supply Boat - AHTS: 256.8' loa x 56.4' beam x 27.2' depth x 22.96' loaded draft. Built in 2007 by SC Aker Braila SA; Braila, Norway. Isle of Man flag. GRT: 3,068. DNV +1A1, SF E0, DK(+) HL(2.5), Supply Vessel, Tug, Clean, DYNPOS-AUTR, TMON. Dwt: 2,350mt. Deck Cargo: 900mt on 540m2 clear deck. FO: 1.060m3. FW: 741m3. DW: 1,231m3. Dry Bulk: 225m3 in 4 tanks. Liq. Mud: 538m3. Calcium Chloride / Brine: 414m3. Crane: 2 - SWL 3mt @ 15m. Winch: 2 - 12mt tugger. Wire: 4,930m x 76mm. Stern Roller. Main Engines: 4 x Bergen C25:33L9P total 16,157BHP. 2 - CP props. 1 - 1,200BHP stern thruster. 1 - 1,200BHP azimuth thruster. Bowthruster 1,200BHP. Dynamic Positioning. Speed about 12-16kn on 21-44mt/day.

Gensets: 2 - 3,000kVA 440V shaft; 1 - 968kW aux; 1 - 410kW emer. Firefighting: FiFi-2. 2 - 3,600m3/h. Quarters: 28 (12-1, 4-2, 2-4). AirCon. Galley. UT 712L design AHTS. Tow pins: 4 - 250mt MWL Karm. Shark jaws: 2 - 750mt MWL Karm. Stern roller: 2 - 3m x 3.5m MWL 500mt. Chain lockers: 4 - 98m3. Kongsberg DP 2 positioning system. Hospital, lounge and office. Currently in lay-up. Available for sale "as is, where is". **Southeast Asia.**

File: SU24000 Supply Boat: 238.0' loa x 54.0' beam x 15.8' depth x 12.10' loaded draft. Built in 1999 by Leevac Shipyard; Jennings, LA. U.S. flag. GRT: 1,549. ABS + A1 + AMS + DPS-2, loadline, SOLAS, SIP, USCG Sub. Ch. "L". Dwt: 2,259lt. Deck Cargo: 1,925LT on 186'x45' clear deck. FO: 454m3. FW: 184m3. DW: 250,928g. Dry Bulk: 8,400ft3. Liq. Mud: 6,280BBL. Main Engines: 2 x CAT 3516B-TA total 4,000BHP. 2 - 5-blade FP props. Bowthruster. Dynamic Positioning. Speed about 10-12kn on 13.6Mtpd. Gensets: 3 - 250kW / CAT3406 480vAC 60Hz 3Ph. Firefighting: 1 - 284m3/h monitor. 14 berths in 6 cabins. AirCon. Passengers: 43. Two sisters. Nautronix DP system. **U.S. Gulf Coast.**



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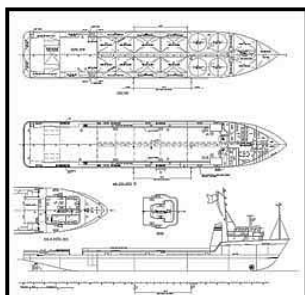
File: SU23667 Supply Boat - Azimuthing: 236.2' loa x 52.5' beam x 23.0' depth x 19.40' loaded draft. Built in 2003 by



Brattvaag Skipsverft, Norway. U.K. flag. GRT: 2,244. DNV +1A1, Supply Vessel, SF E0, Dynopos AUTR - New 5 year Certs Feb 2023. Dwt: 3,200T. Deck Cargo: 1,500T on 640m2 clear deck. FO: 916.8m3. FW: 796.3m3. DW: 1152.4m3. Dry Bulk: 9,000ft3. Liq. Mud: 4,839BBL. Calcium Chloride / Brine: 4,839BBLs. Crane: 1 - 5T @ 10m. Winch: 2 - 10T tugger. Main Engines: 2 x CAT KRMB-9 total 5,450BHP. 2 - azimuthing CP props. 2-800HP stern thrusters; 1- 1,000HP Azi thruster and 1-800HP tunnel fwd. Bowthruster 1,000BHP. Pumps: FO/FW: 200m3/h, DW: 150m3/h, Liquid Mud/Brine: 75m3/h. Gensets: 2 - 1,352kW AC. Quarters: 38 (14-1, 12-2). Kongsberg Simrad SDP DP-2. UT755L design. Supply / ROV support. 6m x 3.5m

survey room (main deck), 5.5m x 4m survey office (A deck), 19" racks and 220v power. Telemetry / video / data link to bridge and Client cabins. Aft deck strengthened for 400T/m Crane, flush with deck, with power supply (optional). Moon Pool (4.35 x 3.8 m). Can be outfitted with 150T A-frame aft. **North Sea.**

File: SU23001 Supply Boat - Azimuthing: 230.0' loa x 40.0' beam x 14.0' depth x 5.50' light draft x 12.00' loaded draft. Built in 1984 by Halter- Moss Point Marine. Rebuilt: 2000. Panama flag. GRT: 911. ABS + A1 + AMS/USCG/SOLAS. Dwt: 1,215T. Light Disp.: 827T. Deck Cargo: 700LT on 168' x 29' clear deck. FO: 129,000g. FW: 10,250g. DW: 66,664g. Dry Bulk: 6,000ft3. Liq. Mud: 3,760BBL. Main Engines: 2 x CAT 3512B total 3,000BHP. 2 - Ulstein Z-Drive props. Range 14,740nm. Bowthruster 650HP. Dynamic Positioning. Speed about 8-13kn on 70-182gph. Gensets: 2 - 99kW / GM 8-71; 1 - 850kW; 1 - 65kW. Quarters: 16 berths. Stretched to 230'. In Shipyard end 2020. Laid-up. Needs repairs to activate. Machinery works. **U.S. Gulf Coast.**



File: SU23002 Supply Boat - Azimuthing: 230.0' loa x 40.0' beam x 14.0' depth x 12.00' loaded draft. Built in 1985 by Moss Point Marine Inc; Escatawpa, MS. Rebuilt: 1998. Foreign flag. GRT: 907. ABS + A1 + AMS, USCG/SOLAS. Light Disp.: 827T. Deck Cargo: 700LT on 168'x29' clear deck. FO: 129,000g. FW: 10,250g. DW: 66,664g. Dry Bulk: 6,000ft3 in 4 tanks. Liq. Mud: 3,760BBL. Main Engines: 2 x CAT 3512B total 3,000BHP. Azimuthing Ulstein 1350-H props. Z-drive / CP Bowthruster. Bowthruster 650HP. Speed about 13kn. Gensets: 2 - 99kW / GM8-71; 1 - 850kW / Main Engine; 1 - 65kW. Firefighting: 1,000gpm monitor. Quarters: 16 in 6 cabins. AirCon. Galley. Stretched to 230', re-powered and DP installed by former owner in late 1990s. Kongsberg Simrad SDP 11. DP-1 Equivalent. Laid-up. Needs repairs to activate. Machinery works. **Caribbean.**

File: SU22353 Supply Boat - AHTS: 223.0' loa x 53.8' beam x 23.6' depth x 19.68' loaded draft. Built in 2006 by Universal Shipbuilding Corp; Japan. Rebuilt: 2022. Japan flag. GRT: 2,057. NK Class NS (Tug, WB), MNS MPP, LSA, CAA, RCF, AFS - Exp. 15 Feb 2028. Dwt: 2,460T. Deck Cargo: 1,000mt on 450m2 clear deck. FO: 955m3. FW: 530m3. DW: 725m3. Liq. Mud: 421m3. Crane: 1 - 5mt @ 10m. Winch: Brattvaag double drum. Line Pull: 300T. Wire: 2500m x 76mm. Main Engines: 2 x Wartsila 9L32 total 12,240BHP. 2 - Wartsila CP props. 2 bow, 1 stern thruster 800kW each. Bowthruster. Dynamic Positioning. Bollard Pull: 150mt. Speed about 14.3kn. Firefighting: FiFi 1. Quarters: 30 (6-1, 8-2, 2-4). Galley. Upgrades and refurbished with fresh NKK class issued in 2022. Formerly ABS +A1 Class. **Far East.**



File: SU21756 Supply Boat - Azimuthing: 217.0' loa x 54.0' beam x 20.0' depth x 7.20' lt draft x 17.10' loaded draft. Built in 2002 by Bender Shipbuilding; Mobile, AL. Panama flag. GRT: 1,888. IBS. In lay-up status, expires 2024. (formerly ABS + A1, E + AMS + DPS-2, Unrestricted Service. Expired June 2018). Dwt: 2,800mt. Light Disp.: 1,358T. 1,200lt on 148' x 45' clear deck. FO: 760m3. FW: 160m3. DW: 1,080m3. BW: 330m3. Dry Bulk: 180m3. Liq. Mud: 460m3. Main Engines: 2 x CAT 3516 BHD total 4,750BHP. 2 - Azimuthing 90" FP props. Bowthruster 2-21.7mt. Speed about 8-12.5kn on 12m3 eco/day. Gensets: 3 - 260kW / CAT 3406C DITA; 1 - 90kW / CAT

3304 480vAC 60Hz. Total 36 persons. DP-2 Class. Laid-up with engines ran periodically. **U.S. Gulf Coast.**

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File: SU20054 Supply Boat: 190.0' loa x 54.0' beam x 18.0' depth x 13.60' loaded draft. Built in 1999 by Atlantic Marine; Jacksonville, FL USA. Vanuatu flag. GRT: 1,226. ABS + A1 + AMS. SOLAS, DPS-1, Loadline. Laid-up. Dwt: 1,780lt. Deck Cargo: 1,385LT on 140' x 46' clear deck. FO: 121,840g. FW: 54,550g. DW: 245,000g. Dry Bulk: 7,000ft3. Liq. Mud: 2,714BBL. Main Engines: 2 x CAT 3516B total 4,000BHP. 96" 5-blade props. High efficiency/high translation rudders. Mathers controls. Bowthruster 600HP. Speed about 10-13kn on 6.4mt/day. Gensets: 3 - 250kW / CAT 480vAC 60HZ, 3Ph. Firefighting: 1 - 1,200m3/h FiFi monitor. 13 crew in 6 cabins. AirCon. Galley. Passengers: 16 pass seats. Total four sisters in this class built 1998/9. Nautronix DP systems. Independent steering, Schiling fishtail rudder. Moonpool. **U.S. Gulf Coast.**



File: SU20086 Supply Boat: 190.0' loa x 54.0' beam x 16.1' depth. Built in 1999 by Leevac Shipyard; LA USA. Mexico flag. GRT: 1,318. ABS + A1 + AMS, DPS-1. SS due May 2024. Dwt: 1,704mt. 1,016mt on 104' x 46' clear deck. FO: 747m3. FW: 486m3. DW: 208,170g. Dry Bulk: 7,000ft3. Liq. Mud: 3,590BBL. Crane: 2 -20T Hyrda Pro Telescoping Boom. M/Es: 2 x CAT 3516B total 4,000BHP. 2 - 96" 5-blade FP props. 1 - 250HP stern thruster. Bowthruster 600HP. Dynamic Positioning. Bollard Pull: 36.7ST. Speed about 10-13kn on 6.4mt/day. Gensets: 3 - 250kW / CAT 3406 480vAC 60Hz 3ph. Firefighting: 1 - 1,250gpm monitor. Quarters: 16 crew. AirCon. Galley. **U.S. Gulf Coast.**

File: CB17024 Crew Boat: 170.0' loa x 28.0' beam x 13.0' depth x 5.60' light draft x 9.60' loaded draft. Built in 2002 by Gulf Craft; Patterson, LA. U.S. flag. GRT: 95. USCG COI. 250T on 102' x 22' clear deck. FO: 24,000g. FW: 31,500g. DW: 15,500. M/Es: 5 x Cummins KTA38 total 6,750BHP. Bowthruster 200HP. Speed about 25kn on 225gph. Gensets: 2 - 75kW / Cummins 6BT5.9. Firefighting: Elkhorn 8393 monitor; 2 - 5 gal AFFF foam. Quarters: 2 - singles; 2 - doubles. Passengers: 78. Carries 12,254g cargo fuel. DP-1 equivalent. **U.S. Gulf Coast.**



File: CB16501 Crew Boat: 165.0' loa x 30.0' beam x 12.0' depth x 5.10' light draft x 6.60' loaded draft. Built in 1997 by Gulf Craft, Inc.; Patterson, LA. U.S. flag. GRT: 98. USCG Sub T, SPV. Dwt: 300T. 280lt on 95.5' x 24.5' clear deck. FO: 25,000g. FW: 40,000g. Main Engines: 4 x Cummins KTA38M total 5,400BHP. 4 - 40"x36" FP props. Speed about 21kn on 220gph. Pumps: FO: 90gpm; FW: 600gpm. Gensets: 2 - 50kW / GM4-71 60Hz. Firefighting: 1 - monitor on stern. Quarters: 6. AirCon. Galley. Passengers: 90 seats. Range 1,602nm. **U.S. Gulf Coast.**

File: SU15060 Supply Boat: 150.0' loa x 36.0' beam x 12.0' depth. Built in 2005 by Master Boat Builders Inc. Foreign flag. GRT: 447. Overseas Marine Cert. Exp. Jan 2025. Last DD 2020. Ex ABS Int. Load Line. Dwt: 518T. 300T on 27 x 9m clear deck. FO: 60,600g. FW: 8,400g. BW: 48,000g. Crane: Palfinger 4.5T (optional). M/Es: 2 x CAT 3508 total 1,800BHP. Bowthruster Schottel. Speed about 11kn on 23-48gph. Pumps: DW: 625gpm @ 150'; FW: 360gpm @ 100'; FO: 360gpm @ 100'. Gensets: 2 - CAT C9DI. Firefighting: 1-FiFi Monitor 1,300gpm @ 240'. 20 berths. Galley. A-frame 15T (optional). Satcom (optional). **Caribbean.**



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Supply Vessels Worldwide

According to *IHS Fairplay Sea-Web*, as of March 14, 2023, there were 7,256 “sea-going” supply vessels over 100GRT worldwide. This is up 66 vessels, or 0.92%, since March 2022. Total horsepower of this fleet is 40,426,718BHP, down 37,001BHP or 0.09% since last year. This shift tells us that newer, lower horsepower vessels are replacing older, higher horsepower vessels which are being scrapped. The largest national fleet of supply vessels worldwide in horsepower and count sails under U.S. registry, with the U.S. operating 761 supply vessels, or 10.49% of the world market, totaling 3,836,906HP (9.49% of global HP) with a 20.5 year average age, about the same as the worldwide fleet. Since March 2022, the U.S. fleet declined by 1.93%, or 15 OSVs, while horsepower decreased 66,466BHP or 1.70%. Compared to five years ago, February 2018, the worldwide fleet is down 2.54% or 189 vessels while horsepower is down 4.76% or 2,018,737BHP. Worldwide average horsepower declined from 5,701BHP to 5,571BHP today. The U.S. fleet is down 173 vessels, or 18.52%, total horsepower decreased by 16.43% or 754,403BHP and average horsepower increased slightly from 4,916BHP to 5,042BHP. While the worldwide fleet is starting to grow again, albeit with lower powered vessels, the US market continues to shrink as aging and non-working tonnage is scrapped.



Top 30 “Sea-Going” Supply Vessel Fleets By Units As Of March 2023 According To IHS Fairplay Sea-Web

Flag	Total HP	%	# OSVs	%	Avg BHP	AvgAge
Worldwide	40,426,718	100.00%	7,256	100.00%	5,571	2003
USA	3,836,906	9.49%	761	10.49%	5,042	2003
Unknown	2,282,222	5.65%	638	8.79%	3,577	1985
Nigeria	2,173,838	5.38%	510	7.03%	4,262	1998
Panama	2,043,898	5.06%	423	5.83%	4,832	1999
China, People's Republic Of	2,760,224	6.83%	368	5.07%	7,501	2010
Malaysia	1,995,404	4.94%	364	5.02%	5,482	2012
Mexico	1,561,886	3.86%	335	4.62%	4,662	1999
Brazil	2,513,514	6.22%	296	4.08%	8,492	2008
Indonesia	1,145,899	2.83%	270	3.72%	4,244	2002
Singapore	1,766,775	4.37%	227	3.13%	7,783	2016
St Vincent & The Grenadines	988,222	2.44%	174	2.40%	5,679	2010
United Kingdom	666,604	1.65%	174	2.40%	3,831	2013
United Arab Emirates	695,684	1.72%	172	2.37%	4,045	2002
India	882,951	2.18%	163	2.25%	5,417	2004
Vanuatu	878,060	2.17%	126	1.74%	6,969	2007
Marshall Islands	889,595	2.20%	122	1.68%	7,292	2013
Norway	1,372,455	3.39%	113	1.56%	12,146	2010
Iran	363,351	0.90%	98	1.35%	3,708	1991
Vietnam	609,409	1.51%	94	1.30%	6,483	2006
Russia	959,037	2.37%	88	1.21%	10,898	2003
Denmark (Dis)	633,526	1.57%	86	1.19%	7,367	2012
Tuvalu	534,807	1.32%	86	1.19%	6,219	2017
Norway (Nis)	861,654	2.13%	82	1.13%	10,508	2010
Azerbaijan	482,394	1.19%	72	0.99%	6,700	1997
Italy	416,393	1.03%	72	0.99%	5,783	2002
Saudi Arabia	348,201	0.86%	68	0.94%	5,121	2014
Thailand	266,984	0.66%	60	0.83%	4,450	2012
Cyprus	408,531	1.01%	55	0.76%	7,428	2006
Liberia	407,000	1.01%	54	0.74%	7,537	2008

Conversely, 1,056 OSVs and 51 crew boats greater than 99GT are shown as scuttled, scrapped or to be broken up. Compared to one year ago, this is up 37 OSVs (or 3.63%) but no change in crew boats. Looking back to pre-COVID October 2018, 591 OSVs and 22 crewboats were noted as scuttled, scrapped or to be broken up, indicating that in less than five years, there was a 78.68% increase in OSVs and a 131.82% in crewboats scrapped. We know of numerous under 99GT or unclassified OSVs and crew boats scrapped during 2020 and 2021, primarily due to owners reporting lack of work and purchase interest at above scrap levels.

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New Construction, Shipyard & Other Vessel News

According to the **U.S. Coast Guard Merchant Vessels of the U.S.** database updated March 6, 2023, there were not any U.S. built, U.S. flag offshore service vessels built or completed in 2022 or 2023 to date. Three U.S. flag OSVs were built in 2021; four in 2020 and two in 2019.

IHS Fairplay Sea-Web as of March 14, 2023 reports 285 OSVs totaling 1,604,700HP (average 5,631HP), 208 other offshore support vessels and 121 crew or crew/supply vessels, all over 99GT, built or to be built in 2023 or later. The 285 OSVs represent 1,604,700HP (average 5,631HP). 58 are on order for Singapore flagging, 45 for Malaysia, 26 for Panama, 21 for the U.K., 11 for Brazil, 10 with unknown flag and nine each India, St Vincent & The Grenadines and the United States flagging. The remaining 87 are being built for 26 other countries. Of the 121 crew or crew/supply vessels on order, 21 are being built for the U.K. flag, 19 for Malaysia, 17 for Panama, eight each for St Vincent & the Grenadines and the U.S. The other 48 are being built for 22 other countries. The 208 other offshore support vessels are being built for 31 countries, primarily China, Singapore, Marshall Islands, Norway, Malaysia, Panama, unknown flag and Bahamas. Only five are noted as under construction for U.S. flagging.



Singaporean shipbuilder **Strategic Marine** on 25th October 2022 announced it secured a four-vessel crew boat order from Malaysian operator **Surya Nautika**. Slated for delivery to the licensed Petronas contractor progressively from the first quarter of 2023, the newbuilds will be Strategic Marine's 40-meter Gen3 Fast Crew Boat (FCB) designed by **Southerly Designs** of Australia in collaboration with Strategic Marine, with bespoke layout and features for Surya Nautika. The new vessels will feature a remote-controlled water monitor with a capacity of 1,200m³/hr, making it fully equipped to carry out external fire-fighting roles and safety standby duties. Each will be equipped with three Caterpillar C32 engines driving fixed pitch propellers. Meanwhile, station-

keeping and maneuvering capability is enhanced by a tunnel thruster installed at the bow. The aft deck has a large clear area of 120m² with deck strength of 2mt/m². The vessel cargo fuel capacity is 70m³ and cargo freshwater capacity is 30m³ allowing for extended endurance operations at sea. Internally the vessel will feature a large galley, and mess areas with dry store catering for a large crew with extended operational endurance. The passenger saloon offers 80 reclining seats arranged with either single or twin seats in each row to provide additional space and privacy. Surya Nautika provides marine transportation and offshore support services for the Malaysian offshore oil and gas industry. The company currently owns and operates a fleet of seven crew boats and the new orders will combine both expansion and a fleet renewal program aimed at making Surya one of the largest crew boat operators in Malaysia.

Strategic Marine has signed an order to build three 'Brevity'-class crew transfer vessels (CTVs) from **Chartwell Marine**. The Brevity-class 27m catamaran design forms part of Chartwell's new offshore wind support vessel range, which has seen multiple orders in the UK and USA since its launch in June 2022. The Brevity-class vessel meets the need of the offshore wind support market for a high-powered CTV capable of cost-effective and low-emissions operation. It boasts enhanced maneuverability and stability due to its signature hull form optimization and has a capacity of 32 personnel. Multiple crew configurations enable flexibility in space planning and enhance the comfort necessary during long offshore stays. The three Brevity CTVs are meant for a new client for the Singapore-



based shipbuilder, and the order shows Strategic Marine's confidence in Chartwell's class-leading design expertise. As the first Chartwell project to be launched in Asia, the Brevity trio enters an exciting new proving ground in the continent's offshore wind support market. The International Renewable Energy Agency estimates that by 2050, Asia will account for over 60% of all offshore wind capacity installed globally. The Global Wind Energy Council expects the Asian offshore market to have installed nearly 100GW of offshore wind capacity by 2030. CEO of Strategic Marine, Chan Eng Yew added: *"Strategic Marine is committed to building vessels that will accelerate the growth of the offshore wind industry. The quality of our materials and expertise go hand in hand with Chartwell's design philosophy of efficiency and adaptability. We are confident of their ability to deliver on both and it is important that we continue to diversify our build strategies; both to capitalize on growing demand for specialised vessels, and to catalyze innovation in the CTV sector as Asian renewables evolve at pace alongside it."*

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Specialist international aluminum shipbuilder **Strategic Marine (S) Pte Ltd** has won a newbuild contract for two Fast Crew Boats (FCB) from **Centus Marine Sdn Bhd** (CMSB). The two offshore support vessels will be the fifth and sixth FCBs ordered from the Singapore based shipyard in the past two years. CMSB provides offshore support vessels, which include Supply Vessels, Anchor Handling Tugs, Fast Crew Boats and other various types of vessels for marine offshore clients. The 42m long FCBs will feature design and technical enhancements when compared to previous vessels. The robust hull engineering ensures vessel performance and efficacy as well as stability

in tough marine environments and challenging offshore conditions. Each vessel will also be powered by three Cummins KTA50 engines, with expected cruising speeds of around 30 knots. Safety and comfort are the top priorities in the design of these vessels. Each vessel can transport 100 personnel in business class recliner seats and is fitted with dedicated luggage racks in the main deck lounge. Accommodation for crew includes 12 berths in seven cabins. Under the safety aspect, each vessel offers bow boarding, an enlarged wheelhouse, and a large deck storage area with wide walkways to ensure safe and efficient crew transfer. The FCB duo is also the 12th and 13th vessels overall that have been ordered by Centus Marine. The vessels are scheduled for delivery in early 2023 and are expected to work in Southeast Asian waters.

In line with its own sustainability efforts, **Strategic Marine** revealed its offshore support vessels of the future at Offshore Southeast Asia (OSEA) 2022 in Marina Bay Sands. Chan Eng Yew, Chief Executive Officer, Strategic Marine, presented the company's latest launches over the last 12 months. Among them are the Generation 4 Fast Crew Boat (FCB), which is being constructed at the group's Singapore yard, the StratCat 27, a crew transfer vessel (CTV) designed specifically for offshore windfarms and renewable energy markets, and a fast crew transfer vessel (FCTV)

designed to replace helicopters. Considering the recent United Nations Climate Change Conference (COP27), which focused on the future of energy, the new generation of vessels must also reduce emissions and carbon footprint. Mr Chan stressed the importance of reducing the carbon footprint during the asset's operating life as well as during construction. Commenting on the designs of these vessels during a presentation at the Knowledge Sharing Theatre in OSEA, he shared: *"We aim to reduce operating costs, impact on the environment, as well as improve operational flexibility and safety."* Technology and ship design are two ways Strategic Marine incorporates sustainability into shipbuilding. The Generation 4 FCB and StratCat 27 CTV, for example, have improved hull forms that improve engine efficiency or reduce emissions. Aside from this, the StratCat 27 has environmentally friendly features such as a green passport for recyclability and is coated with an anti-fouling paint that is silicon-based, which far from compromising the speed of its hybrid engine, helps the vessel to achieve half a knot increase in speed instead. Currently, a pair of hybrid StratCat 27s is under construction and their delivery in 1Q2023 will position Strategic Marine to be the first shipyard in Asia to introduce Hybrid CTVs. On Strategic Marine's push for hybrid systems, Mr Chan said: *"Going hybrid has its advantages – reducing Opex (operating expenditure) by reducing wear and tear on system parts when hybrid systems can actually take over, reducing CO2 emissions, and of course, reducing fuel consumption."* A vessel type dedicated to crew transportation, FCTV, has also been presented by Strategic Marine to operators seeking lower operating costs than helicopters. The FCTV is a catamaran powered by waterjets and compared to helicopters, it consumes significantly less fuel.



Offshore services provider **HST Marine**, part of **Purus Wind**, the offshore wind business of Julian Proctor-led Purus Marine has contracted Singapore-based shipbuilder **Strategic Marine** for the supply of four new battery hybrid crew transfer vessels (CTVs). The inaugural order for parallel hybrid StratCat 27 CTVs will see the four vessels deliver in the first and second quarters of 2023. HST also has an option for two additional ships for delivery in the third quarter of 2023. Acquired by Purus Marine last year, HST has been rapidly expanding its current fleet of vessels with a quick succession of hybrid CTV orders. Purus Wind provides CTV and commissioning/service operation vessels (C/SOVs) to its

customers and will also be expanding its fleet of hybrid C/SOVs. Last December, HST also tapped Dutch shipbuilder Damen Shipyards for three new battery hybrid CTVs. The trio is already under construction in Turkey and is scheduled for delivery in early 2024. (Splash24/7)

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Strategic Marine has signed a Memorandum of Understanding with Purus Wind's **HST Marine** to build three Brevity-class Crew Transfer Vessels for the UK-based offshore vessel owner-operator. The agreement binds the two parties to negotiations on a vessel building contract for the **Chartwell Marine**-designed 27m catamarans. The Brevity-class designs, launched in June 2022, are specifically designed to meet the needs of the offshore wind support vessel market and Strategic Marine has previously committed to build three vessels with progressive deliveries from 2024. The Brevity-class CTV is part of Chartwell Marine's new offshore wind support vessel range and is specifically designed to meet the rigorous demands of the market. The high-powered CTV features enhanced maneuverability and stability due to its signature hull form optimization. This also ensures cost-effective and low-emissions operation via its hybrid systems, a growing requirement of the offshore wind industry and marine decarbonization efforts. The vessel has a capacity of up to 32 personnel. Multiple crew configurations enable flexibility in space planning and enhance comfort and crew welfare during long offshore stays. In addition to the Chartwell Marine-designed vessels in its fleet, HST Marine's choice to work with Strategic Marine on more newbuilds soon after signing a significant contract to build four hybrid CTVs shows its confidence in the company. Acquired by low-carbon maritime energy transportation and infrastructure systems provider Purus Marine in 2022 and now under its offshore wind business Purus Wind, HST Marine has been rapidly expanding its current fleet of vessels. Strategic Marine's build program has played a crucial role in facilitating HST Marine's quick ramp-up during dynamic market conditions. In January, Strategic Marine sealed a deal to build four hybrid CTVs for HST Marine with options for two more vessels.



10th February 2023 **HST Marine** welcomed the arrival of its second UK-built hybrid-electric crew transfer vessel (CTV), "*HST Frances*", at a ceremony attended by Nusrat Ghani MP, **UK Minister of State** (Dept. for Business, Energy & Industrial Strategy) and senior British maritime industry leaders. The event highlighted Britain's role in pioneering low-carbon vessels to support domestic and global offshore wind operations. "*HST Frances*" is HST Marine's second hybrid electric CTV. The 25m vessels can carry 12-24 industrial personnel, and its hybrid electric propulsion system cuts fuel consumption by 30% compared to similar CTVs powered by diesel engines. This follows the delivery of "*HST Ella*" in

2021, the industry's first vessel of this type and recipient of the 2022 EMCAs Green Technology Award. Both vessels were designed by UK naval architect **Chartwell Marine** and built at UK shipbuilder **Diverse Marine** on the Isle of Wight. The "*HST Frances*" will also be British crewed for domestic projects. "*As wind power becomes an integral part of the net zero energy mix, the growth of sustainable offshore wind operations relies on strengthening the efficiency and environmental performance of their value chains. Meeting the rising demand for new, clean support vessels is part of the solution, and we are already taking a leading role on this,*" says Tom Nevin, HST Marine CEO and head, Purus Wind. HST Marine was the first company to provide near-zero emissions operations for offshore wind projects in the UK, Belgium, France and Germany, demonstrating the ability of British companies to compete in the international offshore wind market. In the UK, its fleet has supported windfarms including Moray East and East Anglia 1 for companies including Vestas & SGRE. Purus Wind also provides commissioning/servicing (C/SOVs) to its offshore wind customers and as part of its ongoing expansion, plans to order another 4-8 C/SOVs.

Oslo-based diversified shipowner **Atlantica Shipping** has expanded its offshore fleet with an addition of a 2005-built platform supply vessel "*Atlantica Server*". The 3,300 dwt medium-sized PSV, formerly known as "*Energy Scout*" was picked up from **Golden Energy Offshore Services** (GEOS) for US \$6.45m and delivered in Aberdeen earlier this month. Fearnley Securities acted as the sole arranger for the project. The PSV was reactivated last year in March for work in the renewables sector following a 16-month warm layup. The vessel commenced a 12 month contract with BP UK in December. Atlantica currently has 14 vessels in its portfolio, including four PSVs, four tankers, and a pair of box ships, bulkers and multipurpose (MPP) vessels. (Source: Splash24/7)



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Logistics service provider **Peterson Den Helder** has chartered two large Norwegian supply vessels for a short period. The first is the more than 83 meter long “*Energy Duchess*” (photo) of **Golden Energy Offshore** from **Alesund**, which was launched at the ROC yard in China in 2019. It is a robust supplier of the well-known Ulstein PX121H type with an 858m² working deck. The other supplier is the “*Olympic Electra*” of **Olympic Subsea** from **Fosnavaag**. This 80-metre-long MT6009L feeder was delivered in 2011 by the Norwegian Myklebust shipyard and has a working deck area of 747m². Both diesel-electrically powered ships have a class 2 dynamic positioning system and have already been active from Den Helder. (Source: www.maritiemdenhelder.eu/)

Norwegian service operation vessel (C/SOV) provider and operator **Edda Wind** has launched a Daughter Craft crew transfer vessel (CTV) designed by **Chartwell Marine**, UK pioneer of next generation vessel design for the offshore wind sector.

The innovative new vessel has been built by **Alicat Workboats Ltd** and named “*Boreas Worker*”. It was built on behalf of Astilleros Gondan SA before entering service for operator Edda Wind, as part of the firm’s contract during commissioning and construction of the first phase of major UK offshore wind farm Dogger Bank Wind Farm. The 12m CTV, which will work in conjunction with Edda Wind’s fleet of hydrogen-ready commissioning service operation vessels

(CSOVs) on site, is the first of a new catamaran Daughter Craft design to be commissioned. The Chartwell Daughter Craft responds to the need in the offshore wind support market for low-emissions, cost-effective vessels, with the catamaran’s optimized hull form offering efficient fuel use as well as stability and maneuverability in choppy waters. “*Boreas Worker*” has a capacity of 12 personnel and is designed to be conveniently deployed from CSOVs and ‘flotels’ during extended offshore stays, offering wind farm technicians comfortable and efficient access to turbines, vessels, and other critical project infrastructure. Dogger Bank, a joint venture between energy partners SSE Renewables, Equinor, and Vårgrønn, is set to be the largest offshore wind farm — not just in UK waters, but globally. The three phases of the project, known as A, B, and C, will provide an overall total capacity of 3.6gW, capable of powering up to 6 million homes. “*Boreas Worker*” will form a versatile addition to Edda Wind’s fleet as it supports Phase A of construction this spring. The design forms part of Chartwell’s expanded offshore wind support vessel range, which has seen orders from across Europe, Asia, and the USA since its launch in June 2022. Andy Page, Director of Chartwell Marine, said: “*The Daughter Craft fulfils a key role in a modern support vessel fleet – giving vessel operators a way to safely transfer engineers from rest space to work-space while out at sea for longer periods of time, ultimately streamlining the processes of turbine commissioning and maintenance.*”



Norwegian owner **Standard Supply** has secured employment for two platform supply vessels. The Oslo-listed company, majority owned by **Øystein Stray Spetalen**’s investment vehicle SD Standard ETC, has won a one year contract for the 2005-built “*FS Kristiansand*” in UK waters, while the 2019-built “*Standard Defender*” has been booked for 140-days in West Africa. The contract for the 3,500 dwt ship with an undisclosed client in the UK will be in direct continuation of the current charter at £12,995 (US \$14,779) per day. The deal is expected to generate more than US \$3m in earnings before interest, taxes, depreciation, and amortization (EBITDA). The West Africa charter for the newly delivered 4,200 dwt “*Standard Defender*” is set to start mid-November, securing US

\$18,500 per day during the winter after which the vessel should return to the North Sea ahead of the summer season. The ship was acquired in June from Island Offshore. Standard Supply owns nine PSVs, five of which are part of 51% owned Northern Supply. The company is looking to further grow its fleet with plans to raise around NOK200m (US \$19.5m) through a private placement and has appointed Arctic Securities, Clarksons Securities and Pareto Securities as joint lead managers and bookrunners. (Source: Splash24/7)

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Danish offshore services provider **World Marine Offshore** (WMO), through its Taiwan-based joint venture company **U-Ming Marine Offshore** (UMO), has begun operating a new windfarm support trimaran crewboat built by Thai shipyard **Marsun**. Designed by naval architecture firms **WIND** of Denmark and **One2Three** of Australia, “*Umo Green*” is the first in a series of two to be built by Marsun for WMO. The newbuild has all-aluminum construction, a LOA of 30.5 meters, a beam of 11 meters, a maximum draught of two meters, a displacement of 185mt at full load, and capacity for 20mt of deck cargo and 24 technicians in addition to the five crewmembers. Three MAN D2862 1,066kW engines driving Hamilton waterjets via ZF gearboxes propel the crewboat to a top speed of 29 knots and a service speed of 25 knots. WMO said the use of three waterjets – with one in each of the three hulls – ensures a high bollard push of 17mt and excellent maneuverability. Marsun added that the engine room has been prepared for future hybrid conversion, allowing an electric motor to be installed in the driveline to further enhance operational flexibility. The trimaran design also enables safe operation even in significant wave heights of up to two meters. The optimized hull form guarantees inertia to help compensate for sudden wave motion even during extended periods offshore. A crane with a lifting capacity of 890kg is installed on the foredeck to aid in the loading and unloading of cargo during resupply trips. Fendering from Softbow is also fitted. Below the foredeck is a climate-controlled storage facility for additional cargo. Other onboard facilities include two officer cabins, two double crew cabins, a mess, and a lounge. The crew and passenger spaces benefit from noise levels well below 60 dB even while underway due to the low vibration of the waterjet propulsion and the superstructure being fitted on resilient mounts. “*Umo Green*” is classed by both Bureau Veritas and Taiwan’s CR Classification Society and designed in compliance to both Danish flag requirements and the IMO’s HSC code guidelines. UMO will soon begin operating the crewboat on a long-term contract with an undisclosed charterer in Taiwan.



At the Offshore Energy Exhibition & Conference 2022 Kommer Damen, Chairman of **Damen Shipyards Group**, and Arjan van Stee of **Van Stee Offshore** have signed a contract for the delivery next year of an 80m Multibuster 8020 ultra-shallow draught, multi-purpose workboat. Van Stee’s Multibuster 8020 is the first of a new class that combines the key elements of Damen’s highly successful Multi-Cat and Shoalbuster workboat classes to create a large-scale platform capable of undertaking a wide variety of projects in waters as shallow as three meters. The vessel is the brainchild of Damen CEO Arnout Damen who recognized that workboats of this size and capability were not only in short supply but would also be increasingly required in the

years ahead. The basis of the design was developed by naval architecture studio OSD-IMT, part of the Damen Shipyards Group, and construction got underway at Albwardy Damen Sharjah in the UAE in 2020. Key features of the design in addition to the shallow draught include extensive deck space, ample accommodation and the high stability that enables the fitting of larger cranes than those on vessels of a similar size. DP2 dynamic positioning is standard and the propulsion system includes a retractable tunnel bow thruster that ensures that two tunnel thrusters are available at all times for enhanced maneuverability. All third-part equipment is sourced from leading brands. As well as serving the offshore renewables and oil & gas sectors performing duties ranging from anchor handling and towing to ROV operations, cable laying and beach pulling. The Multibuster is expected to be in demand for nearshore operations. The vessel is built to ground out on the beach for tasks such as cable landings and shore approaches. Arjan van Stee, Director Van Stee Offshore, said: “As a specialist in shallow draft operations the Multibuster will give us new capabilities and opportunities to support our clients in the offshore energy sector. Its low emissions profile will additionally be valued by our partners working on wind and other renewables. We’re very pleased to be renewing our relationship with Damen and look forward to a long and productive cooperation.” Joost van der Weiden, Damen Sales Manager Benelux: added, “It’s great to be working once again with Van Stee Offshore, a family-owned company known for its high-quality vessels and many prestigious customers. We believe that the Multibuster 8020 is the right vessel at the right time, delivering a suite of capabilities that are sure to be in demand in the years ahead. We all look forward to seeing it in operation and to further collaboration with Van Stee Offshore.” Van Stee Offshore currently operates a fleet of three multi-purpose workboats, at present active in the North Sea, Taiwan and Angola. The Multibuster, to be named “*Zwerver V*”, will provide them with another capable of global operations. Prior to its delivery next year, the vessel is undergoing some custom modifications including the addition of a four-point mooring system, the installation of a pedestal to take a large offshore crane and boat landing facilities for crew transfer vessels. The navigation and communication systems are also being upgraded along with the HVAC systems to equip it for high latitude as well as tropical conditions.

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At the annual Damen Maritime Festival held in Gorinchem at Damen's headquarters, offshore services provider **High Speed Transfers (HST) Marine** and **Damen Shipyards** announced that a contract was signed for the supply of three new Fast Crew Suppliers 2710s. The three vessels will be fitted with 190kW battery arrays that will enable them to operate emissions-free both when in harbor and when loitering offshore awaiting the retrieval of their technicians. In zero-emission mode, the vessels will be propelled by an electrical motor that is connected via the gearbox (PTI) to the propeller shaft. When sailing in diesel-mode, the electrical motors are able to work in reverse as PTO and can be used to charge the batteries and provide



the hotel load for the vessel. With the FCS 2710 Hybrids already in build at Damen Shipyards Antalya, Turkey, in anticipation of future demand, the delivery of all three will take place in early 2024. HST will be closely involved throughout as a key part of the build team, with all involved working together to ensure their success. Once operational, the FCS 2710s will receive ongoing support and maintenance services from Damen's service hub located at Portsmouth on the UK's south coast, as part of Damen's commitment to providing through-life support for its vessels. They will also be IMO Tier 3 compliant and feature all the latest upgrades made to the class based on

customer feedback and technological advances. The development and build of these innovative crew transfer vessels is a milestone in Damen's goal of providing a full range of sustainable vessels to support the offshore clean energy sector. The delivery will also enhance the low emission credentials of HST Marine's fleet of crew transfer vessels.

Damen Shipyards Group and **Compagnie Maritime Monffgasque (CMM)** have recently announced a two-year offshore support contract for Damen Fast Crew Supplier (FCS) 7011 "Aqua Helix". The vessel will transport personnel to and from offshore platforms in support of an oil & gas decommissioning project. "Aqua Helix" arrived in Brazil on 26th January, where she was welcomed with a ceremony at Pier Mauá in Rio de Janeiro. CMM is a market leader in Fast Offshore Support vessels and operates a fleet of Damen Sea Axe fast oil spill response vessels in Brazil. This has given the company confidence in the suitability of the FCS 7011 vessel's Sea Axe bow for operations in the region. Christophe Vancauwenbergh, CEO at CMM said, "We are very pleased with the Sea Axe's performance in Brazilian waters. It has proven to reduce slamming and fuel consumption significantly at high speeds, while increasing safety and comfort onboard."



Both Damen and CMM are committed to providing safe, reliable and sustainable offshore logistics solutions. An essential component in "Aqua Helix's" arsenal is her Ampelmann S-type motion compensated walkway. This energy-efficient system, designed specifically for lightweight vessels such as the FCS 7011, allows a continual flow of personnel to and from the offshore platform in safety and comfort, making transfer as easy as crossing the street. "Aqua Helix" also features a VEEM Gyrostabilizer which reduces roll motions up to 70%, working alongside the vessel's (retractable) bow thrusters, ensures outstanding DP performance. The vessel offers a viable and safe alternative to surfer and helicopter transfers. Her ability to transport up to 122 passengers at a time over greater distances offers optimal cost-efficiency. As may be expected, the vessel is fast, too. Thanks in part to her lightweight, aluminum construction, she can sail at speeds of up to 40 knots.



Indonesia's **Wintermar** is expanding its offshore support fleet with the acquisition of two anchor handling tug supply (AHTS) vessels. The transaction details have not been disclosed, except that the AHTS pair will be known as "SMS Sonnet" and "SMS Stanza" after delivery and will be used beginning in the first quarter of 2023. Wintermar has added eight vessels this year and the latest additions will bring its fleet to 41 units by the end of December 2022. "The company is positioning for strong growth in the current environment of higher global OSV demand and is optimistic that charter rates will continue to rise in 2023," Wintermar said, adding that its total remaining contracts on hand

amounted to US \$69.4m at the end of October. (Source: Splash24/7)

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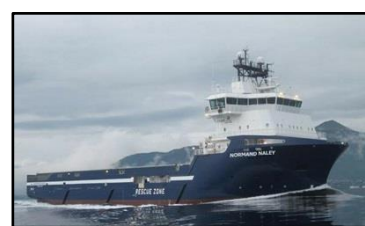
Damen Shipyards and offshore wind services provider **Purus Wind** have signed a contract for the build and delivery of eight new vessels. Four Damen Fast Crew Supplier (FCS) 2710 Hybrid and three Damen FCS 3210 Hybrid Crew Transfer Vessels (CTVs) and one, 90-meter Construction Service Operation Vessel (CSOV). The FCS 3210s and the CSOV will not only be equipped for ultra-low emission operations, but they have also been designed to be upgraded to methanol-fueled engines when the time comes. The order is part of Purus Wind's strategy to be a leading provider of low-carbon, offshore wind support vessels to meet the needs of the clean energy industry as its members set out to decarbonize. Crew Transfer Vessels The new Hybrid FCS 2710s will join the three other Hybrids



that Purus Wind's High-Speed Transfers ordered from Damen in the second half of 2022. In line with Damen's commitment to continuous design improvement, they will be updated with the latest design adjustments such as an improved wheelhouse window arrangement and bridge console lay-out. The twin axle hull form ensures excellent stability and fuel economy as well as providing extensive deck space and accommodation. The larger FCS 3210s are a new design that use the same twin axle hull form and share many of the same attributes as the FCS 2710s. As with the new FCS 2710s, a hybrid battery package for zero-emissions sailing is integrated into the design. The greater length allows for additional space for crew and passengers, making it more comfortable during

operations. Space is also reserved for possible conversion to methanol fuel. An exhaust gas aftertreatment system is included to ensure that the vessels are IMO Tier III compliant. The FCS 3210s are designed for longer distances serving wind parks further from shore and offer the possibility of staying longer at sea. High Speed Transfers has contributed its operational experience to the design and engineering of the FCS 3210 from the outset to ensure that it sets a new level of capability for its class. Construction Service Operation Vessel The latest vessel in the 90-meter

Damen CSOV Series will be highly versatile and capable of carrying up to 120 persons in comfort for up to thirty days at a time. In addition to the diesel / electric propulsion system and battery array, innovative features include a hull design that is almost symmetrical fore and aft below the waterline, on which will be mounted Damen's DPX-Drive. This has four identical thruster units – two forward and two aft - for highly precise maneuvering and station keeping. Other features include excellent stability due to its design, which is further enhanced by a large anti-roll tank. A motion-compensated gangway and crane will also ensure smooth transfers of personnel and equipment. Like the CTVs, it has space reserved for additional battery capacity as and when it is required and will also be prepared for both conversion to methanol engines and offshore charging. The new vessels are scheduled to be delivered between 2024 and early 2027.



Norwegian offshore vessel owner **Solstad Offshore** has fixed two large platform supply vessels to **Equinor UK** for five years. The 2011-built "*Normand Naley*" and the 2013-built "*Sea Frost*" will start their contracts in January 2023 and both charters include options for further extensions. Financial details have not been disclosed. The 4,400 dwt "*Sea Frost*" has been working for Equinor since 2017. As part of the new deal, the vessel will be upgraded with a battery-hybrid system and shore power, while the 5,500 dwt "*Normand Naley*" already sports these systems on board. The latest contracts will see Solstad operate three battery hybrid and shore power-fitted PSVs in

the UK sector on a long-term basis, which is about 15% of its UK fleet. (Source: Splash24/7)

Solstad Rederi AS, a wholly owned subsidiary of Solstad Offshore ASA, has sold the PSV "*Normand Flipper*". Delivery of the vessel to the new owner took place February 9th, 2023. The sale of the vessel will result in a positive accounting effect to be reflected in 1Q 2023. The "*Normand Flipper*" measures 291.4' loa x 61.7' beam x 24.9' depth x 20.34' loaded draft. It was built in 2003 by Kleven Verft AS, Norway. Deck Cargo is 2,850mt on 972m2 clear deck. The UT-745E design PSV is powered by four CAT 3516DITA totaling 10,064BHP driving azimuthing Rolls Royce props and two 1,200BHP bow thrusters.



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Sweden's **Viking Supply Ships (VSS)** has struck a deal with Norwegian owner and sale and leaseback player **Ocean Yield** to bareboat charter in two anchor handling tug supply (AHTS) vessels currently on contract with Solstad Offshore. The Christen Sveaas-controlled Viking Supply will take the 2013-built "*Far Senator*" and "*Normand Statesman*" for a period of five years. KKR-owned Ocean Yield, which exercised its right to have the vessels redelivered from Solstad, said the new deal includes purchase options during the charter period, and an obligation to purchase the vessels at the end of the charter. "*Far Senator*" and "*Normand Statesman*" will join Viking

Supply Ships' fleet when they go off their current charter contracts with Solstad, at the latest during the summer and late fall, respectively. The company's fleet currently comprises four AHTS and two platform supply vessels. VSS also has five Swedish state-owned icebreakers under operational management. (Source: Splash24/7)

KOOLE Contractor's fleet of two seagoing anchor handling tugs "*Koole 42*" and "*Koole 35*" has now increased to four with the purchase of the anchor handling tugs "*Norne*" and "*Viking*" (now named "*Koole 31*"). Both the "*Norne*" and "*Koole 31*" are anchor handling tug supply vessels. With their excellent seakeeping behavior and maneuverability, the "*Norne*" and "*Koole 31*" have outstanding towing characteristics. The "*Norne*" has a bollard pull of 83mt, whilst the "*Koole 31*" delivers a bollard pull of 72.3mt. Both are classed by Bureau Veritas with an unrestricted sailing area and Mon-Schaft Ice Class 1C notation. Both vessels are



manned with well experienced crew and equipped with high quality gear. And are equipped with towing- and anchor handling winches, deck cranes and Karmoy towing pins. Accommodation on board is provided for eight persons. With their multi-purpose design and outstanding towing characteristics, they can be used for worldwide operations such as, but not limited to, single and double towing, pushing, anchor handling, anchor recovery, salvage assistance, wreck removal, escorting and deck and/or cargo transportation and therefore will be a great contribution to Koole's worldwide projects. The "*Koole 31*" will soon depart with the accommodation crane barge "*K10030*" to start on the OS35 salvage off Gibraltar.

Incat Crowther is proud to announce the handover of a new purpose-built catamaran CTV to **Goldsea Marine & Offshore Engineering (Shanghai) Co Ltd** (Goldsea). The Incat Crowther 32, built by AFAI Southern Shipyard in Guangzhou, represents a step change for the Chinese offshore wind industry, offering enhanced capabilities including a large cargo zone and a maximum speed of up to 25 knots. The handover of the CTV follows recent sea trials that confirmed the vessel's high performance, with Incat Crowther meeting all contractual requirements. The state-of-the-art catamaran will now be put into service transporting up to 12 technicians and six crew to and from Goldsea's offshore wind assets. Designed specifically for offshore conditions in China, the vessel offers stability, performance and functionality unmatched by other similar vessels in the region. The main deck features four crew cabins, two bathrooms and a large technician seating area with refreshment space. Internal storage for equipment is provided, as well as a large foredeck cargo zone. The upper deck has two cabins, a bathroom, a large crew mess, pantry and an elevated wheelhouse that provides excellent visibility in almost any offshore conditions. Safety has also been prioritized with Incat Crowther's Resilient Bow Technology ensuring safe landings and transfers during wave height conditions in excess of two meters. Below deck is a workshop, a utility room, additional storage and laundry facilities while the vessel is also prepared for a deck crane capable of lifting two tonnes at a reach of 10 meters. The vessel is designed to work and stay offshore for extended periods and has a large deadweight capacity to allow this functionality. Commenting on the delivery of the 32m catamaran CTV, Ed Dudson, Incat Crowther's Managing Director - Europe said, "*This vessel has been built in China and tailored to provide a comfortable, safe and efficient transport solution for Goldsea – a leader in the Chinese offshore wind industry.*" "*Incat Crowther has collaborated extensively with Goldsea and our long-term partners at AFAI Southern Shipyard on this project, and we are delighted with the results. This vessel heralds a new era in China's offshore wind industry and ensures Goldsea remains ahead of the game,*" said Mr Dudson. The delivery of the 32m Catamaran CTV is the first collaboration between Goldsea and Incat Crowther and reinforces Incat Crowther's position as a world leader in the design and delivery of CTVs for the offshore wind industry.



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Diverse Marine and **NR Marine Services** are proud to announce the contract signing to construct the first of class Diverse Marine 27m CTV (Crew Transfer Vessel). The international expansion of the offshore wind sector is creating significant opportunities and challenges for the maritime supply chain and rewarding operators, builders and designers of innovative craft that meet legislative requirements but reduce vessel emissions and fuel consumption. This new vessel, to be named “*NR Predator*”, is a ground-up design using the experience and expertise gained from all stakeholders over 20 years of chartering, operating, and building crew transfer vessels. The traditional

catamaran hull form has been extensively CFD tested and optimized to provide class-leading seakeeping coupled with reduced fuel consumption and emissions. This first-of-class vessel is being built as ‘hybrid ready’ with an insulated generator space ready to receive generators and batteries, but initially, the vessel will be conventionally powered with quad Volvo Penta IPS900 engine and drive system, all fitted with IMO Tier III SCR and Urea injection exhaust systems to reduce the Nitrogen oxide and Sulphur oxide emission levels. Other features of the new craft include enhanced foredeck capacity and wheelhouse visibility, which enables skippers, crews, and technicians to navigate challenging logistical assignments safely. For NR Marine Services, the vessel will support an ongoing commitment to the highest standards of service for offshore wind farms, while adding new levels and standards of efficiency, versatility and flexibility. An option for a second vessel has also been secured, and Diverse Marine is proud to have worked very closely on the financing of the project with Peter Curtis and LCM Partners to provide the funding and also the start of a shipyard supported finance offering with more information available in due course.

Crew transfer vessel operator **Windcat**, part of Antwerp-based shipping and logistics group Compagnie Maritime Belge (CMB), has struck a five-year charter deal with Dutch utility **Eneco** that will also see the two companies work together on decarbonization of marine logistics using hydrogen dual-fuel solutions. The Windcat 32, the first vessel for the charter, will be tailored to Eneco’s specifications, including the installation of an IMO Tier III engine, which, according to Windcat, significantly reduces NOx emissions. The vessel will operate from IJmuiden port and provide access to Eneco’s offshore wind farms: Prinses Amalia Windpark, Luchterduinen and Hollandse Kust Noord. Windcat rolled out the world’s first hydrogen-powered CTV, the Hydrocat 48, after its delivery and trials with its first customer, Vestas, in 2022. *“With the Hydrocat 48, we invested heavily in emission reduction by using a dual-fuel hydrogen engine, one of the reasons Eneco wanted to partner with us,”* explained Willem van der Wel, the company’s managing director. The partnership allows for additional vessels to be used to further support the existing projects as well as new offshore wind farm projects that Eneco will be part of. Windcat Workboats owns and operates a growing fleet of over 50 CTVs, with an additional five being built, mainly in the European offshore wind sector, but also in the oil and gas industry and outside Europe. A sister company, Windcat Offshore, was also recently launched as a dedicated business focused on commissioning service operation vessels (CSOVs) ownership and operations. The company has lined up a series of hydrogen-powered ships at Dutch shipbuilder Damen Shipyards for deliveries starting in 2025. (Source: Splash24/7)



Oslo-listed **Reach Subsea** has chartered in a multipurpose supply vessel (MPSV) from compatriot owner **Olympic** to cover an upcoming project in the offshore wind sector. The Haugesund-based company has won a contract from an undisclosed renewable energy major to provide wind-related services for six months firm with extension options attached to the deal. The 2007-built “*Olympic Triton*” has been selected for the job, expected to commence in the first quarter of 2023. Reach has the option to extend the charter for up to five years, with three years firm, within a four-week period from signing. *“The market for subsea services is strong and Reach Subsea has recently taken significant steps in order to secure increased*

and cost-efficient vessel capacity for the coming years. The ‘Olympic Triton’ is a modern and versatile vessel which will be an important add-on to our fleet. The structure of the contract implies limited risk and a good upside for Reach and our partners,” explained Jostein Alendal, CEO of Reach Subsea. (Source: Splash24/7)

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Wagenborg Offshore has signed a long term agreement with an energy major for the deployment of a multipurpose offshore vessel. The latest addition to the Wagenborg offshore fleet is a custom-made and specialized offshore vessel that will support subsea activities and decommissioning works in the Southern North Sea. An existing young PX121 platform supply vessel will be converted into a multipurpose offshore vessel within 34 weeks at the shipyard **Royal Niestern Sander** in Delfzijl. During this period, dozens of local employees will work on the innovative conversion of the ship, which will give an impulse to the regional employment. The vessel will be equipped with an additional accommodation module for 20 people. Also, an active heave compensated crane will be installed to comply with all customer requirements. The ship will also have an Emergency Response and Rescue Vessel (ERRV) class C notation enabling the vessel to perform emergency response and rescue duties. By the end of Q2 2023 the vessel will be christened and the name will be revealed, after which it will commence its services on the Southern North Sea. With five operational specialized offshore vessels on the North Sea, Wagenborg can be considered as one of the market leaders in this offshore niche. All offshore vessels have proven to deliver efficiency and logistical advantages.



On Friday, February 17, 2023, Pieter Pruiksmas on behalf of **Werft Shipbuilding** and Pieter Hoefnagel on behalf of TB **Waterwerk** signed the contract for a newbuild Werft Hybrid Cat 2411e. With dimensions of 23.85m LOA by 11.45m beam it will be an ultra-shallow draft cat-type, equipped with Tier III engines to lower NOx emissions. Accommodation for 12 persons, 15mt bollard pull and an operating draft of only 1.0 meters, "*Leon H*" will be a future proof asset on the international workboat market. She features an all-Scania setup with triple Scania generators for added

efficiency and emission reductions which can be converted to meet IMO Tier III compliance. Furthermore, the ship's powerplant will be outfitted with the option for 100% electric power supply. The main deck will be arranged in such way that she can accommodate a 20ft container so she can be equipped with a battery package for zero emission operation. The ship offers 167m² of deck space. A winch with 150mt brake holding power her towing pins and a shark jaws chain stopper are positioned at the front for easy anchor handling. Two Heila cranes gives her a lifting capacity of 25mt @ 5.8m adds to the flexibility of the vessel, that is equipped for a multitude of operations. Engineering of Werft Shipbuilding first built is done by Gaastmeer Design. Production starts right away, and her delivery will be at the end of 2023. The hull will be delivered by VCU-TCD. And with her electrical installation delivered by Piet Brouwer Elektrotechniek, her Woodwork from De Flux and her nautical equipment from De Boer Marine it will be a local masterpiece.



Fugro reached agreement in February 2023 to acquire two platform supply vessels, "*Topaz Endurance*" and "*Topaz Energy*", both built in 2015, which will be repurposed to geotechnical vessels. The offshore renewable energy market continues to grow rapidly, leading to high demand for Fugro's services and strong backlog growth. For Fugro's market leading position, geotechnical vessels are key strategic assets. For the foreseeable future, marine geotechnical services will not be executed with uncrewed platforms. Fugro maintains its uncrewed vessel strategy and net zero emissions roadmap. Securing long-term capacity is critical in order to capture the growth, in particular in the global offshore wind market.

Charter rates have been increasing and the vessel market is expected to remain tight. With the purchase of these strategic assets Fugro will maintain a balanced vessel portfolio while keeping flexibility towards the future. The purchase of these core strategic assets also supports Fugro's net zero 2035 roadmap, as the vessels are significantly more energy efficient than Fugro's current fleet and offer options for hybrid conversions and/or alternative marine fuels in the future. Fugro continues to invest in remote and digital solutions and will further grow its fleet of uncrewed surface vessels as part of its net zero 2035 roadmap.

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Norwegian shipowner **Simon Møkster Shipping** has won a new contract from **Equinor** for its platform supply vessel “*Stril Pioneer*”. The 2003-built vessel has been fixed to Norwegian energy major for six months. The deal comes with options, which have not been specified. The LNG dual-fuel vessel has been on contract with Equinor for many years supporting its logistic operations. (Source: Splash24/7)



Singapore offshore vessel operator and marine engineering services provider has picked up nine secondhand ships for a bargain price of US \$9.28m. The company's 49%-owned indirect subsidiary, **Ruhm Mazu Sdn Bhd**, has agreed to the purchase of one 400 passenger accommodation barge, one special service offshore support vessel, four anchor handling tug supply vessels and three offshore support vessels. said the unnamed vessels will be refurbished at the group's two shipyards and sold for profits and/or chartered out. *“With the acquisition, the group will be able to position and meet the growing demands from the marine and offshore and the renewables sector. The consideration will be funded by a combination of internal resources and bank borrowings,”* the company said in a regulatory filing.

Irish crew transfer vessel (CTV) owner and operator **Farra Marine** is bolstering its fleet with a contract for seven newbuilds at Singapore's **Penguin Shipyard**. The vessels will be delivered in 2023 and early 2024. The newbuilds, part of the WindFlex-27 series, will when complete, see Farra Marine boast a fleet of 14 CTVs servicing the UK and European offshore wind industry. By early 2024, 13 of the 14 CTVs in Farra Marine's fleet will be Incat Crowther-designed, Penguin-built vessels. For the 2023 series, the WindFlex-27 will be powered by IMO Tier III Volvo Penta D16 main engines, which according to **Incat Crowther** represents a significant step forward in emissions reduction. Dublin-based Farra Marine secured contracts in 2023 to support construction activities on the 500mW Ffcamp offshore wind project in France and the 759mW HKN offshore wind project in the Netherlands.



The **U.S. Marine Corps** is about to get its hands on a vessel testbed for a stern ramp landing craft. Trials with the new design will inform the service's plans for its future shore-to-shore



connector, the Landing Ship Medium. Last year, **Military Sealift Command** contracted with **Hornbeck** to transform the commercial OSV “*HOS Resolution*” into a “Stern Landing Vessel” for USMC conceptual testing. “*HOS Resolution*” began life as a 2,750 dwt DP2 OSV with twin CPPs and a 12-foot draft. To make her into a testbed for a stern landing craft, a shipyard in Louisiana is adding a large articulated loading ramp, plus skegs, hull reinforcements, and jackup leg stabilizers, according to USNI. The “*HOS Resolution*” is nearly done with shipyard conversion and should begin evaluation by the Marine Corps Warfighting Lab and Military

Sealift Command soon, according to Defense One. After that, it will head for San Diego in the spring for a series of experiments and tests. As a testbed, “*HOS Resolution*” is a bit smaller than the Marine Corps' vision for its proposed Landing Ship Medium (LSM), which will carry 75 Marines and their gear. However, the OSV-based scale model will give the service an early taste of what it can accomplish with the design; “*HOS Resolution*” may well be the largest beach landing vessel ever built with a stern-facing ramp, and perhaps the sole example with jackup legs. The project appears to be behind schedule: last year, Navy Times reported that the testbed vessel would deliver in summer 2022 and would go to the operational 3rd Marine Littoral Regiment for trials. It will now deliver in spring 2023 and will go to the experimental Marine Corps Warfighting Lab. The LSM is key to the USMC's strategy to disperse small combat groups of Marines on far-flung islands in the Pacific, where they could target enemy warships and aircraft. However, the program has been a source of friction between the Navy and Marine Corps. The Navy would like to build a small number of well-armed, high-spec LAWs; the USMC has insisted on a requirement of 35 lightly-armed, inexpensive LAWs. This month, the USMC dropped its demand for 35 hulls and downgraded its formal requirement to nine. A stern ramp beach landing craft is a rare vessel class, and known examples appear to be less than 500 dwt in size. The Marine Corps has other technical options. A competing proposal from Austal USA would use a bow door and forward ramp arrangement, much like the Landing Ship Tank (LST) of WWII. The Navy solicited about one dozen preliminary designs for the LSM, and after down selecting last year, there are a total of five concept design contracts running. Both bow and stern ramp arrangements are allowable under the requirement. (Source: Marex)

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Petrobras has signed three of **Maersk Supply Service's** L-class anchor handlers for a three-year period, covering a broad work scope of anchoring handling activities and rig movements. "Maersk Leader", "Maersk Launcher" and "Maersk Lancer" have been delivered in Brazil. This now sees twelve vessels from the Maersk Supply Service fleet currently serving the Brazilian and Latin American markets.

"Maersk Supply Service is committed to investing in the Brazilian market and to delivering safe, efficient and sustainable solutions for our customers in this strategically important region. We are pleased at the trust Petrobras has again shown in us, and we look forward to continuing our positive collaboration," says Rafael Thome, Managing Director for Brazil. This contract comes as Maersk Supply Service continues to consolidate its presence in Brazil, establishing itself as a recognized integrated solutions supplier in the region. It follows a series of solutions contracts for the FPSO Fluminense on behalf of Shell, as well as the Mero 2 contract for Petrobras. Since 2017, Maersk Supply Service has expanded its portfolio to delivering EPCI solutions for the safe and efficient fabrication, assembly, and installation of large floating assets, building on its expertise and 50-year legacy of deep-water towing and mooring scopes.



French shipowner **Atlantique Maritime Services**, based in Donges, has taken delivery of a new Crew Transfer Vessel built by **Piriou** in its Vietnamese shipyard. This vessel will join the AMS fleet to serve the French and European offshore wind industry. Sailing under the French flag she is equipped with a comfortable and modular resiliently mounted passenger lounge which can accommodate up to 24 technicians. Designed to be multifunctional the CTV offers spacious decks, an ergonomic wheelhouse and two double cabins for the crew. She benefits from an impact compensation system fitted in addition to the bow fender as well as an easy

maintenance for its equipment. "Hybrid Ready", the vessel – 27m in length – can be converted to electric. The construction of this CTV which was launched on Piriou's own funds a year ago shows Piriou Group's willingness to strengthen its presence in this sector, after having delivered ten CTVs to European shipowners in the past years. Strongly committed to reduce emissions of ships, Piriou is also working on a hydrogen powered CTV. "AMS is delighted to welcome a 5th CTV to its fleet. This French flagged new vessel meets the market requirements. Its design ("Hybrid Ready") will reduce the vessel's carbon impact in line with AMS's environmental policy," emphasizes Jean-Luc DESMARS, President of the LHD Group. "JLD Virginia" arrived in Brest on March 9 and will reach her home port in a few days. Principal Particulars: Construction: Aluminium Catamaran; LOA: 26.65m; Breadth: 9.00m; Max. draught: 1.97m; Fuel: 25m³; Crew: 3; Technicians: 24; Container capacity: 1 x 20' or 2 x 10' containers (foredeck) and 1 x 10' container (aft deck); Propulsion system: 2 x main engines 1,066kW IMO TIER III; 2 x controllable pitch propellers; Class: BV; Hybrid version (option): Battery packs, 2x e-motors, dedicated Power Management System.

US offshore vessel owner **Hornbeck Offshore Services** has secured around US \$8.4m worth of work to provide services in support of **US Navy** operations. The Navy's **Military Sealift Command** took an option on the 2013-built offshore support vessel "HOS Red Rock" for a period of one year. The contract with the Louisiana-based Hornbeck includes a three-one year and an 11-month option to extend, which, if exercised, would bring its total value to nearly US \$39.5m. The 5,494 dwt unit will be globally fixed and could potentially remain so by the end of February 2026. (Source: Splash24/7)



Platypus Marine, a shipbuilder located in Port Angeles near Seattle, Washington, in early April signed a letter of intent with Dutch shipbuilding company **Damen** to build a crew transfer vessel for use in the US offshore wind industry. The vessel will be built to Damen's design, but will comply with the Jones Act as a ship built in and operated by a US company. Platypus will build a 16,500 sq. ft. building to accommodate the 88-foot vessel, adding to the company's existing six buildings and pushing its total area to about 100,000 sq. ft. Construction is expected to start by early 2024 and be completed in early 2025. "Working with Damen Shipyards

gives Platypus Marine the full support of their engineering team as well as their build reputation so Platypus can construct a competitively priced, top-of-the-line vessel, to be used in any waters it is deployed to," said Alan Borde, Damen's area manager for the United States, in a news release. The vessel will hold 24 people and have a maximum speed of 25 knots. (Source: Splash24/7)

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The most unique project of the quarter for **Stevens Towing Shipyard** has been the conversion of a former OSV used to support oil field operations to a wind farm research and support vessel. This ABS classed DPS-2, dually certified Subchapter L & I is 205' x 46' and was dry docked on Railway 2 (1,000 ton marine railway). The most challenging aspect of this job was the vessel's extremely tight schedule. This forced the shipyard to work hand in hand with ABS & the USCG, and the shipyard worked on this vessel around the clock for 21 days in order to meet the deadline. Not only was the shipyard team fully involved in completing the upgrades, but the ship's crew of roughly 20+ personnel worked side by side with the shipyard crews to complete the work list in a timely manner. Shortly after the vessel arrived and was dry docked, crews cleaned and gas freed the vessel's bilges and fuel tanks to allow for the upgrades and modifications to start. The main deck modifications included the installation of (2) PAM Units, (3) winches, (2) boom arm pedestals, (1) boom arm, (1) USBL Pole, (3) moon pools, (2) personnel safety tie-ins, raising the entire stern deck 12", and installing (1) crossbar between the vessel's A-Frame. The first step in laying out the stern deck modifications was the laying out of the beam foundation. Roughly 340' of 12" beam was welded to the deck. This beam acted as the foundation for the PAM units, winches and raised deck. Once the beam foundation was installed, crews were able to swing the PAM units and winches into position. The PAM units were installed using pineapple twist locks and the winches were bolted down. In order to run the electrical for the winches and PAM units, we had to notch out the beams prior to installing the fiberglass deck grating. Upgrades to the raised deck included sloping the stern area (working area) to the customer's satisfaction and installing steps in several locations. In conjunction with the raised deck installation, we were fabricating the Personnel Safety Tie-offs made out of 4" square tubing, and (2) port and stbd boom arm foundations made out of 6" schedule 80 pipe. The safety tie-offs were tested to 5,000lbs and both boom-arms were tested to 1,500lbs. The installation of the (3) moon pools required ABS and USCG weld inspections. Moon Pool sizes included (2) 6" and (1) 16" pipes with flanged goose necks penetrating the top of the main deck. The pipe penetrated (2) fuel tanks and (2) liquid mud tanks. Once the shipyard crew had these installed, the ship's crew outfitted the moon pools with their research equipment using the shipyard's dive team after the vessel was launched. The final piece of the job was the modification of the ship's A-Frame. The angle of the OSV's A-Frame was not suitable for the dragging of the research equipment needed. In order to overcome this hurdle, the shipyard fabricated and installed an additional cross member outfitted with pad eyes and load tested it to 5,000lbs.



SeaZip Offshore Service (Harlingen) is expanding its fleet with the acquisition of a 24 PAX Crew Transfer Vessel from shipping company **Groen** (The Hague/Scheveningen). The vessel, still sailing under the name “*Green Waves*”, was built in 2020 by Damen Shipyards. SeaZip is the owner at the beginning of April. The vessel will soon be renamed “*SeaZip 9*” and will sail under the Dutch flag. In 2020, “*SeaZip 9*” was the first Fast Crew Supplier 2710 supplied in the Netherlands by Damen Shipyards. It is a further development of the Damen FCS 2610, of which SeaZip has four in service. These were converted into 24 PAX vessels in March 2022. A smart step, because the demand for 24 PAX crew transfer vessels is high.

SeaZip itself was closely involved in the innovative design of the new generation of Damen Crew Suppliers. Arends: *“When shipping company Groen put the vessel on the market, we immediately organized an inspection. We were hooked at that very moment. The vessel is in brand new condition and is a perfect addition to our current fleet, which consists largely of 24 PAX Crew Transfer Vessels. We grabbed this opportunity with both hands and negotiated quickly. The sea trial, at the end of March, went beyond expectations. Early April, the vessel will immediately start work on a project for a leading player in the offshore installation and repair market, from Helgoland.”* In this first project, the vessel still sails under her old name and under the British flag. The procedures to sail under the Dutch flag as “*SeaZip 9*” started immediately after the takeover. The formalities will be completed around the beginning of May. *“We are putting pressure on it,”* says Jan Reier Arends, *“because the market is increasingly asking for vessels operating under an EU flag. We want to meet that specific requirement quickly.”* The momentum for fleet expansion with “*SeaZip 9*” couldn't be better, according to Arends. Due to the climate crisis, offshore wind turbine projects are speeding up. Moreover, the climate issue is driving construction and maintenance projects in the gas and oil industry. SeaZip is active in both sectors and has seen the demand for its vessels and services increase rapidly since the end of 2022. Part of the fleet remained operational last winter. For all other vessels, the current season starts earlier than ever before – as early as February. The SeaZip Offshore Service fleet consists of seven own 24 PAX Crew Transfer Vessels, including “*SeaZip 9*”, which will enter service in early April 2023. “*SeaZip 9*”, built in 2020, offers maximum comfort and safety to 24 passengers and has 90m² of deck space for cargo transport. The vessel is very stable and maneuverable and can reach a speed of 25 knots. “*SeaZip 9*” is equipped with innovative technology.

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Company News

Conrad Industries, Inc. announced its 2022 financial results and backlog at December 31, 2022. For 2022, Conrad had net loss of \$17.4 million, compared to net income of \$6.5 million for 2021. Net income for 2021 included the Paycheck Protection Program loan being forgiven and Conrad's qualification for the Employee Retention Credit in 2021. Our backlog as of December 31, 2022 was \$244.1 million, compared to \$148.5 million at December 31, 2021, and \$183.7 million at December 31, 2020.



Johnny Conrad, Chairman and CEO stated, *“Our results for 2022 reflect a continued challenging operating environment, with losses primarily related to new construction gross losses from jobs on which actual costs varied from original estimates due to higher labor hours, higher labor costs, higher material costs and other inflationary cost increases. Many of these jobs were booked in mid-to-late 2020 and early 2021 and were completed or neared completion in 2022.”* Mr. Conrad continued, *“Although we face substantial uncertainties in our markets, we believe we are well-positioned to take advantage of opportunities as market fundamentals improve, due to our shipyard capacity, our investments in improving our shipyards’ capabilities and efficiencies, and our experienced team. Bid activity in early 2023 has been strong, and there is increased government funding available for infrastructure and military projects. We have actively pursued government contracts in an effort to further diversify our new construction portfolio. We believe some delayed customer orders will move forward if steel prices stabilize or our customers’ business opportunities or fleet replacement needs require the vessels. We remain optimistic about opportunities in our repair and conversions segment.”* Mr. Conrad concluded, *“We believe that our ability to provide products and services to a variety of customers and to respond to demand for new types of vessels is a competitive strength. The infrastructure, government, pressurized barge, offshore wind and other markets are presenting us with exciting opportunities. We are intently focused on executing our backlog effectively and on obtaining new projects that will benefit our stockholders, employees, customers, suppliers and our community.”*



Fincantieri reported its full year 2022 results. Revenues, amounting to euro 7,440 million, excluding pass-through activities (euro 42 million), increased by 11.7% compared to 2021. The result confirms the resumption of the growth trend started last year and it is spread across all sectors in which the Group operates. The profit/(loss) for the year is negative for euro 324 million (positive for euro 22 million as at 31 December 2021) after deducting impairment losses of goodwill and other intangible assets for euro 164 million, litigation costs for damages caused by asbestos for euro 52 million, and other costs for euro 22 million.

In 2022, the Group recorded orders of euro 5,328 million compared to euro 3,343 million in 2021, with a book-to-bill ratio (order intake/revenue) of 0.7 (0.5 in 2021). The backlog, as at 31 December 2022, amounted to approximately euro 23.8 billion with 88 vessels to be delivered up to 2029, down from 31 December 2021 (euro 25.8 billion) due to the high production volumes recorded compared to new order intake. In the **Offshore and Specialized vessels** segment, VARD signed an order with the Norwegian company Norwind Offshore for the design and construction of 2 Commissioning Service Operation Vessels (CSOV) for support operations in offshore wind farms. A contract was also signed for the construction of 6 additional marine robotic vessels for the customer Ocean Infinity, and a contract for the design and construction of an innovative Fishery vessel for the German company Deutsche Fischfang-Union, intended for the storage and processing of fish and a contract for the construction of a second cable-laying vessel for the customer Prysmian Group.

The **Offshore and Specialized vessels segment** closed the year 2022 with revenues of euro 751 million, up sharply (+64.7%) compared to the same period of the previous year, partly due to the positive exchange rate effect arising from the translation of the financial statements of foreign subsidiaries (euro 35 million). The growth trend recorded in 2021 continued, supported in particular by progress in the construction of three vessels for the Norwegian Coast Guard and vessels ordered in the offshore wind sector. The EBITDA of the operating segment at 31 December 2022 amounts to euro 22 million (euro 10 million in 2021), with an EBITDA margin of 2.9% (2.1% at 31 December 2021). The result for year further confirms the positive effects of the repositioning strategy in the offshore wind sector, where the Group is the leading player in terms of order intake and customer diversification, with ten SOV units in its portfolio as of 31 December 2022, intended for the maintenance of marine wind farms.



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Havila Shipping ASA achieved an operating income before depreciation of NOK 50.4 million in Q4 2022, compared with NOK 36.4 million in Q4 2021. Total operating income was NOK 171.9 million in Q4 2022, compared with NOK 144.9 million in Q4 2021. The group had as of December 31, 2022, 17 vessels operated from Fosnavåg, six for external owners. The fleet utilization in Q4 2022 was 89%. Havila operates 17 vessels within subsea construction, anchor handling, platform supply vessels and multi-field rescue recovery vessels. The market for the company's vessels has been variable in the fourth quarter. The company has been exposed to a limited extent in the spot market. Income and profit are

affected to a significant extent by the sale of vessels, and reversed write-downs of vessels. Reversed write-downs result from increased income estimates and also result in an increased debt value. Agreement with lenders entered into in 2020 clarifies the company's obligations towards the lenders for the period until 2024. Five vessels that have been in lay-up, of which three AHTS and two PSV, have been sold. Of these, three vessels were delivered to new owners in the second quarter, one vessel was delivered in the third quarter and one vessel was delivered in the fourth quarter. Another vessel has been agreed sold, and was delivered to the new owner in January 2023. The vessel was classified as assets held for sale at December 31, 2022. After the maximum reversal of historical impairment charges, the book amount is lower than the sales value. The debt is recognized at fair value, which is approximately equal to the sales value. As a result of the debt associated with this vessel being valued at fair value as of December 31, 2022, while the book value of the vessel is limited to the original depreciation plan, the group will have negative equity at the end of 2022. The group's equity became positive again when a significant gain on sale of assets is booked upon delivery of the vessel in January 2023.

Mermaid Maritime Public Co Ltd reported results for year ended December 2022.

Subsea group and the Group reported service income in FY2022 of US \$223.9 million, an increase of US \$112.3 million or 100.7% compared to US \$111.6 million in FY2021. The increase was primarily from subsea transportation and installation services ("T&I") including cable lay services. Subsea Group reported operating profit for FY2022 of US \$6.8 million, an improvement of US \$14.3 million compared to operating loss of US \$7.5 million in FY2021. This improvement was mainly from the increase in gross profit for the year.



Subsea inspection, repair and maintenance (IRM) service is the main service types of Mermaid Group. For 2022, the revenue of subsea IRM and survey works was recorded at US \$107.5 million or represented approximately 48.0% of the total revenue. Revenue from rendering of subsea IRM services rose by 21.9% from US \$51.1 million in 2021 to US \$62.2 million in 2022. This was mainly due to higher utilization of the three main performing vessels: "Mermaid Asiana", "Mermaid Endurer" and "Mermaid Sapphire". Total fleet utilization increased from 724 days in 2021 to 868 days in 2022. In line with the higher utilization rate, average day rates also increased from US \$70.6 thousand in 2021 to US \$71.7 thousand in 2022. **Outlook:** Mermaid maintains a cautiously optimistic outlook on the oil and gas outlook over the next 12 months. Mermaid still believes that it remains one of those well-placed companies due to its strategic industry positioning, reputation, track record, and fiscal discipline that will benefit from the higher energy prices in the near and medium term. Looking ahead, the Group remains focused on building capacity in the Engineering and Cable divisions. Mermaid further notes the WEO report findings that new policies in major energy markets will propel annual clean energy investment to more than US \$2 trillion by 2030, a rise of more than 50 percent from present. Mermaid notes that this development bodes well for its stated goals to seamlessly move into the renewables space when the opportunity arises and as clean energy becomes a driver for growth and jobs, as well as a major arena for international economic competition.



Norwegian offshore vessels player **DOF** has completed its financial restructuring with creditors taking over the company. The move saw the conversion of approximately NOK6bn (\$572m) of debt into equity in 'New DOF' which has a share capital of around NOK295.6m (\$37.6m) divided into 158.2m shares, each with a nominal value of NOK2.50. A new board of directors of New DOF, consisting of Svein Harald Øygard as chairman, Harald Thorstein, Christine J. Morris, Daniela Ribeiro Davila and Harry Knox, has also been elected. The Austevoll-headquartered DOF, with a fleet of more than 50 OSVs, and around 70 remotely operated vehicles (ROVs), was founded in

1981 by Helge Møgster. The new company is expected to return to the Oslo stock exchange later in the near future. "Together with the entire DOF team we now look forward to continuing building DOF as a leading global player within both Offshore Floating Wind and Oil Services," remarked Mons Aase, chief executive of DOF. (Source: Splash24/7)

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Solstad Offshore ASA reported full-year revenues for 2022 increased 20% to MNOK 6,493 vs MNOK 5,418 in 2021, while adjusted EBITDA increased with 30% to MNOK 1,995 vs MNOK 1,534 in 2021. The operating result in 2022 was MNOK 1,299 compared to a negative result of MNOK -7 in 2021. The result after tax was MNOK -1,118 compared to MNOK -1,136 in 2021. Key drivers were improved utilization, higher day rates, and strengthened sales of additional services. Solstad completed a year with significant growth despite the global geopolitical uncertainty. Tender activity steadily increased throughout the year. Solstad saw an all time high order intake in the second half of the year, ending on a backlog of MNOK 9,200 at year-end. It strengthened its presence within remotely managed offshore services by establishing Remota AS together with DeepOcean Group and Østensjø Group. At year-end, Solstad operated and managed a fleet of 86 vessels; 27 CSV, 20 AHTS and 39 PSV.



Outlook: The outlook for offshore energy activities continue to strengthen. Driven by energy prices, energy security issues and bold ambitions to increase energy production from renewable energy sources, the offshore energy markets ended 2022 strongly with both high tender activity and a substantial amount of contract awards. The demand for Solstad's services continues to increase and the company enters 2023 with a good balance between secured backlog and available capacity. Even though Solstad's CSVs were originally built for the oil and gas markets, the vessels are already in demand from renewable energy clients and as floating wind continue to develop, it is expected that the AHTSs also will be a central part of the installation of offshore wind parks. Except for vessels dedicated to offshore wind support, there are few new vessels under construction, meaning that all activity increase has to be supported by the vessels that already in operation. This should give a continued positive effect on utilization and commercial terms for the high-end-fleet during the coming year. In some regions, there are seasonal variations in activity. The North Sea is one example where less planned work is conducted during the winter months. As global activity continues to improve, these seasonal variations could be less going forward.

Subsequent to the Year-End: 7 March 2023, subsidiaries of Solstad Offshore ASA signed an agreement with U.S. based Tidewater Inc. for the sale of 37 platform supply vessels. The total cash consideration payable is approximately US \$577 million. *"The sale of the PSVs represents a shift in our strategy in a changing market. The PSVs mainly support the oil and gas industry, while the AHTSs and CSVs can service all offshore energy sectors, including oil and gas and renewables. This move is therefore in line with our strategy of being a key enabler in the energy transition. Further, the transaction will give Solstad greater financial leeway and a significantly improved debt and cash position going forward,"* says Lars Peder Solstad, CEO of Solstad Offshore. After the transaction has been completed, Solstad's fleet in operation will consist of 41 high-end offshore vessels. In addition, six vessels are non-operational and considered to be sold. Solstad's fleet will continue to support clients that operate in the offshore energy sector. Both offshore renewables and oil and gas are predicted to see significant investments in the coming years. *"Following the transaction, the core competence of future Solstad will be even better applied to further developing the CSV and AHTS segments, including building up our service division and capitalizing on a stronger position in the renewable energy market. The generally higher margins for AHTS and CSVs will allow us to improve our financials, strengthen our renewable energy presence, and put us in a position to, over time, renew our fleet"* Lars Peder Solstad adds. The Transaction will considerably strengthen Solstad's balance sheet by facilitating a repayment of approximately NOK 6 billion of the group's total outstanding debt. The Transaction will improve Solstad's debt servicing abilities and liquidity position. The Transaction will facilitate an exit from the PSV segment and in line with Solstad's strategy going forward with focus on high-end CSV and AHTS vessel and project related work. The AHTS and the CSV segments increasingly generate its EBITDA from the renewable energy market. An enhanced focus on these segments signals a strong commitment to the green transition and enables the group to pursue investments to further reduce its carbon footprint. Ongoing charter parties will, subject to the necessary consents from the charterer, be transferred/novated to Tidewater. Absent such consents in time for completion of the Transaction, the economic interest in the charter party will be transferred to Tidewater and until the necessary consents are given or the charter party expires. Solstad will offer management services to Tidewater in a transition period to facilitate a smooth transfer for the parties and the customers. The offshore employees associated with the PSV Fleet will be offered employment with Tidewater. Tidewater will also offer employment to certain of the onshore employees. The transaction will have a minor accounting effect to be reflected upon closing. Completion of the Transaction is contingent on third party approvals such as certain charterers and competition authorities, buyers financing and fulfilment of conditions precedent. The Parties may abandon the Transaction if it is not completed within the longstop date 30 June 2023.

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Royal Boskalis Westminster N.V. (Boskalis) concluded 2022 with a sharp increase in profitability with a strong increase in revenue. Boskalis' order book also increased to an all-time high level. Compared to last year, revenue increased by 21.0% to EUR 3.58 billion (2021: EUR 2.96 billion). Net profit attributable to shareholders increased by almost 60% to EUR 241 million from EUR 151 million in 2021. At Offshore Energy, revenue increased by 14% on a 33% higher EBITDA. As a result of a quiet year at Subsea Cables, revenue and earnings from the contracting business declined. This decline was more than offset by the services cluster, with Marine Transport & Services, Subsea Services and Marine Survey all having a very strong year. The size of the Towage portfolio has diminished in recent years following the strategic decision to divest these activities. In 2022, the Southeast Asian harbor towage activities – Keppel Smit Towage – were divested. Furthermore, an agreement on the intended sale of the terminal services activities of Smit Lamnalco was reached in early 2023. The order book increased to EUR 6.11 billion (year-end 2021: EUR 5.41 billion). The increase in the portfolio largely took place at Offshore Energy, partly as a result of acquiring a number of offshore wind projects in the United States. With the projects in the order book, there is a solid basis for 2023 and for the years thereafter.



Peter Berdowski, CEO Boskalis: *“Last year was a special year in many ways. At the outset, we started the year optimistically with a new ambitious Corporate Business Plan. That optimism was nipped in the bud when Russia invaded Ukraine at the end of February. In haste we had to stop our operations in Russia and brought our colleagues to safety. The consequences of these developments had a major impact on the global economy. Energy and commodity prices rose sharply and inflation reached record levels. Developments that also impacted our clients and projects. This makes it all the more commendable that, despite these adverse developments, we can look back on a strong year, both operationally and financially. Our vessels were well utilized, revenue increased by more than 20%, and the net profit even increased by almost 60%. Moreover, we were successful in acquiring numerous new projects and we started 2023 with a historically high order backlog of EUR 6.1 billion. Offshore Energy had a good year despite the turmoil in the energy market. We were busy in the offshore wind market in Taiwan, France, Germany and the United States. Mid-2022 we also commissioned our newest crane vessel the Bokalift 2. This vessel is now being modified in Rotterdam, after which she will leave for the United States for three wind projects. Looking ahead, I am proud to state that our offshore order book not only reached a record high, but that 75% of the backlog is comprised of renewable energy projects. We recently acquired our 100th offshore wind farm project and we have been involved in the realization of nearly half of all offshore wind farms worldwide over the past decade.”*



Damen Shipyards Group is leveraging its resources and shipbuilding expertise to become a major force in offshore construction. It sees exciting opportunities in offshore wind, in particular the emerging floating wind sector, but also recognizes the potential in other segments of the offshore energy sector and aquaculture. Damen is now offering a complete construction service including delivery, working to clients' designs and providing fabrication engineering expertise. **Damen Shipyards Mangalia (DSMa), Romania**, the group's largest facility, will play a significant role. Capable of handling very large structures, it is also equipped with a semiautomated panel line, modern blasting and painting cells, a 1,000 tonne gantry crane and other equipment that make it highly efficient operationally, as well as economically. The company is currently delivering two HVDC (High-Voltage Direct Current) offshore transmission projects at DSMa, both of which are being constructed under contracts with Aker Solutions as the main EPCI contractor. Work began last year and, with assembly and outfitting commenced, the first is due for delivery in the first half of 2023 and the second will be delivered in Q1 2024. Once complete, the HVDC topsides will set sail for Aker Solutions' yard in Stord, Norway, where the HVDC equipment will be installed and commissioned before they depart for their final destinations. Damen is undertaking the structural fabrication, surface protection, outfitting including insulation, lighting, ducting, local cabling and more, as well as the fabrication of the transport grillages. The structural design by Aker Solution incorporates construction friendly design principles, which enables an efficient fabrication process when combined with the facilities available at DSMa. Arne Engevik, HVDC director at Aker Solutions, said: *“Damen Shipyards Group is a key partner for us in offshore wind. Their facilities are well suited for fabricating these types of structures, and the company shares our passion for delivering large, complex projects safely and sustainably. We have built a very strong relationship with the company over the past years and consider Damen as an integral part in successfully delivering our HVDC portfolio.”*

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SEACOR Marine Holdings Inc announced results for its fourth quarter ended December 31, 2022. SEACOR Marine's consolidated operating revenues for the fourth quarter of 2022 were \$57.9 million, operating loss was \$10.5 million, and direct vessel profit ("DVP") was \$13.6 million. This compares to consolidated operating revenues of \$48.0 million, operating loss of \$14.7 million, and DVP of \$12.9 million in the fourth quarter of 2021, and consolidated operating revenues of \$59.8 million, operating loss of \$10.9 million, and DVP of \$15.8 million in the third quarter of 2022. Notable fourth quarter items include: Extended the maturity of the \$125.0 million of senior convertible debt issued to Carlyle in 2015 by three years by exchanging that debt for \$90.0 million of new guaranteed unsecured notes and \$35.0 million of new convertible notes, both due 2026. Average utilization rate of 76%, the highest for a fourth quarter since 2013, a 3.0% improvement from the fourth quarter of 2021, and a 3.0% decrease from the third quarter of 2022. 20.8% improvement in revenues from the fourth quarter of 2021 and a 3.1% decrease from the third quarter of 2022. DVP margin increased 5.1% from the fourth quarter of 2021 and decreased 13.9% from the third quarter of 2022, inclusive of all drydocking expenses during the periods. For the fourth quarter of 2022, loss from continuing operations was \$13.3 million. This compares to a loss from continuing operations for the fourth quarter of 2021 of \$15.8 million. Sequentially, fourth quarter 2022 results compare to a loss from continuing operations of \$24.4 million in the third quarter of 2022.



Chief Executive Officer John Gellert commented: *"The Company's fourth quarter continued the year-on-year improvement trend in revenues, utilization and average dayrates despite seasonally lower levels of activity, particularly in the North Sea. The decrease in DVP was primarily due to higher maintenance and repair expenses in our PSV fleet, as well as low utilization of a few fully crewed and available vessels, particularly in the North Sea, in anticipation of improving market dynamics. The activity of our liftboat fleet during the fourth quarter was particularly encouraging. During the quarter, we started our first offshore wind project in the U.S., and completed the repair of one of our premium liftboats in the Middle East with the vessel able to return to service immediately. These positive contributions were offset by weather related damage to one of our premium liftboats in the U.S., which was safely demobilized. The Company's efforts are focused on repairing and returning the liftboat to service, although timing is uncertain. The Company has insurance coverage for the repairs as well as for loss-of-hire for this liftboat. I remain optimistic about the potential for SEACOR Marine in 2023, as evidenced by recent chartering activity for our liftboats and hybrid PSVs. This activity should translate into a stronger DVP conversion rate. In light of these positive industry dynamics, we decided to build upon our industry leading position in hybrid PSVs by committing to upgrade one additional PSV to hybrid propulsion, bringing us to a total of seven hybrid PSVs (representing one-third of our PSV fleet). After this conversion, we will have four additional PSVs that could be upgraded with the same technology. Tendering activity remains healthy and we plan to capture further repricing opportunities as contracts rollover, particularly as our customers engage in additional project startups and seasonality factors improve."*



U.S., primarily Gulf of Mexico: As of December 31, 2022, 16 vessels were located in this region, including 12 owned, two leased-in and two managed. The Company's vessels in this market support oil and natural gas exploration and production activities, seasonal construction, decommissioning and diving support operations, as well as the construction and maintenance of offshore wind farms. Africa and Europe, continuing operations: As of December 31, 2022, 19 vessels were located in this region, including 18 owned and one leased-in. The Company's vessels in this market generally support projects for major oil companies, primarily in Angola, Nigeria and the North Sea. Middle East and Asia: As of December 31, 2022, 16 owned vessels were located in this region. The Company's vessels in this area generally support exploration, personnel transport and seasonal construction activities in Saudi Arabia, United Arab Emirates, Qatar, Egypt and Israel. Latin America (Brazil, Mexico, Central and South America): As

of December 31, 2022, nine owned vessels were located in this region. The Company's vessels in this area generally provide support for exploration and production activities primarily in Mexico and Guyana. From time to time, the Company's vessels also work in Trinidad and Tobago, Brazil and Colombia. On September 29, 2022, the Company sold its equity interests in Mantenimiento Express Marítimo, S.A.P.I. de C.V. ("MexMar") and Offshore Vessel Holdings, S.A.P.I. DE. C.V. ("OVH") and acquired 100% of the equity interests in SEACOR Marlin LLC. As a result, the Company no longer operates 19 of the joint-ventured vessels owned by MexMar and OVH and one vessel owned by SEACOR Marlin LLC. The vessel owned by SEACOR Marlin LLC became wholly-owned in the transaction.

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Tidewater Inc. announced revenue for the twelve months ended December 31, 2022 of \$647.7 million, compared with \$371.0 million for the twelve months ended December 31, 2021. Tidewater's net income (losses) for the twelve months ended December 31, 2022, was \$10.6 million, compared with \$(129.0) million, respectively, for the twelve months ended December 31, 2021. Included in the net losses for the twelve months ended December 31, 2022 were long-lived asset impairment and other of \$0.7 million; gain on bargain purchase of \$1.3 million; loss on warrants of \$14.2 million and merger and severance expenses of \$19.1 million. Excluding these items, Tidewater would have reported a net profit for the twelve months ended December 31, 2022 of \$10.9 million. Included in the net losses for the twelve months ending December 31, 2021 were impairment charges related to assets held for sale, affiliate credit loss expense, inventory obsolescence, loss on debt extinguishment and severance expenses totaling \$28.4 million. Excluding these costs, Tidewater would have reported a net loss for the twelve months ending December 31, 2021 of \$100.6 million.



Quintin Kneen, Tidewater's President and Chief Executive Officer, commented, "As we mentioned in this year's second quarter earnings press release, 2022 marked an inflection point in the recovery of the offshore vessel market. I am pleased by our annual financial performance and by our accomplishments during the year. Revenue improved by approximately 75.0% due to the acquisition of Swire Pacific Offshore in April and an increase in offshore activity that has been driven by the need to ensure reliable and secure sources of hydrocarbons for a global economy still emerging from the pandemic. This increase in demand combined with an underinvestment in vessels over the past eight years allowed the industry to push utilization and day rates globally. By all financial measures, 2022 represented a marked improvement in our results. Our primary goal is to build a business that maximizes long-term free cash flow generation within the principles and risk tolerances appropriate for this industry and age. We generated over \$50.0 million of free cash flow during 2022 and as such, we ended the year in a strong cash position, resulting in a net debt balance of only \$9.6 million. The acquisition in April further bolstered our fleet, providing a compelling platform to take advantage of the continued strength in the offshore vessel market."



"Our West Africa business continued to perform well during the fourth quarter, with revenue up about 6.8% sequentially, driven by an increase in average day rates. Likewise, our Americas region experienced a strong fourth quarter, with revenue also up 6.8% sequentially, all of which was driven by an 8.1% increase in day rates, with notable day rate enhancement in the U.S. Gulf of Mexico and Mexico. Further, revenue in the Mediterranean expanded by about 9.3% sequentially, resulting from a 4.5% increase in day rates and additional capacity brought to the area from the U.S. Gulf of Mexico. The North Sea experienced typical seasonality which resulted in total revenue in the fourth quarter declining by 2.6% sequentially. Further, our Asia Pacific segment was adversely impacted by a combination of vessels in transit along with drydocking activity and idle time as vessels came off contract; we expect this frictional unemployment to subside in the first quarter. Activity levels in rest of the world were slightly up during the fourth quarter. Overall day rates remained flat from the prior quarter, and if we exclude the declines in our North Sea and Asia Pacific business, our average day rate increased 4.8% sequentially."

"As we look forward into 2023, we are confident that not only is the recovery here, but that the demand for offshore vessels will continue to strengthen throughout this year. The renewed global focus on securing reliable sources of hydrocarbons has prioritized offshore oil and gas development and we believe that offshore oil and gas capital spending plans will accelerate throughout 2023 and beyond. Just as encouraging as the acceleration in demand for offshore vessels services is the continued reduction in the available supply of offshore vessels. The number of large OSVs that are currently laid up is quite limited and the likelihood any of these vessels returning to the market is remote. We see a similar situation developing in the mid-sized OSV fleet, where additional available supply is also very limited. We see essentially no new vessels on order, indicating that the supply of vessels will continue to decline modestly as vessels naturally attrition out of the global fleet. Accordingly, it is our view that the industry is positioned to benefit from an increase in demand over the medium-to-long term and a slowly shrinking supply of vessels. We believe this imbalance in supply and demand will continue to provide the opportunity for day rate and utilization increases, and we remain committed to maximizing the earnings and cash flow generation from our fleet."

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Norwegian ammonia shipping company **Amon Maritime** has launched a new company specializing in the offshore market with the aim of building, owning and operating a fleet of ammonia-powered platform supply vessels for the Norwegian Continental Shelf. All PSVs on the NCS will release zero emissions by 2030, requiring around 80 newbuilds or significantly modified or rebuilt ships to be delivered between 2025 and 2030, the company said. This is the next generation Amon has developed an ammonia-fueled PSV that features Kongsberg Maritime design and technologies “to meet oil companies’ current and future offshore logistics needs.” The ship has already received approval in principle from the class society DNV and the very first preliminary flag approval from the Norwegian Maritime Authority for an ammonia-powered ship. The new company, called **Amon Offshore**, is said to be working to obtain charter contracts, with the first ships envisioned for delivery in 2025. The vessels will be managed by Amon Maritime’s in-house, fully integrated new ship management setup in Norway – Ula Ship Management, a joint venture with Bernhard Schulte Shipmanagement. “This is the next generation. We are combining new technologies with future requirements, enabling capabilities only available for newbuildings. Our vessels will be carbon free, future proof, and holistically designed for ammonia fuel from the ground up,” said Andrrf Risholm, founder and CEO of Amon Maritime. Ammonia fuel will be made available with a floating bunkering terminal at the selected supply base from affiliated company Azane Fuel Solutions, with fuel provided by project partner Yara Clean Ammonia. (Source: Splash24/7)



PT Pelayaran Nasional Ekalya Purnamasari Tbk (ELPI) bought 98,049 shares of **Kazo Marine Sdn Bhd** from **PT Multi Eximindo** or 49% of the total shares in Kazo. The purchase cost 2.49 million Malaysian ringgit. “The company hereby informs that based on the sale and purchase of shares agreement dated January 3, 2023 which was made under sufficiently stamped hands, there has been a sale and purchase transaction of shares in Kazo Marine (M) SDN BHD between the company and PT Multi Eximindo,” explained the Corporate Secretary of ELPI Wawan Heri Purnomo in

information disclosure, Thursday (5/1/2023). He added that the share sale and purchase transaction was an affiliated transaction in which PT Kreasi Cipta Timur was a shareholder of PT Multi Eximindo. Meanwhile, based on data from the Indonesia Stock Exchange (IDX), Kreasi Cipta Timur also holds 82.36% of ELPI shares. “The share sale and purchase transaction has had a positive impact on the company in terms of expanding the support vessel service business for offshore work in Malaysia,” explained Wawan. He said the purchase of these shares was a stage of business expansion in Southeast Asia. ELPI only listed its shares on the Indonesia Stock Exchange (IDX) in August 2022. In the company’s prospectus it has been stated that one of the plans to use the initial public offering (IPO) funds is to acquire Kazo Marine. Kazo Marine was founded in 2020 which is engaged in the offshore supply ship business. The company’s consideration of the acquisition is due to the potential and market share that will become business expansion outside Indonesia with a target market share in Southeast Asia. (Source: Investor.ID)

Top management at **Vroon** have outlined a restructuring plan with banks set to take control of one of the best known shipping brands in the Netherlands. Vroon’s banks have confirmed their intention to commit to the restructuring plan, which is planned to be closed no later than March 31. The so-called “new Vroon” will aim to be a more focused shipowner with a 60-strong fleet of livestock carriers, product tankers, high-heat tankers, and emergency response and rescue vessels (ERRVs). Vroon’s fleet of 40 offshore support vessels will be sold over the next 18 months, resulting in a slimming down of certain offices and sea staff around the world. As part of the restructuring, ownership will transition from the Vroon family to the company’s banks. The Vroons entered shipowning 133 years ago, marking them out as one of the longest running Dutch families in shipping. Finally, in the major corporate overhaul, Herman Marks has decided to step down as CEO with Rob Schuyt, the current CFO, taking the job on an interim basis pending the appointment of a new managing board later this year. “Restructuring is necessary because our company is faced with a debt level that, due to consecutive economic setbacks, is simply too high to be paid through normal operational and financial performance. Despite the improving performance over 2021 and 2022, the situation requires an immediate solution which subsequently creates long-term perspective,” Marks and Schuyt wrote in a letter to employees this week seen by Splash. (Source: Splash24/7)



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Billions of dollars are likely to be spent on new anchor handlers to meet floating wind farm installation vessel demand through 2035. According to research carried out by analytics firm **Intelatus Global Partners**, an investment of around \$3bn will be needed to meet floating installed capacity, which is forecast to reach 63gW by 2035. This translates to the installation of close to 4,000 floating turbines, over 16,000 anchors and close to 17,000 mooring lines. The largest anchor handlers and light subsea construction vessels will be deployed for floating wind projects to pre-install mooring systems designed to maintain the position of the floating wind turbines, tow the structures from the port, and connect the floating turbines to pre-existing moorings.

Intelatus identified the optimal size of AHTS for mooring prelay as having a bollard pull of at least 250mt and a clear back deck of over 800m². The segment has seen only five vessels delivered in the last five years, according to Intelatus, and with oil and gas activity picking up, availability for wind floater projects will be a challenge, further accentuated by an aging fleet, much of which becomes technically uncompetitive by 2030. *“Our forecast identifies a large anchor handler shortage of around 30 vessels after 2030. Newbuilding prices for large anchor handlers were around \$80-85m in 2015/16, when large anchor handlers were last contracted. Since then, there has been limited activity to guide price estimates. However, a capital cost estimate of at least \$100m per vessel seems reasonable, meaning that potentially \$3bn will be invested in new built optimal anchor handlers to meet floating wind demand,”* said Philip Lewis director of research at Intelatus Global Partners. Global floating wind commissioned capacity at the end of 2022 was less than 200mW. By 2030, close to 11gW of commercial-scale wind farms are planned to be commissioned in Europe and the Asia Pacific region. According to Intelatus, a period of high commissioning activity is expected by 2035 with the US joining these established markets. (Source: Splash24/7)

Singapore's top two yards have completed their mega merger, ending a two-decade saga. **Keppel Offshore & Marine** (Keppel O&M) and **Sembcorp Marine** have joined forces and will trade under the Sembcorp brand with Keppel's Chris Ong taking charge of the yard giant. The combined yard group has a total orderbook of S\$18bn (\$13.4bn) lasting through to 2026. Merging the shipyard units of Keppel and Sembcorp has been mooted many times over the past 20 years as Singapore faces up to cheaper shipyard competition across Asia. Sembcorp Marine is proposing to change its name from



“Sembcorp Marine Ltd” to **“Seatrium Limited”** following completion of the combination of the businesses, and will adopt a new branding for the enlarged entity. The proposed change of name is subject to shareholders' approval and will not affect the identity of Sembcorp Marine or any of its rights and obligations, nor will it affect any of the rights of shareholders or the Group's daily business operations and financial standing. Seatrium is a combination of two words – “sea” and “atrium”. It is a reflection of the business and its aspiration to be a premier global player providing innovative engineering solutions for the offshore, marine and energy industries. To

develop the proposed name, more than 1,000 names were generated, and a rigorous process of legal and linguistic screening was carried out to ensure that the chosen name would be viable. The enlarged entity will unite world-class talent and engineering capabilities to create transformative and sustainable offshore and energy solutions.

Offshore shipping company **Viking Supply Ships** expects a stronger market in 2023, although a *“fragile economic climate”* creates uncertainty. Viking Supply Ships chose to put one of its ships in storage during the fourth quarter, when the market went down. The offshore company's three other vessels had a turnover of SEK 83 million, compared to SEK 86 million in the same quarter of 2021, Viking Supply Ships writes in its accounts. With the lower turnover, the net loss fell to SEK 55 million from a deficit of SEK 27 million the previous year. There was more tonnage on the market during the fourth quarter and generally lower activity, which led to weaker utilization of the Swedish shipping company's fleet of offshore vessels. Russia's war against Ukraine, increasing focus on energy security and a fragile economic climate affected the offshore market in 2022, writes the shipping company's CEO Trond Myklebust in the report. However, he expects that later this year there will be more activity in the North Sea offshore market, driven by *“an increasing number of active rigs on both the Norwegian and UK shelves. We are also seeing increased demand from project work.”* 2023 is therefore expected to be *“marginally”* better than 2022 at Viking Supply Ships.



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Bollinger Shipyards, the largest privately-owned and operated shipbuilder in the United States, November 14, 2022, announced that it has completed its acquisition of **VT Halter Marine, Inc.** and **ST Engineering Halter Marine Offshore (STEHMO)**. The transformational transaction cements Bollinger's position as a globally recognized, leading designer and builder of high-performance vessels and complex structures for government and commercial customers. *"Today marks an important milestone for*

Bollinger and our 76-year history," said Ben Bordelon, CEO and President of Bollinger Shipyards. *"We're excited to offer our defense and commercial customers an expanded suite of high-quality capabilities, services and solutions. By combining our skilled workforces in Louisiana and Mississippi, I know that there's no better team in the shipbuilding industry to take on the largest, most complex projects."* The addition of the newly acquired yards in Pascagoula, Mississippi is strategic as it further strengthens Bollinger's position in the industry and U.S. defense industrial base by increasing capacity and footprint, improving efficiencies, enhancing economies of scale, and building a larger skilled workforce, including increased engineering capacity. It also brings expanded capabilities for future programs, including an ACAT I program. Notably, all ongoing programs at VT Halter Marine and STEHMO were conveyed with the transaction, including the Polar Security Cutter (PSC) program for the U.S. Coast Guard and the Auxiliary Personnel Lighter-Small (APL(S)) program for the U.S. Navy. Those programs will continue to be built at Bollinger Mississippi Shipbuilding. Bollinger Mississippi Repair offers a full suite of repair services to customers, including ship repair and conversion, dry docking, rig repair, fabrication, new construction and ancillary services. The Bollinger Mississippi team can execute projects from simple to the most complex. The acquisition includes 378 acres comprising two shipyards in Pascagoula and two dormant yards north of Pascagoula. The newly acquired yards have been renamed **Bollinger Mississippi Shipbuilding** and **Bollinger Mississippi Repair**. The Pascagoula facilities are strategically located with direct, deep-water access to the Gulf of Mexico and houses corporate office space, engineering, fabrication, warehousing and a foreign trade zone. The shipyard consists of 225,000ft² of covered production area in the main fabrication assembly buildings. The facility is capable of producing Panamax-sized vessels up to 50,000 DWT and features an expanded 225.6m (740ft) tilt-beam launch system.



Bourbon & Horizon Maritime are pleased to announce a new joint venture, **Bourbon Horizon AS**, dedicated to providing leading marine services and operations, focusing on the North Sea and Canadian offshore markets. Incorporated in Norway, the new company is strategically positioned in Fosnavåg (Norway) and St. John's (Newfoundland and Labrador, Canada), with a base fleet of seven modern and capable offshore support vessels: five PSVs, a large AHTS with WROV and a MPSV currently configured for Subsea and trenching services. Cliff Gaetz as

Managing Director of Bourbon Horizon AS will be supported by Bjørn Remøy and senior Operational leads, Ståle Kyrkjedelen and Colin Doody. The partnership builds on natural synergies and shared values between the two shipowners, Bourbon and Horizon Maritime. With extensive experience in the harshest offshore environments, Bourbon Horizon AS will also offer comprehensive ship management services to other shipowners in the industry. With more than 200 dedicated and experienced employees, including a deep pool of experienced seafarers from all over the world, Bourbon Horizon is well-equipped for any project. Rodolphe Bouchet, Bourbon Marine & Logistics CEO: *"Entering this strategic partnership with Horizon Maritime represents a tremendous opportunity to strengthen our current position in the North Sea markets. The Bourbon Horizon AS JV will also support the consolidation of the OSV sector in harsh environments, while achieving substantial economies of scale, to allow the creation of a diversified and particularly competitive offering."* Bjørn Remøy, Bourbon Offshore Norway MD: *"This strategic joint venture combines two groups specialized in the offshore sector, with cultures and visions aligned on the future of the offshore industry. Bourbon Horizon AS intends to support our customers through ongoing market recovery, and active participation in the development of offshore renewable energy and oil & gas projects."*

