NARITIME REPORTER AND ENGINEERING NEWS



NATIONAL WATERWAYS CONFERENCE (NWC) AMERICAN WATERWAYS CONFERENCE (AWO)

Gaming Boat Supplement

Small- & Medium-Size Yard Review

AUGUST 1993



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ON THE COVER

Pictured on this month's cover are Trinity Marine-built barges loaded aboard a semi-submersible ship, prior to their transport to South America for use in the inland waterways system there. Look in this month's issue for stories on the coming NWC and AWO conferences, which will cover the inland waterway systems issues in the U.S.

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Bayou La Batre, Alabama: Channel Deepening Gives **Local Yards Boost** 28 **Special Supplement: Gaming Vessel Review** 35

Preview: AWO Fall Convention 51

Preview: NWC Annual Meeting

Focus: Safety At Sea -The End Of The **Grandfather Clause?**

Review: Small- & Medium-Sized Yards

MarAd: \$167 Million Doled **Out To 14 Companies**

Seatrade Tanker Industry 68

Tampa Shipyard To Build Tug For St. Philip Towing

Tampa Shipyards, Inc. is building a 110-foot towing tug for Bay Transportation Corp. d/b/a St. Philip Towing. The tug will be powered by a pair of Wartsila Vasa 6R32E main engines and two Aquamaster azimuthing propulsion units. The tug will be delivered in June 1994, and the two companies have also agreed on five option vessels. The tug will be built at Tampa Shipyards' fullycovered Westshore facility.

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No. 8

Volume 55

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The Shipbuilders of Spain

Marine Pollution Control Orders Fenders And Fire Monitors

Marine Pollution Control (MPC) has ordered 14 marine fenders and 10 fire monitors for placement at current high capacity off-loading system locations on the East, West and Gulf Coasts. The pneumatic fenders and two-gun fire monitors

are expected to be in place by August

The marine fenders are anticipated to be used primarily during vessel off-loading or ship-to-ship transfer projects to prevent the vessels from colliding.

Ten fire monitors, devices used to distribute water, fire-fighting foam, or other chemical agents during firefighting activities, will be installed as well

MPC has ordered the fenders and

fire monitors to comply with OPA 90 provisions requiring the identification and availability of such equipment.

MSRC To Purchase 68 Barges

Marine Spill Response Corporation (MSRC) plans to purchase 68 shallow water barges to be located at 17 pre-positioned sites arounthe country, four barges per site.

MSRC will also operate a fleet 16 OSRVs, to be stationed at firegional centers and 11 addition sites including Hawaii and the U. Virgin Islands.

Each OSRV will be capable recovering and storing spilled of acting as a command, control an communications center; and providing logistic support to response e forts in a given operating area.

For more information on MSR(

Circle 1 on Reader Service Card

Pan-United Completes Re-Powering Of Container Vessel

Pan-United Shipyard Pte. Ltd. o Singapore announced that it re-delivered the 584-teu container vesse. "Eagle Reliance" (ex-"Esterbrugge", after the completion of a major reengining of the MAN propulsion system. A new Krupp MaK 6M 552C medium speed main engine (4,500 kW at 500 rpm) with reduction gearbox were installed. The existing foundations, intermediate shafting and ancilliary systems were redesigned to suit the new propulsion system with the yard undertaking all design engineering work inhouse. During sea trial, the vessel achieved a maximum speed of one knot faster than the design speed of 15.5 knots.

Pan-United Shipyard has just completed a \$30 million expansion and upgrading program. It undertakes newbuilding conversion and repair of marine vessels and offshore rigs up to 45,000 dwt. Commonwealth Group, Inc. is the exclusive agent of Pan-United Shipyard in the U.S. and Canada.

For more information on Pan-United Shipyard,

Circle 29 on Reader Service Card

Alabama Shipyard Inc. In The Running To Build Texaco Tankers

Alabama Shipyard, Inc. (ASI) announced it has been selected by Texaco Marine Services, Inc. as one of the two final qualified bidders for Texaco's proposed U.S. Newbuilding Project.

The contract would be for two 40,000-dwt tankers with an option for two additional ships.

ASI used Burmeister & Wain Ship Design of Copenhagen, Denmark, for the vessel design and to advise on certain aspects of production.

on certain aspects of production.
American PetroBulk, Inc., as part of the Automar Group of Washington, D.C., would provide the financial arrangements.

ASI estimates that this contract would add approximately 500 workers to its current work force.



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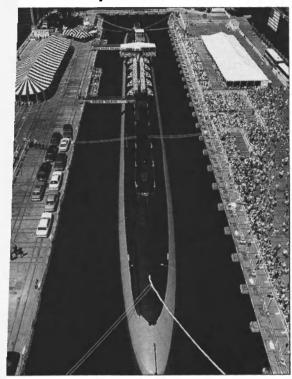
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AMLAM

dent Sub 'Rhode Island' Christened General Dynamics, Electric Boat Div. Fast Ferry Engine Order



The Rhode Island (SSBN740) was christened July 17 at General Dynamics, Electric Boat Division (Photos courtesy of General Dynamics, Electric Boat Div.) The Ohio (Trident) Class submarine is a nuclear-powered ballistic missile-type, and is 560-feet long with a 42-foot hull diameter. The vessel is 18,750 tons submerged, and is armed with 24 Trident II missiles. Rhode Island is the 15th ship in the Ohio (Trident) Class of the U.S. Navy's Fleet Ballistic Missile nuclearpowered submarine force.

South Korea May Be Able To Expand Capacity In '94

South Korea's Ministry of Industry, Trade and Energy said Friday that, starting in 1994, it plans to allow domestic shipbuilders to decide for themselves whether to expand their capacity. Currently, capacity is frozen under a rationalization program by the government. The rationalization program was imposed in 1989 by the government which feared redundant investments. The decision by the government comes on the heels of a joint proposal to the ministry by three builders—Hyundai Heavy Industries, Co., Daewoo Shipbuilding and Heavy Industries and Hanjin Heavy Industries—which urged that Samsung Heavy Industries' plan to expand its shipbuilding capacity by one million tons should be abolished. The nation's shipbuilding capac-ity is estimated at 4.5 million tons per year.

Norway's Kvaerner Gets Stena

Kvaerner Energy, a subsidiary of Kvaerner a.s., received the order to supply propulsion machinery for Swedish Stena Line's new high-speed ferry. The contract is for four Kvaerner/General Electric gas turbines with a combined output of 60,000 kW, the company reported. The turbines will be installed by Finnyards Oy of Finland. The contract also includes options for turbines for two additional High-Speed Sea Service (HSS) ferries.

Avondale Wins \$232.5-Million USCG Contract For Icebreaker

Avondale Industries, Inc. of New Orleans was awarded a \$232.5 million contract for the construction of a new U.S. Coast Guard icebreaker ship. The vessel is designed to measure 420 feet long, with an 82-foot beam, and is scheduled for delivery in 1997. It will be capable of breaking ice up to eight feet thick.

DynCorp Wins \$28 Million Navy Contract

DynCorp, a diversified professional and technical services firm, was awarded a U.S. Navy contract to provide operation and maintenance support at the Southern California Offshore Range (SCORE). The four-year contract is valued at \$28.7 million. Headquartered in Reston, Va., DynCorp provides professional and technical services to U.S. and foreign government agencies and commercial aviation customers worldwide.

Westinghouse Advanced Gas Turbine Test Results Are In

After 18 months into development, the U.S. Navy's Intercooled Recuperated (ICR) Gas Turbine development program is exceeding technical objectives, providing the Navy with the opportunity to introduce the propulsion system in time to support the 1996 fiscal year DDG-51 ship procurement. Key component and system tests, including subsystem model tests for the air intake, compressor, intercooler, combustor, turbine and recuperator, all have been conducted by the Westinghouse Marine Div. The Westinghouse ICR engine, according to the manufacturer, will help reduce operational costs on the DDG-51, enhance its warfighting capability, increase its survivability and safety, while also reducing exhaust emissions. In 1991 the U.S. Navy awarded the \$160-million, four-year contract to Westinghouse, teamed with Rolls-Royce.

UNL-Built Cunard 'Crown Dynasty' Christened

The newest addition to Cunard's family of passenger vessels is the Cunard Crown Dynasty, which was christened in New York on July 16, 1993 by former First Lady **Betty Ford**. Mrs. Ford was accompanied by her husband, former President Gerald R. Ford, and by John Olsen, chief executive at Cunard, and Hans H. Christner, president of EffJohn International, owner of the Cunard Crown Dynasty. The new ship sailed from New York Satur-

day, July 17, on its maiden voyage to Halifax, Bar Harbor, Portland, Provincetown and Martha's Vineyard. Special welcoming festivi-

ties are planned in each port.

The 537-foot Cunard Crown Dynasty, which reportedly cost approximately \$100 million, was designed by Norwegian ship designer **Peter Yran** at the Union Navale de Levante shipyard in Valencia, Spain. She is 74 feet wide with an 18-foot draft and a cruising speed of 18.5 knots.



The 537-foot long Cunard Crown Dynasty made her maiden call at New York on July 16, 1993.

The 146-year-old Cunard, a Trafalgar House company, markets a total of 13 passenger vessels, including five luxury ships, five premium ships under the Cunard Crown brand name, and three deluxe Cunard EuropAmerica River Cruise ves-

GM Hughes, IBM Teams To Compete For \$2 Billion Navy Pact

Hughes Aircraft Co.'s Hughes Data Systems has teamed with Federal Systems, Co., a unit of International Business Machines Corp. (IBM), and BTG to compete for the U.S. Navy's procurement of tactical computer workstations under the Tactical Advanced Computer-4 (TAC-4) program, valued at more than \$2 billion.

Promus, Churchill Downs Explore Casino Boat Development In Indiana

Harrah's, a division of The Promus Companies, has agreed with Churchill Downs Inc. to pursue riverboat casino development in Indiana. The agreement creates a strategic partnership between a premier casino entertainment company and one of the nation's best-known thoroughbred racetracks. For the latest on the burgeoning gaming boat market, please turn to MR/EN's special pull-out section, starting on page 35.

Kvaerner Warnow Werft Wins German Container Ship Order

Kvaerner Warnow Werft GmbH, a shipbuilding unit of Norway's Kvaerner group of companies, was awarded a contract to build a 20,100-dwt container carrier. The value of the contract is around \$28 million, and construction will begin in December, with delivery scheduled for October, 1994.

SSS Clutch Co. Announces License Agreements

SSS Gears Ltd. announced it has obtained design, manufacturing and marketing rights for the Reversible Converter-Coupling (RCC) from Ansaldo, Italy. The RCC was selected by the U.S. Navy for the AOE-6 ship program, after successful testing between 1984 and 1987. RCC's and SSS clutches have already been supplied for two further AOE-6 class ships and orders have just been received for the fourth ship set. For free information on SSS Clutch Co.,

Circle 144 on Reader Service Card

Blohm + Voss Introduces Oil-Pollution **Preventing Seal**

The "Simplex-Compact 2000 Airspace Seal" is the latest in a line of marine shaft seals to be introduced by Blohm + Voss. The manufacturer used well-known and proven features of this new seal's forerunners, and added an additional chamber which contains air as a low-pressure cushion. The new chamber method, according to the manufacturer, is virtually a foolproof method allowing a separation of the sterntube oil and the outside seawater, thus preventing contamination of the sterntube oil and the escape of sterntube oil into the sea. For more information on this new system from Blohm + Voss,

Circle 142 on Reader Service Card

C&M Technology Awarded Contract

C&M Technology was awarded an NUWC contract (N66604-93-C-1685). The contract, valued at \$153,690, is for the supply of 282 towed array hose terminations to support NUWC's research. This award parallels other towed array development work on-going at C&M.

The River's Wrath: Mississippi Flooding **Hampers Barge Movement**

To support relief efforts in the flooded Midwest, Secretary of Transportation Federico Pena directed the Coast Guard to begin an involuntary mobilization of reservists, "only the second mobilization of the Coast Guard Reserves since Congress granted the department this authority," he said.
According to the latest DOT re-

ports, it is estimated that between

1,500 and 2,000 barges were stranded on both the Illinois and Missouri Rivers, as well as the upper Mississippi, and that more than 5,000 barges have been affected by the flooding. Because of the closing of portions of the Mississippi, and several locks, combined with the number of stranded barges, estimates claim it may take a month or longer to clear all stranded barges.

Gallagher Joins C-Map/USA As Manager of Marketing, **Communications**

Kevin Gallagher has joined C-Map/USA to manage the newly formed marketing and communications department. A 1983 graduate of Babson College, his prior experience includes sales and marketing responsibilities for a data communications equipment sales firm, a regional business publication, as well as a co-owner of a commercial photography studio.

RTF Manufacturing Names New Sales Manager

RTF Manufacturing of Hudson, N.Y., an Atmost Refrigeration and Engineering Company, named Jim Dillon as its new manager of mar-keting and sales for its diversified line of galley reach-in refrigerators/ freezers and prefabricated walk-in products. Mr. Dillon has more than

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29 years of experience with commercial marine, offshore and U.S. Military markets. He worked previously with Foster Refrigeration Corporation. For additional informa-

Circle 64 on Reader Service Card

Colbert Joins AWO As New **Director Of Public Affairs**

The American Waterways Operators (AWO) announced that Debra Ann Colbert has been appointed director, public affairs. Ms. Colbert is currently the manager of communications for the Telecommunica-tions Industry Association (TIA), where she handles a broad range of communication duties. Ms. Colbert will fill the public affairs vacancy left by the resignation last month of Jeffrey Smith. A graduate of Maryland's Towson State University, Ms. Colbert holds a degree in English, and is a master's in mar-keting candidate at The Johns Hopkins University.

ABB Turbocharger Holds Shop Repair Open House

ABB Turbocharger Co. hosted an open house luncheon and turbocharger repair demonstration at its North Brunswick, N.J. service center. The open house was attended by 70 shipowners and agents, marine surveyors, government personnel and power station engineers. In a brief address, Mark Rothmann, president, encouraged "greater dialog between ABB Tur-bocharger and its customers, allowing us to better serve our cus-tomers' needs." Upon completion of the repair center tour, Franz Walker, vice president, presented the group with information regarding FABDAB, the company's computerized turbocharger and installation database. For more information on ABB Turbocharger,

Circle 143 on Reader Service Card

Alfa Laval Invited To Participate In SH.I.P. Project

To improve their position in a competitive market, Astilleros Espanoles (AESA) of Spain and Fincantieri of Italy have entered into a joint development project designated SH.I.P., or SHared International Purchase, to coordinate the purchase of technologicallyadvanced marine equipment from selected suppliers. As the first company to be invited to participate in the SH.I.P. project, Alfa Laval will be the sole supplier of fuel and lube oil treatment systems and booster systems for the next two years.

For more on Alfa Laval, Circle 124 on Reader Service Card

C-Map/USA Offers Product To Ease Metric Conversion

NOAA is currently in the proces of converting existing units of me sure on their nautical paper char to metric equivalents. Although will take an estimated 10 to 15 year to complete the projects, mariner will eventually be forced to adap According to Ken Cirillo, vice pres dent and general manager of C-Maj USA, "If you are one of the few Amer cans who already speak in meters, i probably won't affect you at all. Mos electronic charting systems cur rently use metric units of measure ment. However, if you're a boate who only speaks in feet or fathoms you may want to look into one of the many electronic charting systems that have the capability to conver meters to feet or fathoms on every chart, with the simple push of the button. Because we anticipated this transition, all C-Map based systems now have this capability."

For additional information on C-

Map products,

Circle 125 on Reader Service Card

Harris Wins Canadian Coastal Defense Contract

Harris RF Communications of Rochester, N.Y. was selected to supply HF radio communications equipment for the Canadian Dept. of National Defense (DND) Maritime Coastal Defense Vessels (MCDV).

Harris radio equipment will be installed on all 12 vessels in the class, the first of which is scheduled for delivery in 1995. For more information on Harris,

Circle 145 on Reader Service Card

CLARIFICATIONS

In the June 1993 yearbook issue, under title U.S. Flag Oceangoing Merchant Fleet (page 49, June '93), Bay Ship Management's address was mistakenly given as the same address as Atlantic Tankships, Inc. The correct address for Bay Ship Management Inc. is: 270 Sylvan Ave., P.O. Box 1157, Englewood Cliffs, N.J. 07632.

In that same story, under the listing for International Marine Carriers, Inc., of Mineola, N.Y., the type of propulsion was incorrectly listed for the: M/S Faust, S/L Antarctic, S/L Arabian Sea, S/L Arctic, S/L Atlantic, S/L Caribbean, S/L China Sea, S/L Indian Ocean, S/L Mediterrance S/L Beifer All of Mediterranean, S/L Pacific. All of the vessels are propelled by diesel engines, not turbines.

In a story about the M.V. Barbara Foss (page 89, June '93), owned by Foss Maritime of Seattle, the triple rudders supplied by Rice Propeller and Metalmec of Mazatlan, Mexico. will be 114-inches long, and at press time of the June issue, the vessel had yet to complete sea trials.

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TANKERS, SHALLOW & DEEP WATER MODELS AVAILABLE.

Trinity Shipyard Delivers Largest Diesel Tow Boat Ever Built In U.S.

The U.S. Army Corps of Engineers has a new multi-purpose flagship, the \$21.8 million, 241-foot tow boat Mississippi, a vessel which was designed and built by Halter Marine, Inc., Moss Point, Miss., a subsidiary of Trinity Industries, Inc.

The 7,000-hp tow boat is the largest diesel tow boat ever built in the U.S. and the fifth Corps of Engineers vessel to carry the name Mis-

More than 90 percent of the vessel's time is spent as a tow boat for the Corps' Memphis District. Its main role is moving barges, equipment and supplies on the Mississippi River in support of mat sinking operations.

To hold the river in a desired

alignment and prevent bank cav-

ing, articulated concrete mattresses are placed on the subaqueous portion of banks where the river current attack is the most destructive.

The Mississippi moves the complex of barges and equipment from job site to job site, and keeps the launching barge supplied with sections of mattresses as mat sinking

The design of the boat is the result of extensive model testing by Trinity in a model basin to determine bow and stern shapes, optimum propeller configuration and validation of the vessel's performance characteristics.

During the acceptance trials, Col. Clinton W. Willer, Memphis District Engineer, said the vessel "met or exceeded all expectiations," and

he said the model testing and construction produced "phenomenal results in vibration and noise abatement.

An observer reportedly noted at the trials that while the boat was underway near full throttle in the Mississippi Sound, a small coin placed on edge at the base of the boat's stern capstan remained standing until it was toppled by the wind. Overall, the Mississippi is 241 feet long, with a 58-foot beam and a 12.5foot depth. Design draft is eight feet. It is powered by three Caterpillar 3606 diesel engines developing a total of 7,000 hp, and has two "push knees" at the bow. The multi-purpose boat can tow or push up to 16, 200-foot open hopper barges and is equipped with a public hearing room for up to 200 for MRC meetings and hearings aboard at cities and towns along the waterways. It can accommodate up to 78 passengers, with quarters for MRC members and crew. It has two galleys, one for the crew, and another dedicated to serving the main dining room which can accommodate up to 100 people for dinners and other functions. In addition to the usual communications

and navigation equipment, the Mississippi has a command/control center which provides instantaneous communications to Corps of Engineers land-based facilities. A sophisticated computer system provides visual data on the waterways system such as water flow, currents, vessel locations, etc.

The boat also carries two 18-foot rigid hull inflatable boats for use by

inspection teams.

The first three Corps vessels to carry the name Mississippi were stern-wheelers dating to the mid-19th century

The last Mississippi was built in 1961 and the new boat is scheduled to replace it. The new Mississippi was built alongside the Corps of Engineers' 300-foot, 5,700-hp, dustpan dredge Hurley, which is nearing completion at Halter-Moss Point. The \$38.4 million Hurley is the first of her type for the Corps in more than 50 years. For additional free information on Halter Marine, Inc., which is owned by Trinity Indus-

Circle 146 on Reader Service Card

Harding Safety A.S. Lands **Major Orders For** Lifeboats And Davits

Harding Safety, a company in the Ulltveit-Moe group, Norway, has won a contract from the French yard Chantiers de l'Atlantique, St. Nazaire, to supply lifeboats and davits for two cruise vessels being built for Royal Caribbean Cruise Lines (RCCL), as well as an option for a third vessel.

Each of the ships will be equipped with 10 150-person semi-covered lifeboats, two rescue boats and four 150-person combined lifeboats/ten-

ders, all with davits.

The combined 150-person life-boat/tender is a further development of today's boat, which Harding has been supplying since 1988. It will be given the type code CTL 38, and will be able to accommodate 150 persons as a lifeboat, while as a tender it will have room for 120 on the main deck and 20-30 on the top deck.

The cruise vessels, which will be delivered by the French yard during the course of 1995-1997, will have accommodations for about 2,000 passengers and will operate world wide. Harding Safety currently has orders on its books worth a total of

about \$27 million. For more information on Harding

Safety AS,

Circle 57 on Reader Service Card

Daewoo Wins \$50 Million Contract To Build Handysize Bulk Carriers

Daewoo Shipbuilding and Heavy Machinery Ltd. signed shipbuilding contracts for two 44,000-dwt handysize bulk carriers with Ocean Framping, a China-affilliated Hong portedly \$25 million per vessel for delivery in the fourth quarter of 1994 crewed ships.

and the first quarter of 1995.

This is the first newbuilding order placed with a Korean shipyard by a shipowner under the wing of the Ministry of Communication of China. Chinese shipowners have already purchased several ships built by Korean yards. They have, however, been secured on a resale basis or by second hand.

For more information on Daewoo,

Circle 97 on Reader Service Card

Panel OKs Bills That Will **Boost U.S. Shipbuilding**

Two bills that will hopefully boost U.S. shipbuilding have been approved by a House maritime panel.

One bill will provide governmentbacked loan guarantees to American yards and the other would phase out gambling "cruises to nowhere" from U.S. ports aboard foreign-built

Rep. Gerry Studds (D-MASS), chairman of the House Merchant Marine and Fisheries Committee, claims the \$300 million shipbuilding promotion bill "will help U.S. shipyards in transition from defense construction to commercial construction." One hundred million dollars of the measure will be authorized for defense conversion assistance, including establishment of a Defense Department and Department of Transportation technology development program. The money also expands MarAd's ship financing loanguarantee program to cover vessels built in the U.S. for the export market and for shipyard modernization projects.

According to Rep. Studds, the \$200 million authorized under that provision will translate into about \$2 billion worth of business for U.S. Framping, a China-affilliated Hong Kong shipowner. The price is re- yards. "Cruises to nowhere" would be reserved for American compasolidur

tries, Inc.,

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Finnyards To Build HSS **Ferries For Stena**

Finnyards Ltd. and the Swedish Stena AB concluded a multi-million dollar agreement on the construction of two high-speed ferries. The project includes options on two additional vessels.

The 407-foot long and 131-foot wide hull of the ships will be constructed entirely of aluminum. The

vessels will reportedly be the world's biggest and fastest aluminum-built, twin-hulled ferries capable of carry-

ing trucks, trailers or buses. Water-jet propulsion powered by four gas turbines will give the ships a top speed of approximately 40 knots. The High-speed Sea Service (HSS) ferries will be able to carry 1,500 passengers and either 375 cars or 50 trucks and 100 cars.

The vessels will be completed in January 1995 and 1996, and will be operated by Stena Sealink between Holyhead and Dun Laoghaire (Dublin).

In addition to these high-speed ferries, Finnyards' orderbook also contains a passenger ferry, a multipurpose icebreaker and an offshore patrol vessel, as well as modernization of the Rosella car ferry.

For more information on Finnyards,

Circle 34 on Reader Service Card

SWM Wins Three New Contracts; Reaches Settlement With RCCL

Southwest Marine Inc. (SWM) has been awarded approximately \$28 million worth of new contracts by the Military Sealift Command (MSC). On July 2, 1993, SWM won an award valued at \$27 million San the conversion of the USNS San Jose. On that same date, SWM also won a \$713,000 contract for the Post Shakedown Availability (PSA) for the USNS Tippecanoe. On May 19, 1993, a \$726,000 contract for the PSA for the USNS Guadalupe, Tippecanoe's sister ship, was awarded to SWM.

awarded to SWM.

The USNS San Jose, a U.S. Navy
Combat Stores Ship, will arrive at
SWM's San Diego facility for Modification and Dry-docking (MDD) on
Dec. 2, 1993. Completion of the
work is scheduled for Sept. 3, 1994.

The USNS Tippecanoe will arrive on Aug. 26, 1993, and completion is set for Sept. 24, 1993. The
USNS Guadalupe arrived on July 8,
1993. Delivery is scheduled for Aug.

1993. Delivery is scheduled for Aug. 9, 1993. PSA's correct any problems arising after delivery of new ships

by the builder.

In other news, SWM has reached an agreement with Royal Caribbean Cruise Line (RCCL) regarding disputes that occurred while RCCL's cruise ship, Viking Serenade, was undergoing a major overhaul and conversion in SWM's San Diego facility in 1991. The agreement calls for RCCL to compensate for changes to the original work package on Viking Serenade. According to Art Engel, SWM's chairman and CEO, "We are all glad that an agreement has been reached, and we at SWM look forward to a continuing working relationship with RCCL. The quality of work performed on Viking Serenade was outstanding, and the ship is definitely one of the premier vessels in RCCL's fleet of cruise liners." For more information on SWM,

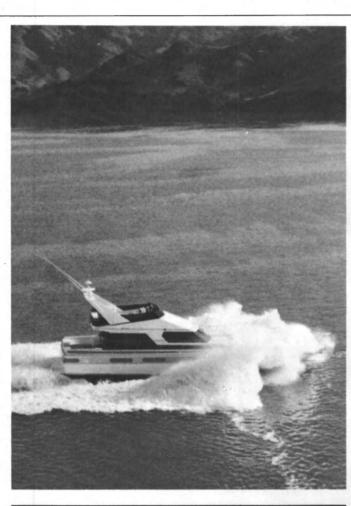
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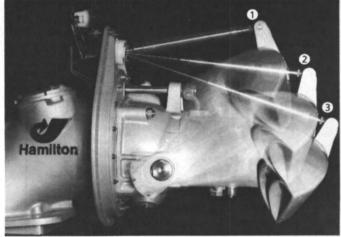
First Thermal Introduces Zietren To Reduce Zebra **Mussel Infestation**

First Thermal Systems, Inc., manufacturer of thermal fluid systems and vaporizers, announced a breakthrough in heat transfer technology through its release to the market the Zietren™ process (patent pend-ing) to eliminate Zebra Mussel Infestations in water intakes of power stations, as well as to treat river locks, hydroelectric facilities and marine vessels. The Zietren process for Zebra Mussel eradication uses a specially formulated thermal fluid called Zietran[™], and uses no harmful chemicals and does not require retrofitting or extensive back flush valving. For more information on this breakthrough process from First Thermal.

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Maritime Reporter/Engineering News





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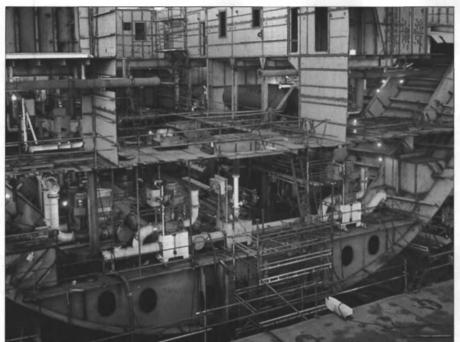


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Kockums To Launch New Generation Of Shipbuilding Systems



KCS's Tribon system, available in October, reportedly will save time and money for shipbuilders.

Kockums Computer Systems (KCS) recently announced that Tribon, a totally integrated design and information system created to fit the specific business needs of the shipbuilding industry, will be available this October.

According to KCS, Tribon is tailor-made to support the main activities in the shipbuilding process, including: tendering; design; production; materials; planning; finance;

and follow-up.

Tribon, by improving accessibility to information, gives the user full control over all stages of building a vessel, from tendering through delivery. To date Kvaerner Masa-Yards, Turku and Helsinki yards, Finland, and Kvaerner Warnow Werft, Rostock-Warnemunde, Germany, have all purchased the Tribon hull application. Some of the features Tribon possesses which make the system beneficial to the industry include: a specialized design application for all disciplines integrated into one environment; product information model database; production information for parts manufacture; integration of a materials application with design applications; use of industry standards e.g. the graphical interface PHIGS new modern user interface; and more. Tribon is available on Digita and Hewlett Packard, and soon IBM hardware. Some of the benefits o using Tribon, as touted by KCS, in clude reduced contract elapsed time from order to delivery, reduced manhours in design and production and reduced cost for materials.

For tendering, Tribon sports ar array of tools to make the initia project design in a structured way to allow full details for exact pricing For design, the system contains spe cialized design applications for hul structure, pipe work, cabling, ac commodation, etc. For parts pro duction, Tribon generates necessary production information which car save the designer time, and in as sembly the system provides tools to define each assembly stage and cre ate the specific production informa tion for each assembly.

Also, Tribon can be fully inte grated with the data processing sys tems of other departments. more information on Tribon from

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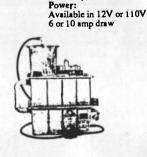
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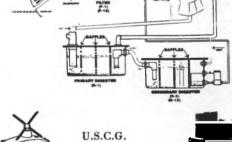
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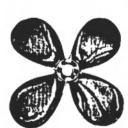
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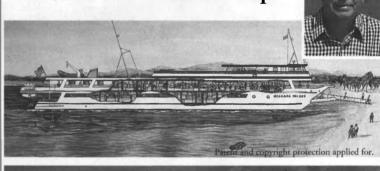
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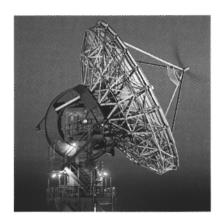
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Now that satellite is an affordable option,



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BT's new M-Sat service has broken through the price barrier for satellite voice communications.

The new service uses much smaller and cheaper terminal equipment than existing systems. And at only \$5.50 per minute, the cost of calls to the US is comparable to HF radio.

Current coverage extends from the eastern Pacific, across the Atlantic and Mediterranean to the Persian Gulf, with total worldwide coverage following shortly.

The service provides telephone, fax and data transmission, with direct dial access to

more than 200 countries via BT's Goonhilly satellite station.

BT M-Sat offers you the quality, reliability and security of satellite communications at an affordable price.

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New Temporary Protection System Gains Ground In Maritime Industry



The QE2 used MegaFilm's protection when it underwent emergency repairs.

MegaFilm is a temporary flame retardant floor and wall protection system developed to specifically solve the unique problems encountered in marine refurbishment work and new ship construction. MegaFilm was designed to protect all surfaces from light to heavy construction traffic areas, while providing safe, non-slip walking. It also doubles as a vertical bulkhead, wall and equipment protective covering. MegaFilm's design has a series of raised pyramids embossed into its surface which helps anchor the material and makes it non-slip to worker and pedestrian traffic. On the reverse side the pyramids are recessed, which when the material is overlapped and taped, produces an interlocked trip-free seam. This simple method saves time and effort during installation, and reportedly increases safety.

MegaFilm is made from special flame retardant polyethylene materials resulting in a flexible, lightweight and durable membrane that is reportedly fast and easy to install and remove. MegaFilm is also waterproof, oil, solvent and paint resistant.

MegaFilm is available in four different thickness grades and in standard widths of three- and six-feet. Roll sizes are kept to manageable weights. MegaFilm can be custom printed with company logos and safety warning messages.

company logos and safety warning messages.

The U.S. Navy's Naval Sea Systems Command has given official approval for the use of MegaFilm on naval ships during refurbishment and for new construction. MegaFilm is now widely specified by many leading cruise lines who have seen the virtues of using this new system. Companies such as Cunard, Princess, Kloster, Royal Caribbean Cruise Lines and Chandris are just a few companies that now use this system. When Cunards' Queen Elizabeth II went aground off the Massachusetts coast last summer, MegaFilm was specified and used to



Yarrow Shipbuilder's warship/frigate being externally protected with MegaFilm.

protect the ship from workmen activity while temporary repairs were made.

Kloster Cruise Ltd.'s vessel Dreamward was recently completed by Chantiers de l'Atlantique and was protected by MegaFilm in its finishing stages. Kloster also specifies MegaFilm for use in refurbishment of its existing vessels. Holland America Line's vessel "Maasdam," under construction by Fincantieri, is using MegaFilm for temporary protection of interior finishes. The product has found uses on a variety of vessels including ferries, yachts, research vessels, tankers, cargo ships and gas carriers.

MegaFilm's use has not been restricted to the maritime industry. The product is also being used extensively within the construction industry on projects from oil rig accommodation modules to hotels, shopping malls and office buildings. For more information on MegaFilm,

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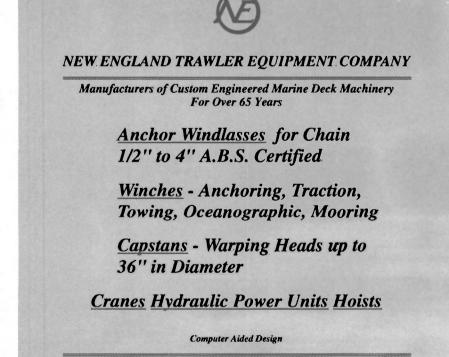
General Plasma Gets ABS Certification; Announces Appointment

The American Bureau of Shipping (ABS) has awarded General Plasma of East Windsor, Conn., ABS certification for their GPX Diesel-4 coating systems. General Plasma introduced its GPX Diesel-4 coating systems to the marine and other diesel market segments in early 1992 following an extensive R&D program performed jointly with FCS Inc., a longtime supplier of diesel products and services to the maritime and power generation industries. FCS has been named sole distributor of GPX Diesel-4 Coatings.

The certification authorizes General Plasma to apply TBCs (thermal barrier coatings) to diesel engine components such as piston crowns, cylinder heads and exhaust valves. Used in these applications, the ceramic-based TBCs offer potential benefits of reduced smoke, fuel conservation and life extension.

General Plasma also announced the appointment of **Donald F. Petri** as market manager, a newly created position. Mr. **Petri** will be responsible for the worldwide marketing of GPX Diesel-4 Coatings and other GPX coatings to power generation markets. For more on General Plasma,

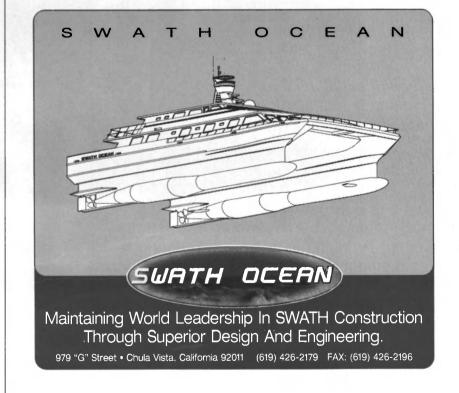
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Aerchant Seamen Granted 'eteran Status

Merchant seamen who served in Vorld War II have been granted eteran status by the Department f Defense. This translates to eligility for VA benefits they have been assing out on for the past 50 years, s well as eligibility for honorable ischarges from the armed forces. A group of surviving seafarers is

A group of surviving seafarers is rying to locate Merchant Marines who served in active oceangoing serice from Dec. 7, 1941 to Aug. 15, 1945. These men are eligible for ervice-related disability compensation, medical care, survivors' benefits, VA-guaranteed home loans, pensions and burial benefits. Widows of veteran merchant seamen nay be eligible as well.

For more information, send a SASE to Combat Merchant Mariners World War II, 14 Castle Drive, Chestnut Ridge, N.Y. 10977.

Bath Iron Works Places \$7 Million Contract For Sonar Domes With MIL Davie

Guy Veronneau, president and CEO of MIL Davie Inc., announced that Bath Iron Works Corporation of Bath, Maine, ordered \$7 million worth of sonar domes from MIL Davie

The order was placed two days before the expiration date of the option included in a 1992 contract. "With the productivity gains MIL Davie has made over the last two years, the company has been able to reduce its price by half a million dollars for this order compared to its last one in 1992," said Mr. Veronneau.

The sonar domes weigh approximately 90 tons and are 60 feet long, 18 feet wide and 16 feet high. The construction of the sonar domes will begin in September. These sonar domes will be mounted on the bow of Arleigh Burke Class destroyers of the U.S. Navy. The construction of a sonar dome requires 14 months of work

MIL Davie presently has five sonar domes in the shipyard; one is completed, and the other four, ordered in June 1992, are scheduled to be completed by the end of the year.

This new order will bring the total number of sonar domes built in MIL Davie shops for the U.S. Navy destroyers since 1972 to more than

MIL, reportedly Canada's largest shipyard, is situated in Levis, Quebec. It is a key subcontractor on Canada's frigate project and is charged with the modernization of the Tribal Class destroyers. It is a member of The MIL Group, which is active in design engineering, program management, manufacturing, installation and life-cycle support in shipbuilding, defense, offshore and general industrial fields in Canadian and international market places. For more information on MIL Davie,

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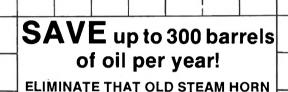
AESA Shipyard Signs Letter Of Intent For Two High-Speed Ferries

Spanish shipowner ISNASA (Islena de Navegacion, SA) and Astilleros Espanoles (AESA) have signed a letter of intent for the construction of two ferries. The vessels will be built at Juliana factory, the AESA shipyard in Gijon, Northern Spain. The 3,600-dwt ferries will be

492 feet long, with a breadth of 71 feet and a depth of 57 feet. The vessels will have a capacity for 1,256 passengers and will have a maximum speed of 23 knots. They will run on four engines with 5,202 bhp each. The two ferries are scheduled to be delivered in the first quarter of 1995, to be fully operational before summer of that year. The vessels will cover the line of the Strait of Gibraltar. The Barreras Shipyard of Astilleros Espanoles recently delivered another ferry to the Moroc-

can company Limadet for the same line. These high-speed ferries will be provided with the most modern equipment for loading and unloading of vehicles and for the highest stability as a guarantee for comfort and safety. They will get an outstanding maneuverability by means of the two main propellers and two second pump-jet propellers. The price of each ferry is approximately \$27 million. For more information,

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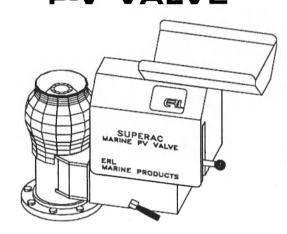
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River Towboat Simulator Training For Exxon

The Gulf Coast/River Division of Exxon Shipping Company (ESC) and MarineSafety International (MSI), have entered into an agreement to provide professional development training for approximately 50 river towboat Captains and Pilots at MSI's Newport, R.I. facility. Using a com-

bination of simulator exercises and classroom discussions, the courses will include actual geographic areas where ESC operates such as Morgan City, Atchafalya River, La.; Houston Ship Channel, Bolivro Roads, GICWW intersection, Texas; and sections in the Mississippi River.

Various combinations of towboats and tows will be simulated such as 12-barge, six-barge and four-barge combinations. The two towboat simulators at Newport will be outfitted with steering rudder/flanking rudder/throttle controls and appropriate indicator and alarms. The towboat simulators are capable of operating independently or interactively. Current, wind, visibility and traffic can be controlled. Depths, bottom and bank forces, flow and stages, and navigation aides will be as in the actual area simulated.

The towboat/barge simulator

courses will be available at MSI ceters in Kings Point, San Diego ar Rotterdam.

For more information on MSI,

Circle 99 on Reader Service Card

Sailors' Union Wins Increases In Salary And Benefits

The 1,500 member San Francisco based Sailors' Union of the Pacifi announced it won salary and ber efits hikes from contract negotiations with American President Line (APL).

The three-year pact gives union sailors who work aboard merchan ships a 12 percent pay raise over the current base salary of \$2,535 a month for sailors with three years' experience and U.S. Coast Guard certification. And, according to union officials, sailors can reportedly making to \$4,500 a month, with more shippers cutting back on crews and paying more overtime.

The contract agreement was struck just before the old pact ex pired and before threats from ship pers, like APL, that it may reflag ships to foreign countries due to changes in federal subsidies for merchant sea lines. Reflagging to foreign countries could mean the loss of hundreds of jobs from the Sailors' Union ranks. However, an announcement from APL that it would expand operations at the ports of Los Angeles and Seattle (thus

denying new jobs for its home port of Oakland) will reportedly not have an effect on union jobs.

Sonat Offshore Drilling Announces Long-Term Contract With Polar Frontier

Sonat Offshore Drilling Inc. announced that Polar Frontier Drilling A/S, a Norwegian partnership in which Sonat owns a 47.5-percent interest, has been awarded a letter of intent for a long-term contract for its fourth-generation semi-submersible drilling rig, the Polar Pioneer.

The letter of intent was received

The letter of intent was received from Norsk Hydro for development of the Troll Field off the coast of Norway. The primary term of the contract extends from April 1994 to

1997, with options to the year 2001. Sonat Offshore Drilling is a worldwide offshore drilling company engaged in contract drilling for oil and gas wells. Other partners in the joint venture are Wilh. Wilhelmsen Limited A/S and North Norway Drilling Company A/S.

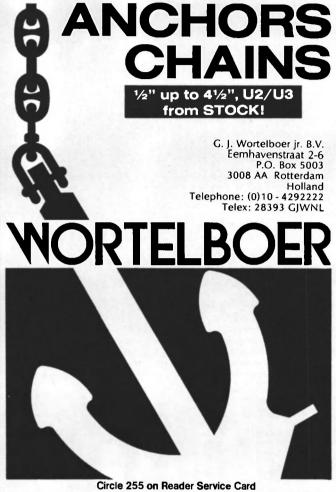
Japanese Firms Expected To Win Seven LNG Carrier Order For Qatar

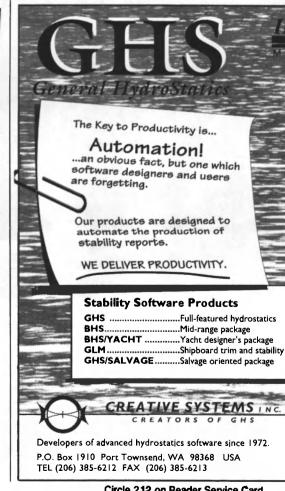
Three Japanese shipbuilders are expected to receive orders worth ap-

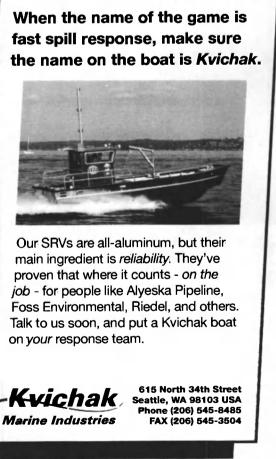
Maritime Reporter/Engineering News



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Circle 265 on Reader Service Card

Circle 212 on Reader Service Card

proximately \$1 billion for the building of seven large liquefied natural gas (LNG) carriers for Qatar Lique-

fied Gas Co.

Mitsubishi Heavy Industries Ltd., Kawasaki Heavy Industries Ltd. and Mitsui Engineering and Shipbuilding Co. have reportedly received notices from the state-owned Qatar that they are likely to be granted the contracts.

The three companies were among Japanese and European shipbuilders that took part in an interna-tional bidding for the tanker con-

tracts in 1992.

Qatar will reportedly come to an official decision soon on orders for the 135,000 m³ vessels. The vessels are going to be used to carry LNG from natural gas fields being developed in the Persian Gulf to Japan for Chubu Electric Power Co.

Each vessel will cost approximately \$200 million.

The tankers are scheduled to be delivered between 1996 and the year

Bremer Vulkan, Metallgesellschaft Combine **Machine Tool Units**

German shipbuilder Bremer Vulkan Verbund AG and trading, metals and engineering group Metallgesellschaft AG agreed to combine their machine tool activities and form a new group that will concentrate on the production of specialized machine tools in Europe, Asia and the U.S.

The plan will reportedly include cemer Vulkan's Doerries Bremer Scharmann group and Metallgesellschaft's Schiess AG. Bremer Vulkan will have a 51 percent stake in the new group, while Metallgesellschaft will be a minority shareholder with approximately percent.

The new group is expected to have annual sales in the \$200 million

The plan to form this new group still has to be approved by the federal cartel office.

For more information on Bremer Vulkan,

Circle 115 on Reader Service Card

China To Charge New Port And Shipping Fees

China is reportedly charging new port and shipping fees to help finance port construction.

The 85 open ports in the country (i.e., ports that can be used by foreign ships) began charging the new fees, as opposed to the 26 open ports that previously charged port and shipping fees. The new fees include extra handling costs for freight, as well as a charge on passengers and freight traveling in coastal areas and on inland rivers.

Revenue generated by the new port charges will be used for shipbuilding and for improving facilities in major coastal ports and ports on the Yangtze River and Amur River, which forms the northeastern border between China and Russia.

Mackay Communications Wins AFSTRS Contract

The U.S. Army Television - Audio Support Activity, Sacramento, Calif., has awarded a five year contract to Mackay Communications for the supply of significant quantities of Inmarsat A terminals modified to receive the Armed Forces Satellite Service Transmitted Radio (AFSTRS). Mackay Communications Inc., headquartered in Raleigh, N.C., will provide a base year quantity of systems with optional quantities deliverable through 1998. The system modifications and final testing will be performed in Mackay's Jacksonville, Fla. facility.

The system is a "Commercial Off

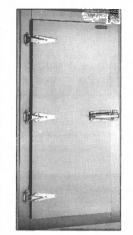
the Shelf" (COTS) Shipboard version Inmarsat A terminal. It enables all Navy Ships to receive AFRTS radio programming via the Inmarsat Network, 24 hours a day, seven days a week, worldwide.

Mackay Communications Inc. offers a full line of Shipboard Products and Services to the U.S. Government and commercial market place.

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August, 1993

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M.T. Knock Clune: First **European Tanker To Comply** With OPA 90

The first European double-hulled Suezmax oil tanker complying with the requirements of OPA 90 was officially named at the Belfast ship-yard of Harland and Wolff Shipbuilding and Heavy Industries Ltd.

The 132,000-dwt M.T. Knock Clune has been developed by the Harland and Wolff design team within the similar efficient hull form as was used on the single-hull Suezmax design. She is powered by one MAN B&W 6S70MC engine and runs at about 14.7 knots at normal output. The vessel incorporates an approximately nine-foot double bottom and 6.5-foot double sides. She is fitted with a deep well cargo pumping system which is centrally controlled by an advanced computer

The M.T. Knock Clune was christened by Kathleen Davidson, wife of Jim Davidson, chairman of Fairhaven International Limited and a director of Fred. Olsen Ltd.

Speaking at the Naming Ceremony, Dr. T. John Parker, chairman and CEO of Harland and Wolff Holdings plc, said, "Currently, freight rates in dry bulk are increasing in a steady and upward trend and we are confident that we will conclude further business this year

in chartering out our large S162 Capesize Bulk Carriers on the inter-

national market."
Harland and Wolff is concentrating on the series building of merchant ships, in both the large Tanker and Bulk Carrier sectors.

For more information on Harland and Wolff Shipbuilding and Heavy Industries Ltd.,

Circle 88 on Reader Service Card



STN Systemtechnik Nord GmbH has been chosen as the system partner of Allseas Marine Contractors a major offshore company - for a project reportedly worth millions of dollars.

The marine technology division of STN has been awarded the order for highly sophisticated equipment for the power supply and distribution system as well as the propul-sion plants of the large pipe-laying vessel "Solitaire." The total installed capacity on board will amount to 82 megawatts.

The new pipe-layer "Solitaire" is a vessel equipped with eight high-thrust azimuth self-propelled propellers for maneuvering and positioning of the vessel. This pipelayer, which is the largest of its type, is more than 935 feet long and can lay pipes with diameters up to 60 inches in virtually unlimited water

Important partners of STN Systemtechnik Nord GmbH cooperating in this project are product divisions of AEG Aktiengesellschaft. They are Bremen, which is supplying the electrical machines; LDW Berlin, which is supplying the drive systems and power electronics; and Regensburg, which is supplying the medium voltage switch gear.

The order will be performed in a

period of approximately 20 months. The first components will already be completed by the end of the year so that system tests can be performed on schedule.

For more on STN Systemtechnik

Circle 91 on Reader Service Card

FMC Delivers Electrothermal-**Chemical Rapid-Fire Gun For** Ship Self Defense

FMC Corporation's Naval Systems Division announced the delivery of reportedly the world's first (ETC) gun to the Naval Surface Warfare Center (NSWC), Dahlgren,

Maritime Reporter/Engineering News



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ETC gun delivered to the Naval Surface Warfare Center by FMC Corp.

The 60mm gun/autoloader is part of the U.S. Navy's ongoing program to demonstrate new weapon technologies such as ETC propulsion and guided projectiles for ship self-defense. The delivery marks the completion of a 30-month effort in which FMC designed, developed and incorporated a 60mm ETC gun/autoloader sub-system into an existing U.S. Navy Mk 15 PHALANX Close-In-Weapon System (CIWS) trunnion assembly. The 60mm gun/autoloader is capable of firing a ten round burst at a rate of over 200 rounds per minute.

ETC propulsion uses electrical pulses and advanced, high energy propellants to achieve improved internal ballistic control and greater muzzle velocity than conventional

gun propellants.

In rapid-fire demonstration, the gun, according to FMC, repetitively launched 2.75kg slugs using ETC propulsion. The gun is scheduled to performlive-fire demonstration tests against incoming airborne targets in late 1993. These tests will combine the gun/autoloader with other program elements including 60mm propelling charges developed under separate contracts by FMC and General Dynamics' Land Systems, a Small Caliber Smart Munition (SCSM) from Martin Marietta Astro Space, and an advanced fire control subsystem.

The 60mm ETC demonstrator may transition to a tactical program initiative to defeat high speed, highly-maneuverable, anti-ship missile threats of the future. In addition, the ETC technology advancements made on this program may be incorporated into the U.S. Navy's five-inch/54 Caliber Mk 45 Naval

Gun System.
FMC's Naval Systems Division has been at the forefront of ETC technology since 1985, and has tested ETC propulsion in guns ranging from 30mm to 127mm for a variety of naval and land warfare applications.
For more on FMC,

Circle 89 on Reader Service Card

Ship Safety Achievement Honored At Safety Awards Luncheon

Two sets of awards honoring maritime safety achievement, the Jones F. Devlin Awards and Ship Safety Achievement Awards, were presented at the Whitehall Club, New York.

The purpose of these awards,

jointly sponsored by the American Institute of Merchant Shipping (AIMS) and the Marine Section of the National Safety Council (NSC), is to publicly recognize and encourage accident reduction efforts by the various maritime industry segments.

Jones F. Devlin Awards, sponsored by AIMS, are conferred on self-propelled American-flag vessels which, at the end of any calendar year, have operated for two full years

or more with a full crew without a crew member losing a full turn at watch because of an occupational injury. The different categories recognized are for two years, four years, and annually after five years accident-free operation.

The 1992 Jones F. Devlin Awards were presented to 96 American-flag vessels, representing 24 U.S. shipping companies. Two achievements involved in these awards were the Exxon Bayou State and the Exxon

Brownsville, both honored for 17 consecutive years of accident-free operation

Ship Safety Achievement Awards, cosponsored by AIMS and the Marine Section of the NSC, are conferred on vessels representing all segments of the U.S.-flag merchant marine that have performed outstanding feats of heroism, rescue at sea, or seamanship illustrative of the high safety standards in our nation's fleet.



Edmond J. Moran, Former Head Of Moran Towing, Dies At Age 96



Adm. Edmond Joseph Moran

Rear Admiral Edmond Joseph Moran, U.S.N.R. (retired) former president and Chairman of Moran Towing Corporation, one of the country's oldest and largest tugboat companies, died on July 15th at his home in New Canaan, Conn. He was 96.

In 1915 he began his career in the family towing business, started by his grandfather **Michael** in 1860 in New York City. In 1917 he joined the Navy Reserve and served on board the USS Winchester and USS Passaic. At the war's end, he returned to his career at Moran, where he worked until 1941 when he was recalled to active Naval Service. Admiral **Moran** was recognized with numerous military and civilian honors. He was a three term president of the Maritime Association of the Port of New York, and a member of

the Board of Directors of Victory Carriers, the Chubb Insurance Co., and the Propeller Club of the Port of New York.

Intercontinental Marine Repair Names President



Michael J. Miller was named president of Intercontinental Marine Repair Co., Inc. of Houston, Texas, a leading ship repair company specializing in marine boilers, condensers and top side repairs.

Mr. Miller joins Intercontinental with a Marine Engineering degree from the U.S. Merchant Marine Academy and an M.B.A. from the University of St. Thomas in Houston. He has more than 16 years of ship repair, vessel operations and management experience. Prior to joining the company he held several engineering and management positions with Exxon, Phillyship, Seahawk Management, Inc. and Apollo Intl.

Nyman Marine Names Two Vice Presidents

The Nyman Marine Corporation has named Barry Nyman vice president in charge of engineering and design. Formerly the manager and construction superintendent, Dock & Pile Driving Division, Mr. Nyman is the son of the corporation's founder and has more than 25 years experience in the structural design and construction of docks.

Nyman Marine also named **Tad Sommerville** vice president of sales and marketing. Formerly the director of sales and marketing, Mr. **Sommerville** will be responsible for the national and international marketing of Nyman's line of WaterLift boat hoists and lifts for personal watercraft.

Harvey B. Walpert Elected Chairman Of AWSC

Harvey B. Walpert was elected chairman of the American Waterways Shipyard Conference (AWSC) and Robert W. Greene was elected vice chairman. AWSC is a conference of the American Waterways Operators (AWO) and is the national trade association for second-tier shipyards.

Mr. Walpert is senior vice president, administration/corporate operations of Trinity Marine Group (TMG) of Gulfport, Miss. Mr. Greene is president of American



Harvey B. Walpert

Commercial Marine Service Co. of Jeffersonville, Ind. AWSC also elected: **Frank McEacharn**, vice president, Newpark Shipbuilding (Houston); **H. Brinson Miles**, division manager, McDermott Inc. (Amelia, La.); and **Dan Larsen**, Fishing Vessel Owners Marine Ways (Seattle), as members of the AWSC Steering Committee.

Joe Cruise Chosen To Head Crowley American Transport

Crowley American Transport has promoted **Joe Cruise** to the position of director of marketing. His new responsibilities will include market research and analysis, service, customer and product information, cargo trends and other business data. Mr. **Cruise** joined Crowley in 1987 in Teaneck, N.J. as a senior financial analyst with the company's South American service.

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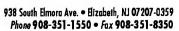
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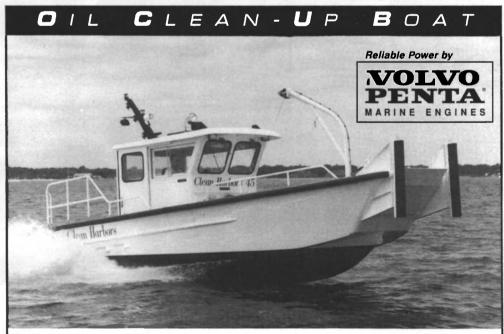
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Lidell Launches 'St. Elias,' Ocean Deck Barge

The St. Elias, a 335-by 76-by 22-loot ocean deck barge, was launched by Zidell Marine Corp. of Portland, Oregon in late June. The St. Elias is being leased by Zidell, Inc. to Samson Fug & Barge of Sitka, Alaska. Samson will be using the St. Elias on an on-going scheduled 35- to 40-day general cargo run.

Finnyards Delivers Ro/Ro Passenger Vessel

The Ro/Ro passenger vessel ordered by French owner Compagnie Meridionale de Navigation was delivered at Rauma yard of Finnyards Ltd. on July 19. The vessel is for service carrying cargo and passengers between Marseille and Bastia. As a passenger vessel the ship is 6,200 dwt, 9,000-dwt as a cargo vessel.

Spliethoff Places \$132M Order With Dutch Yards

Dutch shipping company Spliethoff Bevrachtingskantoor reportedly placed a six ship order valued at an estimated \$132 million with three Dutch yards. The company, which operates a fleet of 47 general cargo vessel, placed the order with Shipyard Merwede, IHC and Frisian Shipyard. The first vessel is due for delivery next year, with the order completed in 1995.

'Zirfaea' Delivered By Bodewes Volharding Yard

The Zirfaea, a vessel designed and built to perform a wide range of survey services in the North Sea and on the Continental Shelf, was delivered recently. The Zirfaea was designed by Nevesbu, The Hague, and the actual building of the vessel took place at Bodewes Volharding yard at Foxhol, Groningen, in close cooperation with Conoship International, Groningen. The vessel will, among other tasks, provide services such as: charting of shipping lanes' drafts, sea bottom and soil investigations, maintenance/inspection surveys of executed dredging works, and seabed pipeline inspections.

Newbuilding Investment Helps Germany Maintain Containership Control

A massive investment in newbuildings has helped Germany consolidate its position as controller of the world's biggest fleet of fully-cellular containerships, concludes the latest issue of World Shipowning Groups, the quarterly publication from Lloyd's of London Press and Lloyd's Register. Companies with ultimate management control in united Germany are responsible for

a fleet of 249 ships totalling 359,352 teu, and the German controlled fleet includes 65 newbuildings of 118,118 teu, far in excess of any other nation's investment in new containerships.

According to the report, Japan and Taiwan rank second and third respectively, with the Japanese controlled fleet consisting of 153 vessels (266,541 teu) and 12 newbuildings (25,628); while Taiwan's fleet total is 132 vessels (248,672 teu) including 15 newbuildings (36,742 teu).

North Atlantic Marine Announces Contract

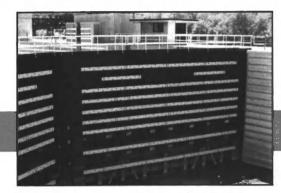
Diana D. Artiaga, president of North Atlantic Marine, Inc., announced that the company signed a contract with Washburn & Doughty Assoc. to install the entire electronic system on an 85-foot passenger ferry for Casco Bay Island Transit District. The diesel-propelled 85-foot ferry is capable of accommodating a minimum of 350 passengers on two decks. The ferry is built in accordance with USCG Sub chapter T and relevant other chapters for lakes, bays and sounds services inside Casco Bay between Portland, Maine, Bailey Island and Orr's Island, Maine. The vessel will be propelled by two GM 8V 92N or equal keel-cooled two cycle engines rated at 364 bhp at 2,100 rpm. North Atlantic Marine specializes in marine electrical and electronics installations. For more information,

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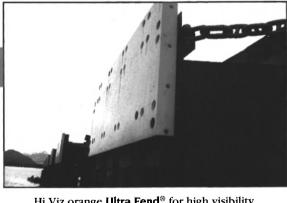
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Weeks Marine Co. Switches To DynaStar II

Weeks Marine Co., one of the largest marine contractors in the U.S. with 2,000 feet of wharf space. 40 cranes, 25 tugboats and 90 barges, has found the solution to managing its large quantity of information in the computerized maintenance management system from DynaStar Systems Group.

Weeks Marine uses DynaStar extensively to generate cost reports broken down by equipment and by job. The company uses these reports to make decisions about whether or how to embark on large-scale, costly projects. The system has helped management make crucial decisions on whether to install and whether to call on in-house sources or to subcon-

Weeks Marine is most impressed with DynaStar's ability to break down costs into a greater number of categories, which allows engineers to "zero in on problem areas." Knowing the detail behind the numbers has been a tremendous help with long-range planning.

DynaStar has also helped Weeks Marine by simplifying work orders, better organizing accountability, and making personnel efficiency easier to track and evaluate.

DynaStar was selected over 15 other systems because of its flexible reporting capabilities, its userfriendliness, and its ability to measure in either time increments or operating hours intervals - a choice not given by most comparable sys-

The DynaStar Systems Group, a division of Decision Dynamics, Inc., was launched in 1982 to pioneer the development of maintenance management systems for use on PCs and PC LANs. DynaStar products are available in versions for the manufacturing and process industries, including forest products; the marine industry; and facility maintenance of office buildings, hotels, hospitals

For more information on Weeks

Circle 27 on Reader Service Card

For more information on DynaStar Systems Group,

Circle 28 on Reader Service Card

INTERTANKO Reports An Increase In VLCCs In Fleet

The International Association of Independent Tanker Owners (INTERTANKO) reported that the tanker and combined fleet is now approximately 300 million dwt, up 33 million dwt from the beginning of 1987 (when the fleet was at its low-

est for the last 20 years.)
Approximately 7.2 million dwt has been reported delivered so far this year, including 16 VLCCs. This belances the 7.1 million dust reported balances the 7.1 million dwt reported sold for scrap (compared with 4.4 million dwt at the same time last The demolition figures include 13 VLCCs (eight VLCCs over the first six months in 1992). Additional delivery of 26 VLCCs are due

later this year.

Altogether 848 tankers above 200,000-dwt have been built since the first such tanker was delivered in 1966, 392 have been scrapped, seven are laid up and 19 are used for storage. All the pre-70 VLCCs have left the market and of the 352 VLCCs which were delivered in 1973 and earlier, only 55 are left (one built in 1970, six built in 1971). The 229 VLCCs built in 1974-76 represent exactly half the current fleet.

Spot tonnage liftings from the Persian Gulf increased by about seven percent the first five months of this year. The average time charter result for a VLCC AG-West of above \$17,500 per day for this period is considerably better than the \$11,000 per day achieved for the same period last year, but still hardly covers the increasing operation costs, let alone capital costs.

Time chartering dropped from about 45 million dwt in 1991 to 20 million dwt last year. During the first six months of 1993, about 15 million dwt were fixed on period basis, but nearly all for periods of less than one year. This indicates that charterers do not seem too concerned about lack of tonnage in the near future.

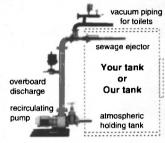
Maritime Reporter/Engineering News

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Amoss, Rankin Assume New Posts At Lykes

W.J.Amoss, Jr. has been elected chairman of the executive committee and Tom L. Rankin has been elected chairman of the board and chief executive officer of Lykes Bros. Steamship Co., Inc., the Board of Directors announced.

Eugene F. McCormick, president and chief operating officer, conditions in the total arises 1006 conditions in the total arises 1006 conditions.

Eugene F. McCormick, presilent and chief operating officer, coninues in that role since 1986 and will manage the company's worldwide shipping operations.

wide shipping operations.
Mr. Rankin, chairman and president of Lykes Bros. Inc., of Tampa, Fla., has been a member of the board of directors of Lykes Bros. Steamship Co., Inc., since 1983.

Mr. Amoss joined the shipping company in 1947, was named president in 1973 and chairman in 1986.

dent in 1973 and chairman in 1986. Lykes Bros. Steamship Co., Inc., headquartered in New Orleans, La., has been a leader in ocean transportation for more than 90 years. Lykes today operates a fleet of cellular container and multipurpose vessels.

Navy Awards Ingalls \$34.9 Million Contract

The U.S. Navy has awarded Litton's Ingalls Shipbuilding Division, Pascagoula, Miss., a \$34.9 million contract extension to provide continuing engineering and support services for the Navy's Spruance and Kidd class destroyer programs.

Total potential value of the five-

Total potential value of the fiveyear support contract is \$188.9 million through the government's 1997 fiscal year.

Ingalls has been providing planning yard support for the destroyers since 1981. Under the program the shipyard provides engineering design, scheduling and logistical support services and planning for the maintenance, upgrading and overhaul of Spruance and Kidd-class ships now in the fleet. Ingalls built all 35 of the ships, which were delivered to the fleet between 1975 and 1983.

For more information on Ingalls Shipbuilding,

Circle 24 on Reader Service Card

Boat Luxury Tax Repeal Passes In Senate

The Senate voted to repeal the 10 percent boat excise tax as part of the Omnibus Budget Reconciliation Bill. Vice President **Al Gore** cast the tie breaking vote in the Senate, providing the package with a narrow 50-49 endorsement. Like the House version approved in May, the Senate bill would make luxury tax repeal retroactive to January 1, 1993. "Elimination of the so-called

"Elimination of the so-called luxury tax on boats will restore thousands of jobs and rescue hundreds of small businesses," said **Jeff Napier**, president of the National Marine Manufacturers Association.

"Boat builders expect to re-employ 5,000 or more workers within weeks of the bill's passage as they fill orders conditioned on repeal of the tax." He estimated that most of the 25,000 jobs lost since the tax was first implemented in January 1991 would be replaced within a year to 18 months.

Also at issue during conference negotiations will be the effective date

for repeal of the luxury tax. The marine industry, with the help of Senator **John Chafee** (R-RI), is pressing for repeal retroactive to January 1, 1992. During markup of the Senate bill, Finance Committee chairman **Daniel Patrick Moynihan** (D-N.Y.) also indicated he favors the earlier date.

he favors the earlier date.

Although tax packages containing repeal of the luxury tax have reached this stage before - only to be defeated in partisan crossfire - industry officials and Congressional

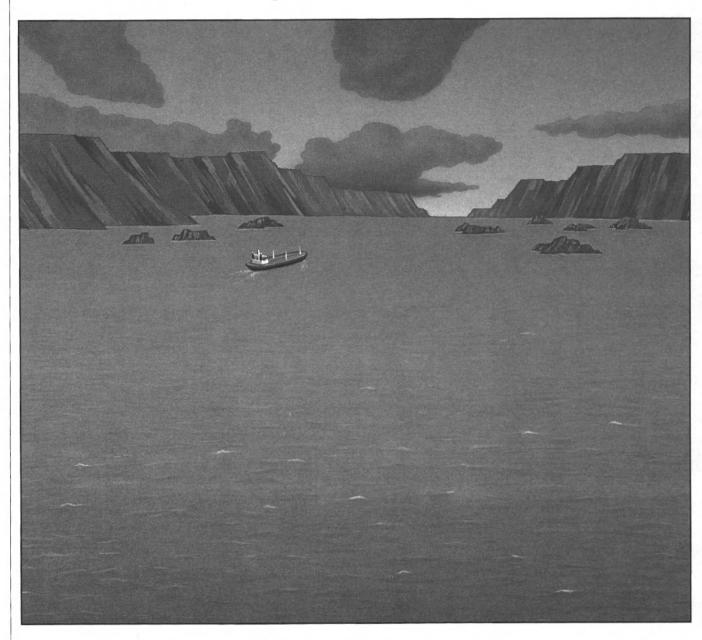
supporters are more optimistic about the current bill's prospects.

The Clinton Administration is likewise encouraged by the similarity of the two budget packages, estimating that the House bill contains about 90 percent of the President's original proposals, and the Senate bill about 75 to 80 percent.

Most Washington observers are

Most Washington observers are predicting that compromise legislation meeting the President's approval will emerge by the end of July.

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Launching Ceremony For MCM-14 "Chief" At Peterson Builders, Inc.



The MCM-14 Mine Countermeasure Ship "Chief" at its christening at Peterson Builders, Inc.

June 12, 1993 marked the christening and launching of the 224-foot wooden MCM-14 Mine Countermeasure Ship "Chief" at the yard of Peterson Builders, Inc., Sturgeon Bay, Wis.

Sponsor of the ship, Susan Walker Bushey, christened the ship "Chief." Her daughter, Terry Bushey Collister, assisted her as Matron of Honor.

Radm. **R. D. Williams III**, Program Executive Officer for Mine Warfare, Washington, D.C., delivered the keynote address.

Captain Daniel R. Welch, USN, Sturgeon Bay supervisor of shipbuilding, was also a speaker and Ellsworth L. Peterson, president of Peterson Builders, gave the welcome address. Richard Russell, PBI vice president of manufacturing, introduced the Sponsor of the

Rev. Matthew Knapp, Moravian Church of Sturgeon Bay, gave the invocation at the ceremony.

Chief is the last of 11 MČM ships contracted with the U.S. Navy to be launched at PBI.

Peterson Builders is one of the few remaining shipyards with the expertise, facilities and knowledge to construct large wooden ships today.

PBI is entering its fifth decade of minecraft ship construction and has built minecraft for thirteen different navies around the world.

The mine countermeasure ships accommodate a crew of 81, and are the Navy's largest wooden-hulled ship.

A wide variety of special skills, equipment and materials are utilized in laminating the ship's major structure from large timbers of Douglas fir, White oak and Alaskan cedar.

The MCM incorporates modern mine countermeasure technology into a specially designed platform which includes low magnetic signature diesel engines, a precise electronic navigation system, a minehunting and classification sonar, and a mine neutralization system.

Overall length of the MCM ships is 224 feet. Draft is 11 feet and beam measures 39 feet.

Full load displacement of the ships is 1,250 tons. The MCM is powered by four diesel engines rated at 600-



Dignitaries, from left to right: Ellsworth L. Peterson, President, PBI; Terry Bushey Collister, Matron of Honor; Radm. R. D. Williams, III, USN, Keynote Speaker; and Susan Walker Bushey, Sponsor.

hp per unit. They are equipped with a 350-hp bow thruster, and electric power is furnished by three 60 hZ, 375 kW generators.

Eight ships of the MCM-1 Class have been delivered and three remain under construction at Peterson Builders.

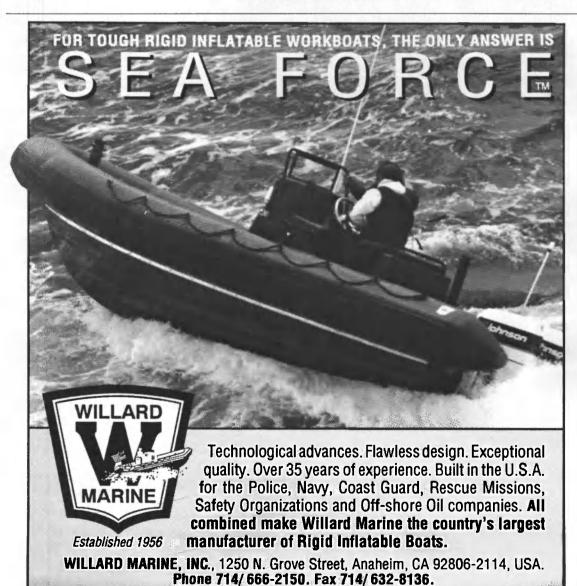
In addition to the MCMs, PBI has contracts with the U.S. Navy for five 51-foot PCFs (Patrol Craft Fast) and seven 36-foot LCPLs (Landing Craft Personnel Large).

The company also received a contract for the mid-life conversion and repair of the R/V Endeavor for the State of Rhode Island.

This ship was originally built at PBI in 1975. Also in for repair is the USCGC Sundew.

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Area Maritime Companies Look To Channel Deepening, Market Diversification

By Vincent Bosarge and Harold Larimer

oday, the industries of Bayou La Batre are again caught in the riptide of change. A general decline of the shrimp industry has caused an increased move toward diversification into construction of varied commercial vessels and increased foreign marketing. Even though the total number of boats being constructed

vessels and increased foreign marketing. Even though the total number of boats being constructed here is significantly down from previous years, the probability is that Bayou La Batrians will evidence their traditional bouyancy and add to local industries the ingredients which will result in bouncing back to greater heights of success.

The riptide in which Bayou industries find themselves today is one made up primarily of market changes rather than internal problems. However, environmental protection demands and other operational costs do pose serious problems to builders that must be overcome.

Evidence of the industry's reaction to change is seen in the degree to which almost all have increased activities aimed at garnering an increased share of foreign markets, updating tools of the trade (primarily through computerization), and a shift to such types of vessels as tugs, oil industry support and passenger vessels.

support and passenger vessels.

The modern age Bayou La Batre boatbuilding and sales record is an exact reflection of worldwide economic and political changes paced by developments of new fishing areas and catch volume within existing fishing areas. From the assembling of an entire fleet of fishing vessels for export to Vietnam at the beginning of the war there, to the recent outreach to Russia, boatbuilders have exploited opportunities as they have presented themselves. The record mirrors African and Central American modernization of fishing fleets and includes such far-flung places

as Somalia and India which have become home port to bayou-built boats.

Channel Deepening Equals Market Expansion

With a channel deepening from 12- to 18-feet soon a reality, Bayou La Batre's shipbuilding and related industries are beginning to speculate as to what must be done to take advantage of the deeper channel, which, for the first time, will afford access to many types of ocean-going vessels.

The shrimp industry, mainstay of the city's economy almost since it was founded more than 200 years ago, has declined steadily since 1975 when it was not unusual to see more than 400 boats lining the Bayou, waiting to unload their catch. Today, according to city councilwoman Vickie Robertson, you're lucky to see 40. In 1992, shrimp landings at Gulf of Mexico ports were down more than 14 million pounds from 1991

In the mid-80s shipyards in Bayou La Batre, anticipating the downtrend in the shrimp industry, began a diversification program which has helped stave off economic collapse. Still prohibited by the shallow 12-foot channel, Bayou shipyards, noted for a favorable labor supply, skilled craftsmen and reasonable wage scale, hope that once the channel is deepened fleet and vessel owners will find them an attractive alternative for economical repair and construction. The area's availabilty as another Gulf Coast port cannot be overlooked either, especially with recent rapid growth of the offshore gas industry



Stern Dragger built by LaForce Shipyard.

which requires large quantities of supplies and building materials. These gas fields are within minutes travel time from the mouth of the channel

The city, with its 14 shipyards, stands poised for an economic shake-up.

To learn more about their plans and what they have in mind for replacing a falling industry, Maritime Reporter & Engineering News sent Vincent Bosarge and Harold Larimer to revisit the city that was featured in the May 1991 issue of the magazine.

At S&S Marine Repair, Inc., a newcomer to the Bayou, Carolyn Overstreet, operations manager, and Daryl Steiner, yard superintendent, are optimistic about the future. They are in the process of upgrading and increasing the capacity of the yard's two haul-out railways in anticipation of an increase in repair and conversion jobs the 18-foot channel will bring. Since opening the yard in 1992 they have established a reputation for quality conversions, a good example being the "Beacon," a 105- by 24- by seven-foot research motor vessel, which was converted to a treasure hunting ship.

The Bayou's reputation for doing conversions is not just local. When Mr. Frank Goto, manager of United Fishing Agency, Ltd., in Hawaii, learned that buyers from Majura in the Marshall Islands were looking for used shrimp boats to convert for their own ocean-going needs, he directed them to the Bayou. Being a satisfied customer of long standing, he knew exactly where they would be able to find not only the boats, but skills required for the conversions. S&S Marine Repair, Inc. accomplished two of the conversions, one for Mr. Sam Leon and another for Mr. Charles Dominick. Two local Bayou boats, "Revenge IV" and "Tami Darlene" became the "Samantha" and "Charlie's Angel."

According to Daryl Steiner, the deeper chan-



Chicago's First Lady, a 96-foot pleasure boat built by Steiner Shipyard.

el will benefit all vessel owners ho utilize the bayou, because at s present depth, the debris colcted on the bottom frequently realts in damage to the vessel's pro-

ellers and rudders.

Jack Mott, general manager of lodriguez Shipyard, Inc., is also ptimistic about the future, feeling hat the deeper channel will make t possible to build a much larger rariety of vessels than are being built now. In the past year most of Rodriguez's contracts have been rom foreign markets, but Mr. Mott feels that a deeper channel will provide increased opportunity in the domestic work boat and specialized vessel market. Since May of 1991 the yard built 21 shrimp and fishing vessels, one of the largest being the Pacific Monarch, a 125- by 34-by 13.5-foot steel crabber-longliner homeported in Seattle.

In talking to the shipyard owner, Joe Rodriguez, Jr., it was learned that a private corporation in Moscow, Russia, has made a deposit along with a letter of intent for 137-foot steel longliners to be used off the Siberian coast. The exact number was not divulged, but the order is proof of how far the reputation of the Bayou boat builder has spread

the Bayou boat builder has spread. Since 1991, Johnson Shipbuilders, Inc. has managed to stay afloat by courting foreign markets. Among other projects over the previous two years, the yard has built new boats for the Marshall Islands. In early 1992 the company launched a 99-by 26-by 13-foot steel longliner, the Paradise Queen, to be used for tuna fishing off the coast of the Marshalls. The vessel's owner, Miyoshi Tanaka of Japan, had seen a boat just like the Queen and upon inquiring about it, was told it was built by the Johnson brothers in Bayou La Batre. Mickey Johnson, a cousin of Frank and Chris, says it is possible that more orders from Mr. Tanaka will be forthcoming.

Steiner Shipyard, Inc., with its modern and highly-sophisticated technological capabilities, has been anticipating the channel deepening. Located at the very end of the Bayou deepening project, it is equipped to take on new construction and repair of larger vessel than are presently able to enter the shallow 12-foot depth. It is estimated that vessels up to 260-feet in length and 50-feet wide will be able to navigate the 18-foot deep channel.

Steiner Shipyard, once a giant in the trawler industry, is still building shrimp boats, but the largest part of its revenue now comes from a diverse range of work boats and related marine equipment.

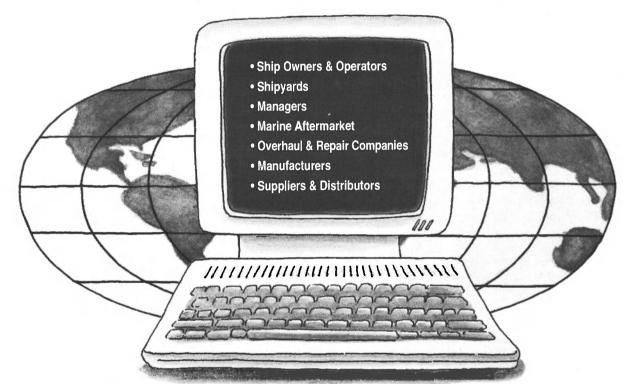
The yard has also achieved a worldwide reputation for conversions, the most recent a 190- by 38-by 14-foot seismograph vessel being converted to a luxurious 450-passenger sea-going pleasure ship, which will soon be operating off the coast of Savannah, Ga. Andrew Overstreet, design engineer and bid preparer for the shipyard, says that the current 12-foot channel depth has severely limited Steiner in its bidding for government contracts.

Tara Steiner, general manger of Lighthouse Marine Supply, one of the bayou's largest marine suppliers, and operating in conjunction with Steiner Shipyard, says that becoming a port facility will definitely be a boon to the supply business in the local area. The demand created by more and larger vessels arriving and departing should increase significantly, she said.

Master Marine, Inc., along with its subsidiary Master Marine Repair, is looking forward to the deeper channel. **Bret Dungan**, chairman of the Bayou La Batre Port Authority, says that even though the shrimp industry is in a state of decline, the seafood processing industry could benefit greatly should this become a seaport. Noting that about 60 percent of the seafood being processed in the Bayou is trucked in from Miami, New Orleans and Texas ports, he proposed that the product be shipped directly into Bayou La Batre. According to Mr. **Dungan**, this would serve three purposes,

including: reducing transportation costs; eliminating the need for double handling of a perishable product; and creating export opportunities. He feels strongly that owners of smaller class oceangoing vessels would prefer a port designed to accommodate their vessel's size and capacity rather than much larger and deeper draft ports such as Mobile. Further, the high percentage of raw seafood importation for processing strongly endorses the favorable local labor market and modern

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The marine repair facility of Master Marine, with its 350- and 370-ton floating drydocks, has remained busy over the past two years, but Mr. **Dungan** admits the 12-foot channel precludes bidding on repair jobs of deeper draft vessels, such as larger oceangoing tugs. A major share of Master Marine's revenue over the past two years came from government contracts, one being the overhaul of the USS Suitland, YDT-

15, a converted mine sweeper. The overhauled vessel is now being used by the Naval Diving and Salvage Training Center in Panama City, Fla. The yard also overhauled a 160-foot buoy tender for the USCG. A project of interest was the conversion of a car ferry to a river bus for passengers now in use between Camden, N.J. and Philadelphia.

passengers now in use between Camden, N.J. and Philadelphia.
The next as a port of call was Landry Boat Works, Inc. The initial picture of the yard was one that

dramatically illustrated small boat evolution. On the first railway was an approximately 30-year-old wooden shrimp boat under repair. The next was a rather new steel shrimp boat and the third railway contained the ribs of a wooden shrimp boat on which construction had ceased several months ago. Joe Landry, company president, said that he sees no present demand for new wooden vessels, but steel and wooden boat repairs have kept the

yard busy. Even though wood boa Landry's building specialty for ma years, are much cheaper than st vessels, the cost of insuring the vessels far outweighs the savin derived from their constructio Scarcity, and the price of good til ber, are also serious disadvantage

Another recently-opened yard co structing boats is LaForce Shipyar Inc., owned and operated by Lest and Raymond LaForce. Their fir two steel trawlers are under co struction for Captain Tom's Seafoo Inc., of Palacios, Texas. The tw vessels under contruction are indicative of some remaining domestic fis boat markets.

Randall's Boat Repair, owned an operated by **Randall Fowler**, i another of the few yards in the Bayot today where wooden boat repair are accomplished. Although dwin dling, a fair number of wooden boats

Andre P. Dubroc of Master Boat Builders, Inc., said that in 1992 his yard built a number of boats for Texas buyers, but most of its present construction is to satisfy foreign demands. Not being situated on the Bayou to be deepened, he feels this project will benefit his yard indirectly, and that all benefits the community receives will trickle down in

one way or another.

LaForce Shipyard, Inc., like most others, experienced a demand from overseas and Canadian markets.

Longliners have been sent to the Pacific area and stern trawlers to the Atlantic and Pacific coasts of

J.L. Howard, president of Ocean Marine, Inc., feels that, until the political future of the country as a whole becomes more predictable, many foreign markets will delay orders. He cites his own case of not having built vessels within the last two years for markets in which he once prevailed.

When asked his opinion of the local channel deepening, Mr. Howard said he is reserving final judgment until he determines the degree to which it will encroach upon his existing railways, and the yet to be determined means by which the City of Bayou La Batre will pay future installments on its \$2 million

portion of the project.

"It's simply a matter of making certain you can pay for something before you buy it," he says, and further adds that he opposes an employee tax on workers, as has been suggested. Today, he is building 10 special-purpose shrimp trawlers to be used for on-board processing and fast-freezing of shrimp. Two of these vessels are presently under construc-

Another noteworthy development taking place in this area which, in the future, will favorably impact the U.S. fishing industry, is being carried out by Retired Colonel **Donald M. Frierson** in cooperation with Auburn University Marine Extension Research Center. The project is a mariculture (saltwater) study being done using oysters, shrimp and crabs. This research is expected to lead to a more extensive and productive harvest of the marine life under

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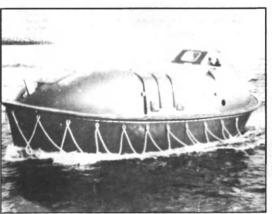
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dy. This development provides mediate knowledge of marine life the wild and produces expertise use in on-shore farming of sea-

At the same time, Bayou La Batre s a total package of up-and-runng marine support industries such

Ladnier-Hardy Refrigeration, nich furnishes refrigeration sysms whenever the demand arises, nd Alabama Roll Products, which engaged in fabricating heavy-duty eel pipe up to three-inches thick. eeting customer needs for such se as legs for oil rigs, etc. umber of these support facilities is lmost endless, and they are preared to go worldwide as illustrated y Ladnier-Hardy's construction of refrigeration plant in Lagos, Nireria, and Alabama Roll Products' upply of pipe to the Mexican oil ndustry. In addition, local rigging and net shop suppliers furnish a arge portion of the worldwide need or their products.

Deepening the channel will not limit benefits to the Bayou La Batre community alone. There are countless suppliers adjacent to the area who will share in these benefits.

McElroy Machine and Engineering Co., Inc., located in Biloxi, Miss., which has furnished local shipyards with winches and specialized machine services for more than 24 years, is one. Devoe Paints, the oldest paint company in the U.S., distributed by Marine Industrial Supply Co. of Mobile, Ala., is another.

Devoe products have been used extensively by Bayou ship and boat builders for many years

builders for many years.

Additionally, Cummins, Inc. and Caterpillar Engines have been predominant in supplying propulsion systems for fishing vessels plying the waters of the Gulf of Mexico, especially the Bayou area. These companies and others, located in even farther reaches of the U.S., will be recipients of the economic windfall the channel deepening will provide.

Warren Seaman, mayor of Bayou La Batre, feels that, having 500 businesses in the area, 14 of which are shipyards, the potential for the city to become a port facility for small ocean going vessels is good, especially with the city being in close proximity to the large Mobil, Exxon and Shell offshore gas refineries. He mentioned that Crum Schambeau, a local businessman, is planning to put together a 50acre industrial park where shipping and receiving needs could be conveniently served if this were to become a larger/deepened port.

Mayor **Seaman** also noted that while repair work for oil industry vessels has contributed significantly to Gulf Coast shipyard earning, the deepened channel will enable local industries with their competitive price structure to claim even more of this burgeoning market.

Regarding the gaming boat business, the mayor thinks that with Illinois, Iowa, Louisiana and Mississippi all having legalized licensed riverboat gaming, the demand for casino boats will continue. Another

future market the city is looking toward is car ferry service wherein operators are now beginning to upgrade fleets with larger vessels with more modern passenger accommodations.

In summation he said, "We are looking at every option available, and we are soliciting suggestions and ideas from anyone who may be able to suggest alternatives we have missed."

It is anticipated by a majority of

local politicians that the deepening of the channel will help expand the local work force by between 500 and 800 workers

When questioned about problems confronting businesses in the Bayou, many owners feel that government environmental regulations and the Americans With Disabilities Act of 1990 will impact their business. The requirement for a Nationl Pollutant Discharge Elimination System (NPDES) permit and the increasing

cost of complying with state and federal laws will prove burdensome for most shipyard owners. Basically, the permit will require businesses to implement pollution-control measures, including treatment of pressure-washing waste water and its discharge to sanitary sewers when possible.

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from boatyards. The level of contaminants allowed in waste water by the general permit for discharge to state waters is based on water quality standards designed to effectively protect the marine habitat. Because even small concentrations of pollutants are known to adversely affect marine plant and animal life, the level of pollutants allowed is very low.

The permitalso requires that each facility has an operating plan to prevent contamination of storm water. Best Management Practices (BMPs) must be incorporated into the plan. BMPs include requirements for chemical and waste storage, use of tarps for dust control, and sweeping, and spill control measures. Environmentalists consider BMPs to be an ounce of prevention and cleanups, because of penalties and fines, a pound of cure.

The American Disabilites Act of 1990 has already imposed an addi-

tional burden on all businesses in the Bayou with more than 24 employees. These businesses are required to provide prospective employees reasonable accommodations with regard to accessibility to job information and to the employer's

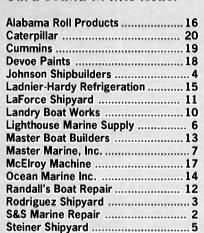
In a significant departure from existing law, under the Rehabilitation Act, the ADA makes unlawful medical examinations and verbal/ written inquiries regarding health or disability of an applicant dur the pre-offer stage of employme Different sets of rules that apply the various stages of the empl ment cycle (pre-employment, pc offer and incumbent employees) a immeasurably to the administrat. work load of all businesses affect by the act. The new act will requi a legal awareness of its conter which could involve additional e penditures for legal assistance.

On the above issues, most but ness owners are in agreement th these regulations are non-discrin natory, and affect all business alike, and each advocates clean ai clean water and fairness in hirin but there is one issue looming on th horizon which everyone seems re luctant to mention: the propositio

of an energy tax.

The total cost of the channel deer ening project is \$18.4 million, to b split by: the Federal governmen (\$7.4 million); the State of Alabam; (\$6 million); the county (\$2.5 million); and the city (\$2.5 million).

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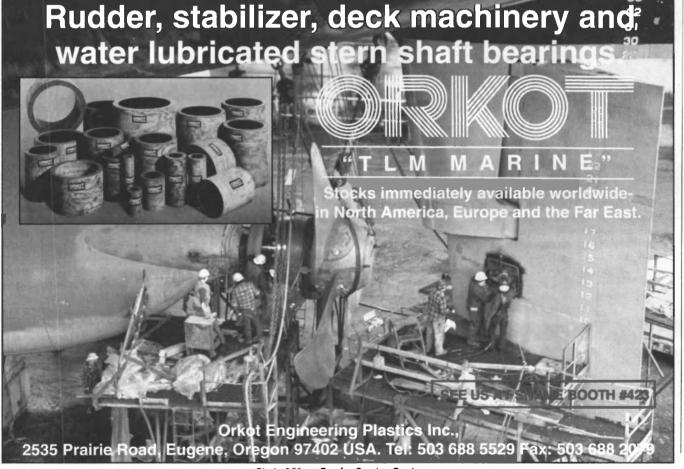


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Two other Chesterton manufacturing facilities have received certification to the appropriate ISO 9000 standards. For more information on Chesterton,

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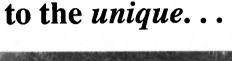
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A rendering of the Queen of New Orleans, being built at Trinity's Equitable Shipyard.

Rollin' On The Rivers

Greg Trauthwein, managing editor

hen it finally seems the casino riverboat market can possibly get no bigger, it does. Recent blockbuster announcements throughout July, such as the legalization of riverboat gaming in Indiana, and Avondale Industries' winning a contract for one vessel and signing a letter of intent to build another, signaling the shipbuilder's entrance into the casino vessel building competition, all point to a market which has some growing to do. Speaking on behalf of prevailing

market conditions and his company's future plans, Laurance Lacaff, president of Harrah's Riverboat Gaming Division (Memphis, Tenn.) said, "With Indiana just legalizing I think its fair to say we will be pursuing opportunities there. We would be interested in being in any state or jurisdiction which legalizes.

While Mr. **Lacaff** said it was far too premature to even guess when the market will peak or eventually how many gaming vessels Harrah's will operate-based on the uncertainty of which states will fall in line and when—he would say, "It is con-ceivable that within a little time we could have 10 to 15 vessels out there. but that is pure speculation, guessing on states which might legalize."

Harrah's recently took delivery of the Northern Star (exterior and interior pictured on the supplemental cover) which was built by Service Marine. Service Marine is currently working on the Southern Star, which is scheduled to start operation in early 1994. Tom Hensley, vice president of marketing for Service Marine, said, "I think the market is going to continue to expand. With Indiana passing its legislation, and indications pointing to Texas passing legislation in 1995...but is it a two-, a three- or a five-year boom...who knows.'

All Eyes On Indiana

While hopes are high for Texas, Virginia, Maryland and Pennsylvania to legalize riverboat gaming, the reality is legalization in Indiana, where 11 boats are authorized.

Five boats are approved on Lake Michigan, with two in Gary and one each in East Chicago and Hammond. Michigan City and Porter County are competing for the fifth boat.

Five boats are authorized in nonecified sites along the Ohio and one will be on Patoka Lake in southern Indiana. The riverboat

gaming provision, included on a budget bill, was passed despite a veto by Governor Evan Bayh, a veto which was cast for reasons unrelated to the gaming provision and was quickly overridden. But although the bureaucracy is in motion, owners and builders might be slowed, although Players International Inc. is already seeking a riverboat gaming license in Evansville. City or county governments have to authorize referendums and gain public approval before licenses are considered, except for Gary, where voters have already approved it. In Clark County, residents will have a chance to decide this fall whether they want riverboat gaming in their area, as a referendum has been set up on the issue in November. Vanderburgh County officials also are preparing for a special election this November for a riverboat development in the Evansville area. But the Army Corps of Engineers is claiming the permitting procedures for any floating casino can take at least a year.

Yard Competition Grows With Market

While wading through the red

tape for permits and licenses in Indiana, or any of the other five states with legalized riverboat gaming, might seem an arduous task, finding a competent yard to build the specialized vessels is becoming easier by the day. And the increased competition is nothing but good news for the owner/operator.

"There are more boats to build than there is capacity to build, and this has brought some other yards into the market," said Mr. Hensley. One of the newcomers is Avondale Industries, which recently signed an \$11.7 million contract for the construction of a 266-foot paddlewheel gaming vessel for Jazz Enterprises, Inc. of Baton Rouge, La., and signed a letter of intent with Skylink America Inc. of Dallas to design and plan the construction of a 280-foot riverboat gaming vessel for operation on the Mississippi River.

"It is the hottest market out there right now," said **Charles Burrell**, sales manager for Leevac Shipyards. "There are certainly more shipyards showing an interest in the market.' Despite that competition, Leevac has gotten its fair share, as it recently delivered the MTU-powered Player Riverboat Casino, and is scheduled to deliver three additional casinos

World Gaming Congress & Expo Set For Sept. 20-22 In Las Vegas

The World Gaming Congress & Expo, now in its seventh year, is reportedly the world's largest gaming management event, drawing 10,000 executives from more than 70 nations. With riverboat gaming a burgeoning business, Maritime Reporter & Engineering News will be included in a distinguished list of exhibitors from the maritime side (see partial list of exhibitors to follow).

The event features more than 90 hours of seminars, workshops and roundtables, and nearly 300 suppliers are expected to attend.

The show is scheduled to run from Monday, Sept. 20 to Wednesday, Sept. 22 at the Las Vegas Conven-

Some of the topics to be discussed include: "The new American casino: The economic impact," which analyzes the short-term versus longterm benefits of the many new gaming facilities opening; "Riverboat gaming: A status report," which will give a complete update on the fastevolving riverboat gaming industry and cover pending legislation; and "Getting your casino shipshape," which covers how to use creative design elements, including color, to create a customer-pleasing casino within riverboat restrictions.

For more information on attending or exhibiting at the event, call Al Liebensohn at (800) 223-9638.

Partial Exhibitor List

Atlantic Marine, Inc. **Bally Gaming Inc.** Bender Shipbuilding & Repair The Bud Jones Company Cellnet Corp. Directions in Design, Inc. **Gasser Chair Company International Game Technology Maritime Reporter** Rodney E. Lay & Associates Service Marine Industries **Trinity Marine Group** Universal Distributing Co.

through the beginning of 1994, the largest being the 367-foot Caterpil-lar-powered President Riverboat Casino La.

Houma Fabricators, a division of L.O.R., is currently building three Cummins-powered, paddlewheel-design casino boats. According to Mike Westbrook, marketing manager, the in-house designed boats which are being built for Kehl Riverboat Inc. of Iowa, and in general all riverboat construction, provides "a good shot in the arm for the southeast Louisiana shipbuilding community. It's been a big filler for the yard and we are ecstatic about Bender Shipyard Inc. of Braithwaite, La. has also emerged with some casino riverboat business. The yard's latest conquest is the 260-foot Treasure Chest, a multi-million dollar vessel for operation on the Mississippi River. The yard currently has four riverboat gaming vessels under construction, including the Star Casino, which was recently launched and is due for an early September delivery. The Star Casino will be the first Louisiana riverboat to go into operation, and in all Bender has won four of 15 boats to get a Louisiana gaming license.

Atlantic Marine of Jacksonville, Fla. has similarly enjoyed successes from the casino vessel market, most recently delivering the Rodney E. Lay & Assoc.-designed Alton Belle Casino II to Alton Riverboat Gambling Partnership in Alton Ill. (as reported in the July issue of MR/ EN). In addition to the Alton Belle II, Atlantic has built four other casino vessels, including three paddle wheel vessels and an ultra-modern catamaran-style boat. Still to come is the Empress II, a 238-foot Caterpillar-powered vessel due for deliv-

ery in November.
"I see this market going strong for a minimum of two years, a maximum of five years," said Edward Doherty, president of Atlantic Marine in Jacksonville.

But as the shipyards become more competitive and accomplished in building these vessel, the demands and expectations of the owners rise similarly. According to Mr. Lacaff of Harrah's, the measuring stick for selecting a yard is on-time, on-budget performance.

Mr. Westbrook from Houma Fabricators concurs, saying, "(Meeting) delivery is very important when you are talking about the kind of revenue these vessels create.

Harrah's Shreveport Casino manager Anthony Sanfilippo said during his recent visit to Service Marine that he was impressed with the progress being made on the construction of Harrah's latest casino boat. "Today they are looking for deliveries as quick as they can get them," said Mr. Hensley. "We have a fasttrack construction program which allows us to do engineering while we build."

For more information on the companies mentioned in this story, circle the number of the Reader Service Card bound in this issue.

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Houma Fabricators	113
Leevac Shipyards	112
Service Marine	111

McElroy Machine Enters Paddlewheel Drive Market

McElroy Machine and Mfg. Co., Inc. announced its recent entrance into the paddlewheel drive market. McElroy is currently designing and supplying ABS- and USCG-ap-proved paddlewheel drives for up to 2,000-hp applications. Power options include diesel/hydraulic, electro/hydraulic and DC electric systems.

McElroy recently delivered a paddlewheel drive system to Bender Shipbuilding's Braithwaithe, La. yard to be installed on the Star Casino riverboat. The system consists of two gear reducers, each driven by two 200-hp radial piston motors. For more information on McElroy Machine paddlewheel

Circle 106 on Reader Service Card

Service Marine Expands Team, Naming Downey And **Herman Vice Presidents**

Recent appointments to management at Service Marine reflects the growth in sales which the shipyard has experienced in the past year.

Ed Downey was appointed vice president of operations, and of the appointment Terry Frickey, president of Service Marine, said "the demands of our business and the need to service our ever widening customer base required that we put experienced people like Ed Downey in charge of specific organizational functions.'

Mr. Downey has a B/S in Naval Architecture and Marine Engineering, and an MS in Structural Engineering, and a Masters degree in Business Administration.

He spent 14 years at Avondale Shipyards. Day to day production management is now under the direction of **Sibley Perry**. He brings 29 years of experience

in shipyard new construction and repair, including the position as production manager with Eastern Shipyard for the past 17 years.

Also, Wayne Herman has joined Service Marine as vice president of administration.

He has 15 years of experience in the Marine Industry at Marathon LeTourneau Company, where he worked as Controller, vice president-CFO of the Brownsville, Texas yard, and later as vice president/general manager of the Vicksburg, Miss. yard.

Additionally, a separate engineering department has been established with Pamela Hidinger as the manager. She has experience as a naval architect designing chemical tankships, yachts, offshore supply boats and passenger boats.

In summing up the changes, Mr. Frickey said, "We foresee an increase in business opportunities from markets in riverboats, offshore oilfield boats, fast ferry boats, dinner boats and an awakening interest from foreign customers for our products. This management team is in place to handle the challenge of not only the present, but also the future.

For more information on Service

Marine,

Circle 120 on Reader Service Card

River Flooding Puts Casino Boats Out Of Action

President Riverboat Casino reported that the severe flooding of the upper Mississippi River put two gaming riverboats out of commission, the hardest hit being the company's "President Riverboat Casino." The Davenport, Iowa casino was closed for more than a week, including the Fourth of July holiday weekend. The closure could prove costly, as it was reported that the riverboat vessel produced \$10 million out of the \$37.6 million total revenue seen in President's third quarter, which ended in November 1992. It was also reported that the Casino Queen was affected as well, and the Alton Belle II, owned by Argosy Gaming Inc., remained open but wasn't cruising.

Avondale Signs Contract, Letter Of Intent For Vessels

Avondale Industries, Inc. of New Orleans recently signed an \$11.7 million contract for the construction of a 266-foot 19th century style paddlewheel gaming vessel for Jazz Enterprises, Inc., of Ba-

ton Rouge, La.

The vessel, to be called the "Catfish Queen," is scheduled for completion in the second quarter of 1994 and will operate in Baton Rouge. The vessel will be constructed at Avondale's Boat Division located in Westwego, La.

Also, Skylink America Inc. has signed a letter of intent with Avondale to design and plan the construction of a 280-foot riverboat gaming vessel to be operated on the Mississippi River. The agree-

ment provides for the companies to negotiate in good faith to execute a vessel construction contract in the immediate future. Skylink said the contract allows Avondale to begin engineering and planning of the 19th century style paddlewheel gaming vessel, while Skylink negotiates the terms of a definitive vessel construction contract.

Avondale is one of the nation's leading marine fabricators. In addition to its shipbuilding opera-tions, the company specializes in boat construction and is a major repair contractor for commercial and Navy ships. For more information on Avondale Boat Division,

Circle 105 on Reader Service Card

Chicago Looks Into Building Entertainment Complex, Five Gaming Boats

Chicago legislators are reportedly looking into raising the \$1 billion needed to establish a riverboat casino complex, which, as currently outlined, includes plans for five riverboats along 150 acres of the Chicago River.

The legislation, in its infancy at press time, would increase the state's gaming tax from 20 to 25 percent for the Chicago riverboats. The city would also impose an eight percent franchise fee to the developers of the project.

Casino America Debuts 45,000-sq.-ft. Dockside Facility In Biloxi

Casino America recently unveiled its new floating pavilion, a facility which reportedly enhances the tropical theme and substantially increases the size of the company's Isle of Capri Casino in Biloxi, Miss.

The two-story pavilion contains 45,000-sq.-ft. of gaming space, a space which features 1,200 slot machines, 50 gaming tables and 14 poker tables.

It is located next to the casino's existing riverboat, the Emerald Lady, which has 15,000-sq.-ft. of gaming space, including 500 slot machines.

The Biloxi facility previously was comprised of two riverboats joined by a floating pavilion.

The company is relocating one of the riverboats and the old pavilion to the new Isle of Capri Casino in Vicksburg, Miss.

Riverboat Gaming Receipts Rise In Illinois

Riverboat casino May wins totaled more than \$13.8 million, up from \$13.6 million in April, according to figures supplied to the Illinois Gaming Board.

Riverboat casino admissions totaled 848,513 in June, compared with 684,377 in May.

For the fiscal year-to-date, beginning July 1, the gaming board said adjusted gross receipts and admissions were as follows for the following vessels:

Boat Adjusted Gross Receipts Admissions

<u>Vessel</u>	Receipts	Admissions
Alton Belle	\$54,447,849	862,676
E. Peoria Par-A-Dice	\$56,419,767	1,099,459
Casino Rock Island	\$35,836,457	846,425
Joliet Empress	\$162,370,099	1,973,048
Jo Daviess Silver Eagle	\$31,293,932	860,427
Metropolis Players	\$20,396,181	426,816

MTU Improves 396 Series Engine Line

MTU Friedrichshafen has reportedly perfected both the injection and supercharging methods on its "396" engines, effectively reducing consumption figures for the TE marine version. Touting it as a future-oriented concept, injection refinement has also led to optimized combus-

tion with the added benefit of fuel efficiency and reduced exhaust emission, reports the manufacturer. Thermal engine loading has diminished so that the power reduction under conditions of 45-degrees Celsius air/32 degree Celsius seawater will be as little as three percent, as compared to the previous 11 percent. For more information on the 396 series from MTU,

Circle 53 on Reader Service Card



The MTU 396 Series engine was recently improved



Flurry Of State Legislation Keeps Yards, **Owner/Operators Hopeful**

A Report From The Transportation Institute

Headed by Indiana's recently passed amendment to allow riverboat gaming, the flood of legislative news and activities coming from the five states which have al-ready legalized riverboat gaming, as well as those considering it, requires a sizable scorecard to keep

But keeping up is exactly what owner/operators and vessel builders must do in order to get the respective licenses and contracts in this burgeoning market sector. Time is indeed money, and information is the key.

With the large number of bills, measures and issues which have been introduced, addressed, voted on, passed and defeated by the various governmental agencies involved, the Transportation Institute of Camp Springs, Md. has introduced and continuously updates the "Guide to Riverboat & Shipboard Gaming Legislation."

The guide was devised as a con-

solidated source for this legislation by determining and updating the status of relevant state and federal

The following is a state-by-state

synopsis of the latest legislation news from The Transportation Institute's latest guide.

Beware, however, that the legislative climate has been changing so quickly that some material may be changed at the time of publication. Also, this is merely a highlight of the information contained in the report. For full details on the Transportation Institute and its Guide, contact: The Transportation Institute, 5201 Auth Way, Camp Springs, Md. 20746; tel: (301) 423-3335.

(Note: H.B. = House Bill; S.B. = Senate Bill)

ALASKA

In 1993, H.B. 240 was the first gaming bill to be introduced since 1990. If passed, it would allow gam-

ing aboard ferries.

The bill is currently in the House State Affairs Committee. This first half of Alaska's two-year session ended in mid-May 1993 and will reconvene for the second half of January 1994.

The regulating body is the Department of Revenue, and as of yet, locality restrictions, as well as tax and fee structures, have yet to be specified.

ALABAMA

In 1993 H.B. 533, authored by Rep. John Rogers (D-52), proposed to amend Section 65 of the state constitution to allow riverboat gam-

ing in Alabama.
Introduced in February and assigned to the House Ways and Means Committee, the bill died when the 1993 legislative session ended in

No action was taken on the bill by the committee.

CONNECTICUT

Senate Bill 602, introduced at the beginning of the year, would have allowed casino gaming on vessels, specifically ferry boats, on the Connecticut and Thames Rivers, and on other bodies of water designated by the division of special revenue.

The measure died in March. Also, the state, at last notice, had alive a bill which would permit operation of two land-based casinos.

The governor, who opposes the expansion of gaming in Connecticut, has vowed to veto the bill if it passes.

GEORGIA

In 1993 H.B. 898 was introduced to amend Article 2 of Chapter 12 of Title 16 of the Official Code of Georgia Annotated, which would "reinforce long-standing statutory prohibitions against gambling on ships that operate in Georgia waters or from Georgia ports." It is currently in the House Industry Committee and will be carried over into the January 1994 session.

ILLINOIS

There are presently seven river-

boats operating in Illinois, and four other riverboats are scheduled to open in 1993.

In May the Illinois Gaming Board voted to reject an applicant's proposal for a riverboat casino in Sauget, lll. Also, an 18-member task force, chaired by State Rep. Louis Lang (D-1) is currently examining the question of casino gaming in Illi-

Except for Rep. Lang, the Speaker's Task Force on Gaming is composed entirely of business and community leaders.

The task force is holding public meetings on various related topics, including job creation and law en-

Three developers (Circus Circus Enterprises, Inc., Caesars World Inc. and Hilton Hotels Corp.) have proposed a \$2 billion casino/entertainment complex for Chicago, and lo-cally Mayor **Richard Daley** favors the idea, while Illinois Governor **Jim** Edgar is strongly opposed to Chicago land-based casinos and has vowed to veto any such casino bill that passes the legislature. Riverboat gaming is prohibited in Lake Michigan, or Cook County (Chicago), a maximum of 10 licenses may be issued and the industry is regulated by the Illinois Gaming Board, within the Department of Revenue.

INDIANA

The state of Indiana enacted legislation to permit gaming on Lake Michigan, the Ohio River and Patoka

The riverboat gaming provision was included in the budget bill, which Governor Evan Bayh vetoed for reasons unrelated to the gaming

The veto was quickly overridden. The new law authorizes five riverboats on Lake Michigan (specified sites), five boats along the Ohio River (non-specified sites) and one for Patoka Lake in Southern Indiana. City or county governments have to authorize referendums and gain public approval before licenses would be considered. Gary, Ind., an approved Lake Michigan site, has already gained public approval.

The law also establishes a sevenmember Indiana Gaming Commission to license and regulate the in-

dustry.

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RIVERBOAT GAMING LEGISLATION UPDATE

IOWA

Legalized, licensed gaming was enacted into Iowa law in 1989, and the state currently has three excursion gaming boats licensed and operating, with a fourth pending. There is no limit to the number of licenses issued, however, each request for a license must be approved first by local referendum, and then by the Iowa Racing and Gaming Commission.

In 1993 three bills were introduced but none were passed. H.F. 13 would have increased the allowable space for gaming activities on an excursion gaming boat.

H.F. 143 would have raised the age restrictions for gaming from eighteen to twenty-one.

S.F. 358 was an attempt to change some of the regulations and increase gaming activities on riverboats and at racetracks.

Vessel specifications for Iowa call for a self-propelled excursion boat, with a maximum of 30 percent of the vessel's square footage for gaming, and a minimum passenger capacity of 500

LOUISIANA

Review of Louisiana activity will be kept brief, not because of lack of activity, but conversely there has been so much action that much is already updated or outdated. S.B. 845, sponsored by Senator **Francis Heitmeier** (D-7), was introduced in April and assigned to the Senate Judiciary B Committee.

Present law requires that gaming vessels be of new construction. While retaining the new-construction requirement, S.B. 845 would allow an operator who has been granted a gaming license, and who has entered into a binding contract for construction of a new vessel, to conduct gaming operations on a leased vessel for up to one year from the date the license was granted.

S.B. 1054, sponsored by Senator **Donald Kelly** (D-31), would increase from 15 to 20 the maximum number of riverboat gaming licenses that may be issued.

It has been placed on the Senate calendar for consideration by the full Senate.

S.B. 761, sponsored by Senator Ron Landry (D-19), would allow local governments to hold elections to approve or prohibit riverboat gaming. H.B. 1613, sponsored by Rep. Arthur Morrell (D-97), would increase the passenger boarding fee for patrons of riverboat casinos from \$2.50 to \$4.

The regulating body for the industry in Louisiana is the sevenmember Riverboat Gaming Commission and the Riverboat Gaming Enforcement Division (within the Department of Public Safety and Corrections).

MARYLAND

In 1993 House Bill 1197, which

was sponsored by Del. **Sheila Hixson** (D-20), planned to allow vessel/riverboat gaming on Maryland waters.

The bill, which was introduced in February, died shortly thereafter in March, in the House Judiciary Committee

However, House Bill 618, a bill which will allow casino gaming activity on cruise ships of any flag operating in state waters east of the Francis Scott Key bridge in the Chesapeake Bay, is on the verge of becoming reality pending the governor's approval.

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RIVERBOAT GAMING LEGISLATION UPDATE

MISSISSIPPI

Six dockside gaming vessels are currently operating in Mississippi. Recently opened was the Grand Casino Gulfport. S.B. 2699, sponsored by Senator Grey Ferris (D-24) would have changed the state's vessel gaming law to allow dockside gaming on navigable waterways anywhere in Hancock and Harrison Counties on Mississippi's Gulf Coast.

The bill would have permitted dockside gaming on all navigable water of Jackson County as well, if voters there were to approve dockside gaming.

The bill died in April. In Mississippi, the State Tax Commission regulates gaming through September 30, 1993.

The State Gaming Commission, currently established and operating under the Tax Commission, will have full independent authority commencing October 1, 1993.

Specifications currently state: vessels (riverboats or floating casinos) must be a minimum of 150 feet long, and cruise vessels (vessels on the Gulf of Mexico) must meet all USCG regulations, must be a minimum of 150 feet long and have a sixfoot draft, with a 200-passenger capacity.

Legend: Vessel gaming legal in Vessel gaming legislation in 92-93 Shipboard gaming on casino ships operating regularly from state Shipboard gaming on cruise ships making port calls in state Note: Many states fall under multiple categories; only the highest category that a state falls under is indicated. See individual states for details. Please note that charitable gaming and "card room" 1990 Transportation Institute. (301) 423-3335; May 1, 1993 update activies are excluded.

RIVERBOAT AND SHIPBOARD GAMING

MISSOURI

In 1993 the debated H.B. 149 (which was passed in November 1992) was revised and passed in late April under S.B. numbers 10 &

The new law establishes the Missouri Gaming Commission, refines the riverboat gaming legislation and after June 30, 1994, allows the lawful operation of the game bingo. To date, six local communities have voted in favor of riverboat gaming on the Mississippi River.

The commission is reportedly empowered to select applicants based on their potential to open and generate tax revenue, thus giving existing boats a better chance of being selected.

In St. Louis, one company has six docking spaces, three of which may be used for gaming if licenses are approved and issued by the state.

The company owns two boats, The Belle of St. Louis and The Admiral. The commission has much to do before any licenses are issued, but the law only provides 30 days to create the rules and regulations,

The commission shall decide the number, location and type of excursion gaming boats licensed in a city or a county.

OHIO

H.B. 93 was introduced in the Ohio House of Representatives by Rep Joseph Koziuru (D-61).

The bill would allow gaming on 10 riverboats operating from munici-palities on the Ohio River, on four vessels permanently moored at docks on a navigable river within a municipality located on Lake Erie, and on six cruise vessels operating from municipalities located on Lake Erie. Final action on the bill is yet to be divulged.

The industry would be ruled by a six-member Casino Control Commis-

Vessel specifications for riverboats are a self-propelled, USCG-approved vessel capable of carrying 250 passengers. Cruise ships must be selfpropelled, meet all USCG requirements and carry at least 750 passen-

Casino space may consist of no more than four rooms together total and no more than 75 percent of the vessel's usable space.

PENNSYLVANIA

In May, Philadelphia mayor Edward Rendell, who has previously attempted to legalize riverboat gaming along the Delaware River in Philadelphia, announced the creation of a 16-member commission to study the issue of gaming in Philadelphia and make recommendations. An expansion of gaming in the state would require state legislative approval, but is firmly opposed by Governor Robert Casey. Vessel specifications call for no more than 30 percent of the vessel's square footage to be used for gaming; vessels must be self-propelled and have a minimum capacity of 200 persons. Also, vessels must be constructed with the approval and oversight of the Commission, using Pennsylvania resources, goods and services to the extent allowable by law.

profit corporation, was chartered in April 1992 by the Secretary of State for the purpose of lobbying for legislation to permit riverboat gaming in Texas. In 1993, both the Senate and the House introduced companion bills (S.B. 597 & H.B. 445) for riverboat gaming legislation. Both are currently in committee, and hearings have yet to be scheduled. The Texas Riverboat Gaming Commission would be formed to regulate the industry, and would be composed of seven members. All vessels must have a certificate of inspection by the USCG, have a passenger capacity of at least 600, be at least 150 feet long, and of a design that replicates as nearly as practical, steamboats of the 19th century or otherwise of a design suitable for riverboat gaming activities on specific waterways.

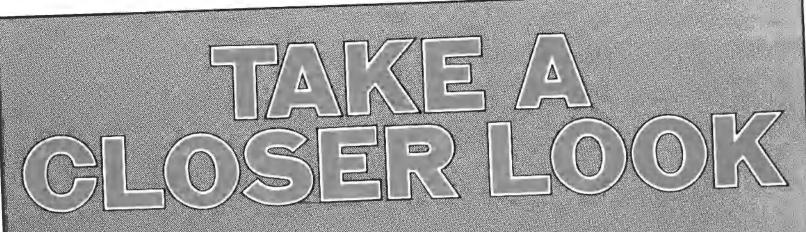
VIRGINIA

TEXAS

There is considerable interest in establishing a riverboat gaming industry within the state. The Texas Riverboat Association (TRA), a non-

In 1993, House Bill 2365, sponsored by Delegate Jerrauld Jones (D-89), would have permitted riverboat gaming in Virginia. The bill, which was introduced and assigned to the House General Laws Committee, was defeated in February.

The preceding report is excerpted from The Transportation Institute's "Guide To Riverboat & Shipboard Gaming Legislation." For the latest updates on legislation which will affect riverboat gaming, contact the Transportation Institute at (301) 423-3335.



AT THE
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Caterpillar Engines Chosen To Power New Generation Of Buoy Tenders

Caterpillar's Defense and Federal Products is supplying Marinette Marine Corporation propulsion engines and generator sets on the lead ship of a new planned fleet of approximately 18 U.S. Coast Guard Seagoing Buoy Tenders. Called "WLBs" by the Coast Guard, these vessels maintain the nation's buoys and other navigational aids used by all ships entering our ports.

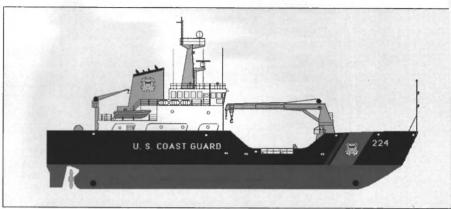
By 1994, many of the existing seagoing buoy tenders will be more than 50 years old. Caterpillar has been involved since 1989 in the U.S.C.G.'s program to replace the existing 27 WLBs.

The newly designated Juniper class of Seagoing Buoy Tenders represents the U.S. Coast Guard's efforts to incorporate the technological progress of the last 50 years. The new 225-foot WLBs will be longer and faster than the 180-foot World War II vintage buoy tenders in service today. They will also require a

smaller crew due to lower maintenance requirements. Their new global positioning electronics package, along with bow and stern thrusters, will allow faster and more accurate placement of buoys.

The new WLBs' modern design will enable these tenders to perform their job in rough weather. In addition to a new capability to respond to oil spills, the new WLBs will still be able to break ice, respond to search and rescue missions, and participate in law enforcement and national defense missions. The first ship of this new fleet will be operational by the fourth quarter of 1994.

Entirely Cat Diesel powered, the vessel will use five Caterpillar engines. Propulsion power is provided by two model 3608 marine diesels, each rated at 3,100 bhp. Two model 3508 marine generator sets, each rated at 450 ekW, provide auxiliary power, and emergency power is supplied by a model 3406 marine diesel



USCG Juniper class Seagoing Buoy Tender (WLB), powered by Caterpillar engines.

generator set rated at 250 ekW. represents This program Caterpillar's first opportunity to put 3600 family engines (the largest Caterpillar diesel engines) into U.S. Coast Guard service.

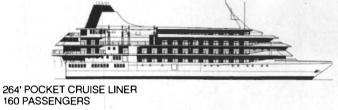
This award continues the recent trend of Caterpillar successes with the U.S. Coast Guard, including repower of 39 Point class patrol boats with 2 x 3412 engines each, replacement of competitive engines with 2 x 3516 each in 12 Island class patrol boats, and provision of 3412 repower kits for six WYTL tugs.

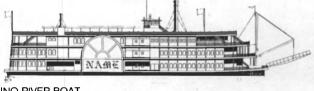
The 3608 is the same engine used for the five ship's service diesel generator sets on the AOE-6 class of Fast Combat Support Ships in the U.S. Navy. Three of the six-cylinder versions (3606) power the U.S. Army Corps of Engineers tug, M/V Mississippi, the largest tug on the inland waterways. More than 50 x 3600 series engines have now been placed in service in different agencies of the S. Government around the world.

For more information on Caterpillar engines,

Circle 58 on Reader Service Card







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336' CASINO STERNWHEELER 3000 PASSENGERS

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Guido Perla & Associates offers a wide variety of services including:

> Computer Aided Design Production Engineering Computer Lofting **Technical Consulting** Regulatory Agency Liaison Preventive Maintenance **Programs**

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the riverboat casino boom, Bender Shipbuilding has delivered boat after boat — on time and on budget. With five riverboat projects completed and ten under construction, Bender is the nation's top builder of casino riverboats and dockside casino barges.

When Illinois river waters opened to gaming, Bender's swift 90-day conversion raced the *Alton Belle Casino* to this market far ahead of its competition.

Since this record-breaking beginning, Bender has set the industry standard for rapid delivery in a business where time means everything.

Bender's conversion of the sleek casino riverboat *Silver Eagle*, operating in Galena, Illinois, was completed in less than 45 days. *Splash*, a 400-foot casino/restaurant barge operating south of Memphis in Tunica, Mississippi, was converted by Bender in less than 120 days. Bender recently

completed the first riverboat casino projects in Vicksburg and Greenville, Mississippi. Before the end of 1993, Bender

will complete the first two riverboat casinos in the state of Louisiana.

Bender has casinos under construction for Louisiana, Illinois, Mississippi, Missouri and Iowa, and is developing markets in Indiana.

With this impressive track record, Bender offers you turn-key entry into the river casino business. Our experienced staff is fully knowledgeable in gaming regulations in all states and can serve as

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TSA Helps Provide Total **Monitoring Solutions**

Tracking Systems of America, Inc. (TSA) is currently working with the Maritime Administration tracking contracted levels of performance on a number of ships on the east coast. TSA was born out of a need to provide concise, timely and accurate information to facilitate quicker, more effective decision

making. At the TSA facility, data from the port engineer and the contractor is input and run through a custom designed comparative analysis software program. The program evaluates the contracted plan, as prescribed by the Gantt and Pert charts, and compares them to the current progress information as reported.

For additional information on the services of TSA.

Circle 63 on Reader Service Card

Marine Accommodations Completes Several Jobs

Marine Accommodations, as the national agent/distributor for the quality marine "BIP" pre-insulated joiner bulkhead and ceiling panes, doors, bathroom floors, furnishings and accessories, has recently designed, supplied and installed interiors on luxury passenger vessels, including Premier Cruise Lines' S.S.

Oceanic, P&O Lines' Pacific Prin cess and Cunard's Sagafjord, to name a few. The company has also re cently finished work on a casing riverboat and some smaller passen ger vessels. For more information on Marine Accommodations, Inc.,

Circle 119 on Reader Service Card

Marine Interface Installs **Engine Monitoring System** On Mystique



The Mystique was recently outfitted with an engine monitoring system and charting system from

Marine Interface Corp. of Floral Park, N.Y. offers conventional IBM-compatible interface systems and software for marine system monitoring. The company specializes in the production of interface equipment and software for a variety of commercial marine applications. All system development, programming and construction are done in-house, and the firm is presently marketing customized tank level indication systems as well as propulsion plant monitoring and alarm equipment.
All of these systems make use of conventional IBM compatible computers for their processing power, color graphic displays and communications ability. By having a wheelhouse mounted personal computer and engine interface unit the vessel's operator can, for example, be provided with a color graphic display of all engine parameters while the vessel is underway. Electronic charting software can be run simultaneously with the engine monitoring system to provide a single split screen display of vessel position and engine parameters. A Marine In-terface engine monitoring and charting system has been installed on the 130-foot dinner boat Mystique located at Pier 9 in New York.

For more information.

Circle 38 on Reader Service Card

IDB Mail Aims To Give Global Link Cost Effectively

IDB Mobile Communications, Inc. introduced a new service called IDB Mail for its mobile satellite communications customers. Utilizing higher speed data communications technology, IDB Mail reportedly cuts the cost of telex and fax communications via the Inmarsat mobile satellite network.

Subscribers gain access to global messaging from personal computers or local area networks using IDB Mail software.

Maritime Reporter/Engineering News

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"Combining better prices with cellent service quality continues be our strategy," said Marceman, vice president of busiss development for IDB Mobile. or example, the cost of sending a pical 10-page message through the B Mobile Inmarsat service via lex is about \$262, via fax about 7; but via IDB Mail, less than 2." For more information,

Circle 40 on Reader Service Card

purs Line & Net Cutter To mit Pollution, Damage

Used by more than 40,000 compercial, Navy and pleasure boats, ne Spurs Line & Net Cutter is now vailable for the world's largest ceangoing vessels, announced purs Marine Mfg., Inc.'s president **Donald Govan**.

Oil tankers, cruise ships, conainer ships and all large vessels nay now protect their shaft seals and running gear and avoid costly lown time with the use of Spurs' propeller anti-fouling device. The ABS-approved Spurs hardened stainless steel cutters work in both orward and reverse to sever lines before fouling and damage can occur. As lines are grabbed by the propeller blades, they are wound to the propeller hub where the propmounted rotating cutter blades bring line to the waiting stationary cutter blades. For more information,

Circle 41 on Reader Service Card

Waterproof SSB Receives DOC Approval

SGC, Inc. announced type certification of the model SG-715 waterproof portable HF single sideband (SSB) transceiver. The Canadian DOC-type certification is of interest to many classes of HF radio users including general aviation and helicopter operators, the timber industry, petrochemical firms, expedition outfitters and operators, fishing companies and geophysical surveyors. The radio is available with a wide

The radio is available with a wide assortment of options including waterproof handsets and a large number of portable and tactical antennas. For more information,

Circle 52 on Reader Service Card

Color Radar Packed With Advanced Features

Advanced operating features make SIMRAD/Anritsu's 15-inch color radar accurate and easy-to-use, with target detection up to 120 nautical miles.

The 713 Series radars feature SIMRAD/Anritsu's exclusive Advanced Visual Sensitivity (AVS). This newly-developed technology enables processor circuits to take in

target echoes and discriminate them from ambient noise. Another exclusive feature, Auto STC, reduces complex and constant target adjustments by automatically suppressing clutter. For vessel safety, Echo Track shows direction of travel and relative speed of approaching ships by tracking wake patterns.

For more information,

Circle 49 on Reader Service Card

Alden Introduces NAVTEX AE-900 Receiver

Alden Electronics, Inc. announced the introduction of its new NAVTEX AE-900 Receiver, which automatically receives all meteorological warnings, navigational notices and search and rescue messages required as part of the worldwide Global Maritime Distress and Safety System (GMDSS). The AE-

900 stores up to 30 such messages over a 68 hour period, and the messages may be received as far away as 400 miles offshore.

The unit uses a high-speed, silent thermal recording printhead to produce easy-to-read radio telex messages. An audible and visual alarm is built in to alert users to incoming search and rescue messages.

For more information,

Circle 42 on Reader Service Card



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Circle 275 on Reader Service Card



Hydro-Québec

PUBLIC NOTICE FOR SALE BSA-93-EQ-06

A SECOND-HAND NON-PROPELLED BARGE

Hydro-Quebec offers for sale through a request for proposals a barge named "McAllister 252", which measures 72 meters long (252') by

23 meters large (76'). The barge is berthed at wharf No. 56N in Montreal harbor and can be visited at all times with a 24 hours notice addressed to:

Andre Tetreault (514) 840-4550 or Fax number (514) 840-4944.

The tender documents together with the technical specifications can be obtained free of charge by dialing: (514) 840-5020 or by Fax at (514) 840-4944, or by presenting oneself at the following address:

6th Floor Atriums' Reception Desk 870 De Maisonneuve Blvd. East Montreal (Quebec) Canada H2L 4Y7

The latest date for which the proposals will be accepted is September 1st, 1993, 14h00, local time.

A bid guarantee of fifty thousand Canadian dollars (50 000 \$) or (40 000 \$ US) must be included with the bid.

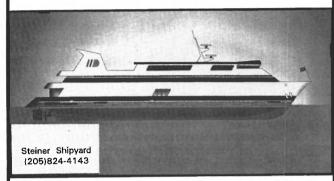
All requests for information should be addressed to:

Andre Tetreault, Tel. : (514) 840-4550 Fax: (514) 840-4944

Le chef de service (par interim) Achats et Contrats Robert Chabot

Circle 280 on Reader Service Card

The Newest GamingVessel Design From Gilbert



Pictured above: Latest Gaming Vessel delivery from Steiner Shipyards ... Designed by John W. Gilbert & Associates

For over 25 years ... John W. Gilbert & Associates have been known for excellence and innovation in design of all types of Riverboats and Coastal Vessels.

John W. Gilbert & Associates also designed the "Emerald Lady" ... the twin sister of the "Diamond Lady" (renamed the "Isle of Capri") operating in Mississippi.

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Circle 284 on Reader Service Card

GAMING VESSEL DESIGN

Gaming Vessel Design: How To Choose The Appropriate Boat Based On Needs & The Law

Now that gaming vessels have become an integral part of the U.S. boatbuilding market, and as the rivers become more clogged with competing vessels, more attention could be paid to interior and exterior design, as owners compete for finite wagering customers. Oftentimes, however, design is dictated by the particular statutes of each state.

The following is a limited run-

down on some of the naval architects which have been very active in this market. Those listed are by no means the only capable of gaming vessel design, but simply a listing of firms which have been involved with the design and construction of several current vessels.

• Rodney E. Lay & Associates: Based in Jacksonville, Fla., and in business since 1959, Rodney E. Lay & Associates has designed four vessels currently in operation, five vessels currently under construction, and "quite a few are on the boards and out for bid." For more information on Rodney E. Lay & Associates,

Circle 130 on Reader Service Card

• **DeJong & Lebet:** Recently this design firm celebrated its 10th Anniversary, and to date the Jacksonville, Fla.-based firm has specialized in designing tug-barge combination, U.S.C.G.-certified passenger vessels. The firm has designed several operating casino vessels and have several more "on the board."

For more information on DeJong

Circle 131 on Reader Service Card

• John Gilbert & Associate Based in Boston, John Gilbert Associates designs passenger excu sion, overnight and ferry vessel The firm has designed or assisted o three currently operating casing and also has approximately 12 to 1 different designs.

For more information on Joh Gilbert & Associates,

Circle 132 on Reader Service Card

• Guido Perla & Associates Inc.: In business for 15 years, Guid Perla & Associates, Inc. has designed four gaming vessels which are currently under construction at Bende Shipbuilding, and reportedly has six other designs under development Formore information on Guido Perla & Associates, Inc.,

Circle 133 on Reader Service Card

CALENDAR

ENS'93 Conference Set For August 24-27 In Stavanger

Environment Northern Seas, a biennial environmental conference and exhibition held in Stavanger, Norway, will cover environmental protections issues, problems and opportunities.

The ENS'93 Conference program covers a broad range of topics, with seminars on offshore industry and shipping, and how they deal with environmental management, liability and insurance; as well as port development and coastal sea transport, and how new technology can reduce pollution problems.

Other seminars will cover fisheries and recycling, and hydro-electric power supply. The seminar features a wide array of well-known speakers.

For more information on attending ENS'93, contact: ENS Secretariat at tel: +47 4 55 81 00 or fax: +47 4 55 10 15.

JULY

Maritime Communications and Control: July 7-8, London Contact: Rhian Bufton, conference organizer, The Institute of Marine Engineers, The Memorial Building, 76 Mark Lane, London EC3R 7JN; tel: +071 481 8493; fax: +071 488 1854.

AUGUST

Smart Shipping '93: August 15-18, Dana Point, Calif. Ritz-Carlton Laguna Niguel. Contact: American Institute for Shippers' Associations (AISA), P.O. Box 33457, Washington, D.C. 20033; tel (202) 628-0933; fax: (202) 296-7374. Offshore Northern Seas Conference & Exhibition: August 23-26, Stavanger, Norway

Contact: Offshore Northern Seas '94, P.O. Box 410, N-4001 Stavanger, Norway; Tel: +47 4 55 81 00; Fax: +47 4 55 10 15.

SEPTEMBER

SNAME Centennial Annual Meeting and International Maritime Exposition: September 14-19, New York

New York New York Hilton Hotel. Contact: The Society of Naval Architects and Marine Engineers, 601 Pavonia Ave., Jersey City, N.J. 07306. tel: (201) 798-4800; fax: (201) 798-4975.

AWO Fall Convention: September 7-9, Washington, D.C. Contact: AWO, 1600 Wilson Blvd., Arlington, Va. 22209; tel: (703) 841-9300; fax: (703) 841-0389.

Clean Gulf '93: September 14-16, Kenner, La. Pontchartrain Center. Contact: Corey Smith, PennWell, (713) 621-8833.

Offshore Europe '93: September 7-10, Scotland
Aberdeen Exhibition & Conference

Center: Contact: Offshore Europe Partnership, Rowe House, 55/59 Fife Road, Kingston upon Thames, Surrey KT1 1TA; tel: +44 81 549 5831; fax: +44 81 541 5657/974 8077.

NEVA '93—The International Shipping Exhibition: September 14-18, St. Petersburg, Russia Contact: Roderick Keay, Dolphin Exhibitions Ltd., 112 High St., Bildeston, Suffolk 1P7 7EB England; tel: +44 9 741087; fax: +44 9 741628.

Icelandic Fisheries Exhibition
1993: September 15-19,
Laugardalsholl, Reykjavik, Iceland
Contact: Patricia Foster, exhibition director, Icelandic Fisheries

The Cava
Virginia C
South Fit
23219; tel
477-7682.

Exhibition, Reed Exhibition Companies (U.K.), Oriel House, 26 The Quadrant, Richmond-on-Thames, Surrey, U.K. TW9 1DL; tel: +44 81 948 9800; fax: +44 81 948 9870.

Gateways To Emerging Markets: A Russian Far East and Pacific N.W. Trade Conference: September 20-22, Vladivostok, Russia. Contact: In the U.S., Sue Simon; tel: (206) 461-2268, fax: (206) 554-7211; In Russia, Pavel Gorshenin, Port of Vladivostok; tel: 4323 219388.

National Waterways Conference: September 15-17, Memphis, Tenn.

Contact: National Waterways Conference, Inc., 1130 17th St., N.W., Washington, D.C. 20036-4676; tel: (202) 296-4415; fax: (202) 835-3861.

MTS '93: "Technology Requirements in the Nineties": September 22-24, Long Beach Convention Center, Long Beach, Calif. Contact: MTS '93 c/o J. Spargo & Associates, Inc., 4400 Fair Lakes Courf, Fairac, Va. 22033; tel: (703)

631-6200; fax: (703) 818-9177.

Tanker Industry Convention: September 27-29, London, U.K. Royal Lancaster Hotel. Contact: Vanessa Stephens, The Seatrade Organization, Seatrade House, 42-48 North Station Road, Colchester CO1 1RB, U.K.; tel: +44 206 45121; fax: +44 206 45190.

82nd Annual AAPA Convention: Sept. 27-Oct. 1, Halifax, Nova Scotia The Prince George Hotel and Chateau Halifax. Contact: American Association of Port Authorities at (703) 684-5700.

World Trade: September 29-Oct. 1, Virginia Beach, Va. The Cavalier Hotel. Contact: The Virginia Chamber of Commerce, 9 South Fifth St., Richmond, Va. 23219; tel: (804) 644-1607 or (800) 477-7682.

45th Virginia Conference on

OCTOBER

International Offshore Contracting & Subsea Engineering: October 13-16, Aberdeen, U.K. Aberdeen Exhibition & Conference Center. Contact: Spearhead Exhibitions, Ltd., Judith Patten, Neville House, 55 Eden St., Kingston upon Thames, Surrey KT1 1BW; tel: +44 81 547 1566; fax: +44 81 547 1143.

ASNE Fleet Maintenance Symposium: October 19-21, San Diego, Calif.

Contact: ASNE, 1452 Duke St., Alexandria, Va. 22314; tel: (703) 836-6727.

West European Cooperation in Marine Technology (WEMT '93): October 20-22, Madrid "Ship Production and Ship Procurement" conference. Contact: Juan Pablo Merino; tel: 34-1-448 4301; fax: 34-1-446 0198.

NOVEMBER

NSRP Ship Production Symposium: November 1-4, Williamsburg, Va.

Contact: NSRP Ship Production Symposium, UMTRI, Marine Systems Division, 2901 Baxter Road, Ann Arbor, Mich. 48109-2150; fax: (313) 936-1081.

ASNE Naval Engineering Symposium: November 8-10, Washington, D.C. Contact: ASNE, 1452 Duke St., Alexandria, Va. 22314; tel: (703) 836-

Ship Repair & Conversion '93: November 9-10, London, England Contact: John Gwynn-Jones, BML Business Meetings Ltd., 2 Station Road, Rickmansworth, Herts WD3 1QP, England; Tel: +44 923

776363; Fax: +44 923 777206.







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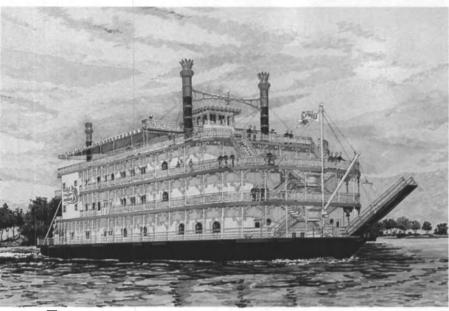
CALL 1-800-321-4936 FOR SAMPLE OR PRICE QUOTATION



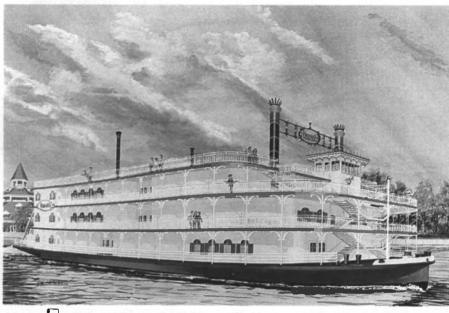
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Grand Casino's dockside floating casinos three stories, 111' wide and 600' long. Talk about a casino!

With our added capacity, we can build six boats at a time and our proven Fast Track Design and Build Methods can deliver your new casino in the shortest possible time.

Call Tom Hensley at (504) 631-0511 to discuss your casino requirements.



Service Marine Industries, Inc.

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AWO

AWO Continues To Support Maritime Issues

by Joseph A'. Farrell, AWO president

At first glance, it may seem that towing industry, we have a full plate the American Waterways Opera- for 1993 and beyond. tors (AWO) has spent the year consumed by a single issue: the Clinton Administration's proposal for a massive new diesel fuel tax on inland waterways operators.

While it is true that AWO launched and continues to sustain a mighty battle against the so-called barge tax, it is also important to note that we haven't let down our guard on the myriad of other regulatory and policy fronts that affect America's barge and towing operators. Because of all the media attention given the barge tax, it just seems like all other issues confronting the industry have been relegated to the back burner.

In fact, there is now a range of unprecendented challenges for AWO as the association attempts to cope with incredibly complex legislation. The impact of these bills on industry operations, personnel and resources demand that AWO continue its work to maintain and improve communication and cooperation between the Congress and our industry. As always, AWO will continue to seek innovative ways to ensure that the decision makers on Capitol Hill hear and understand our viewpoints. Frankly, as the standard bearer for the barge and

First off, the barge tax issue awaits resolution as we go to the press. Action by Congress so far has been a mixed bag in our eyes with the House voting to retain the tax in its budget bill - but at half of the 525 percent level originally proposed by the Administration - and the Senate voting to scrap the tax altogether. Obviously, these two radically different versions will have to be reconciled. As it has from the very beginning, AWO continues its drive to demonstrate that any increase in the barge fuel tax beyond that already in place - 17 cents per gallon on the way to 20 cents per gallon - is not equitable.

AWO is continuing to keep close watch on three related bills introduced in the House this year, which are intended to "revitalize the U.S. Merchant Marine.'

• The Maritime Security and Competitiveness Act aims to reduce needless government regulation of U.S.flagged carriers and to encourage investment in new, more efficient and more economical vessels. Under the Operating Differential Subsidy program, this bill would provide payment to vessel operators of \$2.3 million per vessel for fiscal year 1996

(Continued on page 54)

AWO Fall Convention, Sept. 7 to 9, Washington, D.C.

The AWO Fall Convention, to be held at the Madison Hotel, Washington D.C., will mark the first meeting of AWO's newly-formed sector committees, which will elect officers at that time. Three days of meetings will draw from AWO's 300-plus member companies and will include directors, committee members, affiliates, directors emeritus and other representatives from AWO member companies. Qualified representatives of tug and barge industry companies or shipyards who are interested in membership in AWO may attend the meeting by special arrangement by contacting AWO headquarters. For information, contact AWO at 1600 Wilson Boulevard, Arlington, Va. 22209. Tel: (703) 841-9300; fax: (703) 841-0389.

Meeting schedule:

Tuesday, Sept. 7:

1:00-2:00 p.m. - AWSC Regulatory Committee

2:30-4:00 p.m. - AWSC Legislative & Government Affairs Committee

4:00-5:30 p.m. - AWSC Steering Committee Meeting

5:30 p.m.-Midnight - AWSC Night at the Ball Game

Wednesday, Sept. 8:

8:00-9:30 a.m. - Common Issues Council Meeting

8:30-11:30 a.m. - AWSC Membership Meeting

9:30-11:30 a.m. - Inland Liquid Committee Meeting

11:30 a.m.-12:30 p.m. - AWO Public Affairs Committee Meeting

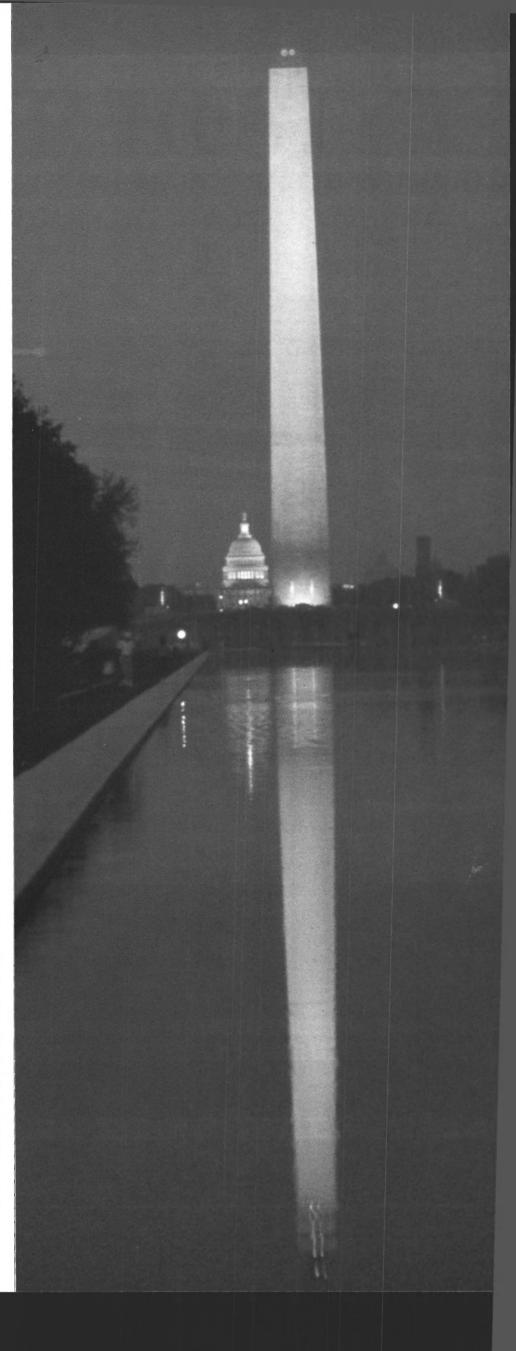
1:00-2:30 p.m. - AWO Harbor Services Committee Meeting

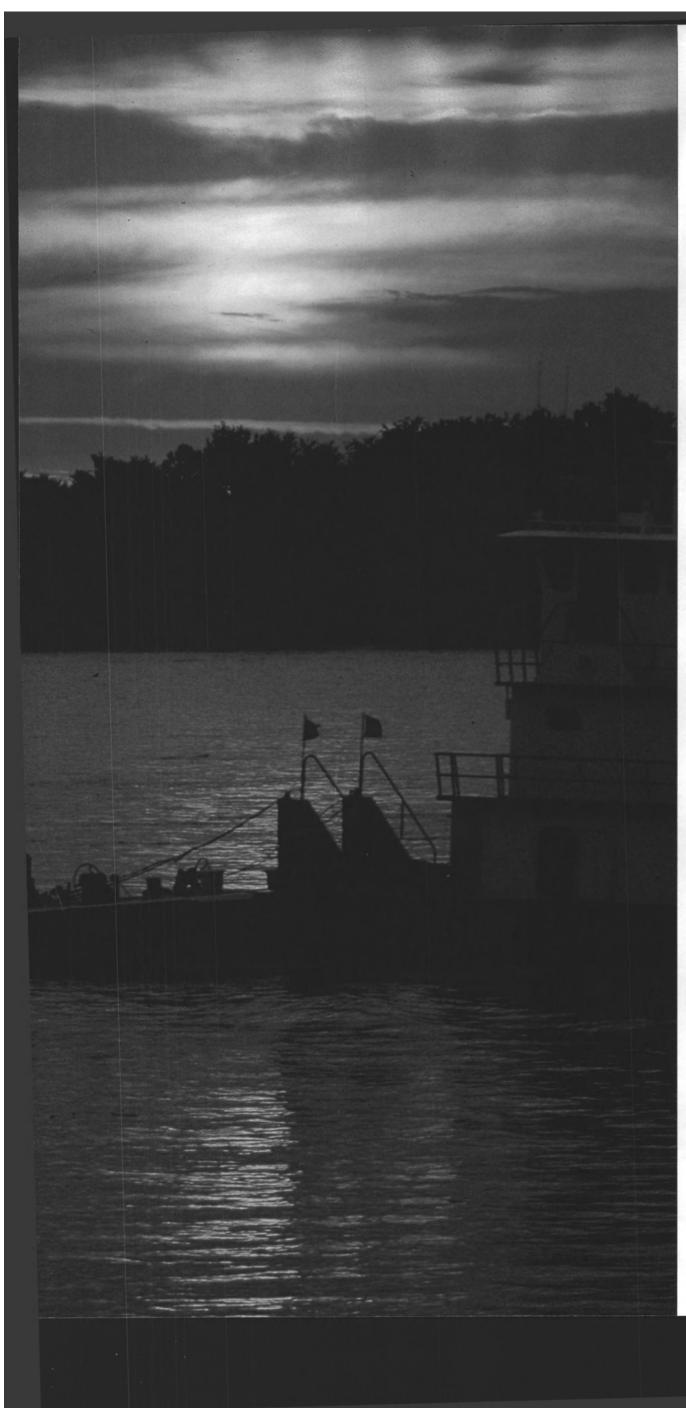
1:00-3:00 p.m - AWO Inland Dry Committee Meeting

3:00-5:00 p.m. - AWO Coastal Committee Meeting 5:30-7:00 p.m. - AWO Reception

Thursday, Sept. 9:

8:00 a.m. - AWO Board of Directors Meeting





ANNUAL MEETING

Is America Abandoning its Rivers?

The theme of the National Waterways Conference's 1993 Annual Meeting and Waterways Exposition is "Confronting Dramatic Change In Waterways Policy: Is America Abandoning its Rivers?." The annual meeting will be held on Wednesday to Friday, Sept. 15-17, at the Peabody Hotel in Memphis, Tenn.

Speakers will include Dr. G. Edward Dickey, Acting Assistant Secretary of the Army (Civil Works), who will discuss the proposed increase in waterway fuel taxes and Conference Pres. Harry N. Cook, who will deliver his annual "state of the waterways" report. They are among some 30 speakers, panelists and moderators on the three-day convention program.

Panels will examine a wide range of waterways issues such as emerging markets for waterborne commerce, taxes affecting navigation programs and their impacts, low-cost lockand-dam construction methods, endangered species protection and wetlands regulation.

For a fifth year, a waterways exposition is planned. It will be located in one section of the main ballroom, next to the rooms where the general sessions and luncheons will be held.

Conference Chmn. W. Richard (Dick) Christensen of Ashland Oil, Inc., Ashland, Ky., will call the NWC annual meeting to order on Thursday morning, Sept. 16. After Mr. Cook presents his report, the opening panel will discuss market trends and developments.

The moderator will be **Peter E. Hubbard** of Cincinnati, senior vice president-sales and marketing for the Ohio River Company.

The second panel will explore the grain outlook. William J. Schmidt, Jr., of St. Louis, assistant vice president of Bunge Corp., will chair the panel.

After the opening luncheon, Michael J. Toohey, associate director of Ashland Oil's government relations department, will moderate a panel analyzing the Administration's proposed \$1-per-gallon inland waterway fuel tax. Dr. Dickey will discuss the case for the tax, and Christoper J. Brescia of St. Louis, president of the Midwest Area River Coalition (MARC-2000), will outline the case against the tax. The Congressional view will be presented by William H. Hanks, Jr., state director of Sen. James Sasser's Nashville office.

Impacts of the proposed fuel tax will be assessed by the last panel of the day, which will be chaired by R. Barry Palmer of Pittsburgh, executive director of the Association for the Development of Inland Navigation in America's

Ohio Valley (DINAMO)

Panelists will include Dr. Robert N. Stearns of the Office of the Assistant Secretary of the Army (Civil Works); **Timothy R. Murphy** of Mercer Management Consulting, Inc. (formerly Temple, Barker & Sloane, Inc.), and Joanna M. Stamatiades of the U.S. General Accounting

In the evening, there will be a banquet in the

Peabody Hotel ballroom.

Gen. Genega will present his civil works report to start the Friday program. The first morning panel will concern the protection of threatened or endangered species, such as the Alabama sturgeon, and the possible impacts on navigation, with panelists representing the Army

Corps of Engineers and U.S. Fish and Wildlife Service.

The final panel will address wetands issues. W.R. (Ron) Coles of Nashville, who is president of Inland Rivers Ports & Terminals, Inc., will be the moderator, and panelists will include John S. Doyle, **Jr.**, chief of staff for Congr. **James** A. Hayes (Louisiana), sponsor of legislation (H.R. 1330) to modify Section 404 of the Clean Water Act, as amended.

The final luncheon will follow. Luncheon speakers are to be an-

nounced later.

Several other organizations will hold meetings to coincide with NWC's convention, including the U.S. Section of the Permanent International Assn. of Navigation Congresses (PIANC). It plans a panel discussion on innovative construction techniques which may reduce the cost of future lock-anddam replacement projects.

The NWC convention will kick off on Wednesday, Sept. 15, with an inspection trip to President's Island. Litco Terminal and David Taylor Naval Surface Warfare Basin to see the large cavitation channel, the most advanced and largest cavitation water tunnel in the world. Registration will begin at 2:00 p.m., the same time that the Waterways Exposition will open.

In the evening, the early arrivals' reception will be held at the Memphis Convention Center, and delegates will have an opportunity to tour the critically acclaimed Na-

poleon exhibition.

A spouses tour is planned on Thursday, including a visit to Graceland, home of the legendary Elvis Presley, followed by a tour and luncheon at the Dixon Gallery.

The convention will end at 2:00

p.m. on Friday, Sept. 17.

Richard A. Wilson of Memphis,
president of Rivergate Terminal Group, is chairman of the general arrangements Committee. Vice chairman is **Donald C. McCrory**, director of the Memphis and Shelby County Port Commission.

The Impact Of Proposed "Barge Tax"

Harry N. Cook, president, National Waterways Conference, Inc.

For inland waterways, the "barge tax" has become a potential Achilles heel. At the level recommended by the Clinton Administration, it could mortally wound the waterways industry just as surely as the arrow which pierced Achilles' vulnerable heel. Earlier this year, the President urged that the fuel tax, now 17 cents a gallon, be increased to \$1.20 a gallon. In addition, the proposed BTU tax would have added another 10 cents to the total.

Waterway interests, including the National Waterways Conference, immediately launched an all-out campaign to head off the tax. Our counter-attack took a variety of

- The Conference prepared a series of authoritative fact sheets, showing how the proposed \$1-pergallon tax would affect interior regions, tributary waterways, industry and agricultural sectors, export trade, and the barge industry. We wanted to get the facts out as soon as

- With the help of consultants, we developed more specialized fact sheets on affected industries, starting with coal and agriculture, which had the most at stake in the user tax

The Conference then received a coalition of waterway interests which we originally set up in 1977 during the Congressional debate over the first waterway fuel tax. Our National Waterways Alliance includes representatives, most of them based in Washington, of some 175 waterway-related associations and industries. At meetings held every couple of weeks, we shared information and insights and discussed strategy.

Working with navigation proponents in the Congress, we helped with a number of "Dear Colleague" letters and joint letters addressed to the President, Cabinet Secretaries

and Congressional Committee chairmen. We also framed responses to a number of issues raised by Administration spokespeople in support of the new inland waterways tax.

Upon request from members of Congress, other public officials, and industry leaders, we prepared speeches, statements, testimony, and resolutions in opposition to the proposed \$1-per-gallon fuel tax. Some of these materials later made

a splash in the press.

- We conducted an aggressive campaign in the media pointing out flaws in the fuel tax proposal. Conference officers were frequently interviewed in leading publications and on radio, including National Public Radio. We distributed several opposite-editorial page ("op-ed") columns, one of which was syndicated by Scripps Howard News Ser-

-Conference officials made a number of speeches and testified before Congressional committees, emphasizing the magnitude of the fuel tax, its probable impact on river valley economies, and its potential role in dismantling the inland waterway system as it now exists.

Through the National Waterways Alliance, we coordinated our efforts with other organizations such as the National Grain and Feed Association, National Coal Association, National Industrial Transportation League, and American Waterways Operators. Working closely together, we were able to marshal our resources and cover more bases than ordinarily would have been possible.

At the National Waterways Conference's forthcoming 1993 annual meeting, two separate panel discussions will examine the fuel tax proposal. The first will deal with the basic issue: whether the Federal government should recover 100 percent of the expenditures attributed



Harry N. Cook

to the operation and maintenance (O & M) of shallow-draft navigation channels.

Dr. G. Edward Dickey, acting assistant secretary of the Army (Civil Works), will present the case for full O & M recovery. Christopher J. Brescia of St. Louis, president of the Midwest Area River Coalition (MARC-2000), will discuss the public value of the Federal investment in navigation O & M programs.
The second user tax panel will

examine the prospective impacts of such taxation. Dr. Robert N. Stearns of Dr. Dickey's office will contend that the impacts are relatively minor, but Timothy R.
Murphy of Mercer Management Consulting (formerly Temple, Barker & Sloane, Inc.) believes coal, chemical and agricultural sectors could suffer.

The waterway fuel tax will remain a lively issue, regardless of what Congress does this year. On May 27, the House of Representatives approved an increase of 50 cents a gallon, and on June 25, the U.S. Senate deleted the tax - sending the entire revenue package to a House-Senate conference, which is to report later this summer.

W. Richard Christensen Takes Conference Helm At Mid-Year

W. Richard (Dick) Christensen of Ashland, Ky., a consultant for Ashland Petroleum Co., is the newly installed Chairman of the National Waterways Conference, Inc. He took over the reins at the March meeting of the Board of Directors from J.D. (Johnnie) Laman of Houston.

Before moving to a consultant's post at Ashland last fall, Mr. Christensen was vice president, marine/surface transportation and facilities. He previously was the Conference's vice chairman.

Serving as the Conference's first vice president, and in line to become the next vice chairman, is **Robert W. Portiss**, who is port Louis, publisher of The Waterways director at the Tulsa Port of Catoosa. Tulsa will host NWC's 1995 annual C. McCrory, director of the Mem-

meeting, which will mark the port's 25th anniversary.

There are four vice presidents: Wallace A. Gieringer, executive director of the Pine Bluff-Jefferson County (Ark.) Port Authority; **Den**nis L. Kirwin of Houston, vice president and general manager of Midland Marine Corp.; Charles F. Lehman of Jeffersonville, Ind., vice president of American Commercial Barge Line Co.; and **Donald G. Walden** of Columbus, Miss., administrator of the Tennessee-Tombigbee Waterway Development Authority.

William J. Hull of Sea Island, Ga., is vice president and counsel. H. Nelson Spencer, III, of St. Journal, is secretary, and Donald phis and Shelby County (Tenn.) Port Commission, is treasurer.

The officers, plus 15 other members elected from the Board of Directors, constitute the Executive Committee: Nicholas J. Barchie, Jr., of Chickasaw, Ala., president of Warrior and Gulf Navigation Company; Robert G. Brave, executive director of the Port of Little Rock; J. Ron Brinson, president and chief executive officer of the Port of New Orleans; W. R. (Ron) Coles of Nashville, president of W.R. Coles & Associates; Brian L. Garrity of Mundelein, Ill., manager of water distribution system, IMC Fertilizer, Inc.; Keith R. Gosney of St. Louis, president of Pinnacle Transportation, Inc.; William F. Harbison of Greenville, Miss., president of Arkansas River Co.; David W. Kreutzer of Elizabeth, Pa., general manager-river division of Consol Inc.; Gary P. LaGrange of Franklin, La., executive director of the Port of West St. Mary.

Thomas D. Murphree, Jr., of Memphis, director-sales and marketing, Mid-South Terminal Co.; Offa S. Nichols, Jr., of Birmingham, president of Warrior-Tombigbee Development Assn.; R. Barry Palmer of Pittsburgh, president of DINAMO; Gale R. Rhodes of Lakin, W. Va., manager-river transportation division, AEP Fuel Supply; **T. Mark Simmons** of Belzoni, Miss., Lower Mississippi Valley Flood Control Assn.; and L.E. (Les) Sutton of Houston.

The Conference is governed by a 75-member Board of Directors. Former chairpeople and presidents who are still active in the waterways industry serve on the Conference's Consultative Council and from time to time the Executive Committee elects former board members to the Advisory Board. Vernon Behrhorst of Lafayette, La., executive director of the Gulf Intracoastal Canal Assn., is currently chairman

of the Advisory Board.

AWO: Focus On The Issues

(Continued from page 51)

and \$2.1 million per vessel for 10 following years - a significant cut from the \$3 million to \$4.5 million under the current program.

• The Merchant Marine Investment Act would amend U.S. tax policy to become more comparable to foreign policies by expanding Capital Construction Fund (CCF) availability primarily to include vessels

in coastwise trade. It also includes inland waterways liquid cargo barges, but only with regard to replacement capacities - dry bulk vessels are excluded. Finally, the act would permit depreciation of U.S.flagged vessels over three years, and allow CCF withdrawals to be used

to acquire vessels by lease.

• The National Shipbuilding and Conversion Act of 1993 would give the U.S. shipbuilding industry a shot in the arm by providing \$175 million in loan guarantees for construction of vessels built in U.S. shipyards but intended for sale in foreign markets. The guarantees, for the purchase of shipyard building equipment, would be made available through the Title XI program.

Other key legislation in which AWO is taking an active role in-

 Endangered Species Act Amendment - One amendment proposed would try to ensure balanced

consideration of all impacts when implementing the law, including ecc nomic and social factors involved in species preservation plans. Spon sored by Rep. Billy Tauzin (D-LA) the bill offers a new, and we believe better, focus on providing private incentives for compliance rather than increased state-based regulation AWO is actively involved with ar endangered species coalition and strongly supports the Tauzin amendment. Similar legislation has been introduced in the Senate by Sen. Max Baucus (D-MT).

• Missouri River Management -AWO also is working hard for passage of a bill already approved by the House Appropriations Committee that opposes efforts to change the water flow of the Missouri River if the result threatens the integrity of the Missouri and Mississippi River Systems. These limitations are defined as any burden greater than that currently placed on downstream states regarding flood control, navigation, power generation, or water supply - particularly during droughts. AWO is working on a similar initiative in the Senate. We will also continue the lengthy task of monitoring the Corps' revision of the Missouri River Master Water Control Manual. The Corps has already released the centerpiece of this revison, the Preliminary Draft Environmental Impact Statement, and a final version is expected early next

• Oil Pollution Act (OPA) - Regulatory implementations of OPA continues with two of the most important and costly provisions, double hulls and tank vessel response plans, for the most part in place. However, the industry awaits implementation of other key rules in the act, including Certificates Of Financial Responsibility (COFRs), and interim structural and operational requirements for existing single-hulled vessels. Still other delays in implementation have slowed introduction of related new technologies which some believe will enhance safety, including the Global Positioning Satellite (GPS) and Vessel Traffic Service (VTS) system. Most importantly, the Coast Guard's slow movement to solve the impasse regarding the regulations for COFRs has caused great uncertainty for the industry.

Finally, the American Waterways Shipyard Conference will be waging an ongoing effort to ensure that Congress maintains America's status as a maritime nation by supporting the maritime industry and the shipyards federal agencies such as the Department of Commerce, the Maritime Administration and the Export-Import Bank - of actively marketing the U.S. shipbuilding and its products. Meeting the challenges, both as an association and an industry, won't be easy. But AWO's mission has never been easy and never will be, particularly in an age of accelerating government activism and limited private financial resources. AWO remains committed to provide the top-notch leadership the barge and towing industry demands and needs to navigate safely past the shoals created by Congress and fed-

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eral agencies.

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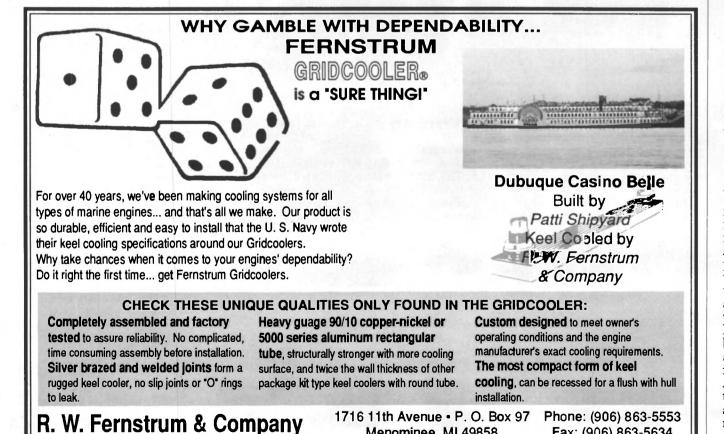
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DB Mobile And Sea Link Sign Pact For **Mobile Communication**

IDB Communications Group, Inc. announced that IDB Mobile Communications, Inc., a joint venture of IDB Communications Group, Inc. and Teleglobe International of Canada, have signed a two-year Inmarsat-A service distribution agreement with Sea Link Ltd., whereby Sea Link will coordinate mobile satellite voice, fax and data communication to Canadian and other international users

The global service will be provided via IDB's earth stations at Niles Canyon, Calif., Staten Island, N.Y. and Gnangara, Australia.

Nils Helle, vice president of Sea Link, said, "Sea Link has been providing modern cost-effective telecommunications to mariners for more than seven years and this agreement with IDB adds new capability to an already proven business

John Marra, IDB's vice president, maritime sales, said, "IDB is pleased to be teamed with Sea Link to provide fishing vessels, offshore oil and gas platforms, and international and domestic shipping operations with this high-quality, costeffective service.

IDB Communications Group, Inc. is a global telecommunications company that operates a domestic and international communications network providing its customers with radio and television transmission services, international private line and long distance telephone services, mobile satellite communications capabilities and the design and integration of satellite networks worldwide. For more information on IDB Mobile Communications, Inc.,

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Finnyards To Modernize Viking Line's "Rosella"

The principal owner of Viking Line, SF Line Ab, has placed an order with Finnyards Ltd. for the modernization of its passenger ferry Rosella. The ship is currently oper-Naantaliating on the Maarianhamina-Kepellskar route.

Constructed in 1980, the vessel will undergo substantial modernization at Finnyards' Rauma shipyard after the end of the summer season. The contract includes the construction of 140 new cabins as well as improvements to the ship's restaurant and conference facilities.

When the work is completed, the ship will provide 1,200 cabin berths and will satisfy the increasingly demanding quality expectations of passengers traveling between Fin-

land and Sweden.

The contract represents a concrete step towards Finnyards' aim of increasing its share of the continuously growing modernization For more information narket. Finnyards,

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Elliott Turbomachinery Purchases Turbine Specialities, Inc.

Elliott Turbomachinery Co., Inc. announced the purchase of the assets of Turbine Specialities, Inc.

Turbine Specialties is involved in the manufacture and repair of turbochargers at its facilities in Salina, Kan. and New Orleans, La.

Of the recent transaction, Paul Smiy, CEO of Elliott, stated, "This acquisition will re-emphasize Elliott as a turbocharger supplier, increase our aftermarket participation and is in keeping with our vision to be recognized by our customers as the world's best turbomachinery company

Elliott Company is a world leader in the production of apparatus and service products sold primarily into the oil, gas, chemical, petrochemical, marine and power generating markets.

The company also manufactures and sells a full line of tube tools and ournishing products.

For additional free information on Elliott Turbomachinery Co., Inc. and its products and services, or for information on the impact of the recent acquisition,

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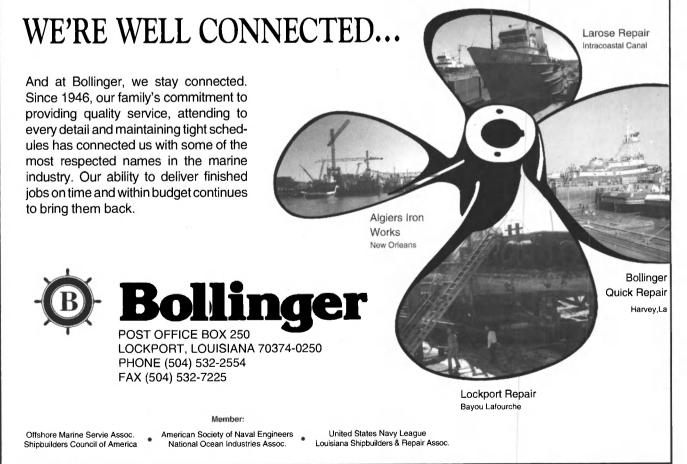


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ARD PROFILE



An overview of the Atlantic Marine Yard. Photo Credit: Aerial & Architectural Photo, Inc.

Atlantic Marine Focuses On Commercial Market, Investment In **Employees To Stay Competitive**

A medium-sized shipyard with approximately 750 employees, Atlantic Marine in Jacksonville, Fla. has positioned itself to take advantage of market conditions on both the repair and newbuild side of the

industry for the 90s.

"Business is good today, after many years when business was not so good for shipyards our size," said Edward Doherty, president. Mr. Doherty pinshis yard's current and

continued success on the burgeoning gaming vessel market and Atlantic Marine's success in finding commercial business to replace dwindling government repair busi-

"Shipowners which have relied on government work only are going to have to learn to do a lot of new

things...fast," he said.

For the coming years, Mr.

Doherty envisions three markets as key to the yard's success: dinner boats, gaming boats and ferries. Atlantic Marine recently delivered the 222-foot, Caterpillar-powered, Rodney Lay & Associates-designed Alton Belle gaming boat to Alton River Gambling.

Work continues on the Martha's Vineyard, a 230-foot, GM-powered ferry for Woods Hole, Martha's Vineyard & Nantucket Steamship Authority, as well as the Empress II, a 238-foot gaming vessel for Empress River Casino.

Both vessels are scheduled for delivery at the end of this year.

Atlantic Marine built some of the first casino vessels for Iowa, where riverboat gaming had its birth in 1991. Since that time, they have built five casino vessels.

But while the passenger vessel market is the growing portion of Atlantic Marine's business today, it surely was not always so.

Atlantic Marine, Inc. has two facilities in Jacksonville, Fla.: its new construction division and Atlantic Dry Dock Corp., its ship repair and conversion division.

Founded in 1964, Atlantic Marine has built over 225 vessels in a variety of styles and sizes in both steel and aluminum for the domestic and international markets.

Atlantic's vessels are built using modular construction techniques, and incorporates state-of-the-art equipment including computerized lofting and generation of hull parts, a numerically-controlled machine for cutting hull parts and automatic and semi-automatic welding equipment.

Atlantic Marine has several piers and two launchways capable of handling vessels up to 400 feet, and a river water depth of 38 feet provides good access.

Atlantic Dry Dock, the repair and conversion division, is equipped with two marine railways with a lifting capacity of up to 4,000 long tons, and the 1,300-foot full service bulkhead is available for topside work.

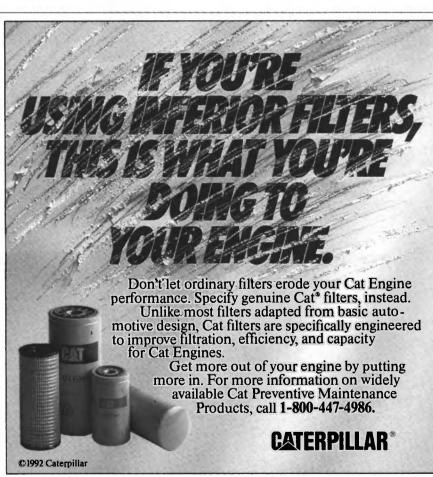
Realizing it takes skilled and dedicated employees to make state-ofthe-art equipment run and make its business prosper, Atlantic provides a variety of training and advancement opportunities for all of its work-

For example, a new formalized multi-craft training program was recently launched, according to Kathie Chumley, human resources manager, which allows employees to learn an additional craft, while still performing their normal du-

She said this not only provides additional job security for the individual, but results in a more skilled and dedicated employee for Atlantic

For more information on Atlantic Marine in Jacksonville, Fla., its facilities and capabilities,

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The End Of The **Grandfather Clause?**

Implications For Owners, Builders & Suppliers

By Roger Kohn, International Maritime Organization

he quaintly-named grandfa-ther clauses have been a feature of maritime safety and anti-pollution conventions for decades. They are designed to protect existing ships from the impact of amendments which involve major changes to construction or equipment, because it was felt unreasonable to expect a shipowner to have to carry out expensive alterations to his fleet every time the regulations were changed.

Today, attitudes have changed.
Two major conventions adopted under the auspices of the London-based International Maritime Organization, the United Nations agency concerned with maritime sefety and pollution prevention. safety and pollution prevention, have been amended specifically to make major changes retroactive. The treaties are the International Convention for the Safety of Life at Sea (SOLAS), 1974, and the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 (MARPOL 73/78).

The reasons for this were best summarized by Norway in a note control MO's conjunt to the land to the control of the summarized by Norway in a note control of the land to the land to

sent to IMO's senior technical body, the Maritime Safety Committee, in 1991. The note stated that "new regulations tend to make new ships more expensive and it is therefore desirable to modify a ship to extend its life instead of replacing it with a newer, safer vessel. It could, therefore, be said that the introduction of new requirements for new ships, without also improving the old, tends to slow down an improved

safety level for the fleet as a whole."

The problem today is that the world fleet of merchant shipping is aging; for example, cargo ships now average 20-years in age.
Old ships are not only more prone

to accidents than new ones, but they were also built to design standards that are now regarded as out of date. But the current economic scene makes it almost impossible to

operate new ships at a profit. Owners are therefore clinging to existing ships for as long as they can.

The changes to MARPOL 73/78 were adopted in response to the Exxon Valdez oil spill. All new oil tankers ordered after July 6 have to with double hulls alternative design approved by IMO. This is perhaps the most important difference between IMO measures and OPA90, which only allows the double-hull option.

The decision was taken after a lengthy examination of design alternatives which showed that designs such as the mid-deck concept offer the same degree of protection as double hulls, and in some cases, better. The changes will become mandatory for existing tankers in 1995. They will apply to 25-year-old ships. The amendments also include provisions for an enhanced program of surveys and inspections which are expected to result in many existing ships being scrapped because the cost of converting them to the new standards will be too high.

The changes to SOLAS are intended to improve the survivability of existing Ro/Ro passenger ships and will become effective October 1, 1994. They are based on the damage of the state of the survivability of the state of the sta age stability standards that have applied to all passenger ferries built since April 1990.

The new measures will be introduced during an 11-year phase-in period. The period of grace will deperiod. The period of grace will depend upon the degree to which each ship complies with the new standard. Those which only achieve 70 percent, for example, will have to be fully modified when the amendments enter into force. Those which already reach 95 percent will be permitted to operate until October 1 mitted to operate until October 1, 2005.

The SOLAS amendments, which were adopted in May 1992, will also improve the fire safety of existing passenger ships (including cruise ships). Some of the amendments will become applicable on October 1, 1994, others in 1997 and the remainder on October 1, 2000.

der on October 1, 2000.

The measures include requirements for smoke detection and alarm and sprinkler systems in accommodation and service space, stairways and enclosures. Others include the provision of emergency lighting, general emergency alarm systems and other means of communication.

The SOLAS changes were heavily influenced by two major disasters: the capsizing of the ferry Herald of Free Enterprise in 1987, in which 183 people died, and the fire on the Scandinavian Star in 1988, in which 159 people died. It is expected that the extension of the modified SOLAS 90 standard in particular will result in several existing Ro/Ro ships being scrapped because of high conversion

Maritime Reporter/Engineering News



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However, it is unlikely that the grandfather clause will disappear completely. Providing ships are well naintained, they can operate safely for many years and the IMO phiosophy is to concentrate more on the effective implementation of existing conventions than the adoption of new regulations. The amendments to MARPOL and SOLAS were both adopted as a result of accidents which revealed deficiencies in existing regulations and led to intense public and political concern.

More worrying in some ways is the fact that the amendments did not achieve full consensus. The MARPOL amendments did not satisfy the U.S. while the SOLAS changes were not acceptable to the U.K., which has insisted on the full SOLAS 90 standard being introduced. IMO exists to develop measures which are applied internationally. The danger is that any further unilateral actions will weaken IMO's position as the world forum for shipping safety and pollution prevention.

Despite economic and other problems, shipping is now safer than it was 20 years ago and marine oil pollution has been reduced 60 percent, according to the U.S. National Academy of Sciences. A major reason for this has been the success of IMO measures, which are now so widely accepted that it is virtually impossible to operate a ship on international voyages that does not meet IMO requirements. In the long run, it would be a tragedy for shipping safety and the marine environment if the IMO consensus were to be replaced by a series of differing, conflicting national codes, the sort of chaos the IMO was created to prevent.

Update On ACCL Cruise Fleet

Omitted from the June review of cruise shipping company fleets was information on the American Canadian Caribbean Line. The company operates the following vessels: New Shoreham II, a 98-gt, 70-passenger vessel built in 1979; the Caribbean Prince, a 89-gt, 76-passenger vessel built in 1983; and the Mayan Prince, a 98.4-gt, 90-passenger vessel built in 1992.

Flag Service & Maintenance Offers 24-Hour Service

Flag Service & Maintenance, Inc. specializes in 24-hour emergency service, working on commercial marine engines on barges, tugs and work boats. The company also services emergency generators. Located in the Philadelphia area and servicing customers from Virginia to New York, the company is an authorized dealer for Detroit Diesel, Caterpillar and Cummins engines, and is also authorized on ZF

marine gears, Fairbanks, GM and EMD engines.

For more information,

Circle 35 on Reader Service Card

IMSSCO Adds Wide Range Of Uses To Maverick System

International Marine Supply & Service Co. (IMSSCO) is the exclu-

sive master marine distributor of the Maverick Foam Vest System worldwide.

In addressing the industry needs for affordable Haz Mat mitigation and Oil Spill Dispersant equipment, Maverick has developed the Haz Mat Vest which mitigates spills and the Dispersant Vest which proportions the dispersants with either fresh or sea water, from one-tenth to three percent.

The Maverick Fire Fighting Vest comes in a variety of models start-

ing at the one-half percent vest rated at 30 gpm at 50 psi to the brass marine model, rated at 95 gpm at 125 psi.

125 psi.
The Maverick Vest is currently used by the Canadian Coast Guard, Texaco, Mobil, Philips and others.

For additional free information from IMSSCO on the Maverick Foam Vest System and its many uses,

Circle 62 on Reader Service Card

ATTENTION

C M HAMMAR Handels AB wish to point out that the reliability of the HAMMAR H20 hydrostatic release for any use approved or presently known to us **other** than with the rod for the ACR RLB-23, Cat I, 406 MHz EPIRB remains unaffected by the knifeholder change.

C M HAMMAR Handels AB Gothenburg, Sweden Tel: +46 31 49 00 60 * Fax: +46 31 49 70 23

Circle 293 on Reader Service Card

IMPORTANT EPIRB SERVICE BULLETIN

Internal changes of the knifeblade holder of the hydrostatic release mechanism manufactured by C.M. Hammar HandelsAB (HAMMAR) for the ACR Electronics, Inc. (ACR) RLB-23 Category I, 406 MHz EPIRB has affected the ability of the hydrostatic release to cut the ACR retaining rod. This cutting action enables the unit to be automatically released from the case when it is submerged.

ACR was only recently made aware of the design changes. ACR will issue a modified rod replacement kit to anyone who purchased the model RLB-23 Category I, 406 MHz EPIRB or a hydrostatic release and/or rod kit for the RLB-23, subsequent to August 31, 1992 when the design changes were implemented. Kits will be sent to any users who have registered their units with the National Oceanic and Atmospheric Administration, and to distributors who were shipped RLB-23 Category I, 406 MHz EPIRBs or hydrostatic release/rod kits after August 31, 1992. Detailed, easy-installation instructions are included with each kit.

CALL ACR FOR YOUR FREE REPLACEMENT KIT.



ACR Electronics, Inc.

USA: (800) 4320-ACR; Worldwide: (305) 981-3333

Circle 276 on Reader Service Card



August, 1993

Circle 246 on Reader Service Card



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Circle 237 on Reader Service Card

Reinauer Transportation Acquires Exxon's N.E. Tug & Barge Fleet

Reinauer Transportation Companies, a tran porter of petroleum products, announced that has purchased Exxon's Northeast fleet of thr tugs and five barges to compliment its existing fleet of tugs and barges in the harbors of Ne York and Boston.

The acquisition enables Reinauer Transport tion and Boston Towing and Transportation expand their geographical and servicing capacit with 28 barges ranging from 123,000 barrels 1 20,000 barrel barges, to broaden their powe with 21 tugs, and to enhance their other mar

time interests totaling 64 vessels.

In a recent move, Reinauer consolidated it three New York area offices into new corporat headquarters in Port Richmond, Staten Island

McElroy Machine & Mfg. Wins NRC Contract

McElroy Machine & Mfg. Co., Inc. of Gulfport. Miss. has been awarded a contract from National Response Corporation (NRC) to construct eight aluminum oil containment boom storage reels. Each reel has 7.5-foot flanges, is 20 feet long, and is designed to hold 2,700 feet of oil recovery boom.

Presently in production at McElroy's facility

are 36 boom storage reels for Marine Spill Response Corporation (MSRC). The frames are built to ISO container standards and are directly driven by a hydraulic motor through a planetary reducer. A clutch and brake are included and are ready for operation when connected to the ship's hydraulic supply

And finally, McElroy Machine has delivered a paddlewheel drive system to Bender Shipbuilding's Braithwaite, La. yard. This system will be installed on the "Star Casino" riverboat presently under construction there.

The system consists of two gear reducers each driven by two 200-hp radial piston motors. Hydraulic reservoir, pilothouse and engine room control panels and hydraulic pump are to be mounted to the vessel's diesel drive. The com-plete system was furnished with ABS and USCG approval. For more information,

Circle 93 on Reader Service Card

Westfalia Wins \$2 Million Floating **Platform Contract**

Westfalia Separator is supplying two modular treatment systems totalling \$2 million for the floating Troll Olje platform.

Two automatically operating self-cleaning purifiers type WSA 100 will be used for drain water treatment. Each purifier has a capacity of 40,000 1/h. The residuals in the discharging purified water are reportedly well below the currently specified Norwegian emission values.

The dewatering and desalting of diesel oil will be handled by two self-cleaning separators type OSB 35 equipped with the Varizone system.

The capacity of each separator is 15,000 1/h. The sodium content in the purified diesel oil is to be reduced to 0.02 ppm.

Both separator installations are designed so that safe operation is guaranteed even in heavy seas. The choice of material meets the high requirements of the products to be processed (e.g. salt content). Commissioning is scheduled for 1995.

For more on Westfalia Separator,

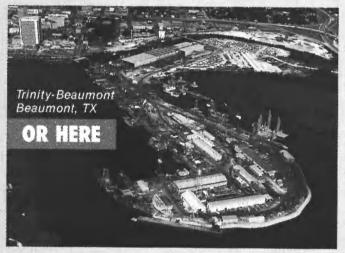
Circle 94 on Reader Service Card

Maritime Reporter/Engineering News

We can build your next boat or barge.















And we will build it quickly, to the highest quality, at competitive prices.





OR HERE

U.S. SMALL- & MEDIUM-SIZED YARD CONSTRUCTION UPDATE

Statistics for this survey were compiled by the MR/EN staff. While every effort has been made to ensure the survey is correct and complete, the publisher is not responsible for errors or omissions. For **additional free information** on specific shippards and their capabilities and facilities, please circle the appropriate number on the Reader Service Card in this issue.

SHIPYARD Vessel	Туре	Dimensions (in feet) L x W x D	Main Engines	De Owrier/Operator	livery Date	SHIPYARD Vessel	Туре	Dimensions (in feet) L x W x D	Main Engines	Owner/Operator	Delivery Date
Atlantia Ma	ulua lua					Henry Hudson	Enem.	97 x 24	Catavrillar	Part Imporial Foreign	1/93
Atlantic Ma	irine, inc.	Circle 69 on P	eader Service Ca	rd		Robert Fulton	Ferry Ferry	97 x 24	Caterpillar Caterpillar	Port Imperial Ferries Port Imperial Ferries	5/93
		Circle 09 on K	eader Service Ca			Golden Gate	Pilot Boat	67 x 20	Caterpillar	San Francisco Bar Pilo	
Alton Belle	Gaming	222 x 66 x 6.5	Caterpillar	Alton River Gambling	5/93	Gulf Challenge	rResearch	50 x 17	DDEC	n/a	8/93
Martha's	Ferry	230 x 60 x 9.5		Woods Hole, Martha's							
Vinyard				Vineyard & Nantucket		Gulf Craft Ir	ic.				
		000 44		Steamship Authority	11/00			Circle 72 on R	eader Service Ca	ard	
Empress II	Gaming	238 x 66	Caterpillar	Empress River Casino	11/93						
						Oil Cross	Crewboat	100 x 23 x 6	Caterpillar	O.I.L. Ltd.	4/93
Bender Shi	ipbuildina & I	Repair Co., In	c.			Joliet Spirit of	Ferry Dinner Cruise	65 x 22 x 5 73 x 22 x 6	Cummins Detroit Diesel	Mackinaw Lakeshore S&M Inc.	5/93 6/93
			Reader Service C	ard		Harbor Town		/3 X ZZ X O	Dell'oli Diesei	SOUVI INC.	0/73
1						Oil Calabar	Crewboat	100 x 23 x 6	Caterpillar	O.I.L. Ltd.	7/93
Cajun Magic	Gaming	320 x 96	n/a	La. Paddlewheels	4/94	Khansaheb	Pleasure	90 x 25 x 6	MTU	Khansaheb Engineerin	
ENSCO VIII	Drill Barges	200 x 85 x 14	n/a	ENSCO 3/93 &	0/93	M/N Wayuu	Crewboat	100 x 23 x 9	Caterpillar	Texas Petroleum	9/93
ENSCO X Star Casino	Gaming	260 x 80	Caterpillar	Star Casino, Inc.	9/93	Beverly F	Crewboat	$135 \times 26 \times 11$	Cummins	Galaxie Marine	10/93
Treasure Ches		280 × 80	Caterpillar		12/93	n/a	Crewboat	100 x 23 x 9	Detroit Diesel	P.T. Baruna	12/93
Horseshoe	Gaming	295 x 79	MTU	Horshoe Entertainment	4/94					Kaya Logistics	
Harrah's	Dockside	276 x 92	n/a	Promus co.	9/93			-41 0 0 1			
Vicksburg						Houma Fab		v. of L.O.R. In			
10	Shrimpers	$83 \times 24 \times 12$	Caterpillar		(Final)			Circle /3 on R	eader Service Ca	ara	
2	Shrimpers	83 x 24 x 12	Caterpillar	Bubiyan Fisheries	9/93	V-:4-7	ractor Tug	00 44 10	MAN B&W	-1-	12/93
4 MSRC Oil S	Spill Recovery	210	Caterpillar	MSRC 4/93	(Final)	voim i	Tank Barge	98 x 46 x 12 164 x 46 x 10	n/a	n/a n/a	12/93
						3 Casino Pada	lewheel Boats	292 x 74 x 13	Cummins		4 to 8/94
						o casmo radi	and window bodies	2,2,7,4,7,10		-, , -	
Blount Indi	ustries, Inc.	Oinele 106 en F	and an Complete C								
		Circle 126 on F	Reader Service C	ard		Jeffboat, Inc					
Miss New Yor	rk Passenaer	133 x 33 x 4.5	Cummins	Circle Line	7/93			Circle 74 on R	eader Service Ca	ard	
	Passenger	$33 \times 12 \times 3.5$	Mercury	Blackstone Valley Tourism							
Niagara Princ	ce Cruise Vessel	166 x 40 x 9	MAN	Am. Canadian Cruise Lin	ne 94		ew Towboats	120 x 34 x 11	EMD		to 10/93
							ew Towboat	126 x 34 x 11	EMD	Commercial 10/03	3/94 to 12/93
Conrad Ind	lustries					5 Double-si	rin Tankbarge Tank barges	222 x 54 x 12 195 x 35 x 12	n/a n/a		to 10/93
		Circle 70 on R	eader Service Ca	ird		,		298 × 54 × 13	n/a	Commercial	9/93
	D 1 D		1-	Commercial 1/93 to	11/02	50 H	lopper barges	various	n/a	Commercial 4th G	Quater/93
11	Deck Barges Spud Barges	various various	n/a n/a	Commercial 1/93 to Commercial	6/93						
3	Fuel Barges	148 x 36 x 8	n/a		10/93						
	Drydock	120 x 52 x 7	n/a	Commercial	7/93	Leevac Ship	yards				
	Ferry	90 x 30 x 4	n/a	Commercial	7/93			Circle 75 on R	eader Service Ca	ard	
2		148 x 36 x 8	Cummins	Commercial 7/93 to							
3	S/P Water Ba	rgie 148 x 36	Cummins	Commercial 7/93 to	9/93	Player River-	Gaming	$210 \times 62 \times 11$	MTU	Southern Illinois River	- 2/93
						boat Casino	C	247 45 10	Catanaillan	boat Casino, Inc.	11/02
						President River		367 x 65 x 10	Caterpillar	PRC Louisiana, Inc.	11/93
Freeport Si	hipbuilding &	Marine Repa				bodi Casino Ec					
		Circle /1 on R	eader Service Ca	ira		Players River-C	Samina	240 x 62 x 11	Cummins	Players Lake Charles	12/93
Island Spirit	Sport Fishing	65 x 20	Volvo	McKeithen Outdoor	3/93	boat Casino II					
Peconic River		65 x 26	Cummins	n/a	5/93	Unnamed	Gaming	$325 \times 80 \times 12$	Caterpillar	Jumer Hotels Ltd.	3/94
Lady	11/ 4	03 X 20	Commis		0, , 0						
Lady Anderso	n Passenger	130 x 32	Caterpillar	Capt. Anderson Cruises	5/93						
Star Gazer	n/a	98 x 26	Caterpillar	n/a	9/93	Marco Ship					
								circle 101 on R	eaders Service (ard	
						Aleutian Tern	Spill Response	42 x 15 x 4	Perkins	Clean Sound Coop.	7/93
General Sh	nip Repair Co					Alcollar Terri	Spill Response		Perkins	Maxus of Indonesia	6/93
		Circle 127 on F	Reader Service C	ard		100	Spill Response		GM	Petrobel of Cairo, Egy	
Donaisl										,	
Repair work:	Coal Carrier	731 x 40	n/a	IMC Intl.	6/93						
Sewell's Point		100 x 29	n/a	Moran Towing	6/93	Marinette M					
G&E #3	Tug	n/a	Caterpillar	Baltimore Gas & Elec.	7/93	14		Circle 128 on F	Reader Service C	ard	
	er Cable Layer	8,300-dwt	n/a	Transoceanic Cableship	7/93	Juniper	Buoy Tender	225 x 46 x 13	Caterpillar	U.S.C.G.	1995
				Co. (AT&T)		Ida Lewis	Buoy Tender Buoy Tender	175 x 36 x 8	Caterpillar	U.S.C.G.	1993
Global Link	Cable Layer	7,900-dwt	n/a	it	8/93	IGG LEWIS	Dooy Telluci	1,0 ,00 ,0	Carerpinal	0.0.0.0.	1//0
	endence Cargo	660 x 34	n/a	Keystone Shipping	7/93 7/93						
Timbo	Tanker	649 x 32	n/a	Rector Shipping	1/73	Munson Ma	nufacturing				
Gladding L	Joarn Chinh	ilding The D	icles Corn					Circle 102 on R	eaders Service (Card	
Gladding-H		ilding, The Du Circle 104 on R	icios Corp. Readers Service (Card							
		OIL CIG TO 4 UII N	Caucia Jei Vice (rui vi		20 USCG Aide	es To Navigation		n/a	USCG	4/93
					/		Research	25 x 10	Merc	USFWS	5/93
	Fire Boat	52 x 15	Detroit	City of New York	12/92	1					
62	Fire Boat	52 x 15	Detroit	City of New York	12/92	1				porter/Engineering	

U.S. SMALL- & MEDIUM-SIZED YARD CONSTRUCTION UPDATE

SHIPYARD

Type

Vessel

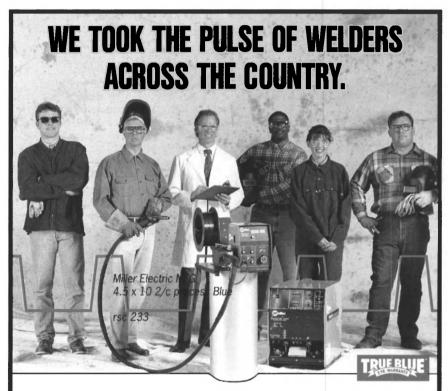
SHIPYARD		Dimensions (in feet)		Deliver
Vessel	Туре	LxWxD	Main Engines	Owner/Operator Date
	Research Spill Response	43 x 14 25 x 9	Detroit Diesel n/a	U.S. Geological Survey 6/9:
	Shimp/Fishing	53 x 14	Yamaha	Clean Island Council 6/93 Golden West 6/93
	4 Units Oil Spill	30 x 10	n/a	Fla. Power & Light 8/9:
	Research	24×10	n/a	n/a 8/9:
	Spill Response	23×8	n/a	n/a 9/9:
	Research	26×10	n/a	National Science Found. 7/9:
	Research	21 x 8	n/a	Ntl. Fisheries Research 9/93
Nichols Bro	ther Boat Bui		eaders Service Ca	ard
C				
	shing Crabber	170 x 44 122 x 59	n/a Tautran luransina	Gunmar Ildhusea 8/93
	enger Ferry Passenger Ferry	97 x 29	Textron Lycoming Detroit Diesel	Martin Automatic 4/94 City of Alameda 5/94
	Passenger Ferry	213 x 66	n/a	Pierce County 5/94
viorionini cary	russenger rerry	210 x 00	II/ a	Tierce County 3/72
Ocean Tech	nical Service		eader Service Ca	rd
n/a	Weather Buoys	n/a	n/a	U.S. NOAA 1/94
Re-Engine)	26 USCG Cutter	s 82 x 17	Caterpillar	USCG 8/93
Patti Shipya				
	(Circle 78 on Re	eader Service Ca	rd
#397 Reynolds	n/a	60 x 22 x 13	Cummins	Corps of Engineers 1/93
Casino Queen	Gaming Vessel	445.5 x 69	Cummins	Casino Queen 3/93
#453 Ceorh	Service Barge		n/a	Corps of Engineers 10/93
#510 Celmk	Quarters Barge	266 x 40	n/a	Corps of Engineers 4/94
Platzer Ship	-	Circle 79 on Re	eader Service Ca	rd
Kraton 3	Pressure T/B	205 x 52 x 12	n/a	n/a 5/90
Buffalo Star		297 x 54 x 12	n/a	n/a 6/93
Hull 306		$297 \times 54 \times 12$	n/a	n/a 9/93
Hull 307		297 x 54 x 12	n/a	n/a 11/93
Hull 308	Chemical T/B	297 x 54 x 12	n/a	n/a 12/93
Quality Ship				
	(Circle 80 on Re	eader Service Ca	rd
Hull 1208 Hull 1209		115 x 50 x 10 284 x 98 x 14	n/a n/a	O.I.L. Ltd. 7/93 n/a 1994
1011 1 2 0 7	11/ U	204 A 70 X 14	ii/ a	11/4 1992
SeaArk Mar	ine			
	(Circle 81 on Re	eader Service Ca	rd
3	Roustabouts	175 x 7	n/a	Government Various
	Transporter	24 x 8	n/a	Government 4/93
	Excursion	54 x 15	n/a	n/a 5/93
0	Little Giant	21 x 8	n/a	n/a 5/93
8	Commanders Navigator	21 x 9 24 x 8	n/a n/a	Government 7/93 Government 1/93
	Roustabout	23 x 8	n/a	n/a 1/93
	Dauntless	40 x 14	n/a	Government 5/93
	Dauntless	43 x 14	n/a	Government 4/93
	River Runners	various	n/a	n/a 4/93 to 5/93
2	Commanders Dauntless	23 x 9 40 x 14	n/a n/a	n/a 7/93 and 8/93 Government 3/93
		40 X 14	11/ 0	Government 3/9.
Service Mar	-	Circle 82 on Re	eader Service Ca	rd
Northern Star	Gaming Vessel	210 x 68	Caterpillar	Harrah's 4/93
Odyssey II	Passenger	200×40	Cummins	Premier Yachts 4/93
Southern Star	Gaming Vessel	210 × 78	Caterpillar	Harrah's 12/93
ı/a	n/a	210 x 78	Caterpillar	Harrah's 2/94

(Yard Review continued on page 67)

Dimensions (in feet)

LxWxD

Main Engines



The Result: More Pulse MIG Control, A Lot More Simplicity.

When Miller Electric began to design a new generation Pulse MIG welding system, we asked the experts: you. You wanted added control over welding parameters. But you wanted to keep it simple for the operator. You liked the convenience of pre-set pulse programs. But you wanted the ability to modify them for your application. You wanted to program a fleet of controllers exactly alike, for greater quality and predictability of parts. But you didn't want to teach them one at a time. And with the concern over environmental regulations, you told us it would be nice if we could help reduce fumes and spatter, too.

Introducing the New 60M Feeder and Maxtron 450.

Miller listened. And came back with a revolutionary new Pulse MIG system, featuring the 60M microprocessor-based wire feeder/controller and the new Maxtron 450 multiprocess inverter power source.

<u>SIMPLE</u>. — The 60M feeder control features eight preset, fully synergic programs. A front control panel allows operators to easily adjust wire feed speed and arc length for more control, more simply.

<u>VERSATILE</u>. — A wide selection of wire sizes and types can be used with the system for either pulse or conventional MIG welding.

<u>PROGRAMMABLE.</u> — The 60M "teach mode" allows the creation of unlimited custom programs, or modification of the factory preset programs. A data card option allows 32 of these custom programs to be stored or loaded into a fleet of feeders.

<u>RESPONSIBLE</u>. — The 60M/Maxtron 450 system can help reduce spatter and fumes, an important consideration for environmentally-sensitive, high-volume welding applications.

If you'd like to be at the pulse of welding technology, take control. See your Miller distributor today, listed in the Yellow Pages, or call toll-free 1-800-950-9353 for free literature.

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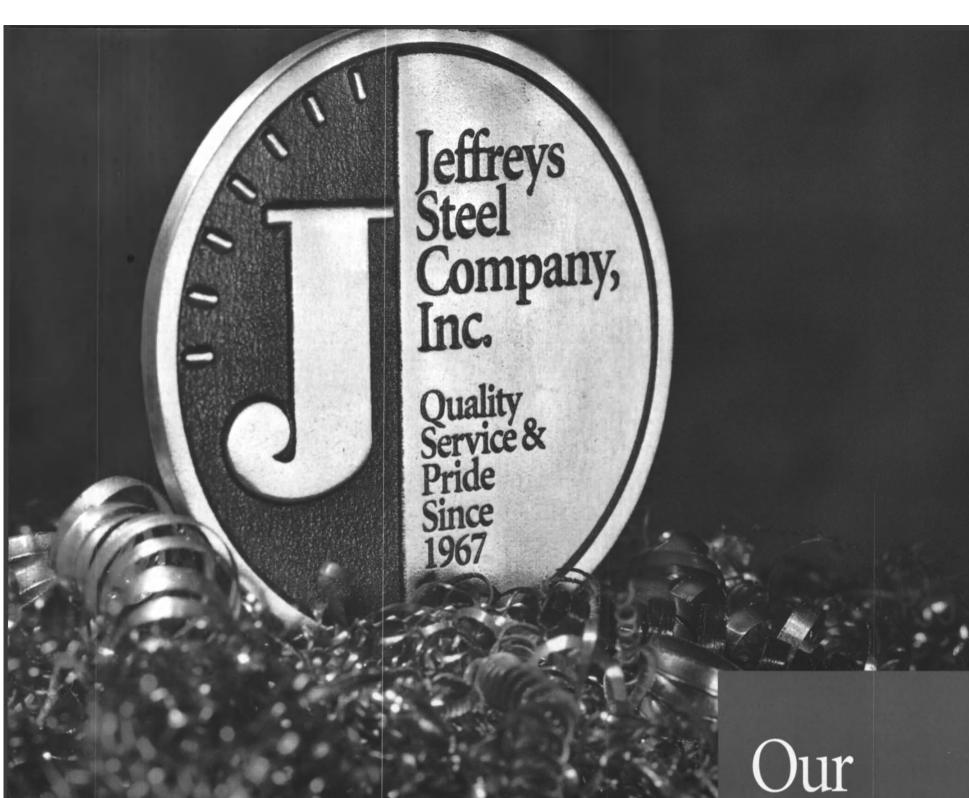


Miller Electric Mfg. Co. • P.O. Box 1079 • Appleton, WI 54912

Delivery

Owner/Operator

Date



With 25 years in the steel business behind us, we've learned our strengths. And ours lie in our customers, our experience, our people, our capabilities and in our equipment.

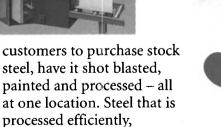
Jeffreys' descaling system features a work opening capacity of 48"w x 12'h.

Jeffreys Steel is proud to serve the marine, construction and related steel industries. We offer an expert, professional staff at our six service centers and the most current technology for every loyal customer we serve. From complete steel stocks to our newly-purchased descaling machine, Jeffreys Steel is a full-service steel center.

We're particularly proud of our state-of-the-art descaling

system because it allows our environmentally safe. This includes steel plates and shapes. With the acquisition of this technology, Jeffreys Steel is one of the only firms in the Southeast to provide full steel services under one roof.

And with all our capabilities, we couldn't help but gain a little polish after 25 years.



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MarAd Awards \$167 Million In Contracts

The Maritime Administration has awarded contracts totaling more than \$167 Million to 14 companies

Ship Manager	Contract Amount/Term	RRF Ship Assignati	Rogion Assign
All Marine Services, Ltd.	\$2,415,740	Pioneer Crusader	Central
(Middle Island, N.Y.)	2.5 years	Pioneer Contractor	Central
American Overseas Marine	\$2,003,601	Pioneer Commander Cape Juby	Central South Atlantic
Quincy, Mass.)	5 years	Cape Johnson	South Atlantic
(Comey, Mass.,	\$2,125,974	Cape Nome	South Atlantic
	5 years	Southern Cross	South Atlantic
	\$2,190,726	Santa Ana	Central
	5 years	California	Central
	\$10,279,980	Cape Lambert	Central
	5 years \$10,279,980	Cape Lobos Wright	Central South Atlantic
	5 years	Curtiss	Western
American President Lines	\$14,231,144	Jupiter	Central
(Oakland, Calif.)	5 years	Cape Isabel	Central
		Cape Inscription	Central
	\$4,509,833	Comet	Western
	2.5 years \$2,203,045	Meteor	Western Western
	5 years	Cape Breton Cape Blanco	Western
	\$2,203,045	Cape Bover	Western
	5 years	Cape Borda	Western
	\$2,304,865	Cape Gibson	Western
	5 years	Cape Girardeau	Western
APEX Marine Corp.	\$1,343,533	Gulf Shipper	Central
(Lake Success, N.Y.)	2.5 years	Gulf Trader	Central
	\$ 904.070	Gulf Merchant Gulf Banker	Central
	\$ 904,070 2.5 years	Gulf Farmer	Central Central
Bay Ship Management	\$1,958,450	Mount Washington	Central
(Englewood Cliffs, N.J.)	5 years	Mount Vernon	Central
	\$1,958,450	Petersburg	Central
	5 years	AM Explorer	Central
	\$1,988,450	Chesapeake	Western
EIII Cara Inc	5 years	Shoshone	Western
Farrell Lines, Inc. (New York, N.Y.)	\$2,980,300 5 years	Cape Ann Cape Avinof	South Atlantic South Atlantic
(New Tork, 14.1.)	5 years	Cape Avinor	South Alidnic
International Marine Carriers	\$4,412,800	Cape Florida	Central
(Mineola, N.Y.)	5 years	Cape Flattery	Central
		Cape Farewell	Central
	\$3,074,800	Grand Canyon State	Western
	5 years	Gem State	Western
	\$2,272,675	Keystone State Austral Lightning	Western Western
	5 years	Green Mountain State	Western
Interocean Management Corp.	\$6,099,790	Gopher State	South Atlantic
(Philadelphia, Pa.)	5 years	Flickertail State	South Atlantic
		Cornhusker State	South Atlantic
	\$4 <u>,</u> 341,650	Diamond State	Central
	5 years	Equality State	Central
	\$3,301,650	Cape Bon Northern Light	Western Western
Marine Carriers (USA) Inc.	5 years \$4,227,360	Cape Archway	South Atlantic
(New York, N.Y.)	5 years	Cape Alexander	South Atlantic
		Cape Alava	South Atlantic
	\$1,454,795	Agent	Western
	2.5 years	Ambassador	Western
	\$2,855,890	Aide	Western
Marine Transport Lines	5 years \$10,469,825	Adventurer	Western South Atlantic
(Secaucus, N.J.)	5 years	Cape Edmont Cape Ducato	South Atlantic
(3000000), 14:3.)	\$10,469,825	Cape Decision	South Atlantic
	5 years	Cape Douglas	South Atlantic
	\$10,469,825	Cape Diamond	South Atlantic
	5 years	Cape Domingo	South Atlantic
	\$15,293,125	Cape Henry	South Atlantic
	5 yeears	Cape Horn	South Atlantic
Mormac Marine Transport	\$1,240,738	Cape Hudson Del Monte	South Atlantic Central
(Stamford, Conn.)	2.5 years	Del Valle	Central
		Del Viento	Central
	\$2,392,475	Buyer	Central
	5 years	Courier	Central
0141.6	¢0.107.575	Banner	Central
OMI Corp. (New York, N.Y.)	\$2,126,575	Cape Carthago	South Atlantic
irew lork, N.T.)	5 years \$2,123,100	Cape Carthage Cape Clear	South Atlantic South Atlantic
	5 years	Cape Cod	South Atlantic
	\$1,490,363	Cape Canaveral	South Atlantic
	2.5 years	Cape Canso	South Atlantic
		Cape Chalmers	South Atlantic
	\$6,231,225	Cape Mohican	South Atlantic
	5 years	Cape Mendocino	South Atlantic
Stapp Towing Company	\$1,886,385	Cape May	South Atlantic
Dickinson, Texas	\$1,886,383 5 years	Mission Buenaventura Mission Capistrano	Central Central
U.S. Marine Management	\$1,505,775	Lake	South Atlantic
(Norfolk, Va.)	2.5 years	Scan	South Atlantic
	\$1,505,775	Pride	South Atlantic
	2.5 years	Cape Catawba	South Atlantic

MarAd News Update:

- Oglebay Can Sell
- APL Asks Permission
- Moon Wins RRF Work
- Lykes Withdraws Request

MarAd Gives Oglebay Norton Permission To Sell Vessel

The Maritime Administration has given Oglebay Norton Co. of Cleveland, Ohio permission to sell the 14,600-dwt cargo vessel Robert C. Norton and the 14,600-dwt bulk carrier William A. Reiss to Corostel Trading Ltd., Quebec, Canada.

The vessels were built in 1943 in Ashtabula, Ohio and 1925 in River Rough, Mich., respectively, and will be scrapped in Turkey, Taiwan or India. MarAd's approval is required under section 9 of the Shipping Act of 1916, as amended.

APL Asks For Permission To Operate Additional Vessel

American President Lines, Ltd., has asked the Maritime Administration for permission to operate an additional foreign-flag feeder vessel, with a capacity of 300 40-foot containers or the equivalent, between Singapore and Indonesia. The company currently has permission to operate one such vessel.

Section 804 of the Merchant Marine Act of 1936, as amended, precludes subsidized U.S.-flag operators or their affiliates from operating foreign-flag vessels which compete with essential U.S.-flag shipping services unless the Secretary of Transportation waives the provision of this section for a specific period of time.

MarAd Awards Moon Engineering RRF Contract

MarAd has awarded a contract to Moon Engineering Co., Inc. of Portsmouth, Va., for long-term lay-up of the three Ready Reserve Force (RRF) vessels Cape Hudson, Cape Henry and Cape Horn.

and Cape Horn.

The contract covers layberthing services including berthage, shore connect and disconnect, and reimbursable services, such as electrical power, potable water and telephone usage. It is for a one-year period but includes options for up to four one-year extensions. The value of the contract for one year is estimated at \$4,065,375.

Lykes Bros. Steamship Withdraws Request

Lykes Bros. Steamship has withdrawn its request for approval of the transfer of its operating differential subsidy agreement to Louisiana Vessel Management and the sale of LVM to independent investors.

SeaArk Delivers Excursion Boat To South Carolina Operator



Captain Dick's Marina's excursion boat "Explorer."

SeaArk Marine, Inc., Monticello, Ark., delivered the excursion boat "Explorer" to Captain Dick's Marina, Murrells Inlet, S.C.

The Explorer is 54 feet long and seats 72 passengers. The design of the Explorer, however, is U.S. Coast Guard certified to accommodate 90 people. Used for Wildlife/Nature tours, the Explorer is powered by twin 150-hp outboards and attains 25 mph with crew onboard and 18.5 mph in a fully loaded condition.

The craft's hulls are constructed of 3/16" all-welded aluminum. Other features of the Explorer include a removable bow ramp, 100 gallon fuel tank, 100 gallon fresh water system and twin marine sanitation systems.

For more information on SeaArk Marine, Inc.,

Circle 122 on Reader Service Card

Trinity Delivers Double Hull Tank Barge To Allied Towing Corp.

A double hull tank barge has been delivered by Trinity Marine-Beaumont to Allied Towing Corporation, Norfolk, Va.

Tank Barge ATC 80 is 332 feet long, with a 74-foot beam, a 25-foot depth, and a fully loaded draft of 22 feet. It transports petroleum products on the Chesapeake Bay and the East Coast for Amoco Oil Company, and is based out of Norfolk, Va.

It is equipped with 10 cargo tanks for a carrying capacity of 80,000 barrels (12,000 long tons) transferred by two Detroit Diesel driven Johnston deep well pumps.

On deck, Tank Barge ATC 80 is equipped with two, two-ton capacity Trident cargo hose handling cranes, two Smatco/Cross Equipment wire rope winches, one Smatco/Cross Equipment anchor windlass and one New England Trawler capstan. The cargo tank level and alarm system was furnished by Bergan Tank Control.

Tank Barge ATC 80 is the first of two barges completed by Trinity Marine-Beaumont for Allied Towing. A sister barge is under construction at the Beaumont shipyard and is scheduled for delivery later this year.

The Allied barge fully meets or exceeds the requirements of OPA 90. Is has an American Bureau of Shipping loadline, meets all applicable U.S. Coast Guard requirements and is certified to carry Grade A flammable cargoes and other various chemical cargoes.

SUNY Maritime College Orders Saab Tank Gauging System

The SUNY Maritime College has recently ordered a two tank Saab TankRadar from Setcor Inc. of Tenafly, NJ.

The Saab TankRadar system will be installed on the College's 1,400 displacement ton tanker. The Saab system is based on the radar principle for tank level gauging. The system measures

levels, temperatures, and inert gas pressures and accepts data from draft, trim and list sensors.

For more on Saab TankRadar from Setcor,

Circle 95 on Reader Service Card

Orkot Helps To Open The Gates At New Bristol Terminal

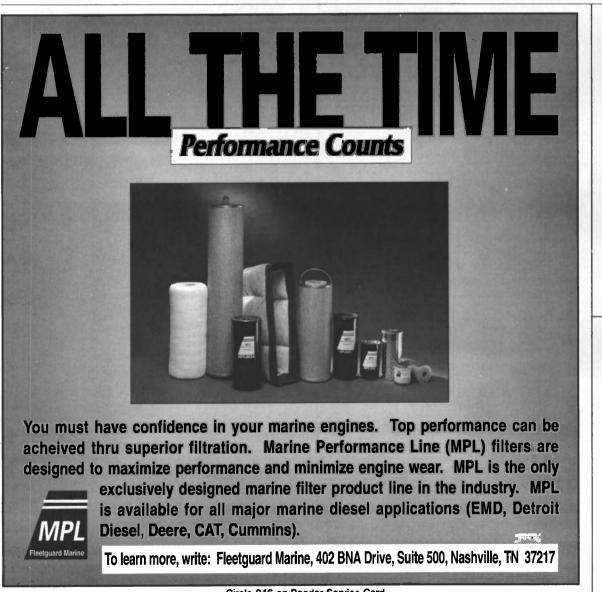
Immediately after taking over the Port of Bristol at the end of 1991, the newly-formed Bristol Port Company unveiled a multi-million dollar development program, the main element being a new bulk handling terminal at royal Portbury Dock. Orkot "TLM Marine" was selected for heal post sealing on a new set of lock gates, and as replacement seals on the existing gates.

Orkot TLM Marine is a non-asbestos composite reinforced with woven textile and is a special development by Orkot Limited of Rotherham. TLM Marine was selected reportedly because of its low friction in water and high compressive

loading capabilities.

The lock at Portbury Dock is the largest in Europe, 140 feet wide and nearly 1,200 feet long. There are six gates in three sets, each gate weighing 490 tons. Each gate heel post is covered by Orkot TLM Marine bearing segments, against stainless steel bearing faces built into the dock wall. Orkot TLM Marine can be supplied, exstock, in standard tubes from 50mm to 800mm diameter for machining to size. Orkot Ltd. has been in business since 1955, and its U.S.-based sister company, Orkot U.S.A., in business since 1990, has the same capabilities and resources. For more information on Orkot U.S.A.,

Circle 66 on Reader Service Card





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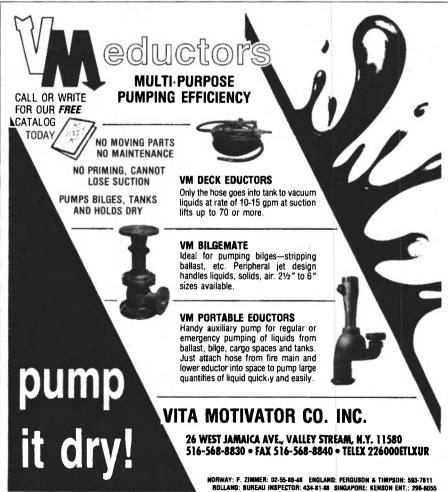
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Circle 226 on Reader Service Card

U.S. SMALL- & MEDIUM-SIZED YARD CONSTRUCTION UPDATE

SHIPYARD		Dimensions (in feet)			Delivery	SHIPYARD		Dimensions (in feet)		D	elivery
Vessel	Туре	L x W x D	Main Engines	Owner/Operator	Date	Vessel	Туре	LxWxD	Main Engines	Owner/Operator	Date
						Kvichak Ma	arine Industrie	s		7.	
(Yard	Review of	continue	d from pag	ge 63)			(Circle 134 on F	Reader Service C	ard	
				•		6	Gillnetters	32 x 14 x 3	Lugger		u 5/93
Isle of Capri	n/a	254 x 78	Caterpillar	Casino America	2/94		Spill Response	20 × 10 × 3	Cummins	Alyeska Pipeline	3/93
Boosier City	, G	204 7 7 0	calcipilai	Casino America	2//4		Spill Response Spill Response	33 x 12 x 2 36 x 12 x 2	Star Power Perkins	Clean Sound Coop.	3/93 5/93
						12	Spill Response	28 x 12 x 3	Caterpillar	NRC 6/93	-10/93
						12	Spill Response	33 x 12 x 2	OMC	Clean Seas	9/93
Steiner Shi	pyard, Inc.						Seine Skiff	20 x 10 x 3	Cummins	n/a	6/93
		ircle 103 on R	Readers Service C	ard			Ocine Okin	20 × 10 × 0	Commis	11/4	0, 73
						Avondale I	ndustries, Inc	-			
Conquistador		$105 \times 24 \times 10$	Caterpillar	Puerto Rico Port Auth.	1/93	1			Reader Service C	ard	
	Debris Collecto		Cummins	Puerto Rico Port Auth.	2/93						
Safety Leader		66 x 24 x 8	Caterpillar	n/a	5/93	1	Towboat	$168 \times 45 \times 12$	Caterpillar	Viking Maritec	8/93
	overed Oil Barge			State of Maine	5/93	#C	Gaming	266 x 77 x 12	n/a	Jazz Enterprises	5/94
Netepinawesi	Oil Barge	148 x 38 x 10	n/a	State of Maine	5/93		Gaming	210 x 73 12	n/a	BoomTown	5/94
		$185 \times 38 \times 14$	Caterpillar	n/a	8/93						
	Ferry	$151 \times 42 \times 8$	Caterpillar	n/a	1/94	NORSHIPC	O				
							(Circle 136 on F	Reader Service C	ard	
Superior B	oat Works					Repairs recen	itly completed (po	ırtial listing):			
		Circle 83 on R	eader Service Ca	ırd		Sealift Medite		n/a	n/a	IMC	n/a
						Cape Doming	jo	n/a	n/a	MTL	n/a
Lady Luck I	Gaming Vessel	$302 \times 66 \times 13$	n/a	Lady Luck Casino/Hote	el 2/93	Empress II		n/a	n/a	EG&G	n/a
						Cape Mohica		, n/a	n/a	OMI	n/a
							Emergency Rep		n/a	Minaminippon Ship.	n/a
SWATH OC	ean Systems			14.		Sealand Atlar	ntic -	n/a	n/a	Sea-Land	n/a
		Circle 84 on R	eader Service Ca	ırd		Carolina		n/a	n/a	Puerto Rico Marine	n/a
	Dil 137 I	/7 O7 O	C + 11	ii . Pri . A	0 /00	Export Patriot		n/a	n/a	Farrell Lines	n/a
	Pilot Vessel	67 x 37 x 8	Caterpillar	Houston Pilot Assoc.	3/93	Sealand Cruso Stellamare	ader	n/a	n/a	Sea-Land	n/a
\\/t	Sport Fishing	90 x 45 x 9.5	Caterpillar	Swath Ocean Systems				n/a	n/a	Kahn Shipping Ltd.	n/a
western riyer	Óceanographic Research	:11/ X 33 X 12	Caterpillar	Monterey Bay Aquariu Reserch Inst.	in 1/95	Gold Bond Co Booked Repair	irs: ´	n/a	n/a	Skaarup Shipping	n/a
						Columbus Am	nerica	n/a	n/a	Columbus Lines	n/a
Zidel Marin						Rotterdam		n/a	n/a	Holland America Lines	n/a
		Circle 129 on F	Reader Service Ca	ard		Royal Princess		n/a	n/a	P&O	n/a
a. =1.			,			Regal Princess	S	n/a	n/a	P&O	n/a
St. Elias Cascades	Deck Barge Petroleum Barg	335 x 76 x 22 e 328 x 76	n/a n/a	Oregon Barge Leasing Corp.	6/93 1/93	Festivale		n/a	n/a	Carnival Cruise (Continued on p	n/a age 70)





Circle 250 on Reader Service Card

Circle 219 on Reader Service Card



Seatrade Tanker Industry Convention

September 27 to 29, London, U.K.

eatrade's Tanker Industry Convention, sponsored by the International Association of Independent Tanker Owners, is set to be held September 27 to 29 at the Royal Lancaster Hotel in London,

The integrated three-day conference and exhibition centers on tanker operators. On the exhibition side, more than 65 exhibitors have signed on to display their wares at the show. Exhibit hours are from 10:30 a.m. to 6 p.m. both Monday and Tuesday (September 27 and 28), and from 10:30 a.m. to 4:30 p.m. on Wednesday. The impressive list of exhibitors includes many of the top shipyards and equipment suppliers.

The conference will run daily from 9 a.m. until 5 p.m. Highlights of the

conference include:

• "The State of the Industry," a panel discussion on the state of the tanker industry and the regulatory, commercial and structural pressures it faces. Introductory speakers include Andreas Ugland, chairman of Intertanko and chairman of The Ugland Group; Gerhad Kurz, chairman of Oil Companies International Marine Forum & president of Mobil Shipping & Transportation Com-

"This house believes that payment by charters of a premium for quality tonnage is the most effective way to maintain standards in the tanker industry." Scheduled is Juan Kelly, chairman, International Chamber of Shipping.
• The Tanker Industry Image

Forum, under the chairmanship of The Rt. Hon. the Lord Tebbit, former U.K. secretary of state for trade and industry. The panel of leading tanker industry personali-ties will discuss existing issues.

The State of the Industry sessions kicks-off the conference Mon-day morning. Following a buffet lunch, the two sessions scheduled to run concurrently are Session I: Charterers and Cargoes, which will examine the relationship between charterers and owners; and Session II, Ship Design and Technology, which will look at alternative tanker designs, hull stress analysis and preventative maintenance.

The Seatrade Debate will start the day on Tuesday. Following lunch, the Tanker Technology Forum is scheduled, and includes a series of presentations, highlighting technical innovations for the in-

• The Seatrade Debate, a parliatry Image Forum is scheduled for the morning. It will attempt to tackle mentary-style debate on the motion: the morning. It will attempt to tackle

such questions as: What is the public perception of the tanker industry?; How important to the industry is it that it should be improved?; and Who should assume responsibility for tackling the problem?

Following lunch, the two sessions which run concurrently include Session III, Operations, which examines the true relationship between the age and the quality in VLCCs; OPA 90; and green tariffs for oil tankers. Session IV, Finance, will include discussion of current chartering policies and their significance for the financing of the fleet renewal program, the Gibbons Bill and its implications, and more.

There will also be a full schedule

of social events to compliment the exhibit and conference side, details of which were not available at press

For additional information on attending the Seatrade Tanker Industry conference, contact: The Seatrade Organization, Seatrade House, 42 North Station Road, Colchester CO1 1RB, U.K.; Tel: +44 206 45121; Fax: +44 206 45190.

EXHIBITOR LIST (at time of publication)

Alfa-Laval Engineering Ltd. American Bureau of Shipping Aquamaster-Rauma Astilleros Espanoles Autronica Marine Bibby International Services Bremer Vulkan Bureau Veritas Camrex Chugoku Ltd. Centromor Chantiers de l'Atlantique Computube Ltd. Consilium Marine Danaos Management Consultants David Caps Denholm Ship Management Det Norske Veritas

Acomarit Services Maritimes SA

Dorchester Maritime Ltd. **Dubai Ports Authority** Energy Marine Euroyards Fincantieri Finnish Foreign Trade Assoc. Gdynia Shipyard Gulf Agency Co. Hempels Marine Paints Howaldtswerke Deutsche Werft lan-Conrad Bergan Inc. IHI Ltd. Intertanko Isle of Man Government Isle of Man Registry Japan Ship Center/JSME Jotun Protective Coatings

Kawasaki Heavy Industries

Kennar Maintenance Lloyd's Register of Shipping MacGregor-Navire Group Marine Pollution Control Corp. MG Duffy Mitsubishi Heavy Industries Mitsui Shipbuilding MMC (Europe) Ltd. Musasino Engineering Novorossiysk Shipping Co. Petrobras Polarmarine Scandinavia AB Pres-Vac Engineering A/S Saab Marine Electronics Shell Marine Personnel Sumitomo Heavy Industries Swedish Telecom Radio Tanksystem Toftejorg Ltd. Wartsila Diesel Witherby & Co. Ltd.

Nichols Brothers Lengthens And Repowers Washington State Cat

The M/V Tyee, Washington State Ferries' passenger-only catamaran ferry, went back into service in May after being lengthened and repowered in the Nichols Brothers Boat Builders yards, Whidbey Island.

The twin hulls were extended 8.5 feet. Caterpillar 3512 engines replaced the original Deutz engines. Matt Nichols, president of Nichols Brothers of Freeland, said that they were able to complete the job "on

budget and ahead of schedule."
Robert Jones, marine engineering manager for the state system, said that the "quality of the work was good and getting the vessel back earlier than expected was a savings to the taxpayers.'

The state ferry system leased the clipper III from the Clipper Lines while the M/V Tyee was out of ser-

It spent four months in the Nichols' yard.
The two Caterpillar engines, rated at 1,228-hp at 1,760 rpm, were installed with the original Reintjes WVS832 reduction gears. These gears were rebuilt during the project. The original John Deere 4276 50-kW generators, which were supplied by Alaska Diesel Electric of Seattle, were moved aft to the compartments formed by extending the hulls.

For more information,

Circle 26 on Reader Service Card

Racal Adds New Vessel To Its Survey Capabilities



The M/V "Miclyn Searcher" has been acquired as an addition to the geophysics capabilities of Racal

Racal Survey has acquired the M/ V "Miclyn Searcher" on long term charter for use in the Asia Pacific region. Based in Singapore, she has entered service as a replacement to the M/V "Algosaibi 21," which has operated successfully in the region

for the past two years.

The new addition to Racal Survey's geophysics capabilities is expected to operate from the Gulf of Korea to Australia with the bulk of its work being offshore Thailand, Malaysia, Myanmar, Indonesia and the Philippines and with occasional projects off southern China.

Following the successful completion of its commissioning trials, the Miclyn Searcher" has been awarded a major contract to perform drill site hazard surveys for P.T. Caltex Pacific Indonesia. In addition to the site surveys, Caltex has requested a high resolution digital survey to con-

duct further exploration.

Launched by Walkers Ltd. of
Australia in 1970 as the "Western
Endeavour," the vessel has since undergone numerous modifications and upgrades to place it among the best equipped and most capable vessels of its type.

For more information on Racal,

Circle 25 on Reader Service Card

Samson Re-enters Large **Diameter Rope Market**

Samson Ocean Systems is re-entering the large diameter rope offshore market with a four-inch diameter product that has a break strength of more than one million pounds. Called Spectron 12, the new rope is made from Spectra^R, the ultra-high molecular weight polyethylene fiber from Allied Signal of Petersburg, Va.

The company makes ropes with Spectra ranging in size from 7/64inch diameter to four-inch diameter that are used for everything from ligament replacement to fishing nets to mooring lines. Reportedly Spectra is, pound for pound, 10 times stronger than steel, and with a specific gravity of .98, it floats.

For more on Samson Ocean Sys-

Circle 43 on Reader Service Card



27-29 September 1993 Royal Lancaster Hotel, London, UK.

Your opportunity for face to face contact with the industry's top players

The Seatrade Tanker Industry Convention is an innovative programme of discussion, debate and presentations, plus a specialised exhibition of the latest technology.

Addressing the crucial issues that will shape the industry's future well into the next century. And giving you the opportunity to meet face to face with

A limited number of delegate places are available, so book early and take advantage of the early bird discount. Fax or mail the coupon now for your copy of the programme.

• MAIN CONFERENCE SESSIONS

"THE STATE OF THE INDUSTRY"

A panel discussion on the state of the tanker industry and the regulatory, commercial and structural pressures it faces.

• THE SEATRADE DEBATE

A parliamentary style debate on the motion:

"This house believes that payment by charterers of a premium for quality tonnage is the most effective way to maintain standards in the tanker industry".

• THE TANKER INDUSTRY IMAGE FORUM

A panel of five spokespeople will consider how the industry's image can most effectively be improved and who should assume responsibility for tackling the problem.

• FURTHER SESSIONS ON

- STRATEGIC ISSUES
- SHIP DESIGN AND TECHNOLOGY
- OPERATIONS
- FINANCE

An exhibition of state of the art products and services for the tanker industry is being organised as an integral part of the Convention. Delegates will have the opportunity of visiting the exhibits and attending exhibitor presentations.

> Sponsored by INTERTANKO (International Association of Independent Tanker Owners)



• SPEAKERS AND PANELLISTS WILL INCLUDE:

THE RT HON THE LORD TEBBIT. Former UK Secretary of State for

ALAIN GRILL, Chairman, Chantiers de l'Atlantique

LAURA RAUN. Producer. CNN Business News WILHELM MAGELSSEN, Head of Department for Ships Newbuilding.

ERIC SHAWYER, Chairman & Chief Executive, E A Gibson

GREGORY HADJIELEFTHERIADIS, Vice President

PETER COWLING. Chairman, Hong Kong Shipowners Association &

Managing Director, Wallem Group Limited
PAUL SLATER, Chairman, First International Financial Corporation SVEN H SALEN, Chairman, Frontline AB

JAMES BELL, Permanent Secretary, International Association of

CHRISTOPHER HORROCKS, Secretary General, Internationa

JIM DAVIS, Chairman, International Maritime Industries Forum KLASS REINIGERT, President. International Salvage Union & Managing

Director, Smit Tak BV
TORMOD RAFGARD, Managing Director, Intertanko

KEITH BROOK, Senior Development Engineer, Lloyd's Register

DAVID USHER, President, Marine Pollution Control, USA

LEONID LOZA, General Director & Chairman of the Board, Novorossiysk Shipping Company EUGENIO KOSLINSKI, Superintendent of Transport,

MARLENE DANIELS, Partner, Seward & Kissel

PHILIP OWEN, Head of Marine Affreightment. Shell International Marine JOHN STOCKER. President, Shipbuilders Council of America

BILL GRAY, Executive Vice President, Skaarup Shipping Corpora PER JESSING, Director, The Swedish Shipowners' Association FRANCIS VALLAT, Chairman and Chief Executive Officer.

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Nature of Business	
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Please mail or fax to:	Or:
Michael Kazakoff,	Vanessa Stephens,
The Seatrade Organisation,	The Seatrade Organisation,
Princeton Forrestal Village,	Seatrade House,
125 Village Boulevard - Suite 220, Princeton, NJ 08540-5703, USA.	42 North Station Road,
	Colchester CO1 1RB, UK.
Tel: +1 609 452 9414 Fax: +1 609 452 9374	Tel: +44 206 45121 Fax: +44 206 45190

U.S. SMALL- & MEDIUM-SIZED YARD CONSTRUCTION

(Continued from page 67)

(Continue	i irom pay	e 01)			
SHIPYARD		Dimensions (in feet)			Delivery
Vessel Type		LxWxD	Main Engines	Owner/Operator	Date
Bollinger Ma	achine Sho _l	p & Shipyard, I			
		Circle 14	1 on Reader Service	e Card	
USS Cyclone C		170 x 25 x 13	Paxman	U.S. Navy	2/93
USS Tempest (Cyclone Class	170 x 25 x 13	Paxman	U.S. Navy	5/93
Trinity Mari	ne Group				
,		Circle 14	0 on Reader Service	e Card	
	Utility Boat	135 x 28 x 8	Detroit Diesel	n/a	8/93
	LSV (6)	272 x 60 x 12	EMD	n/a	9/93
	LT-801	128 x 36 x 16	EMD	n/a	9/93
	LT-805	128 x 36 x 16	EMD	n/a	9/93
	Towboat	85 x 30 x 7	Caterpillar	n/a	9/93
		85 x 30 x 7	Caterpillar	n/a	10/93
Offsl	hore Support	$218 \times 46 \times 20$	Caterpillar	n/a	10/93
1		82 x 18 x 9	Detroit Diesel	n/a	10/93
	Dive Boat	38 x 11 x 4	Detroit Diesel	n/a	10/93
	Tank Barge	332 x 74 x 25	n/a	n/a	10/93
Paddlewh	eel Riverboat	$322 \times 90 \times 14$	Caterpillar	n/a	11/93
	Tank Barge	$297 \times 54 \times 12$	n/a	n/a	11/93
	Crew/Utility	$y 135 \times 28 \times 8$	n/a	n/a	11/93
	XFPB No. 3	82 x 18 x 9	Detroit Diesel	n/a	12/93
	LSV (7)	272 x 60 x 12	EMD	n/a	12/93
	Tank Barge	$325 \times 60 \times 21$	n/a	n/a	1/94
	LT-806	128 x 36 x 16	EMD	n/a	1/94
	Tractor Tug	$155 \times 46 \times 19$	EMD	n/a	1/94
	Tug	124×37	EMD	n/a	1/94
	Tug	$127 \times 37 \times 20$	EMD	n/a	2/94
	Patrol Boat	53 x 15 x 8	Detroit Diesel	n/a	4/94
Paddlewh	neel Riverboat	245 x 62 x 12	Cummins	n/a	10/94
	T-AGS 60		SCR Drive	n/a	10/94
	Tractor Tug	155 x 46 x 19	EMD	n/a	11/94
	TACC 41		CCD Daine	-/-	5/05

SCR Drive

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General Ship Repair Offers Full Range Of Services

The General Ship Repair Corp., a family-owned and operated company, offers a full-range of services, including new vessel construction, repair work and conversions at its own yard which has complete shops for machining, fabrication, pipe, electrical, paint and engine work. The yard utilizes a certified 950-ton capacity floating drydock plus four wetberth facilities. General Ship Repair will dispatch complete riding crews to any global point for top side work and emergency repairs of any kind for all vessels destined for Baltimore. Over the years, General Ship Repair gained a reputation for handling repairs on tugboats, fire boats, excursion vessels, work boats of all types, sailing ships and cargo ships. Recent work typifies the versatility of General Ship Repair: Renewing all brackets on the side shells of a coal carrier for a Singapore owner, using a fully mobile crew at a Bethlehem Steel Corp. Cargo Pier, Sparrows Point, Md. (with inspections by the U.S. Coast Guard and NKK Classifications); repairs of a crane boom from a general cargo freighter; (removing and repairing the boom at its yard, then re-installation at the cargo pier; fabrication and complete replacement of four corrugated cargo bulkheads on a self-unloading bulk gypsum carrier using a fully mobile work crew, cranes and equipment (including finished sandblasting

and two-coat epoxy painting; fine inspections by Lloyd's Register of Shipping; and completely refurbishing a Moran Co. tug. Personnel changes at the helm for General Ship Repair include Charles F. (Derick) Lynch, Jr., formerly vice president, succeeding his father Charles F. (Jack) Lynch as the third generation president of the company. For more information on General Ship Repair,

Circle 147 on Reader Service Card

HDW Appoints Roland Marine As New Agents

Roland Marine, Inc. of New York has been appointed exclusive agents in the U.S. of Howaldtswerke-Deutsche Werft AG (HDW), Kiel, Germany, for repairs and conversions of ships. In early July HDW inaugurated its newly-acquired floating dock with a lifting capacity of 55,000 tons. The acquisition of the dock is part of the yard's substantial "HDW 2000" investment concept, which also provides for the installation of new, state-of-the-art equipment and the general improvement of the structure of HDW's organization to increase its competitiveness. HDW recently concluded contracts with APL for the construc- \mathbf{of} three 4,800-teu containerships. For more information on Roland Marine, Inc.,

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USCG Awards \$22 Million Contract To Marinette Marine For Construction Of New Coastal Buoy Tender

The U.S. Coast Guard has awarded a \$22 million contract to Marinette Marine Corp. of Marinette, Wis. to construct a new 175-foot coastal buoy tender that will be used to enhance the Coast Guard's aide to navigation program as well as search and rescue operations and marine environmental protection missions. If all options are exercised, the total value of the contract will be between \$179.4 million and \$219 million.

The 175-foot coastal buoy tender

will have a 36-foot beam and displace 916 long tons. The crane provides a 10-ton capacity main hoist, 3.75-ton capacity secondary or whip hoist and 42-foot long boom.

Propulsion includes two main diesel engines, 855 bhp per unit, driving two propellers through right angle, azimuthing propulsion thrusters (Z-drives). Other propulsion equipment includes: two fixed pitch propellers, 5.5' diameter each; two right angle, azimuthing drives; and a 400-hp, fixed pitch propeller tunnel-type, electrically-powered bow thruster. Steering is provided by an electro-hydraulic system that powers hydraulic drive motors on the Z-drives. The cutter will incorporate an integrated bridge and utilize a dynamic positioning system. The propulsion control system will also be automated.

"The new coastal buoy tenders will modernize the fleet by replacing the current tenders that are between 28- and 50-years-old," Secretary of Transportation **Federico Pena** said. "The new tenders will reduce operating costs and provide a safer and more efficient working environment."

The contract provides the Coast Guard with the lead ship, options for up to 13 additional cutters, spare parts, training and a technical data package for support and possible future construction.

The Coast Guard said the cutters will be used to place, maintain and repair more than 50,000 buoys, day markers and lights. These aids are essential to the safety and welfare of maritime vessels and recreation boats that use U.S. waters daily.

The new Keeper Class Coastal buoy tender will be the first of an expected 14 cutters and will be named "Ida Lewis." The 14 Ida Lewis class cutters will be named for famous lighthouse keepers and will replace the 11 aging 133- and 157-foot cutters and supplement the replacement fleet of Juniper Class seagoing buoy tenders.

seagoing buoy tenders.

The Ida Lewis will hold a crew of 18 and the vessels will be designed to provide berthing for both male and female personnel. The Ida Lewis will be capable of maintaining a

speed of 12 knots at full load. The cutter will have a range of no less than 2,000 nautical miles at a speed of 10 knots in the full load condition.

The 133-foot cutters have been in Coast Guard service since 1947. Prior to that, they had been used by the U.S. Army since 1942. The 157-foot cutters have been in service since 1964.

In addition to having design, equipment and technical upgrades that make the vessel more suited for conducting aids to navigation and search and rescue missions, the Keeper Class tenders will be specifically designed to deploy an oil skimming system which will be positioned near the vessel's home port. This will enhance the vessel's ability to carry out its marine environmental protection mission. The cutter will also have an integrated electronic bridge and ship positioning system and automated propulsion controls. Ida Lewis will be capable of operating in ice or breaking ice.

For more information,

Circle 138 on Reader Service Card

Caribbean Countries Consider Regulating And Taxing Cruise Industry

Twelve Caribbean countries are considering forming a regional agency to regulate and tax the cruise industry, which is being viewed recently by island governments as a richly endowed business sapping island services.

P.J. Patterson, prime minister of Jamaica, said, "As we have rules governing our air space, so must there be rules governing the use of our sea space." Mr. Patterson went on to say, "Let us together all insist that cruise shipping make its appropriate contribution for the benefit of the people of our region." The Caribbean Hotel Association, which instigated the campaign to regulate and tax the industry, claims the cruise business has been growing at the expense of land-based tourism and doesn't pay its fair share for the island visits. The idea received a positive reception at the annual meeting of the Caribbean Community, where the heads of 12 English-speaking countries and the British colony of Montserrat met.

The campaign comes on the heels of a decision by Miami-based Royal Caribbean Cruises Ltd. to drop St. Lucia as a port of call after it raised its head tax on cruise passengers from \$2.50 to \$10.00 last October.

According to John LaCapra, head of the Florida-Caribbean Cruise Association, governments of the Caribbean countries are preoccupied with tax income but ignore cruise passenger spending ashore and their return visits as hotel guests. The Caribbean Community is also considering adopting a uniform port user fee covering berthing, waste disposal and terminal construction costs; adopting a uniform licensing fees that could be offset by buying supplies in the Caribbean instead of out of Miami; and adopting a law imposing fines for illegal ocean dumping.

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BUYERS DIRECTORY

This directory section is an editorial feature published in every issue for the convenience of the readers of MARITIME REPORTER/Engineering News. 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/EN assumes no responsibility for errors. If you are interested in having your company listed in this Buyers Directory Section, contact John C. O'Malley at (212) 477-6700.

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JONER—Watertight Door—Paneling—Ceiling System—Decking
Branton Industries, Inc., 1101 Edwards Ave., Harihan, LA 70123
GEC-Marconi Electronic Systems Corp., 550 S. Fulton Ave., Mt. Vernon, NJ 10550
IMAC AB, Berga Alle 1, S-252 55 Helsingborg, SWEDEN
U.S. Rep: Hopeman Brothers, Inc., P.O., Box 820, Waynesboro, VA 22980
Jamestown Metal Marine Sales, Inc., 4710 NW Second Ave., Boca Raton, FL 33431
Marine Accommodations Inc., 8535-3 Baymeadows Rd., Se 140, Jacksonville, FL 32256
Maritime Services Corp., 3457 Guignard Drive, Hood River, OR 97031
Walz & Krenzer, Inc., 90 Forest Ave. Locust Valley N.Y. 11560
KEEL COOLERS
R.W. Femstrum & Co., 1716 Eleventh Ave., Menominea, MJ 40950

R.W. Femstrum & Co., 1716 Eleventh Ave., Menominee, MI 49858 Kahlenberg Bros. Co., P.O. Box 358, Two Rivers, WI 54241 The Walter Machine Co., Inc., 84-98 Cambridge Avenue, Jersey City, NJ 07307

The Walter Ma

U.E. Systems, 12 West Main St., Elmsford, NY10523

LFEBOATS/RAFTS

American United Marine Corp., 5 Broadway, Rt.1, Saugus, MA 01906

Boston Whaler, Inc. Commercial Products Div., 1149 Hingharm St., Rockland, MA 02370

Fr. Fassmer GMBH & Co., D-2876 Berne 2, Wese, GERMANY

Norsafe AS, P.O. Box 115, N-4818 Faervik, Norway

Willard Marine Co., Inc., 1250 N. Grove St., Anaheim, CA 92806

Zodiac of North America, P.O. Box 400, Stevensville, MD 21666

LIGHTING EQUIPMENT—Lamps, Fixtures, Searchlights

ACR Electronics, Inc., 5757 Ravenswood Rd., P.O. Box 5247, Ft. Lauderdale,

FI. 33310-5247

Archway Marine Lighting, 4501 Swan Ave. St. Louis MO 63110

FL 33310-5247
Archway Marine Lighting, 4501 Swan Ave., St. Louis, MO 63110
Fishermans Wholesale Marine Supply Co., Inc. 4540 B Downman Road
New Orleans, LA 70126
The L.C. Doane Co., P.O. Box 975, Essex, CT 06426
Julian A. McDermott, 1639 Stephen St., Ridgewood, NY 11385
Nautilus Equipment Ltd., P.O. Box 66, Station M, Halifax, Nova ScotiaB3J 2L4, CANADA
Pauluhn Electric Mfg. Co., Inc. 1616 N. Main, P.O. Box 53, Pearland, TX 77581
Phoenix Products, 6161 N 64th St., Milwaukee WI 53218
FB LINDS

LINE BLINDS

Stacey/Fetterolf, P.O. Box 103, Skippack, PA 19474
LIQUIDLEVELINDICATORS
Setcor, 2 Dean St., Tenafly, NJ 07670
LIQUID OVERFILL PROTECTION SYSTEMS
E.R.L. Marine Products, P.O. Box 1026, New Albany, IN 47151-1026

Setcor, 2 Dean St., Tenafly, NJ 07670 LOGISTICS VL Logistics Consultants, Inc., 3420 Bienville Blvd., Ocean Springs MS 39564

Buyer's Directory continues on page 73

QED, 4646 N. Witchduck Road, Virginia Beach, VA 23455 LUBRICANTS

LUBRICANTS
Pre-Lube, 13790 NW 4th St., Ste. 111, Ft. Lauderdale FL 33325
MACHINERY MAINTENANCE, REPAIR, OVERHAUL, AND TESTING
Del Gavio, 619 Industrial Rd., Carlstadt, NJ 07072
Global Maritime Services, 247 SW 33 Court, Ft. Lauderdale, FL 33315
Golten Marine Company Inc., 160 Van Brunt Street, Brooklyn, NY 11231
New England Trawler Equipment Co., 291 Eastern Avenue, Chelsea, MA 02150
MACHINERY MONITOR AND CONTROL SYSTEMS
Electronic Marine Seytems, 800 Ferndale Pl., Eahway, NJ 07065
MACHINING—On Site Repair
Global Maritime Services, 247 SW 33 Court, Ft. Lauderdale, FL 33315
In-Place Machining, 1929 N. Buffum Street, Milwaukee, WI 53212
MARINE ACCOMMODATIONS
Directions in Design Inc. 633 Emerson, Suite 100. St Louis, MO 63141

Directions in Design Inc, 633 Emerson, Suite 100, St Louis, MO 63141
Hopeman Brothers, P.O. Box 820, 435 Essex Ave., Waynesboro, VA 22980
Jamestown Metal Marine Sales, Inc., 4710 Northwest Second Ave, Boca Raton, FL 33431
Marine Accommodations Inc., 8535-3 Baymeadows Rd, Ste 140, Jacksonville, FL 32256
Maritime Services Corp., 3457 Guignard Dr., Hood River, OR 97031
MARINE ELECTRONICS

MARINE ELECTRONICS

High Seas Technology, Inc., 2965 West State Rd., Fort Lauderdale, FL 33312 MARINE FURNITURE

MARINE FURNITURE

Directions In Design, 633 Emerson, Ste. 100, St. Louis MO 63141

Engineered Data Products, P.O. Box 565, Woodbury, NJ 08906-7565

Jamestown Metal Marine Sales, Inc., 4710 NW Second Ave, Boca Raton, FL 33431

Marine Accommodations Inc., 8535-3 Baymeadows Rd, Ste 140, Jacksonville, FL 32256

Maritime Services Corp., 3457 Guignard Dr., Hood River, OR 97031

Wilson & Hayes, 1601 Eastlake Avenue, East, Seattle, WA 98102

MARINERADAR COMPONENTS

EEV. Log. 4 Westbester Plaze, Elegated, NY 10523

EEV, Inc., 4 Westchester Plaza, Elmsford, NY 10523
MARINE SHIP MANAGEMENT

BarbaArkhon, 1810 Chapel Ave. West, Cherry Hill, NJ 08002

Seamens Church Institute, 741 Water St., New York City, NY 10038
METAL PRODUCTS

Engineered Data Products, P.O. Box 565, Woodbury, NJ 08906-7565
Jamestown Metal Marine Sales, Inc., 4710 N.W. Second Ave., Boca Raton,FL
MULTI-CABLE PENETRATION DEVICE
NMP, 12437 E. 60th St., Tulsa,OK 74153
NAVAL ARCHITECTS, MARINE ENGINEERS, SURVEYORS

Advanced Marine Enterprises, Inc., 1725 Jefferson Davis Hwy., Arlington, VA 22202 CDI Marine Co., 9487 Regency Square Blvd., Ste. 500, Jacksonville, FL 32225 Childs Engineering Corp., Box 333, Medfield, MA 02052 Crandall Dry Dock Engrs., Inc., 21 Pottery Ln., Dedham, MA 02052 Crandall Dry Dock Engrs., Inc., 21 Pottery Ln., Dedham, MA 02052 Crandall Dry Dock Engrs., Inc., 21 Pottery Ln., Dedham, MA 02052 Crandall Dry Dock Engrs., Inc., 21 Pottery Ln., Dedham, MA 02052 Crandall Dry Dock Engrs., Inc., 21 Pottery Ln., Dedham, MA 02052 Crandall Dry Dock Engrs., Inc., 21 Pottery Ln., Dedham, MA 02052 Crande Consultants, 15301 First Ave S., Seattle WA 98148 C.R. Cushing, 18 Vesey St., New York, NY 10007 Arthur D. Darden, 3200 Ridgelake Dr., Suite 403, Metairie LA 70002 Design Associates Inc., 14360 Chef Menteur Highway, New Orleans, LA 70129 Diversified Technologies, 812 Live Oak Dr., Chesapeake VA 23320 Encon Mgmt.& Engineering Consultant Services, P.O. Box 7760, Beaumont, TX 77706 GHM Inc. (Ind. Measurement Consultants), P.O. Box 1836, Newport News, VA 23601 Gibbs & Cox, Inc., 50 West 23rd St., New York, NY 10010 The Glosten Assoc. Inc., 600 Mutual Life Bidg., 605 First Ave., Seattle, WA 98199 Morris Guralnick Associates, Inc., 130 Sutter St., Ste. 400, SanFrancisco, CA 94104 C. Raymond Hunt Associates, 69 Long Wharf, Boston MA 02110 Hydrocomp, Inc., 45 James Farm-Lee, P.O. Box 865, Durham, NH 03824 J.H Inc., No. 4 Executive Campus, Culbert Bivd. & Route 70, P.O. Box 5031, Cherry Hill, NJ 08034
R.D. Jacobs & Associates, 11405 Main St., Roscoe, IL 61073

Hydrocorin, Inc., 49 Janies Parin-Lee, 7-D. Box 869, Durriam, Nrt 19324
JJH Inc., No. 4 Executive Campus, Culbert Blvd. & Route 70, P.O. Box 5031, Cherry Hill, NJ 08034
R.D. Jacobs & Associates, 11405 Main St., Roscoe, IL 61073
James S. Krogen, 1515 NW 7th St., Ste. 124, Miami FI, 33125
Rodney E. Lay & Associates, 13891 Atlantic Blvd., Jacksonville, FL 32225
David P. Levy Enterprises, 527 Legendre Dr., Slidell, LA 70460
MCA Engineers, Inc., 2960 Airway Ave., #A-103, Costa Mesa, CA 92626
Alan C. McClure Associates, Inc., 2600 South Gessner, Houston, TX 77063
John V. McCollum, Inc., 1199 Long Point Road, Mt. Pleasant, SC 29464
McErroy Machine & Mig Co., Inc., P.O. Box 4454, Biloxi, Ms. 39535-4454
John J. McMullen Associates, Inc., 1 World Trade Ctr, Ste 3000, N Y,NY 10048
MacPherson Maritime Services, 141 Jefferson Ave., Westfield NJ 07090
Fendall Marbury, P.O. Box 2321, Annapolis, MD 21401
Marine Design & Operations, Inc., 226 Chestnut St., Roselle Park, NJ 07204
Marine Management Systems Inc., 102 Hamilton Ave., Stamford CT 06902
Marine Power Associates, 1010 Turquois St., Ste 217, San Diego, CA 92109
Maritech, Seacliff, Bay Road, Newmarket, NH 03857
Maritime Design, Inc., 3020 Hartley Rd., Jacksonville, FL 32257
RJ., Mellusi & Co., 71 Hudson St., New York, NY 10013
Nautical Designs, Inc. 2101 S. Andrews Ave, Suite 202, Ft Lauderdale FL 33316
Northern Marine, P.O. Box 1169, Traverse City, MI 49685
Ogden Government Services, 3211 Jermantown Rd., Fairfax, VA 22030
Olsen Marine Surveyors Co., P.O. Box 283, Port Jefferson, NY 11777
Omega Marine Engineering Systems, Inc., 11757 Katy Freeway, Ste 1100, Houston TX 77079
QED Systems Inc., 4646 Witchduck Rd., Virginia Beach, VA 23455
M. Rosenblatt & Son, Inc., 350 Broadway, New York, NY 10013 and 620 Fulsom St., Ste. 301, San Francisco, CA 94107
Sargent & Herkes, 225 Baronne St., Suite 1405, New Orleans LA 70112
Sea School, 10812 Gandy Boulevard, St. Petersburg, FL 33702
Seaworthy Systems Inc., P.O. Box 956, Essex, CT 06426; 17 Battery Pl., New York, NY 10004; P.O. Box

NAVAL BOAT BUILDERS
Atlantic Boat Group, Inc., 1850 Lake Park Dr., Ste. 216 Smyrna, GA 30080
NAVIGATION & COMMUNICATIONS EQUIPMENT
Anschutz & Company, One Madison St., East Rutherford, NJ 07073
AT&T, High Seas Dept., 412 Kemble Ave., Room C380, Morristown, NJ 07960
Autronica Marine A/S, Drammensveien 126, N-0277 Oslo 2, NORWAY
Cellnet Corp., 400 Main St, Stamford, CT 69901-3004
Comsat Maritime Services, 950 L'Enfant Plaza SW, Washington DC 20024
C. Plath, 222 Severn Ave., Annapolis, MD 21403
Electronic Marine Systems, 800 Ferndale PL., Rahway, NJ 07065
Fairtide Enterprises, Inc., 2536 Sonata Dr., Columbus, OH 43209
Furuno U.S.A., 271 Harbor Way, S. San Francisco, CA 94080
Hose McCann, 9 Smith St., Englewood, NJ 07631
Henschel, Inc., 9 Hoyt Drive, Newburyport MA 01950
IDB Mobile Communications, 1828 L Street NW, Suite 660, Washington, D.C. 20036
Kenwood USA Corp., Marine Prod. Div., 2201 E. Dominquez St.,
Long Beach, CA 90810
Mackay Communications, 441 US Highway #1, P.O. Box 331. Flizabath N 1 07007

Long Beach, CA 90810
Mackay Communications, 441 US Highway #1, P.O. Box 331, Elizabeth NJ 07207
Marine Electric RPD, Inc., 50 Carol St., P.O. Box 1135, Clifton, NJ 07014-1135
Megapulse, Inc., 8 Preston Court, Bedford MA 01730-2380
Nautronix, 15401 Vantage Pkwy W., Houston, TX 77032
Norwegian Telecom, P.O. Box 6701, Oslo 1, NORWAY
Novatech, 820 Cormorant St., Victoria, BC V8W 1R1, CANADA
Pauluhn Electric Mg. Co., Inc. 1616 N. Main, P.O. Box 53, Pearland, TX 77581
Raytheon Marine Co, 46 River Road, Hudson, NH 03051
Robertson Marine Systems, 3000 Kingman Street, Suite, 207, Metairie, LA 70006
SPD Technologies, 13500 Roosevelt Blvd., Philadelphia, PA 19116
Scandinavian Micro Systems P.O. Box 155, N-1411, Kolhoton NORWAY

Scandinavian Micro Systems P.O. Box 155, N-1411, Kolboton, NORWAY

Simrad, 19210 33rd Avenue West, Lynwood, WA 98036
Sperry Marine Inc., 1070 Seminole Trail, Charlottesville VA 22901
Standard Communications, P.O. Box 92151, Los Angeles, CA 90009
Summer Equipment Ltd., 24 West 4th Ave., Vancouver V57 IG3, CANADA
Trimble Navigation, 585 North Mary Avenue, P.O. Box 3642, Sunnyvale, CA 94086
Waterway Communications System, Inc. 453 E. Park Pl., Jeffersonville, IN 47130
World Communications Sys., 11834 Canon Blvd., Newport News, VA 23606

--Marine --Additives

World Communications Sys., 11834 Canon Blvd., Newport News, VA 23606

OIL—Marine—Additives
Mobil Oil Corporation, 3225 Gallows Road, Fairfax, VA 22037-0001
Shell Oil, P.O. Box 2463, Houston, TX 77252
Texaco, International, 2000 Westchester Avenue, White Plains NY 10650

OIL/WATER SEPARATORS
ACS Industries, Inc., 14208 Industry Rd., Houston, TX 77053
Alfa-Laval Separation, Inc., 955 Meams Rd., Warminster, PA 18974-0556
Blohm & Voss AG, P.O. Box 10 07 20, D-2000 Hamburg 1, GERMANY;
U.S.A. Reps:Simplex-Turmar Inc., P.O. Box 168, Little Neck, NY 11363-0168
Centrico, Inc. (Westfalia Separators), 100 Fairway Court, Northvale NJ 07647
Fast Systems, 3240 North Broadway, St. Louis, MO 63147
MMC International, 60 Inip Dr., Inwood NY 11696
Nelson Industries, Highway 51 West, Stoughton, WI 53589
PAINT—COATING—CORROSION CONTROL
Amdean Coating Removal, 12920 S.W. 99 N. Ave., Miami, FL 33176

PAINT—COATING—CORROSION CONTROL

Amclean Coating Removal, 12920 S.W. 99 N. Ave., Miami, FL 33176

Ameron, 201 N. Berry St., Brea, CA 92622

The Armessen Corp., Corrosion Dynamics Div., 1100 Walmut St., Rosell, NJ 07203

Esgard, Inc., P.O. Drawer 2698, Lafayette, LA 70502

Jamestown Distrib., 28 Narragansett Ave., P.O. Box 348, Jamestown, RI 02835

Hempel Coatings, Foot of Curie Avenue, Wallington, NJ 07057

Melvin Pierce Marine Coating, Inc., P.O. Box 93, Semmes, AL 36575

Microphor, Inc., Marine Div., 452 E. Hill Rd., P.O. Box 1460, Willits, CA 95490

Royal Chemical, 2705 Concord Road, Belle Chasse, LA 70037

Sigma Coatings, 8979 Market St., Houston, TX 77029, 330 Rover Rd.,

Harvey, LA 70059, 1100 Adams St., Hoboken, NJ 07030

UT Technologies Ltd., Box 31114, Robie St. RPO, Halifax Nova Scotia Canada B3K5T9

PAINT REMOVAL

LTC Americas, 101 G. Executive Dr., Sterling, VA 22170

PAINTREMOVAL
LTC Americas, 101 G. Executive Dr., Sterling, VA 22170
PIPEFITTINGS/CONNECTING SYSTEMS
Deutsch Metal Components, 14800 S. Figueroa, Gardena, CA 90248
Stanley G. Flagg Co., 1020 W. High St., Stowe, PA 19464
PORTSERVICES
Port of Portland, 5555 N. Channel Ave., Portland, OR 97217
PROPULSION EQUIPMENT—Bowthrusters, Diesel Engines, Gears, Propellers, Shafts, Turkinge

Port of Portland, 5555 N. Channel Ave., Portland, OR 97217
ROPULSION EQUIPMENT—Bowthrusters, Diesel Engines, Gears, Propellers, Shafts, ribines
Avondale Industries, Harvey Quick Repair, P.O. Box 116, Harvey, LA 70058
American Air Filter, P.O. Box 35690, Louisville, KY 40432
ABB TURBOCHARGER, INC., 1460 Livingston Avenue, N. Brunswick, NJ 08902
ASEA Brown Boveri (Stromberg), P.O. Box 185, 00381 Helsinki, FINLAND
Aquamaster-Rauma Ltd., Box 220, SF-26101, Rauma, FINLAND
Bird Johnson Company, 110 Norfolk St., Walpole, MA 02081
Brunvoll A/S, P.O. Box 370, N-6401, Molde, Norway
CWF Hamilton & Co., Ltd., P.O. Box 709, Christchurch, NEW ZEALAND
Caterpillar, 100 NE Adams Street, Peoria, IL 61629-2320
Coltec Industries (Fairbanks Morse Engine Div.), 701 Lawton Ave, Beloit, WI 53511
Electro-Motive, div. General Motors, 9301 W 55th St, La Grange, IL 60525
Fincantieri, Diesel Engines Div—GMT, Bagnoli della Rosandra 334, Trieste, ITALY
Fundiciones RICE, AV Rios Espinoza No. 88, COL BENITO JUAREZ, Mazatlan,
GE Naval & Drive Turbine Systems, 166 Boulder Dr., Fitchburg MA 01420
Harbormaster Marine, Inc., 31777 Industrail Road, Livonia, MI 48150
Kahlenberg Bros. Co., P.O. Box 358, Two Rivers, WI 54241
Krupp MaK, 7555 Danbro Crescent, Mississauga, Ontario, CANADA L5N 6P9
Lohmann & Stolterfoht, P.O. Box 1860, D-5810 Witte, Germany
Mapeco Products Inc., 90 Forest Ave., Locust Valley, N.Y. 11560
Marine Gears, Inc., P.O. Box 689, Greenville MS 38707
Markisches Werk, P.O. Box 1442, D-5884 Halver GERMANY
MAN B&W Diesel A/S, Alpha Diesel, Niels Juels Vej 15, DK-9900 Frederikshavn, DENMARK
MAN B&W Diesel A/S, Alpha Diesel, Niels Juels Vej 15, DK-9900 Frederikshavn, DENMARK
MAN B&W Diesel A/S, Alpha Diesel, Niels Juels Vej 15, DK-9900 Frederikshavn, DENMARK
MAN B&W Diesel A/S, Alpha Diesel, Niels Juels Vej 15, BASB Balerna SWITZERLAND
Omnithruster Inc., 9515 Sorensen Ave., P.O. Box 2144, Santa Fe Springs, CA 90670
Rolla SP Propellers SLA, 4030 Mustang Road, Melbourne, FL 32934, USA
Karl Senner Inc., 25 W Third, Kenner LA 70062
Schottel-We

Oy Wartsila Ab, Vasa and Abo Divisions, P.O. Box 244, SF65100 Vasa, FINLAND WesTech Gear Corp., 2600 E. Imperial Highway, Lynwood, CA 90262 Westinghouse Marine Div., 401 E Hendy Ave, Sunnyvale, CA 94088 PROTECTION MATERIALS

Megafilm, Bone Lane Industrial Estate, Newbury, Berkshire RG145SH EENGLAND PROTECTIVE WRAPS

PROTEČTIVE WRAPS
FANA (Film Applicators of North America), 1260 E Woodland Ave., Springfield PA 19064
PUMP—Repat—Drives
Coffin Turbo Pump, Inc., 326 S. Dean Street, Englewood, NJ 07631
Del Gavio, 619 Industrial Rd., Carldstadt, NJ 07072
Gilkes, Inc., PO Box 628, Seabrook, TX 77586
Jim's Pump Repair, 48-55 36th St., Long Island City NY 11101
Leistritz Corporation, 165 Chestnut Street, Allendale, NJ 07401
Vita Motivator, 99 W Hawthorne Ave., Suite 622, Valley Stream NY 11580
REFRIGERATION EQUIPMENT/SERVICES
Adrick Marine, 141D, Central Ave., Farmingdale, NY 11735
Balley Refrigeration Co., 2323 Randolph Ave., Avenel, NJ 07001
REMOTE VALVE OPERATORS
American United Marine Corp., 5 Broadway, Rt 1, Saugus, MA 01906

American United Marine Corp., 5 Broadway, Rt 1, Saugus, MA 01906
Telefley, Inc., 771 First Ave., King of Prussia, PA 19406
ROPE—Marila—Nylon—Hawsers—Fibers
Allied Signal Inc., Fibers Division, 1411 Broadway, New York, NY 10018
Dupont, Montgomery 403, 1011 Centre Road, Wilmington, DE 19805
United Ropeworks (USA), Inc., 151 Commerce Dr., Montgomeryville, PA 18936
RUDDER STOCK SEALS
Blobm & Voss AG, P.O. Rev. 100700, D. 000001

IDENSTOCKSEALS
Blohm & Voss AG, P.O. Box 100720, D-2000 Hamburg 1, GERMANY
U.S.A. Reps: Simplex Turmar Inc., P.O. Box 168, Little Neck, NY 11363-0168
John Crane Marine USA,1536 Barclay Blvd., Buffalo Grove, IL 60089 SAFETY LIGHTING

Loctite Luminescent Corp., Etna Road, Lebanon, NH 03766
SAFETYTOOLS

SAFETYTOOLS

NGK Metals Corp., P.O. Box 13367, Reading, PA 19612

SANITATION DEVICE—Pollution Control

Eltech International Corp, 12850 Bournewood Dr, Sugarland TX 77478

Jered Brown Brothers, 56 South Squirrel Rd, Aubum Hills, MI 48326

Byrne, Rice & Turner, Inc., 1172 Camp Street, New Orleans, LA 70130

Envirovac Inc., 1260 Turret Dr., Rockford, IL 61111

Fast Systems, 3240 North Broadway, St. Louis, MO 63147

Microphor, Inc., 452 E. Hill Rd., P.O. Box 1460, Willits, CA 95490

Markitect, PO Box 225,Oconomowoc, WI 53066 Sturgeon Bay Model Shop, 187 N Ninth Ave., Sturgeon Bay WI 54235 SCUTTLES/MANHOLES

SCALE MODELS

Markitect, PO Box 225, Oconomowoc, WI 53066
Sturgeon Bay Model Shop, 187 N Ninth Ave., Sturgeon Bay WI 54235

SCUTTLESMANHOLES

L.S. Baier & Assoc., 7527 NE 33rd Dr., Portland OR 97211

SHIPBUILDINGE-GUIPMENT

NEI Syncroilt, Inc., 8970 S W 87th Ct., Miami FL 33176

SHIPBUILDING—Repairs, Maintenance, Drydocking
Astilleros Espaneles S.A., Padilla 17, 28006 Madrid, SPAIN
Atlantic Marine, Inc., P.O. Box 3202, Mobile, AL. 36652

Atlantic Marine, Inc., B500 Heckscher Dr., Jacksonville, FL 32226
Avondale Industries Inc., P.O. Box 50280, New Orleans LA 70150

Balehi Marine Inc., P.O. Box 600, Lacombe, LA 70445
Bender Shipbuilding & Repair, P.O. Box 50280, New Orleans LA 70150

Balehi Marine Inc., P.O. Box 600, Lacombe, LA 70445
Bender Shipbuilding & Repair, P.O. Box 42, Mobile AL 36601
Bender Inc., 400 Gordon Drive, Bidg. 501, Exton, PA 19341

BethShip, Sparrows Point Yard, Sparrows Point MD 1219

Bisso Marine Co., P.O. Box 4113, New Orleans, LA 70178

Boillinger Lockport & Larose, P.O. Box 250, Lockport, LA 70374-0250

Boston Whaler, Inc., Commercial Products Dv., 1149 Hingham St., Rockland, MA02370

Bourg Drydock, P.O. Box 3052, Sex 2000 39, Malmo, SWEDEN

Conrad Industries, 1501 Front Street, P.O. Box 790, Morgan City, LA 70381

Curaca Drydock Inc., P.O. Box 3012, Curacao, Netherlands Anilles

Eastern, 505 North Sam Houston Pkwy, East, Ste. 1504, Houston, TX 77060

European Ship Repair, 120 NE 20th St., Miami, FL 33137

Fincantier SpA Cantieri Navall Italiani, Via Cipro 11, 16129 Genoa ITALY

G. Marine Diesel, PO Box 050221, Brooklyn, NY 11205

Gulf Craft, Inc., 3904 Highway 182, Patterson, LA 70392

Hall Buck Marine, P.O. Box 3312, Braterson, LA 70392

Hall Buck Marine, P.O. Box 355, Baton Rouge, LA 70816

Hitachi Cosen, Hitachi Shipbuilding & Engineering Co., 1-1-1 Hitotsubashi, Chiyoda-ku Tokyo 100, JAPAN

In-Place Machining, 1929 N. Buffum St., Milwaukee, WI 53212

Institute for International Research, 437 Madison Ave., N.Y., N.Y., 10022

Jacksonville, Shipyards, 750 Box 3606, Morgan City, LA 70546

SIMULATOR TRAINING

Houston Marine Training Services, 1600 20th Street, Kenner, LA 70062 Marine Safety International, Marine Air Terminal, LaGuardia Airport, NY 11371 Beaird Industries Inc., P.O. Box 31115, Shreveport LA 71130

SKILLED LABOR
Craft America, 1302 Ingleside Rd., Norfolk, VA 23502
SPILL RESPONSE/ENGINE ROOM MAINTENANCE

Haz-Mat Response Technologies, 5841 Box Canyon Rd., La Jolla, CA 92037 Reduced Environmental Liabilty, 1201 Ocean Ave.. Suite 58 Sea Bright, NJ 07760 Reduced Environmental Liability, 15 Fairfield Ave., Old Greenwich CT 06870

STERN TUBE SEALS ENN TUBE SEALS
Blohm & Voss AG, P.O. Box 10 07 20, D-2000, Hamburg 1 Germany
U.S.A. Reps: Simplex-Turmar Inc., P.O. Box 168, Little Neck, NY 11363-0168
John Crane Marine USA, 1536 Barclay Cove, Buffalo Grove, IL 60089
Kobelco Marine Engineering Co., LTD., Tokyo, Japan
USA Reps: Roland Marine Inc., 90 Broad St., New York, NY 10004

STUFFING BOXES
Kahlenberg Bros. Co., P.O. Box 358, Two Rivers, WI 54241
SURVIVAL EQUIPMENT

Parkway/Imperial, 241 Raritan Street, South Amboy, NJ 08879 Schat Watercraft, P.O. Box 7008, Newark, DE 19714 Viking Life Saving Equipment, 1625 N Miami Ave., Miami FL 33136 TANK CLEANING EQUIPMENT

Seltor, 2 Dean St., Tenafly, NJ 07670
Polarmarine, Alvsborgsgatan 37, 72 Gotbenburg, SWEDEN S-41472
TANK LEVELING INDICATORS

TANK LEVELING INDICATORS

American United Manne Corp., 5 Broadway, Rt. 1, Saugus, MA 01906
Autronica Marine A/S, Drammensveien 126, N-0277 Oslo 2, NORWAY
Bergan Tank, 3409 Gulf Breeze Pkwy, Gulfbreeze, FL 32561
ERL Marine Products div, PO Box 1026, New Albany, IN 47151-1026
Ian-Conrad Bergan, 3409 Gulf Breeze Parkway, Gulf Breeze, FL 32561
IMO Industries, Gerns Sensors Division, One Cowles Rd, Plainville CT 06062
Metritape, PO Box 2366, Littleton, MA 01460-2366
MMC International, 60 Injp Dr, Inwood NY 11696
Saab Marine Electronics AB, P.O. Box 13045, S-402 51 Goteborg SWEDEN
TELECOMMUNICATIONS
Mitel, 11911 Freedom Dr., Suite 700, Reston, VA 22090
TEMPORARY FLOOR & WALL PROTECTION SYSTEMS
Meadfilm, Bone Lane Industrial Estate, Newbury, Berkshire BG14 5SH ENGLAN

Megafilm, Bone Lane Industrial Estate, Newbury, Berkshire RG14 5SH ENGLAND TESTING SERVICES Wyle Laboratories, 7800 Govern's Dr. S.W., Huntsville, AL 35807 THICKNESS TESTING

Cygnus Instruments, P.O. Box 3127, Annapolis, MD 21403

San Diego Marine Hardware, 1660 Logan Avenue, San Diego, CA 92113 Tri Tool Inc., 3806 Security Park Drive, Rancho Cordova, CA 95742-6990 TORSIONAL VIBRATION SPECIALISTS

T.W. Spaetgens, 156 W. 8th Ave., Vancouver, BC, CANADA, V5Y 1N2 Vibranalysis Engineering Corp., 9300 Gamebird, Houston, TX 77034 TOWING—Barges, Vessel Chartering, Lighterage, Salvage, etc. Balehi Marine Inc., P.O. Box 600, Lacombe, LA 70445 Jack Faulkner, 2419 Caddy Lane, Flossmoor IL 60422 TURBOCHARGERS

ABB Turbocharger Co., 1460 Livingston Ave., North Brunswick, NJ 08902
VACUUM TOILET SYSTEM
Envirovac Inc., 1260 Turret Dr., Rockford, IL 61111

Fast Systems, Inc., 3240 N. Broadway, St. Louis, MO 63147 Jered Brown Bros., 56 S. Squirrel Rd., Auburn Hills, MI 48326 Jets Vacuum Sewage System, P.O. Box 14, N-6060 Hareid, NORWAY.

Buyer's Directory Continues on page 74

VALVES AND FITTINGS

Circle Seal Controls, Brunswick Corporation, P.O. Box 3666, 1111 N. Brookhurst St., Anaheim, CA 92803

Cla-Val Co., P.O. Box 1325, Newport Beach, CA 92663

Derbyshire Machine & Tool, 5100 Beffield Ave., Philadelphia, PA 19144-1788

Dolsey Ltd., 863 West 44th Street, Norfolk, VA 22508

ERL Marine Products Div., PO Box 1026, New Albany, IN 47151-1026

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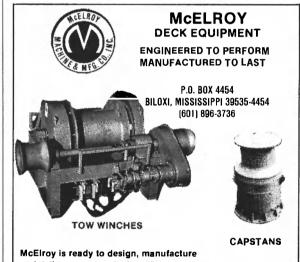
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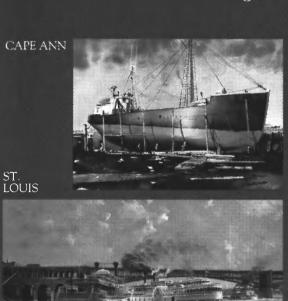
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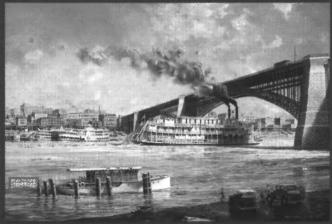
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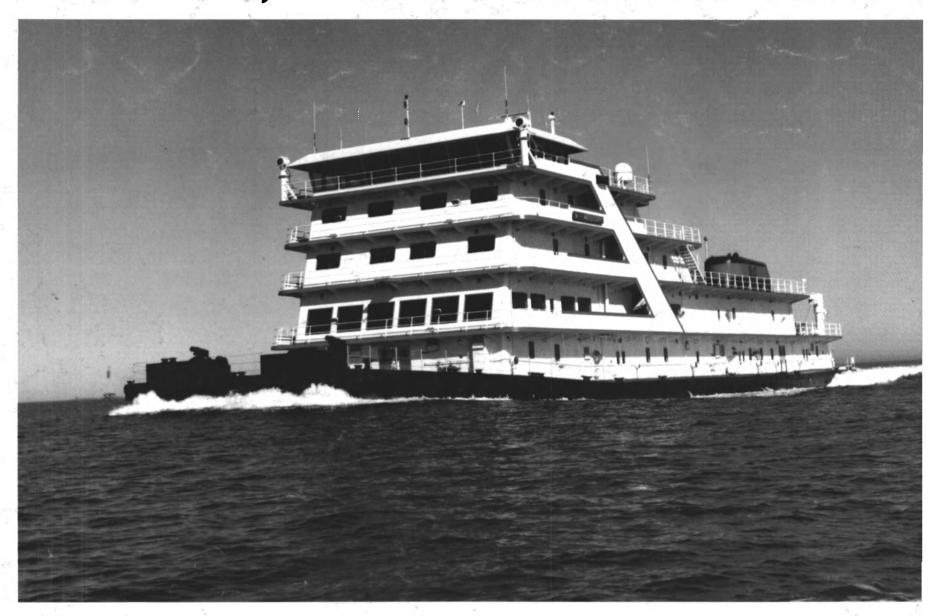
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