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Global Safety Day Increases Focus on Safe Operations

On 25 September 2012, ABS kicked off its first official global Safety Day. Setting aside a full day to focus on safety gave ABS Bureau and Group employees around the world an opportunity to participate in planned safety events that elevate safety awareness.

“Advancements in technology, coupled with increasing client demands, have created a new era of safety challenges that ABS surveyors and engineers must confront head on,” says Christopher J. Wiernicki, ABS President and CEO. “To meet these challenges, safety has to become second nature to ABS employees so that safety is the first and last thought associated with every activity every day.”

One of the primary goals of the first official worldwide Safety Day was to underscore the message of safety consciousness in every ABS location.

ABS is a global, multicultural and multinational organization that is driven by its universal Mission – to promote the security of life and property and to preserve the natural environment. For every ABS employee, safety is the underlying principle for everything they do as they fulfill their work obligations each day, yet safety is not something that only applies in the workplace.

“For safety consciousness to govern our actions, it must go beyond the workplace,” Wiernicki says. “It has to be a fundamental part of everything we do.”
This point was central to the special Safety Day video message from ABS senior leadership viewed by every employee in every ABS office around the world when they opened their email to begin the day.

Each location found a way to integrate the Always Be Safe message in planned activities that included safety banners and safety messages supplied by ABS Headquarters as well as activities organized in each office. Some locations provided meals or refreshments. Others created scenarios that tested the employees’ ability to contend with safety issues. And in Houston, employees were able to participate in a Safety Fair that featured volunteers from ABS departments and local organizations to promote safety in the community.

“It was gratifying to see how ABS employees embraced this opportunity to focus on safety,” Wiernicki says. “The creative ways our employees found to emphasize safety show a genuine grasp of its significance to ABS and to every individual member of the ABS family.”

ABS senior management used Safety Day as an opportunity to launch the new Golden Eagle Award program – an initiative created by ABS leadership to recognize safety leadership in the office and in the field. Employees are nominated for the award by their supervisors for demonstrating safety consciousness that goes above and beyond standard practices. This year, 18 ABS employees received Golden Eagle Awards.

“This group of exemplary employees recognizes the value ABS places on safety and the well-being of its employees,” Wiernicki says. “We are pleased to introduce a program that honors deserving individuals such as these and recognizes their commitment to creating safe work environments in their varied roles in the organization.”

Plans are in place for ABS Safety Day to become an annual campaign to build awareness in the workplace and in the field. “ABS’ goal is to create a safety mindset among employees around the world that becomes the foundation for their actions at work, at home and everywhere in between,” Wiernicki says. “There is no substitute for this type of safety consciousness, and there is nothing of greater importance to the organization.”
ABS Signs MOUs to Further Technology Development

Research & Development Efforts in Korea

ABS is taking an active lead in furthering its research and development efforts in Korea with the signing of several Memoranda of Understanding (MOUs) with prominent entities and universities in the region.

Korea Gas Corporation (KOGAS) and ABS will collaborate on international projects through participation in overseas LNG projects. The scope of the agreement includes technological cooperation, training and co-hosting seminars related to research and development in offshore LNG development, including LNG cargo containment systems, LNG floating storage and regasification units, floating storage and offloading units, LNG fueled ships, bunkering and subsea exploration and production.

“ABS has a vast amount of experience in the areas of LNG technology. Coupled with KOGAS’ strong history of LNG development, our organizations stand to become a leading resource for the maritime and offshore industries,” says Christopher J. Wiernicki, ABS President and CEO. “This is an exciting opportunity for both of our organizations to extend the boundaries of what is possible.”

In addition to the KOGAS MOU, ABS signed agreements for academic collaboration with Pusan National University and with Seoul National University, where Wiernicki presented a lecture titled “Future Challenges for Ship and Offshore Engineering.”

“It was gratifying to be able to share the exciting technology challenges that the students at these universities will be instrumental in solving,” says Tony Nassif, ABS Executive Vice President and COO. “ABS places great importance on encouraging careers in the marine and offshore industries, and these MOUs are a demonstration of our commitment.”

The MOUs represent an exciting opportunity for mutually beneficial cultural exchange and scientific advancement. “The cooperative research that will be undertaken by ABS and KOGAS and with these prestigious universities will be vital to successful innovation and technology development,” says Nassif. “The partnerships that we are officially acknowledging as we sign these MOUs provide a solid foundation on which we can build and innovate together.”
BS officially opened its first global energy, research and development center in Busan, South Korea, in October 2012. Researchers at the ABS Korea Energy Technology Center (KETC) will work independently and in partnership with local industry, universities and government to develop technology for the offshore and energy industries in Korea.

KETC, which is staffed locally by skilled research engineers, will have access to resources at the ABS global Technology headquarters in Houston as well as ABS offshore technology centers around the world.

“Investment in research and development (R&D) is critical to the future of the offshore and energy industries and is a priority for ABS,” said Christopher J. Wiernicki, ABS President and CEO at the opening ceremony. “I am convinced that we will make the best and most rapid progress in R&D by working together – pooling our knowledge and concentrating our efforts to solve challenges both in Korea and abroad,” he added.

“Korea’s yards are at the forefront of the global shipbuilding industry, and I believe the vision and initiative that have made Korea a leader in the marine industry can be similarly applied in other areas of specialization,” Wiernicki added. “Through KETC, ABS will join its resources with the drive, energy and technical capabilities of the Korean people.”

ABS’ objectives dovetail with the efforts of the Korean Government, which according to Dr. Sang Jick Yoon, Vice Minister of the Ministry of Knowledge Economy, is developing offshore energy resources through R&D and investment in human resources. “In view of this,” Yoon said, “it is all the more timely that ABS has established the Korea Energy Technology Center in the port city of Busan, which will serve to promote technology development not only in Korea but in Asia more broadly. I expect that KETC will offer a platform for close cooperation and enable us to generate innovative technology.”

The potential impact of research carried out through KETC will be significant according to Dr. Kyuho Whang, Chairman of the ABS Korea National Committee and President of SK Shipping. “As Newton’s apple changed the world and a small candle light brightens the whole room, I believe the beginning of the ABS Korea Energy Technology Center today will lead to positive changes and tremendous results in the shipping, shipbuilding and energy fields beyond our imagination.”

There is opportunity for many local entities to benefit from collaboration with KETC. “ABS founded the KETC to increase knowledge and advance the development of the latest technology,” says Hoseong Lee, ABS Vice President, Global Korean Business Development. “We believe KETC will be valuable in assisting ABS clients in solving their technology challenges and will enable ABS to develop stronger working relationship with Korean firms, local universities and R&D institutes.”
ABS has signed a strategic cooperation agreement with CSBC Corporation, Taiwan (CSBC), to enhance project coordination, advance information exchange and establish technical development that is important for the advancement of both ABS and CSBC.

The agreement creates an opportunity for ABS and CSBC to form joint development projects in the areas of design optimization, energy efficiency management and design and fabrication of offshore support vessels, bulk carriers, oil tankers, ice-classed vessels and floating production units. ABS also will support CSBC in vessel and offshore asset construction and will be the preferred classification society for CSBC.

“Our long-term relationship will keep growing tighter and stronger through this multi-variant cooperation, and I believe it will make CSBC more competitive for the current challenging situation,” says Lie-Lin Chen, CSBC President.

In addition, an exchange program will be developed for ABS and CSBC engineers to improve communication between the organizations and strengthen the working relationship.

During the most recent Offshore Technology Conference in Houston, ABS and the China State Shipbuilding Corporation (CSSC) signed a strategic cooperation agreement that will be the foundation for building a stronger relationship between ABS and industry leaders in Asia.

The scope of the agreement, signed by ABS Greater China Division President and COO Richard Pride and CSSC Vice President Qiang Wu, includes joint industry development projects and training based on existing ABS courses. It also includes an engineer exchange program and a commitment to regular meetings that will be used to steer cooperation and exchange views on current technical developments.

“Our training courses will help CSSC develop in the areas of design and construction of ships and offshore units, while an engineering exchange program will foster a better understanding of the different business models within our organizations,” Pride says.
Ocean Tankers (Pte) Ltd., a prominent Singapore-based tanker owner and operator, worked with ABS to receive the Statement of Voluntary Compliance to International Labour Organization’s Maritime Labour Convention, 2006 (ILO MLC) for the vessel Ocean Odyssey, making the company one of the early movers in complying with this new convention.

ILO MLC is a global standard that goes into effect in August 2013. The stated objective of the ILO MLC is, “to achieve both decent work for seafarers and secure the economic interests in fair competition for quality shipowners.”

“Ocean Tankers met the requirements of the new convention and decided to follow through with a verification conducted by ABS personnel,” says ABS Director of Management Systems Certification Hemant Juneja. “In making this investment, Ocean Tankers has taken the steps necessary to provide evidence of early compliance that will be valuable when presented to customers, flag State and port State authorities,” he says.

“This is an example of ABS working with a client to help them demonstrate compliance ahead of the deadline,” Juneja says. “It is evidence of the close working relationship that ABS maintains with clients to assist them stay on top of upcoming regulations and conventions.”

ABS conducts an ILO MLC assessment of a company’s policies and procedures and the manner in which they are implemented on board a vessel to identify potential shortcomings that must be addressed to achieve compliance. The assessment includes a review of the vessel’s documentation, an interview with onboard personnel and an inspection of the vessel’s working and living areas.

“ABS has established resources in its four operating divisions to help clients meet the requirements set forth by ILO MLC,” says Juneja. “We have developed a complete suite of ILO MLC services and we encourage companies to proactively seek out the information and take steps necessary to comply with the ILO MLC before the compliance deadline.”
ABS, SCUT Formalize Plans for Joint Research

ABS has a history of establishing and developing valuable relationships with research facilities. The organization added to its academic partnerships in August 2012 with the signing of a letter of intent for cooperative research and development projects that will be carried out through the South China University of Technology (SCUT) and the ABS China Offshore Technology Center (COTC) in Shanghai.

The agreement, signed by ABS Vice President, Offshore Technology Bret Montaruli, and SCUT Vice President Dr. Zhu Min at the SCUT campus in Guangzhou, China, lays the groundwork for collaboration on educational, outreach activities related to shipbuilding, offshore and marine engineering.

“Signing this agreement will highlight the research capabilities at the COTC, strengthen our ties with SCUT and allow us to invest in students who will be the future leaders of the marine engineering industry,” Montaruli says.

The agreement will enable SCUT personnel to participate in ABS research projects and activities and establish a jointly funded research program within SCUT. ABS will also provide financial support to post-graduate students who will participate in the joint COTC-SCUT research and development projects.

“This agreement opens the door to collaboration between two leading organizations that will yield substantial research for major industry disciplines such as shipbuilding, offshore and marine engineering,” says ABS President and CEO Christopher J. Wiernicki.

Following the signing event, Montaruli and Min joined members of the delegation to tour the School of Civil and Transportation Engineering and visited the experimental facilities in the Department of Navigation.

ABS Cleared in PRESTIGE Case

After nine years of proceedings, the United States Court of Appeals for the Second Circuit unanimously upheld the decision of the lower court to dismiss Spain’s lawsuit against ABS in the Prestige tanker oil spill off the coast of Galicia in 2002. Spain filed a suit against ABS in 2003 seeking to recover economic and environmental damages resulting from the sinking of the Prestige and the release of an estimated 476,000 barrels of heavy fuel oil.

The Second Circuit’s dismissal of this landmark case not only brings final closure to a claim that has been argued in various courts for nearly a decade, but also eases fears of possible ramifications for the classification business as a whole.

“I cannot overstate the importance of the US Second Circuit’s ruling to the future of classification societies and the work we do,” says Robert D. Somerville, ABS Chairman. “It is an acknowledgment and affirmation that, for more than 150 years, ABS has played and will continue to play a vital role in the advancement of safety upon the high seas.”

The Court concluded that the case could not and should not be allowed to proceed to trial, explaining that Spain failed to establish “a genuine dispute of material fact” regarding whether ABS breached any duty for which the organization might have been responsible.

“This ruling ensures that we will be able to continue furthering our Mission without the threat of unsubstantiated, expensive and harassing lawsuits,” Somerville says.
ABS Grants AIP for LNG ATB Regas Vessel

A new liquefied natural gas (LNG) and regasification articulated tug barge concept introduced by Waller Marine Inc. received approval in principle (AIP).

The vessel can load LNG from existing terminals, liquefaction facilities or traditional carriers and transport the LNG to existing tanks, traditional LNG carriers, trucks or marine vessels using LNG as a fuel.

The barge is equipped for regasification of LNG directly to a pipeline or power plant. Using an LNG articulated tug and barge regas vessel (ATB RV) allows LNG to be moved and delivered more efficiently on a small-scale basis in locations where large LNG infrastructure would be cumbersome, costly and time consuming.

ABS worked with Waller Marine from the inception of this project and has been the primary certification body in carrying out reviews, including conducting a program review. “We worked closely with Waller Marine through the development of the LNG ATB RV,” says Roy Bleiberg, Director, Engineering, ABS Americas Division.

The barge will be fitted with independent Type ‘C’ LNG tanks. To make the most efficient use of the hull volume and maximize the cargo-carrying capacity of the barge, bi-lobe tanks of maximum width are also centered along the barge centerline. The cargo containment system is split into four longitudinally located independent tanks, with each tank supported by a simple structure that isolates the tanks from hull loads.

According to Waller Marine, these tanks will be constructed of either 9 percent nickel steel or stainless steel AISI 304L to contain the cargo at a minimum temperature of -163°C.

“ABS has been a great resource in developing the LNG ATB RV product,” says Vice President, Gas Solutions Bill Hutchins of Waller Marine.

“By conducting multiple meetings – including a HAZID (hazard identification) – ABS has helped us to ensure safety and regulatory aspects have been appropriately addressed.”

Since AIP was granted, Waller Marine has moved into the detail design phase with a goal of creating multiple variations for clients.

Energy Management Certificate for Maersk Line Limited

In November 2012, ABS issued its first certification for energy management using the Guide for Marine Health, Safety, Quality, Environmental and Energy (HSQEE) Management. The recipient, Maersk Line Limited, implemented the standards as part of its ongoing commitment to environmentally sustainable operations.

ABS requirements for energy management are based on the international standard, ISO 50001:2011, Energy Management Systems. ISO 50001 specifies how an organization should establish targets and develop and implement an energy policy which takes into account legal requirements and other factors related to energy use. This international standard sets forth the systems and processes necessary to improve energy performance and efficiency. Implementing an energy management system supports reductions in energy costs, greenhouse gas emissions and other environmental impacts.
BS entered into a joint venture with Herbert Engineering Corp. (HEC) to enhance the development and delivery of critical software solutions for its clients. Complementing ABS Nautical Systems’ products, the innovations of Herbert-ABS Software Solutions fill an important role in safety efforts and energy efficiency in the marine and offshore industries.

“The integration between Herbert-ABS’ and Nautical Systems’ software programs bridges the design, classification and operational management aspects of vessels and offshore units,” says ABS President and COO Christopher J. Wiernicki.

With offerings that cover such topics of environment efficiency, salvage, load management and stability, the synergy between the NS5 Enterprise software suite and Herbert’s offerings was readily apparent, leading to the formation of the joint venture in February 2011.

“We have had a long relationship of research and new construction cooperation with Herbert Engineering,” ABS Chief Technology Officer Todd Grove says. “Herbert’s HECSALV salvage and emergency response software is the primary tool used in our Rapid Response Damage Assessment program. Additionally, its CARGOMAX program is one of the world’s premier loading analysis instruments and is an ABS class-approved software solution.”

Karen Hughey, President and COO of ABS Nautical Systems, adds, “This dovetails nicely into our NS5 Enterprise software by taking advantage of what Herbert Engineering has done over the years. Now, Nautical Systems and Herbert-ABS Software Solutions can cooperate and grow these solutions, thus providing a more comprehensive package of services for our clients.”

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The Herbert-ABS team is focusing its efforts on the environmental software offered by Nautical Systems. “At the present time our Trim Optimization tool runs parallel with NS5 Enterprise’s software package,” Hendrik Bruhns, President of Herbert-ABS Software Solutions, says. “We’re working to integrate the two programs and have them run seamlessly.”

The Trim Optimization tool adds trim and draft optimization for enhanced fuel savings. “Genetic algorithms in our program use real-time data and propose optimal management solutions to the vessel’s master. It offers a simple and fast way for the master to make the necessary adjustments,” Bruhns says. “The program also takes into account the regulatory aspects under which the vessel operates. Other products only tell the master to adjust the trim up or down and don’t take the regulatory regime into consideration.”

Bruhns foresees greater opportunities for software solutions in the offshore industry. One of the first offshore projects for the Herbert-ABS group was its assistance in upgrading the damage assistance package called LMP-Offshore (load management program).

Based on the HECSALV software, this application brings increased functionality through the use of multiple access stability. “We’ve
increased the functionality of HECSALV by modifying it to encompass all sorts of shapes, not just ship shapes,” Bruhns says.

“With this multiple access stability, we can visualize the 360-degree righting curve of the asset, not just the usual sideways righting curve of a vessel. We can use this in damage load cases offshore to conduct reverse engineering as to what damage might have occurred and suggest remedial action that might be used to save the asset.”

Customized software programs also are being sought by many clients. “Every piece of software we develop for load management is customized to some degree by using a computer model of the ship or asset as well as the regulatory guidelines it operates under,” Bruhns says. “These programs are very specific.”

However, one offshore operator hopes the safety package it is developing in conjunction with Herbert-ABS is utilized by other offshore clients as well. “This industry leader is assisting us with development funding and encouraging us to make this software available to other offshore clients as well with the ultimate goal of enhancing the product and having it accepted as an industry standard,” Bruhns says.

“The ABS name has given us greater credibility and made it easier for us to compete for larger projects. Operators are willing for us to undertake custom design software projects for their assets, knowing that we have the backing of ABS.”

– Hendrik Bruhns

The addition of the ABS name to Herbert Software Solutions has already brought positive results. “ABS is well-known and respected, especially in the offshore industry,” Bruhns says. “The ABS name has given us greater credibility and made it easier for us to compete for larger projects. Operators are willing for us to undertake custom design software projects for their assets, knowing that we have the backing of ABS.”

Bruhns also is excited about the collaboration opportunity offered via ABS’ new partnership with Engineering Software Reliability Group (ESRG), a provider of leading-edge data analysis and remote monitoring technology.

“ABS has given us an opportunity for growth,” Bruhns notes. “We look forward to assisting ABS employees and clients with any questions they might have. We realize many users have not dealt with us yet, but we’re available any time. We’re happy to be part of ABS.”

The Trim Optimization tool adds trim and draft optimization for enhanced fuel savings.
Rising fuel costs and anticipated environmental requirements are forcing owners and operators to find ways to improve efficiencies, and ABS is providing solutions with the recently released Energy & Environmental Manager module, an addition to the NS5 Enterprise software suite. The new module will help owners and operators contend with increasing energy efficiency, emissions and ballast water management regulations that will increase the amount of information they are required to capture during day-to-day operations.

“One of the biggest challenges facing the marine and offshore industries is how to successfully meet changing environmental regulatory requirements,” says ABS Nautical Systems President and COO Karen Hughey. “ABS is systematically combining traditional class services with innovative products and services to support compliance efforts and improve vessel performance.”

“The Energy & Environmental Manager was developed to help owners and operators realize more environmentally sound voyage management,” says Fernando Lehrer, Vice President of Product Development for ABS Nautical Systems. “The module tracks and records key voyage-related events, including fuel and lube oil consumption, cargo information and ballast activities. By centralizing real-time environmental and energy data collection, this comprehensive module makes it easy to track, trend and report the information required for various regulation requirements, including Ship Energy Efficiency Management Plans, ballast water management and fuel oil switching.”

Using the new module with the Trim Optimization tool that is already a complement of the NS5 Enterprise suite extends its value. The Trim Optimization tool adds trim and draft optimization data for improved fuel savings and provides optimized ballast configuration to achieve minimum hull resistance. By using these tools together, vessel operators can achieve better performance while reducing costs through streamlined data collection and analysis, more accurate reporting, demonstrable evidence of regulatory compliance and more efficient and environmentally sound operations.

“Our objective at ABS is to provide a complete approach to shipowners and operators in meeting their operational and regulatory goals,” Hughey says.

To learn more about the Energy & Environmental Manager and other environmental management solutions visit http://www.eagle.org/nsenvironmentalsolutions.
Nautical Systems Partners with ESRG to Strengthen Service Offerings

ABS Nautical Systems and Engineering Software Reliability Group (ESRG) announced a partnership earlier this year to expand service offerings in real-time data management and analytics to the marine and offshore industries.

“The future of operational optimization and regulatory compliance in the marine and offshore industries lies in the ability to collect, analyze and act upon real-time data gathered from operations around the world,” says Karen Hughey, ABS Nautical Systems President and COO. “ESRG’s experience and capabilities in vessel operational monitoring and analysis will help strengthen the NS5 Enterprise fleet management platform and enhance future product and service offerings from ABS Nautical Systems.”

ESRG brings to the table more than 12 years of reliability and maintenance experience monitoring and analyzing US Navy ships. The group’s OstiaEdge® software is a leading shipboard real-time analytics application that addresses environmental, fuel, energy and maintenance issues at the vessel and fleet level as well as all levels of management. This information can improve operations by enabling automated data collection for a number of areas, including environmental compliance reporting energy management, maintenance and monitoring.

“We are pleased about working together and the level of service we can bring to the industry,” says Ken Krooner, ESRG President. “ABS and ESRG can assist the industry in addressing environmental issues much more effectively. This is a powerful data management partnership that can help operators resolve these issues faster, leading to fewer noncompliance events, lower energy and fuel consumption, less downtime and lower maintenance costs.”

Integrating NS5 Enterprise and OstiaEdge® will bridge fleet management with the maintenance and operational management aspects of vessels and offshore units, Hughey says. “This will provide owners and operators the ability to make decisions with data and analysis they can trust. The partnership brings tremendous opportunity for marine and offshore operators to better manage key fleet data and improve upon the larger classification experience.”

The Nautical Systems partnership with ESRG, a leading data analysis and remote monitoring technology provider, bridges fleet maintenance and operational management effortlessly.
Several scholars from prestigious universities around the globe came together in Houston in 2012 to discuss their latest research initiatives related to renewable energy and the environment.

The ABS Technology Forum provided an opportunity for some of the brightest minds within academic circles at the Massachusetts Institute of Technology (MIT), the University of California-Berkeley (UC Berkeley) and Webb Institute to discuss their marine research portfolios. Topics included green ship design and wave energy technology.

“For us, technology is a key differentiator in our market. While many new technologies are still questionable, it is not a question that we are avoiding,” Christopher J. Wiernicki, ABS President and CEO said during his opening remarks. “As the maritime industry pushes people to understand the gray areas of technology, this forum is the first of many where ABS will bring the industry’s leading experts together to discuss research that will help us frame a strategic plan for the future.”

Notable attendees included Ron Yeung, Professor of Mechanical Engineering at UC Berkeley; Dr. Reza Alam, Assistant Professor of Mechanical Engineering at UC Berkeley, and Matthew Warner, Professor of Naval Architecture and Marine Engineering at Webb Institute. These prestigious researchers also share the position of occupying ABS-endowed chairs at their respective universities.

ABS has opened technology centers around the globe to expand research efforts in some of the most dynamic areas of the world. “We cannot grow with just an organization in Houston,” says Todd Grove, ABS Chief Technology Officer. “By bringing these leading scholars together, we have an opportunity to see firsthand research that will shape the future of the shipping and maritime industry and discuss ways ABS can partner with these experts to assure their research continues moving forward.”

Leading Scholars Discuss Marine Research

Christopher J. Wiernicki

Todd Grove
ABS opened its Singapore Offshore Technology Center (SOTC) in 2006, as part of a technology outreach to the world’s leading rig builders and the surrounding engineering community. Created to support local industry and build technical capabilities within ABS, the SOTC was so successful that ABS established additional technology centers in Brazil, Canada, China and Korea.

Because research at SOTC sometimes involves novel concepts, much of the work carried out at the center is confidential. One representative project involves engineers from Singapore’s Jurong Shipyard undertaken when the yard began developing new hull designs for deepwater semisubmersible rigs; another involves a training and development effort with engineering teams from China’s Hudong Shipyard when the yard began work on LNG carrier designs.

Recently, the SOTC has been collaborating with Professor Lee Fook Hou of the Civil and Environmental Engineering department at the National University of Singapore (NUS) on two important offshore engineering research projects: a study to understand and improve spudcan fixity that has yielded promising results for improving jackup rig stability and for mitigating damage when a leg punches through the seabed; and a study that is just getting under way on the holding abilities of torpedo piles.

“Clients come to us because our technical capabilities can help specific parts of their overall research and development projects,” says SOTC Manager Jer-Fang Wu. “Many times, we will work with the shipyard team from day one of a project involving advanced ideas and novel technologies.”

If that calls to mind the ABS Advanced Analysis department, there is good reason. Wu joined Advanced Analysis when the group was formed in 1991 and remained with it for 11 years. He carried the same investigative spirit with him when he started up the SOTC.

A legacy of that hands-on work with Advanced Analysis surfaces as a novel design moves toward completion.

“When I see the design is mature enough, maybe towards the final stages, I bring the ABS Engineering department into the process,” he says. “This allows them to understand the reasoning behind the design, to examine it and to identify any class-related issues which we can then address right away. Later, their understanding of the design speeds up turnaround time during plan review.”

“Professor Hou demonstrates an experiment for jackup rig stability at NUS.”

“Professor Lee Fook Hou of the Civil and Environmental Engineering department at the National University of Singapore and Jer-Fang Wu, ABS SOTC Manager.”
ABS is providing guidance and requirements for systems verification to shipowners and operators with the release of the ABS Guide for Systems Verification (SV Guide). The Guide sets the requirements for the optional SV notation and can be used to increase confidence that software systems will perform as intended when an asset is in an operational, degraded or failed condition.

System verification is a life cycle commitment to review specific systems on a vessel, offshore facility or installation. The SV Guide identifies shortcomings within software systems, giving owners and operators a tool they can use to reduce the potential for lost time.

“ABS developed the SV Guide in response to an industry need for a systems verification notation,” says ABS Vice President of Offshore Technology Bret Montaruli. “Clients are looking for a higher degree of confidence in their systems, and the SV Guide provides the guidelines they need to identify potential shortcomings in software systems. Major operators are beginning to realize the benefit of this notation and are now requiring it on vessels and offshore facilities.”

Applying ABS’ recommended techniques for systems verification can facilitate system optimization, allowing for alternatives to be tested and evaluated prior to selection and implementation. System analysis requirements in ABS’ SV Guide and the SV notation go beyond those for basic classification, Montaruli explains. “We are offering detailed requirements that set the standard for the verification process and allow clients to have the flexibility to meet their own needs. ABS remains focused on developing quality products that set the standards of excellence.”

Recently Released ABS Rules & Guides

ABS Rules and Guides are available for purchase and/or free download directly from the website at www.eagle.org. Subscribe online to receive email notifications when new publications or notices are available. The following listing reflects Rules and Guides updates from 1 May 2012 to 15 December 2012.

**UPDATE** Rules for Building and Classing Steel Vessels, January 2013 (Pub 2)
Effective 1 January 2013, this edition of the Rules apply to steel vessels of 90 meters (295 feet) and over in length. The requirements are applicable to those features that are permanent in nature and can be verified by plan review, calculation, physical survey or other appropriate means. The primary changes from the 2012 edition of the Rules are identified in Table 3 of the Notices and General Information book.

**NEW** Rules for Building and Classing High-Speed Craft, January 2013 (Pub 61)
The Rules supersede the 2012 Guide for Building and Classing High-Speed Craft. This new edition includes ABS requirements applicable to all types and sizes of high-speed craft. The Rules contain materials and welding requirements for vessels built from steel, aluminum and fiber-reinforced plastics. The primary changes from the previous Guide are identified in Table 3 of the Notices and General Information book.

**NEW** Rules for Building and Classing Floating Production Installations, January 2013 (Pub 82)
The Rules supersede the 2009 Guide for Building and Classing Floating Production Installations. This new edition specifies the ABS requirements for design, construction and surveys after construction for hull structures, equipment and marine machinery, position mooring systems and hydrocarbon production facilities. Floating production installations include ship-shaped and column-stabilized units, tension leg platforms and spars, as well as existing vessel conversions. The primary changes from the previous Guide are identified in Table 3.

**NEW** Rules for Building and Classing Offshore Support Vessels, January 2013 (Pub 180)
The Rules supersede the 2011 Guide for Building and Classing Offshore Support Vessels. The Rules are applicable for offshore support vessels of all sizes and include specific requirements for specialized multi-purpose vessels. The Rules also contain materials and welding requirements for vessels built from steel, aluminum and fiber-reinforced plastics. The primary changes from the previous Guide are identified in Table 3 of the Notices and General Information book.

**NEW** Guide for Crew Habitation on Mobile Offshore Drilling Units (MODUs), September 2012 (Pub 190)
This newly released Guide provides the assessment criteria and describes the measurement methodology for obtaining habitability notations for drilling units – HAB(MODU), HAB+(MODU) and HAB++(MODU). This publication is only available for download.

**NEW** Rules for Building and Classing Facilities on Offshore Installations, July 2012 (Pub 63)
The Rules supersede the 2009 Guide for Building and Classing Facilities on Offshore Installations. The Rules are applicable to hydrocarbon production and processing systems and the associated utility and safety systems located on fixed offshore structures of various types as well as systems installed on floating installations such as ship-shaped FPSOs, tension leg platforms, spars and semisubmersibles.
NEW Guide for Systems Verification, July 2012 (Pub 189)
This newly released Guide covers the requirements and criteria used during the review and survey of systems where the Systems Verification (SV) notation has been requested. It is applicable during the initial construction and classification process to systems that are installed on board vessels, offshore installations and facilities. It is also applicable to existing vessels that wish to have the SV notation granted. This publication is only available for download.

UPDATE Guide for the Classification of Drilling Systems, September 2012 (Pub 57)
This revision supersedes the 2011 edition. The latest Guide includes a risk assessment for drilling systems as well as requirements for conductor tensioning systems and/or units. This publication is only available for download.

UPDATE Guide for Crew Habitability on Offshore Installations, September 2012 (Pub 105)
Previously released in 2002, this updated Guide has been significantly revised to incorporate whole-body vibration measurement and evaluation, changes to ambient lighting criteria, and changes to the noise and accommodation area requirements. This publication is only available for download.

UPDATE Guide for Hull Inspection and Maintenance Program, September 2012 (Pub 156)
This is the third edition of this Guide. This edition adopts a more logical approach for applying requirements on mobile offshore drilling units (MODUs). As MODU crew may have difficulties in safely accessing spaces as frequently as possible on a ship, this revision clarifies the requirements for implementing a hull inspection and monitoring program for MODUs. This publication is only available for download.

UPDATE Guide for Integrated Software Quality Management, September 2012 (Pub 185)
As the marine and offshore industries are increasingly relying on computer-based control systems, the verification of the software used in control systems and their integration into the overall system is an important element within the overall safety assessment. ABS developed this Guide based on the internationally recognized standards for integrated software quality management. Compliance with the criteria may result in the granting of the optional notation ISQM to a vessel or offshore unit. This publication is only available for download.

UPDATE Guide for Crew Habitability on Ships, July 2012 (Pub 102)
Last published in 2001, the 2012 edition of the Guide specifies the new changes to the whole-body vibration (WBV) measurement and evaluation methodology and criteria, ambient lighting methodology and criteria, and changes to the noise and accommodation area criteria. This Guide is intended for use by vessel owners or companies requesting the optional notations of ship Habitability (HAB), ship Habitability Plus (HAB+) or ship Habitability Plus Plus (HAB++). This publication is only available for download.

Recent Updates to ABS Rules & Guides

NOTICES & CORRIGENDA - GENERIC RULES

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# Recent Updates to ABS Rules & Guides

## Notices & Corrigenda

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A large contingent of US Coast Guard (USCG) officers from the Offshore National Center of Expertise joined representatives from major mobile offshore drilling unit (MODU) operators for a public course at Houston’s ABS Academy to learn about the latest service classification and statutory requirements for MODUs. ABS instructors led the course, which familiarizes participants with the MODU classification process.

“ABS and the USCG support each other on a wide array of maritime projects and continuously work together to support the safety of life and the marine environment,” says Commander Jim Rocco, USCG Chief, Offshore National Center of Expertise. “We’re taking advantage of this particular training because it’s an opportunity for our inspectors to gain the vital surveyor and industry perspective as it relates to offshore safety and the industry in general. The USCG also seeks to satisfy the 2010 Coast Guard Authorization Act mandate which requires that USCG marine inspectors be trained to a level equivalent with that of a surveyor working for a flag State-recognized classification society. This training has certainly hit the mark for both of these objectives.”

Course participants gained a better understanding of the issues in the IMO MODU Code and classification Rules. David Forsyth, ABS Chief Surveyor for Offshore, led the group instruction and provided a thorough review of how to prepare for class surveys.

“The increased technical sophistication of MODUs coupled with the most recent advances of technology have created a need for courses that detail the latest survey and inspection requirements set forth by the IMO MODU Code,” Forsyth says. “Our aim is to work alongside the USCG to provide them with technical knowledge that will provide a clearer understanding of the MODU surveying process.”

Graham Marshall, ABS Director, External Learning, adds, “The relationship with the US Coast Guard is a fundamental part of our classification role, and ABS offers this course on a regular basis in order to build understanding of offshore classification requirements.”

USCG Officers Gain Instruction on MODU Classification
Liquefied natural gas (LNG) has gained popularity as a cost-effective alternative to marine diesel. This growing interest sparked the development of an ABS Academy course that addresses the latest technology and requirements for the technical installation of LNG fuel systems for vessels that use LNG as their main propulsion fuel. Shipowners, US Coast Guard inspectors and oil majors attended the ABS Academy for the first course.

“At the moment, 99 percent of all ships that use LNG as a fuel actually carry LNG as a cargo; however, major moves are currently taking place in the wider shipping industry to use LNG as a fuel,” said Howard Candelet, a guest instructor with more than 40 years of LNG service with British Gas. “The main vessels of interest are ferries, offshore supply vessels, intercostal barges, cruise liners and large containerships.” The main benefit of using LNG is simply cost, he said. “At the moment LNG is about 30 percent the equivalent cost of marine diesel fuel, which represents a very large operating cost benefit.”

The course introduced the arrangements, construction, installation and operation of machinery components and systems for vessels fueled by natural gas as published in the ABS Guide for Propulsion and Auxiliary Systems for Gas Fueled Ships.

“As owners and operators look to LNG fuel systems as a cost-effective solution to marine propulsion, ABS must exercise control over the standards of safety,” Graham Marshall, ABS Director, External Learning explained. “Our responsibility is to oversee the design and construction of the new LNG fueling systems and verify that they meet current safety standards and continue to do so throughout the life of the vessel.”

Recent Seminars Focus on Energy Efficiency & Environmental Solutions

Recent environmental regulations are creating concern for shipowners, operators and other maritime personnel around the world as they look for ways to safely comply with new requirements. In response, ABS has hosted a series of seminars to provide industry updates on environmental regulations and available management tools.

As part of this process, ABS Director, Environmental Programs Thomas Kirk composed an overview of current MARPOL regulations aimed at mitigating greenhouse gas emissions from shipping. Measures include the Energy Efficiency Design Index (EEDI) and the Ship Energy Efficiency Management Plans (SEEMP).

Kirk focuses on the link between an effective SEEMP and larger organizational programs, particularly those complying with the ISO 50001 Energy Management System standard. The goal of these seminars is to facilitate discussion of industry best practices and provide a better understanding of energy management practices for ships and companies.

“We introduce energy management and explain what is required for statutory compliance,” Kirk says. “We also present the ISO 50001 standard and the new ABS Nautical Systems Environmental Management tools at each seminar. This approach gives owners a better understanding of how these three components impact them, and shows them how using a structured approach and proper tools can minimize operational costs. The practical examples we discuss during these seminars have been well received by owners, who continue to manage their fuel costs while reducing greenhouse gas emissions.”

ABS Nautical Systems, the software arm of ABS, also has participated in the seminars by demonstrating the Environmental Management tools that are part of the industry-recognized NS5 Enterprise software suite. During a series of ABS-sponsored seminars in Europe, ABS Nautical Systems Regional Director, EMEA Rogerio Vieira, discussed the importance of streamlining the data collection and reporting necessary to support the growing number of regulatory requirements. He also explained how the Trim Optimization tool enhances this new module and pointed out the potential fuel savings that can be realized.

“Our main goal was to provide an informative session and demonstrate how utilizing the proper tools can help owners and operators work in a safer and more efficient way, while reducing costs through streamlined data collection, analysis and reporting,” Vieira says.

CAMEROON
DOUALA
ABS Europe Ltd.
Ex Immeuble SOCAR
Douala Stock Exchange Building,
5th Floor
PO Box 1997
Douala, Cameroon
Telephone and fax numbers remain unchanged

TAIWAN
TAIPEI
ABS Greater China Division
3rd Floor, No. 146
Sung Chiang Road
Taipei 10458, Taiwan
Telephone and fax numbers remain unchanged

Now available for iPhone and iPad, the ABS DIRECTORY app provides addresses and contact information for ABS’ global network of offices. Download for free from iTunes.
ABS Membership Plaques

Abu Bakar Mohd Noor, CEO, Nakilat-Keppel Offshore and Marine Ltd. (center) receives an ABS membership plaque from Eric Kleess, ABS Pacific Division President and COO and Joseph Brincat, ABS Regional Vice President, Middle East.

Richard D. Pride, ABS Greater China Division President and COO, presents an ABS membership plaque to Ge Zhang, President, Jinhai Heavy Industry Co.

Bradley Achorn, ABS Vice President, Northern Region, Greater China Division, presents an ABS membership plaque to Muh-Huar Jou, Vice Chairman, Chinese Maritime Transport.

Jack Buono, President and CEO, SeaRiver Maritime Inc., receives an ABS membership plaque from Christopher J. Wiernicki, ABS President and CEO.

Ray-Chung Chang, Vice President, CPC Corporation, receives an ABS membership plaque from Tony Nassif, ABS Executive Vice President and COO.

John Gallagher, ABS Regional Vice President, Northern Europe, presents an ABS membership plaque to Tanel Hinno, Managing Director, Tallink Ship Management while Claes Andersson, ABS District Manager, Sweden looks on.
Robert Gilman, ABS Americas Division President and COO, presents an ABS membership plaque to Nickel H.S. van Reesema, Co-Founder and Principal of MidOceanMarine, LLC.

Derek Novak, ABS Vice President, Operations, Americas Division, presents an ABS membership plaque to Robert Hayes, Manager, Fleet Engineering, Conoco Polar Tankers, while Brian Barton, ABS Central US District Manager, looks on.

Raghvan Narasimhan, Vice President, Technical Accounting, Diamond S Management LLC (center), receives an ABS membership plaque from Thomas Blenk, ABS Regional Vice President, North America, and an ABS Technical Committee plaque from Karen Hughey, ABS Nautical Systems President and COO.

Tony Nassif, ABS Executive Vice President and COO, presents an ABS membership plaque to Sung-Yong Ha, President, Sungdong SB & ME Co. Ltd.

John Cheak, Non-Executive Director of Chuan Hup, receives an ABS membership plaque from Eric Kleess, ABS Pacific Division President and COO.

Bradley Achorn, ABS Vice President, Northern Region, Greater China Division, presents an ABS membership plaque to Bronson Hsieh, Vice Group Chairman, Evergreen Group.
Thomas Blenk, ABS Regional Vice President, North America, presents an ABS membership plaque to Ted Makrinos, Vice President, Engineering, Liberty Maritime Corporation.

Stephen Gumpel, ABS Vice President, Business Development, presents an ABS membership plaque to Jesper Bo Hansen.

Claes Andersson, ABS District Manager, Sweden, presents an ABS membership plaque to Ture Axelsson, Owner, Charterfrakt Baltic Carrier AB.
Tony Nassif, ABS Executive Vice President and COO, presents an ABS membership plaque to Oi-Hyun Kim, President and COO, Hyundai Heavy Industries.

Won-Kil Choi, CEO of Hyundai Mipo Dockyard Co. Ltd., receives an ABS membership plaque from Stephen Auger, ABS Senior Vice President, Operations, Pacific Division.

Ong Poh Kwee, Managing Director, Sembawang Shipyard, receives an ABS membership plaque from Eric Kleess, ABS Pacific Division President and COO.

Kurt Crosby, President and CEO, Crosby Tugs, LLC (second from the right) receives an ABS membership plaque from Stephen Gumpel, ABS Vice President, Business Development; Mitch Martin, President and CEO, Martin Towing; Vinton Crosby, Chairman, Crosby Tugs, LLC; and Brian Barton, ABS US Central District Manager.

Jenn-Hwu Hsu, Director, Department of Fuels, Taiwan Power Company, receives an ABS membership plaque from Bradley Achorn, ABS Vice President, Northern Region, Greater China Division.

Ong Poh Kwee, Managing Director, Sembawang Shipyard, receives an ABS membership plaque from Eric Kleess, ABS Pacific Division President and COO.
Jan Berglöw, Executive Vice President, Wallenius Marine, receives an ABS membership plaque from Claes Andersson, ABS District Manager, Sweden.

Stephen Gumpel, ABS Vice President, Business Development, presents an ABS membership plaque to Greggory Mendenhall, Special Counsel, Sheppard Mullin.

Robert Gilman, ABS Americas President and COO, presents an ABS membership plaque to Kwok Kai Choong, President and CEO, Keppel FELS Brasil, while Jose C. Ferreira, ABS Regional Vice President, South America looks on.

Hocine Kennouche, ABS Principal Surveyor, Aberdeen, looks on while Evert Maandag, Managing Director, Vroon Offshore receives an ABS membership plaque from John Gallagher, ABS Regional Vice President, Northern Europe.

Kirsi Tikka, ABS Europe Division President and COO, presents an ABS membership plaque to Peter Hinchliffe, Secretary General of the International Shipping Federation.

Jasneet Maiaise, Vice President of Technical Operations, Diamond S Management LLC, receives a membership plaque from Thomas Blenk, ABS Regional Vice President, North America.

Robert Gilman, ABS Americas President and COO, presents an ABS membership plaque to Kwok Kai Choong, President and CEO, Keppel FELS Brasil, while Jose C. Ferreira, ABS Regional Vice President, South America looks on.

Stephen Gumpel, ABS Vice President, Business Development, presents an ABS membership plaque to Greggory Mendenhall, Special Counsel, Sheppard Mullin.
Robert D. Somerville, ABS Chairman, presents an ABS membership plaque to Eric Kleess, ABS Pacific Division President and COO.

Sanjay Sukhrani, Chief Operating Officer, Diamond S Management LLC, receives an ABS membership plaque from Thomas Blenk, ABS Regional Vice President, North America.

Tony Nassif, ABS Executive Vice President and COO, presents an ABS membership plaque to Yong Wang, President of Hudong-Zhonghua Shipbuilding (Group) Co., Ltd.

Burhan Deval, Part Owner, Deval Shipping (fourth from left) receives an ABS membership plaque as Hakki Deval, Part Owner, Deval Shipping; Seylettin Tatlı, ABS Country Manager for Turkey; Levent Deval, Part Owner, Deval Shipping; Stefano Penco, ABS Regional Vice President, Southern Europe; and Orhan Deval, Part Owner, Deval Shipping look on. 
The Society of Naval Architects and Marine Engineers (SNAME) awarded Kirsi Tikka, ABS Europe Division President and COO, its highest technical honor, the David W. Taylor Medal for notable achievement in naval architecture or marine engineering. The award was presented at a banquet during the SNAME Annual Meeting in Providence, RI in late October.

“It is an honor to have been selected to join the distinguished group of David W. Taylor Medal recipients, particularly at a time when the skills of naval architects and marine engineers are once again in high demand,” Tikka says upon accepting the award. “I have been fortunate to have had the opportunity to study and work with many remarkable individuals, and I hope that I am able to provide the same level of support to the younger generation of naval architects and marine engineers who are facing today’s challenges and opportunities.”

“Kirsi is an international leader in ship structure design and energy efficiency,” says ABS President and CEO Christopher J. Wiernicki. “Her insight and guidance are valued throughout the industry because throughout her career she has consistently provided practical solutions for the challenges impacting the marine and offshore industries.”

Tikka is hopeful that the current generation will approach the future with the optimism and enthusiasm that will allow them to solve tomorrow’s challenges. “It is my strong belief that if we are to meet future demands, we cannot get there with current technologies. We need to look beyond traditional naval architecture,” she says.

“Kirsi is an international leader in ship structure design and energy efficiency,” says ABS President and CEO Christopher J. Wiernicki. “Her insight and guidance are valued throughout the industry because throughout her career she has consistently provided practical solutions for the challenges impacting the marine and offshore industries.”

Since she joined ABS in 2001, Tikka helped to establish the ABS Harsh Environment Technology Center in collaboration with Memorial University of Newfoundland, played a key role in developing Common Structural Rules for Tankers and Bulk Carriers, served as the driving force behind the Common Structural Rules Harmonization Project and set up and led the ABS Environmental Solutions Group.

Tikka is the third ABS executive in the past decade to receive the David W. Taylor Medal. “These awards are a testament to the caliber of individuals at ABS who continue to lead the technological advancements across the industry and position ABS as Class of the Future,” says Wiernicki.
 Webb Institute Names 2012 ABS Scholars

Two Webb Institute students were each awarded $50,000 scholarships as part of the ABS Scholarship Program established earlier this year.

ABS President and CEO Christopher J. Wiernicki and ABS Chairman Robert D. Somerville presented the first scholarship to Jonathan Soja, class of 2013, during a reception in May 2012. Samantha Griswold, class of 2014, received the second ABS scholarship in November 2012 at the Fall Board of Trustees meeting hosted on campus.

“ABS is proud of its partnership with Webb Institute and we fully believe in its mission of preparing graduates for maritime careers,” says Wiernicki. “Supporting the next generation of maritime professionals is an important element of ABS’ Mission to protect the safety of life, property and the natural environment. We are pleased to be able to continue our support of the Webb Institute and wish the scholarship winners successful careers in the industry.”

Scholarships are awarded to students who have shown exemplary academic performance, have excelled in executing work term assignments and have engaged in serving their school. These scholarships financially support deserving engineering and naval architecture students, as recommended by faculty members.

“Webb Institute is honored to receive ABS’ continued support of our students as they pursue their educational aspirations,” says President of the Webb Institute RADM Robert C. Olsen, Jr. USCG (Ret.). “Through this scholarship program and the support of the ABS Chair of Naval Architecture and Marine Engineering, ABS will continue to serve as a catalyst for advancing educational programs in the maritime industry.”

Christopher J. Wiernicki presented the first scholarship to Jonathan Soja.

Samantha Griswold received the second ABS scholarship.
Economic growth in Africa and the development of its natural resources have changed the region’s standing on the global stage, drawing increasing international attention and growing investment.

With African activity on the rise, ABS is forming a new Africa Region as a standalone entity within the ABS Europe Division.

“The growing demand for ABS services, particularly in Sub-Saharan Africa, has led to the

Decision to expand the organization’s presence in East Africa and to commit additional resources to operations in western and southern Africa,” says ABS President and CEO Christopher J. Wiernicki.

“By establishing a new entity in Africa, ABS not only gains a more firm foothold on the continent, but creates a better growth environment for the expanding offshore activities of the ABS Southern Europe Region,” Wiernicki says.

Karel Van Campenhout, Senior Vice President of Operations for the ABS Europe Division will oversee activities in the newly formed region. ABS currently has offices in Ghana, Nigeria, Cameroon, Congo Brazzaville, Angola, Namibia and South Africa.

Robert D. Somerville accepted the award from Coast Guard Foundation Chairman Robert J. Flynn.
21-23 January 2013
Offshore Middle East
Doha, Qatar
Sponsored by ABS
www.offshoremiddleeast.com

4-7 February 2013
EWEA
Vienna, Austria
ABS Exhibit
www.ewea.org

5-7 February 2013
Topsides Platforms-Hulls
Galveston, TX, US
Sponsored by ABS
www.topsidesevent.com

5-6 February 2013
IADC Health, Safety, Environment & Training
Houston, TX, US
ABS Presenter: Smarty Mathew John
www.iadc.org

18-21 February 2013
Nigeria Oil & Gas
Abuja, Nigeria
ABS Exhibit
http://cwcnog.com

20-22 February 2013
Australasian Oil & Gas
Perth, Australia
ABS Exhibit
Sponsored by ABS
www.aogexpo.com.au

21-22 February 2013
ASNE Day
Arlington, VA, US
Sponsored by ABS
www.navalengineers.org

27-28 February 2013
LNG Fuel Forum North America
Miami, FL, US
Sponsored by ABS
www.informamaritimeevents.com

27-28 February 2013
Lloyd’s List 4th International LNG Shipping Conference
London, UK
ABS Presenter: Patrick Janssens
www.informamaritimeevents.com

27 February – 1 March 2013
Panama Maritime XI
Panama City, Panama
ABS Exhibit
www.panamamaritimeconference.com

18-20 March 2013
MCE Deepwater Development
The Hague, Netherlands
ABS Exhibit
Sponsored by ABS
www.MCEDD.com

19-21 March 2013
Offshore West Africa
Accra, Ghana
ABS Exhibit
Sponsored by ABS
www.offshorewestafrica.com

21 March 2013
Mare Forum Istanbul
Istanbul, Turkey
Sponsored by ABS
www.mareforum.com

9-11 April 2013
Sea Asia
Singapore
Sponsored by ABS
www.sea-asia.com
Somerville Honored with Seatrade Lifetime Achievement Award

The marine industry has chosen ABS Chairman Robert D. Somerville as the recipient of the Seatrade Lifetime Achievement Award, presented at the 2012 Seatrade Awards Ceremony Dinner. The award, which recognizes Somerville’s outstanding contributions to the shipping industry in a career of more than 40 years with ABS, was presented at London’s Guildhall. A particular note was for his passion for maritime safety and education. Sheikh Khalil Al Salmi, Deputy CEO of Oman Drydock Company and IMO Secretary-General, Koji Sekimizu were on hand to present Somerville with the award.

“I am truly humbled and honored to receive this award,” Somerville said, noting, “none of these successes would have been possible without the support of the people of ABS with whom I have had the pleasure and honor of working for so many years. It has been a privilege for me to have been a part of a remarkable team of individuals.”

More than 400 of the maritime industry’s key players came together at Guildhall in London to celebrate outstanding contributions made over the last year for safe, efficient and environmentally friendly shipping.

The Seatrade Awards program rewards new ideas and concepts that have proven themselves in early operational use and recognizes those at the forefront of new thinking.
Global Management Appointments

Americas Division
Stephen Auger, currently Senior Vice President, Operations for the Pacific Division, will transfer to Houston to assume the role of Senior Vice President, Operations for the Americas Division.

Stephen Gumpel, currently Vice President of Business Development for the Americas Division, has been named Regional Vice President, North America.

Sidney Bereicoa, currently an Offshore TBD Manager in Brazil, has been promoted to Director of Engineering, South America.

Europe Division
Paul Karam, currently Regional Vice President, Northern Pacific, will transfer to London as Regional Vice President, Northern Europe.

Pacific Division
Thomas Blenk, currently Regional Vice President for North America, will transfer to Busan as Regional Vice President, Northern Pacific.

Derek Novak, currently Vice President, Operations, for the Americas Division, will relocate to Singapore as Vice President, Operations, for the Pacific Division.

Nautical Systems
Rogerio Vieira, currently Regional Sales Director, EMEA for ABS Nautical Systems, will transfer to Houston and assume the position of Vice President of Global Sales and Marketing for ABS Nautical Systems.

Headquarters
Joseph Woods, currently Senior Vice President of Global Sales and Marketing for ABS Nautical Systems will assume a new position as Vice President, Business Development.

John Gallagher, currently Regional Vice President for Northern Europe, will transfer to New York to assume the position of Vice President, Client Management.

ABS Awards Best Theses at University of Tokyo

Yusuke Hara, a student in the Department of Systems Innovation, was the 2012 winner of the ABS award for the Best Thesis in the Graduate School of Engineering at the University of Tokyo.

Tatsuki Yokoyama, a student in the Department of Ocean Technology, Policy and Environment in the Graduate School of Frontier Sciences at the University of Tokyo, was awarded the ABS Best Thesis award for 2012.
Newly Classed Vessels and Recent Contracts

JOÃO CANDIDO, a 157,055 dwt crude oil tanker, NIBS, VEC, TCM, AB-CM, CSR, built by Estaleiro Atlântico Sul for Transpetro-Petrobras Transport.

1 April 2013 to 30 September 2012
**Newly Classed Vessels and Facilities**

### TANKERS

**AMAZONA**, 5,064 gt / 6,284 dwt, built by CSC Chongqing Dongfeng Shipbuilding for CSC Amazona

**ANATOMA**, 1,531 gt / 1,422 dwt, built by Pioneer Smith for Swisser Australia

**ANSHENG**, 4,445 gt / 6,842 dwt, built by Shangou Shipping General for Vermont UM Shipping

**ANTARES VOYAGER**, 161,535 gt / 317,113 dwt, PORT, VEC-L, TCM, AB-CM, CSR, ENVIRO, GP, RES, built by Daewoo Shipbuilding & Marine Engineering for Linton Maritime

**AQUALEGACY**, 61,237 gt / 115,763 dwt, VEC, TCM, AB-CM, BWE, CSR, ENVIRO, GP, built by Samsung H I for Gregale Maritime

**AMAZONA**, 5,064 gt / 6,284 dwt, built by CSC Chongqing Dongfeng Shipbuilding for CSC Amazona

**ELEVIT**, a 16,971 dwt oil and chemical tanker, ES, Ice Class “IA”, VEC, built by Yardimci Gem Insa for Yardimci Gemi Insa.

**AQUALEGACY**, a 115,763 dwt crude oil and product tanker, VEC, TCM, AB-CM, BWE, CSR, ENVIRO, GP, built by Samsung H I for Gregale Maritime.

**GUADALUPE**, a 105,276 dwt crude oil and product tanker, VEC, TCM, AB-CM, built by Hyundai H I for DSS Vessels II

**ANTARES VOYAGER**, 161,535 gt / 317,113 dwt, PORT, VEC-L, TCM, AB-CM, CSR, ENVIRO, GP, built by Shangou Shipping General for Vermont UM Shipping

**ANTARES VOYAGER**, 161,535 gt / 317,113 dwt, PORT, VEC-L, TCM, AB-CM, CSR, ENVIRO, GP, built by Samsung H I for Gregale Maritime

**GUADALUPE**, 57,244 gt / 105,276 dwt, VEC, TCM, AB-CM, CSR, built by Hyundai H I for Orca Tanker

**GUADALUPE**, 57,244 gt / 105,276 dwt, VEC, TCM, AB-CM, CSR, built by Hyundai H I for Orca Tanker

**ELEVIT**, 12,137 gt / 16,971 dwt, ES, Ice Class “IA”, VEC, built by Yardimci Gem Insa for Yardimci Gemi Insa

**FPMC P IDEAL**, 59,174 gt / 114,406 dwt, VEC, AB-CM, CSR, built by Sasebo H I for FPMC Ideal Marine

**FS DILIGENCE**, 63,057 gt / 115,586 dwt, AB-CM, CSR, VEC, TEM, RRDA, built by Namura Shipbuilding for Simosa Shipping

**FS ENDEAVOR**, 63,058 gt / 115,626 dwt, AB-CM, CSR, VEC, TCM, built by Namura Shipbuilding for J & K Shipping

**GUADALUPE**, 57,244 gt / 105,276 dwt, VEC, TCM, AB-CM, CSR, built by Hyundai H I for DSS 3, c/o Anglo Eastern Shipmanagement

**JOAO CANDIDO**, 81,429 gt / 157,055 dwt, NIBS, VEC, TCM, AB-CM, CSR, built by Estaleiro Atlantico Sul for Transpetro-Petrobras Transport

**KING PHILIPPOS**, 62,375 gt / 112,070 dwt, NBLES, VEC-L, TCM, AB-CM, BWE, CSR, ENVIRO, GP, built by Hyundai H I for Breakers Holdings

**KONDO**, 156,651 gt / 296,714 dwt, SH, SHCM, VEC, GP, RRDA, built by Shanghai Jiangnan-Changxing Shipbuilding for Kenmore Shipping

**MARIA BOTTIGLIERI**, 60,205 gt / 107,505 dwt, VEC, TCM, AB-CM, CSR, built by Tsuneishi Shipbuilding for Rizzo-Bottiglieri-De Carlini Armatori

**MARINE PROSPER**, 724 gt / 988 dwt, built by Ocean Leader Shipbuilding for Da An Shipping

**MARKA**, 42,341 gt / 74,127 dwt, VEC, TCM, AB-CM, BWE, CSR, RES, built by SPP Shipbuilding for Marka Shipping

**MAXWELL BAY**, 30,400 gt / 50,243 dwt, AB-CM, CSR, ES, VEC-L, TCM, built by Guangzhou Shipyard for Maxwell Bay Shipping

**NAVE ESTELLA**, 42,338 gt / 74,999 dwt, SH, SHCM, VEC, TCM, BWE, ENVIRO, GP, RRDA, built by Sungdong Shipbuilding & Marine Engineering for Serifos Shipping

**NISSOS ANAFI**, 61,320 gt / 115,666 dwt, VEC, TCM, AB-CM, BWE, CSR, GP, built by Samsung H I for Athinais Maritime

**GUADALUPE**, a 105,276 dwt crude oil and product tanker, VEC, TCM, AB-CM, CSR, built by Hyundai H I for DSS 3, Anglo Eastern Shipmanagement.
<table>
<thead>
<tr>
<th>Ship Name</th>
<th>GT / DWT</th>
<th>Class</th>
<th>Builder</th>
<th>Owners/Ownerships</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARKA, a 74,127 dwt crude oil and product tanker</td>
<td>VEC, TCM, AB-CM, BWE, RES</td>
<td>built by SPP Shipbuilding for Marka Shipping</td>
<td></td>
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</tr>
<tr>
<td>MAXWELL BAY, a 50,243 dwt oil and chemical tanker</td>
<td>AB-CM, CSR, BWE, RES</td>
<td>built by SPP Shipbuilding for Maxwell Bay Shipping</td>
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</tbody>
</table>

**BULK CARRIERS**

<table>
<thead>
<tr>
<th>Ship Name</th>
<th>GT / DWT</th>
<th>Class</th>
<th>Builder</th>
<th>Owners/Ownerships</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADELINA, a 34,032 dwt bulk carrier</td>
<td>TCM, GRAB(30), AB-CM, CSR, ENVIR0, GP</td>
<td>built by Hyundai Mipo Dockyard for Panopea Maritime</td>
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<tr>
<td>AGAPI S, a 37,215 dwt</td>
<td>BC-A, TCM, GRAB(20), AB-CM, CSR, ENVIR0, GP</td>
<td>built by Dae Sun Shipbuilding &amp; Engineering for Empire King Navigation</td>
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<tr>
<td>ALINDA, a 22,223 dwt</td>
<td>BC-A, AB-CM, CSR, GRAB(30), TCM, ENVIR0, GP</td>
<td>built by Hyundai Mipo Dockyard for Delian Grace Shipping</td>
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<tr>
<td>ALITHIA, a 22,223 dwt</td>
<td>BC-A, TCM, GRAB(30), AB-CM, CSR, ENVIR0, GP</td>
<td>built by Dae Sun Shipbuilding &amp; Engineering for Empire King Navigation</td>
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<tr>
<td>ANANGELO ASTRONOMER, 89,891 gt / 179,718 dwt, TCM</td>
<td>AB-CM, CSR, GRAB(25), TCM,Vk, built by Daewoo Shipbuilding &amp; Marine Engineering for Maggiore Shipping</td>
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<tr>
<td>ANDANTE, 44,544 gt / 81,575 dwt</td>
<td>BC-A, TCM, GRAB(20), AB-CM, BWE, CSR, built by SPP Shipbuilding for Maribol Shipping</td>
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</tr>
<tr>
<td>AQUA HONOR, 91,971 gt / 175,428 dwt</td>
<td>BC-A, TCM, GRAB(25), AB-CM, CSR, ENVIR0, GP</td>
<td>built by Hyundai Mipo Dockyard for Zoshsun Jinhaiwan Shipyard for Marina Honor Shipping</td>
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</tr>
<tr>
<td>AQUA SPLENDOR, 91,971 gt / 175,589 dwt</td>
<td>BC-A, TCM, GRAB(25), AB-CM, CSR, ENVIR0, GP</td>
<td>built by Hyundai Mipo Dockyard for Zoshsun Jinhaiwan Shipyard for Marina Honor Shipping</td>
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<td></td>
</tr>
<tr>
<td>ARIETTA, 22,223 dwt</td>
<td>34,146 dwt</td>
<td>BC-A, AB-CM, CSR, ES, GRAB(30), TCM, BWE, built by Dae Sun Shipbuilding &amp; Engineering for Mentor Maritime</td>
<td></td>
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<tr>
<td>ARUN, 62,271 gt / 106,415 dwt</td>
<td>BC-A, AB-CM, CSR, GRAB(20), TCM, BWE, built by STX Dalian Shipbuilding for Essar Shipping</td>
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<tr>
<td>AS ELYSIA, 23,443 gt / 34,790 dwt</td>
<td>BC-A, TCM, GRAB(20), AB-CM, CSR, GP, built by SPP Shipbuilding for Thirtyfourth Aare Shipping</td>
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<tr>
<td>ASIATIC, 34,456 gt / 58,923 dwt</td>
<td>BC-A, TCM, GRAB(20), AB-CM, CSR, GRAB(25), built by SPP Shipbuilding for Whiterock Shipping</td>
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</tr>
<tr>
<td>BERGE TOWNSEND, 91,971 gt / 175,588 dwt</td>
<td>BC-A, AB-CM, CSR, GRAB(25), built by Zoshsun Jinhaiwan Shipyard for Berge Bulk</td>
<td></td>
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</tr>
</tbody>
</table>
INCE ANKARA, a 106,677 dwt bulk carrier, TCM, GRAB(20), AB-CM, CSR, built by STX Dalian Shipbuilding for Incetrans Deniz Tasimaciligi.

PAC SUHAIL, a 27,230 dwt bulk carrier, BC-A, TCM, SH, GRAB(20), SHCM, built by Taizhou Kouan Shipbuilding for Suhail Shipping.

POS TURMALIN, a 92,762 dwt bulk carrier, BC-A, TCM, GRAB(20), AB-CM, CSR, built by COSCO (Zhoushan) Shipyard for Conti 181 Schiffahrts Gmbh.
RARAKA, a 76,037 dwt bulk carrier, TCM, GRAB(20), AB-CM, CSR, ENVIRO, GP, built by Hudong-Zhonghua Shipbuilding for Amathus Owning Company.

STAR POLARIS, a 179,545 dwt bulk carrier, BC-A, AB-CM, CSR, GRAB(20), TCM, BWE, HIMP, ENVIRO, GP, built by Hanjin H I & Construction for Star Polaris.

WOOLLOOMOOLOO, a 76,064 dwt bulk carrier, BC-A, AB-CM, CSR, GRAB(20), TCM, ENVIRO, GP, built by Hudong-Zhonghua Shipbuilding for Pergamos Owning.
MAERSK LABERINTO, a 8,700 teu containership, TCM, SH, SH-DLA, BWE, ES, GP, SHCM, built by Daewoo Shipbuilding & Marine Engineering for Maersk Shipping.

TRANS HANGZHOU, 51,195 gt / 92,028 dwt, BC-A, TCM, GRAB(20), AB-CM, CSR, built by COSCO (Zhoushan) Shipyard for Chemikalien Seetransport

ULTRA ROCANVILLE, 33,900 gt / 61,683 dwt, BC-A, SHR, built by Oshima Shipbuilding for Youth Ship Holding

VENUS HORIZON, 50,647 gt / 95,755 dwt, TCM, GRAB(20), AB-CM, CSR, built by Imabari Shipbuilding for Maxenteka Shipping

WOOLLOOMOOLOO, 41,254 gt / 76,064 dwt, BC-A, AB-CM, GRAB(20), TCM, ENVIRO, GP, built by Hudong-Zhonghua Shipbuilding for Pergamos Owning

XIAO YU, 41,260 gt / 76,116 dwt, BC-A, AB-CM, CSR, built by Hudong-Zhonghua Shipbuilding for Shandong Zhengtong Shipping

YANGTZE XING HUA, 45,271 gt / 81,678 dwt, BC-A, TCM, GRAB(20), AB-CM, CSR, built by CSSC Guangzhou Longxue Shipbuilding for Fortune Ocean Shipping

ZINA, 23,322 gt / 33,861 dwt, BC-A, TCM, GRAB(30), AB-CM, CSR, built by 21st Century Shipbuilding for MB Zina Shipping

CONTAINERSHIPS

KAAN KALKAVAN, 1,849 teu, Ice Class IC, SH, SHCM, built by Sedef Gemi Insaati for Sedef Gemi Insaati

MAERSK CABINDA, 4,496 teu, NBL, TCM, SH, SHCM, built by Hyundai Samho HI for A P Moller

MAERSK CABO VERDE, 4,496 teu, NBL, TCM, SH, SHCM, built by Hyundai Samho HI for Maersk Shipping Hong Kong

MAERSK CAIRO, 4,496 teu, NBL, TCM, SH, SHCM, built by Hyundai Samho HI for Maersk Shipping

MAERSK CASABLANCA, 4,500 teu, NBL, TCM, SH, SHCM, built by Hyundai Samho HI for Maersk Shipping Hong Kong

MAERSK COLOMBO, 4,500 teu, NBL, TCM, SH, SHCM, built by Hyundai Samho HI for A P Moller

MAERSK CUANZA, 4,496 teu, NBL, TCM, SH, SHCM, built by Hyundai Samho HI for A P Moller

MAERSK CUBANGO, 4,500 teu, NBL, TCM, SH, SHCM, built by Hyundai Samho HI for Maersk Shipping

MAERSK LABERINTO, 8,700 teu, TCM, SH, SH-DLA, BWE, ES, GP, SHCM, built by Daewoo Shipbuilding & Marine Engineering for Maersk Shipping

MAERSK LEON, 8,700 teu, SH, SH-DLA, SHCM, ES, TCM, BWE, GP, built by Daewoo Shipbuilding & Marine Engineering for A.P. Moller Singapore

MAERSK LOTA, 8,700 teu, SH, SH-DLA, SHCM, ES, TCM, BWE, GP, built by Daewoo Shipbuilding & Marine Engineering for A.P. Moller Singapore

SAFMARINE CHACHAI, 4,500 teu, NBL, TCM, SH, SHCM, built by Hyundai Samho HI for Maersk Shipping

SAFMARINE CHAMBAL, 4,500 teu, NBL, TCM, SH, SHCM, built by Hyundai Samho HI for Maersk Shipping Hong Kong

SAFMARINE CHILKA, 4,500 teu, SH, SHCM, NBL, TCM, built by Hyundai HI for Maersk Shipping

YM MASCULINITY, 6,589 teu, NBL, TCM, ES2020, SHR, built by CSBC for All Oceans Transportation

SONANGOL ETOSHA, a 160,896 m³ liquefied gas carrier, NIBS, PORT, TCM, SH, SH-DLA, ENVIRO, GP, RES, SHCM, built by Daewoo Shipbuilding & Marine Engineering for Sonangol Etosha.

YM MASCHULITY, a 6,589 teu containership, NBL, TCM, ES2020, SHR, built by CSBC for All Oceans Transportation.

SONANGOL ETOSHA, 160,896 m³, NIBS, PORT, TCM, SH, SH-DLA, ENVIRO, GP, RES, SHCM, built by Daewoo Shipbuilding & Marine Engineering for Sonangol Etosha.
**OFFSHORE**

**Column Stabilized Drilling Units**
ENSCO 8505, 19,377 gt, ØDPS-2, built by Keppel Fels for Ensco
SONGA ECLIPSE, 30,923 gt, ØCDS, ØDPS-2, built by Jurong Shipyard for Sona Eclipse
WEST CAPRICORN, 30,147 gt, ØCDS, ØDPS-2, built by Jurong Shipyard for Seabras Rig Holdco

**Drillships**
ENSCO DS-6, 60,162 gt, SH-DLA, ØCDS, ØDPS-3, NBLES, WT-READY, built by Samsung H I for ENSCO
NOBLE GLOBETROTTER I, 35,676 gt, Ice Class IA, ØDPS-3, built by STX Dalian H I for Noble GT Holding
PACIFIC SANTA ANA, 60,538 gt, CDS, ØDPS-3, NBL, SH-DLA, GP, built by Samsung H I for Pacific Santa Ana

**Fixed Platforms**
ERWZB, built by Cuel for Chevron Thailand Exploration & Production
ERWZC, built by Cuel for Chevron Thailand Exploration & Production
KPWG, built by Cuel for Chevron Thailand Exploration & Production
MGWA, built by Cuel for Chevron Thailand Exploration & Production
MGWB, built by Cuel for Chevron Thailand Exploration & Production
PAWP, built by Cuel for Chevron Thailand Exploration & Production
PDWB, built by Cuel for Chevron Thailand Exploration & Production
PKWA, built by Cuel for Chevron Thailand Exploration & Production
PKWB, built by Cuel for Chevron Thailand Exploration & Production
PMWM, built by Cuel for Chevron Thailand Exploration & Production
PSWA, built by Cuel for Chevron Thailand Exploration & Production
SBWA, built by Cuel for Chevron Thailand Exploration & Production
SPWA, built by Cuel for Chevron Thailand Exploration & Production
TRWE, built by Cuel for Chevron Thailand Exploration & Production
WPWA, built by Cuel for Chevron Thailand Exploration & Production
YAWI, built by Cuel for Chevron Thailand Exploration & Production

**Self Elevating Units**
ESV GUARDIAN, 7,535 gt, ØDPS-1, built by Yantai Cimc Raffles Offshore for Yantai Cimc Raffles Offshore
HAFFAR-2, 6,982 gt, built by Maritime Industrial Services for Marine Investments Holdings
LEWEK LIFTER, 5,097 gt, built by Saigon Shipyard for Lewek Shipping
MWP MARK II, built by Oresund Steel Construction for Svensk Sjørentreprenad
SEAJACKS ZARATAN, 9,704 gt, HELIDK, ØDPS-2, Wind IMR, built by Lamprell Energy for Seajacks 3
SEP 450, 5,685 gt, built by National Petroleum Construction for National Petroleum Construction
TAM DAO 03, 7,279 gt, built by Petrovietnam Marine Shipyard for Joint Venture Vietsov Petro

**Single Point Moorings**
KUMUL SPM 2, built by Penglai Jutal Offshore Engineering H I for Penglai Jutal Offshore Engineering H I
SPM NO. 1, built by Gulf Piping for International Petroleum Investment
SPM NO. 2, built by Gulf Piping for International Petroleum Investment
SPM NO. 3, built by Gulf Piping for International Petroleum Investment

SONGA ECLIPSE, a 30,923 gt column stabilized drilling unit, ØCDS, ØDPS-2, built by Jurong Shipyard for Sona Eclipse.
SEAJACKS ZARATAN, a 9,704 gt self-elevating unit, HELIDK, ØDPS-2, Wind IMR, built by Lamprell Energy for Seajacks 3.
NOBLE GLOBETROTTER I, a 35,676 gt drillship, Ice Class IA, DPS-3, built by STX Dalian H I for Noble GT Holding.

PACIFIC SANTA ANA, a 60,538 gt drillship, CDS, DPS-3, NBL, SH-DLA, GP, built by Samsung H I for Pacific Santa Ana.

ANATOMA, a 1,422 dwt crude oil and product tanker, built by Pioneer Smith for Svitzer Australia.

<table>
<thead>
<tr>
<th>MISCELLANEOUS</th>
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<tbody>
<tr>
<td><strong>Barges</strong></td>
</tr>
<tr>
<td>121, 1,107 gt, built by Servicios Industrial de la Marina for Autoridad Del Canal de Panama</td>
</tr>
<tr>
<td>122, 1,107 gt, built by Servicios Industrial de la Marina for Autoridad Del Canal de Panama</td>
</tr>
<tr>
<td>750-2, 25,239 gt, SH, SHCM, VEC, built by VT Halter Marine for Vessel Management Services</td>
</tr>
<tr>
<td>A.M.S. 1803, 1,261 gt, built by Yizheng Xinyang Shipbuilding for Triton Marine Logistics</td>
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<tr>
<td>A.M.S. GLADSTONE, 1,435 gt, built by Yizheng Xinyang Shipbuilding for Triton Offshore</td>
</tr>
<tr>
<td>ALIM B-37, 1,525 gt, built by Nantong Tongcheng Ship Manufacturing for PT Alim Shipping</td>
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<tr>
<td>ALIM B-38, 2,200 gt, built by Yizheng Xinyang Shipbuilding for PT Alim Shipping</td>
</tr>
<tr>
<td>AMB THEODORUS 03, 3,186 gt, built by PT BH Marine &amp; Offshore Engineering for PT Andalan Mitra Bahari</td>
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<tr>
<td>AMS 250, 1,764 gt, built by Gunderson Marine for Anderson Marine Services</td>
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<tr>
<td>AZAMARA 2, 3,105 gt, built by Nanjing Ding Feng Shipbuilding for PT Bahtera Energi Samudra Tuah</td>
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<tr>
<td>AZAMARA 3, 3,105 gt, built by Nanjing Ding Feng Shipbuilding for PT Bahtera Energi Samudra Tuah</td>
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<tr>
<td>AZAMARA 5, 3,796 gt, built by Nanjing Asiapride Shipping Making for PT Bahtera Energi Samudra Tuah</td>
</tr>
<tr>
<td>AZAMARA 6, 3,796 gt, built by Nanjing Asiapride Shipping Making for PT Bahtera Energi Samudra Tuah</td>
</tr>
<tr>
<td>BINA MARINE 92, 3,254 gt, built by PT Marcopolo Shipyard for PT Sukses Karimun Jaya</td>
</tr>
<tr>
<td>BINA MARINE 96, 3,254 gt, built by PT Marcopolo Shipyard for PT Pelayaran Nasional Bina Buana Raya</td>
</tr>
<tr>
<td>BINAINDO BAHARI III, 2,133 gt, built by Nantong Tong Sheng Shipbuilding for Ciesco</td>
</tr>
<tr>
<td>BUKIT BERLIAN, 1,466 gt, built by PT Sumatera Maju Jaya Shipyard for PT Adhi Berlian Shipping</td>
</tr>
<tr>
<td>CAMAR LAUT 2702, 2,140 gt, built by Yizheng Xinyang Shipbuilding for PT Pelayaran Camar Laut</td>
</tr>
<tr>
<td>CIB 101, 3,034 gt, built by C &amp; C Marine &amp; Repair for Cibco Barge Line</td>
</tr>
<tr>
<td>CMS 261, 2,194 gt, built by Halimar Shipyard for Cenac Marine Services</td>
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<tr>
<td>COMET 8, 3,113 gt, built by Nanjing Suopu Shipbuilding for Sinosisi Sentosa</td>
</tr>
<tr>
<td>DIAMOND 2702, 2,140 gt, built by Jiang Du Yuan Hang Shipyard for PT Tanjung Harapan Selatan</td>
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<tr>
<td>DIAMOND 3001, 3,146 gt, built by Jiang Du Yuan Hang Shipyard for PT Tanjung Harapan Selatan</td>
</tr>
<tr>
<td>DIAMOND 3002, 3,071 gt, built by Yangzhou Topniche Shipbuilding for PT Tanjung Harapan Selatan</td>
</tr>
<tr>
<td>DIAMOND 3003, 3,071 gt, built by Yangzhou Topniche Shipbuilding for PT Tanjung Harapan Selatan</td>
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<tr>
<td>DLB 1454, 20,271 gt, built by Jingjiang Nanyang Shipbuilding for Poet Shipbuilding &amp; Engineering</td>
</tr>
<tr>
<td>EASTERN DRAGON T1, 2,007 gt, built by Taizhou Sanfu Ship Engineering for PT Pelayaran Nasional Indo Nusantara Beilung</td>
</tr>
<tr>
<td>EASTERN DRAGON T2, 2,007 gt, built by Taizhou Sanfu Ship Engineering for PT Pelayaran Nasional Indo Nusantara Beilung</td>
</tr>
<tr>
<td>EASTERN WB300, 15,820 gt, built by Yiu Lian Dockyards for Eastern Navigation</td>
</tr>
<tr>
<td>ELNUSA SAMUDRA 7, 2,074 gt, built by PT Dok &amp; Perkapalan Surabaya for PT Elnusa - Oilfield Services Division</td>
</tr>
<tr>
<td>ETI 3004, 3,147 gt, built by Nantong Tongbao Shipbuilding for Pac-Ocean Shipping &amp; Trading</td>
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</tbody>
</table>
FS DILIGENCE, a 115,586 dwt crude oil and product tanker, AB-CM, CSR, VEC, TCM, BWE, ENVIRO, GP, built by Samsung H I for Maestro Maritime.

SISUAQ, a 3,912 gt offshore support vessel, Fire Fighting Vessel Class 1, built by Eastern Shipbuilding for Harvey Gulf International Marine.
NUSANTARA 3003, 3,256 gt, built by PT Marcopolo Shipyard for PT Pelayaran Nasional Bina Buana Raya
OMC 251, 2,083 gt, built by Ocean Marine Contractors for Ocean Marine Contractors
PB 3020, 3,071 gt, built by Jiangsu Huatai Shipbuilding for PT WHS Maritime Investments
PB 3021, 3,071 gt, built by Jiangsu Huatai Shipbuilding for PT WHS Maritime Investments
PB 3025, 3,066 gt, built by Tongzhou Huaya Shipbuilding for Putra Bulian Shipping & Trading
PB 3028, 3,071 gt, built by Nanjing Sandingli Ship Industry for Putra Bulian Shipping & Trading
PERDANA ODYSSEY, 10,159 gt, built by Fuzhou Xiyang Shipbuilding for Perdana Neptune
PMS 203, 2,140 gt, built by Yangzhou Hanjiang Jiudian Eastern Shipyard for PT Panca Merak Samudera
PMS 205, 2,140 gt, built by Yangzhou Hanjiang Jiudian Eastern Shipyard for PT Panca Merak Samudera
PMS 206, 2,140 gt, built by Yangzhou Hanjiang Jiudian Eastern Shipyard for PT Panca Merak Samudera
POMP-001, 1,469 gt, built by Guangdong Yuexin Ocean Engineering for P&O Maritime Services
POMP-002, 1,444 gt, built by Guangdong Yuexin Ocean Engineering for P&O Maritime Services
POMP-003, 1,469 gt, built by Guangdong Yuexin Ocean Engineering for P&O Maritime Services
POMP-004, built by Guangdong Yuexin Ocean Engineering for P&O Maritime Services
POMP-005, 1,469 gt, built by Guangdong Yuexin Ocean Engineering for P&O Maritime Services
POMP-006, built by Guangdong Yuexin Ocean Engineering for P&O Maritime Services
POMP-007, 1,469 gt, built by Guangdong Yuexin Ocean Engineering for P&O Maritime Services
POMP-008, built by Guangdong Yuexin Ocean Engineering for P&O Maritime Services
POMP-009, 1,469 gt, built by Guangdong Yuexin Ocean Engineering for P&O Maritime Services
POMP-010, built by Guangdong Yuexin Ocean Engineering for P&O Maritime Services
POMP-011, 1,469 gt, built by Guangdong Yuexin Ocean Engineering for P&O Maritime Services
POMP-012, 1,444 gt, built by Guangdong Yuexin Ocean Engineering for P&O Maritime Services
PRIDE OF MARAMPA, 3,779 gt, built by K S Yanase Industries for Egon Oldendorff
PRINCESS MARY, 2,470 gt, built by PT United Sindo Perkasa for PT Gunung Mas Shipping
RIMAU 3310, 4,265 gt, built by Yangzhou Hairun Shipping for Sinosin Sentosa
RMG-1000, 4,735 gt, built by Corn Island Shipyard for Resolve Marine
RMN 379, 3,071 gt, built by Nanjing Sandingli Ship Industry for Putra Bulian Shipping & Trading
ROBBY 219, 2,140 gt, built by Nantong Tongde Shipbuilding & Repairing for PT Perusahaan Pelayaran Rusianto Bersaudara
ROBBY 221, built by Nantong Tongde Shipbuilding & Repairing for PT Perusahaan Pelayaran Rusianto Bersaudara
ROBBY 222, built by Jiangsu Huatai Shipbuilding for PT Rusianto Bersaudara
ROBBY 223, built by Jiangsu Huatai Shipbuilding for PT Rusianto Bersaudara
ROBBY 315, 3140 gt, built by Nanjing Suopu Shipbuilding for PT Perusahaan Pelayaran Rusianto Bersaudara

DESSERT MOON, a 57,467 dwt bulk carrier, BC-A, AB-CM, CSR, GRAB(25), built by Hyundai Mipo Dockyard for Seville Shipping & Investment.

MAERSK LOTA, a 8,700 teu containership, SH, SH-DLA, SHCM, ES, TCM, BWE, GP, built by Daewoo Shipbuilding & Marine Engineering for A.P. Moller Singapore.

MARLENE D’AMATO, a 93,207 dwt bulk carrier, BC-A, AB-CM, CSR, GRAB(20), TCM, PORT, built by Jiangsu New Yangzi Shipbuilding for Fertilia.
ROBBY 316, 3,140 gt, built by Nanjing Shunxin Ships for PT Perusahaan Pelayaran Rusianto Bersaudara
ROBBY 317, 3,140 gt, built by Nanjing Shunxin Ships for PT Perusahaan Pelayaran Rusianto Bersaudara
ROBBY 318, 3,140 gt, built by Nanjing Shunxin Ships for PT Perusahaan Pelayaran Rusianto Bersaudara
SAL DRACO, 3,191 gt, built by Jinsheng Ships Manufacturing for Sal Shipping
SAMUDRA BINTAN 230-1, 1,381 gt, built by Canuarta Starmarine for PT Pelayaran Angkutan Laut Samudra Bint An
SAMUDRA IX, 2,243 gt, built by PT Sumatera Maju Jaya Shipyard for PT Moro Citra Samudra
SBS PROSPERITY I, 5,316 gt, built by Nantong Tiannan Shipyard for Poet Shipbuilding & Engineering
SBS PROSPERITY II, 5,316 gt, built by Nantong Tongde Shipbuilding & Repairing for Poet Shipbuilding & Engineering
SINAR ANUGRAH 2503, 2,212 gt, built by Jinsheng Ships Manufacturing for PT Pelangi Sindu Mulia
SOEKAWATI 2706, 2,140 gt, built by Yizheng Xinyang Shipbuilding for PT Pelayaran Samar Laut
SOEKAWATI 2707, 2,140 gt, built by Yizheng Xinyang Shipbuilding for PT Pelayaran Samar Laut
SOEKAWATI 2708, built by Yangzhou Hairun Shipping for PT Pelayaran Borneo Karya Swadiri
SOEKAWATI 2709, 2,140 gt, built by Taizhou Xing Gang Shipbuilding for PT Pelayaran Borneo Karya Swadiri
SOEKAWATI 308, 3,113 gt, built by Nanjing Suopu Shipbuilding for PT Pelayaran Borneo Karya Swadiri
SR-B-07, 3,142 gt, built by Taizhou Sanfu Ship Engineering for SB Marine
SSA 308, 3,256 gt, built by PT Marcopolo Shipyard for PT Samudera Sentosa Abadi
SSA 318, 3,256 gt, built by PT Marcopolo Shipyard for PT Samudera Sentosa Abadi
STELLA MARIS 203, 2,243 gt, built by PT Sumatera Maju Jaya Shipyard for PT Yala Kharisma Shipping
SUMANGGALA, 2,140 gt, built by Yangzhou Hanjian Jiudian Eastern Shipyard for PT Pelayaran Jadi Berlian Samudra
SUPPORT 15, 2,133 gt, built by Nantong Jinjian Shipbuilding & Repairing for Tanoto Shipyard
SUPPORT 16, 2,133 gt, built by Nantong Jinjian Shipbuilding & Repairing for PT Whs Maritime Investments
SUPPORT 17, 2,133 gt, built by Nantong Tongbao Shipbuilding for PT Whs Global Mandiri
SUPPORT 18, 2,133 gt, built by Nantong Tongbao Shipbuilding for PT Whs Global Mandiri
TABGHA 1, 2,140 gt, built by Nanjing Shunxin Ships for PT Sentosa Laju Maritime
TAT HONG 821, 2,200 gt, built by Pacific Marine & Shipbuilding for Tat Hong Offshore & Marine Services
TCP 30-01, 3,066 gt, built by Yangzhou Topniche Shipbuilding for Sinosin Sentosa
TCP 30-02, 3,066 gt, built by Yangzhou Topniche Shipbuilding for Sinosin Sentosa
TCT 8000, 3,008 gt, built by Jiangsu Yangzijiang Shipbuilding for Malaspina Marine
TGH 3651, 5,875 gt, built by Nanjing Yonghua Shipbuilding for Putra Bulian Shipping & Trading
TMS 1, 2,133 gt, built by Yangzhou Hairun Shipping for Sinosin Sentosa
TRIBAMA 01, 1,436 gt, built by PT Marindo Jaya Samudera for PT Trisakti Bahari Mandiri
TRIMEGAH 5, 2,212 gt, built by Jinsheng Ships Manufacturing for PT Trimegh Bangun Persada

MAERSK LEON, a 8,700 teu containership, SH, SH-DLA, SHCM, ES, TCM, BWE, GP, built by Daewoo Shipbuilding & Marine Engineering for A.P. Moller Singapore.

NISSOS SANTORINI, a 115,724 dwt crude oil and product tanker, VEC, TCM, AB-CM, BWE, CSR, GP, built by Samsung H I for Danais Maritime.

USNS HOWARD O. LORENZEN, a 17,420 gt military missile tracker, Ice Class CO, NIBS, R1, SH-DLA, built by VT Halter Marine for US Navy.
TRUST LINE 717, 2,140 gt, built by Nanjing Suopu Shipbuilding for PT Trust Line Marine
TUAH KENANGAN 01, 2,009 gt, built by PT Jasamarin Engineering for PT Niaga Jaya Samudera
WAHANA 37, 1,903 gt, built by PT Citra Shipyard for PT Wahana Wira Line
WEEKS 2600, 2,164 gt, built by C & C Marine & Repair for Weeks Marine
WESTSEA 71, 4,487 gt, built by Yangzhou Hairun Shipping for C & D Prosper Shipping
WESTSEA 98, 5,844 gt, built by Yangzhou Hairun Shipping for C & D Prosper Shipping
WINBUILD 1520, 5,270 gt, built by Nantong Tiannan Shipyard for Poet Shipbuilding & Engineering
WINBUILD 1526, 3,147 gt, built by Poet Shipbuilding & Engineering for Poet Shipbuilding & Engineering
WINBUILD 73, 1,601 gt, built by Nantong Tongde Shipbuilding & Repairing for Poet Shipbuilding & Engineering
WINBUILD 74, 1,601 gt, built by Nantong Tongde Shipbuilding & Repairing for Poet Shipbuilding & Engineering
ZHPL 3, 40,612 gt, built by Shanghai Zhenhua H I for Shanghai Zhenhua Port Machinery

Government Vessels
BUBIYAN, HSC patrol vessel, OE, built by Trinity Yachts for Naval Sea Systems Command
GENERAL IRWIN, towing vessel, 78 gt, built by Horizon Shipbuilding for US Army Corps of Engineers - Mobile District
ICGS RAJ TARANG, HSC patrol vessel, 356 gt, built by Garden Reach Shipbuilding & Engineering for Indian Coast Guard
ICGS RAJSHREE, HSC patrol vessel, 356 gt, built by Garden Reach Shipbuilding & Engineering for Indian Coast Guard
KATIE T. MORAN, towing vessel, 284 gt, built by Washburn & Doughty for Moran Towing
USNS HOWARD O. LORENZEN, military missile tracker, 17,420 gt, Ice Class C0, NIBS, R1, SH-DLA, built by VT Halter Marine for US Navy
USNS MEDGAR EVERS, cargo & fuel oil carrier, 43,758 gt, Ice Class C0, 6RC (Hold 3), NIBS, R1, VEC, SH-DLA, built by General Dynamics NASSCO for Military Sealift Command
USNS WILLIAM MCLEAN, cargo and fuel oil carrier, 43,758 gt, Ice Class C0, 6RC (Hold 3), NIBS, R1, SH-DLA, built by General Dynamics NASSCO for Military Sealift Command
YP 706, training vessel, 305 gt, built by C & G Boat Works for Naval Sea Systems Command (Sea 05D)
YT-807 / MENOMINEE, towing vessel, 462 gt, built by J M Martinac Shipbuilding for Commander Navy Region NW

Tugs, Workboats and OSVs
ALMOJIL 60, 1,093 gt, built by Hin Lee (Zhuhai) Shipyard for Mohammad Al Moji Group
ALYSSA CHQUEST, 4,022 gt, Fire Fighting Vessel Class 1, Oil Recovery Vessel Class 1, 6OPS-2, built by North American Shipbuilding for Nautical Solutions
ARMADA TUAH 301, 2,900 gt, Fire Fighting Vessel Class 1, 6OPS-2, built by Fujian Southeast Shipyard for Bumi Armada Navigation
ARMADA TUAH 302, 2,903 gt, Fire Fighting Vessel Class 1, 6OPS-2, built by Fujian Southeast Shipyard for Nam Cheong International
BELUGA 2, 2,437 gt, Fire Fighting Vessel Class 1, 6OPS-2, built by Zhongshan Jinhui Ship Repair & Building Factory for Beluga 2
BOURBON LIBERTY 253, 1,733 gt, Fire Fighting Vessel Class 1, 6OPS-2, built by Zhejiang Shipbuilding for Bourbon
BOURBON LIBERTY 254, 1,733 gt, Fire Fighting Vessel Class 1, 6OPS-2, built by Zhejiang Shipbuilding for Bourbon Supply Investissements

JAYA CRYSTAL, a 2,763 gt offshore support vessel, Fire Fighting Vessel Class 1, 6OPS-2, built by PT Jaya Asiatic Shipyard for JSE Shipping Offshore.
ARMADA TUAH 301, a 2,900 gt offshore support vessel, Fire Fighting Vessel Class 1, DOPS-2, built by Fujian Southeast Shipyard for Bumi Armada Navigation.

A LYSSA CHOUEST, a 4,022 gt offshore support vessel, Fire Fighting Vessel Class 1, Oil Recovery Vessel Class 1, DOPS-2, built by North American Shipbuilding for Nautical Solutions.

BRITOIL 72, a 1,094 gt offshore support vessel, built by PT Britoil Offshore for Britoil Offshore Services.

BRITOIL 72, 3,606 gt, Fire Fighting Vessel Class 1, DOPS-2, built by Estaleiro Navship for Bram Offshore Transportes Maritimos

BRITIOL 72, 1,094 gt, built by PT Britoil Offshore for Britoil Offshore Services

CPC ANGELICA, 5,477 gt, DOPS-1, built by Poet Shipbuilding & Engineering for CPC Crest

CPC ZAPATA, 5,477 gt, DOPS-1, built by Poet Shipbuilding & Engineering for CPC Crest

CREST AMETHYST, 1,759 gt, Fire Fighting Vessel Class 1, DOPS-1, built by Nam Cheong Dockyard for Pacific Crest

DAYANG TOPAZ, 5,089 gt, built by Shin Yang Shipyard for DESB Marine Services

DOGANCAY XXIII, built by Gemsan Gemi Ve Gemi Islt.San.Ve Tic. LTD. STI. for Sanmar Denizcilik Makina Ve Ticaret

ESVAGT SERVER, 2,576 gt, Fire Fighting Vessel Class 1, DOPS-2, built by PT Nan Indah Mutiara Shipyard for Esagt

FOSTER TIDE, 2,605 gt, Fire Fighting Vessel Class 1, DOPS-2, built by Guangdong Yuxin Ocean Engineering for Indigo Fleet

GEO SERVICE I, 1,736 gt, DOPS-1, built by Rizhao Kingda Shipbuilding H I for Longzhu Oilfield Services

GO SIRIUS, 3,260 gt, Fire Fighting Vessel Class 1, DOPS-2, built by Universal Shipbuilding for Go Sirius

GREATSHIP VIMLA, 3,556 gt, Fire Fighting Vessel Class 1, DOPS-2, built by Drydocks World for Greatship Global Offshore Management Services

HALUL 61, 1,953 gt, Fire Fighting Vessel Class 1, Oil Recovery Vessel Class 2, DOPS-2, built by Boustead Penang Shipyard for Halul Offshore Services

HAMED GLORY, 1,678 gt, Fire Fighting Vessel Class 1, DOPS-1, built by Fujian Southeast Shipyard for Gulf Glory Marine Services

HANIND TIDE, 3,601 gt, Fire Fighting Vessel Class 1, DOPS-2, built by Fujian Mawei Shipbuilding for Vermillion Fleet

HARVEY SUPPORTER, 3,912 gt, Fire Fighting Vessel Class 1, DOPS-2, built by Eastern Shipbuilding for Harvey Gulf International Marine

JASON DUA, 1,020 gt, Fire Fighting Vessel Class 1, built by Sealink Shipyard for Sealink

JAYA CRYSTAL, 2,763 gt, Fire Fighting Vessel Class 1, DOPS-2, built by PT Jaya Asiatic Shipyard for JSE Shipping Offshore

JAYA PEARL, 4,393 gt, DOPS-2, built by PT Jaya Asiatic Shipyard for JSE Offshore Shipping

LEAH G CALLAIS, 1,158 gt, DOPS-2, built by Master Boat Builders for Abdon Callais Offshore

LEWKE ANDRES, 4,087 gt, Fire Fighting Vessel Class 1, Oil Recovery Capability Class 2, DOPS-2, TCM, ENVIRO, GP, built by Remontowa Shipbuilding for Lewek Shipping

LEWKE AQUARIUS, 4,142 gt, Fire Fighting Vessel Class 1, Safety Standby Service GR B (300), Oil Recovery Capability Class 2, DOPS-2, TCM, ENVIRO, GP, built by Remontowa Shipbuilding for Lewek Shipping

LIBERTY, 2,164 gt, R2, built by Dakota Creek Industries for Vessel Management Services

MARIDIVE 601, 3,404 gt, Fire Fighting Vessel Class 1, Oil Recovery Capability Class 1, DOPS-2, built by Jingjiang Nanyang Shipbuilding for Poet Shipbuilding & Engineering

MARIDIVE 602, 3,404 gt, Fire Fighting Vessel Class 1, Oil Recovery Capability Class 1, DOPS-2, built by Poet Shipbuilding & Engineering for Poet Shipbuilding & Engineering

MERMAID STRAIT, 1,344 gt, Fire Fighting Vessel Capability, DOPS-1, ENVIRO, GP, built by ASL Shipyard for Mermaid Marine

MONTGOMERY TIDE, 1,678 gt, Fire Fighting Vessel Class 1, DOPS-1, built by Fujian Southeast Shipyard for Purple Fleet
ESVAGT SERVER, a 2,576 gt offshore support vessel, Fire Fighting Vessel Class 1, DPS-2, built by PT Nan Indah Mutiara Shipyard for Esvagt.

MP VELOCE, 1,260 gt, Fire Fighting Vessel Class 1, DPS-1, built by PT Marcopolo Shipyard for PT Pelayaran Nasional Bina Buana Raya

OMNI STELLA, 1,958 gt, Fire Fighting Vessel Class 1, DPS-1, built by Sapor Shipbuilding Industries for Omni Stella

P&O MBURUCUYA, 1,052 gt, built by Guangdong Yuexin Ocean Engineering for P&O Maritime Services

PELANGI ESCORT-2, 1,884 gt, Fire Fighting Vessel Class 1, built by PT Anggrek Hitam for PT Pelangi Niaga Mitra International

REDFISH 4, 2,446 gt, Fire Fighting Vessel Class 1, DPS-2, built by Guangdong Yuexin Ocean Engineering for Siva Global Redfish 4

ROZO TIDE, 2,899 gt, Fire Fighting Vessel Class 1, DPS-2, built by Fujian Southeast Shipyard for Indigo Fleet

S.C.I. KUNDAN, 2,048 gt, Fire Fighting Vessel Class 1, DPS-1, built by Cochin Shipyard for Shipping Corporation of India

SANKO ELEGANCE, 3,260 gt, Fire Fighting Vessel Class 1, DPS-2, built by Universal Shipbuilding for Elegance Offshore

SEACOR VIKING, 3,601 gt, Fire Fighting Vessel Class 1, DPS-2, built by Fujian Mawei Shipbuilding for Maintenimiento Express Maritimo

SISUAQ, 3,912 gt, Fire Fighting Vessel Class 1, DPS-2, NBLES, ENVIRO+, GP, built by Eastern Shipbuilding for Harvey Gulf International Marine

SK LINE 548, 2,178 gt, Fire Fighting Vessel Class 1, DPS-2, built by Nam Cheong Dockyard for Nam Cheong Dockyard

STANFORD HOBBY, 3,601 gt, Fire Fighting Vessel Class 1, DPS-2, built by Fujian Mawei Shipbuilding for Stanford Hobby

TERAS GENESIS, 1,330 gt, Fire Fighting Vessel Class 1, built by Cheoy Lee Shipyards for Teras Genesis

VOS SHINE, 1,741 gt, DPS-2, built by Fujian Southeast Shipyard for DSV IV Express

VOS THALIA, 1,678 gt, Fire Fighting Vessel Class 1, DPS-1, built by Fujian Southeast Shipyard for Offshore Support Vessels 10

WINPOSH RAMPART, 2,588 gt, Fire Fighting Vessel Class 1, DPS-2, ES2020, built by Paxocean Engineering Zhuhai for PT Win Offshore

ZAKHER PROVIDER, 1,976 gt, Fire Fighting Vessel Class 1, DPS-1, built by Berjaya Dockyard for Zakher Marine International

ZAMIL 64, 2,276 gt, Fire Fighting Vessel Class 1, DPS-2, built by Zamil Offshore Services for Zamil Offshore Services

Yachts

ANGEL WINGS, 333 gt, built by Westport Shipyard for Angel Wings

CANGARDA, built by Pusey & Jones for Zephyrus IV Partners

E&E, 487 gt, built by Cizgi Yat Imalat Turz. San. for Superyacht Management

FF1, 299 gt, built by Azimut-Benetti for Sarda Leasing

GO SIRIUS, a 3,260 gt offshore support vessel, Fire Fighting Vessel Class 1, DPS-2, built by Universal Shipbuilding for Go Sirius.

Yachts

ANGLER WINGS, 333 gt, built by Westport Shipyard for Angel Wings

CANGARDA, built by Pusey & Jones for Zephyrus IV Partners

E&E, 487 gt, built by Cizgi Yat Imalat Turz. San. for Superyacht Management

FF1, 299 gt, built by Azimut-Benetti for Sarda Leasing
HARBOUR ISLAND, 1,100 gt, built by Newcastle Shipyards for PYC 5500

LADY L, 463 gt, built by Heesen Yacht Builders for Douglaston

LADY LINDA, 782 gt, built by Trinity Yachts for Lady Linda Marine

MISUNDERSTOOD, 488 gt, built by Overmarine Due for LMS 165 Cayman

MONARCH, 499 gt, built by Northern Marine for Caterpillar Financial Services

SPIRIT OF BERMUDA, 92 gt, built by Rockport Marine for Bermuda Sloop Foundation

WHY WORRY, 419 gt, built by Cantieri Navali Baglietto for Unicredit Leasing

WINNING DRIVE, 333 gt, built by Westport Shipyard for Winning Way

Others

CSI-ADS2, air diving system, built by Lexmar Engineering for Crest Subsea International

CSI-SDS2, saturation diving system, built by Lexmar Engineering for Crest Subsea International

FAST CARRIER, HSC crew boat, 449 gt, #DPS-2, built by Breaux Bros Enterprises for Nautical Solutions

HAI YANG SHI YOU 201, pipe laying and crane vessel, 53,350 gt, #DPS-3, built by Jiangsu Rongsheng H I for Offshore Oil Engineering

KEPPEL FLOATING DOCK NO. 3, floating dry dock, built by Keppel Nantong Shipyard for Keppel Shipyard

LINEA SUBMARINA DE RETORNO DE 24, subsea pipeline, built by Ecopetrol for Ecopetrol

MS. NETTY, HSC crew boat, 684 gt, #DPS-2, built by Gulf Craft for Gulf Offshore Logistics

NEPTUNE, saturation diving system, built by Arc Controls for Oceaneering

PELICAN GALLANT, HSC crew boat, 236 gt, built by PT Kimseah Shipyard for Pos Gallant

PELICAN GOLD, HSC crew boat, 236 gt, built by PT Kimseah Shipyard for Penguin Shipyard International

PELICAN GRACE, HSC crew boat, 257 gt, built by Penguin Shipyard for Pelican Offshore Services

PELICAN GREAT, HSC crew boat, 236 gt, built by PT Kimseah Shipyard for Pelican Offshore Services

QUEEN OF CALABAR, HSC crew boat, 236 gt, built by Penguin Shipyard for Nkrah Investment

RANGIROA, manned submersible, built by Seamagine Hydrospace for Oakleigh Commercial

SEVEN INAGHA, liftboat, 3,783 gt, built by Semco for Subsea7 Offshore Resources

SIEM CARAJAS, HSC crew and cargo boat, 492 gt, built by Inace Industria Naval Do Ceara for DSND Consud

SMIT SAT 4, saturation diving system, built by Unique Hydra for Smit Subsea Africa

SOLUTION, HSC patrol vessel, 316 gt, built by Westport Shipyard for Westport Shipyard

MS. NETTY, a 684 gt HSC crew boat, #DPS-2, built by Gulf Craft for Gulf Offshore Logistics.
Recent Class Contracts

**TANKERS**
Three 161,300 gt / 318,451 dwt at Hyundai HI
Three 31,000 gt / 51,480 dwt at Hyundai Mipo Dockyard
Three 30,000 gt / 52,000 dwt for Oinousses Shipping at SPP Shipbuilding
Two 31,000 gt / 49,600 dwt at STX Offshore & Shipbuilding
Two 31,000 gt / 49,600 dwt for Pleiades Shipping at STX Offshore & Shipbuilding
Two 30,000 gt / 51,800 dwt for Forth Shipco at SPP Shipbuilding
Two 3,000 gt / 4,200 dwt at Shanghai Waigaoqiao Shipbuilding & Offshore
One 166,000 gt / 320,000 dwt for Neda Maritime Agency at Daewoo Shipbuilding & Marine Engineering

**BULK CARRIERS**
Six 41,254 gt / 76,000 dwt for Iolcos Hellenic Maritime Enterprises at Hudong-Zhonghua Shipbuilding
Four 47,000 gt / 87,000 dwt for Foremost Maritime at Hudong-Zhonghua Shipbuilding
Three 22,800 gt / 37,000 dwt at Onomichi Dockyard
Two 105,000 gt / 206,000 dwt at Shanghai Waigaoqiao Shipbuilding & Offshore
Two 23,900 gt / 34,800 dwt at Hyundai Mipo Dockyard
One 93,000 gt / 180,600 dwt at Imabari Shipbuilding
One 40,600 gt / 74,000 dwt at Sasebo HI
One 35,000 gt / 61,000 dwt at Iwagi Zosen
One 23,300 gt / 37,300 dwt at Imabari Shipbuilding
One 22,600 gt / 31,400 dwt at Hyundai-Vinashin Shipyard

**CONTAINERSHIPS**
Ten 18,000 teu for A. P. Moller Maersk at Daewoo Shipbuilding & Marine
Ten 8,400 teu for Neptune Orient Lines at Daewoo Shipbuilding & Marine
Two 9,200 teu at Daewoo Shipbuilding & Marine Engineering
One 7,450 teu for A. P. Moller Maersk at Daewoo Shipbuilding & Marine

**GAS CARRIERS**
Two 164,000 cbm for Maran Gas Maritime at Hyundai Samho HI
One 162,000 cbm at Hyundai HI

**OFFSHORE**
Drillships
One 59,000 gt / 96,000 dwt at Samsung HI
One 59,000 gt / 60,000 dwt for Seatankers Management at Samsung HI

Single Point Moorings
One at Gulf Piping

**MISCELLANEOUS**
Barges
Four 7,900 gt at C & C Marine and Repair
Four 7,000 gt at Jiangsu Hongqiang MMarine HI
Two 11,270 gt for Kirby at Signal International
Two 7,000 gt for PT Kapuas Jaya Samudera at Nantong Tong Sheng Shipbuilding
Two 5,248 gt at Nantong Tongmao Shipbuilding
Two 3,008 gt for Malaspinia Marine at Jiangsu New Yangzi Shipbuilding
Two 3,000 gt for Fujian Zhongshe Machinery & Equipment at Nantong Tongde Shipbuilding & Repair
Two 3,000 gt for Putra Bulian Shipping & Trading at Nantong Tongbao Shipbuilding
Two 2,133 gt at Nantong Ruide Steel Structure
Two 2,000 gt for Ciesco at Nantong Tongbao Shipbuilding
Two 1,800 gt at Nantong Gangzhy Shipping Manufacturing
One 13,270 gt for Seadrill Tender Rig at COSCO Nantong Shipyard
One 10,500 gt for PT Eka Nusantara Line at K S Yanase Industries
One 5,142 gt at C & C Marine and Repair
One 3,147 gt for Poet Shipbuilding & Engineering at Nantong Tongmao Shipbuilding
One 3,141 gt for China Communications Imports & Export at Nantong Jinjian Shipbuilding & Repairing
One 3,000 gt for China Communications Imports & Export at Nantong Tongcheng Ship Manufacturing
One 2,600 gt at Conrad Industries
One 2,155 gt for Donjon Marine at Donjon Shipbuilding and Repairing
One 2,139 gt for Central Boat Rentals at Halimar Shipyard
One 1,887 gt for Marinex Construction at Corn Island Shipyard
One 1,700 gt for Charleston Heavy Lift at Metal Trades
One 1,470 gt for Weeks Marine at C & C Marine and Repair
One 1,028 gt at C & C Marine and Repair
One 1,000 gt for Lockwood Maritime at Conrad Orange Shipyard

**Government Vessels**
Eight special purpose vessels, 1,001 gt, for Indian Navy at Garden Reach Shipbuilding & Engineering
Six high speed craft, 3,110 gt, for Indian Coast Guard at Goa Shipyard

**Heavy Lift Ships**
Two 3,000 gt / 7,000 dwt for Sapura Holdings at COSCO Nantong Shipyard

**Tugs, Workboats and OSVs**
Eight 3,283 gt for Hornbeck Offshore Operators at Eastern Shipbuilding Group
Six 1,922 gt for Varada Marine at ABG Shipyard
Six 1,500 gt for Seacor Marine at Master Boat Builders
Five 3,237 gt for Boldini at Eastern Shipbuilding Group
Two 3,700 gt at Remontowa Shipbuilding
Two 3,470 gt at Universal Shipbuilding Keihin Shipyard
Two 3,061 gt at Honghua Offshore Oil & Gas Equipment
One 2,994 gt for Gulf Offshore Logistics at Thoma-Sea Marine Construction
One 2,968 gt for Tidewater Marine at Quality Shipyards
One 2,540 gt for Galliano Marine Service at North American Shipbuilding
One 2,253 gt at Thoma-Sea Marine Construction
One 1,780 gt at Jingjiang Nanyang Shipbuilding
One 1,600 gt for Poet Shipbuilding & Engineering at Jingjiang Nanyang Shipbuilding

**Yachts**
Two 500 gt at San Lorenzo
One 900 gt at Pisa Super Yachts
One 500 gt for Heesen Yacht Builders at Heesen Yacht Builders
One 500 gt at Perini Navi
One 500 gt at Tyg Spa

**Others**
Three high speed craft, 99 gt, for Seacor Marine at Gulf Craft
Two high speed craft, 99 gt, for Nautical Solutions at Breaux Bay Craft
Two high speed craft, 99 gt, for Seacor Marine at C & G Boat Works
One high speed craft, 98 gt, for St. Bernard Boat Rental at Breaux Bay Craft
One underwater system at Pressafe

MARIDIVE 602, a 3,404 gt offshore support vessel, Fire Fighting Vessel Class 1, Oil Recovery Capability Class 1, DOPS-2, built by Poet Shipbuilding & Engineering for Poet Shipbuilding & Engineering.

S.C.I. KUNDAN, a 2,048 gt offshore support vessel, Fire Fighting Vessel Class 1, DOPS-1, built by Cochin Shipyard for Shipping Corporation of India.

VOS SHINE, a 1,741 gt offshore support vessel, DOPS-2, built by Fujian Southeast Shipyard for DSV IV Express.
We Welcome Your Thoughts

Activities is intended to provide our members and clients with ABS views, news and research. Editorial content is gathered from ABS engineering and field offices around the globe.

To comment, please contact Jean Gould, Vice President, External Affairs, at tel: 1-281-877-5850 or email CorporateCommunications@eagle.org.

The mission of ABS is to serve the public interest as well as the needs of our clients by promoting the security of life and property and preserving the natural environment.

ON THE COVER

The IONIC HUNTRESS, a 34,062 dwt bulk carrier, was built by Dae Sun Shipbuilding & Engineering Co., Ltd in South Korea for Ionic Huntress. In addition to several optional notations, the IONIC HUNTRESS carries the following ABS class notations: BC-A, CSR, AB-CM, TCM, GRAB(30), BWE, ENVIRO and GP. Photo © Walter Pless, MarineTraffic.com