

MARITIME REPORTER AND ENGINEERING NEWS



Gulf Marlin

**HUDSHIP Delivers
GM Powered Gulf Marlin
To Gulf Fleet Marine**

(SEE PAGE 12)

MARCH 1, 1980

When you pass The Ambrose Light, you're not far from Gulf.



Back in 1908, U.S. Lightship No. 87 first dropped her mushroom anchor at 40° 27.5' N, 73° 49.9' W.

She was stationed there to guide square riggers and steamers through the shifting sandbars of the newly dredged Ambrose Channel and on into New York harbor.

When fog obscured her light, she blared a warning heard for miles.

And in 1912, ships began to home in on her radio beacon, the first in the world to operate successfully.

You can board the original Ambrose at New York's South Street Seaport Museum. The less romantic, but more efficient tower above now stands where she rode at anchor, a welcome sight (or sound) to seamen inward bound.

New York. Still another port where you'll find premium Gulf marine lubricants like Gulf Veritas Cyloils.

These highly alkaline cylinder lubricants are for use in all low-speed crosshead diesel engines burning residual fuel oils. They're manufactured from highly refined base oils

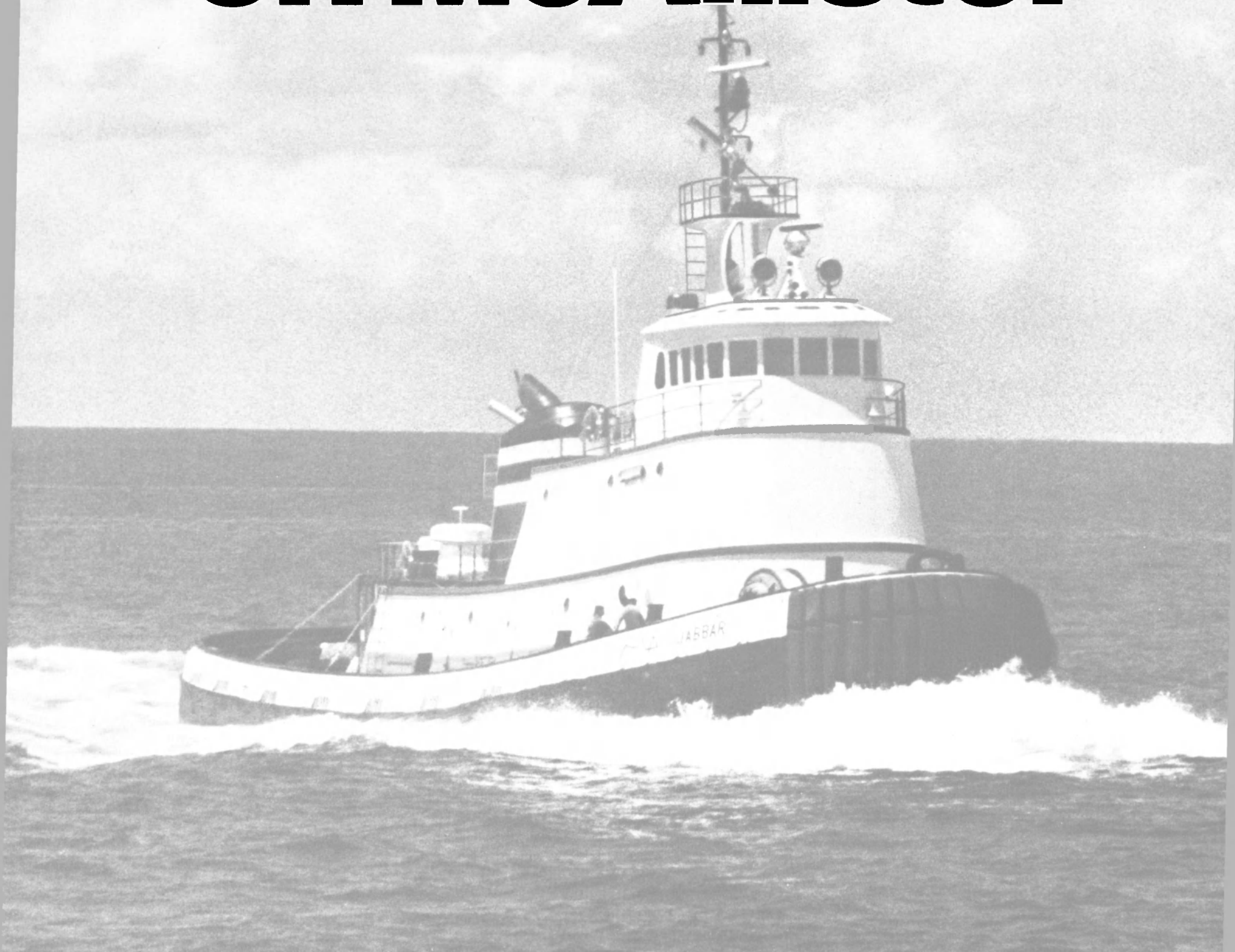
having maximum film strength and high oxidation stability, compounded with oil-soluble additives to provide the alkaline reserve needed to neutralize the acidic products of combustion and a high level of detergency to ensure maximum component cleanliness.

All of Gulf's marine products give you maximum quality, performance and bottom-line economy. They're available, backed by a complete and comprehensive service capability, at ports of call throughout the world. For specifics, please contact your local Gulf representative.



Gulf Trading and Transportation Company
A Division of Gulf Oil Corporation

The biggest call on McAllister



The largest tanker terminal in the world located at Ras Tanura, Saudi Arabia, needed a new dimension in shiphandling. McAllister, through its joint venture company, Saudi Tug Services, provided the expertise in the tug JABBAR.

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Marine Contractors Begins Work On \$68-Million Turnkey Project

Marine Contractors, Inc., a subsidiary of J. Ray McDermott & Co., Inc., announced the beginning of a \$68-million turnkey project for Sociedade Nacional de Combustives (SONANGOL) and Cabinda Gulf Oil Company (CABGOC). The project includes the design, engineering, fabrication and installation of three gas injection platforms and their process facilities off the coast of Cabinda, Angola, West Africa.

The project is scheduled to be completed in 18 months. By then, two 8-pile platforms, a 6-pile platform, with utilities and pipelines will be installed, and their gas lift, injection, dehydration, NGL extraction and fractionating facilities started up.

Several McDermott divisions and subsidiaries will participate in the project's distinct phases. Hudson Engineering Corporation of Houston, Texas, will perform the design, engineering and procurement of materials. The two 8-pile and one 6-pile jackets will be fabricated by the McDermott Fabricators at Morgan City, La. The Bayou Black Division, also located near Morgan City, and the Harvey Fabrication Division at Harvey, La., will fabricate and complete the process decks and facilities. Marine Contractors will install the three platforms off the Cabinda coast.

Storck Publishes 1980 Service Stations For Ships

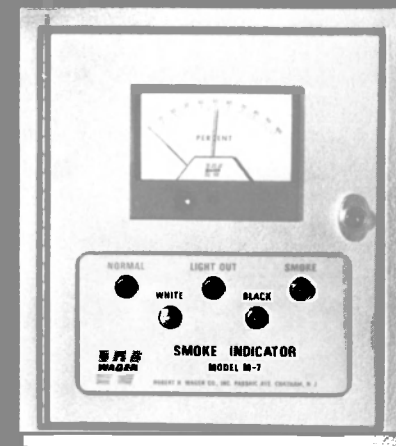
The 1980 edition of "Service Stations for Ships" offers information about 32 marine suppliers (i.e., propulsion, equipment, components, deck machines, gears, fire protection), with delivery programs and worldwide service stations in part one (white pages).

Part two (yellow pages) contains details about the facilities of repair yards in Denmark, the Netherlands, and the Federal Republic of Germany.

This annual publication is available free of charge to shipping companies, ship masters and chief engineers, consulting bureaus and shipyards.

For a free copy of the 1980 edition of "Service Stations for Ships," write K.O. Storck & Co., Stahltwiete 7, D-2000 Hamburg 50, Federal Republic of Germany.

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Get all the facts on versatile Wager Smoke Indicating Systems: Visual, Photoelectric, Visual/Photoelectric—to monitor, detect or measure accurately the opacity of smoke emissions in all situations.

Wager Photoelectrics give you a sensitive, automatic smoke opacity read-out to within 2% accuracy on a scale of 0-100%. New models, ideal for diesel and gas turbine emissions, give readouts with no interference from ambient light—on two scales, 0-100%, 0-20% (additional scales available.)

With Wager, you can also differentiate between black and white smoke if you so desire.

Wager Smoke Indicators are the most dependable units available to help you comply with environmental regulations and to monitor combustion conditions for appreciable fuel economy.



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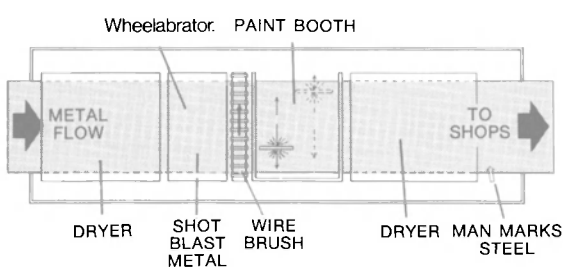
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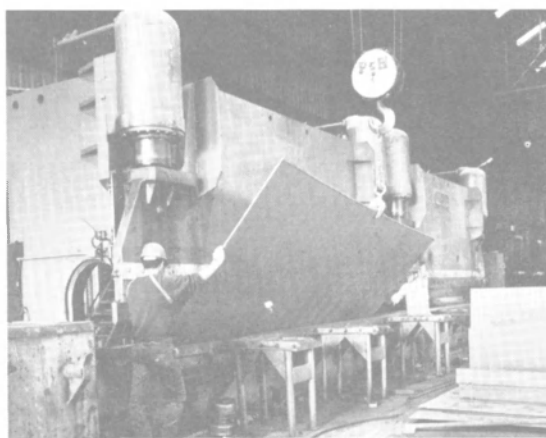
Why is Jeffboat America's largest inland shipbuilder?

The extra steps we take to insure quality construction keep us in front. Our tough standards are designed to make dependable barges that work hard and yield a fast return on investment.



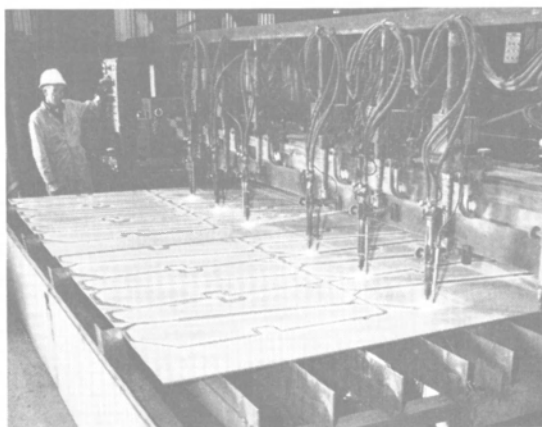
The Wheelabrator

Using the wheelabrator is one of these extra measures. After pre-drying all the plate steel that goes into our barges, we blast the plate on both sides for exceptional durability. Following the blasting, we cover one or both sides with inorganic zinc and oven dry the plate for further processing.

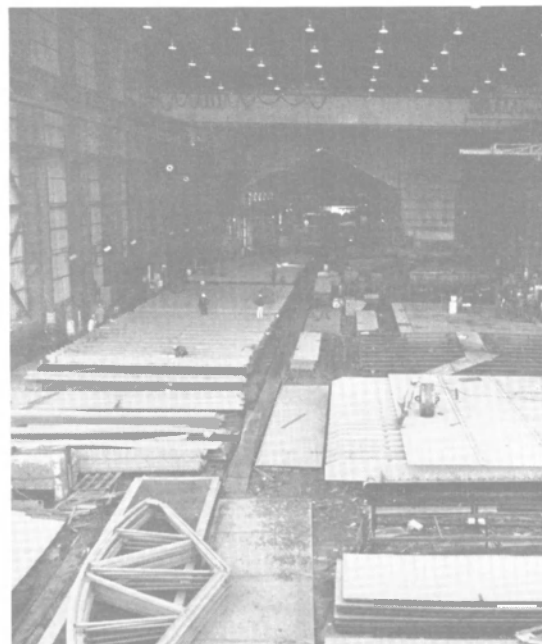


1200 Plate Press

To meet exact hull specifications, we use two large press brakes to form half-inch plate in lengths of up to 40



feet. Then, in our 700-foot plate processing shop, the plate is precisely cut out on burning tables with duograph, linagraph and servograph machines.



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Jeffboat's 350' x 120' subassembly building permits year-round fabrication of assemblies weighing as much as 100 tons. Fifty-five foot ceilings allow even the largest assemblies to

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Division of Texas Gas Transmission Corp.

Megasystems Receives Contracts To Equip Two Amoco Vessels

Another major oil company, Amoco, has signed contracts to equip ships in its fleet with computerized engine monitoring and control systems from Megasystems, Inc., Cleveland, Ohio.

The orders were placed through Kevin Patrick Smith's Suppliers Marine & Industrial, Inc., Great Lakes area representative for the Cleveland firm, it was announced by Dean Chimples, Megasystems president.

The manufacturer reports the Seamatic II systems can achieve fuel savings of 5 to 20 percent. They will be installed aboard the Amoco Cremona and the Amoco Voyager, 71,000-dwt tankers which operate primarily in the Caribbean.

The Amoco order follows announcement by Mr. Chimples in early January that four Seamatic II systems will be installed via IHI of Japan when it converts four VLCC supertankers for Mo-

bil Shipping and Transportation Co. from steam to diesel operation.

A similar conversion was completed by IHI (Ishikawajima-Harima Heavy Industries, Ltd.) in December 1978, on the 285,000-dwt Mobil Hawk. The current fourfold order will raise to 15 the number of Seamatic IIs ordered for the Mobil fleet.

Orders announced this past December by Megasystems call for installations aboard the Texaco tanker Texaco Hanover, Hanna Mining Co.'s Great Lakes ore carrier MV George Stinson, and Germany's Hapag-Lloyd container ship Leverkusen Express.

Borkowski And Windell Promoted At State Boat

State Boat Corporation, Houston, Texas, announced the promotion of Joseph Borkowski II and Arthur A. Windell to the position of fleet supervisor. In their new positions, both Mr. Borkowski and Mr. Windell will each be responsible for the operation, manning,

and maintenance of 13 vessels in the State Boat Corporation fleet. Both will work out of State Boat's Morgan City, La., office.

Mr. Borkowski is a veteran of 25 years on and around the water. He joined State Boat in 1965 as captain of the M V State Star, and served on a number of other State Boat vessels prior to coming ashore as a marine supervisor in March 1977.

Mr. Windell spent 12 years in the U.S. Navy, rising to engine-man first class before joining State Boat in 1965. With State Boat, Mr. Windell served on a number of vessels as chief engineer prior to coming ashore as a marine supervisor. He recently completed overseeing the construction of the M V State Justice and the M V State Courage, State Boat's innovative 204-foot supply vessels.

For over two decades, State Boat Corporation has been a pioneer in providing tug supply and supply vessels for the offshore transportation industry in the Gulf of Mexico and throughout

the world. State Boat's fleet currently consists of 26 vessels, ranging up to 204 feet and 7,200 hp, with additional vessels under construction.

V. Hill Appointed Manager So. & Central America For Decca Survey Systems

Val Hill has been appointed manager of the South and Central American Division of Decca Survey Systems, Inc., according to C.D. Paget-Clarke, president.

For the past five years, Mr. Hill was managing director of an affiliated company, Decca Survey of Brazil in Rio de Janeiro. He has been associated with the Decca Survey organization since 1962.

Decca Survey Systems, Inc., Houston, Texas, operates throughout the Americas providing all types of offshore survey, general positioning and allied systems engineering for such operations as pipeline route surveys, oil and gas exploration, offshore rig positioning, seabed investigations, hydrographic surveys, etc.

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SEA KING 2400 shp One of our tugs serving the Texas Gulf Coast, Sea King has recently been refurbished in line with our policy of keeping our fleet constantly updated to provide efficient reliable service at all times.



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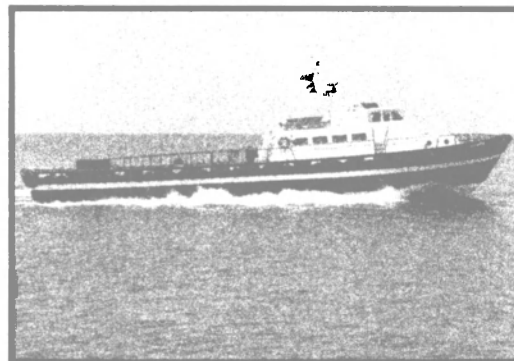
AQUAMET 18 is the economical shaft—competitive with ABS Grade 2 carbon steel shafting with sleeves and corrosion protection. But there's much more. AQUAMET 18 offers superior strength and toughness plus excellent corrosion resistance.

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ARMCO Advanced Materials Division



Far East Levingston To Build \$37-Million Rig For The Western Company

Western Co. of North America, Fort Worth, Texas, announced it has ordered a \$37-million deep-water jackup drilling rig for delivery in July 1981, from Far East Levingston Shipbuilding Ltd., a member of the Keppel group of companies in Singapore. In addition to drilling operations, Western provides other services to domestic petroleum operators.

R.B. Inserra Appointed VP-Engineering/Operations At Atlantic Diving Co.

Russell B. Inserra, former project manager of Atlantic Diving Company, Inc. of Gloucester, Mass., has been appointed to the post of vice president, Engineering and Operations, by William T. Jebb Jr., president of Atlantic Diving Company.



Russell B. Inserra

"Mr. Inserra has been project manager on some very tough jobs for us—a 5,500-foot polyethylene pipeline installation, an 18,000-foot 72-inch-diameter concrete-coated steel pipe installation, and the installation of a 21-ton stainless-steel cofferdam in the active spent fuel pit of a nuclear power reactor," commented Mr. Jebb. "And, over the four years he's been with us, Atlantic Diving Company has become the largest underwater contracting firm on the East Coast."

Mr. Inserra is a graduate of Columbia University with an engineering degree. He has developed proprietary techniques for ultrasonic testing of concrete under water, and has worked as a project engineer and diver on numerous underwater sewer and gas pipeline projects, cathodic protection installations, and pier rehabilitation projects.

ASSOPO '80 Set For June 16-18 In Trondheim—Program Available

An International Symposium on "Automation for Safety in Shipping and Offshore Petroleum Operations" (ASSOPO '80) is scheduled to be held in Trondheim, Norway, June 16-18, 1980.

The symposium was organized by the Norwegian Society for Automatic Control, jointly spon-

sored by IFIP (International Federation for Information Processing) and IFAC (International Federation of Automatic Control). It will present the state of the art and potential future developments of automation as a tool for improving safety in shipping and offshore petroleum operations.

About 75 papers from 10 countries will be presented during the three-day meeting.

Among topics to be covered

are: Instrumentation; Control Systems; Monitoring and Alarm Systems; Navigation and Traffic Surveillance; Risk, Safety and Reliability; Man-Machine Systems; Simulators for Training; and Maintenance Systems.

This symposium is a successor of five previously held Symposia on Automation of Maritime Operations. About 400 experts from nations active within this field are expected to attend.

The Program Committee has representatives from England, Finland, Japan, the Netherlands, Norway, Poland, and the USA.

Registration deadline is March 15, 1980. Registrations are accepted, with an increased fee, until May 1980.

For a copy of the Preliminary Program and registration details, write ASSOPO '80, SINTEF, Automatic Control Division, N-7034 Trondheim-NTH, Norway.

The savings we delivered 4 years ago are FOUR TIMES GREATER today!

This ad appeared in major marine publications in 1976.

At today's high fuel costs these savings can be up to \$1,000,000 per vessel,** making SCAMP® hull cleanings an essential part of your profit program.

If your vessel has been in service six months or more contact us immediately.



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fuel savings up to \$228,000* demonstrated as a result of regular hull cleanings with SCAMP®

underwater hull cleaning services

An Exxon Corporation study determined actual cash savings from regular hull cleanings with SCAMP® equipment.

| Speed of | 21 MDWT Diesel | 50 MDWT Steam | 250 MDWT Steam |
|----------|----------------|---------------|----------------|
| 11 Knots | \$31,000 | \$127,000 | \$144,000 |
| 12 Knots | \$33,000 | \$141,000 | \$161,000 |
| 13 Knots | \$35,000 | \$157,000 | \$188,000 |
| 14 Knots | \$38,000 | \$185,000 | \$228,000 |

The net savings represent total fuel savings from regular hull cleanings and delay costs based on 4 to 16 hour cleaning periods. For example, for a VLCC, the savings amounted to 6 tons of fuel per day or \$38,000 per round trip.

The following chart illustrates typical fuel savings of a 50 MDWT vessel operating at a reduced speed of 11 knots as an example.

Increase of shaft horsepower and fuel consumption become necessary to hold speed at 11 knots due to loss of hull and propulsion plant efficiency as time elapses. Since regrowth of fouling takes place after each cleaning, maximum net savings are realized from a regular SCAMP hull cleaning program. In the preceding example, net savings (fuel savings less SCAMP hull cleaning costs) were \$127,000.

Optimum cleaning programs are every round trip for long-haul VLCC's and every four months for smaller vessels commencing at the onset of fouling, about 10 to 12 months after dry dock.

A SCAMP hull cleaning program returns fuel savings many times greater than the cost of the cleanings even when operating at reduced speeds.

Since its introduction, over 1600 vessels have been cleaned by SCAMP units. Many ship operators bank on it.

* Source: Exxon Corporation study of various vessel sizes.

A limited number of copies of this Exxon Corporation study are available. Please write on your company letterhead to Donald Rowe, Vice President—Marketing, Butterworth Systems Inc., P.O. Box 3, Dept. LL, Bayonne, N.J. 07002 (USA).

Workboat arrives and the SCAMP unit is lowered into water.

SCAMP unit "swims" to hull.

Working deep.

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Telex: 946524



'Birgit-N' — First Crabber/Trawler From Tacoma Boatbuilding For Bering Sea Service

The newly christened fishing vessel Birgit-N is the first crabber trawler built by Tacoma Boatbuilding Co., Inc., Tacoma, Wash., for service in the Bering Sea.

The Birgit-N (shown above) was built by Tacoma Boatbuilding Co., Inc. for Peter Njardvik and A.O. Nordheim to join their other vessels in the rigorous and highly competitive Bering Sea crab fishery. The design, by B.F. Jensen and Associates, incorporates several features improving the efficiency of the vessel.

The Birgit-N has four crab tanks, each tank being insulated with 6 inches of closed cell urethane foam. The four-tank arrangement allows for ease of loading crab, and also facilitates han-

dling of salmon when the vessel acts as a tender during the Alaskan salmon season. A 60-ton refrigeration plant is installed to maintain fish in the tanks at a temperature of 30 F in chilled seawater. Sumps located in the forward tanks and a sliding watertight door between tanks will allow rapid discharge of the frozen salmon via a fish elevator through the forward tank hatches.

A major benefit of the four-tank arrangement is a shaft alley allowing access from the engine room to the steering compartment and lazarette below decks. The circulation pumps are located in the shaft alley, thus leaving more usable space in the engine room. All compartments below the

deck are protected by watertight doors.

The efficiency of the Birgit-N's design is enhanced by the use of two 10-ton cranes, both fabricated by Northern Line Machine, a division of Tacoma Boat. The forward crane has a reach of 36 feet, and will serve as the picking boom. The aft crane is a unique level luffing design with a reach of 48 feet. The level luffing feature of this crane allows the operator to raise and extend the boom without the need to constantly pay out or haul in line. No matter how the boom is manipulated, the line length remains fixed. This arrangement is safer, faster, and more precise than existing installations. Both cranes are controlled by hydraulic servos on the main control valves which are located in the engine room.

The boat is also equipped with a pair of trawl winches, a stern

ramp, and a Northern Line net reel to allow the Birgit-N to trawl for bait fish.

Pentimonti Appointed VP-Engineering At APL

Eugene K. Pentimonti has been named vice president, Engineering at American President Lines, Ltd., Oakland, Calif. His responsibilities include overseeing all engineering design and construction of vessels, facilities and equipment.



Eugene K. Pentimonti

The announcement was made by Henry Kozlowski, senior vice president, Planning and Control.

Mr. Pentimonti joined American Mail Line (which subsequently merged into APL) in 1972. He has served as director of engineering for APL since 1973, concentrating on the engineering aspects of the company's shift to containerization in the early 70s. More recently, Mr. Kozlowski said, Mr. Pentimonti has played an integral part in evaluation and design of the company's three new diesel-powered C-9 container ships (1,247 forty-foot container capacity), scheduled for delivery in 1982.

Mr. Pentimonti is a graduate of the U.S. Merchant Marine Academy, Kings Point, N.Y., and the Massachusetts Institute of Technology. Prior to joining APL, he sailed as an engineer and worked in a Seattle shipyard. He is based at the company's headquarters in Oakland.

Machinery Condition Monitoring Literature Offered By OES Engrg.

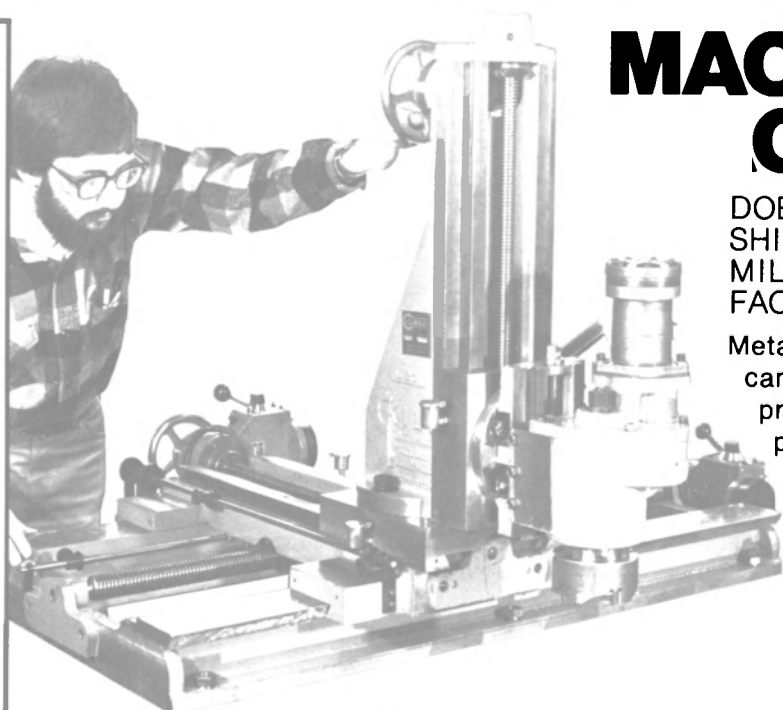
In order to assist shipowners and operators with rising maintenance and fuel costs, OES Engineering, New Rochelle, N.Y., has announced the availability of a new brochure entitled "Machinery Condition Monitoring."

The brochure describes how OES for the past several years has applied and refined an engineered preventive maintenance program which combines routine and indicated maintenance to reduce unnecessary repairs, machinery downtime, and fuel consumption.

For a free copy of the brochure and further information, write Norman Gleicher, Serial 213, OES Engineering, 77 Quaker Ridge Road, New Rochelle, N.Y. 10804.

| The Birgit-N | |
|--------------------------|--|
| Length Overall | 123 Feet |
| Beam | 32 Feet |
| Depth, Main Deck to Keel | 16 Feet |
| Fuel Capacity | 46,000 Gallons |
| Crab Tank Capacity | 8,800 Cubic Feet |
| Propulsion | Caterpillar D399 main engine with 4.5 to 1 Reduction Gear |
| Controls | Mathers Controls |
| Speed | 12 Knots |
| Electric Power | 2 Caterpillar 3406 with 210-kw Generators; 1 Caterpillar 3304 with 90-kw Generator. |
| Hydraulic System | 2 Vickers 4525 pumps 2 Vickers 3525 pumps Driven by Clutched Power Take-offs |
| Chilled Seawater System | 2 York 30-Ton Compressors and Four 15-Ton Chillers in the Crab Tanks |
| Deck Cranes | 2 Northern Line 10-Ton Cranes: 1 Telescoping; 1 Level Luffing "Knuckle" Boom. |

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\$5-Million Navy Order To Raytheon Division

Raytheon Company, Submarine Signal Division, Portsmouth, R.I., is being awarded a \$5,100,000 modification to a previously awarded contract for long lead material modification for the AN/SQS-56 Sonar Systems and an Operator Trainer for use on the FFG-36 and FFG-49. The Naval Sea Systems Command is the contracting activity. (N00024-79-C-6114)

Willard G. Olmstead Named VP And Controller At Federal Barge Lines

Willard G. Olmstead has been appointed to the position of vice president and controller of Federal Barge Lines, Inc., St. Louis, Mo., by Pott Industries Inc., it was announced by Robert A. Kyle, president of Federal Barge Lines, a wholly owned subsidiary of Pott Industries. Pott is a member of the Houston Natural Gas Corp. group of companies.

Mr. Olmstead joined Federal Barge Lines in 1971 as chief accountant. He became assistant controller in 1976, and was advanced to controller in 1978.

His new position carries with it the responsibilities for all finance and accounting areas involving the companies comprising the Inland Waterways Division of Pott Industries. He will place special emphasis on the development of the division's data processing services in connection with the implementation of a management information data base system.

Mr. Olmstead was educated at the MacMurray College in Jacksonville, Ill. He has been active in the Water Transport Association, in which organization he currently serves as treasurer.

'How-To' Manual For Oil-Spill Cleanup Available From EPA

The U.S. Environmental Protection Agency has released a comprehensive "Manual of Practice for Protection and Cleanup of Shorelines" from oil spills. The two-volume manual was prepared by Woodward-Clyde Consultants (San Francisco).

The manual is designed as a decision-making guide to provide the on-scene coordinator and his staff with a systematic, easy-to-apply methodology that can be used: (1) to assess the threat of an oil spill or the extent of shoreline contamination, and (2) to choose the most appropriate and effective shoreline protection, cleanup and restoration techniques for specific shoreline types in a given oil-spill situation.

The manual is divided into two

volumes: Volume I, Decision Guide, gives instructions on how to gather information on a spill, to assess the type and extent of a spill, and to decide which protection and cleanup actions are appropriate; Volume II, Implementation Guide, presents background information on oil characteristics, behavior and movement, shoreline processes and sensitivity, and impacts associated with

cleanup operations. The volume provides detailed instructions on how to implement various protection and cleanup procedures, and presents criteria for terminating cleanup operations as well as a discussion on handling of oily wastes.

The manual, which can be obtained from the National Technical Information Service (NTIS) in Springfield, Va., is entitled

"Manual of Practice For Protection and Cleanup of Shorelines," Volume I—Decision Guide, Volume II—Implementation Guide, by C. Foget, E. Schrier, M. Cramer, and R. Castle of Woodward-Clyde Consultants, Report #EPA-600/7-79-187a, Industrial Environmental Research Laboratory, Office of Research and Development, U.S. Environmental Protection Agency, Cincinnati, Ohio.

Your lucky number is 7 but don't gamble for winning results

You'll be ahead of the game if you count on Todd as your "ace-in-the-hole" when ship repairs or conversions are in the cards. Our seven shipyards are fully equipped to handle any type of ship repair job. We have the drydocks, machine shops, electrical and paint shops, with skilled craftsmen to handle your needs. Our facilities, located on all three U.S. coasts, are always ready to do any job with expertise and speed - saving you some chips. We don't stack the deck, so for a good deal - call on TODD.

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Canada To Seek Bids On \$C43-Million Drydock For Use At Halifax Shipyards

A 43.5-million Canadian dollar agreement was signed recently for the purchase of an oversized Panamax floating dock for Halifax Shipyards of Nova Scotia.

The new dock will be capable of handling all types and sizes of vessels up to 115,000 dwt, and when commissioned will enable

Halifax Shipyards to carry out repairs to the vast majority of vessels trading in the North Atlantic area.

The floating dock, tenders for which will be called for in early April, will be purchased by the Canadian Federal Government and the Provincial Government of Nova Scotia on an 80-20 cost-share basis and owned by the Government of Nova Scotia. It will then be leased to Halifax Industries.

William J. Riley, president and chief executive officer of Halifax Industries, owner-operator of Halifax Shipyards, said: "The new dock will mean that Halifax Shipyards can offer shipowners worldwide a complete service, 24 hours a day, 7 days a week—regardless of the vessel's size. It will widen our potential market very considerably."

The agreement to purchase the floating dock was signed jointly by the Honorable John Buchanan,

Q.C., Premier of Nova Scotia, and the Honorable Elmer Mackay, Canada's Federal Minister of the Department of Regional Economic Expansion.

When completed in 1981, the new dock will provide immediate additional employment for about 360 people, bringing the total labor force of the yard to over 1,000 employees. Construction of the drydock will cost 35 million Canadian dollars and a further 8.5 million Canadian dollars will provide moorings, on-shore infrastructure and other equipment.

The dock will join Halifax Shipyards' other floating dock—the Scotiadock—which only recently came into operation. This dock (185 meters by 25.2 meters—about 607 feet by 83 feet) has a maximum lifting capacity of 16,000 tons.

The yard also operates a graving dock (length 172.9 meters—about 567 feet, draft over keel blocks 9.15 meters—about 30 feet, open width 24.4 meters—about 80 feet) as well as two slipways used for the construction of trawlers and five marine railways across the harbor at Dartmouth Marine Slips.

When completed, the new dock will be positioned inside the yard's operation on the Halifax side of the ice-free harbor.

Bandon Elected VP And General Manager Of Curtis Bay Towing Of Pa.



John F. Bandon

The election of John F. Bandon to the position of vice president and general manager of Curtis Bay Towing Co. of Pennsylvania was recently announced by Malcolm W. MacLeod, president. Mr. Bandon succeeds the former manager of Curtis Bay's Philadelphia, Pa.-based operation, Eric W.L. Heeley, who passed away January 3, 1980, after a short illness.

Curtis Bay Towing has tug fleets based in Baltimore, Md., and Hampton Roads, Va., as well as Philadelphia, and provides harbor, inland, and ocean towage to the marine industry.

Mr. Bandon comes to Curtis Bay from Martin Marietta Corporation, where he was marine manager and district sales manager for the New York area. His extensive marine background also included 17 years with Red Star Towing & Transportation Co., Inc. of New York, where he advanced from dispatcher to executive vice president.

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**H.T. Wilson Joins
Adams & Porter Assoc.**

Richard R. McKay, president of Adams & Porter Associates, Inc., Houston, Texas, has announced the addition of **Hugh T. Wilson** to the firm.



Hugh T. Wilson

Mr. Wilson, with more than 25 years of industry experience, joined the organization in January of this year. For the past 11 years, he was with Highlands Insurance Company of Houston, where he served as executive vice president. Prior to that, he was with a long-time Houston underwriting agency.

A graduate of Rice University, Mr. Wilson is an active member of the American Institute of Marine Underwriters, Maritime Law Association of the U.S., and the Houston Mariners Club.

Adams & Porter Associates, Inc., is a Houston-based international insurance brokerage company founded in 1907.

**Webb Seeks Applications
For New Assistantship**

Webb Institute of Naval Architecture recently announced the Jeremy B. Blood Research Assistantship in Marine Engineering. **Jeremy B. Blood**, class of 1922, was professor of marine engineering at Webb Institute from 1926 through 1946. He subsequently headed the Department of Marine Engineering at the New York State Maritime Academy, now the S.U.N.Y. Maritime College at Fort Schuyler. This newly created position will enable a promising young graduate marine engineer to further his professional studies while functioning as a research and academic assistant at Webb Institute, the nation's oldest and most prestigious school of naval architecture and marine engineering.

An applicant for this position must be a United States citizen with a Bachelor of Science degree in marine or mechanical engineering, and a minimum of 12 months' experience in a field related to marine engineering. The position is offered for a contract period of approximately one year, and may be renewed for up to two further periods of one year each to a maximum of three years. To facilitate the candidate's own graduate studies, his normal obligation to Webb Institute is for a four-day, 28-hour work week. Ben-

efits include a salary of \$11,500 for a 50-week year. The position is available currently, and is expected to be filled by June 1980.

Interested applicants should write, enclosing a resume, to Prof. **J.B. Hadler**, Director of the Center for Maritime Studies, or to **Alan L. Rowen**, Associate Professor of Marine Engineering, Webb Institute of Naval Architecture, Crescent Beach Road, Glen Cove, N.Y. 11542.

**Hulse Named Treasurer
Of American Ship Building**

David Y. Hulse has been appointed treasurer of The American Ship Building Company, Cleveland, Ohio. Mr. Hulse had previously been assistant treasurer and assistant vice president at Jim Walter Corporation, which he joined in April 1974. From 1968 until that time, he was a

vice president at Pierce, Wulbern, Murphey Inc., Tampa, Fla. Earlier, he had been in retail and institutional securities sales at Merrill Lynch, Pierce, Fenner and Smith.

Mr. Hulse holds a B.S. degree from Florida State University and is a graduate of the Institute of Investment Banking sponsored by the Wharton School of Business and Commerce, University of Pennsylvania.

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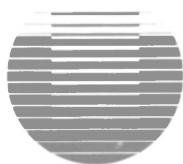
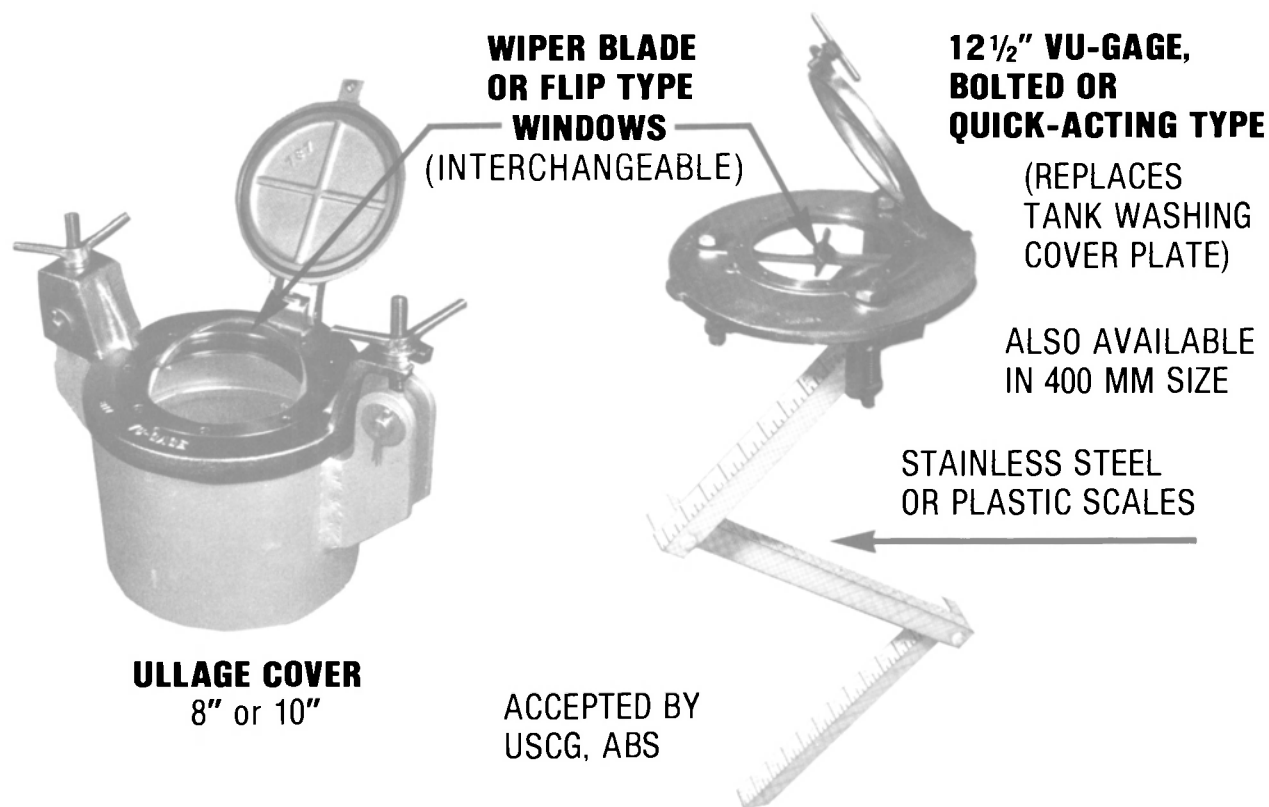
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Nashville Bridge Co. Plans Major Expansion At Ashland City Yard

A \$2-million expansion of the Nashville Bridge Company Shipyards, Ashland City, Tenn., was announced recently by Al Zang, president of NABRICO.

Mr. Zang said the expansion will increase the company's production in Ashland City by as much as 15 percent, and will provide NABRICO with the capabilities of producing oceangoing vessels there. The expansion is designed to provide NABRICO with the added flexibility necessary to meet the ever-increasing market demands for hopper barges, tank barges and oceangoing vessels. Construction, which is expected to begin in late March, will require some 18 months for completion. It has been planned in stages so it will not interfere with current produc-

tion at the plant. According to Mr. Zang, plans call for an expansion in both the fabrication and assembly areas at Ashland City. Some 30,000 square feet will be added to the fabrication area, including a new hatch cover facility. A 50-ton bridge crane will be housed in this area. The assembly area will be increased by 20 percent, adding the capability to effectively translate and launch a 340-foot oceangoing vessel.

NABRICO is a wholly owned subsidiary of The American Ship Building Company, Cleveland, Ohio. Headquartered in Nashville, Tenn., NABRICO has been in the marine field for more than 60 years, and is primarily concerned with the design, engineering and construction of grain and coal barges, deck barges, liquid tank barges, cement barges, drydocks and towboats. NABRICO is a major supplier of marine deck

hardware to the marine industry. The company, with plants in Nashville and Ashland City, pioneered the design and building of much of the modern equipment used on rivers today.

Ship Operations Symposium And Exhibit To Be Held Sept. 23-25 In N.Y. City

A three-day International Symposium on Ship Operations (ISOSO) will be held at the Downtown Athletic Club in New York City September 23, 24, 25, 1980.

This conference will examine the navigations, weather forecasting, and communications aspects in the maritime industry. An exhibit of the latest equipment from international manufacturers in these three areas will be held concurrently. The sponsors of the symposium are the Maritime Association of the Port of New York, the Council of American Master Mariners, the American Institute of Merchant Shipping, and the Council of American Flag Ship Operators.

Conference chairman Capt. Alfred E. Fiore of Mara-Time Marine Service, commented: "Tremendous strides have been made in the 'new technology' in the areas of navigation, communications, and weather adaptive processes of ship operations. At the same time, there has been a large growth in the size of the world's merchant fleets along with an alarming increase in vessel casualties. The latter development has caused international reaction in the form of severe regulatory requirements. The vessel operators are presently worried about effecting compliance with these new regulations. We feel that the solution of this problem, along with the concomitant interest in saving fuel and safeguarding the marine environment, implies an urgent need to spread the word on how this 'new technology' can assist vessel operators in attaining improved safety records and hence, stay within the spirit and constraints of the new laws. The Symposium on Ship Operations is dedicated to this precept."

For more information on the Symposium and Exhibit, write International Symposium on Ship Operations, 80 Broad Street, 34th Floor, New York, N.Y. 10004.

ADAC Offers Brochure On 'Energy-Miser' Valve Actuators

ADAC, Hatfield, Pa., recently published a four-page illustrated brochure complete with technical specifications on their new quarter-turn valve actuators.

The brochure highlights the following ADAC actuators' features: (a) self-locking gear trains permitting the use of drive motors one-third the size required for conventional actuators, while providing the same amount of torque; (b) manual operation without declutching; (c) an overload release for both manual and electric operation; (d) conversion of actuator speed without major disassembly in the field; (e) reorientation in the field; (f) dual torque switches independently adjustable; (g) multiposition limit switches; (h) valve-mounted installation eliminates need for intermediate gear box.

For a free copy of the brochure on ADAC quarter-turn actuators write Charles F. Snyder, Manager, Actuator Project, ADAC, Line Lexington Industrial Park, Hatfield, Pa. 19440.

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For further information, please contact: HARRIS CORPORATION, RF Communications Division, National Marketing Department, 1680 University Avenue, Rochester, N.Y. 14610. Telephone 716-244-5830 or Telex 978464.



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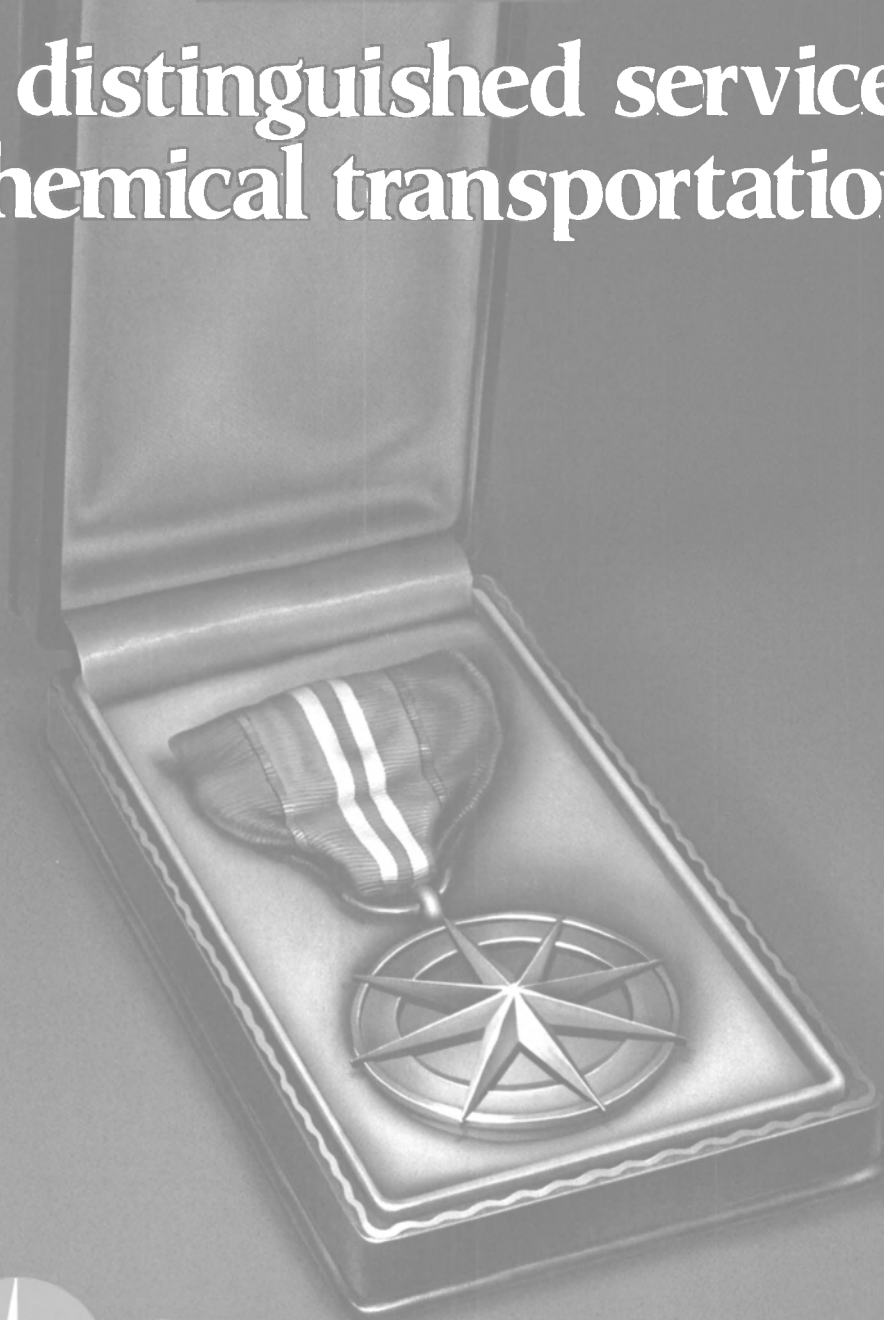
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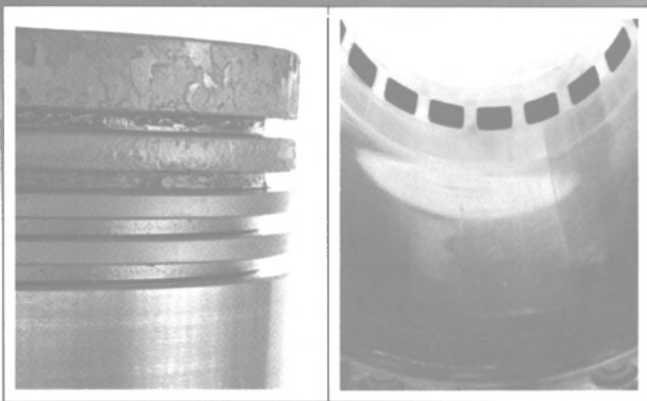
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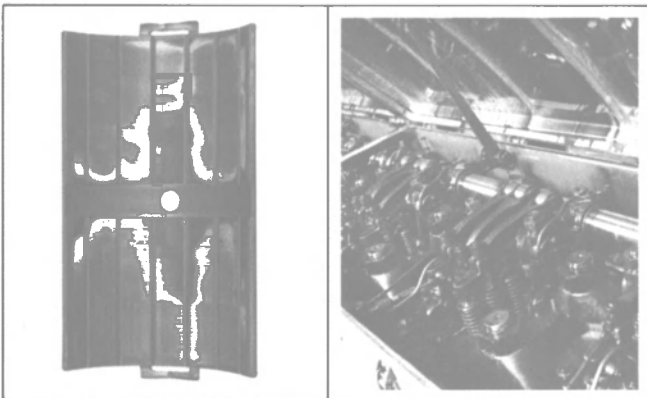
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Silver trunnion bearing shows
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Valve deck illustrates cleanli-
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The MV "Mana" does-for Dillingham. Her 12 645 E6 engines, overhauled at 16,753 hours, looked good for many more-on **Caprinus[®] Oil.**

During late 1976, the then new MV Mana's engines were filled with high alkalinity *Caprinus** T Oil. Then, in 1978, the switch was made to the even more improved *Caprinus* R Oil. Since 1976 the engines have racked up 16,753 hours before *scheduled* overhaul — without a *single* power-pack replacement. The consensus? The engines looked good enough for 20,000 hours — probably even longer.

Dillingham Tug & Barge Corporation *needs* reliability — there are no repair stations between the Hawaiian islands and the "mainland" or throughout the South Pacific where they operate. Dillingham Tug & Barge runs a top-notch maintenance program with *Caprinus* R to keep the boats working.

Both engines were exceptionally clean. Top ring side clearance averaged 0.013" and the top rings were rated at 2 to 2A — which means the grooves were visible on the top ring on about half the pistons. Silver trunnion bearings were good. Overall engine reliability as shown by maintenance records was excellent.

Low wear rates were especially evident in the top ring side clearances, ring gap clearances, ring faces, piston ring groove widths (pistons

were reusable without machining for oversize rings), liners and piston skirts. Shell's premium MVI base oil keeps ring groove deposits soft, friable so deposits are worked out by ring action. Rings compress into the grooves and traverse the ports without breaking or chipping. The result is low ring and liner wear rates.

In addition, Dillingham's use of *Caprinus* R in its Fairbanks Morse engines has eliminated the former expensive task of intake and exhaust port cleaning of those engines three times a year.

Caprinus R Oil is Shell's one oil for big medium-speed marine diesels. Its high alkalinity reserve and dispersancy with Shell's premium MVI base oil fight corrosive wear, keep engines clean and deposits soft — so that normal engine operation keeps deposits from building up. It's been proven — in ALCO, EMD and Fairbanks Morse, as well as other engines.

For more information write: Shell Oil Company, Manager, Commercial Communications, One Shell Plaza, Houston, TX 77002.

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Deep Sea Marine Products
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Mobile
Midstream Fuel Service, Inc.
Location: Mobile River, Mile 1.5
Address: Fairhope 36532
Phone: (205) 433-4972
Radio: Ch 16, VHF

ARKANSAS

Helena
Helena Fuel & Harbor Service, Inc.
Location: Mississippi Service, Inc.
Mississippi River, Mile 661
Riverfront & Bridge Road
Phone: (501) 338-8321
Radio: Ch 16

CALIFORNIA

Oakland
Bay Area Petroleum, Inc.
Location: 421 23rd Ave.
Phone: (415) 534-4517
San Diego
Alameda & Brito, DBA Tuna Clipper Marine
Location: San Diego Harbor
Foot of Crosby Street
Phone: (714) 232-1838
San Pedro
San Pedro Marine, Inc.
Location: Berth 74
Phone: (213) 832-1339

FLORIDA

Jacksonville
See Savannah Oil & Chemical
Savannah, Ga.
Port Everglades
Belcher Oil Company
Location: Port Everglades
2401 Eisenhower Boulevard
Address: Fort Lauderdale
Phone: (305) 525-4261
Tampa
Belcher Oil Company
Location: Tampa Bay
Phone: (813) 247-4572, 247-4573
West Palm Beach
Belcher Oil Company
Location: Port of Palm Beach
1733 Hill Avenue
Phone: (305) 848-1495

GEORGIA

Brunswick
See Savannah Oil & Chemical
Savannah, Ga.
Savannah
Belcher Oil Company
Location: Savannah River, Mile 17
Pier 50, Georgia Ports Authority
Phone: (912) 964-8821
Savannah
Savannah Oil & Chemical
Location: Savannah River
647 W. River Street
Phone: (912) 234-5402

ILLINOIS

Hartford
Ory Bros. Marine Service of America, Inc.
Location: Upper Mississippi River, Mile 197
Foot of Hawthorne Street
Phone: (618) 254-0626 (Illinois)
(314) 741-2570 (Missouri)
Radio: Ch 16, KLC 791
Wood River
Hartford Fueling Service
Location: Upper Mississippi River, Mile 196
Phone: (618) 254-4333
(314) 741-3667
Radio: Ch 16 VHF KLG 280

KENTUCKY

Louisville
Wooten River Service
Location: Ohio River, Mile 603
2927 River Road
Phone: (502) 896-0317
Paducah
Molloy Marine Service, Inc.
Location: Ohio River, Mile 934
100 Husband
Phone: (502) 443-6456
Paducah
Walker Midstream Fuel and Service Co.
Location: Ohio River, Mile 934
532 South Second St.
Phone: (502) 442-2738
Radio: freq. 156

LOUISIANA

Amelia
Berwick Bay Oil Co., Inc.
Location: Bayou Boeuf
Intracoastal Waterway
1/2 mile North 85 mile board
See Berwick listing under Morgan City, La.
Baton Rouge
Capital Marine Supply, Inc.
Location: Lower Mississippi, Mile 230
Foot of North Street
Phone: (504) 343-8379
Radio: Channels 16, 7a, 10, 66a VHF KFT 322

Baton Rouge

Channel Fueling Service, Inc.
Location: Lower Mississippi, Mile 232
River Road
Phone: (504) 383-4691, 383-4814
Radio: freq. 156.8
Belle Chasse
Plaquemines Oil Sales Corp.
See Plaquemines Oil, Venice, La.
Berwick
Berwick Bay Oil Co., Inc.
Location: Atchafalaya River - 1/4 mile north of Hwy 90 bridge
See Berwick Oil Listing under Morgan City, La.

Cameron

Camaron Marine Service, Inc.
Location: Calcasieu River
Phone: (318) 775-5206
Dulac
Berwick Bay Oil Co., Inc.
Location: Houma Navigation Channel
17 miles South of Houma
See Berwick Bay Oil listing, Morgan City, La.

Gretna

John W. Stone Oil Distributor, Inc.
Location: Lower Mississippi, Mile 96.5
87 First Street, Gretna
Harvey 77059
Phone: (504) 366-3401
Radio: KGW 352
Houma
Houma Oil Company, Inc.
Location: Intracoastal Canal
Phone: (504) 872-0464
Intracoastal City
Berwick Bay Oil Co., Inc.
Location: Vermillion River - 1/4 mile north of Intracoastal Canal Mile 155
See Berwick Bay Oil listing, Morgan City, La.

Lake Charles

Channel Fueling Service, Inc.
See Channel Fueling Service, Sulphur, La.
Morgan City
Berwick Bay Oil Company, Inc.
Location: Young's Road
Phone: (504) 384-1610
Radio: Ch 16 VHF KXR979
New Orleans
Gulf Outlet Fuel & Marine Supplies, Inc.
Location: Gulf Intracoastal Waterways
Mile 8 East
3400 Jourdan Road
Phone: (504) 241-8680
Radio: KVF 893

Port Allen

Tri-State Marine Service Co.
Location: Lower Mississippi, Mile 227.5
River Road
Phone: (504) 749-3171
Radio: 156.8
Sulphur
Channel Fueling Service, Inc.
Location: Gulf Intracoastal Waterway
West, Intersection of Calcasieu River
Phone: (318) 583-7215, 583-7384
Radio: 156.8
Venice
Plaquemines Oil Sales Corp.
Location: Mississippi River
Mile 10.5 at Grand Pass
Louisiana Hwy 23, Venice
Address: Belle Chasse
Phone: (504) 394-5555 (Belle Chasse)
(504) 534-7403 (Venice)

Radio: WY2 2375

MASSACHUSETTS

Gloucester
Progressive Oil Co., Inc.
Location: Gloucester
Address: 92 Grove St.
Phone: (617) 283-2000
MINNESOTA
Winona
Waterways - Winona, Inc.
Location: Upper Mississippi, Mile 725
376 East 2nd St.
Address: 455 North St.
Fountain City, WI.
Phone: (608) 687-6931 (Wisconsin)
(507) 452-5252 (Minnesota)
Radio: Ch 16-12

MISSISSIPPI

Biloxi
Ship Services Corporation
Location: Gulfport State Port and Biloxi Back Bay, Beacon :7
Phone: (601) 374-1000
Greenville
Waterways Marine of Greenville, Inc.
Location: Lower Mississippi, Mile 537
Warfield Point Road
Phone: (601) 335-2526
Radio: KWS 617

Pascagoula

Fuel Services, Inc.
Location: Bayou Casotte
Ingalls Avenue
Phone: (601) 762-0636, 762-0640
Radio: Ch 16
Vicksburg
Vicksburg Mid-River Services, Inc.
Location: Lower Mississippi, Mile 437
Foot of Lee Street
Phone: (601) 636-4814, 636-7731
Radio: 156.8

MISSOURI

St. Louis
St. Louis Fuel & Supply Co., Inc.
Location: Upper Mississippi, Mile 179
Address: Foot of Gratiot Street
Phone: (314) 421-3960
Radio: Ch 16, VHR-KDO 722 Fort Guage
NORTH CAROLINA
Elizabethtown
Campbell Oil Company, Inc.
Location: 1010 West Broad Street
Phone: (919) 862-4107

OREGON

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see Lilyblad Petroleum listing under Tacoma, Washington

PENNSYLVANIA

Philadelphia
River Associates, Inc.
Location: Delaware River
Pier 9 North
Phone: (215) 463-8100
SOUTH CAROLINA
Charleston
Charleston Oil Co.
Location: Ashley and Cooper Rivers,
1553 King St. Extension
Phone: (803) 577-5600
Charleston
See Savannah Oil & Chemical,
Savannah, Ga.
Georgetown
See Savannah Oil & Chemical,
Savannah, Ga.
Port Royal
See Savannah Oil & Chemical,
Savannah, Ga.

TENNESSEE

Memphis
Memphis Boat Refueling Service, Inc.
Location: Lower Mississippi, Mile 735
Foot of Illinois Street
Phone: (901) 775-3131
Radio: Ch 16
Memphis
Waterways Marine of Memphis, inc.
Location: Lower Mississippi, Mile 736
Foot of Beale Street
Phone: (901) 525-5761
Radio: Ch 16, 156.6

TEXAS

Galveston
Grasso Marine Service, Inc.
Location: Galveston Ship Channel
Pelican Island
Phone: (713) 744-2888 (dock)
(713) 763-4343 (office)
Lake Jackson
Channel Fueling Service, Inc.
Location: Gulf Intracoastal Waterway
West, Mile 393
1400 Marlin Avenue
Phone: (713) 233-5321, 233-5322
Radio: 156.8
Port Arthur
Channel Fueling Service, Inc.
Location: Gulf Intracoastal Waterway
West, Mile 282
5700 Proctor Street
Phone: (713) 962-5657
Radio: 156.8
Rockport
Berwick Bay Oil Co., Inc.
Location: Rockport Navigation Harbor,
Intracoastal Canal, Mile 526
See Berwick Bay Oil Listing, Morgan City, La.

VIRGINIA

Norfolk
Marine Oil Service, Inc.
Location: Elizabeth River
Address: 71 Radar Street
Phone: (804) 622-0934, 622-3109

WASHINGTON

Seattle
Ballard Oil Co.
Location: Lake Washington Ship Canal
Phone: (206) 783-0241
Tacoma
Lilyblad Petroleum, Inc.
Location: Washington and Oregon - all ports
Phone: (206) 572-4402
Radio: KLB radio station
Marysville, Wa.

WASHINGTON

all other ports see Lilyblad Petroleum above
WEST VIRGINIA
Pt. Pleasant
City Ice & Fuel Co.
Location: Ohio River, Mile 265.3
Address: 224 First Street
Phone: (304) 675-2010



Peterson Builders Launches The Captain Frank Medina

The second of a series of 1,200-ton/225-foot seiners being built by Peterson Builders, Inc., Sturgeon Bay, Wis., splashed into Sturgeon Bay's waters on January 5, 1980, nearly three months ahead of schedule. The Captain Frank Medina (shown above) is owned by the Carolyn M. Corporation of San Diego, Calif., whose president is experienced and well-known Joe Medina Jr. The vessel will fish for Star-Kist and will fly the U.S. flag. She is now in the final outfitting stages and a festive christening and commissioning ceremony will be held in the spring.

Of a completely new design prepared by Ivo (John) Zaninovich of Chula Vista, Calif., the Captain Frank Medina will pack 1,200 tons of tuna in her 17 refrigerated brine wells. She features the new MARCO "Superseine" model WS444 winch and a newly designed MARCO hydraulic system which includes a 56-inch power block, servo operated control valves and a Caterpillar model D353 prime mover. An auxiliary hydraulic system in the bow handles the anchor windlass, Husky deck crane and speedboat davits.

She will achieve speeds of over 16 knots from her single General Motors EMD 20E7 engine driving a five-blade 128-inch-diameter Coolidge stainless-steel propeller through a Falk 5:1 reverse/reduction gear. Mathers of Seattle, Wash., supplied the engine and bowthruster controls. Her 48-inch Schottel bowthruster, driven by a GM Detroit Diesel 12V-71 engine, is controlled from either the port bridge wing or the crew's nest, and is interfaced with her Sperry gyro and autopilot system to maintain a heading while in a set or drifting. Three Caterpillar model D353 engines driving 300-kw Kato generators supply the Federal Pacific parallel switchboard. A Vilter refrigeration system is fitted, which includes four 8-cylinder compressors, over 28,000 feet of ammonia coils in

the brinewells, and a brine circulating and transfer system utilizing PACO pumps.

The Captain Frank Medina will be equipped for helicopter reconnaissance, including over 12,000 gallons of turbine fuel in double bottom tanks. Her electronic outfit is most complete, comprising two Sperry MK127E radars, two Hull model 2320 single-sideband radios (one with a 1-kw Northern linear amplifier), two Hy-Gain VHF/FM radios, Northern emergency SSB, Magnavox satellite navigation receiver, Furuno scanning sonar and Baymar recording fathometer, Taiyo VHF and marine band automatic direction finders, and Honor Marine telephone and public address systems. A complete engine monitoring and alarm system was designed and built by Peterson Builders. Pro-Line of San Diego supplied all the paints for the vessel, including epoxy and polyurethane coatings.

Under construction and awaiting spring launching is Peterson Builders' third hull in this series, the F/V Jane. She is being constructed for Venatun, S.A., owners of the lead ship of the class, the F/V Napoleon which is rapidly setting a mark as one of the most successful new tuna boats to enter the fleet.

PBI's general manager Joe Gagnon has announced that there is production space open for 1981 deliveries, subject to prior commitment. The Peterson yard is located in Sturgeon Bay, Wis. 54235.

APL Opens New Orleans Office

According to T.J. Rhein, vice president, North America, American President Lines has opened a full-service New Orleans, La., office.

The new office, located at Canal Place One, will serve all of Louisiana, southern Mississippi, and southern Alabama. It will be headed by district manager Ross Warner.

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- Send me the Shell Marine Equipment Lubricants chart (SOC: 122-79)
- Send me the Shell Marine Jobber Directory (SOC: 127-79)
- Send me the Caprinus R Technical Bulletin (SOC: 17-77)
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General Electric marine field engineers are available 24 hours a day to make quick, competent repairs in any emergency . . . or to perform a wide range of scheduled maintenance services that can help keep navy and merchant ship equipment working at peak efficiency.

Services are tailored to specific turnaround schedules, and backed by GE’s worldwide manufacturing and repair facilities. They range from appraisals/inspections that pinpoint maintenance needs, to responsibility for a total program . . . including the complete supply of labor, job management, tools and equipment, parts procurement, and machine shop services. Contact the GE Marine Superintendent nearest you, or write:

General Electric Co., Section 950-39A,
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- Shipyard Installation
- Warranty Administration

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- Troubleshooting

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- Surveys/Overhauls
- Modifications/Retrofits/Upgrades
- Complete Maintenance

Technical Training Programs

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Electrical & Electronic

- Automated propulsion controls
- Central Operating Systems (COS)
- Cranes-shipboard & dockside
- Winches
- Diesel engines/diesel generators
- AC and DC motors and controls
- Shipboard power distribution

Mechanical

- Steam turbine & gear propulsion
- Ship’s service turbine-generators
- Gas turbines
- Distillation units
- Pumps and Compressors
- Condensers
- Fans



Installation & Service Engineering Division

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GENERAL  ELECTRIC

March 1, 1980

Electric Boat Awarded \$39-Million For Additional Trident Program Material

General Dynamics' Electric Boat Division, Groton, Conn., is being awarded a \$39,200,000 modification to a previously awarded contract for the purchase of additional long-lead time material for Trident submarine hull #8, and certain items of long-lead time material for Trident hull #9. The Naval Sea Systems Command is the contracting activity. (N00024-78-C-2453)

Bethlehem Boston Reports 1979 Business Increase

Business at Bethlehem Steel Corporation's Boston, Mass., Yard in 1979 was substantially better than in 1978 because of the yard's success in obtaining contracts to overhaul U.S. Navy vessels.

Raymond F. DeVinney, general manager of the facility, reported in a year-end statement recently that the yard had repaired about 112 ships overall during 1979, up slightly from the 99 repaired in 1978. With four Naval vessels in the yard for major work during 1979, employment was up to about 700, which is an increase of about 35 percent compared with the previous three-year average, Mr. DeVinney said.

Work on two Navy frigates, the USS Miller and the USS Valdez, which was started during 1978, was completed this past spring and summer. Two more frigates entered the yard in 1979. They are the USS Blakely, which arrived in June, and the USS Truett, which arrived in October. Both are scheduled for completion in May.

Regular overhaul of the Navy's destroyer USS Barry began recently, with completion scheduled for next January.

New Technical Services Brochure Available From Atlantic Diving Co.

A new 12-page Technical Services brochure from Atlantic Diving Company, Inc. describes new underwater tools and techniques. It includes 14 on-the-job photographs and five technical diagrams.

Atlantic Diving Co. has programs for total inspection, maintenance, and repair. The Technical Services brochure deals primarily with inspection: visual inspections, using closed-circuit TV, color still photography, and certified welding inspectors; cathodic protection inspections, dealing with anode installation, potentiometer surveys and cathodic protection monitoring; ultrasonic and magnetic particle detection, for steel thickness readings, wood and concrete testing, weld flaw detection.

The brochure includes a case history of Atlantic Diving Company's inspection of the Norton (Va.) Reservoir dam. The dam was leaking 750,000 gallons of water per day through a number of leaks, and contributing to a local water shortage.

Atlantic Diving Co. inspected the dam using visual, low-frequency ultrasonic, and core-sampling techniques. They presented recommendations to the owner, and ultimately repaired the dam with quick-setting cement, and underwater epoxy to seal all the leaks completely.

The booklet details some of the new tools which Atlantic Diving Co. employs as part

of their underwater technology, including the V-meter, which measures compressive strength nondestructively in concrete, wood, plastics and other coarse-grained material; the Haglof coring tool, which takes wood samples of timber piles; the bathycorrometer, a diver-operated device which measures the corrosion potential or cathodic protection of any underwater structure at any point on that structure; the D-meter, a portable thickness-measuring instrument which only requires access to one side of the structure to be measured (equally useful for ships' hulls and pipelines).

The booklet describes Atlantic Diving Co.'s basic monitoring packages, designed to maintain up-to-date information on any marine structure, gives a list of personnel and a representative customer list.

Atlantic Diving Co. maintains sales offices in Gloucester, Mass., Mamaroneck, N.Y., and Portland, Maine. In Virginia, the company is licensed under the name of A.D.C. Inc.

For a free copy of Atlantic Diving Co.'s Technical Services brochure, write Russell Inserra, Vice President, Atlantic Diving Company, Inc., Blackburn Industrial Center, Gloucester, Mass. 01930.

Junana Delivered To NDC Of Abu Dhabi By Hitachi Zosen



A jackup-type offshore oil drilling rig built at the Ariake Works of Hitachi Zosen, Japan, was recently delivered to the National Drilling Company (NDC) of Abu Dhabi, United Arab Emirates.

Christened Junana, the slot-type drilling rig is one of three offshore drilling rigs (the other two are cantilever-type rigs) ordered from Hitachi Zosen by NDC in June 1978. The first rig, Al Yasat, was completed in September 1979. The second rig, Diyana, was completed in November 1979.

The Junana (shown above) consists of a platform with three legs, a drill floor with drilling equipment and a derrick, living quarters, and a helicopter deck.

The Junana is large in scale and incorporates highly sophisticated technologies. The drilling rig is designed so that the legs can be completely contained in the platform. This construction allows towing in shallow waters or transportation on the deck of a barge. Although the rig is designed for a maximum operating depth of 150 feet, its legs are constructed with sufficient strength to allow future extension for use in water depths of up to 200 feet.

The Junana is classified by ABS.

When you need dependability a single-source Cat Power System pays off.

Whether you're faced with heavy weather or calm, you can depend on Cat *single-source* Marine Power Systems.

Cat propulsion and auxiliary power systems feature totally integrated design with Caterpillar Engines, Transmissions, Generators and Controls. All are built to a single standard of dependable quality.

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MarAd Seeks Foreign Cost Computation For Retrofitting 9 Berger Group Vessels

The Maritime Subsidy Board has issued a notice of intent to compute the foreign cost of retrofitting seven tankers and two oil/bulk/ore carriers with safety and anti-pollution features to comply with the Port and Tanker Safety Act of 1978.

The computations are being made in anticipation of the award of a construction-differential subsidy contract for retrofitting nine vessels owned by the Berger Group of shipping companies. The proposed shipbuilder for the project is National Steel and Shipbuilding Co. (NASSCO), San Diego, Calif.

Any party having an interest in the computation of the foreign cost of this work may file a written statement by the close of business on March 21, 1980, with the Secretary, Maritime Subsidy Board, Room 3099-B, Department of Commerce, Washington, D.C. 20230.

A notice of this action has been sent to the Federal Register for publication.

Engstrom To Manager Of Golten Service-Miami

Norman Golten, vice president, Golten Marine Co., Inc., recently announced the hiring of **Kenneth Engstrom** as manager of Golten Service Co., Inc. in Miami, Fla.

Golten Service Co., Inc. is a subsidiary of the Golten Marine Co., Inc., headquartered in Brooklyn, N.Y., a member of the Golten Group. Golten is a worldwide diesel engine repair facility and renewal parts source.

Mr. Engstrom replaces **Olav Fossan**, who has been moved to sales manager of all Golten U.S. East Coast facilities.

Mr. Engstrom, a diesel engineer, graduated from the Maritime Academy in Stockholm, Sweden.

Literature Available On 2 New Chart Recorders From Raytheon

Raytheon Marine recently published literature on two new "white-line" chart recorders which have been added to the Fathometer® line of depth sounders.

The Fathometer R-600W and R-1400W each use 6-inch recording paper and operate at 50 KHz. Both models have six overlapping ranges. The R-600W has a large-scale first range of 0-80 feet and a maximum range of 630 feet. The R-1400W has a first range of 0-260 feet and a maximum range of 1,380 feet.

Features include "white-line" operation for a high-contrast display of bottom characteristics and ease in recognizing bottom-feeding fish. Other standard features include switchable 20- and 200-watt power for optimum shallow and deep sounding, a time-varied gain control (TVG) to eliminate unwanted echoes near the surface, variable chart paper speed from 18 to 60 inches per hour, an electronic fix marker, a "bottom adjust" feature for reusing paper, adjustable panel illumination, and interchangeable depth scales calibrated in feet, fathoms, or meters.

For free literature and complete specifications on the Fathometer R-600W and R-1400W, write **Stanley Clark**, Raytheon Marine Company, 676 Island Pond Road, Manchester, N.H. 03103.

March 1, 1980

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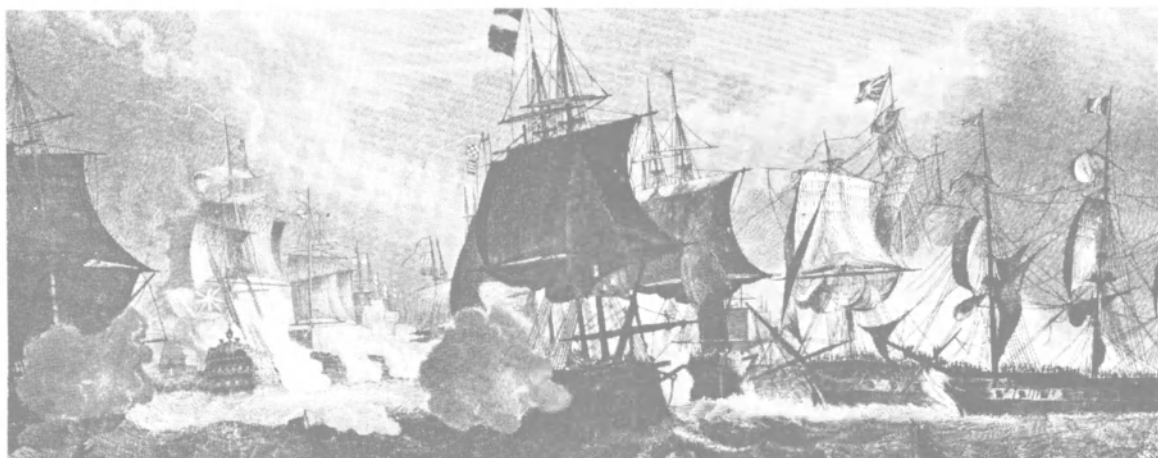


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Our marine air conditioning wasn't around during this scene. But if it was, many ships might not have gone down with men.

James D. Nall marine air conditioning keeps you cool on seagoing vessels...from the largest tanker to your weekend runabout.

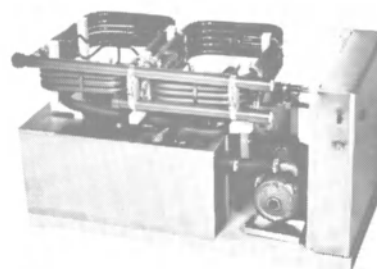
Our expertise and over 36 years serving the marine industry insures cool comfort in the tightest, hottest seafaring situations.

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TURBO GENERATOR SETS


G.E. 1500 KW A.C. TURBO GENERATORS

- 1  1500 KW — 450/3/1200 RPM — 0.8 P.F. — 2450 amps — 525 PSI — 850° TT — 8145 RPM — 11-stage geared 8145/1200 — type FN4 — 3 1/2" steam inlet. Unit will deliver full power at 440 lbs & 760° TT. OAL 16' 3-3/8" — OAW 6'6" — OAH 7'5 1/4" — wt. 36000 lbs. Almost equal to new. Very little use. With ABS or Lloyds.


G.E. 600 KW GEARED TURBO GENERATORS

- 2  450/3/60/1200 RPM — 961 amps — type ATI — 0.8 PF. TURBINE: FSN-FN-20 6-stage — 525 lbs/825°F — superheat 355°/371°F. GEAR: 10033/1200 — RPM 10033 — total — 6390 lbs. steam/hr. steam flow.

G.E. 400 KW TURBO GENERATORS

- 3  450/3/60/1200 — 0.8 PF — 641 amps. TURBINE: 6-stage — 10059 RPM — 525 lbs/825° TT — type GE 618N. Steam rate 5100 lbs/hr. — OAL 10' 10 1/2" — OAW 4' 10 1/2" — OAH 5' 5 1/4" — wt. 14,855 lbs.


400 KW WESTINGHOUSE TURBO GENERATOR SETS FOR BETH-SPARROWS POINT HULLS 4467 TO 5400; QUINCY HULLS 1600 SERIES

- 4  400 KW (500 KVA) — 0.8 PF — 1200 RPM — 450/3/60. TURBINE: 585 lbs — 840° TT — 28 1/2" vacuum — 9018 RPM — serial 10A4462-3 & 10A4462-4. GEAR: 9018/1200 RPM. A.C. GENERATOR: 500 KVA — 400 KW — 450 volts — 641 amps — 0.8 PF — 3-phase 60-cycle — 1200 RPM — CR 40° — excitation amps 41 — excitation voltage 120. Instruction book 5442. Switchgear available.

UNUSED WESTINGHOUSE 60 KW 120 VDC M-20-EH

- 5  120 VDC — 1800 RPM. TURBINE: M-20-EH — 20 lbs dry & saturated — 25" vacuum. 7283 RPM. GEAR: 7283/1800. GENERATOR: 60 KW — 120 VDC — 500 amps — SK — stab. shunt wound.

UNUSED 500 KW DELAVAL-WESTINGHOUSE GEARED TURBO GENERATOR

- 6  GENERATOR: Westinghouse 500 KW — 120/240 volts DC — 2080 amps — 1200 RPM — stab. shunt. TURBINE: DeLaval — 730 HP — 440 PSI working pressure condensing. Temperature 740° — 9977 RPM. HELICAL GEAR: 9977/1200 RPM. Serial # of turbine 245204 — weight 22,000 lbs.

TURBINES & ROTORS

BETH-SPARROWS POINT, QUINCY HULLS

- 7 1 HP Turbine or rotor — Bethlehem
1 400 KW Stator only — Westinghouse
1 HP turbine casing only — Bethlehem
1 Complete Westinghouse 400 KW turbo generator set
1 Forced draft motor fan
1 Anchor windlass — 2 11/16"
Steering gear motors — 15 HP
Forced draft fan impeller

WESTINGHOUSE C-25 CARGO PUMP TURBINE ROTOR VICTORY-AP2 MAIN PROPULSION

- 8 Westinghouse AP2 19-stage HP rotor for 6000 HP Victory — serial #4A-2079 — equal to new. Unused surplus AP2 — Victory Ship complete HP & LP turbines
Allis-Chalmers HP & LP
Westinghouse LP AP2 with throttle valve
G.E. HP & LP with throttle valve

VICTORY-AP3 MAIN PROPULSION NEW 8500 HP G.E. TURBINES

- 9 Large Victory or C-3
HP #72271 LP #72272
10 Boxes spare parts, tools & fittings. With maneuvering valves.


8500 HP G.E. — C-3 OR VICTORY

- 10 H.P. — 8-stage — 6159 RPM — serial 62043
L.P. — 8-stage — 3509 RPM — serial 62042
G.E.I. 16263

VICTORY SHIP AUXILIARY TURBO GENERATOR SET ROTORS

- 11 300 KW 5965 RPM JOSHUA HENDY
Turbine — 3H-69 Gear — 52269
Turbine — 3H-52 Gear — 52252
Turbine — 3H-62 Gear — 52262
ALSO WESTINGHOUSE 2A & 5A SERIES

— FOR T-2 VESSELS —

- 12  TURBINE: DORV-325M — 525 KW — 5645 RPM — 435 PSIG — 28" exhaust. REDUCTION GEAR: S-162 — form D — 5641/1200. A.C. GENERATOR: 500 KVA — 400 KW — 440/3/60 — 1200 RPM — 0.8 PF. D.C. EXCITATION GENERATORS: 75/55 KW — form AL — 110 volts DC. With new type amplydines.

538 KW WESTINGHOUSE T-2 AUXILIARY GENERATOR — COMPLETE

- 13 TURBINE: 538 KW @ 5010 RPM — 438 PSIG — 750° TT — 28 1/2" vacuum. GEAR: 5010/1200 RPM. A.C. GENERATOR: 400 KW — 450/3/60/1200 — 0.8 PF. DC EXCITER: 32.5 KW — 120 volts (variable voltage) — shunt — 4-pole — DC excitation 5 KW. ALWAYS WELL MAINTAINED BY MAJOR OIL CO.


T-2 UNUSED G.E. MAIN PROPULSION STEAM TURBINE WITH ROTOR

- 14 10-Stage — 435# — 720° TT — turbine complete with rotor — serial #109166 — 4925/5400 KW — 3600/3720 RPM — 28.5" vacuum.


WESTINGHOUSE MAIN PROPULSION STEAM TURBINE WITH ROTOR

- 15 EX-CHEVRON VESSEL "MACGAREGILL"
Shrouded — like-new condition. Will sell rotor separately. WESTINGHOUSE MAIN PROPULSION TURBINE Ex "Pecos" — unshrouded — serial 2A-7733-2 type A

UNUSED G.E. MAIN PROPULSION STATOR


- 16  Type ATB-2 — serial #6978272. 2300/2370 volts — 60/62 cycles — 3-phase — 3600/3720 RPM — armature amps 1237/1315 — 4925/5400 KW — 1.0 PF.
Westinghouse stator — from Ex "Pecos"

WESTINGHOUSE 538 KW AUX. GENERATOR EXCITER ARMATURE

- 17  We have both types:
110 KW — 32 KW — 5.5 KW
110 KW — 28 KW — 5.5 KW

538 KW WESTINGHOUSE AUXILIARY TURBINE ROTORS

WESTINGHOUSE T-2 TANKER MAIN GENERATOR COOLERS & MAIN MOTOR COOLERS

- 19  Reconditioned — with A.B.S. Units all ready to ship.
Also G.E. Main Generator Coolers


G.E. 525 KW AUX. GENERATOR EXCITER ARMATURE

- 20  75-55 KW


NEW STYLE AMPLIDYNE

- 21  5LY148A2 — type A.M. — frame 605


AUXILIARY GENERATOR ROTORS

- 22  G.E. aux. generator rotors — DORV-325M — for 525 KW turbo generator sets


T-2 MAIN CARGO PUMPS

- 23  Ingersoll-Rand 6GT — 2-stage — bronze — 2000 GPM — 280' head

LATEST DESIGN 5-SPEED FORCED DRAFT FAN MOTORS

- 24  G.E. Model 5M505FE-1 — frame 5055 — type M — 440/3/60 — serial S.E.6731807. Controller available. (Complete with fan impeller)

T-2 SHIPS SERVICE AIR COMPRESSORS

- 25  Worthington — 5 1/2 x 3 1/2 x 3 1/2 — VA2 — 20 C.F.M. — 100 lbs. — 5 H.P. Motors — 440/3/60 — 1750 RPM.

WESTINGHOUSE DRY TYPE T-2 CARGO PUMP TRANSFORMERS

- 26  200 KVA — single phase — 60 cycle 2300/450 volts — weight 3720 lbs. each. 4 available.

G.E. PYRONOL OIL COOLED TRANSFORMERS


- 27 200 KVA — single phase — 60 cycles — 2300/450 volts — 3 available.

MISCELLANEOUS DRY-TYPE TRANSFORMERS

- 28 Lighting Transformers — 15 KW — 450/120 volts
Galley Power Transformers — 15 KW — 450/220 volts


INGERSOLL-RAND

14,000 GPM MAIN CIRCULATOR

- 29  14,000 GPM @ 25' head — model 24UCM — bronze — with 125 HP 440/3/60 580 RPM motor. 26" suction — 24" discharge. Can furnish with Westinghouse type CS frame B-876C or GE type KF vertical motors.

PUMPS

BRONZE T-2 TANKER STRIPPING PUMPS

- 30  14x14x12 — 700 GPM at 100 lbs. Same pump available in steel for fuel oil transfer, etc.


WESTINGHOUSE 200 H.P. CARGO PUMP MOTORS

- 31 440/3/60 1750 RPM — 40°

MISSION TANKER T2SEA2 CIRCULATING PUMP MOTOR

- 32 150 HP — 440/3/60/590 RPM. Frame 6335 — type KF — 204 amps

T-2 MAIN ROTOR

- 33  LARGE G.E. MAIN PROPULSION SCHENECTADY TURBINE ROTOR

Turbine serial 77418 — reconditioned with certificate. Just out of Beth shop 1970

T-2 MISCELLANEOUS, PUMPS ETC.

- 34 10 HP Labour Self-Priming Bilge Pumps • Rudder 13 1/2" Rudder Stocks • Main Injection 3-Way Valve Main Condensate Pumps • Fuel Oil Service Pumps Magnablast Breaker • 1 Set New Bull Gear & Pinion for G.E. 525 K.W. Diesel Gen Model S-162 • 32", 24", 15" Rubber Expansion Joints • Mission Tanker Steering Gear Pumps

TURBINE FIRE PUMPS — BRONZE

- 35 Worthington turbine — 440# — 448° — 3500 RPM — 75 HP — 15# back pressure — 750 GPM @ 125 lbs — 6" suction — 4" discharge.



NEW BLACKMER FUEL OIL TRANSFER PUMP

36



Rotary — 50 GPM — 50 lbs. — 2" — 5 HP — 440/3/60 — with starter & spares



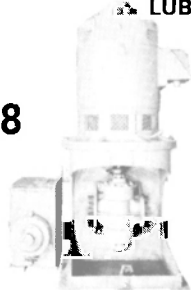
UNUSED BRONZE FEED-WATER BOOSTER PUMPS

220/237 GPM @ 144' head — 2-stage — 1750 RPM with 30 HP 440/3/60 motor control & spares. Built for USN

37

LUBE OIL SERVICE PUMP

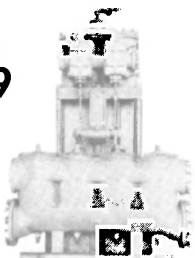
38



Quimby-Rotex — size 6D — 500 GPM @ 70 lbs — 6"x6" flange — 720 RPM. MOTOR: Allis-Chalmers — 40 HP — 230 VDC — type EBV-147S — stab. shunt — 148 amps. Complete with starter and rheostat — designed originally for C-1MAV-1 vessels.

WORTHINGTON 16" x 14" x 18" VERTICAL DUPLEX STRIPPING PUMP

39



1400 GPM @ 110 PSI; suction lift 11.5 ft. Steam back pressure 15 lbs. Suction 14" — discharge 10" — steam 2 1/2" — exhaust 4". Overall width 6' 8" — overall height 9' 1 1/2" — depth 3' 9 1/2" — approx. wt. 10,000 lbs.

NEW WORTHINGTON VERTICAL SUBMERSIBLE BILGE PUMP

40



For emergency use on passenger ships, etc. PUMP: JAS — 264 GPM — 171' head — two 6" inlets — one 5" outlet. MOTOR: 40 HP — 230 VDC — 149 amps.

MOTOR-DRIVEN GARDNER-DENVER RECIPROCATING BILGE PUMP

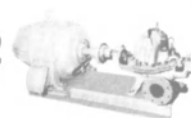
41



50 GPM — 150 PSI — Model ALAXE — serial #106335. 3 3/4" bore — 4" stroke — 2 1/2" suction — 2" discharge. 51" long — 21" wide — 21" high — weight 750 lbs. MOTOR: Diehl — 2.5 HP — 440/3/60 — 1750 RPM — 3.53 amps.

GOULD FIRE AND BILGE PUMP

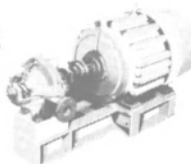
42



Ex-LST — horizontal centrifugal — bronze — 4" suction — 3" discharge — 250 GPM @ 100 PSI — 2200 RPM. MOTOR: 30 HP — 230 VDC with magnetic starter.

AURORA HEAVY DUTY BRONZE FIRE SERVICE PUMP

43



Single stage — 2 1/2" suction — 2" discharge. 3000 RPM — 250 GPM. 100 lb. head. Impeller diameter 9 1/2". MOTOR: Air cooled heavy duty 25 HP Reliance T type ON-2S-2 1/2 230 VDC — 110 amps — stab. shunt.

DIESEL GENERATOR SETS

44

410 KW ENTERPRISE DIESEL GENERATOR SET

Enterprise DSG-6 6-cylinder diesel engine driving Westinghouse generator. 250 volts DC — 1640 amps — 650 RPM — shunt wound.

AUTOMATIC TENSIONING 12X14 STEAM WINCH

45



American Engineering. Drum diameter 24". Will stow 1500 ft of 1 1/2" in 8 layers. Capacity 1st layer: 20,000 lbs/100 FPM — 16,000 lbs/50 FPM. Drum width 2' 6 3/4". Steam inlet 3" — exhaust 4". 8' 4 1/2" wide over cylinders. Base 6' x 6' 3 1/2".

46



16" BRASS PORTLIGHTS

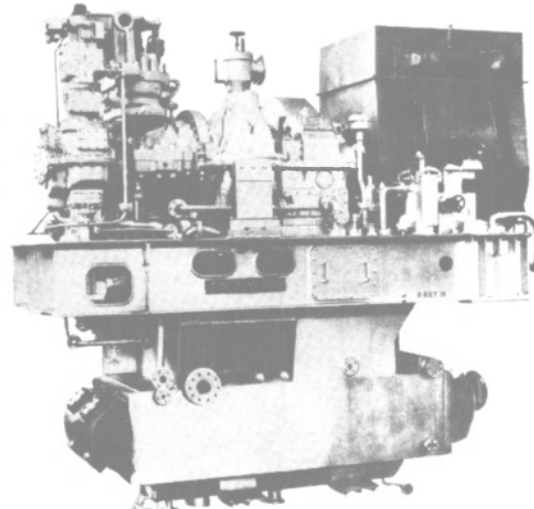
15" and 16" brass portlights. 16" portlights are 3-dog type.

MISCELLANEOUS

47

IF YOU'RE GOING TO JUMBO-IZE YOU CAN ECONOMIZE WITH THESE ALLIS-CHALMERS — DELAVAL 1000 KW GEARED MARINE TURBO-GENERATORS

If you are contemplating the new construction of TANKERS, ORE CARRIERS, CONTAINER VESSELS, ETC.



YOU CAN SAVE THOUSANDS OF DOLLARS

with these modern, practically new units — built to highest Navy standards. Send for our free descriptive brochure. You'll be glad you did.... and money ahead!

IMPORTANT INFORMATION

DELAVAL TURBINE: 1442 HP — 10019 RPM — Class GJ-N — 9-stage — 10,000 RPM — 1050 PSI — 950°TT — condensing steam rate 10.30 lbs. Typical serial number 652468. DELAVAL DOUBLE HELICAL GEAR: 10000/1200 RPM — Allis-Chalmers — 1000 KW — 450 volts — 3-phase — 60 cycle — 1200 RPM — 0.8 PF — static excitation — totally enclosed air-to-water cooling — temperature rise: Stator 130°C — Rotor 110°C — class H insulation — typical serial number 160615 — type M.A.K.G. Complete with 525 sq.ft. condenser — 190 lbs/hr air ejector — oil coolers — strainer — piping & valves — generator switchgear — static excitation control — voltage regulator. Total weight of unit 40,300 lbs. OAL 12' 9" — OAW 6'. Turbo-generator height 5' 8" — total height of turbo-generator & condenser 12' 8". UNITS IN EQUAL-TO-NEW CONDITION. Originally designed for DLG Guided Missile Frigate Program. Installed only about 2 years, then removed and carefully re-boxed by U.S.N. at Bath Iron Works 1964-65. Navy installed larger units due to increased load requirements.

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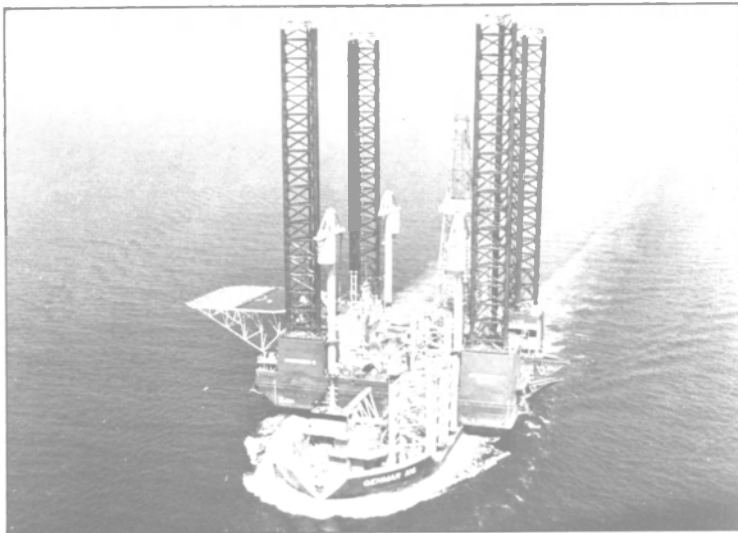


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THE CURRENT MAGAZINE

Requested...by thousands throughout your

***MARITIME REPORTER blankets all
over 18,000 shoreside buyers...
magazine in the entire world***

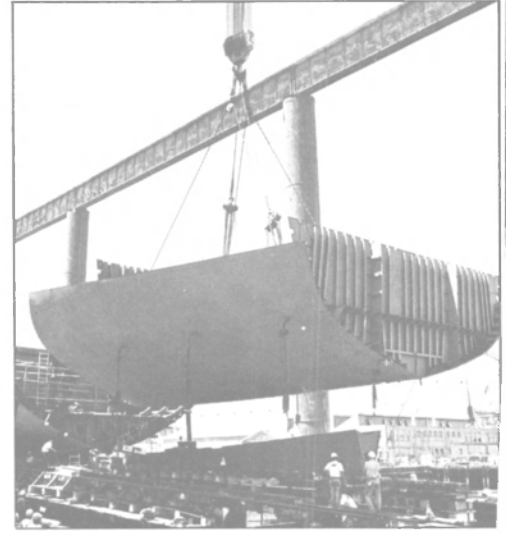
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GREAT LAKES



SHIPYARDS



**These are BUYING POWER readers —
the only people with *authority* to give business to all marine advertisers.**

**MARITIME REPORTER is wanted — requested ... in writing by thousands more individuals with these titles
than any other marine magazine in the entire world.**

VESSEL OPERATING COMPANIES, OCEAN, INLAND, HARBORS, OFFSHORE OIL DRILLING, PORT AUTHORITIES
Directors, owners, agents, presidents, vice presidents, managers, secretaries, treasurers, port engineers, superintendents,
purchasing agents, port captains, port stewards, naval architects and engineers shoreside

SHIPBUILDING, BOATBUILDING, AND REPAIR COMPANIES

Directors, owners, presidents, vice presidents, secretaries, treasurers, superintendents, managers, purchasing agents,
naval architects and chief draftsmen

PROFESSIONAL MEN

Naval architects, engineers and consultants shoreside

**TOTAL CIRCULATION OVER 99% REQUESTED...IN WRITING
...BY EACH INDIVIDUAL READER**

FIRST CHOICE OF MARINE BUYING READERS!

Thousands more marine buyers entire marine market

**marine areas...with a requested circulation to
thousands more than any other marine**

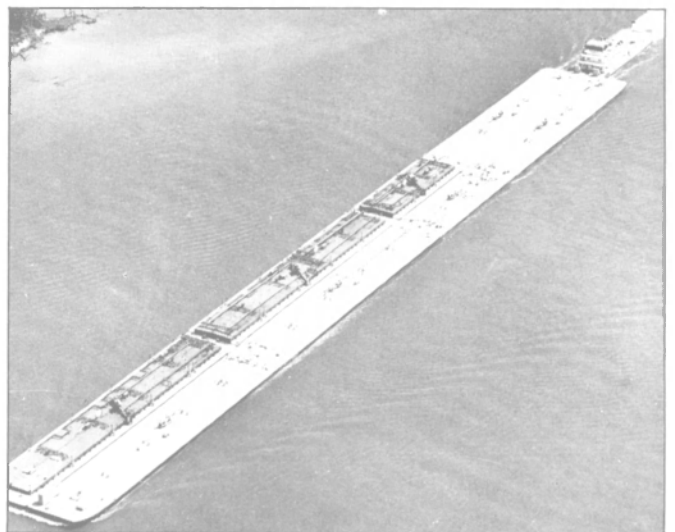
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HARBORS



INLAND WATERWAYS



**Your marine advertising works harder...covers your entire market...to produce more sales for you...
in the leading magazine, MARITIME REPORTER.**

REQUESTED BY THOUSANDS MORE BUYERS WORLDWIDE — MARITIME REPORTER is requested, in writing, by thousands more marine men who specify and buy than any other marine magazine in the entire world.

REQUESTED BY THOUSANDS MORE U.S. BUYERS — Throughout the entire United States... MARITIME REPORTER is requested by thousands more shoreside buyers than any other U.S. marine magazine.

REQUESTED BY THOUSANDS MORE FOREIGN BUYERS — Than the second magazine, ME/Log.

MOST ADVERTISING PAGES — In 1979, MARITIME REPORTER carried more pages of advertising (7" x 10") than No. 2, ME/Log.

400,000 FREE DIRECTORY LISTINGS — Regular display advertisers in MARITIME REPORTER receive a free listing — company name and address — in the buyers directory section in all 24 issues for one entire year... whether an ad appears in every issue or not. No other marine magazine gives you this continuous sales-building exposure.

LOWEST COST — Why pay more... MARITIME REPORTER's advertising rates are lower than ME/Log's... and lower, cost per buying reader, than any other marine magazine.

AND MARINE ADVERTISERS

107 EAST 31st STREET • NEW YORK, N.Y. 10016 • (212) 689-3266

**MARITIME
REPORTER**
AND
ENGINEERING NEWS



The Rhonda Kathleen, a 74-foot, steel-hull shrimp boat, is equipped with Stewart & Stevenson-supplied power systems.

Rhonda Kathleen, 74-Foot Shrimp Boat, Placed In Service

A 74-foot, steel-hull shrimp boat, one of the most modern in the Texas Gulf Coast area, has been put into operation recently by **Vernon Bates Jr.** of Palacios, Texas. Named the Rhonda Kathleen, it is powered by a Stewart & Stevenson-supplied Detroit Diesel 12 V 71n engine driving through Twin Disc marine gear

to a 63-inch by 57-inch Michigan four-blade wheel and 64-inch Kort nozzle.

Stewart & Stevenson also supplied the light plant, a 30-kw marine generator set powered by a GM Detroit Diesel 3-71 engine.

The Rhonda Kathleen was custom-built by **Leon Smith** and **Vernon Bates Jr.**, both of Palacios, Texas.

Three Papers Presented At Winter Meeting Of SNAME Great Lakes And Great Rivers Section



Shown at the Winter Meeting of the Great Lakes and Great Rivers Section are, left to right, (standing) **John Stuart**, Section Meetings chairman; **Edwin A. Rosson**, author; **Ian Sharp**, Section Papers chairman; **Richard Jacobs II**, Section chairman, and **John Colletti**, Section vice chairman, Great Rivers; (seated) authors **Allen R. Dujenski**, **Robert Latorre**, and **Frederick Ashcroft**.

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"Presenting New Regulatory Requirements for Improved Steering Gear," by **Edwin A. Rosson**, Sperry Marine Systems, a guest, and "Fillet Weld Joint Penetration of AWS-E7024 Electrode in Mild Steel," by **Allen R. Dujenski**, U.S. Coast Guard, a member.

During the afternoon, many members in attendance toured the NASA Lewis Research Center, which included their display area and the propulsion system laboratory.

The next meeting of the section is scheduled for Thursday, May 22, at the Hyatt Regency Hotel in Dearborn, Mich.

MARINE INSURANCE SPECIALISTS

by **Whitehall**

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| <p>Over 25 years successfully placing coverage</p> <ul style="list-style-type: none"> • Dry Cargo Vessels • Tankers • Ocean Cargo and all types of Marine Special Coverages | <ul style="list-style-type: none"> • Tugs/Barge • Floating Equipment • Drydocks/Shipyards |
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HYDRAULIC PUMP DRIVE

MARCO unbeatable marine-quality HPD

We are a world leader in marine HPDs and specialize in...

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Send for our HPD catalog today.

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 2300 West Commodore Way - SEATTLE, WA 98199 USA
 Tele (206) 285-3200 - Telex: 32-0098 - Cable: Marco

Dr. Bill R. Jones To Head New Sales Office For Oceanographic Services



Dr. Bill R. Jones

Oceanographic Services, Inc. has opened a new sales office at 7500 San Felipe, Houston, Texas. **Dr. Bill R. Jones** has joined the company as sales manager for the new office. **Dr. Jones** was formerly with Harvey-Lynch, Inc. He will be responsible for marketing, consulting services, and products in the Gulf Coast area.

Oceanographic Services, Inc., a subsidiary of Global Marine Inc., provides professional services in data acquisition, weather, and Arctic engineering.

Reaches more marine buyers entire marine market

**marine areas...with a requested circulation to
thousands more than any other marine**

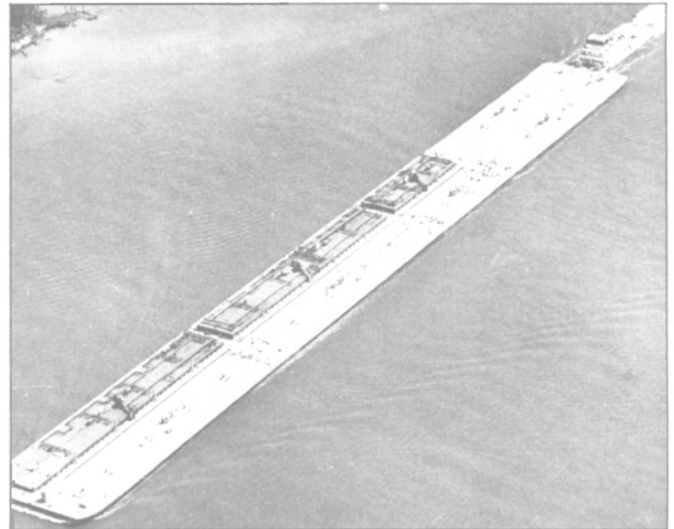
OCEAN



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Over 25 years successfully placing coverage

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 - Tugs/Barge
 - Floating Equipment
 - Drydocks/Shipyards
- and all types of Marine Special Coverages

- Property/Casualty
- Personal Lines
- Bonds
- Employee Benefits

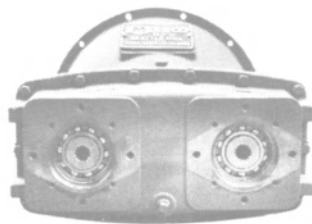
- Professional Insurance Analysts
- Creativity
- World Markets
- Analysis and risk management on all types of insurance coverages required

Whitehall Brokerage Inc.

Insurance Brokers and Average Adjusters
17 Battery Place, New York, N.Y. 10004 - 212 425-0580
Telex 62204 - Cable Hallbrok, N.Y.
A Division of **TER BUSH & POWELL** Incorporated

MARCO HPD HYDRAULIC PUMP DRIVE

MARCO unbeatable marine-quality HPD



We are a world leader in marine HPDs and specialize in...

- small & medium size orders
- short lead-time
- standard or special designs

Send for our HPD catalog today.

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2300 West Commodore Way - SEATTLE, WA 98199 USA
Tele (206) 285-3200 - Telex: 32-0098 - Cable: Marco

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B&W Reports Hong Kong Engine Orders For 1980-81

Burmeister & Wain recently announced that 29 of 44 vessels ordered by Hong Kong shipowners for delivery in 1980-81 will be equipped with B&W engines.

World Wide Shipping Ltd., headed by chairman Sir Yue-Kong Pao, has chosen Burmeister & Wain's new engine type L-GFC(A) for 18 of the 24 ships ordered for delivery in 1980-81. The total propulsive power for the 18 vessels exceeds a quarter of a million bhp.

The engines will be delivered by B&W's licensees, Mitsui Engineering and Shipbuilding and Hitachi Zosen, as follows: Mitsui—four 7L67GFC and two 6L67GFCA engines; Hitachi—two 6L90GFC, two 6L90GFCA, one 6L80GFCA, one 7L67GFC, and four 8L55-GFCA engines.

In addition, two 6L80GFCA (Japanese License built) will be delivered for installation in ships built by Kawasaki Heavy Industries, Ltd.

Wah Kwong & Co. (Hong Kong) Ltd., headed by chairman T.Y. Chao, has chosen Burmeister & Wain's L-GFC for 11 of 20 ships ordered for delivery in 1980-81.

These engines will also be delivered by B&W's licensees, Mitsui Engineering and Shipbuilding and Hitachi Zosen, as follows: Mitsui—one 6L80GFC, six 7L67-GFC, and three 6L67GFC engines; Hitachi—one 6L67GFC engine.

Gdynia America Line Appoints Davie As N.Y. Regional Sales Manager

Continuing to build its executive team in anticipation of four new Polish Ocean Lines container ro/ro ships early next year, Donald D'Agostino, executive vice president of Gdynia America Line, POL's agents in the U.S. and Canada, has announced the appointment of Ronald G. Davie as regional sales manager, New York.

Mr. Davie previously held sales management posts with Seatrain Lines, ACT/Pace Lines, and U.S. Lines. He is a member of the Raritan Traffic Club.

Gulf Oil Trading And Transportation Division Will Move To Houston

Gulf Trading & Transportation Company (GT&T), a division of Gulf Oil Corporation, Pittsburgh, Pa., responsible for marine transportation and the supply, sales and trading of foreign crude oil, will transfer its headquarters and the bulk of its operations to Houston, Texas.

Herbert I. Goodman, president of GT&T, said the move will facilitate the coordination of the crude oil supply function with the

refining, marketing, exploration and production segments of the corporation already based in Houston.

"Gulf traditionally has depended upon long-term supply contracts for much of our refining system requirements," Mr. Goodman said, "but constantly changing conditions in international crude oil supply are now dictating an even more closely coordinated effort by all the operating elements of the corporation's oil

business, with a great premium on fast reactions and prompt decision making.

"It has become increasingly clear that GT&T headquarters and operations must be in the same location as its principal customers and clients, which are Gulf's refining and production divisions. This need now dictates our move to Houston."

Following a restructuring of the corporation in 1975, three of Gulf's operating companies—Gulf

Refining & Marketing Company, Gulf Oil Exploration and Production Company, and Gulf Oil Chemicals Company—moved their headquarters to Houston.

Gulf Oil Corporation currently employs about 3,000 people in the Pittsburgh area. Approximately 180 GT&T employees will be involved in the move.

The GT&T move to Houston will begin in April, and is scheduled to be completed in September of this year.

The Raytheon "Big Tens." Because we all need reliable radar performance.

Ideal for workboats and fishing boats where space is at a premium, Model 6410 and Model 6425 are also superb back-up radars for large, high-seas vessels. Each features a big 10-inch display in an extremely compact unit that may be pedestal, bulkhead, table-top, or overhead mounted. A number of extra-performance options are available including gyro-stabilization now required on large ocean-going vessels.

River models are also available with statute-mile ranges, stern flasher, and off-centering.

Economical installations.

These Mariners Pathfinder® Radars have a combined scanner/transceiver for easy installation aloft. An optional below-deck transceiver is available. Model 6410 has a 10-kW output, Model 6425 a 25-kW output for extra long-range performance.

Big-ship features.

Standard features of both units include:

- Ten ranges from 1/4 to 64 miles for river, harbor, and high-seas navigation.
- Four pulse lengths and repetition rates for optimum target detection and definition on all ranges.

- Built-in variable range marker with three digit readout pinpoints target distances within 1/100th of a mile on short ranges, within 1/10th of a mile on long ranges.
- Choice of 4 or 6-foot antennas, each with 25° vertical beamwidth to compensate for vessel pitch and roll.
- Complete controls for tuning, gain, sea clutter and rain suppression, CRT

- intensity, panel illumination, etc.
- Manually rotated parallel line cursor.
- High-persistence CRT for bright sharp pictures.

Extra performance.

Economical options to meet specific operating requirements include:

- Off-centering kit.
- Gyro-stabilized north-up presentation kit.
- Gyro-interfaced true-bearing kit.
- Optical magnifier for the equivalent of a 15-inch picture.
- Reflection plotter.
- Additional variable range marker with digital readout.

Unmatched two-year warranty.

These Raytheon Marine products have a two-year limited parts warranty plus one-year free on-board service within 50 miles of any of our 210 U.S. dealers and worldwide service network in major ports everywhere.

RAYTHEON MARINE COMPANY
676 Island Pond Road
Manchester, New Hampshire 03103
Telephone: (603) 668-1600
Telex: 94-3459



Jeffboat Receives Order For Six 20,000-Barrel Double-Skin Barges

Jeffboat, Inc., Jeffersonville, Ind., has announced it has received a contract for six 264-foot by 52-foot 6-inch by 12-foot 20,000-barrel double-skin tank barges from Shoreline Investments, Galveston, Texas; Joe Grasso III, owner.

These vessels will be equipped with steam coils, a deep-well pump, a stripping system, closed gauging, and will be built to American Bureau of Shipping, Class Tank Barge River Service standards.

The steel for these vessels, as for most Jeffboat-built products, will be wheelabrated and primed with preconstruction primer prior to fabrication.

CREATIVE CONSTRUCTION TIONEERING

In marine engineering and construction, no-one can offer more creativity than DeLong. This has been proven by over thirty years experience in almost every corner of the globe.

When drilling first went offshore, the typical rig was a crude platform on pilings. DeLong put the rig on a floating barge, added jackup legs (the jacks were our idea too) and, in 1949, made offshore drilling mobile.

Since then, we've covered virtually every aspect of the marine business: drilling rigs, offshore platforms, piers, bridges, tunnels, outfalls, bulk product terminals to name just a few.

Send for our new brochure. It describes just how creatively DeLong can solve your problems.



DeLong Corporation
29 Broadway, New York, N.Y. 10006
Tel: 212-422-1275/Telex: ITT 42-3644



The automated containership, Nichigoh Maru, powered by a Hitachi 8L90GFC-type diesel engine, attained trial speed of up to 25.4 knots. The vessel was constructed by Hitachi Zosen at their Hiroshima Works for joint owners Yamashita-Shinnihon Steamship, Mitsui O.S.K. Lines, and Nippon Yusen.

Fully Automated Containership Nichigoh Maru Delivered By Hitachi

Nichigoh Maru, a 36,912-gt, fully automated containership built at the Hiroshima Works (Innoshima) of Hitachi Zosen, Japan, was delivered recently to her joint owners — Yamashita-Shinnihon Steamship, Mitsui O.S.K. Lines, and Nippon Yusen.

A special committee made up of personnel representing the owners and the shipyard was established to guide the construction of the ship, i.e., to conduct research and development on manpower reduction, safety, and economy.

As a result of this joint effort, the cargo hold of the ship is designed to provide greater carrying capacity than conventional ships of the same class. The load on the deck is diminished and

loading and unloading time is substantially reduced.

The new vessel employs a newly developed, high hull-efficiency construction, including a special bulbous bow, and is equipped with a constant-pressure turbocharged, low-fuel engine resulting in higher propulsion speed at lower horsepower.

Extensive automation of engine room machinery and other main operating and control equipment reduced manpower requirements allowing operation by a crew of only 18.

The Nichigoh Maru is 217.175 meters long (about 713 feet) and carries 1,588 twenty-foot containers including 584 which are refrigerated. The main engine, a Hitachi B&W 8L90GFC-type diesel, provided the ship with a maximum trial speed of 25.4 knots.

Bulkfleet Marine Elects G.J. Mount V-P

G.J. Mount has been elected vice president of Bulkfleet Marine Corporation, a Houston, Texas-based company engaged in the marine transportation of liquid and bulk materials, according to a recent announcement.

Mr. Mount will be based in the company's recently established Northeast division headquarters located at 325 Chestnut Street, Suite 1216, Philadelphia, Pa. 19106. He will be responsible for Bulkfleet's operations in the Northeast sector of the United States.

Bulkfleet Marine Corporation designs and constructs tug/barge units for charter to oil and chemical companies for the purpose of transporting materials along the U.S. Gulf, East and West Coastlines. The company's Dedicated Deep Notch Tug Barge Unit (DDNTBU) has been engineered as a means for moving materials at lower costs. Bulkfleet Marine Corporation tug/barge units feature heavy fuel engines because of the distinct advantage of fuel availability. All such units designed and built by Bulkfleet will be classed and operated with full unrestricted ocean service by the American Bureau of Shipping and the U.S. Coast Guard.

America's Newest and Finest Coastal-Inland Cruise Ship

Designed and Built by Blount Marine Corporation



Left to Right
LOUNGE
STATE ROOM
LOUNGE



Left to Right
BOW LANDING
DINING ROOM
AFTER DECK



BOW RAMP PATENT PENDING



BAHAMA CRUISE SCHEDULE 1979-80

| | | |
|--------------------|--------------------|-----------------|
| Dec. 27 - Jan. 7 | 12 Days, 11 Nights | Exuma-Eleuthera |
| *Jan. 11 - Jan. 22 | 12 Days, 11 Nights | Exuma-Eleuthera |
| Jan. 25 - Feb. 5 | 12 Days, 11 Nights | Exuma-Eleuthera |
| Feb. 8 - Feb. 19 | 12 Days, 11 Nights | Exuma-Eleuthera |
| Feb. 22 - Mar. 4 | 12 Days, 11 Nights | Exuma-Eleuthera |
| *Mar. 7 - Mar. 18 | 12 Days, 11 Nights | Exuma-Eleuthera |
| Mar. 21 - Apr. 1 | 12 Days, 11 Nights | Exuma-Eleuthera |
| Apr. 4 - Apr. 15 | 12 Days, 11 Nights | Exuma-Eleuthera |
| Apr. 18 - Apr. 29 | 12 Days, 11 Nights | Abaco Sound |
| May 4 - May 17 | 14 Days, 13 Nights | Florida to R.I. |

*Shelling Expert Aboard!

NORTHERN CRUISE SCHEDULE 1980

| | | |
|-------------------|--------------------|-----------------------|
| June 1-June 13 | 13 days, 12 nights | Saguenay River ● |
| June 15-June 27 | 13 days, 12 nights | Saguenay River + |
| June 29-July 11 | 13 days, 12 nights | Saguenay River ● |
| July 13-July 25 | 13 days, 12 nights | Saguenay River + |
| July 27-Aug. 8 | 13 days, 12 nights | Saguenay River ● |
| Aug. 10-Aug. 22 | 13 days, 12 nights | Saguenay River + |
| Aug. 24-Sept. 5 | 13 days, 12 nights | Coast of Maine |
| Sept. 7-Sept. 12 | 6 days, 5 nights | Cape Cod Islands |
| Sept. 14-Sept. 26 | 13 days, 12 nights | Americas Cup Races |
| Sept. 28-Oct. 10 | 13 days, 12 nights | Fall Foliage |
| Oct. 12-Oct. 17 | 6 days, 5 nights | Bird Watchers |
| Nov. 9-Nov. 22 | 14 days, 13 nights | R. I. to Florida |
| Nov. 24-Nov. 30 | 7 days, 6 nights | Florida, Thanksgiving |

● UP BY BOAT + DOWN BY BOAT

Bahama Cruises

**NASSAU
ELEUTHERA
HATCHET BAY
GOVERNOR'S HARBOR
NORMAN'S CAY
STANIEL CAY
GRAND BAHAMA ISL.**

Northern Cruises

**HUDSON RIVER
ERIE CANAL
ST. LAWRENCE RV.
MONTREAL
QUEBEC CITY
SAGUENAY RV.
CHAMBLY**

10% Reduction to U.S. Marine Personnel Making Direct Reservations

Fill out and mail the coupon below

**NEW SHOREHAM II is the 6th Cruise Ship built by
BLOUNT MARINE CORPORATION
P.O. Box 368 Warren, R.I. 02885**

REQUEST FOR RESERVATION FORM AND BROCHURE

Fill out and Mail to:

AMERICAN CANADIAN LINE, Inc. — P.O. Box 368 — Warren, R.I. 02885

R.I. ONLY (Collect) 401-245-1350 Outside of R.I. (Free) 800-556-7450

Name (first-middle-last)

Street Phone Area Code

City State Zip

AGE GROUP Under 40 Under 65 Over 65 CITIZENSHIP

IT9EA1ACL100 For Bahama Cruises Only

How this diesel safeguards heavy fuel economy:



"Enterprise" diesels by Transamerica Delaval are designed like no others to live with the contaminants present in less expensive residual fuels. You don't have to trade the 10-30% potential savings in fuel for added maintenance cost.

Our successful history in heavy fuel operation is becoming more important to ship operators coping with an era of cost-intensive energy.

One reason why Transamerica Delaval can zero in on

these often complex needs of customers is that we share with no one the responsibility for our diesels. Our own people design and build them; our own people support them from company parts distribution centers worldwide.

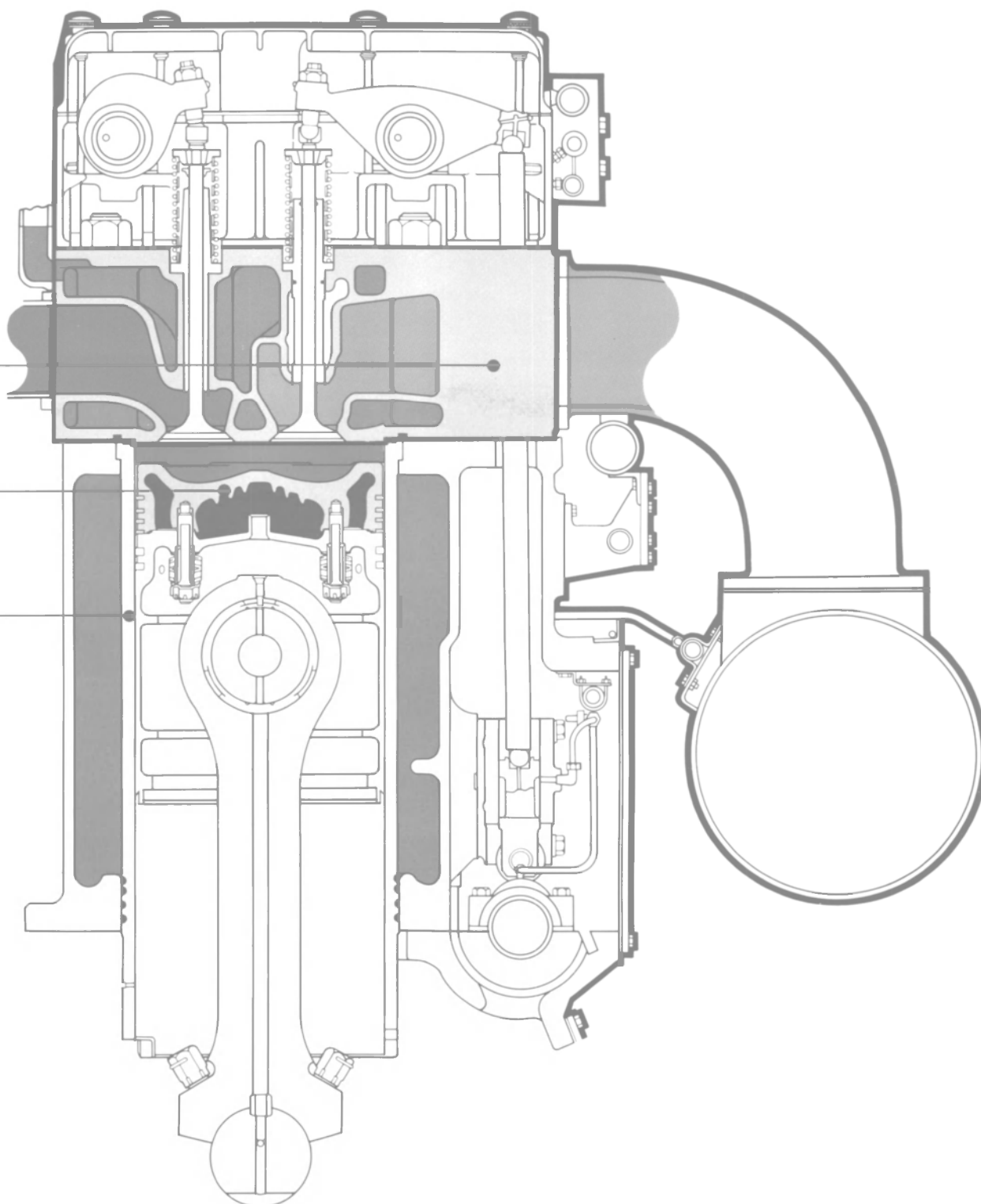
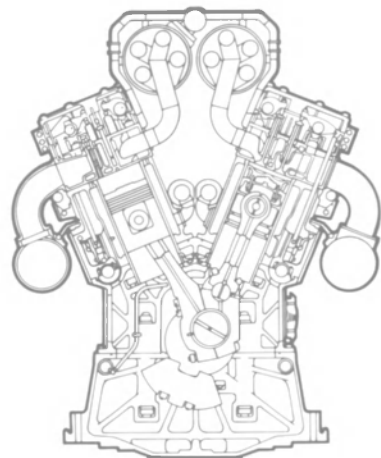
Become better acquainted with America's leading medium speed, 3,000 to 13,500 hp diesels. Contact: Transamerica Delaval Inc., Engine and Compressor Division, 550 85th Ave., Oakland, California 94621. Phone (415) 577-7400. Telex (47) 33-5304. Cable Enterfound.

The heart of combustion economy is a cooling scheme that discourages the build-up of deposits from vanadium and ash.

Use of steel for cylinder head permits thinner walls, so water circulates close to exhaust valve faces and seats.

Steel piston crown, finned inside, and cocktail shaker action of cooling oil: an effective heat dam to the ring belt sector.

Fully machined wet liners are cooled the entire working length of cylinder and above ring travel area.



 **Transamerica
Delaval**

America's Newest and Finest Coastal-Inland Cruise Ship

Designed and Built by Blount Marine Corporation



Left to Right
LOUNGE
STATE ROOM
LOUNGE



Left to Right
BOW LANDING
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| | | |
|-------------------|--------------------|-----------------------|
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| July 27-Aug. 8 | 13 days, 12 nights | Saguenay River ● |
| Aug. 10-Aug. 22 | 13 days, 12 nights | Saguenay River + |
| Aug. 24-Sept. 5 | 13 days, 12 nights | Coast of Maine |
| Sept. 7-Sept. 12 | 6 days, 5 nights | Cape Cod Islands |
| Sept. 14-Sept. 26 | 13 days, 12 nights | Americas Cup Races |
| Sept. 28-Oct. 10 | 13 days, 12 nights | Fall Foliage |
| Oct. 12-Oct. 17 | 6 days, 5 nights | Bird Watchers |
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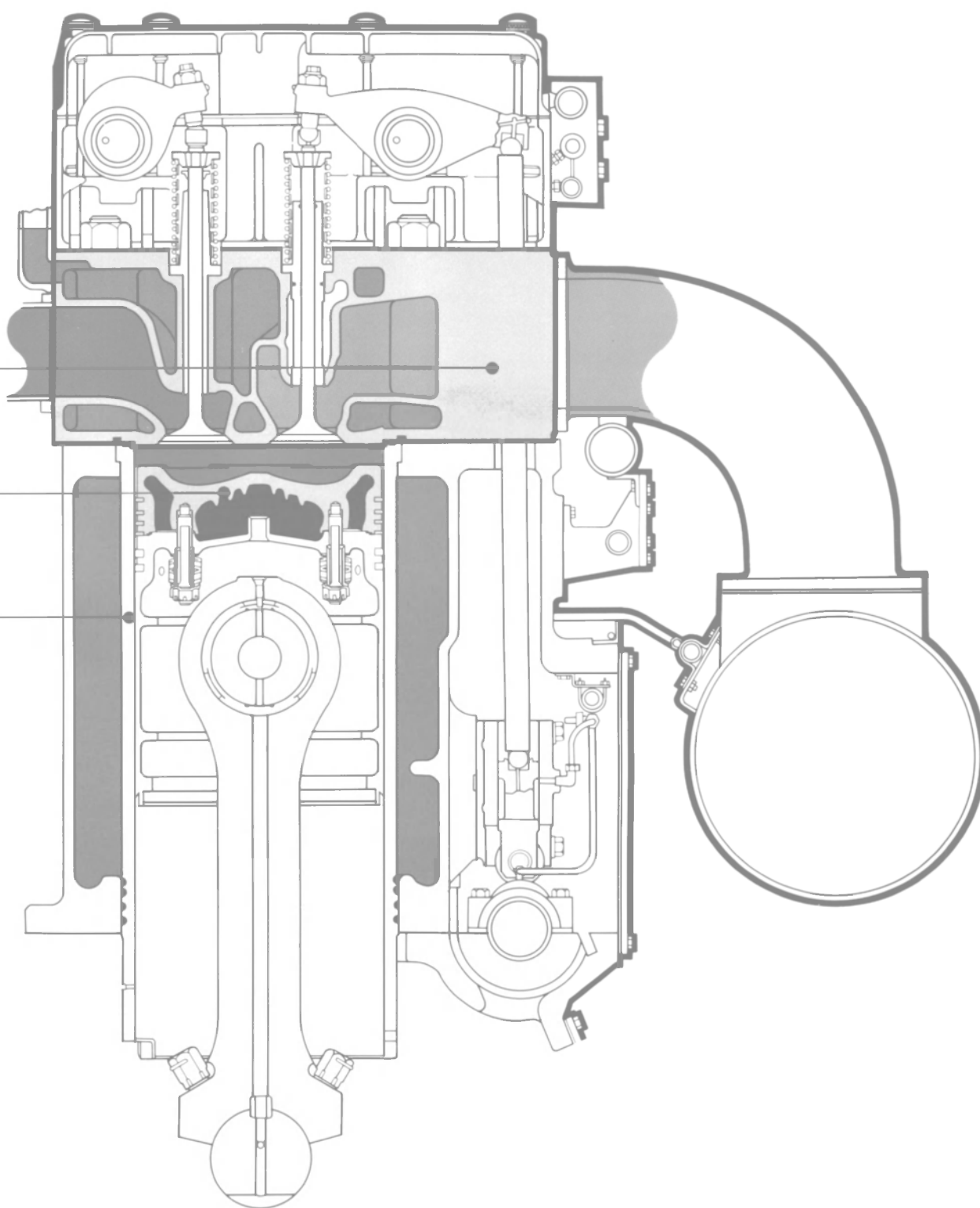
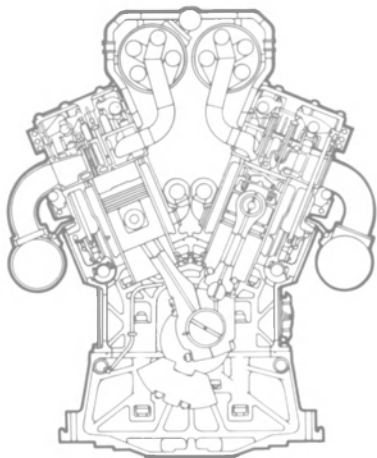
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Kaune Named Assistant General Manager At Todd-San Francisco

Capt. James E. Kaune, USN (ret.), has been appointed assistant general manager of the San Francisco (Calif.) Division of Todd Shipyards, according to Carl R. Meurk, Group vice president-West Coast, Todd Shipyards Corporation.

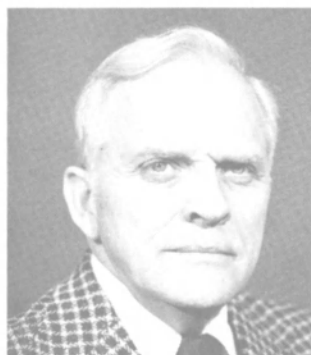


Capt. James E. Kaune

Captain Kaune joins the Todd organization after an outstanding Naval career encompassing more than 30 years of various senior industrial and fleet responsibilities. Prior to retirement, his Navy assignments were as Commanding Officer, Long Beach Naval Shipyard, and as Supervisor of Shipbuilding, Conversion and Repair, Long Beach. More recently, Captain Kaune was on the corporate staff of the American Metal Bearing Co., with responsibilities for Planning, Production Control and Engineering.

Mr. Meurk explained that in his new duties with Todd Shipyards, San Francisco, Captain Kaune will be responsible for Planning and Scheduling, Engineering, Estimating, Quality Assurance, and overall administration of Naval Overhaul programs.

R.L. Crocker Promoted To Manager Of Quality Assurance At Bath



Richard L. Crocker

John F. Sullivan Jr., president of Bath Iron Works, Bath, Maine, recently announced the promotion of Richard L. Crocker to manager of Quality Assurance.

He succeeds Edward J. Tremblay, who has been reassigned as marketing manager of Special Projects.

Mr. Crocker's new responsibilities include quality assurance procedures, dimensional control, audits and reports, materials inspection, vendor quality controls, and nondestructive testing.

He has been involved in quality control at the shipyard since 1965, as a technical writer, auditor, quality assurance engineer, and then as section head of Material Surveillance.

Retired as a major from the U.S. Army Reserve, graduate of both the Army Missile School and Armor Officer Career Course, Mr. Crocker joined Bath Iron Works in 1957 in production planning.

Richard D. Rogers Named To Executive Posts By Pott Industries Inc.

Richard D. Rogers has been appointed vice president-Engineering of the Cora Dock Corporation and manager, Special Projects of Federal Barge Lines by Pott Industries Inc. The announcement was made by Robert A. Kyle, president of Federal Barge Lines, a wholly owned subsidiary of Pott Industries. Pott is a member of the Houston Natural Gas Corporation group of companies.

Mr. Rogers will be responsible for the construction and all aspects of the future operations of the Cora Dock Coal Terminal.

He has a B.S. degree in mechanical engineering from Princeton University, as well as an M.B.A. degree from the University of Virginia.

Three Key Appointments Announced At Solus Ocean Systems, Aberdeen

Solus Ocean Systems have made the following executive appointments as the first part of a planned corporate reorganization to transfer the company's Europe and West Africa headquar-

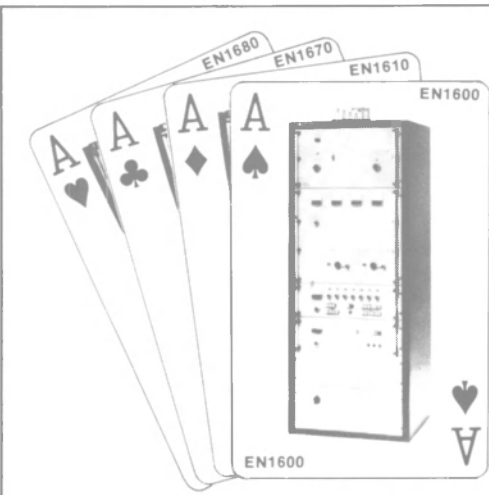
ters from Hounslow, Middlesex to Aberdeen, Scotland.

Colin James has been appointed, manager, unmanned submersibles. Prior to this appointment, Mr. James, a submersible pilot, was manager of RCV operations for Sonarmarine.

Clive Keenlyside has been appointed inspection and project engineering sales manager with responsibility for Europe and West Africa. Mr. Keenlyside has been with Solus Ocean Systems for six

years, and was previously manager of the company's NDT inspection service in the North Sea area.

Tony Gilbert has been appointed corrosion control and project engineering sales manager responsible for Europe and West Africa. Prior to this appointment, Mr. Gilbert was paint inspection manager with Solus Schall. He also served as sales and technical manager with Ramco Oil and Marine Services.



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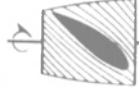
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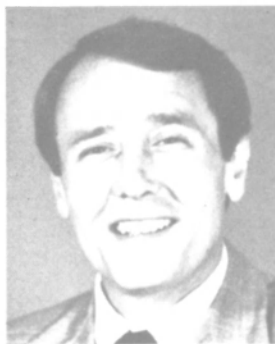
Two Vice Presidents Appointed At Texas Gas Transmission Division

Two vice presidential appointments have been announced in the Inland Waterways Services Division of Texas Gas Transmission Corporation, Jeffersonville, Ind.

Kenneth W. Peters has been named vice president of finance at the division level, while **Robert W. Kilroy** has been appointed vice president of industrial relations for American Commercial Barge Line Company (ACBL), the division's principal operating company, and its affiliate, American Commercial Terminals, Inc. (ACT).



Kenneth W. Peters



Robert W. Kilroy

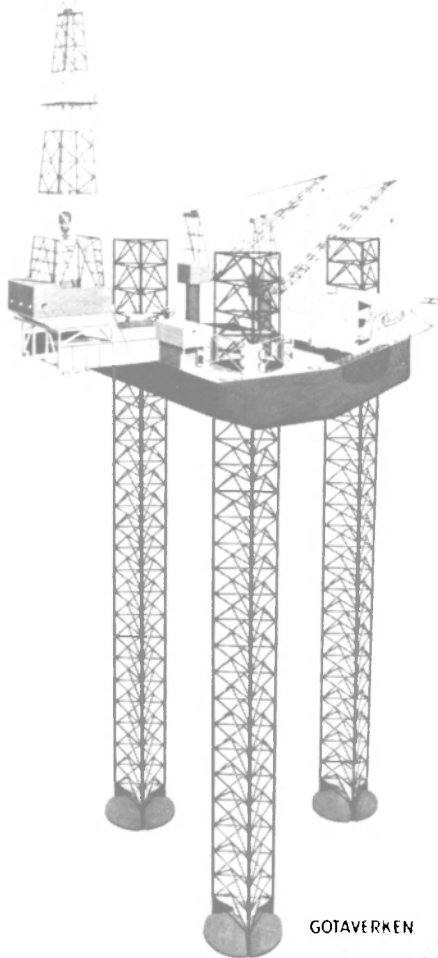
As chief financial officer, Mr. Peters will continue his previous responsibilities as division treasurer. He joined the Inland Waterways Services Division in 1971 and held various systems development and financial analysis positions before being named treasurer in 1976. He gained earlier experience

in finance with Cummins Engine Company and General Motors Corporation.

Mr. **Kilroy** has been director of industrial relations for ACBL since joining the company in 1975. He earlier practiced labor law in Indianapolis and was formerly associated with Teamsters Local 135 and the National Labor Relations Board.

Mr. **Peters** holds a bachelor's degree in business administration from Indiana University. Mr. **Kilroy**, who earned his undergraduate degree at Boston College, is a graduate of Indiana University Law School.

Gotaverken Arendal To Build Rigs For Mexican Group



GOTAVERKEN

Designer's model of jackup drilling rig to be built in Sweden for operation in the Gulf of Mexico.

An agreement has been reached between the Mexican industrial group Protexa and Gotaverken Arendal, Goteborg, Sweden, to build two jackup drilling rigs for delivery in 1980-81. The contract is for approximately US\$70 million.

The Protexa Group is one of Latin America's leading industrial organizations, with offshore drilling interests in the Gulf of Mexico, where these two rigs will operate.

These rigs will be of the same type as those Gotaverken Arendal is now building for the Swedish firm Salen Energy. These platforms are designed with an effective steel utilization which minimizes the hull weight and results in larger storage spaces compared to other types of rigs. The units are designed to operate in water depths of 76 meters (about 249 feet), and can drill to depths of 6,500 meters (about 21,000 feet).

Ship Dynamic Positioning & Mooring Systems Conference —Papers Available In Booklet Form

North Sea weather is expected to produce some 273 days in any one year officially described as bad (mist, rain, fog, snow, ice),

49 "marginal," and 43 "fair or good" days. Because of this weather pattern, outlined by **P.H. Barton** (divisional) manager, Marine Offshore Division, (GEC), in his opening address when taking the chair for the morning session of a one-day conference on "Ship Dynamic Positioning and Mooring Systems—Electrical Aspects," organized by The Institute of Marine Engineers in London on February 22, 1979, platforms in the "Forties" were designed to withstand 94-foot waves, and winds up to 130 mph. The integrity and reliability of electrical systems associated with such projects had to be of a very high order, and new techniques and extended practices evolved to meet the demands of supporting offshore oil technology.

The aim of the conference was to examine the considerable practical experience with electrical systems for specialist support vessels in the realms of design, building, operation and maintenance, and personnel training. Also discussed were applications on semisubmersibles as well as ships, covered position measurements as a necessary prerequisite to dynamic position control, and power systems on vessels equipped with sophisticated control systems.

Seven papers were presented: (1) "Design Considerations of Electrical Power Systems for Offshore," by **R.L. Ames**; (2) "Evaluation of Microwave Positioning Systems," by **D. Green** and **A.J.C. Hamblin**; (3) "Computer Controlled Anchor Positioning for a Pipelaying Barge—System Design and Experience During Pipelaying," by **Kai von Thienen**; (4) "Personnel Training Simulator for Anchor Positioning," by **H.E.D. Jensen**; (5) "The Scott Lithgow DP Vessel," by **J.K. Robinson** and **J.F. Simpson**; (6) "Dynamic-Positioning Control Systems and Operational Experience," by **R. Bond**; and (7) "New Diving Support Vessels for the Royal Navy," by **K.E. Jordan**.

The conference papers in full, with discussions and authors' replies are now available in booklet form, priced £25, and may be obtained from Marine Management (Holdings) Limited, Activities Division, 76 Mark Lane, London EC3R7JN, England.



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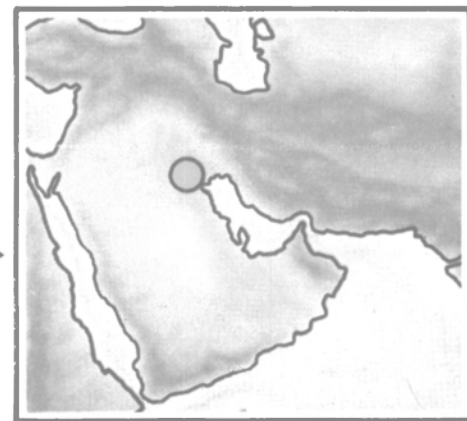
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FOURTH FOR TMT CHRISTENED — The El Rey, Trailer Marine Transport Corporation's fourth triple-deck barge, departed Jacksonville, Fla., on January 18 for its maiden voyage to San Juan, Puerto Rico. The El Rey (shown above), the final in a series of four mammoth triple-deck barges, was built in Portland, Ore., by the Marine and Rail Equipment Division of the FMC Corporation. After being launched from FMC's ways, the El Rey was towed from Portland through the Panama Canal to join Crowley's Trailer Marine Transport fleet operating in the Caribbean. Upon arrival in Puerto Rico, christening ceremonies for the barge were held on January 24 at the TMT Isla Grande Terminal in San Juan. The wife of the Governor of Puerto Rico, **Kate Donnelly de Romero**, christened the El Rey. **Thomas B. Crowley**, president and chairman of Crowley Maritime Corporation, **Leo L. Collar**, **James B. Rettig**, and **J. Alec Merriam**, members of the Crowley Management Committee, arrived in San Juan on January 21 for a week of activities in commemoration of Crowley Maritime Corporation's 10 years and TMT's 26 years of service to Puerto Rico. The 580-foot by 105-foot by 57-foot vessel joins three identical triple-deck barges in TMT's roll-on/roll-off trailer service between the U.S. Mainland and the Caribbean. The El Rey and its sister vessels, La Reina, El Conquistador, and La Princesa, are the largest ro/ro barges in the world. Each carries up to 374 forty- and forty-five-foot trailers. Triple-deck loading ramps at both Jacksonville and San Juan permit the mammoth vessels to be completely unloaded and reloaded in as little as eight hours. They are towed by modern 9,000-hp oceangoing tugboats.

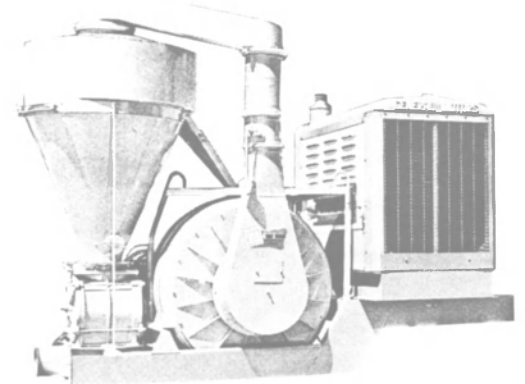
NMC Appoints Two U.S.-Flag Officials

The National Maritime Council, Washington, D.C., recently announced two top level appointments. **Edward Chick**, senior vice president/Africa Division, Farrell Lines, New York, was named National Shipper Advisor Coordinator for the entire NMC, serving as liaison with all four NMC Regional Shipper Advisor Coordinators and their respective Shipper Advisory Boards. **Michael Bural**, Midwest manager/Americas Services, Sea-Land Service, Chicago, was appointed NMC Shipper Advisor Coordinator for the Midwest Region. Mr. Bural replaces **Jack Smith**, vice president, Moore McCormack Lines, Chicago, who still retains the chairmanship of that Region.

The NMC's Regional Shipper Advisor Coordinators also include **John A. Vanna**, executive vice president, Sea-Land Service, Menlo, Park, N.J. (Eastern Region); **Joseph E. Frank**, general sales manager, Lykes Bros. Steamship Co., New Orleans (Central Region); and **Fred E. Waterhouse**, vice president, traffic and sales/Pacific Division, Delta Steamship Lines, San Francisco (Western Region).

Serving as the U.S. maritime industry's umbrella trade association, the NMC seeks to strengthen America's maritime industry which, according to **C. William Neuhauser**, NMC's executive secretary, is vital to our nation's military and economic security.

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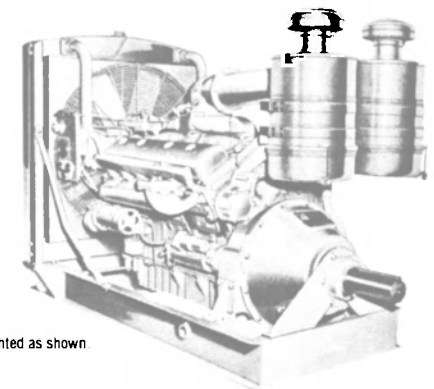
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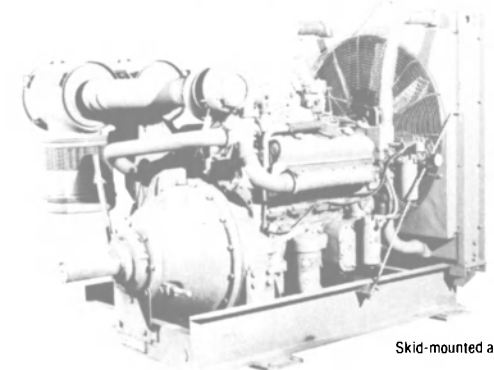
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| Engine Type | 2 cycle V8 Diesel |
| Number of Cylinders | 8 |
| Bore and Stroke | 4.84" x 5" |
| Total Displacement | 736 cu./in. |
| Max. Brake H.P. Basic Engine | 550 @ 2300 RPM (Turbo-charged) |

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**Bruce Boat Rentals
Seeks Title XI For
Seven Crewboats**

Bruce Boat Rentals, Inc., Gibson, La., has applied for a Title XI guarantee to aid in financing seven crewboats. Swiftships, Inc., Morgan City, La., is the shipbuilder for the project.

One of the boats, the Destiny, is a 120-foot (36.6-meter) vessel with four 535-horsepower diesel engines. Each of the other six boats will be 100 feet (30.5 meters) in length and have three of the 535-horsepower diesels.

Three of the vessels were delivered last year, and the other four are expected to be delivered by this August.

The estimated actual cost of the seven crewboats is \$4,533,400. If approved, the Title XI guarantee will cover 75 percent of that amount.

**AAMS Names Vasquez
Administrative Assistant**

All American Marine Slip (AAMS) has named **Jerry Vasquez** administrative assistant at its New York, N.Y., home office. Mr. Vasquez is responsible for the underwriting of energy-related offshore exploration and production risks. He now also assumes administrative responsibilities as assistant to AAMS president **Robert G. Lowry**. All American Marine Slip is a syndicate of 31 insurance and reinsurance companies that insures high value, offshore energy risks, managed by Marine Office of America Corporation.

A senior underwriter since 1978, Mr. Vasquez has 10 years' experience in insurance, six of those with the MOAC organization.

**American Manufacturing
Promotes Key Executives**

American Manufacturing Company recently announced, as a result of a plan for reorganization, the promotions of key executives of the company, effective February 7, 1980.

Joseph A. Berthelot will be advanced to the position of vice president-sales, **Frank D. Vaughn** to vice president and general manager of American's Lafayette, La., operation, **Herbert S. Sneiderman** to chief division engineer, **Nagui B. Badir** to division controller, and **Andrew J. Booths** to manager, employee relations, payroll and insurance. **Robert L. Stanton** becomes president and will serve on the board of directors of the new corporation as cochairman of the board. Mr. Berthelot and Mr. Vaughn are also named directors of the new corporation.

American is one of the oldest and largest cordage operations in the United States.

**Lockheed Offshore Systems
Opens Houston Branch Office**

Lockheed Missiles & Space Co. announced that a branch office in Houston, Texas, has been opened for its Offshore Systems & Services organization.

Named as manager of the new office at North Belt Place Three, 340 North Belt East, is **James E. Lucas**. Prior to assuming his new post, Mr. Lucas was with Lockheed Petroleum Services as operations manager.

William A. Smith, manager of Lockheed Offshore Systems & Services office in Sunny-

vale, Calif., said the group is presently engaged in contracts with numerous major oil companies in the development of hardware, feasibility studies, innovative conceptual and preliminary design, and project management services. The Houston office will enable experienced Lockheed engineers and offshore operations personnel to work closely with the petroleum industry to solve complex offshore problems.

Lockheed Missiles & Space Company's Ocean Systems organization, the parent organization at Sunnyvale, has broad experience on hardware systems in the ocean, Mr. Smith said, including the initial development and operation of a unique one-atmosphere subsea completion and production system, design, fabrication and operation of a deep-ocean mining system capable of seafloor

operations to 18,000 feet, Ocean Thermal Energy Conversion, oil-spill cleanup equipment and several deep-diving submersibles, including the Deep Quest and U.S. Navy's Deep Submergence Rescue Vehicles.

**B.F. Goodrich Receives
\$4.8-Million Order For
Inflatable Lifeboats**

The B.F. Goodrich Company, Akron, Ohio, is being awarded a \$4,892,988 firm fixed price contract for MK6, 25-min inflatable lifeboats as a result of formal advertising. Work will be performed in Union, W.Va. The Navy Ships Parts Control Center, Mechanicsburg, Pa., is the contracting activity. (N00104-80-C-3766)

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**Use Of Combustion
To Combat Oil Spills
—Report Available**

Practical information on using combustion to combat oil spills is contained in a report released recently by the Department of Energy's Pacific Northwest Laboratory (operated by Battelle Memorial Institute).

The purpose of the report is to provide decision-makers with information they can use when considering combustion as an option in combating oil spills. Use of combustion is evaluated for disposing of oil within a stricken vessel, oil on water and oil-contaminated debris.

The study was conducted by researchers

in Battelle's Water and Land Resources Department and sponsored by the Department of Energy (DOE) and the United States Coast Guard.

Part one of the two-part report is a practical guide that summarizes results of the study. "It classifies oils by their combustibility potential and gives information on the technical feasibility of burning oil," said **C. Hugh Thompson**, project manager. Significant points to consider in deciding whether to use combustion and research and technology development needs complete part one.

The statements in part one are based on data in part two, the resource document. It examines use histories of oil spills and includes theoretical studies of oil combustibility under varying weather conditions. Part two

also includes a discussion of the ethics of oil burning and a comparison of combustion with other alternatives for dealing with oil spills.

Parts one and two are contained in a single volume entitled "Combustion: An Oil Spill Mitigation Tool," available from the National Technical Information Service, United States Department of Commerce, 5285 Port Royal Road, Springfield, Va. 22151.

**McDermott Norge Receives
\$100-Million Amoco Norway
Letter Of Intent**

McDermott Norge, a division of Oceanic Contractors, Inc., which is a subsidiary of J. Ray McDermott & Co., Inc., has received a letter of intent for a \$100-million contract with Amoco Norway Oil Company. McDermott Norge will act as the prime contractor for the fabrication of production/compression facilities in the Valhall field in the Norwegian sector of the North Sea. Included in the project are the hookup and commissioning of the facilities.

These topside facilities are made up of a three-level deck weighing 7,100 tons, four separate modules with a total weight of 6,700 tons, a 120-ton bridge, and a 300-ton flare boom.

Fabrication will begin in Norway and is scheduled to be completed in January 1981, with final hookup scheduled for July 1981.

The facilities will be installed atop an 8-pile jacket now being completed under a separate \$22-million contract by the McDermott Fabricators Division in Morgan City, La. Oceanic will transport the jacket and install it at a site in the Valhall field where water depth is 230 feet.

In other projects related to the development of the Valhall field, McDermott Norge has responsibility for the fabrication of Amoco's quarters platform. It will also install this platform and hookup and commission facilities on it. This contract formerly belonged to the Netherlands Offshore Company.

McDermott Norge also has notices of intent from Amoco to transport and install a drilling platform in the Valhall field and to lay and bury two 20-inch pipelines (one to transport oil, one for gas) from the field 22 miles north to facilities in the Ekofisk field.

**Partnership In Hopper
Dredging Firm Formed
—Gulf Coast Trailing**

The formation of Gulf Coast Trailing Company was recently announced by **G.W. James Jr.**, president, T.L. James & Company, Inc., Ruston, La., and **G.J. De Wolf**, director, Hollandsche Aanneming Maatschappij BV (HAM), Rijswijk, Holland. Gulf Coast Trailing Company, a partnership of the two major construction and dredging companies, was organized to participate in the seagoing hopper dredging industry in the United States.

The company's first hopper dredge of 1,000 cubic meters is presently under construction at Twin City Shipyard, St. Paul, Minn., and should be ready for service by June 1980.

Gulf Coast Trailing Company's offices are co-located with those of T.L. James & Company, Inc. in Kenner, La. **L.A. Hubert Jr.** has been appointed general manager of Gulf Coast Trailing Company, in addition to his current responsibilities as manager, Special Projects for T.L. James & Company, Inc.

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**TANO Wins \$2.6-Million
Contract For Marine
Automation Systems**

TANO Corporation, New Orleans, La., has been awarded a \$2,652,000 contract by Avondale Shipyards, Inc. to provide centralized control and monitoring systems for the three containerships Avondale is currently building for American President Lines Ltd.

The ships, which will be powered by large, low-speed diesel engines, will utilize the TANO control and monitoring systems to allow operation of machinery in space unattended by engine room personnel. The systems, including engine control room and wheelhouse consoles, will provide control and monitoring of the vessels' powerplants, as well as fuel, oil and ballast tanks. Single-lever bridge propulsion control is also included.

The TANO systems will be built to American Bureau of Shipping (+ACCU) and U.S. Coast Guard requirements for vessels with periodically unattended machinery spaces.

TANO has designed, manufactured and installed more than 70 marine automation systems on major commercial and naval vessels since 1971, including two of the largest commercial vessels ever built in a U.S. shipyard.

For free copies of the TANO equipment literature, write to **James J. Reiss Jr.**, president, TANO Corporation, 4301 Poche Court West, New Orleans, La. 70129.

**Loran-C Brochure Is
Available From Navidyne**

A brochure describing the expanded Loran-C system and a new Loran-C receiver has recently been published by Navidyne Corporation, Newport News, Va.

A new product, the ESZ-7000 Loran-C Navigator, shows all navigation data, including latitude and longitude, on a CRT display. The ESZ-7000 draws heavily upon technology developed by Navidyne for its successful ESZ-4000 Satellite Navigator.

Introduction of the ESZ-7000 was timed to coincide with the recent expansion of the Loran-C system by the U.S. Coast Guard. Coverage is now available in all U.S. coastal waters, including the Great Lakes, in addition to large portions of the Mediterranean, North Sea, North Atlantic, and Pacific.

The Navidyne brochure explains how the Loran-C system works and describes the operation of the ESZ-7000. For a free copy of this brochure, write **Ed Easter**, Navidyne Corporation, 11824 Fishing Point Drive, Newport News, Va. 23606.

**Student Paper Presented
At The New England
Section Of SNAME**

At the fourth meeting of the New England Section of The Society of Naval Architects and Marine Engineers, **Todd Peltzer**, Ensign, USN, presented a paper entitled "On the Use of High-speed Photography in the Study of Propeller Cavitation." Ensign Peltzer is a recent graduate at the Massachusetts Institute of Technology, having received his S.B. degree in naval architecture and marine engineering in June 1979.

The speaker discussed in detail research conducted at M.I.T. during the 1978-79 academic year, involving the use of high-speed photography in the study of propeller cavitation. The objective of this research was

to obtain a set of photographs from which the extent of cavitation could be determined quantitatively. As background, the significance of such measurements to the general study of cavitation was discussed. The difficulties encountered in previous attempts at the use of high-speed photography in cavitation research were also discussed.

The solution to these problems was the motivation for the use of some advanced photographic techniques. In particular, the introduction of Kodak Ektachrome 400 film, and the development of a digital time-delay unit made possible a detailed photographic survey of propeller cavitation. These photographic techniques formed the basis for experiments which produced a series of photographs of a five-bladed, gold-anodized propeller, taken at one degree intervals, and

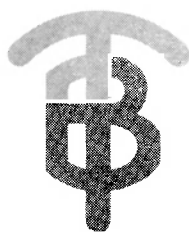
at cavitation indices of 2.05, 2.5, and 3.0. While the quality of these photographs was excellent, geometrical distortions precluded any meaningful quantitative measurements of cavitation extent.

This problem inspired further experimentation using a four-bladed brass propeller. Here, the fixed wake screen used in the previous experiment was replaced by a rotatable wake screen, allowing the propeller to be photographed in a single orientation and yet still achieve the desired variation in flow. From these measurements, an estimation of cavity volume was made yielding a history of cavity formation and collapse. These volume estimates very closely agree, within experimental limits, with the prediction of a numerical lifting surface computer model.

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Require person to supervise work aboard vessel, familiar with pumps, turbines and other shipboard machinery. Also will be needed on field work, to estimate jobs etc. Please specify in your resume former employers, shipping companies and any other helpful information. All replies will be kept confidential. Please state salary required.

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Port Engineering:

Respondents should have 5 to 7 years hands-on-experience in towboat operations and maintenance. Knowledge of and experience in all aspects of structural, propulsion and auxiliary systems, engine overhaul and trouble shooting is required. Familiarity with EMD engines is desirable.

Fleeting Operations:

The successful candidate will have experience in the make up of tows and the securing of barges in accordance with U.S.C.G. regulations. Familiarity with barge cleaning, minor barge repair and rigging is required. Experience in the supervision of fleet foremen and watchman would determine the superior candidate.

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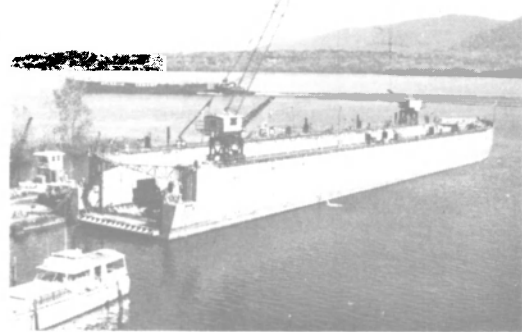
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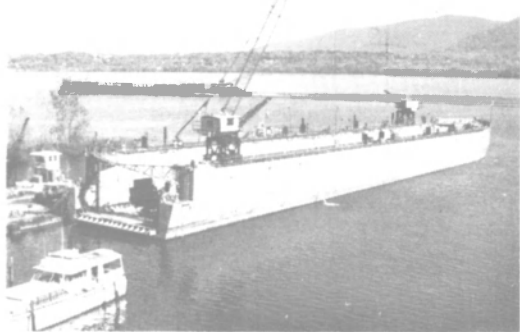
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M/V TAKU PROJECT NO. F9500(4)

Sealed bids in single copy for furnishing all labor, mat-
erials, and equipment and performing all work on Project
F9500(4) described herein will be received until 3:00 PM
prevailing time April 3, 1980 in the Division Directors Office,
Division of Highway Design and Construction, Island Center
Building, Douglas, Alaska.

The project consists of refurbishing M/V TAKU by: replac-
ing or rebuilding major machinery components, living
accommodations and food facilities, the addition of a
solarium, a passenger/freight elevator and installation of
a Type I Marine Sanitation Device. ALL WORK SHALL BE
COMPLETED BY APRIL 30, 1981.

In accordance with requirements set forth by the Federal
Highway Administration, the following provisions are made
a part of all advertisements for construction contracts:
"Bidders must submit certification stating whether or not
they intend to subcontract a portion of the work and, if
so, that they have taken affirmative action to seek out
and consider minority business enterprises as potential sub-
contractors. Each bidder intending to sublet part of the
contract work shall make contact with potential minority
business enterprise subcontractors to affirmatively solicit
their interest, capability and prices and shall document
the results of such contacts. A bidder's failure to submit
this certification or submission of a false certification shall
render his bid nonresponsive."

Plans and Specifications may be obtained by potential
prime contractors for bidding purposes by contacting the
Director, Division of Harbor Design and Construction,
Pouch Z, Juneau, Alaska 99811, (907) 586-2195.

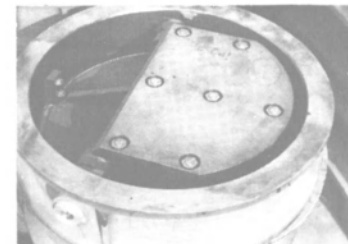
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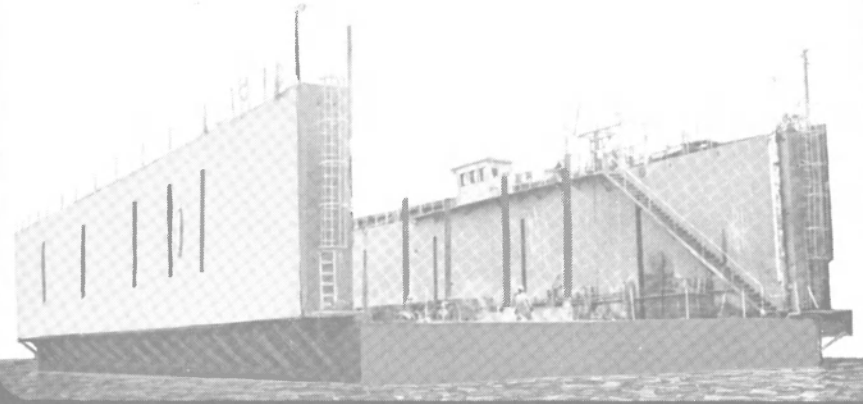
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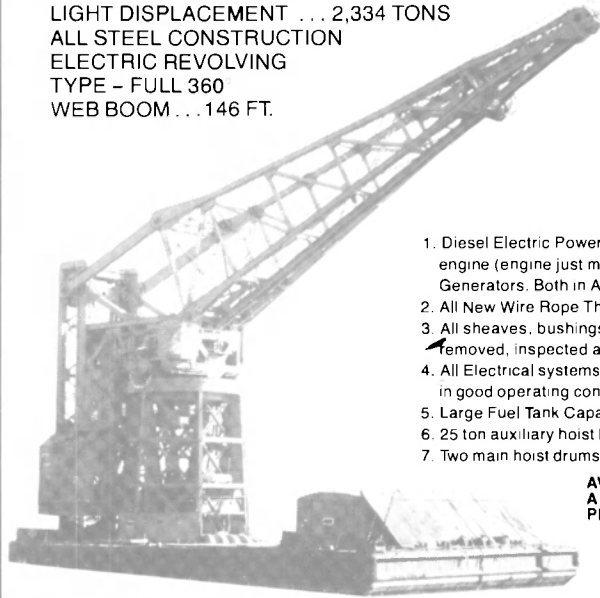
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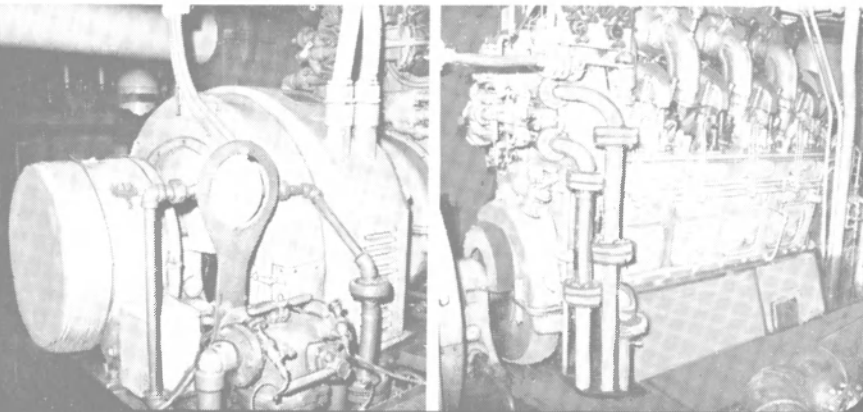
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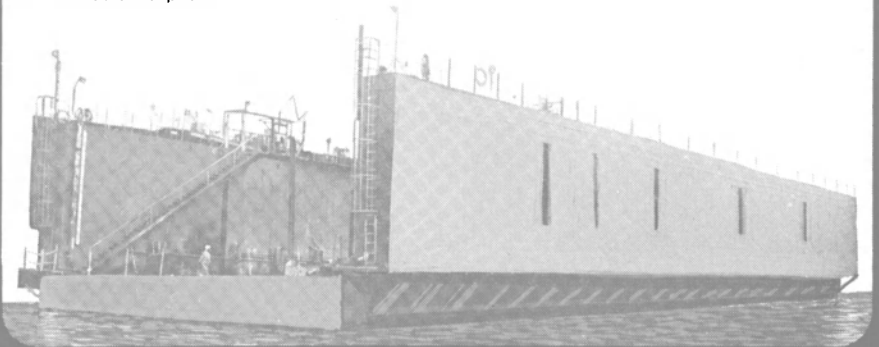
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 Breadth between wing walls — 74'
 Capacity — 2,400 tons

Three longitudinal bulkheads; four transverse bulkheads; fifteen watertight ballast tanks. Six 8" centrifugal pumps (40 HP motors). Fifteen air operated flood valves. Total weight — 900 tons. Two ventilation blowers — one for starboard pump room and one for port pump room. 4' keel blocks full length included.

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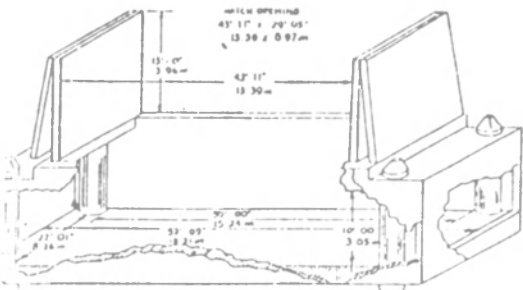
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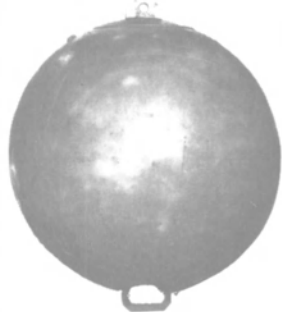
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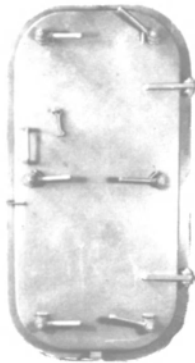
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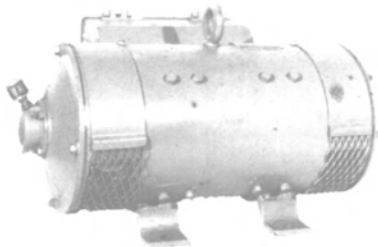
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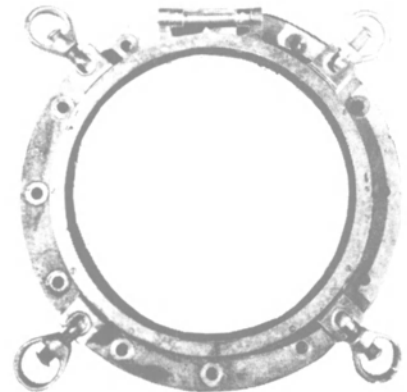
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- Voith Schneider of America—U.S. Agent: Eli Sharprut, 347 Evelyn St., Paramis, N.J. 07652
- Tacoma Boatbuilding Co./Escher Wyss, 1840 Marine View Dr., Tacoma, WA 98422
- PROPULSION—Marine**
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- Maritime Industries, Ltd., 6307 Laurel St., Burnaby, B.C. Canada V5B 3B3
- Port Electric Turbine Div., 155-157 Perry St., New York, N.Y. 10014
- Schottel of America, Inc., 8375 N.W. 56 Street, Miami, Fla. 33166
- Transamerica Delaval, Inc., Turbine & Compressor Div., P.O. Box 8788, Trenton, N.J. 08650
- PUMPS—Repairs—Drives**
- Penco Division/Hudson Engineering Co., 1114 Clinton St., Hoboken, N.J. 07030
- Transamerica Delaval, Inc., IMO Pump Div., P.O. Box 321, Trenton, NJ 08602
- Warren Pumps, Inc., Bridges Ave., Warren, Mass. 01083
- Worthington Pump Inc., P.O. Box 1250, Mountainside, N.J. 07092
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- CM American, Division Columbus McKinnon Corp., P.O. Box 74, McKees Rocks, Pa. 15136
- REELS—Coiling Systems**
- Reel-O-Matic Systems, Inc., 418 Hellman St., Wrightsville, Pa. 17368
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- Bailey Refrigeration Co., Inc., 74 Sullivan St., Brooklyn, N.Y. 11231
- Port Refrigeration Div., 157 Perry Street, New York, N.Y. 10014
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- Johnson Rope Co., Reading, Pa. 19603
- Samson Ocean Systems, Inc., 99 High Street, Boston, Mass. 02110
- Tubbs Cordage Co., Orange, CA 92666
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- Electric Tachometer Corp., 68th & Upland St., Philadelphia, Pa. 19142
- Henschel Corp., 14 Cedar St., Amesbury, Mass. 01913
- Hose McCann Telephone Co., Inc., 524 W. 23rd St., N.Y. 10011
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- SANITATION DEVICES—Pollution Control**
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- Demco, Inc., P.O. Box 94700, Oklahoma City, OK 73109
- Envirovac (Division of Dometic Inc.), 1260 Turret Drive, Rockford IL 61111
- Marine Moisture Control Co., Inc., 449 Sheridan Blvd., Inwood, L.I., N.Y. 11696
- Marland Environmental Systems, Inc., N. Main Street, Walworth, WI 53184
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- Red Fox Industries, P.O. Drawer 640, New Iberia, LA 70560
- Research Products/Blankenship, 2639 Andjon, Dallas, Texas 75220
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- Sigma Treatment Systems, 2 Davis Ave., Frazer, PA 19355
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- Spider Staging Sales Co., P.O. Box 182, Renton, Washington 98055
- Trus Joist Corp., P.O. Box 60, Boise, Idaho 83707
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- Bethlehem Steel Corp., One State Street Plaza, N.Y. 10004
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RO-RO 80

The 4th International Conference & Exhibition
on Marine Transport
using Roll-on/Roll-off Methods
Monte Carlo, 15-17 April 1980

CONFERENCE PROGRAMME

Tuesday 15 April

Session 1 14.00h. – 17.00h.

Ro-Ro Operations and Trades

The potential of the Ro-Ro vessel as a multi-purpose carrier in general cargo trades between developed and lesser developed countries.

Speaker: Bjorn Ervell, Johansson Group Management Board Member responsible for Ro-Ro Services to the Middle East, Pakistan, India, US Gulf and Mexico.

The uncommon box — the relationship of an intermodal equipment lessor to the intermodal community, the free flow on intermodal trailers between hauliers, railroads and the Ro-Ro operators.

Speaker: Gordon C. Miller, Vice-President, Transamerica Realco Inc, Chicago.

The adaptation of the Ro-Ro concept to the integrated transport system — a major shipper will give his thoughts on refining the systems, both administratively and physically to give better economies, especially capital rationalisation.

Speaker: Rune Svensson, Transport Director, AB Volvo, Sweden.

The Ro-Ro Market in the Caribbean — an examination of the existing trades and future opportunities for European shipowners to place their vessels in the Caribbean.

Speaker: Peter S. Shaerf, Director, Common Brothers USA Ltd., New York.

Slow or fast — is the move towards faster Ro-Ro's really necessary? The economics of a new concept of vehicle/passenger ship — designed to operate at slower speeds with bow access only and unusual machinery arrangement — is compared to conventional designs.

Speaker: Pekka Kandelin, Naval Architect, Oy Wartsila, Finland.

19.00h. Reception given by the Principality of Monaco.

Wednesday 16 April

Session 2 09.15h. – 10.30h.

Ship Design

Seaborne Rail Transportation — the growing interest in integral rail transport systems emphasises the need to define common criteria to achieve optimum results.

Speaker: George Spalatin, Naval Architect, Inkobrod, Zagreb, Yugoslavia.

The planning of a Ro-Ro fleet for developing countries.

Speaker: to be confirmed.

Session 3 11.00h. – 12.30h.

Stability and SOLAS Session

Ro-Ro Damaged Stability — a joint presentation by: P. Fagerlund, Technical Director, Transatlantic Rederi A/B, Gothenburg.

P. Damkjaer-Nielsen, Naval Architect, East Asiatic Co. Copenhagen.

B. Berg, Assistant Manager, Wilh. Wilhelmsen, Oslo.

Cargo Ship or Passenger Ship? Some notes on coping with regulations on the survival capability of Ro-Ro ships in the light of recent IMCO recommendations.

Speakers: Martin A. W. M. van Hees, Naval Architect, Rhine-Schelde-Verolme, Netherlands.

Patrick G. Martin, Naval Architect, Verolme Cork Dockyard Ltd (RSV Group), Ireland.

Fire-fighting and water clearance on trailer decks and other safety considerations in the design of a family of wide beam, shallow draft container Ro-Ro ships.

Speaker: E. J. B. Pawsey, Director, Hart Fenton & Co. Ltd, Consultant Naval Architects to the Sea Containers Group of Companies, London.

E. Vossnack, Chief Naval Architect, Nedlloyd Fleet Services will also contribute to this session.

Session 4 14.30h.

Mediterranean Ro-Ro Operations

Introduction by Session Chairman Franco Dellepiane, Managing Director, Adriatica di Navigazione SpA, Venice.

The commercial and economic aspects of East Mediterranean Operations.

Speaker: Captain Oktay Sonmez, Commercial Director, DB Turkish Cargo Lines, Istanbul.

The importance of a Ro-Ro capacity on containerhips.

Speaker: Dr. Fabrizio Serena, Director General, Italia Navigazione SpA, Genoa.

Other panellists taking part in the Mediterranean Session will be: J. P. Isoard, Managing Director, SNCM (Societe Maritime Corse Mediterranee), Marseilles.

Comm. Spiro Magliveras, Managing Director, Traghetti del Mediterraneo, Genoa. Eugenio Belloni, Director, Andrea Merzario SpA, Milan.

19.30h. Reception for Conference Delegates.

Thursday 17 April

The operation of self-sustaining container Ro-Ro vessels — a film presentation introduced by Nigel J. Tatham, Director, Sea Containers Services Ltd, London.

Session 5 11.30h. – 16.00h.

Ports and Terminals

Bridging the Gap — solutions to the Ro-Ro access problems in the world's ports utilising experience from both the ship and quay sides of the Ro-Ro interface.

Speaker: Geoffrey A. Stokoe, Managing Director, MacGregor Ports and Terminals Ltd, London.

Simplifying the Ro-Ro interface — the instigator of the portable linkspan looks towards simple systems to be applied to the totally committed container port whose present economics he questions.

Speaker: John Rose, Managing Director, Marine Development (Glasgow) Ltd, UK.

The application of articulated steering on terminal tractors. The author discusses new case studies of terminal operations where articulated steered terminal trucks and trailers have replaced the all-wheel-steered straddle carriers.

Speaker: Douglas Ross, President, CTEC Company, Bellevue, Washington, USA.

Aligning Ro-Ro equipment to handle specialised bulk and unitised loads — how far can the ship operator be asked to go towards integrated systems?

Speaker: Warren S. Lister, Terminal Handling Consultant, Managing Director, Listavia Ltd, UK.

Pavement Design for Ro-Ro port areas. No recommendations have been issued for the design of Ro-Ro Port Pavements and every port has developed its own means of solving its paving problems. The authors have studied some 30 structures at 17 different ports and report their conclusions and suggest a coherent design philosophy.

Speakers: S. D. Barber and J. Knapton, Department of Civil Engineering, University of Newcastle upon Tyne, UK.

Ro-Ro Exhibition

More than 40 international companies will be exhibiting the latest Ro-Ro technologies and services during the three days of the Conference.

FINAL REGISTRATION

We wish to make Conference Registration(s) for _____ delegate(s) at Ro-Ro. We enclose our cheque for _____ made payable to BML Business Meetings Ltd.

I require details of the Technical Visits to the Port of Genoa and the Port of Marseilles

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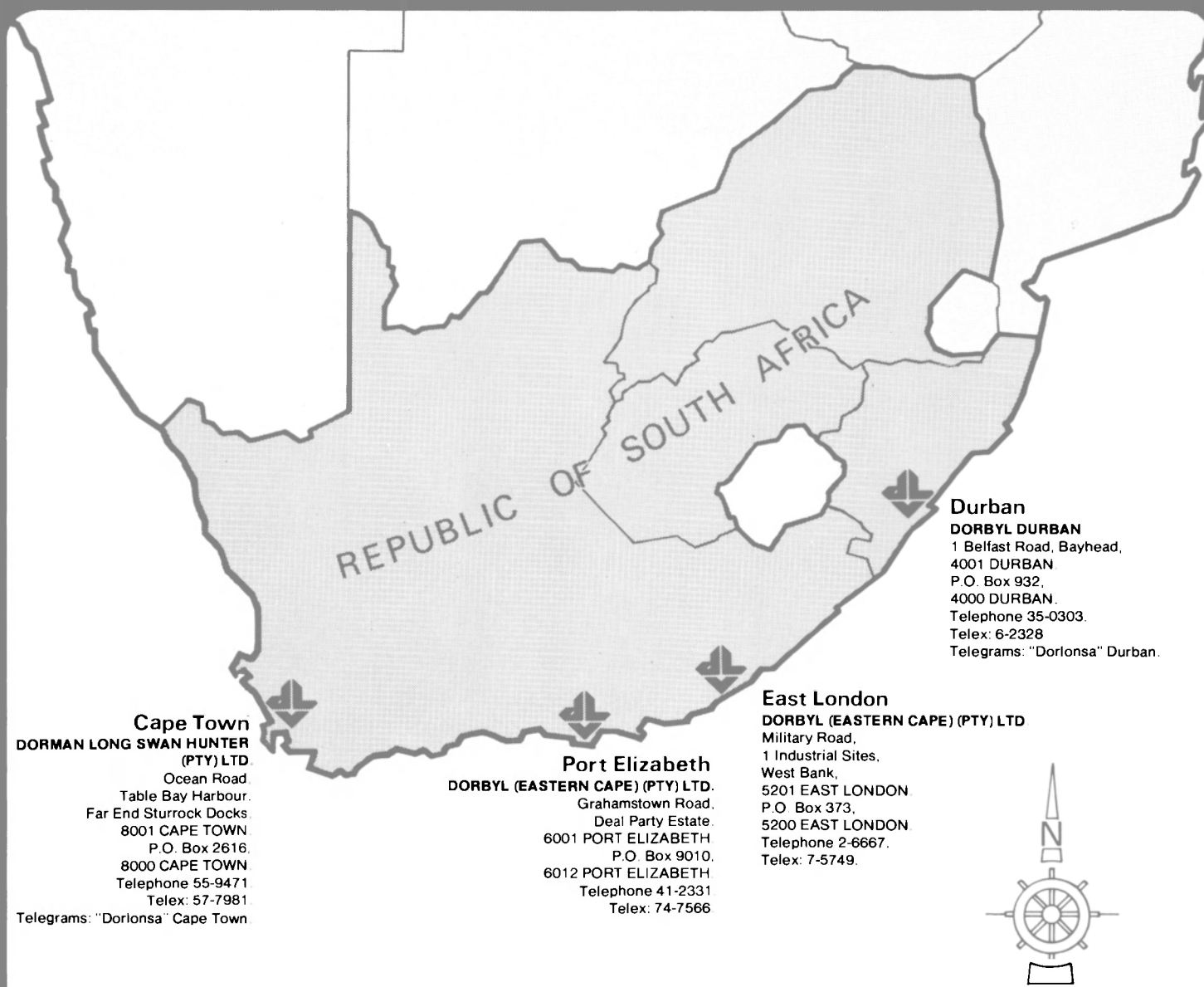
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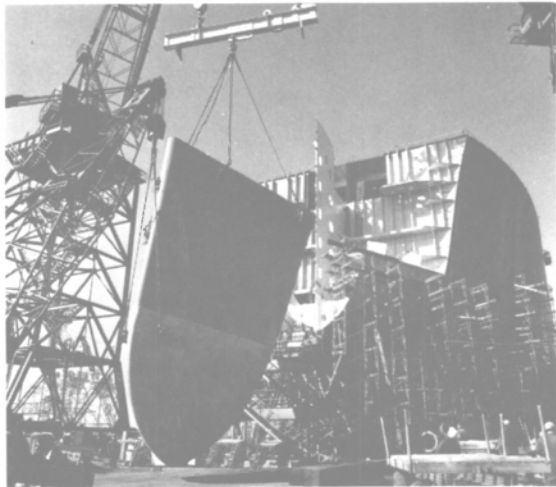
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