

MARITIME REPORTER AND ENGINEERING NEWS

Pick a Pod

Podded propulsion solutions are finding new applications

Gulf of Mexico

The offshore market upswing continues to drive new business

Clearing the Air

California's Carl Moyer Program helps companies to repower fleets profitably

SatCom

Gino Picasso and his technical team has the new Iridium poised to prosper

Cruise Blues

Booming cruise market stumbles on technical, environmental issues



Would you like to send a short message to let someone special know you are thinking about them while at sea? With Eik SMS you can do this anytime at less than it would cost you to buy a greeting card. In addition, authorized GSM subscribers* can send an SMS directly from their telephone to an Inmarsat-C terminal.

Eik SMS

Easy to use

Sending an SMS message directly from your Inmarsat-C terminal is as easy as using Eik Internet C. Like Eik Internet C, no Internet connection, additional software, or registration is necessary. You can send SMS messages from your vessel's Inmarsat-C terminal to friends, family and important business contacts on shore, provided that they have a GSM mobile/cellular telephone.

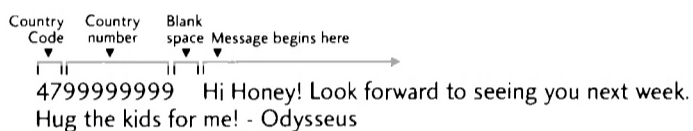
Sending an SMS from your GSM phone to an Inmarsat-C terminal is virtually no different from sending a normal SMS.

Sending SMS ship to shore (from an Inmarsat-C terminal)

In the body of the message (text field) enter the country code (without 00) and the telephone number of the recipient followed by a blank space. Start typing your message immediately after this.

NOTE: The telephone number and start of text MUST BE in the very first line of the message.

Example:



Then send the message using special access code 66. Both 5-bit (telex) and 7-bit (text) formats can be used.

Details:

SMS messages from from Inmarsat-C terminals are limited to a total of 160 characters (excluding the country code and telephone number). In the above example, 160 characters are available following the blank space. If your message is larger than 160 characters, the message will automatically be split into two or more messages. For example, a message of 200 characters will be divided into two SMS messages of 160 and 40 characters, respectively.

Sending SMS shore to ship (from a GSM telephone)

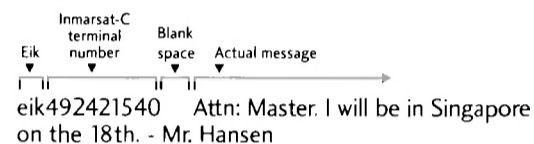
To use this service from shore to ship, the Inmarsat-C terminal in question must be registered for SMS reception. The terminal owner designates which GSM numbers are allowed to send SMS transmissions on his account. To register, contact customer support at the coordinates given below.

To send an SMS from shore, write an SMS message consisting of the following three elements:

- 1) The Inmarsat-C number of the target terminal preceded by the word "eik"
- 2) A blank space
- 3) Your actual message. Below is an example of a correct SMS to Inmarsat-C terminal number 492421540:

NOTE: A blank space must be used between the designated terminal and the actual message.

Example:



Send your message to the following number: **+353868060722**

NOTE: Consult your telephone's user manual if you are unfamiliar with sending an SMS. This manual likely contains information on how to quickly switch between text mode and number mode when writing an SMS. This will make it easier to enter the recipient's address correctly.

Benefits:

- SMS reaches a greater number of people than e-mail
- SMS promotes concise, inexpensive communication
- Messages can be sent at all hours of the day without disturbing recipients
- Easy to use

Practicality and savings:

The introduction of Eik Internet C provided vessels with a money-saving alternative for the transmission of vital information ashore. Similarly, Eik SMS is an inexpensive alternative to voice communications when the need arises to communicate short messages between ship and shore, and is available in all ocean regions.

Assistance

For further information contact our customer support centers:

Onboard users:

Eik 24-hour Customer Support, short code 33 (free of charge), Fax: +47 51 40 22 40
E-mail: customer-support@eik.com

Shore users:

Tel: +47 22 77 80 10, Fax: +47 22 77 80 20
Internet: www.eik.com

*Registration and authorization by terminal owner required.



EIK GLOBAL COMMUNICATION

Circle 279 on Reader Service Card

www.maritimereporterinc.com



**ExxonMobil: The resources and technology to
take you where you want to go. Ahead.**

© 2001 Exxon Mobil Corporation

ExxonMobil combines the strengths of two of the world's leading lubricant and petroleum specialties companies. We now have greater technology and more relationships with the world's leading equipment builders. Together with our deep sector expertise, these resources keep us at the forefront of lubrication science. And we'll continue to offer Exxon and Mobil products, so you can get the same dependable brand you trust virtually anywhere in the world. As a leader in the marine lubricants industry, we're always looking for new solutions. And always moving ahead. Visit us at www.exxonmobil.com/lubes.

ExxonMobil
Marine Lubricants **moving AHEAD**

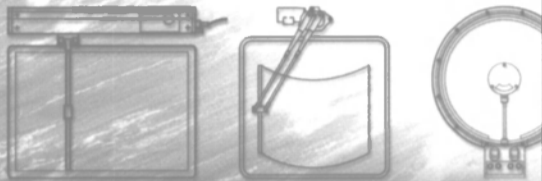
Circle 23C on Reader Service Card

www.maritimereporterinfo.com

Wynn

High Performance Wiper Systems

- Straight line window wipers
- Pantograph window wipers
- Pendulum window wipers
- Clear view screens
- Associated control systems



Wynn Marine Ltd, Wynn House, Lansdown Estate,
Cheltenham, GL51 8PL, United Kingdom
Tel: + 44 (0)1242 232266, Fax: + 44 (0)1242 231131,
email: sales@wynn.co.uk, website: www.wynn.co.uk

Circle 290 on Reader Service Card
www.maritimereporterinfo.com

HEADHUNTER INTEGRATED MARINE SYSTEMS

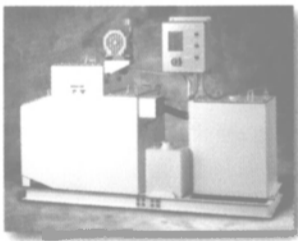
ROYAL FLUSH

- Powerful Jet Macerator
- 1 1/2" Discharge Piping
- 5 Year Warranty
- Weight And Space Saving Vacuum Alternative
- Labor-Saving Installation



TYPE II MSD

- USCG/IMO Certified
- No Harsh Chemicals
- Custom Designs Available
- Lightweight
- Steel, Plastic, or Aluminum Construction



tel 954-581-6996 fax 954-587-0403 www.headhunterinc.com
4100 RAVENSWOOD RD. FT. LAUDERDALE, FL 33312

Circle 236 on Reader Service Card
www.maritimereporterinfo.com

MARITIME REPORTER

AND
ENGINEERING NEWS

ISSN-0025-3448
USPS-016-750

No. 7

Vol. 63

118 East 25th Street
New York, NY 10010
(212) 477-6700

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means mechanical, photocopying, recording or otherwise without the prior written permission of the publishers.

Founder: John J. O'Malley 1905 - 1980
Charles P. O'Malley 1928 - 2000

On the Cover: Podded propulsion systems, despite a few glitches, have proven their value in helping vessel owners to increase operational reliability, safety and performance. Pictured on the cover is Mermaid pod propulsors — from Rolls-Royce & Alstom Power Conversion — on Millennium.

8 Power Challenge

With containerhips fast approaching the 10,000 to 12,500 teu category — with still larger vessels on the drawing board — the question of efficient power for these behemoths comes to the forefront.
— by David Tinsley, technical editor

23 Cruise Blues

The cruise industry has enjoyed a near decade long rampage, adding new, large ships at a record clip. However, the recent economic slowdown in the U.S., coupled with mechanical problems and operational mishaps, have conspired to cool down the cruise sector.
— by Regina Ciardiello, senior editor

26 Gulf of Mexico Offshore Report

The fickle, cyclical business of discovering and recovering resources from offshore Gulf of Mexico is set for another wild ride up. Exploration and Production budgets continue to rise, and though no one is forgetting the most recent crash of 1997, there is an undeniable good feeling in the Gulf.

33 From Rags to Riches

Iridium is back, and though the return is under a completely new company, management and financial structure, it will have to battle mightily to eradicate the memory of its bankrupt predecessor. New CEO Gino Picasso and his team seem up for the task.
— by Regina Ciardiello, senior editor

Diesel Power Annual

36D Taking Care of the Bay

California's Carl Moyer Program is helping companies to replace engines to reduce NOx emissions. Westar Marine Services, with a diverse fleet of nine tugs and five water taxis, found the plan, and their new engines, much to its liking.
— by Alan Haig-Brown

36F Diesel Engine Technical Guide

44 Pick a Pod

Podded propulsion systems are quickly becoming the propulsion solution of choice for some interesting applications.
— by David Tinsley, technical editor

51 Germany is Forging Ahead

A traditional maritime power beset with challenges from lower-cost competitors, German shipbuilders and marine equipment makers continue to produce quality ships and systems.

12 **Feature Vessel:** Fortuny delivered by IZAR Puerto Real.

13 **E-Commerce**

14 **Feature Vessel:** Bollinger christens 8,000-hp Bootsie B.

19 **New & Notable**

36B **Maritel Calling:** Maritel has launched its new marine telephone service and vessel locator system.

56 **Leave it to Oslo:** NorShipping once again proved to be a launch pad for innovative marine solutions.

58 **Ferlship's New Vessel Contracts**

60 **Ship's Store**

62 **Buyer's Directory**

64 **Advertising Index**

65 **Classifieds**

Subscriptions: One full year (12 issues) \$18.00 in U.S.; outside of U.S. \$96.00 including postage and handling. For subscription information, contact: Dale Barnett, fax: (212) 254-6271; e-mail: barnett@marinelink.com

Maritime Reporter/Engineering News is published monthly by Maritime Activity Reports, Inc. Mailed at Periodicals Postage Rates at Waterbury, CT 06701 and additional mailing offices.

Postmaster send notification (Form 3579) regarding undeliverable magazines to Maritime Reporter/Engineering News, 118 East 25th Street, New York, NY 10010.

Canada Post International Publications Mail Product (Canadian Distribution) Sales Agreement No. 0970700. Printed in U.S.A.

Publishers are not responsible for the safekeeping or return of editorial material.
© 2001 Maritime Activity Reports, Inc.



Member
BPA
INTERNATIONAL®
Business Publications
Audit of Circulation, Inc.

Marine GPS

30 40 50

Introducing A Total Solution To GPS & AIS

And This Is Really Something To Talk About!

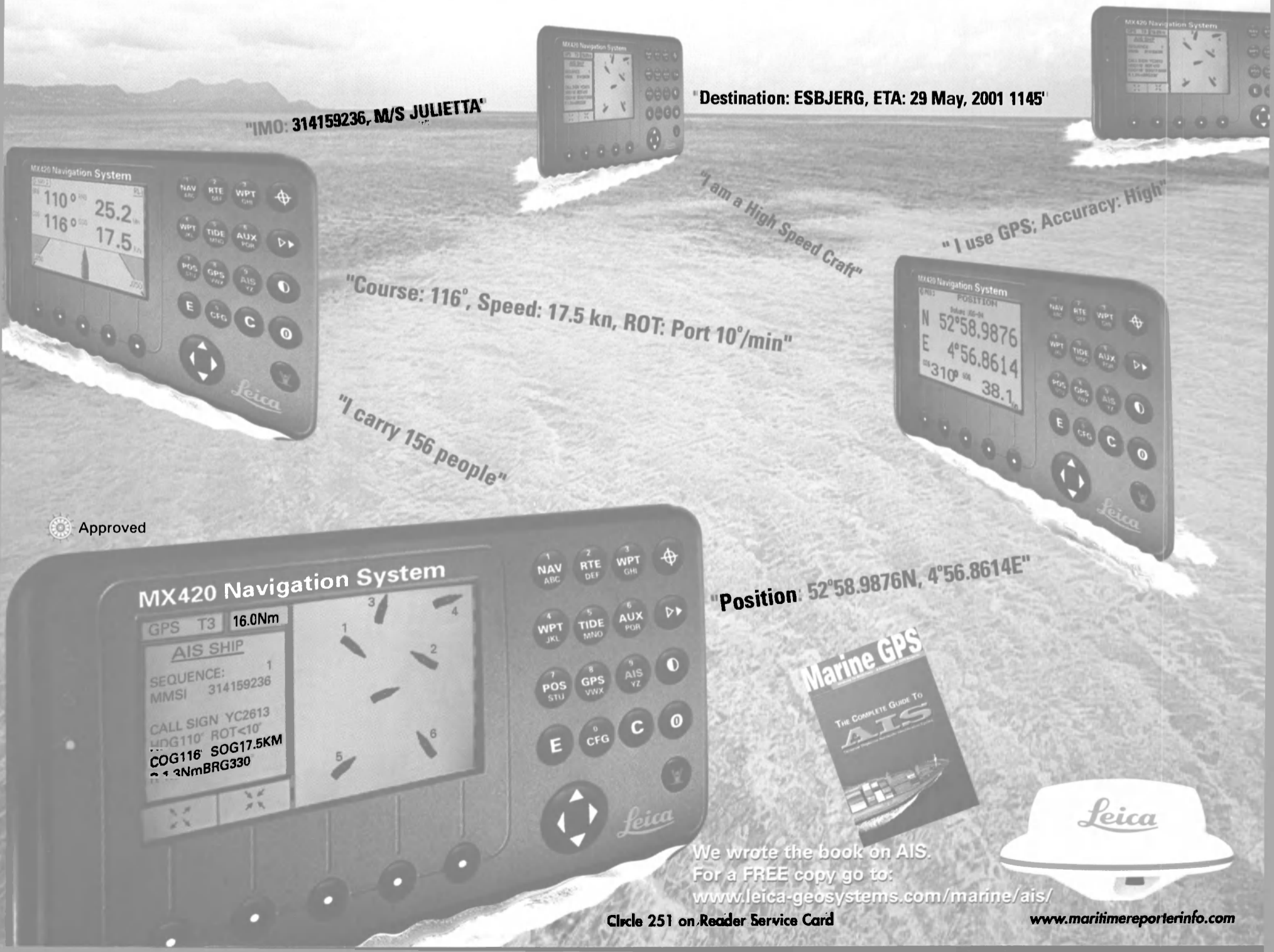
The introduction of the MX420 Navigation System provides a complete solution to GPS/DGPS and the new IMO requirements for Automatic Identification System (AIS). Incorporating our latest GPS technology—jointly developed with IBM—and the now legendary 'World's Most Accurate' Leica precision, we created the new MX421 Smart Antenna, once more pushing the standards of accuracy to new heights. The **MX420** is the one navigator that

takes care of it all... integrating the new AIS controls and displays with all your equipment... your gyro, speed log, charting system, ARPA, satellite communication, pilot's laptop PC and a brand new **STDMA AIS Transponder**, creating a complete navigation system that is entirely IMO compliant.

The **MX420 Navigation System**: we call it a giant leap forward for navigation; you'll call it "The Great Communicator".

Call us today. We'll steer you right!

Contact Leica Geosystems: +1 310 7 91 5300 (USA - Canada), +45 4454 0300 (Denmark), +65 776 9318 (Singapore) or www.leica-geosystems.com/marine.



Approved

We wrote the book on AIS.
For a FREE copy go to:
www.leica-geosystems.com/marine/ais/

Circle 251 on Reader Service Card

www.maritimereporterinfo.com

Coming in MR/EN

August 2001

U.S. SHIPBUILDING REPORT • Electronic Charts •
Vessel Focus: RIB Report • Ship's Store: Deck Machinery
 & Cargo Handling Equipment • **Country Focus: U.K.**

September 2001

MARINE PROPULSION ANNUAL • Marine Technology —
 Electronics: Simulator & Computer-based Training •

Ship's Store: Boatbuilding Buyer's Guidebook • Country
 Focus: Eastern Europe

October 2001

SHIP REPAIR & CONVERSION • Naval Architecture &
 Marine Engineering Annual • **Ship's Store: Monitoring
 and Control Systems** • Region Focus: BENELUX
 Countries

Get connected @ www.marinelink.com



STERLING RWO

TURNKEY WATER TREATMENT SOLUTIONS ONBOARD SHIPS

MARINE WATER TREATMENT SYSTEMS

- Potable Water
- Technical Water
- Swimmingpool water
- Waste Water
- Bilge Water
- Grey Water
- BLACK Water

TOTAL WATER MANAGEMENT ONBOARD SHIPS

- Seawater Desalters
- FW - Generators & RO Reverse Osmosis
- Filtration with autbackflush
- UV-Sterilisers
- Chlorination & Dechlorinatio
- Hardening & Softening
- Ion exchangers
- Mineralisation & Demineralisation
- Swimmingpool Water Treat
- Bunker Water Treatment

RWO Water Technology
 Leerkämpe 3 • D-28259 Bremen • Germany
 Tel: +49-421-53 70 50 • Fax: +49-421-53 70 540
 E-mail: RWO@men@T-Online.de • <http://www.Sterling-RWO.com>

Member of the Sterling Fluid Systems Group
<http://www.Sterlingfluidsystems.com>

Circle 340 on Reader Service Card

www.maritimereporterinfo.com

International Operations

CHARLES E. KEIL, Vice President

215 NW Third Street
 Boynton Beach, FL 33435
 Tel: +561-732-0312; Fax: +561-732-8063
 24-hr Tel/Fax: +561-998-0313;
 Mobile Tel: +561-716-0338
 e-mail: bkeil@marinelink.com

AustralAsia, United Kingdom

TONY STEIN, International Sales Manager
 12, Braehead, Bo'ness,
 West Lothian EH51 0BZ, Scotland, U.K.
 Tel: +44 (0) 1506 822240;
 Fax: +44 (0) 1506 828085

Benelux

PAULA TACQ
 Maritime Media NL, Otweg 18 2771 VX Boskoop, Nether-
 lands
 Te: +31 172 230707; Fax: +31 172 230708

China

TED GREEN
 Zhejiang International Advertising Corp.
 596 Tiyuchang Road, Hangzhou, Zhejiang 31007
 Tel: +86 571 5150937; Fax: +86 571 5150444

Germany/Switzerland

TONY STEIN, International Sales Manager
 12, Braehead, Bo'ness,
 West Lothian EH51 0BZ, Scotland, U.K.
 Tel: +44 (0) 1506 822240;
 Fax: +44 (0) 1506 828085

Italy

VITTORIO NEGRONE
 Ediconsult Internazionale
 Piazza Fontane Marose, 3-16123 Genoa, Italy
 Tel: +390 10 583684; Fax: +390 10 566578

Japan

AKIO ISHII
 Ace Media Service Inc., 12-6, 4-chome, Nishiike
 Adachi-ku, Tokyo 121, Japan
 Tel: +81 3 5691 3335; Fax: +81 3 5691 3336

Korea

JO, YOUNG SANG
 Business Communications, Inc.
 Kwangwhamun P.O. Box 1916, Seoul, Korea
 Tel: +82 2 739 7840; Fax: +82 2 732 3662

Scandinavia

STEPHAN R.G. ORN/LEON SCHULZ
 AB Stephan R.G. Orn, Box 184
 S-271 24 Ystad, Sweden
 Tel: +46 411-184 00; Fax: +46 411 105 31

Spain

JOSE LUIS SEVA
 Via Exclusivas S.L., C/ Viriato, 69 SC
 28010, Madrid, Spain
 Tel: +34 91 448 76 22; Fax: +34 91 446 0214

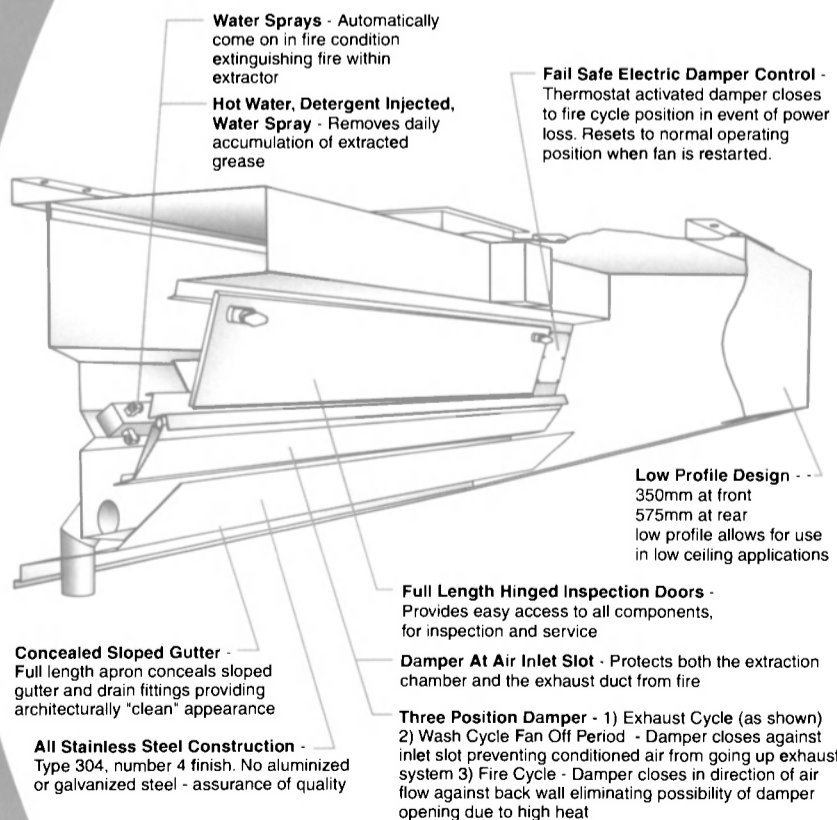
GAYLORD - The Premier Name In Galley Exhaust Hoods

Over 50 years of experience of providing exhaust hoods and canopies to the Navy and Marine Industries.

The MCG3, water-wash exhaust hood offers many features and benefits:

- Meets all the requirements of USPH
- 95% grease extraction efficiency reducing grease build-up in the exhaust system
- Wash system that automatically washes the extracted grease away
- Low air volume design - 270 L/s/m
- Optional CO₂/Fire Solas fire damper mounted at duct collar

Gaylord Industries, Inc.
 Tualatin, Oregon U.S.A.
 Fax: 503-692-6048 • email: info@gaylordusa.com



Circle 234 on Reader Service Card

www.maritimereporterinfo.com



AMEQUEST

The Solution for your Deepwater Field Development and Subsea Operations

DAVIE's roll call of excellence. *When can we start building for you?*



Petrobras 36



Cohasset-Panuke



Glomar High Island VII



Glomar High Island IX



Glomar High Island II

INDUSTRIES
DAVIE

www.davie.ca

22 George-D.-Davie street, Lévis, Québec G6V 8V5, CANADA
Tel.: (418) 837-5841 / Fax: (418) 835-1017 / marketing@davie.ca

Circle 22 on Reader Service Card

www.maritimereporterinfo.com



ISO
9001

Editor's Note

Considering the over abundance of conferences and exhibitions that grace the marine industry's business calendar, I am pleased to report on the activities of the Ship Operations Cooperative Program (SOCP), which most recently met on the scenic campus of the Massachusetts Maritime Academy. SOCP — which is a business/government partnership — provides a fresh dialogue among industry players with discussions focused on real-world issues and solutions. June's meeting featured a number of topics, from alternative fuel technologies to a ferry operator panel, which discussed regulation, training, safety and technology. A more extensive account of the meeting will be found in *MR/EN's* August edition, U.S. Report. For more information on the group and its meetings, I encourage you to visit www.socp.org.



While the marine business continues to be characterized as one that is conservative in regards to the technology it incorporates, I strongly disagree. A read through this edition, in fact, illustrates many examples of how advanced technology is shaping and re-shaping the industry every day. Starting with the Gulf of Mexico Offshore Report on page 26, it is no small issue that the latest round of good business prospects is being driven by and supported with advanced technology, from the ability to discover and recover resources in increasingly deeper waters, to the ability to place production facilities on station and seamlessly transport the product back to shore. The Diesel Power Annual starting on page 36D starts with a report from Alan Haig-Brown on how a small company — Westar Marine — is capitalizing on California's Carl Moyer Program to re-power its fleet of 14 vessels, reducing NOx and improving performance. Advances in propulsion, however, is not limited to the diesel engine realm, as David Tinsley reports — starting on page 44 — on the tremendous headway being made with the increasing variety of podded propulsion systems available today. Though there have been a few well-reported technical glitches with some systems, it is widely agreed that the operational advantages — which include unparalleled maneuverability, increased propulsion efficiency and improved safety — will ensure the product's viability in a wide range of marine applications.

The U.S. demand for some of the most technologically advanced commercial vessels afloat — LNG carriers — is set to take off, if results of a recent Lloyd's Register survey are complete. On page 10 there is a small news item, received at press time, which says that up to 75 new LNG carriers could be needed for U.S. operation in the next decade. This report — which will be expanded upon in the August edition — follows on our June World Yearbook report ("Frozen Gas Market Heats Up," page 50, June 2001).

Gregory R. Trauthwein

www.marinelink.com

trauthwein@marinelink.com

MARITIME REPORTER AND ENGINEERING NEWS

ASSOCIATE PUBLISHER

Gregory R. Trauthwein • trauthwein@marinelink.com

NEW YORK
118 E. 25th St., New York, NY 10010
Tel: (212) 477-6700; Fax: (212) 254-6271
e-mail: mren@marinelink.com
Internet: www.marinelink.com

FLORIDA
215 NW 3rd St., Boynton Beach, FL 33435

EDITORIAL

Senior Editor

Regina P. Ciardiello • ciardiello@marinelink.com

Editorial Intern

Jennifer Rabulan

Technical Editor

David Tinsley

Editorial Consultant

James R. McCaul, president, International Maritime Associates

MARKETING

Vice President of Marketing

Susan Cosme • cosme@marinelink.com

Marketing Manager

Richard Grable • grable@marinelink.com
Tel: (561) 732-1659; Fax: (561) 732-6984

PRODUCTION

Production Manager

Sharon Griffin • griffin@marinelink.com

Asst. Production Manager

Oksana Martemy • martemy@marinelink.com

CIRCULATION

Circulation Manager

Dale L. Barnett • barnett@marinelink.com

ADVERTISING SALES

Vice President of Sales

Lucia M. Annunziata • annunziata@marinelink.com

National Sales Manager

Robert C. Howard • howard@marinelink.com
Tel: (561) 732-3001; Fax: (561) 732-6984

Regional Sales Manager

Jennifer Truman • truman@marinelink.com

Regional Sales Manager

Brett W. Keil • bkeil@marinelink.com
Tel: (561) 732-1185; Fax: (561) 732-6984

Electronic Product Sales

Joe Trubinsky • trubinsky@marinelink.com
Tel: (561) 732-4368; Fax: (208) 575-3217

Assistant to the Vice President of Sales

Tina Angelino • angelino@marinelink.com

Accounting Manager

Angela Rivera • arivera@marinelink.com
Classified Sales
Tel: (212) 477-6700

PUBLISHER

John E. O'Malley
John C. O'Malley • jomalley@marinelink.com

Chief Financial Officer

Al Adinolfi

Other Printed, Internet & Electronic Products

Publications

MarineNews



MarineNews

Published 18 times per year, MarineNews is the acknowledged provider of information and analysis for the North American inland/offshore shallow draft market.

Electronic Products & Services



www.maritimetoday.com

Customized e-mail news service delivered twice a day, including the latest contracts, casualties, people & company reports.



www.maritimejobs.com

The marine industry's recruiting & employment resource.



www.marinelink.com

The Internet's largest marine website, recording more than 270,000 "hits" per month. Daily news, data & statistics, industry directories.

Looking for *service* reliability, we deliver it.
ABB Turbochargers

ABB

New York/NJ, Miami, Houston, Seattle/Tacoma, Los Angeles – email: turbochargers@us.abb.com

Circle 201 on Reader Service Card

www.maritimereporterinfo.com

Maritime Reporter/Engineering News

We've never made a VHF
handheld this SMALL,
this SUBMERSIBLE,
this RUGGED and
this quick to recharge.
And neither has anyone else.

The new HX460S is built like a tank, thinks nothing of spending half an hour under water, operates up to 19 hours on a single charge and completely recharges on the boat or at home in three hours or less. Plus it's the smallest portable ever made. Aren't you glad you didn't just buy something less? Full specs and where to buy at www.standardhorizon.com or at (800) 366-8431.



Actual size 3.5" high



STANDARD HORIZON
Marine Division of Vertex Standard

Circle 274 on Reader Service Card

www.maritimereporterinfo.com

Hybrid Powering for Boxships

by David Tinsley,
technical editor



A convincing economic argument fuels the liner shipping sector's adoption of unprecedented capacity ratings, with a new level soon to be reached in impending projects for newbuilds in the 9,000-TEU category, and technical work set in train for ships in the 10,000-12,500 TEU category. Experts believe that behemoths of 18,000-TEU could be in service on specific volume trades within a decade, yielding unit operating cost savings in the order of 30-percent relative to the 5,000-TEU size.

The enormous infrastructural implications attached to nurturing a new generation of ultra-large container vessels seem to be less daunting now compared with even a year ago, as the port and allied industries have demonstrated a readiness to invest in the requisite means for ensuring the expeditious working of such ships. A prudent design approach to marrying unprecedented stowage capacity within foreseen navi-

gational constraints on the hull envelope, and access to technology tools which provide the means of rapid and reliable structural analysis, have brought the era of the mega-containership closer.

The latest catalogs of the two-stroke diesel engine market leaders MAN B&W and Wärtsilä defer to clients' requirements for advances in unit power concentrations, by including new, in-line models of cathedral engines with up to 14-cylinders, giving outputs of nearly 109,000-bhp (80,000-kW). Furthermore, MAN B&W has confirmed its willingness to provide single-engine, two-stroke solutions to power needs as great as 140,000-bhp, through models embodying up to 18 cylinders.

However, while the single-screw, single diesel engine approach is overwhelmingly preferred for deepsea containership propulsion, the limit to which it will actually be taken by the liner service providers and fleet operators will



Photo Credit: Port of New Orleans / Donn Young Photograph

be governed by pragmatic considerations rather than solely by what is available and attainable technologically.

The standard single-engine, direct-drive arrangement can certainly be

expected to be used for the next stage of development in containership size, but industry sources believe that any eventual move to considerably larger capacities still will foster twin-engine, twin-pro-

AMSTEEL® BLUE

THE PROVEN LEADER IN TRACTOR TUG APPLICATIONS

The advent of tractor tugs permanently changed the industry by offering unparalleled maneuverability and power. The key to harnessing the tug's potential was the development of an ultra high-strength, lightweight ship assist line. Samson Rope Technologies met this challenge with the development of AmSteel®-Blue and today it is still the industry standard aboard tractor tugs.

AmSteel®-Blue is an excellent example of Samson's ability to translate new fiber technologies into working solutions for tug and marine applications. It is just one more reason Samson is the strongest name in rope.

TIE-UP WITH SAMSON.



2090 Thornton Street, Ferndale, WA 98248
{T} 800.227-7673 / 360.384.4669
{F} 800.299.9246 / 360.384.0572

www.samsonrope.com

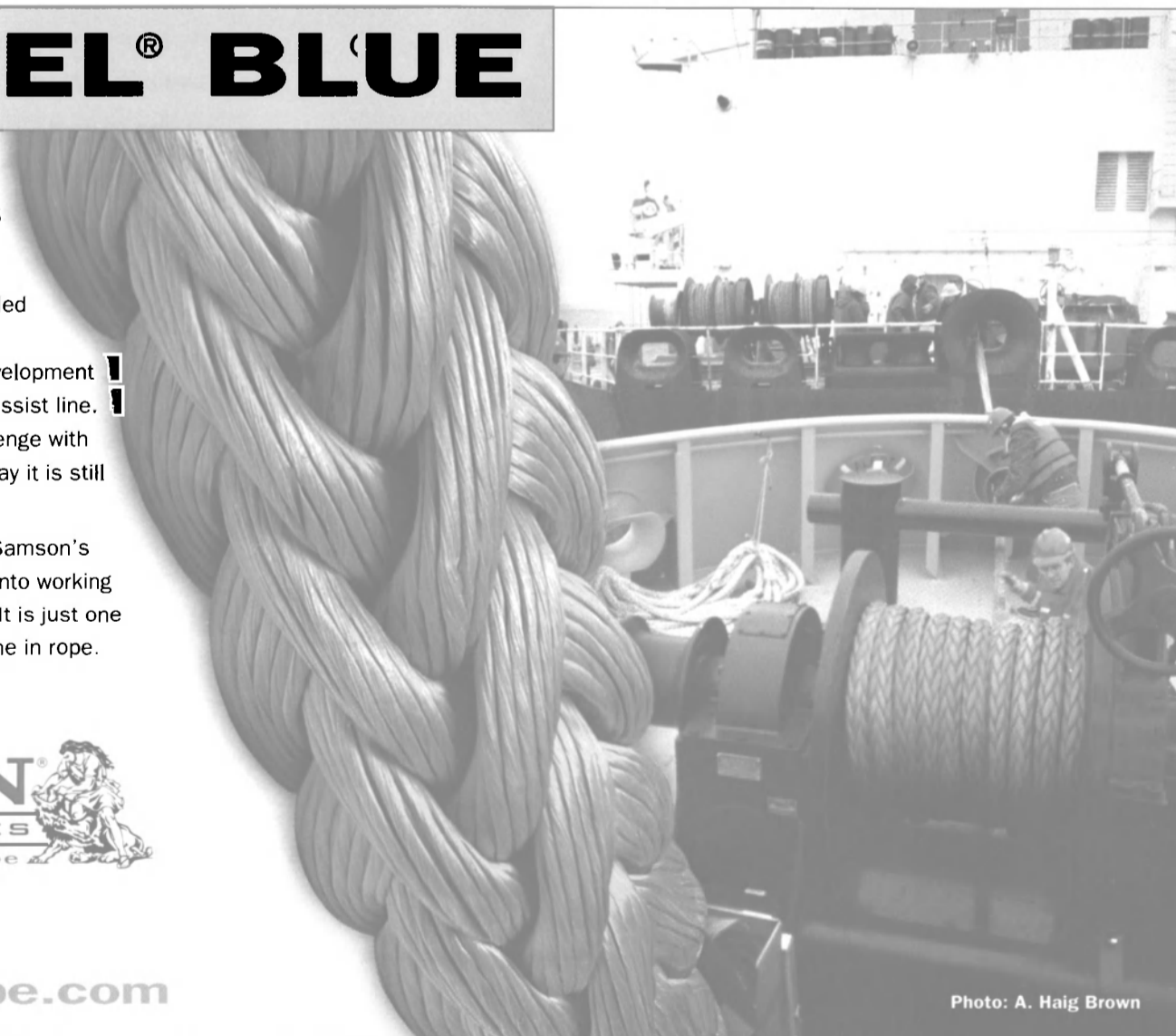
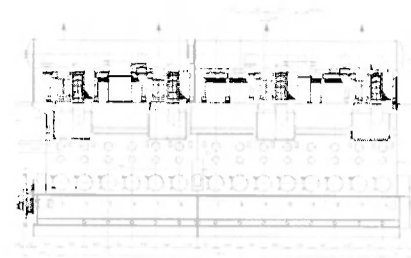


Photo: A. Haig Brown

Investment in Design



Side elevation of the 14-cyl. Sulzer RTA96C.

The innovative unit measures 89.6 ft. (27.31 m) long overall to the flywheel, and is 44.4 ft. (13.54 m) tall. Development of the mammoth engine is direct response to investigation of an ever-larger breed of containerships.

pellor configurations. The area encompassed by what is currently on the drawing board and the purely conceptual designs of colossal capacity could also provide opportunities for hybrid propulsion concepts, combining proven systems.

ABB Industry's **Rami Jokela** has provided new food for thought in this respect by advocating the use of the proprietary Azipod podded propulsion system in conjunction with a conventional, low-speed diesel-driven propeller as an effective solution for the upcoming generation of ultra-large boxships. An essential element of the proposal is that the diesel-electric pod propeller would contra-rotate behind the main propeller.

It is claimed that this would give the increased propulsion efficiency associated with a contra-rotating arrangement, but without the complexities of established contra-rotating propeller solutions based on concentric shafts. The concept put forward by Jokela is targeted at vessels over 9,000-TEU, and its economic merits are most pronounced in relation to twin-screw solutions. It has been formulated in mind not only of the raw propulsive power needs of the huge new ships, but also of the rising onboard requirement for electrical energy attributable to growing provision for refrigerated containers. Reefer box slots can typically account for up to 10-percent of total stowage in the large new classes of post-Panamax linehaul vessel, requiring a very substantial auxiliary genset outfit.

It is claimed that a combination of low-speed diesel plus a genset plant that can feed electrical power to the pod end of the propulsion system plus all other shipboard consumers offers savings of some 17-percent in total installed power in relation to an outfit based on twin main engines and auxiliary gensets. The azimuthing podded propeller offers a degree of redundancy, and would contribute to better maneuverability, as well as enabling rudder systems to be dispensed with.

Although the Finnish company contends that cavitation would be within acceptable limits, some experts believe that more hydrodynamic work needs to

be undertaken to ensure satisfactory blade cavitation performance with systems where the podded propulsor is to be used for steering purposes.

Ideas Management

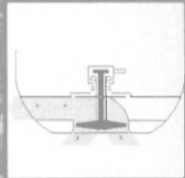
In a bid to create an effective structure

for stimulating and assessing ideas suggested to or generated within the organization, Germanischer Lloyd has implemented a system known as innovation management.

The main objective of the initiative is to provide strategic guidance for all future technical developments undertaken

en by the society, so that time, people and resources are utilized in a more focused manner. The move is also designed to create more of an incentive to personnel to be forthcoming with ideas, and to provide a fast-track route to the development of agreed projects in targeted areas. A dedicated innovation

OMEGA THRUSTERS FOR EASY MANOEUVRING



Ideal for river barges, seagoing vessels, inland vessels, supply vessels and drilling barges



Jan Verhaar builds reliable, long-life Omega bow and stern thrusters.

With a thrust direction that's adjustable over 360°, Omega thrusters will keep any ship on the right course. They're the ideal complement to a DP system with a Bollard Pull of 24.9 LBF/kW.

The complete construction is placed inside the ship, so no vulnerable parts under the bottom plate.

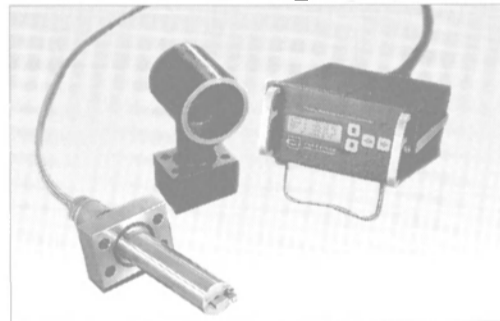
The state-of-the-art Omega thrusters are available with power ratings ranging from 150 to 1500 kW.

OMEGA THRUSTERS

Jan Verhaar. P.O. Box 119
2340 AC Oegstgeest - Holland
Tel: + 31 71 5172631
Fax: + 31 71 5171926
E-mail: info@verhaar.com
Website: <http://www.verhaar.com>

Circle 246 on Reader Service Card
www.maritimereporterinfo.com

Reliable Fuel Viscosity



- Accurate HFO control
- Small and easy to install
- Reduce operating costs



Visit our website: <http://www.cambridgeapplied.com>



CAMBRIDGE APPLIED SYSTEMS, INC.
LEADERS IN VISCOSITY MANAGEMENT

196 Boston Avenue
Medford, MA 02155 USA
Tel.: 781-393-6500
Fax: 781-393-6515
info@cambridgeapplied.com

Circle 213 on Reader Service Card
www.maritimereporterinfo.com

Marine Deck Hardware and Equipment

◆ **ANCHORS:** ◆
50 to 60,000 Lbs. - New and Used
Stockless - Danforth - L.W.T. - Halls - Snug Stowing

◆ **CHAIN:** ◆
3/4" to 5 1/8" - New and Used
Stud Link - Cast Steel - Grades 2 and 3 - Oil Rig Quality for Moorings, Towing, Barge Handling, Ship's Replacement

◆ **WINCHES - WINDLASSES - CAPSTANS** ◆
Vertical or Horizontal Hand, Electric, Diesel, Hydraulic or Repowered to your specs

◆ **HATCHES - WATERTIGHT DOORS** ◆
MANHOLE COVERS - SCUTES - PORTHOLE ◆
All Sizes - New or Reconditioned

◆ **PANAMA CHOCKS - DOUBLE BITTS** ◆
SINGLE BITTS - CAST STEEL CLEATS AND KEELS ◆
All Sizes Available, New & Used

◆ **FENDERS FOAM FILLED and PNEUMATIC** ◆
For Rent or Sale
All Sizes, New & Used

GIGANTIC INVENTORY NEW & USED
Call Toll-Free (800) 322-3131

IN STOCK NOW
in the West Coast
East Coast and The Gulf

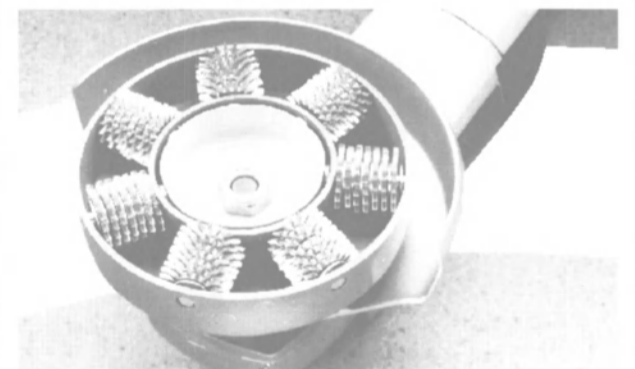
SERVING THE MARINE & OIL INDUSTRIES FOR OVER 50 YEARS
WE ARE DIRECT FACTORY DISTRIBUTORS & IMPORTERS

P.O. BOX 596
WILMINGTON, CA 90748
PH: (310) 522-9698
FAX: (310) 522-1043

WATERMAN SUPPLY CO., INC.

Circle 287 on Reader Service Card
www.maritimereporterinfo.com

Barnacle, Paint, and Rust Remover



Rapidly remove paint, rust, scale, barnacles, and other hard coatings from metal and concrete surfaces without heavy pressure. New Swirl-Off scarifier attaches to your grinder, sander, drill, or polisher. Rotary tool scours tough deposits. Using pneumatic tools, it removes marine growths underwater. Easier, faster, and safer than scraping, sandblasting, or chemicals. There's nothing else like it! Ask for Bulletin MAR-1 showing many models and styles.

DESMOND

The Desmond-Stephan Mfg. Co., P.O. Box 30, Urbana, Ohio 43078
Phone 937-653-7181, Fax 937-653-5511

*Trademark of The Desmond-Stephan Mfg. Co

Circle 222 on Reader Service Card
www.maritimereporterinfo.com

Investment in Design

manager drawn from GL's technical research domain, **Pierre Sames**, has been appointed to head up the operation.

The systematic collection and promotion of ideas will feed into the society's research and development (R&D) endeavors. GL has always taken a prag-

matic line towards R&D, in looking towards projects that can deliver tangible benefits in terms of services, technology and products. One of the tasks of the innovation manager will be to better ensure that ideas are relevant to the society's more focused approach in expand-

ing or establishing competence in select areas.

Although the innovation management process was only set in train towards the end of last year, the society collected about 90 ideas in the 12 months to April this year, about 20 percent of which

emanated from its field services. A total of eight proposals or concepts were subsequently investigated, resulting in the uptake of two as development projects since last October.

It is estimated that around a third of the ideas were rejected outright for being outside the bounds of GL's actual or intended areas of activity.

The ideas management framework accordingly addressed the perceived requirement for a systematic, internal approach to the collection of ideas for services and products, and to the task of identifying those, which ally with the society's strategic development objectives. The system that has been laid down opens up possibilities whereby the proposer of the idea might come to take an active role in the development process, if the project is authorized. The very fact that a process has been implemented to give individuals a voice and a hearing over such matters is regarded as positive from a staff motivation standpoint. It opens up the catchment for feedback, potentially stimulates more ideas, and helps provide a basis for a more creative organization, believes GL management. "With the new system, I have the possibility to catch ideas that might otherwise be lost," confirmed Mr. Sames. GL annually spends an estimated \$8.4 - \$12.6 million on R&D, with the larger projects sponsored either by the European Commission or the Federal Ministry of Education and Research (BMBF).

Internationally Recognized for our versatility and commitment to quality in building a full range of vessels at competitive prices.



HIKEMETAL
PRODUCTS AND SHIPBUILDING LTD.

BOX 698, WHEATLEY, ONTARIO, CANADA N0P 2P0
Phone 519-825-4691 / Fax 519-825-7572
Email: hike@netcore.ca

BUILDERS OF:

- PATROL BOATS
- CREW BOATS / SUPPLY VESSELS
- PASSENGER FERRIES & SIGHTSEEING BOATS OF ALL TYPES
- CAR FERRIES
- FISHING VESSELS
- RESEARCH VESSELS
- TUG BOATS
- HOVERCRAFT
- MOTOR YACHTS
- FIREBOATS
- SPECIALIZED GOVERNMENT VESSELS OF ALL TYPES

SPECIALIZING IN STEEL AND ALUMINUM CONSTRUCTION





Offering a wide range of utility boats



Research Vessel



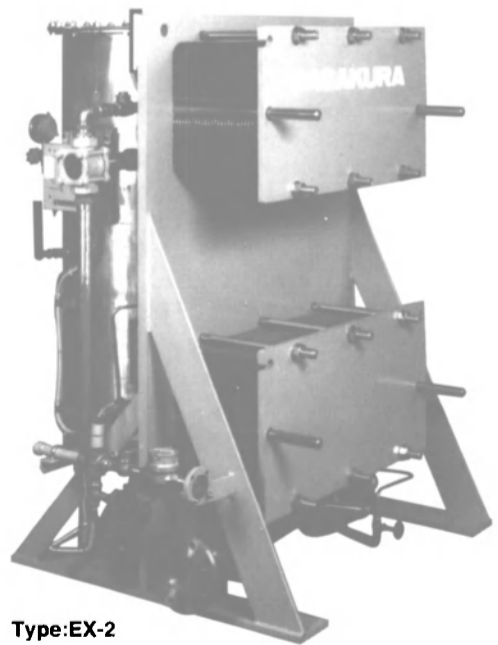
Hovercraft



Trimarans

Circle 237 on Reader Service Card

www.maritimereporterinfo.com



Type: EX-2

Sasakura developed new generation of Plate Type Fresh Water Generator.

AQUARIO


Capacity range: 3-40t/day

No Front Cover!!

The deletion of front cover provides:-

- * Easier disassembly and reassembly of Plate Heat Exchanger.
- * No corrosion of Frame, Guide bar, End cover and Bolts & Nuts because they do not contact with seawater.
- * Minimal installation and maintenance.

Sasakura provides Water Makers of the Submerged Tube Type, Multiple Effect Type, Two Stage & Multi Stage Flash Type, Reverse Osmosis Type and Vacuum Vapor Compression Type for various applications.



SASAKURA ENGINEERING CO., LTD.

7-32, Takejima 4-chome, Nishiyodogawa-ku, Osaka 555-0011, Japan Tel: +81-6-6473-2134 Fax: +81-6-6473-5540
E-mail: webmaster@sasakura.co.jp website: http://www.sasakura.co.jp
HONG KONG: Sasakura International (H.K.) Co., Ltd. Tel: +852-2850-6139 Fax: +852-2850-5259

Circle 267 on Reader Service Card

www.maritimereporterinfo.com
www.maritimetoday.com

LR Report: 75 New LNG Ships Needed For The U.S.

Lloyd's Register (LR) said that between 27 and 75 new LNG ships will be needed to meet the demand for LNG over the next decade in the U.S. market alone. Results of an extensive study into the matter were released at the LNG conference, "The role of LNG in North American and Caribbean gas supply in Washington D.C."

Many factors have been considered by LR in its forecast of the LNG market, including consideration of replacement of aging existing ships, take-up of excess capacity at existing import terminals and a rash of new import terminal projects that are likely to succeed.

The U.S. market finds itself short of energy. Gas is the clean burning fuel-of-choice for the electricity-generating plants mooted for construction in the U.S. over the next decade. LNG is being targeted to provide a large proportion of this demand. This dictates new import, gasification and distribution facilities within the U.S. To serve these facilities, ships to transport the LNG are a pre-requisite since the most suitable exploitable sources are remote from the U.S. mainland.



ALUMINUM VESSELS FOR THE USA

The newest and most technologically advanced aluminum yard in the USA is up and running. Austal USA, backed by the powerhouse of Austal Ships and the design team of the world's largest aluminum builder, has vessels under construction and the capacity and skills to meet the most demanding of aluminum vessel requirements. Come and build at the new home of quality performance.

Please contact Chris Pemberton or Bill Pfister
Telephone: (1)-334-434-8000 Facsimile: (1)-334-434-8080
Email: usasales@austal.com www.austal.com


AUSTAL
USA

Feature Vessel

Largest Spanish RoPax Enters Service

The largest Spanish flagged RoPax ferry, named Fortuny, has been delivered by IZAR's Puerto Real shipyard to the Spanish shipowner Trasmediterranea. The contract for the construction of this ferry was landed by Puerto Real yard, formerly part of Astilleros Espanoles group, on July 30, 1999. The new ferry has become the fastest vessel to join the owner's fleet, with a 23.5 knot speed on the engines' 85 percent continuous service rating.

On trials, the vessel reached a top speed or more than 25 knots. Propulsion power is supplied by four 7,240 kW diesel engines rated at 500 rpm, coupled



by pairs to two shaft lines and two CP propellers. Maneuvering equipment includes two 1,000 kW bow-tunnel thrusters.

With an overall length of 566 ft. (172 m), a breadth of 86 ft. (26.2 m) and a depth of 20 ft. (6.2 m), the ferry is also the largest in Trasmediterranea's fleet. The vessel has a capacity to carry 1,000 passengers, part of them in 200 cabins. Accommodation is also provided for 71 crew.

The ship incorporates spacious and comfortable public areas and includes restaurants, shops, nursery school, swimming pools (even an indoor winter pool), sauna, jacuzzis, solarium, gym, cinema, disco, and several bars and lounges.

Of the vessel's total 25,000 sq. m. built area, 10,000 sq. m. are exclusively occupied by passenger and crew spaces. The vessel has a freight capacity of 1,800 lane meters, equivalent to 80 trucks and 336 cars. The rolling cargo area comprises three decks.

The ship satisfies all the latest safety regulations. Large area fin stabilizers and an active anti-heeling system have

been incorporated. This vessel completes the fleet renewal program of Spain's leading shipping company.

Circle 46 on Reader Service Card

Main particulars

Length, (o.a.)	566 ft. (172.6 m)
Length, (b.p.)	515 ft. (157 m)
Breadth, molded	86 ft. (26.2 m)
Depth to main deck	30 ft. (9.2 m)
Deadweight, design	5,000 dwt
Draft, design	20.3 ft. (6.2 m)
Speed, trials at 85 percent MCR	23.5 knots
Classification	BV Class I3/3 + E Ferry, Deep sea, AUT-PORT-F, Short International Voyages, 1100 persons, SOLAS 1997, Stockholm Agreement
Main engines	4 x 7240 kW @ 500 rpm
Propellers	2 cpp
Passenger	1,000
in Cabins	748
VIP class	64
Tourist class	660
Disabled people	24
Complement	71
Truck lane length	1,809 m
Car lane length	830 m
Doors /ramps	
Two stern, One 48 m x 3.5 m internal ramp	
Rudders	2 semi-spade type
Thrusters	2 x bow tunnel
Steering gear	Electro-hydraulic
Stabilizers	Retractable, hydraulic
Roll reduction	.85/90 percent at service condition

IZAR Hosts Keel Laying Of LNG Carrier



Jose Silveira, chairman of Elcano attended the LNG keel laying at IZAR's Puerto Real yard.

The keel was laid last month for the first of three LNG carriers being built at IZAR Puerto Real yard for Elcano for servicing the transport of natural gas from Repsol's concession in Trinidad Tobago to Spain.

The operators for the remainder of the LNG series that is being constructed at IZAR Sestao yard, will be Knutsen OAS Shipping and Naviera Tapias.

Scheduled to enter service in 2003, the vessel series was recently enlarged with a fourth order, placed by Spanish power company Union Fenosa.

On the bridge... CM-93/3[®]

Or in the office... OceanView[™]

C-MAP has you covered!

C-MAP has combined the world's most complete vector chart database, CM-93/3, with a new software application, OceanView. Together they provide the solution for effective vessel safety and management operations.

We've got you covered with these advantages:

- ✦ Global coverage with over 14,000 vector charts sailing onboard thousands of ships worldwide.
- ✦ Replaces paper charts in the office with powerful, intelligent vector electronic charts.
- ✦ Route planning with easy ship-to-office, office-to-ship transmissions.
- ✦ Real-time chart updating at the push of a button.
- ✦ Advanced publishing features.
- ✦ 3D profiling capabilities.



For more information please contact
C-MAP/Commercial at 508.477.7537
or visit www.c-map.no

Circle 215 on Reader Service Card

www.maritimereporterinfo.com

E-Commerce

MarineSoup.com Creates Online Marketplace

IndustrialSoup, Inc. has established MarineSoup.com to provide an independent marketplace for buyers and sellers of virtually all raw material, finished goods, parts, and services required by the marine industry.



Scott Parfitt, president of IndustrialSoup, Inc, emphasized several points about the Web site: "First, MarineSoup is comprehensive — it offers products, parts, supplies and a host of services full-fill virtually all the needs of the industry. In addition, the workings of the Web site are completely adaptive to the work style of its customers, whether they are a large or small business. The site also focuses completely on facilitating buying and selling — we always talk about how all of our sites are designed to be the most economical way to connect buyers and sellers."

As with all IndustrialSoup Web sites, MarineSoup.com is designed to easily fit within a users' current purchasing or selling operations. For a larger company with systems already in place, MarineSoup can simply be layered on; for smaller companies with little or no system setup, the site can serve as an entire buying and selling back office service. An additional aspect to the easy to use site is the availability of both industry experts and regional representatives to ensure — with on-site visits to the customer, as necessary — that the customer is getting full benefit from MarineSoup.com.

The site has the ability to connect buyers and sellers in the industry via a special feature known as the Buyer Manager Tool. This concept provides effective handling of purchase orders whether managing the authorization process or doing monthly reporting. Buyers can monitor order status, inventory levels, backorders and shipping times for careful order management.

The site's Product Detail screens provide the buyer with in-depth information about products, including videos, engineering drawings, installation instructions and approval letters.

Circle 24 on Reader Service Card



www.vanhallhealth.com

Are you paying too much for U.S. medical bills?

Circle 283 on Reader Service Card

www.maritimereporterinfo.com

Offshore, On Time!

Time isn't the only important factor when you're doing business offshore...your engines have to perform with consistency every day!

So why take chances? Join companies across the globe who depend on the power of CUMMINS!

Uptime is critical for your customers and your fleet, so let Cummins support you with:

- Reliability
- Durability
- Economy
- Propulsion & Auxiliary
- Service
- Global Capability

If it's time for a new vessel or a repower project, the clear choice is Cummins!

Welcome aboard!



Marine

4500 Leeds Avenue, Suite 301, Charleston, SC, 29405
www.cummins.com E-mail: wavemaster@cummins.com
Toll Free 1-800-Diesels for the distributor in your area!

Circle 219 on Reader Service Card

www.maritimetoday.com

www.maritimereporterinfo.com

News

Bollinger Christens 8,000-hp Towboat, Bootsie B

Bollinger Shipyards, Inc., Lockport, La., with the Riverway Co., Eden Prairie, Minn., christened the M/V Bootsie B., a 188-ft. (57.3 m), 8,000 hp towboat. Bootsie B. is the first such vessel for the Riverway Co., in 25 years. It was

christened by Ms. Mary Sutton Becker, granddaughter of Mrs. Mary Sutton "Bootsie" Baskerville, whose family established Riverway's predecessor company, the Upper Mississippi Towing Corp. in 1937. Lawson and Lawson will operate the vessel

"This is our first new construction project for Riverway," said Walter Berry,



executive vice president and COO of Bollinger said.

Bollinger Northshore Engineering designed the vessel, and Corning Townsend, with C.T. Marine, provided naval architectural services for proper water flow through the kort nozzle and across the rudders. This included design of propellers, kort nozzles, rudders, and overall vessel review, and Berry stressed that this was not a re-work of an old design.

Bootsie B. measures 188 x 48 x 11.5 ft. (57.3 x 14.6 x 3.5 m), with a minimum draft of 8.5 ft. (2.6 m). It is powered by a pair of EMD 16-710G7B-diesel engines developing a total of 8,000 hp and 196,000 lbs. of Bollard pull. Bollinger manufactured shafts with John Crane seals drive two Bollinger 122 in. by 138 in., five-blade propellers installed in Harrington CT28 nozzles. Lufkin provided RH53624 horizontal offset reverse/reduction gears with a ratio of 4.9:1, and Fernstrum grid coolers cool the engines.

Bollinger independent steering and flanking rudders with electronic synchronization are installed to act in a conventional jockey bar configuration. Electrical power is supplied by two 190 KW generators, each driven by a Caterpillar 3306 diesel engine. Bollinger also manufactured the tiller arms and underwater spares.

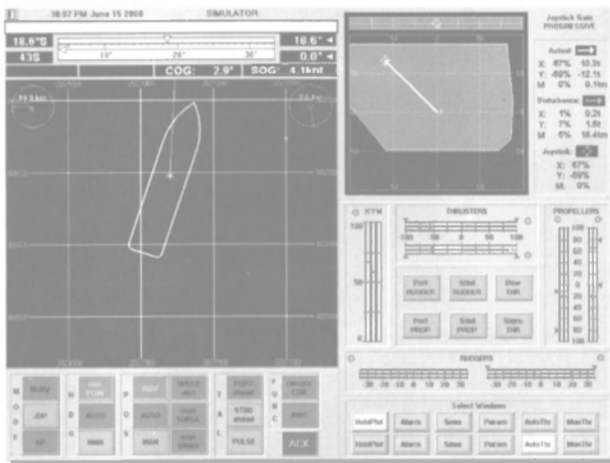
The boat carries 140,500 gallons of fuel, 6,150 gallons of oil, 33,300 gallons of fresh water, 104,000 gallons of ballast water and 540 gallons each of hydraulic and gear oil.

Deck equipment includes six Patterson 65 winches; Schoellhorn-Albrecht 10 hp-two speed capstans; 14, 48-in. Nabrico levels; 10 Blackburn roller chocks; two six-in. button chocks and 18 x 24 in. bolted watertight manholes; and 18 in. quarter turn flush manholes. The deckhouse is mounted on vibration isolators for greater crew comfort and equipment longevity. Quarters are provided for a crew of 12 and two guests, with a galley and dining facilities. Carrier air conditioning cools and heats the pilothouse, galley and dining areas. A partial list of equipment in the wheelhouse includes: two Furuno radars; a Furuno color depth sounder; a DeHart gyro; a GPS receiver; a Pinpoint River Pro Charting system; two Icom VHF radios with handsets; a Sea-Hail loud-hailer; and two Watercom cellular communications systems.

Attention Control Freaks!

for those of you who think you have always known where you were, how fast you were going and when you would get there,...

the Beier IVCS 2000 gives new meaning to the term "know-it-all."



- Automatic Position Hold (DP)
- Manual Joystick Control
- Graphic Display of Position, Movement, NavData & Actuators
- Sunlight Viewable Display
- Easy Operation
- Easy Maintenance
- Windows NTS Software



The Beier IVCS 2000

INTEGRATED VESSEL CONTROL SYSTEM

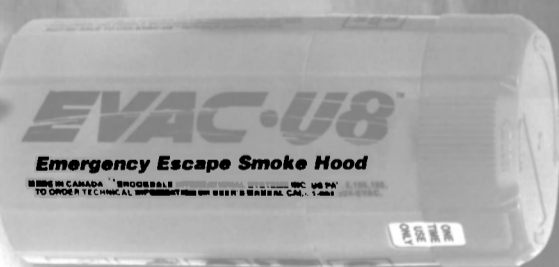
The safest, easiest way to be sure you are where you want to be.

1990 Industrial Blvd. • Harvey, LA 70058 • 504.341.0123 • Fax 504.348.2007 • www.BeierRadio.com

Circle 232 on Reader Service Card

www.maritimereporterinfo.com

The World's Most Advanced Smoke Hood



Fire aboard ship is a uniquely dangerous situation. Protect crew, passengers, property and reputations with this state-of-the-art technology. Avoid potential issues of liability by joining the increasing number of marine operators who have equipped their vessels with EVAC-U8.

BROOKDALE
(a DuPont Canada company)

1-800-459-3822

www.evac-u8.com

Vancouver, Canada Tel: 604-324-3822 Fax: 604-324-3821 e-mail: info@evac-u8.com

Circle 212 on Reader Service Card

www.maritimereporterinfo.com

News

COMSAT Mobile Honored For Maritime Safety

COMSAT Mobile Communications (CMC) was honored with the Maritime Safety Award at the Seaman's Church Institute's 24th Annual Silver Bell Awards Dinner in New York City on June 14.

The plaque, mounted on a large life ring, cites CMC and vigilant earth station operators, "For an abiding commitment to professionalism and innovative approaches to maritime safety."

In addition to noting CMC's variety of data, high-speed data and voice mobile satellite communications services, the Maritime Safety Award also recognized CMC's operators and their ability to respond effectively in emergency situations.

Traditionally, the Seaman's Church Institute Maritime Safety Award is presented to groups or individuals at the Silver Bell Awards dinner in recognition of a specific event, such as a rescue or dedicated commitment to the industry. This year, however, the interest in CMC was attributed to several media stories of the company's involvement in sea rescues, including the December 2000 report of the rescue of the 34 crewmembers aboard the *SeaBreeze I*, which sank in rough seas several hundred miles off the coast of Virginia. (See *Heroes on the High Seas*, which ran on page 43 of the February 2001 edition of *MR/EN*). CMC operator **Eileen Joyce's** initiative in establishing communications with the U.S. Coast Guard and the sinking trip proved to be the critical link in getting Coast Guard rescue personnel to the ship in time to save the crew.

Kvaerner Lands \$67.7 Million Containership Contract

Kvaerner won a \$67.7 million from Hamburg-based Oskar Wehr GmbH to build two containerships.

The company said that its German subsidiary Kvaerner Warnow in Rostock would build the two ships for delivery in the third and fourth quarter 2002; the contract comes on top of an existing contract to deliver four similar ships to Oskar Wehr.

Circle 6 on Reader Service Card

Kaplan & Associates Acquires Colin Glen Company

Kaplan & Associates has purchased the assets of the Colin Glen Company of Canada. The assets include replacement marine parts and assemblies for Murray & Tregurtha models O2D series, 6DH series and O4 series outboard propulsion units and the English Harbormaster models 50 and 75 F7's.

Circle 78 on Reader Service Card

State of Delaware Partners With Band, Lavis Associates

Band, Lavis and Associates, a CDI Marine Group Company, will provide support to the State of Delaware, Department of Natural Resources and Environmental Control, Division of Fish and Wildlife, during its acquisition

of an 62 ft. (18.8 m) research vessel, which will be built by Derektor Shipyards, for use in the Delaware River, Delaware Bay and along the coastline to sample fish and shellfish populations.

Band, Lavis and Associates evaluated numerous vessel options and configurations, developed concept designs, evalu-

ated the effects of different requirements on cost and performance, and prepared a design and build specification. The firm then worked with the State to review and evaluate proposals as well as to assist in the final selection of the builder, and will also monitor construction progress for the State.

Circle 40 on Reader Service Card

Kahlenberg USCG/IMO CERTIFIED SOUND SIGNALS

SINCE 1895

Kahlenberg Sound Signals have set the standard for quality and reliability for over 100 years.

- Air and Electric Horns
- Electric Piston Horns
- Air/Steam Whistles
- Signal Timers
- Controls and Accessories



T-3A "Chimetone" Air Horn



M-511 Signal Controller



KPH-130
Piston Horn



KB-20
Electric Horn

www.kahlenberg.com

Kahlenberg Brothers Company, P.O. Box 358, Two Rivers, WI 54241 USA, 920-793-4507, Fax: 920-793-1346

Circle 249 on Reader Service Card

www.maritimereporterinfo.com

Universal Telegraphs

STORK-KWANT

Voltastraat 3, P.O. Box 23
8600 AA Sneek Holland
Phone: +31 (0)515 413745
Fax: +31 (0)515 422478
Email: kwant@stork-kwant.nl Website: www.stork-kwant.com

Quality in Command

Circle 276 on Reader Service Card

www.maritimereporterinfo.com

www.maritimetoday.com

News

USN Awards \$52M Contract To DD21 Gold Team

The U.S. Navy announced a \$124 million contract modification for continuation of design and test planning of its 21st century DD 21 destroyer program. The contract was awarded to the DD 21

Alliance, which includes Ingalls Shipbuilding and Bath Iron Works of Bath, Me. Ingalls Shipbuilding, a Northrop Grumman company, is leading the DD 21 Gold Team, which includes the Raytheon Company and The Boeing Company, and will receive \$52 million for the continuation of its work associat-

ed with Phase II of this program. Work involved by the Gold Team during the continuation of Phase II includes the development and maturity of critical technologies such as the vessel's integrated power system, the advanced gun and dual-band radar suite.

Circle 80 on Reader Service Card

Kvaerner Philadelphia Signs \$240 Million LOI

Kvaerner has received a Letter of Intent (LOI) from Keystone Shipping Company of Pennsylvania, for the construction of four handy-sized (40,000 dwt) clean product carrier vessels. The total value of the award amounts to approximately \$240 million. The vessels are to be built at Kvaerner Philadelphia, which was formally opened on June 20, 2001 by Tom Ridge, the Governor of the Commonwealth Pennsylvania; and John Street, Mayor of Philadelphia. Based on this LOI, the parties will now enter into negotiations with the objective of establishing a final contract. A final contract will be subject to MARAD Title XI or other equivalent financing arrangements.

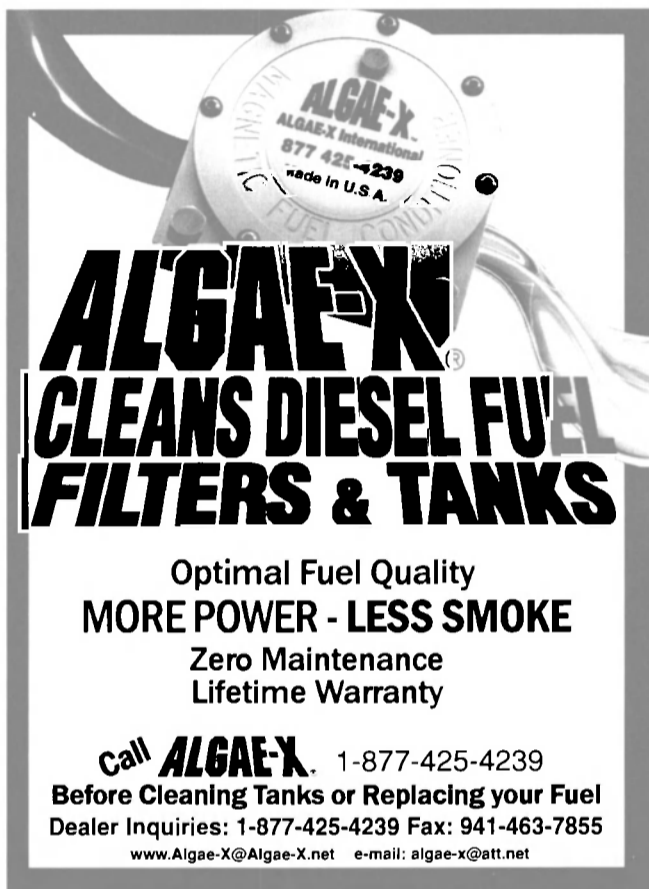
Circle 81 on Reader Service Card

Keppel Singmarine Lands \$5.5M Harbor Tug Contract

Keppel Smit Towage Private Limited (KST), signed a contract with Keppel Singmarine Dockyard Pte Ltd. (Keppel Singmarine) to build two 3,600-bhp harbor tugs for a contract value of about \$5.5 million, with an option for two tugs. These two tractor tugs will have a bollard pull of 47 tons. They will include fire-fighting capability.

With the delivery of these two new-buildings at the end of the year, KST will have a combined fleet of 26 tugs ranging between 3,000 to 4,000 bhp.

Circle 79 on Reader Service Card



ALGAE-X
CLEANS DIESEL FUEL
FILTERS & TANKS

Optimal Fuel Quality
MORE POWER - LESS SMOKE
Zero Maintenance
Lifetime Warranty

Call **ALGAE-X** 1-877-425-4239
Before Cleaning Tanks or Replacing your Fuel
Dealer Inquiries: 1-877-425-4239 Fax: 941-463-7855
www.Algae-X@Algae-X.net e-mail: algae-x@att.net

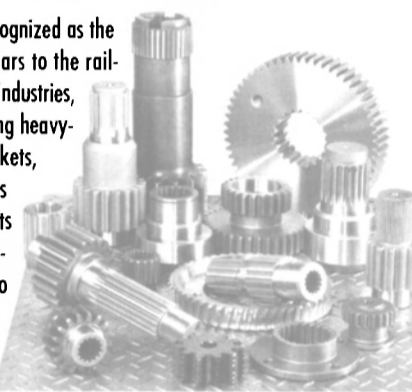
Circle 204 on Reader Service Card
www.maritimereporterinfo.com

HEAVY-DUTY, PRECISION GEARS MADE TO YOUR SPECIFICATIONS

Penn Machine, long recognized as the leading supplier of gears to the railroad and light rail transit industries, also specializes in producing heavy-duty gears, pinions, sprockets, shafts, bushings, couplings and overhead gearing parts for cranes. Our total capabilities and commitment to quality and service make us the best choice for all your gearing needs.

- Four specialized manufacturing facilities with CNC-equipped machine shops
- State-of-the-art inspection equipment for quality assurance
- Complete heat treating capabilities
- Gearbox overhaul & repair services
- Small quantities or high volume production
- Competitive prices

For more information, contact us today.



PMC Since 1920

PENN MACHINE COMPANY

210 Pine Street, Carnegie, PA 15106
412.279.4460 • FAX 412.279.4465
E-mail: pmcsales@pennmach.com

A member of The Mormon Group of companies

Circle 261 on Reader Service Card
www.maritimereporterinfo.com



Location is no limitation.

STRATOS

Stratos is pleased to offer Iridium, the world's only truly global satellite communications system.

The equipment is affordable ranging from \$495 to \$1495, and is only \$1.50/min for all international calls. Contact Stratos today for your remote communications requirements.

For more information on Iridium or Stratos additional products and services please contact:

Seattle:
10700 Meridian Ave. N. Suite 215
Seattle, WA 98133
Tel: +1 206 633 5888
Toll Free: 1 800 250 8962

Worldwide:
Toll Free N.A. 1 888 766 1313
Tel: +1 709 748 4233
Fax: +1 709 748 4305
E-mail: info@stratos.ca

www.stratos.ca

Circle 277 on Reader Service Card

www.maritimereporterinfo.com
www.maritimetoday.com

Trico Marine to Acquire North Sea Platform Supply Vessels

Trico Marine Services signed a definitive agreement to acquire two 279-ft. (85 m) platform supply vessels for a cost of approximately \$4.5 million. The two state-of-the-art, UT 745 design vessels are currently under construction in Norway and will be delivered in April and August 2002.

Circle 39 on Reader Service Card

Devonport Royal Dockyard Gets Paxman Gen-Sets

Four Paxman 12VP185 engine driven gen-sets rated 1,600 kWb at 1,800 rpm will be supplied to Devonport Royal Dockyard. Together with control panels, radiators, sound attenuators, exhaust systems and bulk fuel tanks, the gen-sets will be installed into a new on-shore based facility in Devonport.

Delta Design Systems of Colchester are packaging the gen-sets and will be responsible for installation and commissioning.

Circle 4 on Reader Service Card



JOTUN

Primastic-AV

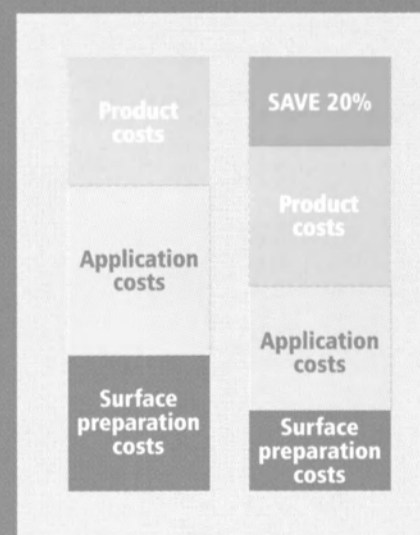


time-saving, cost-saving, all-around protection for marine and industry

THE KEY BENEFITS

- **Saves time by keeping preparation to a minimum**
Can be applied to surfaces prepared to St 2 or waterjetted
- **Saves application costs through fewer coats**
Up to 9.5 mil. in just one coat. Volume solids 75%
- **Saves time through faster and easier application**
Easily applied by airless spray, brush or roller
- **Saves on existing coatings upgrades**
Compatible with most generic types of coatings
- **Solves problems in protecting difficult areas**
Tough protection if blast cleaning cannot be carried out
- **Solves problems at low temperatures**
Wintergrade versions cures down to 23°F (-5°C)
- **Saves time and suits applicators**
No isocyanates. Low in solvents. Less impact on the environment.

COMPARE THE COST PER SQUARE FOOT PER YEAR



The illustration above demonstrates the cost benefits of Primastic-AV compared to pure epoxy coatings.



For further information contact Jotun Paints, Inc.

9203 Highway 23, P.O.Box 159, Belle Chasse, LA 70037 Phone: 1-800-638-7756 / 504-394-3538 Fax: 504-394-3726

11245 State Highway 225, La Porte, TX 77571 Phone: 281-842-3300 Fax: 281-471-0267

www.jotun.com • e-mail: houstonoffice@jotun.com

Circle 248 on Reader Service Card

www.maritimereporterinfo.com

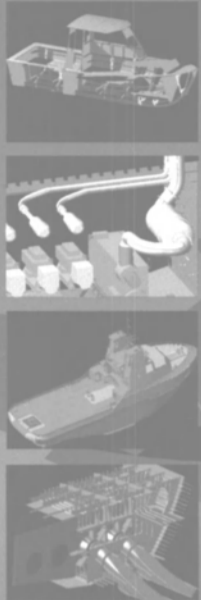
Product Modeling - Structure - Outfitting - Piping - Automatic Nesting

ShipConstructor

3D Product Modeling in AutoCAD easy as 2D Drafting
Scales from a single user to a hundred users

In reference: Chacking - Smart Pipes - 3D Spool Drawings - Catalog Editor - 3D Assembly Drawings

Revision Tracking - Build Strategy - Profile Reports - Prints Plots - Printing Profiles



Piping
Lofting
Nesting
Structure
Outfitting

NC-Processing

E-mail: info@ShipConstructor.com
Web: www.ShipConstructor.com
Tel: 1-250-479-3638
Toll free: 1-888-210-7420
Fax: 1-250-479-0868



Fairing - Lofting - Plate Expansion - Shell Expansion - NC Processing

Circle 203 on Reader Service Card

www.maritimereporterinfo.com

FOR SALE AND RENT

TENSION LOAD LINKS AND SHACKLES Cabled and Radio-Telemetry



0-300 TONS CAPACITY
custom specials to 5000 tons



Water Weights Inc

for further details call:
USA toll free: 1-888-998-3787
tel: 1-909-626-8316
fax: 1-909-626-8326

www.waterweights.com

AN IMES GROUP COMPANY
www.imes.group.com



Circle 286 on Reader Service Card

www.maritimereporterinfo.com

We're The Difference Between Inside & Out



Clean Seal® has partnered with engineers since 1978, designing a full line of products that seal out noise, dust, and moisture. Our climate controlled facility maximizes bonding potential of adhesives on gaskets, molding and decorative trim. Clean Seal supports many applications in the RV, automotive, marine, and transportation industries with quality, service and product availability.

- 3M® brand tapes and adhesives
- On-time delivery
- Wide variety of profiles available - 6 million feet in stock
- Packaged by linear foot, on easy to use reels
- Our specialty division can cut, splice and glue to your specifications
- 100 ft. minimum order

For assistance in selecting the right seal for your application, call a Clean Seal specialist today.
1-800-366-3682 ext. 1363



The Original Industrial Seal
800-366-3682 ext. 1363
219-299-1888
Fax: 219-299-8044
P.O. Box 2919
20900 W. Ireland Rd
South Bend, IN 46680-2919
<http://www.cleansal.com>
e-mail: cleansal36@cleansal.com



CLEAN SEAL

Circle 214 on Reader Service Card

www.maritimereporterinfo.com

CUT FILTER USAGE BY MORE THAN 50%

FILTERS	OTC 2
LOWEST LIFECYCLE COST	✓
REMOVES WATER CONTINUOUSLY	✓
REMOVES ALL SOLIDS	✓
PREVENTS MICROBIAL GROWTH	✓
HIGH DISPOSAL COSTS	✓
FREQUENT REPLACEMENT	✓

Think You Can't Afford A High Performance Centrifuge?

Call today for information about this ground breaking new design for purifying diesel fuel, lube oil and oil-water-sludge mixtures.

1-800-722-6622.



GEA Westfalia Separator, Inc.
A company of mg technologies group.

Westfalia Separator, Inc.
100 Fairway Court • Northvale, NJ 07647
Tel: (800) 722-6622 • Fax: (201) 784-4399
www.wsus.com

Circle 289 on Reader Service Card

www.maritimereporterinfo.com

New & Notable

Aegis Destroyer Christened At Ingalls Shipbuilding

America's newest Aegis guided missile destroyer, Preble (DDG 88), was christened last month at Ingalls Shipbuilding, a Northrop Grumman company, when U.S. Rep. **Edward L. Schrock** of Virginia called for increasing the

number of ships built annually by seven to eight ships.

In naming DDG 88 PREBLE, the Navy for the sixth time honors Commodore **Edward Preble** (1761-1807), a pioneer in U.S. naval and merchant marine service. **Connie Rae Clark**, wife of Chief of Naval Operations Adm. Vern Clark, USN, did the honors of


christening the 38th ship in the Arleigh Burke Class of Aegis guided missile destroyers.

Measuring 509.5 ft. (155.2 m), the 9,300-ton Preble has an overall beam of 66.5 ft. (20.2 m), and a navigational draft of 32 ft. (9.7 m). Four gas turbine propulsion plants will power the ship to speeds of more than 31 knots. Operated


by a crew of approximately 383 officers and crewmembers, the vessel, upon its completion in 2002 will be homeported in San Diego as part of the U.S. Pacific fleet.

DDG 88 is the 38th ship in the Arleigh Burke (DDG 51) Class of Aegis guided missile destroyers — the Navy's most powerful destroyer fleet.

QUALITY FIBERGLASS PRODUCTS
Molded to Your Needs



FIRE HOSE BOX
 Hanging fire hose box features stainless steel hardware, nylon webbing; decals included. Two standard sizes (21"x24"x7" pictured, and 25"x28"x7"). Fire suit boxes also available.



PORT HOLE CASING
 Fiberglass hull insert for ready-made application. Available in any size (24" x 24" x 7" pictured).



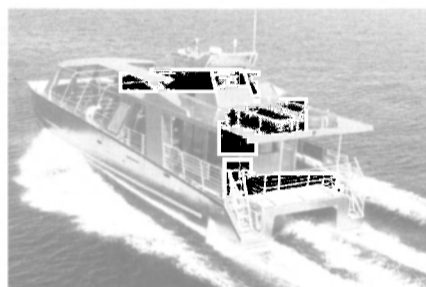
PERSONAL EFFECTS TRAY
 Molded tray for crews quarters, heads and showers. Available in any size (11" x 5-1/4" x 4-1/2" pictured).

ACUY
 AMERICAN CUSTOM YACHTS
 MARINE PRODUCTS DIVISION
 ~Innovators in Marine Technology~
 6800 S.W. Jack James Drive, Stuart, FL 34997
 www.americancustomyachts.com
 Call (561) 221-9100 For Pricing

Circle 205 on Reader Service Card
www.maritimereporterinfo.com

Kvichak Marine Delivers Aluminum Catamaran To Lake Mead Cruises

Lake Mead Cruises (LMC), Boulder City, Nev. received a 57 x 17 ft. (17.3 x 5.1 m) aluminum catamaran built by Kvichak Marine for operation on LMC's 65-mile sightseeing tour up Lake Mead and the Colorado River. The vessel will touch on the edge of the Grand Canyon.



Powered by twin Caterpillar 3196-TA diesel engines, rated for 660-bhp at 2,300 rpm, and fitted to ZF 350A marine gears, the catamaran will cruise at 27 knots — topping out at 32 knots. The transmissions will be fitted to 28-in., five-bladed propellers. Designed by Morrelli & Melvin of Newport Beach, Calif., Velocity will provide passengers with a comfortable, fast ride in often-choppy Lake Mead waters.

Circle 10 on Reader Service Card

Main Particulars - Lake Mead Fast Ferry

Length, (o.a.)	57 ft. (17.3 m)
Beam	17 ft. (5.1 m)
Draft	2.5 ft. (0.7 m)
Displacement	55,000 lbs.
Engines	CAT 2 x 3196
Propellers	30-in. NiBrAl
Fuel	400 Gallons
Max Speed	30 Knots
Cruise Speed	27 Knots
Passengers	71

A&B Delivers M/V Leif S To Sacramento Tug Boat

A&B Industries of Morgan City, La. has delivered the M/V Leif S to Sacramento Tug Boat Co. of Sacramento Calif. The Model Bow Tug measures 76 ft. (23.1 m), with a 26 ft. (7.9 m) beam and 10 ft. (3 m) depth. Two Caterpillar 3508B Main Engines with 6:1 Twin Disc reduction gears furnished by Louisiana Machinery provides power; electrical generation is provided by two Caterpillar 65Kw generator sets also sold by Louisiana Machinery.

Sheaves & Blocks



- Tough, cold formed, high quality steel sheaves.
- Grooves are work hardened for extended rope life.
- Lifetime lubricated sealed bearings.
- High sheave to rope ratios.
- A vast selection of sizes available from stock.
- Stainless steel sheaves and blocks are also available.



Send for a complete catalogue of Jeamar products.

Jeamar Winches

1051 Clinton Street, Buffalo, New York, U.S.A. 14206

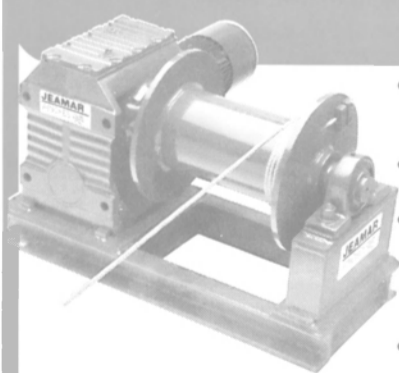
Tel: (716) 854-3211 • Fax: (716) 854-4141

Toll Free: Tel: 1-877-884-8118 • Fax: 1-877-569-9909

web site: www.jeamar.com • Email: sales@jeamar.com

Circle 247 on Reader Service Card
www.maritimereporterinfo.com

Electric Winches



- Tough, rugged, continuous Heavy Duty Winches.
- Conforms to International Standards.
- Extensive range of options. Grooved drums, free spooling, controls, limit switches and many more.
- Line pulls from 400 lbs to 75,000 lbs single line pull.

Send for a complete catalogue of Jeamar products.



Jeamar Winches

1051 Clinton Street, Buffalo, New York, U.S.A. 14206

Tel: (716) 854-3211 • Fax: (716) 854-4141

Toll Free: Tel: 1-877-884-8118 • Fax: 1-877-569-9909

web site: www.jeamar.com • Email: sales@jeamar.com

Circle 293 on Reader Service Card
www.maritimereporterinfo.com

Peel Strip Remove



An improved method for removing paint, rust, adhesives & coatings from concrete. Aurand tools literally "peel" any accumulation from any hard surface. Here is the power of sandblasting in a compact, hand-held tool that can be used wherever a hard surface needs to be prepped prior to painting, refinishing or coating.

Available in several widths, and in gasoline, pneumatic and electric models.

TAKE IT OFF, TAKE IT ALL OFF

Since 1937



1210 Ellis Street
 Cincinnati, Ohio 45223-1843
 (513) 541-7200 • FAX (513) 541-3065

Email: sales@aurand.net • web: www.aurand.net • (800) 860-2872

Circle 208 on Reader Service Card
www.maritimereporterinfo.com

New & Notable

Marco Shipyard Concludes Pilot Station Vessel Contract

Marco Shipyard has concluded its contract for two new pilot station vessels for the San Francisco Bar Pilots with the delivery of the 104-ft. (31.7-m) California — sistership to San Francisco.

Outfitted with the latest nav aids and communications technology, the new Marco-designed boats transfer pilots safely to and from ships entering or leaving San Francisco Bay, and provide quarters for pilots between assignments.

The San Francisco Bar Pilots maintain two pilot stations — one of which is on

duty 12 miles outside the Golden Gate Bridge at all times — in order to serve approximately 8,500 vessels per year.

California's raised pilothouse forward provides excellent visibility over pilot transfer operations on both the port and starboard sides, as well as clear visibility up the side of the vessel being ser-



The 104-ft. (31.7-m) pilot station vessel California, which was designed and built by MARCO Shipyard Seattle.

The fish can't believe their eyes

Now it's your turn...
Insist upon
Barkemeyer
manoeuvring
equipment



Barkemeyer Schiffstechnik GmbH & Co. KG., Birkenweg 11, D-21465 Reinbek
Tel.: +49 (0)40 7118020, Fax: +49 (0)40 7110086
E-mail: info@barkemeyer.com, Internet: www.barkemeyer.com

Circle 210 on Reader Service Card
www.maritimereporterinfo.com

**STOP MARINE RUST
& CORROSION
PERMANENTLY!!!**



EVEN SALT WATER WON'T EAT THROUGH POR-15®!

Stop rust PERMANENTLY with POR-15® MARINE, a rock-hard yet flexible coating that won't crack, chip, or peel. NOTHING ON EARTH compares to POR-15® MARINE for durability. We guarantee it unconditionally!

...and it's "Hammer Tough"!

CALL TODAY FOR
FREE CATALOG
1-800-457-6715

Shop our
on-line
catalog:



www.por15-marine.com



**RESTO
MOTIVE**
LABORATORIES, INC.
A DIVISION OF POR-15, INC.



P.O. Box 1235 • Morristown, NJ 07962-1235
MMR01 In NJ: (973) 887-1999 • FAX: (973) 887-8007

Circle 263 on Reader Service Card
www.maritimereporterinfo.com

GET PREPARED WITH DATREX

Tested and Approved HAMMAR H2OE Hydrostatic Release for Most Cat. I 406 MHZ Float Free EPIRB's

DISPOSABLE - This hydrostatic release is a two year disposable unit, requiring no annual maintenance.

EXPIRATION DATE - Just look on the side of the unit to see which month and year are etched out. If the expiration date is near or has lapsed, it is time to replace the hydrostatic release and the plastic bolt with attachments.



Marine Visual Distress Signal Kit For Commercial Fishing Vessels

Ocean Kit: Approved for vessels operating in all waters.

Signals included in Ocean Kit:
3 RED PARACHUTE FLARES,
6 RED HAND FLARES,
3 ORANGE SMOKE SIGNALS

Watertight container • Signals meet U.S.C.G. and S.O.L.A.S. • Signals available individually

DATREX'S DECKBUOY® AND BRIDGEBUOY®

Deckbuoy: 30" 2.5 kg. buoy with retroreflective tape. Approved for shipboard and offshore deck platform installations. Meets U.S.C.G., S.O.L.A.S., and EC Certified.

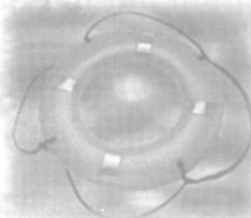
Bridgebuoy: 30" 4 kg. buoy with retroreflective tape. Approved for use with quick release ring buoy bracket. Meets U.S.C.G. and S.O.L.A.S.

NEW 24" DIAMETER NOW AVAILABLE

U.S.C.G. APPROVED

DATREX

Marine Safety Equipment
P.O. Box 1150, Kinder, LA. 70648
1-800-828-1131 Fax: 337-738-5675
www.datrex.com



Circle 220 on Reader Service Card

www.maritimereporterinfo.com
www.maritimetoday.com

vided.

The vessel's accommodations are provided on the lower deck, with an eight-person berthing compartment for pilots forward; crew quarters for five are located aft of the amidships engine room.

Located at the vessel's stern is a 16-ft. (4.8-m) Ocean Tech RIB powered by a 100-hp diesel engine and waterjet, which can be used as an emergency rescue boat and for pilot transfers with low-freeboard vessels. The RIB is carried on a hydraulically-powered cradle that lowers the boat for release while underway, raising it to main deck level for stowage.

Measuring 104 ft. (37.1 m) with a beam of 30 ft. (9 m), and a depth of 13 ft. (3.8 m), the all-steel, twin-screw California is powered by a pair of Caterpillar diesels, providing a combined 2,200 hp to drive its 64-in. Sound Propeller via Twin Disc gearboxes.

Exceeding its 14-knot design speed during trials, the vessel is fitted with a host of distribution panels, master alarm panel and wiring by Harris Electric. Electronics onboard include two Furuno X-band radars, GPS receivers, color depth sounder; Transas chart plotting system; Sperry gyrocompass; and Litton autopilot

Circle 11 on Reader Service Card

Bath Iron Works Launches Mason (DDG 87)

Bath Iron Works launched its newest U.S. Navy destroyer on June 23 — subsequent to the opening of its new Navy shipbuilding facility, which occurred on May 5. Scheduled to launch at slack high tide, Mason was sponsored by U.S. Senator Olympia Snowe of Maine. DDG 87 is the 21st Arleigh Burke-class Destroyer to be built at BIW.

The vessel's namesake honors two previous ships of the same name. The first Mason, which served the Navy from 1920-1941, was named for **John Young Mason**, Secretary of the Navy for Presidents John Tyler and **James K. Polk**. The second Mason was used by the Navy from 1944-1945, and was named for Ensign **Newton Henry Mason**, who enlisted as a seaman in the Naval Reserve — eventually becoming an aviation cadet in 1941.

Maritime Reporter & Engineering News

Kockum Sonics AB launches Ballast Water Exchange Concept

In response to the threat of invasive marine species, Sweden-based Kockum Sonics AB has developed a new concept for safe and efficient ballast water exchange on high seas. The concept is based on their two products LoadRite and Levelmaster - as exchanging ballast water in deep water requires careful planning.

LoadRite, with its full 3-D description of the hull, is being used for hydrostatic calculations. It has been developed further to include the powerful Ballast Exchange Support Tool for the ship officers to define the fastest and safest way of ballast exchange at sea.

A simulation of the complete ballast exchange process is followed by an online supervision in real-time as well as predicting future conditions.

While simulating the ballast exchange process of any selected tanks and sequence, the responsible officer can overview the process in detail at any time interval. Values of certain limits may also be adjusted at this stage. Time bars give the user a quick and clear overview of the situation at any moment of the process. Parameters of the ship's drafts, stability and longitudinal strength are calculated at any stage and compared with allowable limits.

Should the chosen sequence at any time exceed any parameter limits, the program will display a visual warning, giving the user the signal to amend the defined process. After an acceptable simulation, LoadRite exchanges information online with Kockum Sonics' Levelmaster and its new patented intelligent CALM-sensors (Computer Aided Level Measurement).

The CALM-sensors constantly feed LoadRite with actual and accurate levels and flows in the tanks, supervising the real-time process. Predictions and data on future conditions are constantly being calculated and warnings are given if limits are being exceeded, thus giving a second layer of protection. Both simulation and online supervision are crucial, since the actual process could deviate from the approved simulation, due to a failure such as a broken pump.

Circle 5 on Reader Service Card

New Managing Director At Kelvin Hughes

Kelvin Hughes has appointed **Ron Nailer** as the new managing director of Kelvin Hughes Ltd., succeeding Dr. **Martin Jones**, who has returned to the parent company — Smiths Group Plc head office — to pursue his responsibilities as director of Technology and Innovation of Smiths' Industrial Group.

Oceaneering and DNV Team Up

Oceaneering International announced that its Norwegian subsidiary, Oceaneering AS, has entered into a joint venture agreement with Det Norske Veritas (DNV) to provide a new inspection service capability to the offshore oil and gas, shipping, and other vessel-related markets utilizing a unique combination of Remotely Operated Vehicles (ROV) and Resonance Thickness Measurement (RTM) technology.

July, 2001

Need Anti-Sweat Protection?

Delta T Insulated Coating

Marine Formulation

A coating system that provides excellent thermal and anti-condensation protection in an easy, cost effective spray method.



Over 160 vessels to date have successfully used our system in waters worldwide.

Start saving now, call today!

20-60 mil layer achieves an equivalency of R9-14!

Environmentally friendly, containing no harmful VOC's

U.S.C.G., DNV, ABS, and Lloyd's certified.

Expedites vessel construction time!

Mascoat Products

Houston, Texas
Phone: (713) 465-0304
Fax: (713) 465-0302
Email: Sales@deltacoat.com



Circle 255 on Reader Service Card
www.maritimereporterinfo.com

Time, Experience, & Reliability...

THE MARITIME GROUP

Since 1939 The Maritime Group has been a leader in the marine industry. Today it's supported by a network of publications and electronic products.

MARITIME REPORTER AND ENGINEERING NEWS

MarineNews
MarineLink.com MaritimeEquipment.com
MaritimeJobs.com MaritimeToday.com

THE MARITIME GROUP

a combined audience of over

450,000

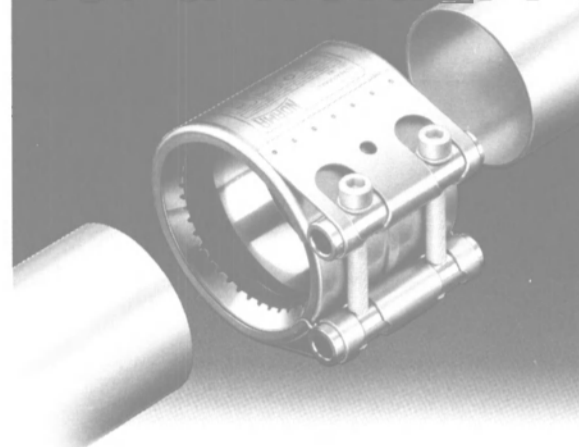
each month.

Reserve your ad today! Call: 212-477-6700

THE MARITIME GROUP
118 East 25th Street, New York, NY 10010
tel: (212) 477-6700 fax: (212) 254-6271

www.maritimetoday.com

Why wait for a welder?



Join and seal pipes in less than 15 minutes



With a NORMACONNECT® coupling and a torque wrench, anyone can connect high-pressure pipes in minutes — and they'll stay sealed.

Rugged NORMACONNECT® couplings are 70% lighter than welded flange joints and take up 40% less space. They also:

- reduce noise and dampen vibration
- save time previously spent on welding and x-rays
- compensate for misalignment, angular deflection and variances in pipe O.D.
- eliminate the pipe grooving and end treatment necessary with other couplings
- feature a patented double-lip seal
- are available in all IPS nominal O.D.'s, from 3/4" to 48" (26.9mm to 1220mm)
- are rated at 16 bar to IPS 8.0" (219.1mm) by all major marine approval bodies.

For metal-to-metal, metal-to-plastic and plastic-to-plastic joints, you'll save time and money with NORMACONNECT® Pipe Couplings. They're used on everything from ocean-going passenger ships (e.g., the first ones built in the U.S. in 40 years) to semi-submersible oil rigs.

For more information, contact NORMA Products or our marine distribution partner, W&O Supply.



W&O Supply
Engineered Products Division
Phone: (334) 438-2810
Fax: (334) 438-2817
e-mail: epdivision@wosupply.com

NORMA®

A WORLD OF INNOVATIVE SOLUTIONS.

NORMA PRODUCTS (U.S.), INC.
Phone: (800) 406-6762
Fax: (248) 668-9523
Website: www.norma.de
e-mail: npus@normatech.com



Circle 260 on Reader Service Card
www.maritimereporterinfo.com

21

Cruise Shipping Annual

Carnival's 2Q Earnings Drop Eight Percent

Carnival Corp. reported that fiscal second-quarter profits dropped eight percent, in line with expectations, as prices for sea vacations remained tepid.

The Miami-based owner of Holland

America, Cunard and four other cruise lines said profits were \$187 million, or \$0.32 per share, for the three months ended May 31, compared with \$204 million, or \$0.34 per share, a year earlier.

Industry analysts had forecast that Carnival, whose 45 ships dominate the

\$12 billion global cruise market, would earn between \$0.28 and \$0.33, according to a survey of 19 analysts by Thomson Financial/First Call. The analysts' median estimate was \$0.30.

Revenues were \$1.08 billion, up from \$875.1 million a year earlier, as Carnival added ships in a massive, sectorwide

fleet expansion analysts partly blame for weak cruise ticket pricing. The slowdown in the U.S. economy is also dragging demand for cruises.

The company, described as "reasonable" analysts' estimates for the full fiscal year ending in November. The company gave no figure, but First Call's mean full-year estimate for Carnival is \$1.65 a share, or a penny more than last year.

The company reported that net yield, a measure of revenue per passenger closely watched by Wall Street, had risen 1.8 percent in the quarter over the same three months in 2000. Chairman Micky Arison said yields were likely to be down two to three percent over last year in the six months to November.

"In spite of the continuing weak economic environment, we were still able to achieve strong growth in the operating earnings of our cruise brands," Arison said.

"A combination of an 8.4 percent increase in capacity, a 1.8 percent increase in net revenue yields (revenue per available berth day), and lower operating cost per available berth day helped to drive the growth in our second quarter operating earnings."

Operating income, including the consolidation from the company's Costa Cruises based in Italy, rose 20.2 percent in the quarter to \$241.1 million from \$200.7 million.

Arison said slow economic growth in the United States was still weighing on cruise ticket prices, especially for the company's most expensive lines such as Seabourn. More modestly priced lines were a bright spot, he said.

"The North American contemporary cruise segment continues to perform quite well despite the slowing economic environment," Arison said.

Carnival, whose lines also include Windstar and Carnival Cruise, announced in May that it was selling for approximately \$500 million a 25 percent equity stake in Airtours plc.

New Marine Fire Suppression Systems Receive USCG Approval

Fike Corporation has been granted U.S. Coast Guard Approvals for its Marine FM-200 and CO2 Fire Suppression Systems.

An effective option for many shipboard and offshore applications, such as machinery spaces, generator rooms, pump rooms and electrical areas, Fike systems provide the flexibility to apply safe, environmentally friendly extinguishing agents when required.

Circle 75 on Reader Service Card



Dutchess
Bakers' Machinery Co., Inc.
Subsidiary of Superior-Lidgerwood-Mundy Corp.

BAGEL & BUN SLICER

for • Bagel Shops • Retail Bakeries
• Restaurants • Hospitals
• Schools • Delis • Etc.

NSF USA

• Fast
• Adjustable
• Easy to Operate
• Low in Cost



Model 260

Increase Sales with Sliced Products
For Slicing Bagels, Hamburger Buns, Hot Dog Rolls, Biscuits, Muffins, etc.
Adjustable for product size up to 4 1/2" (114mm) wide x 2 3/4" (70mm) thick.
Will slice all the way through or part way
Production capacity is as fast as the operator can feed it.

• Blade Re-Sharpening Service available for all makes
1101 JOHN AVENUE SUPERIOR, WI 54880-0039
PH: 715-394-444 FAX: 715-394-2406
1-800-777-4498

Circle 224 on Reader Service Card
www.maritimereporterinfo.com

Cable Transit Problems...

Solved

RISE

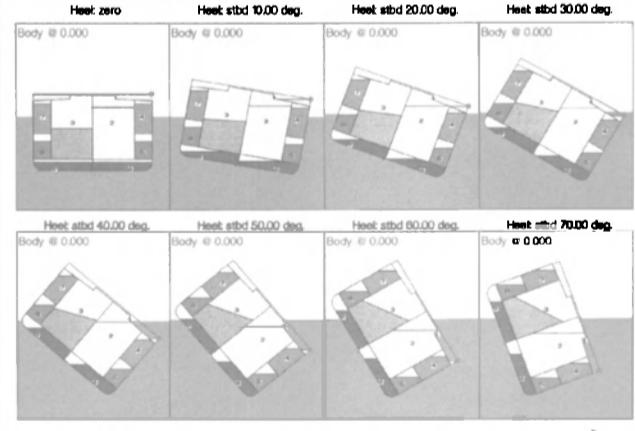
Rapid Transit® Sealing System

- ✓ Approved: Firestop/Watertight/Gas-tight
- ✓ Approved: ABS, DNV, Lloyds, USCG
- ✓ Saves labor, weight & space vs. block systems
- ✓ RISE Software makes material calculation easy
- ✓ Also approved for single and multi pipes
- ✓ **New RISE Extend-A-Frame - Doubles** usable space in any block system frame!

For a full catalog, software and informational video contact:

CSD Sealing Systems-North America
Tel. 603-641-3914 E-mail: sales@csdsealingsystems.com
www.csdsealingsystems.com

Circle 218 on Reader Service Card
www.maritimereporterinfo.com



GHS Modeling and Visualizing all Kinds of Free Surface

General HydroStatics

Ship Stability and Strength Software:

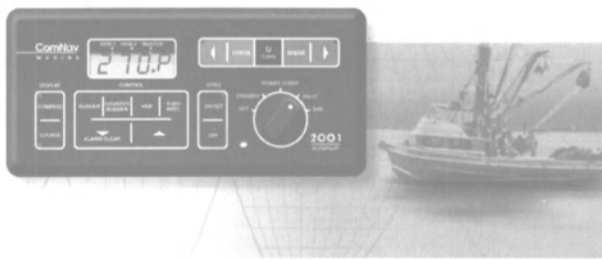
GHS.....Full-featured naval architect's system
GHS LOAD MONITOR.....Onboard system
GHS/SALVAGE.....Salvor's system
BHS.....Economy system
BHS/YACHT.....Yacht designer's system

CREATIVE SYSTEMS, INC.
CREATORS OF GHS

P.O. Box 1910 Port Townsend, WA 98368 USA
TEL (360) 385-6212 Fax (360) 385-6213
E-MAIL: sales@GHSport.com - Website: www.GHSport.com
Producing Advanced Hydrostatics Software since 1972

Circle 217 on Reader Service Card
www.maritimereporterinfo.com

The crewmember you always wanted



Since their introduction in 1982, ComNav Autopilots have gained a reputation for top performance and reliability in any sea and weather conditions. ComNav Marine has a broad line of autopilots suitable for all types of vessels.

2001 Autopilot

- Water resistant Control Head
- Three "Turn" functions
- Automatic trim
- Two remote ports built-in
- Two navigation ports for dual input of NMEA information
- Two heading outputs
- Selectable steering parameters
- Optional rudder angle indicator, up to 4 stations
- 3 year Extended Warrantee

ComNav ComNav Marine Ltd.
#15-13511 Crestwood Place, Richmond, BC, Canada V6V 2G1
(604) 207-1600 www.comnavmarine.com

Circle 216 on Reader Service Card
www.maritimereporterinfo.com

Mechanical Problems, Late Deliveries Continue to Plague Industry

A stagnant economy, threat of overcapacity and canceled cruises due to repairs and late deliveries have conspired to slow the hyper-growth cruise industry has enjoyed for the past decade.

Even last year's new Millennium, which burst onto the cruise scene with its new gas turbine propulsion, had its share of troubles. Despite unparalleled reassurance by Celebrity that Millennium's propulsion problem was remedied, Infinity, its sistership, which was delivered this past Spring, recently experienced new problems with faulty bearings in its propulsion system — forcing the line to cancel two weeks of sailings.

In addition, Celebrity's Galaxy dealt with a damaged propeller, causing lost money and cruises on that vessel. These problems not to mention the late delivery of Royal Olympic's Olympic Explorer and the complications with the two new U.S. Lines Ships currently being built at Litton Ingalls offers a plaguing question — Has the Cruise Industry Gone Bust?

By **Regina P. Ciardiello**, senior editor

With order books filling up and yards bursting at the seams with cruise ship newbuilds, it would seem as though the industry is one that is flying high — at least by the numbers — 58 ships on order consisting of 98,000 berths worth \$18.5 billion, (Source: CLIA). But, will the lines be able to fill these ships to their full capacity, or will they be forced to perform weekly sail-

ings with a large quantities of empty staterooms? That is if they even manage to get their vessels up and running according to schedule — and keep them running smoothly and safely.

Cruise companies, which have faced a falling economy, resulting in heavy discounts, have had to recently contend with a number of revenue-slapping technical issues. Case in point is the recent delay of Royal Olympic's 24,500-ton Olympic Explorer, which was to have been delivered to the Fort Lauderdale, Fla.-based line from Germany's Blohm + Voss Shipyard on April 27. The \$175 million vessel has since been pushed back for delivery sometime this summer — leaving Royal Olympic in a financial and itinerary bind; the line had to cancel all cruises until September 15, 2001. The delay, according to Royal Olympic is reportedly due to "a variety of technical problems that need to be addressed before the vessel's delivery." While Royal Olympic waits in limbo while a technical team assesses the situation, Celebrity Cruise Lines has also called upon Blohm + Voss' Repair Division to help it fix its 866-ft. (263.9-m) Galaxy. The vessel, which entered service in December 1996, sustained damage to its port propeller as it moved through a lock in Holland, according to the company's director of corporate communications, **Lynn Martenstein**. A diver managed to recover one eight ft. blade, which was bent. Three other blades — each weighing 3.5 tons sustained scratches. At press time, the vessel was at Blohm + Voss' drydock,




Olympic Voyager's (pictured) sistership, Olympic Explorer, is currently laid up at builder Blohm + Voss in Germany where a technical team is assessing the reasons for its late delivery.

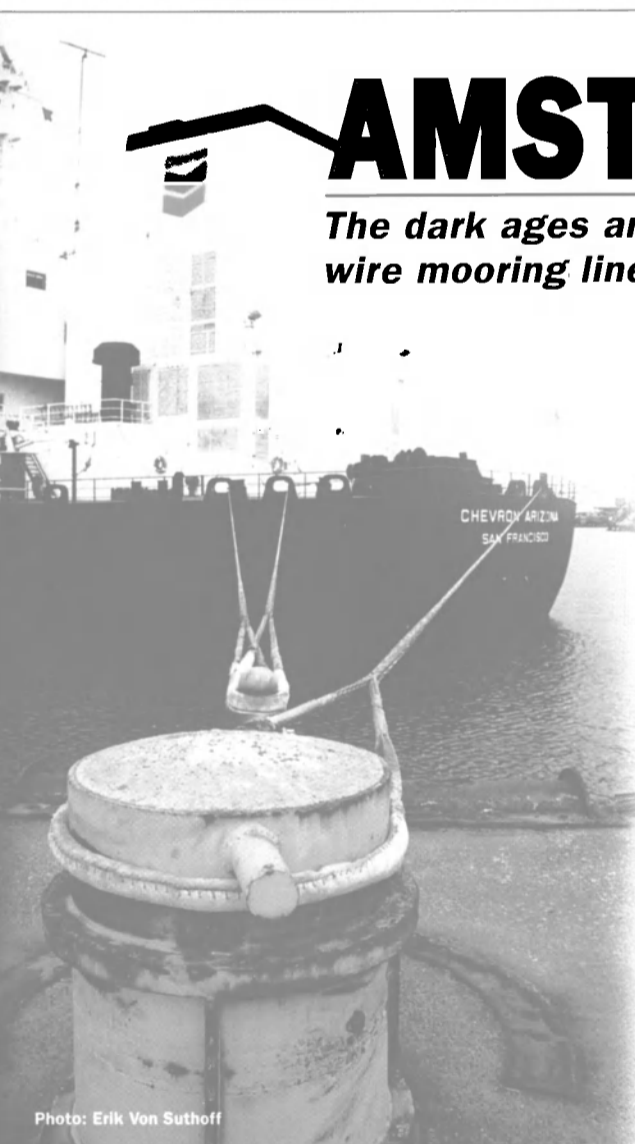
waiting to undergo repairs. While the drydocking forced Celebrity to cancel a 14-night Northern European cruise, Martenstein added that the company expects Galaxy to have returned to the seas by June 16.

Celebrity also had to contend with bearing problems on its newest delivery — Infinity — the second member of the Millennium class of ships. The vessel had to undergo repairs associated with a ball bearing in its starboard propulsion system and had its own slew of canceled itineraries.

Infinity's drydocking at Victoria Shipyard threw out its June 8 and June 15 sailings — seven night Alaskan cruises leaving from Vancouver.

Celebrity's decision to dry dock Infinity at Victoria





AMSTEEL® BLUE®

The dark ages are over and so are the days of wire mooring lines.


Why continue the drudgery and injury associated with the use of wire mooring lines? The lightweight and strength of AmSteel®-Blue saves time, money, and the environment while eliminating back injuries. Harness technology and let it work for you.

Many major shipping companies have retrofitted their fleets from wire to AmSteel®-Blue mooring lines. They saw the light — and the savings, and so can you.

- Outlasts wire mooring lines by 3 – 4 times
- Decreases mooring time by 50% – 75%
- Greatly reduces injuries associated with the use of wire rope
- Eliminates maintenance required for wire mooring lines

AmSteel®-Blue is now recognized as the synthetic replacement for wire mooring lines.

For more information contact Samson Rope Technologies and ask for our Marine Applications Engineer.



SAMSON®
ROPE TECHNOLOGIES
The Strongest Name In Rope

2090 Thornton Street, Ferndale, WA 98248
{T} 800.227-7673 / 360.384.4669
{F} 800.299.9246 / 360.384.0572
www.samsonrope.com

Photo: Erik Von Suthoff



Technical teams from Victoria Shipyard, Alstom and Kamewa assess the damage to Infinity's propeller.

was two-fold — close proximity and capability. The yard, which is located on the Southern tip of Vancouver Island is only a four-and-a-half hour transit time from where the vessel had been docked. In addition, Victoria is the sole facility in the area capable of accommodating Infinity. Its graving dock, which measures 1,176 x 126 ft. (358.6 x 38.4 m) can handle vessels up to 100,000 dwt. According to **Malcolm Barker**, manager of Ship Repair for the yard, other reasons prevailed as well. "We (Victoria) are the largest drydock on the west

coast, next to San Francisco Dry Dock." Barker said. "Geographically we were the first choice, in addition to our already-established relationship with Celebrity."

While Victoria proved to be a smart choice economically, the yard ran into one significant logistical roadblock as it readied for Infinity's arrival — two vessels already occupied the yard's drydocks; Canadian Naval vessel HMCS Protecteur, and Sarga Sea, a Russian-flag fish factory trawler. The former was already three months into a nine-month refit project, while the latter was in

the process of having its interior design finalized; both therefore had to be moved for berthing at the shipyard's landing wall. In addition, customized keel blocks had to be constructed specifically for Infinity. According to Barker, it took three days to reset the blocks (where Protecteur had been berthed) from 5.2 to 12 ft. so that Infinity could be drained and drydocked properly.

Upon the vessel's arrival on June 14, crews from both Alstom and Kamewa (the pod's manufacturers) were flown in

and worked round-the-clock to identify the problems. According to Barker, once the pod is stripped down, the technical crews assessed that the bearing was indeed showing signs of deterioration. There were also indications that metal was seeping into the vessel's hydraulic oil. And while the ship was still able to move at 22 knots, the bearing was poised for failure — ultimately leading to Celebrity's decision to dry dock.

Barker added that the old bearing was removed and new bearings were then fitted into the starboard side unit. As an extra precaution, Celebrity opted to replace the vessel's port side bearing as well.

Subsequent to testing of both units, Infinity was deemed fit to return to sea and departed Victoria Shipyard on June 21 — one day ahead of schedule.

However, Royal Caribbean, Celebrity's parent company, admitted that these mechanical failures would lead to lowered financial returns during the second quarter. The company indicated that repairs, refunds and other compensation to Infinity passengers would impact earnings of that quarter anywhere from \$0.03 - \$0.04. per share.

As a result, Equity Research Analysts Lazard Freres have cut their 2002 EPS



estimate to \$1.96 from \$2.09. Despite RCCL's added compensation expenses, Lazard analysts continue to rate the line at Hold.

Illegal Dumping Continues

One problem that RCCL managed to avoid so far this year, however, is illegal dumping, a violation, which scarred the line when it was fined \$6.5 million in October 1999 for dumping oily bilge water and other pollutants into Alaskan waters. This area was once again tainted this past May, this time by Norwegian Cruise Lines, who was cited for illegally dumping concentrated sewage into the scenic Inside Passage, according to the U.S. Coast Guard. The line's Norwegian

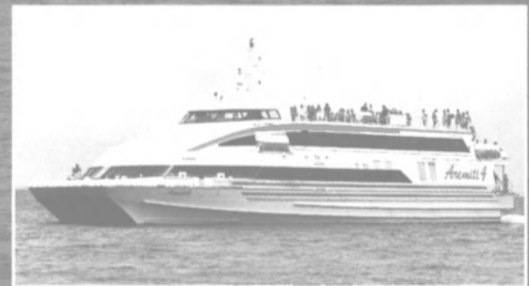
Serving demanding customers worldwide



Aqualiner
Low Wash Ferry
130 passengers



New Ferry V
Damen Fast Ferry 4010
400 passengers



Aremiti 4
Damen Fast Ferry 5012
445 passengers / 20 cars

DAMEN SHIPYARDS

SHIPBUILDING AND SHIPBUILDING KITS FOR CONSTRUCTION IN THE USA
Industrieterrein Avelingen West 20 · P.O. Box 1 · 4200 AA Gorinchem/HOLLAND
Telephone: 011 31 183 639528 · Telefax: 011 31 183 637762
E-mail: americas@damen.nl · Internet: www.damen-shipyards.com



Sky reportedly discharged the sewage for approximately 30 minutes while steaming between Juneau and Ketchikan. Known as the first large cruise ship to dock this year in Juneau, the ship, which was traveling at 17 knots, produced a waste stream of about three-quarters of a mile, according to Coast Guard Commander.

Adding fuel to the fire at Norwegian, tests conducted by an independent lab on samples from the vessel showed fecal coliform 3,500 times the acceptable fed-



Rod McLeod, president and COO, AMCV

"We're looking at a delay of about four to nine months. The shape of the hull is taking form, but this will not be an easy process."

— Rod McLeod, COO of AMCV confirms the problems plaguing the U.S. Lines vessels being constructed at Litton Ingalls Shipbuilding in Pascagoula, Miss.

eral standard and suspended solids 180 times the standard, the Coast Guard added.

The violation by Norwegian is the first of its kind in regards to a new federal law that sets guidelines for treated

sewage from cruise ships and forbids discharge of untreated sewage in the Inside Passage's "donut-holes," which are sections in the channel more than three miles from shore. According to the Coast Guard, the civil penalty for a violation of this nature is up to \$25,000 per day.



Delta Queen's Cape May Light recently visited Chelsea Piers in New York City. (Photo Credit: Barbara Hauley Kempe)

U.S. Cruise Ships Face Delays


Just as quick as cruiseship building has returned to the U.S. after 45 years, with the construction of the recently delivered Cape May Light by Atlantic Marine for American Classic Voyages' (AMCV) Delta Queen Coastal Vessels, it was also quick to run into delivery delays — specifically the two new U.S. Lines vessels.

Better known as Project America, the vessel pair, which is currently being built at Litton Ingalls in Pascagoula, Miss. is behind on its steel fabrication, according to AMCV's president and


COO Rod McLeod. He added that the vessels, which are in a 10-K delay are about 20 percent complete. "We're looking at a delay of about four to nine months," McLeod said at a recent press conference onboard Cape May Light in New York City. "The shape of the hull is taking form, but this will not be an easy process," he added.

Following discussions held at the beginning of June between AMCV and the shipyard, it was approximated, according to McLeod that the first part of the U.S. Lines series will be delivered "sometime during 2003" as opposed to its original delivery date of January 2003.


Damen Workboats




Stan Tug 1605




Azimuth Stern Drive Tug 3110




Multi Cat 2510



Stan Tug 2909



Azimuth Stern Drive Tug 3111



DAMEN SHIPYARDS
 Industrieterrein Avelingen, Vest 20 · P.O. Box 1 · 4200 AA Gorinchem/HOLLAND
 Telephone: +31 183 63 21 81 · Fax: +31 183 63 21 81
 E-mail: info@damen.nl · Internet: http://www.damen.nl

Local Yards Start To Feel The Impact

The U.S. Gulf of Mexico region is again poised to prosper, spurred by the buzz of activity surrounding the oil patch, and specifically the renewed vigor with which companies will explore and develop deepwater fields for the production of natural resources.

Though the resumption of business at "full throttle" has taken perhaps a bit longer than many observers would have initially predicted, particularly given the continued high price of oil and gas and the "pro" oil industry political team occupying the White House, it is a safe bet that, at least for the next several years, the offshore oil business will ensure that the marine business in the GOM region is a prosperous one.

While a recent (May 11, 2001) report from the International Energy Agency notes that global oil demand has dipped in recent months, a look at the big picture shows that global oil demand has grown from 74.8 million barrels per day in 1999 to 76.5 million barrels per day in 2001. As is always the case with oil production, however, straight supply and demand analysis are rarely the entire picture, as the market is fraught with an array of political motives. Today, OPEC insistence on maintaining new production targets, in the face of slacking output from Iraq, has kept oil prices in the stratosphere, and there are indications that shortages are imminent.

Reflecting the sector's positive sentiment, in a recent interview, Global Marine Inc.'s Chief Executive **Bob Rose** said he expects dayrates for offshore oil and gas drilling rigs to surpass their highs of three years ago in 2001.

Dayrates are currently at about 74 percent of their 1997/98 highs, Rose said, with the West African and North Sea markets now showing signs of recovery as a longer-established natural gas drilling boom continues in the U.S. Gulf of Mexico.

Interestingly, Rose said Global Marine is currently limiting the length of new contracts that it signs for its rigs so that it can benefit from the further increases in dayrates that it expects. The average dayrate for the company's rigs was \$71,100 during the first quarter of 2001, up from \$52,000 in the same period of 2000. The fleet utilization rate reached 100 percent last month for the first time since July 1988.

Rose said he expects some drilling rigs to be moved from the U.S. Gulf of Mexico to other markets this year, as international dayrates catch up with and overtake domestic rates.

Rose said global oil markets were currently more firmly underpinned than they were in late 1997 — when prices peaked before starting a steep decline — because, unlike then, there is currently very little unused production capacity.

The little spare capacity now available is held by Saudi Arabia, the United Arab Emirates, and Iraq, all of whom back OPEC's policy of limiting supply to support prices, thus reducing the chance of cheating on OPEC production quotas, he said.

The Yards

Despite a spate of financial woes, Friede Goldman Halter, Inc. (FGH) appears to be back on track, with a host



Leevac Industries LLC of Jennings, La., recently delivered to Hornbeck Offshore Services Inc. the first Classed DP II PSV, HOS Innovator.

of recent contract announcements.

Halter Marine, Inc., the vessel segment of Friede Goldman Halter, Inc., signed a contract for the new construction of a 230-ft. (70.1 m) offshore supply vessel for Kim Susan, Inc. Construction, which is scheduled to begin in 30 days, will be completed for delivery in one year.

FGH was also awarded a contract from the U.S. Army Tank and Automotive Command (TACOM) for the detailed design and construction of a Logistic Support Vessel (LSV). The contract includes provisions for spare parts, technical services, and options to build two additional LSVs. The total value of the base contract is \$26.9 million, and could be worth upwards of \$78 million once the options are exercised.

Engineering and construction at the company's Halter Moss Point shipyard in Escatawpa, Miss., are scheduled to take about two years to complete. This project is expected to create approximately 75 new jobs at that yard.

The 313-ft. (95.4 ft.) LSV class vessels will have a beam of 60 ft. (18.2 m) and a molded depth of 19 ft. (5.7 m). They are designed to carry more than 2,000 tons of deck cargo, and will be designed and built to the requirements of the American Bureau of Shipping.

"We are extremely pleased that the U.S. Army has chosen Halter for this very significant program," said **Anil Raj**, COO of Friede Goldman Halter. "The government conducted a detailed review of our financial and technical capabilities before making this award. We appreciate the government's continued confidence in Halter's capabilities."

Halter has successfully completed numerous U.S. Army programs such as the Landing Craft Utility (LCU), the Large Tug (LT), and has already built all

six (6) of the LSV's currently in the Army's fleet.

The newly constructed LSVs will be based in Hawaii and Baltimore, Md.

With comments in regards to the company's recent financial struggles, Raj continued, "With the exception of the Petrodrill program where we had no choice but to curtail our losses, work on our other projects continues, and negotiations continue to secure even more work in each of our segments. In the recent past, we have delivered two Power-Generation Barges, an Expeditionary Series yacht, and the world's largest SWATH-hull vessel."

Leevac Industries LLC of Jennings, La., recently delivered to Hornbeck Offshore Services Inc. the first Classed DP II PSV, HOS Innovator. Upon delivery, the vessel began a three-year charter with Sonsub Inc. of Houston, Texas as a multi functional ROV Support Vessel. This vessel is the first of six DP II classed vessels to be delivered to Hornbeck Offshore during the next eight months. HOS Innovator measures 240 x 54 x 18 ft. (73 x 16.5 x 5.5 m).

The vessel features passive roll reduction technology, as well as active stabilization. It is certified to both USCG subchapter L (OSV) and I (Industrial Service) and is fully SOLAS for international operation.

Two Caterpillar 3516 B main engines produce 4,520 bhp. The mains drive two 96-in. Scana Volda CP propellers. Three CP tunnel thrusters (two forward and one aft) are provided by Brunvoll and produce 800 bhp each. Two Schilling "Fishtail" rudders, which may be operated independently, are designed to provide superior maneuverability and vessel control.

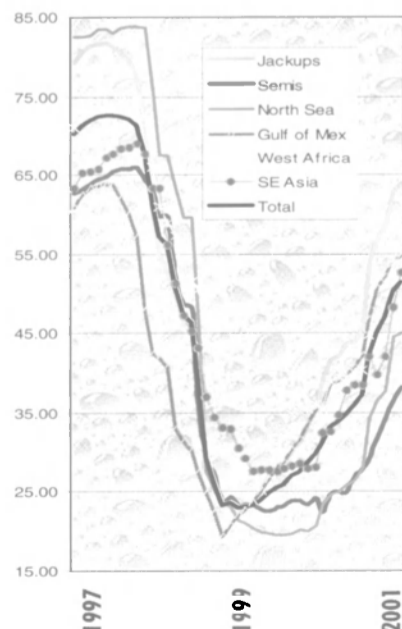
The new design offers optimum deck space and load capabilities, with a clear

GLM's SCORE Indicates Good Health

After peaking in 1997, the Asian financial fall-out, among other factors, conspired to drive the offshore oil business into a funk, as is clearly illustrated by the chart above. (Source: Global Marine's Summary of Current Offshore Rig Economics (SCORE) dating October 1997 to May 2001.)

In mid-June GLM reported that the May 2001 SCORE rose 2.1 percent from the previous month's SCORE, marking the 21st consecutive month-to-month increase for the indicator.

"Continued spending by the majors this year has tightened semi utilizations to the point that dayrates have been bid up to levels not seen in more than two years," said **Bob Rose**, Chairman, President and CEO of Global Marine. SCORE compares the profitability of current mobile offshore drilling rig dayrates to the profitability of dayrates at the 1980-81 peak of the offshore drilling cycle, when speculative new rig construction was common.

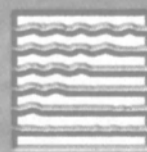


In your business, you don't have time for delays. That's why Coastel's unmatched reliability, crystal clear signal, and Gulf-wide coverage often mean the difference between profit and loss.

With a variety of options—from the **Communicator**, a personal portable phone, to the **Mariner**, a cellular system for the entire company—Coastel has a plan to suit your company's needs. Plus, we can offer these services at lower prices than our competitors.

Nobody does offshore business communications better. Nobody.

The Pulse of Business.



Coastel[®]
Offshore Cellular Service

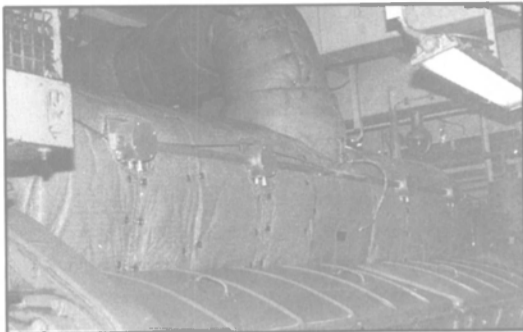
4549 Johnston Street • Lafayette, Louisiana 70503 • 337-989-0444 • 800-822-8400

Circle 29[®] on Reader Service Card

www.maritimereporterinfo.com



SUPERIOR ENERGIES INC.



TEMP-SET® INSULATION COVERS MANUFACTURING AND CONTRACTING

Removable Reusable Temp-Set Insulation Covers.
Manifolds, Turbos, Silencers, and complete Exhaust Systems.

- Reduce engine room temperature
- Lower engine room noise
 - Easy to assemble
- Coast Guard Compliant

ACOUSTICAL INSULATION
ASBESTOS ABATEMENT
TURN-KEY JOBS

Let us take care of all your
insulation and abatement needs

We accept MasterCard, Visa and Amex
WANT SUPERIOR QUALITY
WANT SUPERIOR SERVICE
CALL SUPERIOR ENERGIES INC.

1-800-BUY-SEI-1

P.O. Drawer 386, Groves TX 77619
Telephone: (409) 962-8549 Fax: (409) 962-4027
Website: www.insulationsei.com

Circle 278 on Reader Service Card
www.maritimereporterinfo.com

Gulf of Mexico Report

deck space area for cargo loading of 8,100 sq. ft. and a cargo capacity of 1,900 long tons.

Navigation equipment includes the IVCS 2000 DP system provided by Frank L Beier Radio Inc. Five more of these units have been slated for installation on the remaining HOS vessels under construction. The electronics suite selected by Hornbeck Offshore and installed by Beier offer the crew state-of-the-art tools needed to operate safely and efficiently. Other advanced technologies in this suite include radars providing real-time chart plotting software and touch-screen monitoring systems. The next of these state-of-the-art DP II vessels is due for delivery mid October 2001.

Conrad Industries in Morgan City, La., has logged its best quarterly results since 1998 in announcing that its net income for 1Q 2001 is \$951,000 for the three months ended March 31, versus net income of \$782,000 for the comparable quarter in 2000. Gross profit for the quarter was \$2.8 million, as compared to a gross profit of \$2.5 million for the three months ended March 31, 2000. In assessing the results, **William H. Hidalgo**, president and CEO, said "The vessel construction segment continues to remain competitive, but we believe that our strategies of managing our backlog to take advantage of favorable pricing trends and pursuing opportunities in our key niche product areas will continue to produce favorable results. We are currently in discussion and negotiations with various customers for vessel construction projects, and have learned that the U.S. Army is planning to purchase three additional ST Tugs, which have already been authorized and appropriated by Congress for approximately \$7.5 million."

Conrad is in the midst of a big facility expansion and enhancement, with the development of 52 acres of land in Amelia. The first phase of the development will start this summer, cost \$4 million, and include dredging a slip, bulkheading and partial construction of an infrastructure to support repair and conversion activities. An \$800,000 expansion of the Morgan City facility will increase capabilities

ties for pre-fabricated components and modular construction techniques."

Alabama Shipyard in Mobile, Ala., has entered into an alliance with Conoco wholly owned affiliate, Seahorse Shuttling and Technology LLC (Seahorse) and Samsung Heavy Industries of Korea to develop a design and construction plan that could have American-built shuttle tankers ready for service in 2004.

The approval of the use of FPSO vessels in the Gulf of Mexico (see *MR/EN* June 2001, Future Requirements for Shuttle Tankers in the Gulf, pg. 42) means that the demand for these vessel types will be high for the coming five to 10 years. Seahorse was formed by Conoco to provide crude oil storage and tanker shuttling services for new oil discoveries made by Conoco and other companies in the deepwater Gulf of Mexico. "Our previous successes with Samsung building the first generation of double-hulled tankers and our pacesetter ultra deepwater drillships are evidence of the companies' technological innovation," said **Rick Oshlo**, vice president and general manager of Conoco Supply and Trading. "We are pleased to add Alabama Shipbuilding to this long-standing relationship," Oshlo added.

The recent surge in offshore fortunes has even spurred the opening of a new construction facility, in anticipation of the overflow of demand, which can be expected in a strong offshore oil market.

Kiewit Offshore Services, Ltd., a unit of Peter Kiewit Sons', Inc. of Omaha, Neb., is building a state-of-the-art offshore fabrication facility in Ingleside, Texas, near Corpus Christi. The new yard is being built on a 400-acre parcel along the La Quinta Channel, providing unrestricted deepwater access to the Gulf of Mexico. The yard is currently under construction and will be ready to start performing fabrication services in June 2001. The KOS facility is expected to create 800 to 1,000 jobs.

Said KOS President, **Myron Rodrigue**: "We expect to successfully compete in the offshore fabrication arena, especially on large, complex deepwater projects. Our greatest assets are our people, our cohesive team and our commitment to safety, quality and productivity." He added that a team of seasoned Kiewit employees, who have worked together in the offshore industry, will manage the new KOS facility.



INTERCON

COUPLER SYSTEMS
for ARTICULATED TUG-BARGES

- INNOVATION
- EXPERIENCE
- QUALITY

NICOLE LEIGH REINAUER
RTC 135

For more information
on Intercon's ATB
connection technology,
contact:

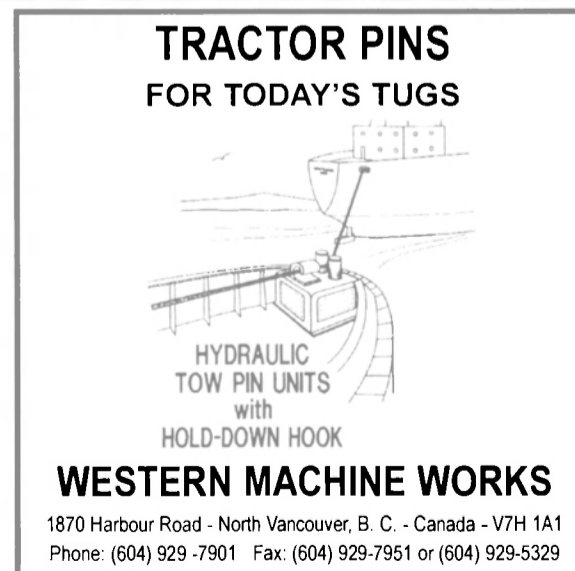
INTERCONTINENTAL
ENGINEERING - MANUFACTURING CORPORATION

P.O. Box 9055
Kansas City, Missouri 64168
phone (816) 741-0700
fax (816) 741-5232

www.intercon.com

Circle 243 on Reader Service Card

www.maritimereporterinfo.com



**TRACTOR PINS
FOR TODAY'S TUGS**

HYDRAULIC
TOW PIN UNITS
with
HOLD-DOWN HOOK

WESTERN MACHINE WORKS

1870 Harbour Road - North Vancouver, B. C. - Canada - V7H 1A1
Phone: (604) 929-7901 Fax: (604) 929-7951 or (604) 929-5329

Circle 288 on Reader Service Card

www.maritimereporterinfo.com

Owners ... Start Counting The Cash

The much anticipated turnaround in the Gulf of Mexico Oil Patch is happening, and the companies that supply boats and services in the area are feeling the impact.

Consolidation has touched every facet of the marine business — every facet of business — for nearly a decade. Following the economic slow-down and resultant "weeding out of the weaklings" in the early 1990s, a new business plan stressing size and economic resource emerged. The plan, obviously, has not worked universally, as some companies overextended just as the market came crashing down in 1997. Today, for better or worse, a handful of enormous companies reign over the business of owning and operating vessels and rigs in the Gulf of Mexico region.

Seacor Smit is perhaps the best example of controlled growth and adhering to a solid business plan — in times good and bad. Led by **Charles Fabrikant**, the company has amassed one of the world's largest fleets of diversified marine support vessels primarily dedicated to supporting offshore oil and gas exploration and development in the U.S. Gulf of Mexico, offshore West Africa, the North Sea, Mexico, the Far East and Latin America. The company announced net earnings for the first quarter ended March 31, 2001 of \$12,134,000 on revenues of \$93,200,000.

Operating revenues were up \$4.9 million, or 5.5 percent, from 4Q 2000 due, primarily, to increases in the size and rates per day worked of the company's offshore fleet. In the first quarter, Seacor continued its expansion tradition and acquired 17 mini-supply, 11 utility, two towing supply and one supply vessel. Also in the first quarter, it sold three utility and three crew vessels, and removed three standby safety vessels from

service to be held for sale.

Seacor, however, saw drydock expenses rise \$1.6 million due to an increase in the number of large supply, towing supply and anchor handling towing supply vessels put through survey. Twenty-six vessels were drydocked in 1Q 2001, compared to 19 in 4Q 2000. 1Q 2001 results were positively impacted by \$947,000 of income from Chiles Offshore Inc., a drilling rig affiliate, whose profits improved parallel with strong demand for offshore contract drilling services.

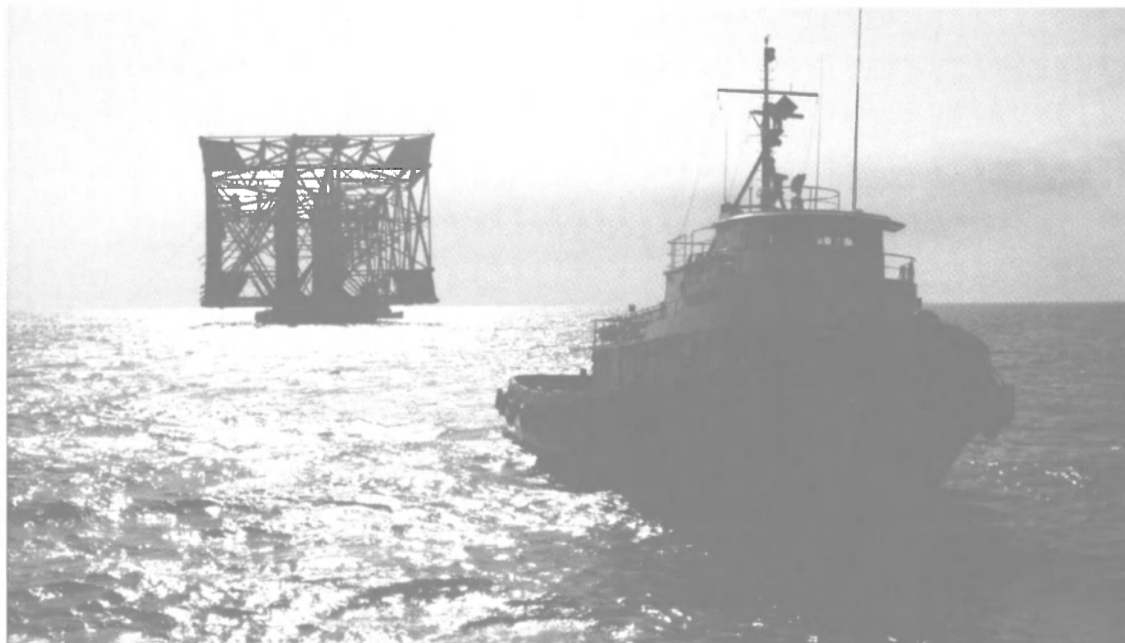
Ft. Lauderdale-based Seabulk International (formerly Hvide Marine Intl.) continued on the road to recovery by announcing a net loss of \$7.2 million versus a net loss of \$12.9 million during the year-earlier period. While a loss may hardly seem like a gain, Seabulk said that revenues were up four percent (versus the year-earlier period) to \$81.4 million, and that operating income hit \$8.4 million versus \$2 million in the 2000 first quarter.

"We had good results in what is traditionally our weakest quarter," said **Gerhard E. Kurz**, president and CEO. "While we have not yet achieved bottom-line profitability ... we did post solid quarter-over-quarter gains." He noted that Seabulk Offshore is benefiting from rising rates in the worldwide offshore energy support market.

while Seabulk Tankers is in a strong position in the domestic product tanker market. Seabulk Offshore saw its revenues leap 26 percent to \$43.2 million, or 53 percent of company revenues. Supply boat day rates in the Gulf of Mexico averaged \$6,946 for the

I am cautiously optimistic that 2002 will be a good year, although any prediction that looks out more than one year has to be a guess ... My nightmare is the U.S. and global economy. Why, I ask myself, be optimistic when the United States appears to be entering a recession? ... The answer is Natural Gas.

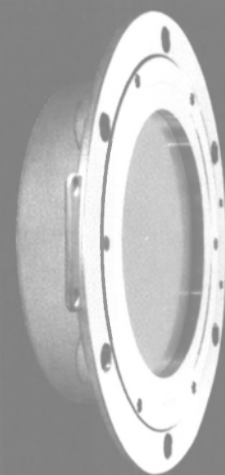
*Charles Fabrikant,
Chairman of the Board,
Seacor Smit, in his annual
letter to shareholders*



(Photo credit: Crowley Marine)

"Now with leak detection"

**THE
RADAR**



Smart Radar Level Sensor with Generic RS485 Output

The first flat array antenna for liquid tank gauging. This software driven array allows for each sensor to remotely configure itself for the type of product as well as the structural characteristics within each tank. It is completely self-diagnostic and is factory calibrated using a laser interferometer to .1mm. It is designed for the harshest environments and can be provided in a high temperature version to 385°F. It is intrinsically safe with Class 1, Div. 1, Group D & C approvals. As a smart sensor, all processing calculations and software are resident in the device itself, only a high level generic data output, i.e., RS485 (or others on request) is sent to the cargo control area.

Options:

- Multiple alarm set-points
- Temperature • PV Pressure • I.G. Pressure
- Tank Management Software
- Automated draft and trim

Call today for more information!



ELECTRONIC MARINE SYSTEMS, INC.
800 Ferndale Place
Rahway, NJ 07065

732.382.4344
732.388.5111 fax
emsmarcon@aol.com e-mail
http://www.emsmarcon.com

Circle 226 on Reader Service Card
www.maritimereporterinfo.com



DEUTZ Power For A World Class Performance

The 1015M Series

- ▶ Water-cooled Four Stroke V6 & V8 Engines From 364 To 590 HP
- ▶ Compact Design & Low Engine Weight Drastically Reduce Installation Costs & Space Requirements
- ▶ Water-cooled Turbocharger And Exhaust Manifolds Greatly Increase Engine Room Safety And Reduce Operating Noise Level & Radiated Heat
- ▶ Extremely Low Operating Costs Due to Low Fuel & Oil Consumption
- ▶ Easily Accessible Service Points Provide Simple & User-friendly Maintenance Operations
- ▶ Fully IMO Certified
- ▶ Outstanding Product Support With Over 1500 Locations Worldwide & Certified Expertise In DEUTZ Know-how
- ▶ Visit Us Today At www.deutz.com For More Detailed Information
- ▶ 24 Hrs Emergency Parts & Service Information Call 1-800-241-9886

“We Move Your World”

Circle 223 on Reader Service Card

www.maritimereporterinfo.com



3883 Steve Reynolds Blvd Norcross, GA 30093
Tel: 770-564-7100 Fax: 770-564-7222

Gulf of Mexico Report

quarter, or nearly double that of year-ago levels. In West Africa dayrates averaged \$6,325, and in Southeast Asia they averaged \$5,347, 19 and 33 percent gains respectively.

The company currently operates a cumulative fleet of 207 vessels in its off-shore, tanker and towing business lines.

Tidewater, another of the area's major vessel-owning players, announced 4Q (ending March 31, 2001) net earnings of \$29.3 million on revenues of \$174.5 million. By comparison, net earnings in the quarter immediately preceding were \$22.3 million on revenues of \$159.1 million, and last year's 4Q earnings were \$19 million on revenues of \$139.6 million. For the year ended March 31, 2001, net earnings were \$86.1 million on revenues of \$616.7 million, versus net earnings of \$76.6 million on revenues of \$574 million for the year previous. The company owns and operates 570 vessels, the world's largest fleet of vessels serving the global offshore energy industry. Galliano, La.-based Edison Chouest Offshore (ECO) has announced plans to continue its newbuilding program, which has already produced more than 50 new generation offshore vessels servicing the deepwater oil and gas industry. The company is adding six 260-ft. (79.2-m) deepwater supply vessels, a pair of 165-ft. (50.3-m) fast supply vessels, and the conversion of an existing vessel into the largest offshore supply vessel on the U.S. march, and the construction of the largest anchor-handling vessel in the world. The company's affiliate shipyards will perform all construction and conversion, with the first 260-ft. deepwater supply vessel delivered in January, and the two 165-footers expected in 2001.

North American Shipbuilding is converting the Margaret B. Chouest — the largest vessel in the fleet at 320 ft. (97.5 m) — into the largest offshore supply vessel in the U.S. market. It was built in 1995 as a container/cargo vessel.

The recordbreaker of the newbuild will be the construction of the 347-ft. (105.7 m) long, 6,500-dwt anchor handling vessel. The vessel will be equipped with the largest winch system ever installed on an anchor handling vessel in the world, producing a 600-ton pull. The vessel will offer an installed power rating of 30,000 hp and will be capable of operating in depths up to 12,000 ft.

Privately owned Crowley Maritime Corporation, based in Oakland, Calif., has embarked on two new business opportunities. Based on its long service and commitment to the oil industry — Energy Logistics and Project Management services group both based in Houston, TX, will incorporate all of Crowley's expertise in servicing the needs of

Energy Operators. Crowley's Energy Logistics group assists customers in the set-up and operation of their logistics during various stages of their E&P program. This could range from supporting a 1 to 2 well exploration drilling effort or a larger field development program; to supervision of crude offloading and

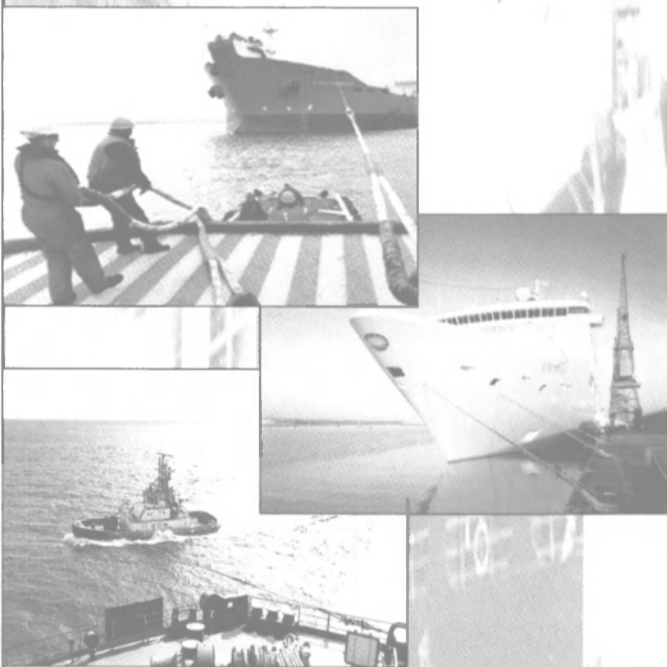
marine transportation. Current customers include majors such as BP and Repsol, independents including Presence and CGX, and contractors such as Heerema, R&B Falcon (TransOcean) and Noble. Crowley's Energy Support Services is designed to address challenges inherent in today's energy indus-

try, including:

- Exploration and Production (E&P) that is taking place in increasingly remote areas with limited access to infrastructure
- The economic challenge from increasing field development costs and volatile petroleum product prices.

The Preferred Connection

Marlow Ropes, an approved ISO 9001 company, is recognised as one of the world leaders in synthetic rope design and production. Extensive research into fibres and constructions has resulted in products surpassing the exacting demands of mooring, towing and offshore exploration applications.



Our extensive range of high performance fibre ropes are available in a size range up to 40" circumference. Constructions available include 8 and 12 strand, Doublebraid and Superline circularbraid.

To find out more about products such as our Steelite uhmp range and our TQ12 roundline range, contact our head office directly or alternatively our US distributors: CWC (West Coast), Atlantic Cordage (East Coast).

All offshore exploration enquires please contact direct.

For further information contact:
Marlow Ropes Ltd, Hailsham,
East Sussex
BN27 3JS, UK

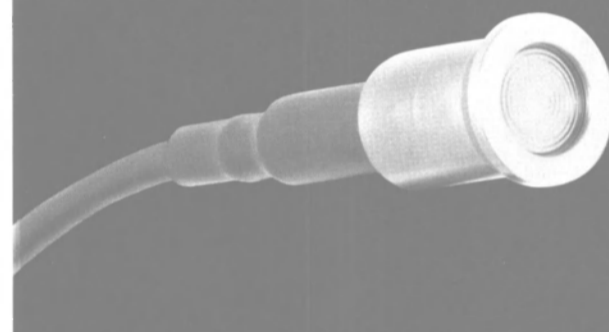
Tel: +44(0)1323 847234
Fax: +44(0)1323 440093
email: marine@marlowropes.com
www: www.marlowropes.com

Marlow
ROPES

Circle 312 on Reader Service Card
www.maritimereporterinfo.com

www.maritimetoday.com

"Now with
leak detection" **THE**
BALLAST



Smart Strain Gauge Level Sensor with Generic 4-20mA Output

Use one sensor for all shipboard
liquid levels

This technology has been designed specifically for surviving the rigors of ballast tank continuous monitoring. It weighs less than 2 oz. and is constructed from 100% pure titanium.

- It's the size of your thumb
- Accuracy .25% of full scale
- 100% Titanium
- Weighs less than 2 oz.
- ABS/USCG/Lloyds approved
- FM Class 1, Div. 1 Intrinsically Safe
- Removal without tank entry
- No mercury or other contaminants
- Interfaces to your existing monitoring system
- One sensor for all shipboard liquids: fuel oil, lube oil, fresh water, black water, etc.
- Generic 4-20 mA output
- Used in 15,000 tanks worldwide

Many Options

EMS

ELECTRONIC MARINE
SYSTEMS, INC.
800 Ferndale Place
Rahway, NJ 07065

Call today
for more
information!

732.382.4344
732.388.5111 fax
emsmarcon@aol.com e-mail
<http://www.emsmarcon.com>

Circle 227 on Reader Service Card
www.maritimereporterinfo.com

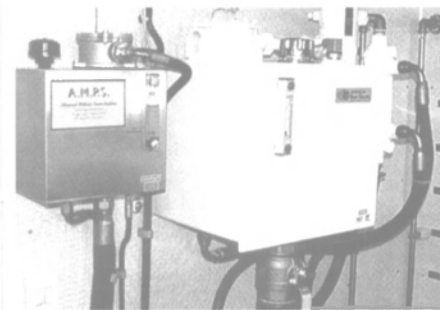
Trico Marine Acquires Two Large PSVs

Trico Marine Services, Inc. signed a definitive agreement to acquire two 279-ft. (85 m) platform supply vessels for approximately \$4.4 million. The two state-of-the-art, UT 745 design vessels

are currently under construction in Norway and are slated for delivery in April and August 2002. Payment terms for each of the vessels call for payments equal to 20 percent during construction and 80 percent upon delivery. "The UT 745 vessels, which are equipped with DP2 (dynamic positioning) systems, are

among the largest, most technological-ly advanced platform supply vessels available in the industry today," said **Thomas E. Fairley**, president and CEO. "The addition of these two vessels to our fleet enhances Trico's ability to service both the North Sea market and the growing deepwater market worldwide."

AMPS Provides The Power



The AMPS generators is designed to run cooler and more efficient than their diesel counterparts, the supplied hydraulic pump and fluid reservoir can be used to run other hydraulic systems onboard a vessel.

Advanced Modular Power Systems (AMPS) is the largest manufacturer of hydraulically driven generators, producing approximately 100 units per month in the range from 6 to 30 kW. The marine generators are known as the CruiseGen, and currently there are 6,000 units in service. The AMPS hydraulic AC generators are designed to provide advantage over traditional diesel powered generator systems. For example, hydraulics reportedly allow the generator to spin at a constant rpm, even with variable engine speeds and loads. In most applications, AMPS hydraulic generators provide clean, quality power from engine idle to engine redline. The company said the units are more dependable, run cooler and less expensive, and take up less space than traditional diesel powered generators. The hydraulic pump and fluid reservoir are provided with AMPS generators, thus with the help of flow control valves, other hydraulic systems onboard may be run off of the same system as the AMPS generator.

Circle 44 on Reader Service Card

Thompson Paves The Way

Thompson Engineering is a 48-year-old company that is involved in multi-disciplined engineering design, environmental consulting, construction management, construction inspection and materials testing. The company had revenues of \$20 million in FY 2000. Thompson has strong ties to the marine market, and offers a full range of services such as field landside and marine geotechnical services, marine hydrographic surveys, and specialized and chemical laboratory analyses on samples from dredge sites. Thompson has worked to bring several of the GOM area's leading projects to fruition, including a full range of projects for the Coflexip Stena Offshore Pipe Fabrication Facility. It also designed a 40,000-sq.-ft. manufacturing building, as well as a launch facility at the new Austal Shipbuilding facility in Mobile, Ala.

Circle 42 on Reader Service Card

CITIS 2001 Award: Highly Commended



@SEA (mail) 2000

fast-easy-reliable satellite communications

Satellite e-mail with Internet, fax & telex delivery **easier-to-use and improved** user interface.

Features:

- Mailbag compression
- HSD support
- Full duplex
- LAN support (POP3/SMTP)
- Works over Inmarsat (A, B, M, Mini M & M4)

Possibility of **automated cost allocation** to control costs.

Networked version for on-board multi PC operation available soon.

Runs under Windows™ 95, 98, 2000, NT4.
Support for all MAPI compliant e-mail clients.
For non-Outlook users we provide an Outlook compatible e-mail client.



- Argentina
- Belgium
- Caribbean
- Croatia
- Cyprus
- Denmark
- Germany
- Greece
- Hong Kong
- India
- Italy
- Japan
- Lebanon
- Mexico
- Mongolia
- Netherlands
- Norway
- Portugal
- Romania
- Sharjah
- Singapore
- South Africa
- Sweden
- Turkey
- UK
- USA
- Venezuela

Global 64 kbit/s HSD service for back-up and fast data transfer

Connected using Inmarsat-B HSD service of e.g. France Telecom offered through SAIT-RadioHolland High Speed Data for Internet search/consultation, e-business and e-commerce, file transfer, e-mail, ... For use on sea and on land

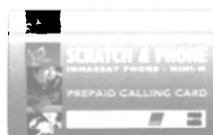
In addition to being an Accredited Accounting Authority, SAIT-RadioHolland

offer highly attractive airtime rates for use with the Inmarsat system through preferred LESOs (Land Earth Station Operators): DeTeSat, MVS, Inc. & France Telecom To find out more, contact our customer service department.



Scratch & Phone

cards with dialler
For fraud free and hassle free crew calling SAIT Scratch & Phone cards are available from France Telecom & MVS.



Contact our customer service department for the reseller nearest you.
tel: +32 70 233 220 fax: +32 2 332 3327
e-mail: custsrv.coms@saitrh.com web: <http://www.saitrh.com>

Circle 265 on Reader Service Card

www.maritimereporterinfo.com
www.maritimetoday.com

Satellite Communications

Back in Business — Iridium Returns Under New Ownership



Gino Picasso,
CEO Iridium

When Iridium, the \$5 billion satellite company, fell into bankruptcy on March 18, 2000, it went down as one of the costliest corporate fiascoes of all time. More than one year later, Iridium is back in business, though under completely new ownership. Iridium raised a few eyebrows and a fair share of skeptics with its decision to launch its global satellite

communications services. How could the new company prosper when the previous one — using the same technology had failed? Enter Gino Picasso, the company's CEO. Up front and honest, Picasso says that the new Iridium is no pipe dream. Speaking via telephone from a restaurant near Iridium's Tempe, Ariz. offices, Picasso shared his visions and ideas with MR/EN regarding the future of the new company.

By Regina P. Ciardiello, senior editor

On Wednesday, March 28, 2001 Iridium Satellite LLC called members of the media and the satellite communications community to a press conference in Washington, D.C. announcing its return to the satellite communications market. Subsequent to more than three months of quality assurance testing, Iridium expressed that its gateway was fully operational out of Tempe, Ariz. — making the commercial launch of its global satellite communications a reality. Many probably wondered, "Was this the same Iridium that filed Chapter 11 almost a year to the date of its re-launching?" But ask the company's CEO **Gino Picasso**, and he will say that the differences between the old and the new companies are like night and day.

"The fact that the current satellite system was purchased for \$25 million — rather than \$3.5 billion gives us a huge cost advantage," Picasso said. "The total monthly operating costs for the company are less than one-tenth of the original Iridium."

The advantage of the new Iridium is straightforward. Since the company had already established a satellite system, it did not need to start from the ground up. The systems were already in place and were just waiting for Picasso and his team to work the technological ideas into the fray. Not to mention the fact the new Iridium already has committed, signed contracts from the U.S. Department of Defense, as well as 13 service provider agreements, who are offering worldwide distribution capabilities. These non-exclusive agreements, which were signed even before Iridium launched its services, enable the providers, namely GEOLINK, Marconi Marine, Stratos and Infosat Telecommunications, to sell Iridium's services to industrial and government markets.

With a business plan in place, the company, whose Satellite Network Operations Center is currently located in Leesburg, Va., brought highly regarded Boeing Company into the mix for technical support. Boeing's involvement in the new Iridium entails all engineering,

technical, operations and maintenance support for the system that includes 66 operational satellites, as well as seven spares in orbit. Iridium also has gateway operations out of Tempe, Ariz. location, and in Hawaii, which handles the services for the U.S. Department of Defense. According to the company, the multi-year fixed contract with Boeing, all marketing and promotional expenses and Iridium Satellite's LLC debt service on the closing note to Iridium LLC, who is the previous owner of the satellite system, will not exceed more than \$7 million per month. This plan represents a significant decrease of the original Iridium's operating expenses, thus giving the company more leeway in terms of pricing and break-even threshold.

No Pipe Dreams Here — Only Reality

"Why are we going to succeed — because we are able to," Picasso said. "The numbers add up and they are compelling — there is no doubt in my mind that we will break even."

According to Picasso, already one-third of Iridium's services are contractually committed — demonstrating that there is a demand for this type of service. "There's no market to prove when the market is already there," he said.

Picasso is referring to the company's focus on government and industrial users who have a proven track record of satellite phone utilization in remote areas — areas such as heavy construction, defense/military, maritime, oil and gas, and aviation. Picasso hopes that the mix of intelligent marketing strategies, new technology, a system that is the only truly mobile and global one available, as well as a cost-effective pricing will lead Iridium into the forefront of the satellite communications market.

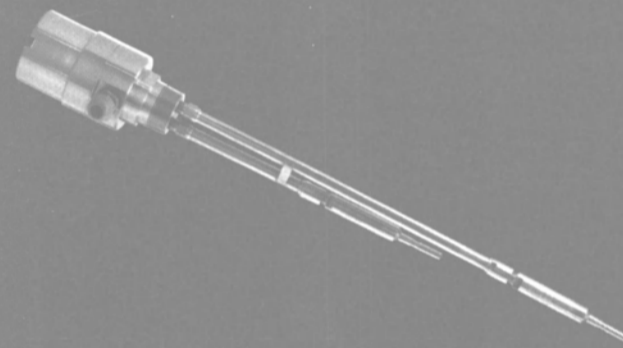
According to Picasso, the company will target the vertical markets, (marine, aviation, oil and gas, etc.), as well as more broad-based groups, proving Iridium is "more than just a cell phone company" offering cost-effective, easily portable phones for half the price of its competitors. "Which would you rather do, carry a lap top or a small phone that fits into your hand," Picasso said. "With other models you have to set up an antenna and walk and talk at the same time - the Iridium phones don't require this."

The new Iridium phones are not bulky and awkward to handle, and the company's 9505 handset is touted as the smallest satellite phone available. Measuring 158 x 62 x 59 mm, the 13.2 oz phone is expected to retail at approximately \$1,500, including accessories, and will be available for purchase in August 2001. Specialty equipment geared to address the needs of maritime customers is also offered, mainly Iridium's Fixed Mast Antenna, which is marine rated for permanent vessel or building mounting and provides optimum

reception for all of the company's satellite products.

Estimated costs (which are set by Iridium's service providers) for the satellite Series 9500 are less than \$1,000 and airtime rates are expected to steady at

THE SEA SWITCH TWO



Smart Electronic Level Switch with No Moving Parts

The Sea Switch Two was designed and patented for all tank applications. The Sea Switch Two offers a reliable solution for liquid level detection and control for cargo, ballast, and storage tanks, without any moving parts.

The Sea Switch Two uses a fully static system that is based on the propagation of an acoustic wave into a metallic rod. A piezo-electric sensing element produces a wave along the rod. As the liquid reaches the sensing element the oscillation stops and the alarm is activated.

The Sea Switch Two sensor detects high, high-high, or low level in any liquid with an alarm output given by a dry contact or current loop change 6-18 mA.

- Easy installation • Self-test built-in
- Fully static system — no moving parts

EMS

ELECTRONIC MARINE
SYSTEMS, INC.
800 Ferndale Place
Rahway, NJ 07065

732.382.4344
732.388.5111 fax
emsmarcon@aol.com e-mail
http://www.emsmarcon.com

Call today
for more
information!

Circle 228 on Reader Service Card
www.maritimereporterinfo.com



© 2001 Inmarsat Limited. In certain countries regulatory restrictions may apply.

Take remote control of your fleet.



A Division of Mackay Communications

Maritime services

Highly competitive markets demand highly effective communications solutions. For a successful maritime trading operation, this means keeping in constant contact, wherever your fleet is operating. Via Inmarsat. Via the same reliable network that's provided the satellite component of the Global Maritime Distress and Safety System since 1979. A truly integrated global network for voice, fax, e-mail and internet, enabling the cost-effective co-ordination and monitoring of vessels anywhere in the world. To take remote control of your fleet, zap to the website below.

www.mackaycomm.com



www.inmarsat.com

Circle 252 on Reader Service Card

www.maritimereporterinfo.com

Satellite Communications



Iridium's 9505 model is touted as the smallest satellite phone available.

\$1.50/per min. — with no additional long distance, roaming or zoning charges.

As Picasso and his team fully realize, trying to shoe-horn the same old product to a market that rejected it some 12 months earlier would be a mistake. Thus, the new company, realizing the diversity of needs in the maritime realm, but

understanding the core desire for seamless communication, increased data capability, innovative add-on services and, of course, affordable cost, bringing to the table innovations it believes will make it a success.

The company plans to keep on the cutting edge of technology, and predicts that it will provide short burst messaging service within 12 months' time.

Launched in June 2001, Iridium's data and Internet services are viewed as crucial for remote mobile telecommunications. Iridium's dial up data capability provides connectivity to corporate data users at 2.4 kpbs, while the company's direct-Internet data services provides a connection at 10 kbps - providing a quick connection even to those based on an oil rig located offshore Gulf of Mexico. Even more attractive is the company's data services are included with voice telephony charges — all for the same price of \$1.50 per/min.

Head of the Table

While Picasso may sit at the head of the Iridium helm, he is quick to credit his colleagues, whom he describes as technology driven — specifically **Dan Colussy**, Iridium's chairman. Colussy, who this past December, along with a group of private investors purchased the assets of Iridium LLC, had a tremendous vision in seeing to it that the Iridium got off the ground. "Dan pulled together the investors (Boeing, Motorola), which is nothing short of phenomenal," Picasso said. "With the business structure in place, the hardest part is done — all the parts and pieces finally come together."

As for himself, Picasso sees his position at Iridium as the greatest opportunity that he has ever experienced. Referring to his tenure at Iridium as "absolutely extraordinary," Picasso said. "Personally speaking, my career ambition has been met by seeing this (Iridium) through — it's a perfect match," he said. "While it's a tremendous undertaking and a tremendous innovation, I am absolutely satisfied."

A seasoned technological "guru," Picasso's resume proves that he is capable of driving Iridium higher into the sky. Boasting more than 20 years of experience within the telecommunications and international satellite networking arena, Picasso was previously president and COO of Ace*Comm Corpora-

tion, a provider of support systems (OSS) software to telecommunications service providers. While there, he directed and expanded global sales, increased the company's profitability, while streamlining and reorganizing operations ensuring the company's place in real-time data warehousing and infor-

mation delivery systems crucial to future communication network operators.

Picasso also spent a few years at General Electric Company, where he held a variety of positions at GE Capital Spacenet Services, GE Americom and GE Communications Services. As president of GE Spacenet, Picasso managed

Want to be a marine operations specialist?

Didn't think so.



Bahamas Fast Ferries

Moving people through paradise—a *very* tough job that *someone* has to do, daily.



Caesars The Glory of Rome

Marine services for the world's largest riverboat casino—definitely *not* all fun and games.



The Belle of Louisville

How's *this* for a special marine challenge—a National Historic Landmark with an aggressive excursion schedule.

Our clients do their thing...

- inter-island transportation/charters
- gaming
- historic vessel excursions

and we do ours...

- critical analysis and solutions
- strategic planning
- assumption of operational responsibility for owners/operators



HORNBLOWER

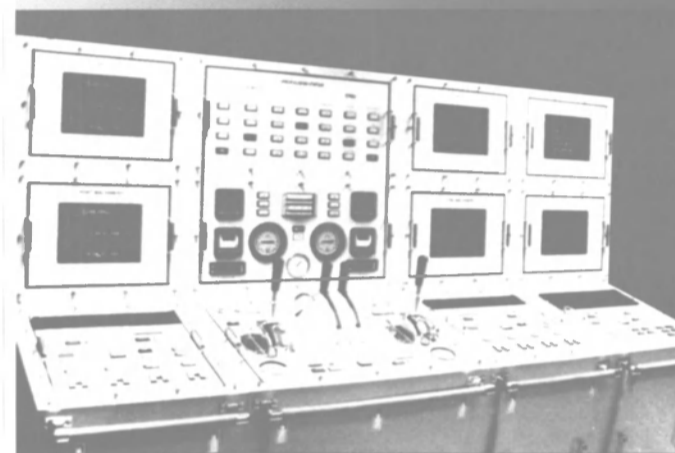
MARINE SERVICES

www.hornblowermarine.com

For more information on Hornblower marine management and consulting services, please contact our corporate office at: 115 E. Market Street, New Albany, Indiana, 47150. Phone (812) 218-9570 FAX (812) 218-9571.

Circle 238 on Reader Service Card
www.maritimereporterinfo.com

BIG GREEN



Dual engine room design shown above

A Breakthrough Technology in Console System Design!

Lightweight, modular console systems replace the hard-wired embedded technology. These systems permit the console to be the last item placed in the control room and walked through a standard marine door frame.

- ACCU certified shown above.
- Data buss monitoring and control drastically reduces wiring to the EOS.
- Modular designs which are assembled in place.
- No single piece weighs more than 25 lbs.
- Easy disassembly for maintenance or upgrade.
- Fail-safe redundant CPU's and displays for each of 3 main sections.
- Software and hardware "mimics".
- ABS and USCG approved for all levels of manning ACC, ACCU, ABCU.
- Port, STBD, and auxiliary section from left to right.



ELECTRONIC MARINE SYSTEMS, INC.
800 Ferndale Place
Rahway, NJ 07065

Call today for more information!

732.382.4344
732.388.5111 fax
emsmarcon@aol.com e-mail
<http://www.emsmarcon.com>

Circle 229 on Reader Service Card
www.maritimereporterinfo.com

Satellite Communications

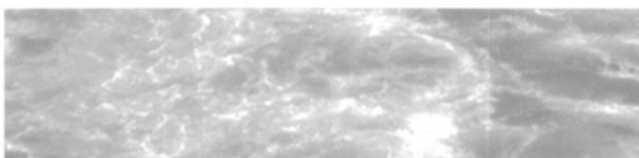
Xantic: New Look, New Name... More Service

Part of the curse of corporate consolidation comes in the combining of or complete re-naming of the new entity. The quandary: maintaining critical market awareness of individual brands while adequately communicating the entirety of the new organization's capabilities. Such was the problem facing the new company comprised of Station 12, Telstra Global Satellite and SpecTec.

The Netherlands-based Station 12 has been one of the acquisition leaders on the satellite communication fronts, a role that the newly named company — Xantic — promises to continue. "Future consolidation is coming, as margins are (still) very tight, and there is the need to drive volume very high," said Rune Martini, Xantic's vice president of the Americas and Northern Europe. Previously, Martini was managing director of SpecTec Group's operations in America.

Xantic today offers a portfolio of satcom-based solutions that will now include broadband and IT. While the name may be new to the marine market, the company's experience spans more than 90 years, with its heritage traced back to Scheveningen Radio, a radio telegraphy service that was designed to keep ships' crews in touch with their owners. The company, by its own estimations, owns 25 percent of the world market in delivering mobile satcom services via the Inmarsat platform. In 2000 it boasted revenue of \$250 million, supporting 700 employees and 29 offices worldwide. It was scheduled to open its Houston office on July 1, in order to adequately service its quickly expanding business in the oil and gas industries in the Gulf of Mexico region.

It provides global service through land earth stations in Burum, The Netherlands; and Perth, Australia, providing what the company dubs C3AT: Connection, Content, Consultancy, Applications and Transaction services for both



maritime and broadband oriented businesses.

"Total Solution Provider" is a description bandied about by many companies today, from manufacturers of heavy equipment to service providers, but the moniker seems particularly appropriate for Xantic given the depth and breadth of its offerings.

Recent strategic moves include a strategic partnership with Innovative Communications Technologies, Inc. (ICTI), which allows Xantic to take advantage of ICTI's Inmarsat Capacity Expander (ICE) technology. ICE, in essence, allows for higher capacity and faster speeds. Xantic also introduced a new messaging system dubbed AmosConnect, a system that integrates ship-shore-ship communications into one platform.

Circle 50 on Reader Service Card

to raise the company's growth in revenues four-fold in just three years.

All the while, Picasso thought about (the former) Iridium, which at the time was just starting up. The ideas and innovations were in place, but many skeptics theorized (as it turns out correctly), that it wouldn't work.

Picasso, however felt otherwise. Ironically, Colussy and his investors contacted Picasso, who had by then moved over to Ace*Comm, and invited him to share in their vision for the new Iridium. While he was more than satisfied during the year-and-a-half that he was with ACE*Comm, Picasso felt that the invitation to lead Iridium was too good to pass up. "The opportunity to make an impact on the world of communications goes beyond anything that I could ever have imagined," he said. "Just the impact that it makes on our civilization alone is unimaginable."

Picasso predicts that within the next couple of years, it will be proven to the world that satellite communications is a great value. The company is already planning to launch seven additional spare satellites in 2002. But, what happens after that?

"In three or four years, I would like to bring satcom to areas that had not been serviced previously," Picasso said. "I am confident that we can do that because we don't have to create a new market. The technology is there and we can accomplish this by melding together new markets with new technology."

Furuno Launches New Inmarsat B Terminal

Furuno has introduced Felcom 82 - its highly advanced Inmarsat B ship-borne terminal for vessels requiring steady, high quality worldwide communication.

The communication unit, which is based on new components, provides an overall range of INM-B communication services, such as high quality two-way duplex telephone (voice), Telex, Telefax, e-mail via Internet as well as Distress and urgency communications. Up to eight additional telephones, as well as PABX, can be connected to the communication unit. The NBDP telex includes a new 10.4-in. TFT color LCD display terminal, which also enables interactive view of the communication unit status. A digital interface by IEC 61162 is available for position, heading and other relevant data in addition to L-Band DGPS correction signal output.

Circle 13 on Reader Service Card

A GENERATION OF RELIABLE COMMUNICATIONS AT SEA

Nera has led maritime communications since 1919 and is the world's leading satellite equipment manufacturer. Nera WorldPhone Marine and Nera Saturn Bm provide secure satellite communications at sea.

Nera WorldPhone Marine

- Cost effective telephone service
- Telephony, fax and data (2400 bits)
- Easily installed below deck unit
- Small Gyrostabilized antenna to secure stability in all weather conditions
- Flexible and self-explanatory menu

Nera Saturn Bm

- Bi-directional fixed global communications system
- Telephony, fax, telex and data (9.6 and 64 kbps)
- Auto-polling for real-time information
- Navigational, safety and meteorological features

The sea does not accept compromise and neither should you.

Just one call to Nera — that's all you need.
Tel: +47 67 24 47 00 Fax: +47 67 24 46 21
e-mail: saturn@satcom.nera.no
www.satcom.nera.no



Nera WorldPhone Marine antenna



Nera Saturn Bm antenna

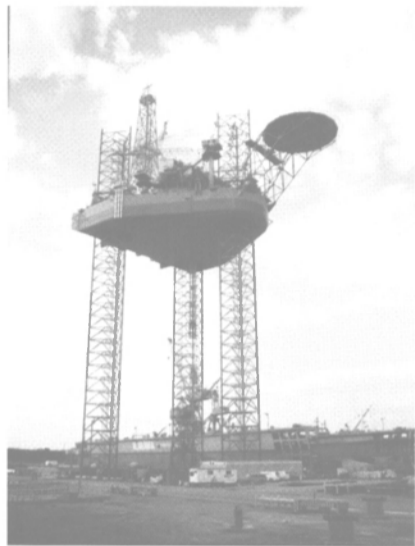
CHANGING THE WAY WE COMMUNICATE



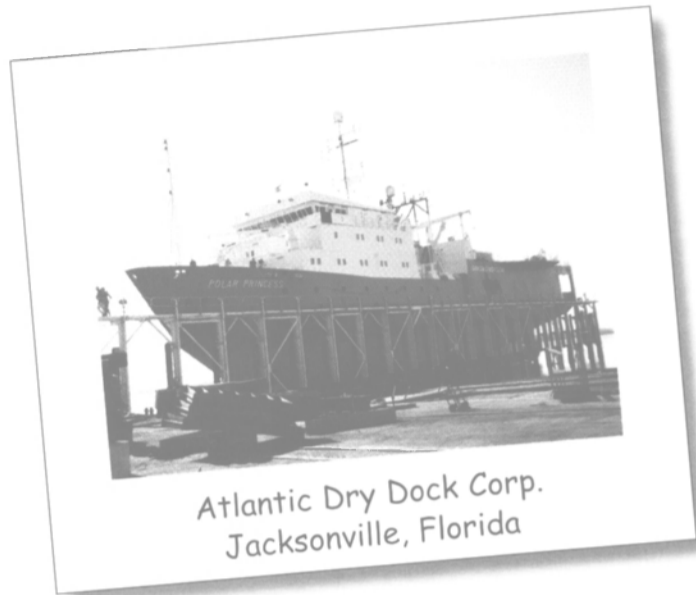
Circle 258 on Reader Service Card

www.maritimereporterinfo.com
www.maritimetoday.com

Offshore Specialists...



Atlantic Marine-Mobile
Mobile, Alabama



The Atlantic companies are known throughout the world for quality workmanship, on-time delivery and competitive pricing. If you have a repair, upgrade, conversion or newbuilding project approaching, we can help. Call us to discuss your offshore projects.



Alabama Shipyard
Mobile, Alabama



Atlantic Marine, Inc.
Jacksonville, Florida

Atlantic Marine, Inc.
New Construction
Atlantic Dry Dock Corp.
Repairs & Conversions

8500 Heckscher Drive
Jacksonville, FL 32226
Tel: (904) 251-1545
Fax: (904) 251-3500
jaxsales@atlanticmarine.com



Website:
atlanticmarine.com

Atlantic Marine-Mobile
Repairs & Conversions
Alabama Shipyard
New Construction

660 Dunlap Drive
Mobile, AL 36652
Tel: (334) 690-7100
Fax: (334) 690-7107
ammsales@atlanticmarine.com

Maritime Communications

MariTel Launches New Marine Telephone Service With Vessel Location

The owner of a small inland tug company has no choice but to come in to the office every Saturday morning to update his fleet and load locations for his customers; he can't reliably update his crew with change orders as the tugs frequent-

ly travel in rural areas with no cell phone coverage.

On the coast, a marine ops center frequently needs to get change orders to its vessels transiting the area. Unfortunately, the center often has to wait until the

boats have moved inshore before contact can be made and new orders communicated. In this case, the fastest way between points A to point B often takes an alphabetical detour, costing time and money, negatively impacting the man-



agement of valuable marine resources.

Common problems?

Yes. And until now, there wasn't much a commercial operator could do to increase telecommunications capability. The only options included a satellite system or to operate in an area that had a regional provider offering a limited solution.

As the industry faces increasing regulatory pressure and higher operating costs, commercial operators are forced to improve the management and resources in order to preserve revenue and gain a competitive edge.

MariTEL has started to solve these brown water challenges with the recent launch of its new Marine Wireless VHF Radiotelephone Network in the Gulf of Mexico and lower Mississippi River. The June 2001 launch is the first in the company's \$300 million nationwide telecommunications Network, scheduled for completion by the end of 2002.

Built expressly for the maritime industry, the telecommunications network is a new marine resource management tool that employs internationally mandated Digital Selective Calling (DSC) technology. Upon completion of the network's 161 towers covering essentially all of the U.S. coastline and inland navigable waterways, offshore range will be from up to 50 to 100 miles.

According to **Jim Tindall**, vice president Sales and Marketing, MariTEL, "The Network brings easy-to-use, cellular telephone-like functionality to the maritime environment, combining the convenience and safety of a traditional VHF radio with a modern telephone system."

The first services to be offered with MariTEL are automatic telephone calling between ship and the public telephone network and Vessel Location services.

The Network is comprised of strategically placed public coast station tower sites, a fiber-optic network, and integrated hardware and software. At a minimum height of 330 ft., the company's radio towers provide connectivity well beyond conventional cellular coverage, and are cost-effective.

MariTEL's Region One will cover the area from Corpus Christi, Texas to Sarasota, Fla. and the lower Mississippi River as far north as Memphis, Tenn. At

A wide horizon is a privilege, not a right

SAILOR SATELLITE SYSTEMS
A breakthrough in communication

Sailor has a long history as a leading manufacturer and supplier of satellite communication systems. Our products are sold as both stand alone products and as integrated units in our highly regarded GMDSS solutions.

With the latest SAILOR SP4400 SAT-B MK II, Sailor has untangled the Gordian knot of satellite technology. It is a flagship among digital

Ship Earth Stations (SES) and a breakthrough in maritime aerial technology, transmission speed, quality and reliability.

SAILOR SP4400 MK II is the result of this highly visionary development strategy. Today, nearly 10% of our annual turnover is invested in product research and development and more than one out of ten of our employees are involved in projects facing the challenges of

SAILOR
When safety counts

Porsvej 2 · DK-9200 Aalborg SV · Denmark · Phone: +45 9634 6100
Fax +45 9614 6101 · Telex 69 789 SPRAD DK
E-mail: sailor@sailor.dk · Web: www.sailor.dk

Circle 326 on Reader Service Card

www.maritimereporterinfo.com

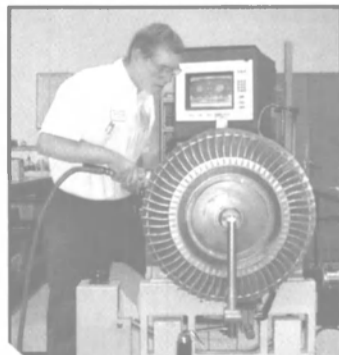
MSHS A NETWORK OF SOLUTIONS

Motor-Services Hugo Stamp, Inc. (MSHS) provides a network of services for the Maritime Industry. From Norfolk, Virginia to Corpus Christi, Texas, **MSHS** and its group of companies can deliver high-quality products and services.

We provide factory-trained turbocharger services, overhauling and repairing two-stroke components,

laser alignment and complete engine overhauls. We sell and service Boll Filtration Systems, Deutz Engines and Woodward Governors.

MSHS is ISO 9002 certified and we are available 24-hours a day worldwide to meet your needs. For more information, call toll free **1-800-622-6747** or visit our web page at www.mshs.com. To reach us by fax, dial (954) 763-2872.



MOTOR-SERVICES HUGO STAMP, INC.

AUTHORIZED DISTRIBUTORS & SERVICE CENTER

4th Avenue, Ft. Lauderdale, FL 33315 • (954) 763-3660 • Fax (954) 763-2872 • <http://www.mshs.com>

Circle 235 on Reader Service Card

www.maritimereporterinfo.com

Maritime Communications

press time, this service area includes 15 deployed tower sites of region's scheduled total of 35. The total number of sites to be deployed by the end of July and August are 20 and 24, respectively.

Tindall claims that mariners no longer have to be near shore or in port to reliably make a telephone call. If a vessel is overdue, if a change of routing needs to be made or if a crew member's family needs to contact a loved one in an emergency the call can be made now. The company also offers Crew Calling Cards with separate billing as a way of improving employee relations.

MariTEL's Vessel Location service provides another valuable tool in marine resource management, either by way of an on demand "polling" procedure or by automatic reporting pre-programmed into the radiotelephone. Commercial operators will no longer be required to manually update fleet or barge locations, turning a time consuming chore into an easy, automatic operation. The location information can be automatically sent to a customer or viewed on a secure website. This feature also provides an excellent system for owners of red flag cargos, which need frequent monitoring.

MariTEL's pricing plans include free long distance to anywhere within the U.S., Canada and parts of the Caribbean. The company does not charge any roaming or connection fees. The only requirement to utilize these new features is the need for a "MariTEL READY" DSC VHF radiotelephone.

Commercial operator pricing starts at \$10 per month, per vessel, with per minute rates at \$.99 per minute. Tindall claims that adding Vessel Location services to a subscription "Adds only pennies per vessel update."

Digital Selective Calling is the internationally mandated VHF communications protocol that utilizes channel 70 to "Selectively Call" (hail) specified DSC VHF radiotelephones (vessels) or shore stations. Each DSC radiotelephone has its own unique Maritime Mobile Service Identity (MMSI) number that identifies the caller. The MMSI is a maritime version of the cell telephone Electronic Serial Number that enables a telephone call to be attributed to a specific radiotelephone.

The call is established in an automated, non-voice mode that once connected, automatically transfers to a working voice channel to allow the user's communications (voice or data) to take place.

Not all DSC VHF radiotelephones offer the same features. Users may easily identify DSC VHF's by a one-touch mayday distress button on their faceplate, usually with a protective cover that prevents inadvertent operation. All

new model DSC VHF's introduced since 1999 have this mayday functionality as a minimum.

Radiotelephone manufacturers Furuno, Sailor, SEA, Shipmate, Skanti, Simrad, Standard, Raymarine and Ross all have, or are expected to offer "MariTEL-READY" radiotelephones. In

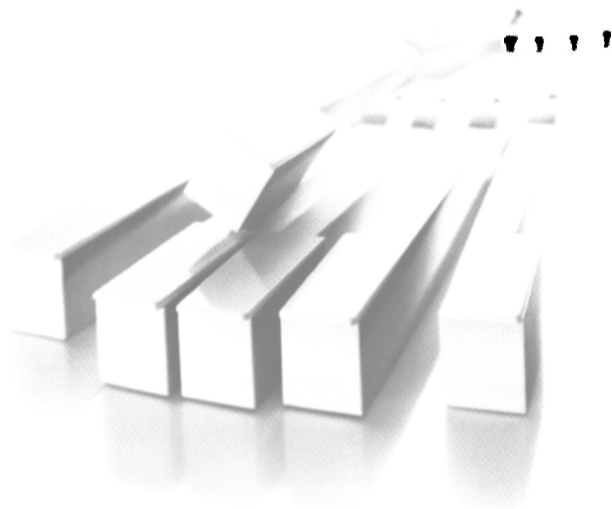
addition to the minimal one-touch mayday distress function, these radios support the much higher-level enhancements offered with a MariTEL subscription, including the automatic Ship-and-Shore telephone interconnect and Vessel Location services. At press time, manufacturers were also expected to

announce the availability of scrambling features that will make marine telephone calls totally private. In addition, touch tone dialing for access to voice-mail, bank accounts and other such systems, and data transmission such as fax and e-mail, were also expected.

Circle 76 on Reader Service Card



BRINGING TWO TOGETHER CAN MAKE A DIFFERENCE



Xantic, the new company formed by the merger between Station 12 and SpecTec, will be music to your ears. Because by combining the knowledge and expertise of the two companies, Xantic will deliver smart new solutions and synergies, while offering you a genuine one-stop solution for all mobile satellite communications, maritime ICT, and satellite broadband communications. These services represent the highest quality of

satellite services currently available, and Xantic will also be offering you all the exciting ICT developments that lie ahead.

Xantic is a truly global company, with 29 offices and agents all over the world and 24/7 customer services helpdesks. To find out more about how to benefit from a reliable partnership with Xantic, please contact Customer Services: service@xantic.net. Or visit our website: www.xantic.net.



Circle 291 on Reader Service Card

www.maritimetoday.com

www.maritimereporterinfo.com

Repowering and Niche Marketing at Westar

By Alan Haig-Brown

Fireworks exploded over the Bay Bridge and thousands of people crowding the waterfront near the new ballpark gasped in admiration. Some of the best seats for the spectacle are along the north side of Pier 50, home of Westar Marine Services where owners and employees share a barbecue in honor of the annual display sponsored by a local radio station. But the folks at Westar are more than passive observers, the tugs that are managing the fireworks barges are contracted from Westar.

This annual fireworks event sums up Westar Marine Services' role on San Francisco Bay. They are the company that takes on all of the niche jobs that others with their large investments in big horsepower and Z-drives can't afford to be doing.

Founded in 1976 by the late "Buzz" Heffron the company is now owned by Buzz's daughter **Wendy Morrow** and **Mary McMillan** who was the original firm's book keeper and office manager. Both women are active in the daily operations of the company and currently serve as vice-president and president, respectively. In a continuation of the family nature of the company both husbands work for Westar. When he is not busy barbecuing for company picnics, Mary's husband **Bill Sherfy** is the company's port captain.

The marine area inside the Golden Gate Bridge amounts to an inland sea extending from the Port of Redwood City in the South Bay, 20 miles north to Oakland and the Bay Bridge, then another 25 miles north through the Richmond San Rafael Bridge and across San Pablo Bay to the Carquinez Strait. From that point it is over 50 miles up through Suisun Bay and up the San Joaquin River to Stockton or nearly 60 miles up the Sacramento River to Sacramento. According to the San Francisco Bar Pilots, excluding the rivers, "The San Francisco, San Pablo and Suisun Bays. From the Gulf of the Farallones to the Sacramento Delta, these waters include nine bridges, twenty ports, two hundred miles of shipping lanes — and countless hidden dangers."

The diversity of the company's fleet of nine tugs and five water taxis, defines their success in serving a wide range of niche markets over this large geographical



Mary McMillan (left), president, and **Wendy Morrow**, vice president, own and operate Westar Marine Services.

area. The largest of their tugs, Orion, does some ship assist work and handles the company's tank barge that lighters molasses, carried as back haul freight by Hawaiian ships, from Oakland up river to Stockland. Built for service in the canals south of Chicago, the 3,000 hp, 100-ft. (30.4 m) twin-screw tug Orion has a telescoping wheelhouse that works well when pushing light barges.

Another large model bow tug, Sagittarian, is equipped with a towing winch, while a third large boat, Solana, has push knees. A large winch has been installed on the foredeck of the Solana to set anchors for the construction industry. Westar has six tugs in the 1,000 hp and under class: Bearcat, Betty L. Warrior, Kitsap, Wildcat and Mudcat. They also have five water taxis ranging from 26 to 49 passengers.

When Buzz Heffron started the company in the 1970s, he did so to meet a need for delivery of large orders of ship's stores and paint to vessels at anchor in the Bay. Tending to the needs of visiting ships remains an important part of the company's business. In its warehouse at Pier 50, just south of the new Pacific Bell baseball park, they receive miscellaneous supplies ordered by agents for their ships. These are consolidated into plywood totes and labeled with the vessel names. When the ship arrives in port, smaller orders are run out on one of the water taxis, while larger orders are taken out to the ships on one of the company's two crane equipped barges. These can also pick up garbage for disposal ashore. A separate company maintains a lube oil barge at the Westar pier and contracts with Westar for towing services to the ships.

Since the Exxon Valdez oil spill, the authorities in San Francisco Bay have introduced stringent tug escort requirements for petroleum product vessels. This has led to the advent of fierce competition among companies with Z-drive and cycloidal drive tugs. But smaller tankers and tank barges, while requiring escort, don't require the most expensive technology and rates. This has left another comfortable niche for the entrepreneurs at Westar. They have contracts with barging companies like Sause Brothers as well as some smaller tankers.

Westar has always maintained a central position in the Bay area construction industry. With the extensive seismic upgrades to the Bay Area bridges, this work has grown. With their tugs they handle construction company barges, with their own barges they transport materials to the site and with their water taxis they move personnel to work the work site and ashore after their shift.

When the State of California, long a leader in reducing air-pollution, announced the Carl Moyer Program to reduce Nox emissions, Westar Marine Services decided to get on board. The program was supported by an appropriation of \$50 million dollars for the 2000/2001 fiscal year. A significant portion of this amount was allotted for Carl Moyer Program incentive grants, as a means to reduce emissions from heavy-duty engines.

These grants cover the incremental cost of cleaner



From the state through the Carl Moyer Program to reduce Nox emissions, Westar Marine Services was able to more cost-effectively repower its fleet (middle photograph). Pictured on the left is a pair of new Cummins N14s aboard Wildcat.

Skipper **Dana Sargeant** aboard Ms. Katie, which was named for a much loved company cat. The vessel was repowered with the Cummins N14 that have the same 360 hp rating as the two-cycle engines that were taken out, but are considerably lighter.

Diesel Power Annual

on-road, off-road, marine, locomotive and stationary agricultural pump engines, as well as forklifts and airport ground support equipment. Beginning in summer 1999, grants became available through participating air pollution control and air quality management districts grants. "Heavy-duty engines are a significant source of smog-forming pollutants," says a State of California press release, adding that, "In addition, the fine particulate matter exhaust from heavy-duty diesel engines is a toxic air contaminant. The incentive program focuses on reducing emissions of smog-forming oxides of nitrogen (NOx), but will also reduce particulate emissions. In recognition of his work in the air quality field and his efforts in bringing about this program, the incentive program is named after the late Dr. Carl Moyer."

Westar's boats have been purchased over years from a variety of sources to meet diverse needs. As a result, they have had a variety of different manufacturer's main engines. Westar has tried three different manufacturers' IMO compliant engines in their repowers under the Carl Moyer program. This has included three boats with Cummins engines. In June of this year the company repowered a fourth boat with Cummins engines and have engines on order for a fifth boat. The company initially found success with the Cummins model N14. These six-cylinder 14-liter 855 cu. in. displacement engines can be set-up with continuous duty ratings of 360, 400 or 440 hp, depending on the owners' demands and planned fuel consumption. Westar has taken all of the N14s at the 360 hp rating. Wildcat, repowered in 1999 with a pair of N14s, was also lengthened by five feet and had a pair of Kort nozzles added to increase its bollard pull still further. Mudcat, a former LCM with a shallow 4.2-ft. (1.2 m) draft that allows the vessel to work in many of the Bay's shallow areas, was repowered with a pair of N14s in 2000. The 65-ft. (19.8 m), 49-passenger steel crew boat Ms. Katie, named for a much loved company cat, was repowered with N14 that have the same 360 hp rating as the two-cycle engines that were taken out, but they are considerably lighter. With gear, the old engines weighed about 4,500 lbs. each, while the new engines with gear weigh about 3,000 lbs.

Fuel consumption with the new engines has been reduced by 20 to 25 percent while giving the boat a top speed of 17 knots, some three knots faster than previously. In each case, as the people at Westar repower their boats they carry out other upgrades such as the new wheelhouse, lengthening and nozzles on the Wildcat. Among other upgrades on the Ms. Katie was the con-

version from mechanical controls to electronic Mathers control units. The majority of design work is done in-house by naval architect and Westar general manager **Richard Smith**.

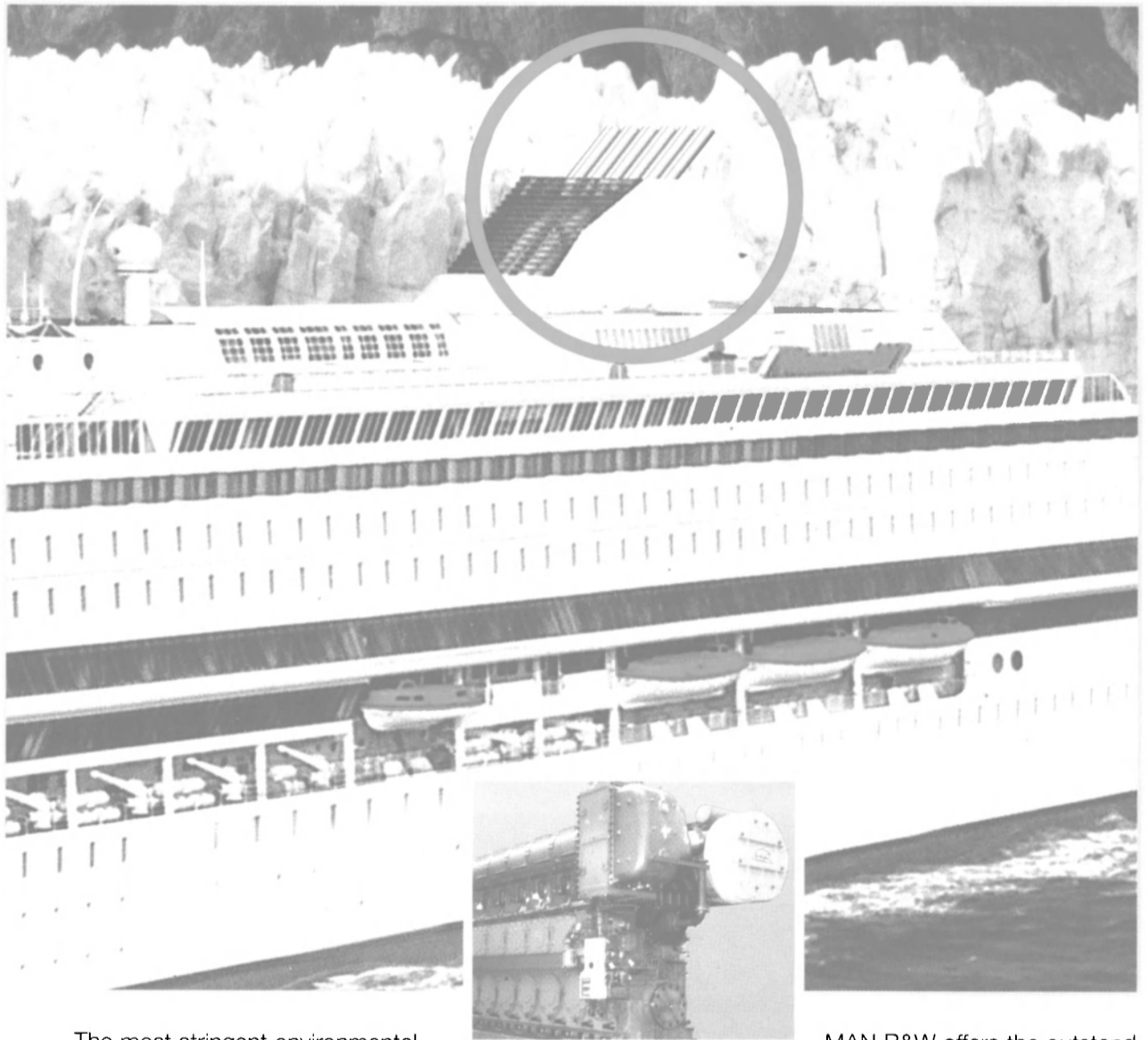
The Cummins repowers have proven so successful that the company has installed in the Solana a pair of Cum-

mins KTA38 M0 engines rated for 850 hp or a combined 1,700 hp at 1,800 rpm. The engines turn into ZF BW461 gears with 5.63:1 ratios. This gives this big 65 x 24-ft. (19.8 x 7.3 m) boat a new lease on life and will give the Bay Area construction industry an important tool for anchor handling. Also slated for a Cum-

mins repower this June is Sagittarian. This 79 x 25-ft. (24 x 7.6 m) model bow tug will get a pair of V-12 2300 cu. in. displacement Cummins KTA 38 M2 engines, each generating 1,200 hp each at 1,800 rpm.

(continued on page 36G)

MAN B&W Diesel engines **IS** (*Invisible Smoke*) not only in cruise ships



The most stringent environmental protection regulations are now in effect in Alaska. To support cruise vessels slow-steaming in sensitive glacial waters, MAN B&W Diesel already introduced **IS** (*Invisible Smoke*) engines in 1998. These engines provide smokeless performance at even the lowest load levels.

MAN B&W's modern **IS** engines use fuel-water emulsification with only moderate water content to perform with invisible smoke and clean exhaust at any load - with NOx emissions far below the IMO limit.

MAN B&W offers the outstanding performance of the proven **IS** engines for cruiseships and other applications today. To find out how to enjoy the benefit of a non-smoking engine, please contact us.

Worldwide Service

MAN B&W Diesel AG, Stadtbachstr.1, 86224 Augsburg, Germany, Phone +49-821 3220
MAN B&W Diesel Inc., 17 State Street, 18th Floor, New York, NY 10004, Tel. (212) 269-0980



Diesel Power Annual

Note: Bore & Stroke measurements are in mm unless otherwise indicated.

Alaska Diesel Electric (Northern Lights / Lugger)

4420 14th Ave NW., Seattle, Wash. 98107, Tel: 206-789-3880;
Fax: 206-782-5455, Email: ade@northern-lights.com; Website:
http://www.northern-lights.com

Model	Bore	Stroke	Cyl#	kw/cyl	RPM	BMEP
L-6108A2	108	130	6L	37-50.5		
L-6125A	125	150	6L	40-61.7		
L-6140AL2	140	165	6L	61.6-81.3		
L-6170A	170	170	6L	87.2-102.5		

Anglo Belgian Corp.

9958 North Alpine Rd., Ste. 101, Machesney Park, Ill. 61115,
Tel: 815-637-2880; Fax: 815-637-2877, Email:
anglobel@aol.com

Model	Bore	Stroke	Cyl#	kw/cyl	RPM	BMEP
DX	242	320	3.6.8L	110	750	12
DZ	256	310	6.8L	221	1,000	16.6

Goodrich - Fairbanks Morse Engine Div.

701 White Ave., Beloit, Wis. 53511, Tel: 608-364-8100; Fax:
608-364-8194, Email: nstiener@fairbanksmorse.com; Website:
http://www.fairbanksmorse.com

Model	Bore	Stroke	Cyl#	kw/cyl	RPM	BMEP
38D8-1/8	206.4	254	4-12L	132-149.3	750-900	5.9-6.2
38TD8-1/8	206.4	254	6.9.12L	217.5-261	750-900	10.2
FM/ALCO 251	228.6	266.7	6L, 8.12.16.18V	80-184.4	750-1200	6.4-10.67

Caterpillar

P.O. Box 610, Mossville, IL 61552, Tel: (800) 321-7332; Fax: (301) 578-
2559, e-mail: Cat-power@cat.com, web site: www.cat-marine.com

Model	Bore	Stroke	Cyl.	KW/cyl	RPM	BMEP (bar)
12CM32	320	420	12V	447-466	750	22.7
12CM43	430	610	12V	873	500-514	24.4
14CM43	430	610	14V	873	500-514	24.4
16CM32	320	420	16V	448-468	750	22.7
16CM43	430	610	16V	873	500-514	24.4
18CM43	430	610	18V	873	500-514	24.4
3054	100	127	4L	14-21	2400-2600	10.4
3056	100	127	6L	14-23	2400-2600	10.4
3116	105	127	6L	14-44	1800-2800	16.9
3126	110	127	6L	27-52	2200-2600	18.6
3126B	110	127	6L	22-45	2200-2600	18.6
3196	130	150	6L	46-82	1800-2300	22.1
3304	121	152	4L	16-36	1400-2200	13.8
3306	121	152	6L	16-44	1400-2200	13.8
3406C ₂	137	165	6L	31-72	1800-2100	18
3406E	137	165	6L	45-100	1800-2300	18
3406E-600	140	171	6L	72-75	1800-2100	18
3408C	137	152	8V	30-55	1200-2100	18
3408E	137	152	8V	44-83	1200-2100	18
3412C	137	152	12V	26-84	1200-2300	18
3412E	137	152	12V	31-65	1200-2100	18
3508	170	190	8V	56-107	1000-1925	20.2
3508 EU1	170	190	8V	80-107	1000-1925	20.2
3508B	170	190	8V	72-140	1000-1925	20.2
3512	170	190	12V	56-109	1000-1925	20.2
3512 EU1	170	190	12V	80-109	1000-1925	20.2
3512B	170	190	12V	62-140	1000-1925	20.2
3516	170	190	16V	56-103	1000-1925	20.2
3516 EU1	170	190	16V	80-103	1000-1925	20.2
3516B	170	190	16V	62-140	1000-1925	20.2
3606	280	300	6L	248-338	750-1000	22
3608	280	300	8L	248-339	750-1000	22
3612	280	300	12V	248-375	750-1000	22
3616	280	300	16V	248-375	750-1000	22
3618	280	300	18V	400	750-1000	22
6CM20	200	300	6L	181	900-1000	24.2
6CM25	255	400	6L	275-285	720-750	23.7
6CM32	320	480	6L	461	600	24.9
6CM43	430	610	6L	873	500-514	24.4
6CM610C	580	600	6 & 8L	1132-1213	425	22.3
7CM43	430	610	7L	873	500-514	24.4
8CM20	200	300	8L	181	900-1000	24.2
8CM25	255	400	8L	275-285	720-750	23.7
8CM32	320	480	8L	461	600	24.9
8CM43	430	610	8L	873	500-514	24.4
8CM601C	580	600	6 & 8L	1133-1213	425	22.3
9CM20	200	300	9L	180	900-1000	24.2
9CM25	255	400	9L	275-285	720-750	23.7
9CM32	320	480	9L	461	600	24.9
9CM43	430	610	9L	873	500-514	24.4

Cummins Marine

4500 Leeds Ave., Ste. 301, Charleston, S.C. 29405, Tel: 843-745-1620;
Fax: 843-745-1549; Email: wavemaster@cummins.com;
Website: http://www.cummins.com

Model	Bore	Stroke	Cyl#	kw/cyl	RPM	BMEP
4B3.9-M	102	120	4L	14.3-15	2500-2800	101-95
4BT3.9-M	102	120	4L	24.3-28	2500-2800	172-178
6B5.9M-	102	120	6L	14.3-15	2500-2800	101-95
6BT5.9-M	102	120	6L	22.3-26.2	2500-2600	159-178
6BTA5.9-M (JW)	102	120	6L	28-32.3	2500-2600	199-221
6BTA5.9M (SW)	102	120	6L	34.8-39.2	2600-3000	238-248
6CTA8.3-M (JW)	114	135	6L	31.3-37.3	1800-2500	222-260
6CTA8.3-M (SW)	114	135	6L	43.5-53.5	2500-2600	220-260
N14-M	140	152	6L	44.8-65.3	1800-2100	185-232
KTA19-M3	159	159	6L	74.5-79.5	1800	191-245
KTA19-M4	159	159	6L	87	2100	230
QSK19-M	159	159	6L	82	1800-2100	253
KTA38-MO	159	159	12V	46.6-52.8	1600-1800	161-163
KTA38-M1	159	159	12V	55.9-68.4	1600-1800	194-210
KTA38-M2	159	159	12V	65.3-93.3	1600-2050	226-252
KTA50-M2	159	159	16V	65.3-93.3	1600-2050	226-252
QSM11-M	125	147	6L	72.2	2300	302

Deere Power Systems

3801 West Ridgeway Ave., Waterloo, Iowa 50704, Tel: 1-800-533-6446;
Fax: 319-292-5075; Email: jdpower@deere.com;
Website: www.deere.com/jdpower

Model	Bore	Stroke	Cyl#	kw/cyl	RPM	BMEP
3009D	72	72	3L	4.3-4.7	2000-3000	6.44
3011D	78	80	3L	5.3-6.3	2000-3000	7.03
3015D	84	90	3L	7.3-8.2	2000-3000	6.5
3029D/T	106	110	3L	11.0-19.7	1600-2500	7.1
4020D/T	84	90	4L	7.4-10.3	2000-3000	8.16
4039D/T	106	110	4L	13.3-20.5	1600-2500	10.04
4039DFM	106	110	4L	13.3-15.0	1600-2500	7.3
4045D/TH	106	127	4L	9.1-26.0	1600-2400	11.49
4045TFM	106	127	4L	19.0-24.3	1600-2400	10.73
6059D/T	106	110	6L	13.3-20.5	1600-2500	10.03
6068D/TH	106	127	6L	14.0-28.0	1600-2400	12.37
6068TFM	106	127	6L	19.2-28.0	650-2600	12.37
6076AFM	116	121	6L	26.7-37.3	1600-2400	14.66
6081T/A/H	116	129	6L	21.2-37.3	1600-2200	15.05
6105A/H	127	138	6L	31.7-43.5	1400-2100	14.2
6125A/H	127	165	6L	37.0-62.2	1400-2100	17
6125AFM	127	165	6L	31.7-56.0	650-2100	15.3
OM 502 LA	130	150	8V	52.5	1800-2000	21.3

Detroit Diesel Corporation

13400 Outer Drive, West, Detroit, Mich. 48239-4001, Tel: 313-
592 5000; Fax: 313-592-5137;
Website: http://www.detroitdiesel.com

Model	Bore (in.)	Stroke (in.)	Cyl.	RPM (Max Continuous)
Series 60	5.12	6.30	6	375 @ 1800
Series 60	5.12	6.30	6	400 @ 1800
Series 60	5.12	6.30	6	
Series 60	5.24	6.61	6	475 @ 1800
Series 60	5.24	6.61	6	450 @ 1800
Series 60	5.24	6.61	6	425 @ 1800
Series 60	5.24	6.61	6	350 @ 1800
8V2000	5.12	6.91	8	499 @ 1800
8V2000	5.12	6.91	8	535 @ 1800
12V2000	5.12	6.91	12	805 @ 1800
12V2000	5.12	6.91	12	
12V2000	5.12	6.91	12	
16V2000	5.12	6.91	16	1070 @ 1800
16V2000	5.12	6.91	16	
16V2000	5.12	6.91	16	
8V4000	6.50	7.50	8	940 @ 1600
8V4000	6.50	7.50	8	1180 @ 1800
12V4000	6.50	7.50	12	1410 @ 1600
12V4000	6.50	7.50	12	1770 @ 1800
16V4000	6.50	7.50	16	1880 @ 1600
16V4000	6.50	7.50	16	2360 @ 1800
16V4000	6.50	7.50	16	

Deutz Canada

4420 Garand St., Montreal, Que. H4R 2A3 Canada,
Tel: 514-335-3150, Fax: 514-332-4173;
Email: deutzcan@msn.com; Website: http://www.deutzcanada.com

Deutz Corp. - 3883 Steve Reynolds Blvd., Norcross, GA 30093; Tel: 770-
564-7100; Fax: 770-564-7222; Website: http://www.deutz.com

Model	Bore	Stroke	Cyl#	kw/cyl	RPM	BMEP
616	132	160	8, 12, 16V	48-85	1500-2300	
620	170	195	8, 12, 16V	110-140	1500-1800	
628	240	280	6, 8, 9L; 12, 16V	206-246		900-1063
632	250	320	6, 8, 9L; 12, 16V	240-411		900-1200
640	370	400	12, 16V	412-453	500-650	
645	330	450	6, 8, 9L	425-460	600-650	
BFM1013	108	130	4, 6L	15.75-32.5	1500-2300	11.75
BFM1015M	132	145	6, 8V	31.7-55	1500-2100	15.9
BFM2013	98	126	4, 6L	18.5-31.7	2400-2500	16

Model	Bore	Stroke	Cyl#	kw/cyl	RPM	BMEP
D203	100	105	2, 3L	12.5-18.5	2800-3000	8.8
D229	102	120	4, 6L	12.7-19.2	2500-3000	7.8

Electro-Motive Div. of General Motors Corp.

9301 West 55th St., La Grange, Ill. 60525, Tel: 708-387-5853;
Fax: 708-387-5430; Website: http://www.gmcmd.com

Model	Bore	Stroke	Cyl#	kw/cyl	RPM	BMEP
645E	230	254	8, 12, 16V	75-98	750-900	5.7-6.2
645F	230	254	8, 12, 16, 20V	133-149	750-900	8.4-10.3
710G	230	279	8, 12, 16, 20V	155-186	750-900	9.2-10.3

Isotta Fraschini

800 Principal Ct., Ste. C, Chesapeake, Va. 23320, Tel: Toll Free: 1-888-4-
isotta, Fax: 757-548-6012, Email: isotta@fdgm.com

Model	Bore	Stroke	Cyl#	kw/cyl	RPM	BMEP
4S20U	200	300	4L	160-175	900-1000	22.3-22.6
6S20U	200	300	6L	160-175	900-1000	22.3-22.6
8S20U	200	300	8L	160-175	900-1000	22.3-22.6
9S20U	200	300	9L	160-175	900-1000	22.3-22.6
L1306	130	14				

Diesel Power Annual

(continued from page 36E)

The success of the Cummins repowers to date and the support offered by **Tom O'Connor** and the people at Cummins West in San Leandro is prompting plans for further repowers. With the higher horsepower boats carrying KTA38s in their hulls and the smaller boats packing N14s, the company is looking to their mid range boats. Plans call for installation of Cummins QSK19 M's in the 69 x 23-ft. (21 x 7 m) model bow tug Bearcat and the 60 x 23-ft. (18.2 x 7 m) push boat Betty L. At 660 hp each, these engines will give the boats 1,320 hp and many more years of working life.

A recent report by the Carl Moyer program says that "Over 80 percent of first and second year engine project funds (about \$38 million) have been committed to specific projects. Of these funds 50 percent paid for alternative fuel projects (610 engines), 26 percent paid for agricultural irrigation pump projects (947 engines), 16 percent paid for marine vessel projects (95 engines), four percent paid for forklift projects (105

motors), and four percent paid for both on- and off-road diesel-to-diesel repower projects (108 engines)."

Mary McMillan and **Wendy Morrow** were in the process of a fleet upgrade before the State of California Carl Moyer program but are now getting some real help from the state. At the

same time they are investing a good bit of their own money to maintain their position in niche marketing of marine services in the Bay Area. While enjoying a barbecue and fireworks with her crews, **Mary McMillan** explains that the company's success comes from a "family-like" work environment. She

adds, "We offer so many services from ship's stores delivery to tank barge escort and construction assistance, that when one area is slow the other hopefully picks up. So we try to balance the cyclical nature of the typical marine businesses."

Circle 33 on Reader Service Card

MAN B&W Diesel Reorganizes Engine, Aftermarket Businesses

MAN B&W Diesel, Stockport, Cheshire is in the process of reorganizing its engine and aftermarket businesses, and for an investment program to develop its U.K. manufacturing facilities.

The formation of new High Speed and Medium Speed Strategic Business Units, incorporating all sales, marketing, project management, applications engineering and aftermarket activities, will provide more focused and coordinated support for the Marine, Industrial, Power Generation and Rail Traction markets.

The Medium Speed Business Unit will focus on the products of Mirrlees Blackstone and most of the Ruston products sold into power generation markets. The High Speed Business Unit will be responsible for all of the Paxman products in all markets and the Ruston products into marine, rail and some industrial applications via specialist packagers and distributors. More than \$28.2 million will be invested to upgrade and extend the manufacturing facilities at the Stockport site including a centralized R&D facility for all Mirrlees Blackstone, Paxman and Ruston products.

Circle 32 on Reader Service Card



On Time – Every Time

Whether it's routine maintenance, extensive repairs or emergency service, we can handle all your ship repair needs. Virtually every needed ship repair capability is available in-house, supported by skilled craftsmen that are motivated to minimize your out-of-service time. Newport News is ready to support your repair—anytime, anywhere.



**NEWPORT NEWS
SHIPBUILDING**

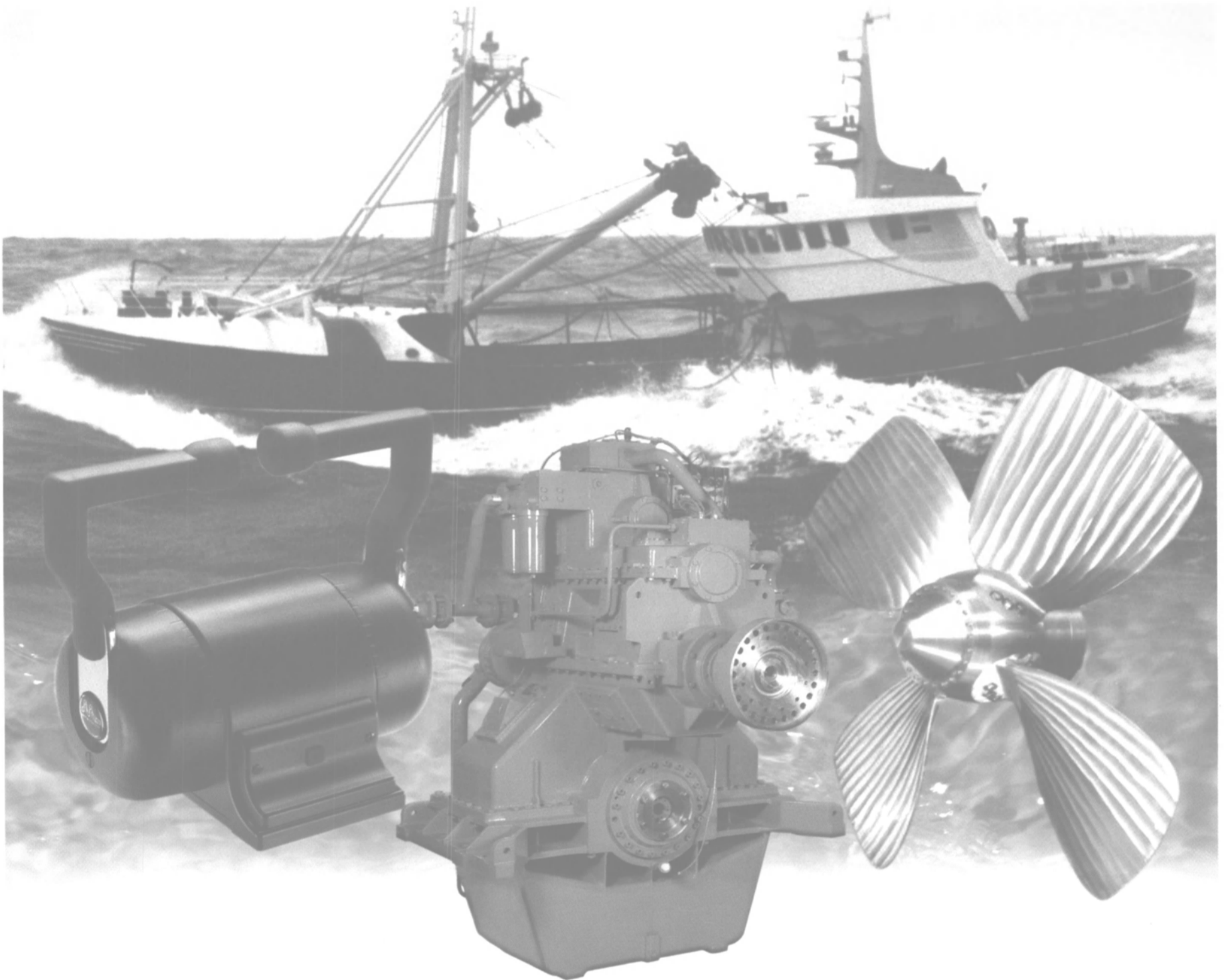
World's Most Advanced Shipbuilder

www.nns.com

Copyright 2001 Newport News Shipbuilding

Circle 259 on Reader Service Card

www.maritimereporterinfo.com



Perfect propulsion partners.

Correct Combination

From fishing boats to icebreakers, from tugs to tankers, the correct combination of propulsion system components is vital for performance, reliability and safe operation.

Transmission Leader

ZF Marine Group is the world leader in the design and manufacture of marine gearboxes for all types of vessels. Pace-setting technology that now embraces complete propulsion systems which include fixed-pitch and controllable-pitch propellers, surface-drives and marine controls.

Propulsion Partnerships

Naval architects, boat builders, engine manufacturers and operators now have the opportunity to select the optimum propulsion system from a single source. New partnerships forged by ZF Marine incorporate the knowledge, expertise and product ranges of three innovators in marine propulsion technology - Piening Marine Tecnic, Faster Propulsion System and Mathers Controls - to bring you ZF Marine Tecnic, ZF-FPS and ZF Mathers.

Perfect Packages

Each of our partners places a wealth of experience at your disposal. Together we can offer the ideal package to suit your exact propulsion requirements - either for new-buildings or re-powers.



Propulsion

For further information, please contact :

ZFI Marine U.S. Headquarters

3131 SW 42nd Avenue,
Fort Lauderdale FL 33312.
Phone: (954) 581-4040 Fax: (954) 581-4077

ZFI Marine Gulf Coast

161 James Drive West,
Suite 120, St. Rose, LA 70087.
Phone: (504) 443-0501 Fax: (504) 443-0504

ZFI Marine West Coast

1095 Andover Park East,
Seattle WA 98188.
Phone: (206) 574-0375 Fax: (206) 574-0868

ZFI Marine North East Coast

20 Walling Ford Way,
Shamong NJ 08088.
Phone: 609-268-9186 Fax: 609-268-0544

Visit our website - www.ZF-Marine.com

Circle 292 on Reader Service Card

www.maritimereporterinfo.com

**Repower Helps
Graham Gulf**

Graham Gulf of Bayou LaBatre, Ala., which operates five 140-ft. (42.7 m) aluminum offshore crew/supply vessels in the Gulf of Mexico, in June of 2000 repowered Brother with a Cat 3508B and claims vessel performance has improved 20 percent, with significant decreases in downtime. Brother is unique because it was built only in 1998,

but the owner decided after two years that the originally installed engines were not performing to the level it required. Enter Caterpillar and local dealer Thompson Power Systems, which supplied four Cat 3508B engines rated 1,200 bhp (895 bkW) at 1,800 rpm. The

power system was further enhanced with ZF 2.33:1 marine gears and four new Michigan propellers. At full load speed, the owner said vessel speed improved from 15 to 20 knots, while light boat speed increased from 19 to 22 knots.

Circle 36 on Reader Service Card

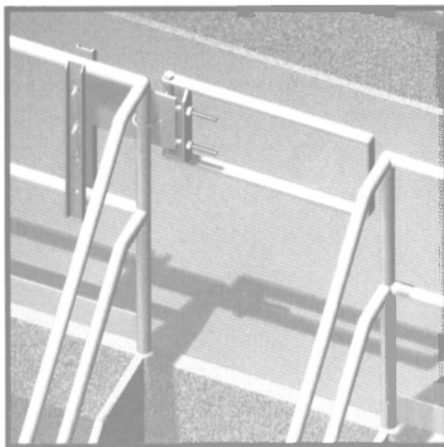


L21/31 Engine Debuts

An innovative "new generation" medium speed design from MAN B&W Diesel will debut in its 21 cm bore configuration for a new series of large high-tech RoRo vessels. The ships, ordered by DFDS Tor Line and to be built at Germany's Flensburger Schiffbau-Gesellschaft GmbH & Co. — are scheduled for delivery during September 2003. The auxiliary power package for each vessel will consist of four Holeby GenSets type 7L21/31 with a total output of 5,600 kW. The seven cylinder gensets for the vessels will deliver each 1,400 kW at 1,000 rpm, 50 Hz. The exterior design of the new L21/31 genset is a continuation of the streamlined and cleanlined pipeless new generation design.

Circle 199 on Reader Service Card

Step Up To The Safety Solution®



THE Self-Closing Safety Gate

Save the time and expense of fabricating gates as required by OSHA for Fall Protection at your ladder, platform and stair openings. The easy-to-install FabEnCo Self-Closing Safety Gate is adaptable, versatile and adjustable.

- Three-point mounting contact provides secure installation
- Stainless steel spring returns gate after each passage
- Adjustment bolts provide positive stop without handrail contact
- Available in Galvanized Steel (Safety Yellow optional), Aluminum or Stainless Steel

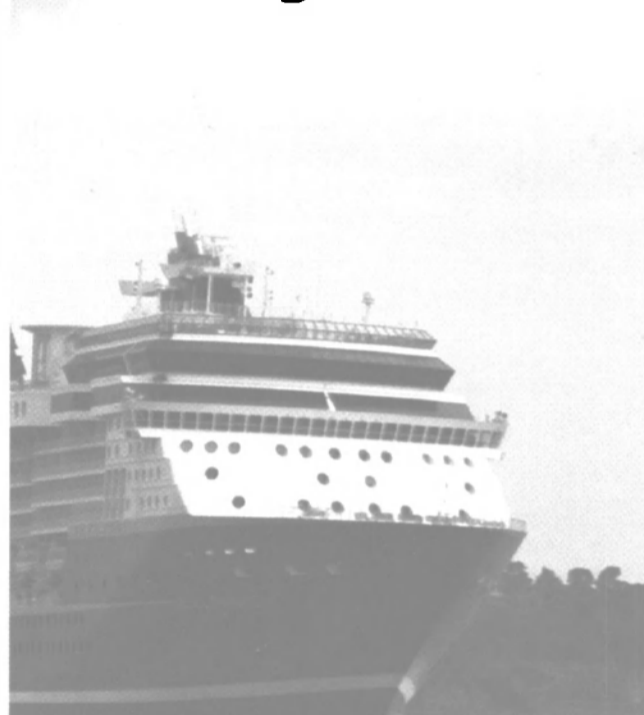


FABENCO, INC.

The "Safety Gate" Company
2012 Karbach • Houston, Texas 77092
Tel: (713) 686-6620 • Fax: (713) 688-8031
Toll Free: 1-800-962-6111
Internet: www.safetygate.com

Circle 231 on Reader Service Card
www.maritimereporterinfo.com

Leading the wave



Developed by Kamewa and Alstom, Mermaid™ is the most powerful and flexible marine propulsion system in the world.

Mermaid™ systems are optimized by Rolls-Royce Hydrodynamic Research Centre to the hull form and performance specifications of your vessel.

With outputs of up to 25 MW, and giving optimum manoeuvrability, Mermaid™ is the perfect propulsion solution for a broad spectrum of shipping applications.

Mermaid™ – pod propulsion systems from two world leaders in marine technology.



Mermaid™
by Kamewa — ALSTOM

Rolls-Royce

TRUSTED TO DELIVER EXCELLENCE

Rolls-Royce AB, P.O. Box 1010, SE-681 29 Kristinehamn, Sweden.
Phone: +46-550 840 00. Fax: +46-550 181 90 www.rolls-royce.com

Circle 298 on Reader Service Card
www.maritimereporterinfo.com

Your Days Are NUMBERED!



Call Today!
1-800-947-7737

You only have until **February 1, 2002** to make sure all your mariners comply with STCW.

With Basic Safety Training through Houston Marine Training Services' **Computer Based Training (CBT)**, your

personnel can avoid the classroom and train more efficiently while retaining more information than ever before.

The CBT program is approved by the U.S.C.G. and offers crew flexibility, cost savings, and student data management.

**HOUSTON MARINE
TRAINING SERVICES**

5728 Jefferson Highway • New Orleans, Louisiana 70123 • Fax: 504-729-4450 • www.houstonmarine.com

Circle 240 on Reader Service Card

www.maritimereporterinfo.com

■ Communication at Sea



INMARSAT

The TT-3064A Capsat® Maritime Telephone has the world's smallest automatic 2-way maritime satellite tracking antenna.



It is the ultimate choice for your vessel, whether it is a private yacht, a large coaster, or a fishing vessel.

The TT-3064A is operated like a standard cellular phone, however, with trans-ocean coverage.



The TT-3064A is a 3-in-1 communication tool providing telephone calls, fax transmission, and e-mail/Internet messaging.

www.tt.dk

Are you looking for high-quality, fast and reliable satellite communication? Visit our Shop On-line on www.tt.dk

Thrane & Thrane

We bring satellite communication down to earth

Thrane & Thrane A/S
Denmark
info@tt.dk
www.tt.dk

S60MC-C	600	2400	4-8	1085-2255	79-105	12.2-19.0
S70MC	700	2674	4-8	1350-2810	68-91	11.5-18.0
S70MC-C	700	2800	4-8	1490-3105	68-91	12.2-19.0
K80MC-C	800	2300	6-12	2470-3610	89-104	11.5-18.0
S80MC	800	3056	4-9	1840-3840	59-79	12.2-19.0
S80MC-C	800	3200	6-8	1860-3880	76-57	12.2-19.0
K90MC-C	900	2300	6-12	3100-4560	89-104	11.5-18.0
K90MC	900	2550	4-12	2200-4570	71-94	11.5-18.0
S90MC-C	900	3188	6-9	3140-4890	61-76	12.2-19.0
K98MC-C	980	2400	6-12	4130-5710	94-104	14.6-18.2
K98MC	980	2660	6-14	4090-5720	84-94	14.6-18.2

MAN B&W Diesel AS Holeby

Ostervej 2, Holeby DK-4960 Denmark, Tel: 45-5469-3100; Fax: 45-5469-3030, Email: holeby@manbw.dk

Model	Bore	Stroke	Cyl#	kw/cyl	RPM	BMEP
L16/24	160	240	5-9L	90-100	1000-1200	22.4-20.7
L23/30H	225	300	5-8L,12	130-135	720-750	18.2-18.1
				-160	-900	-17.9
L-V28/32H	280	320	5-9L	210-220	720-750	17.8-17.9
			12,16,18V			
L27/38	270	380	5-9L	300-320	720-750	23.0-23.9
L32/40	320	400	6-9L	480	720-750	24.9-23.9
			12,14,16,18			

MAN B&W Diesel A/S-Alpha Diesel

Niels Juels Vej 15, Frederikshavn DK-9900 Denmark, Tel: 45-9620-4100; Fax: 45-9620-4030; Email: alpha@manbw.dk; Web: http://www.manbw.dk

Model	Bore	Stroke	Cyl#	kw/cyl	RPM	BMEP
L23/30A	225	300	6.8L	133-160	825-900	16.3-17.9
V23/30A	225	300	12V	160	900	17.9
L27/38	270	380	6.7,8,9L	340	800	23.5
L28/32A	280	320	6.7,8,9L	245	775	19.3
V28/32A	280	320	12,16V	245	775	19.3
S26MC	260	980	4-12L	275-400	212-250	14.8-18.5
L35MC	350	1050	4-12L	440-650	170-210	14.7-18.4
S35MC	350	1400	4-12L	605-740	147-173	15.3-19.1
L42MC	420	1360	4-12L	480-995	132-176	11.5-18
S42MC	420	1764	4-12L	695-1025	115-136	14.5-18.5
S46MC-C	460	1932	4-8L	880-1310	106-129	15.2-19
L50MC	500	1620	4-8L	640-1330	111-148	10.5-17
S50MC	500	1910	4-8L	690-1430	95-127	11.5-18
S50MC-C	500	2000	4-8L	760-1580	95-127	12.2-19

MAN B&W Diesel Ltd., Mirrlees Blackstone

Bramhall Moor Lane, Hazel Grove, Stockport, Cheshire SK7 5AH U.K., Tel: 44-161-483-1000; Fax: 44-161-487-1465; Email: sales@manbwhouston.com; Web: http://www.manbwLtd.com

Model	Bore	Stroke	Cyl#	kw/cyl	RPM	BMEP
K Major	400	457	6,8,9L,12,16V	544	600	19
MB430M	430	520	12,16,18V	865	600	23
MB430L	430	560	6-9L	800	514	23
MB430V	430	480	12,16V	730	600	23

MAN B&W Diesel Ltd., Paxman

Hythe Hill, Colchester, Essex CO1 2HW United Kingdom, Tel: 44-1206-795151; Fax: 44-1206-797869

Model	Bore	Stroke	Cyl#	kw/cyl	RPM	BMEP
VALENTA	197	216	6L,8,12,16,18V	101-192	1200-1640	15.4-21.3
VP185	185	196	12,18V	156-222	1500-1950	25.96

MAN B&W Diesels Ltd., Ruston

Newton-LE-Willows, Merseyside WA12 8RU United Kingdom, Tel: +44-1925-225151; Fax: +44-1925-222055

Model	Bore	Stroke	Cyl#	kw/cyl	RPM	BMEP
RK215	215	275	6L, 8,12, 16V	198	720-1000	21.64
RK270	270	305	6.8L,12,16, 20 V	378	720-1032	20.48
RK 270 HF	270	305	6.8L,12,16, 20V	253	720-1000	17.36
RK 280	280	330	12,16,20V	450	720-1000	26.50

MAN Engines & Components, Inc.

595 S.W. 13th Terrace, Ste. A, Pompano Beach, Fla. 33069, Tel: 800-MAN-2842; Fax: 954-946-9098; Email: man@man-mec.com; Website: http://www.man-mec.com

Model	Bore	Stroke	Cyl#	kw/cyl	RPM	BMEP
D0826LE40	108	120	6L	45	2100-2600	13.9
D2866E	128	155	6L	31	1500-2200	8.4
D2866TE	128	155	6L	39	1800-2200	10.7
D2866LXE40	128	155	6L	54	1800-2200	14.8
D2866LE402	128	155	6L	61	2200	16.8
D2866LE403	128	155	6L	61	2100	17.6
D2866LE405	128	155	6L	75	2200	20.5
D2876LE401	128	166	6L	86	2200	21.8
D2848LE	128	142	8V	43	1800-2300	12.4
D2848LE401	128	142	8V	63	2100-2300	17.8
D2848LE403	128	142	8V	74	2300	21
D2848LE405	128	142	8V	60	2100	18.7
D2840LE	128	142	10V	59	2300	12.4
D2840LE401	128	142	10V	60	2300	17.2
D2840LE402	128	142	10V	44	1800	16.1
D2840LE403	128	142	10V	77	2300	22
D2842LE	128	142	12V	43	1800-2300	12.4
D2842LE401	128	142	12V	61	2100-2300	17.5
D2842LE402	128	142	12V	67	2300	19.2
D2842LE403	128	142	12V	44	1800	16.1
D2842LE404	128	142	12V	80	2300	22.8
D2842LE406	128	142	12V	74	2300	21
D2842LE408	128	142	12V	61	2100	19.2

MAN Nutzfahrzeuge AG, Nuremberg

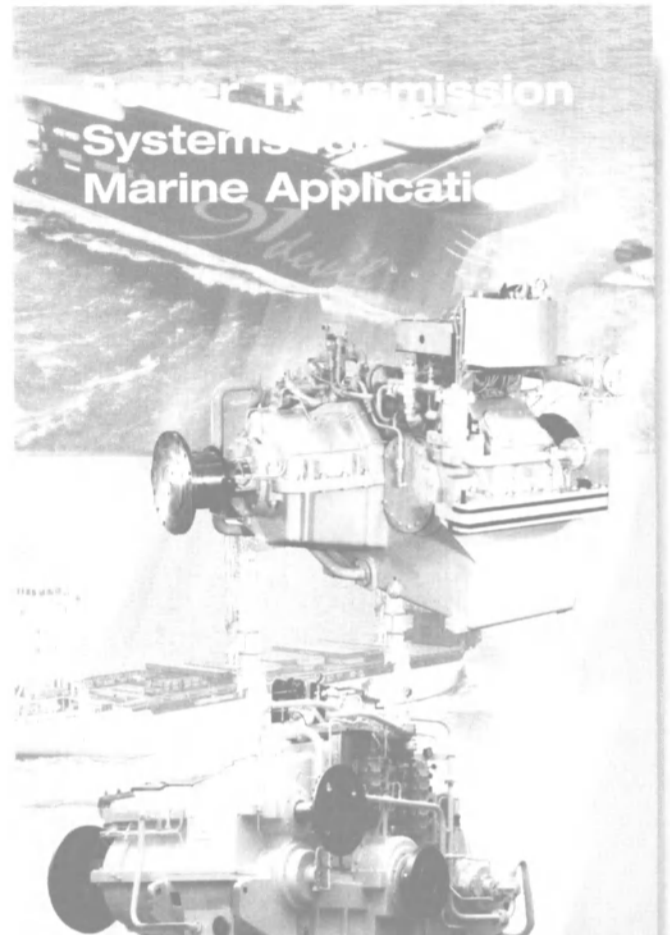
Vogelweierstr 33, Nuremberg D-90441 Germany, Tel: 49-911-420-6218; Fax: 49-911-420-1915; Email: brigitte-koehler@mn.man.de; Website: http://www.man-nutzfahrzeuge.de

Model	Bore	Stroke	Cyl#	kw/cyl	RPM	BMEP
D2866E/TE/LE	128	155	6L	27.5-41.7	1800-2200	7.9-13.9
D2866LE/402/3/5	128	155	6L	61.3-74.8	2100-2200	17.5-20.5
D2876LE/401	128	166	6L	86	2200	21.9
D2848LE/401/403/5	128	142	8V	35-73.5	1800-2300	12.8-21
D2840LE/LE401/2/3	128	142	10V	34.6-77.2	1800-2300	12.6-22
D2842LE/401/2/3/4/6/8	128	142	12V	35-79.7	1800-2300	12.8-22.8

MTU

Tel: 49-7541-90 3118; Fax: 49-7541 90 2724; E-mail: haussmann@mtu-friedrichshafen.com; Web: www.mtu-friedrichshafen.com

(Continued on page 42)



RENK is a worldwide manufacturer of gears, couplings and slide bearings for Merchant vessels with single- and multi-engine propulsion units. Cruise vessels with low-noise gear units for any propulsion system and for a large range of voyage speeds and schedules.

Fast ferries and yachts with light weight gear units for conventional and waterjet propulsion systems. Naval vessels with extremely noise optimized gear units for any propulsion system. Systems for on-board power supply by the main engine. Contact us for the optimum solution to your requirements.

Powering the Future

RENK AG • Gogginger Straße 73 • D-89159 Augsburg
Phone: ++49/821/5700-270 • Fax: ++49/821/5700-559
E-Mail: mar@renk.de

RENK AG • Rheine Works • Rodder Damm 170 • D-48432 Rheine
Phone: ++49/5971/790-383 • Fax: ++49/5971/790-208
E-Mail: kk_rh@renk.de

RENK is a member of the MAN group

Internet: www.renk.de

Circle 297 on Reader Service Card
www.maritimereporterinfo.com

ANCHORS

ANCHOR MARINE CHAINS

LARGEST INVENTORY OF NEW & USED IN THE U.S.A.

FAX: 713/644-1185
WATTS: 800/233-8014
PHONE: 713/644-1183

P.O. BOX 58645
HOUSTON, TX 77258

ALL TYPE ANCHORS & CHAIN ABS, LLOYDS GRADE 2, 3, K-4 CHAIN & FITTINGS

sales@anchormarinehouston.com
www.anchormarinehouston.com

Circle 207 on Reader Service Card

www.maritimereporterinfo.com

www.maritimetoday.com

Hornbeck-Leevac Expands Tug and Barge Fleet

Hornbeck-Leevac Marine Services has acquired the Spentonbush/Red Star Group marine transportation fleet for \$28 million, and has entered into a strategic alliance with Amerada Hess Corp. in the Northeast U.S. market. The vessels acquired include nine ocean-going tugs and ocean-going tank barges.

In addition to the acquisition of the Hess fleet, Hornbeck-Leevac has signed a long-term contract with Amerada Hess with the understanding that it will be exclusive marine logistics provider and transporter of petroleum products in the Northeast U.S. These vessels will be utilized primarily in the transportation of gasoline, and residual fuel oil between refineries, distribution terminals and ships lightering across the Eastern

Seaboard. The transaction also covers the right to acquire Amerada Hess's marine facility in Brooklyn where Hornbeck-Leevac's regional operations will now be based.

ASRY Elects New Technical/Marketing Manager

ASRY (Arab Shipbuilding and Repair Yard) in Bahrain has appointed **Franciszek Magnowski**

as the head of its Technical and Marketing Department.

Magnowski, whose expertise encompasses not only the ship repair and conversion market, but also the offshore sector (particularly the FPSO and FSO market), will work to expand further the company's business into major conversion and offshore projects.



Franciszek Magnowski, Head of ASRY's Technical and Marketing department.

IUM's President and CEO Retires After 12 Years

Interocean Uglan Management Corp. (IUM), Voorhees, N.J., announced that **William H. Lockwood, Jr.**, president and CEO, retired from the organization on May 31, 2001. Lockwood, who has served the maritime industry in various capacities for 39 years, had held the top position at IUM since 1989.

Replacing Lockwood is Captain **Jorge Aguirre** — the organization's current executive vice president and COO. Captain Aguirre, who has been with IUM since 1980, has held numerous operational positions throughout his 16-year sea-going career, and has been executive vice president/COO since 1997.

WSF Needs A New CEO

Washington state's Department of Transportation is currently seeking a Chief Executive to pilot its ferry system. The company, which operates 29 boats that cross Puget Sound and inland waterways, boasts the largest fleet in the U.S. transporting approximately 27 million passengers last year.

Inexa Signs Agreement For Shipbuilding Profiles

The Inexa Group has agreed to a long-term contract with the German company HSP Spundwand und Profil GmbH in Dortmund, and with the Italian company AFV Beltrame Sidermarghera rolling mill (SDM) in Marghera. According to the agreement, Inexa will take over the sales and marketing of these companies' production of shipbuilding profile — mainly bulb flats.

Circle 34 on Reader Service Card

PMA Approves MITAGS

The Director General of Training for the Panama Maritime Authority (PMA) has approved accreditation of MITAGS' STCW95 training courses, declaring that MITAGS had met the stringent requirements for accreditation as a STCW95 Training Center for the Panamanian Seafarers Maritime Training Department.

COMMERCIAL NEWBUILDINGS



As the result of the merger of the well-known Spanish builders Astilleros Españoles and Bazan, IZAR offers one of the largest shipbuilding capabilities in the world.

Our mission is to help shipowners to match the increasing demands of a competitive shipping market. And we have a large experience in doing it.

IZAR is currently building a series of LNG carriers with the latest technology, but also the new dredgers for the best known operator of the world

WHO ELSE BUT IZAR

IZAR has built some of the fastest ferries in the world, but also three dual drilling units for the Gulf of Mexico, incorporating the latest offshore technology, after having been the pioneer in FPSO's.

IZAR is designing a new generation of fast Ro-Pax, but also has the most advanced and environment friendly technology in double-hull tankers or in chemical carriers.

And far more, because we are ready to meet any demand.

Bring your utopia to IZAR.



Pº de la Castellana, 55 • 28046 MADRID, Spain • Tel. +34 91 335 84 00 • Fax +34 91 441 50 90 • www.izar.es



Circle 245 on Reader Service Card

www.maritimereporterinfo.com

www.maritimetoday.com

Maritime Reporter & Engineering News

MALIN 6000

Portable Electronic Diesel Engine

Data Acquisition and Performance Monitoring System

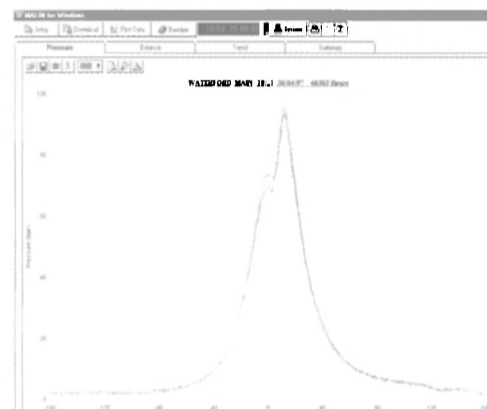
With hundreds of installations worldwide, the manufacturer of the first commercial portable engine analyzer has just raised the industry standard - AGAIN!



Complete hardware and software package

EASY TO USE PC ANALYSIS SOFTWARE CREATES:

- Draw cards
- PV diagrams
- Derivative curves
- Data overlays
- Balance diagrams
- Trends of critical parameters



OPTIMIZE ENGINE PERFORMANCE and REDUCE FUEL CONSUMPTION

NEW FEATURES

Start of injection sensor - external vibration sensor is utilized to detect fuel pump timing. Superimpose this critical performance parameter on the cylinder pressure traces.

Free running mode - allows the engineer to view real time data on the Malin display. Data is continuously updated. Extremely useful when making adjustments to the engine.

User defined channel - facilities are available for other inputs such as temperature, turbo speed, differential pressures, gas pressures or an optional bar code reader.

USCG licensed, degreed engineers available to provide training and installation assistance

Manufactured in England by Malin Instruments, Ltd.

Contact the exclusive North American Distributor

Seaworthy Industrial Systems, Inc.

E-mail: sales@seaworthyindustrial.com

Tel: (860) 767-3095

Fax: (860) 767-1263

22 Main Street

Centerbrook, CT 06409 USA

Diesel Power Annual (Directory continued from page 39)

Model	Bore	Stroke	Cyl#	kw/cyl	RPM	BMEP
1000	103	129	6L	49	2800	19.6
1800	128	155	6L	73.5	1500-2300	19.3
183	128	142	8.12V	37.5-81	1500-2400	22.1
2000	130	150	8.12.16V	41.5-92	1500-2350	23.6
396	165	185	8.12.16V	85-160	1500-2100	23.1
4000	165	190	8.12.16V	87.5-170	1500-2100	23.9
595	190	210	12.16V	245-270	1750-1800	30.2
956	230	230	20V	245	1500	20.5
1163	230	280	12.16.20V	300-370	1200-1300	29.4
8000	265	315	20V	410-450	1150	27

Perkins - Sabre, A Caterpillar Company

22 Cobham Rd., Ferndown Industrial Estate, Wimborne, Dorset BH21 7PW
United Kingdom, Tel: 44-01202-893-720; Fax: 44-01202-851-700; Email:
post@sabre-engines.co.uk; Website: <http://www.perkins-sabre.com>

Model	Bore	Stroke	Cyl#	kw/cyl	RPM	BMEP
M65	97	100	4L	11.75	2600	7.34
M85T	97	100	4L	14.88	2600	9.35
M92	103	127	4L	16	2400	7.58
M115T	100	127	4L	20.1	2400	10.11
M130C	100	127	6L	16	2600	7.47
M135	100	127	6L	16.5	2600	7.64
M185C	100	127	6L	23.33	2100	13.36
M215C	100	127	6L	26.33	2500	12.67
M225TI	100	127	6L	27.58	2500	13.45
M265TI	100	127	6L	32.5	2500	15.65
M300TI	100	127	6L	36.83	2500	17.72
350C	112	115	6L	42.83	2600	17.45

S.E.M.T. Pielstick

2, Quai de Seine, BP no 75, Saint-Denis Cedex 93202 France, Tel: 33-148097600; Fax: 33-148097878, Email: sales_marine@pielstick.com

Model	Bore	Stroke	Cyl#	kw/cyl	RPM	BMEP
10.3 Offshore	127	135	6L	134.8	3250	3.3
PA4-185 VG	185	210	6L: 18V	98-123	1200-1500	17.4
PA4-200 VGA	200	210	8, 16V	132-165	1200-1500	20
PA5	255	270	5L: 18V	132-147	900-1000	12.8
PA5	255	270	4L: 18V	210-220	900-1000	19.2
PA6	280	290	6L: 20V	272-325	900-1050	21.8
PA6B	280	330	6L: 20V	325-405	900-1050	22.8
PA6CL	280	350	6L: 20V	295	720-750	21.9

PC2.6	400	460	6L: 18V	550	500-520	22
PC2.6B	400	500	12. 20V	750	600	23.9
PC2.6B DF	400	500	12. 20V	625	600	19.9
PC4.2	570	620	6L: 18V	1215	400-429	21.5
PC4.2B	570	660	10. 18V	1300-1400	400-430	23.3
PC40	570	750	5. 10L	1325	375	22.2

Wärtsilä Corp.

John Sjöbergin, Ranta 2 00530, P.O. Box 196, Helsinki, Finland,
Tel: +358 10 709 00 00; Fax: +358 10 709 5700

Model	Bore	Stroke	Cyl#	kw/cyl	RPM	BMEP
RTA48T-B	480	2000	5-8L	1020-1455	102-127	19
RTA52U-B	520	1800	5-8L	1120-1600	110-137	18.3
RTA58T-B	580	2416	5-8L	1490-2125	84-105	19
RTA60C	600	2250	5-8L	1650-2360	91-114	19.5
RTA62U-B	620	2150	5-8L	1600-2285	92-115	18.4
RTA68T-B	680	2720	5-8L	2060-2940	75-94	19
RTA72U-B	720	2500	5-8L	2155-3080	79-99	18.3
RTA84C	840	2400	6-12L	2840-4050	82-102	17.9
RTA84T-D	840	3150	5-9L	2870-4100	61-76	18.5
RTA96C	960	2500	6-14L	4000-5720	92-102	18.6
Vasa 32GD	320	350	4-9R:12.16.18V	405-410	720-750	24.0-21.3
Vasa32	320	350	4-9R:12.16.18V	405-410	720-750	24.0-21.3
W20	200	280	4-9L	130-180	720-1000	22.5-25.8
W200	200	240	12.16.18V	175-200	1200-1500	21.2-23.2
W26	260	320	6-9L:12.16.18V	310-325	900-1000	24.3-23.0
W26X	260	320	12. 16. 18V	400	1000	28.2
W32	320	400	6. 8. 9L: 12. 16. 18V	450-460	720-750	23.3-22.9
W38B	380	475	6-9L:12.16.18V	725	600	24.5-26.5
W46	460	580	6-9L:12.16.18V	905-1050	450-514	21.9-26.1
W46GD	460	580	6-9L:12.16.18V	975	500-514	23.6-24.3
W64	640	700	12.16.18V	1940	400-428.6	23.5-22.0
W64	640	900	6-9L	2010	327.3-333.3	25.5-25
ZA40S	400	560	6-9L:12.14.16.18V	750	510	25.1

Volvo Penta of the Americas

Gothenburg S-40508 Sweden, Tel: 46-31-235460; Fax: 46-31-510348
U.S. • 1300 Volvo Penta Dr., Chesapeake, Va. 23320, Tel: 757-436-2800;
Fax: 757-436-5158, Website: <http://www.penta.volvo.se>

Model	Bore	Stroke	Cyl#	kw/cyl	RPM	BMEP
AD31L	92	90	4	23.8	3800	12.8
AD31P	92	90	4	27.5	3900	14.8

AD41P	92	90	6	20.2	3600	11.3
KAD43P/DP	92	90	6	28.3	3900	12.8
KAD43P/DPX	92	90	6	28.3	3900	12.8
TAMD102AF	120.65	140	6	44.2	2000	16.6
TAMD102AF	120.65	140	6	39.2	1800	16.3
TAMD102DF	120.65	140	6	52.5	2200	17.9
TAMD102DF	120.65	140	6	55.8	2250	18.6
TAMD122AF	130.2	150	6	49	1900	15.5
TAMD122AF	130.2	150	6	46.7	1800	15.6
TAMD122PF	130.2	150	6	73.5	2250	19
TAMD122PF	130.2	150	6	65	2100	18.6
TAMD162C	144	165	6	67.5	1900	15.9
TAMD162CF	144	165	6	62.5	1800	15.5
TAMD163AF*	144	165	6	67.5	1800	17
TAMD163PF	144	165	6	83.3	2100	17.7
TAMD163PF	144	165	6	94.3	2100	19.6
TAMD31LF	92	90	4	24	3800	12.8
TAMD31MF	92	90	4	20.3	3250	12.5
TAMD31PF	92	90	4	27.5	3900	14.2
TAMD41HF	92	90	6	17.8	2500	14.2
TAMD41MF	92	90	6	20.8	3250	12.8
TAMD41PF	92	90	6	24.5	3800	12.8
TAMD42WJF	92	90	6	28.3	3800	12.8
TAMD63L	98.42	120	6	39	2800	17.9
TAMD63LF	98.42	120	6	28.8	2500	16.2
TAMD63PF	98.42	120	6	45.3	2800	20.7
TAMD71B	104.7	130	6	46.7	2600	19.2
TAMD71BF	104.7	130	6	35	2500	15
TAMD71BF	104.7	130	6	26.7	2000	14.2
TAMD71BF	104.7	130	6	42.8	2500	18.7
TAMD72PF	104.7	130	6	52.7	2600	21.7
TAMD72WJF	104.7	130	6	55.2	2600	22.3
TMD102A	120.65	140	6	33.3	2000	12.8
TMD102AF	120.65	140	6	29.2	1800	12.3
TMD122A	130.2	150	6	39.2	1800	13.3
TMD122AF	130.2	150	6	36.8	1800	12.5
TMD31L	92	90	4	18.5	3800	9.7
TMD41LF	92	90	6	18.3	3800	9.7



www.volmar.it



Since 1973, Moletron Ultrasonic Eq. has dissolved asphaltene of low grade fuels enabling better burnability in Diesel Engines and Boilers (WITHOUT ADDITIVES)

MOLETRON eliminates slag build-up, restrains maintenance costs, produces less pollutants and less CO₂ at stacks, and pays back investment within a few months while the life span of the asset investment is prolonged.

from Italy

VOLMAR - Brughiero Milan ☎ +39 039 883195 - Fax +39 039 878283 - e-mail: info@volmar.it

from U.S.A.

COMCOR Tech (NJ) ☎ 908 9798193 - Fax 908 9791815 - e-mail BrM746@aol.com

Circle 284 on Reader Service Card

www.maritimereporterinfo.com

MARINE PROPULSION PARTS & PRODUCTS

KAPLAN & ASSOCIATES, INC

Seal Kits
Gear Sets
Overhaul Kits
"Hard to find Parts"

New & Used
Thrusters
Prop Shafts
Marine Equipment

TOLL FREE
1.877.SEND SPARES (1.877.736.3772)

Parts Available 7 Days a Week - 24 Hours a Day - Visa/Mastercard
Harbormaster-Murray & Tregurtha-Sykes-Schottel-Jastram-Others

24 Hour Hotline: 248.788.8989
Tel: 248.788.8161 Fax: 248.788.8162
Email: alankaplan@aol.com
Web Site: <http://www.alkaplan.com>

Circle 296 on Reader Service Card
www.maritimereporterinfo.com

Corpus Christi - Sept. 11th

The Lift Boat GULF ISLAND V, a 3-legged jack-up, sank off Corpus Christi, Texas. The vessel sank in 100 feet of water on to her port side with half her deckhouse beneath the sea bed.

Response & Results:

After unsuccessful recovery attempts by others, Titan's salvage team removed the wreck and placed it on shore using the 500-ton sheerlegs Southern Hercules.



DAMAGE STABILITY · FIREFIGHTING · LIGHTERING · SALVAGE

USA • P.O. Box 350465 · Ft. Lauderdale, FL 33335
Tel: 954-929-5200 · Fax: 954-929-0102

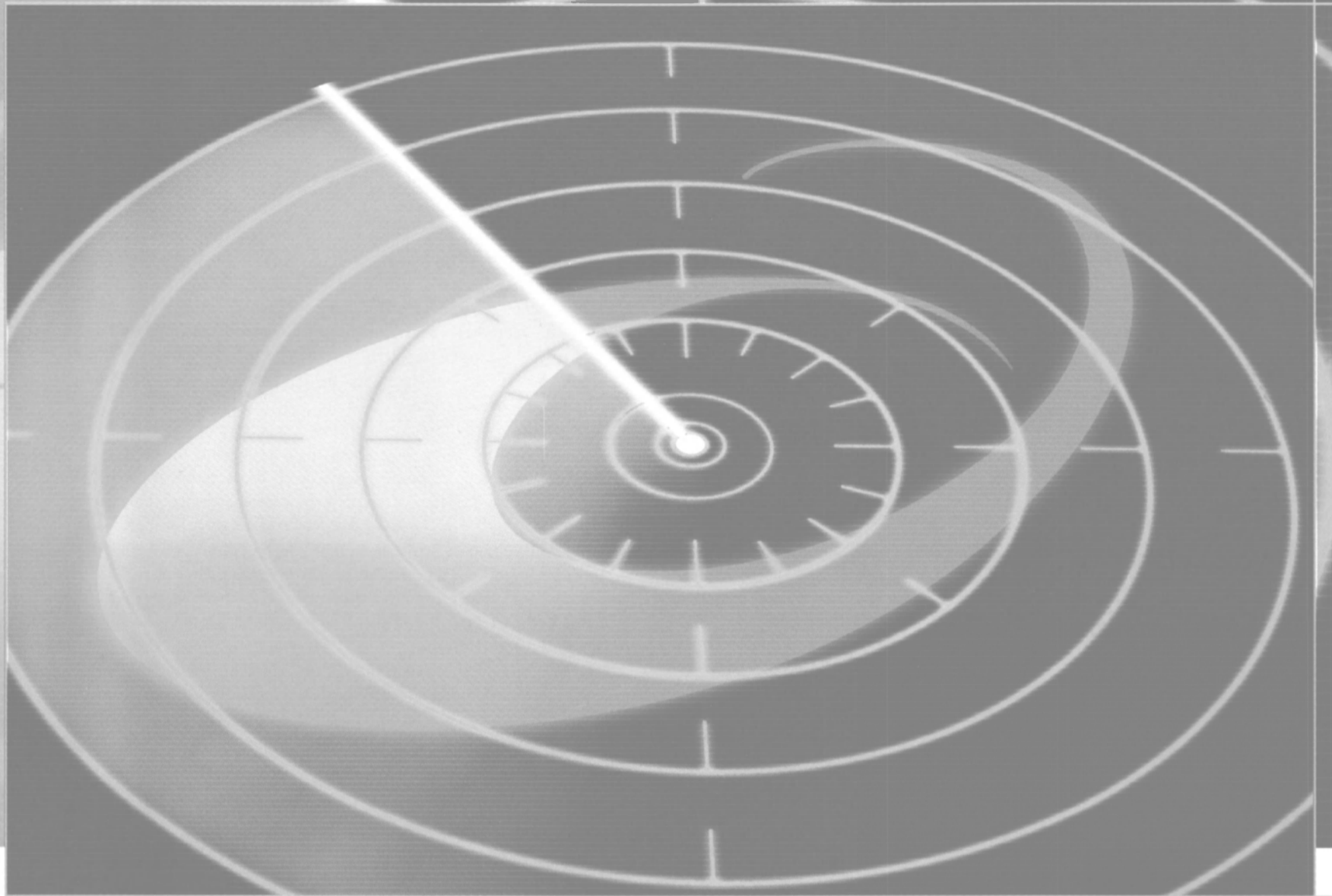
UK • New Road, Newhaven · East Sussex · BN90HE
Tel: ++44 (0) 1273 515-555 · Fax: ++44 (0) 1273 515-456

BR • Rua Gen. Mena Barreto 708 · Sao Paulo, Brasil
Tel: ++55 11 887 9217 · Fax: ++55 11 887 2687

Circle 300 on Reader Service Card

www.maritimereporterinfo.com

The sign of
The Ship Power Supplier



The
Ship Power
Supplier



Buying and successfully operating marine power systems based on many suppliers and diverse components is normal – but it puts a lot of responsibility on your shoulders. Turn to Wartsila as your source. What you'll get is reliability, functionality and global availability for your power system on a unique one supplier–one responsibility basis. In brief, a total marine power solution, tailored to your particular needs and to optimize the life cycle costs of your investment.

Wartsila & Sulzer engines 520 - 80,080 kW | Gears | Wartsila-Lips propulsion power systems | Control systems
Generating sets | Ancillary systems | Design | Engineering | Procurement | Project management | Commissioning
Operational support | Maintenance | Spare parts | Financing | **For information please visit: www.wartsila.com**

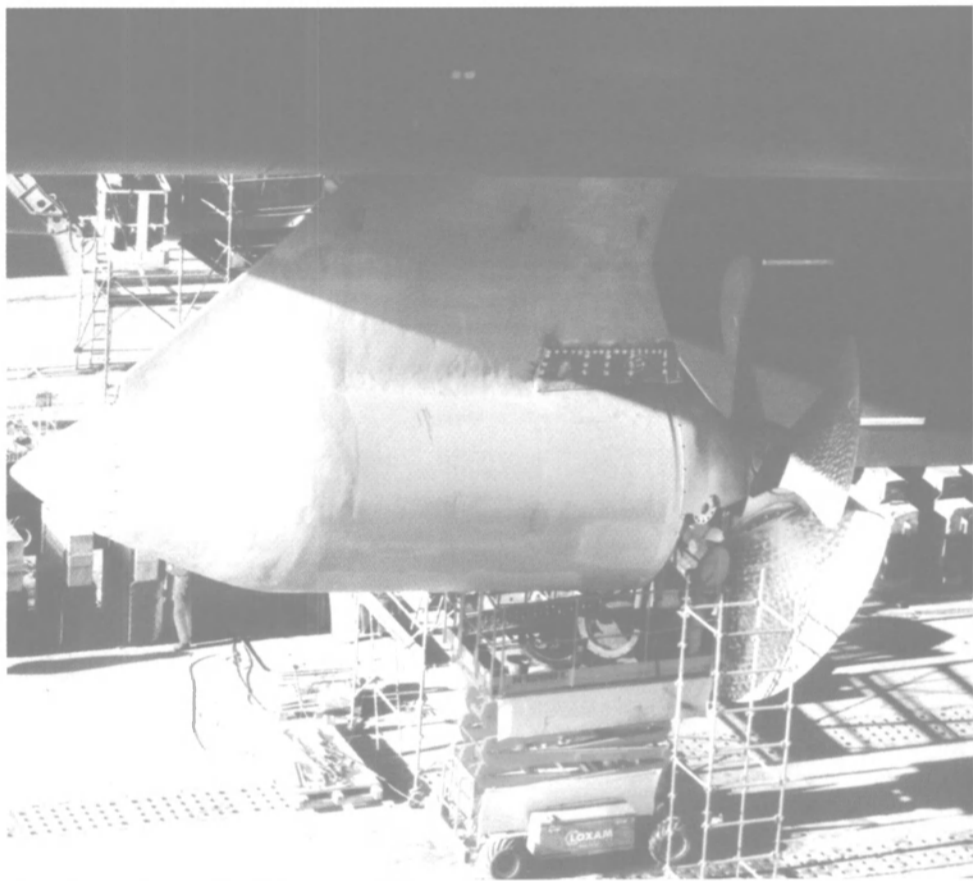


WÄRTSILÄ

Circle 285 on Reader Service Card

www.maritimereporterinfo.com

Podded Propulsion Goes Beyond the Cruise Realm



Each of the Mermaid pod propulsors for Celebrity Cruises' Millennium ship is rated at 19.5 MW and swings a 5.7 m diameter fixed pitch propeller. Mermaid has been jointly developed by Rolls-Royce in partnership with Alstom Power Conversion.

By David Tinsley, technical editor

Compelling design and operational arguments in favor of podded electric drives can be expected to transcend any negative impressions formed from the recent clutch of problems and complications experienced with such systems in certain cruise ship and ferry applications. Experience has shown that technical innovation in the maritime field has invariably been accompanied by early setbacks in some shape or form. In an industry where conservatism is the order of the day, and understandably so where assets are subjected to the rigors of the elements as well as the vicissitudes of the markets, those operators willing to be the standard bearers with new technology provide a beacon for the wider maritime community.

In some segments, most especially the domain of large cruise vessels, the podded option has forever altered the established position of standard propulsion arrangements. As has been witnessed over the past

12 months, an ever-widening appreciation of the merits of podded electric propulsors has spread the reference list to new areas, including crude oil tankers, survey ships and offshore support vessels. Soon, the concept will make its seagoing debut in the RoRo ferry sector.

From establishing a commitment to 'power station'-type plant and electric propulsion drives, it can be just a short, further step to fostering the adoption of a pod. This remarkable, generic device encapsulates the electric motor and can deliver full thrust in any direction, dispensing with the need for conventional shaftline, propeller and rudder.

Intense competition between a handful of producers, in each case melding the expertise of specialists in electrical engineering and propulsion co-venturers, is of itself enhancing the scope and the attraction of podded systems, through design development and a solution-based approach to new powering and propulsion options. For instance, pods are now being proposed within hybrid systems to meet the powering needs of the envisioned breed of ultra-large containerships, while new design variants have been developed specifically for smaller-ship applications, bringing major new areas of the market within the ambit of podded drives.

Superior maneuvering capabilities, increased hydrodynamic and drive system efficiencies, overall energy gains, and the shipboard space savings and design flexibility associated with electric pod propulsion give a solid foundation to consideration of the podded options. Building on a long track record in thruster technology, and underscoring a propensity for maritime innovation, the Finns were the leaders in the podded drive concept. The first contractual reference for the Azipod system originated by ABB Industry and Kvaerner Masa-Yards (KMY) gave the design its operational debut in 1991.

While various specialized vessels for ice navigation have carried the concept forward, the large-scale recourse to the system by leading operators in the cruise shipping sector within the past few years has constituted one of the outstanding aspects of propulsion system development over the past decade. Since 1997, the business activities for the system have been managed by ABB Azipod of Helsinki, in which ABB Industry is the majority shareholder, complemented by

4 out of 5 Cruise Ships are optimizing their communications systems with
Maritime Telecommunications Network...


The LEADER

in Maritime Communications

MTN's technology is second to none. Always an innovator, MTN is dedicated to providing state-of-the-art global satellite communications integrating today's infrastructure with tomorrow's technology.

MTN currently offers a wide array of products and services to our Cruise and Oil Industry partners including ShipNet, MTN's private IP network; Cruiselink, our advanced billing system; Live On-Board Broadcasting Services, Television, Internet and Radio, and Enhanced Services, such as Internet Cafes, ATMs, Calling Cards, Ship-to-Shore Calling and more!

The Experts in Offshore
Communications & Broadcasting.



Toll Free: 877.464.4MTN (468) • 954.538.4000 • Fax 954.431.4077 • mtn_info@mtnsat.com • www.mtnsat.com

Circle 257 on Reader Service Card

www.maritimereporterinfo.com



ALSTOM

91,000 gross tons

965 feet long

2 pods (27,000 Hp each)

Turns on a dime

We make amazing things happen



ALSTOM Power Conversion, in partnership with Kamewa of Rolls-Royce, has designed the world's largest, most advanced, electric propulsion pod. All four of Celebrity Cruises' new Millennium class cruise ships will be driven by our Mermaid™ azimuth external propellers. So too will the Queen Mary 2. The compact Mermaid™ system releases valuable space inside the hull to accommodate more passengers.

Simpler, more flexible operation with higher overall efficiency make Mermaid™ the ideal propulsion solution. This fully integrated system provides excellent maneuverability and crash stop capability and reduces the need for tug assistance. Noise and vibration levels, NOx emissions, maintenance schedules, installation time and costs – all are substantially reduced to provide a safer, greener, more efficient operation.

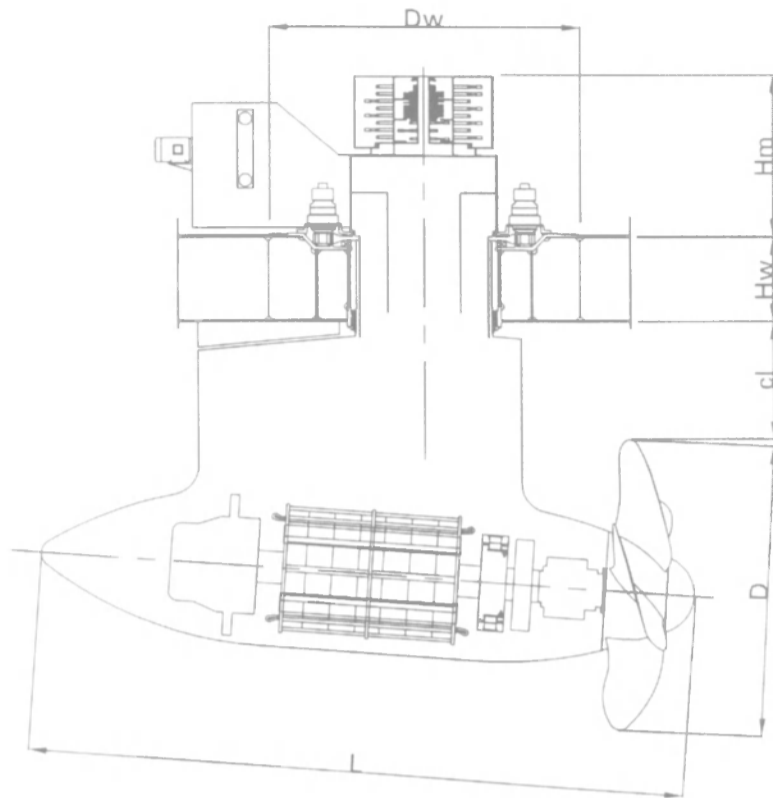
ALSTOM, the global specialist in energy and transport infrastructure

www.powerconv.alstom.com

Podded Propulsion

shipbuilders KMY and Fincantieri. One of the champions of diesel-electric powering, Carnival, gave podded propulsion its start in the cruise ship domain with the commissioning of the Elation and Paradise in 1998, sparking

broader industry uptake of the concept. Subsequent problems experienced with the systems, which led to an out-of-court settlement between ABB Azipod and Carnival at the end of last year, prompted certain design modifications.



A technical drawing of Dolphin — A John Crane-Lips / STN Atlas Marine Electronics Podded Propulsion System. Dolphin's main principle is its powerful electric motor, which drives the propeller, installed in a streamlined pod under the vessel.

By the end of May this year, Azipod installations had been specified for 24 cruise vessels, encapsulating a total of 53 pods, and involving newbuild commitments extending into 2005. While Royal Caribbean's Vantage series from Meyer Werft field the biggest unit power concentrations of 19.5-MW per pod in twin Azipod applications, the same U.S. group's Voyager of the Seas class from Kvaerner Masa-Yards have the largest array of power through the adoption of three pods of 14-MW apiece. The design offering now extends through the performance range up to 25-MW, and has been strengthened in the sector up to 5-MW by the development of the Compact Azipod series.

A market breakthrough has been achieved with the specification of the first podded propulsors specified for large crude oil carriers, whereby a 16-MW Azipod will be used for each of two 106,000-dwt diesel-electric tankers ordered in Japan for deployment with Fortum Oil & Gas.

The heavily ice-strengthened vessels will serve the Finnish energy group's year-round transportation of crude oil from the North Sea basin to its Baltic refineries. The project provides a breakthrough in the large tanker sector for Kvaerner Masa-Yards' double-acting technology, which champions the concept of podded drives. Podded propulsion is central to double-acting technology, whereby vessels are formed and equipped to sail astern in icebound waters, permitting the use of a hydrodynamically-optimized bow for open-

water navigation.

Fortum has the most extensive seagoing service experience to date of any user of podded propulsors, through its Nemarc Shipping joint venture with KMY. Nemarc's two 16,400 dwt Arctic tankers Uikku and Lunni were each retrofitted with a 11.4 MW Azipod in 1993 and 1995, respectively.

The tankers have been booked with Sumitomo Heavy Industries, where they will be constructed to the Finnish Maritime Administration's Ice Class 1A Super requirements, and incorporate a hull structural design based on a 40-year fatigue life.

By developing a system tailor-made for smaller vessels, ABB has increased the market reach of innovative podded propulsion technology. The Compact Azipod design has been engineered by the Finnish group for unit power applications in the 400-kW to 5-MW range, and early contractual successes in the offshore field have been followed by survey ship applications for the U.K. Ministry of Defence. While encapsulating the concept and attendant benefits of the original Azipod series, the latest system incorporates distinct features influenced by the particular design and operating needs of a very large population of small vessels, including ferries, inland vessels, coastal and offshore service vessels. Enhanced maneuverability and operational economy have been the twin objectives in the Compact Azipod development project.

It is felt that market demand for the

**July 2001
22 Towers
On-Line**

The MarITEL Network Is Running

America's most ambitious marine telecommunications project is now delivering superior VHF radiotelephone service along the Gulf of Mexico and lower Mississippi River. The MarITEL Network, with its giant radio towers and fiber optic infrastructure, offers far more reliable VHF marine radiotelephone communications and landline connections than the maritime community has ever experienced. MarITEL subscribers can transmit and receive private voice and data from up to 50 miles offshore and the MarITEL Network enables vessel position to be monitored from a computer anywhere in the world.



For more information on how MarITEL can benefit your shipping operation, e-mail us at: customerservice@maritelusa.com visit our website: www.maritelusa.com or, call Toll Free 1-888-MARITEL.

Circle 254 on Reader Service Card

www.maritimereporterinfo.com

Podded Propulsion

compact, water-cooled unit could reach several hundred units per annum within just a few years.

The adoption of a permanent magnet motor not only allows a slimmer pod and promises higher electrical efficiency, but also obviates cooling on the rotor, while the stator is cooled by convection to the surrounding seawater. The standard, single-propeller system can be delivered as either a 'pulling' or 'pushing' version, and the pushing variant may be fitted with a nozzled propeller to give a higher bollard pull rating.

The distinctive propulsor type has been selected for three multi-role support vessels contracted from a west Norwegian shipyard by the Ulsteinvik-based company Island Offshore. The recipient, diesel-electric newbuildings will be of the UT745E type, drawn up by Rolls-Royce Marine.

With the 4,000-dwt first-of-class due for handover this year by Soviknes Verft, the versatile support vessel class features with two pulling-type Compact Azipod units dimensioned and powered for an output of 2,300 kW apiece. The project also signifies a new application, in a demanding operating scenario, for ABB's new, water-cooled ACS600 Marine Drive, a key constituent of the Compact Azipod.

The first Royal Navy vessels incorporating integrated electric propulsion and Azipod propulsors will be the survey vessels HMS Echo and HMS Endurance, which are being constructed by Appledore Shipbuilders under subcontract from Vosper Thornycroft (UK). Each vessel will be equipped with two PWM (pulse width modulation)-controlled Compact Azipod units rated at 1,700-kW each, as part of a broader package of supply by ABB also encompassing the generators for the main power plant.

The prestigious contract to supply four Mermaid pod systems to the nascent Queen Mary 2, the 150,000-gt luxury cruise liner booked from Chantiers de l'Atlantique for Carnival's Cunard Line brand, has taken the sales tally for the series to 40 units. Originally parented by Kamewa and electric drive specialist Cegelec, now respectively vested in Rolls-Royce and Alstom Power Conversion, Mermaid has also recently been nominated for NYK's 68,000-gt cruise ship newbuild at St. Nazaire, and also for the 60,000-gt sisters placed with the same yard by Italian operator MSC Cruise.

The Queen Mary 2 project signifies application of the technology at an unsurpassed level of power, whereby the installation will comprise two fixed and two azimuthing pod units of 21.5-MW each, delivering a combined out-

put of 86-MW. The arrangements are designed to ensure a speed of nearly 30-knots with low noise and vibration levels and maximum maneuverability.

The Mermaid range covers unit powers up to 25-MW, and has hitherto been sold in versions from 7-MW upwards.

The proprietors plan to introduce drives starting at 500-kW, cognizant of the considerable small-ship market potential for pod propulsors. The 85,000-gt Millennium-class cruise ships entrusted by Celebrity Cruises to Chantiers de l'Atlantique provided the debut for the

Mermaid as well as for the gas turbo-electric powering concept in the cruise sector.

Mermaid has also been favored for the Project America initiative, whereby two 12.5-MW units will be supplied in each case to two 72,000-gt cruise ships to be

YOU'VE KNOWN US FOR QUALITY RIGGING PRODUCTS SINCE 1890



Now more than ever, Skookum signifies value in today's cost-conscious world. Our comprehensive block, fairlead, sheave and alloy forging lines have met the challenges of the most demanding applications around the world. And in the process, we've proudly taken part in the shaping of American history, from salvage operations at Pearl Harbor and construction of the Grand Coulee Dam to San Francisco's BART and the space shuttle.

Whatever your applications, we're committed to serving you with the finest in standard and custom engineered products. For further information contact your nearest dealer or call us direct:
Skookum
PO Box 280, Hubbard, Oregon 97032
Telephone 503/651-3175
1-800/547-8211 FAX 503/651-3409

SKOOKUM  **Blocks & Rigging**

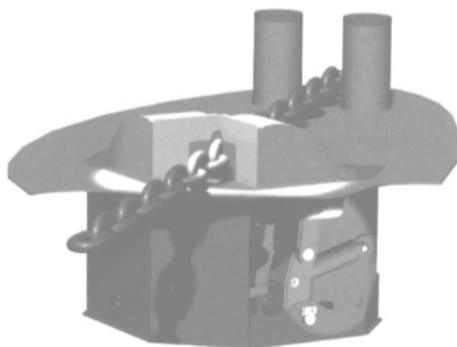
AN ULSTEIN COMPANY

Circle 271 on Reader Service Card
www.maritimereporterinfo.com



Smith Berger Marine, Inc.
Now Offers A Complete Line Of

SHARK JAWS



SAFE – RELIABLE – ECONOMICAL

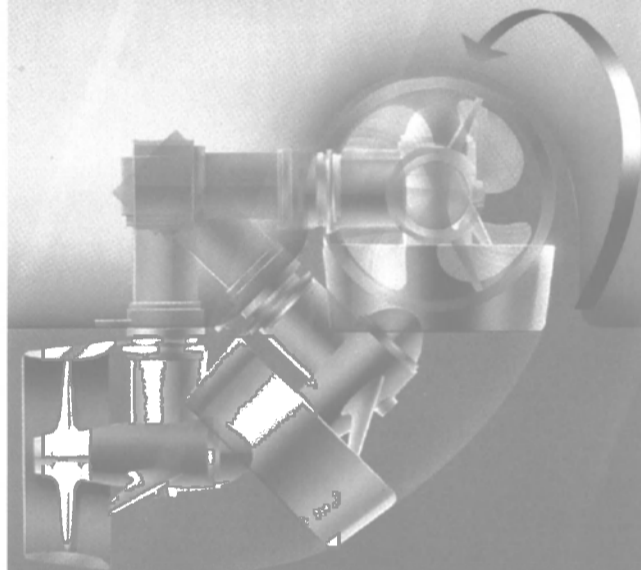
Smith Berger Marine, Inc. is pleased to introduce the newest addition to our product line. Designed to demanding Smith Berger standards, our Shark Jaws are a natural extension of our capabilities and add to our long history of providing the maritime community with rugged, dependable mooring and towing equipment.

By coupling our new Shark Jaws with Smith Berger Towing Pins and Stern Rollers you can now take advantage of Smith Berger quality to outfit your next Anchor Handling/Tug Supply Vessel.

Smith Berger Marine, Inc. 7915 10th Ave. S., Seattle, WA 98108 USA
Tel. 206.764.4650 - Toll Free 888.726.1688 - Fax 206.764.4653
E-mail: sales@smithberger.com

Circle 272 on Reader Service Card
www.maritimereporterinfo.com
www.maritimetoday.com

We serve you both!



ULSTEIN AQUAMASTER™ COMBI THRUSTERS – AZIMUTH AND TUNNEL THRUSTER IN ONE SINGLE UNIT

The Ulstein Aquamaster™ Combi Thruster from Rolls-Royce is designed for accurate positioning and precise manoeuvring – developed through years of experience and close cooperation with our customers. The thruster is well suited for use in vessels requiring a quick conversion from operational to retracted thruster position. The swing-up function reduces both fuel consumption and resistance when retracted into the hull.

Go for both! Contact us for more information on Ulstein Aquamaster™ Combi Thrusters, which not only position the vessel but propel it as well.

UAQM1/052001

 **Rolls-Royce**

TRUSTED TO DELIVER EXCELLENCE

Rolls-Royce Marine AS, N-6065 Ulsteinvik Norway
Telephone: +47 70 01 40 00. Fax: +47 70 01 40 17 www.rolls-royce.com

Circle 264 on Reader Service Card
www.maritimereporterinfo.com

PRELIMINARY NOTICE - UNRESERVED PUBLIC AUCTION

Jacksonville, Florida

2000 IMS 4010 Dredge

1995 Moody Bros 13 Ft 9 In. x 25 Ft 6 In.



MARINE EQUIPMENT

4- Dravo 10 x 34 x 130 Ft Double Rigged Cargo Barge, Ingalls Shipyard 10 x 34 x 130 Ft Double Rigged Deck Cargo Barge, 5 x 22 x 88 Ft Military Spar Barge, 2 x 6 x 12 Ft Barge, 5 x 21 x 88 Ft Military Spud Flat, 5 x 21 x 88 Ft Military Work Flat, 16 Ft 3 In. x 50 Ft Work Flat, 5 x 12 x 34 Ft Dredge Tender, 1995 Moody Bros Marine 13 Ft 9 In. x 25 Ft 6 In. Dredge Tender, 4 Ft 9 In. x 18 Ft x 25 Ft Dredge Tender, 2000 IMS 4010 Dredge, 1996 Boston Whaler Dauntless 15 15 Ft Open Skiff, 1998 Liningston 14 Ft Open Fiberglass Skiff, 2000 Green Cove Springs 7 x 22 x 45 Ft Pushboat, 1999 Moody Bros Inc 8 x 24 Ft Crewboat, 2- F & F 20 Ft Aluminum Jon Boat, Monarch 20 Ft Aluminum Jon Boat.

Other Equipment Includes:

Crawler Tractors, Wheel Loaders, Hydraulic Excavators, Loader Backhoes, Rough Terrain Cranes, Conventional Truck Cranes, 10- Crawler Draglines/Cranes, Concrete Pavers, Truck Tractors, Dump Trucks, Utility Trucks, Flatbed Trucks, Pickups, Lowboys, Hiboyes, Camp Units, Forklifts, Drills, 17- Compressors, 12- Generator Sets, Light Towers, 16- Welders, 12- Pumps, Concrete Equipment, Survey Equipment, Hydraulic Hammers, Equipment Attachments And Much More.

A Realignment & Relocation of Equipment For Wood-Hopkins Contracting Company LLC

Thursday, August 16, 2001 8:00 am

Sale Site: 1901 Hill Street, Jacksonville, Florida 32205 Fax: (352) 401-0450

CALL FOR A FREE BROCHURE

(352) 401-0460

rb RITCHIE BROS.
Auctioneers

RBA
MEMBER
NYSE

FOR INFORMATION ON OTHER RITCHIE BROS. AUCTIONS PLEASE CONTACT - TEL: (402) 421-3631 OR
1-800-663-8457 • FAX: (402) 421-1738

Auction Business License # AB-0000303

UNRESERVED - EVERYTHING SELLS TO THE HIGHEST BIDDER

Circle 325 on Reader Service Card

www.maritimereporterinfo.com

Podded Propulsion

constructed by Litton Ingalls Shipbuilding for American Classic Voyages Co. (AMCV). The propulsor choice is all the more significant for the fact that the new-builds are the first large, ocean-going passenger ships to be laid down in the U.S. for 40 years.

Swedish tanker operator Donsotank has re-affirmed its belief in podded electric drive technology by nominating a Siemens-Schottel Propulsor (SSP) system for a further chemical products carrier to be built in China.

The latest diesel-electric newbuilding will be a near-sister of the 18,000-dwt Prospero, commissioned from Shanghai Edward Shipyard last September. Prospero provided the all-German SSP concept with its first seagoing reference, by way of a 360-degree rotating pod incorporating a 5.1-MW electric motor.

Ease of fitting, a factor salient to its adoption for a project in China, was one of the characteristics of the integral drive system, which favored its selection for the new tanker. The SSP's modular design and, unlike other podded drives, its avoidance of complicated air cooling arrangements, makes for relatively straightforward installation. The SSP solution differs from other podded propulsion options by way of the use of tractor and pusher propellers at each end of the pod unit. It is also distinguished by the adoption of a permanent magnet, longitudinal-flow motor. Each end of the armature is direct-coupled to a propeller, such that the two propellers rotate in the same direction. Donsotank's second-of-class from the partially German-owned Shanghai Edward establishment is

scheduled for handover at the beginning of 2002.

TT-Line of Germany has provided an opening reference for podded electric drives in the ferry market, a project which has drawn considerable media attention for the ship handover delays attributable to problems encountered with the SSP pod system on sea trials. At the time of writing, with the 34,500-gt Nils Holgersson being readied at Bremerhaven for a delayed commissioning in July, the precise nature and cause of problems had still to be made known. However, the concept holds good, based as it is on solid operational and economic factors.

The exacting level of maneuverability needed for the new ships, the savings in fuel associated with more efficient maneuvering, along with weight, space, and propulsive efficiency factors favored the selection of azimuthing pods in preference to a more standard diesel-electric layout based on internal propulsion motors driving fixed-pitch propellers. The nature of the SSP system, whereby machine cooling is effected principally by direct seawater contact with the pod body, so dispensing with the need for special cooling equipment and space provision, is regarded as a plus factor in RoRo ferry design.

Using 11-MW SSP10 pods, the system has been incorporated into its new class of RoPax ferries within the limited height constraints imposed by the aft-end configuration of such vessels, and the need to ensure unobstructed access from the stern ramp into the main garage deck.

With the sales tally growing for the competing Azipod, Mermaid and Siemens-Schottel Propulsor (SSP) design series, STN Atlas Marine Electronics and John Crane-Lips have demonstrated the market's receptivity to a further propulsion option by landing an opening deal for the jointly developed Dolphin pod system.

Radisson Seven Seas' 50,000-gt newbuilding Seven Seas Voyager, will provide the debut contract for the Dolphin series, in the form of two 7,000-kW pods. The units figure in a considerably broader powering and drive package to be supplied by STN Atlas and John Crane-Lips to Genoese yard of build T.Mariotti.

The co-developers claim that a typical Dolphin installation can result in power savings of 5-10 percent relative to conventional propulsive drive arrangements based on fp propellers. The pulling action of the podded propulsor makes for an improved axial water flow towards the propeller compared with a traditional twin-screw, inboard-drive arrangement. As well as reduced propulsive energy requirements at a given ship speed, the podded option is said to result in improved cavitation characteristics with low excitations, and a low noise level.

REPAIR SERVICE CONVERSION



GALAXY - extensive propeller repairs within 5 days at Blohm + Voss Repair.

REPAIR

- Bottom damage repairs
- Rudder and propeller repairs
- Engine damage repairs
- Class work of all types
- Dockings for all purposes
- Conservation work

CONVERSIONS

- Lengthening and shortening of vessels
- Reengining of ships and conversion of bulk-carriers into self-unloaders
- Ro-Ro cargo ferries were converted into Ro-Ro passenger ferries
- Many other offshore units were prepared for specific deployment roles or upgraded in order to meet the latest technical standards
- Dock facilities up to 351 m length, 59,20 m breadth

24 hours at your disposal



P.O.Box: 10 05 26 · D-20004 Hamburg
Phone: +49 (40) 31 19 - 80 00 · Fax: +49 (40) 31 19 - 33 05
e-mail: BVREPAIR@BlohmVoss.Thyssen.com
www.blohmvooss.com



BRAEMAR - four-week conversion at Blohm + Voss Repair.

Circle 211 on Reader Service Card

www.maritimereporterinfo.com

Podded Propulsion

The heart of the Dolphin is a six-phase, brushless, synchronous motor incorporating double windings, and speed-controlled by converter. The concept has been engineered for operational reliability and system simplicity. The shaft is protected within its pod casing by a combination of face and lip seals. Dolphin's Dutch and German technicians have developed systems for applications in the 3-MW to 19-MW power band. The diesel-electric Seven Seas Voyager, arranged for 700 passengers, will be similar to the Mermaid-fitted Seven Seas Mariner, completed this year by Chantiers de l'Atlantique. Options available to shipowners and designers have also been increased by the development of a new pod design by the French state-owned undertaking DCN. Although conceived for the naval sector, DCN's primary marine market, the system is also claimed to offer substantial potential in the mercantile vessel field. Using a permanent magnet motor-based solution and employing a pulling-propeller configuration, the French offering is understood to match the broadest power range currently available with existing podded drives.

Meanwhile, a three-year research program drawing in European and U.S. participants, and dubbed Pods in Service, is expected to yield valuable data that will help quantify operational performance with podded systems and feed into future design work. The project is being coordinated by the Dutch Maritime Research Institute MARIN.

\$67M Containership Order Logged

South Korea's Hyundai Merchant Marine placed a \$67 million order for a containership with Heavy Industries. Hyundai Merchant said it had borrowed funds from foreign financial institutions at LIBOR plus one percent for the 5,700 TEU-sized order. The shipping and trading company, a unit of Hyundai Group, said the containership would serve Asia-Europe routes from 2003. It said it would also place more ship orders in the second half of this year, including two 4,700 TEU container ships.

Frontline Execs. Approve \$321M Four-Tanker Purchase

Frontline's board approved the firm taking a 33 percent stake of a partnership buying four tankers from Bergesen valued at \$321 million.

Bergesen made a preliminary agreement to sell four tankers to a consortium, Tankers International, led by Frontline.

The remaining interest will be taken

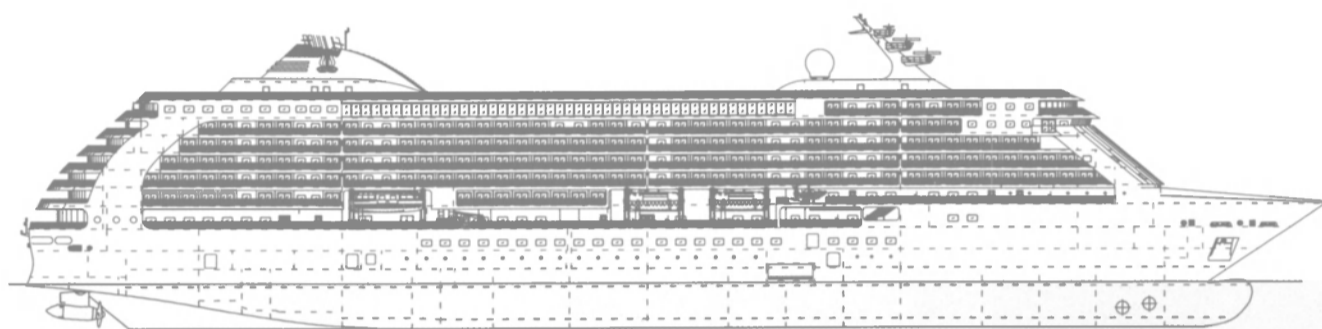
up by other partners in Tankers International. The ships will be financed through the joint venture and it is anticipated that Frontline's equity investment in the four ships will be less than \$35 million. The deal included two tankers and contracts to build two new tankers. The sales price of the two tankers was \$164 million, while the new contracts

had a total value of \$157 million. The four tankers were part of a series of eight tanker projects that Bergesen acquired from the Hitachi yard in Japan in January 2000. Frontline's board also agreed to buy the remaining 47.2 percent in a unit of Moseagle Invest K/S, which controls a VLCC tanker to be delivered from Samsung in November 2001.

H+W Awarded Final Delivery Installment from Global Marine

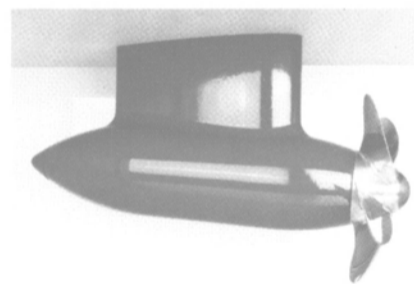
The Court of Appeal in London issued its judgment in relation to the outstanding delivery installment payable on the deepwater drillship Glomar Jack Ryan, completed by Harland and Wolff in July 2000.

DOLPHIN - The new Star in the Field of Pod Drives



STN ATLAS Marine Electronics delivers the propulsion system with DOLPHIN pods 2 x 7 MW for the cruise liner "Seven Seas Voyager", under construction at T. Marnotti, Italy for V.Ships Leisure/ Radisson Seven Seas Cruises

The DOLPHIN project becomes reality. This success follows from the co-operation between the competent partners John Crane-Lips and STN ATLAS Marine Electronics.



Covering a power range of 5...19 MW, the highly advanced propulsion system DOLPHIN offers an optimized solution for pod drives.

Hydrodynamic advantages

- Higher efficiency
- Low pressure pulses resulting in low noise and low vibration levels
- Optimum steering accuracy

Mechanical design

- Modular design concept
- Installation block facilitates easy integration on the ship
- Proven design components
- Design based on the John Crane-Lips steerable thruster technology with over 500 references

Electrical advantages of an electric propulsion system using synchro-converter drives

- Far less components for power and control electronics with simpler and more robust system structure
- Protection of the converter thyristors in case of short circuit in the mains without additional electronic assemblies
- Lower level of harmonic interference providing better mains quality

STN ATLAS Marine Electronics GmbH

Member of the EuroMarine Group
Behringstraße 120
D-22763 Hamburg, Germany
Phone: +49 - 40 - 88 25 - 0
Fax: +49 - 40 - 88 25 - 40 00
e-mail: info@sam-electronics.de
<http://www.sam-electronics.de>

John Crane-Lips Marine Propulsion Systems

P. O. Box 6
5150 BB Drunen, The Netherlands
Phone: +31 - 416 - 38 81 15
Fax: +31 - 416 - 37 31 62
e-mail: info@johncrane-lips.com
<http://www.johncrane-lips.com>



John Crane-Lips
Marine Propulsion Systems



SAM
Electronics

Circle 275 on Reader Service Card

www.maritimetoday.com

www.maritimereporterinfo.com

OUTSTANDING SHIPS BUILT BY HDW



Class 123 stealth frigate



Shipbuilding R+D



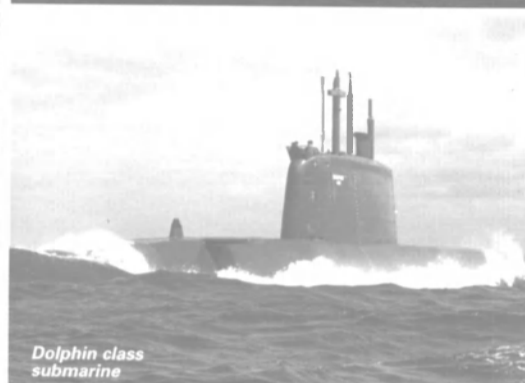
25 knot hatchcoverless feedership



Superfast Ferries



Class 212 submarines



Dolphin class submarine



1000 FEU reeferships



Passengerships, private passengerships



5.200 TEU containership

Tomorrow's Ships Today

Backed by more than 160 years of shipbuilding expertise, HDW is a preeminent maritime industry leader.

Our recent list of newbuilds includes luxury passenger ships, superfast ferries, a fleet of fast feeder ships, the world's largest hatchcoverless reeferships, as well as gigantic containerships serving the new millennium.

And last but not least, HDW's cutting edge shipbuilding know-how spearheads new naval technologies above and below the world's oceans.



HOWALDTSWERKE-DEUTSCHE WERFT AG

P.O. Box 63 09 · D-24124 Kiel · Tel.: (+49) 431 / 700 - 0 · Fax: (+49) 431 / 700 - 2312
www.hdw.de

Germany

Forging Ahead

Despite a marked drop in shipbuilding volume during the past decade to lower cost competitors in the East, Germany's marine market has maintained its adherence to the highest technical standard while carving its niche in the world of constructing complex, high-value vessels. In many ways, the saying "the more things change, the more they stay the same" could be aptly applied to the current status of the German marine market. While the world, and certainly the business of constructing commercial ships for the world fleet, has changed dramatically in the past decade, Germany's role in this market has stayed remarkably on course. Facing steady market erosion to competitors in Japan, South Korea and China, German yards and ships equipment suppliers have maintained the mantra of quality product and quality construction.

While most of the German shipyards are well-regarded for producing high-value, quality ships, Meyer Werft GmbH in Papenburg undoubtedly is one of the first companies that comes to mind when discussing superior performance, in Germany and around the world.

The shipyard itself is an engineering wonder, situated for more than 200 years in the Northwest corner of Germany, near the Dutch border, and nearly 40 km from the sea on the River Ems. Shipbuilding is conducted in a totally enclosed facility, and high importance is placed on ensuring a smooth and efficient workflow. By next year the yard will have built 14 luxury cruise liners between 40,000 and 90,000 gt, and work is currently underway to ensure the shipyard's prosperity in the long term.

The shipyard is in the process of adding a second covered building facility, an edifice which measures 1,240 ft. (378 m) long, 246 ft. (75 m) high and 410 ft. (125 m) wide. While Meyer Werft has enjoyed great success in building ships for the international cruise market, it was previously unable to build the cruise behemoths which are currently in demand because of its facilities and because of restrictions posed by transporting the ship to sea on the River Ems. This mammoth building — scheduled for completion soon — combined with a new River Barrier system — scheduled to be in operation by 2002 — will allow the shipyard to build the largest class of cruise ships on the market today. In total, the company has invested about \$100 million for the new building facility and the needed prefab area, outfitted modular roller system which allow ship blocks to be moved without a crane, and outfitted with the latest laser cutting machines.

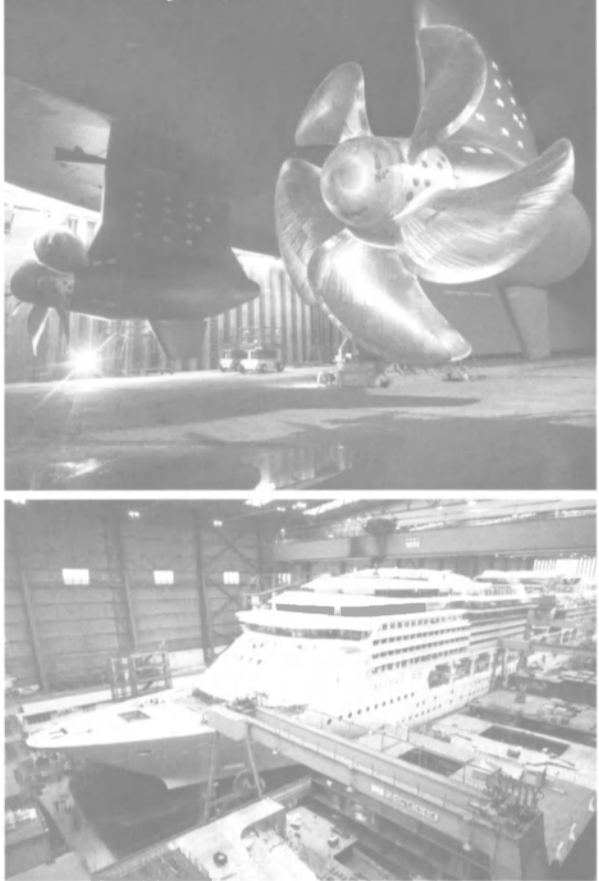
While Meyer Werft is most closely associated with the cruise ship market, it constructs a variety of high-value vessels — including Ferries, RoRo ships and Gas Tanker — for owners around the globe. The

yard also has what it believes to be the largest series of passenger ships ever built, as between 1983 and 1998 it delivered 20 vessels for operation around the island nation of Indonesia. Additional vessels of the series are expected this year and next.

The three German shipyards under the Thyssen Krupp Werften GmbH Group — Blohm + Voss GmbH, Blohm + Voss Repair GmbH, and Thyssen Nordseewerke — collectively increased sales 10 percent in 2000 v. 1999. Most notably, Blohm + Voss sales surged 53 percent, from approximately \$315 million to nearly \$483 million. The jump in the orderbook for 2000 for the Emden and Hamburg-based yards was due in large to orders for South African and Malaysian naval vessels, five containership and the consortium's share in a four-submarine order. The non-naval orderbook at the end of 2000 totaled about \$3.4 billion, and was comprised mainly of cruise ships being built at Blohm + Voss in Hamburg and 2,500 teu container vessels being built at Thyssen Nordseewerke in Emden.

Always well-regarded for delivering a healthy dose of innovative technology, Blohm + Voss delivers on that reputation again with the delivery of the 800-passenger Olympic Voyager, a Fast Monohull passenger vessel handed over to its Greek owners at the end of 2000. Powered by four Wartisla medium speed diesel engines which product a cumulative 37,800 hp, the twin-screw 24,500-gt vessel has a cruising speed of 28 knots at 85 percent MCR. The ship is based on the patented Fast Monohull design, which is touted as

Azipods installed on Radiance of the Seas at Meyer Werft.



Radiance of the Seas under construction at Meyer Werft.

reducing power installed requirements by up to 20 percent. The signatures of the design are a very slim underwater body, and large propellers installed in a tunnel. The design originated from in-house, from the talents of Mr. **Hans Langenberg**, who put his full life experience of hydrodynamics into the project, which curiously started out as a containership design. The quality of the Blohm + Voss Fast Monohull concept was proven when Olympic Voyager was singled out at

Tired of ads that go nowhere?

Place an ad in MARITIME REPORTER
and
sales will head in the right direction.

Call: 212-477-6700

THE MARITIME GROUP
118 East 25th Street, New York, NY 10010
Tel: 212-477-6700, Fax: 212-254-6271, E-mail: info@marinelink.com

MARITIME
REPORTER
AND
ENGINEERING NEWS

It Can Take You Anywhere...



Are you interested in getting in on the action—taking paying passengers on charter fishing parties, or on dive trips, or sight-seeing tours?

Houston Marine can make this possible in 9-15 days with three courses combined into one. We will train you to become a *licensed captain*. Our OUPV 100/200 ton courses are USCG-approved.

Call today for course dates!
1-800-947-7737



HOUSTON MARINE TRAINING SERVICES
The Complete Training Source

5728 Jefferson Highway • New Orleans, Louisiana 70123
Fax: 504-729-4450 • www.houstonmarine.com

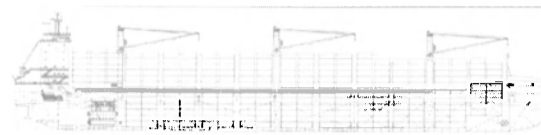
Circle 241 on Reader Service Card
www.maritimereporterinfo.com

Germany

the prestigious Cruise and Ferry Awards 2001 as the most significant cruise ship newbuilding in the past two years. The event, which was hosted at the Royal Lancaster Hotel in London, saw the Olympic Voyager take the top prize amongst fierce competition for pioneering the fast cruise concept. The panel of judges, who were chosen from such organizations as the International Maritime Organization, the Maritime Hotel Academy and the Royal Institute of Naval Architects.

In the constant battle to increase efficiencies enjoyed by all yards, of all sizes, Blohm + Voss has sought to give greater amounts of work and responsibility to fewer subcontractors working at the shipyard. This concept came to full fruition on Olympic Voyager, as, in essence, there were three main suppliers features: Kaefer handled the interior; ABB was responsible for electronics and electric; and Aero M took care of heating and ventilation.

Bremerhaven-based SSW GmbH effectively started its shipbuilding under this name in May 1998, and currently focuses on newbuilding of seagoing passenger ferries and midsize ships, as well as RoRo ships, luxury cruise vessels, reefer ships and gas carriers. In early April, the company was putting the finishing touches on Nils Holgersson, a 640 passenger, 22-knot RoPax vessel for TT Line, but was delayed by a problem with the ship's podded propulsion system. At press time the situa-



SSW GmbH has orders for seven new-design containerships (with three options) in hand. Steel was cut in April, and the first launch is due in October.

tion was still being worked on, but upon delivery the ship will offer a host of innovative advances. Powered by five MaK engines (two MaK 8M 43's; two MaK 7M 43's; and one 6M 32), the ship will be propelled by two pod drive units arranged aft (each 11,000 kW stepless 0-175 rpm). Sister ship Peter Pan was scheduled for delivery in August, but that date is questionable given the delay with the first vessel. Interestingly, as soon as Peter Pan is delivered, Nils Holgersson will be back into SSW GmbH for a conversion, as the owner wants to



Olympic Voyager from Blohm + Voss is the embodiment of the company's Fast Monohull design.

WHERE IN THE WORLD IS METAL SURGERY?

SPECIALISTS IN CAST IRON REPAIR



Stitching restores a hard to replace pump manifold.



Plating a worn lofting cylinder on an ore carrier.



Stitching approximately 100 in. of crack on a ship's propeller hub.



Stitching a severely cracked engine block.



Stitching, machining and plating a cracked housing.



Grinding generator slip rings to save \$1,000's in costs.

EVERYWHERE!

A FULL RANGE OF SERVICES/
READY TO TRAVEL ROUND
THE WORLD/24 HOURS A DAY
One Year Warranty



METAL SURGERY, USA, Ltd.
1-800-394-8489/www.metalsurgery.com

The *Get-It-Done* Professionals in World-Wide Repair

Circle 256 on Reader Service Card

www.maritimereporterinfo.com



Total Marine Solutions

Offering the Right Solutions and Quality Customer Service to ship Owners & Operators

Proudly Representing:

Marinfloc AB
United Ship Service
Rivertrace Engineering
Tramp Oil & Marine Ltd

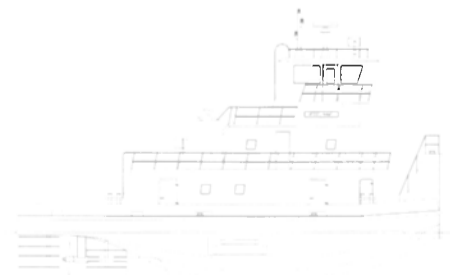
Biotrace
Bio-Matrix
Citro Bio
Masto

4350 Oakes Road, Ste 501 Ft Laud, FL 33314
Ph: 954-327-2032 Fx: 954-327-2530
totalmarinesolutions@msn.com

Circle 282 on Reader Service Card
www.maritimereporterinfo.com

CONSTRUCTION PACKAGES

BARGE BOAT DRYDOCK KITS
COMPUTER LOFTING PLATE PROCESSING
Advance Fabricating, Inc. Galveston, Tx. (281)-414-5550 advancefab.com



Circle 202 on Reader Service Card
www.maritimereporterinfo.com

eliminate some passenger capacity for additional RoRo space. It will also receive a new name, Tom Sawyer. While SSW GmbH is strictly a new construction facility, it agreed to the conversion because it built the ship.

Apart from the RoPax ships, SSW GmbH also has an order for seven containerships (pictured on page 52) plus three options. The 696 x 97.7 ft. (212.2 x 29.8 m) new design features improved lines, which as a result are intended to provide the same speed with less installed power. The 27,000 dwt, GL-classed ship will have a 22 knot speed courtesy of a Wartsila 7RTA 72 U-B powerplant which generates 21,560 kW at 99 rpm.

Of the 2,500 container spaces available, nearly 14 percent — 340 — are for cool carriers. First steel was cut in April, and the launching is set for October. Three hulls in the series will be built in Romania, coming to Germany for full outfitting. The last of the seven vessels is due for delivery in mid 2003.

Three shipbuilding contracts exceeding 400 Million DM (172.6 million) were recently awarded to Lübeck, Germany-based Flender Werft. The contracts include a RoRo passenger ferry for Smyril Line of the Faroe Islands, which will be built in accordance with

the plans and documents of Flensburger Schiffbau-Gesellschaft. In addition, a pair of 3,600-TEU containerships will be built for Hamburg-based shipowner Claus-Peter Offen.

These newbuildings will be initiated directly following the Superfast Ferries currently under construction at the yard, and will keep the yard fully occupied to the start of 2003.

Greek ferry operator Attica Enterprises took delivery of its new Superfast VII ferry, the first of four sister ships, from

Howaldtswerke Werft (HDW) shipyards in Kiel, Germany. Attica's new ferries will be deployed in the Baltic Sea, serving routes between Germany and Finland and Germany and Sweden. Superfast VII will start commercial operations linking the German port of Rostock with Hanko in Finland on May 17, with Superfast VIII joining it in about six months. Attica Enterprises said its new Baltic cruise-class ferries have a capacity for 626 passengers, 85 cars and 110 trucks each.

For additional information on the shipyards in this report, circle the number on the Reader Service Card in this edition, or log on to www.maritimereporterinfo.com:

Blohm + Voss	65
Blohm + Voss Repair	66
Flender Werft	67
Howaldtswerke Werft (HDW)	68
Meyer Werft	69
SSW GmbH	70

Hall Associates of Washington, Inc. Exclusively in our hands for sale.



**U.S. Flag
Dual Mode Articulated Tug-Barge
493'x 58'x 19' 2"
Max Draft 5500 ST DWT
ABS Ocean Loadline
Built 1941/Converted 1998
5 year ABS done in October 2000
Tug built 1943 as ATA/Converted 1998
Asking USD 4,250,000 as is
where is U.S. Great Lakes.
Details upon request.**

Christopher E. Hall

Hall Associates of Washington, Inc.
Commercial Marine Brokers and Consultants
11503 Pine Ct., P.O. Box 1554, Mukilteo, WA 98275

Phone (425) 349-5867
Fax (425) 349-1576
email-chall@halltug.com
http://www.halltug.com

Circle 324 on Reader Service Card

www.maritimereporterinfo.com

Schottel Tug Featured In Oslo



The latest Schottel tugs for the Fairplay shipping company are equipped with Schottel Rudderpropellers of type STT 1515 CP.

Hamburg tug operator Fairplay Towage and Schottel GmbH & Co. teamed to present Fairplay-26 at Nor-Shipping 2001 in Oslo. This stern tug and its sister ship Fairplay-25 were built by the Spanish yard Astilleros Zamakona. Both are equipped with two Schottel Rudderpropellers — type SRP 1515 CP (2,025 kW each) — and one Schottel STT 110 LK Transverse Thruster, type (2.8 tons of thrust). The tugs are stationed in Rotterdam, and are used primarily for offshore tasks, achieving a bollard pull of 67 tons and a forward speed of 13.5 knots. Schottel also presented a full-size example of the Schottel type STP 200 Twin Propeller (max. 420 kW), a propulsion system that is the successful optimization of the complete Schottel Rudderpropeller system.

Circle 63 on Reader Service Card

July, 2001

Attention, Radio Electronics Technicians!

Connect

With Excellence and Opportunity

Your communications, electronic repair, and maintenance experience is needed. Whether your experience is commercial or military, Military Sealift Command needs you as a member of its advanced technology team. Imagine travel to ports in Europe, Asia, and the Caribbean while supporting Department of Defense initiatives.

Earn top pay, excellent leave, and full government health and retirement benefits. If you have the background experience, and the ability to obtain a top-secret clearance, MSC can put your skills to work today.

Communications is the key to MSC.

Call 1-877-292-7709



Military
Sealift
Command

1-877-292-7709
www.msc.navy.mil

MSC is an equal opportunity employer and drug-free workplace.

Circle 323 on Reader Service Card

www.maritimereporterinfo.com

www.maritimetoday.com

53

**IT WILL COST YOU
\$THOUSANDS\$
IF YOU DON'T READ
THIS AD!
BE PREPARED!**



**Leaks in marine operations
create safety exposure for personnel,
and environmental damage risks are
enormous.
Here's the way to fix leaks fast!**

**COMMON PIPE
LEAK PROBLEMS:**

- Cargo, Ballast, Steam and Potable water lines.
- Fuel and Lubricant lines.
- Fire Systems.
- Engine Room and galley.
- Electric Conduit exposure.
- General pipe corrosion.



YOUR SOLUTION:

Onboard Reviews:
"Terrific results...works like normal original pipe...so strong..."
"When I join a ship, I request a dozen Stop It® to immediately use in an emergency without a delay in operation..."
"This product is a life saver for offshore locations."

**The STOP IT® PIPE REPAIR SYSTEM
saves you time and money!**



STOP IT® is simple to use. One man, no special tools, NO HOT WORK, and can even be applied underwater. Pipes are wrapped with a knitted fiberglass tape, pre-coated with a water activated urethane system that sets in 5 minutes, cures fully in 30 minutes and conforms around elbows, tees and complex fittings. After the 30-minute cure, STOP IT® will withstand up to 400 PSI and 500° F and has excellent chemical resistance.

Used by domestic and foreign Coast Guards, Navy, Air Force and marine operators worldwide!

STOP IT® - A FAST LOW COST SOLUTION.

PHONE, FAX or EMAIL NOW TO START SAVING MONEY!

Toll Free 1-800-523-7867 or (713) 977-4100, fax (713) 977-4164
E-mail stopit@indumar.com, web site www.stopit.com

The STOP IT® Pipe Repair System, FIX STIX™ hand moldable epoxy, the STOP IT® Pipe Repair Clamp™ and FUSION TAPE™ are manufactured by

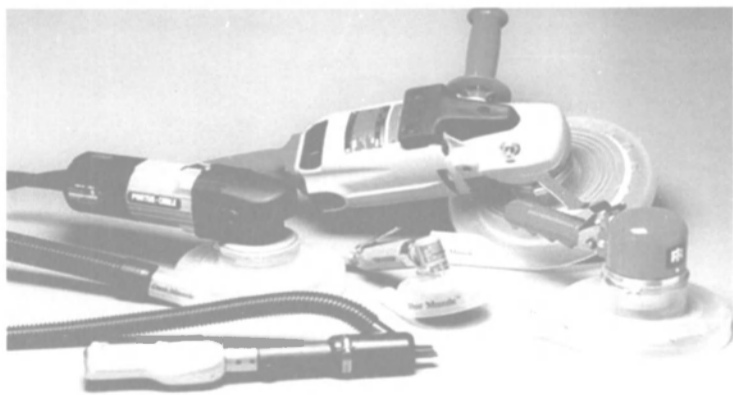


InduMar Products, Inc.
PO Box 70008
Houston, TX 77215-0008

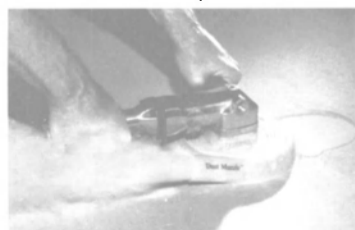
Circle 327 on Reader Service Card

www.maritimereporterinfo.com

**DUSTLESS DIE GRINDERS, ANGLE SANDERS AND
NEEDLE SCALERS!**



Flexible • Transparent • Retrofits over 1200 tools in Minutes



The Dust Muzzle
\$24.95



The Chip Muzzle
\$59.95

Dealer Inquiries Invited.

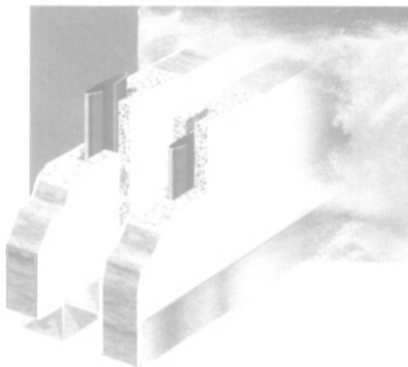
Shave Away, Europe 837 Cornish Drive, San Diego, CA 92107
619 223-2154 Fax 619 223-9690 www.dustmuzzle.com

Circle 270 on Reader Service Card

www.maritimereporterinfo.com

Germany

Kaefer Expands Capabilities



CFS, a company in the Kaefer Group, manufactures the LOLAMAT wall and ceiling system, a system that offers exceptional acoustic, fire protection, weight and strength qualities.

engine rooms on the world's largest liquefied gas tanker, is all within Kaefer's spectrum of operation.

One of the company's more recent acquisitions was finish-based CFS, manufacturers of LOLAMAT wall and ceiling systems, a lightweight, very strong product for use in cabins and bathrooms onboard passenger ships. Expansive walls are able to be installed without seams, and the surface finish is particularly variable (wallpaper, paint, tiles, laminate, etc.). The walls are, for the most part, pre-fabricated to ease installation, and feature excellent acoustic and fire protection.

Circle 72 on Reader Service Card

**STN Atlas Unveils SatCom
Developments**

An advanced Inmarsat-B satellite communication system equipped with a small, light antenna, the Debeg 3250, is among latest satcom developments from Hamburg-based STN ATLAS Marine Electronics. Designed for both new installations and retrofits aboard vessels of all types and sizes, the system provides high-speed data transfer at rates costing up to 50 percent less than current Inmarsat-A services, making it ideal for ship management functions such as cargo data and remote engine monitoring. The system is also being marketed by Raytheon Marine, following a collaborative agreement between the two companies.

Bremen-based Kaefer is an international conglomerate with nearly 4,000 employees in 24 countries. The company has steadily built its portfolio of shipbuilding and marine products through internal creation and acquisition, and today sits well positioned to service a diversity of marine applications.

Kaefer has excelled in the realm of interior finishing, and it has taken that concept many steps past the simple supply of materials with its role as one of the three lead subcontractors in the construction of Olympic Voyager and Olympic Explorer at Blohm + Voss.

Interior finishing on all decks, from galleys to deluxe cabins on cruise ships to refrigerated cold storage rooms and

**In 1886, The Most Elegant Hotel
In The French Quarter Was On Royal Street.**



It Still Is Today.

For well over 100 years, the Hotel Monteleone has stood as one of the Grande Dame hotels of New Orleans. Located just steps from New Orleans' finest restaurants, antique shops and world-famous nightclubs, it's often said that "The French Quarter Begins In The Lobby Of The Hotel Monteleone." Come see for yourself why we won the 2000 J.D. Powers Award for outstanding customer service.

The Hotel Monteleone

A National Historic Landmark Hotel

214 Rue Royale, New Orleans, Louisiana 70130-2201
(800)535-9595 or (504)523-3341

Visit our website at www.hotelmonteleone.com or contact us at reservations@hotelmonteleone.com

Circle 239 on Reader Service Card

www.maritimereporterinfo.com

Germany

Deerberg Systems: Experts in Flow Management

Germany's Deerberg Systems has been a pioneer in the waste management sector, responsible for the creation of the Multi-Purpose-Waste-Management-System (MPWMS). Given the increasing political attention given towards clean seas, and the tremendous public backlash and financial ramifications for companies who pollute, organizations such as Deerberg are positioned to clean up in the marine market.

The complete MPWMS design is based on the pre-condition that the operator must be free in his decision to operate the complete system in a Non-Sorting or Sorting Mode from one moment to the other. All subsystems, such as shredder, silo, incinerator and de-ashing are able to handle all kinds of burnable and non-burnable waste. Glass, tins and metal cans as non-burnable waste, can pass through the system as well as all kinds of burnable waste, like plastic, paper, etc. On top of this, the Incineration System is able to handle high quantities of Sludge Oil and Food Waste with burn out results of 100 percent. The heart of the MPWMS, the unique design of the Incinerator, equipped with movable grate technology, facilitates this. The advantages for the operator are the simple handling of waste, no manual sorting out, less manpower, low expenditure of work, disinfected, bacteria free sterile ash.

The complete system fulfills all international and national rules and regulations such as IMO, EPA, USDA, USCG, USPHS as well as future rules for emissions. This ensures that all world-wide receiving stations will accept disinfected, bacteria free and non smelling residuals. Import of bacteria to foreign countries is excluded. Ash disposal to sea is also possible, because all plastic is burned 100 percent.

Another important development is the Deerberg Complete Green Ship Philosophy 21, which takes into account all emissions to sea, air and land, offering to the ship owner a total turn-key package of Waste Management following rigorously the Zero Discharge Ideals of the 21st century.

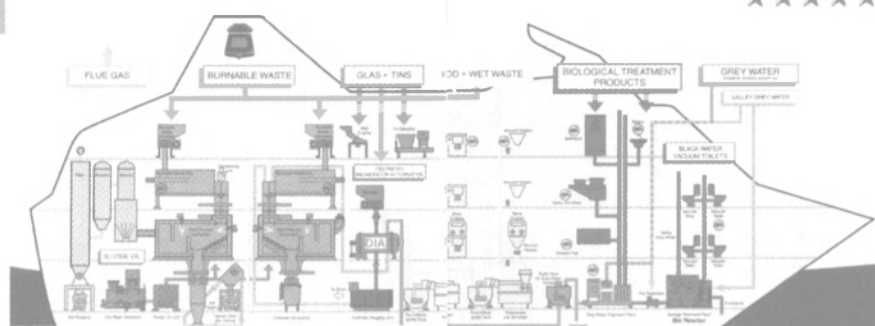
This development has been rounded up by the introduction of Hepburn Bio Ship Care Products (HBSC), which replace the acids and chemical cleaning products used onboard ships by biological products. This new generation of

totally biodegradable cleaning and technical products help to dramatically reduce the blockages, odors, and pollution levels.

Circle 29 on Reader Service Card

The Deerberg Complete Green Ship Philosophy 21

★★★★★



You'd Be Hard- Pressed To Find A Better Fender. Really Hard- Pressed.

Large or small, floating or fixed, Seaward SEA GUARD® fenders cover you from the tropics to the arctic. Seaward International brings to fender technology the same rigorous quality control and attention to detail we put into all our marine products. From the 2'x4' to the tanker-scaled 12'x24', all our fenders meet the most stringent quality and performance standards.

The SEA GUARD fender combines quality assurance standards with new elastomer technologies such as a reinforced skin, making it the answer to most fender system requirements.

The first of its kind 20 years ago, the Seaward foam-filled fender maintains its record of reliability. And we continue to develop and supply the protective marine technologies that keep you on course.

All our products tell the same story: Seaward is committed to safeguarding your peace of mind.

Structures, ships, environments, budgets: We protect it all.



3470 Martinsburg Pike, P.O. Box 98,
Clearbrook, VA 22624-0098 USA
1-800-828-5360 • 540-667-5191
Fax: 540-667-7987 www.seaward.com

SEA GUARD® is a registered trademark of the Chem Ray-SEAGUARD Corporation. Used under license by SEAWARD International, Inc.

Circle 268 on Reader Service Card

www.maritimereporterinfo.com

www.maritimetoday.com

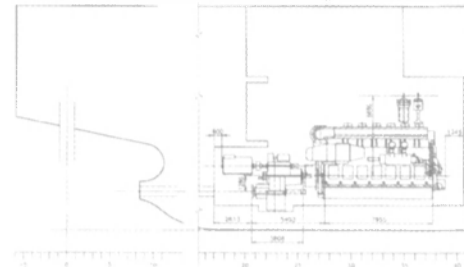
New Technology Debuts in Oslo

NorShipping 2001, held in Oslo, Norway in early June, once again proved to be a dynamic exhibition complete with

some of the more influential personnel in the marine business on-hand for the week long event. As usual, marine man-

ufacturers used the platform of NorShipping to launch new products, systems and services to the international market.

APD installation on a Handy size tanker



Wartsila was chosen as the single source propulsion system supplier for a new set of 40,000-dwt Italian tankers.

some of which is detailed in the following report.

Wartsila Corp., the ubiquitous propulsion system manufacturer announced that it had received a contact to supply the complete marine power system for the first of a series of environmentally safe 40,000-dwt chemical/product tankers building at the San Marco shipyard in Italy. In an interview with Wartsila's **Mikael Makinen** earlier this year, he stressed that the company was expanding beyond the mere business of manufacturing engines, seeking to become a single source propulsion system provider, or, as the company touts, "The Ship Power Supplier."

For the 40,000-dwt tankers, Wartsila will be just that, as it is responsible for the complete functionality of the system. In addition to supplying the hardware, it will provide the shipyard with all of the functional drawings and will be supervising the plant's installation, commissioning and sea trials. The ship will be equipped with a Wartsila 6L64 medium-speed diesel engine, of 12,060 kW output at 333 rpm and a CP 6,200 mm diameter Lips propeller, together with shafting and reduction gear. The new vessel will measure 563 ft. (171.6 m) long and feature 12 cargo, two slop and one recovery tank. The propulsion package will give the ship a maximum 17-knot speed on a 34 ft. (10.3 m) draft, and a service speed of 16 knots.

Leica made waves on the electronics front by introducing first fully integrated GPS/DGPS/AIS shipboard system. While the final standards regarding AIS are still years in the making, Leica — traditionally a company that pushes the innovation edge — has delivered a product in the MX 420, which incorporates a



Leica introduced the first fully integrated GPS/DGPS/AIS shipboard system — MX 420.

Thermax

®

SALES & DISTRIBUTION

Panel Specialists, Inc. / Thermax NA
3115 Range Road (P.O. Box 968)
Temple, TX 76504-1240, USA

Tel: (800) 947-9422 *USA only
(254) 774-9800
Fax: (254) 774-7222
Website: www.panelspec.com

INTERIOR JOINER WALL PANELS

AROUND THE WORLD NAVAL ARCHITECTS, INTERIOR DECORATORS, MATERIAL SPECIFIERS, SHIP-BUILDERS, JOINERS, AND CABINET MAKERS LOOK TO THERMAX FOR:

- NON-COMBUSTIBLE marine construction boards meeting requirements of SOLAS and IMO resolutions
- Marine fire rated construction boards for bulkheads, joiner panels, walls, double shell, and ceiling
- Marine Regulatory Body Certification (USCG/UL, Canadian Coast Guard, UK DOT, Lloyds, DNV, etc.)
- Excellent core material for marine furniture fabrication
- Environmentally friendly construction material (no fibers, no formaldehydes, nontoxic)
- Technical Support
- Inventory in the USA ready for immediate shipment
- Laminating services available
- Metal profiles for bulkhead systems upon request
- Design, production, and sales of marine products according to requirements of EN DIN ISO 9001:1994

Sales
Panel Specialists, Inc. (PSI)
15006 Shaw Road
Tampa, FL 33625, USA

Tel: (800) 540-5503 *USA only
(813) 264-2656
Fax: (813) 264-2507
E-mail: thermax@erols.com

ISO 9001

Registered and Certified

THERMAX • Subsidiary of ISOVOLTA AG • Austria
A Constantia Industrieholding A.G. Company

Circle 280 on Reader Service Card

www.maritimereporterinfo.com

Visit www.marinesoup.com

to learn how you can

increase purchasing efficiency,

cut costs & simplify the

communication process.

1.877.965.6096

MARINESOUP

connecting buyers & suppliers in industry

Circle 242 on Reader Service Card

www.maritimereporterinfo.com

high-accuracy MX 421 GPS/DGPS receiver and an IMO-compliant AIS transponder system, with a combined control and display unit. Optionally, the MX 420 AIS can be interfaced with an already installed GPS or DGPS receiver onboard instead of the MX 421. The AIS transponder module in the MX 420 system was designed and developed by SAAB TransponderTech, and meets all specifications for marine AIS shipboard equipment, and is designed to be compliant with future standards through software upgrades. The combined system takes advantage of another Leica innovation, the MX 421, a type-approved high-precision GPS/DGPS "smart antenna." It was the first GPS product to use the new Silicon Germanium (SiGe) receiver chip, and was developed jointly by Leica and IBM.

In the wake of corporate consolidations, marine buyers can sometimes be confused as from which house comes which product. ExxonMobil, which completed the granddaddy of all mergers last year in combining the two oil industry behemoths, announced a plan to simplify the marine lubricants buying choice to its deep sea customers. ExxonMobil Marine Lubricants announced that its Mobilgard brand will be the flagship product line offered to deep sea customers. The Mobil-



Transas rolled out its new line — Navi-Sailor 3000 — in Oslo last month.

gard brand includes a full range of mineral oils and synthetic lubricants for marine engines and equipment. The company will retain the Esso and Exxon brand of marine lubricants for the coastal and inland sectors.

The company also introduced an enhanced oil analysis program with new Web-based delivery capabilities. Dubbed Signum Oil Analysis, it will replace the company's Exxcare and Progressive Fast Analysis (PFA) oil analysis programs. "The upgraded Exxcare and PFA programs adds new on-line capabilities that will make it easier for customers to access information and remedy problems," said **Wayne Sirois**, global marketing manager. **ExxonMobil Marine Lubricants**. The new system allows customers to gain access to their specific accounting information, including on-line lube charts, through the Internet, without adding new software.

Transas Marine, another company synonymous with advanced marine technology, in June launched the first of its new generation Navi-Sailor navigation systems, Navi-Sailor 3000. The system incorporates all the functionality of the previously type-approved ECDIS with an additional array of innovative features. According to **Peter Mantel**, director of marketing and business development, Transas made the decision about a year and a half ago to invest in a new platform that would satisfy the technological needs of today and tomorrow. The system has been designed with flexibility in mind, as it features: the option of North-

ANCHORS CHAINS

WORTELBOER

Up/Course-
Up/Head-Up
chart display
modes; integrated
weather forecasting, multi-
ple chart display and user-selectable screen layout; advanced Route Planning, Radar Overlay and Playback facilities; Relative and True Motion display; and an advanced (U)AIS transponder interface, that will be modified with the final specification come out. The company intends to launch two additional products in the series later this year.

Hamworthy KSE AB, the Swedish-based dry cargo handling division of Hamworthy KSE, stressed that it was involved in far more than the simple design, manufacture and supply of cargo handling solutions. The organization is involved with three major European shipping transport projects, including the Improved Port Ship Interface (IPSI) project, which aims to reduce cargo transported on Europe's clogged motorways with an integrated solution highlighting short sea shipping and inland waterways transportation.

Other significant developments that occurred throughout the week included:

MacGregor announced that its new Sherlog ultrasonic testing system — designed to quickly and easily check the cargo access sealing system — has been type approved.

For additional information on the companies mentioned in this report, circle the appropriate number on the Reader Service Card in this edition.

ExxonMobil Marine Lubricants	53
Hamworthy KSE	54
Leica	55
Lloyd's Register	56
Loipart	57
MacGregor	58
Transas Marine	59
Wärtsilä Corp.	60

Lloyd's Register

completed a study to find the optimum solution to the question of how to most efficiently propel the next generation of Ultra Large Containerships (UCLS).

Finland's **Loipart** introduced a combined fire resistant and thermally insulated door for cold rooms and freezers, the A-60 line.

Brunvoll Bucks The Trend, And Prospers

At a time when many companies in the marine industry see mergers as the key to success, Brunvoll AS, continues to steer its own course. In fact, as **Knut Andresen**, Brunvoll's technical director said recently, acquiring a "package" of systems from a large concern may not be the best solution for shipowners anyway, because of the temptation for some companies to hide costs within the package.

Brunvoll has been designing and manufacturing thrusters for more than 37 years since it first introduced tunnel thrusters onto the Norwegian market. It continues to specialize in thrusters to this day, and has gained a worldwide reputation in that sector of the market, choosing to design and manufacture thrusters that are customized to meet the demands of individual ships, rather than low cost, off-the-shelf equipment that is

(continued on page 59)



A.R. LARSEN COMPANY INC.

www.marinegalley.com

Excellence in Food Service Equipment & Services to the MARINE INDUSTRY ... around the globe.

MARINE GALLEY DESIGN
EQUIPMENT & APPLIANCES
CUSTOM EQUIPMENT & FABRICATION
INSTALLATION
JOINER SYSTEMS
FIXTURES & FURNISHINGS

1-800-735-7286

(425) 861-8868 • Fax: (425) 861-8668 • email: arlarsenco@yahoo.com • Redmond, WA 98073-0088
All A.R. Larsen products and services meet marine industry regulations, standards and requirements.



Ferliship's New Ship Contracts • April 2001 • by Type

Ferliship is a strategic consultancy highly specialized in market researches guided to the shipping industry. For additional information, please contact Ferliship (a: Pza. Sta. M^a Soledad Torres Acosta, 2. 2^o C., 28004 Madrid, Spain, Tel. : +34 91 531 01 78 , 689 01 45 66; Fax: +34 91 531 01 78' e-mail: ferliship@iies.es (Prices are in U.S. Dollars)

OWNER OPERATOR	COUNTRY SO	SHIPYARD	COUNTRY SB	TYPE	No	TEU	DWT	DELIV	PRICE M \$
MITSUI O.S.K. LINES (MOL)	JAPAN	NKK CORP	JAPAN	BULK CARRIER	2	0	178000	03/04	0
NIPPON YUSEN KAISA (NYK)	JAPAN	NKK CORP.	JAPAN	BULK CARRIER	3	0	178000	03/04	0
ALASSIA STEAMSHIP	GREECE	TSUNEISHI	JAPAN	BULK CARRIER	2	0	76000	03	0
SAFETY MANAGEMENT OVERSEAS	GREECE	TSUNEISHI	JAPAN	BULK CARRIER	2	0	76000	03	0
ITOCHU CORP	JAPAN	SANOYAS CORP	JAPAN	BULK CARRIER	1	0	75500	02	0
LEMOS,N.S.	UK	HUDONG SHIPYARD	CHINA	BULK CARRIER	1	0	74000	02	0
UNKNOWN	—	HAKODATE DOCK	JAPAN	BULK CARRIER	1	0	31500	02	0
JAPANESE INTERESTS	JAPAN	HAKATA ZOSEN	JAPAN	BULK CARRIER	1	0	13000	01	0
OKINO KAIUN	JAPAN	KANDA SHIPBUILDING CO.	JAPAN	BULK CARRIER	1	0	7070	01	0
COSCO	CHINA	SHANGHAI WAIGAOQIAO	CHINA	BULK CARRIER ORE STRENGTHENED	2	0	170000	03	80
ORIENT MARITIME	JAPAN	KANDA SHIPBUILDING CO.	JAPAN	BULK CARRIER ORE STRENGTHENED	1	0	32400	02	0
NIEDERELBE SCHIFFFAHRT	GERMANY	DAEWOO	KOREA	CONTAINER	4	6750	0	03	0
MEDITERRANEAN SHIPPING CO	SWITZERLAND	DAEWOO	KOREA	CONTAINER	2	6600	0	03	132
NIPPON YUSEN KAISA (NYK)	JAPAN	ISHIKAWAJIMA HARIMA H.I. (IHI)	JAPAN	CONTAINER	3	6200	0	04	0
HERMAN WULFF	GERMANY	GDYNIA	POLAND	CONTAINER	2	4400	0	04	92
CHINA SHIPPING GROUP (CSG)	CHINA	HUDONG SHIPYARD	CHINA	CONTAINER	5	4000	0	03/04	247.5
A. P. MOLLER	DENMARK	VOLKSWERFT STRALSUND	GERMANY	CONTAINER	3	3000	0	03	0
AHRENKIEL	GERMANY	HYUNDAI MIPO	KOREA	CONTAINER	2	2770	0	03	65
BERTRAM RICKMERS REEDEREI	GERMANY	JIANGSU YANGZUJIANG	CHINA	CONTAINER	4	1800	0	03/04	96
LEONHARDT & BLUMBERG	GERMANY	GUANGZHOU	CHINA	CONTAINER	1	1740	0	03	0
GERMAN INTERESTS	GERMANY	PEENE-WERFT	GERMANY	CONTAINER	3	1200	0	03	0
REEDEREI JUNGERHANS	GERMANY	PEENE-WERFT	GERMANY	CONTAINER	1	1150	0	02	0
ALPHA SHIPPING	GERMANY	GDANSK	POLAND	CONTAINER	2	1100	0	03	34
FINNISH INTEREST	FINLAND	J.J. SIETAS	GERMANY	CONTAINER	1	966	0	02	0
JAPANESE INTERESTS	JAPAN	HAKATA ZOSEN	JAPAN	CONTAINER	1	600	0	02	0
SPANISH INTERESTS	SPAIN	CELIKTEKNE SANAYII	TURKEY	CHEMICAL TANKER	1	0	21000	03	0
UNKNOWN	UNKNOWN	USUKI	JAPAN	CHEMICAL TANKER	1	0	8600	02	0
UNKNOWN	UNKNOWN	USUKI	JAPAN	CHEMICAL TANKER	1	0	6500	01	0
ITALIAN INTEREST	ITALY	CELIKTEKNE SANAYII	TURKEY	CHEMICAL TANKER	1	0	5500	02	0
REIMERSWAAL ZAND	—	BARKMEIJER STROOBOS	NETHERLANDS	DREDGER SUCTION HOPPER	1	0	0	02	0
NORWEGIAN GAS CARRIER	NORWAY	HUDONG SHIPYARD	CHINA	ETHYLENE TANKER	2	0	10000	04	40.6
EIWA KAIUN	JAPAN	KURINOURA	JAPAN	GAS CARRIER	1	0	11000	01	0
HIRATA KAIUN	JAPAN	HONDA	JAPAN	GENERAL CARGO	1	0	2000	01	0
AKI MARINE	JAPAN	MATSUURA TEKKO	JAPAN	GENERAL CARGO	1	0	1586	01	0
EXMAR	BELGIUM	DAEWOO	KOREA	LNG	1	0	0	04	0
OSPREY MARITIME	SINGAPORE	DAEWOO	KOREA	LNG	2	0	0	03	0
UNKNOWN	—	MURAKAMI HIDE	JAPAN	LPG	1	0	6300	02	0
I. M. SKAUGEN	NORWAY	ZHONGHUA SHIPYARD	CHINA	LPG	2	0	0	03	43
KRISTIAN GERHARD JEBSEN	NORWAY	HYUNDAI HEAVY INDUSTRIES (HHI)	KOREA	OBO	2	0	0	03	96
K-SEA TRANSPORTATION	—	BOLLINGER	US	OIL BARGE	4	0	10000	02/03	0
UNKNOWN	—	CANTIERI NAVALE RODRIGUEZ	ITALY	PASS/FERRY	7	0	0	02/03	0
UNKNOWN	—	CANTIERI NAVALE RODRIGUEZ	ITALY	PASS/FERRY	3	0	0	02/03	0
UNKNOWN	—	CHEOY LEE	HONG KONG	PASSENGER	1	0	0	01	0
MARNALI	ITALY	CANTIERI NAVALI TERMOLI	ITALY	PLATFORM SUPPLY VESSEL	7	0	0	01/02/03	0
BRASILEIRA OFFSHORE	BRAZIL	PROMAR	BRAZIL	PLATFORM SUPPLY VESSEL	1	0	0	02	0
UNKNOWN	GREECE	DAEDONG SHIPBUILDING	KOREA	PRODUCTS TANKER	2	0	76000	03/04	68
OMI CORPORATION	US	ONOMICHI	JAPAN	PRODUCTS TANKER	1	0	47000	03	29
OVERSEAS MARITIME CARRIERS	—	GUANGZHOU	CHINA	PRODUCTS TANKER	1	0	38000	02	0
ANDROMEDA SHIPPING	GERMANY	HYUNDAI MIPO	KOREA	PRODUCTS TANKER	1	0	37000	03	26
SEARLAND GROUP	AUSTRIA	DAEDONG SHIPBUILDING	KOREA	PRODUCTS TANKER	2	0	36000	03	52
A. P. MOLLER	DENMARK	GUANGZHOU	CHINA	PRODUCTS TANKER	1	0	35000	03	27.5
CARL F PETERS	GERMANY	UNDENAU	GERMANY	PRODUCTS TANKER	1	0	34200	03	0
KINRIKI KISEN	JAPAN	HAKATA ZOSEN	JAPAN	PRODUCTS TANKER	1	0	5000	01	0
UNKNOWN	—	MURAKAMI HIDE	JAPAN	PRODUCTS TANKER	1	0	5000	01	0
JOHN H. WHITAKER	UK	GEMAK INDUSTRY & TRADING	TURKEY	PRODUCTS TANKER	2	0	4450	02	16
AUGUSTA DUE	ITALY	CANTIERE NAVALE MARIO MORINI	ITALY	PRODUCTS TANKER	1	0	3200	02	0
UNKNOWN	—	MURAKAMI HIDE	JAPAN	PRODUCTS TANKER	1	0	1940	01	0
KAWASAKI KINKAI KISEN	JAPAN	IWAGI	JAPAN	RO-RO	1	0	5000	01	0
NEPTUNE ORIENT LINES (NOL)	SINGAPORE	NKK CORP.	JAPAN	TANKER	2	0	300000	03/04	154
SK SHIPPING	KOREA	SAMSUNG	KOREA	TANKER	3	0	300000	04	0
KRISTIAN GERHARD JEBSEN	NORWAY	SAMHO NEW SHIPYARD	KOREA	TANKER	2	0	159000	03	0
NEPTUNE ORIENT LINES (NOL)	SINGAPORE	IMABARI SHIPBUILDING	JAPAN	TANKER	2	0	107000	03	0
VALLES STEAMSHIP CO	CANADA	KOYO DOCK	JAPAN	TANKER	1	0	107000	03	0
SEAWORLD MANAGEMENT AND TRADING	GREECE	TSUNEISHI	JAPAN	TANKER	2	0	106000	03	80
SANKO KISEN	JAPAN	NAMURA ZOSENSHO	JAPAN	TANKER	1	0	105000	03	0
SANKO STEAMSHIP	JAPAN	SASEBO	JAPAN	TANKER	2	0	100000	03	85
EUROPEAN NAVIGATION	GREECE	BRODOSPLIT	CROATIA	TANKER	3	0	95000	03/04	123
UNKNOWN	GREECE	SAMHO NEW SHIPYARD	KOREA	TANKER	2	0	72500	03	0
PRESIDENT MARINE	SINGAPORE	PRESIDENT MARINE	SINGAPORE	TUG	3	0	140	01	0
HAKKO MARINE	JAPAN	HONDA	JAPAN	VEHICLE CARRIER	1	0	0	02	0

Don't risk engine security, maintenance economy and proven peace of mind: Specify **CHOCKFAST ORANGE**.

Chockfast is the chocking compound approved by every major classification society, including ABS

ITW Philadelphia Resins

130 Commerce Drive, Montgomeryville, PA 18936
Tel 215.855.8450 Fax 215.855.4688 www.chockfast.com

Circle 262 on Reader Service Card

www.maritimereporterinfo.com

NorShipping Report

(continued from page 59)

poorly suited to individual shipowners' requirements.

In the cruise ship sector, one of the main reasons for increased demand for thruster capacity is the growing requirement for better position keeping capability. Often this is because anchoring restrictions prevent the use of traditional means of maintaining a ship in position, leading to increased use of azimuthing propulsion units and larger bowthrusters.

In other sectors of the shipping industry, such as offshore supply vessels and cable layers, additional thruster capacity greatly enhances position keeping, providing a redundant propulsion capability, and reducing operating costs.

The most important factor in selecting the proper thrusters, said Andresen, is that the thruster or thrusters are matched to its operating requirement. Some ships may use their thrusters routinely, almost on a daily basis; but on board other types of vessel, although the thrusters may be rarely used, they need to be designed to a very high, demanding specification which can't be met with low cost, off-the-shelf products.

Brunvoll has also gained an enviable reputation for its retractable thrusters, which continue to be especially popular in the offshore market, particularly on shuttle tankers, cable layers and multi-purpose offshore support vessels.

In keeping with the company's emphasis on innovation and on meeting specific customer requirements, Brunvoll has also developed retractable thrusters designed both for use when lowered and when retracted.

A typical application is on board a shuttle tanker, where rolling motions can cause a conventional tunnel thruster to draw air if they break the surface in bad weather, preventing them from maneuvering precisely enough to load safely at sea. This problem is overcome, however, when a retractable thruster is lowered beneath the ship.

Circle 61 on Reader Service Card

Unitor Unveils Range Of Welding Machines

In response to changing market requirements, Unitor has enhanced and expanded its range of shipboard welding machines for onboard repair and maintenance use, with two new inverters and three upgraded units.

Unitor can now provide vessel operators and ship's crews with hardware that meets every onboard welding requirement, from the simplest weld to the most complicated and demanding steel

repair job.

The new range of welding machines from Unitor comprises:

- UWI 140 — an upgraded machine ideal for daily onboard maintenance work

- UWI 200 — a new, compact, portable welding inverter for cost-conscious users


- UWI 400 — an upgraded powerful, high capacity, portable welding inverter

- UWR 303 — a new welding rectifier

er offering ship's crews an alternative to welding inverter technology

- UPC 838 — an upgraded powerful, portable plasma cutter

Circle 62 on Reader Service Card



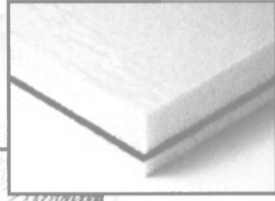
NOISE CONTROL SOLUTIONS

FOR METAL, FIBERGLASS, OR COMPOSITE CONSTRUCTED VESSELS

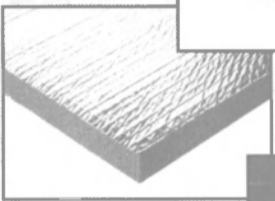
Let Soundcoat assist you in meeting all of your acoustic requirements by providing Uncompromised Engineered Solutions

For Technical Support call 1-800-394-8913

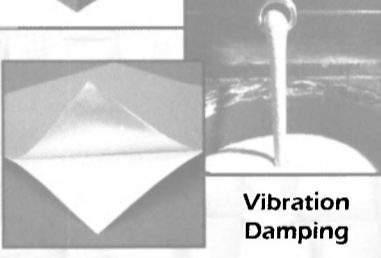
- ▶ Use **Soundmat PB** to block noise paths from engine rooms to cabin
- ▶ Various **Soundfoam** acoustic absorbers available for lining of passenger compartments and engine rooms
- ▶ **Vibration Damping** methods available as spray on compounds or sheet products to eliminate structure borne noise in metal structures
- ▶ Design assistance and noise testing services available




Soundmat™ PB-2



Soundfoam™




Vibration Damping



AB350 REGISTERED ISO 9002

The Soundcoat Company, Inc. Deer Park, New York




One Burt Drive • Deer Park, NY 11729 (631) 242-2200 • FAX (631) 242-2246
16901 Armstrong Ave., Irvine, CA 92606 • (949) 955-9202 • FAX (949) 222-0834
e-mail: info@soundcoat.com • www.soundcoat.com

Circle 273 on Reader Service Card

www.maritimereporterinfo.com

BUILDING SOLID SALES LEADS TO SUPERIOR CIRCULATION.




MARITIME REPORTER AND ENGINEERING NEWS

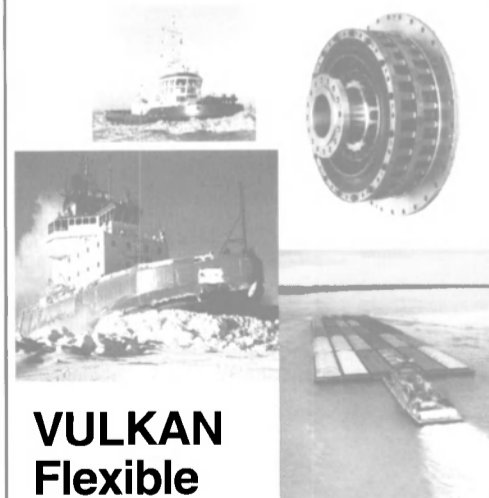
...the only way to build sales!

Call: 212-477-6700

THE MARITIME GROUP
118 East 25th Street, New York, NY 10010
tel: (212) 477-6700 fax: (212) 254-6271



Protecting Gears and Shafts from Vibration



VULKAN Flexible Couplings

RATO Family • Main Propulsion • EZR • Auxiliary Propulsion • Vulastik-L • GenSets
Vulkardan • Cardan Drives • Propflex • Composite Shafts • Monitoring Devices • VKE • Torflex • Up to 464,660 lb-ft. torque.

American VULKAN

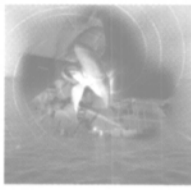
Sales and Service 863-324-2424 Fx: 863-324-4008
www.vulkanusa.com • ISO 9002 and QS 9000

Circle 206 on Reader Service Card

www.maritimereporterinfo.com

Ship's Store

Receive additional details on any of the companies listed here — Fast & Free — at www.maritimereporterinfo.com



Mermaid
By Alstom

Alstom and Kamewa Combine Expertise To Create Mermaid
Alstom and Kamewa (part of Rolls-Royce), have joined forces in developing a marine propulsion system based on the 'pod' concept. The joint development combines Kamewa's hydrodynamic experience with Alstom's expertise in marine engineering, electric propulsion, motors and generators.

Circle No. 101



ExxonMobil
Marine Lubricants

ExxonMobil Takes A New Approach to Marine Lubrication

ExxonMobil Marine Lubricants is working diligently to set a new standard in performance around the world-with a new global approach to marine lubrication that provides easier ways of doing business. To develop our approach, we conducted extensive research, and customers around the world told us what mattered to them.

Circle No. 102



DNV's
Knowledge Base

Gain Knowledge Via DNV's Dedicated Network

Gain access to DNV's knowledge base, which accumulates information about customers' individual ships. The knowledge base is accessed through a private and dedicated network enabling all our staff to work on-line with the knowledge base. **Circle No. 103**



MAN B&W
Marine Engines

MAN B&W Works to Meet NOx Limits

MAN B&W is keen on meeting the primary methods of moderate local NOx limits via ultrasonic or mechanical homogenizers; increased pressure to avoid cavitation; 1+ years of operational experience; and modification of engine components such as fuel pumps, camshaft and control system. The company also complies with IMO NOx limits by means of engine adjustment and component modification, which affects the engine combustion process directly. **Circle No. 104**

company also complies with IMO NOx limits by means of engine adjustment and component modification, which affects the engine combustion process directly. **Circle No. 104**



Wartsila
Marine Engines

Wartsila Introduces Latest Engines

Wartsila has continuously enlarged its gas engine portfolio in recent decades. The gas engines have also been developed for different applications to suit customer needs. The latest gas engines introduced are the Wartsila 32DF and Wartsila 50DF engines.

Circle No. 105

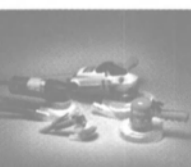


Clean Seal
Marine Seals

Clean Seal Provides Endless Coverage

Clean Seal, Inc. of South Bend, Ind. offers extruded EPDM, Neoprene, Silicone and Nitrile Seals to the marine industry. The company offers vulcanizing services for endless seal applications. In the extruded rubber industry since 1978, the company warehouse more than 6 million feet of products, stocking more than 500 profiles for just-in-time delivery. **Circle No. 106**

applications. In the extruded rubber industry since 1978, the company warehouse more than 6 million feet of products, stocking more than 500 profiles for just-in-time delivery. **Circle No. 106**



Shave Away
Dust Muffle

Shave Away's Dust Muffle Works With Any Vacuum

Dust Muffle is a polypropylene shroud for collecting dust made by angle sanders and die grinders. It is flexible, transparent and retrofits over 1,200 tools in minutes. No special paper is needed, it works with any vacuum and it is over 95 percent efficient. The company also offers its Chip Muzzle, which is a heavy duty PVC dust collector that retrofits all needle scalers into dustless tools in minutes. Easily adapted to corners or curves, it is more than 95 percent efficient. **Circle No. 107**

utes. No special paper is needed, it works with any vacuum and it is over 95 percent efficient. The company also offers its Chip Muzzle, which is a heavy duty PVC dust collector that retrofits all needle scalers into dustless tools in minutes. Easily adapted to corners or curves, it is more than 95 percent efficient. **Circle No. 107**



IMC
Internet-On-Board

Step On Board With IMC

Internet-On-Board is the latest product from IMC, the acknowledged cruise industry leader in wireless data communication, information content and processing services for the mobile community. Internet-On-Board gives you the opportunity to generate significant additional revenue through e-mail and surfing charges as well as marketing other shipboard items and services. **Circle No. 108**

shipboard items and services. **Circle No. 108**



Inmarsat
A-M Services

Telenor Provides Global Inmarsat Coverage

Telenor offers Inmarsat A-M services in all ocean regions. The Inmarsat A-M terminals make use of global beam technology, while the latest members of the Inmarsat family, Mobiq (mini-M) and GAN, exploit the spot beam technology. **Circle No. 109**



Delta Coating
Marine Insulation

Mascoat's Delta T Enhances Shipboard Insulation

Delta T Marine Insulating Coating designed to replace or enhance conventional thermal insulating materials found in shipboard construction. A 20-60-mil layer achieves an equivalency insulation factor of R9-15 Equivalency. **Circle No. 110**

equivalency insulation factor of R9-15 Equivalency. **Circle No. 110**



NLB
40201 Pump

NLB's 40201 Pumps Out The Power

NLB 40201 pump produces up to 40,000 psi of (waterjet) power to quickly remove coatings, rust and more from ship surfaces. Features rugged, reliable performance and low operating cost. **Circle No. 111**

performance and low operating cost. **Circle No. 111**

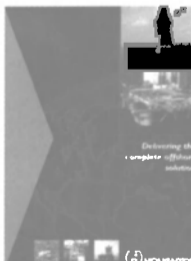


STN
Pod Propulsion

STN Offers Innovative Pod Concept

The main principle of this new podded propulsion system is a powerful electric motor, which directly drives the propeller, installed in a streamlined pod under the ship. DOLPHIN is applicable for a large variety of ship types when high speed or maneuverability or a combination of both is required. **Circle No. 112**

Circle No. 112



Houghton
Offshore Chemical Collection

Houghton Offshore Produces Chemical Collection

Since 1865, Houghton International has been serving the offshore oil and gas industries along with a variety of other markets with the development and production of specialty chemicals, oils, and lubricants. **Circle No. 113**



Maritime Associates
Technology

Sign Out With Maritime Associates' Technology

Maritime Associates, Inc. manufactures and supplies a complete range of IMO/SOLAS safety signs and posters as well as I.L.L. pathway systems. The company uses a number of materials in manufacturing, including the inter-

nationally certified American Permalight substance used to make the photoluminescent signs. **Circle No. 114**

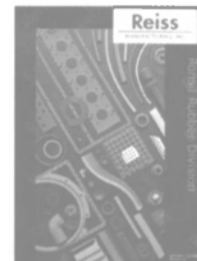
Circle No. 114



Wich iTech
Repair Systems

Keep it Safe and Simple With Wich iTech

Wich iTech Industries, Inc. designs and manufactures simple, safe, reliable and value packed composite repair systems. Wich iTech accessories include heating blankets, HB-1 printer, vacuum pump, student training kit, mobile repair station and more. **Circle No. 115**



Reiss
Manufacturing

Reiss Manufacturing Turns Up the Heat

Reiss Manufacturing, Inc. and its Ronsil Rubber Division is one of the oldest compounders/formulators and fabricators of heat cured silicone in the country. Since 1947 the company has supplied the marine industry with a variety of silicone seals, gaskets, tubing and specialty design silicones to solve shipbuilding problems. **Circle No. 116**

problems. **Circle No. 116**



Omnithruster
Jets

Omnithruster's Jets Answer the Call At All Times

For 25 years, Omnithruster has been designated as a leading company in the development of (waterjet) maneuvering systems. Omnithruster's unique patented designs, which provide diverse maneuverability and auxiliary propulsion, have been the installation choice on vessels worldwide. **Circle No. 117**

Circle No. 117

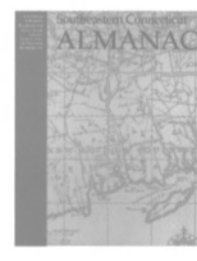


Thordon
Bearings

Thordon's Bearings are Pollution-Free

Thordon Bearings, a pioneer in the development of pollution free bearing designs offer a choice of sealed or open, water lubricated propeller shaft bearing systems. The Thor-Lube sealed stem tube system combines proven XL bearings with Thor Lube, a water soluble, non-polluting lubricant.

Thordon's open water lubricated system choices are COMPAC, XL and composite; each offering specific advantages in different water environments. **Circle No. 118**

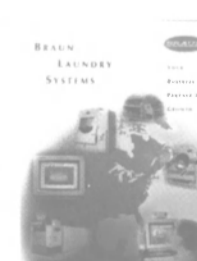


Almanac
Marine Businesses

Southeastern Connecticut Is Ideal for Marine Businesses

Learn about Southeastern Connecticut — the ideal location for marine-related businesses. The company offers a great location (only a two-hour drive from both Boston and New York), a deep water port, enterprise and foreign trade zones, targeted tax breaks, resourceful incentive programs and a special marine loan fund. **Circle No. 119**

loan fund. **Circle No. 119**



G.A. Braun
Laundry Systems

G.A. Braun Keeps Shipboard Washrooms Clean

G.A. Braun, Inc., is your single-source supplier for a fully automated laundry system — a system that enables one operator to manage the washroom from one station-efficiently and profitably. Global leadership in the design, building and manufacture of world-class commercial/industrial laundries; "smart" laundry and textile systems, products and services. **Circle No. 120**

"smart" laundry and textile systems, products and services. **Circle No. 120**

Ship's Store



Lolamat Provides Shock Value

Lolamat is extremely shock-proof and at the same time extraordinarily resistant to wear and tear. The panels offer planners, architects and users remarkable freedom in design. With LOLAMAT, excellent acoustic sound proofing results are achieved so that the passengers' use of all rooms is as pleasant as possible.

Circle No. 121

Oil and Water Don't Mix at RWO

RWO-Water Technology-Bremen is specialized since 1975 in oil/water separation. More than 5,000 waste water treatment systems have been sold worldwide to first class customers in the marine business. RWO offers all kind of water-and waste water treatment systems for shipboard use.

Circle No. 122



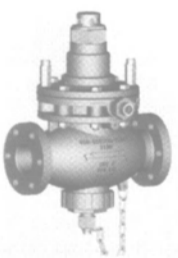
Fidelio Keeps Cruise Industry Wired

Formed in 1995, and headquartered in Hamburg, Germany, with an office in Fort Lauderdale, Fla., Fidelio Cruise Software Group is a global company and currently supports 91 vessels representing 31 cruise lines worldwide.

Clean Up With Amistco's Filco Plus Units

Amistco Filco-Plus units separate solids, emulsions, hydrocarbon fluids and water. They can clean diesel, jet fuel or other hydrocarbon products by removing water emulsions and solids from ships, barges, at terminals and storage facilities. The company manufactures a wide range of pollution control and separating technologies for a wide range of industries.

Circle No. 124



Leslie's Valves Provide Control

Leslie Controls, Inc., a division of Circor International, is a manufacturer of process control valves, severe service control valves, on-off valves, regulators, steam water heaters, actuators, and controls.

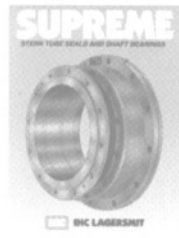
Mathey Dearman — A Cut Above The Rest

Equipment such as automatic welding machines, welding and cutting robots and lasers for cutting and welding were invented to improve welder productivity and accuracy. Mathey goes one step further, as it offers seven ways to cut and bevel

Receive additional details on any of the companies listed here — Fast & Free — at www.maritimereporterinfo.com

pipe in an attempt to fill every facet of the customer's cutting and beveling needs.

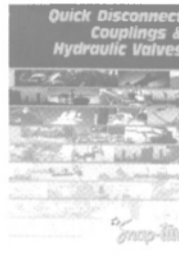
Circle No. 126



IHC Lagersmit's Stern Tubes Are Supreme

Supreme stern tubes are suitable for all types of vessel and for every shaft diameter. Because of their high reliability and the ease with which they can be inspected and maintained, these seals are widely used in conjunction with controllable-pitch propellers.

Circle No. 127



Make Sure Your Couplings are Snap-Tite

Based on its motto of "Performance Without Compromise," since 1935, the Quick Disconnect and Valve Division of Snap-tite, Inc., offers a variety of combinations, sizes, and types of quick disconnect couplings.

Circle No. 128



American Vulkan's Couplings Are Quality Driven

Vulkan Couplings are world renowned for high quality, guaranteed torsional stiffness and damping capacity. Brand names include the highly flexible Rato Couplings, Vulastik-L, Vulkardan-E, Flexomax, and Torflex. Vulkan Couplings are found on Diesel engines and electric motor-driven equipment including marine propulsion, on rigid-mounted or free-standing transmissions, compressors, two-bearing generators and pumps. Silicone elements are available on several couplings for high temperature applications.

Circle No. 129



Blohm + Voss Continues A Strong Shipbuilding Foundation

Since 1877, Blohm + Voss, a company of ThyssenKrupp Werften, has stood for quality in shipbuilding and mechanical engineering. In 1995/1996, the three company divisions were split into independent companies: Blohm+Voss GmbH. Covering the shipbuilding activities, Blohm + Voss Repair GmbH, concentrates on service and ship repair, and focuses on mechanical engineering and system engineering.

Circle No. 130



Brookfield Engineering — A New Generation of Viscosity Measuring

For over 65 years Brookfield Engineering Laboratories has been the world's leading manufacturer of Viscosity

Measuring Equipment for laboratory and process control applications. The new generation of sophisticated Brookfield Viscometers and Rheometers sets world standards for fast, accurate, reliable measurement and control.

Circle No. 131



Meyer Werft — The Jewel in the German Shipbuilding Crown

Now in the sixth generation of the Meyer family with Bernard Meyer serving as managing partner of the company, since 1982, Meyer Werft has earned an international reputation for building special types of ships, such as luxurious car and passenger ferries, RoRo, and passenger ships, as well as gas tankers and livestock carriers — in addition to its construction of cruise liners.

Circle No. 132



It's Survival of the Fittest With Imperial's Suit

The founders of Imperial International, Inc. have been in the marine industry for decades, and as manufacturers of the Imperial Immersion Suit, are steadfast to ensure the protection of individuals within the marine industry. A well maintained suit increases chances of survival, lasts longer, and saves time and money. An experienced service technician can find seemingly minor defects that can cause major problems.

Circle No. 133



Dräger Protects Against Toxic Gases

Since 1889, Dräger has had an outstanding reputation for solving problems in the field of human breathing. Dräger has been deeply involved in the handling of gases, in particular hazard protection and the saving of life in medical and industrial emergencies. Many of the company's 8500 employees are active in research and innovation to ensure that the latest techniques and scientific advances are fully tested before their inclusion in new equipment.

Circle No. 134



Kaefer Offers A Complete Solution

As a main contractor, KAEFER offers yards and shipping companies the complete turn-key interior finishing of their ships.

Circle No. 135



Aluma-Tech Designs To Individual Specs

Located in La Porte, La., Aluma-Tech designs and manufactures custom aluminum products, such

as control rooms, command centers, doors, windows and complete workstations to each customer's specifications.

Circle No. 136



communication

Stay in Touch At Sea With Coastel Communications

Coastel Communications offers its customers one of the most reliable offshore cellular equipment product base in the industry. However, dependable equipment is just the beginning; Coastel continually searches for new ways to better serve its customer — with competitive rates, new technology and ever-expanding coverage.

Circle No. 137



TechnoFibre Maintains Safety

Technofibre provides professional lifeboat and davit maintenance worldwide. ISO 9002 Certified, it is also an authorized service company to over 20 lifeboat and davit manufacturers.

Circle No. 138



Fleet Ensures Healthy Environment

Before any ship sets out for the seas, the captain always examines the list of medical and pharmaceutical requirement and issues requisitions to obtain supplies essential for the voyage of his ship. Fleet Medical Resources recognizes the importance of the ship's requirements for these drugs used to restore and maintain a healthy environment for the captain and crew.

Circle No. 139



Get More From Your Fuel With Power Research

PRI-R heavy fuel oil treatment and PRI-D diesel treatment provide superior protection against the ravages of today's tough fuels. Merchant and cruise ship operators have documented that PRI prevents engine deposits, overcomes compatibility issues, protects against high CCAI, and reduces smoke opacity, Nox and SO₂.

Circle No. 140



Marlow-Ropes Are Diversified in Demanding Markets

Marlow Ropes, an approved ISO 9001 company, are worldwide leaders in pioneering the use of specialist fibers and rope constructions for the marine and offshore industries. Our success is based on technical knowledge, understanding the application requirement and satisfying the user needs. This ensures that Marlow products are used with confidence in diverse and demanding markets.

Circle No. 141

INFORMATION

S H O W C A S E

GET FREE INFORMATION ONLINE at: www.maritimereporterinfo.com

Get Free Information Fast

Circle the appropriate Reader Service Number
on the opposite page or visit
www.maritimereporterinfo.com



Page	Advertiser	Product	R/S#	Page	Advertiser	Product	R/S#
57	A R Larsen	refrigeration	200	17	Jotun Paints Inc.	coatings	248
6	ABB Turbosystems AG	turbochargers	201	15	Kahlenberg	airhorns	249
52	Advanced Fabricating	CNC lofting & plate cut.	202	42	Kaplan & Associates	propulsion parts	296
36A	Alabama Shipyard	shipyard	301	C4	Karl Senner Inc.	propulsion systems	250
18	Albacore Research	CAD/CAM	203	3	Leica Navigation	marine navigation	251
16	Algae X International	fuel filtration	204	34	Mackay Comm.	navigation/comm.	252
45	Alstom Engines Inc.	drives & controls	294	36E	Man B & W Germany	diesel engines	253
19	American Custom Yachts	fire hose boxes	205	56	Marine Soup.com	e-commerce	242
59	American Vulkan	couplings	206	46	Maritel Marine	communications	254
39	Anchor Marine	marine equip & supplies	207	31	Marlow Ropes Ltd	rope	312
19	Aurand Manufacturing	surface prep tools	208	21	Mascoat Products	marine insulation	255
11	Austal	shipyard	209	52	Metal Surgery	cast iron repair	256
20	Barkemeyer-Schifftechnik	maneuvering equipment	210	53	Military Sealift Command	employment	323
48	Blohm & Voss Gmbh	shipyard	211	44	MTN	satellite comm.	257
4	Brookdale International	survival equipment	212	36	Nera Satcom AS	communications	258
9	Cambridge Applied Systems	viscometers	213	36G	Newport News Shipbuilding	shipbuilding	259
18	Clean Seal	extruded rubber products	214	21	Norma Products Inc.	pipe fittings & cuttings	260
12	C-Map	electronic charts	215	16	Penn Machine Company	gears & couplings	261
27	Coastel Communications	offshore cellular service	295	58	Philadelphia Resins	coatings	262
22	Comnav Marine Ltd.	navigation	216	39	Renk AG	gearboxes & bearings	297
22	Creative Systems	software	217	20	Restomotive Laboratories	protective coatings	263
22	CSD	sealing systems	218	48	Ritchie Auctioneers	auction	325
13	Cummins Marine	diesel engines	219	37	Rolls Royce	offshore supply/service	264
24	Damen	shipyard	310	47	Rolls Royce	offshore supply/service	298
25	Damen	shipyard	310	4	RWO	water technology	340
20	Datrex	distress signals & buoys	220	32	Sait Radio Holland	communications	265
5	DAVIE Industries Inc.	offshore buildings	221	8	Samson Rope Technologies	rope	266
9	Desmond Stephan	swirl off scarifier	222	23	Samson Rope Technologies	mooring & towing	299
30	Deutz	engines	223	10	Sasakura	fresh water generator	267
22	Dutchess	galley equipment	224	55	Seaward Intl	fenders	268
C3	Eastern Shipbuilding	ship repair/shipyard	225	41	Seaworthy Systems	diesel engine analyzer	269
29	Electronic Marine Systems	sensors	226	54	Shave Away	maintenance tools	270
31	Electronic Marine Systems	sensors	227	47	Skookum	deck machinery	271
33	Electronic Marine Systems	sensors	228	47	Smith-Berger Marine	deck hardware	272
35	Electronic Marine Systems	sensors	229	59	Soundcoat Co. Inc	noise control	273
36B	EuroCom Industries	communications	326	7	Standard Horizon	marine electronics	274
1	Exxon Mobil	synthetic lubricants	230	49	STN Atlas Marine Elec.	podded propulsion	275
37	Fab EnCo Inc	safety products	231	15	Stork-Kwant	universal telegraphs	276
14	Frank L. Beier Radio	integrated vessel control	232	16	Stratos	remote communications	277
57	G J Wortelboer Jr. B.V.	chains	233	28	Superior Energies, Inc.	insulation manufacturer	278
14	Gaylord Industries	galley hoods	234	C2	Telenor Satellite	communications	279
36B	Governor Control Systems	diesel engine parts	235	56	Thermax	bulkhead panels	280
53	Hall Associates	marine brokers	324	38	Thrane & Thrane	communications	281
50	HDW	shipyard	322	42	Titan Maritime Ind.	salvage & wreck removal	300
2	Headhunter	sanitation systems	236	52	Total Marine Solutions	safety & environment	282
10	Hike Metal	products & shipbuilding	237	13	Van Hall Health	medical management	283
35	Hornblower Marine	consultants	238	42	Volmar	ultrasonic homogenizers	284
54	Hotel Monteleone	New Orleans hotel	239	43	Wartsila Corporation	propulsion	285
37	Houston Marine	marine training	240	18	Water Weights	load measuring equip	286
52	Houston Marine	marine training	241	9	Waterman Supply	marine equip & supplies	287
54	Indumar	pipe repair system	327	28	Western Machine Works	tractor pins	288
28	Intercontinental Engineering	deck machinery	243	18	Westfalia	oil/water separators	289
40	IZAR	shipyard	245	2	Wynn Marine Ltd	wind screen & wipers	290
9	Jan Verhaar Omega Thrusters	thrusters	246	36C	XANTIC	satellite comm.	291
19	Jeamar Winches	winches & sheaves	247	36H	Z F Marine Group	propulsion systems	292
19	Jeamar Winches	winches & sheaves	293				

The listings above are an editorial service provided for the convenience of our readers.

THE MARINE MART

The Classified
and Employment Section



PRODUCTS & SERVICES

Single source vendor:
Spare Parts + Equipment
for foreign built ships

SCARDANA

FAX: (1) - 450 - 671 - 3898

TEL: (1) - 450 - 465 - 6556

TOLL FREE FAX:

1 - 877 - 228 - 9879

E-mail: service@scardana.ca

Web Site: www.scardana.ca

Procurement Contractors
+ Spare Parts Agents
Since 1974

Tired of nautical reproductions



Maritifacts has only **authentic marine collectibles** rescued from scrapped ships: navigation lamps, sextants, clocks, bells, barometers, flags, binnacles, telegraphs, portholes & more. Current Brochure - \$1.00.

www.maritifacts.com / maritifacts@aol.com

MARTIFACTS, INC.

P.O. Box 350190 Jacksonville, FL 32235-0190

Phone/Fax: (904) 645-0150

SHIPPING & STORAGE CONTAINERS



NATIONWIDE AVAILABILITY
SALES, RENTAL, BUYBACKS

TRS CONTAINERS
NEW, USED & MODIFIED CONTAINERS

800 969 2174

Email: trscontainers@att.net

Website: www.trcontainers.com

SCALE MODELS

SCALE REPRODUCTIONS, INC.

9121 PRECISION PLACE FAIRHOPE, AL 36532

DISPLAY, ENGINEERING, TANK TEST

SINCE 1976

WWW.2SCALE.COM
2SCALE@2SCALE.COM

(334) 928-3829
(334) 928-1859 Fax

REPLACEMENT PARTS FOR:

SKL/DMR • Paxman • Sulzer

Fairbanks • MTU

Fuel Injection Parts • Superior • GMT

Alco • Cooper • Delaval Enterprise

PHONE: 719-227-1821

FAX: 719-227-7498

APPLIED ENERGY CORP

EMAIL: Applied@JTP.com
WEBSITE: www.JTP.com/Applied

2442 GUNNISON ST. • COLORADO SPRINGS, CO 80909

MAK

TECH. SERVICE

ims MARINE SERVICE ESPANA, S.L.

- Service engineers (German, Spanish, English)
- Experienced flying-riding crews specialized in MAK engines.
- At site machining.
- Maintenance follow-up.
- Free 24 h. emergency consulting (+34 609817645)

Phone: +34 956 587109 Fax: +34 956 587244

E-Mail: imsespana@ono.com

CUNNINGHAM MARINE HYDRAULICS CO., INC.

Service Parts Repair Consulting

Litton Marine Systems
Authorized Sperry - Decca - C. Plath Dealer

CMH HELE-SHAW, INC.



201 Harrison Street
Hoboken, N.J. 07030
(201) 792-0500 # (212) 267-0328
1-800-322-2641
FAX# (201) 792-7716

E-Mail Address:
cmh-hydraulics@erols.com

TANKS

Custom Fuel Cell Bladder Tanks

Diesel or Gas

- Impact Resistant
- Non-Expanding
- Vibration Proof
- Lightweight
- Fully Baffled

MADE TO FIT
WORK BOATS, PATROL
BOATS, RACE BOATS.

TOLL FREE 800-526-5330

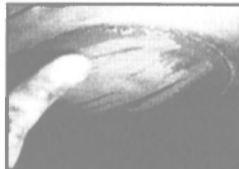
AERO TEC LABORATORIES, INC.
Spear Road Industrial Park, Ramsey, NJ 07446-1251 USA
Phone: 201-825-1400 Fax: 201-825-1962

CUT COSTS IMPROVE OPERATIONS

PRI-R

HFO Treatment

This Vasa 32 exhaust valve
is carbon free after
12,000 hours on PRI-R!



- Improve Your Fuel
- Reduce Charter Hire Loss
- Extend Engine Component Life & Reliability
- Enhance Vessel Safety & Emissions Control

Actual Results From PRI-R Users:

- 82 exhaust valve replacements eliminated annually. Saved more than \$73,000 in parts and labor alone!
- 8 days of downtime at sea eliminated. Charter hire losses avoided, which saved \$120,000 in annual cost.
- Fuel sludge reduced 50%. Savings in fuel valve and disposal cost totaled more than \$ 74,000.

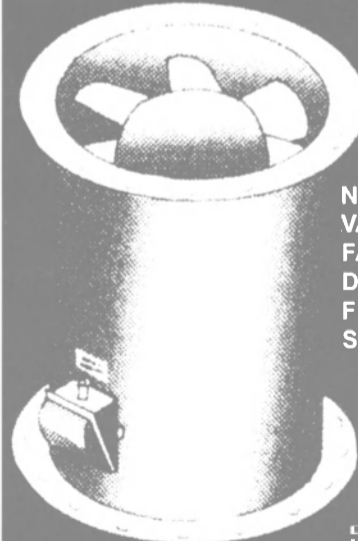
Call PRI Today!
888-776-9373
www.priproducts.com



Power
Research
Inc.

JON M. LISS ASSOCIATES, INC.

411 BOREL AVENUE, SUITE 500 • San Mateo California 94402



NAVY STANDARD
VANEAXIAL
FANS
Delivery
From
Stock

(650) 573-9191

Fax (650) 572-8458

jon411@pacbell.net

PRODUCTS & SERVICES

NOW REQUIRED:

A Shipping Vessel Equipped with Fixed Pitch Propellers Must Have A Propeller Speed and Direction Indicator For each Shaft

U.S.C.G. 46 CFR113.37-5

DIRECTIONAL SHAFT TACHOMETER



Model 8402-DIR

- Guaranteed Accurate To 1 RPM
- Withstands Severe Marine Use
- Economical & Reliable
- Other Applications For Engine & Shaft

"Call For Free Brochure"

AETNA ENGINEERING

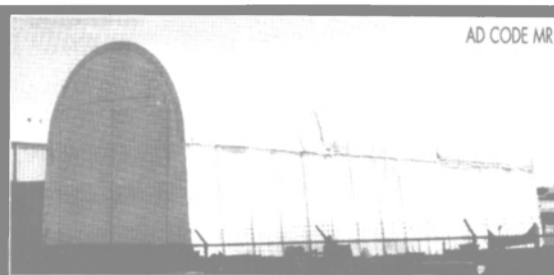
FIREBOY - XINTEX, Inc.

800-776-7962 616-735-9380

616-735-9381 Fax

www.fireboy-xintex.com

e-mail: aetnaengineering@fireboy-xintex.com



AD CODE MR

60' W x 150' L x 60' H PAINTING & SANDBLASTING ENCLOSURE

We have economical solutions for anything — from permanent drydock enclosures to temporary work & storage shelters!

CALL THE BEST! 800-874-2900



P.O. Box 1588 • Quincy, FL 32353

Tel: 850-875-2300 • Fax: 561-586-7024

25 Years of Manufacturing Excellence



www.lavtec.com

Built with seamless fiberglass for a completely watertight structure. Luxury, custom and standard designs are available, factory direct. Delivered completely assembled, plumbed, and wired. Made in USA with Coast Guard approved composite materials.

AMTECH CORPORATION, Yelm WA. 360-458-3999, johnr@amtechcorp.com



Established since 1988

ANTI GLARE SOLAR SHADES FOR SHIPS WHEELHOUSE WINDOWS



SOLAR SOLVE MARINE

South Shields, UK, NE33 1RA

Tel: +44 191 454 8595 Fax: +44 191 454 8692

E-mail: sales@solasolv.com

www.solasolv.com



Standard Calibrations Inc.

☆ Calibration Services

*Physical/Dimensional Calibration and Repair

*Electrical/Electronic Calibration and Repair

☆ Propulsion Automation and Control

*Boilers*Gas Turbine*Diesel

☆ Fluid Level and Flow

*GEMS SENSORS® Factory Service Center

*Large Inventory *Raychem Cable*FSS-2 Cable

Chesapeake, VA. Dubai, U.A.E

800-500-0804 FAX 757-549-0666

ANSI Z540 ISO 9002 Certified

visit us at www.standardcal.com

SPARE PARTS FOR:

- ABB/VTR • ALFA LAVAL • ATLAS COPCO
- CATERPILLAR • CARRIER • CUMMINS
- DAIHATSU • DETROIT • DEUTZ
- DONALDSON FILTERS • HAMWORTHY
- INGERSOLL RAND • MAN • MITSUBISHI • PAXMAN
- SULZER • YANMAR • QUINCY ... AND MORE

HP INTERNATIONAL, INC.

5506 56th Commerce Park Blvd.

Tampa, FL 33610

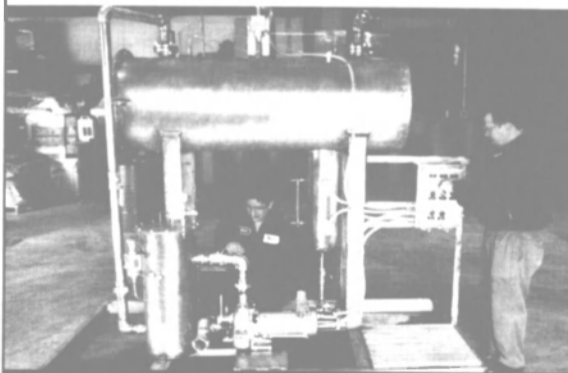
Telephone: (813) 740-9333 • Fax (813) 740-9334

E-Mail: Parts@HPINTERNATIONAL.COM

Clean Up

with **AMISTCO Filco-Plus™**

- Bilge Water • Storage Facilities
- Fuel Depots • Marine Terminals



Pump - Separate - Discharge

- Oil & solids from water
- Water from fuels, oil & other products

AMISTCO Filco-Plus™ separator units are skid mounted and fully instrumented to meet application requirements. Call for more details.

Amistco Separation Products, Inc.

www.amistco.com

(800) 839-6374 Fx: (281) 585-1780



Worldwide Supplier



Barataria Lofting Company, Inc.

"Professional Lofting Services"

Phone/Fax: (504) 340-5859

1616 Barataria, Blvd. suite 4

Marrero, LA 70072



CAMAR International Corp.

186 Prescott St. Worcester MA 01605

FMS REPAIR PARTS

For Ex-USN Ships in Foreign Navies



The most complete stock of MILSPEC replacement parts and components for:

- Blowers & Compressors
- Steam Turbines
- Pumps
- Steam Valves
- Steam Boilers



Rotating Equipment Specialists

For Sales, Service and Support Call

(800) 352-7629 or fax to (508) 752-5687

MARITECH

Marine Service, Inc.

Specialized in technical services of

BERG CP PROPELLERS

worldwide since 1981.

200 Leslie Dr. Suite # 1114, Hallandale, FL 33009 U.S.A

Phone: (954) 454-7990 Fax: (954) 454-7702

E-Mail: maritech@attglobal.net

PRODUCTS & SERVICES

ShipMan Preventive Maintenance Software

Written by experienced ship engineers and operators

Use for one vessel or for your entire fleet

Maintenance scheduling and reporting
Integrated onboard/shoreside spares
Stocking levels and reorder points
Vessel configuration tracking

Technical manual and data tracking
Manufacturer and vendor tracking
Preventive maintenance history
Spare parts usage history

Quantic

Engineering and Logistics Corporation

Build your own PM program using our software, or let our experienced technicians develop it for you.

Box 9567 Panama City Beach, Fl. 32417
850-234-7933 FAX - 850-234-1032
E-Mail- Quanticeng@AOL.COM

Windows 95, 98, NT and Macintosh

Vesconite Rudder and Stern Tube Bearings

Cut greasing. Lowest friction.

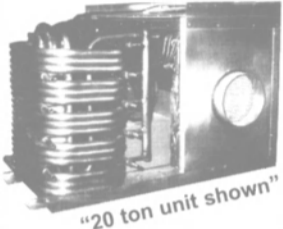
Use dry or underwater. ABS etc approved.



For free Marine Design Manual
www.vesconite.com

Toll Free 1-866-635-7596 (8-5 EST)

Slash your HVAC budget! Slash long term maintenance!



1 Ton - 20 Tons
Self-Contained
High-Pressure
Split & Chiller

Chosen over all others by the US and Canadian Coast Guard since 1996



Let us design a **fresh water cooled** self-contained HVAC system for you!
Fernstrum™ keel coolers & Sen-Dure® heat exchangers

800-316-6426 www.flagshipmarine.com



Commercial-Military
Pleasurecraft

MAN B&W Diesel (Houston) Inc
10801 Kempwood Drive
Suite 1, Houston, TX 77043
Tel: 800 965-4322
Fax: 713 939-0105
sales@manbwhouston.com
www.manbw ltd.com



GENUINE
Mirreles Blackstone, Paxman,
Ruston and Regulateurs Europa

Spare Parts, Repairs and Overhauls



www.suncorstainless.com
(781) 829-8899 FAX: (781) 829-9220

SUNCOR
Stainless

STCW

Compliant

Includes required practical aboard the USS American Victory on Tampa Bay
1-800-237-8663



AB & LIFEBOATMAN

Coast Guard Approved Courses
Five Day AB and
Two Day Lifeboatman

SEASCHOOL
Since 1977

VESSELS FOR SALE OR CHARTER

FOR SALE



Utility / Supply Vessel

115 foot * Steel construction * Refurbished in May 2001 * New certificate - dry docking * USCG approved EEP certified for 100 * For information call: **1-800-245-9825**

CENTRAL BOAT RENTALS, INC.



Morgan City, LA

Phone: (504) 384-8200 Fax: (504) 384-8455
website: www.centralboat.com

TUGS & BARGES
INLAND & OFFSHORE
OIL BARGES
WATER BARGES
SPUD BARGES
LIQUID MUD BARGES
DECK BARGES
VESSEL DOCKAGE
KEYWAY BARGE
QUARTER BOATS



100' x 25' All Weather Aluminum

2 air conditioned & heated cabins. 3-1271 natural - 2-371, 1200 rpm, 30kw generator. Full electronics, new paint, COI & stability for 150, May 2000. Completely renovated in & out, must see. Priced to sell. No tire kickers please. Capt. George 718-252-4398. Very economical on fuel, sailing daily.



Specializing In Barges

- ◆ Single or Double Hull, Inland or Ocean-Going
- ◆ Design, Construction & Modification
- ◆ Chartering, Sales & Brokerage



ZIDELL
MARINE CORPORATION

Ask for Bill Gobel or Jack Breshears

503-228-8691 1-800-547-9259

3121 SW Moody Avenue, Portland, Oregon 97201

EMPLOYMENT/RECRUITMENT



**U.S. Coast Guard
Personnel**

Professionals Only

Needed Now

**Masters - Mates - Engineers - OS - AB
TK - Deep Draft - Oilfield - Non-Oilfield**

Coast to Coast Marine Employment Services
www.c2marinejobs.com
e-mail: info@c2marinejobs.com

PORT ENGINEER

The Steamship Authority is seeking an experienced individual to direct the day-to-day engine department operations and coordination of maintenance activities of the Authority's 9 vessel fleet, including planning of vessel maintenance schedules, development and management of operating budgets, coordinating vessel engine department design requirements for USCG approval and management of vessel engine department operations. Must respond to all emergency calls to ensure continued uninterrupted service of all Steamship Authority vessels. Degree in marine engineering, or equivalent, computer literate, and previous experience in the operation and maintenance of main propulsion and auxiliary systems in a marine environment are required. Complete job description available upon request. Competitive salary and fringe benefit package.

Send resume to:

Phillip J. Parent, Personnel Manager
Woods Hole, Martha's Vineyard and Nantucket
Steamship Authority
P.O. Box 284
Woods Hole, MA 02543

Marine Engineer-Recent Graduate

Field Service Engineer/Reporting to Service Manager.

Based in Northern New Jersey this Company represents leading marine engineering equipment manufacturers, on a national basis.

Prefer recent graduate, with sailing time, computer skills and knowledge of ship's machinery. Job requires availability to travel 24/7. Travel approximately 75%. Applicant will attend factory product training (In Europe & Japan).

Survey vessels in various ports for installation quotations; respond to service calls, service equipment returned to plant

Applicant must be able to give instruction to ship's Engineers and Deck Officers, following installation. Follow-up work with ABS/USCG, where required.

Inside and outside contact with Port Engineers: Engineering Managers and Purchasing Managers.

Contact: Stephen P. Keller, 201-767-8080 x 211
Or fax resume 201-768-2570

PORT ENGINEER

American Management Systems, Inc., has immediate opening for experienced Port Engineers to support US Navy fleet maintenance. Applicants must have US citizenship, BS degree in Marine Engineering or Naval Architecture, USCG Engineers license, and prior commercial Port Engineer, shipyard, and/or shipboard experience. Competitive salary & benefits. E.O.E. Send resume to:

AMS, Inc.
Personnel Director (J-4)
1455 Frazee Road, Suite 315
San Diego, CA 92108
or FAX: (619) 683-5699

BENDER

NOW HIRING!

A/B's & O/S's

OVER 50 POSITIONS AVAILABLE

100 TON MASTERS

IMMEDIATE JOB OPENINGS

1600 TON MASTERS

CALL TODAY FOR JOB OFFERS

LICENSED ENGINEERS

\$3000 SIGNING BONUS

QMED's & OILERS

EAST COAST, GULF, CARRIBEAN

CALL TOLL FREE 1-888-824-1626

APPLY ONLINE

www.bendermarine.com
www.maritimejobsonline.com

ELECTRICAL MARINE DESIGN ENGINEER

Experience required. Multiple openings.

Fax resume to:

Terry Logue
Noramtec Consultants
(804) 897-9163
Refer to AD# IB.

BOAT JOB LISTINGS UPDATING

DAILY

CALL 24 HOUR

MARINE JOB HOTLINE

504-889-JOBS (5627)



ENGINEERING MANAGER

Production Engineering Manager for nationally known yacht and trawler manufacturer in St. Augustine, Florida. Experience with design/architect on fiberglass yachts.

Luhrs Corporation
Lynda Frankenthal
255 Diesel Road
St. Augustine, FL 32157
Phone: 904-829-0500 Fax: 904-827-2153
Email: personnel@luhrs.com

Gulfcoast Transit Company has the largest U.S. flag ocean-going fleet specializing in dry bulk cargo. We seek experienced mariners for both deck and engine positions. Our company, founded over 40 years ago, boasts a fleet of conventional tug-barge units, ITBs and ships. Gulfcoast Transit's parent company, TECO Transport, is a subsidiary of TECO Energy. A diversified family of energy-related companies. As a Gulfcoast team member, you'll enjoy the following benefits:

- A safe work environment
- Competitive Pay
- Pay for training
- Opportunities to advance within a growing company
- Medical/dental benefits
- Paid Holidays
- Tuition reimbursement program for approved courses
- 401(K) Savings Plan with a company match
- Performance-based incentive compensation program
- Retirement Plan

Interested candidates are encouraged to apply:

Gulfcoast Transit Marine, Human Resources
2101 GATX Drive, Second Floor, Tampa, FL 33605
Phone: 813-209-4261 Fax: 813-677-5514
E-mail: cramstrong@tecoenergy.com
Online application: www.gulfcoasttransit.com



Administration - Construction
Crewing - Engineering
Finance - M & R
Operations - Sales

(Established 1969) P O Box 260 • Mercer Island, WA 98040 • 206-232-6041

DOCKMASTER

BMI has immediate opening for experienced dockmaster. Responsible for all docking and undocking operations for Ocean vessels and maintenance of Floating Drydock and Graving Dock. Individual should have, or be capable of NAVSEA certification in accordance MIL-STD 162 C. Company provided competitive salary and excellent benefits package. Send resume and salary requirements by e-mail to: bmisales@baltimoremarine.com or by US mail to the following address:

Baltimore Marine Industries, Inc.
600 Shipyard Road
Baltimore, MD 21219
Human Resources Dept.
Attn: Mr. Michael Fox, Manager

PROJECT COORDINATOR

SeaTrax, is recruiting for an experienced Project Coordinator & Drafting Supervisor in Houston, TX.

Project Coordinator must have experience with Int'l Regulatory & Classification Society Specifications. Drafting Supervisor must have experience with Int'l Regulatory Drawing Standards.

Fax resume to:
O. Pedersen@ 713/896-6611.
NO CALLS

MARINE ARCHITECT

Experience required. Multiple openings

Fax resume to:

Terry Logue
Noramtec Consultants
(804) 897-9163
Refer to ad number: ME

EMPLOYMENT/RECRUITMENT

PORT CAPTAIN

The Delaware River & Bay Authority, a bi-state agency of the states of Delaware and New Jersey, owner of the Cape May-Lewes Ferry, has an opening for a Port Captain, headquartered in Cape May, New Jersey. The Port Captain will report to the Director of Marine Operations and have broad responsibility for directing all aspects of vessel scheduling, manning, operations, and safety of the five-vessel ferry fleet and other supporting vessels of the Delaware River and Bay Authority. The Port Captain will ensure compliance with all applicable Federal regulations (Titles 33 and 46, 47 and 49 CFR) in the interstate marine transportation of vehicles and passengers. Additional responsibilities include budgeting and training to support operations. Required to be on call 24-hours to support Ferry operations.

Successful candidates must have US citizenship, must have a B.S. Degree in a Nautical Science and/or eight (8) years experience in marine transportation in an active licensed capacity, must hold a valid USCG Inland Master's license (minimum 3000 ton) and be licensed by FCC as a qualified radio operator. Salary range for this position is \$65-72K per year plus comprehensive benefits package.

Interested candidates are invited to submit their resumes and salary requirements to:

The Delaware River & Bay Authority
P.O. Box 71
New Castle, DE 19720
Attention: **Ezzie Henry-Murray, PHR**
or Fax to: 302-571-6420
Or email: hrdept@drba.net

For additional information on the Delaware River and Bay Authority, please visit our website at: www.drba.net

The Delaware River & Bay Authority is proud to be an Equal Opportunity Employer (EOE)
Women and Minorities are encouraged to apply.

Brazil Project Coordinator

Oversee the development of an Amazon natural gas project; research local gas market and alternatives; identify principals and contacts; research nautical and navigational issues and coordinate engineering design of transport system; oversee contract preliminaries and coordinate with legal staff; develop customer and supplier contacts; provide financial analysis and pricing model development; make business presentations to investors and partners; coordinate start up activities in-country; provide legal and document review in Portuguese, and translations of key documents for management purposes; develop an integration plan for the startup company.

Must have Master's degree in Business, Finance or related field. Must have 1 year of experience in natural gas pipeline or transportation projects; 1 year of experience in merchant marine practices and knowledge of engineering design principles; fluency in Portuguese and knowledge of Spanish; extensive travel required.

Send resume and cover letter to:

American Commercial Barge Line LLC
Attn: **Angela Sheckell**
1701 East Market Street
Jeffersonville, Indiana 47130-4717

ALUMINUM WELDER

RESPONSIBILITIES:

PERFORMS A VARIETY OF ALUMINUM WELDING FUNCTIONS ON THE YACHT INCLUDING WELDING STRUCTURAL ELEMENTS, PLATE AND COMPONENTS. MUST BE ABLE TO WELD IN ALL POSITIONS. WILL PERFORM METAL FABRICATOR DUTIES WHEN NOT WELDING.

Burger Boat Company
Attention: **Fred Petters**
1811 Spring Street
Manitowoc, WI 54220
Phone: 920-684-1600 Fax: 920-686-5165
email: fredpetters@burgerboat.com

SECOND MATE

Come travel and work in one of the most extraordinary environments possible! We are a unique travel company specializing in environmentally responsible expedition travel around the globe. We are currently looking for a Second Mate to work aboard our 152' ships that take 70 guests and 23 crew members to some of the most beautiful destinations for hiking, kayaking and whale watching.

The Second Mate is the person responsible for maintaining the bridge navigational and communications equipment as well as assisting with the vessel's piloting, navigation, safety, and small boat operations. The Second Mate takes responsibility for bridge navigation during specified periods. He/She must be able to determine the geographical position of the ship using all available means such as LORAN, GPS, radar ranges, visual observations, depth sounders, etc. The Second Mate makes necessary entries in navigation and radio logs as well as FCC, MARPOL, USPHS, CDC and others. In addition to participating in all safety trainings, meetings and drills the Second Mate must be familiar with the company's Safety Management System including Emergency Response Activities.

Required Qualifications:

Minimum 100 ton U.S. Coast Guard Masters License with operating limits extending the full scope of the expected itineraries.
Radar Observer endorsement
GMDSS License
Current First Aid/CPR certification.
STCW Basic Safety Training
STCW Crowd Management
Fire Fighting Certification

Desired Qualifications:

Experience operating port-to-port in Southeast Alaska, the Snake and Columbia Rivers, and/or the Gulf of California, Mexico.
Experience as Mate operating a passenger-carrying vessel which required the Mate to manage a small deck force and to participate in on board social events with guests.
Personal computer experience: Lotus or Excel, Windows applications.

Position Start Date: July 8, 2001

Locations: SE Alaska: July-August

Pacific NW: September

Baja, Mexico: December-April

The Snake and Columbia Rivers: May-June and October-November

Please contact:
Nancy Kaptinski
Lindblad Expeditions
1415 Western Avenue, Suite #700
Seattle, WA 98101
Phone: (206)382-9593
Fax: (206)382-9594

And, Check out our website at www.expeditions.com to gain a good understanding of where we go and what we do. While you are there please fill out our online application. This will reach us almost instantly.

We look forward to hearing from you!

FERRY MECHANIC

\$27.13 per hr. first shift, \$29.85 per hr. swing shift, \$31.22 per hr. grave shift,+ excellent benefits including District paid medical and transportation benefits

An excellent job opportunity currently exists in the Ferry Division, requiring training and experience equal to completion of a four-year apprenticeship program or approved equivalent as a marine mechanic including four years full time experience maintaining and repairing diesel engines, marine gears, piping, waterjet pumps and electrical/electronic experience. Experience operating machine shop equipment (such as lathes, drill presses, grinders, presses, pipe threading machines, band saws and all types of welding equipment desirable.

For more information and to request a detailed job description and application:

call (415) 257-4526
or visit our office at:
1011 Andersen Drive
San Rafael, CA 94901
or visit our website at
www.goldengate.org.

The District is proud to be an EOE, drug-free workplace.

SAFETY ENGINEER

Multi Port Stevedore/Terminal Operator has immediate opening for experienced, highly motivated individual to fill the position of Safety Engineer. Successful candidate will have a thorough knowledge of all safety aspects of the shoreside maritime industry to include:

- OSHA
- Coast Guard
- EPA
- Employee Training
- Loss Prevention

We offer a competitive salary and benefits in a positive work environment. The successful candidate must be willing to travel and relocate to either Ft. Lauderdale or Houston.

Respond to:

Henry E. Milam
General Manager
Florida Transportation Services, Inc.
P.O. Box 22696
Ft. Lauderdale, FL 33335
Fax: 954-764-3069
E-Mail: hemilam@msn.com

EMPLOYMENT/ RECRUITMENT

METAL FABRICATOR

RESPONSIBILITIES:

PERFORMS A VARIETY OF DUTIES ASSOCIATED WITH THE ASSEMBLY OF THE STRUCTURAL ELEMENTS OF YACHTS. LAYS OUT AND CUTS NECESSARY PIECES FROM ALUMINUM SHEET OR BAR STOCK. THE ABILITY TO WELD ALUMINUM IS DESIRABLE.

Burger Boat Company
Attention: Fred Petters
1811 Spring Street
Manitowoc, WI 54220

Phone: 920-684-1600 Fax: 920-686-5165
email: fredpetters@burgerboat.com

PLUMBER

RESPONSIBILITIES:

PLAN, SET-UP, FABRICATE, FIT, POSITION AND INSTALL ENTIRE PIPING SYSTEMS SUCH AS FUEL AND LUBE OIL, FRESH WATER, SALT WATER, GREY WATER, BLACK WATER, BILGE AND DECK DRAINAGE, HVAC, ETC., USING PVC, ALUMINUM, COPPER AND OTHER METAL PIPES.

Burger Boat Company
Attention: Fred Petters
1811 Spring Street
Manitowoc, WI 54220

Phone: 920-684-1600 Fax: 920-686-5165
email: fredpetters@burgerboat.com

PROFESSIONAL

AlcoTec

A Subsidiary of The ESAB Group, Inc.

AlcoTec Wire Corporation
Traverse City, Michigan 49686 / USA

- Premium Aluminum Weld Wire
- World Market leader
- Fully Integrated Manufacturing
- Welding Technology Leaders
- Design Consultation
- Trouble Shooting
- Customized Weld Schools

Phone (231) 941-4111 Fax (231) 941 9154
E-mail- sales@alcotec.com www.alcotec.com



TELEPHONE (604) 736-9466
FACSIMILE (604) 736-9483
E-MAIL ral@ral.bc.ca
WEB www.ral.bc.ca

ROBERT ALLAN LTD.
NAVAL ARCHITECTS AND MARINE ENGINEERS

SUITE 230 - 1639 WEST 2nd AVENUE
VANCOUVER, B.C. CANADA V6J 1H3



STOCKS IN MAJOR U.S. PORTS
ASSOCIATED COMPANIES IN MEXICO,
EUROPE AND THE FAR EAST

21 CHARLES ST., WESTPORT, CT 06860
Ph: 203-226-5200 Fx: 203-226-5246
ANKERPAIN@aol.com

PROFESSIONAL

CDI. Band, Lavis & Associates, Inc.
A CDI Marine Group Company

Naval Architects & Marine Engineers
900 Ritchie Highway
Severna Park, Maryland 21146
Tel: (410) 544-2800; Fax: (410) 647-3411;
E-Mail: bla@cdicorp.com
Web Site: www.cdicorp.com/bla

BAYFRONT MARINE, INC.

EXPERT WORLDWIDE VESSEL DELIVERY SERVICE
EXPERIENCED PROFESSIONALS
Licensed
Masters, Engineers and Crews
Call Mel or Diane Longo (904) 824-8970



BISSO MARINE

- HEAVY LIFT SPECIALIST
- MARINE SALVAGE
- WRECK REMOVAL
- SONAR SURVEY - DIVING

P.O. BOX 4113
NEW ORLEANS, LOUISIANA 70178
Phone: (504) 866-6341
Fax: (504) 865-8132

Bludworth Cook Marine
ATB Flexible Connection Systems

Richard Bludworth
& John Cook

Houston, Texas

(713) 644-1595
(281) 006-1414

rbludworth@hotmail.com
jcookmarine@aol.com
www.vesselrepair.com
(link)

CDI.

CDI Marine Group

CDI Marine Company 904-805-0700
The M&T Company 732-657-5600
Band, Lavis & Associates, Inc.
410-544-2800
Naval Architects • Marine Engineers
Naval Aviation Support

JACKSONVILLE, FL • BREMERTON, WA
ISLANDIA, NY • POTTSTOWN, PA
LAKEHURST, NJ • PATUXENT RIVER, MD
PASCAGOULA, MS • PORTSMOUTH, VA
SEVERNA PARK, MD

Email: marine@cdicorp.com

Visit us at our web site at:
http://www.cdimarinegroup.com



CHILDS ENGINEERING CORPORATION

WATERFRONT ENGINEERING • DIVING INSPECTION
BOX 333 MEDFIELD, MA 02052 (508) 358-8945

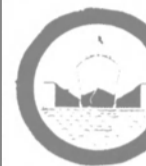
C.R. CUSHING & CO., INC.
NAVAL ARCHITECTS, MARINE ENGINEERS
& TRANSPORTATION CONSULTANTS

18 Vesey Street
NEW YORK, NY 10007

TEL: (212) 964-1180
FAX: (212) 285-1334

CRCUSHING@AOL.COM

Serving the marine industry for over 140 years



CRANDALL
DRY DOCK ENGINEERS, INC.

- Consulting • Design • Inspection
- Railway and Floating Dry Docks
- Dry Dock Hardware and Equipment

Box 505804, Chelsea, MA 02150 (617) 884-8420 Fax: (617) 884-8466
www.crandalldrydock.com

GHS
General HydroStatics

Visit
www.GHSport.com

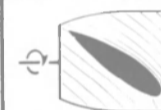
Computer software for Naval Architects

hydrostatics, stability, strength, modeling
salvage simulations
onboard trim/stability/strength



CREATIVE SYSTEMS Inc.
CREATORS OF GHS
P.O. Box 1910 Port Townsend, WA 98368 USA

sales@ghsport.com
Phone: 360 385-6212
Fax: 360 385-6213



CT MARINE

• NAVAL ARCHITECTS • MARINE ENGINEERS •

- VAPOR RECOVERY
- TOWBOATS
- BARGES

Tel. 203-831-0405

Fax: 203-831-0407

56 CROOKED TRAIL, ROWAYTON CT. 06853

CUNNINGHAM & WALKER
MARINE CONSULTANTS, INC.



NAVAL ARCHITECTURE & MARINE ENGINEERING
MARINE HVAC ENGINEERING
MARINE ELECTRICAL ENGINEERING

1762 PROVIDENCE HOLLOW LANE, JACKSONVILLE, FL 32223
TEL 904 292 9293 FAX 904 824 1423



ARTHUR D. DARDEN
INCORPORATED

NAVAL ARCHITECTS & MARINE ENGINEERS

3200 RIDGELAKE DRIVE, SUITE 403
METAIRIE, LOUISIANA 70002
(504) 832-3952 FAX (504) 832-3953

**DESIGNERS &
PLANNERS, INC.**

Naval Architects & Marine Engineers
Environment & Safety • Information Systems

2120 - Washington Boulevard, Suite 200,
Sequoia Plaza, Arlington, VA 22204-5717



PHONE: (703) 920-7070
FAX: (703) 920-7177
WEBSITE: www.dawdp.com

Member of the BIMM Group of Companies

PROFESSIONAL

**D Y E R
E L L I S &
J O S E P H** A PROFESSIONAL CORPORATION

COUNSELORS AT LAW
Watergate, Eleventh Floor
600 New Hampshire Ave., NW
Washington, DC 20037
202-944-3000
FAX 202-944-3068

www.dyerellis-maritime.com
E-mail: nav@dejlaw.com

311 Legget Drive
Kanata, Ontario, Canada
Phone: (613) 592 2830
Fax: (613) 592 4950

FTL FLEET TECHNOLOGY

Trials and Instrumentation
Structural Assessment
Fatigue / Fracture Experts
Shafting/Vibration Analysis
Performance Prediction
Model Testing

Fleetway Inc.

• Marine Engineering • Naval Architecture
• Life Cycle Support

Suite 200, 155 Chain Lake Drive, Halifax, Nova Scotia, Canada B3S 1B3
Phone: (902) 494-5700 Fax: (902) 494-5792

GEE & JENSON

Engineers • Architects • Planners, Inc.

**Comprehensive Waterfront
Development Services**

One Harvard Circle
West Palm Beach, FL 33409
Tel: (561) 515-6500 Fax: (561) 515-6502
www.geejenson.com

GEORGE G. SHARP, INC.

100 CHURCH STREET, NEW YORK, NY 10007
TEL (212) 732-2800 FAX (212) 732-2809

WASHINGTON (703) 548-4400
VIRGINIA BEACH (757) 499-4125
PHILADELPHIA (609) 772-0888
SAN DIEGO (619) 425-4211

MARINE SYSTEMS • ANALYSIS & DESIGN

GIBBS & COX INC
Naval Architects & Marine Engineers

50 West 23rd Street
New York, NY 10010
212-366-3900

Brunswick, ME
207-721-8200

Hampton, VA
757-896-0200

Arlington, VA
703-416-1240

Philadelphia, PA
215-952-0172

JOHN W. GILBERT ASSOCIATES, INC.
Naval Architects  Marine Engineers

(781) 740-8193
FAX (781) 740-8197

75 Terry Drive, Suite 200
Hingham, MA 02043

GLOSTEN

The Glostén Associates, Incorporated

Naval Architecture Marine Engineering Ocean Engineering Hydrodynamics Transportation Analysis Contract Administration
605 First Avenue, No. 600 Seattle, WA 98104-2224 Phone: (206) 624-7850 Fax: (206) 682-9117

CONSULTING ENGINEERS SERVING THE MARINE COMMUNITY

HEGER DRY DOCK, INC.

13 Water Street, Holliston, MA 01746

Engineering for all types of dry docks

• Design • Docking Calculations
• Certifications • Engineer/Diver
• Inspections • U.S. Navy 1625C FCR's
• Dockmaster Training Classes

Phone: (508) 429-1800 Fax: (508) 429-1811
www.hegerdrydock.com

HERBERT ENGINEERING CORP.

2417 Mariner Square Loop, Suite 125
Alameda, CA 94501

Naval Architects • Marine Engineers • Marine Software Specialists

Tel: (510) 814-9700
Fax: (510) 814-9763

E-mail: info@herbert.com
http://www.herbert.com

CERTIFIED
ISO 9002

JMS

**JMS NAVAL ARCHITECTS
SALVAGE ENGINEERS**

The sea-going naval architects

860-448-4850 • jmsnet.com

John J. McMullen Associates, Inc.

An Employee Owned Company

JJMA

Naval Architects
Marine Engineers

Program Support Specialists

Alexandria, VA • Arlington, VA • New York, NY
Newport News, VA • Pascagoula, MS • Pittsburgh, PA
Bath, ME • Port Hueneme, CA • Bremerton, WA
Philadelphia, PA • San Diego, CA • Tacoma, WA
Charleston, SC • Quantico, VA • New Orleans, LA

Corporate Headquarters:

4300 King Street Suite 400 Alexandria, VA 22302

Business Development: (703) 933-6690 Fax: (703) 933-6777

Web Site: www.JJMA.com Email: Marketing@JJMA.com



Michael R. Keough, CPC
KEOUGH ASSOCIATES

124 Garretson Avenue
Staten Island, NY 10304-2830

PH: (718) 979-8698 Fax: (718) 667-8347

Our 25th Year, Providing Executive Search & Technical
Recruitment Services to the Maritime Community
and Supporting Industries.

M.A.C.E.

FT. LAUDERDALE - USA - WORLDWIDE
PHONE: (954) 493-8913 • FAX: (954) 493-9559

• N.D.T. Services
• Vibration - noise - structural/modal analysis
• Field balancing, Laser Alignment
• Torque - torsional vibration analysis
• IR - Thermography inspection
• Emission tests, Engine Performance tests



P.O. Box 18098
Beverly Hills, CA 90209
(310) 550-1980

Murray D. Black
President

MARINE DRILLING & BLASTING, INC.
Marine Contractors • Underwater Drilling & Blasting
Contract Consulting

MSC MARINE SYSTEMS CORPORATION
MARINE ENGINEERS / NAVAL ARCHITECTS

HM&E Design Inspection **Drawings Vibration** **Logistic Support Testing Programs**

68 FARGO STREET, BOSTON, MA 02210
TEL (617) 542-3345 FAX (617) 542-2461

INFO @ MSCORP.NET
WWW.MSCORP.NET

US/GLOBAL...WE DELIVER

♦ Delivery of vessels from 50 feet, to 5000 gross tons.
♦ An Experienced Team of Expert Licensed Masters,
Engineers, Certified Marine Surveyors/Consultants.
♦ 25+ years of No Accidents/No Incidents Operations.

MARNAV INTERNATIONAL Ltd.
800-217-5059 ♦ mni@mar-nav.com ♦ Fax 360-697-9450

MCA ENGINEERS, INC.

• Marine Structural Engineering (FEA, Fatigue,...)
• Hull Monitoring System (Motions, Stress,...)
• Ship Repair Analyses & New Designs
• Mooring Master (Analyses / Monitoring)
• Vessel Information Archive System (Multimedia)
• FracTrac Relational DataBase
• Ultrasonic Leak Detection

e-mail: info@mcaengineers.com
web-site: www.mcaengineers.com
Phone: (714) 662-0500 Fax: (714) 668-0300
2960 Airway Ave., A-103, Costa Mesa, CA 92626

Coast Guard/State Pilotage License Insurance

Worried about defending your license or yourself in a hearing conducted by the Coast Guard, National Transportation Safety Board or a State Pilotage Authority, which could result in license revocation, suspension or assessment of a fine/money damages against you personally?

Stop worrying. Insure yourself and your license with a Marine License Insurance Policy. For more information, contact R.J. Mellusi & Co., 71 Hudson Street, New York, N.Y. 10013, Tel. (212) 962-1590 Fax (212) 385-0920, E-mail rmellusi@idt.net.com

Alan C. McClure Associates, Inc.
NAVAL ARCHITECTS • ENGINEERS

2600 South Gessner • Suite 504 • Houston, Texas 77063
(713) 789-1840 • (713) 789-1347 Fax

MIL Systems
Naval Architects &
Marine System Engineers

1150 Morrison Drive, Tel.: (613) 726-0500
Ottawa, Ontario K2H 8S9 Fax: (613) 726-0252
www.milsystems.com quality@milsystems.com

PROFESSIONAL

MOSS MARINE USA, Inc.
Ship & Equipment Repair
☎ 410-542-8775 fax 410-542-1115
Baltimore, MD 21209

PHONES:
(973) 984-2295
1-800-762-9383
NIGHT:
(973) 538-1789
FAX:
(973) 984-5181

**MOWBRAY
MARINE SALES INC.**
2 BROOKFIELD WAY
MORRISTOWN, N. J. 07960

SPECIALISTS IN
BUYING, SELLING
AND RENTING
TUGBOATS
• BARGES
CONTRACTORS
FLOATING
EQUIPMENT

YOUR MARINE CONSULTANTS

Modern Maritime, Inc.

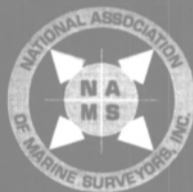
Modern Solutions for the Traditions of the Sea

**Safety, Quality
and Environmental
Management
Systems**

- Consulting
- Implementation
- Administration
- Document Control



1-800-876-8969
or
www.modernmaritime.com



**NATIONAL
ASSOCIATION OF
MARINE
SURVEYORS, INC.**
established 1962

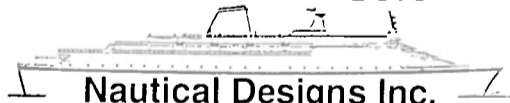
WE ARE THE OLDEST U.S. ORGANIZATION
for CARGO, HULL & MACHINERY and YACHT SURVEY.

For a NAMS surveyor in your area, call

1-800-822-6267

fax: (757) 488-0584 e-mail: office@Nams.cms.org
www.nams-cms.org

CRUISE SHIP SPECIALISTS



Nautical Designs Inc.

NAVAL ARCHITECTS / MARINE ENGINEERS

2101 S. ANDREWS AVE. FT. LAUDERDALE, FL. 33316 PH. (954) 463-2033

Noise Control Engineering, Inc.

Shipboard Noise & Vibration Control
Design, Analysis, FEA, Treatment Selection,
Diagnostics, Testing & Underwater Noise

799 Middlesex Turnpike
Billerica, MA 01821

www.noise-control.com

978-670-5339

978-667-7047 (fax)

noise@tiac.net

OCEAN ENERGY SYSTEMS

Naval Architects & Marine Engineers

505 N. Sam Houston Pkwy, Suite 320
Houston, TX 77060

Phone: 281-820-4200 Fax: 281-820-2440
Web Site: <http://www.oceaneng.com>



P.O. Box 28009 St. John's Canada A1B 4J8 <http://www.oceaniccorp.com>
Email: oceanic@oceaniccorp.com Tel: (709) 722 9060 Fax: (709) 722 9064



PRO-DIVE INC.

Complete and Professional Diving Services

501 Illinois Avenue, P.O. Box 663, Ottawa, IL 61350
Phone: (815) 433-5228 Fax: (815) 434-2433

Randy Jacobs
President

24-HR. SERVICE

e-mail: prodiver@theramp.net



WWW.RADIANINC.COM

- Marine Engineering
- Vessel Operations
- Marine Electrical Systems
- Marine Safety
- International Marine Services
- Life-Cycle Management

Radian Inc.

5845 Richmond Hwy. - Alexandria, VA 22303
Phone: (703) 329-9300 - or - (800) 595-5593

TURBOCHARGERS III

ALL MAKES AND MODELS

• INDUSTRIAL • AUTO • MARINE

- Caterpillar
- Holset
- Toyota
- Mitsubishi
- Air Research
- Ray
- Garrett
- Hitachi
- KKK
- Detroit Diesel
- Yanmar
- Roto-Master
- Schwitzer
- Warner (SH) (HI)
- Elliot
- Brown Boveri (ABB)
- Alco

Phone: 321-868-2920 • Fax: 321-868-2921 (Quotes by Fax Only)

E-mail: ramturbo@bellsouth.net • website: www.turbochargers.org

BRS

Barry Rogliano Salles USA LLC
Shipbrokers and Consultants

Provides brokerage and consulting services for the sale,
purchase, finance and chartering of ships or new build
projects in the maritime and offshore industry.

5177 Richmond Avenue, Suite 1142 Houston, TX 77056
Tel: 713-871-8900 Fax: 713-871-9688 www.brs-houston.com



**M. ROSENBLATT
& SON**

an AMSEC LLC Group



NAVAL ARCHITECTS • MARINE ENGINEERS

Advisors and Consultants on Marine Matters of All Types

San Francisco • Bremerton • New York • San Diego • Washington, DC
New Orleans • Newport News • Virginia Beach • Charleston • Philadelphia

For information please contact Marketing at (703) 415-7800

E-Mail: info@mrosenblatt.amsec.com

Web Site: www.mrosenblatt.com

SARGENT & HERKES, INC.

NAVAL ARCHITECTS • MARINE ENGINEERS

225 BARONNE ST., SUITE 1405
NEW ORLEANS, LA 70112

504-524-1612 • 504-523-2576 (Fax)

E-mail: sahinc@bellsouth.net

Schrider

Naval Architects

& Associates, Inc.
Marine Engineers

P.O. Box 2546
Daphne, AL 36526
E-mail: info@schneider.com

Office: (251) 621-1813
Fax: (251) 626-1814

Technical and Managerial Solutions for Shipyards & Vessel Owners



Scientific Marine Services, Inc.

Naval Architects, Instrumentation Engineers, Ocean Engineers
Mechanical Engineers, Software Engineers, Coastal Engineers

Member of The BMT Group of Companies

Houston, Texas
Tel: (281) 458-9090
Fax: (281) 458-9998
eMail: sms@scimar.com

**MARINE INSTRUMENTATION
TRIALS and TESTING
HULL MONITORING SYSTEMS**

Escondido, California
Tel: (760) 737-8605
Web: www.scimar.com

Seaworthy Systems, Inc.

ISO 9001

MARINE ENGINEERS AND NAVAL ARCHITECTS

Essex, CT 06426

(860) 767-9061; Fax: (860) 767-1263; www.seaworthysys.com
SAN FRANCISCO • PHILADELPHIA • WASHINGTON, DC



A. K. Suda, Inc.

NAVAL ARCHITECTS & MARINE ENGINEERS

- Concept & Contract Design
- Transportation Analysis
- Construction Drawings
- Owner Representation

3004 19th Street • Metairie, LA 70002

Ph. (504) 835-1500 • Fax (504) 831-1925 • info@aksuda.com

SURVIVAL SYSTEMS



931
Industry
Road
Kenner
LA, 70062

INTERNATIONAL

LIFEBOAT INSPECTION, REPAIRS, PARTS.

PHONE: (504) 469-4545, FAX: (504) 466-1884

E-mail: lifeboatserv@earthlink.net

VIBRANALYSIS ENGINEERING CORP

- PREDICTIVE MAINTENANCE PROGRAMS
- VIBRATION ANALYSIS
- FIELD & SHOP BALANCE
- ACOUSTICAL CONSULTANTS
- COMPUTERIZED DATA COLLECTION
- MARINE APPLICATIONS—IR/THERMAL IMAGING



VIBRANALYSIS ENGINEERING CORP

9300 Gamebird
Houston, TX 77034

800-553-1614

713-944-3633

Fax: 713-944-8797

VIBTECH, INC.

Box 435 North Kingstown
Rhode Island 02852
TEL: 401-294-1590
FAX: 401-295-2592

NAVAL ARCHITECTURE

MARINE ENGINEERING

STRUCTURES

VIBRATION

SHOCK

NOISE



FAST SHIP DESIGN

MAIN OFFICE: 125 STEAMBOAT AVENUE,
NORTH KINGSTOWN, R.I. 02852
E-mail: Vibtech@ids.net

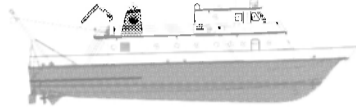
WALKE POINT

Surveys: Damage Insurance Pre-Purchase
Regulatory Inspections on Panamanian and Belizean Flag Vessels
Procedures: Repair Stability Welding

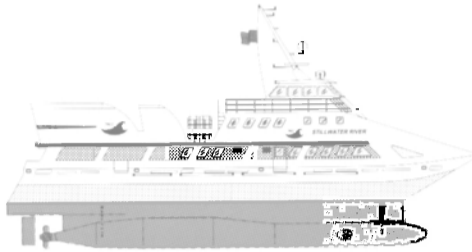
(757) 426-1405
(757) 426-6479 Fax
Email: walkept@erols.com

345 Princess Anne Road
Virginia Beach, VA 23457
<http://www.angelfire.com/biz/mrncslnt>

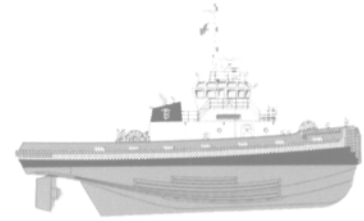
Diversification



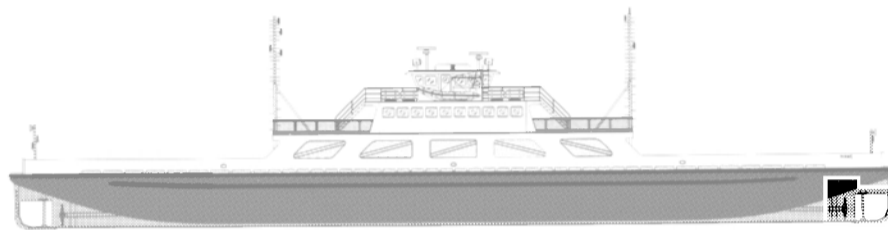
96' Research Vessel



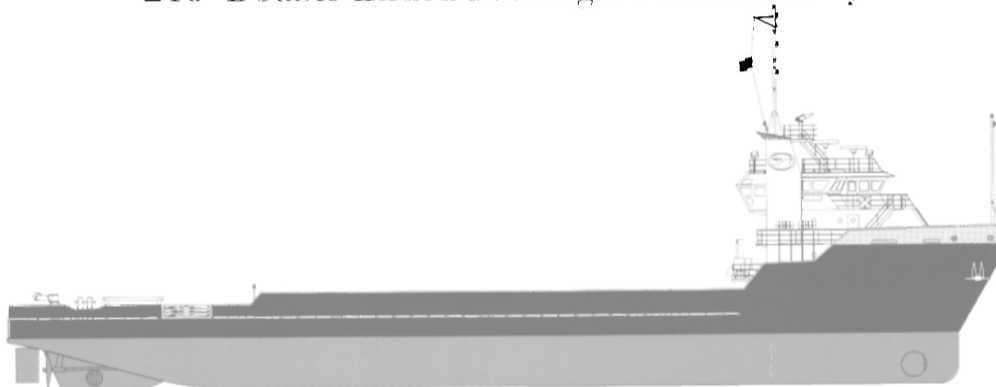
120' Aluminum SWATH



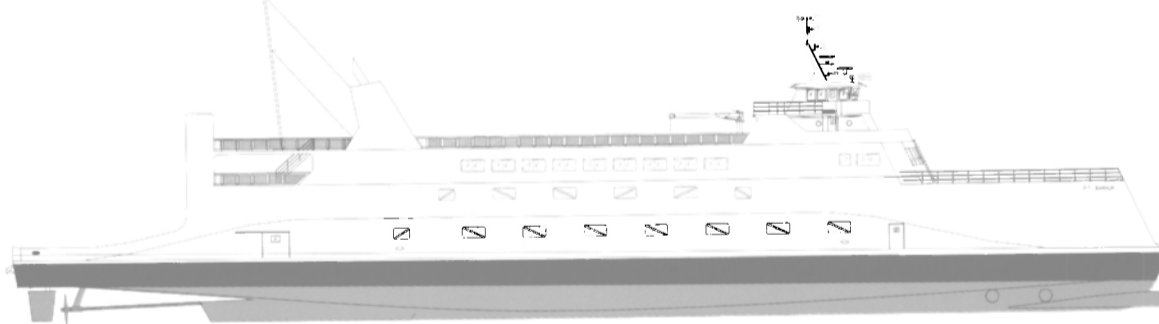
110' Z-Drive Tug



216' Double Ended Passenger /Vehicle Ferry



232' DP Platform Supply Vessel



306' Passenger /Vehicle Ferry

New Construction, Conversions, Repairs

Eastern Shipbuilding Group

P.O. Box 960, 2200 Nelson Street, Panama City, Florida 32402. Phone 850-763-1900. Fax: 850-763-7904
Website: www.easternshipbuilding.com email: info@easternshipbuilding.com

KARL SENNER, INC...WHEN ONLY THE BEST WILL DO



M/V J.P. Laborde

Karl Senner, Inc. has been awarded the contract to supply the marine gears for Tidewater, Inc.'s Anchor Handling Tug Supply Vessel, M/V J.P. Laborde, which is currently under construction at Yantai Raffles Shipyard Company, Ltd. in China.

Karl Senner, Inc.'s scope of supply includes:

Two (2) Reintjes DLG 4447U, Twin Input, Single Output, Horizontal Offset Reduction Gears, with a Reduction Ratio of 5.96:1

Owner: Tidewater, Inc., New Orleans, Louisiana

Shipyard: Yantai Raffles Shipyard Company, Ltd. People's Republic of China

REINTJES
MARINE GEARBOXES

BERG PROPULSION
CONTROLLABLE PITCH PROPELLERS
AND BOWTHRUSTERS

ABB

TURBOCHARGER SERVICE

REXROTH
MARINE CONTROLS

SALES, PARTS, SERVICE • 500 H.P. TO 20,000 H.P.

website: <http://www.karlsenner.com> sales@karlsenner.com service@karlsenner.com parts@karlsenner.com



Karl Senner, Inc.

WEST COAST
Karl Senner, Inc.
12302 42nd Drive S.E.
Everett, WA 98208
Mr. Whitney Ducker
(425) 338-3344

NEW ORLEANS
Karl Senner, Inc.
25 W. Third St.
Kenner, LA 70062
(504) 469-4000
Telefax: (504) 464-7528

EAST COAST
Olof Wadehn Enterprises
30 Sheppard Lane
Huntington, Long Island
New York 11743
Mr. Olof Wadehn
(631) 692-4548

Visit our website at <http://www.karlsenner.com>

Circle 25C on Reader Service Card

www.maritimereporterinfo.com