MARITIME REPORTER AND ENGINEERING NEWS

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June 2006

2006 Annual World Yearbook

Contents

MARITIME REPORTER AND ENGINEERING NEWS

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People who know Crowley know it takes more than a little ice to break our spirit.

In the summer of 1975, Crowley Maritime Corporation was about to embark on the biggest sealift in history. It was also the year when Alaska would experience the worst arctic ice conditions of the century. 47 Crowley barges were being cautiously towed from Anchorage up to the North Slope for the Trans-Alaskan Pipeline project. Arctic ice usually retreats for six weeks every summer, but this year it never happened. The determined fleet was forced to a standstill. Finally, after two months of waiting, the ice flows momentarily retreated. The Crowley crews immediately forged ahead. When the ice began to close in once again, it took four tugs to force each barge through.

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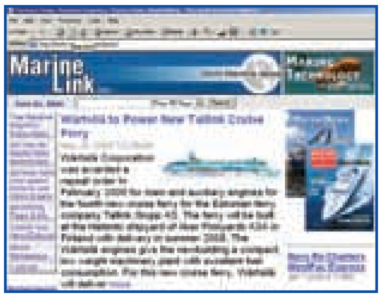

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Top Tankers 1Q Profit Rises

Greek oil shipping company Top Tankers Inc. said first-quarter earnings rose sharply as the company increased the size of its fleet under operation. Net income rose 59 percent to $30.4m, or $1.06 per share, from $19.1m, or 69 cents per share, in the year-ago period. The latest quarter included charges of $3.2m, or 12 cents per share related to stock options and financing. Revenue more than doubled to $101.7m from $47.3m last year. At the end of March, the company operated 27 vessels, or 2.6 million dry-weight tons, up sharply from 18 vessels (1.3 million dwt) last year.

Nakilat orders 10 LNG carriers

Qatar Gas Transport Company says it has ordered 10 LNG carriers from Korean shipbuilders Daewoo, Hyundai and Samsung. Nakilat now has 16 LNG carriers on order at a cost of around $5bn. They will be chartered to Qatar Liquefied Gas Company from January 2009.

Sevmash Starts Building Megayacht

The construction of the second oceanic mega-yacht of the A1331 class started at the Sevmash shipyard in Severodvinsk, a shipyard spokesman told Itar-Tass. The construction of the first yacht began last year to order of the Baltika Shipbuilding Company. Sevmash has technologically prepared for batch production of large cruise vessels.

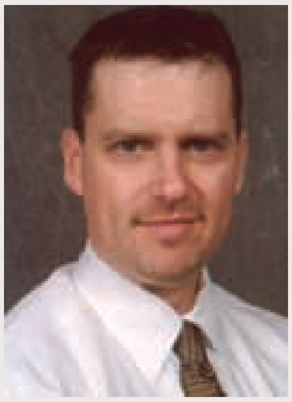
Bill Would Block LNG Tankers

The House of Representatives on May 10 joined a growing list of official bodies erecting hurdles in front of a proposed liquefied natural gas terminal in Fall River, Mass. The House unanimously approved legislation that would, in effect, block LNG tankers from sailing through Rhode Island waters to get to the terminal. Sponsored by Rep. Raymond E. Gallison Jr., D-Bristol, the bill would prevent any tanker from coming within 1,000 yards of any residences, piers, docks, wharves or waterfront facilities

Funding OKd for China LNG Project

Newbridge Capital LLC, one of Asia's largest private equity funds, has signed an agreement to invest up to $200m in Xinjiang Guanghui's Liquefied Natural Gas project in China's northwestern Xinjiang region, an official with the Xinjiang Guanghui Group told XFN-Asia. Under the agreement, Newbridge Capital will initially invest $33.8m for a 24.99 pct stake in Xinjiang Guanghui LNG project and has the option to increase its share in the project to as much as 67 pct with an additional investment of $169m.

Editor's Note



Talk to 10 different people and its likely you'll get 10 different opinions as to the "mood" and direction of the maritime and offshore oil and gas business in the coming few years. As oil prices — and for that matter, prices for just about everything — hold at historic highs, there is a feeling that the mythical bubble is going to burst, sending the economy into a withdrawal. In historical context, this is true, as markets in general seem to eschew the ability to avoid roller coaster-esque peaks and troughs.

Last month I was in Copenhagen with diesel engine maker MAN B&W. The company was holding a social and technical program for its licensees from around the globe, and invited us to participate in a separate program of discussions regarding new technological developments (which will be published in the July 2006 edition in concert with our "Diesel Engine Buyer's Guide"). Walking away with several thick manuals of information, there is one non-technical statistic given that, to me, stands out above the rest. In 2001, the company announced an "unprecedented order intake for our MC brand engines," quantified by a historically high orderbook. The company, at the time, projected a modest but stable market. Fast forward five years, and the reality is very different. In the last five years more MC engine power has been sold than in any previous period, and the backlog today is double that of the 2001 record backlog.

In collecting material and data for this, our annual yearbook edition, I've kept this data in mind tried to avoid bold predictions to any particular niche's rise or demise. While data and analysis suggests a cooling shipbuilding market and a growing offshore business, keep in mind that in every market there are opportunities: the trick is picking the good from the bad.

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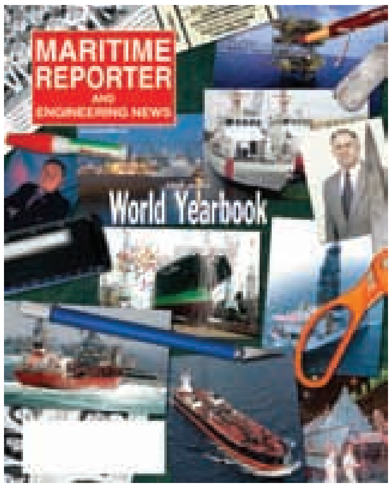
On the Cover



On the Cover: Pictured on this month's cover is production manager John Guzman's ode to the yearbook theme. Most importantly, please note the High School Yearbook phots of two MR staffers in the bottom lefthand corner, just left of the mailing label: Lucia Annunziata and Tina Veselov!

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The Index

Korean Shipbuilding Profits Surge

Korean shipbuilders are enjoying good financial times, with a combination of historically high ship prices and steel price reductions, according to a report in the Korean Herald.

Hyundai Heavy Industries reported its fourth-consecutive quarterly profit. Net income totaled 22.9 billion won, or $24.4 million, in the three months ending March 31, compared with a loss of 88.95 billion won in the same period a year earlier, Hyundai Heavy said in a regulatory filing to the nation's financial watchdog, according to the report.

Global ship prices for very large crude oil carriers rose 39 percent to $110 million per vessel at the end of 2004 from $79 million at the beginning of 2004, Hyundai Heavy said in a statement. Prices for container ships which can carry 6,200 TEU rose 24.6 percent to $91 million per ship at the end of 2004 from the beginning of 2004.

Samsung Heavy Industries reported that first-quarter net profit jumped 440 percent compared to a year ago, rising to 15.3 billion won on increased orders for high value-added ships.

Daewoo Shipbuilding & Marine Engineering Co. fell short of Hyundai and Samsung in the first quarter with an earnings loss of 141.5 billion won, but its prospects are also bright with increasing orders for costly LNG carriers and offshore engineering facilities.

Korean shipyards ranked No. 1 through No. 7 in order backlogs as of the end of April, a London-based market researcher said last week. Hyundai Heavy kept its spot as the world's No.1 shipbuilder in order backlogs of 11.44 million compensated gross tons, Clarkson Plc. said. Samsung Heavy overtook its rival Daewoo with an order backlog of 8.34 million CGTs.

Aker Philadelphia Begins Tanker Construction

Aker Philadelphia Shipyard has started production on the third vessel in the 10-ship product tanker build program initiated in April 2005. The third tanker vessel is scheduled to be completed in the fourth quarter of 2007. The first steel plates cut for the ship will be used in construction of the engine room of the 46,000-dwt product tanker. Upon completion, the tankers will be owned by American Shipping Corporation, a subsidiary of Aker American Shipping, and bareboat chartered to Overseas Shipholding Group, Inc (OSG).

Aker Yards to Build More PSV's for Nordcapital

Aker Yards has confirmed an optional agreement with Nordcapital Holding GmbH & Cie. KG in Hamburg, Germany for the building of two Platform Supply Vessels. The contract value is approximately $47m. Delivery is scheduled for summer and autumn 2008.

Bourbon 1Q Revenues Up 21.5%

Bourbon reported that first quarter 2006 revenues totaled 172.4 million euros, an increase of 21.5 percent compared with the same period in 2005. With the exception of the North Sea, the offshore oil and gas marine services recorded strong growth, with revenues of 79.3 million euros at the end of March 2006, up +32.9 % (24.2% at constant exchange rates) compared with the same period in 2005. Several scheduled maintenance programs were performed in the first quarter of 2006. The West Coast of Africa, and Nigeria in particular, continued to generate a very strong performance. Operations are developing gradually in Asia with the delivery and commissioning of an Anchor Handling Tug Supply vessel (AHTS 120 tons) for Shell Malaysia.


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The Towage & Salvage Division reported revenue growth of 18.5 percent in the first quarter of 2006 against the backdrop of a strong market, particularly in the international segment. The assistance and salvage activity benefited from the commissioning of the Abeille Bourbon and the Abeille Liberté.

The Bulk Division recorded revenues of 41.1 million euros at March 31, 2006, down slightly as expected from the same period in 2005. This change was driven by the combination of two opposite trends over the period: an increase in the volume shipped, specially in the trade of coal and iron ore in Far East; and a slight decrease in freight rates despite a still favorable market.

The company forecasts positive trends for the coming year. In an offshore oil and gas market that is still expected to be very strong in 2006, Bourbon plans to diversify its client portfolio in its traditional operating zones and should accelerate its growth in new zones (particularly Southeast Asia).

Siemens, Rolls-Royce Tech for New Rig

Sevan Drilling Pte. Ltd., Singapore has signed an agreement with a consortium consisting of Siemens and Rolls-Royce for deliveries to a new deepwater drilling rig. Siemens will deliver electrical, automation, telecom and control systems together with the rig's dynamic positioning systems. Rolls-Royce will deliver diesel generators and thrusters. The drilling rig is equipped to operate in rough climatic conditions, will operate at extreme depths and is expected to be ready for delivery during the first half of 2009. Sevan Drilling´s parent company, the Norwegian Sevan Marine ASA, has developed a new cylindrical platform, the "Sevan Stabilized Platform" (SSP), which combines excellent sea-going properties with reasonable building costs. The commissioned deepwater rig is based on the SSP concept. The new rig is classified as an offshore installation and will be constructed and partly built in Norway.

Hybrid Ferries Planned for Alcatraz Tours

Two hybrid ferries will carry visitors to Alcatraz under a new 10-year contract between the National Park Service and Hornblower Cruises and Events. The ferry operator reportedly committed to build two new hybrid-electric passenger vessels that maximize the use of solar and wind energy, with zero emissions at the wharf. The first will be built within two years, and the second by year five. The hybrid vessels in the winning proposal by Hornblower were designed by Solar Sailor and modeled on the Solar Sailor ferry in Sydney, Australia. Bluewater Network introduced the Solar Sailor concept to ferry planners on the Bay five years ago. The new ferries hold 600 passengers and operate at 12 to 15 knots. The vessels will be fitted with a large, rigid wing covered in solar panels that will capture sun and wind power. When conditions are right, the vessels will be able to sail back and forth. In extreme weather, the sail will automatically fold down flat above the deck like a roof. Much like a hybrid car, large batteries on board the vessels will store electricity generated by the diesel generators and collected by solar panels. The electricity then powers the electric motors.

While loading and unloading passengers, the diesel engines will be turned off and run solely on electricity.

Rajang River Express Boats

The port city of Sibu, Sarawak - about 80 miles (130 kilometers) up from the South China Sea on the Rajang River of Malaysian Borneo - was built on the wealth of the timber industry. Now that industry is in decline and the town is earning a global reputation as a quality builder of tugs and offshore supply vessels. It is also here that a variety of fast river ferries is built. While some of these are built for export, others are used to take passengers up river from Sibu to the smaller towns, logging operations and longhouse villages that have no road access.

Two of Capt. Ting Heng Sing's vessels, the Sri Jaya and Asian Vision, operate daily between Sibu and the up river towns of Song and Kapit. Along with about ten other vessels they depart on a scheduled basis from a city ferry dock that is built so as to provide shelter to the boarding passengers. Each boat makes one round trip daily with the first departure at 5:45 a.m. The 90 miles up river to Kapit takes three hours going up river with a brief stop at Song about half way. The trips back down river with the current takes about a half hour less.

The Sir Jaya has seating for 90 passengers with 32 in first class and balance in economy. The brightly painted white, yellow and red, 113 x 9.67 ft. hull is reminiscent of a Boeing 737 minus the wings and tail. An 18-in. deck extends out from the hull. The little pilot cabin with its streamline windows is bare of electronics except for a compact radar set and a pair of DVD players (for showing movies to the passengers). The key to navigating a fast flowing muddy river, with no navigation buoys but full of driftwood, is a good local knowledge and keen eyes. Having spent their lives on the Rajang, Capt. Ting and his son Capt. Ting Kee Wong, who skippers the 103-passenger Asian Vision, have both. Power for both the Sri Jaya and the Asian Vision is a single 1200 hp Cummins KTA38 M2 mounted well aft in each of the two all aluminum vessels' hulls. An extension of the hull's bottom plating allows the engine to be further aft and provides additional lift. These boats are not only fast, but also highly maneuverable so as to avoid the heavy driftwood in the Rajang River.

In addition to passengers, the express boats carry general cargos of fresh vegetables, cans of paint, sacks

Obituary: Professor Günther Zade

Professor Günther Zade, founding father and former Vice-Rector and Academic Dean of the World Maritime University (WMU) has died in Germany. He was 70.

Professor Zade was involved with the design and establishment of the WMU prior to its opening in Malmö, Sweden, in July 1983 and he then dedicated his life and intellect to the creation and progressive development of the University. As Vice-Rector and Academic Dean of WMU, he contributed towards the well-being and academic achievement of the University and, more importantly, those of its students. Even after his retirement in 2001, he continued to serve WMU as a research fellow and became editor of the WMU Journal of Maritime Affairs. Zade grew up in East Germany and studied mathematics at Leipzig University. He embarked on a seafaring career in the West German merchant marine in 1957, becoming a master mariner and subsequently completing postgraduate studies in Nautical Studies and Education. From 1968 until 1983 he served at Bremen Hochschule für Nautik, as Lecturer, Professor, Vice-Rector and, finally, Rector.

In 1982, the then Secretary-General of IMO, Dr. C.P. Srivastava, asked Professor Zade to assist in the design and establishment of WMU.

Professor Zade was founding member, first chairman, and President of the International Maritime Lecturers' Association (IMLA) and played a leading role in many other international and national professional associations such as the International Association of Institutes of Navigation (IAIN), the International Association of Maritime Universities (IAMU) and the German Institute of Navigation. He was a prolific researcher and author of many studies on the subjects of maritime education and training.

To honor the memory of Professor Zade, WMU will establish the annual Günther Zade Lecture, to be held in connection with the annual meeting of the University's international Board of Governors. Distinguished experts from the international maritime education milieu will speak on issues of maritime education and training, to which Professor Zade devoted his professional life.

of cement and anything that might be needed up river. Most cargo is stowed on the rounded cabin top, tucked in behind a windbreak and lashed to rails provided for that purpose. Plastic cages of live ducks and chickens go onto the small aft deck behind the engine room.

Passengers wanting to go further up the Rajang River from Kapit board slightly smaller 500 hp Cummins KTA19 M powered express boats. These boats will, except in the dry season, take them another four or five hours upriver to Belaga. The narrowing river above Kapit, flows through a number of tricky spots including the notorious Pelagus Rapids.

Texas-Sized Offshore Wind Farm

A proposal to build the biggest offshore wind farm in the nation won approval from Texas state officials, the latest development in the fast-growing segment of the alternative-energy industry, the Washington Post reported.. Texas General Land Office, which manages state lands and mineral rights, said that it reached an agreement granting Superior Renewable Energy LLC the rights to 39,900 acres of submerged lands in the Gulf of Mexico, just off the coast of Padre Island and south of Baffin Bay. The big wind turbines, expected to number more than 100, will be erected as few as three and as many as eight miles offshore.

Concordia Orders Two Ships

Concordia Maritime's and Brodosplit shipyard's boards have issued final approval of the newbuilding contract for vessels number seven and eight in Concordia Maritime's P-MAX-series. Estimated time for delivery is the 4Q 2009.

New CEO at ShipNet

ShipNet named Tormod Haavi as its new Managing Director, succeeding Sven Erik Dølvik. Haavi will assume his new role from July 1, 2006. Haavi was ShipNet's Commercial Director until the end of 2000. During the years since he left ShipNet, Haavi has worked as an independent management consultant. His projects, amongst others, have been related to business development, mergers and acquisitions on an international level. "ShipNet`s unique asset in the form of its global customer base and shipping competence, is a great basis, but without adapting to tomorrows technology and changes, is worth nothing, " said Tormod Haavi. "Our job is to further build on this basis in order to maintain and further develop ShipNet`s leading market position."

Tal Anniversary

On May 19, Avi Tal, a 27 year veteran of the marine and cruise industry, celebrated his first year at the helm of Callenberg Engineering. He is busy directing Callenberg's growth and expansion activities as a marine technical support company, specializing in electrical, control, automation and HVAC technologies.Prior to pursuing his entrepreneurial career, he spent 13 years with Carnival Cruise Lines in several technical capacities, including four years as Vice President Marine and Technical Operations.

Trico Appoints Francois

Trico Marine Services appointed Larry D. Francois as Senior Vice President of Operations. Francois served as President of Seabulk Offshore, a subsidiary of Seabulk International, Inc., for approximately three years where he was responsible for its worldwide offshore operations.

Intec Names Tam CSO

Christophe (Chris) Tam, Ph.D., was named INTEC Engineering's chief strategy officer (CSO). Tam, an eight-year veteran of INTEC, has served as the company's president of North America operations since 2003. Tam's responsibilities as chief strategy officer-a newly created position with global impact-include strategy development, planning and implementation with continued emphasis on technology.

Aalborg Strengthens O&G Position

Aalborg Industries signed a binding agreement to acquire the Australian company Gosfern Pty Ltd. Gosfern's core competence lies within combustion technology and related control and safety systems. The company has, over the past decade, developed a strong position as supplier to special vessels for the exploration, production and preprocessing of oil (FPS). With the acquisition of Gosfern, Aalborg Industries becomes a supplier of complete boiler plants with related combustion equipment, automation and safety systems to the maritime oil and gas sector.

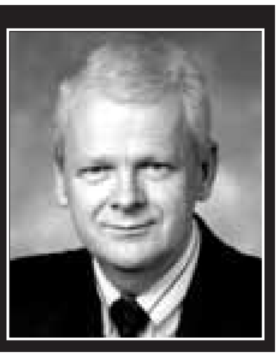
Seamobile Acquires MTN

SeaMobile, Inc. has acquired Maritime Telecommunications Network, Inc. (MTN), a provider of satellite-based broadband communications and networking services for the maritime industry. Terms of the agreement were not disclosed. "SeaMobile saw a strategic opportunity to combine the wireless and satellite expertise of the world's leading maritime communications companies to completely change the way travelers communicate at sea," said William D. Marks, Chief Executive Officer of SeaMobile. SeaMobile, a Seattle, Wash., based company, was founded in March 2005 by veterans of the wireless telecommunications and cable industries to provide wireless voice, data, Internet and other content and communications related services for cruise lines, oil and gas platforms, ferries, yachts, containerships, and government/military sectors. The company recently announced contracts with Silversea Cruises and Oceania Cruises and has since deployed wireless services on ships for both companies. SeaMobile's proprietary technology is a sophisticated IP/software based solution that works with any type of wireless phone (GSM, GPRS or CDMA) used by the customer when accessing the SeaMobile network at sea. This allows virtually anyone aboard any vessel at sea to use voice and data services available through their wireless home carrier, just as they would on land. Worldwide roaming agreements established by SeaMobile provide transparent connectivity for wireless services and billing is provided by the home carrier.

Queen Mary 2 Repaired at Blohm + Voss

On May 6, 2006, Queen Mary 2 was docked at Blohm + Voss Repair's dry dock Elbe 17 with a 13 hours delay on the masterplan because of the weather conditions on her trip from New York to Southampton. The ship was docked to dismantle one of two fixed propulsion units from the stern that was damaged when exiting Port Everglades earlier this year. On Monday afternoon, the damaged propulsion unit was already dismantled. A floating crane lifted the unit for transport to the workshops of Blohm + Voss Repair for inspection and repairs, approximately 39 hours after being drydocked. The job was completed after 56 hours.

TWIC: This Time it is for Real



Dennis L. Bryant, Senior Maritime Counsel at the law firm of Holland & Knight, Washington, D.C., is a contributing editor of MR/EN.

On May 22, 2006, the Transportation Security Administration (TSA) and the US Coast Guard issued their long-awaited Notice of Proposed Rulemaking (NPRM) for implementation of the Transportation Worker Identification Credential (TWIC) in the maritime sector. Under the proposal, TSA would collect worker's biographic information (including but not limited to ten fingerprints, name, date of birth, address, telephone number, photo, employer, and job title). All individuals (including US merchant mariners) with unescorted access to secure areas of port facilities and vessels regulated under the Maritime Transportation Security Act would be required to have a TWIC. Background checks would include a review of criminal history records, terrorist watch lists, immigration status, and outstanding wants and warrants. The TWIC would utilize Smart Card technology and include the individual's photograph, name, and biometric information and would include multiple fraud protection measures. The program is expected to cover 750,000 individuals and would be funded by user fees (estimated to be approximately $139 per person). Port facilities and vessels would be required to implement TWIC into their existing access control systems and operations, purchase and utilize card readers, and update their approved security plans. Implementation costs are estimated to be between $8,900 and $11,900 per facility or vessel. Public meetings will be held in Newark, NJ (May 31); Tampa (June 1); St. Louis (June 6); and Long Beach (June 7). Written comments on the proposal must be submitted by July 6. Actually, by the time you read this article, the meetings will probably have already been held, but there may still be time for you to submit written comments.

This rulemaking represents a major, if somewhat belated, step forward in the process which began with high hopes on the enactment of the Maritime Transportation Security Act (MTSA) in 2002. TSA, an agency largely focused on the aviation industry, was somewhat out of its element trying to implement a major program in the maritime industry.

Problems arose almost immediately with regard to data collection. The maritime unions feared a return to the port security cards of the 1950's, when some longshore workers lost their jobs supposedly in the name of national security, but just as likely for being union activists. The unions are also concerned with what criminal convictions and arrests would be considered disqualifying. Their argument is that most criminal acts that a person might have committed in the past do not indicate that the individual is disloyal or presents a threat to the security of the nation. This issue will be a stumbling block throughout the rulemaking and beyond. Another problem related to technology. No one knew what the TWIC should look like and what information it should include. Vigorous (and long-winded) debate ensued. Some contended the cards should be as simple as possible, with the information made easily retrievable. Others contended that the cards should incorporate the latest technology, hold a significant amount of identifying information, and include sophisticated security measures to both protect the information and preclude tampering.

The technology debate was prolonged in part due to Congressional intervention. One Congressional Representative, in particular, wanted the TWIC to be manufactured in his home district. You can read all the details in an article that appeared on the front page of the May 14, 2006 edition of the New York Times, which will not be repeated here. Eventually, once the Representative withdrew his objections, the TSA settled on using Smart Card technology - which, while not leading edge, is fairly sophisticated.

What's next?

One should expect the TWIC proposal to be finalized not long after the close of the comment period. Some objections will lead to changes from the initial proposal, but most will be rejected.

While collection of information from mariners, facility employees and longshore workers will be relatively easy, collection, verification, and processing of such information from other persons needing TWICs will prove more difficult. This group is highly disparate, consisting of chandlers, vendors, truck drivers, railroad workers, company officials, union officials, the media, ministers, and even lawyers (the latter group may have scarlet L's imprinted on their cards).

The biggest single problem to full implementation of the TWIC may, once again, be technology. To date, the TSA has not awarded a contract for production of the actual TWIC cards. It taxes one's faith in God, motherhood, and apple pie to belief that a government contract can be awarded and executed within the six-month timeframe that TSA envisions.

In addition to the collection and collation of personal information on over 750,000 individuals (which can't commence until after the rulemaking is finalized), there must be criminal record checks and terrorist checks on each person, as well as verification that each applicant is who he or she says they are. The TWIC cards will then have to be distributed. It must be hoped that few individuals will have changed jobs, locations, or qualifications during the interim between collection of the information and dissemination of the cards.

Each maritime facility and ship will then have to obtain the equipment necessary to read the TWIC card.

I presume that this equipment will resemble the card reader at a bank's automatic teller machine (ATM), but without being mounted in a wall. The technology to develop a TWIC card reader that is both portable and electronically connected to the central database may prove very interesting. The facilities and ships will have to amend their security plans to incorporate this process. The rulemaking, as currently drafted, requires that security plans include different processes for each different maritime security (MARSEC) level. The facilities and ships will then have to implement the TWIC security process.

It is unclear how foreign vessels, operating under security plans approved by their flag administrations, are to incorporate these processes, if at all. The regulations, as proposed, exempt foreign vessels entirely. It seems to be presumed that, since foreign vessels are largely restricted to berthing at US facilities that are compliant with the USCG maritime security regulations, any individual boarding or disembarking from the ship will have to pass through the facility's security system. The rulemaking includes the following caveat: "Nothing in the proposed exemption [for foreign vessels] should affect the existing requirements that owners and operators have procedures in place for allowing seafarers to traverse facilities for the purpose of completing crew changes or taking shore leave."

Legacy security systems and security systems mandated by state or local programs are not addressed in the rulemaking. Florida, for example, has a sophisticated port security identification card program. How is that accounted for in the TWIC process? Do the two systems operate independently or is there a way to merge them? Are all the time, effort, and monies devoted to other security card systems to be written off?

Merchant Mariner Credential

On the same date that the TWIC proposal was officially unveiled, the US Coast Guard issued its 74-page Notice of Proposed Rulemaking (NPRM) regarding consolidation of merchant mariner qualification credentials. This proposal is to be read in conjunction with the TWIC proposal. This rulemaking would combine the individual Merchant Mariner's Document (MMD), License, Certificate of Registry, and STCW Endorsement into a single Merchant Mariner Credential (MMC), which will be endorsed to reflect a mariner's qualifications. The Coast Guard also proposes to streamline the application process for the MMC by removing the requirement that mariners appear at least once at a Regional Exam Center (REC). Instead, the information previously submitted by the applicant at the REC would be submitted to the TSA through the TWIC enrollment process and shared with the Coast Guard by the TSA. US merchant mariners would carry the TWIC for identification purposes and the MMC for qualification purposes. Public meetings regarding this rulemaking will be held in conjunction with those for the TWIC proposal.

Time and space do not allow for a full exposition of all the issues raised by this dual rulemaking. The TWIC has spent four years in gestation and is not born yet. But, the sonograms have now been made available and everyone is hoping for a healthy baby. As with most newborns, one should expect some loud noises and some sleepless nights. Let us hope that the new baby grows up fast.

Navy

Dedicated to Winning

Ships assigned to Combined Task Force One Five Zero (CTF-150)

(U.S. Navy photo by Photographer's Mate 1st Class Bart Bauer)

Edward Lundquist is a retired Navy captain and a senior technical director with Anteon Corporation.

Department of the Navy leaders recently provided an update to representatives of the Navy and Marine Corps Council at the Army Navy Country Club on May 3, 2006. The council is composed of 21 organizations that support the Navy and Marine Corps, with a total membership of 500,000 constituents.

Secretary of the Navy Donald C. Winter has served in his position for four months. In that time he has been involved in a navy that is taking on new missions, establishing new units in unique warfare areas, and building coalitions to meet the current threat.

Today the Navy is taking a leadership role with Task Force Guantanamo and Task Force Horn of Africa; and Navy men and women are performing security duties at Fort Suse Prison in Iraq, and other Sailors are relieving Marines in providing security for the Haditha Dam.

"We are preparing for an uncertain future," he said. "We are not just facing a single enemy. We are dealing with a complex set of threats.

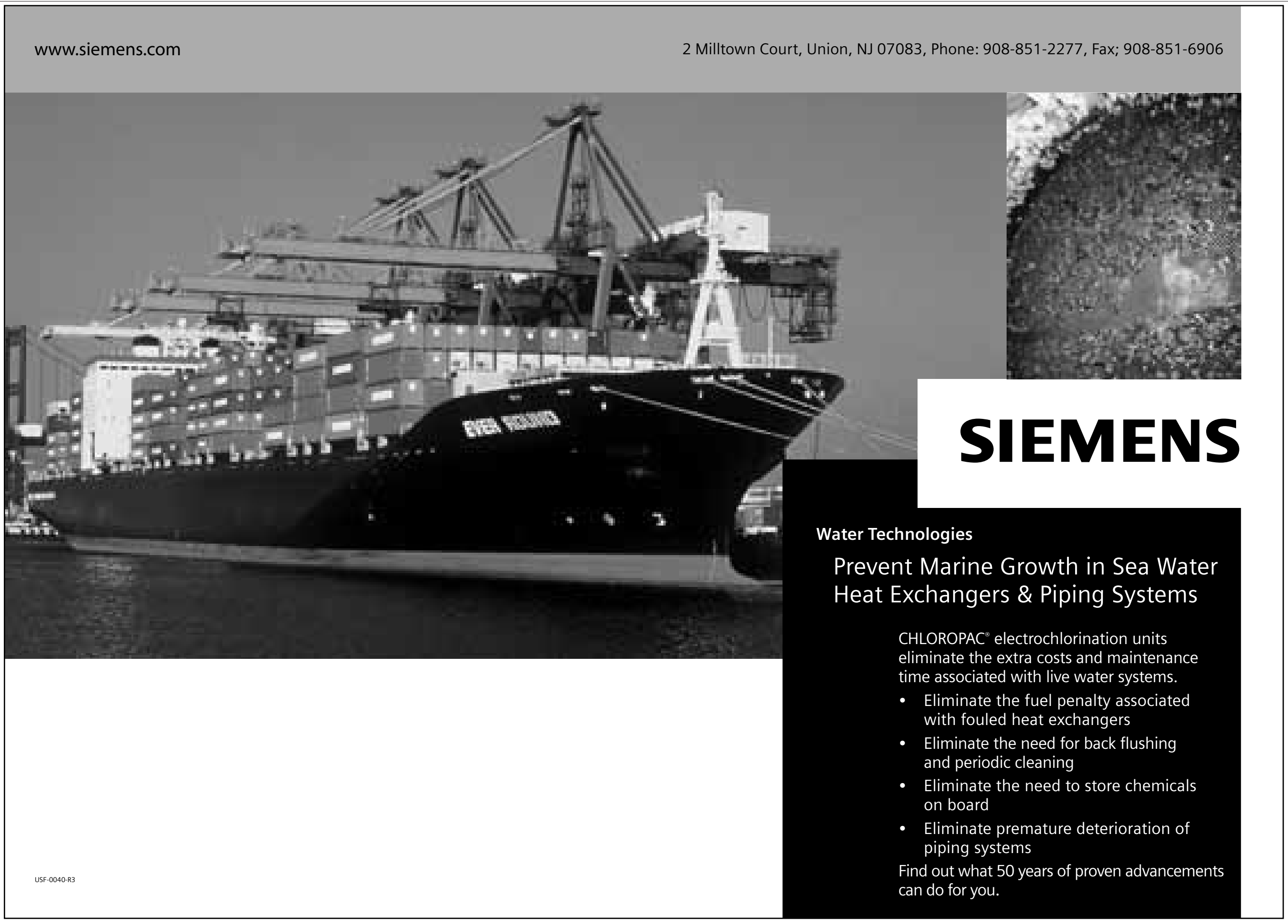
Furthermore, Winter said, uncertainty is the nature of these threats.

While reaffirming the Navy's commitment to maintain superiority of the high sea, or "blue" water, is now focusing on the coastal and riverine environments. "Future operations will require a wide range of capabilities and evolving focus. Changes to our naval forces will include a shift in emphasis from blue water to green and brown water missions."

The Navy is not abandoning the blue water, Winter said. The service is investing in both equipment and people to raise the size of the force from 281 ships to 313, based on analysis that supports the Navy's 30-year shipbuilding plan.

Chief of Naval Operations Adm. Mike Mullen talked about his three priorities of sustaining readiness, building a fleet for the future and creating 21st century leaders.

Circle 277 on Reader Service Card



Circle 300 on Reader Service Card

"We've put readiness dollars in, and we know what we're getting out." The key to building the fleet of the future is to balance capability with affordability, Mullen said. In shaping the workforce of the future, he said "we've got to get it right."

The Navy's shipbuilding plan is supported in the Quadrennial Defense Review (QDR). Beyond the questions of capability and affordability, Mullen also asks himself "if industry can build it." To keep cost growth in check, Mullen said, the Navy must stick to its plan. "We've got to give industry a shot at stability."

"Leadership," he said, "more than anything else, is what can solve intractable problems."

Mullen referred to the importance of the reserves. He stressed the importance of creating a force where Navy people can leave active duty for a while, join the reserves, and potentially return to active duty later. "We've got to get to the point where you can leave and come back."

Mullen also spoke about engaging with other naval forces to create what he calls the "1,000 ship navy." Partner nations are anxious to be engaged, he said. The U.S. Navy will acquire some smaller platforms, like LCS and Riverine craft, which can get into smaller ports and can operate with similar sized craft of other nations.

Mullen recently met with six Navy commanders in the Pentagon as they prepare to assume command of half the U.S.-led Provincial Reconstruction Teams (PRT) in Afghanistan. Each PRT will work directly with an Afghan Province, mentoring and assisting its relationships with towns and villages and with the national government.

Sailors and officers are being trained at places like Ft. Jackson, South Carolina, and Ft Bragg in North Carolina, in preparation for Individual Augmentee assignments in the CENTCOM AOR to join combat support and combat service support units. About half are coming from the active forces, and half are being drawn from our reservists.

Seabees are building border security posts in Iraq along the Jordanian and Syrian borders. Sailors are also taking over the defenses of Iraq's Haditha Dam, which provides the Iraqi people with a third of their electricity, and relieving the Marines of this duty. A Navy unit is also assuming responsibility of Fort Suse, the highest security prison in Iraq.

A Navy admiral has assumed command of Joint Task Force Guantanamo, responsible for detainee operations and

intelligence gathering at Camp Delta there.

Rear Adm. Harry B. Harris assumed command from Army Maj. Gen. Jay Hood last month in April.

Combined Task Force (CTF 150) is now commanded by Pakistan navy Rear Adm. Shahid Iqbal. The multi-national task force is responsible for conducting maritime security operations in the Gulf of Oman, Gulf of Aden, the Red Sea and the North Arabian Sea. The U.S. Navy is a part of this task force.

Navy Rear Adm. Richard Hunt commands of Combined Joint Task Force Horn of Africa.

This task force is providing "theater security cooperation" in this the troubled region, which includes Ethiopia, Eritrea, Sudan, Somalia, Kenya and Yemen. It is an area two-thirds the size of the continental United States with 181 million people. This term "theater security cooperation" includes civil military cooperation, humanitarian assistance, military-to-military training, and capacity building to improve regional security.

This Day in Navy History

June 1, 1813 - HMS Shannon captures USS Chesapeake, Capt. James Lawrence. As the mortally wounded Captain Lawrence was carried below, he ordered "Tell the men to fire faster! Don't give up the ship!" These words would live on in naval history. Oliver Hazard Perry honored his dead friend Lawrence when he had the motto sewn onto the private battle flag flown during the Battle of Lake Erie, 10 September 1813.
1871 - RADM Rodgers lands in Korea with a party of Sailors and Marines and captures 5 forts to secure protection for U.S. citizens after Americans were fired upon and murdered.
1939 - Director of the Naval Research Laboratory, Captain Hollis M. Cooley, proposes research in atomic energy for future use in nuclear powered submarine
1954 - First test of steam catapult from USS Hancock

June 2, 1941 - First aircraft escort vessel, USS Long Island (ACG-1), commissioned, then reclassified as an auxiliary aircraft carrier (AVC-1) on 20 August and finally reclassified as an escort carrier (CVE-1) in July 1943.

June 3, 1785 - Order to sell last ship remaining in Continental Navy, frigate Alliance. No other Navy were ships authorized until 1794.
1898 - Collier Merrimac sunk in channel leading to Santiago, Cuba in unsuccessful attempt to trap Spanish fleet. The crew was captured and later received the Medal of Honor.
1949 - Wesley A. Brown becomes the first African-American to graduate from the U.S. Naval Academy.

June 4, 1934 - USS Ranger, first ship designed from the keel up as a carrier, is commissioned at Norfolk, VA
1942 - Battle of Midway (4-6 June) begins; during battle, the 4 Japanese carriers which attacked Pearl Harbor are sunk; this decisive U.S. victory is a turning point in the Pacific war
1944 - Hunter-killer group USS Guadalcanal captures German submarine, U-505

June 5, 1794 - First officers of the U.S. Navy under the Constitution are appointed. The first 6 captains appointed to superintend the construction of new ships were John Barry, Samuel Nicholson, Silas Talbot, Joshua Barney, Richard Dale, and Thomas Truxtun
1917 - First military unit sent to France, First Naval Aeronautical Detachment, reaches France on board USS Jupiter
1945 - Typhoon off Okinawa damages many U.S. Navy ships

June 6, 1944 - In Operation Overlord, Allied invasion fleet (over 2700 ships and craft) land troops on Normandy beaches, the largest amphibious landing in history

June 7, 1819 - LT John White on merchant ship Franklin, anchored off Vung Tau is first U.S. naval officer to visit Vietnam
1917 - U.S. subchasers arrive at Corfu for anti-submarine patrols
1942 - Battle of Midway ends with loss of USS Yorktown
1991 - Joint Task Force Sea Angel ends relief operations in Bangladesh after Cyclone Marian

June 8, 1830 - Sloop-of-war Vincennes becomes first U.S. warship to circle the globe
1880 - Congress authorizes the Office of Judge Advocate General
1958 - Navy and Post Office deliver first official missile mail when USS Barbero (SS-317) fired Regulus II missile with 3000 letters 100 miles east of Jacksonville, FL to Mayport, FL.
1960 - Helicopters from USS Yorktown (CVS-10) rescue 54 crewmen of British SS Shunlee, grounded on Pratus Reef in South China Sea.
1990 - CDR Rosemary Mariner becomes first Navy women to command fleet jet aircraft squadron.

June 9, 1882 - Establishment of Office of Naval Records of the War of the Rebellion (became part of Naval Historical Center)
1942 - First Navy photographic interpretation unit set up in the Atlanic.
1959 - Launching of USS George Washington (SSBN-598), first nuclear powered fleet ballistic missile submarine, at Groton, CT

June 10, 1854 - U.S. Naval Academy at Annapolis, MD, holds first formal graduation exercises. Previous classes graduated without ceremony.
1896 - Authorization of first experimental ship model tank

June 11, 1853 - Five Navy ships leave Norfolk, VA on 3 year exploring expedition to survey the far Pacific
1927 - USS Memphis arrives at Washington, DC, with Charles Lindbergh and his plane, Spirit of St. Louis, after his non-stop flight across the Atlantic

June 12, 1944 - Four U.S. Carrier Groups (15 carriers) begin attack on Japanese positions in the Marianas.
1948 - The Women's Armed Forces Integration Act provides for enlistment and appointment of women in the Naval Reserve.
1970 - After earthquake in Peru, USS Guam begins 11 days of relief flights to transport medical teams and supplies, as well as rescue victims

June 13, 1881 - USS Jeannette crushed in Arctic ice pack

June 14, 1777 - John Paul Jones takes command of Ranger
1777 - Continental Congress adopts design of present U.S. Flag
1847 - Commodore Matthew Perry launches amphibious river operations by Sailors and Marines on Tabasco River, Mexico
1940 - Franklin D. Roosevelt signs Naval Expansion Act to construct ships to increase Navy's tonnage by 11 %
1985 - Steelworker Second Class Robert D. Stethem, USN of Underwater Construction Team ONE was killed by terrorist hijackers of TWA Flight 847. He later received a Bronze Star for his heroism.

June 15, 1944 - Fifth Fleet lands Marines on Saipan, under the cover of naval gunfire, in conquest of Marianas
1963 - Launching of combat store ship, Mars (AFS-1), first of new class of underway replenishment ships
1991 - 2 battle groups and amphibious ships evacuate dependents and Air Force personnel from Clark Air Force Base after Mount Pinatubo erupts in Philippines

June 16, 1898 - U.S. squadron bombards Santiago, Cuba
1965 - Navy Department schedules reactivation of hospital ship Repose (AH-16), first hospital ship activated for Vietnam Conflict

June 17, 1833 - USS Delaware enters drydock at Gosport Navy Yard in Norfolk, VA, the first warship to enter a public drydock in the United States
1870 - USS Mohican burns Mexican pirate ship Forward
1898 - Navy Hospital Corps established
1940 - Chief of Naval Operations asks Congress for money to build two-ocean Navy

June 18, 1812 - U.S. declares war on Great Britain for impressment of Sailors and interference with commerce
1942 - First African-American officer, Bernard W. Robinson, commissioned in Naval Reserve
1957 - CNO approves ship characteristics of the Fleet Ballistic Missile sumbarine

June 19, 1864 - USS Kearsarge sinks Confederate raider Alabama off France
1944 - Battle of the Philippine Sea begins ("The Marianas Turkey Shoot")

June 20, 1813 - Fifteen U.S. gunboats engage 3 British ships in Hampton Roads, VA
1815 - Trials of Fulton I, built by Robert Fulton, are completed in New York. This ship would become the Navy's first steam-driven warship.
1898 - U.S. forces occupied Guam, which became first colony of U.S. in the Pacific.
1913 - First fatal accident in Naval Aviation, ENS W. D. Billingsley killed at Annapolis, MD
1934 - Commander in Chief, Asiatic Fleet Admiral Frank Upham reports to CNO that based on analyses of Japanese radio traffic, "any attack by (Japan) would be made without previous declaration of war or intentional warning."
1944 - Battle of Philippine Sea ends with Japanese losing 2 aircraft carriers and hundreds of aircraft.

June 21, 1898 - USS Charleston captures island of Guam from Spain
1945 - Okinawa declared secure after most costly naval campaign in history. U.S. had 30 ships sunk and 223 damaged, mostly from kamikaze attacks, with 5000 dead and 5000 wounded, while the Japanese lost 100,000 dead

June 22, 1807 - HMS Leopard attacks USS Chesapeake
1865 - Confederate raider Shenandoah fires last shot of Civil War in Bering Strait
1884 - Navy relief expedition under CDR Winfield S. Schley rescues LT A.W. Greely, USA, and 6 others from Ellesmere Island, where they were marooned for 3 years on Arctic island.
1898 - ADM Sampson begins amphibious landing near Santiago, Cuba

June 23, 1933 - Commissioning of USS Macon, Navy's last dirigible
1961 - Navy's first major low frequency radio station commissioned at Cutler, ME
1972 - Navy helicopter squadron aids flood-stricken residents in Wilkes-Barre, Scranton, and Pittstown area of PA

June 24, 1833 - USS Constitution enters drydock at Charlestown Navy Yard, Boston, MA, for overhaul. The ship was saved from scrapping after public support rallied to save the ship following publication of Oliver Wendell Holmes' poem, "Old Ironsides."
1926 - Office of Assistant SecNav set up to foster naval aeronautics; aircraft building increased
1948 - Berlin airlift initiated to offset the Soviet Union's blockade access of U.S., France, and Great Britain to their sectors of Berlin.

June 25, 1917 - Navy convoy of troopships carrying American Expeditionary Forces arrives in France
1950 - North Korea invades South Korea beginning Korean Conflict

June 26, 1884 - Congress authorizes commissioning of Naval Academy graduates as ensigns
1918 - Marine brigade captures Belleau Wood
1959 - Twenty-eight Naval vessels sail from Atlantic to Great Lakes, marking the formal opening of Saint Lawrence Seaway to seagoing ships.
1962 - NAVFAC Cape Hatteras makes first Sound Surveillance System (SOSUS) detection of a Soviet diesel submarine.
1973 - Navy Task Force 78 completes minesweeping of North Vietnamese ports.

June 27, 1813 - USS President anchors in Bergen, Norway
1950 - To support U.N. call to assist South Korea, Truman authorizes U.S. naval and air operations south of 38th Parallel, Korea

June 28, 1794 - Joshua Humphreys appointed master builder to build Navy ships at an annual salary of $2,000.
1814 - USS Wasp captures HMS Reindeer
1865 - CSS Shenandoah captures 11 American whalers in one day
1970 - USS James Madison (SSBN-627) completes conversion to Poseidon missile capability

June 29, 1925 - Ships and men from 11th and 12th Naval Districts assist in relief after earthquake at Santa Barbara , CA
1950 - Truman authorizes sea blockade of the Korean coast
1950 - USS Juneau fires first naval shore bombardment of Korean Conflict

June 30, 1815 - USS Peacock takes HMS Nautilus, last action of the War of 1812
1943 - Third Fleet Amphibious Force lands troops on Rendova Island while naval gunfire silences Japanese artillery
1951 - Naval Administration of Marianas ends

(Source: www.history.navy.mil)

Circle 288 on Reader Service Card

Mitsubishi Launches 7,024-TEU Ever Spring

Reviving the name of Evergreen's very first full containership, Chang Kuo-Cheng (K C Chang), Evergreen Group's Vice Group Chairman, launched the 7,024 TEU Ever Spring in Kobe, Japan, on May 17. She is due for delivery in August 2006 and is scheduled to enter service on the WAE pendulum service linking the West Coast of North America with Asia and Northern Europe.

Ever Spring is the fifth in a series of ten S-types being built for the Evergreen Group by Mitsubishi. Three have already been delivered to the Evergreen Group's U.K. affiliate Hatsu Marine Ltd. and a fourth, Hatsu Smile, is due for delivery at the beginning of June.

The Evergreen Group is taking delivery of 18 large post-Panamax containerships over the period 2005 to 2008 - ten S-types and eight 8,063 TEU C-types - allowing the Group companies to upgrade existing services and phase out older vessels. In July 1975, the previous Ever Spring inaugurated the company's first full container service when she sailed from Taiwan to the U.S. East Coast. The new S-type vessels are particularly noteworthy in that they incorporate many new environmental features that go well beyond the requirements of new and soon-to-be-introduced international requirements.

"We should not wait for legislation to be introduced," said Dr. Chang. "We should use the latest technology as soon as it is available so as to minimize the impact of container shipping operations both on marine life and on port communities."

The S-class ships incorporate a double-skinned hull and all fuel tanks have been located within the transverse bulkhead spaces, thus minimizing the risk of oil pollution or fire as a result of grounding or collision. A high capacity oily water separator enables the oil content of waste water to be reduced below 15 ppm while much larger separator bilge oil and bilge oil holding tanks provide more storage capacity than normal, enabling the vessels to avoid any discharge when sailing in sensitive areas and to maximize the amount of waste that can be held for ultimate disposal in specialized shore facilities.

Similar arrangements have been made for handling sewage and so-called grey water, including water from the cargo hold bilges, when the vessels are in port or close to shore.

The main engines and generators incorporate low NOx technology while the ships are also able to switch to low sulfur fuels when sailing in restricted areas such as the Baltic Sea.

Cold-ironing, the ability to shut down all shipboard generators while in port, switching to shore-based electricity supplies, is also a feature of the S-class vessels. So far, only the Port of Los Angeles has initiated an Alternative Maritime

Power (AMP) program that requires ships to shut down their diesel generators while in port but Evergreen expects many more ports to follow LA's lead. The Group estimates that the cost of meeting AMP requirements amounts to approximately $2m per vessel.

Evergreen has chosen to class those S-class vessels allocated to Hatsu with Lloyd's Register (LR) while those for operation by Evergreen Marine Corporation will be classed with the American Bureau of Shipping (ABS). It has obtained LR's EP (environment protection) notation for the Hatsu ships and the equivalent ABS ES (environment safety) notation for the EIS vessels.

With an overall length of 300 m and a beam of 42.8 m, the S-class vessels are able to carry containers 17 rows across on deck and 15 rows across below deck. They are 78,700 dwt on a service draft of 14.2 m. Each vessel has a single 10-cylinder Mitsubishi Sulzer 10RTA96C main engine developing 74,700 bhp (54,900 kW) to provide for a service speed of 25.3 knots.

Malaysian Made Buoy Tender

The Marine Department of Malyasia is taking delivery of the 131.2 x 32.8 ft. (40 x 10 m) buoy tender Permata from the NGV Tech Shipyard near Port Kelang. With a raised foc'sle and low midships deck the vessel is equipped for servicing navigational aides. A large crane mounted forward will be used to deploy and retrieve the buoys. A shallow two meter draft combined with a pair of electrically powered spuds located on the stern quarters can be used to create a stable working platform in shallower harbor areas. A pair of keel-cooled Cummins KTA50 M2 engines, each rated for 1,875 hp (1,398 kW) @ 1950 rpm, supplied by Scott and English (Malaysia) provide main propulsion power for the vessel. Large deck mounted cooling fans pump ample air to the engine room. The engines turn fixed pitch open propellers through ZF W7000 gears. Accommodation is provided for a crew of 17. Tankage includes about 42,000 liters of fuel and about 23,000 liters of potable water.

Bollinger Delivers OPA'90 Barges to Bouchard

Following the delivery of Bouchard's B. No. 280 from Bollinger Gretna and the delivery of the tug Rhea Bouchard from Bollinger Algiers, the ATB set sail for Texas and its first load of cargo bound for the U.S. West Coast.

Bollinger Gretna, LLC, Harvey, La., delivered, B. No. 280, a double hull, 80,000 BBL oil tank barge built to meet the requirements of the Oil Pollution Act

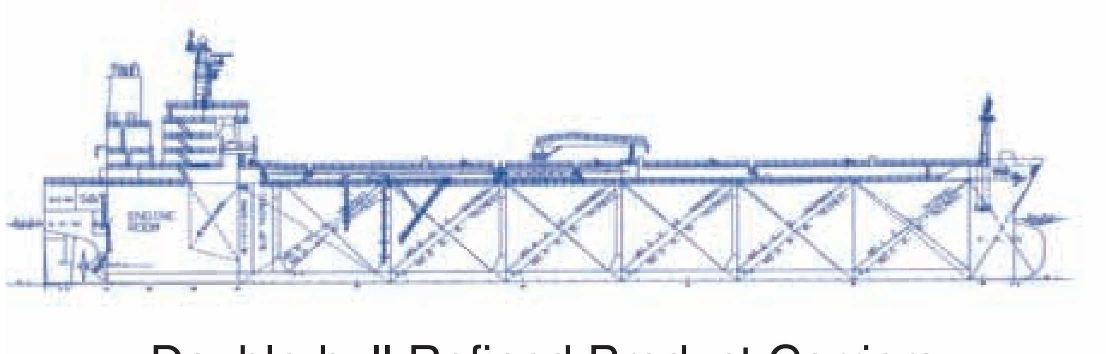
General Dynamics NASSCO and DSEC in Partnership to Build Jones Act Ships

General Dynamics NASSCO and DSEC of Busan, Korea, a wholly owned subsidiary of DSME (Daewoo Shipbuilding and Marine Engineering), have teamed to bring the very best in commercial ship designs and technology to U.S. Jones Act customers.

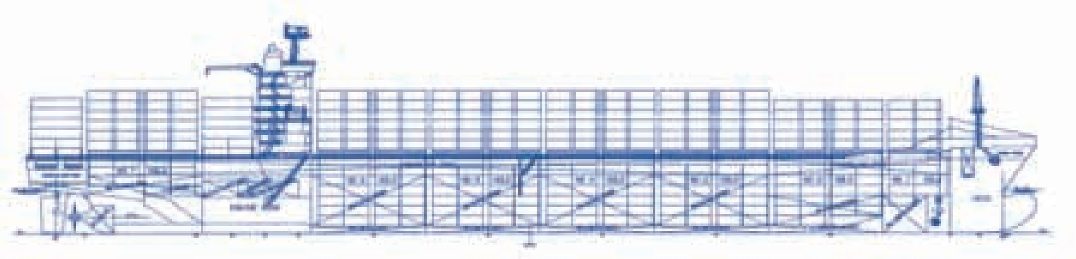
The initial offerings will be to the refined product carrier, containership and shuttle tanker markets.

A leading commercial shipbuilder in the U.S., General Dynamics NASSCO has been designing and building ocean-going commercial ships since the early 1960s and will continue to provide low-cost offerings in the Jones Act market.

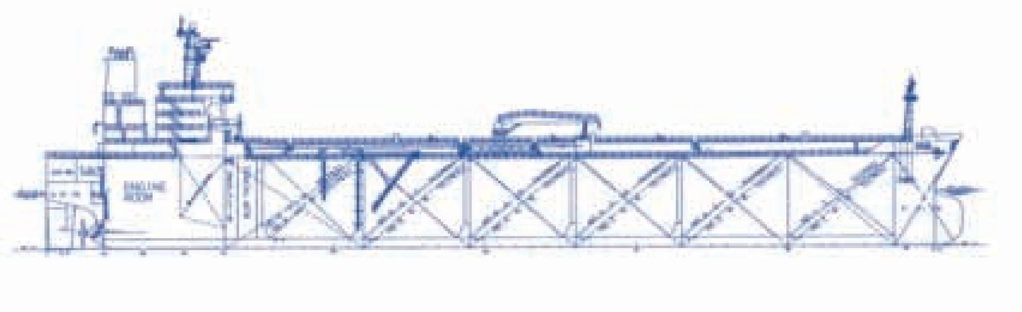
This collaboration will be a cornerstone U.S.-Korean partnership and will build upon both companies' outstanding records as leaders in ship design and construction.



Double-hull Refined Product Carriers



Containerships for Hawaii, Alaska, Puerto Rico



Shuttle Tankers for Deepwater Gulf of Mexico

dsec DSEC CO.,LTD.

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NASSCO

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San Diego, CA 92113
www.nassco.com

of 1990 (OPA'90), to Bouchard Coastwise Management, Corp., Hicksville, N.Y.

Following the delivery of the B. No. 280, Bollinger announced the signing of the sister ship, B. No. 282. The B. No. 282 will also be built at Bollinger Gretna, along with the previously announced 110,000 BBL, B. No. 205, a black oil barge measuring 430-ft. long, with a 79-ft. beam and a depth of 34-ft. Additionally, Bouchard has awarded Bollinger a 35,000 BBL barge, B. No. 233, which will be built at Bollinger Marine Fabricators in Amelia, La.

Morton S. Bouchard III, president and chief executive officer of Bouchard Affiliates, said "The delivery from Bollinger of the first barge, as part of our second phase construction program, places us right on schedule with our future outlook program. Signing with Bollinger on the sister ship to the B. No. 280 and the B. No. 233 barge is our confirmation and commitment to our customers of our dedication to providing them with modern up-to-date equipment and services."

The B. No. 280 is a clean oil barge measuring 399-ft. long, with a 74-ft. beam and a depth of 28-ft. The barge is coupled with an existing Bouchard tug, Rhea Bouchard, using the Intercon coupler system. Bollinger Algiers retrofitted the Rhea Bouchard with the Intercon system, regulatory recertification and completed a re-powering of the vessel.

New York Waterways to Take Another "Taxi"

Gladding Hearn and Incat Crowther are teaming to provide another vessel for New York Water Taxi. Following the introduction of the Seymour B Durst and the Sam Holmes, NYWT has ordered a third vessel due for delivery in this northern summer. The vessel will be absorbed into the current fleet. The 22 m boat will be certified to carry 149 passengers with 99 passengers in the main deck cabin and the remainder on the open upper deck. Like the previous vessels this one will have the same low wake hulls and hospital grade mufflers that are an element of NYWT's commitment to minimize the impact of its operation on the marine environment. The vessels are also accessible to people with disabilities and will include Gladding Hearn's Winterization Pack which features hull strengthening for operation in slush ice, deck heating and enhanced cabin insulation. The vessel will be fitted with a pair of Cummins QSK19-M main engines each producing 800 bhp at 2,100 rpm, providing a service speed of 26 knots at full load.

New York Water Taxi's currently have a fleet of 8 vessels running commuter

and tour services around Manhattan and surrounding areas.

Main Particulars

Design Type	22m Catamaran Ferry
Survey	USCG Sub Chapter T
Construction material	Marine Grade Aluminium
LOA	72.1 ft. (22 m)
LWL	68.3 ft. (20.8 m)
BOA	26.5 ft. (8.1 m)
Draft (approx)	5.6 ft. (1.7 m)
Passengers	
Main Deck internal	99
Upper Deck external	50
Fuel capacity	1000 gallons
Fresh water capacity	300 gallons
Deadweight	16.12 tons
Main Engines	2 x Cummins QSK 19-M
Power	2 x 800BHP @ 2100rpm
Gearboxes	2 x Twin Disc MGX-5145
Propulsion system	2 x 5 Bladed Bruntons Propellers
Speed	26 knots

Gulf of Mexico Recovery

A Conversation with Donald "Boysie" Bollinger

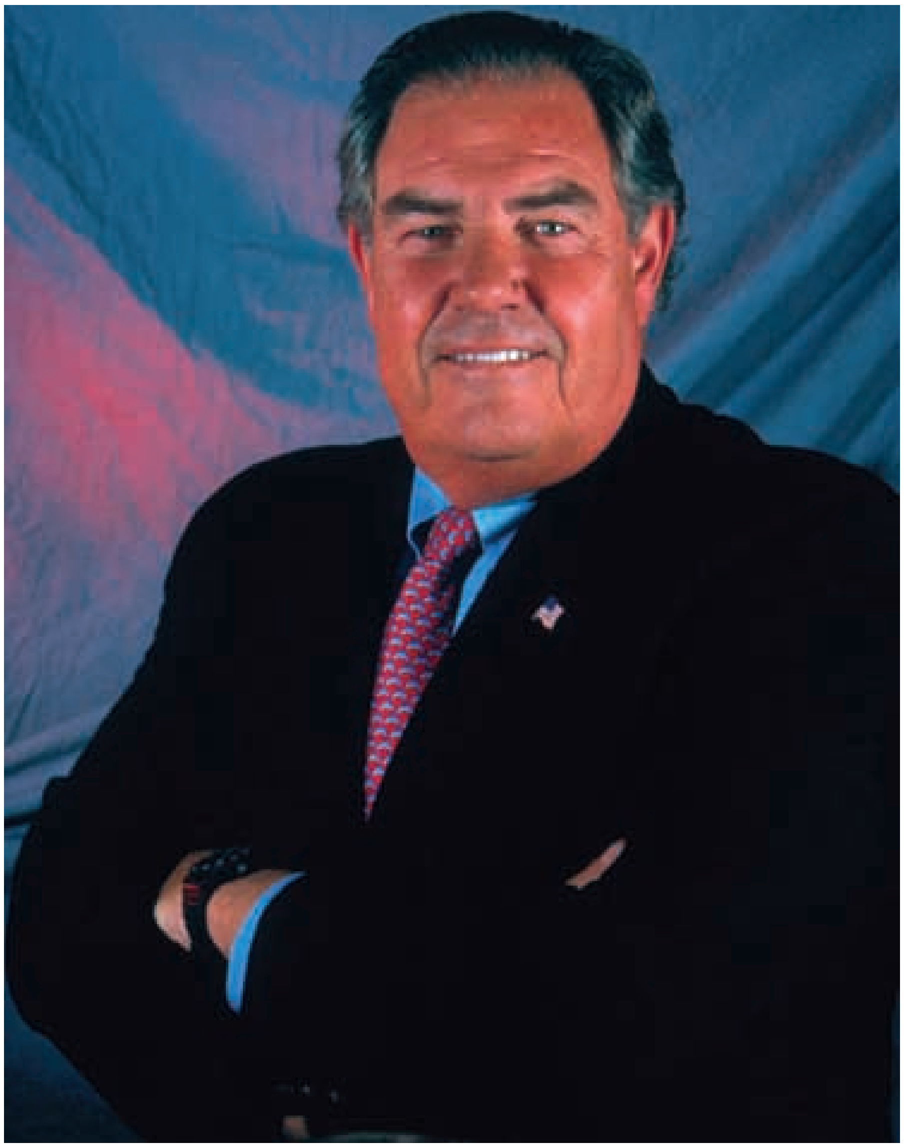
As the Gulf of Mexico recovers from the devastation wrought by hurricane's Katrina and Rita, MR *had the chance to chat with one of the country's leading maritime executives — **Donald "Boysie" Bollinger**, CEO of Bollinger Shipyards — to discuss the current status of building boats in the region.*

MR: How would you best describe your management philosophy?
Bollinger: Generally, I like to find good people, set the vision and direction, and let them manage. Staying in touch with details is only necessary to make sure that we are on course.

MR: What do you consider to be the three of the most significant changes that have occurred within the maritime industry in the last five years?
Bollinger: First and foremost, is the new technology constantly coming out to make the newer equipment more adaptable to today marine environment. Additionally, the increased demand for new and converted equipment to deal with the effects of OPA '90, and then the increased activity levels in the oil and gas business sectors around the world.

MR: How has the industry changed from when you began your career?
Bollinger: In the 70s and early 80s, the companies we dealt with were mostly family owned and local. Since then, many have become part of larger companies (or grown internally to larger companies) and have much more structured management in place. Relationships are still extremely important, but price and service drives most of our customer's actions.

MR: What would you say (so far) has been the pinnacle of your career?
Bollinger: I'd say the first was winning the USCG contract in 1984. This was at a time when the oil and gas support industry was beginning a downward spiral. It kept us busy and profitable during some very difficult times, as well as establishing us as a quality government contractor. The second would be the purchase of five shipyards from Frieda Goldman Halter in 2000. It nearly doubled the size of our repair business and put Bollinger in business with customers we had never worked with before.



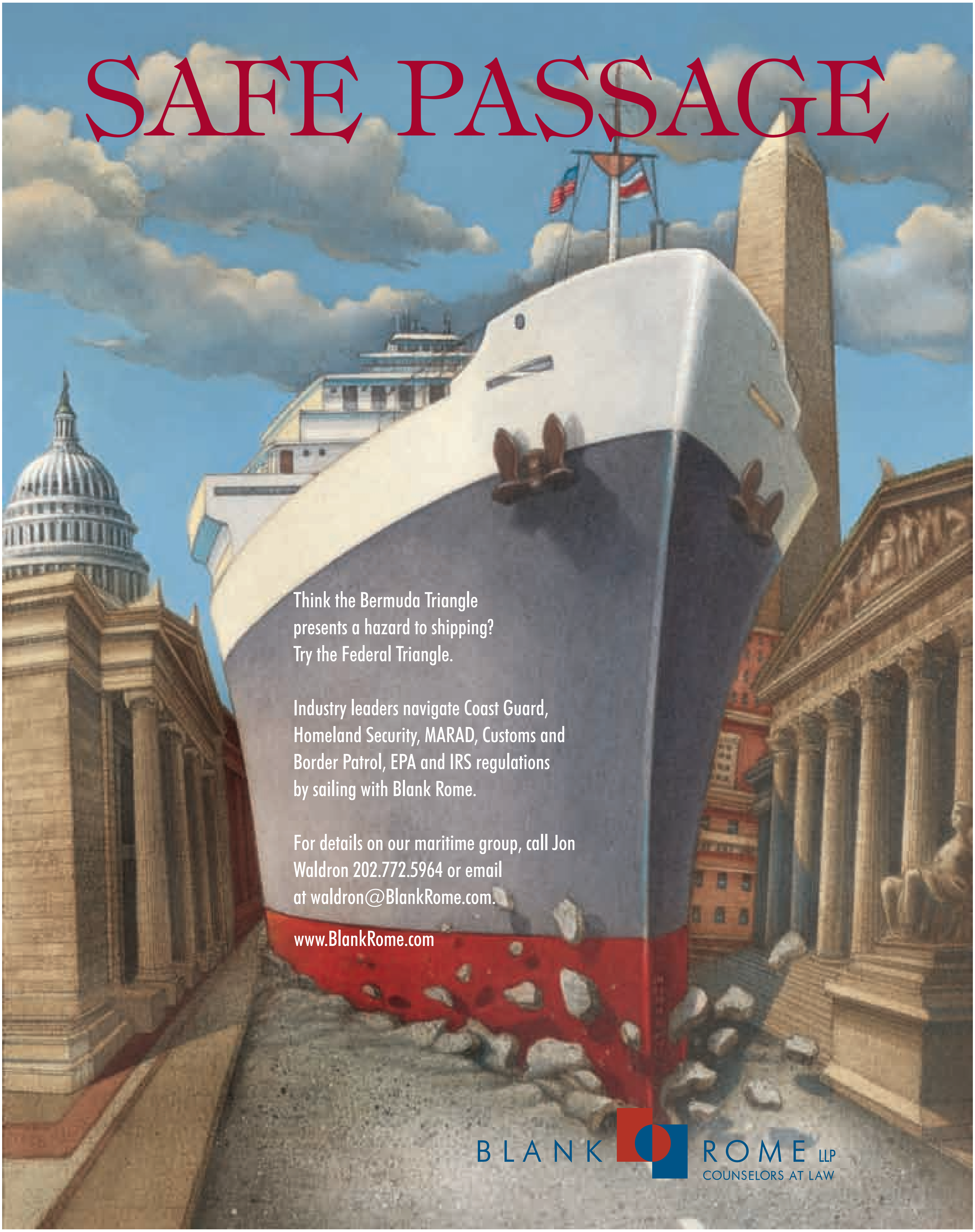
MR: Now that nearly 9 months have passed, please give MR readers an assessment of the damage — physically and financially — inflicted by last year's hurricanes to your company.
Bollinger: Physically, 12 of our 13 shipyards had damage and we lost 3 of our drydocks. Texas City was the only one that basically had no damage. Bollinger Gulf Repair and Bollinger Calcasieu facilities were both destroyed - one by Katrina and one by Rita. The other yards had various degrees of damage, but all recoverable. Financially, the jury is still out, but our losses will be in the tens of millions of dollars.

MR: From your view, give us an assessment of the damage to the Louisiana Shipbuilding Industry as a whole.
Bollinger: The biggest damage to the industry is to our workforces. Physically, most of Louisiana's shipbuilding was spared major damage, but recovery to an increased market and repairing what damages we did have without our normal workforce is ongoing and extremely difficult.

MR: Overall, what are the greatest challenges in resuming "business as usual" at your shipbuilding and repair facilities?
Bollinger: People and housing — no question about it. The first thing we realized after Katrina and Rita was that housing for employees was going to be extremely challenging. We had lost almost 700 people that had evacuated to other areas. We needed to assess the damages they had sustained to their living arrangements and try to see what we could do to get them back into some type of home. We initiated a program with the La. Department of Economic Development to get FEMA housing into plants and shipyards, in order to get the workforce back home. Obviously, this was not great, but at least we gave people a place to live and get back to work. That had some effect, but many had relocated to other places and were not ready to return. We then developed housing for non displaced workers so people who wanted to work from outside the area, but not affected by the storms, could have a place to live.
Additionally, we had to deal and be responsive with our customers that wanted to know when they were going to get their equipment. Generally, they were wonderful and understanding what we had gone thru, worked with us and went out of their way to help. I'll never forget those that helped us while suffering delays as a result of these terrible storms.

MR: Can you give us an overview - a birds-eye assessment - as to where you stand today in terms of recovery.
Bollinger: Except for Gulf Repair in New Orleans east and Calcasieu in S.W. Louisiana, we are basically back to normal. Some damage still exists, but we are operating at 95% in the other yards. Gulf Repair is operating in very difficult circumstances and with two less drydocks. We operated for 5 months by generating our own electricity. We still don't have water or sewer and have to haul it in and out.

MR: From such devastation there is often a "silver lining" ... can you comment to as how this natural disaster has perhaps made Bollinger Shipyards a stronger company?
Bollinger: After we recover from the financial losses, I think our facilities will be better. We lost 3 drydocks totally and we have to focus on their replacements. We may also have to relocate a shipyard as a result of the closure of the MRGO which will eliminate our deepwater access to Bollinger Gulf Repair.



Circle 211 on Reader Service Card

In the wake of the hurricanes, Bollinger counted people and housing as its greatest challenge in resuing business as usual.

Winning the Coast Guard contract in 1984 was a company highlight, as it kept the yards busy during the oil and gas downturn, and established a good business relationship with a valued customer.

MR: Can you share with us a personal story or two that best illustrates the resilience of your company/your people?
Bollinger: Communications became a huge issue right after Katrina. We were able to get our management back together quickly and under very difficult condition since some of them had lost their homes and we had to get them and their families into housing and schools. Through all of this, they were there, dealing with all of the difficulties of trying to get "Bollinger" back on line.

MR: What investments are Bollinger Shipyards making today that are intended for the long-term health of the company?
Bollinger: New drydocks, improved infrastructure and bulkheading, more focused hurricane preparedness will all make Bollinger Shipyards a better company.

MR: What do you consider the top priorities, project wise, for your company in the coming 12 to 24 months?
Bollinger: Focusing on continuing to get a workforce back up and running, dealing with construction of new drydocks and facilities while our customers are demanding more and more of our services. Locations for moving shipyards and building new ones. We will have our plate full.

MR: Briefly describe your outlook for the business in 2006 and beyond?
Bollinger: We feel that the demand for our products and services will be very strong. We are preparing ourselves to be ready to assist our customers in their new construction, repair and conversion needs.

MR: What markets, by vessel niche, do you see as being lucrative in the coming years? Which segments do you see on the decline?
Bollinger: We don't see any decline. The strongest will be the oil and gas service industry, the OPA '90 oil transport market and the government markets. We feel that the inland market will remain strong without much change.

MR: What do you consider to be the biggest challenges (ie. Legislation, technical demand, competition, etc.) to your company's continued success?
Bollinger: We constantly are concerned with any actions that could affect our ability to get and sustain a workforce. Training that workforce will remain a very high priority for our entire industry.

Bollinger History: Celebrating 60 Years

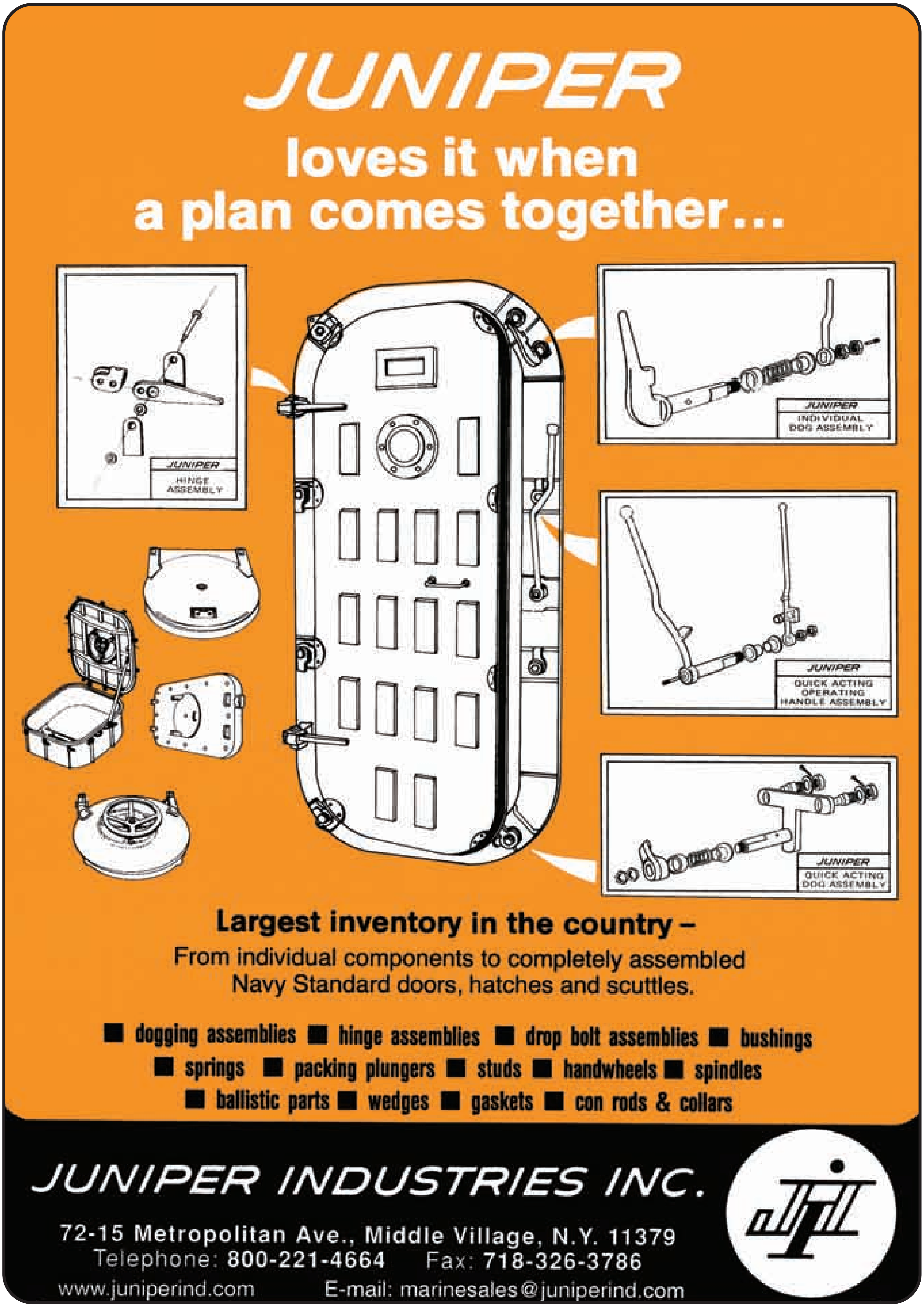
In 1946 Donald Bollinger had a dream to establish a business that would grow slowly but surely to provide jobs for the area residents and provide security for the growing Bollinger family. Bollinger Machine Shop and Shipyards was begun by Donald in a small wooden building constructed on the bayouside south of Lockport, Louisiana on the banks of Bayou Lafourche.

The work in the area consisted of farming, small wooden and steel tugs, fishing boats and general machine work. With his brothers Ralph, a mechanic and George, a welder, along with brother-in-law Pappy Boyd, Mr. Bud, Donald's father and Dick, the youngest brother, who with his degree from L.S.U., became president of Bollinger Shipyards, the dream became a reality.

The beginning was humble and the guys worked hard. They soon earned a reputation for their efficient service and innovation in marine repair. It wasn't long after the Bollinger's got their little business underway that the oilfield boom in South Louisiana started. The demand for larger, more specialized vessels, inland and offshore, helped their company grow by leaps and bounds.

As the company grew, so did the families. Many of the descendents of the founders found themselves assuming major roles in the evolution of the shipyard business. They performed difficult tasks and worked hard under the watchful eye of their predecessors. The young ones learned well and brought their own energies and talents to the business.

(Continued on page 65)



Circle 252 on Reader Service Card

Waterways System Must Remain a Priority

By R. Barry Palmer, President and CEO, Waterways Council, Inc.

Just last month, House Appropriators on Capitol Hill overwhelmingly approved spending nearly $415m in fiscal year 2007 to complete critical Inland Waterway Trust Fund financed lock and dam projects on the Nation's inland waterways system. This action underscores and improves upon President Bush's highest-ever request in FY 2007 for the U.S. Army Corps of Engineers Civil Works program. These actions by the Administration and the Committee continue to demonstrate the important contributions of America's inland navigation system to the nation's economy.

The commitment of Energy & Water Development Subcommittee Chairman David Hobson to the efficient funding and prompt completion of the economically important inland navigation projects of the Army Corps of Engineers should be commended. The work of Ranking Minority Member Pete Visclosky and the Subcommittee members, and the efforts of Appropriations Committee Chairman Jerry Lewis and Committee Ranking Minority Member David Obey, who continue to provide strong, supportive leadership, should also be recognized.

Particularly during wartime the appropriations process creates difficult choices, but the action of the Committee substantiates the goal of keeping the Nation strong and economically competitive.

Waterways Council advocates for the modernization of priority Inland Waterway Trust Fund financed projects and urges funding at the highest levels possible, in order for the benefits of lock and dam investments to be fully realized. And while there are positive trends on the construction general side of waterways infrastructure work, there is much work that lies ahead on funding Operations and Maintenance (O&M) needs on the system.

In the 1990s an increasing amount of maintenance on the system was deferred. That deferred maintenance became unfunded maintenance and the aging infrastructure, combined with a growing O&M backlog, has resulted over the last five years in an average of 30 unscheduled shutdowns at lock sites per year. Tight O&M funding means maintenance and repair is done on that "fix-as-fail" basis, while the list of major rehabilitations waiting for funding grows. This "fix-as-fail" policy is not good for the waterways industry, and it is not good for the Nation.

One recent example, the Greenup lock on the Ohio River was originally scheduled to close for 18 days in 2003 for routine maintenance, but took eight weeks to repair, forcing the use of the auxiliary lock chamber which more than doubled tows' processing times. The total delay during that outage was more than 27,000 hours, or the equivalent of delays associated with six years of normal operations. Following that closure, a survey was conducted of shippers and

carriers. Figures are available from six companies only, but aside from delay costs, costs to the shipping community were estimated at $28.7m. Delay costs were estimated to be about $13.2 million. The total costs associated with the Greenup main chamber closure event for these six companies alone were estimated to be about $41.9m. And those costs are ultimately passed to the consumer, who will begin to see higher costs for electricity, chemical products, gasoline and food.

McAlpine Lock and Dam's unscheduled closure in Summer 2004 took only 10 days to repair, but severed navigation on the Ohio River at Jeffersonville/Louisville, KY. Towing companies experienced traffic delays and idled equipment that cost an estimated $2.7m, while shippers incurred $1.1m in additional costs and lost sales of $665,000.

Funding for O&M has remained flat for more than two decades. And while lock and dam facilities continue to age as we apply a band-aid approach to infrastructure problems, additional expenditures are needed to make the current system more reliable. We must commit to this issue now and stay the course to realize the many benefits of waterborne transportation and commerce.

Our Nation's inland waterways industry and inland rivers network is a world-class system and the envy of all nations. The river and its system of locks and dams - constructed in the 1930s and 1950s - are an economic generator that has attracted and will continue to attract billions of dollars in public and private investment in plant and equipment. This investment creates and maintains positive economic growth and sustains family-wage jobs. The river system is a critical energy supply line, a facilitator of exports, and an environmentally superior mode of transport. For every dollar of investment in waterways priority projects, between $7 and $13 is returned in transportation benefits to the United States.

In 2004 more than 607 million tons of "building block" commodities moved on America's inland navigational system. These commodities keep America strong and feed the world.

Interestingly, though, in a $765b U.S. transportation market-with 87.7 percent of that spent on the trucking industry-with only 1 percent of the total transportation dollars is spent on water transportation, even though we move 16.5 percent of the total commodities.

Our industry - and waterborne transportation - is generally out of sight, out of mind.

But the inland waterways transportation system is truly what binds us together in this country and allows us to turn on a light, eat our cereal in the morning, and drive our car to work. It deserves our support and our commitment to nurture it, not neglect it.

Waterways Council, Inc. is the national public policy organization advocating a modern and well-maintained national system of ports and inland waterways. The group is supported by more than 250 waterways carriers, shippers, port authorities, shipping associations and waterways advocacy groups from all regions of the country.

Which Direction Forward on

World Shipbuilding Prices

Owners of most types of tonnage were paid handsomely in the freight markets, albeit not as handsomely as the year before. A modern VLCC earned on average $55,000 per day and rates for Capesize bulk carriers were $47,000. In the container market, average charter rates for a 4,500 teu vessel were up by $6,000 per day in 2005, but towards the end of the year rates were significantly lower than the peak in the summer.

Following the same pattern, preliminary estimates for ordering activity at yards competing for tonnage above 30,000 dwt show a decline in 2005 compared to the year before. Measured in compensated gross tons (cgt), orders for tankers and bulk carriers dropped significantly, whereas new orders for container tonnage stayed at a comparatively high level. Ordering activity for LNG, LPG, car carriers and other types of tonnage were also in decline from the previous year. In sum, the 55 million cgt of new orders placed in 2005 was close to our estimated delivery capacity at delivery time. A balanced supply and demand situation indicates a flat development in terms of price.

Although newbuilding prices ended the year at roughly the same level as at the start of 2005, prices increased during the first half by 5 to 10 percent and reached its highest level since the early 1990s. This can be explained by looking at ordering activity during the year. Almost two-thirds of this year's order volume was placed in the first half, equaling an annualized rate of 72 million cgt. Compared to an estimated building capacity of 55 million cgt at delivery date, this created an upward pressure on newbuilding prices. By the third quarter, however, the annualized rate of new orders was well below the building capacity and ended a 30 months' period of continued price increases.

At the very end of the year renewed interest, particularly in tankers, resulted in a small increase in prices for tonnage. As a result of the high ordering activity during the year, yards got more orders than they delivered and thus increased their order book. A 13 million cgt increase was noted, ending with an order book of 154 million cgt, or about 2.5 years of work. The three major segments, tankers, bulk carriers and container ships accounted for 70 percent of the order book, although this share declined somewhat due to the increased order book of other types of tonnage such as LNG, LPG and Car Carriers.

While China has made great strides in garnering market share, South Korea will not let its shipbuilding dominance go so easily. South Korea is starting win the lion's share of new orders for complex tonnage, such as the growing LNG business.

Activity by Country

2005 - in million cgt

Region	Tankers	Bulkers	Container	Others	Total
China	2.4	2.5	3.9	0.7	9.5
Japan	2.5	3.1	1.6	4.2	11.4
S. Korea	5.8	0.3	8.3	10.3	24.7
Others	0.8	0.9	4.2	3.3	9.2
Total	11.5	6.8	18.0	18.5	54.7

2004 - in million cgt

Region	Tankers	Bulkers	Container	Others	Total
China	2.9	2.0	3.3	1.0	9.3
Japan	4.6	7.7	1.4	4.9	18.6
S. Korea	6.8	0.0	9.4	12.7	29.2
Others	1.8	1.4	4.8	3.5	11.5
Grand Total	16.0	11.5	19.0	22.1	68.6

(Source: The Platou Report 2006)

The Price of Steel

A significant part of the cost for a shipbuilder is closely linked to the steel market, which has been booming in the past two years following the global economic upturn that created higher demand for steel. However, the price increases for steel plates used in shipbuilding culminated in the middle of 2005, as additional Chinese production capacity entered the market. Two new facilities with a combined capacity of 2.6 million mt were commissioned during the year, raising the total capacity for making heavy plates by close to 10 percent. Our price index for heavy steel plates peaked in May 2005 at $667 per ton and ended the year 15 percent below at $575/mt.

At the end of the year, South Korean shipyards announced they would compensate the rise in steel prices by sourcing more steel from China. Domestic prices for heavy plates in China was reported at $475/mt towards the end of the year. Hyundai said they considered buying a stake in a major Chinese steel mill as part of this initiative, which could boost its Chinese imports from the current 10 percent to between 15 and 20 percent of imports. Total Chinese steel exports to Korea have grown from one million tons in 2001 to an estimated five million tons in 2005. However, Korean steel plate still dominates in domestic shipbuilding with only 30 percent imported, mainly from Japan. In an industry producing goods for the international market, a fluctuation in the currency of the producing country will affect profitability. In 2005 European and Japanese shipbuilders were helped by a depreciation of their currencies as both the euro and yen fell some 15 percent against the dollar. Korean and Chinese builders were not as lucky as both won and yuan maintained their value against the dollar. The yuan did so in spite of the release from a long period of being pegged to the dollar.

Korean Yards Remain Aggressive

Korean yards were also in 2005 the most aggressive and grabbed close to half of all new orders, helped by their dominance in the LNG and LPG segments. They maintained their dominance in the tanker and container segments where they took about half of all orders. The Korean order book grew by 8 million cgt, representing 44 percent of all tonnage on order. In 2005, the Korean yards delivered 23 percent more tonnage in terms of cgt than the previous year, thanks to a massive increase of container vessels and LNG carriers. This trend is likely to continue in Korea. According to the order book, in two years' time deliveries will have increased by close to 20 percent per year. During the recent order boom there has been a number of new Korean companies entering the shipbuilding market. This year Daehan Shipbuilding announced they started to build a new yard in Haenam, which will have two drydocks, and aims to build the first vessel there in early 2007.

Driven by an endless search for lower costs and also due to the fact that some Korean block builders have taken steps to become independent newbuilding yards, yards are seeking opportunities abroad. China has so far been the favorite country for outsourcing part of the production. Daewoo reported plans to invest $100 million in the Sanndong province. The new block factory will start production of 50,000 mt per year in 2007, with plans to expand to 300,000 mt by 2016. STX also announced plans to invest $100 million in a 30,000 mt per year hull-block facility in the Shandong province. Samsung said it has plans to invest in a second, 200,000 mt per year block factory in China as their first six year old facility in Ningbo is no longer able to meet their demand. Furthermore, two major Korean block builders, DongYang and SungDong H.I., are entering the newbuilding market. Other low cost countries have also become alternatives for outsourcing. Daewoo said they will develop a shipyard in the Philippines. The initial plan is to start up by building vessels up to Panamax size and the first newbuildings will be delivered in 2008. Hanjin Heavy Industries was also planning to invest $1 bill. to set up a 1 mill. square metres large shipyard in the Philippines. Initially, they plan to manufacture hatch and hull blocks from the middle of 2007. Once its workers have acquired shipbuilding experience, they will progress to constructing large ships up to VLCCs and post-Panamax container ships sizes.

China

Chinese yards increased their market share by three percentage points in 2005. The most significant change was recorded in the dry bulk segment where they doubled their share and took one-third of all orders. During the year they increased deliveries by 30 percent. A 3.8 million cgt increase was noted in their order book, which by the end of the year represented 14 percent of the overall order book.

China's ambition to become a big shipbuilding nation is all well known. The country obviously has comparative advantages in terms of being a low cost area, but its ambitions in shipping also springs out of a huge need to import raw materials and export products. Numerous new facilities have already been constructed and more are set to follow. China Shipbuilding Industry Corp (CSIC), the northern shipbuilding group, announced plans for new a yard in the province of Heibei, dubbed Shanhaiguan Shipbuilding Heavy Industries. The CNY 2.6 billion, 700,000 sq. m. project will focus on containerships, bulk carriers, tankers and FPSOs and are set to start building its first vessel in 2008 with delivery 20 months later. Also, Dalian and Dalian New Shipbuilding & Heavy Industries merged at the end of 2005 after a 15-year separation, and the owner is planning to expand the facilities further by adding two more VLCC-size dry docks. Jiangsu Yangzijiang got approval from the central government to build a new 96 x 500 m drydock directly across the Yangtze River from where it is currently situated. The yard said it had ambitions to build container ships of more than 4,000 TEU and would be able to deliver the first ship at the end of 2008. Nacks, a joint venture between Cosco and Kawasaki, got government approval to build a new 500-meter long CNY 2 billion drydock with first delivery in 2008. China also has plans to start building sophisticated tonnage, and the Shanghai based yard Hudong-Zhonghua Shipbuilding had at the end of 2005 received orders for a total of five LNG carriers. This year the yard launched its first LNG vessel.

(Continued on page 65)

Offshore O&G Spend

Forecast to Surge to $247 Billion by 2010

Daily offshore oil & gas production, currently standing at around 43 million barrels of oil equivalent (boe), is forecast to grow to 53 million boe in 2010 and drive industry annual expenditure from $193 billion in 2006 to $248 billion by 2010, according to the "The World Offshore Oil and Gas Production & Spend Forecast", a study on the prospects for the offshore oil & gas industry published by Douglas-Westwood and based on information in the Energyfiles database.

Douglas-Westwood' managing director John Westwood said "High oil & gas prices over the period to 2010 will result in continued strong growth in the offshore oil & gas sector. Over the next five years we expect annual capital expenditure to increase by 10 percent from just under $110 billion in 2006 to $120 billion in 2010, but the real star of the show will be the less glamorous operational sector with a forecast growth of 53 percent, from $83 billion to $127 billion."

Energyfiles director and report lead author Dr Michael R. Smith said "offshore spends are increasing rapidly but there are considerable differences across the regions. The main causes for the disparities are an increasing shortage of lower cost prospects in all but the Persian Gulf and the limited availability of deep water sedimentary areas with potential for oil and gas reserves outside those already identified in Brazil, the Gulf of Mexico, West Africa and some other less prominent regions. Nevertheless all markets will retain ever-higher levels of operating expenditure. Overall, we expect West Africa to show the greatest growth at nearly $13 billion."

The report stresses that new activity in the mature offshore regions will increasingly become dominated by existing and new start-up small oil companies (along with the relevant National Oil Companies) as producing and exploration assets are acquired by smaller companies that specialise in marginal field developments and in scavenging for tail-end production.

Resource Limitations

However, a particular concern is that over the next three years most sectors of the offshore industry will be equipment and people resource-constrained. "Day rates will remain high, especially for capital assets such as high specification drilling rigs and other vessels. The experienced personnel needed to design, build, and operate drilling and production equipment will also command a growing premium".

However, it is noted that "new rigs have already begun to enter the market and are now serving to moderate day rate growth. These restraints are reinforced by limits on opportunities in offshore regions available to private oil & gas companies."

"The offshore market forces directing the industry towards new cost-cutting technology and other commercial innovations are strengthening. In this sphere the greatest challenges faced by technology developers remain problems related to the conversion of new products into proven hardware, in particular the reticence by oil companies to introducing unproven equipment into a high technology project. New low-risk ways of product introduction are needed for both technology developers and oil companies to field-prove new technology."

In the light of growing offshore expenditure another challenge that both the oil companies and their contractors is facing is that of accessing human resources. "The 'skills shortage' may in time be addressed as new people enter the industry attracted by higher salaries. But the 'experience shortage' is far more challenging and there exists a growing potential for both technical and strategic mistakes to be made by inexperienced personnel acting in an environment of rapid technology advances" said Westwood.

Low Cost Plays Disappeared

On the other hand resource-limited growth is also of increasing concern said Dr Smith. "Besides the portfolios of a few NOCs operating in the Persian Gulf, the low marginal cost oil plays have virtually disappeared.

Opportunities for finding and developing large offshore oil fields with relatively benign sub-surface and reservoir conditions are now rare.

Only the most demanding environments in ultra-deep waters and Arctic regions are expected to offer new large scale opportunities by the end of the period."

"Conversely, offshore gas still has opportunities related to the advent of new gas production and conversion technologies, the growth of gas markets in the developing world, and pressures by all governments to eradicate gas flaring. LNG projects and the beginnings of a GTL industry are kick-starting the development of stranded gas fields that have been lying fallow for many years and are also encouraging new exploration drilling in gas-prone areas."

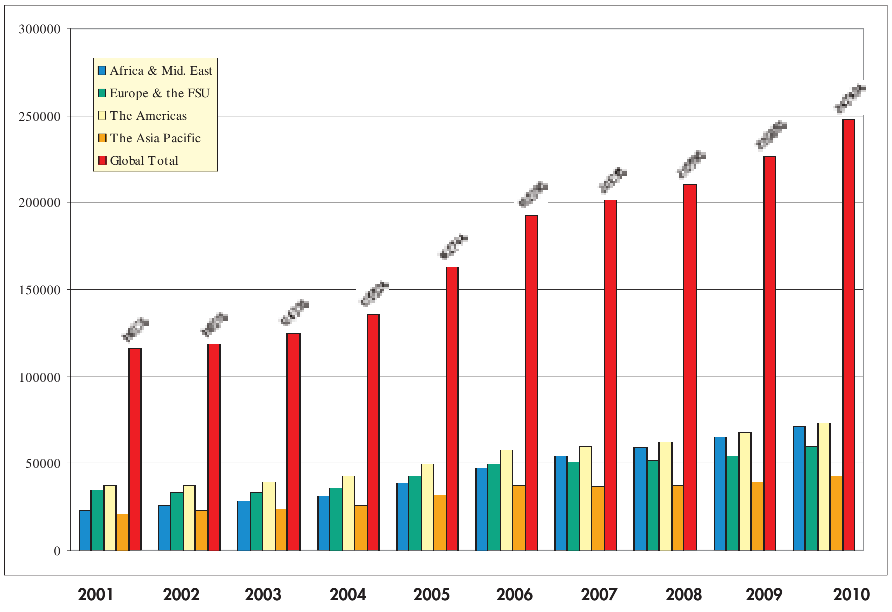
"What's more considerable growth is forecast for all forms of deep water production facilities, but especially floating production systems and subsea production and processing hardware.

Subsea systems are also expected to attract an increasingly larger part of the shallow water offshore spend as marginal development programs escalate."

Future Oil Prices

"The oil price rises of the last three years have had a big effect on prices" said Dr. Smith.

Global Offshore O&G Spending - 2001-2010



Global Offshore O&G Spending — 2001-2010

Total Spend, $ million	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Africa & Mid. East	23066	25697	28764	31494	38413	47784	54369	58903	65035	71240
Europe & the FSU	34488	32925	33444	35701	42433	49672	50811	51837	54597	59973
The Americas	37533	37389	39064	42769	49744	57926	59442	62475	67587	73425
The Asia Pacific	21050	22807	23667	25561	32154	37508	36693	37376	39431	42846
Global Total	**116136**	**118819**	**124939**	**135524**	**162744**	**192890**	**201315**	**210590**	**226650**	**247484**

"The Energyfiles forecast for oil prices over the next five years is of erratic but generally flat levels in 2006 as oil demand growth is forced down by higher oil prices; as new non-OPEC production enters the market from the deep waters of West Africa, from the Gulf of Mexico and from the Caspian Sea; and as new LNG developments continue to replace oil use in Asia. Renewed oil price escalation is forecast after 2007 eventually leading to more cost inflation in the service sector. By 2010 the world will have entered a new, permanent energy capacity-constrained environment waiting on real large-scale alternatives to oil in the transport sector."

The report concludes that "offshore production forecasts show that the lengthy era of relatively low-cost oil and gas sources has ended. Higher oil and gas prices are here to stay - an oil price collapse could only be driven by a world-scale economic and/or political crisis that interrupts demand growth."

As we move beyond 2010 the future of companies operating in the offshore exploration and production industry will become increasingly vulnerable to outside economic and political circumstances. The period from 2010 to 2015 is still expected to be "the time period when global oil production from all offshore and onshore sources, including unconventional sources, will become seriously resource-limited and year-on-year declines in global oil output will begin. During the transition period, whilst new transport fuels will have to be developed, the world will need all the offshore oil it can get."

(Source: The World Offshore Oil and Gas Production & Spend Forecast, Douglas-Westwood)

Ameri-Force Craft Services Acquires SyCom

Ameri-Force Craft Services Inc. has completed the acquisition of SyCom Services, Inc., a defense industry engineering and professional staffing services firm. SyCom will operate as a wholly owned subsidiary of Ameri-Force Craft Services Inc. The SyCom Services acquisition is part of Ameri-Force's strategy to complement its existing position in the marine new construction and repair segment of the federal market with targeted growth in information technology, administration and engineering services. Ameri-Force Craft also announced that it has hired Beth Cahallan as the Virginia Branch Manager. Cahallan has more than 16 years experience in the contract labor support business in the Tidewater Virginia Marine and Industrial markets. She was the founder and owner operator of Alliance Staffing Services, a contract labor provider to the marine and industrial sector in Virginia. In addition to her hiring, Ameri-Force has gained the market share and employees of the former Alliance Staffing Services.

Electrochem Announces Record Quarter

Electrochem Commercial Power announced a 24 percent increase in cumulative sales revenue during the first quarter ending March 30, 2006, compared to the same quarter in the prior year. "We're very pleased to see 2006 off to a great start," said Richard Fagan, Business Unit Controller, Greatbatch Ltd. "We are successfully executing our manufacturing strategy and our new product introductions remain on track." The revenue growth during the first quarter resulted from a rising demand for Electrochem lithium battery packs and cells from customers in various global markets including oil and gas, oceanography and seismic surveying.

Containership Survey

Box Carriers Fall Short on Reliability

Drewry's survey of containershipping performance found that Matson was one of the world's most reliable carriers, arriving 'on-time' 83 percent of the time.

Despite claims that most containerships operate on fixed-day weekly schedules, more than 40 percent of vessels operated in liner services arrive one or more days late, according to a global survey from Drewry Container Shipper Insight. Drewry carried out what it believes is the liner shipping industry's largest schedule reliability survey, based on the tracking of 3,300 vessel arrivals on 23 different east/west and north/south trade routes. The continuous survey is an attempt to help shippers plan their supply chains with realistic expectations of delivery times and assist them in the selection of liner carriers.

The survey found relatively low average schedule reliability levels overall

Liner/Carrier	% of ships arriving on scheduled day	On-time arrival industry rank	Transit Time deviation from schedule (in days)	Transit Time reliability industry rank
Top 3 carriers in on-time reliability				
Korea Maritime Transport (Korea)	91%	1	0.2	1
Alianca (Brazil)	90%	2	0.4	5
Matson (US)	83%	3	0.4	2
Bottom 3 carriers in on-time reliability				
Delmas (France)	0%	61	3.4	60
OT Africa Line (UK)	0%	62	3.4	61
MACS Maritime Carrier (Gerrmany)	0%	63	4.5	63

(Source: Drewry Container Shipper Insight Q2 2006)

across the industry, but with stark variations between the schedules of different liner carriers. The current percentage of liner vessel calls arriving on time is 57 percent, with 22 percent of all vessels arriving the day after the scheduled day, 7 percent making it two days late and 12 percent of vessels calling at the port of arrival three or more days late.

Looking at individual carriers, their on-time arrival reliability percentages ranged between 0 percent for the least reliable shipping lines and 91 percent for the best performing carriers, over the December 2005-April 2006 period of the survey (see table, previous page).

Among the major east/west carriers, the lines with the highest schedule reliability results are Safmarine, Hatsu Marine (part of Evergreen) and Maersk Line, according to the survey. The major east/west carriers with the lowest on-time schedule percentages are Mediterranean Shipping Co. and China Shipping Container Lines.

"Of the 63 international liner carriers whose vessel schedule reliability we monitor, only 16 have on-time vessel arrivals of 60 percent or more," said Philip Damas, lead researcher on the Drewry Container Shipper Insight. "This indicates that a large section of the industry still does not operate with the sort of predictable, reliable schedules which most shippers need," he added.

The low schedule reliability of some carriers can be partly explained by trade-specific conditions, such as port congestion in many African ports. However, the survey found that, within the same trade route, schedule reliability scores also vary considerably, depending on the individual service and individual carrier.

"In the transpacific trade, regarded as a market where shippers are very demanding in terms of fast and reliable transit times, we found that seven West Coast of North America weekly services and three East Coast of North America weekly services had on-time arrivals of less than 30 percent," Damas said.

Drewry contends that most liner carriers have not included in their weekly schedules sufficient buffer time for contingencies such as bad weather and port delays, and that some lines regard buffer time as too expensive. This was compounded in early 2006 by the switch of the vessels of P&O Nedlloyd from the Grand Alliance to Maersk, which disrupted the services of both.

To protect the integrity of their supply chains, Drewry is urging shippers, before they use additional carriers or import from new sourcing areas, to consider the schedule reliability levels of different carriers and the varying levels of delays of the trade route concerned. Quantified trade route and carrier-specific schedule reliability information was not publicly available until now.

According to Drewry's survey, the following routes experience some of the highest vessel schedule reliability: transpacific, Asia/Indian Subcontinent/Middle East, North America mainland/Hawaii/Guam and, somewhat unexpectedly the South American East and West Coasts trades to and from both Europe and North America. The routes with the lowest percentage of on-time vessel arrivals (less than 40%) include: Europe/Africa, North America/Africa and Europe/Caribbean/Central America. Transit time delays of up to four days are typical on some trade routes.

(Source: Drewry Shipping Consultants Ltd., www.drewry.co.uk)

Cruise Report

Passenger Traffic Up 3.5 Percent in 2005

North American cruise passenger traffic increased by 3.5 percent in 2005, with more than 9.7 million passengers carried on 4,463 cruises by the 17 largest cruise lines, according to preliminary figures from the U.S. Maritime Administration (MarAd). Growth figures were lower than in recent years, due in part to last year's hurricanes, but occupancy rates remained high, reaching nearly 110 percent. (Note: A double stateroom with two passengers is considered 100 percent occupied. Since many double staterooms can accommodate three or four people, occupancy can be more than 100 percent.)

Table 1: North American Cruise Statistics

Year	Cruises	Passengers	Capacity	Occup. %	Passenger Nights	Avg. Nights
2003	4,094	8,348,719	7,875,665	106.0	53,533,841	6.41
2004	4,465	9,418,317	8,724,434	108.0	61,627,535	6.54
2005	4,463	9,747,188	8,885,612	109.7	63,730,903	6.54

Table 4: North American Cruise Passengers, New Orleans and Other Ports

Year	Qtr.	New Orleans	Other Ports	Total
2003	1	79,319	1,949,491	2,028,810
2003	2	41,848	1,970,230	2,012,078
2003	3	75,122	2,105,903	2,181,025
2003	4	100,465	2,026,341	2,126,806
Annual		296,754	8,051,965	8,348,719
2004	1	114,966	2,190,160	2,305,126
2004	2	86,692	2,230,697	2,317,389
2004	3	77,096	2,359,974	2,437,070
2004	4	117,067	2,241,665	2,358,732
Annual		395,821	9,022,496	9,418,317
2005	1	142,589	2,402,254	2,544,843
2005	2	107,947	2,302,535	2,410,482
2005	3	57,858	2,365,638	2,423,496
2005	4	0	2,368,367	2,368,367
Annual		308,394	9,438,794	9,747,188

Ports that escaped hurricane damage last year showed the most dramatic growth in 2005: Los Angeles departures rose 41.5 percent; Honolulu grew 37.9 percent; and Jacksonville increased 20.5 percent. Even Galveston, TX, which was temporarily closed due to Hurricane Rita, showed 22.5 percent growth during 2005. New Orleans had been showing strong growth in the first two quarters, with departures up 23.7 percent over the same period in 2004, but after the devastation of Hurricane Katrina, New Orleans experienced a 22.2 percent decline for the year.

The North American Cruise line market is highly concentrated, with the five largest lines accounting for 84.9 percent of the passenger-nights in 2005 (Table 2), up slightly from 83.9 percent in 2003. Over the last three years, each of these lines has registered growth in passenger-nights over the last 3 years. In addition, average cruise length has grown slightly over the past three years, from 6.4 to 6.5 nights.

Table 2. North American Cruise Passenger Nights by Cruise Line

Cruise Line	2004	2005
Carnival Cruise Line	17,276,524	17,738,690
Royal Caribbean	15,735,164	15,962,894
Princess Cruises	7,730,667	8,316,412
Norwegian Cruise Line	6,086,050	7,187,735
Holland America Line	5,105,213	4,906,262
Celebrity Cruise Lines	5,062,467	4,665,555
Disney Cruise Line	1,849,956	1,875,052
Costa Cruise Line	627,702	868,757
Cunard Line	809,055	802,394
Crystal Cruises	385,177	392,029
MSC Italian Cruises	296,366	381,985
Radisson Seven Seas Cruises	371,658	372,825
Oceania Cruises	80,088	87,482
Silversea Cruises	86,413	71,285
Seabourn Cruise Line	51,715	51,299
Windstar Cruises	49,431	25,652
Seadream Yacht Club	23,889	24,595
Total	**61,627,535**	**63,730,903**

Miami, Port Canaveral and Fort Lauderdale accounted for 43 percent of passenger departures in 2005 (Table 3), down from 49 percent 2 years earlier. For the same period, U.S. West Coast ports registered a 64 percent increase in departures, increasing their combined share from 12 percent to 17 percent. Most notable among West Coast ports was Seattle with a 104 percent increase.

Ports that escaped hurricane damage last year showed the most dramatic growth in 2005: Los Angeles departures rose 41.5 percent; Honolulu grew 37.9 percent; and Jacksonville increased 20.5 percent

Table 3. North American Cruise Passengers by Departure Port

Departure Port	2004	2005
Miami	1,682,777	1,771,250
Port Canaveral	1,230,130	1,233,616
Fort Lauderdale	1,237,227	1,199,413
Los Angeles	434,352	614,780
San Juan	676,600	581,116
Galveston	433,355	530,704
Vancouver (Canada)	436,156	434,455
Tampa	399,159	407,665
New York	548,016	369,870
Long Beach	401,341	362,834
Seattle	290,880	336,538
New Orleans	395,821	308,394
Honolulu	170,183	235,647
San Diego	172,639	234,284
Cape Liberty	0	146,714
Jacksonville	113,728	137,083
Houston	90,515	98,545
Whittier	88,293	95,504
San Francisco	84,894	88,822
Mobile	28,821	87,628
Boston	73,105	80,403
Seward	75,034	67,957
Baltimore	104,633	66,782
Philadelphia	29,624	50,444
Norfolk	47,888	45,414
Charleston	38,892	41,337
All Other Ports	134,254	119,989
Total	**9,418,317**	**9,747,188**

Third and fourth quarter departures clearly showed the impact of last year's hurricanes (Table 4). While departures from New Orleans fell sharply, the impact on overall departures was softened by growth in departures from other North American ports.

Piracy: Way Beyond The Cost of Doing Business

By Joe DiRenzo III, Chris Doane and Captain David Moskoff, USMS

On March 15, 2006 under increasing calls from both the International Maritime Organization (IMO) and the maritime industry, the United Nations Security Council acknowledged the escalating piracy problem off of the coast of Somalia by issuing a declaration which stated,

"Taking note of resolution A.979 (24) of the International Maritime Organization's biennial assembly adopted on 23 November 2005 and concerning the increasing incidents of piracy and armed robbery against ships off the Somali coast, the Council encouraged Member States with naval vessels and military aircraft operating in adjacent international waters and airspace to take appropriate action to protect merchant shipping, particularly the transportation of humanitarian aid."

This declaration comes on the heels of an attack on the M/V Rozen that was carrying relief supplies to Somalia. The attack was carried out, according to published reports, by five pirates armed with machines guns and rocket-propelled grenades.

The attack on the Rozen follows a growing number of piracy acts, not only off the coast of Somalia, which is still one the world's hot spots but throughout the world.

This issue is of increasing concern to the merchant industry, insurance companies and security forces alike as pirates are branching out into new areas to conduct operations. It also highlights the need for fundamental change that must occur regarding the way piracy is viewed by both industry and insurance organizations.

Colin James, writing for the New Zealand Herald, focused on a key issue evidenced by a quote from Eric Barratt, the Managing Director of Sanford, Ltd., a New Zealand seafood company. Barratt, commenting about New Zealand's Toothfish industry impacted by pirates boarding fishing vessels and stealing their catch said, "some ships involved in the piracy are impounded if they turn up in the port of a country that outlaws piracy. But Barratt says some companies regard the loss of an occasional ship as the "cost of doing business" and even budget for it."

However, this "cost of doing business" has other foreseeable costs for the merchant industry and their insurance companies. The change in recent years makes this unmistakable. Piracy has become very big business, netting millions of dollars for successful attacks through cargo hijacks, ship hijacks and even kidnapping the crew for ransom. Attacks have become more violent and comparatively more complex. The ability of ship owners to absorb piracy events as a "cost of doing business" is prohibitively expensive, both financially and politically.

Where a decade ago, the cost to most ship owners was typically a short delay to the vessel or the theft of some rope or tools, this "cost" has escalated to include previously unprecedented crimes that now lead to fatalities in addition to the loss of the vessel and its cargo. This deadly change even more seriously impacts lives of merchant seamen and travelers as well as the multi-trillion dollar shipping industry and the global economies of the planet. It may only take one or two significant piracy events to trigger an uncontrolled apprehension beyond the $16-25 billion in annual losses now estimated (experts are unsure of the actual true costs due to the large number of unreported attacks). If left unchecked, it has the potential to cost hundreds of lives annually and hundreds of billions of dollars. If a cruise ship is successfully targeted, the losses would be much higher.

From a February 8, 2006 report from an industry publication, "A string of piracy hot spots has emerged over the past 12 months and attacks are becoming more violent." The report continued "Iraq, Somalia and Vietnam have seen significant increases in the number of pirate attacks this year." In a January 19, 2006 Toronto Star article, Patrick Evans quotes Thomas Brown, a principal of insurance intermediary Seacurus, Ltd., "But he said piracy is getting deadlier. "Pirates realized it's actually easier to hold the humans who man these ships for ransom"

Acknowledging the issue of Piracy is detrimental to the maritime transportation system has been steadily growing, The Insurance Journal reported in its March 20, 2006 edition that Lloyd's has modified it policies and that a "set of clauses have been made available for use on marine hull and hull war policies held by shipowners to cover piracy risks. Use of these new clauses will clarify the situation for policyholders and insurers as piracy and terrorism will be covered by the same policy." The announcement said the "changes have been made to reflect the difficulty in distinguishing between pirate and terrorist attacks as pirate attacks have become more violent and sophisticated. This has led to an increased risk of disputes over who should pay up when a ship is attacked in the event that the motive for the attack is unclear. The clauses, drawn up by the London Market's Joint Hull and Joint War Committees allow for the removal of piracy and some other similar coverage from the hull policy, and their reallocation under the war policy."

The Insurance Journal article further explained, "In the past, piracy has not been a substantial economic issue for insurers," it further explained. "While insurers were aware of the incidents, thankfully they have not led to major financial losses. The method of operation of many of these gangs has been of general concern for some time, but the increasingly sophisticated methods and equipment used by these gangs have heightened fears that one of these incidents may lead to a major loss for underwriters."

The maritime industry, the maritime governing bodies and their insurance providers are becoming cognizant they must respond to the rising level of violence associated with piracy.

First, it is important that the belief that losses due to piracy are an acceptable "cost of doing business" be challenged and questioned by members of the maritime transportation system world-wide.

Secondly, nations in regions where piracy is prevalent need to develop coalitions to address the problem. The model for this concept is the collaborative initiative that has been undertaken in the vicinity of the Straits of Malacca where pirates have been very active for decades. The countries of Indonesia, Singapore, Malaysian and Thailand

Piracy Incidents Drop in 2005

According to the Annual Piracy Report, 2005 reveals an increase of pirate activity in Somalia, Tanzania and Vietnam. Somalia recorded 35 reported attacks in 2005 compared to just two in 2004. The increased attacks now rank Somalia number two after Indonesia in the table of world piracy risk prone areas and declares Somali waters the most dangerous in Africa.

According to the report a total of 23 vessels were hijacked in 2005, the highest in four years. 440 crewmembers were taken hostage in 2005, the highest number since IMB started compiling statistics in 1992. The hostages were taken in incidents in Somalia, Indonesia and Nigeria. Despite a rise in attacks in some areas, the number of reported piracy attacks for 2005 fell from 329 in 2004 to 276 in 2005, the lowest recorded figure in six years. According to the report no crewmembers were killed in acts of piracy last year — though 12 remain missing.

Despite accounting for nearly 30% of all reported attacks, figures for Indonesia show a drop from 94 reported attacks in 2004 to 79 attacks in 2005. Attacks in the Malacca Straits fell from 38 in 2004 to 12 attacks in 2005. Malaysia, Thailand, Brazil, Venezuela, Colombia, Haiti, Nigeria and Guinea also all recorded a fall in the number of reported piracy and armed robbery attacks.

On a trial basis, IMB is offering the report free of charge. To request a PDF version of the report by email, please visit:

http://www.icc-ccs.org.uk/prc/piracy_rep_app.php

signed an agreement that allows the naval forces of the participating countries to chase pirates across each other's borders — after obtaining permission from the host nation. This "border transparency" takes away a shelter that pirates have long exploited, the inability of foreign naval vessels to chase pirates in the territorial waters of another nation. The UN Convention on the Law of the Sea (UNCLOS), which was ratified by 145 nations (but not the U.S.), allows states to seize pirate ships on the high seas and determine a penalty at their own discretion.

These four countries, in an operation dubbed "Eyes in the Sky", have also agreed to provide air assets to jointly patrol the straits. Zurich Financial Services, another multi-national company with significant maritime ties, reported on their web site that: "According to an article in Insurance Day on January 19, 2006, this "Eyes in the Sky" initiative compliments joint naval patrols that were introduced in the summer of 2004. The article goes on to note that "the increased presence seems to have paid off, as the number of piracy attacks in the Strait decreased in 2005 compared with previous years." Thirdly, maritime companies need to take aggressive steps to promote ship self-defense and crew anti-terrorism training. The numbers of schools offering anti-piracy defense tactics have grown steadily, as has the literature surrounding anti-piracy operations. One of the most anticipated books related to this topic will be published by Steven Bronson. Bronson, who is well-known in police and anti-terrorism training circles will publish "Maritime Counterterrorism and Anti-Piracy: Prevention, Critical Response, and Investigation (ISBN: 0849314313)" in June 2006. Enhancements to vessel self-defense should be rewarded by recognized insurance companies through credits or rate adjustments based on the layers of defense that merchant vessels implement. For example if ship self-defense and surveillance systems are installed and fully operational credit may be provided. Additionally, if crews attend and pass rigorous training programs in anti-piracy methods, that training should be rewarded through premium discounts or other methods.

Finally, there needs to be acceptance that despite the best concerted efforts of defense, security and law enforcement agencies piracy is a life-threatening challenge for the maritime industry. This idea was captured extremely well by then United States Navy Secretary Gordon England. England, while addressing the Woodrow Wilson International Center for Scholars, noted that "The seas are un-policed and unregulated and, therefore, attractive to those who want to exploit or abuse them". Adding that "On average, more than one ship each day is attacked, robbed, hijacked or sunk." The now Assistant Secretary of Defense, acknowledged the actual growth in piracy events as "more than 56 percent in recent years," which is an alarming trend. The maritime transportation industry must object to the concept that losses incurred from piracy is a simple cost of doing business. Piracy is arguably intensifying through the present policy of passive acceptance. This, in turn, will involve aggressive enforcement actions by the security forces of all maritime nations and an aggressive self-defense posture on board merchant ships to stem the rising tide of piracy.

Jones Act Remains Foundation of Domestic Maritime Policy

By Philip M. Grill, Chairman, Maritime Cabotage Task Force

As the Maritime Cabotage Task Force (MCTF) begins its 11th year of existence, we are both proud of our accomplishments and mindful of our challenges going forward. MCTF was founded at a time when some wished to set U.S. domestic maritime policy hopelessly adrift by opening domestic trades to foreign shipping. MCTF steered the nation clear of those shoals, but we must maintain a proper lookout today and tomorrow. Because MCTF has been on watch for quite a while, some readers might not be familiar with our origins. We were founded in the fall of 1995 in response to unprecedented media and Congressional attacks on the U.S. maritime cabotage laws. An admittedly effective campaign of disinformation had more than a few members of Congress questioning the need for the

A U.S.-flagged, 550-series ATB transports bulk petroleum along the West Coast. These ATBs are the newest additions to the petroleum tank vessel fleet and are the result of years or research, testing and customer partnering.

Jones Act and other U.S. maritime cabotage laws. A number of bills were actually introduced that would have scuttled the Jones Act, Passenger Vessel Services Act and other statutes. Some even attracted a fair number of cosponsors. In light of these developments, the U.S.-flag Jones Act industry banded together as never before and launched the Maritime Cabotage Task Force. Our most immediate need was to rebut the false claims of inadequate service or capacity in the Jones Act trades. MCTF produced a number of landmark studies, most notably Full Speed Ahead, which quickly set the record straight and led to a majority of the House endorsing H. Con Res. 65, a statement of full support for the Jones Act, in 1998.

Our 2004 Annual Report, which is available on our Web site (www.mctf.com), recounts MCTF's history and accomplishments in depth, so the remainder of this column will be dedicated to the current state of our cabotage laws and a look at the future.

The most serious threats to the Jones Act of late were the blanket waivers granted for certain petroleum products following Hurricanes Katrina and Rita in August and September of 2005. MCTF did not oppose the first waiver. The destruction was so widespread that we understood the Administration had to make momentous decisions without the luxury of in-depth analysis. We publicly stated that we "respected" the President's action and pledged our full cooperation in the rescue and rebuilding efforts. The second waiver was another matter. It was totally unnecessary in more than one way. First, the Jones Act fleet did in fact have the capacity to meet all of the nation's cargo needs, liquid or dry-bulk, even after the first hurricane. Second, there is already a provision for waiving the Jones Act for an energy emergency on a case-by-case basis. These waivers, however, require a determination that U.S.-flag tonnage is not available and that the emergency threatens national security before the waiver would be approved. Because the Jones Act fleet has sufficient capacity to meet ongoing fuel transportation needs, this provision is infrequently used, and later analysis almost always verifies that the requested waiver was unnecessary.

The Maritime Cabotage Task Force Board.
First row, left to right: Alan Butchman, American Shipping Group, Marine Resources Group; Philip Grill, Matson Navigation Company and Chairman of MCTF; Michael Roberts, Crowley Maritime Corp., Venable LLP; Robert Zuckerman, Horizon Lines; Jim Weakley, Lake Carriers' Association.
Second row, l-r: Frank Pecquex, Maritime Trades Department, AFL-CIO; Thomas Allegretti, The American Waterway Operators; James Rausch, Dredging Contractors of America; James Henry, Transportation Institute; Eric Smith, Overseas Shipholding Group; Charles Crangle, American Maritime Officers; Allen Walker, Shipbuilders Council of America.

A precedent, once set, can be a blessing or curse. Following the second waiver, MCTF had to mobilize to ensure that blanket waivers became a historical footnote rather than a new domestic maritime policy.

MCTF logged many an hour meeting with the Federal agencies involved with the waiver process. Our message was simple. The Jones Act fleet can meet the needs of domestic waterborne commerce under even the most trying circumstances. If it appears there might be a need for a waiver, there is a time-tested process in place. Blanket waivers accomplish nothing more than undermining the integrity of a law that has served the nation well since 1920.

That message sank home. If a future catastrophe, natural or otherwise, prompts consideration of waivers, the decision makers will be much better prepared to deal with the situation and not jeopardize our maritime cabotage laws.

As for the future, we claim no clairvoyance. We can only state that with such strong support in the Administration, Congress and key Federal agencies, the Jones Act is as solid as it ever was.

Not that there won't be challenges. The law continues to be a frequent topic before the World Trade Organization. The United States has never bent to pressure in these or other trade talks, but MCTF has to make sure that remains the case.

Will some future legislation present a loophole, intentionally or not? The potential is there, but just as when a recodification of Title 46 inadvertently threatened to remake basic domestic maritime policy, MCTF will sound the alarm.

If there's any frustration that MCTF feels, both collectively and individually, it's that America's Jones Act fleet is not appreciated as much as it should be outside our nation's Capital. Many Americans are unaware of the scope and impact of domestic waterborne commerce. Unfortunately, unlike many modes of domestic transport, MCTF does not have the resources to launch a nationwide education effort.

Even those familiar with our maritime industry sometimes do us a disservice when they compare today's merchant marine to previous levels. It is true that at the end of World War II, the United States had the largest fleet in the world. A U.S. flag could be seen flying from the sterns of vessels in just about every port in the world.

While one may wax nostalgic for those days and rightfully lament that flag of convenience operators have usurped our fleet in international commerce, it is misleading to suggest that the domestic fleet's stature has diminished. The vessels that fly the American flag on our inland rivers, Great Lakes, coasts and trade to Hawaii, Alaska, Puerto Rico and Guam, are among the most efficient in the world. The increasing size and efficiency of modern ships makes reliance on comparing numbers of ships a risky proposition. In just about every trade, one vessel now carries as much cargo as did five, seven… decades ago. It is fitting then that this column will appear close to National Maritime Day on May 22. May is also the month that the National Archives are devoting to the U.S. maritime industry. We hope that our nation will take special notice of the event and reflect on the contributions of our domestic fleet. It is truly U.S.-owned. It employs Americans. It's built here. It pays taxes here.

It complies with our laws. Because of all that and more, America's Jones Act fleet is the foundation of the world's safest and most efficient transportation system.

The largest Jones Act vessels on the Great Lakes are more than 1,000 feet long and can carry nearly 70,000 tons of iron ore or coal each trip. A 70,000-ton iron ore cargo will feed a major steel mill's blast furnaces for 5 days. A like-sized coal cargo will produce enough electricity to power a metropolitan area the size of Greater Detroit for a day. (Photo courtesy U.S. Army Corps of Engineers)

ADVERTORIAL

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For more information, contact us toll free at 1-800-ESAB-123 or online at www.esabna.com.

OPA-90 Phase-Out, U.S.-Flag Product Tankers By Phase-Out Year

10,000-70,000 DWT, As Of December 31, 2005

Name	GRT	DWT	Year Built	Year Reblt.	OPA-90 Phase-Out*	Hull
PERSEVERANCE	17,491	29,999	1981	na	2006	SH
SMT CHEMICAL EXPLORERI	17,126	41,108	1981	na	2006	SH
SMT CHEMICAL TRADERI	17,126	41,108	1981		2006	SH
SCC 3902I	18,671	39,976	1977		2007	DB
SEABROOK	21,055	33,869	1983		2008	SH
SEABULK POWER	17,393	37,166	1969	1983	2008	SH
OVERSEAS NEW ORLEANS	24,816	43,643	1983		2008	SH
ASPHALT COMMANDER	21,401	33,869	1984		2009	SH
COAST RANGE	24,348	40,632	1981		2011	DB
BLUE RIDGE	24,348	42,268	1981		2011	DB
KEYSTONE TEXAS	21,354	39,990	1981		2011	DB
SEABULK CHALLENGE	29,763	45,350	1981		2011	DB
SEABULK TRADER	29,763	43,727	1981		2011	DB
S/R GALENA BAY	27,894	50,116	1982		2012	DB
GROTONI	22,471	47,247	1982		2012	DB
JACKSONVILLEI	22,331	47,247	1982		2012	DB
DELAWARE TRADER	27,894	50,057	1982		2012	DB
S/R BAYTOWN	32,136	59,625	1984		2012	DB
OVERSEAS PHILADELPHIA	24,816	43,276	1982		2012	DB
SEA VENTURE	9,993	18,924	1972	1983	2013	DB
BALTIMOREI	22,470	47,247	1983		2013	DB
NEW YORKI	22,470	47,247	1983		2013	DB
S/R PUGET SOUND	27,894	50,860	1983		2013	DB
S/R CHARLESTON	27,669	48,846	1983		2013	DB
CHEMICAL PIONEER	19,980	35,430	1968	1983	2013	DB
MOBILEI	22,331	47,247	1984		2014	DB
PHILADELPHAI	22,331	47,247	1984		2014	DB
S/R WILMINGTON	27,508	48,846	1984		2014	DB
SEABULK AMERICA	22,139	46,312	1975	1990	2014	DB
INTEGRITY	22,761	36,324	1975		na	DH
DILIGENCE	22,761	39,959	1977		na	DH
WASHINGTON VOYAGER	22,761	39,796	1976		na	DH
ARIZONA VOYAGER	22,664	39,836	1977		na	DH
COLORADO VOYAGER	22,735	39,843	1976		na	DH
HOUSTON	19,037	33,095	1985		na	DH
USNS LAWRENCE H. GIANELLAM	19,037	33,095	1986		na	DH
PAUL BUCKM	21,471	33,095	1985		na	DH
USNS RICHARD G. MATTHIESENM	19,037	33,095	1986		na	DH
SAMUEL L. COBBM	21,471	33,095	1985		na	DH
ANASAZIR	24,458	39,384	1958	1997	na	DH
CAPTAIN H.A.DOWNINGR	24,458	39,385	1957	1996	na	DH
NEW RIVER	23,538	38,861	1960	1997	na	DH
MAERSK RHODE ISLAND#	22,181	35,000	2002		na	DH
THE MONSEIGNEURR	23,538	38,861	1959	1997	na	DH
S/R AMERICAN PROGRESS	30,415	46,095	1997		na	DH
SEABULK ENERGY	30,770	45,671	1999		na	DH
HMI BRENTON REEF	30,770	45,671	1999		na	DH
SEABULK ARCTIC	30,415	46,074	1998		na	DH
SEABULK MARINER	30,415	46,094	1998		na	DH
SEABULK PRIDE	30,415	46,069	1998		na	DH
Total	**1,182,090**	**2,076,877**				
Total (DH)	**515,108**	**828,398**				

Hull codes
SH - single hull
DB - double bottom
DH - double-hull

Last year/partial year of operation in U.S. trades. For example, a vessel with a January 1, 2007 phase-out date would have a 2006 phase-out year, while a vessel with a March 1, 2006 phase-out date would have a 2006 phase-out year.

na: not applicable.
I Integrated tug/barge units.
Vessel not eligible to operate in domestic trades.
M Vessels owned by the Military Sealift Command.
R Vessels retrofitted with double hulls, delivery 1996-97.
Sources: Clarkson's Tanker Register, January 2006; American Bureau of Shipping, Record 2006.

OPA-90 Phase-Out, U.S.-Flag Tankers By Phase-Out Year

70,000+ DWT and Greater, As Of December 31, 2005

Name	GRT	DWT	Year Built	Year Reblt.	OPA-90 Phase-Out*	Hull
DENALI	94,647	188,101	1978		2006	DB
S/R COLUMBIA BAY	95,447	191,120	1978		2006	DB
POLAR ALASKA	83,675	191,472	1979		2007	DB
POLAR CALIFORNIA	83,675	127,003	1980		2008	DB
S/R LONG BEACH	94,999	214,853	1987		2009	SH
POLAR DISCOVERY	85,387	141,740	2003		na	DH
POLAR RESOLUTION	85,387	140,320	2002		na	DH
POLAR ENDEAVOUR	85,387	141,740	2001		na	DH
PRINCE WILLIAM SOUND	64,340	122,941	1975		na	DH
TONSINA	64,329	124,822	1978		na	DH
KENAI	60,385	124,777	1979		na	DH
POLAR ADVENTURE	85,387	141,740	2004		na	DH
ALASKAN FRONTIER	110,693	193,050	2004		na	DH
ALASKAN EXPLORER	110,693	193,050	2005		na	DH
ALASKAN NAVIGATOR	95,000	193,048	2005		na	DH
Total	**1,299,431**	**2,429,777**				
Total (DH)	**846,988**	**1,517,228**				

Hull codes
SH - single hull
DB - double bottom
DH - double-hull

* Last year/partial year of operation in U.S. trades. For example, a vessel with a January 1, 2007 phase-out date would have a 2006 phase-out year, while a vessel with a March 1, 2006 phase-out date would have a 2006 phase-out year. (Sources: Clarkson's Tanker Register, January 2006; American Bureau of Shipping, Record 2006.)

Yount Named 2006 Maritime Person of the Year

George R. Yount, sector vice president of ship construction for Northrop Grumman Corporation, was honored by the U.S. Port of New Orleans Propeller Club as the 2006 Maritime Person of the Year. The award is presented annually to a person who has demonstrated outstanding leadership in furthering and-promoting the maritime industry. Nominations are collected from past presidents and then a vote determines the winner. "I'm honored to be considered part of the maritime industry, which I think has enormous value to this nation," said Yount. "We could not have evolved without the strength of the maritime industry. It's an honorable profession that we're all in and I'm proud to accept this award on behalf of the men and women working at Northrop Grumman Ship Systems."

The award was bestowed in conjunction with National Maritime Day, during a ceremony celebrating the club's 73rd anniversary. Propeller Club president Jacqueline K. Tonguis made the presentation to Yount, the 47th Maritime Person of the Year.

Yount joined Northrop Grumman's Ship Systems sector in January 2002. Prior to joining Northrop Grumman, Yount completed a 30-year career of service to the nation as a rear admiral in the U.S. Navy. He was commissioned into the Navy following graduation from the University of Wisconsin, Stout with a degree in industrial education. He later received a master's degree in mechanical engineering from the Naval Postgraduate School. He received the 1996 Distinguished Alumni award from University of Wisconsin, Stout, is a member of Sigma Xi, and a life member of the American Society of Naval Engineers. His military awards include the Navy Distinguished Service Medal, Legion of Merit with two gold stars, Meritorious Service Medal with four gold stars, Navy Commendation Medal with three gold stars, and Combat V.

His naval career included service on both surface ships and submarines with operational assignments on four ships. More than 25 years of his career was spent as a naval engineer with assignments in five different shipyards and two repair activities.

Marinette Marine Wins Navy Deal

Marinette Marine Corp., Marinette, Wis., is being awarded $125,968,000 to exercise an option under a previously awarded firm-fixed-price contract for the manufacture of the improved Navy lighterage system to be delivered at Naval Amphibious Construction Battalion One, Coronado, Calif. and Naval Amphibious Construction Battalion Two, Little Creek, Norfolk, Va., Expeditionary Warfare Training Group Pacific and Blount Island Command, Jacksonville, Fla. The work to be performed consists of manufacturing 300 powered and non-powered modules. Contractor-approved detailed design drawings will be utilized for full rate production. After exercise of this option, the total cumulative contract amount will be $170,379,551. This contract contains two additional one-year option periods, which if exercised, will bring the total contract value to $314,078,157. Work will be performed in Marinette, Wis., and the expected completion date is December 2007. The entire period of performance if all options are exercised will be through October 2009.

Port Security Legislation Passed

The House of Representatives passed legislation that would tighten security at U.S. seaports, requiring more "dirty" and nuclear bomb detectors and background checks on dockside workers. Under the measure, which was approved 421-2, the Homeland Security Department would have to put in place enough radiation monitors to scan 98 percent of the cargo coming into the U.S. by the end of the next fiscal year, which is Sept. 30, 2007. With House passage, the focus of the port-security debate turns to the Senate, which plans to consider a similar measure within the next few months. The Bush administration is generally supportive of the legislation, although it thinks the deadline for installing detectors is overly ambitious. Port security legislation was stalled in committee until Congress was spurred by the public outcry last month when DP World bought terminal operations at six major U.S. ports.

U.S. Flag Oceangoing Fleet - 2005

U.S.-Flag Oceangoing Fleet, by Type

Vessel Type U.S.-Flag	2001 No.	2001 Mil. DWT	2002 No.	2002 Mil. DWT	2003 No.	2003 Mil. DWT	2004 No.	2004 Mil. DWT	2005 No.	2005 Mil. DWT
Tankers	84	5.5	77	5.2	68	4.3	60	4.4	58	4.3
Roll-on/Roll-off	32	0.6	32	0.6	35	0.7	35	0.8	40	0.9
General Cargo	12	0.3	7	0.1	9	0.2	8	0.2	8	0.2
Containership	78	2.9	75	2.9	74	3.0	78	3.2	75	3.1
Dry Bulk	15	0.8	14	0.7	14	0.7	15	0.7	14	0.6
Total	**221**	**10.1**	**205**	**9.5**	**200**	**8.9**	**196**	**9.3**	**195**	**9.1**
Jones Act										
Tankers	77	4.9	72	4.9	63	4.3	56	4.1	51	3.6
Roll-on/Roll-off	12	0.2	12	0.2	14	0.3	14	0.3	15	0.3
General Cargo	6	0.2	2	0.0	2	0.0	2	0.0	2	0.0
Containership	32	0.9	29	0.8	28	0.8	28	0.8	29	0.8
Dry Bulk	4	0.2	3	0.1	3	0.1	3	0.1	3	0.1
Total	**131**	**6.4**	**118**	**6.0**	**110**	**5.5**	**103**	**5.3**	**100**	**4.8**

(Source: U.S. Flag Oceangoing Fleet - 2005, U.S. Maritime Administration)

Highlights

• As of year-end 2005 the U.S.-flag oceangoing fleet included 195 vessels (9.1 million DWT). Of this, 100 vessels (4.8 million DWT) were Jones Act vessels (U.S.-built) eligible for domestic trades.

• From 2001 to 2005, the U.S.-flag privately-owned oceangoing merchant fleet declined by 26 vessels (1.0 million DWT). The Jones Act fleet declined by 31 vessels (1.6 million DWT), while the non-Jones Act fleet (foreign trade vessels) increased by 5 vessels (0.6 million DWT).

• As of year-end 2005, 47 percent of the U.S.-flag fleet (DWT) was older than 20 years. For the Jones Act segment, 67 percent of the fleet was older than 20 years.

• As of year-end 2005, there were thirteen U.S.-flag oceangoing vessels on order, accounting for 9 percent of the existing fleet (DWT).

Age Profile of U.S.-Flag Oceangoing Fleet, by Type

Year Built / Vessel Type	<1980 No.	<1980 Mil. DWT	1980-1984 No.	1980-1984 Mil. DWT	1985-1989 No.	1985-1989 Mil. DWT	1990-1994 No.	1990-1994 Mil. DWT	1995-1999 No.	1995-1999 Mil. DWT	>1999 No.	>1999 Mil. DWT
U.S.-Flag												
Tankers	18	1.5	18	0.9	2	0.2	1	0.0	11	0.5	8	1.2
Roll-on/Roll-off	15	0.3	5	0.1	7	0.2	4	0.1	5	0.1	4	0.0
General Cargo	4	0.1	3	0.1	0	0.0	1	0.0	0	0.0	0	0.0
Containership	15	0.4	15	0.6	22	1.0	6	0.2	12	0.7	5	0.1
Dry Bulk	3	0.1	5	0.2	3	0.2	0	0.0	0	0.0	3	0.2
Total	55	2.4	46	1.9	34	1.6	12	0.3	28	1.3	20	1.5
Jones Act												
Tankers	16	1.4	18	0.9	2	0.2	1	0.0	10	0.4	4	0.6
Roll-on/Roll-off	7	0.1	3	0.1	2	0.0	0	0.0	0	0.0	3	0.1
General Cargo	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Containership	15	0.4	7	0.2	3	0.1	1	0.0	0	0.0	3	0.1
Dry Bulk	1	0.0	2	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Total	**41**	**1.9**	**30**	**1.3**	**7**	**0.3**	**2**	**0.0**	**10**	**0.4**	**10**	**0.8**

(Source: U.S. Flag Oceangoing Fleet - 2005, U.S. Maritime Administration)

U.S.-Flag Oceangoing Fleet On Order, Year-End 2005

Name	Year	Vessel Type	Owner	DWT
Alaskan Legend	2006	Tanker	BP PLC	185,000
N/B Kvaerner Philadelphia 004	2006	Containership	Matson Navigation	30,000
N/B Kvaerner Philadelphia	2009	Tanker	Aker American Shpg.	45,000
N/B Kvaerner Philadelphia	2009	Tanker	Aker American Shpg.	45,000
N/B Kvaerner Philadelphia 005	2007	Tanker	Aker American Shpg.	45,000
N/B Kvaerner Philadelphia 006	2007	Tanker	Aker American Shpg.	45,000
N/B Kvaerner Philadelphia 007	2007	Tanker	Aker American Shpg.	45,000
N/B Kvaerner Philadelphia 008	2008	Tanker	Aker American Shpg.	45,000
N/B Kvaerner Philadelphia 009	2008	Tanker	Aker American Shpg.	45,000
N/B Kvaerner Philadelphia 010	2008	Tanker	Aker American Shpg.	45,000
N/B Kvaerner Philadelphia 011	2008	Tanker	Aker American Shpg.	45,000
N/B Kvaerner Philadelphia 012	2008	Tanker	Aker American Shpg.	45,000
Polar Enterprise	2006	Tanker	Polar Tankers Inc.	141,740
Total				**806,740**

(Source: U.S. Flag Oceangoing Fleet - 2005, U.S. Maritime Administration)

Commanding Officer Change at USCG Engineering Logistics Center

The U.S. Coast Guard has appointed Captain Paul J. Roden as Commanding Officer of the Engineering Logistics Center (ELC) in Baltimore, Md. Captain Roden relieved Capt. Kevin P. Jarvis, USCG in a Change of Command ceremony on June 9, 2006. The USCG ELC supports the entire Coast Guard fleet of cutters and boats as well as all ashore units. As the USCG's naval engineering and logistics "Center of Excellence," the ELC maintains the service's technical knowledge and expertise of USCG platforms, systems, and items to deliver life-cycle engineering support and Integrated Logistics Support (ILS) necessary to sustain USCG operational capability.

Dominion Announces GOM Discovery

Dominion Exploration & Production announced a natural gas discovery on the Gulf of Mexico Shelf at the West Cameron 130 field. The field is located in 40 ft. of water approximately 250 miles southwest of New Orleans. "We are encouraged by this latest discovery in what continues to be the core area for our Gulf of Mexico Shelf program," said Kevin P. Guilbeau, senior vice president and general manager for Dominion E&P's offshore unit. "The new discovery is deeper than our existing production in the field. These deeper sands will be more fully appraised by continued drilling in this field and on other leases currently in our shelf inventory."

Demands of the Sea Never Change

By Edward Lundquist

Technology has transformed the way Navy ships operate, but respect for the sea and the need for a strong moral compass have not changed in the past 40 years, says Vice Admiral Rodney Rempt, Superintendent of the U.S. Naval Academy at Annapolis, Maryland. Rempt is also the "Old Salt," meaning he is the "senior" Surface Warrior on active duty.

Rempt began his seagoing career as a junior officer on a destroyer on the gun line off Vietnam. Later, he prepared to fight a Cold War fleet engagement. "Our AEGIS fleet was designed for the Soviet air threat."

Today, computerized navigation has replaced celestial observations and handwritten sight reduction equations. Contact course and speed and station keeping determined automatically instead of with a maneuvering board.

"We have new and better sensors, and weapons with longer ranges and better accuracy," Rempt says. "What has not changed are the demands of the sea. There are tough days and good days. You need stamina, perseverance and vigilance. You must undertake your job as a watchstander with a sense of accountability and responsibility in what you are doing, particularly if you are an officer of the deck (OOD) at night or in a firefight ashore with your Marines."

The scope and magnitude of shipboard operations has expanded, too. "We used to focus on fighting well as a unit, training our bridge team, CIC, gunnery crews, and learning to fight together as a ship. Today we focus on fighting as part of a Joint Force. We operate as part of a Carrier Strike Group, and Expeditionary Strike Group, or as part of a Sea base. There is more of a joint emphasis."

Today, he notes, the Navy has shifted its thinking to how best to support forces ashore by projecting defense and providing precision strike. Today's Navy is a distributed fleet that is designed to address asymmetric threats. Our contemporary Navy is also well postured to provide prompt and meaningful humanitarian assistance, such as in response to the Tsunami or Hurricane Katrina.

As a junior officer, Rempt was impressed that he could live in San Diego, but travel aboard his ship to the far reaches of the Pacific Ocean and back again. He learned to stand his bridge watches in demanding sea conditions and during periods of intense operations.

The designation as the "Old Salt" is determined by the date of attainment of the Surface Warfare designation, or Officer-of-the-Deck letter for those who qualified before the SWO designation was established. Rempt recalls he qualified as OOD while transiting from Sydney to Wellington aboard USS Coontz (DLG 9) in 1967.

This "seniority" is a relative thing to the Midshipmen at the Academy, Rempt says. "When I was a junior officer is ancient history to them."

But Rempt's experience enables him to set and maintain a high standard for the Midshipmen. "We want our Midshipmen to be the commanding officer of a YP," he says, referring to the

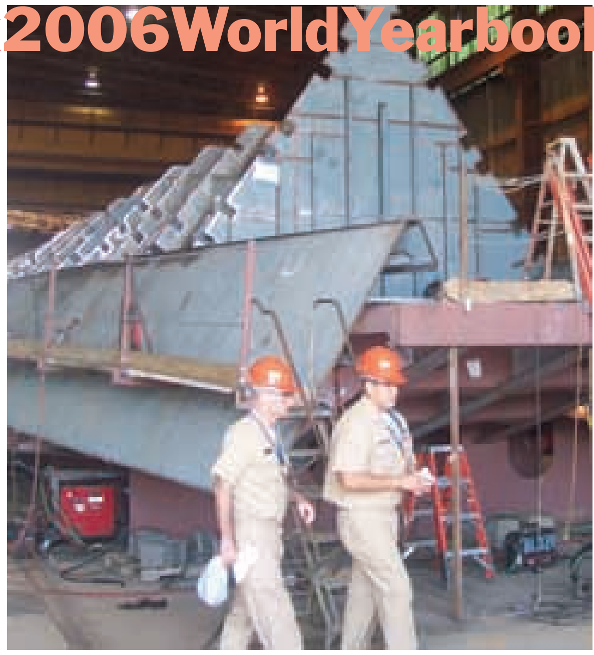
Yard Patrol Craft used for training. "'You have four years to do it,' we tell them. Only a few will obtain this, but it's what we want them to do."

Rempt says "We teach basic seamanship and watch keeping to all Midshipmen to give them a better sense of the sea and the weather. Even those who will not be surface warriors need this fundamental knowledge. Marines and naval aviators still operate from ships. With all of the electronic sensors available to you, there is no substitute for deck officers and lookouts who understand their surroundings. Radars and sensors can give a sense of complacency."

Building an Effective Team

Rempt says the Academy strives to develop Midshipmen into good leaders. By leading by example, one can earn the trust of their subordinates, and build teamwork with the people they are trying to lead.

"We teach them to do the things that help build the team. As leaders, they are usually responsible for a handful of people. On a ship, a division officer has his or her chief and leading petty officers. A department head has his or her division officers. A CO has the executive officer, command master chief and department heads. It isn't necessary to deal with everybody and their issues. It is important to understand and work closely with that team for which you are responsible, to help them with their careers and their family issues. Focus on them and they can focus on their teams. The result is a very caring and supportive organization,



The first Littoral Combat Ship, USS Freedom, takes shape in Marinette, Wisconsin (photo by E. H. Lundquist)

Rempt says.

Teaching Core Values

The Navy has gone through some ups and downs, but the desire to live up to these high standards has not changed, Rempt says. "We want them to take honor into their soul, with continuous vigilance and application of what they've learned."

The Navy's core values of honor, courage and commitment are pretty simple. The Academy teaches honor. If your people do not trust you, they will not follow you.

"They come from all walks of life," says Rempt, referring to the freshman "plebes" who come to Annapolis. "They don't all have the same standard. We have the same focus on leadership, honor and character values today as we did when I was a Midshipman. They're smarter, and better academically and physically prepared. They come into the Academy at a higher standard than when I arrived here, and leave even better. But they do not all arrive with the same sense of honor. By the time they graduate, however, they are ready to lead and serve with the highest sense of personal honor.

That's a big challenge, but "They have four years at the academy to do that."

The young people who come to the Naval Academy inspire Rempt. "Their whole approach to serving impresses me. They want to be a part of something bigger than themselves. They want to make a difference."

Rempt says he can speak for the Old Salts before him. "None of us thought we would be around as long as we did. My roommate, Mike Haskins and I vowed we would never come back here after we graduated. Both of us became admirals, and here I am as the Superintendent, and Mike retired and is now the Distinguished Chair of Leadership at the United States Naval Academy."

Qatar Orders World's Largest LNG Ships

Qatar Gas Transport Company (Nakilat) signed a contract with two South Korean shipbuilders to construct the world's largest liquified natural gas (LNG) carriers at a cost of $2.5bn, according to a report from The Peninsula/Agencies.

Nakilat said in a statement that it has ordered three "QMax" LNG carriers with a capacity of 265,000 cu. m. (9.3 million cu. ft.) each from Daewoo Shipbuilding and Marine, and another three from Samsung Heavy Industries. The carriers reportedly will be the largest in the world in terms of capacity, the statement said.

The carriers will be leased to Qatar Liquefied Gas Company, a joint venture between Qatar Petroleum and energy giant ExxonMobil, to transport LNG from one of their largest projects at the North Field, estimated to contain nearly 10 per cent of the world's proven gas reserves. Nakilat is reportedly expected to acquire a total of 61 liquefied natural gas (LNG) vessels worth $16bn up until 2010.

Qatargas-2, (QG2) and Nakilat, according to the report, signed a 25-year time-charter for six "QMax" LNG carriers of approximately 265,000 cu. m. carrying capacity each.

In addition to the 100 percent owned six ships, Nakilat has 30 to 60 percent equity interest in another 28 LNG carriers that have either been delivered or on order to service Qatar's LNG projects, including the earlier QG-2 vessels.

The six first-ever double hull QMax ships have been designed with state of the art safety features, such as an 80 year inner hull fatigue life combined with primary and secondary membrane barriers for LNG containment.

Quintana Buys 17 Ships for $735 Million

Quintana Maritime Ltd. is reportedly buying 17 ships from a private Greek shipowner for about $735 million. The fleet, purchased from Metrobulk reportedly includes three Panamaxes and 14 Kamsarmax bulkers.

Petroleos de Venezuela Orders 18 Tankers

Petroleos de Venezuela SA said it will buy 18 oil tankers from China for $1.3b as South America's largest oil firm seeks to boost exports to Asia. Orders for the tankers were placed with China State Shipbuilding Corp., and China Shipbuilding Industry Corp. A timetable wasn't provided for deliveries.

Stena Vision Repair Prolonged

Arlington Tankers was notified by its vessel manager, Northern Marine Management (Northern Marine), that one of its two VLCC tankers, the Stena Vision, built in 2001, will now start a prolonged period of repair due to an engine maintenance program. The 314,000 metric dwt vessel was undergoing a scheduled dry-dock period when it was determined that the repair was necessary, and that the vessel will be out of service for several months.

Stena Vision is currently on a long-term time charter to Concordia Maritime AB (Concordia) of Sweden until November 2009. The daily basic charter rate for the Stena Vision for 2006 is $36,075. Under the terms of its agreements, during the period of repair, the company will continue to receive its full contractual charter hire and pay its contractual vessel management fees.

Circle 281 on Reader Service Card

Circle 250 on Reader Service Card

Circle 240 on Reader Service Card

Circle 274 on Reader Service Card

World Fleet Development

Mill. dwt

Start	Tankers	Chemical carriers	Bulk carriers	Combined carriers	Others	Total
1996	261.0	9.5	241.3	20.7	140.9	673.4
1997	265.1	10.0	250.0	17.3	149.1	691.5
1998	268.5	11.0	260.7	16.9	155.3	712.4
1999	273.2	11.9	260.4	16.1	160.9	722.6
2000	276.0	13.5	264.8	15.2	166.7	736.2
2001	281.3	15.0	274.0	14.6	169.3	754.3
2002	274.9	15.0	287.4	13.8	174.7	765.9
2003	278.8	15.4	295.0	12.6	181.2	783.0
2004	287.9	17.3	303.3	12.2	189.6	810.3
2005	304.1	18.0	320.7	11.7	200.5	855.0
2006	326.9	19.2	341.9	11.7	213.3	913.1

(Source: R.S. Platou Shipbrokers a.s., The Platou Report 2006, www.platou.com)

Deliveries

Mill. dwt

Start	Tankers	Chemical carriers	Bulk carriers	Combined carriers	Others	Total
1996	10.8	0.7	17.2	0.3	6.9	35.9
1997	7.0	1.0	18.6	0.3	8.1	35.0
1998	11.7	1.0	11.5	0.0	8.8	33.0
1999	19.1	1.7	13.5	0.4	6.5	41.2
2000	19.2	1.7	13.6	0.0	8.5	43.0
2001	13.1	0.2	20.6	0.0	10.5	44.4
2002	22.7	0.8	13.6	0.0	10.4	47.5
2003	27.9	2.0	11.8	0.2	11.2	53.1
2004	26.4	0.8	18.3	0.0	11.9	57.4
2005	28.0	1.5	22.3	0.0	13.8	65.6

(Source: R.S. Platou Shipbrokers a.s., The Platou Report 2006, www.platou.com)

New Orders

Mill. dwt

Start	Tankers	Chemical carriers	Bulk carriers	Combined carriers	Others	Total
1996	12.1	1.4	12.7	0.2	8.9	35.3
1997	27.7	1.8	17.9	0.2	4.4	52.0
1998	18.0	0.8	10.4	0.0	5.3	34.5
1999	15.3	1.0	18.5	0.0	8.3	43.1
2000	34.9	0.9	14.5	0.2	17.5	67.9
2001	26.2	0.7	8.7	0.0	10.5	46.1
2002	17.7	1.6	21.9	0.0	8.4	49.6
2003	47.9	1.4	27.9	0.0	27.5	104.7
2004	34.0	2.2	28.8	0.0	28.1	93.1
2005	24.0	0.9	16.8	0.0	25.9	67.6

(Source: R.S. Platou Shipbrokers a.s., The Platou Report 2006, www.platou.com)

Orderbook

Mill. dwt

Start	Tankers	Chemical carriers	Bulk carriers	Combined carriers	Others	Total
1996	17.1	2.0	31.8	0.7	15.3	66.9
1997	17.5	2.7	27.1	0.5	18.3	66.1
1998	38.2	3.5	26.4	0.4	14.5	83.0
1999	42.1	3.3	25.5	0.4	13.7	85.0
2000	32.6	2.6	30.5	0.0	15.5	81.2
2001	47.0	1.8	34.3	0.2	24.5	107.8
2002	59.7	2.3	22.4	0.2	27.9	112.5
2003	53.1	3.0	30.3	0.2	22.9	109.5
2004	72.8	2.4	48.4	0.0	41.2	164.8
2005	79.8	3.9	60.6	0.0	56.2	200.4
2006	76.5	3.3	61.4	0.0	68.1	209.3

(Source: R.S. Platou Shipbrokers a.s., The Platou Report 2006, www.platou.com)

Tonnage Sold for Scrapping, Lost & Other Removals

Mill. dwt

Start	Tankers	Chemical carriers	Bulk carriers	Combined carriers	Others	Total
1996	6.7	0.1	8.5	1.9	0.7	17.9
1997	3.6	0.1	7.9	2.3	2.5	16.4
1998	7.0	0.0	11.8	1.3	3.0	23.1
1999	16.3	0.1	9.1	0.9	3.9	30.3
2000	13.9	0.2	4.4	0.6	3.1	22.1
2001	19.5	0.2	7.2	0.8	4.0	31.7
2002	18.9	0.4	6.0	1.2	3.9	30.4
2003	18.8	0.1	3.5	0.7	2.8	25.9
2004	10.2	0.1	0.8	0.5	1.0	12.7
2005	5.1	0.3	1.1	0.0	1.0	7.5

(Source: R.S. Platou Shipbrokers a.s., The Platou Report 2006, www.platou.com)

Age Profile for Tankers (incl. Chemical Carriers)

Mill. dwt - 1.1.2006

Size	Year of build -85	86-90	91-95	96-00	01-05	Total
10-69,999	23.3	8.9	8.7	13.5	24.4	78.9
70-119,999	6.6	10.6	11.5	15.4	33.5	77.5
120-199,999	5.0	4.6	11.5	12.3	18.1	51.5
200,000+	4.2	14.0	36.8	34.2	49.0	138.2
Total	**39.2**	**38.0**	**68.5**	**75.4**	**117.2**	**346.1**

(Source: R.S. Platou Shipbrokers a.s., The Platou Report 2006, www.platou.com)

Recent Ship Sales

Vessel Name	Type	Dwt	Built	Price
Antilles I	Bulker	12235	2000	12.3
Antilles Ii	Bulker	12235	2001	12.3
Theano K.	Bulker	19020	1977	2.3
Dellagrazia	Bulker	19409	1978	2.8
Global Sydney	Bulker	20219	1990	8.5
Sterling Seas	Bulker	24718	1977	3
Pantelis P	Bulker	26354	1981	4.7
Ostria Breeze	Bulker	27921	1981	5.2
Aurora Topza	Bulker	28268	1982	5.2
East Ender	Bulker	28300	2002	23
Helena Oldendorff	Bulker	28354	1984	7.1
Moondance	Bulker	28468	1986	10.4
Atlantic Venus	Bulker	28685	2000	20.5
Sirocco Breeze	Bulker	30413	1981	5.5
Paul Oldendorff	Bulker	35116	2003	27
Fiora Topic	Bulker	37179	1984	9
Holy Light	Bulker	37680	1977	4.6
Astradance	Bulker	37895	1986	10
Jin Shun	Bulker	39728	1984	7.5
Sea Phoenix	Bulker	40473	1985	8.4
Jin Da	Bulker	41346	1986	9.7
Belgreeting	Bulker	43549	1987	9.5
Tomahawk	Bulker	45423	1997	22.5
Johann Oldendorff	Bulker	46601	1995	20.5
Ocean Galaxy	Bulker	46663	1997	22.5
Axios	Bulker	47240	1997	22.5
Ocean Paradise	Bulker	48256	1996	20.5
Artemis Ii	Bulker	52055	2001	30.5
Marina Ii	Bulker	52064	2001	30.5
Nord Bulker	Bulker	52994	2003	32.5
Tenacity	Bulker	63940	1984	9.5
New Horizon	Bulker	66742	1984	8.5
Four Iron	Bulker	67395	1987	12.5
Jurong Sea	Bulker	69203	1983	8.5
Rubin Energy	Bulker	69601	1993	21.3
Ayrton Ii	Bulker	72561	2000	33
Oak Star	Bulker	73740	1997	25.5
Kingston Trader	Bulker	74242	1999	29.8
Atacama	Bulker	75941	2001	34
Lake Sequoia	Bulker	75955	2001	32.5
Sophia	Bulker	76421	2002	34.6
Noble Dragon	Bulker	149782	1994	31.5
Yusei Maru	Tanker	5291	1989	3.5
Sun	Tanker	29815	1993	12
Sea Lion	Tanker	97002	1991	25
Hanne Knutsen	Tanker	123851	2000	115
Somjim	Tanker	160183	2001	74
Eton	Tanker	162000	2006	90
Sunrise Iii	Tanker	264165	1993	36
Hs Constance	Tanker	285365	1994	46

(Source: Shipping INtelligence)

Daewoo Marine Wins $730M Order

Daewoo Shipbuilding and Marine Engineering won a combined $730m orders to build four ships. They include liquefied natural gas re-gasification vessels (LNG-RV, or LNG carriers equipped with LNG terminals). The shipbuilder won a contract to build two LNG-RV with a capacity of 150,900 cu. m. for Belgium's Exmar Marine N.V. and two large LPG vessels with a capacity of 83,000 cu. m. for Greece's Gulf Marine Management S.A. The LNG-RV that Daewoo is to build is 291 x 43 x 26 m. They can make some 19.2 knots (36 km/h).

Age Profile for Combined Carriers

Mill. dwt - 1.1.2006

	Year of build					
Size	-85	86-90	91-95	96-00	01-05	Total
10-69,999	1.1	0.3	0.0	0.0	0.0	1.4
70-119,999 2.5	0.2	1.8	1.2	0.0	5.6	
120-199,999	0.9	0.5	1.4	0.0	0.2	3.0
200,000+	0.2	1.5	0.0	0.0	0.0	1.7
Total	4.7	2.4	3.2	1.2	0.2	11.7

(Source: R.S. Platou Shipbrokers a.s., The Platou Report 2006, www.platou.com)

Second Hand Prices of 5 Year Old Bulk Carriers

Mill. $

Start	Handymax	Panamax	Capesize
1996	21.0	22.0	28.0
1997	19.0	19.0	25.0
1998	18.5	20.5	30.0
1999	13.0	14.0	23.5
2000	16.0	17.5	28.0
2001	15.5	16.0	27.0
2002	12.2	13.4	22.0
2003	14.8	16.5	27.5
2004	20.5	27.5	45.0
2005	31.0	38.0	64.0
2006	25.5	29.0	55.0

(Source: R.S. Platou Shipbrokers a.s., The Platou Report 2006, www.platou.com)

Second Hand Prices of 5 Year Old Tankers

Mill. $

Start	Mr Product	Aframax	Suezmax	VLCC
1996	24.0	31.0	36.0	54.0
1997	24.0	32.0	38.0	60.0
1998	25.0	37.0	42.0	65.0
1999	16.0	26.0	36.0	47.0
2000	19.0	24.0	35.5	53.0
2001	25.5	41.0	49.0	70.0
2002	20.5	31.0	38.0	60.5
2003	21.0	28.0	37.0	52.0
2004	28.0	38.0	48.0	72.0
2005	39.0	56.0	71.5	106.0
2006	45.0	61.5	75.0	113.5

(Source: R.S. Platou Shipbrokers a.s., The Platou Report 2006, www.platou.com)

Age Profile for Bulk Carriers

Mill. dwt - 1.1.2006

	Year of build					
Size	-85	86-90	91-95	96-00	01-05	Total
10-59,999	53.4	19.2	13.7	25.3	31.2	142.9
60-79,999	20.1	8.2	11.7	20.8	24.8	85.6
80,000+	17.0	17.7	19.3	27.8	31.6	113.4
Total	90.5	45.2	44.8	74.0	78.6	341.9

(Source: R.S. Platou Shipbrokers a.s., The Platou Report 2006, www.platou.com)

Vessel Calls at U.S. & World Ports - 2005

The following report contains data on calls by oceangoing vessels of 10,000 DWT or greater at U.S. ports. The calls are presented in terms of vessels and vessel capacity (calls weighted by vessel deadweights (DWT)). For containerships, capacity is also expressed in terms of twenty-foot equivalent units (TEU). This report and additional data on calls and capacity for all U.S. ports are available at www.marad.dot.gov/marad_statistics.

Vessel Calls at U.S. Ports, Calls, Capacity and Average DWT/TEU Per Call, 2001-2005

Vessel Type	2001	2002	2003	2004	2005	% Ch. 01-05
Calls						
Tanker	18,387	17,320	18,503	19,316	20,118	9.4
Double-Hull	9,568	10,045	11,903	12,925	15,802	65.2
Product	11,780	10,949	10,998	11,572	12,200	3.6
Double-Hull	5,755	5,770	6,576	6,759	9,070	57.6
Crude	6,607	6,371	7,505	7,744	7,912	19.8
Double-Hull	3,813	4,275	5,327	6,166	6,732	76.6
Container	17,076	17,138	17,287	18,279	18,542	8.1
Dry Bulk	11,628	11,112	10,271	11,631	11,406	- 2.0
Ro-Ro	5,712	5,632	5,191	5,317	5,663	- 0.9
Vehicle	3,646	3,605	3,113	3,065	3,652	0.2
Gas Carrier	739	739	926	916	969	31.0
Combination	770	761	666	459	414	-46.0
General Cargo	4,076	3,894	3,915	3,967	3,935	- 3.5
All Types	**58,388**	**56,596**	**56,759**	**59,885**	**61,047**	**4.6**
Capacity (Million DWT/TEU)						
Tanker	1,274	1,202	1,339	1,365	1,450	13.8
Double-Hull	678	752	910	996	1,201	77.1
Product	443	406	416	436	478	7.9
Double-Hull	208	208	244	261	363	74.5
Crude	831	797	924	929	972	17.0
Double-Hull	470	544	666	735	838	78.3
Container	677	722	746	797	827	22.2
Container (TEU)	48	52	54	59	62	29.2
Dry Bulk	490	476	438	500	494	0.8
Ro-Ro	117	115	105	107	112	- 4.3
Vehicle	64	63	54	51	68	6.3
Gas Carrier	25	24	35	36	40	60.0
Combination	68	64	56	39	36	- 47.0
General Cargo	95	91	93	97	99	4.2
All Types	**2,746**	**2,695**	**2,813**	**2,942**	**3,058**	**11.4**
Average DWT/TEU Per Call						
Tanker	69,313	69,412	72,387	70,690	72,056	4.0
Double-Hull	70,914	74,887	76,458	77,062	75,987	7.2
Product	37,612	37,050	37,790	37,684	39,138	4.1
Double-Hull	36,180	36,128	37,103	38,663	40,020	10.6
Crude	125,833	125,028	123,085	120,010	122,840	- 2.4
Double-Hull	123,338	127,200	125,040	119,153	124,445	0.9
Container	39,656	42,158	43,168	43,610	44,593	12.4
Container (TEU)	2,801	3,020	3,144	3,241	3,321	18.6
Dry Bulk	42,142	42,876	42,685	42,972	43,276	2.7
Ro-Ro	20,445	20,376	20,270	20,190	19,838	- 3.0
Vehicle	17,579	17,528	17,496	16,708	18,506	5.3
Gas Carrier	33,438	32,099	37,818	39,145	41,411	23.8
Combination	87,873	84,459	84,016	84,699	87,151	- 0.8
General Cargo	23,416	23,496	23,655	24,542	25,101	7.2
All Types	**47,034**	**47,625**	**49,557**	**49,125**	**50,083**	**6.5**

(Source: Vessel Calls at U.S. & World Ports - 2005, U.S. Maritime Administration)

Foreign-Flag Vessel Calls at U.S. Ports, Calls, Capacity and Average DWT/TEU Per Call, 2001-2005

Vessel Type	2001	2002	2003	2004	2005	% Ch. 01-05
Calls						
Tanker	14,378	13,771	14,744	15,725	16,438	14.3
Double-Hull	8,055	8,597	10,266	11,127	13,790	71.2
Product	8,919	8,519	8,629	9,113	9,809	10.0
Double-Hull	4,505	4,708	5,408	5,482	7,698	70.9
Crude	5,459	5,252	6,115	6,602	6,629	21.4
Double-Hull	3,550	3,889	4,858	5,645	6,092	71.6
Container	14,330	14,314	14,389	15,287	15,937	11.2
Dry Bulk	11,477	10,956	10,159	11,503	11,275	- 1.8
Ro-Ro	4,811	4,738	4,238	4,238	4,425	8.0
Vehicle	3,399	3,377	2,923	2,838	3,201	5.8
Gas Carrier	739	739	926	916	969	31.1
Combination	770	761	666	459	414	-86.0
General Cargo	3,942	3,804	3,818	3,865	3,840	- 2.6
All Types	**50,447**	**49,083**	**48,940**	**51,993**	**53,298**	**5.7**
Capacity (Million DWT/TEU)						
Tanker	1,006	956	1,066	1,117	1,182	17.5
Double-Hull	596	659	802	874	1,055	77.0
Product	326	305	319	337	382	17.6
Double-Hull	159	166	198	210	310	70.5
Crude	680	651	747	780	800	17.1
Double-Hull	437	493	603	664	745	95.0
Container	579	624	643	688	732	26.4
Container (TEU)	41	45	47	51	55	34.1
Dry Bulk	483	470	433	495	488	1.0
Ro-Ro	100	98	86	85	88	- 0.1
Vehicle	60	59	51	47	59	- 1.7
Gas Carrier	25	24	35	36	40	60.0
Combination	68	64	56	39	36	-47.1
General Cargo	91	89	90	94	96	5.5
All Types	**2,352**	**2,324**	**2,410**	**2,553**	**2,662**	**13.2**
Average DWT/TEU Per Call						
Tanker	69,996	69,424	72,299	71,010	71,883	2.7
Double-Hull	73,944	76,690	78,075	78,558	76,513	3.5
Product	36,572	35,854	36,973	36,929	38,878	6.3
Double-Hull	35,278	35,311	36,630	38,363	40,284	14.2
Crude	124,605	123,876	122,147	118,106	120,721	- 3.1
Double-Hull	123,011	126,784	124,211	117,592	122,293	- 0.6
Container	40,402	43,585	44,720	44,987	45,943	13.7
Container (TEU)	2,845	3,121	3,256	3,340	3,423	20.3
Dry Bulk	42,152	42,862	42,649	42,996	43,311	2.7
Ro-Ro	20,810	20,735	20,408	20,094	19,932	- 4.2
Vehicle	17,584	17,494	17,527	16,606	18,530	5.4
Gas Carrier	33,438	32,099	37,818	39,145	41,411	23.8
Combination	87,873	84,459	84,016	84,699	87,151	0.8
General Cargo	23,041	23,320	23,461	24,364	24,918	8.1
All Types	**46,632**	**47,357**	**49,239**	**49,103**	**49,950**	**7.1**

Dry Bulk	41,354	43,885	45,926	40,890	40,257	- 2.6
Ro-Ro	18,491	18,476	19,657	20,572	19,504	5.5
Vehicle	17,517	18,042	17,020	17,975	18,329	4.6
Gas Carrier	0	0	0	0	0	0.0
Combination	0	0	0	0	0	0.0
General Cargo	34,451	30,897	31,260	31,299	32,509	- 5.6
All Types	**49,588**	**49,375**	**51,551**	**49,273**	**50,994**	**2.7**

Vessel Calls at U.S. Ports by Coastal Region and Vessel Type, 2001-2005

Vessel Type/Region	2001	2002	2003	2004	2005	% Ch. 01-05
Tanker						
North Atlantic	3,682	3,122	3,679	3,801	3,875	5.2
South Atlantic	1,437	1,297	1,303	1,455	1,622	12.9
Puerto Rico	212	241	273	312	261	23.1
U.S. Gulf	9,155	8,798	9,370	10,125	10,474	14.4
Pacific Northwest	1,805	1,793	1,900	1,538	1,690	- 6.4
Pacific Southwest	2,096	2,069	1,978	2,085	2,196	4.8
Total	18,387	17,320	18,503	19,316	20,118	9.4
Container						
North Atlantic	3,196	3,043	3,036	3,115	3,291	3.0
South Atlantic	5,479	5,444	5,341	6,079	6,339	15.6
Puerto Rico	586	568	504	505	487	-16.9
U.S. Gulf	1,283	1,262	1,263	1,284	1,378	7.4
Pacific Northwest	1,705	1,787	1,875	1,855	1,890	10.9
Pacific Southwest	4,827	5,034	5,268	5,441	5,157	6.8
Total	**17,076**	**17,138**	**17,287**	**18,279**	**18,542**	**8.6**
Dry Bulk						
North Atlantic	1,588	1,388	1,351	1,566	1,609	1.3
South Atlantic	1,341	1,156	1,054	1,297	1,253	- 6.6
Puerto Rico	91	85	126	72	73	19.8
U.S. Gulf	4,793	4,983	4,837	4,959	4,575	- 4.5
Pacific Northwest	2,420	2,111	1,479	2,267	2,364	- 2.3
Pacific Southwest	1,395	1,389	1,424	1,470	1,532	9.8
Total	**11,628**	**11,112**	**10,271**	**11,631**	**11,406**	**1.9**
Ro-Ro						
North Atlantic	1,786	1,804	1,577	1,542	1,587	-11.1
South Atlantic	1,644	1,555	1,434	1,527	1,682	2.3
Puerto Rico	200	167	243	204	214	7.0
U.S. Gulf	449	431	398	370	337	24.9
Pacific Northwest	773	792	679	593	609	21.2
Pacific Southwest	860	883	860	1,081	1,234	43.5
Total	**5,712**	**5,632**	**5,191**	**5,317**	**5,663**	**- 0.9**
Gas Carrier						
North Atlantic	75	73	122	161	174	132.0
South Atlantic	33	26	45	71	69	109.1
Puerto Rico	28	33	35	41	24	-14.3
U.S. Gulf	493	514	624	548	558	13.2
Pacific Northwest	61	43	48	34	93	52.5
Pacific Southwest	49	50	52	61	51	4.1
Total	**739**	**739**	**926**	**916**	**969**	**31.1**
All Types						
North Atlantic	11,424	10,453	10,833	11,218	11,498	0.6
South Atlantic	10,805	10,375	9,928	11,304	11,709	8.4
Puerto Rico	1,407	1,377	1,497	1,359	1,290	- 8.3
U.S. Gulf	17,940	17,673	18,034	18,685	18,683	4.1
Pacific Northwest	6,927	6,697	6,234	6,510	6,941	0.2
Pacific Southwest	9,885	10,021	10,233	10,809	10,926	10.5
Total	**58,388**	**56,596**	**56,759**	**59,885**	**61,047**	**4.5**

Vessel Capacity Calling at U.S. Ports by Coastal Region and Vessel Type, 2001-2005 (Thousand DWT/TEU)

Vessel Type/Region	2001	2002	2003	2004	2005	% Ch. 01-05
Tanker						
North Atlantic	218,849	188,820	239,242	255,390	271,573	24.1
South Atlantic	59,243	53,201	55,298	63,843	72,510	22.4
Puerto Rico	9,325	11,267	13,123	16,120	13,042	39.9
U.S. Gulf	662,854	621,759	684,133	698,420	727,065	9.7
Pacific Northwest	158,030	155,389	176,978	151,484	172,189	9.0
Pacific Southwest	166,151	171,777	170,595	180,183	193,246	16.3
Total	**1,274,451**	**1,202,213**	**1,339,369**	**1,365,441**	**1,450,225**	**13.8**
Container						
North Atlantic	118,536	124,692	130,401	133,006	142,538	20.2
South Atlantic	216,947	232,109	231,845	264,959	278,719	28.5
Puerto Rico	11,338	12,361	11,016	10,869	10,115	-10.8
U.S. Gulf	39,761	40,170	40,771	40,623	44,473	11.9
Pacific Northwest	75,230	81,326	84,963	86,731	88,295	17.4
Pacific Southwest	215,352	231,842	247,248	260,964	262,700	22.0
Total	**677,164**	**722,500**	**746,244**	**797,154**	**826,839**	**22.1**
Container (TEU)						
North Atlantic	8,066	8,688	9,323	9,598	10,312	27.8
South Atlantic	15,054	16,316	16,576	19,079	20,198	34.2
Puerto Rico	701	763	704	760	702	0.1
U.S. Gulf	2,713	2,787	2,952	2,922	3,193	17.7
Pacific Northwest	5,534	6,053	6,397	6,825	6,975	26.0
Pacific Southwest	15,756	17,151	18,405	19,698	20,194	28.2
Total	47,824	51,757	54,356	58,882	61,574	28.8
Dry Bulk						
North Atlantic	62,986	58,404	54,914	65,944	66,515	5.6
South Atlantic	57,067	47,377	41,012	55,123	52,696	- 7.7
Puerto Rico	2,726	2,849	3,993	2,756	2,652	- 2.7
U.S. Gulf	212,913	222,278	213,964	213,668	197,705	- 7.1
Pacific Northwest	95,401	83,800	63,452	99,616	107,063	12.2
Pacific Southwest	58,931	61,730	61,081	62,705	66,970	13.6
Total	**490,024**	**476,438**	**438,416**	**499,812**	**493,602**	**0.7**
Ro-Ro						
North Atlantic	40,174	39,861	34,426	34,058	34,820	-13.3
South Atlantic	34,484	32,474	28,415	31,143	33,928	- 1.6
Puerto Rico	3,197	2,643	3,760	3,220	3,456	8.1
U.S. Gulf	9,976	9,612	8,730	7,696	6,519	34.7
Pacific Northwest	12,952	13,329	12,777	12,101	11,978	- 7.5
Pacific Southwest	15,996	16,841	17,113	19,136	21,644	35.3
Total	**116,780**	**114,760**	**105,222**	**107,355**	**112,344**	**- 3.8**

Top 20 World Ports of Call by Type, 2005

All Vessel Types

Port	Calls	% of Total
Singapore	27,521	4.8
Hong Kong	18,812	3.1
Rotterdam	9,445	1.5
Busan	8,973	1.4
Kaohsiung	8,134	1.3
Antwerp	6,756	1.1
Yokohama	6,594	1.1
Shanghai	5,728	1.0
Houston	5,617	0.9
Nagoya	5,572	0.9
Port Klang	5,309	0.9
LA/Long Beach	5,290	0.8
Santos	4,918	0.8
New York	4,862	0.8
Keelung	4,596	0.8
Jebel Ali	4,565	0.8
Tokyo	4,238 0.7	
Gibraltar	4,186	0.7
Hamburg	4,087	0.7
Kobe	3,936	0.7
Top 20 Ports	155,974	24.8
All Ports	**628,962**	**100.0**

Top 20 U.S. Ports of Call by Vessel Type,2005

(Vessel Calls)

All Vessel Types

Vessel Type/Port	Calls	% of Total
Houston	5,891	10
LA/Long Beach	5,178	8
New York	4,902	8
San Francisco	3,871	6
New Orleans	3,749	6
Philadelphia	2,998	5
Virginia Ports	2,547	4
Savannah	2,333	4
Columbia River	2,189	4
Charleston	2,046	3
Baltimore	1,825	3
Port Arthur	1,563	3
Miami	1,299	2
Tacoma	1,270	2
Jacksonville	1,237	2
Seattle	1,186	2
Port Everglades	1,182	2
Texas City	1,142	2
San Juan(PRI)	1,086	2
Tampa	1,003	2
Top	20	Ports
48,497	79	
All Ports	**61,047**	**100**

Top 20 U.S. Ports of Call by Vessel Type, 2005

(Vessel Calls)

Tanker

Vessel Type/Port	Calls	% of Total
Houston	3,392	17
Philadelphia	1,534	8
New York	1,380	7
Port Arthur	1,270	6
New Orleans	1,121	6
Texas City	1,074	5
LA/Long Beach	1,070	5
Corpus Christi	788	4
San Francisco	692	3
Freeport(Texas)	561	3
Port Everglades	440	2
Lake Charles	434	2
Tampa	401	2
LOOP Term.	400	2
Valdez	399	2
March Point	340	2
Portland(ME USA)	304	2
Jacksonville	299	1
Savannah	273	1
Wilmington(NC USA)	267	1
Top	20	Ports
16,439	82	
All Ports	**20,118**	**100**

Tanker, Crude

Vessel Type/Port	Calls	% of Total
Philadelphia	857	11
Port Arthur	814	10
Houston	761	10
Texas City	474	6
LA/Long Beach	435	5
New Orleans	414	5
LOOP Term.	398	5
Valdez	353	4
New York	343	4
Corpus Christi	340	4
San Francisco	336	4
Freeport(Texas)	275	3
Lake Charles	267	3
March Point	228	3
Port Angeles	215	3
Portland(ME USA)	183	2
Cherry Point	172	2
El Segundo	142	2
Ferndale	108	1
Galveston light. area	93	1
Top 20 Ports	7,208	91
All Ports	**7,912**	**100**

Tanker, Product

Houston	2,631	22
New York	1,037	9
New Orleans	707	6
Philadelphia	677	6

LA/Long Beach	635	5
Texas City	600	5
Port Arthur	456	4
Corpus Christi	448	4
Port Everglades	424	3
Tampa	399	3
San Francisco	356	3
Freeport(Texas)	286	2
Jacksonville	277	2
Wilmington(NC USA)	249	2
Savannah	248	2
Lake Charles	167	1
Portland(ME USA)	121	1
March Point	112	1
El Segundo	103	1
Valdez	46	0
Top 20 Ports	9,979	82
All Ports	**12,200**	**100**

Container		
LA/Long Beach	2,812	15
New York	2,370	13
San Francisco	1,930	10
Virginia Ports	1,731	9
Charleston	1,464	8
Savannah	1,386	7
Miami	907	5
Houston	874	5
Seattle	808	4
Tacoma	618	3
San Juan(PRI)	485	3
Port Everglades	460	2
Philadelphia	390	2
Baltimore	376	2
Honolulu	362	2
New Orleans	310	2
Jacksonville	244	1
Dutch Hbr.	152	1
Boston(USA)	149	1
Anchorage	121	1
Top 20 Ports	17,949	82
All Ports	**18,542**	**100**

Dry Bulk		
New Orleans	1962	17
Columbia River	1586	14
San Francisco	792	7
Houston	765	7
LA/Long Beach	640	6
Philadelphia	435	4
Mobile	415	4
Baltimore	408	4
Tampa	396	3
Virginia Ports	391	3
New York	348	3
Seattle	295	3
Tacoma	280	2
Savannah	264	2
Jacksonville	191	2
Port Arthur	179	2
Lake Charles	164	1
Corpus Christi	145	1
Charleston	138	1
Galveston	114	1
Top 20 Ports	9,908	87
All Ports	**11,406**	**100**

Gas Carrier		
Houston	193	20
New Orleans	112	12
Tampa	94	10
Cove Point	73	8
Savannah	60	6
Freeport(Texas)	56	6
Nikiski	51	5
San Francisco	48	5
Philadelphia	35	4
Point Comfort	34	4
Lake Charles	34	4
Boston(USA)	32	3
Port Arthur	22	2
Guayanilla	18	2
Homer	18	2
New York	13	1
Portsmouth(NH USA)	10	1
Columbia River	8	1
Port Angeles	7	1
San Juan(PRI)	6	1
Top 20 Ports	924	95
All Ports	**969**	**100**

Ro-Ro

Vessel Type/Port	Calls	% of Total
Baltimore	717	13
New York	573	10
Jacksonville	437	8
LA/Long Beach	345	6
Miami	318	6
Tacoma	283	5
Brunswick	219	4
Port Hueneme	218	4
San Juan(PRI)	214	4
Columbia River	199	4
Savannah	195	3
Charleston	194	3
San Francisco	191	3
Philadelphia	189	3
Houston	183	3
San Diego	178	3
Honolulu	167	3
Virginia Ports	160	3
Port Everglades	105	2
Anchorage	94	2
Top 20 Ports	5,179	91
All Ports	**5,663**	**100**

World Shipbuilding Prices

(Continued from page 39)

Europe

European yards held their market share in 2005 at approximately 14 percent. Germany, taking orders for container vessels, RoRo and cruise ships, were the most active of the European yards. Akeryards in Finland and Fincantieri in Italy were also blessed with an increase in demand for passenger vessels. A reduction in the ordering activity was noted in most segments in 2005. Of the three largest segments, the number of container vessels was only slightly reduced from the previous year, which was also the case for car carriers and cruise ships. However, in the LPG segment a doubling of orders was recorded. One reason is obviously an ageing fleet, but an explanation can also be found in the LNG market. A number of LNG projects is due for start-up the coming years which will also yield LPG, and this may boost LPG volumes by as much as 50 percent by the end of this decade. A long period of high oil prices has led to an intensified search for oil and gas. Russia has been given a lot of attention in the search to diversify supply of both oil and gas. A majority of new Russian export projects are located in areas with a cold climate which has increased demand for ice-classed tankers and by the end of the year the total ice class order book of tankers represented 14.8 mill. dwt.

Future Prospects

Last year we concluded that a good balance between supply and demand for newbuildings could be expected in 2005. For the year as a whole this turned out to be not far from the truth, and newbuilding prices ended the year close to the level it started out after having peaked during the summer. In 2006 we expect the downward trend in newbuilding prices to continue. The supply side has proved to be very price sensitive, and has increased capacity substantially in the past two years. Higher building capacity means that more orders are now required to achieve balance between demand and supply and thus provide continued high newbuilding prices. On the demand side, we have been through a 'super-cycle', lasting two years and has resulted in large order books. Consensus forecasts for the world economy indicate that 2006 will remain healthy and should give continued growth in demand in the various shipping markets. However, due to the huge order books we foresee a decline in the rate level for most segments, which would also indicate a slow down in the number of new orders placed. In conclusion, we anticipate a downward pressure on newbuilding prices, as building capacity looks likely to exceed demand in 2006. However, one factor that may postpone falling prices is the huge order book which should keep yards busy for almost three years. Some will argue that yards have no incentives to lower their prices as the have plenty of work already secured. Finally, exchange rates may alter this picture if significant changes occurs.

The preceding was excerpted from a report was authored by Jørn Bakkelund, R.S. Platou Economic Research a.s., and printed in The Platou Report 2006.
R.S. Platou is an international shipbroking company established in 1936, which serves the shipping and offshore industry world-wide by providing services within chartering, sale and purchase and contracting of ships and offshore units. **For additional information, visit www.platou.com**

Bollinger

(Continued from page 34)

Bollinger's businesses did very well up until the oil bust of 1984. Louisiana oil industry collapsed and the economy of the area soon followed. Remembering the initial dream, the Bollinger's worked harder. They remembered their commitment to the Bollinger family of workers who needed this employment and the community that was also dependent on this business surviving. Donald "Boysie" Bollinger, son of Donald Bollinger, had worked his way up to become Chairman of the Board of the organization. He saw the slowdown in the oilfield work coming and took a risk to bid on a U.S. Coast Guard contract for some new Patrol Boats. This was quite a chance, but Boysie new his workers had the skills and could do the job if given the opportunity. Bollinger was awarded the contract, which eventually meant they would build 49, 110 ft US Coast Guard Island Class ships during the oilfield depression. This, along with their commercial repair programs, sustained the company moving through the 80's. Recently Bollinger delivered an additional 66, 87 ft Marine Protector Class Coastal Patrol Boats for the US Coast Guard. Since the initial contract with the US Coast Guard, Bollinger has continued to grow and expand it's commercial and military new construction and repair facilities. The company has expanded to sites from New Orleans, Louisiana to Texas City, Texas, currently owning and operating thirteen shipyard facilities on the Gulf Coast. Bollinger is the largest vessel repair and conversion company in the Gulf of Mexico region with a total of 40 dry-docks in Louisiana and Texas. (See chart below left).

Bollinger Shipyards: 60 Years in the Making

Company	Established
Bollinger Shipyards, Inc., Lockport, La	1947
Bollinger Larose, L.L.C., Larose La	1978
Chand, L.L.C.	1988
Bollinger Algiers, L.L.C., New Orleans, La	1990
• *Formerly Algiers Iron Works & Drydock Co.*	
Bollinger Quick Repair, L.L.C., Harvey La	1993
• *Formerly - Avondale Quick Repair*	
Bollinger Morgan City, L.L.C. , Amelia La	1995
• *Formerly Mc Dermott Marine*	
Bollinger Marine Fabricators, L.L.C., Amelia, La	1997
• *Formerly Mc Dermott Marine Fabricators*	
Bollinger Amelia Repair, L.L.C. , Amelia La	1998
• *Formerly - Service Marine*	
Bollinger Fourchon, L.L.C., Golden Meadow , La (Port Fourchon)	1998
Bollinger Calcasieu, L.L.C., Sulphur, La	2000
• *Formerly Halter Calcasieu*	
Bollinger Gretna, L.L.C., Gretna, la	2000
• *Formerly - Gretna Machine and Iron Works*	
Bollinger Gulf Repair, L.L.C., New Orleans La	2000
• *Formerly - Halter Gulf Repair*	
Bollinger Houston, L.P., Houston Tx	2000 -
• *Formerly - Bludworth-Bond Houston - (Bollinger sold this facility in 2005)*	
Bollinger Texas City, L.P., Texas City Tx	2000
• *Formerly - Bludworth-Bond Texas City*	

New Underwater Coatings

SeaCoat Technology released several underwater hull coatings ahead of IMO standards. The products are non-toxic, biocide and poison free, and are free from any IMO regulations or limitations in use or application. Sea-Speed V3 is its new hard film siloxane foul release bottom paint. It is an evolution in siloxane (silicone) based non-toxic coatings for underwater hulls. With a 7-10 year useful life, SeaCoat claims to have taken siloxane technology to the next level.

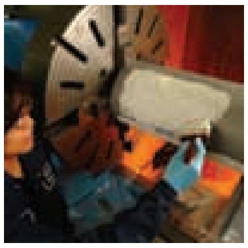
Circle 1 on Reader Service Card

Furuno Offers New Radar

Furuno introduced its FR8062/8122/8252 Series X-band radars. Offering a variety of power levels and range scales, the new series includes Furuno's 6 kW model FR8062 (72 nm max. range), 12 kW model FR8122 (72 nm max. range) and 25 kW model FR8252 (96 nm max. range). The radars incorporate video processing technology and logarithmic amplifiers with automatic tuning and anti-clutter controls.

Circle 2 on Reader Service Card

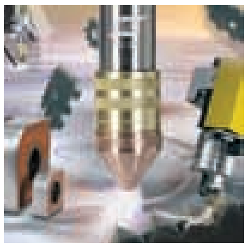
New Shaft Coating



Thordon Bearings introduced Thor-Coat, a new proprietary shaft coating formulated to address the risk of coating failures on water lubricated propeller shafts. Thor-Coat was developed to complement Thordon's COMPAC water lubricated propeller shaft bearing system to provide corrosion protection for a minimum 10-year period in service. Thordon is working with Class to develop approval for other techniques, such as borescoping, that facilitate inspection of the bearings and coating without withdrawing the shaft.

Circle 3 on Reader Service Card

New ESAB m3 Plasma Cutting System



ESAB's m3 Plasma System combines multiple plasma cutting and marking features in a single system. The m3 system is designed to deliver high-speed, low-cost standard plasma cutting; high-quality precision cutting and marking; and high-current, thick-plate cutting all with a single plasma torch. When configured for 600-amp operation, the system can cut and mark material from 20 ga. to 6.25 in. (1mm to 160mm) with uniform quality.

Circle 4 on Reader Service Card

New Diesel Performance Analyzer

Drew Marine, a business group of Ashland Specialty Chemical, a division of Ashland Inc. introduced an upgrade to its diesel performance monitoring system, the DREW Diesel Performance Analyzer IV (DPA IV). The DPA IV system relies upon a computer interface with sensors attached to the engine. These sensors capture "real-time" information providing specific engine analysis traits to the ship's engineer.

Circle 5 on Reader Service Card

"HYN" Class Flux Cored Wire for HSLA-65 Steel

Hobart Brothers has released the first military approved "HYN" classification flux cored wire for HSLA-65 grade steel (a new high strength, low alloy steel used to construct U.S. Naval ship hulls). Specially formulated to provide high strength welds on critical applications, the new Tri-Mark TM-71 HYN gas-shielded flux cored wire exceeds the extremely stringent welding standards established by the U.S. Navy.

Circle 6 on Reader Service Card

SBS Fire Protection System

Kidde Fire Systems offer the new SBS Fire Protection System for marine applications. Developed for use in small to medium sized vessels, the SBS Fire Protection System is designed to offer high-performance, clean agent fire suppression with optimized fire detection, fire suppression agent distribution and cylinder placement. It also features a patent-pending thermobulb heat detector, developed to react to the elevated temperature associated with machinery space fire. The SBS System is suitable for both gas and diesel powered vessels and is offered in two basic configurations: the Sentinel and the Sentinel PRO, both customizable for specific applications.

Circle 7 on Reader Service Card

Hellbeater Fire Pump

The "Hellbeater" diesel driven marine fire pump and monitor sets — portable equipment as used by the U.S. Navy and marine salvage companies — and stocks of the Pyrocool firefighting agent are available to municipal and port authority fire departments. The Hellbeater pumps and stocks of Pyrocool are ready for deployment aboard tugs, workboats and vessels of opportunity at the time of an incident, effectively converting the boats into NFPA Class A fireboat equivalents. Maritime Solutions is the U.S. supplier.

Circle 8 on Reader Service Card

Pulsating/Jetting Valve

CAT PUMPS introduced the MAG-JET Valve for jetting. The MAG-JET uses a SS magnetic valve and a strong corrosion resistant magnet to hold one inlet valve open, creating a strong pulse-jetting action to power nozzles through the toughest clogs.

Circle 9 on Reader Service Card

Gas Freeing Fans

Alfa Laval introduced a new range of gas freeing fans for all vessel types. Light and portable, the fans are designed to provide user-friendly, efficient and safe ventilation and complement the company's tank equipment portfolio. Three different models cover virtually all applications, tanks and cargo types.

The deep penetration fans are designed to provide top performance, directing the airflow to the tank bottom. This reduces the risk of vapor pockets accumulating within the tank. Time spent on gas freeing operations is significantly reduced, thanks to high performance fans with deep penetration. Shorter operation time minimizes water consumption and as a result reduces energy consumption as well.

Circle 10 on Reader Service Card

New Wind-Heeling Method

A general method for computing wind heeling moments based on the gemetrical model of the ship has been developed by Creative Systems, Inc. and is now available in a beta-test version. Called the Band method by its developer, it stands between the classical lateral plane projections and the more sophisticated panel-based wind drag approach. The Band method is still based on laterally-projected areas, but it automatically accounts for shielding between overlapping geometrical elements. It also applies to wind approaching from any direction, a capability important when analyzing the stability of mobile drilling units and other floating structures where ordinary transverse stability is not the major concern. The net result of the modeling efficiency and the run-time efficiency is a very substantial convenience which should prove beneficial, especially in preliminary design.

Circle 12 on Reader Service Card

Circle 295 on Reader Service Card

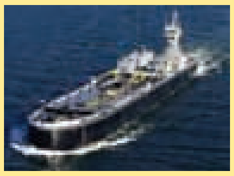
Detyens Shipyards, Inc.

1607 Drydock Ave.
N. Charleston, SC 29405 USA
www.detyens.com
Bus 843.746.1603 • Cell 843.991.2626 • Fax 843.308.8058
Contact: Bradley Kerr
E-mail: brad@davidenman.com

Detyens Shipyard in Charleston, SC is a full service ship repair facility that is located in Charleston, SC. Established in 1962; Detyens has earned a reputation for flexibility, excellent production capabilities & low-cost work. In addition to three (3) dry docks with a capacity of up to 229m x 33.5m, the facility offers over 2,100 meters of deep water pier space, state-of-the-art trade shops, ten (10) 56-ton gantry cranes, three (3) 100-ton large floating cranes, a 400-ton floating crane and a strong subcontractor base to support shipyard labor. We would encourage you to visit our web site at www.detyens.com and www.davidenman.com for more details.

Circle 224 on Reader Service Card

Manitowoc Marine Group



1600 Ely Street
Marinette, WI 54143 USA
Tel: (715) 735-9341 Ext. 6528
Fax: (715) 735-3516
Contact: Floyd Charrier
Email: fcharrier@marinettemarine.com
Website: www.manitowocmarine.com

Manitowoc Marine Group (MMG), a Manitowoc Company, has over 100 years of commercial and government experience in multi-vessel new construction and ship repair/conversion projects. MMG is a full service shipyard organization that additionally provides our customers with engineering/design, system & logistics integration, and floating/graving dock facilities. MMG shipyard locations: Bay Shipbuilding Company (Sturgeon Bay, WI), Marinette Marine Corporation (Marinette, WI), and Cleveland Shiprepair Company (Cleveland, OH).

Circle 263 on Reader Service Card

Aegean Yacht Builders
Turkey
www.aegeanyacht.com
tel: + 90 252 313 26 55
email:yachtbuilding@aegeanyacht.com
Descr: Steel yacht (up to 50 m) builders in Turkey

All American Marine
200 Harris Ave.
Bellingham, WA 98225
USA
www.allamericanmarine.com
Joe Hudspeth
tel: 3606477602
fax: 3606477607
email:sales@allamericanmarine.com
Descr: Builder of high speed aluminum catamarans
Products: Teknicraft hydrofoil assisted catamarans

Allied Shipbuilders Ltd.
1870 Harbour Road
N.Vancouver, BC V7H 1A1
Canada
www.alliedship.com
Malcolm McLaren
tel: 604-929-2365
fax: 604-929-5329
email:asl@alliedship.com
Descr: Ship Building & Repair
Products: Fishing Vessels, Passenger Ferries, Tugs, Barges, Supply Vessels,Patrol Vessels,

Ananda Shipyard and Slipways Limited
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Dhaka, 1000
Bangladesh
www.anandagroup.biz
Dr. Abdullahel Bari, Phd, CEng.
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fax: +880-2-8312681
email:ananda@bdmail.net
Products: Container vessel, Oil tanker, Catemeran, Ro-Ro ferry, Patrol craft, Dredgers, Survey vessel, Supply barge, Fishing trawler, wooden and fibre boats.,

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Punta Arenas,
Chile
www.asmar.cl
Gabriel Barros
tel: 56-61-203610
fax: 56-61-203658
email:asmarmag@asmar.cl
Descr: Shipyard
Products: Ship Maintenance,

Aussam Shipyards Nigeria Limited
Plot 39a Seinde Callisto Crescent, Oshodi-Lagos
Lagos, Lgs 23401
Nigeria
www.aussam.com
Austen U. Inyangsam
tel: +23418116492
fax: `+23414964825
email:aussamshipyards@engineer.com
Descr: Shipbuilding/Repairs, Offshore Technical Support, Fisheries & Brokerage
Products: Ships, Chartering etc

Bender Shipbuilding & Repair Co.
265 South Water Street
Mobile, AL 36603
USA
www.bendership.com
Frank Terrell
tel: 251-431-8000
fax: 251-432-2260
email:corporate@bendership.com
Descr: Ship Builder/Repairer
Products: OSVs, PSVs; AHTS; Tugs; Barges; Repairs,

Bludworth Marine LLC dba Texas Pump & Repair
3502 Broadway
Houston, Tx 77017
USA
www.vesselrepair.com
Richard Bludworth
tel: 713 644 1595
fax: 713 644 1598
email:rbludworth@hotmail.com
Descr: Marine Repair and Pump Repair
Products: Shipyard Galveston, Topside Reapirs, Fabrications, ATB Coupler Systems,

Bollinger Shipyards, Inc.
P. O. Box 250
Lockport, LA 70374
USA
www.bollingershipyards.com
Robert A. Socha
tel: 985-532-2554
fax: 985-532-7225
email:sales@bollingershipyards.com
Descr: Ship building and repair
Products: Repair/Conversions/New Construction/Drydocks,

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PO Box F-44867
Freeport, GB
Bahamas
www.bradford-grand-bahama.com
Dan Romence
tel: 242-352-7711
fax: 242-352-7695
email:dan@bradford-grand-bahama.com
Descr: Yacht and ship repair facility
Products: Full service marine repair,

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New Orleans, LA 70153
USA
www.bkco.us
William J. Baraldi
tel: (504) 524-7681
fax: (504) 522-5879
email:wb@bkco.us
Descr: Topside Marine Repair
Products: Repairs to Vessels,

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COLOMBO 15,
SRI LANKA
WWW.CDL.LK
K.B. NAYAKARATHNA
tel: +94777761529
fax: +94112446441
email:bm@cdl.lk
Descr: Colombo Dockyard Ltd. operates 4 drydocks upto a maximum capacity of 125,000 dwt, in collaboration with Onomichi Dockyard Co. Ltd. Japan. Established in 1974 has a proven track reccord as a reputed ship repair, ship building & Heavy Engineers.
Products: Ship Repairs - capacity to handle all types, specilising in tankers. Ship Building - Construction in Aluminium and steel, proven product portfolio to international clients.,

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Istanbul, 81700
Turkey
www.desan-shipyard.com
Hakan Turedi
tel: 90 216 395 20 25 / 25
fax: 90 216 395 69 43
email:h.turedi@desan-shipyard.com

Detyens Shipyard, Inc.
1670 Drydock Avenue
North Charleston, SC 29405
USA
www.detyens.com
Bradley Kerr
tel: 843-308-8000
fax: 843-308-8058
email:sales@detyens.com
Descr: Ship repair and conversions
Products: Ship repair specialist,

Fraser Shipyards Inc.
P.O. Box 997,
Third St. & Clough Ave.
Superior, WI 54880
www.frasershipyards.com
Trevor White
tel: 715-394-7787
fax: 715-394-2807
email:twhite@frasershipyards.com
Descr: Shipbuilder and ship repairer with 2 graving docks
Products: New vessels and all type repairs,

GUAM SHIPYARD
P.O. Box 13010, NAVACTS BRANCH
Santa Rita, GU 96915-3010
UNITED STATES
gaumshipyard.com
M. Pothen
tel: 671-339-5700
fax: 671-339-3610
email:mpothen@guamshipyard.net
Descr: Ship Repair and Industrial fabrication
Products: Ship repair, industrial fabrication, machining and motor rewinding,

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POB 10630,
Haifa Bay,
Israel
www.israel-shipyards.com
Shuki Sagy
tel: +972 4 8460359
fax: +972 4 8419219
email:shukis@israel-shipyards.com
Descr: Shipyard
Products: Military vessels, commercial vessels, tug boats. Ship Repair,

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Longview, Tx 75606
U.S.A.
www.letourneau-inc.com
Mr. Julian Bowes
tel: (903) 237 7558
fax: (903) 237 7569
email:jbowes@letourneau-inc.com
Descr: Designer and Builder of Offshore Jack-Up Drilling Units
Products: Offshore Jack-Up drilling rigs, cranes, anchor winches, drilling equipment,

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Brueckenstr. 25
Bremerhaven, 27568
Germany
www.lloydwerft.com
Mr. Lueken
tel: +49-471-478 0
fax: +49-471 478 280
email:info@lloydwerft.com
Descr: Shipyard
Products: shiprepair, shipconversion, newbuilding,

Lürssen Yachts
Zum Alten Speicher 11
Bremen, 28759
Germany
www.lurssen.com
Michael Breman
tel: +49 421 6604 166
fax: +49 421 6604 170
email:yachts@lurssen.com
Descr: Shipyard
Products: Yachts from 50 to 170 m,

Manitowoc Marine Group
1600 Ely Street
Marinette, WI 54143 USA
Tel: (715) 735-9341 Ext. 6528
Fax: (715) 735-3516
Contact: Floyd Charrier
Email: fcharrier@marinettemarine.com
Website: www.manitowocmarine.com
Descr: Manitowoc Marine Group (MMG), a Manitowoc Company, has over 100 years of commercial and government experience in multi-vessel new construction and ship repair/conversion projects.

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MADRID, 28006
SPAIN
www.navantia.es
Esther Benito Lope
tel: 91 3358555
fax: 91 3358628
email:ebenito@navantia.es
Descr: Integral Naval shipbuilding: design, construction, integration, test, commissioning and guarantee
Products: Frigates, Submarines, Minehunters, double-hull Supplying Ships, Aircraft carriers,

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Carretera Industrial s/n
Cadiz, 11007
Spain
www.navantia.es
Ignacio Galan
tel: +34 956 299274
fax: +34 956 299309
email:igalan@navantia.es
Descr: Ship Repairs & Conversions
Products: 7 Drydocks up to 386 x 66 M (400,000 DWT), repair berths,

Navantia Shiprepairs Cartagena
Carretera de la Algameca s/n
Cartagena (Murcia), 30205
Spain
www.navantia.es
Lucía Gil
tel: +34 968 128331
fax: +34 968 128399
email:reparaciones.cartagena@navantia.es
Descr: Ship Repairs & Conversions
Products: Synchrolift (5,500 T capacity) & 210 x 22 M Drydock (35,000 DWT),

Navantia Shiprepairs Ferrol - Fene
Carretera de la Circunvalación
Ferrol (La Coruna), 15403
Spain
www.navantia.es
Jose Manuel Noya
tel: +34 981 355927 Ext. 1753
fax: +34 981 336939
email:jmnoya@navantia.es
Descr: Shiprepairs and Conversions
Products: 4 Drydocks up to 330 x 50 M (230,000 DWT) & repair berths.,

Odyssey Boatworks, LLC
348 Waterview Avenue
Bridgeport, CT 06608
USA
www.odysseyboatworks.com
Frederic A. Ohrn
tel: 203 972-7117
fax: 203 972-9401
email:odysseyboatworks@yahoo.com
Descr: "The Best Little Shipyard in Connecticut" Deep Water Dock, Full Service, Yacht Refurbishment
Products: Yacht Renovations & Restoration: Hydrofoil Systems, Propulsion Systems, Yacht Renovations & Restoration, Trailers,

Pacific Shipyards International
Pier 41
Honolulu, HI 96817
USA
www.pacificshipyards.com
Iain Wood, General Manager
tel: 808-848-6211
fax: 808-848-6233
email:shiprepair@pacificshipyards.com
Descr: Shipyard
Products: Full Service shipyard, Drydocks, International Paint and Awl Grip distributor,

SeaArk Marine, Inc.
P.O. Box 210
Monticello, AR 71657
www.seaark.com
Ken McFalls, VP of Sales
tel: 870-367-9755
fax: 870-367-2120
email:sales@seaark.com
Descr: All Welded Aluminum Boat Manufacturer
Products: All-welded aluminum work and patrol boats, ranging from 17` to 65` in length,

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P.O. Box 22077
Beaumont, TX 77705
www.unitedmarineshipyard.com
Randy Bonin
tel: 409-833-7070
fax: 409-833-0744
email:mail@unitedmarineshipyard.com
Descr: General Contractor serving the international ship and drilling rig industry. Provides ship repairs and drill rig repairs, upgrades, conversions and new construction.
Products: Drill Rigs, Production Platforms,

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This directory section is an editorial feature published in every issue for the convenience of the readers of MARITIME REPORTER. A quick-reference readers' guide, it includes the names and addresses of the world's leading manufacturers and suppliers of all types of marine machinery, equipment, supplies and services. A listing is provided, at no cost for one year in all issues, only to companies with continuing advertising programs in this publication, whether an advertisement appears in every issue or not. Because it is an editorial service, unpaid and not part of the advertisers contract, MR assumes no responsibility for errors. If you are interested in having your company listed in this Buyer's Directory Section, contact Mark O'Malley at momalley@marinelink.com

ACCOMMODATION LADDERS & GANGWAYS
Generon IGS, 11985 FM 529, Houston, TX 77041

AIR CONDITIONING & REFRIGERATION
Cospolich Refrigeration, 14695 Highway 61, Norco, LA 70079
RW Fernstrum, 1716 11th Avenue, Menominee, MI 49858, 9068635553, 9068635634, seanf@fernstrum.com, Contact: Sean Fernstrum, www.fernstrum.com

ANCHORS & CHAINS
Anchor Marine, PO BOX 58645, Houston, TX 77258

AUTOPILOT SYSTEMS
AG Marine Inc., 5711 34th Avenue, Gig Harbor, WA 98335-8548

BEARING- RUBBER, METALLIC, NON-METALLIC
Thordon Bearings, 3225 Mainway, Burlington Ontario L7M 1A6, Canada

BOATBUILDER
AF Theriault & Son, P.O. Box 10, Meteghan River, NS B0W 2L0 , Canada
AMERICAN MARINE HOLDINGS GOVERNMENT SERVICES, 1838 Turnbull Lakes Drive, New Smyrna Beach, FL 32168
Blount Marine, 461 Water St., Warren, RI 02885
Gladding Hearn, 1 Riverside Ave., Somerset , MA 02725
Willard Marine Inc., 1250 N. Grove St., Anaheim, CA 92806

BOLLARDS
Anchor Marine & Industrial Supply, PO BOX 58645, Houston, TX 77258

BULKHEAD SEALS/PANELS
CSD North America, 880 Candia Rd., Unit 10, Manchester, NH 03109

CAD/CAM SYSTEMS
Autoship Systems Corp., 611 Alexander Street, Suite 312, Vancouver, BC V6A 1E1, Canada, 604-254-4171, 604-254-5171, sales@autoship.com, Contact: Ross Muirhead, www.autoship.com
Creative Systems Inc., P.O. Box 1910, Port Townsend, WA 98368

CAPSTANS
Coastal Marine Equipment, 20995 Coastal Parkway, Gulfport, MS 39503-9517, 228-832-7655, 228-832-7675, sales@coastalmarineequipment.com, Contact: Ralph Waguespack, www.coastalmarineequipment.com

CARGO MANAGEMENT
Autoship Systems Corp., 611 Alexander Street, Suite 312, Vancouver, BC V6A 1E1, Canada, 604-254-4171, 604-254-5171, sales@autoship.com, Contact: Ross Muirhead, www.autoship.com

CFD SOFTWARE
CD-Adapco, 9401 General Dr., Ste 131, Plymouth, MI 48170

COATINGS/ CORROSION CONTROL/ PAINT
Ameron International Performance, 13010 Morris Road, Ste 400, Alpharetta, GA 30004
International Paint Co., Stoneygate Lane, Felling, Gateshead, Tyne and Wear NE10 OJY, UK
Mascoat Products, 4310 Campbell Rd, Houston, TX 77041
NAPASCO, INC., 213 Main Project Road, Shriever, LA 70395, 985-449-0730, 985-449-0740, napasco@napasco.com, Contact: Pam Bartell, www.napasco.com
Sea Coat Technology, 11215 H Jones Road West, Houston, TX 77065

COMMUNICATIONS
David Clark, PO Box 15054, Worcester, MA 01615
L-3 Communications, 6000 Fruitville Road, Sarasota, FL 34232
Pipeline Communications and Technology, Inc., 2800 Woodlawn Dr. Ste. 264, Honolulu, HI 96822
Xantic, PO Box 30012 , 2500 GA The Hague, Netherlands

COMPOSITE SHAFTS
Centa Corp., 815 Black Hawk Drive, Westmont, IL 60559, 630-734-9600, 630-734-9669, bobl@centacorp.com

COMPUTER/ COMPUTER SOFTWARE
Omega Engineering, One Omega Dr., Stamford, CT 06907

CONTROL SYSTEM-MONITORING/STEERING
Kobelt Manufacturing Co., Ltd., 8238-129 Street, Surrey, BC V3W0A6, Canada
L-3/TANO-EDI, 759 Hill Street, New Orleans, LA 70121, 504-831-9800, 504-833-4119, guy.hardwick@l-3com.com
Omega Engineering, One Omega Dr., Stamford, CT 06907

COUPLINGS
American Vulkan, 2525 Dundee Rd, Winter Haven, FL 33884, 863 324 2424, 863 324 4008, vulkanusa@vulkanusa.com, www.vulkanusa.com
Centa Corp., 815 Black Hawk Drive, Westmont, IL 60559, 630-734-9600, 630-734-9669, bobl@centacorp.com
Mapeco Products, 91 Willenbrock Rd., Unit B, Oxford, CT 06478

CRANE - HOIST - DERRICK - WHIRLEYS
Davit Sales, PO BOx 232, Jefferson Valley, NY 10536
DMW Marine, LLC, 1123 St. Matthews Road, Chester Springs, PA 19425, 610-827-2032, 610-827-1199, dw@dmwmarine.com , Contact: Douglas M. Weidner, www.dmwmarine.com/

CRANE TESTING
Imes, Inc., 5139 Brook St., Suite E, Mont Claire, CA 917063

CUTTING & WELDING MACHINES
ESAB Cutting Systems, 411 South Ebenezer Road, Florence, SC 29501

DECK MACHINERY- CARGO HANDLING EQUIPMENT
Burrard Iron Works Ltd., 220 Alexander Street, Vancouver, BC V6A 1C1, Canada, 604-684-2491, 604684-0458, sales@burrardironworks.com
Coastal Marine Equipment, 20995 Coastal Parkway, Gulfport, MS 39503-9517, 228-832-7655, 228-832-7675, sales@coastalmarineequipment.com, Contact: Ralph Waguespack, www.coastalmarineequipment.com
Davit Sales, PO BOx 232, Jefferson Valley, NY 10536
DMW Marine, LLC, 1123 St. Matthews Road, Chester Springs, PA 19425, 610-827-2032, 610-827-1199, dw@dmwmarine.com , Contact: Douglas M. Weidner, www.dmwmarine.com/
Global Incorporated, P.O. Box 24, 160 Cannery Road, Somerset, PA, PA 15501
Hyde Marine Inc, 28045 Ranney Parkway G, Cleveland, OH 44145-1144
Nabrico Marine Products, 1050 Trinity Road, Ashland City, TN 37016
Norwegian Maritime Equipment AS, BOX 244, NO-5480 HUSNES, Norway

DIESEL ENGINE OVERHAUL
Fincantieri Marine Systems, 800 Principal Court, Suite C, Chesapeake, VA 23320

DIESEL ENGINE- SPARE PARTS & REPAIR
Mariso USA, Inc., 12783 Capricorn Dr., Stafford, TX 77477

DIESEL FUEL INJECTORS
Interstate Diesel, 4901 Lakeside Avenue, Cleveland, OH 44114-3996, 800-321-4234, 216-881-0805

DISPLAY TECHNOLOGY
Barco Simulation, 600 Bellbrook Avenue, Xenia, OH 45385

DOOR LOCKS
The Brass Works Inc., P.O. BOX 566, DeLand, FL 32721, 386-943-8857, 386-943-8810, info@marinedoorandcabinethardware.com

DOORS- MARINE & INDUSTRIAL
Diamond/Sea Glaze, 19372-94th Ave, Surrey, BC V4N 4E4, Canada
Joiner Systems, 1925 52nd Avenue, Lacine, Quebec H8T 3C3, Canada
Juniper Industries, 72-15 Metropolitan Ave., Middle Village, NY 11379
Seaclear Industries, 220 Maltby Rd., Suite 131, Bothell, WA 98012
USA Sliding Doors, Inc., 801 Hosmer Road, Churchville, NY 14428, 585-538-4160, 585-538-2806, info@usaslidingdoors.com, Contact: Mr. Robert Weiland, www.usaslidingdoors.com

EDUCATION
Massachusetts Maritime Academy, 101 Academy Drive, Buzzards Bay, MA 02532

ELECTRICAL SERVICES
QCI Marine Offshore, 6754 Willowbrook Park Dr, Houston, TX 77066

EMPLOYMENT
Military Sealift Command, PO BOX 120, CODE APM-124, VIRGINIA BEACH, VA 23458-0120, 1-888-SEALIFT , webmaster@msc.navy.mil, Contact: Audra Lamb, www.msc.navy.mil/

ENGINE ROOM LIGHTING/ MONITORING & CONTROL
GMT Electronics, 171 Main St., South River, NJ 08882

ENGINES
Fairbanks Morse, 701 White Avenue, Beloit, WI 53111
Fincantieri Marine Systems, 800 Principal Court, Suite C, Chesapeake, VA 23320

ENVIRONMENTAL SOLUTIONS
Hyde Marine, 28045 Ranney Parkway G, Cleveland, OH 44145-1144

EQUIPMENT FINANCING
AIG Commercial Equipment Finance, Inc., 5700 Granite Parkway, Suite 850, Plano, TX 75024, 972-987-3708, 972-987-3700, kirk.phillips@aig.com

EXHIBITIONS/TRADE SHOWS
CMA Shipping, 62 Southfield Ave, Stamford, CT

FENDERING SYSTEMS/ BUOYS - DOCK & VESSEL
Anchor Marine & Industrial Supply, PO BOX 58645, Houston, TX 77258

FIRE & SAFETY PRODUCTS
Western Fire & Safety, 2446 NW Market Street, Seattle, WA 98107

FLOW CONTROLS
EIM Controls, 13840 Pike Road, Missouri City, TX 77489

GALLEY EQUIPMENT
Jamestown Metal Marine Sales, Inc., 4710 Northwest 2nd Ave. , Boca Raton, FL 33431

GLASS
Garibaldi Glass, 7344 Winston Street, Burnaby, British Columbia V5A 2G9, Canada
ProCurve Glass Technology, LLC, 3535 Davisville Rd., Hatboro, PA 19040

HATCHES & DOORS
Juniper Industries, 72-15 Metropolitan Ave., Middle Village, NY 11379

HOISTS
Coastal Marine Equipment, 20995 Coastal Parkway, Gulfport, MS 39503-9517, 228-832-7655, 228-832-7675, sales@coastalmarineequipment.com, Contact: Ralph Waguespack, www.coastalmarineequipment.com

HVAC
Jamestown Metal Marine Sales, Inc, 4710 Northwest 2nd. Ave., Boca Raton, FL 33431
QCI Marine, 6754 Willowbrook Park Drive, Houston, TX 77066, 281-885-1300, 281-885-1349, Lbobbit@qcimarine.com

IMAGING EQUIPMENT
EMX, Inc., 4200 Dow Road, Suite C, Melbourne, FL 32934

INSULATION
Superior Energies, 3115 Main Ave., Groves, TX 77619
Superior Energies Inc., 3115 Main Ave., Groves, TX 77619

INTERIOR MATERIALS
Thermax - Fipro, 3115 Range Rd., Temple, TX 76504, 8132642656, 8132642507, sales@thermaxmarine.com, Contact: John Hutchison, www.thermaxmarine.com

INTERIORS
Jamestown Metal Marine Sales, Inc., 4710 Northwest 2nd Ave. , Boca Raton, FL 33431
QCI Marine Offshore, 6754 Willowbrook Park Dr, Houston, TX 77066, 281 885 1300, 281 885 1349, Lbobbit@qcimarine.com, Contact: Larry Bobbit, www.qcimarine.com

JOINER, WALL SYSTEMS, CEILING SYSTEMS, DOORS
Thermax - Fipro NA, 3115 Range Rd., Temple, TX 76504, 8132642656, 8132642507, sales@thermaxmarine.com, Contact: John Hutchison, www.thermaxmarine.com

JOINER- WATERTIGHT DOOR-PANELING-CEILING SYSTEM
Joiner Systems, 1925 52nd Avenue, Lacine, Quebec H8T 3C3, Canada

JOYSTICKS & POTENTIOMETERS
Feteris Components USA, 4703 Murat Place, San Diego, CA 92117

KEEL COOLERS
RW Fernstrum, 1716 11th Avenue, Menominee, MI 49858, 9068635553, 9068635634, seanf@fernstrum.com, Contact: Sean Fernstrum, www.fernstrum.com

LIFEBOAT TESTING
Imes, Inc., 5139 Brook St., Suite E, Mont Claire, CA 917063

LIFEBOATS/RAFTS
Viking Life Saving Equipment, 1400 NW159th Street Suite 101, Miami, FL 33169

LIFESAVING EQUIPMENT
C.M. Hammar AB, August Barks Gatan 15, 421 32 Vastra Frolunda, Sweden
Viking Life Saving Equipment, 1400 NW159th Street Suite 101, Miami, FL 33169

LOAD CELLS
Omegadyne Inc, 149 Seltzer Ct, Sunbury, OH 43074, 740 965 9340, 740965 9438, info@omegadyne.com, Contact: Alfred Friere, www.omegadyne.com

MARINE ELECTRONICS
GMT Electronics, 171 Main St., South River, NJ 08882

MARINE ENGINE EMISSIONS MONITORING
Martek Marine Ltd., Century Business Park Manvers Way, Rotherham, South Yorkshire 560 5DA, UK

MARINE ENGINEERING
Delta Marin, Kurokatu 1, Raisio FIN-2100, Finland
Hike Metal, PO BOX 698, Wheatley, ON N0P 2PO, Canada

MARINE EQUIPMENT
Tidewater Skanska, Inc., PO Box 57, Norfolk, VA 23501, 757-547-2153, 757-547-4806, sby@tidewaterskanska.com
Waterman Supply, P.O. Box 596, Wilmington, CA 90748

MARINE HAZARD RESPONSE
Marine Respose Alliance LLC, 1102 SW Massachusetts St., Seattle, WA 98134-1030

MARINE PRESSURE TRANSDUCERS
Omegadyne Inc, 149 Seltzer Ct, Sunbury, OH 43074, 740 965 9340, 740965 9438, info@omegadyne.com, Contact: Alfred Friere, www.omegadyne.com

MARINE TRANSPORTATION
SEACOR Marine, Inc., 5005 Railroad Ave., Morgan City, LA 70380

MARITIME TRAINING & SCHOOLS
Marine Safety International, Marine Terminal , Laguardia Airport, NY 11371

MONITORING SYSTEMS
Bulldog Technologies Inc., 11120 Horseshoe Way - Suite 301, Richmond, BC V7A 5H7, Canada

MOTOR PROTECTION
Marine Safe Electonics, 261 Milway Ave. #12, Concord, Ontario L4K 4K9, Canada

NAVAL ARCHITECTS, MARINE ENGINEERS
BMT Fleet Technology, 311 Legget Dr, Kanata, ON K2K 1ZB, Canada
Bristol Harbor Group, Inc., 103 Poppasquash Rd., Bristol, RI 02809, 401-253-4318, 401-253-2329, design@bristolharborgroup.com, Contact: Greg Beers, P.E. - President, www.bristolharborgroup.com
CDI Marine Co., 9550 Regency Square Blvd, Ste 400, Jacksonville , FL 32222
Delta Marin, Kurokatu 1, Raisio FIN-2100, Finland
Jamestown Marine Services, Inc., 1084 Shennecossett Road, Groton, CT 06340
JMS Naval Architects & Salvage Engineers, 1084 Shennecossett Rd., Groton, CT 06340, 860-448-4850, 860-448-4857, jms@jmsnet.com, Contact: Blake Powell, VP, www.jmsnet.com
R.J. Mellusi & Co., 71 Hudson St., New York, NY 10013
Schrider & Associates, Inc., P.O. Box 2546, Daphne, AL 36526, 251-621-1813, 251-626-1814, mikes@schrider.com, Contact: Michael Schrider

NAVIGATION
AG Marine Inc., 5711 34th Avenue, Gig Harbor, WA 98335-8548

OFFSHORE SERVICES
Harvey Gulf Marine, 3817 Spencer St, Harvey, LA 70058
SEACOR Marine, Inc., 5005 Railroad Ave., Morgan City, LA 70380

OIL SPILL RESPONSE
Marine Response Alliance, 1102 SW Massachusettes St, Seattle, WA 98314-1030

PAINTS AND ANTI FOULANTS
International Paint Co., Stoneygate Lane, Felling, Gateshead, Tyne and Wear NE10 OJY, UK
Sea Coat Technology, 11215 H Jones Road West, Houston, TX 77065

PIPE FITTINGS/CUTTINGS/CONNECTING/ SYSTEMS
Ameron International Performance, 13010 Morris Road, Ste 400, Alpharetta, GA 30004
W & O Supply, 3485 Evergreen Ave., Jacksonville, FL 32208

PIPE LEAK REPAIR
CSD North America, 880 Candia Rd., Unit 10, Manchester, NH 03109

PORTABLE VENTILATORS
Americ Corp, 785 Bonnie Lane, Elk Grove Village, IL 60007

PREVENTATIVE MAINTENANCE
Marine Safe Electonics, 261 Milway Ave. #12, Concord, Ontario L4K 4K9, Canada

PROFESSIONAL SOCIETY
SNAME, 601 Pavonia Ave, Jersey City, NJ 07306

PROPULSION EQUIPMENT
Fincanteri, Diesel Engine Div., GMT, Bagnoli della, Rosandra 3334 Trieste, Italy
Hamilton Jet, 20 Lunnis Road, Po Box 709, Christchurch 8004, New Zealand

REFUELING EQUIPMENT
Global Incorporated, P.O. Box 24, 160 Cannery Road, Somerset, PA, PA 15501

REMOTELY OPERATED VEHICLES
VideoRay LLC, 580 Wall St, Phoenexville , PA 19460, 610-458-300, 610-524-9846, info@videoray.com , Contact: Chris Gibson, www.videoray.com/

RIGID INFLATABLE BOATS
Willard Marine Inc., 1250 N. Grove St., Anaheim, CA 92806

ROPE-MANILA-NYLON-HAWSERS-FIBERS
Atlantic Cordage, PO BOX 30, Avenal, NJ 07001-0030
Miami Rigging, 2475 NW 38th Street, Miami, FL 33142

ROTATING EQUIPMENT
Seatworthy, 22 Main Street, Centerbrook, CT 06409

RUDDER BEARINGS & BUSHES
Thordon Bearings, 3225 Mainway, Burlington Ontario L7M 1A6, Canada

SAFETY PRODUCTS
Western Fire & Safety, 2446 NW Market Street, Seattle, WA 98107

SALVAGE ENGINEERS
Jamestown Marine Services, Inc., 1084 Shennecossett Road, Groton, CT 06340

SANITATION DEVICE- POLLUTION CONTROL
EVAC North America Inc., 1260 Turret Dr., Rockford , IL 61115

SATELLITE COMMUNICATIONS
France Telecom Mobile Satellite Communications, 16,bvd du Mont d'Est-BP 14-93161, Noisy le Grand, France
Seawave, 76 Hammarlund Way (Tech 3), Middletown, RI 02842
Stratos , Donovan Business Park, St. Johns, NL Canada A1C 5X3, Canada

SEATING
H.O. Bostrom, 818 Progress Ave., Waukesha, WI 53186, 262.542.0222, 262.542.3784, johnbostrom@hobostrom.com, Contact: John Bostrom, www.hobostrom.com

SECURITY
Bulldog Technologies Inc., 11120 Horseshoe Way - Suite 301, Richmond, BC V7A 5H7, Canada
EMX, Inc., 4200 Dow Road, Suite C, Melbourne, FL 32934

SHAFTS
American Vulkan, 2525 Dundee Rd, Winter Haven, FL 33884

Centa Corp., 815 Black Hawk Drive, Westmont, IL 60559, 630-734-9600, 630-734-9669, bobl@centacorp.com

SHIP DESIGN

AVEVA, Inc, 10370 Richmond Ave, Houston, TX 77042

Lockheed Martin, 199 Borton Landing Road, Moorestown, NJ 08057

SNAME, 601 Pavonia Ave, Jersey City, NJ 07306

SHIP REPAIR

Manitowoc Marine Group, 1600 Ely St., Marinette, WI 54143-2434

United Marine Services, Po BOX 22077 , Beaumont, TX 77720, 4098330744, 4095473815, Lrichardson@ATT.net

SHIPBUILDING-REPAIRS, MAINTENANCE, DRYDOCKING

Cotecmar, KM 9 VIA A MAMONAL ZONA INDUSTRIAL, CARTAGENA, BOLIVAR 6911, Colombia

Detyens Shipyards Inc., 1670 Drydock Ave., Bldg 236, North Charleston, SC 29450

Lindenau GmbH, P.O. Box 90 93, Kiel D - 24157, Germany

Manitowoc Marine Group, 1600 Ely St., Marinette, WI 54143-2434

United Marine Services, Po BOX 22077 , Beaumont, TX 77720, 4098330744, 4095473815, Lrichardson@ATT.net

VT Halter, PO Box 3029, Gulfport, MS 39505

SHIPYARDS

Cotecmar, KM 9 VIA A MAMONAL ZONA INDUSTRIAL, CARTAGENA, BOLIVAR 6911, Colombia

Lindenau GmbH, P.O. Box 90 93, Kiel D - 24157, Germany

SIMULATION TRAINING

Barco Simulation, 600 Bellbrook Avenue, Xenia, OH 45385

Calhoon MEBA Engineering School, 27050 St. Michaels Road, Easton, MD 21601

Marine Safety International, Marine Terminal , Laguardia Airport, NY 11371

Maritime Institute of Technology, 5700 Hammonds Ferry Rd., Linthicum Heights, MD 21090

SOFTWARE

AVEVA, Inc, 10370 Richmond Ave, Houston, TX 77042

CD-Adapco, 9401 General Dr., Ste 131, Plymouth, MI 48170

Pipeline Communications and Technology, Inc., 2800 Woodlawn Dr. Ste. 264, Honolulu, HI 96822

STEERING GEARS/ STEERING SYSTEMS

Jastram Engineering, 467 Mountain Hwy, North Vancouver, BC V7J 2L3, Canada

Kobelt Manufacturing Co., Ltd., 8238-129 Street, Surrey, BC V3W0A6, Canada

SURFACE PREP TOOLS

Aurand Mfg., 1210 Ellis St., Cincinnati, OH 45223

Daleseide, 200 Dairy Ashford, Ste. 440, Houston, TX 77077

SURVEYORS

Hike Metal, PO BOX 698, Wheatley, ON NOP 2PO, Canada

TANK LEVELING INDICATORS

Ian-Conrad Bergen, 3119 North Davis Highway, Pensacola, FL 32503, 850-434-1286, 850-434-1246, sales @icbergeb.com, Contact: Ron Monell, www.icbergan.com

Technical Marine Service, Inc., 6040 North Cutter Circle, Suite 302, Portland, OR 97217-3956

TESTING SERVICES

BMT Fleet Technology, 311 Legget Dr, Kanata, ON K2K 1ZB, Canada

TOWING EQUIPMENT

Harvey Gulf Marine, 3817 Spencer St, Harvey, LA 70058

TRAINING

Calhoon MEBA Engineering School, 27050 St. Michaels Road, Easton, MD 21601

DM Consulting, 12316 Dormouse Road, San Diego, CA 92129, 858-705-0780, 858-538-5372, jstiglich@aol.com, Contact: Joe Stiglich, www.drydocktraining.com

Massachusetts Maritime Academy, 101 Academy Drive, Buzzards Bay, MA 02532

TRAVEL SERVICES

Griffin Americas, 3648 Greenbriar Drive, Houston, TX 77098

TURBOCHARGERS

McAllister Towing, 17 Battery Pl. Suite 1200, New York, NY 10004

ULTRASONIC TESTING

M.A.C.E, 5910 NE 15th Ave., Fort Lauderdale, FL 33331

Panametrics-NDT, 18 Woerd Avenue, Waltham, MA 02453

VACUUM TOILET SYSTEM

EVAC North America Inc., 1260 Turret Dr., Rockford , IL 61115

VALVE ACTUATORS

EIM Controls, 13840 Pike Road, Missouri City, TX 77489

VALVES

W & O Supply, 3485 Evergreen Ave., Jacksonville, FL 32208

VENTILATION SYSTEMS / PRODUCTS

Howden Buffalo, 2029 West DeKalb Street,, Camden, SC 29020

VESSEL FINANCING

AIG Commercial Equipment Finance, Inc., 5700 Granite Parkway, Suite 850, Plano, TX 75024, 972-987-3708, 972-987-3700, kirk.phillips@aig.com

VOYAGE DATA RECORDERS

Rutter Technologies Inc., 22 Pearl Place, P.O.BOX 427, St. John's NL A1C 5N8, Canada

WATERMAKERS

Village Marine Tec, 2000 West 135th St, Gardena, CA 90249

WATERTIGHT CLOSURES

Walz & Krezner, 91 Willenbrock Rd., Oxford, CT 06478

WELDING PRODUCTS & POWER EQUIPMENT

ESAB Welding and Cutting Products, 411 S. Ebenezer Rd. PO Box 100545, Florence, SC 29501

WINCH MANUFACTURER

Burrard Iron Works Ltd., 220 Alexander Street, Vancouver, BC V6A 1C1, Canada, 604-684-2491, 604684-0458, sales@burrardironworks.com

WINCHES & FAIRLEADS

Coastal Marine Equipment, 20995 Coastal Parkway, Gulfport, MS 39503-9517, 228-832-7655, 228-832-7675, sales@coastalmarineequipment.com, Contact: Ralph Waguespack, www.coastalmarineequipment.com

Nabrico Marine Products, 1050 Trinity Road, Ashland City, TN 37016

WINDLASSES (ANCHORS)

Coastal Marine Equipment Inc., 20995 Coastal Parkway, Gulfport, MS 39503-9517, 228-832-7655, 228-832-7675, sales@coastalmarineequipment.com, Contact: Ralph Waguespack, www.coastalmarineequipment.com

WINDOWS

Diamond/Sea Glaze, 19372-94th Ave, Surrey, BC V4N 4E4, Canada

WINDSCREEN & WINDOW WIPERS

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Service Representative - 5261BR

Job Location: USA, Miramar, FL

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Angie Remaklus

Rolls Royce of North America

Email:angie.k.remaklus@rolls-royce.com

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Sales Engineer/Product Specialist

Job Location: USA, Gulf Region

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Job Location: USA, Seattle

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Technical Manager

Job Location: USA, Houston, TX

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Be responsible for sales of UT Ship designs and RR equipment in the US. When successful in selling a UT design, be the RR project manager. Be a liaison and guide to both the Client and RR Shiptech to assure a successful project and contract. Assist the Client in developing the Ship specification including key design drawings, equipment list, and marine and machinery systems. Assist RR Shiptech in developing a US version of the UT design in question. The US version UT design must have characteristics, equipment and systems solutions attractive to the US shipowners and the US yards; as much US equipment as possible except for what is standard RR equipment in a UT design, the hull construction principles and material, must be adjusted to US shipyard standards and to the yard in question in particular. General marketing and customer relation building with offshore customers in Americas. Account Management responsibilities for defined customers. Personnel responsibility (in accordance with existing organizational chart) for the employees in RR US Offshore Sales Group.

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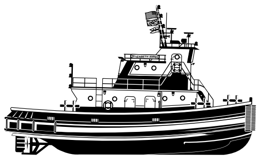

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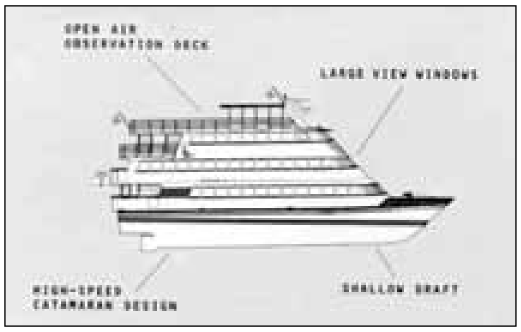

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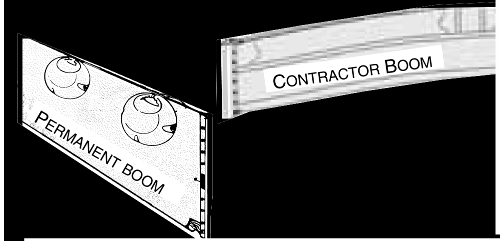

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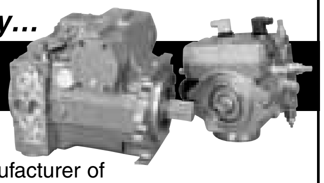

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