

July 2003

MARITIME REPORTER AND ENGINEERING NEWS

www.marinelink.com

Cruise
Older Ships: Save 'em or Scrap 'em

Maritime Security
Bryant: Show me the (grant) Money!

Offshore Report
When will the Drilling Pick Up?

Marine Propulsion
2003 Diesel Engine Technical Guide

Investment in Design • CAD/CAM • SatCom Update • NorShipping 2003 Round-up



GUASCOR



*IMO® & EPA Compliant Engines
& reduction gears from 575 hp to 1550 hp*



I-6 (575 hp) • I-8 (750 hp) • V-12 (1150 hp.) • V-16 (1500 hp.)

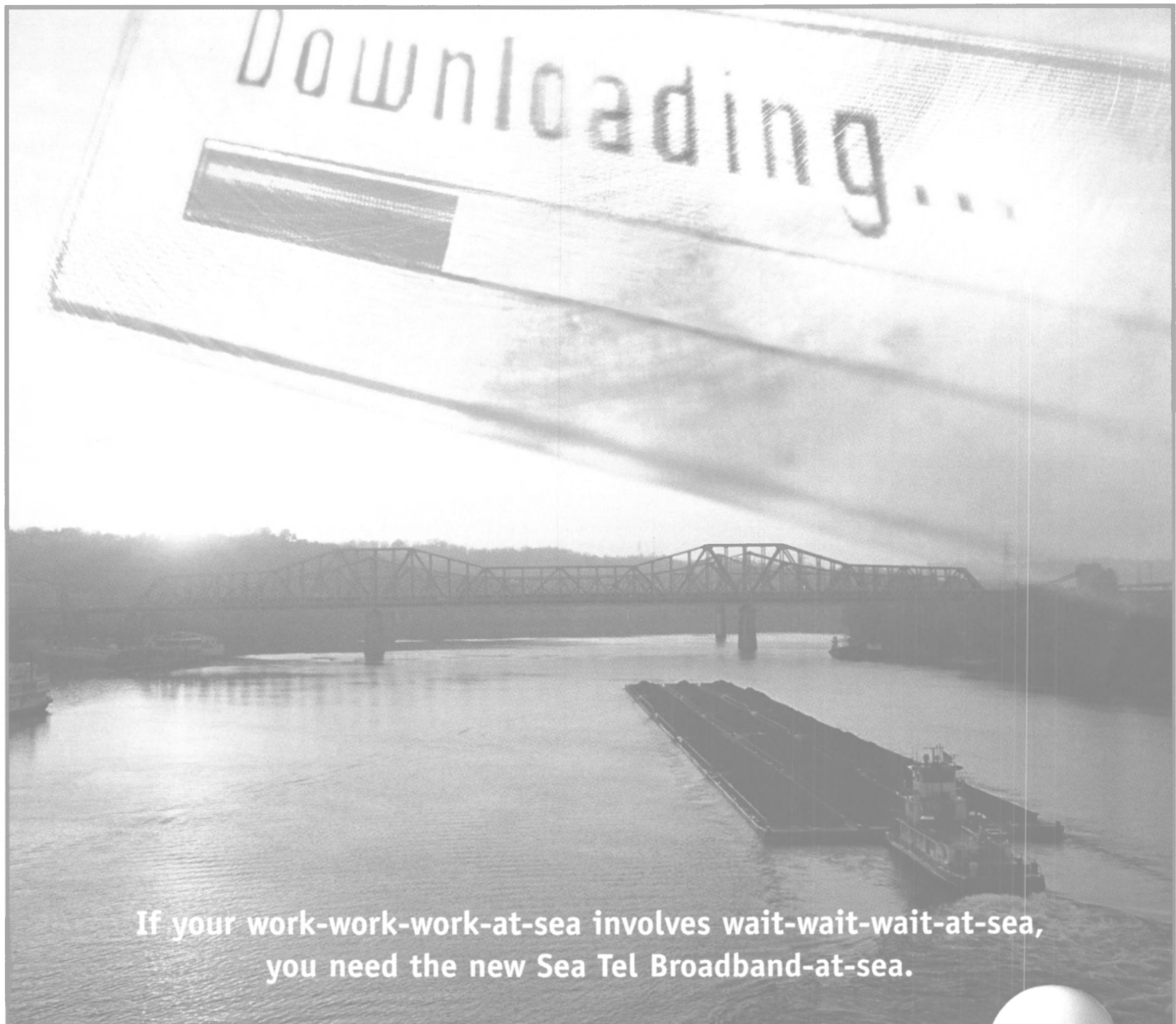


REAGAN MARINE DIVISION



Circle 270
on Reader
Service Card

REAGAN MARINE • 29060 Highway 75 • Plaquemine, LA • Tel (800) 237-3160 • Fax (225) 659-9090 • marinesales@reaganpower.com
GUASCOR, S.A. • 7220 N.W. 36 St., Suite 310 • Miami, FL 33166 • Tel (305) 436-8929 • Fax (305) 436-9633 • guascor@bellsouth.net



If your work-work-work-at-sea involves wait-wait-wait-at-sea, you need the new Sea Tel Broadband-at-sea.

Introducing the WaveCall 4003. Business level connectivity wherever you cruise.

Tired of waiting for dial up or downloads at sea? Imagine Internet connectivity offshore the same as you get on shore - always on, lightning fast and multiple users. ✦ Just one meter in size, the WaveCall 4003 gives you blazingly fast inbound and outbound speeds for downloading large files, streaming video, voice, video teleconferencing or simply surfing the web at will. ✦ With coverage from

Airtime Cost Comparison

	WaveCall 4003	Inmarsat 77 ¹	B ²
Download speed	512 kbps	64 kbps	64 kbps
1 GB file download	256 min	2,080 min	2,080 min
Cost/MB	*1	*16.53 ISDN *36.00 MFOS	*18.60 (*9.00/min)
Cost/GB	*1,000	*16,640 ISDN *36,000 MFOS	*18,720

4:15:03. ¹Source: KVH website ²Source: Delta Communications website

North to South America, Northern Europe to the Med, and soon in the Far East, the 4003 also is the most cost efficient. Perfect for business.

Perfect for family and crew. Perfect. ✦ The WaveCall 4003 from the name you trust, Sea Tel. Affordable broadband Internet-at-Sea™ in a compact dome. Work without the wait.



Compact and rugged, the 4003 stands up to all conditions.



Look to the leader. Look to Sea Tel.

© 2003 Sea Tel, Inc.

Sea Tel, Inc. 925.798.7979 ✦ www.seatel.com ✦ Sea Tel Europe 44 (0) 2380 671155

Circle 250 on Reader Service Card

Contents

17 Government Update SHOW ME THE (grant) MONEY!

Dennis Bryant laments that politics, as usual, may be the cause for a bottlenecking of federal security funding to the marine industry.

20 Navy & USCG Integrated Deepwater System Update

Rear Adm. Patrick M. Stillman, a driving force behind the delivery of the USCG's historic transformation, updates *MR* on the \$17 billion project.

26 GOM Report When will the Drilling Start Again?

Is the drilling market's current trough driven by real or imagined conditions ... or both. Larry Pearson explores, citing some positive indicators for a recovery sooner than later.

28 Investment in Design Build it ... but will they come?

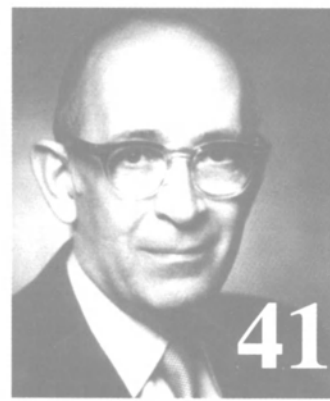
Vosper Thornycroft has created a state-of-the-art production facility within Portsmouth Naval base. But what will fill the shop? David Tinsley explains.

33 Cruise Market S.S. Norway: The Aftershock

The explosion aboard S.S. Norway raises new questions about old ships. — by Regina P. Ciardiello

41 In Memory: Lester Rosenblatt

46 2003 DIESEL ENGINE GUIDE



MARITIME REPORTER AND ENGINEERING NEWS

NEW YORK

118 E. 25th St., New York, NY 10010
Tel: (212) 477-6700; Fax: (212) 254-6271
e-mail: mren@marinelink.com • Web: Internet: www.marinelink.com
FLORIDA • 215 NW 3rd St., Boynton Beach, FL 33435

Associate Publisher

Gregory R. Trauthwein • trauthwein@marinelink.com

EDITORIAL

Managing Editor • Regina P. Ciardiello • ciardiello@marinelink.com

Associate Editor • Jennifer Rabulan • rabulan@marinelink.com

Technical Editor • David Tinsley

Contributing Editor • Dennis L. Bryant, Senior Maritime Counsel,
Holland & Knight

Editorial Consultant • James R. McCaul, president,
International Maritime Associates

PRODUCTION

Production Manager

Michael Lowe • lowe@marinelink.com

Asst. Production Manager

Irina Tabakina • tabakina@marinelink.com

CIRCULATION

Circulation Manager

Dale L. Barnett • bornett@marinelink.com

ADVERTISING SALES

Vice President of Sales

Lucia M. Annunziata • annunziata@marinelink.com

National Sales Manager

Rob Howard • howard@marinelink.com

Tel: (561) 732-4368; Fax: (561) 732-6984

North American Sales Manager

Brett W. Keil • bkeil@marinelink.com

Tel: (561) 732-1185; Fax: (561) 732-8414

Director, New Business Development

Jean Vertucci • vertucci@marinelink.com

Marketing Manager

Richard Grable • grable@marinelink.com

Tel: (561) 732-1659; Fax: (561) 732-6984

Manager, Information Services

Tina Angelino • angelino@marinelink.com

Manager, Accounting Services

Esther Rothenberger • rothenberger@marinelink.com

Manager, Advertising Services

Kristen O'Malley • omalley@marinelink.com

Sales Assistant

Elizabeth Singh • singh@marinelink.com

Classified Sales • Tel: (212) 477-6700

Manager, Web Services

Rostislav Sakhnovskiy • sakhnovskiy@marinelink.com

Manager, Information Technology Services

Vladimir Bibik • bibik@marinelink.com

PUBLISHERS

John E. O'Malley

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

International Sales Operations

Managing Director, International Sales

TONY STEIN

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

CHARLES E. KEIL, Vice President, International Operations

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: ckeil@marinelink.com

Germany/Switzerland

TONY STEIN

Tel: +44 (0) 1506 822240; Fax: +44 (0) 1506 828085

Japan

KATSUHIRO 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 9136; Fax: +34 91 446 0214

From Sea To Shining Sea



SeaArk Has You Covered.

**NO MATTER WHAT YOUR LOCATION,
SEAARK HAS A SALES OFFICE NEAR YOU.**

SeaArk Marine manufactures all-welded aluminum work and patrol boats from 17 to 85 feet in length. SeaArk's sales staff has a combined total of 163 years experience in the boat building industry. Our extended sales force has the expertise and commitment to customer satisfaction that keeps our customers coming back again and again.

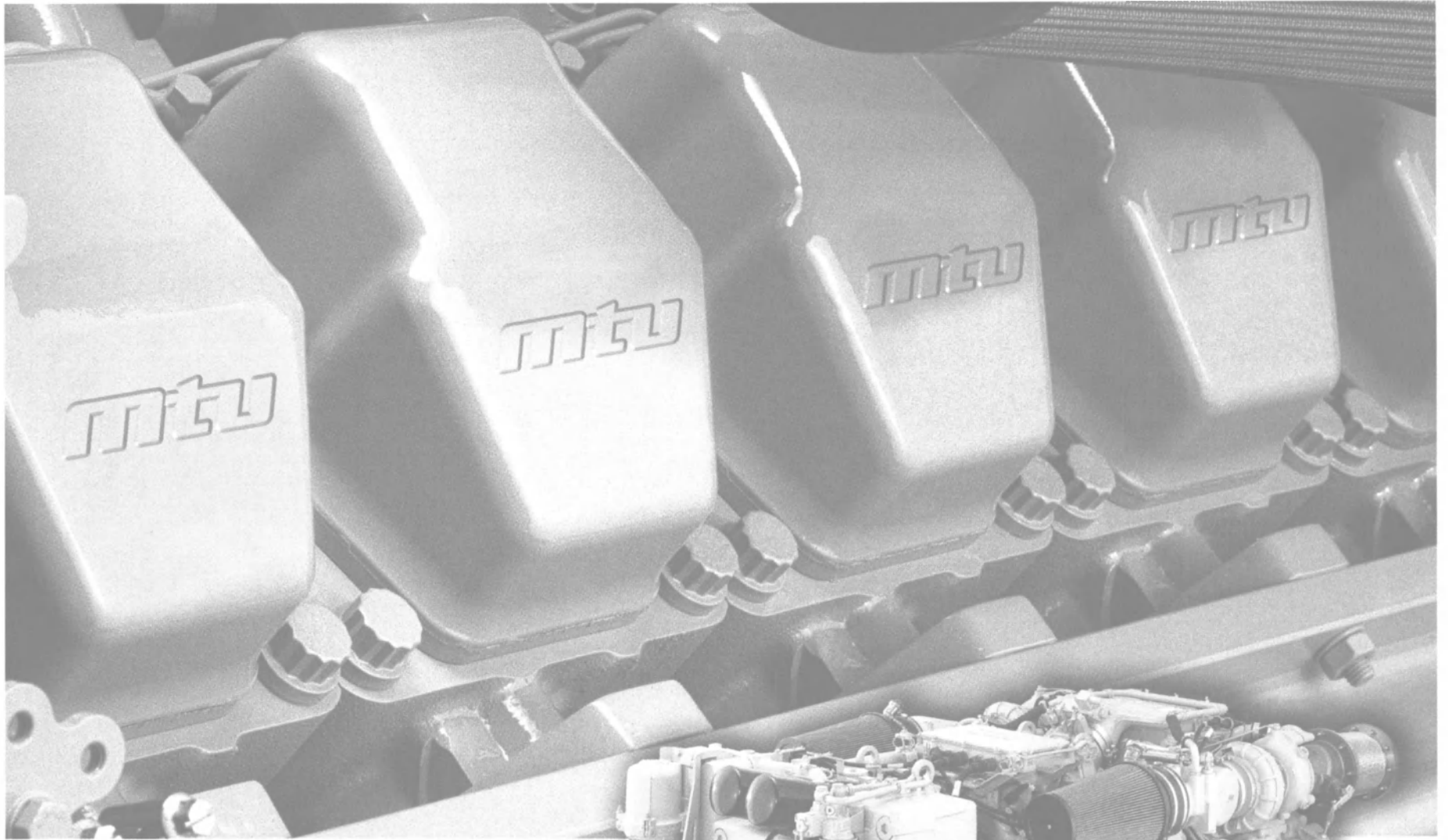
**The only thing stronger than our boats
is the knowledge and dedication of our people!**

Call us today to discuss your requirement.



P.O. Box 210, Monticello, Arkansas 71657
PHONE: 870-367-9755 — FAX: 870-367-2120
E-mail: sales@seaark.com — www.seaark.com

Circle 249 on Reader Service Card



Globally One Brand

Series 2000
535 - 2000 BHP

Marine engines built by MTU and Detroit Diesel are now branded MTU. One company and one team globally. Together, MTU and Detroit Diesel are committed to providing the industry's finest marine engines with the highest quality service and product support.

For more information:

Contact your MTU or Detroit Diesel Distributor or www.detroitdiesel.com

In NAFTA, all Detroit Diesel Distributors are authorized MTU Distributors.



DaimlerChrysler Off-Highway

Circle 214 on Reader Service Card

The Index

Directory of companies given editorial coverage in this edition of *Maritime Reporter & Engineering News*.

ABS	12, 41, 42	Elliott Bay Design Group	33	MacGregor	36	Saab Transponder Tech	37
Aker MTW Werft	12	EMS Technologies	38	MAN B&W	16, 36, 45	SENER	52
Albacore Research	52	Energy Information Administration	26	Marine Offshore Service Association	26	Shanhaiguan Shipyard	12
Algoship Designer	12	Engineered Piping Products	30	Marine Society of New York	41	Shell	36
American Superconductor Corporation	24, 45	Engineered Support Systems	24	Marlink	36	ShpServ	37
Arrendadora Ocean Mexicana	25	Farstad Shipping ASA	25, 42	Mastek Heavy Industries	12	Skopos	31
Austal Ships	16, 24	FDGM	24	McMurdo	36	SNAME	41
Autoship Systems	52	Fred Olsen S.A.	16	Mitsubishi Shipyards	36	Sonsub	25
Bachrach & Wood	43	G.P. Wild International	33	Montco Offshore	27	SOROSS	45
BAE Systems	28	General Dynamics	16	MTS	37	Sperry Marine	10, 36
Bass Maritime Software	36	Gladding-Hearn Shipbuilding	14	MX Marine	36	Springfield Shipping Company	36
Bergen	29	Grace Lines	45	Nantucket Steamship Authority	18	Star Information Systems	37
Bollinger Shipyards	10	GTR Campbell	12	Navatek	24	Stelmar Shipping	42
Bouchard Coastwise Management Co.	9	Gulf Copper Ship Repair	52	Navy Inventory Control Point	24	STN Atlas Marine Electronics	37
Broward County Board of Commissioners	18	Hagglunds	42	New York Marine Terminals	45	Thales	28
Bureau Veritas	41	Hammar	30	NOL	43	Tidewater	27
C&G Boats	27	Hamworthy	30	Norsk Inova	30	Tidewater Barge Lines	18
Canada Maritime	15	Hapag Lloyd	36, 45	Northrop Grumman	20, 27	Todd Pacific Shipyards	42
Central Gulf Lines	45	Hornbeck	25	Northrop Grumman Newport News	42	Transas	36
CIBC World Markets	26	Hy-Line Cruises	14	Northrop Grumman Ship Systems	24	Transportation Security Administration	18
Columbia Coastal Transport	19	Hyundai Shipyard	36	Norwegian Cruise Line	33	Tribon Solutions	52
Columbia Container Services	19	IMO	29	NTSB	34	Tsakos Energy Navigation	42
Congress	17	Incat	16	NYC Dept. of Transportation	18	U.K. Ministry of Defense	28
ConocoPhillips	25	Infield System	27	NYC Economic Development Corp.	18	U.S. Army	25
Crowley Marine Services	42	Innova	45	NYK	45	U.S. Coast Guard	17, 20
CSIC	12	Integrated Coast Guard Systems	20	Ocean Safety	31	U.S. Lines	45
Cummins	14	Integrated Logistics System	21	Office of Naval Research	24	U.S. Navy	16
Cunard	31, 50	International Shipholding Corporation	43	Offshore Magazine	27	U.S. Navy Surface Effect	24
Daewoo Shipbuilding & Engineering	14, 15	Izar Gijon Shipyard	15	Orkot TLM	36	Unitor	37
Danish Interior	31	Kelvin Hughes	36	P&O Nedlloyd	40	Vacon Plc	37
Deepwater Drilling II	25	Kody Marine	14	Palmer Industries	19	Viking	30
Deepwater Project Development	27	Kongsberg	36	Petroleos Mexicanos	25	Vosper Thornycroft	28
Defense Logistics	24	Kvaerner Masa-Yards	36	Port of New York and New Jersey	45	VSTEP	52
Defense Supply Center	24	Kvaerner Warnow Werft	12	Prudential Lines	45	VT Halter Marine	25
Deltamarin	52	Leica Geosystems	36	Quest Offshore Resources	26	Waterman Steamship Corp.	45
Department of Homeland Security	18, 20	Leigh Hoegh	14	Quincy	10	Webb Institute	41
Diamond Offshore Drilling	25	Lloyd Werft	33	R&D Nautics International	30	Wynn Marine	37
DNV	37	Lloyd's Register	42	Radio Holland Group	37	Xantic	40
DNV Software	52	Lockheed Martin	20	Reederei Hartmann	12		
Dockendale Shipping Co. Ltd.	12	Lubmarine	43	Rolls-Royce Group	29		
Douglas-Westwood	27	M. Rosenblatt & Son	41	Royal Caribbean Cruises	35		
El Paso Energy Partners	27	M/S Costa Mediterranea	35	Royal Navy	28		

Ever Expanding Horizons

Shipping communication keeps getting better.

Use the latest technology

- Inmarsat Fleet 55 & 77 - stay online all the time at no extra cost
- Iridium data - send emails fast, at low cost
- Software upgrades - reduce your sat comms costs with *StratosOne* and *StratosNet*

To hear more about these and other exciting services, contact Stratos today!

Weston: 1 800 566 9600 saleseast@stratosglobal.com
 Seattle: 1 800 250 8962 saleswest@stratosglobal.com
 Worldwide: +1 709 748 4233 info@stratosglobal.com

STRATOS®

www.stratosglobal.com
 Beyond the Horizon™

Circle 257 on Reader Service Card

T R A N S F O R M A T I O N



United Defense and United States Marine Repair are now one team supporting Government and commercial customers with the highest level of quality, reliability, expertise, and on-time delivery. As the U.S. Navy undergoes transformation to meet national security challenges, the 'United' team is ready to support the mission - with a unique mix of ship repair, modernization, conversion / overhaul services, and leading-edge naval armament. See the future of defense. Visit www.uniteddefense.com



United Defense

Editor's Note

As we steam towards the traditional 'dog days of summer,' the feeling here is that this will anything but a relaxed period in the maritime world. Simply put, the industry is experiencing a significant metamorphosis, with upheaval of varying degrees on most all fronts — from commercial to military; from shallow draft to deep draft.



The only constant, as the saying goes, is change, and given the history of the marine business, it would seem that regulatory change should be a staple on any veteran company's agenda. Stoked by a hyper-sensitive media that is poised to pounce on any story, employing sensationalist means to capture attention and revenue, the relatively fragmented marine business is no match for a motivated international media and politicians seeking to secure their positions.

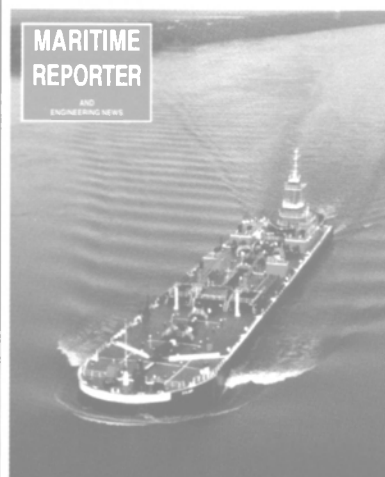
At home and abroad, marine companies this summer are (or should be) hitting the books to understand and assimilate many of the changes that will affect their business. Understanding the new rules for compliance, however, are just a part of the equation. It is equally necessary to comprehend the bottom-line impact — from the initial financial hit to the continuing drag on case flow for years to come — as it is critical to not only comply with the rules du jour, but to position your company to prosper for years to come. Organizations with informed executives and mid-level managers, as always, will rise to the top, while those choosing to go about "business as usual" could suffer in the long term.

New regulations incorporating the ISPS Code and provisions of the Act will be published on or about July 1, 2003, as Charley Haven pointed out in the June 2003 edition of *Maritime Reporter*. (*Seminar Series Aims to Ensure Compliance*, MR, June 2003, p. 26). These regulations will have far reaching impact upon most of the maritime industry in the U.S., and the entire maritime community needs to get up to speed on compliance with the new measures.

www.marinelink.com

trauthwein@marinelink.com

On the Cover



On the Cover: The *Jone A. Bouchard* — a 130-ft., 6,140-bhp tug — and Barge B. No. 225, a 110,000 barrel class double hull oil Barge — the two major pieces of an Articulated Tug/Barge (ATB) built by Bollinger Shipyards for Bouchard Coastwise Management Co. See story on page 10.

- 35 Finland
- 38 Satcom
- 41 People & Company News
- 52 Cad/Cam
- 53 Ship's Store
- 54 Buyer's Directory
- 56 Advertiser's Index
- 57 Classified

Subscriptions: One full year (12 issues) \$24.00 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

AND
ENGINEERING NEWS

www.marinelink.com

ISSN-0025-3448
USPS-016-750

No. 7

Vol. 65

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

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

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. ©2003 Maritime Activity Reports, Inc.

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.

Member



Business Publications
Audit of Circulation, Inc.

Other Printed & Electronic Products

MarineNews

Published 18 times per year, *MarineNews* covers the North American inland/offshore shallow draft market.

Marine Security Sourcebook

Published four times per year, the definitive guide to marine security systems, products and services.

The Repair Report

Weekly electronic newsletter dedicated to delivering the world of Ship Repair News, Contracts and Data. Sample for FREE at www.shiprepairer.com

2003 Global Marine Directory CD

More than 110,000 records ... log onto www.marinelink.com and download a FREE SAMPLE.

www.maritimetoday.com • Customized e-mail news service twice a day.

www.maritimejobs.com • The marine industry's recruiting & employment resource.

www.marinelink.com • The Internet's largest marine website, with over 270,000 "hits"

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

ABB

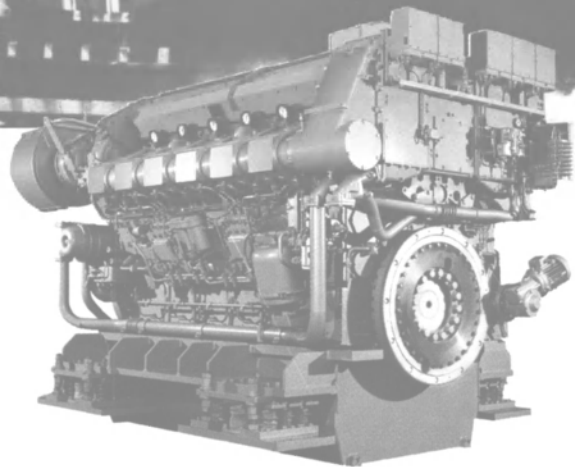
New York/NJ, Miami, Houston, Seattle/Tacoma, Los Angeles — email: turbochargers@us.abb.com

Circle 20 on Reader Service Card

DEUTZ...

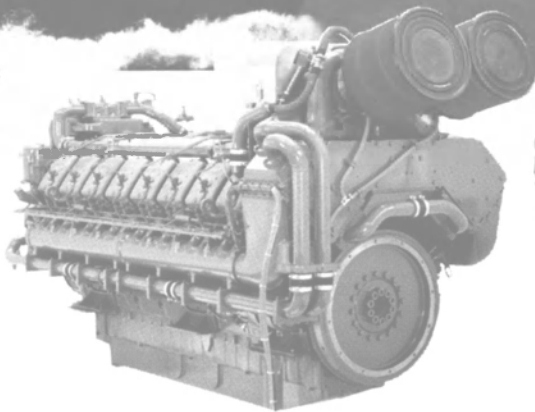
Reliability & Dependability

In All Waters



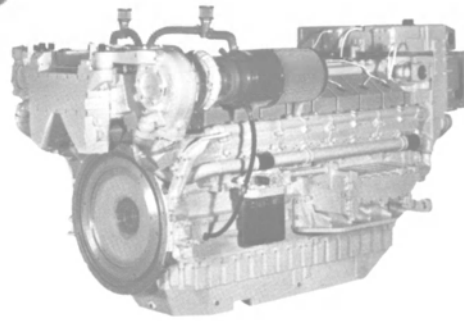
628

1333 - 4825 BHP
Speed 750 - 1000 min⁻¹
Water-cooled L6, L8, L9, V12 and V16



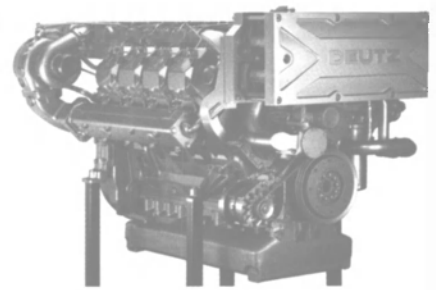
620

1197 - 3046 BHP
Speed 1500 - 1860 min⁻¹
Water-cooled V8, 12 and V16



616

418 - 1776 BHP
Speed 1500 - 2300 min⁻¹
Water-cooled V8, V12 and V16



1015

272 - 590 BHP
Speed 1500 - 2100 min⁻¹
Water-cooled V6 and V8

- ▶ Fully IMO Certified
- ▶ Outstanding Product Support With Over 1500 Locations Worldwide & Certified Expertise In DEUTZ Know-how
- ▶ Visit Us Today At www.deutzusa.com For More Detailed Information
- ▶ 24 Hrs Emergency Parts & Service Information Call 1-800-241-9886

“We Move Your World”

Circle 215 on Reader Service Card



3883 Steve Reynolds Blvd Norcross, GA 30
Tel: 770-564-7100 Fax: 770-564-7222

50 Years Ago

S. S. AMERICA GETS BIG WELCOME ON FIRST VISIT TO HOME PORT



A tumultuous welcome was given on Monday to the new United States Lines' flagship **America** as the 35,000-ton vessel, largest and fastest merchantman ever built in this country, made her first visit to her home port in New York.

From the moment the **America** passed Sandy Hook the harbor was marked by a shrill and continuous ovation from freighters, tugboats, ferries and specially chartered excursion steamers. The din increased in volume, reaching crescendo when the **America** hove in sight off the Battery. Then the harbor craft tied down their whistles, setting up a tumult that drowned the cheers of thousands in Battery Park.

Aboard the **America** on her voyage from the builder's yards at Newport News, Va., were 851 guests of the line, including fifteen Sena-

In July 1940, SS America made its inaugural voyage to its homeport in New York, as reported in the July 31, 1940 edition of Maritime Activity Reports. The 723-ft. ship, built at Newport News Shipbuilding and Dry Dock Company, was, at 35,000 tons, the largest and fastest (23 knots) merchant ship ever built in the country.

Academy. A brief welcoming ceremony was held as soon as **Capt. Giles R. Stedman**, master of the **America**, and **John M. Franklin**, president of the United States Lines, had descended the gangplank.

The Fire Department Band played "God Bless America," the inevitable theme song of the liner's debut, and the sweltering pier echoed to the chorus as the crowd spontaneously sang the popular anthem.

Principal Features

Length over	723'
Length between perpendiculars	640'
Beam, molded, maximum	93'
Depth molded to sports deck	32' 6"
Load draft, molded	29' 4 1/2"
Gross tonnage	35,410
Displacement, full load, tons	14,200
Net tonnage	20
Guaranteed service speed, knots	23
Reserve speed, knots	20

A Little Unsolicited Advice



Not all Louisiana-built boats are constructed in modern shipyards where metal plates are cut to thousandths of an inch. Like the three deck boat above, many vessels are constructed by individuals in their backyard. These one-off craftsmen are often bedeviled by dozens of well-meaning individuals who stop by unannounced with tons of advice on boat building. That's the reason for the signs on the vessel. (Thanks to **Larry Pearson**)

Did you Know?

That Pigeons have been trained by the U.S. Coast Guard to spot people lost at sea. This little known fact appeared on the inside of a Snapple bottle caps. Dubbed Real Fact #125, this tidbit of information is part of the Real Facts series that the beverage company has been promoting on its bottle caps.

Separation of Church and State?



While the U.S. Supreme Court wrestles with the issue of prayer in schools, Sea School, the College of Nautical Knowledge, endorses its own special prayer for students studying for their Charterboat Captain's License.

*Now I sit me down to study
I pray the Lord I won't go nutty
With plotting, rules, and signals to pass
Lord keep me from falling on my a***

*But if I do, don't pity me
My course is plotted
Just let me be.*

*Tell my instructor I did my best
Then pile my textbook upon my chest
And when I lay me down to rest
I pray I'll pass the Captain's test*

*If I should die before I wake
That's one less test I'll have to take.*

www.seaschool.com

OFFSHORE DOES NOT MEAN OFFLINE.

It does, however, call for special technology and telecommunications expertise. Maritime Telecommunications Network has both.

OMTN
MARITIME TELECOMMUNICATIONS NETWORK

TOTAL COMMUNICATIONS SOLUTIONS FOR THE OFFSHORE OIL & GAS INDUSTRY

Satellite Communications Experts

Toll Free: 877.464.4MTN (4686) • 954.538.4000 • Fax 954.431.4077 • mtn_info@mtnsat.com • www.mtnsat.com

Circle 241 on Reader Service Card



Below-the-Water Coatings Performance That's Above All Others

SIGMAPLANE ECOL HA

When you need fouling protection under extreme conditions, choose Sigmaplane Ecol HA. TBT-free, it's the underwater hull coating that will allow you to sail to any port.

Sigma Coatings' proven technology has produced a new type of antifouling that releases biocides slowly into the laminate layer around the hull, keeping it smooth and fouling free—even in certain static conditions. And service life is longer—up to 60 months, depending on operation rates of the vessel.

Choose Sigmaplane Ecol HA for new building or maintenance. It's the antifouling that's a top performer below the water.

- High activity, self polishing action for severe fouling conditions
- TBT-free
- USA EPA approved version available
- Suitable for both new building and maintenance
- Direct overcoating, no sealer coats needed over SPC's
- Available worldwide
- No extra waste disposal costs



SIGMA[®]
COATINGS USA

Protecting the Future

North American Headquarters: 1401 Destrehan Ave. • Harvey, LA 70059 • (504)347-4321 • (800) 221-7978

SigmaCoatingsUSA@sigmacoatingsusa.com

Circle 255 on Reader Service Card

Bollinger Delivers ATB for Bouchard

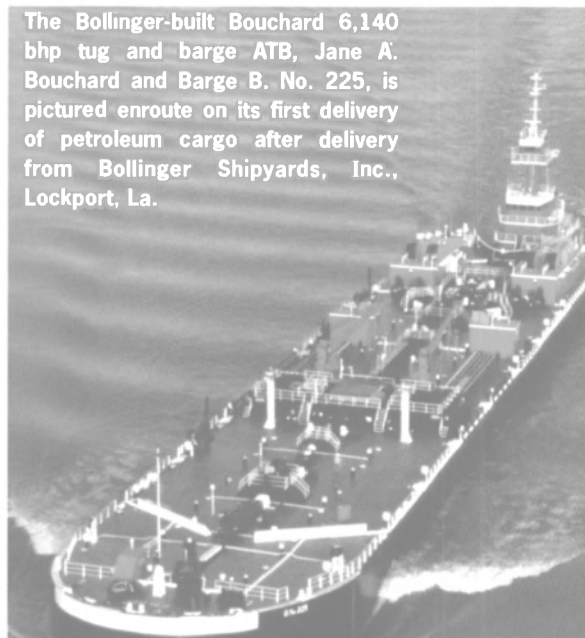
Bouchard Coastwise Management Co., Hicksville, NY, has added to its fleet a double-hull articulated ocean-going tug/barge units (ATB) with the delivery from Bollinger Shipyards, Inc., Lockport, La., of the 130-ft. tug Jane A. Bouchard and the 430-ft., 110,000 barrel (BBL) class double-hull oil Barge B. No. 225 that meets the requirements of the Oil Pollution Act of 1990 (OPA '90). The Jane A. Bouchard and Barge B. No. 225 is the first of a two ATB contract between Bouchard and Bollinger. The second, planned for delivery in May 2004, will be the sister ship, Morton S. Bouchard IV and a larger, 487-ft. barge B. No. 242 capable of carrying 135,000 BBL of clean petroleum products. **Donald "Boysie" Bollinger**, chairman and CEO of Bollinger said, "Barge B. No 225 brings the total OPA '90 barges built by Bollinger yards to 20 with three more under construction, one for Bouchard and two for another customer. We have positioned ourselves well in the OPA 90 market, with our Gretna and Marine Fabricator facilities building for the industry and other Bollinger locations handling conversions of barges to meet OPA 90 regulations. Each location has established portfolios providing quality, expertise and the ability to adjust to client/industry requirements." The Jane A. Bouchard was built at Bollinger's Lockport, La., shipyard and the Barge B. No. 225 was built at Bollinger Gretna, in Harvey, La.. Joined together by an Intercon coupler system, they form a 520-ft.

ATB unit capable of carrying several types of petroleum products.

Jane A. Bouchard, named in honor of the mother of Morton Bouchard III, company president, is 130-ft. long with a 38-ft. beam and normal operating draft of 19-ft. Maximum draft is 22-ft. It is powered by two channel cooled General Motors EMD 16-645-F7BA diesel engines developing a total of 6,140 bhp. They drive two Bollinger manufactured five-blade, 140-in. diameter by 94-in., manganese/bronze propellers through Reintjes WAT 3455 reverse/reduction gears with a ratio of 4.480:1.

Three Detroit Diesel 8V-71 engines driving three Baylor generators develop a total of 297 kW of electrical power. The engines are started by Quincy air compressors and monitored by an EMI 72-point system. A Sperry Marine electro/hydraulic system steers the tug. The tug's deck is outfitted with an Intercon single-drum hydraulic tow winch, forward and aft vertical electric capstans and a rescue boat and davit. The Intercon coupler system has two electric rams that lock into a rack or ladder at the notched stern section of the barge that when the tug and barge are locked together, keeps each of the two units rigidly in place. The system provides a single degree of freedom allowing the tug to pitch about a transverse connection between the tug and barge. All other motions are restrained so that tug motions match barge motions in roll and heave.

The Bollinger-built Bouchard 6,140 bhp tug and barge ATB, Jane A. Bouchard and Barge B. No. 225, is pictured enroute on its first delivery of petroleum cargo after delivery from Bollinger Shipyards, Inc., Lockport, La.



Jane A. Bouchard Specifications		Barge B. No. 225 Specifications	
Length	130 ft.	Design	Guarino & Cox
Beam	38 ft.	Length	430 ft.
Draft, max	22 ft.	Beam	79 ft.
Main engines	EMD	Depth	34 ft.
Total power	6,140 bhp	Cargo Tanks	16
Propellers	Bollinger	Cargo Tank, Pipe Coating	Ameron Amercoat 253
Gears	Reintjes	Connection System	Intercon
Design	Guarino & Cox		
Classification	ABS		
Fuel 150,000			
Oil	9,000		
Potable Water	11,000 gallons		
Accommodation	12		
NavComm Equipment	Beier & Associates, Inc.		
Air Conditioning	GMDSS		
Compass	Ritchie		
Radar	Furuno		
Carrier	JRC		



JAZZ UP SUMMER.

RATES AS LOW AS
\$89*
SUNDAY-THURSDAY

- Rooftop pool • Children under 17 stay FREE
- 24-hour valet parking • Kids menus in dining facilities
- French Quarter location • Exercise facility

*\$99 rate applies to Friday and Saturday. Offer valid May 15 through September 15, 2003. Based on double occupancy and availability.



214 Rue Royale, New Orleans, LA 70130 • 504-523-3341 • 800-535-9595
FAX: 504-528-1019 • www.hotelmonteleone.com • reservations@hotelmonteleone.com

Circle 225 on Reader Service Card

ISLAND BOATS, INC.

ALUMINUM CATAMARANS & UTILITY CRAFT



66' x 20' ALUMINUM LANDING CRAFT SHIP TENDER--ABS RULES

- *USCG/ABS CERTIFICATION * HULLS TO 100'
- *RUGGED ALUMINUM HULLS * CAD/CAM METHODS
- *NC PLASMA CUTTING

***BOATS UNDER CONSTRUCTION: 53' EXCURSION VESSEL
82' PASSENGER FERRY
68' SHIP TENDERS

WWW.ISLANDBOATS.COM

5109 EAST OLD SPANISH TRAIL JEANERETTE LA 70544
PH: 337-560-4483 FX: 337-560-4473

Circle 237 on Reader Service Card

NUPAS

C A D / M A T H / C

NEW
VERSION
4.4



3 D C A D / C A E / C A M

The ultimate 3D ship design software to improve your ship design and engineering

Nupas-Cadmatic is a modern 3D CAD/CAE/CAM software for ship designers and shipyards who want to improve their productivity.

Nupas-Cadmatic is a powerful tool for global ship design and engineering needs from project and basic design phases up to detailed engineering. Based on the 3D product model all the necessary production information is easily output to build the ship.

Nupas-Cadmatic has enhanced tools to manage your ship design project in a distributed global environment. The Nupas-Cadmatic eBrowser utilizes Internet technology to share the ship model and related information globally for all the parties involved in the process.



3D ship design and engineering

- GA's
- Classification drawings
- Hull structures
- Piping and other diagrams
- Machinery & piping, HVAC
- Accommodation & interior
- Outfitting
- Virtual 3D models
- On-line Walk Arouns
- Windows Video AVI files
- Interfaces with other systems

Production information

- Plate and profile cutting
- Plate and profile bending
- Pipe spools and isometrics
- Pipe cutting and bending
- Other material lists
- Centers of gravity
- Weights
- Logistic data
- Data for production robots

CONTACT US FOR MORE INFORMATION
Circle 207 on Reader Service Card

 **CADMATIC**

Cadmatic Oy
Itäinen Rantakatu 72, 20810 Turku Finland.
Tel +358-2-412 411, fax +358-2-412 4495.
Internet www.cadmatic.com. e-mail sales@cadmatic.com

 **NUMERIEK CENTRUM
GRONINGEN**

Numeriek Centrum Groningen B.V.
Osloweg. 110, 9723 BX Groningen. The Netherlands.
Tel +31-50-5753-980, fax +31-50-5753-981.
Internet www.ncg.nl, e-mail sales@ncg.nl

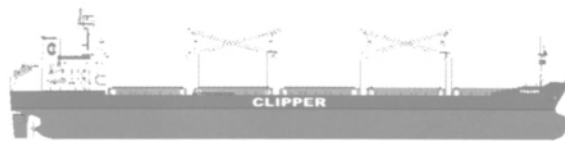
The Nupas-Cadmatic models are courtesy of Elomatic Marine Engineering Ltd, Finland and Shipyard Ferus Smit, the Netherlands.

Vessels

GTRC Campbell Behind New Set of Orders in China

GTR Campbell, the designers of standard design ships like Freedom, Fortune, Friendship, Fantasy, Fortune MKII, Festiva, Valiant and Galaxy in cooperation with their associated concept design firm; Algoship Designers Ltd. of the Bahamas are behind the recent wave of new building orders of the Trader class handysize double hull bulk carriers by their long term clients Clipper Group of the Bahamas in conjunction with Shanhaiguan Shipyard and CSIC. Algoship has, in the past, developed the double hull, handy size bulk carriers of the Fantasy and Valiant types and the double hull handymax size bulk carrier of the Galaxy type for Clipper, Dockendale and Unicorn. Algoship was also instrumental in bringing out the Fortune MKII and Festiva designs. All of these designs are being built in various Chinese Shipyards according to ABS regulations. The Trader design is based on various discussions between the Chartering and operations department of Clipper and the technical department of their technical managers - Dockendale Shipping Co Ltd., and drawing on GTRC's own experience in standard ship design and supervision for various owners such as Unicorn, Navarone, Pysos, Egon Oldendorff, Aug Bolten and Transmer.

The design also incorporates high specification machinery and equipment with safe margins, high specification paint coating including tar-free, light colored "surveyor friendly" paints for ballast tanks, tin



free antifouling paints with sixty months life, a 1,300 mm wide double hull giving ample access for surveys and inspections. The characteristic Algoship wide hatches (75 percent of the beam) with minimum overhang, large cargo hold tank top foot prints with small side hoppers and square bulkhead stools and four sets of 30-ton cranes fitted with radio controlled grabs enables the Trader design to handle cargoes without the assistance of secondary cargo handling equipments such as forklifts, pay-loaders etc. This not only reduces cargo damages but also substantially reduces the cargo handling time and costs.

Algoship and Shanhaiguan Shipyard have retained Mastek Heavy Industries of Pusan, Korea to carry out the basic and detail design in order to achieve a better quality of detailed design and material control. Algoship and MASTEK are now developing a double hull super panamax bulk carrier to be built in China for their international ship owner clients.

The model test of the Trader was carried out at KRISO model basin in Korea.

Circle 23 on Reader Service Card

Main Particulars - TRADER

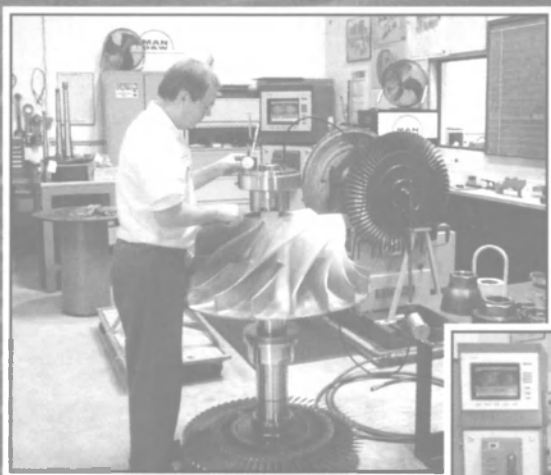
Class	ABS
Length, (o.a.)	586 ft. (178.7 m)
Length, (b.p.)	558 ft. (170 m)
Beam, molded	92 ft. (28 m)
Depth, molded	46 ft. (14 m)
Draft, design	31 ft. (9.5 m)
Draft, scantling	32 ft. (9.7 m)
DWT, design draft	29,300 tons
DWT, scantling draft	30,000 tons
Cargo hold volume	40,000 cu. M.
Gross	20,000 tons
Tank top strength	20 tons/sq. m.
Cargo gear	4 x 30 tons
Main Engine	Man B&W 6S42MC Mk VII
Output, MCR	6,480 kW at 136 rpm
Speed, service	14.3 knots

Aker MTW Wins Containership Deal

Aker MTW Werft (AMTW) in Wismar, Germany has acquired three orders to build container vessels, a joint development with Kvaerner Warnow Werft in Rostock-Warnemünde (Germany). The contract, worth \$115M, is for three vessels that were ordered by Reederei Hartmann in Leer (Lower Saxony). The vessels, which will be built in Wismar and Rostock-Warnemünde, are due for delivery in the third and fourth quarters 2004. The vessels of the type BALTIC CS 2500 are 207.4 m long and 29.8 m wide, with deadweight of 33,900 tons. They have a total container stowage capacity of 2,478 TEU with 400 reefer sockets for FEU.

MSHS INTEGRATED SERVICES

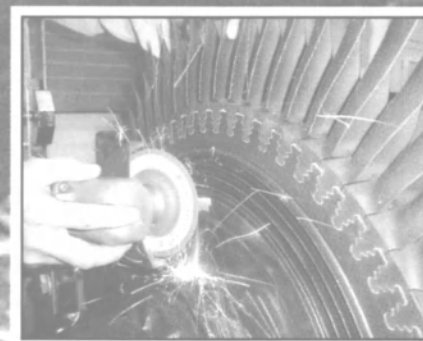
Maximizing efficiency, reliability and performance.



Benefit from our integrated services.

Cargo and cruise operators, MSC support vessels and stationary power plants are taking advantage of the innovative turn-key solutions MSHS offers. Using the latest technology, our factory-trained employees are committed to customer satisfaction

Quality-Assurance
ISO 9002



AUTHORIZED TURBOCHARGER SERVICES

Reblading with new or reconditioned components
Computerized balancing • OEM spare parts and exchanges
Field service with factory trained engineers

1-800-622-6747 • www.mshs.com



MOTOR-SERVICES HUGO STAMP, INC.

AUTHORIZED DISTRIBUTORS & SERVICE CENTER

MAN B&W • NAPIER • KBB • ABB • LASER ALIGNMENT • BOLL FILTRATION • DEUTZ ENGINE SALES AND SERVICE

Circle 244 on Reader Service Card

ACCESS

THE

ENTIRE

WORLD

WITH

ONE CD

18,000 +

With C-MAP/Commercial's CM-93 electronic chart database, you receive global coverage on one CD. Our 18,000+ electronic charts make navigating commercial vessels easier and safer than ever. CM-93 gives you the most up-to-date electronic charts you'll need on every port and every harbor in the world.

on-demand

CM-93 provides daily chart corrections instantly via the Internet or e-mail. Our dedication to providing you the latest information not only includes chart updates, but also worldwide weather services.

thousands

Current North American customers...

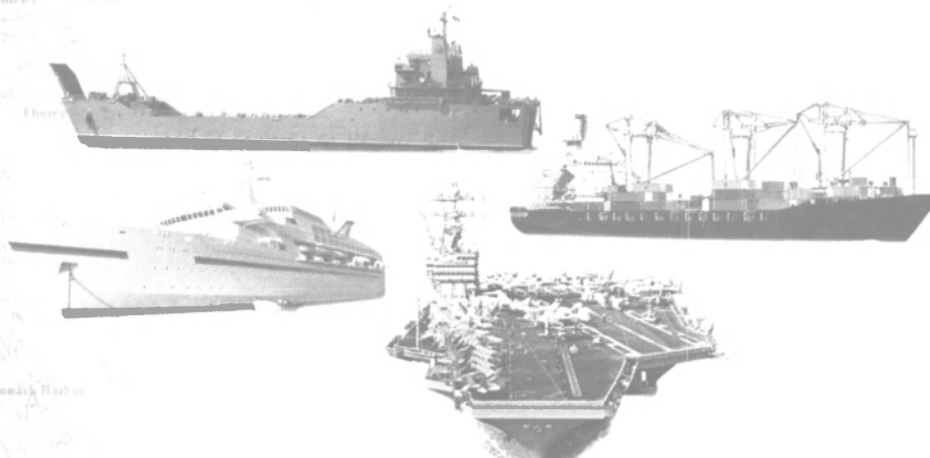
- US Army • US Navy • Carnival Cruises • Celebrity Cruises
- Holland American Line • Princess Cruises • Royal Caribbean Cruises
- Alaska Tanker Company • Crowley Petroleum Transport
- Polar Tanker • Teekay Shipping • APL • Matson Navigation
- And Many Others

CM-93/3

...using CM-93 based systems by:

- Raytheon Marine • Sperry Marine • Kelvin Hughes • Klein Navigation
- STN Atlas • Furuno • JRC • And Others

Select a navigational system with C-MAP CM-93/3 compatibility, and you'll be navigating with confidence! Call for product information.



508.477.7537 • commercial@c-map.com
www.c-map.com • Cape Cod, MA

Circle 208 on Reader Service Card

Vessels

Leif Hoegh & Co. Increases PCTC Order

Leif Hoegh & Co. (LHC) has exercised options for two additional new-buildings to be delivered by Daewoo Shipbuilding & Marine Engineering Co., Ltd. in the third and fourth quarter of 2005. This brings the number of PCTC (Pure Car Truck Carrier) new-

buildings ordered from Daewoo to five. The vessels will enter service in LHC's RoRo subsidiary HUAL's worldwide trade systems and will have capacity to carry 6,100 ceu. The order forms part of the renewal of HUAL's fleet, which includes a number of vessels built in 1980/81, and which will be 25 years in 2005/2006.

Kody Building 3,200 hp Pusher for Blessey

Kody Marine of Harvey, La. began construction of a powerful push boat for Blessey Marine. "It will be similar to the Dreama Klaiber and the Walter E. Blessey Jr." says Blessey's **Mitch Jones**. "With the same propulsion package and four deck layout, but it is longer and

wider." The progression in size has been evolutionary. The Dreama, launched in late 1999, is 95 x 30 x 13 ft. (28.9 x 9.1 x 3.9 m) and the Walter, launched in mid-2002, is longer and wider at 110 x 32 x 11.5 ft. (33.5 x 9.7 x 3.5 m). The new boat will add still more to the dimensions at 120 ft. long with a 34-ft. (10.3-m) beam and a 12.5-ft. (3.8-m) molded depth. Jones explains that the additional beam gives the boat a shallower draft while the increased length gives improved performance. All three vessels are built with the same proven main engine package of a pair of 16-cylinder Cummins KTA50 M2 engines, delivering a total of 3200 hp (2,388 kW) for continuous duty at 1,800 rpm. The as yet unnamed new vessel is scheduled for delivery in April of 2004.

Circle 92 on Reader Service Card

Gladding-Hearn Delivers Incat-Designed Ferry



Hy-Line Cruises, a division of Hyannis Harbor Tours, Hyannis, Mass., has received a new 300-passenger, high-speed catamaran from Gladding-Hearn Shipbuilding, the Duclou Corporation. This is the third Incat-designed fast ferry built by the shipyard for the Cape Cod tourism company, and the 27th high-speed catamaran built by Gladding-Hearn. The M/V Grey Lady replaces the smaller Grey Lady II and provides year-round passenger service between Hyannis and Nantucket Island.

The new, all-aluminum ferry is 144 ft. (43.7 m), with a 35-ft. (10.6 m) beam and draws 6.5 feet (2 m). It is powered by four Cummins KTA50M2 diesel engines, each delivering 1,800 bhp at 1,900 rpm. The vessel is propelled by four Hamilton HM651 water jets through Reinjtes WVS730D gearboxes. The ferry's top speed is over 36 knots when full loaded at a deadweight of 40 tons, said **Peter Duclou**, president of the Shipyard.

In order to improve passenger comfort, the vessel is equipped with a Vosper/MDI active, motion-control and autopilot system. A motion sensor acuates a computer in the wheelhouse to adjust the two trim tabs, reducing the motion of the vessel by as much as 60 percent. Interior accommodations include Beurteaux seating, a cocktail bar, heating and air conditioning and four heats.

Circle 4 on Reader Service Card

Tough Lights for Rough Seas



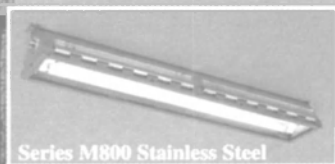
Series M3

When you demand the best lighting — demand lights from

The L.C. Doane Company

Call us today about your lighting needs.

UL 1598A Marine
UL 844, Class 1, Div 2
USCG
ABS



Series M800 Stainless Steel

We wrote the book on toughness.

LCD

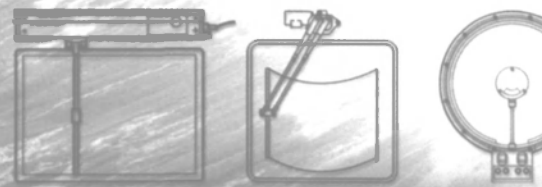
The L.C. Doane
P.O. Box 975, Essex, CT 06426
860-767-8295 • Fax: 860-767-1397
www.lcdoane.com • e-mail: sales@lcdoane.com

Circle 238 on Reader Service Card

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 268 on Reader Service Card

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

Revision Tracking - Build Strategy - Profile Reports - Profile Plots - Pin Jigs - Inverse Profile Bending

Piping
Lofting
Nesting
Structure
Outfitting
NC-Processing

Interference Checking - Smart Pipes - 3D Spool Drawings - Catalog Editor - 3D Assembly Drawings

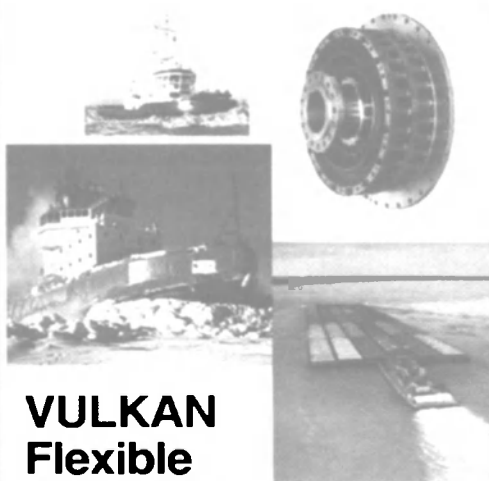
ARL
Albacore Research Ltd.

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 202 on Reader Service Card

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 203 on Reader Service Card

Izar Gijon Launches Second Dredger For Jan De Nul



Izar Gijon Shipyard launched the construction number 368, named Francesco di Giorgio, a suction dredger with a capacity of 4,400 cu. m., for Jan de Nul. The ceremony, which occurred on June 13, 2003, was followed

by the naming of the twin dredger, Taccola. The delivery of the Francesco di Giorgio, whose godmother was Isabelle de Sadeller, will occur this November 2003, while the delivery of its twin, whose godmother was Ghislaine de Jul, is scheduled for December 2003.

Circle 192 on Reader Service Card

Canada Maritime \$800M Fleet Renewal Begins

Canada Maritime, as part of its \$800 million fleet

renewal, has received the first of two vessels. Delivered early from Daewoo Shipbuilding and Heavy Machinery in South Korea, Canmar Venture will commence operations in Canada Maritime's transatlantic services in July. In September, the vessel's sister ship Canmar Spirit will also enter service.

The two vessels will secure Canada Maritime's position as one that is reportedly the largest carrier providing container-shipping services in the North America-Europe trade lane via the Montreal



Gateway. The ships are of a specialized design that is able to cope with the particular requirements of the St Lawrence River trades.

Each measures 294 x 32.2 m. with a draft of 10.7 m., their nominal capacity is 4,100 teu, with a service speed of 22 knots.

Circle 39 on Reader Service Card

PROTECTING MAN MACHINE ENVIRONMENT

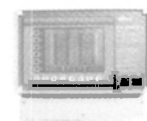


GAS STATUS SX



IR SENSORS

Ballast Tank Gas Detection



GAS STATUS LX

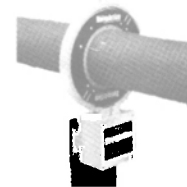
Ballast Tank Oil On Water Detection



Radar Based High / Overfill Level Detection



Water Ingress Detection



Shaft Horsepower And Performance Monitoring



Vigilant Marine Systems, LLC
2667 E. 28th Street
Building 521
Long Beach, CA 90755

Call or E-mail today for more information!

Phone +1 562-981-0846
Fax +1 562-981-0856
E-mail info@vigilantmarine.com
<http://www.vigilantmarine.com>

Circle 253 on Reader Service Card

BISCAYNE LADY
111 FT CATAMARAN
BISCAYNE LADY CRUISES

CHRISTOPHER M COLASANTI
86 FT CATAMARAN
CURRENTLY AVAILABLE

Austal USA

Passenger ferries and dinner cruise yachts of choice

CLOUD NINE
135 FT MONOHULL
CLOUD NINE

ZEPHYR
143 FT CATAMARAN
CIRCLE LINE - STATUE OF LIBERTY FERRY CO

PLEASE CONTACT
CHRIS PEMBERTON OR CARL WEGENER IN MOBILE, AL
TELEPHONE: 251-434-8000 FACSIMILE: 251-434-8080
EMAIL: USASALES@AUSTAL.COM WWW.AUSTALUSA.COM

Circle 252 on Reader Service Card

Austal Ships To Build Massive High-Speed Multihull



Austal Ships and Fred. Olsen, S.A. have signed a contract for what the company dubs the world's largest high-speed multihull vessel which will be based on a new hullform. When delivered in the second half of 2004, the 416-ft. (126.7-m) cargo-vehicle-passenger fast ferry will also be larger than any existing diesel-powered fast ferry — catamaran or monohull.

Fred. Olsen, S.A. and Austal Ships have cooperated on an extensive program of research, tank testing and other analysis to firstly develop a new design and then ensure it would meet Fred. Olsen, S.A.'s requirements in an efficient and cost-effective manner — a slender, stabilized monohull — often referred to as a trimaran.

With power provided by four diesel engines driving waterjets, the Auto Express 126 trimaran will be able to maintain Fred. Olsen S.A.'s projected service speed in excess of 40 knots and provides the capacity to carry 1,350 passengers, over 340 cars and a substantial number of trucks. The superior seakeeping performance of the trimaran will provide Fred. Olsen, S.A.'s passengers with significantly enhanced levels of comfort compared to the company's existing fast ferries and is also expected to result in noticeably higher levels of operability.

The vessel will be constructed in Austal's existing facilities using techniques and materials that have been thoroughly proven and refined over

many years through the construction of almost 100 previous aluminum vessels.

A team led by General Dynamics and including Austal USA is offering a variant of the trimaran hullform for the US Navy's Littoral Combat Ship project, and Austal USA is also in the running to build a series of Theatre Support Vessels for the US Army.

Circle 185 on Reader Service Card

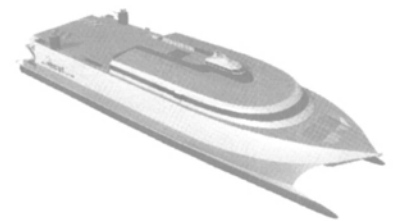
Incat Introduces New Catamaran

Incat has introduced the Evolution One12 367-ft. (112-m) Wave Piercing Catamaran, which is designed to fulfill the demands of both commercial and military operators. Construction of the first Evolution One12, ordered by Incat USA, will commence shortly in Hobart, with delivery scheduled for 2004. The vessel will be capable of carrying up to 1,500 tons dwt, and will boast four 20RK280 MAN B&W engines to provide the 36 MW required to power the

vessel at speeds of up to 50 knots. Each 20-cylinder RK280 engine is rated for continuous operation at 9,000 kWb at 1,000 rpm for this application.

Constructed as a base vessel or SeaFrame, the craft can be fitted out for numerous purposes, including passenger/commercial and military deployment. The cargo deck of the Evolution One12 SeaFrame provides 589 truck lane m (TLM) plus 50 cars or, 312 cars if required for a full tourist mode. With extra optional mezzanine decks fitted the possibility for even greater car capacity exists. Evolution One12 also includes an increased vehicle deck headroom of 6.3 m

Circle 14 on Reader Service Card



Removes Rust, Paint & Barnacles!
From Steel Ships

SWIRL-OFF

DEEMOND
P.O. Box 30
Urbana, Ohio 43078
Phone 937-653-7181
Fax 937-653-5511
www.swirloff.com

Circle 213 on Reader Service Card

Ocean Technical Services Corp.

General Ship Repair
Steel Work
Piping and Valve Overhaul
Welding Of All Types, ABS Certified
Electrical
Mechanical Services
Voyage Repairs

Military Ocean Terminal Bayonne
Unit # 8 - Foot of 32nd Street
Bayonne, New Jersey 07002
Tel: 201.858.8552/3 Fax: 201.858.8509

Circle 245 on Reader Service Card

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 **MarineNews**
AND **ENGINEERING NEWS**
MarineLink.com MaritimeEquipment.com
MaritimeJobs.com MaritimeToday.com

The Maritime Group has a combined audience of over 450,000 each month.

In a unsure market make sure you get the most out of your advertising dollar.

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

McELROY/CATCHOT WINCH COMPANY, INC.
- SINCE 1915 -
P.O. BOX 4632, BILOXI, MS. 39535-4632
Phone: 228-875-6327 Fax: 228-872-7880

MCDW-125-HS WINDLASS MC-16-H CAPSTAN

McELROY / CATCHOT STANDS READY TO DESIGN, ENGINEER, AND DELIVER ANY TYPE OF DECK MACHINERY
WWW.MCELROYCATCHOTWINCH.COM

Circle 243 on Reader Service Card

Visit our new website for Winch Listings

Complete Mooring Systems
Anchor/Spud Winches
Used Skagit, Clyde
American, Manitowoc
Rental / Sales

We also supply . . .

- Wire Rope
- Lashing Gear
- Synthetic Rope
- Fairleads
- Barges

RASMUSSEN EQUIPMENT COMPANY
Seattle, WA (206) 762-3700 (800) 227-7920 Fax: (206) 762-5003
Belle Chasse, Louisiana (504) 392-0442 Fax: (504) 392-0107
email: equipmentsales@rasmussenco.com www.rasmussenco.com

Circle 247 on Reader Service Card

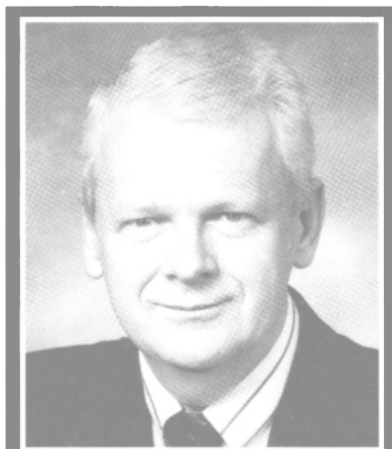
(2) ELWELL PARKER PROPELLER AND SHAFT HANDLING LIFTS
Designed to be lowered into Dry Dock to facilitate removal/installation of large propellers and ship shafts
Model: E22T822-120
Capacity 120,000 lbs at 150"ht.
Machine wt. 105,000lbs.
Both units: 1989yr. models w/ approx. 650hrs. use since new
Special hydraulic fixtures to handle large propellers and ship shafts.

Sierra Equipment Co. Inc.
San Francisco, CA
Phone (415)467-3822 Fax (415)467-2401
email: jweiss8888@aol.com

Circle 254 on Reader Service Card

Show Me the (Grant) Money

By Dennis L. Bryant, Senior Maritime Counsel, Holland & Knight



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

Following the mandates to enhance maritime security throughout the United States, programs were developed to make federal funds available to partially offset the costs being imposed on the private sector. The programs, which started off with great fanfare, are in danger of collapsing due to lack of continued funding by Congress and attempts by the Administration to siphon off monies for other missions.

The first monies appropriated by Congress for port security grants were in the Department of Defense and Emergency Supplemental Appropriations for Recovery from and Response to Terrorist Attacks on the United States Act, 2002 (Pub.L. 107-117, January 10, 2002). This measure provided, in pertinent part, that \$93,300,000 should be made available "to award competitive grants to critical national seaports to finance the costs of enhancing facility and operational security." The monies were to be derived from the \$40 billion appropriated in the emergency supplemental appropriations bill enacted shortly after the September 11, 2001 terrorist attacks. No more than \$1 million of the appropriated monies could be used for administration of the grant program. The grants were to be awarded based on the need for security assessments and enhancements as determined jointly by the Under Secretary of Transportation for Security, the Maritime Administrator, and the Commandant of the Coast Guard.

Establishment of the Port Security Grants Program was announced by the Secretary of Transportation on February 28, 2002. Two categories for grants

were developed: (1) security assessments and mitigation strategies; and (2) enhanced facility and operational security. The first was focused on ascertaining

vulnerabilities and identifying mitigation strategies. The second was for actual security enhancements including facility access control, physical security,

cargo security, and passenger security. On June 17, 2002, the Secretary of Transportation awarded \$92.3 million in grants for port security. Only \$5 million

G. T. R. CAMPBELL
MARINE CONSULTANTS LTD.

DESIGN DEVELOPMENT OF SHIPS

SUPERVISION OF NEW BUILDINGS

P.O. Box AP-59219
SUITE 301, CENTRE OF COMMERCE, ONE BAY STREET
NASSAU, BAHAMAS

TEL: +1 (242) 356-4615 • FAX: +1 (242) 365-4616
GTRC@CORALWAVE.COM
WWW.MARINECONSULTANTS.COM

Circle 211 on Reader Service Card

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 209 on Reader Service Card

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.

MarineNews
AND ENGINEERING NEWS
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

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" - 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 - SCUTLES - PORTHOLES** ◆
All Sizes - New or Reconditioned
- ◆ **PANAMA CHOCKS - DOUBLE BITTS - SINGLE BITTS - CAST STEEL CLEATS AND KEELS** ◆
All Sizes Available, New & Used
- ◆ **FENDERS PNEUMATIC** ◆
For Rent or Sale
All Sizes
New & Used

GIGANTIC INVENTORY NEW & USED IN STOCK NOW
Call Toll-Free (800) 322-3131
in the West Coast East Coast and The Gulf

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

Circle 266 on Reader Service Card

Government Update

was provided for security assessments, with \$78 million funding enhanced facility and operational security and \$9.3 million for "proof-of-concept" projects. The latter projects explored new technology, such as electronic seals, vessel tracking, and electronic notification of vessel arrivals. The largest single award was for \$6,844,800 to the Broward County Board of Commissioners in Florida. The New York City area, though, received a total of \$9.3 million when the separate awards to the Port Authority of New York and New Jersey, the New York City Department of Transportation, and the New York City Economic Development Corporation were counted together. The smallest award was for \$8,000 to the Woods Hole, Martha's Vineyard, and Nantucket Steamship Authority in Hyannis, Mass. Details of the individual projects were not identified, but 77 entities in 51 ports received awards.

On January 14, 2003, the Secretary of Transportation announced that \$105 million would be made available in the second round of port security grants. An additional \$28 million would be used to fund the Operation Safe Commerce pilot program. At the time of the announcement, monies had not yet been appropriated by Congress. When the regular appropriations were finally enacted into law on February 20, 2003, they included \$150 million for port security grants and an additional \$30 million for grants, contracts, and inter-

agency agreements for the purpose of deploying Operation Safe Commerce. A separate \$10 million was appropriated for research and development grants for port security purposes, such as cargo targeting and inspection, detection of weapons of mass destruction, and smart containers. The schedule called for the new grants to be awarded in May 2003.

During negotiations in Congress on the 2003 Emergency Wartime Supplemental Appropriations Act, Sen. Hollings, (D-S.C.), offered an amendment to include \$2 billion for implementation of the Maritime Transportation Security Act of 2002. Of this, \$450 million would have been for grants to ports and waterfront facilities to help ensure compliance with federally approved security plans and \$150 million would have been for grants to states, local municipalities and other entities to help comply with federal area security plans and to provide grants to responders for port security contingency response. The amendment was initially approved by the Senate under a voice vote, but was dropped from the final bill prior to enactment. When finally adopted, the Act only provided \$20 million for new port security grants.

On April 21, 2003, administration of Round II of the Port Security Grant Program transitioned to the Transportation Security Administration (TSA), which had previously been transferred from the Department of Transportation to the new Department of Homeland

Security. In May 2003, the Administration advised Congress that it would seek authorization to transfer monies from the Port Security Grants Program and from Operation Safe Commerce to other security programs, including payment of overtime for airport security screeners. This proposal raised a firestorm of protest from members of Congress and from affected ports. The Administration has now receded from its original proposal and, as of this writing, seems to be re-evaluating its approach to port security grants.

The Department of Homeland Security has, though, awarded monies via its general grant program for various port security purposes. On May 14, 2003, the Department announced allocation of \$700 million to enhance the security of urban areas with high density population areas and critical infrastructure. Included in this allocation were \$75 million for selected high threat ports and certain ports involved in Operation Liberty Shield. The port security funds could be used to cover operational activities conducted during times of high threat conditions, critical infrastructure security, security enhancements, training, exercises, equipment, planning, and information sharing. Additional allocations were made to the New York/New Jersey Metropolitan Area (\$30 million) and to Charleston, S.C. (\$5 million) to implement radiological defense systems. These systems are intended to enhance radiological detection capabilities and may or may not be used in the seaport areas.

On June 12, 2003, responding to heavy political pressure, the Department of Homeland Security announced the award of Round II of the port security grants. The awards, totaling almost \$170 million, were made to 199 state and local agencies and private entities. The largest single award was to CITGO Petroleum Corporation, LCMC, of Lake Charles, La. in the amount of \$13,467,015. The smallest single award was for \$8,598 to Tidewater Barge Lines of Vancouver, Wash. At the same time, Operation Safe Commerce grants were made to the port authorities of Seattle/Tacoma (\$13,302,791), Los Angeles/Long Beach (\$8,250,356), and New York/New Jersey (\$6,747,227). It is presently unclear when, if ever, the remaining \$30 million in Operation Safe Commerce funds will be awarded.

Meanwhile, the President's budget proposal for fiscal year 2004 contains no monies specifically designated for port security grants. Monies are provided, though, for grants to address infrastructure and key asset protection measures and various other broad programs that might include grants to ports and port facilities to assess vulnerabilities and enhance security. The problem with the general grant program is that maritime interests have never competed well with non-maritime interests when it comes to allocation of federal funds. One needs only to look at transportation funding allocations to realize that if maritime security funding is not fenced off, it will suffer in the political process.

While port interests may lament these developments, it must be borne in mind that no grant monies have been appropriated to help offset the costs being imposed on vessel owners and operators to enhance maritime security. The U.S. Coast Guard has estimated the 10-year cost of its maritime security plan requirement alone at \$6 billion for ports, port facilities, and vessels. Most who have looked at this believe the Coast Guard estimate is low by a factor of up to four,

STRONGER REPAIRS FASTER EASIER

Unique epoxy resin system bonds to almost anything—produces proven, long lasting repairs with outstanding impact strength, tensile strength, and abrasion resistance.

- Repairs everything from pinholes and ruptures to complete breaks in pipes, pumps, ducts, tanks, valves, flanges, joints, and machinery casings, including equipment carrying water, low-pressure steam, gases, gasoline, oil, alcohol, and caustics
- Bonds tenaciously to most surfaces including steel, plastic, fiberglass composites, ceramic and wood



STANDARD RESIN for small holes/cracks (large holes/cracks with reinforcement)

RED PUTTY for medium to large holes, cracks and other defects

STEEL PUTTY for steel-like repairs on metal—can be drilled, tapped, machined

SEALER for small holes and cracks

LEVELING COMPOUND for corroded surfaces

UNDERWATER PUTTY for repairs in dry, moist, or submerged conditions

For detailed literature contact:
Ferro Corporation
Liquid Coatings and Dispersions Division
1301 N. Flora St., Plymouth, IN 46563
Tel: 219-935-5131 • Fax: 219-935-5278




Circle 222 on Reader Service Card

Concerned About Safety?

FILL THE GAPS IN YOUR RADAR.

“NEW! Thermal Infrared Technology!”

See In Complete Darkness
Avoid Nighttime Collisions
Watch for Floating Debris & Markers
Designed for Salt Water Use
No Illuminators Required
Easy Installation on Most Boats



(800) 365-7443 (407) 568-9767
Fax: (407) 568-9872

www.arion-international.com

Circle 205 on Reader Service Card

Regardless of how you route your voice communications, SeaWave helps manage your costs more easily than ever before. SeaWave's Least Cost Routing automatically finds the best available rate for all calls placed on board your vessel. Furthermore, SeaWave virtually eliminates administration associated with your communications investment by preparing a comprehensive and understandable billing statement that may be viewed on board the vessel, sent to payroll or invoiced directly to each user - SeaWave saves you time and money.



Voice

SeaWave provides land-like data communications at a fraction of the cost of most services. SeaWave's proprietary Throughput Technology utilizes superior compression and a low overhead - light application to move data more efficiently over Satellite, HF & GSM. This means more data throughput in less time. If you are sending data now, let SeaWave simplify and streamline your communications - If you are not routinely using e-mail now, see how SeaWave can make it more affordable and powerful than ever before.



Value

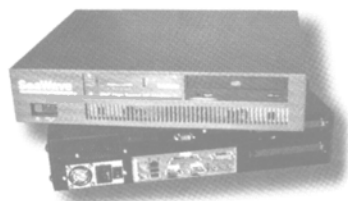


Data

SeaWave is more than just e-mail and voice communications! SeaWave's suite of weather products, vessel tracking package, world-class support and relationships with premier marine companies combine to bring you affordable and reliable services at sea. While onshore, the mySeaWave Web portal provides you access to your e-mail, news information, billing detail and other services. Whether at sea or onshore, SeaWave controls costs and adds value to every dollar you spend on communications.

Who's Controlling Your Escalating Communication Costs?

YOU can regain control of your communications costs by taking advantage of SeaWave's superior performance and value added features such as **Velocity** throughput technology, Least Cost Routing, consolidated billing, and SeaWave's premier partner relationships. SeaWave solutions are designed to work with your existing communications equipment, minimizing capital expenditures.



The SeaWave Integrator, available in a variety of configurations, may include Satellite, GSM, HF/SSB and GPS. Contact SeaWave for details.

Control is at your finger tips: Monitor usage while at sea or manage your account onshore via our secure web portal. **mySeaWave** is your land based entry point to e-mail and billing information such as payment method, passwords, contact information or vessel id. Other features of mySeaWave include a vessel tracking system, industry news and weather. mySeaWave is another way professional mariners can control costs and increase value with SeaWave.

Contact SeaWave today and let us show you how you can reduce costs and add value to your communications solution.



Reliable • Affordable • Worldwide



Newport, Rhode Island • (800) 746-6251 • Fax: (401) 846-9012 • Email: sales@seawave.com • www.seawave.com

Circle 251 on Reader Service Card

USCG Deepwater

sition strategy calls for the delivery of an entire system of interoperable platforms and supporting systems designed to meet performance-based requirements. The IDS Mission Need Statement expresses this requirement for a systems solution: "The goal of this effort is not to replace ships, aircraft, and sensors with more ships, aircraft, and sensors, but to provide the Coast Guard with the functional capabilities required to achieve mission success safely."

This overarching focus on a system-wide acquisition outcome obliged industry to view Deepwater performance requirements in their entirety in order to develop

an integrated strategic plan that ensured asset comparability and interoperability, while providing high levels of operational effectiveness and the most affordable solution for U.S. taxpayers. Cost is treated as an independent variable in the IDS acquisition program; this approach is essential if the Coast Guard is to remain within planned annual expenditures of \$500 million (in fiscal year 1998 dollars adjusted for inflation) over the life of the program. The program also is unusual for its efforts to reduce total ownership costs to the lowest possible level. Our ICGS partners in industry were provided with the performance specifications needed to achieve system-wide capabilities. This approach allows industry to leverage state-of-the-market technologies and bring its innovation and industrial capacity to bear most effectively. Commercially available "state-of-the-market" and non-developmental items will be the basic building blocks for Deepwater's assets and components.

A System of Systems

When the transformational Deepwater program is fully implemented, the total ICGS system will consist of upgraded 123-ft. (37.4-m) Island-class patrol boats, three classes of new cutters and their associated small boats, new and upgraded fixed-wing maritime patrol aircraft, a combination of upgraded and new helicopters, and both cutter-based and land-based unmanned air vehicles. The Deepwater program will provide the Coast Guard with the operational capabilities, capacity, platforms and systems necessary to focus on the prevention of attacks on the U.S. homeland. In addition, Deepwater's more capable platforms also will benefit the Coast Guard's other traditional missions, including maritime safety, the protection of natural resources, maritime mobility

and national defense. Most importantly, Deepwater assets will be supported by fully interoperable C4ISR (command, control, communication, computers, intelligence, surveillance, and reconnaissance) and an Integrated Logistics System (ILS).

Deepwater's C4ISR system will be a critical enabler in allowing the Coast Guard to develop maritime domain awareness — comprehensive information, intelligence, and knowledge of all relevant entities in the U.S. maritime domain that could affect U.S. security, the U.S. economy and environment. This knowledge will lead directly to improved risk management, the more productive employment of operational assets, and a common operational picture. Deepwater's more capable platforms and C4ISR system will greatly expand surveillance and detection efforts. Capabilities also can be cascaded to other agencies as new joint competencies are forged. Deepwater's Integrated Logistics System (ILS) will, in many ways, provide the solid foundation needed to support this extraordinary transformation of the Coast Guard's operational capabilities. The integration of ILS performance specifications across air, surface, and C4ISR domains will help to drive platform designs as such factors as optimal manning, supportability, maintainability, reliability, and total ownership costs are incorporated—leading eventually to higher operational readiness, improved safety, and lower operating expenses.

Surface and Air Domains

During the years ahead, the Coast Guard's legacy force will be progressively upgraded and recapitalized as new and more-capable cutters, aircraft, and unmanned aerial vehicles (UAVs) are introduced to the fleet. The first five years of the program will see considerable progress. For example, in February, the 110-ft. (33.5-m) cutter USCGC Matagorda became the first of 49 Island-class patrol boats to enter the Bollinger shipyard in Lockport, La., to undergo conversion to a 123-ft. (37.4-m) vessel with upgraded operational capabilities. Modifications include the fitting of a stern ramp to enhance small boat launch-and-recovery operations. The Short-Range Prosecutor, a new seven-meter boat, will add to the patrol craft's capabilities. A new deckhouse, new berthing compartments, a new galley, an improved air-conditioning system, and other enhancements will improve habitability and quality of life for the crew when they are underway. Three new classes of cutters (the National Security Cutter (NSC), the Offshore Patrol Cutter (OPC), and the Fast Response Cutter (FRC)), are being designed from the keel up. The first NCS will enter service in 2006. These new cutters will be more seaworthy and include reconfigurable spaces that can be tailored for specific missions. Crew size, which is the most significant factor affecting a ship's total life-cycle costs, will be reduced through a variety of means, including a greater reliance on automated systems, by incorporating design requirements based on human-centered



Incorporating



Endorsed by the U.S. Department of Commerce



Visitor Online Registration
Available Now!

THE ALL CHINA MARITIME
CONFERENCE & EXHIBITION

2-5 December 2003

SHANGHAI NEW INTERNATIONAL EXPO CENTRE
PUDONG · SHANGHAI · CHINA

For details, please contact:

CMP Asia Ltd
Tel: (852) 2827 6211
Fax: (852) 2827 7831
Email: marintec@cmpasia.com

CMP (Princeton) Inc
Tel: (1) 609 452 2800
Fax: (1) 609 452 9374
Email: marintec@cmpasia.com

Organised by
CMP / Seatrade
Shanghai Society of Naval Architects &
Marine Engineers (SSNAME)

Managed by
CMP China Ltd



MIC 1003 Maritime Reporter US 03.15

www.marintecchina.com

Circle 274 on Reader Service Card

Onboard Trim & Stability Update
Ship Operators & Naval Architects
Consider the new GLM for your onboard stability software. Why?

1. Users like it.
2. It's truly GHS yet it costs less.
3. It can do almost anything but brew coffee.

GHS Load Monitor

Ship Stability and Strength Software

GHS	Full featured naval architect's system
GHS Load Monitor (GLM)	Onboard system
GHS/Salvage	Salvor's system
BHS	Engineer's system
BHS/Yacht	Yacht designer's system

Creative Systems, Inc.
Creators of GHS™

P.O. Box 1910 Port Townsend, WA 98368 USA
phone: (360) 385-6212 fax: 385-6213
email: sales@ghsport.com

www.ghsport.com/glm

Making software that naval architects love since 1972

Circle 210 on Reader Service Card

engineering principles, lessons learned from the Coast Guard's cutter-crewing analysis and past experiences in recent DOD acquisition programs and studies.

Other planned improvements include:

- Large hangars that will accommodate a mix of helicopters and UAVs;
- A 360-degree bridge to enhance operational awareness and safety;
- Dual-gender berthing accommodations to enable more flexible crew assignment;
- Enhanced stability to enable small boat and air operations in higher sea states.

As an outgrowth of the National Fleet Policy Statement between the Navy and the Coast Guard, I signed a Memorandum of Understanding with Rear Adm. **Charles Hamilton II**, the Navy's deputy program executive officer for ships, in April 2002 and established a working group to commit our respective Program Executive Offices to specify common technologies, systems, and processes critical to both the Navy's future Littoral Combat Ship (LCS) and the Coast Guard's future National Security Cutter and other surface platforms.

This cooperation and collaboration reflect my obligation and determination to ensure that the Integrated Deepwater System is totally interoperable, wholly compatible, and completely seamless with the Navy's recapitalization programs. This linkage is supported by regular meetings and exchanges at all levels in staffs to ensure that we will derive mutual benefits through a cooperative technical approach in areas of common interest. A number of the Coast Guard's assigned missions, for example, have the possibility of

high commonality with LCS mission areas. Close cooperation and, when it makes sense to do so, collaboration will allow our two future forces to obtain common benefits as our programs mature. The LCS design construct of modularity, scalability, flexibility, and transformational capabilities is the right direction to address our joint naval requirements and to ensure a seamless intersection between our two services in providing for the maritime security and defense of the littorals. Deepwater's recapitalization of Coast Guard aviation assets also is moving forward. Modern systems and equipment will be retrofitted on several existing classes of fixed-wing aircraft and helicopters, and detailed designs will be finalized during the years ahead for follow-on assets slated for new production.

In addition to planned upgrades to legacy platforms, ICGS proposals include a mix of new aircraft and UAVs, but IDS recapitalization planning retains sufficient flexibility to adopt other platforms should options offering a better mix of operational capability and value be developed in the future.

Profound Expertise

Much of the past year's activity associated with the implementation of the Deepwater acquisition strategy has entailed the formation of partnerships with a wide range of players. In addition to Deepwater's partnering with ICGS, the Navy, and other agencies in the Department of Homeland Security, we seek to create other joint competencies where and when it makes sense to do so. The profound expertise demonstrated by our public and private partners complements the Coast Guard's proficiencies enormously.

There is excellent potential, for example, for similar

partnering opportunities around the world. The Deepwater International Office serves as a critical link between the IDS program and the international community. Our long-range goal is to achieve heightened cooperation and interoperability with U.S. allies, increased efficiency in the acquisition program, and worldwide visibility of the technological superiority that the Integrated Deepwater System offers to navies around the world to address their 21st-century security requirements. As Commandant of the Coast Guard Adm. Thomas H. Collins said earlier this year in his Status of the Coast Guard address, the current and future readiness of the Coast Guard "... depends entirely on obtaining the right capabilities, the right capacity, and the right partnerships with others."

The Integrated Deepwater System is on course to achieve its end in mind in each of these areas—a firm guarantee that tomorrow's Coast Guard will be even more capable of fulfilling its role as America's "sentinels of the sea."

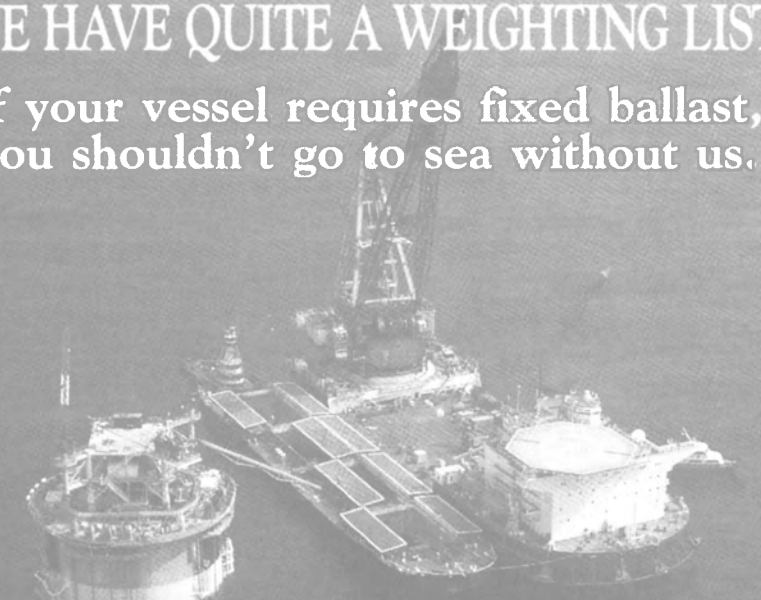
About the Author

RADM Patrick M. Stillman became the first Program Executive Officer of the Integrated Deepwater System Acquisition in April of 2001. He is responsible for the leadership of the largest recapitalization effort in the history of the Coast Guard. RADM Stillman's career includes numerous afloat assignments. He served as Operations Officer, Executive Officer and later commanded the Coast Guard Barque Eagle. He also served as the first commanding officer of the 270-ft. medium endurance cutter Forward.

CO...
Pres...
Dir...
P...

WE HAVE QUITE A WEIGHTING LIST


If your vessel requires fixed ballast, you shouldn't go to sea without us.



**PROVEN PROCESS
PROVEN SYSTEM
PROVEN COMPANY**


**FIXED BALLAST MATERIALS
AND INSTALLATION**

BALLAST TECHNOLOGIES, INC.
520-790-2229 FAX: 520-790-2239 WWW.BALLASTTECH.COM



Circle 206 on Reader Service Card

Port Security Barrier





Foss Port Security Barrier creates a rugged, highly visible, floating perimeter in the water for commercial and military facilities. Photocell flashing lights and installation hardware are available.

The barrier is constructed from Foss PetroBarrier which is built utilizing non-corrosive materials. It is designed for durability and resistance to UV and marine growth. The PetroBarrier has been proven effective since 1977, with installations in continuous service for over 20 years.

Port Security Barrier establishing a perimeter to control onlooking vessels during the transfer of Howard Hughes famous "Spruce Goose".

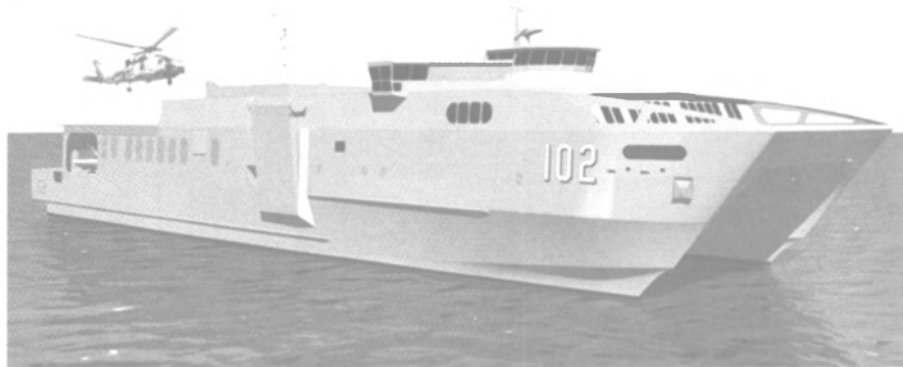
Long Beach Harbor, Feb. 1982

Phone (206) 768-1450 :: Fax (206) 768-1405 :: Email worldwide@fossen.com
PO Box 3535 :: Seattle, WA 98124 :: www.fossen.com/worldwide/

Circle 224 on Reader Service Card

Austal Unveils HSV-M



Developed in response to existing naval requirements and incorporating advanced hull and propulsion technology, the Austal High Speed Vessel - Multipurpose (HSV-M) is an example of the potential effectiveness of high-speed vessels for future naval and other military roles. Austal's HSV-M design is

based on the company's 331-ft. (101-m) catamaran platform which has proved to be a great success in both commercial and military roles, including the Theatre Support Vessel "WestPac Express" currently operating for the U.S. Marines.

The Austal HSV-M has been designed from the keel up to meet military

requirements for a highly capable and multi-purpose platform. For example, the military vessel incorporates a significant increase in structural strength in the bow and tunnel areas, enabling it to operate at higher speeds in more extreme sea conditions. It can undertake a variety of roles with a high degree of interoperability, both with other vessels and port infrastructures.

Propelled by four steerable waterjets, and powered by four medium speed diesel engines, the Austal HSV-M is designed to sustain speeds in excess of 38 knots in Sea State 3 when loaded with 450 tons of troops and equipment, and carrying sufficient fuel for a range of 1,100 n.m. It has a range of over 4,000 n.m. at an average speed of 20 knots. The vehicle deck provides over 1,765 sq. m. of useable space and can carry a range of military hardware including M1 Abrams (M1A1) Main Battle Tanks, High Mobility Multipurpose Wheeled Vehicles (HMMWV), LARC and AAV amphibious vehicles, and semi-trailers. Helicopters and cargo can also be transported on the vehicle deck.

Circle 6 on Reader Service Card

Ship (SES-200) provided the parent hull of the HYSWAC, reducing project costs. During the two-year project, Navatek removed the existing SES air lift system and all related components, and installed a 170-ton Navatek underwater lifting body incorporating a new propulsion drivetrain (engines, gearboxes, shafts and propellers) within the lifting body. This allows the craft to be operated with variable immersion as speed increases with the parent hull fully out of the water at maximum speed. An aft cross-foil was also added for pitch stabilization and control, along with a proprietary advanced ride control system (ARCS).

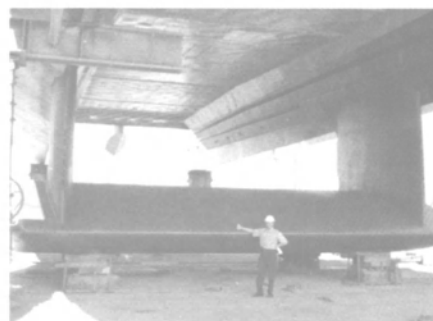
Circle 62 on Reader Service Card

AMSC PowerModule To Be Used by Royal Navy

American Superconductor Corporation (AMSC) has launched commercially its new PM1000 PowerModule power converter line. The initial customer is Calnetix, a leader in high speed motors and generators, who will use the PM1000 in a 2 MW shipboard generator intended for use by the Royal Navy.

Circle 5 on Reader Service Card

Navatek Launches Innovative Tech Demonstrator Craft



170-ton Navatek lifting body below HYSWAC.

Navatek Ltd. has launched a large-scale, U.S. Navy technology demonstrator craft incorporating the company's proprietary, underwater "lifting body" technology. The Office of Naval Research, Arlington, Va., is funding the \$18-million project, which began in 2000. The 160-ft., 30+ knot craft, known as HYSWAC, has a full-load displacement of 340 LT. Sea trials of the new craft are expected to begin later this summer in waters off Hawaii.

The HYSWAC is designed to confirm on a large scale the three major benefits of underwater lifting bodies verified on an earlier, small-scale 65-ft., 50 LT Navatek lifting body demonstrator craft called MIDFOIL, as well as through extensive computational fluid dynamics (CFD) studies.

A former U.S. Navy Surface Effect

FDGM Awarded U.S. Navy DVD Contract


FDGM, the Northern Virginia subsidiary of Italian engine manufacturer Isotta Fraschini, has been awarded a U.S. Department of Defense contract to supply spare parts items for the non-magnetic diesel engines in the U.S. Navy mine sweeper fleet. Managed by Defense Supply Center in Columbus, Ohio, the contract also includes spare parts items for Defense Logistics Agencies in Richmond and Philadelphia, as well as the Navy Inventory Control Point (NAVICP) in Mechanicsburg, Pa. The minimum guaranteed annual contract value is \$700,000 for the first three years with an annual maximum ceiling of approximately \$10,000,000.

Engineered Support Gets \$11.1 M in Orders

Engineered Support Systems, Inc. has received orders totaling \$11.1 million under the U.S. Navy's LPD-17 San Antonio Class Amphibious Transport Ship program.


Northrop Grumman Ship Systems recently exercised production options under existing subcontracts with the company for the manufacture of four separate shipboard systems for the third and fourth ships of the program.

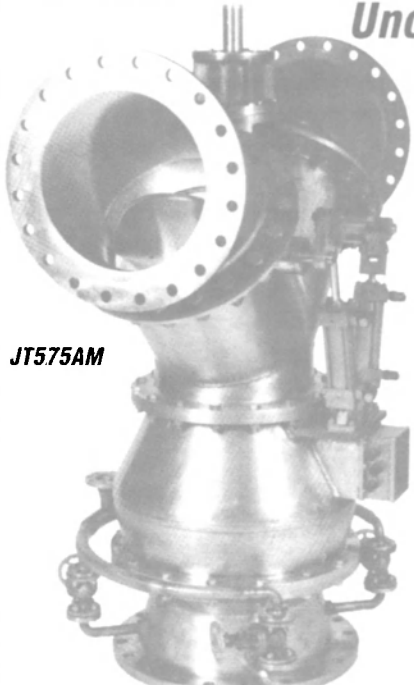
Circle 11 on Reader Service Card



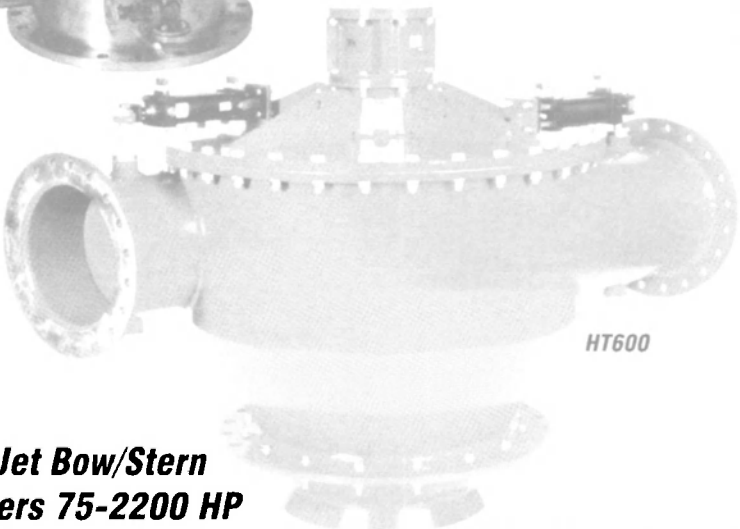
OmniTHRUSTER™
Marine Maneuvering and Propulsion Systems

Uncompromised Control

- **Low Submergence Requirement**
- **Small Hull Penetrations**
- **Auxiliary Propulsion/ "Take Home" Capability**
- **Effective Thrust In Currents**
- **Proudly Made In The USA!** 



JT575AM



HT600

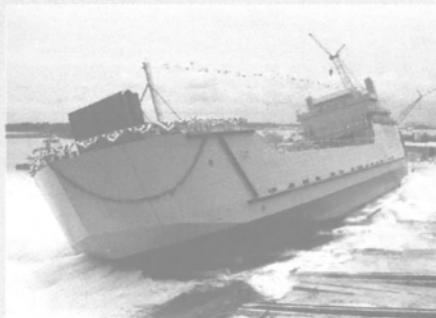
WaterJet Bow/Stern Thrusters 75-2200 HP

30555 Solon Industrial Parkway • Cleveland, OH 44139
440 542 0200 www.omnithruster.com

Circle 246 on Reader Service Card

VT Halter Marine Launches New LSV

VT Halter Marine, a subsidiary of Vision Technologies Systems, launched a Logistic Support Vessel (LSV) designed and built for the U.S. Army's Tank-automotive and Armament Command (TACOM). The vessel, which was christened SSGT Robert T. Kuroda, is named in honor of the WWII American hero, who was killed in action on October 20, 1944 during a rescue operation of a battalion surrounded by German forces. Kuroda, a Japanese-American, was part of the 442nd Regimental Combat Team, which earned the distinction of being the most decorated unit of its size and length of service in U.S. military history. With an overall length of 313 ft. (95.4 m), a beam of 60 ft. (18.2 m) and a molded depth of 19 ft. (5.7 m), the LSV-7 is designed and built to carry more than 2,000 tons of deck cargo, including combat vehicles or armament cargo. The vessel can also support logistical efforts worldwide.



Circle 13 on Reader Service Card

Sonsub Awarded Contract From Global Industries

Sonsub has been awarded a one-year preferred provider agreement with Global Industries to provide ROV and ROV-DSV services to support Global's projects in the Gulf of Mexico.

Circle 12 on Reader Service Card

Diamond Offshore Wins Contract of Three

Diamond Offshore Drilling Inc. has received three drilling contracts awarded by Mexico's state-owned oil company Petroleos Mexicanos S.A. (PEMEX) for three of its semisubmersible rigs. The work, which is expected to generate total combined revenues of approximately \$272 million, will take place in the Gulf, offshore Mexico, and is scheduled to begin in late July 2003.

The Ocean Worker, now completing a job in the U.S. Gulf of Mexico, will be contracted for 1,462 days. The Ocean Ambassador, currently idle in the U.S. Gulf, was awarded a contract for 1,601 days. And the Ocean Whittington, presently idle in Ghana, received a contract for 1,167 days.

HOS Dominator Vessel Crew Receives Award

Sonsub's HOS Dominator vessel crew was recently recognized for completing 100,000 man-hours with no Lost Time Incidents (LTIs)



and no OSHA recordables. In honor of their accomplishments, Sonsub's senior V.P. of Operations and Commercial, **Robert J. Keith**, presented an award to the company to superintendent **John**

Rhodes, who accepted the honor on behalf of the HOS Dominator crew.

Sonsub believes this achievement was made possible by collaboration between Sonsub and Hornbeck personnel and demonstrates the close working relationship that exists and the single purpose philosophy of everyone on board and supporting the HOS Dominator.

Since it began working for Sonsub in 2002, the vessel has been involved with mattress installation; touchdown monitoring, pre and post lay survey, pod change outs, and a variety of other construction related activities.

Transocean Acquires ConocoPhillips Interest

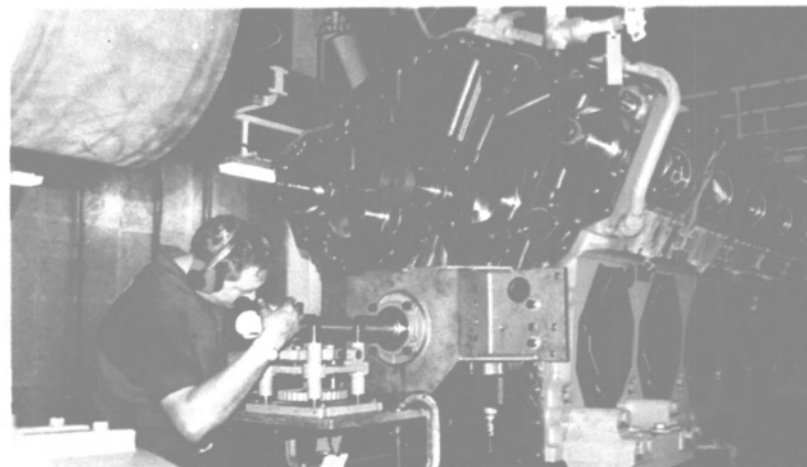
A subsidiary has purchased ConocoPhillips' 40 percent interest in the Deepwater Frontier joint venture, Deepwater Drilling II L.L.C. The company, which already owns the other 60 percent interest in the joint venture, is a party to a lease-financing arrangement for the drillship.

Farstad Enters Long-Term Charter with Arrendadora

Mexican offshore service company Arrendadora Ocean Mexicana SA was nominated as winner of a maintenance contract for the oil company Pemex in Mexico. This contract, which is based on the utilization of two of Farstad's vessels, and Farstad Shipping ASA, will as a consequence enter into a long-term charter with Arrendadora Ocean Mexicana SA for Far Scotia and Far Swift, each for 3.3 years. With total contract value for Farstad Shipping ASA at approximately \$32.1 million, both platform supply vessels will commence operations in August/September. Far Scotia will finish a two-year contract for ASCO in July.

CRANKSHAFT GRINDING

While Installed in Engine



- CRANKPIN AND MAIN JOURNAL REFURBISHING While crankshaft is in engine

- UNE BORING OF MAIN BEARING POCKETS Laser and Optical Alignment

- ALL TYPES OF ON-BOARD MACHINING Cylinder boring, engine top decks, horizontal joints, couplings, journals



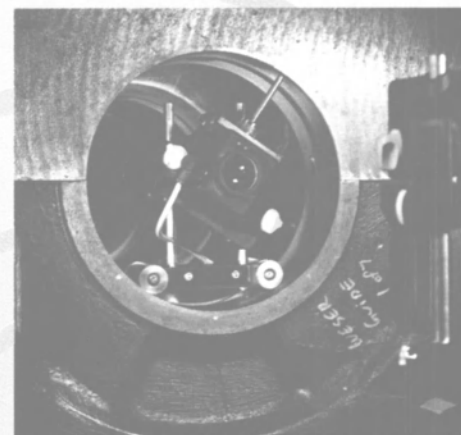
- METALSTITCH® Repair of cracked or broken cast iron engine blocks

IN-PLACE MACHINING COMPANY

USA: 800-833-3575 International: 414-562-2000 FAX: 414-265-1000
24 HOUR EMERGENCY SERVICE...day or night, 365 days a year
email: help@inplace.com Website: www.inplace.com

Circle 230 on Reader Service Card

Laser alignment measurement of stern tubes, strut bearings, engine and compressor bores



BORALIGN®, the latest development measures true bore center, not just bore straightness. It measures whether multiple bores are in line with one another and with the rotating centerline of the shaft. Universal brackets fit bore diameters from 5" to 30".

LUDECA (305) 591-8935 • www.ludeca.com
info@ludeca.com • Fax (305) 591-1537
1425 NW 88th Avenue, Miami, FL 33172

Circle 239 on Reader Service Card

Is More Drilling on the Way?

"Deep" Gas in Shallow Water, Increased Deepwater Activities are Positive Signs for Recovery

By Larry Pearson

There has been a steady stream of bad news recently in the marine press regarding the health of the oil and gas industry in the Gulf of Mexico.

Much of this bad "press" is fueled by boat operators who are trying to do a "Rope-a-dope" on their competitors.

That is by "talking the industry down" they are trying to convince competition that "better days" may be years out, hoping they may not be ready when the turnaround comes.

All indications are that the industry will indeed drill itself out of the current malaise - sooner than later. And the indicators for such a turnaround are right in front of your face if you know where to look.

In general, people who follow intensely the oil and gas industry all agree that a significant rebound is on the way.

CIBC World Markets is one such expert in oil and gas markets and they recently concluded, "During the past few months oil and gas operators seem to be getting a new degree of confidence in future natural gas prices.

As a result, we anticipate the 19 percent increase in drilling activity the oil field service industry has experienced in the last 15 weeks could just be a precursor of things to come."

Paul H. Hilegeist, president of Quest Offshore Resources, added, "An analysis of the North American Gulf of Mexico market reveals a large upside potential for growth over the next six years despite weaker overall market conditions in 2002."

Drilling for natural gas and oil drives the Gulf of Mexico energy market. Here is an analysis of these two sectors and how development in both gas and oil impact the fleet of offshore vessels.

Natural Gas

A prime example of why a great increase in the drilling for natural gas is on the way is the action Interior Secretary Gale Norton took recently when she proposed major new incentives to increase deep natural gas production in the Gulf.

Under the proposal, the Interior Department's Minerals Management Service would provide royalty suspension incentives when companies take the risk of exploring and developing deep gas deposits in shallow water areas already leased.

There are about 2,400 such leases targeted by the proposal. The royalty relief would be applicable for wells drilled beyond 15,000 ft. There is even a "dry hole" incentive built into this new program. If a dry hole 18,000 ft. or deeper is drilled, then a royalty relief of 5 billion cu. ft. of gas is given to the driller.

Most of those existing leases have been explored and wells drilled, but new technology makes it feasible to find gas at much greater depths than before.

The Energy Information Administration forecasts the demand for natural gas will increase by 30 percent in the next 15 years with supplies available to meet only 70 percent of this demand.

The immediate supply-demand equation for natural gas is tight at best. Natural gas prices have been running about \$6 per thousand cu. ft. ...almost double that of a year ago.

Coupled with the price is that storage levels of the clean and odorless fuel are at a five year low after a colder than average winter. And even though rig count is up 44 percent since April 2002, storage is down almost 50 percent from just one year ago.

So the short term forecast for shallow water drilling mostly via jackups is very promising indeed.

Bob Alerio, president of the Marine Offshore



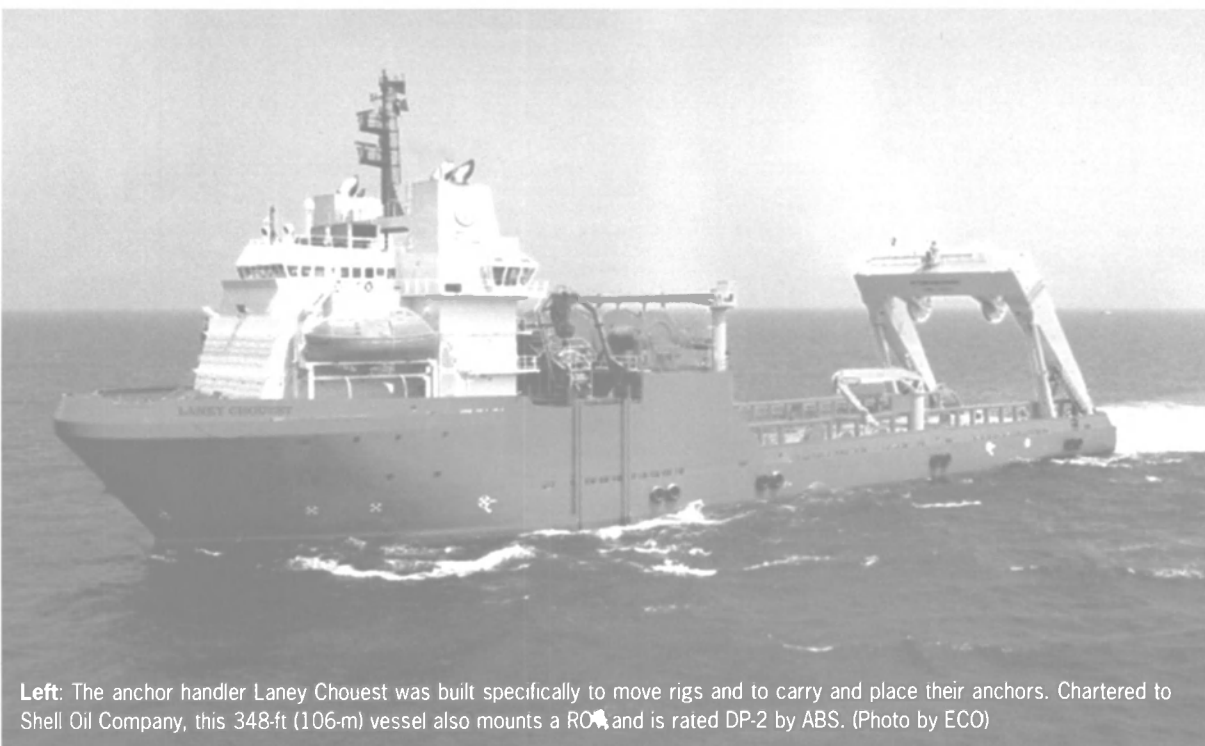
Seacor Madison, the first of three 220 series 207-foot x 54-foot x 19-foot OSV's built at Bollinger Shipyards for Seacor Marine. (Photo Credit: Bollinger Shipyards)

Service Association (OMSA) is very optimistic about the drilling for deep gas on the shelf. "Deep gas is one piece of the puzzle that our members (offshore vessel operators) think will result in significant activity on the shelf," Alerio said. "The development of 3- and 4-D technology has found proven reserves of natural gas far deeper than anyone had imagined and on the same leases where there were major gas finds and shallower depths," Alerio added. "Although the 'glass is half empty' crowd tries to diminish the importance of deep gas, our membership takes a more positive view," Alerio added.

Given a huge need for natural gas and the rig availability to drill for it, what's the likely impact on the offshore oil and gas service industry?

Any increase in drilling is a boost for the offshore service sector. But the drilling for deep gas has a special significance for the boat operators. With the rigs drilling from 15,000 to 20,000 ft. deep, drilling mud takes on a special significance in that much more mud is used, a greater variety of mud is called for and "mud swaps" (the complete change out of mud where the vessel takes on old mud and delivers new mud) is in increasing demand by the drillers.

This demand for mud has had a direct impact on the design of the newer supply boats. For example, Bollinger's new 207 Series of supply boats was designed to carry 6,000 barrels of liquid mud in 10 tanks. "We can carry three different types of mud and have two independent piping systems to circulate the various types of mud we carry," said **Albert**



Left: The anchor handler Laney Chouest was built specifically to move rigs and to carry and place their anchors. Chartered to Shell Oil Company, this 348-ft (106-m) vessel also mounts a ROV and is rated DP-2 by ABS. (Photo by ECO)



Cheremie, co-owner of C & G Boats, Golden Meadow, La. purchaser of the first two of this new series of boats. "Mud swaps are easier than ever before," Cheremie added.

Additional details on the new building plans for supply boats were exhaustively covered in the April 28, 2003 issue of sister publication *MarineNews*.

The emergence of the deep gas in shallow water market will also be a boon to operators of lift boats. These specialized vessels lift themselves out of the water on three cylindrical legs are ideal work platforms for jack up rigs and shallow water platforms. Lift boat companies such as Montco Offshore, Golden Meadow, La. have recently put new high capacity lift boats in their fleet in anticipation of significant business on the

Continental Shelf.

Deepwater

No other single drilling initiative has had the impact on the offshore vessel business as the exploration and drilling for oil and gas in deepwater. Deepwater drilling and production activities are farther from shore than the 100-400 ft. water depth on the shelf. According to a survey just completed by *Offshore Magazine*, there are 174 fields in water depths ranging from 1,000 ft. to more than 9,680 ft. An additional 12 fields were added in 2002.

According to Infield Systems Ltd., 4.3 billion barrels of "energy" (a term including both gas and oil) were found between 1998 and 2002. Deepwater fields are expected to yield 9.9 billion barrels of energy between 2003 and 2007. El Paso Energy Partners believes there is a strong future in deepwater, especially with subsea tiebacks and multiuse floating platform facilities.

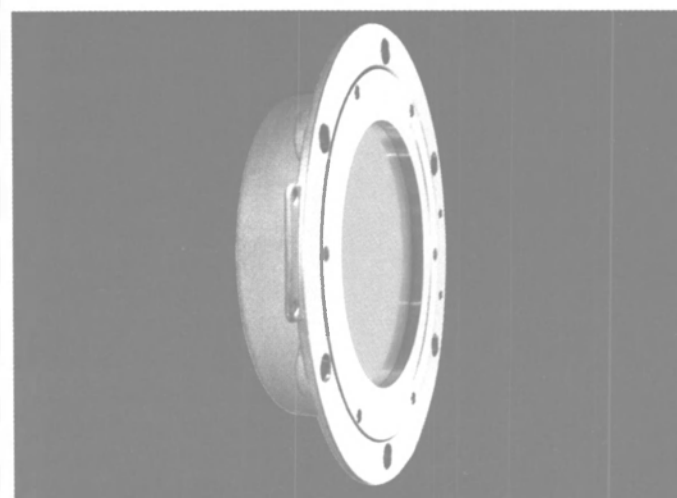
Bart Heijermans, V.P. of Deepwater Project Development for El Paso was quoted at a recent energy conference as saying, "The cost of deepwater platforms has significantly decreased leading to the development of a new series of platforms focusing on reuse and relocation." The mobility of this new series of platforms will call for an increased use of anchor handlers to handle the movement and mooring of these platforms. Recent fleet additions among the larger offshore operators underscore the increased importance of anchor handlers. Tidewater's purchase of the Ensco Marine fleet that includes five anchor handlers makes more sense taken into this context. They get instant access to this type of vessel without the usual construction wait.

The deployment of the large anchor handler Laney Chouest by Shell also fits into this pattern. As reported exclusively by *MarineNews* in February and March of this year, the Edison Chouest Offshore-built Laney Chouest can move rigs faster and carry more mooring devices such as suction piles than any other anchor handler in the Gulf of Mexico.

At day rates of \$11,000 a day or more, anchor handlers are really the queens of offshore service vessels and it appears that they will be in heavy demand this year and in the future. Capital expenditures for deepwater

construction for the 2003-2007 period will reach \$18 billion, according to leading energy trackers Douglas-Westwood and Infield Systems. Much of this investment is expected in the near term as 17 deepwater pipelines including several major gathering systems and other subsea construction projects kick-off this year. Not to be optimistic about the future of the Gulf of Mexico is both foolish and uninformed.

"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

Northrop Grumman Begins Modernization Of Gulfport Operations



Northrop Grumman Corporation broke ground on a \$64-million modernization project at its Ship Systems sector's Gulfport Operations, which will create the first large-scale advanced composite manufacturing facility to produce U.S. Navy and U.S. Coast Guard ships. The modernization will dedicate \$30 million to increasing capacity for composite construction, \$19 million for ship construction and outfitting improvements, \$8 million for additional support facilities, and \$7 million to upgrade distributive systems. Known as one of the leading designers of an all-composite Littoral Combat Ship (LCS) for the Navy, Northrop Grumman is bidding to become the sole manufacturer of this 21st century ship at its Gulfport Operations, which the company has designated its Composite Manufacturing Center of Excellence. "Composite technology is revolutionizing the shipbuilding industry," said Dr. **Philip A. Dur**, Northrop Grumman corporate vice president

and president of the Ship Systems sector. "Composite materials are stiffer and stronger by weight than steel and aluminum counterparts, and result in a lighter weight ship that will save the Navy thousands of gallons of fuel.

Mississippi Governor **Ronnie Musgrove** (D-Miss.) and the Mississippi Legislature were instrumental in securing a \$48 million bond issue to complement Northrop Grumman's capital investment for Ingalls Operations in Pascagoula and the Gulfport facility..

A New Chapter in Naval Shipbuilding

As a resounding endorsement of its long-term commitment to shipbuilding in the U.K., Vosper Thornycroft (VT) has created a state-of-the-art ship production facility within Portsmouth Naval Base. Having recently attained preliminary operational status through steel cutting on 295-ft. (90-m) transport barge, the 33-acre naval shipbuilding yard is set to play a key role in the construction of the Royal Navy's next generation of destroyers while extending VT's overall build capabilities and market reach.

It has been some decades since Britain last saw the opening of a new yard of any significant size, and VT's initiative ensures a future for the industry in southern England. The \$82.2-million project is all the more impressive for the fact that it has been achieved with no call on the public purse, whether at central, regional or local government level.

Through its emphasis on automated processes, fully under-cover fabrication and assembly, and optimized workflow and logistics, the new yard should enable VT to boost productivity by as much as 20-percent relative to operations at the group's Woolston yard in

Southampton. Woolston is to be closed, and the scheduled run-down in work envisions VT's wholesale departure by March next year.

The move provides the shipbuilding and support services group with the resources to attract contracts on the home and overseas markets for a much broader range of business than could be handled at space-constrained Woolston. The Portsmouth site offers room for expansion, a fact that is particularly salient to VT's aspirations to a stake in the program for the Royal Navy's new aircraft carriers (CVF).

Key elements of VT Shipbuilding's Portsmouth facility are the 426.5-ft. (130-m) unit construction hall and ship assembly hall, and the refurbished, 10,000-sq. m. steel production hall. The ship assembly hall stands on an infilled drydock, reclaimed using 100,000-tons of marine-dredged material to provide the foundation for the massive new structure. The site also has at least one drydock that can be used specifically for ship outfitting.

The investment at Portsmouth was made possible by VT's contract to construct and outfit the forward section,

funnel and masts for each of the six Type 45 destroyers ordered to date by the U.K. Ministry of Defense. The ship sections will be transported by barge to BAE Systems' Scottish yards for final assembly. Production work on the series is scheduled to start later this year. In addition to constructing blocks for the destroyers and potentially other vessels, VT is looking to secure orders, which would enable the concurrent building of whole vessels, such as patrol ships, corvettes and other tonnage.

On the export market, VT has been shortlisted to supply, under a technology transfer deal, up to seven patrol vessels of varying sizes to the New Zealand Navy, and is also bidding for three 262-ft. (80-m) ocean patrol vessels sought by Oman. The group has completed much of its share of work under a technology transfer agreement with the Greek shipyard Elefsis to supply three fast attack craft for the Hellenic Navy, and is in discussions concerning two follow-on craft and a new corvette.

VT Shipbuilding stands to benefit from the announcement by the U.K. Secretary of State for Defense in January to place a contract with BAE



by David Tinsley,
technical editor

Systems in partnership with Thales to design and deliver two new aircraft carriers. At the time, the Secretary of State for Defense indicated his belief that the carriers could be built by a combination of four yards, including VT at Portsmouth. VT is closely involved in talks with the BAE Systems/Thales team about both the level and nature of work it is best placed to carry out under the program, and is hoping to attract around 20-percent of the production hours as well as participating in the design and support activities.

Phase two of the development of the Portsmouth premises will center on the elongation of the ship assembly hall by a further 230- to 656 ft. (70-to 200 m).

Success in winning work on the CVF program would lead to the implementation of a third phase of development. This could entail a third shipbuilding bay up to (190 m), to be built on the site of an adjoining drydock, which would be filled in to provide the platform for construction.

VT is also investigating the possible use of fast catamaran technology in application to U.K. military logistical requirements.

Integration the Theme

There is an ever-stronger case for truly functional integration in application to shipboard systems, on efficiency, reliability and safety grounds. As those at the sharp end know only too well, there is a world of difference between a package of assorted parts, albeit brought together in workmanlike fashion, and a system, which has been designed and crafted from the outset so that each and every element is optimized in relation to every other element. Advances in interfacing technology have had a signal influence

Shipyards Depend on COPPUS®

for Reliable, Heavy Duty, Portable Air Moving Equipment!

For over 90 years **COPPUS** has provided shipyards all over the world with a wide range of dependable, portable air moving products.

Our new **'Air MAX-12** is a powerful, economical blower ideal for applications where a compact, low profile air mover is needed.

With 2,200 CFM of free air flow the **Air Max-12** can quickly purge or exhaust fumes from confined spaces and deliver large volumes of air to cool workers or equipment.

Demand the best.. demand COPPUS Portable Air Movers!

Contact us today for more information about the Air MAX-12 and how to arrange for your FREE 7 day trial demonstration.

Call: 1-888-268-8726 or e-mail us at pvdcustserv@tuthill.com.



A division of Tuthill Energy Systems

Circle 264 on Reader Service Card

We at Superior Energies Inc. extend our gratitude and appreciation for the opportunity to provide our insulation, acoustical, and fire proofing services for the past 25 years!



Let us take care of all your insulation blanket requirements
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

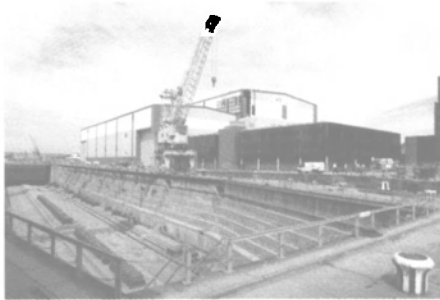
Circle 258 on Reader Service Card

on the development of functionally integrated systems, and the improvements can clearly be seen on the bridges and in the engine control rooms of modern ships worldwide. Organizations which span a wide range of products serving the marine market have sought to expand and reinforce their offering not only by adding to the portfolio but also by strengthening the capability to provide integrated solutions.

Towards that end, the multi-faceted Rolls-Royce group is developing its own dynamic positioning (DP) technology, promising a package integrated in such a way that the hydrodynamic, mechanical, electrical, electronic hardware and software constituents work in the greatest possible harmony.

With an eye initially to market demand from the offshore industry, and drawing on its legacy, Scandinavian companies' long experience in designing and equipping vessels built to the various IMO DP classes, Rolls-Royce intends to provide single DP1 systems through to redundant systems meeting DP2 and DP3 criteria. A module-based approach, as regards both software and hardware components, will increase flexibility and facilitate DP system upgrades over the course of a vessel's life.

The move is regarded as a logical extension of the group's business in the field of thrusters, rudders, propellers and associated control systems. The DP technology drive is in keeping with Rolls-Royce's marine automation strategy, based on the concept of a common control platform. Aspects of the latter are already being applied in the new MT30 marine gas turbine and Bergen diesel engine control systems, and in the integration of propulsion control systems, as expressed in a new joystick about to enter service. The initiative will also employ know-how from the group's propulsion and automation products that are now interfaced with DP controls from third parties.

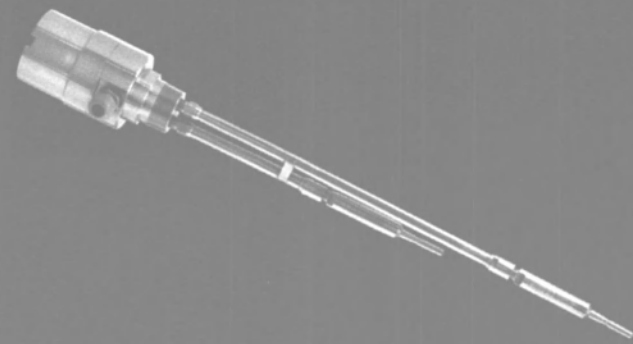


Vosper Thornycroft's (VT) new state-of-the-art shipbuilding facility is located within the Portsmouth, U.K. Naval Base.



July 2003

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

Call today for more information!

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

Circle 217 on Reader Service Card

Cruise Report

While the Cruise & Ferry Exhibition in London earlier this year was not as busy as usual due to the general tepid conditions of the cruise and ferry markets, it was hopping with new products, systems and solutions to keep the current and future fleets running at optimum performance. The following two pages highlight some of these recent developments.

EPP Provides State-of-the-Art Tech Advice

With more than 20 years of experience in marine engineering technical sales, Engineered Piping Products (EPP) supplies shipping companies, OEMs and engine manufacturers with quality products and technologically-driven advice. The company provides a turn-key package that covers engineering, design and stress analysis as well as an extensive range of products that include metal and rubber bellows, expansion joints and hydraulic fittings alongside valve and pipe design and manufacture.

Circle 43 on Reader Service Card

Hamworthy Dolphin Pump Range Wins Accolades

The Hamworthy KSE Dolphin range of marine centrifugal pumps have been granted wide acclaim for their reliability, accessibility and efficiency, and are supplied to every shipbuilding and major industrial country - worldwide.

With more than 80 years of centrifugal

pump design and manufacturing experience, Dolphin pumps meet the increasing need for alternative forms of pump construction. The design provides considerable flexibility with maximum use of common parts, while maintaining the economics of manufacturing. Manufactured in Hamworthy's factory in Poole, both the pumps' design and production systems are approved to ISO 9000 standards.

Circle 44 on Reader Service Card

Via Land or Sea - Norsk Inova Gets the Waste Out

Norsk Inova is a company of Von Roll Inova - the waste treatment division of Von Roll Group. Headquartered in Switzerland, Von Roll Inova, for more than 60 years, has been developing thermal water processing technologies.

Having built more than 300

environmentally friendly plants that process in excess of 100,000 Mg of waste each day, the company's reputation is based mainly on its proven ability to develop innovative waste processing technologies. In fact, many of the energy recovery and emission-reducing processes used today were pioneered by Von Roll Inova.

Circle 45 on Reader Service Card

Viking Life Saving Offers Complete Range

Viking's range of liferafts, marine evacuation systems and offshore evacuation systems, are created via the company's quality system, which is certified according to the international quality standard DS/EN ISO 9001; 1994 covering design, development, manufacture, sales and maintenance of maritime liferafts, slides, evacuation systems, MOB boats and personal protective safety equipment.

Circle 46 on Reader Service Card

R&D Nautics International Provides Inner Beauty

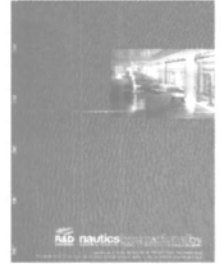
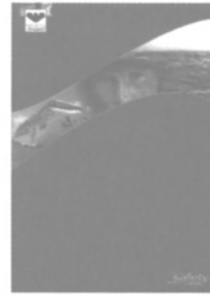
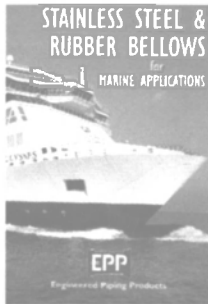
R&D Nautics International, the specialized marine division of the Dutch Vervoort Group, are manufacturers and suppliers of furniture, such as chairs and settees, table tops and table bases. R&D Nautics is also the exclusive distributor of Fire Resisting Mattresses, type Safety Project Foam and Safety Project Bonnell, which comply with the latest MED requirements.

Circle 47 on Reader Service Card

Stay Afloat with Hammar

According to the Swedish-based company, one of the most surprising things about the Hammar life-jacket inflator is that there is no risk of inflation - except when it is submerged in water.

Equipped with a hydrostatic safety valve, the Hammar Inflator is fully disposable, needs vir-



LEADING THE WAY IN ARTICULATED TUG-BARGE COUPLERS

- ATB Coupler systems and hull modules.
- Patented mechanical drive with engagement safeguards.
- Application engineering - new build or retrofit.
- ABS and USCG approved.
- Worldwide product support.

INTERCON
ENGINEERING - MANUFACTURING CORPORATION

P.O. Box 9055 • Kansas City, Missouri 64168
Phone (816) 741-0700 • Fax (816) 741-5232

www.intercon.com

Circle 231 on Reader Service Card

SENSORS SYSTEMS SERVICES **3PS, Inc.**
3 Point Solutions

WIRELESS PRODUCTS for all Shipboard Applications

Applications Include:

- Any 4-20mA Sensor
- Pressure, Temperature
- Flow, Position, Angle
- Winches
- Cranes
- Mooring
- Lightering
- Quick Release Hooks
- Inventory Management

3PS, Inc. Hutto, Texas, USA
Phone: 512-759-5137 Email: sales@3PSINC.com

Circle 200 on Reader Service Card

tually no maintenance and offers fast inflation - even at low temperatures. Easy to re-arm, the small, light-weight device can be easily converted to a manual version.

Circle 48 on Reader Service Card

Ocean Safety Offers AQ02 Lights

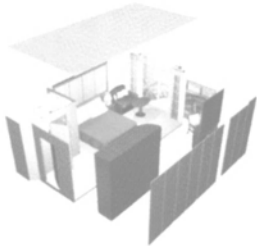


Ocean Safety has launched the latest in its range of compact lifejacket lights, the AQ02, which had its premiere showing at Cruise + Ferry 2003. One of the first lifejacket lights equipped with a three-way operation switch as standard, the AQ02 provides the user with the choice of selecting either manual or automatic operation, or deactivation of the light altogether to avoid accidental usage.

Circle 49 on Reader Service Card

Danish Interior: Design Champion

In cooperation with each individual shipyard's design and production department, Danish Interior develops functional and competitive "design solutions" and "Interior specifications" at the very early stage of the bidding. The company takes the full responsibility, at the pre-contractual stage at a fixed price for concept design, interior outfitting for all public areas on the entire vessel, and provides an architectural outline and "material specification"



Circle 50 on Reader Service Card

INEXA Panel Sets Standards

For more than 30 years, INEXA Panel has been designated as one of the leading and most innovative suppliers of marine interior accommodation. Setting new standards for the decoration of wall panels, ceilings, marine doors, inspection hatches and cabins, INEXA's TNF Magic provides marine architects with a free hand. With 10,000 designs, with the possibility for designing new, TNF Magic has been tested by several maritime authorities and has proven to be of high quality.

In the event of fire, Magic emits neither chloride - which makes other surfaces damaging for electrical equipment - nor does it develop cyanides that are fatal for crew and passengers.

Circle 52 on Reader Service Card



TNF MAGIC

Aurora Brings Life Via Light

Having just landed a contract to supply \$1 million worth of 300,000 ft. of flame-retardant fabric for Cunard's Queen Mary 2, Skopos introduced its collection of colorwoven Trevira CS fabrics, in a wide variety of colors, brought to life through changes in the light.

The first Trevira CS collection for the cruise market by Skopos, the design innovation has always been a key feature of product develop-



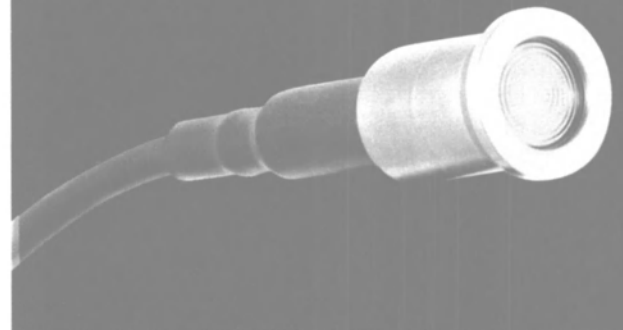
Cruise Report

ment for the company. Aurora is comprised of eight innovative designs across 55 light-reflecting, shimmering colorways including classic reds, golds, blues and greens.

Available for use as both bedspreads and curtains, Aurora fabrics can be used in contact environments and are available at 140 cm or 280 cm wide.

Circle 53 on Reader Service Card

"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

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 218 on Reader Service Card

FREE

INSPECTION

LIFEBOATS & Davits
(Only in Singapore)

Call +65.6266-1412 now

We Also:

- Service Lifeboats And Davits Worldwide
- Sell Reconditioned / New Lifeboats & Davits
- Franchise scheme available worldwide

TechnoFIBRE
Lifeboat and Davit Maintainers

Techno Fibre (S) Pte Ltd
51 Shipyard Road, Singapore 628139

Our International Network

Aberdeen • Australia • Brunei • Dubai
Honolulu • India • Indonesia • Malaysia
Philippines • Sri Lanka • Sweden
Singapore • South Korea
Rotterdam

Email: lifeboat@technofibre.com
Website: www.technofibre.com

Circle 259 on Reader Service Card

Old Cruise Ships: Save 'em or Scrap 'em?



S.S. Norway at sea. (Photo by Peter Knego).

It was a Memorial Day Weekend tragedy onboard the famed 50-year old S.S. Norway, when an explosion rocked 2,000 passengers from their bunks, an accident which killed eight and injured 22. While thoughts immediately turned to terrorism, reports indicate that the explosion emanated from one of Norway's four boilers. The explosion and its aftermath is sure to put the spotlight on older ships and their maintenance habits, though it is far too early to predict any tangible changes.

By Regina P. Ciardiello, managing editor

Basking in the limelight of its highly-publicized purchase of the S.S. United States (as seen in *MR's* June 2003 Yearbook edition), Norwegian Cruise Lines' (NCL's) moment was short-lived when the Norway incident occurred on May 25, 2003 — approximately one month after the company announced its intentions for the United States — as well as its new Homeland Cruising brand. Inevitably the question will have to be raised regarding the fate of both old cruise ships and the United States — are they worth saving?

"I believe that the Norway boiler explosion will certainly bring increased scrutiny of the older steam powered vessels," said **John Waterhouse**, president of Elliott Bay Design Group, a Seattle, Wash.-based Naval Architecture and marine engineering firm. "This will likely increase their already high (relative to newer vessels) operating costs. However, the older ships have little or no debt service so they will likely continue in service until phased out by SOLAS requirements."

Colin Veitch, when questioned by *MR/EN* at a recent Propeller Club Luncheon in New York City, said "We're not worried at all." He admitted that bookings for the Norway were down, but the line is not concerned about this incident affecting the future of its plans for the United States, of which

he said will boast all new equipment.

According to Maritime Matters, a web site dedicated to ocean liner history, the Norway underwent conversion between 1979 and 1980, when the vessel (then known as France) was purchased by Lauritz Kloster, owner of the then Norwegian Caribbean Line. Kloster, who purchased the France for \$18 million and spent approximately \$80 million converting the vessel at Lloyd Werft shipyard in Bremerhaven, Germany.

In 1984, according to MaritimeMatters, the ship was sent to Hamburg where its steam powered auxiliary machinery was replaced with diesel installations.

Robert Hudson Westover, president of the S.S. United States Foundation, shares Veitch's positive views regarding the United States' refurbishment. "Of course when the Norway (explosion) happened, I was concerned," Westover said. "But even if NCL decided to keep the original steam plant on the United States, it would have to be completely rebuilt," Westover said.

Unlike the Norway, which, for the most part, held a continuous itinerary since its christening, the United States has also been laid up for the last 34 years — its engines not fired since it was decommissioned, another point that Westover mentions. "The United States only sailed for 17 years...she doesn't have half the wear and tear that the Norway does," he said.

Peter Wild, of U.K.-based cruise consultancy firm, G.P. Wild (International) Ltd., doesn't seem to think that this recent turn of events for NCL will affect their plans to rebuild the United States. "I can't see how the two would be linked directly," he said. "It's more economical for NCL to operate the United States with new engines, galley arrangements, etc. However, an extensive examination will have to be undertaken by technical surveyors to assess how the United States will have to be re-

LITTLE GREEN



New Console System Technologies for the EOS!

It is designed to fit like a glove in any ECR for refit or new construction with all the advantages of Big Green's modular technology. These new concepts in console system design lets you select the layout. We make it modular for one day assembly and the lifetime maintenance access is unparalleled in the marine industry.

- ACC certified shown above.
- Logger-installed in pull-out draw on left side.
- Customer requirements of gauges and annunciator easily accommodated.
- Redundant displays CRT, LCD, plasma standard.
- Keypad summary alarms.
- Lightweight.
- Data buss control and monitoring.
- 2 wires to the console above monitors every point on the vessel.

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 219 on Reader Service Card

S.S. Norway in 1998 off St. Thomas, Caribbean. (Photo by Martin Cox).



fit for modern trading." While the recent States, will it affect the fate of all older events may not affect the S.S. United States, will it affect the fate of all older cruise vessels? "Obviously if there's a



The Windward Dining Room onboard the S.S. Norway. According to SOLAS Regulations, the entire ship must be free of all combustibile materials by October 2010. (Photo by Peter Knego).

system failure, which was identified by NCL, then that might lead to added regulations, which could affect older cruise vessels," Wild said. "The industry is always looking to improve, especially if it's a safety issue."

According to a statement by NCL that was issued on June 9, 2003, the boiler involved in the incident will have to be completely rebuilt, in addition to other technical spaces, automation systems and equipment that were damaged or destroyed in the past. The line has also decided to cancel the Norway's itinerary through September 28, 2003, with expectations of re-introducing the ship on October 5, a move that Wild quips is "a prudent move on NCL's part."

With inspections taking longer than

expected, the line had first estimated that subsequent repair work on the ship would take several weeks, but weeks soon turned into months, when it was confirmed by the NTSB that a high level of asbestos was detected in the boiler room. This, coupled with poor ventilation, and limited access, have slowed the investigation process. "When the Norway was constructed (more than 50 years ago) asbestos was standard in boiler rooms," often used in this area to protect the piping, said Waterhouse. Indeed, it was confirmed last month by the NTSB that the asbestos was used to insulate the steam piping throughout Norway's boiler room. It has also been reported by the NTSB that investigators assigned to the Norway have had to wear personal protective clothing and equipment due to the asbestos in the inspection area. "If it's (the asbestos) encapsulated or contained, then it will not be a problem," Waterhouse said.

While the asbestos issue has helped to mire the NTSB's investigation process, NCL must now assess the best way to get the ship healthy and running again. The NTSB report classifies the damages as "extensive," and the report notes that boiler No. 23's outer casing was ruptured, revealing the interior of the boiler to be viewed on the starboard aft section. It also stated that the explosion "knocked out and opened doors three decks above the boiler."

Coupled with this, the owner must also consider its power options for the ship, and is reportedly weighing the benefits of installing a diesel system.

According to a report, "Implications of Fleet Changes for Cruise Market Prospects to 2010" that was issued by G.P. Wild in 2001, there may still be hope for these aging transports. "Despite their age, these ships remain in service with a variety of operators. They are almost a 'living testament' to the great strength and quality to which ocean liners and other classic ship-types were constructed," the report states.

THE BRAND OF RELIABILITY

HELKAMA SHIPBOARD CABLES

Halogen-free and fire-resistant power, control & communication cables approved by all major classification societies

By choosing HELKAMA you will secure the fastest and most reliable deliveries for your projects. All over the globe.

HELKAMA

Helkama Bica, Lakimiehenkatu 4, FIN-20780 KAARINA, FINLAND / Tel. +358 2 410 8700 / Fax +358 2 410 8750 / www.helkamabica.fi / marinecables@helkamabica.fi

Circle 228 on Reader Service Card

Royal Caribbean Looks to Order New Ultra-Voyager

Royal Caribbean Cruises Ltd., along with Finnish shipbuilder Kvaerner Masa-Yards, has developed a design for a new and even more spectacular ship, the "Ultra-Voyager," and that both parties have signed an agreement that could lead to a firm order. The conditional agreement anticipates one newbuilding, deliverable in 2006, and one option, for delivery in 2007 or 2008. The agreement anticipates that the cruise line and the yard could enter into construction contracts for Ultra-Voyager, provided that certain conditions, such as the euro-dollar exchange rate, move to a more favorable position. Royal Caribbean may activate the agreement up to August 31, 2003 or under certain terms up to December 31, 2003.

The new Ultra-Voyager would be roughly 15 percent larger in space and in passenger capacity than the earlier Voyager-class vessels. It would carry more than 3,600 guests (double-occupancy), 500 more than its predecessors. At just under 160,000 gross tons the Ultra-Voyager would provide even more room for passenger facilities and amenities and would provide even greater economies of scale than her predecessors.

Royal Caribbean has four Voyager-class ships in its fleet today. The fifth sistership, Mariner of the Seas, is due for delivery at Kvaerner Masa-Yards Turku yard in October this year.

One key factor affecting whether this

agreement leads to a firm contract is how much the current euro-dollar exchange rate improves. Royal Caribbean hopes that circumstances will allow it to finalize the order later this year and that these new berths will enjoy a lower capital and operating cost than earlier Voyager-class ships.

Royal Caribbean currently has three ships under construction in Finland and in Germany. In addition, the cruise line has options for two Radiance-class ships in Germany. With fleet capacity having grown 77 percent in the last four years, this has been the height of the company's growth spurt, or more than 15 per-

cent annually. Adding an Ultra-Voyager in 2006 would increase capacity by 3 percent in 2006 and 2.9 percent in 2007. If the decision is made to build an Ultra-Voyager, there would be a two-year gap between the last of the current new-buildings and the first of the Ultra-Voyagers.

Curaçao Drydock Company, Inc.

YARD Shiprepair • Conversion • Engineering
PRS Portrepair • On-Voyage Services



KMY Delivers Costa Mediterranea

M/S Costa Mediterranea, newbuilding 502, for Costa Crociere S.p.A., was delivered on May 22, 2003 at Kvaerner Masa-Yards' Helsinki shipyard. Costa Mediterranea is the fifth ship in a series of Panamax size cruise ships of a new type for Costa Cruises and Carnival Cruise Lines, and is the second ship in this series built for Costa Crociere. Costa Atlantica was delivered in June 2000.

With the order for the ship placed in August 2000, hull assembly commenced in June 2001, and the vessel was launched in September 2002 from the Panamax-size covered newbuilding dock at the Helsinki yard. The sea trials took place in April 2003.

Costa Mediterranea has a diesel-electric machinery, consisting of six Wartsila NSD 9L46D diesel engines, with a total power of 62,370 kW, each connected to an alternator producing electricity to the ship's main electric network. The propulsion units consist of two azimuthing electric Azipod propulsion units, with a power of 17.6 MW each. Costa Mediterranea has three 1.91 MW tunnel thrusters in the bow. The vessel measures length overall 960 x 127 ft. (292.5 x 38.8 m), with a speed of 22 knots.

Please send your inquiries to:

Client & Agent Communication Department
Phone: (599)9-733-0266/276
Telefax: (599)9-736-5580
E-mail: cac@cdmrv.com
Website: www.cdmrv.com



Circle 212 on Reader Service Card

Stepping Out in Oslo

The Nor-Shipping Exhibition concluded June 6, 2003. Following were some of the major announcements during the week in Oslo.

Kongsberg won a contract for the control systems for four LNG tankers

scheduled to be built in Japan. The ships will carry LNG from the Snohvit field to the U.S., Spain and France. Two of the ships are being built for Hoegh shipping lines at Mitsubishi Shipyards, while the other two are being built at the Mitsui

and Kawasaki shipyards. **Kelvin Hughes** was awarded type approval for its ECDIS-based Track Control System. This is the first Approval of its type to be granted by LR and covers the integration of the company's ECDIS and Autopilot products into a system meeting the new IEC 62065 track control performance standard. The massive new ferry for Color Line, a 74,600-gt ship

under construction at **Kvaerner Masa-Yard's Turku New Shipyard**, will feature RoRo access equipment and passenger elevators from **MacGregor**.

MAN B&W announced that **Hapag Lloyd** has placed an order for three 12K98ME engines to power their latest large containership. The ME engines each have an output of 68,640 kW (93,360 bhp). Each ME engine will power the massive 1,099 x 141-ft. (335 x 43-m), 8,145-TEU containerships, which are being built at **Hyundai Shipyard** in Korea. On its stand at Norshipping **McMurdo** was featuring a number of products, including the joint **McMurdo/Transas UAIS**. The MT-1 meets the mandatory Class A carriage requirement, and incorporates the latest state-of-the-art technology with a touch screen minimum keyboard and display.

Two new marine DGPS navigation receivers meeting IMO performance standards were introduced in Oslo by **MX Marine**, of the **Leica Geosystems** group. The MX521 Smart Antenna and MX 525 Black Box receiver comply with the new IMO requirement for Receiver Autonomous Integrity Monitoring (RAIM), which applied to all new SOLAS-compliant marine GPS receivers installed after July 1, 2003. Northrop Grumman Corporation's **Sperry Marine** announced that its Decca BridgeMaster E marine radars have been type accepted by QinetiQ for display of Automatic Identification System (AIS) data in accordance with the technical provisions of the International Maritime Organization Circular SN/Circ. 217. **Orkot TLM** marine bearings have approvals from all main classification societies for use as rudder bearings and water lubricated stern tube bearings. Orkot is typically approved for 10, or even 15 N/mm-cu. **Rolls-Royce** and **Furuno** have agreed to cooperate in the marketing and sup-



NEVA 2003

THE 7th INTERNATIONAL EXHIBITION

ST. PETERSBURG RUSSIA 22-25 SEPTEMBER 2003

DIRECT ACCESS TO THE FASTEST GROWTH MARKET — RUSSIAN SHIPPING, SHIPBUILDING, PORTS & OFFSHORE ENERGY INDUSTRIES

FOR THE RECORD.....NEVA 2001 WELCOMED

- **OVER 500 EXHIBITING COMPANIES (40% growth)**
- **6350 sqm NET EXHIBITION SPACE (incl. 68% growth in Russian space)**
- **31 EXHIBITING COUNTRIES (incl. 7 National Pavilions)**
- **17,500 VISITORS (25% growth)**
- **100 CONFERENCE & SEMINAR PAPERS to 300 DELEGATES**

THE NEVA 2003 WEEK WILL INCLUDE THE
1st INTERNATIONAL MARITIME FORUM OF RUSSIA
HOSTED BY THE UNION OF RUSSIAN SHIPOWNERS

REGISTER YOUR INTEREST IN NEVA 2003 NOW!

Contact

For USA & Canada: Bruce Cole, McNabb Marketing Resources
Tel: 207/236-6196 Fax: 207/236-0369 E-mail: bcole@midcoast.com

All other enquiries to:

Dolphin Exhibitions, PO Box 68, Ipswich, IP7 7ZY, England
Tel: +44 1449 741801 Fax: +44 1449 741628
E-mail: info@dolphin-exhibitions.co.uk
Website: www.setcorp.ru/eng/neva



Circle 271 on Reader Service Card

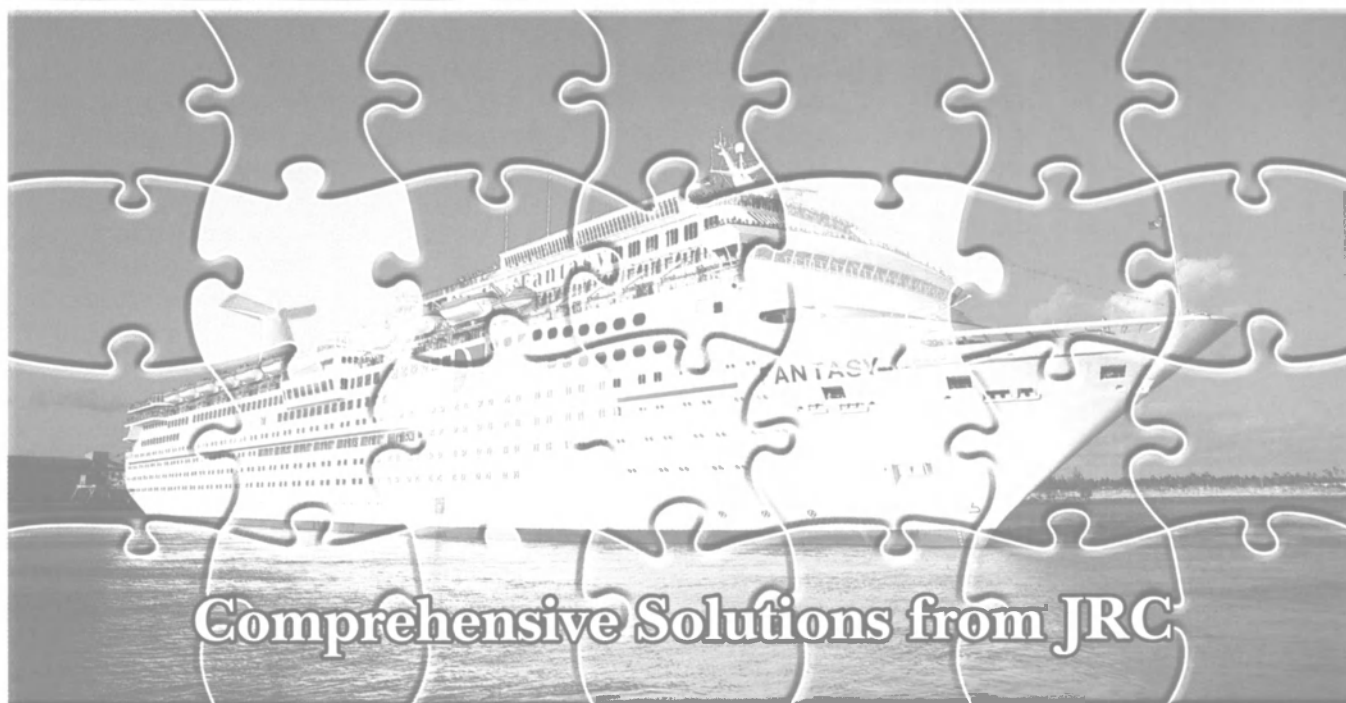
ply of Integrated Bridge Systems to the commercial maritime market. Based on Furuno IBS products in Rolls-Royce ship systems and the use of Rolls-Royce Automation and Control products, the companies will develop jointly elements of the IBS to improve information flow and to provide operator benefits with improved man-machine interfacing. According to Rick Kane, president, Rolls-Royce Marine Electrical Systems, the effort will start in the offshore business and evolve globally. **Saab Transponder Tech** strengthened its distribution network when it signed an agreement with **Radio Holland Group** for worldwide distribution and service for the SOLAS class A transponders. Saab also announced the start of cooperation with **Seagull A/S** from Horten, Norway to develop a CBT module for AIS that will be provided with each delivery of our R4 AIS Transponder. **Simrad** launched an Automatic Identification System (AIS) package — the type-approved Simrad AI70. **Star Information Systems** launched a new B2B solution — a fleet and ship management package — at NorShipping, a solution developed in concert with **ShipServ** and **MTS**, and includes major vendors such as **Unitor** and **MAN B&W**. **STN Atlas Marine Electronics'** European Wheelmark-accredited Debeg 3400 UAIS has also now been type-approved for GPS operation by the German Maritime & Hydrographic Agency (BSH), enabling it to be connected to all standard navigation equipment for provision of 12-channel Differential GPS data — at no additional cost. Transas has received a **DNV** type-approval certificate for its second-generation electronic chart display information system, Navi-Sailor 3000 ECDIS. Extended functionality of the unit includes integrated weather forecasting, multiple chart display and user-selectable screen layout.

It was announced by **Unitor** that Hull 588/1, a 39,500-dwt chemical tanker being built in Poland for Odfjell ASA, is equipped with the largest nitrogen gen-

erator that Unitor has ever delivered. Based on IGS membrane technology, the system can deliver up to 3,750-cu. m. of nitrogen/hr. Germany's **Voith** has developed an optimized Voith-Schneider-Propeller (VSP) for Platform Supply Vessels (PSV). The company has designed and tested at the model basin Marintek a new unit with improved blades for optimum free running effi-

ciency. **Vacon Plc** of Finland introduced a series of completely modular AC drives for marine applications. Used for stepless speed control of asynchronous motors, the new Vacon NX series includes both air and liquid cooled units within the power range of 0.2 kW to 3 MW. The new Vacon NX frequency converters are based on a completely modular design with separate control

and power sections and easily customized software. Benefits are the high cooling efficiency of up to 95 percent, and a space savings of up to 80 percent. **Wynn Marine** unveiled its Series 5010 Window Wash System — for both newbuild and retrofit projects. It was designed to compliment Wynn's existing range, and is designed as a compact off-the-shelf module.



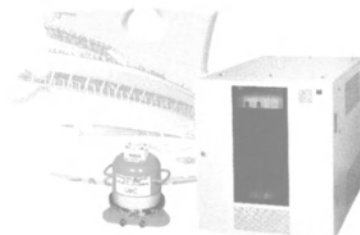
JCIE-410F Inmarsat Fleet F77 Mobile Earth Station

- Single modular structure with internal AC PSU, for simple installation
- Multiple interfaces: Ethernet, USB, ISDN (BRI), Serial and PCMCIA
- Communication capabilities:
 - Mobile Packet Data Services (MPDS)
 - ISDN Link 64k HSD communications
 - High MTBF antenna with automatic positioning by internal JRC GPS



JHS-180 Automatic Identification System

- Fully compliant with IMO/IEC standards
- Easy installation thanks to integrated GPS/VHF antenna and transponder
- Expandable interfacing radar, ECDIS and long-range tracking



JCY-1000 Voyage Data Recorder

- Fully compliant with IMO/IEC standards
- LAN connection, enabling reduction in cabling
- DVD playback of voyage events

JAN-901 ECDIS/Total Navigator

- Fully compliant with IMO/IEC standards
- Large 23.1-inch LCD
- Automatic track-keeping system
- AIS/ARPA target display
- North-up/course-up in multi-views



"OceanExplorer" Integrated Bridge System

The JRC "OceanExplorer" is the world's first certified integrated bridge system (IBS) for vessels of unlimited size. It was WI-ANTS type-approved by Det Norske Veritas (DNV) on November 14, 2001.

☛ JRC-supported remote diagnostic and on-line maintenance (option) ☚ All JRC products are of in-house design.

JRC Japan Radio Co., Ltd.

Visit www.jrc.co.jp

Circle 234 on Reader Service Card

For more information on the companies in this report, circle the appropriate number on the Reader Service Card

Bass Maritime Software	66
Kelvin Hughes	85
Kongsberg	67
Kvaerner Masa-Yards	68
MacGregor	69
MAN B&W	70
Marlink	71
McMurdo	72
MX Marine	73
Orkot	74
Saab Transponder Tech	86
Simrad	75
Star Information Systems	76
STN Atlas	77
Transas	78
Unitor	79
Vacon	80
Wynn Marine	81

SatCom

EMS Enters the SatCom Fray

Advances in communication services for ships and boats is expanding rapidly, keeping pace with development cycles of landside installations. Last autumn,

Inmarsat unveiled Fleet F55 and Fleet F33, the two new members of the Fleet family designed to meet the communication needs of small to medium-sized

vessels. Earlier this year, EMS SATCOM, a division of EMS Technologies, Inc., entered the maritime market with its pedigree of land-based communication



solution expertise. At NorShipping in Oslo, the company announced that it has received full Inmarsat type-approval for its new Fleet 55 Maritime satellite terminal.

A New Path

EMS Technologies is a \$310 million company with 1,800 employees worldwide. In 1968, Dr. John E. Pippin, then vice president of Research at Scientific Atlanta, founded Electromagnetic Sciences (now EMS Technologies) in Atlanta, Ga. The company quickly evolved to be a leading developer and

HM Bark Endeavour Brought Into 21st

In 1768 British-born explorer Lt. James Cook and his crew set sail on the HM Bark Endeavour on one of the most significant maritime voyages ever. After observing the transit of Venus across the sun in the Pacific, they headed southwest to New Zealand, traveling up the east coast of Australia, then on to the Dutch East Indies (Jakarta and Indonesia). Contrary to popular belief, Cook didn't discover Australia — he wasn't even the first European to arrive there. What's most remarkable about his journey was his use of cutting-edge 18th century scientific techniques to chart a substantial part of the coastline and fix the continent. On this voyage Cook became the first to calculate his longitudinal position with accuracy, using a complex mathematical formula that was only developed in the 1760s. Given his love of science, the 18th century explorer would certainly have chosen the best satellite communications if he had been making the journey today. Which perhaps explains why, when a replica of the famous HM Bark Endeavour was being constructed for a BBC TV series *The Ship* a few years ago, it was fitted with the latest Inmarsat-based equipment.

Now EMS Satcom has updated HM Bark Endeavour once more, choosing the vessel for beta trials of its latest Fleet F55 terminal because of the extremes it operates in. Replacing a mini-M that was already onboard, the Fleet F55 has enabled a wireless LAN (Local Area Network) to be set up on board the ves-



2ND ANNUAL MARITIME & SHIPPING SECURITY CONFERENCE & EXPO USA 2003

www.maritimesecurityexpo.com

October 29-30, 2003 Jacob Javits Convention Center, New York City

ORGANIZED BY:



E. J. KRAUSE & ASSOCIATES, INC.

IN COOPERATION WITH:
Homeland Security Industries Association

IN ASSOCIATION WITH:

The US Merchant Marine Academy
Hudson Institute

SPONSORED BY:

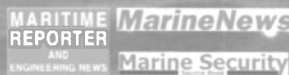
The John Jay College of Criminal Justice

OFFICIAL PUBLICATION:

Journal of Commerce

MEDIA PARTNERS:

Security Technology & Design
The Maritime Executive
The Maritime Group



- 3,000 buyers from 50 Countries
- 250 International Exhibitors
- International Conference with Participation from the White House, Congress, EU Commission, Department of Homeland Security, International Maritime Association

Exhibit Hall 75% sold out — Reserve your space today

PROTECTING

- PORTS
- HARBORS
- BRIDGES
- CARGO CONTAINERS
- POWER PLANTS
- OFF SHORE OIL RIGS
- RAILROADS
- CARGO & PASSENGER SHIPS

MARITIME SECURITY CONFERENCE & EXPO EUROPE

www.maritimesecurityexpo.com/europe

October 1-2, 2003, Congress Center Hamburg (CCH), Hamburg, Germany

Over 100 Exhibitors and over 2000 attendees from Europe, Asia and the United States are expected

For more information, please call Cory Capps or Carol Fleming at 301-493-5500.

Circle 223 on Reader Service Card

SatCom

manufacturer of technology for commercial space, defense and wireless communications.

It was about this time last year, with the acquisition of EMS acquires Ottercom Ltd., a provider of Inmarsat communication terminals, which becomes EMS Satcom U.K., that the company started training its sites on the maritime business.

With the technology in hand, the only missing link was personnel with knowledge of the unique maritime environment, a bill that was quickly filled.

Nils Helle, Director of Programs, was tapped to head the Maritime business unit within EMS Satcom. Helle, former VP of Stratos, heads a teams that is well acquainted with the unique requirements of the maritime business, and includes: **Ed Bender** (former VP Comsat); **Gregor Ross** (former VP GN Comtext); **Phil van Bergen** (former VP GN Comtext and maritime marketing manager for Inmarsat), and **Stewart Allington** (formerly of Sperry).

r: Cook's "Vessel" Century



HM Bark Endeavour under full sail.
(Photo courtesy of www.barkendeavour.com.au)

sel. This means that a variety of laptops and VoIP (voice over internet protocol) phones can be connected wirelessly to the ship's two servers via a Cisco router and VPN (virtual private network). Using this technology, The Endeavour updates regularly its own website (www.barkendeavour.com.au) from onboard, providing schedule information and images from recent passages. The satellite link is used to ensure the Endeavour's shore-based office in Whitby, U.K., has the same information as the vessel itself, while NetMeeting software enables video conferences with head office or for shore-based media events. With all this technology on board, you might think that it would spoil the overall look of the classic vessel. But there are no worries on this score either. All of the equipment, including HF and VHF radio, EMS Satcom F-55 terminal, weather fax, collision radar and GPS are housed in a small room, no larger than 1.6 x 1.3 m.

(Courtesy www.inmarsat.com)

The Technology

The company sees ample opportunity in the maritime realm for its product, and the push now is to find strong geographical distributors to spread the word (and the equipment) faster and further. The company currently has its equipment on trial on 15 vessels, ranging from luxurious yachts to offshore ves-

sels to bulk carriers to the historic HM Bark Endeavour (see related story).

The Fleet 55 terminal provides global voice services, as well as 64kbps/s Mobile ISDN (including G-3 fax at 14.4kbps, or full-blown G-4 fax) and Mobile Packet Data Service (MPDS), Inmarsat's "always connected" service. It supports a comprehensive selection of

interfaces, including ISDN, X.21, RS449, RS232, and two RJ11 ports, as well as optional STUIIB/III service for reliable secure communications.

The Fleet 55 is the flagship product for EMS SATCOM's newly formed Maritime Group.

Circle 87 on Reader Service Card

■ Capsat® Fleet77 – always online



The next generation Capsat Fleet77 is based on the new Inmarsat Fleet F77 service and is the next generation of maritime satellite communication terminals.

Great experiences with already installed Capsat Fleet77 systems. More than 250 Capsat Fleet77 systems have been installed successfully. The installations count a wide range of vessels within merchant, fishery, and the navy as well as super yachts.

Worldwide network of service. Capsat Fleet77 is covered by Thrane & Thrane's Capsat Fleet Service Partner Network. This means that a worldwide network of engineers always will be ready to provide the service you need quickly and efficiently.

www.tt.dk/fleet

Thrane & Thrane

We bring satellite communication down to earth

Thrane & Thrane A/S
Denmark
www.tt.dk
info@tt.dk
+45 39 55 88 00

Circle 263 on Reader Service Card

SatCom

Xantic Enables P&O Nedlloyd to Upgrade at Low Cost

P&O Nedlloyd Container Line is the world's third largest container shipping company, operating 157 vessels, a cumulative 407,000 tons on 84 routes with 235 direct call ports. With a fleet

this massive and the growing need to communicate with ships, P&O Nedlloyd was expecting an increase in the volume of data transfers to and from its vessels. In addition to email, it want-

ed the ability to send and receive electronic updates of navigational charts and file transfers for ship management applications.

As it was investigating ways to reduce

costs, it also considered updating its existing Inmarsat -A terminals, which forced it to consider: costs involving this project should not exceed the current operational costs; the solution should involve minimal or no additional investment; any costs incurred should be included within existing operational expenses.

Xantic proposed a turnkey solution based on the hardware and a lease construction. This involved the Inmarsat -A terminals installed on 23 vessels being replaced by Inmarsat Fleet 77 terminals.

The migration to Inmarsat Fleet 77 terminals provides P&O Nedlloyd with an increased connection speed of 64 kbit/s. By combining it with Xantic's AmosConnect transaction speeds are now six times faster than was previously the case. Moreover, the Fleet 77/AmosConnect combination is also highly economical. AmosConnect offers P&O Nedlloyd substantial cost savings thanks to the integration of email traffic, fax traffic and file transfer.

In deciding to upgrade its vessels' satellite terminals to Fleet 77, P&O Nedlloyd was looking for a partner that could provide a complete package of services, including airtime, hardware lease and solutions. To meet this requirement, Xantic teamed up with Thrane & Thrane distributor Holland Nautic. The migration package offered to P&O Nedlloyd included a full operational lease for all hardware. This financial construction meant no initial investment was required for the hardware, making the upgrade easily affordable.

The first Fleet 77 terminal to replace an Inmarsat -A terminal has been installed on the P&O Nedlloyd vessel Peninsular Bay. The total installation, including cabling, fixing the antenna and the below-deck unit, and configuring the AmosConnect software, took less than four hours.

**For more information from Xantic
Circle 179 on Reader Service Card**

Mitropoulos Elected New IMO Secretary-General

Efthimios Mitropoulos of Greece was elected as the new Secretary-General of the IMO, to succeed the incumbent William O'Neil of Canada when he steps down from the post at the end of this year. Mitropoulos was elected to the post by IMO's 40-member Council, beating out competitors Magnus Johannesson and Monica Mbanefo.



Maritime Reporter & Engineering News

SAILOR

SAILOR UAIS1900 and KDU1905

Universal Automatic Identification System

Increased safety at sea

With AIS on board, safety related navigational information can be received automatically from other AIS equipped vessels or base stations.

According to the International Maritime Organisation (IMO) all SOLAS vessels are to install AIS transponders between the years 2002 and 2004 according to pre-defined deadlines for different categories of vessels.

Visit the SAILOR website for detailed information on AIS installation deadlines.

Among the features are:

- IMO compliance: Class A UAIS transponder and KDU (Keyboard Display Unit)
- Wheelmark Approved
- Ruggedized design for the maritime environment
- User friendly graphical and alphanumerical presentation
- Flexible interfaces



SAILOR

When safety counts

www.sailor.dk

Circle 221 on Reader Service Card

Fleet via inmarsat

THE NEED FOR SPEED
HIGH SPEED COMPACT MARITIME DATA SOLUTIONS

EMS
SATCOM
Fleet 55

UK
T: +44 (0) 1684 290 020
F: +44 (0) 1684 295 535
Email: sales@emssatcom.co.uk
Web: www.emssatcom.com & www.fleet-55.com

CANADA
T: +1 613 727 6277
F: +1 613 727 1200



EMS SATCOM Fleet 55, a compact terminal with highly versatile data capability, enables shipboard IT as never before. Send and receive email, access your VPN, transfer data and pictures and run live video conferencing, via mobile ISDN at 64 Kbps, or send faxes at 14.4 kbps - whatever you need to stay in touch on the move.

- Supports a comprehensive selection of interfaces - RJ11, RS449, X.21, Euro ISDN, RS232/PC connection, expansion port to facilitate our unique EMS Fleet 55 bonding capability for 128 kbps operation - option for STUIB/III.
- Supports Inmarsat's popular Mobile Packet Data Service (MPDS) for cost savings when sending e-mail or small files - provides documented data cost savings in excess of 65%.
- Extensively tested and evaluated in a variety of demanding markets, including cruise vessels, bulk ships, workboats and a variety of sailing vessels - from luxury yachts to tall-ships and ocean racers.
- The most cost-effective high speed data solution available today and the ideal replacement for Inmarsat A.

Circle 220 on Reader Service Card

Industry Icon Lester Rosenblatt Leaves an Indelible Mark

On June 15, 2003, **Lester Rosenblatt** passed away at the age of 83. *MR/EN* remembers this industry icon, who through his ambition and wealth of industry knowledge founded what would become one of the world's most successful naval architecture and marine engineering firms.

Lester Rosenblatt, (along with his father, **Mandell**) founded M. Rosenblatt & Son, Inc. in 1947, where he served as Chairman, CEO and Naval Architect. Through his unending drive, the company grew to be one of the world's largest private engineering firms specializing in naval architecture and marine engineering. Providing management and leadership to his company in the design and development of all types of naval and commercial ships, Rosenblatt's expertise extended from aircraft carriers and submarines to tankers, tugs and high performance craft. Many of the world's most innovative designs, which included the Spruance Class Destroyers, L.Y. Spear Class Submarine Tenders, Shimrit Class Hydrofoils, T-AO187 Class Fleet Oilers, and T-AGS 39 Class Oceanographic Survey Ships, can be attributed to the company he founded.

Through its nationwide network of offices M. Rosenblatt & Son, Inc. completed successfully more than 27,000 assignments on such tasks as management and technical aspects of ship design, complete ship designs, including engineering analyses, conceptual, preliminary, contract and detail designs, and installation and support services.

Before founding the company that bears his name, Mr. Rosenblatt earned undergraduate degrees from the

University of Michigan and the City College of New York (CCNY), as well as an honorary doctorate degree from the Webb Institute in Glen Cove, L.I.

Mr. Rosenblatt was not only an innovator in his industry, but a leader as well, serving for two years as President of the Society of Naval Architects and Marine Engineers (SNAME) — a position that is currently held by his son, **Bruce**. He was a Fellow and Honorary Member of SNAME, a member of the American Society of Naval Engineers (ASNE); an Honorary Trustee of Webb Institute, a member of the American Bureau of Shipping and Bureau Veritas, and an Honorary Member of The Marine Society of the City of New York. He was also an active participant on the National Academy of Sciences' Maritime Research Board's Committee on Innovation in the Maritime Industry.

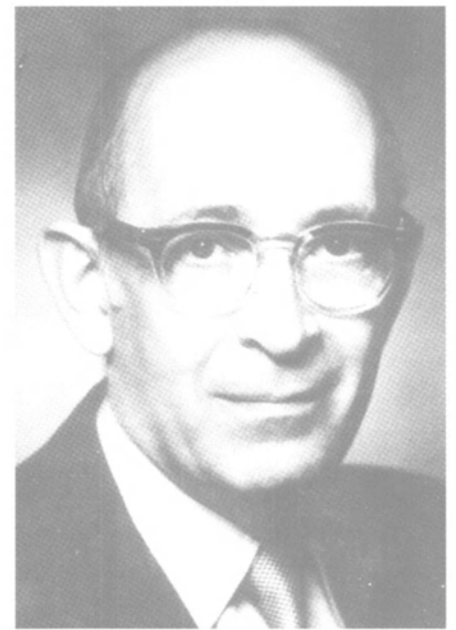
Known for his active support of the maritime industry's professional societies, Mr. Rosenblatt will also be remembered for his lively discussions and comments on technical presentations at section meetings, symposiums, and other colloquia. He was an ardent and strong advocate of the generation and dissemination of state-of-the-art technical information, as evidenced by his support of hundreds of employee

written papers on the subject of naval architecture and marine engineering.

Through his personal efforts, M. Rosenblatt & Son, Inc. became a significant part of the U.S. naval and merchant ship design capability. With the firm belief that a strong navy, coast guard and merchant marine are vital to the well being of this nation, Lester Rosenblatt dedicated his more than 59-year career to excellence, integrity, technical proficiency, and innovation in ship design.

Mr. Rosenblatt's many accomplishments in ship design and marine engineering never went unnoticed. He was honored in 1967 by his alma mater, receiving the University of Michigan's Sesquicentennial Award. In 1984 he was awarded SNAME's Vice Admiral "Jerry" Land Medal for outstanding accomplishment in the marine field, and in 1987 he was the recipient of ASNE's Harold E. Saunders Award for outstanding accomplishments in the field of naval engineering.

Mr. Rosenblatt capped off his career in 1995 when he was inducted into the International Maritime Hall of Fame and presented with the coveted Ship's Lookout Award for his dedication and leadership in the advancement of the marine industry. Five years later, on April 7, 2000, M. Rosenblatt & Son,



Lester Rosenblatt

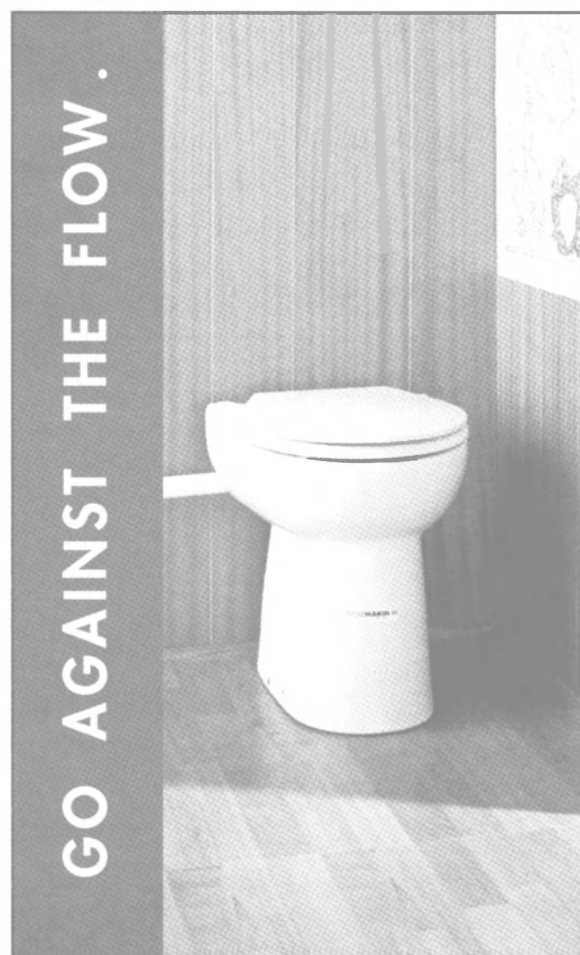
Inc., was acquired by the Virginia Beach, Va.-based firm of AMSEC LLC - while still maintaining the traditions and expertise on which the company was modeled. The son of **Mandell** and **Rosa**, Lester Rosenblatt is survived by wife **Helen**; daughters, **Arlene**, **Roberta** and **Laurel**; son **Bruce** — children of the late **Lucille** and **Audrey**; and grandchildren, **Adam**, **Eric**, **Evan**, **Shanna**, **Dylan**, **Adar**, **Noah**, **Melissa**, and **Daniel**.

Jones Named Director Engineering Development at Port of LA

Port of Los Angeles has appointed **Stacey Jones** as the Director of Engineering Development — the first female Director of Engineering Development in the Port's history.



Jones was promoted from Chief Harbor Engineer, a position she held for nearly four years. She began her career at the Port in 1981 as a student engineer and steadily worked her way up through the engineering ranks.



Where you go *with* the flow, lots of toilets will do. Where you go *against* the flow — such as below deck — there's **Sanimarin**.

The Sanimarin is a compact, white porcelain toilet that:

- uses only 3.6 liters (1 gallon) of fresh or salt water per flush
- pumps waste water up to 9' vertically or 100' horizontally (or a combination of both)
- only requires a 1" discharge pipe
- is available in 12 vdc, 24 vdc, 120 vac or 220 vac

It's easy to install Sanimarin. All you need is water and you've got yourself a toilet! Don't let its small size fool you.

Sanimarin gives you the flexibility to solve big plumbing problems.

SANIMARIN

1-800-36-FLUSH / 1-800-363-5874

www.saniflo.com

Circle 248 on Reader Service Card

People & Company News



Stewart



Wilson

Stewart, Wilson Promoted at NNS

Northrop Grumman Corporation's Newport News sector announced that **Becky Stewart** was promoted to vice president, Surface Ship and Submarine Fleet Maintenance and **Veasey Wilson** was promoted to vice president, Supply Chain Management. Stewart previously served as director for Surface Ship and Submarine Fleet Maintenance, is now responsible for all aspects of naval and commercial surface ship and submarine fleet maintenance from pre-contract through delivery. Wilson previously served as executive director for Supply Chain Management. He joined the company in 1997 and is now responsible for all material operations across the sector, which includes sourcing, logistics, supplier quality, material operations, and supply chain business planning, analysis and efficiency.

Farstad Signs MOU With P&O

Farstad Shipping ASA has signed a Memorandum of Understanding (MOU) with P&O for the purchase of P&O's 50 percent share in P/R International Offshore Services ANS (IOS) and P&O's offshore supply management services in Melbourne, IOS, where Farstad already has a 50 percent share, has presently a fleet of 18 vessels, including two vessels on bareboat contracts. With an operating income of \$76 million in 2002, IOS has two newbuild-

ings for delivery in 2003. And with the exception of two vessels, the fleet is trading the South East Asian and Australian market. The purchase price is \$84.7 million. With the gross investment for Farstad Supply at approximately \$150,000 for the 50 percent-share, the parties intend to complete the transaction by the end of June.

Caporelli to Manage Crowley's Dispatch in Southern California

Crowley Marine Services has appointed **Elizabeth Caporelli** as Manager of Tug Dispatch in Southern California.

She will be based in Los Angeles and will have responsibility for Crowley's day-to-day commercial tug operations in Los Angeles/Long Beach and in San Diego. In addition, she will handle customer service, marketing data collection and analysis, and maximizing fleet utilization.



Caporelli

Hagglunds Names Duncan President

Hagglunds has named **John Duncan** as president of Hagglunds Drives, headquartered out of Columbus, Ohio. A member of the Arcorus Group, parent Hagglunds Drives AB is headquartered in Mellansel, Sweden with sales companies and representatives throughout the globe.

Duncan will be charged with directing the aggressive new equipment sales growth of Hagglunds' U.S. and Canadian operations.



Duncan

TEN Receives Panamax Tanker, Announces Charter Agreement

Tsakos Energy Navigation Ltd. has entered into a new medium-term charter arrangement with PMI, the state owned oil company of Mexico. Under the terms of the agreement, TEN has chartered its newly delivered coated double-hulled Panamax, the Aztec, to PMI. The contract is for 30 months at an accretive rate. TEN currently has the Handysize product carrier Libra chartered to PMI until 2005. The Panamax Aztec was delivered on May 29 from Imabari Shipyards in Japan. The vessel immediately entered into a profitable repositioning voyage with a major oil trading concern, and will then commence the time charter with PMI.

Van Dawark to Head Todd Pacific

Thomas V. Van Dawark will assume duties as the president and COO of Todd Pacific Shipyards. Van Dawark, who is the former president and CEO of Marine Resources and Foss Maritime Co., in his 14 years as president, managed to elevate revenue and income substantially.

He succeeds **Rollie Webb**, who recently announced his resignation from the president and COO position.

Stelmar Signs Time Charter

Stelmar Shipping Ltd. has signed a time charter contract for Ambermar, a 2002 double-hull Handymax tanker. The time charter was renewed for another two years by Fuel and Marine Marketing LLC (FAMM), a ChevronTexaco company, at a rate of \$14,000/day. To date, Stelmar has secured 82.4 percent of the net operating days of its fleet on profitable time charters for 2003 and 39.2 percent for 2004, representing \$138 million and \$86 million in revenues, respectively. Stelmar also announced the sale of Promar, a

1988 double sided Handymax tanker. Following the sale of Promar, Stelmar will have 30 tankers in service, with an average age of 7.3 years.

LR Appoints New COO

Chris Loughlin

has been appointed to the new post of COO for the Lloyd's Register Group, effective July 1, 2003. This appointment marks the successful completion of the second phase of the Lloyd's Register recovery program, during which **David Moorhouse** has carried out the roles of Chairman and Chief Executive. As Executive Chairman, Moorhouse will continue to take responsibility for the Group's activities, with Loughlin joining him and **Robert Biddle**, Group Finance Director, as an executive member of the Board.



Loughlin

Somerville elected CEO of ABS

Robert D. Somerville,

currently President and COO of ABS has been elected to the position of CEO by the ABS Board of Directors. These duties will be in addition to Somerville's current responsibilities. The transfer of CEO responsibilities from ABS Chairman Frank J. Iarossi marks the first phase in a carefully planned leadership transition strategy. Iarossi will continue as Chairman of the classification society until May 1, 2004 and remains Chairman and CEO of the ABS Group of Companies, an affiliate



Loughlin

Want the very latest maritime news e-mailed to you daily? It's one click away at ...  **MaritimeToday.com**



MARINE EXHAUST SYSTEMS OF ALABAMA INC.

Mesamarine@Earthlink.net <http://www.mesamarine.com>

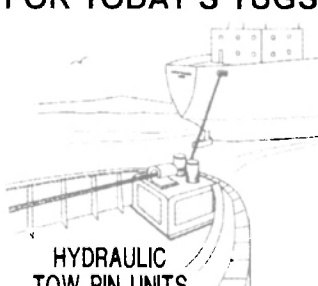
Water Cooled Manifolds, Heat Exchangers, Collector Risers, Wet Ells, Mufflers, and Custom Fabrication for Caterpillar, Cummins, Onan, Detroit, Perkins, Waukesha, Superior, Guascor, Westerbeke, Hercules, Mack, Isuzu, John Deere, Kubota, Daewoo, Isotta Fraschini, Ford, Palmer, International, Fairbanks Morse, Lister, Wisconsin, and more. Marinization, Repair, and Duplication of Obsolete Parts available upon request.



Please Contact us for all of your exhaust needs.

Circle 240 on Reader Service Card

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 267 on Reader Service Card

Maritime Reporter & Engineering News

of ABS. The Board of Directors has also elected **Robert E. Kramek**, currently senior V.P. and president, ABS Americas division to the position of executive V.P.

Perez Resigns as Trico Marine's CFO

Victor M. Perez, who has served as V.P., CFO and Treasurer since 1995 for Trico Marine Services, Inc., has resigned effective June 30, 2003. The Board of Directors has elected **Ronald O. Palmer**, Chairman of the Board, to serve as interim CFO and Treasurer. One of the Company's founders, Palmer served as the Company's CFO and Treasurer from 1980 to 1995.

Lubmarine to Launch New Line for Medium-Speeds

Lubmarine will launch a new generation of clean lubricants for medium-speed engines and high stress applications, which will be available this month. The new range, Aurelia XL, has been formulated using the latest additive technology to cope with the increasingly demanding environment of modern marine engines.

The new clean formula is designed to reduce ring sticking and breakage, which contributes to a longer engine life. The lubricant offers superior protection of all engine parts against corrosion due to Aurelia XL's high BN.

Aurelia XL has been developed for use in medium speed main propulsion and auxiliary trunk piston diesel engines in both marine and power plant applications. It is also suitable for use in turbochargers, geared transmissions, oil filled stern tubes and variable pitch propellers and other deck equipment requiring a SAE 30 or 40-grade oil.

Aurelia XL is available in SAE 30 and 40 grades and in a range of BNs with the major grades being BN 30, BN40 and BN 55. For special applications BN 25 and BN 65 grades are also available.

Circle 32 on Reader Service Card

NOL Names Lim as President, CEO

Singapore-based container shipping group, Neptune Orient Lines (NOL), has appointed **David Lim** as group president and CEO. Lim, who will assume his new role on July 10, will join Group CFO **Lim How Teck** as an executive director on the NOL Board.

Bachrach & Wood Celebrates 50th

Bachrach & Wood was formed 1953 to provide marine surveying and consultant services to the shipping industry in New Orleans. Over the years, Bachrach & Wood has changed its focus from bluewater shipping to the offshore oil-field, now providing builder's risk sur-

veys for heavy lifts and pipeline construction, warranty surveys for trips-in-to, vessel safety and security audits, and on/off charter surveys for barges and boats. The firm is headquartered in Morgan City, La., with offices in Metairie, Fourchon and Harvey, La., as well as Houston.

Top Management Changes at ISC

Erik F. Johnsen has been elected Chairman of the Board and CEO of International Shipholding Corporation (ISC), while **Niels M. Johnsen** has been elected president, and **Erik L. Johnsen** has been re-elected Executive Vice President.

Erik F. Johnsen (left), has been elected Chairman of the Board and CEO of ISC, succeeding his brother, **Niels W. Johnsen**.



Crew Calling Solutions
- Private,
reliable and
convenient

The ability for crew and staff to easily keep in touch with family and friends is an important factor to maintain and enhance motivation on board. Marlink provide crew calling solutions with easy and convenient access to reliable and private communication - around the clock and around the world.

Any time. Any place.

MARLINK.

www.marlink.com

Circle 260 on Reader Service Card

PORT & MARITIME SECURITY COMPLIANCE SEMINAR

Will your company be prepared when the Port Security Rules go into effect?

US Coast Guard Security Regulations will be published by July 2003, with compliance submissions required by January 2004 and full compliance by July 2004.

Will your company be affected?

Security is everyone's concern, but currently the government has four primary areas of focus:

- Vessels in international service
- Vessels & Facilities that handle materials classified as Certain Dangerous Cargoes (CDCs) - explosives, poisonous gases, radioactive & poisonous materials, liquidified chlorine or flammable/toxic liquids, ammonium nitrate, and a hand full of specific, nasty chemicals
- Vessels certified to carry 150+ passengers, and the facilities that handle them
- Facilities that handle international vessel traffic, regardless of cargo or passenger load

Be prepared with series of seminars presented by:



Marine Security
Source Book

MarineNews
The information source for the North American shallow draft marine market

**MARITIME
REPORTER
AND
ENGINEERING NEWS**

How can you ensure your company is prepared?

Knowledge is power, and the Port & Maritime Security Compliance Seminar is designed to provide this knowledge. Featured presenters Charley Havnen, Commander USCG (Ret) is Maritime Regulatory Authority & Compliance Specialist. Pat Touchard is a Chemical Emergency and Security Specialist, a retired Commander of the Louisiana State Police HAZMAT Response Team and a former SWAT Team Leader. Together, they offer more than 70 years of hands-on regulatory experience.

Port Security Compliance Seminar Schedule:

New Orleans - 7/22 Airport Hilton	Tampa - 8/4 Airport Hotel	Mobile - 8/6 CBD Hotel	Corpus - 8/19 Beach Hotel	Houston - 8/21 By Hobby Airport
Port Arthur - 8/28 Near MSO	Morgan City - 9/5 Downtown	St. Louis - 9/9 TBD	New York - 9/17 Midtown	

Register by fax at: 504-394-8869 or phone: 504-394-8933 or e-mail: security@havnengroup.com

www.havnengroup.com

Name: _____	<input type="checkbox"/> Early Registration: \$325	<input type="checkbox"/> Late Registration: \$350
Company: _____	<input type="checkbox"/> NY: \$425	<input type="checkbox"/> NY: \$495
Billing Address: _____	<i>Early Registration Deadline: 30 Days Before Session</i>	
City: _____ State: _____	Payment: Please charge my credit card.	
Postal Code: _____ Country: _____	<input type="checkbox"/>	<input type="checkbox"/>
Phone: _____	Account #: _____	Exp. Date: _____
Fax: _____		
E-mail: _____		

The July issue of the Marine Security Source Book will be distributed at all seminars.

Erik F. Johnsen succeeds his brother, Niels W. Johnsen, who has been chairman and CEO of ISC since its inception in 1978, and will continue to serve as a member of the Board. Niels M. Johnsen, who has been elected president, succeeds his uncle, Erik F. Johnsen, president of ISC since its beginnings. He is a director of ISC and president and a director of Waterman Steamship Corp. Erik L. Johnsen has been re-elected Executive V.P. and a director of ISC and ISC subsidiary Waterman Steamship Corp., and president and a director of Central Gulf Lines and ISC's other major subsidiaries.

New York Seaport Manager Honored

Arie Van Tol, a veteran Port Authority employee who currently manages the New York Marine Terminals, has been honored for more than 30 years of distinguished service to the bi-state agency and the maritime community, according to Port Commerce Director **Richard M. Larrabee**. Larrabee presented Van Tol with the **Lillian C. Borrone** Award, given to individuals who render unusually effective service to the port community. The award is named for Lillian C.



Van Tol

Borrone, a longtime director of the Port Authority's Port Commerce Department who retired in 2001.

Van Tol was instrumental in the reopening of the Howland Hook Marine Terminal in Staten Island in 1996, and in negotiating leases with the operators of that facility and the Red Hook Container Terminal in Brooklyn. He also has played a critical role in the \$350 million redevelopment initiatives under way at Howland Hook, including the purchase of the Procter & Gamble site in December 2000. That property will serve as the site of a new on-dock rail facility. Mr. Van Tol began his maritime career in 1962, sailing with U.S. Lines, Prudential Lines and Grace Lines, where he achieved the rank of chief officer. He sailed on vessels that called on the Port of New York and New Jersey,

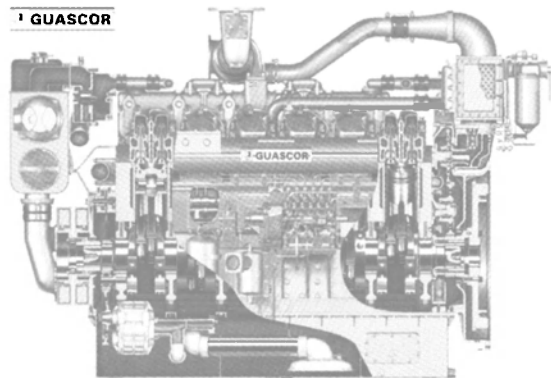
ANCHORS CHAINS

WORTELBOER

Tel.: +31 (0)10 429 2222
Fax: +31 (0)10 429 6459
info@wortelboer.nl
www.wortelboer.nl

including the piers along the Brooklyn waterfront that he now oversees as Manager of New York Marine Terminals.

Guascor Engines Make Serious Inroads



The Guascor engine supplied by Reagan Equipment Co. was chosen to repower the 39-year-old towboat M/V Creole Pass.

Guascor Inc., a manufacturer of diesel and gas engines, power systems and marine reduction gears based in Northern Spain and distributed throughout the Southeastern United States by Reagan Equipment Company, Inc. has accumulated a number of interesting references in the past six months, installations that should go a long way in extending the brand to users throughout the country. For the Louisiana Department of Transportation's Ferry Division, Guascor supplied a pair of SF 180 TAs for the repower and repair of the 30-year-old ferryboat, M/V Acadia. M/V Acadia has a busy work life, crossing the Mississippi River at State Route 75 in Plaquemine, LA, every half-hour, 16 hours a day, seven days a week carrying up to 35 cars per trip. Last summer it was decided to repower the boat, and Leevac Industries and Reagan Equipment Company Inc., Marine Division in Plaquemine, LA, was chosen for the task. The six-cylinder in-line SF 180TA diesels are rated at 581 hp at 1,800 rpm. The ferry was redelivered to the State of Louisiana in October 2002.

Another interesting challenge for the Guascor power products was the repowering of Lebeouf Bros.

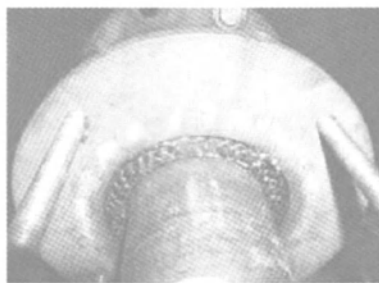
towing's M/V Creole Pass, a 39-year-old twin-screw towboat, which needed to come in under new environmental emission guidelines. Chosen for this task was a pair of SF240 TAs, engines rated 750 hp at 1,800 rpm. The 66 x 22 ft. boat with an eight-ft. draft is now engaged in heavy oil trade in the lower Mississippi and Intercoastal Waterways, reportedly running at peak efficiency with its new Guascor units.

LeBeouf is a particularly interesting reference, as it is one of the oldest marine companies operating on the inland waterway systems, having been formed in the early 1940's. The company today operates 22 towboats and forty 46 barges, including 33 double skin barges.

For Progressive Barge Line of Westwego, La., a pair of Guascor SF240 TAs were specified for the newbuild

towboat M/V Freedom. The engine pair produces 1,548 hp for M/V Freedom, a vessel built by LaForce Shipyard Inc. The boat measures 74 x 28 x 11 ft. with an 8.5 ft. draft, and was christened about one year ago. The Guascor engines are coupled to Twin Disc gears driving Sound Propellers. Progressive also enjoyed the benefits of repowering with Guascor, as it needed to replace an engine in M/V Gizmo earlier this year and opted for a six cylinder, 581 hp Guascor. Progressive specializes in shipside bunkers in the port of New Orleans, with eight double skinned barges ranging from 9,434 barrels to 30,000 barrels. They also operate six boats ranging from 1,000 to 1,800 hp.

For more information on Guascor
Circle 178 on Reader Service Card



Slade Fluid Sealing

No Flush - No Leak Service

Simply the best!!

- UP TO 10 YRS SERVICE IN TAILSHAFTS
- VIRTUALLY LEAK FREE
- DRY BILGES MEAN FEWER HAZMAT or DISCHARGE WORRIES
- NO WEAR ON SHAFTS OR SLEEVES - SEALS WORN EQUIPMENT
- LIFETIME GUARANTEE IN VALVES
- NUCLEAR SERVICE APPROVED - ABS Type Approval Pending
- OUR GASKETS PERFORM ON STEAM CUTS & IRREGULAR FACES

Contact **DELAMAR** - EXCLUSIVE Distributor of Slade Products to the Marine Industry
434-983-6104 (Phone) www.delamar.net (Internet) info@delamar.net (E-mail)

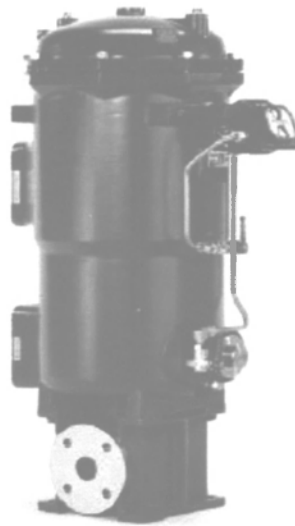
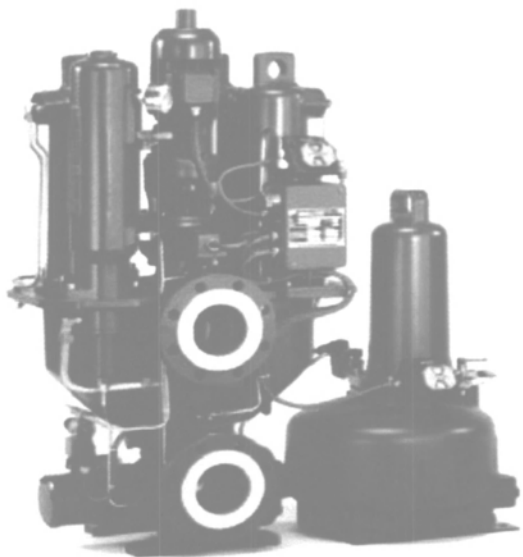
Circle 261 on Reader Service Card

2003 Marine Diesel Engine Technical Guide

Data by Worldmarine Ltd. info@worldmarine.org

BRAND NAME	Model	Bore	Stroke	Cyl#	kW/cyl	RPM	BMEP	BRAND NAME	Model	Bore	Stroke	Cyl#	kW/cyl	RPM	BMEP	
Anglo Belgian Corp	DX	242	320	3 - 8	46 - 110.4	600 - 750	6 - 12.5		3400	137	152	6 - 16	26.4 - 99.5	1200 - 2300	8.5 - 21.3	
	DZ	256	310	6 - 16	135 - 221	720 - 1000	16.5 - 18.1		C18	145	183	6	108.8 - 124.3	2200 - 2300	19.6 - 21.5	
ADD	30V	300	480	6 - 18	548.3 - 572.2	720 - 750	26.9 - 27	C30	145	152	12	93.3 - 96.3	2300	19.3 - 20		
Akasaka	M23R	230	390	6	86.0	440	14.5	CRM	3500	170	190	8 - 16	65.8 - 108.8	1200 - 1800	12.3 - 16.8	
	U26	260	320	6 - 16	159.3 - 165	720 - 720	15.6 - 16.2		3500	170	190	8 - 16	93.3 - 139.9	1600 - 1925	14.4 - 20.2	
	T26	260	440	6	104.2 - 147	350 - 420	15.3 - 18		3600	280	300	6 - 18	247.5 - 400	750 - 1100	20 - 24.7	
	K26	260	480	6	159.2 - 171.5	410 - 420	18.3 - 19.2		12 D/S/SS	150	180	12	52.1 - 84.3	1900 - 2075	9.4 - 15.3	
	U28	280	340	6 - 8	221 - 245.2	680 - 720	18.6 - 19.5		BR-1/2000	150	180	18	61.3 - 74.2	2020 - 2075	11.4 - 13.5	
	U28AK	280	380	6 - 8	303.4 - 306.7	720 - 720	21.6 - 21.8		18 D/SS	150	180	18	55.8 - 67.4	2010 - 2075	10.5 - 12.3	
	E28	280	480	6	220.5 - 245.2	420 - 450	21.3 - 22.1		18 D/SS BR-1	150	180	18	61.3 - 74.2	2010 - 2075	11.5 - 13.5	
	K28	280	500	6	171.5 - 196	380 - 410	18.3 - 18.6		18 D/SS BR-2	150	180	18	77.9 - 85.8	2050	14.3 - 15.3	
	A28/A28S	280	550	6	183.8 - 196	320 - 340	20.3 - 20.4		Cummins Marine	QSM11	125	147	6	55 - 77.8	2300	19.2 - 22.8
	K31	310	550	6	196 - 245.2	340 - 380	17.3 - 18.6		N14-M	139.7	152.4	6	54.7 - 65.3	1800 - 2100	15.6 - 17	
	A31	310	600	6	220.8	290	20.2		KTA19/M	159	159	6	52.8 - 87	1800 - 2100	11.2 - 16.8	
	A34C/S	340	620	6	270.0	310	18.6		KTA38/M	159	159	12	49.8 - 80.8	1800 - 1950	10.5 - 17.1	
	A34S	340	660	6	294.2	280	21		KTA50/M	159	159	16	58.3 - 74.6	1800 - 1950	12.3 - 16.8	
	S35	350	640	6	318.7	280	22.2		QSK19-M	159	159	6	82 - 99.5	1800 - 2100	17.1 - 18	
	A37	370	720	6	318.3	250	19.7		Daewoo	V 158TI	128	142	8	44.1 - 62.5	1800 - 2300	15.8 - 18.2
	A38/S	380	740	6	343.3 - 367.7	240 - 250	20.4 - 21		V 180TI	128	142	10	44.1 - 60.3	1800 - 2300	15.3 - 18.6	
	DM41	410	640	6	367.0	300	17.4		V 222TI	128	142	12	44.2 - 61.3	1800 - 2300	15.6 - 17.9	
	DM41AK	410	640	6	441.2	350	17.9		Daihatsu Diesel	6DLM-16	160	210	6	73.6	1350	15.5
	AH41AK	410	640	6	490.3	350	19.9		6DLM-19	190	230	6	85.9	900	17.5	
	A41/S	410	800	6	404.2 - 441.2	230 - 240	20 - 20.9		6DLM-20	200	260	6	104.3	900	17	
A45/S	450	880	6	490 - 551.5	210 - 220	20 - 21.5	DKM-20	200	300	6 - 8	156 - 159	900	22.1 - 22.5			
U50	500	620	6 - 9	674 - 674	380 - 380	17.5 - 17.5	DKM-26	260	380	6	269.7	750	21.4			
Alaska Diesel Electric Luger/Northern Lights	SA6D140-1	140	165	6	62.2 - 87	1800 - 2100	16.3 - 19.6	DKM-28	280	390	6 - 8	313 - 319	720 - 750	20.8 - 22.1		
	SA6D170-A-1	170	170	6	87 - 111.9	1800 - 2100	15 - 16.6	6DY-28	280	530	6	171.7 - 220.7	395	16.3 - 20.9		
Baudouin	VTI	120	110	12	26.4 - 50.3	2680 - 3000	15.0 - 17.0	DKM-32	320	360	6 - 8	368.0	720	21.2		
	R 124 SR	124	165	6	49 - 62.5	1800 - 1900	16.4 - 19.8	DKM-36	360	480	6 - 8	551.5	600	22.6		
	M26	150	150	6 - 12	29.4 - 79.8	1800 - 2000	7.4 - 18	DIM-40A	400	480	6 - 8	552.0	515	21.3		
Bergen	B32-40	320	400	6 - 12	500	750	24.9	DEUTZ	FM 1015	132	145	6 - 8	43.5 - 70.8	2100 - 2300	12.5 - 18.6	
	C	250	330	5 - 9	240.0	1000	17.8	616	132	160	8 - 16	60 - 85.8	2100 - 2300	15.7 - 20.4		
	KRMB/KVBM	250	300	6 - 18	222.9	825	22	620	170	195	8 - 16	127 - 140	1800 - 1860	19.2 - 20.4		
Collesen	425	250	300	3 - 4	44 - 59	500	7.3	628	240	280	6 - 16	165.8 - 225	750 - 1000	20.3 - 21		
	427	270	400	3 - 8	58.8 - 124.1	395 - 500	10.4	645	330	450	6 - 9	425 - 460	600 - 650	22.1		
Caterpillar	3176B	125	140	6	56 - 74.7	2300	17 - 22.7	Electro-Motive Division of General Motors Corp.								
	C12	130	150	6	87	2300	22.8	645E6	230	254	8 - 16	93.3 - 98.1	900	5.9 - 6.2		
								645F7B	230	254	8 - 20	149.3 - 163.1	900	9.4 - 10.3		
								645EB	230	254	8 - 20	148.0	1000	8.4		

The Blue Ribbon Filters



For over 50 years, BOLLFILTERs have improved the efficiency and prolonged the life of ships' vital equipment throughout the world.

BOLL
BOLLFILTER
Protection Systems

Boll Filter Corporation
www.bollfilter.com

Plymouth, MI 800-910-2655
boll@bollfilterusa.com

Circle 272 on Reader Service Card

Contact Information

IncShipbuilding
IncShipbuilding

IncShipbuilding Research Centre Bldg 3-8
Mejira 1-chome, Toshima-ku Tokyo 171, Japan
+81 3 3985 6416 / +81 3 3985 3604

Akasaka
Akasaka Diesels

4-3-1- Nakaminato, Yaizu Shizuoka, Japan
+81 5462 72121 / +81 5462 96933
<http://www.akasaka.co.jp> (japanese)

Alaska Diesel Electric - Luger/Northern Lights
Alaska Diesel Electric Inc.

4420-14th Avenue NW,
PO Box 70543, Seattle 98107 WA
+1 206 789 3880 / +1 206 782 5455
ade@northern-lights.com, <http://www.northern-lights.com>

Anglo Belgian Corp
Anglo Belgian Corporation N.V.

Wiedauwkaai 43, Ghent 9000 Belgium
+32 (0)9 267 0000 / +32 (0)9 267 0067 info@abcdiesel.be,
<http://www.abcdiesel.be>

Baudouin
Moteurs Baudouin

165 Bd de Pont de Vivaux

Maritime Reporter & Engineering News

2003 Marine Diesel Engine Technical Guide

BRAND NAME	Model	Bore	Stroke	Cyl#	kW/cyl	RPM	BMEP	BRAND NAME	Model	Bore	Stroke	Cyl#	kW/cyl	RPM	BMEP
	710	230	280	8 - 20	186.5	900	10.7	Hedemora Diesel	VA	185	210	12 - 18	91.7	1350	14.4
	H	263	300	16	260.9 - 279.7	900 - 1050	19.3 - 21		VB	210	210	12 - 18	116.7	1350	14.3
Fairbanks Morse	38TD8-1/8	206.4	254	6 - 12	261.1 - 217.6	750 - 900	20.5	Himsen	H21/32	210	320	5 - 9	160 - 200	720 - 1000	21.7 - 24.1
GE Diesel	7FDM	229	267	12 - 16	163.4 - 209.7	900 - 1050	19.8 - 21.8		H25/33	250	330	5 - 9	290.0	900	23.9
Guascor	E318	150	150	12	27.1 - 50.6	1800 - 2100	8.5 - 12.7	Isotta Fraschini	1300	130	142	6 - 12	36.7 - 73.3	1800 - 2700	13 - 19.4
	F180	152	165	6	30.7 - 79.4	1800 - 2000	6.8 - 17.2		1700	170	170	8 - 16	87.5 - 146.9	1800 - 2000	15.1 - 21.8
	F240	152	165	8	55.2 - 79.5	1800	12.3 - 17.7		S20U	200	300	4 - 9	160 - 175	900 - 1000	22.3 - 22.6
	F360	152	165	12	55.2 - 79.5	1800 - 2000	12.3 - 17.7	Iveco	8281/8291	155	130	8 - 12	25.8 - 64.6	1800 - 2200	7.0 - 19.6
	F480	152	165	16	58.4 - 79.5	1800	13 - 17.7	John Deere	6081AFM	116	129	6	29.2 - 55.9	2100 - 2400	12.2 - 20.5
Hanshin	6L24GSH	240	400	6	79.7	400	13.2		6125AFM	127	165	6	42.3 - 74.6	1800 - 2100	13.5 - 20.4
	6LU24	240	410	6	103.5	410	16.3	MaK	M20	200	300	6 - 9	170 - 190	900 - 1000	24.1 - 24.2
	6LUD24	240	410	6	110.0	400	17.8		M25	255	400	6 - 9	290 - 308.3	720 - 750	23.5 - 24.5
	LH26	260	440	6	147.0	420	18		M32C L	320	480	6 - 9	480	600	24.9
	LH26/A	260	440	6	171.5	450	19.6		M32C V	320	420	12 - 16	480 - 500	720 - 750	23.7
	LC26	260	440	6	104.2	400	13.4		M43	430	610	6 - 18	900	500 - 514	23.7 - 24.4
	6LU26	260	440	6	123.0	400	15.8	Makita	M30M	300	480	6	183.9	375	17.4
	8MX28	280	330	8	303.4	730	24.5		L30M	300	600	6	223.8 - 248.7	300 - 330	21.1 - 21
	6MUH28	280	340	6	281.8	780	20.7		M31M	310	550	6	223.8 - 248.7	320 - 355	20.2 - 20
	6MX28	280	380	6	306.5	730	21.5		L31M	310	600	6	223.8 - 248.7	290 - 320	20.4 - 20.3
	LH28	280	460	6	171.5	395	18.4		M32M	320	550	6	223.8 - 248.7	315 - 350	19.3 - 20.2
	6LUN28	280	480	6	196.0	395	20.1		M33M	330	600	6	248.7 - 286	290 - 330	20 - 20
	L/C/H/Z28L	280	530	6	196 - 245.2	380 - 430	19 - 21		LS33L	330	640	6	186.5 - 245.2	250 - 290	16.3 - 18.5
	LH30L	300	600	6	220.5	300	20.8		LS35L	350	680	6	211.4 - 282	245 - 275	15.8 - 18.8
	LH31	310	530	6	220.5	370	17.9		LS38L	380	740	6	261.1 - 343.2	230 - 255	16.2 - 19.2
	LH32L	320	640	6	245.2	280	20.4		LS42L	420	840	6	317.1 - 416.8	205 - 227	15.9 - 18.9
	LH34LA	340	640	6	269.7	280	19.9	MAN Nutzfahrzeuge AG	D28	128	142	6 - 12	31.6 - 91.9	1800 - 2300	10.7 - 26.2
	LA34	340	720	6	294.2 - 306.5	260 - 265	21.2 - 21.7		2876	128	166	6	77.2 - 85.8	2200	17.1 - 22.0
	6LU35	350	550	6	245.2	320	17.4	MAN B&W AG	S26MC	260	980	4 - 12	275 - 400	212 - 250	14.8 - 18.5
	6LUD35	350	550	6	245.0	320	17.4		L35MC	350	1050	4 - 12	440 - 650	178 - 210	14.7 - 18.4
	LH36L/LA	360	670	6	294.2 - 367.8	240 - 270	20.7 - 21.3		S35MC	350	1400	4 - 12	475 - 700	145 - 170	14.7 - 18.4
	6EL38	380	760	6	343.0	240	19.9		L42MC	420	1360	4 - 12	480 - 995	132 - 176	11.5 - 18
	6LUS40	400	640	6	465.7	320	21.7		S42MC	420	1764	4 - 12	695 - 1025	115 - 136	14.8 - 18.5
	6LU40	400	640	6	343.2	300	17.1		S46MC-C	460	1932	4 - 8	880 - 1310	108 - 129	15.2 - 19
	6LUS40	400	640	6	367.0	300	18.2		L50MC	500	1620	4 - 8	640 - 1330	111 - 148	10.9 - 17
	6EL40	400	800	6	405.0	240	20.1		S50MC	500	1910	4 - 8	690 - 1430	95 - 127	11.5 - 18
	LH41L/LA	410	800	6	404.5 - 441.3	225 - 240	20.4 - 20.9		S50MC-C	500	2000	4 - 8	690 - 1580	95 - 127	12.2 - 19
	6LF46/A	460	740	6	441.3 - 490.3	245 - 270	17.6 - 17.7		L60MC	600	1944	4 - 8	920 - 1920	92 - 123	10.9 - 17
	LH46L/LA	460	880	6	490.3 - 551.5	200 - 220	20.1 - 20.6		L60MC/ME-C	600	2022	4 - 8	1520 - 2230	105 - 123	15.2 - 19
	6LF50/A	500	800	6	490.3 - 551.6	215 - 240	17.4 - 17.6								
	6LF54/A	540	850	6	612.9 - 674.2	215 - 240	17.6 - 17.7								
	6LF58/A	580	1050	6	735.5 - 772.3	180 - 190	17.6 - 17.7								

Marseille 13010 France
+33 91 83 85 00/+33 91 79 09 38 <http://www.moteurs-baudouin.fr>

Bergen Rolls-Royce Marine

Department Engines — BergenHordvikneset
125 Hordvik 5108 Norway
+47 (0)55 53 6000/+47 (0)55 19 0405 engines.bergen@rolls-royce.com
<http://www2.rolls-royce.com>

Callesen Heinrich Callesen

Aabenraa Motorfabrik
Naestmark 30, Aabenraa 6200 Denmark
+45 (0)74 622088/+45 (0)74 627407 bukh@bukh.dk
<http://www.bukh.dk>

Caterpillar Caterpillar Inc.

Marine Engine Division
P.O.Box 610
Mossville, IL 61552-0610
+1 309 578 6369/+1 309 578 6466
cat_power@cat.com, <http://www.cat-engines.com>
CRM

CRM Spa Motori Marini

Via Marnate 41
Castellanza 21053 Italy
+39 0331 501548/+39 0331 505501
crm spa@tin.it, <http://www.crm-spa.it>

Cummins Marine Cummins Marine

4500 Leeds Avenue - Suite 102, Charleston, SC 29405
+1 803 554 6700/+1 803 745 1603
wavemaster@cummins.com
<http://www.cummins.com/marine>

Daewoo

July 2003

THE WORLDWIDE COMMERCIAL MARITIME INDUSTRY IS IN THE PALM OF YOUR HAND.



- Audited global circulation of over 31,000 ...
- Unparalleled pass along readership ...
- Bonus distribution at maritime conferences and expositions throughout the world ...

With MARITIME REPORTER thousands of international maritime companies are within your grasp.

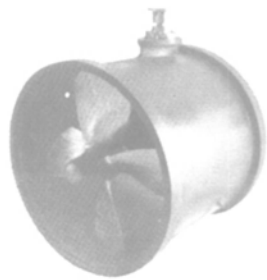
118 East 25th Street, New York, NY 10010, Tel: 212-477-6700, Fax: 212-254-6271, E-mail: info@marinelink.com
215 NW Third Street, Boynton Beach, FL 33435, Tel: 561-732-1659, Fax: 561-732-6984, E-mail: info@marinelink.com

**MARITIME
REPORTER**
AND
ENGINEERING NEWS

2003 Marine Diesel Engine Technical Guide

BRAND NAME	Model	Bore	Stroke	Cyl#	kW/cyl	RPM	BMEP	BRAND NAME	Model	Bore	Stroke	Cyl#	kW/cyl	RPM	BMEP
	S60MC	600	2292	4 - 8	980 - 2040	79 - 105	11.5 - 18		MA31GSC	310	600	6	122.6 - 220.7	260 - 320	12.5 - 19.5
	S60MC/ME-C	600	2400	4 - 8	1085 - 2255	79 - 105	12.2 - 19		MA32GSC	320	600	6	122.6 - 245.2	270 - 320	11.3 - 19
	L70MC	700	2268	4 - 8	1355 - 2830	81 - 108	11.5 - 18		MA33GSC	330	600	6	269.7 - 281.8	330 - 340	19.1 - 19.4
	L70MC/ME-C	700	2360	4 - 8	248 - 3110	91 - 108	15.2 - 19								
	S70MC	700	2674	4 - 8	1350 - 2810	68 - 91	11.5 - 18	Mitsubishi Heavy Industries Ltd.	UE33LSII	330	1050	4 - 8	306.7 - 567.5	162 - 215	12.5 - 17.3
	S70MC/ME-C	700	2800	4 - 8	1490 - 3105	68 - 91	12.2 - 19		UE37LA	370	880	4 - 8	280 - 520	158 - 210	11.4 - 15.7
	K80MC/ME-C	800	2300	6 - 12	2470 - 3610	89 - 104	14.4 - 18		UE37LSII	370	1290	5 - 8	420 - 772	158 - 210	12.5 - 17.3
	L80MC/ME	800	2592	4 - 12	1750 - 3640	70 - 93	11.5 - 18		UE43LSII	430	1500	4 - 8	570 - 1050	120 - 160	12.5 - 18.1
	S80MC	800	3056	4 - 9	1840 - 3840	59 - 79	12.2 - 19		UE45LA	450	1350	4 - 8	477.5 - 889	119 - 158	11.5 - 15.7
	S80MC/ME-C	800	3200	6 - 8	1760 - 3870	57 - 76	12.2 - 19		UE50LSII	500	1950	4 - 8	144.5 - 1445.1	95 - 127	12.5 - 17.3
	K90MC/ME-C	900	2300	6 - 12	3100 - 4560	89 - 104	14.4 - 18		UE52LA	520	1600	4 - 8	640 - 1180	100 - 133	11.3 - 15.7
	K90MC/ME	900	2550	4 - 12	2200 - 4570	71 - 94	11.5 - 18		UE52LS	520	1850	4 - 8	720 - 1320	90 - 120	12.2 - 16.9
	L90MC/ME-C	900	2916	4 - 12	275 - 4890	62 - 83	12.2 - 19		UE52LSE	520	2000	4 - 12	930 - 1700	95 - 127	13.8 - 19.4
	S90MC/ME-C	900	3188	6 - 9	3130 - 4880	61 - 76	15.2 - 19		UE60LA	600	1900	4 - 8	840 - 1550	83 - 110	11.3 - 15.7
	K98MC/ME-C	980	2400	6 - 18	4130 - 5719.9	94 - 104	14.6 - 18.2		UE60LS	600	2200	4 - 8	950 - 1770	75 - 100	12.2 - 17.1
	K98MC/ME	980	2660	6 - 18	4090 - 5720	84 - 104	14.6 - 18.2		UE60LSII	600	2300	4 - 8	1075 - 1986	79 - 105	12.5 - 17.3
	21/31	210	310	6 - 9	215	1000	24.1		UE75LSII	750	2800	4 - 9	1595 - 2940	63 - 84	12.5 - 17.0
	23/30A/AE	225	300	6 - 12	133.3 - 160	800 - 900	16.8 - 17.9		UE85LSC	850	2360	5 - 12	2115 - 3900	76 - 102	12.5 - 17.1
	27/38	270	380	6 - 9	340.0	800	23.4	MTU	183	128	142	6 - 16	21.1 - 80.8	1900 - 2400	6.6 - 22.1
	28/32A	280	320	6 - 16	245.0	775	23.5		2000	130	150	8 - 16	50 - 91.9	1900 - 2350	15.9 - 23.6
	32/40	320	400	6 - 18	480.0	750	23.9		SERIES 60, 12.7L	130	160	6	46.6 - 87	1800	14.6 - 21.4
	40/50	400	500	12 - 20	750.0	600	23.9		SERIES 60, 14L	133	168	6	46.6 - 102.5	1800	13.3 - 22.9
	40/54	400	540	6 - 9	700 - 720	500 - 550	23.2 - 24.8		396	165	185	8 - 16	80 - 186.7	1600 - 2100	15.2 - 23.1
	48/60	480	600	6 - 18	1050.0	500 - 514	22.6 - 23.2		4000	165	190	8 - 16	105 - 170	1700 - 2100	18.2 - 23.9
	48/60B	480	600	6 - 18	1200.0	500 - 514	25.8 - 26.5		595	190	210	12 - 16	190 - 270	1600 - 1800	23.9 - 30.2
	58/64	580	640	6 - 9	1390.0	428	23		1163	230	280	12 - 20	184 - 370	1200 - 1300	17.2 - 29.3
									8000	265	315	16 - 20	410 - 450	1150 - 1200	24.6 - 27
MAN B&W Diesel LTD								Niigata Engineering Co.	NSAK	132.9	160	12 - 16	40.4 - 44.1	1950 - 2000	11.2 - 11.9
	K MAJOR MK3	400	457	6 - 16	544.0	600	18.9		NSF	132.9	160	6	51.3 - 61.3	2100 - 2200	13.2 - 15.1
	MB430	430	480	6 - 16	608.4 - 800	500 - 600	19 - 23		NSE	150	165	6	67.3 - 76	1950 - 2100	14.2 - 14.9
	MB430M	430	520	12 - 18	723.5 - 976.7	500 - 600	23		NSD	150	210	6	79.7 - 88.2	1450 - 1500	17.8 - 19
	RK215	215	275	6 - 18	130 - 197.5	720 - 1000	21.6 - 23.9		NSDL	160	235	6	91.8 - 101.7	1400 - 1450	16.7 - 17.8
	RK270	270	305	8 - 20	246.7 - 377.5	720 - 1032	21.5 - 25.1		MG17	165	215	6	92 - 101	1650 - 1700	34.3 - 36.6
	RK280	280	330	12 - 20	450.0	1000	26.6		16FX	165	185	8 - 16	125 - 139.2	1950 - 2000	19.4 - 21.1
	VP185	185	196	12 - 18	166.7 - 222.2	1770 - 1950	21.1 - 25.9		18CX	180	240	6	79.0	950	16.3
	VALENTA	197	216	6 - 18	140.6 - 191.7	1500 - 1640	17 - 21.6		MG19	190	260	6	122.5	1000	19.9
Matsui Diesel									20CX	200	260	6	98.0	900	16
	ML624G/A/H/S/C	240	400	6	42.9 - 110.3	420 - 420	6.9 - 17.7		20FX	205	220	12 - 16	250 - 270.8	1650 - 1695	25 - 26.4
	MS245GTSC	245	470	6	150.0	420	19.3		22X	220	250	6 - 12	123 - 232	1000 - 1100	14.1 - 24.4
	ML626GSC	260	480	6	61.3 - 161.6	310 - 410	10.8 - 18.6								
	ML627GSC	270	480	6	73.6 - 186.4	300 - 410	10.7 - 19.9								
	MS28BGFC	280	500	6	184.0	390	18.4								
	MA28GSC	280	540	6	85.8 - 183.9	300 - 700	4.4 - 18								
	MA29GSC	290	540	6	85.8 - 208.4	290 - 375	10 - 19								
	HD30FSC	300	460	6	184.0	360	18.9								

Maneuver...Propel...Position

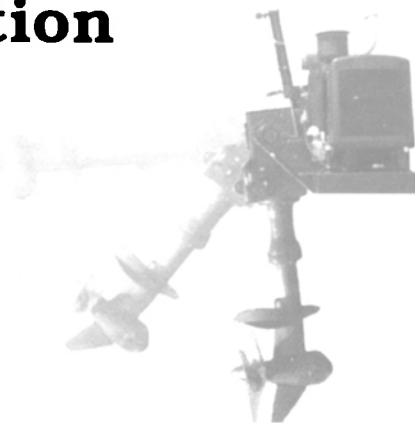


**Tunnel Thrusters
100 to 2000 HP**

Harbormaster thrusters and outdrives are found around the world in ships, boats and barges where economical performance is required.

For unassisted maneuvering in tight quarters. For easily-moved, deck-mounted propulsion. For critical dynamic positioning. For precision vessel control.

Harbormaster Marine products are designed to customer specification and built with utmost care and highest quality. They provide years of durable service and are backed by a reliable support system.



**Outboard and through-the-hull azimuthing drives
50 to 1500 HP**

Fast world-wide support!

If you operate a Harbormaster or Murray & Tregurtha product anywhere in the world, we can provide spare parts and on-site field service. Call us first!

Harbormaster
Harbormaster Marine, Inc.
31777 Industrial Road
Livonia, MI 48150 USA
(734) 425-1080 Fax (734) 425-1850
 Website: <http://www.harbormastermarine.com>

Contact Information

Daewoo Heavy Industries

6 Manseok-dong, Dong-gu, Incheon, Republic of Korea+82 32 760
 1523/+82 32 762 1546engine@solar.dhild.co.krhttp://www.dhild.co.kr

Daihatsu Diesel

Daihatsu Diesel Mfg. Co. Ltd.,
 4-14 Tokui-cho, Chuo-ku, Osaka 540, Japan
 +81 (0)6 945 5331/+81 (0)6 945 5308
<http://www.dhdt.co.jp/index.html>

Detroit Diesel /MTU

Detroit Diesel/MTU

13400 Outer Drive West, Detroit, MI 48239-4001
 +1 313 592 5000/+1 313 592 5137
<http://www.detroitdiesel.com>

DEUTZ

Deutz AG

Deutz-Muelheimer Str. 147, Koln51057, Germany
 +49 (0)221 822 2510/+49 (0)221 822 2529 <http://www.deutz.de>

EMD

Electro-Motive Division of General Motors Corp.

9301 West 55th Street, La Grange, IL 60525
 +1 708 387 5843/+1 708 387 5845robert.l.grajek@gm.com
<http://www.gmcmd.com>

Fairbanks Morse

EnPro Industries Inc.

Fairbanks Morse Engine Division
 701 White Avenue, Beloit, WI 53511-5492
 +1 608 364 4411/+1 608 364 0382
commerce@fairbanksmorse.com
<http://www.fairbanksmorse.com>

Circle 227 on Reader Service Card

Rules for success: #1

Development & Partnership

MWH-Thermove. The

Cooperative development of innovative products maximizes benefit for all our customers.

MWH brings in decades of system competence, continuously reinforced through development, field-experience and manufacturing excellence.

For expertise and reliability major engine manufacturers and users trust MWH. You can too.

Circle 242 on Reader Service Card



The
Gas Exchange
Optimizer

MÄRKISCHES WERK



www.mwh.de

2003 Marine Diesel Engine Technical Guide

BRAND NAME	Model	Bore	Stroke	Cyl#	kW/cyl	RPM	BMEP	BRAND NAME	Model	Bore	Stroke	Cyl#	kW/cyl	RPM	BMEP
	MG22	220	280	6 - 18	171.5 - 220.7	1000	19.3 - 24.4		RTA62U	620	2150	5 - 8	1165 - 2220	82 - 113	10 - 18.2
	22LX	220	290	6	135.0	900	16.3		RTA62UB	620	2150	5 - 8	1600 - 2285	92 - 115	12.9 - 18.4
	25CX	250	320	6	171.0	750	17.4		RTA68TB	680	2720	5 - 8	2060 - 2940	75 - 94	13.3 - 19
	MG25	250	350	6	220.5	750	20.5		RTA72U	720	2500	5 - 8	1640 - 2990	70 - 97	10 - 18.3
	26FX	260	275	12 - 18	312.6 - 378.8	1185 - 1290	21.7 - 24.1		RTA72UB	720	2500	5 - 8	2155 - 3080	79 - 99	12.8 - 18.3
	MG26	260	275	6 - 18	230.1 - 245.2	750 - 1000	18.9 - 21.1		RTA84C	840	2400	6 - 12	2840 - 4050	82 - 102	12.6 - 17.9
	M26	260	460	6	104.2 - 171.5	400 - 440	12.8 - 19.1		RTA84TB	840	3150	5 - 9	2130 - 3880	54 - 74	9.9 - 18
	28BX	280	320	6 - 16	221.0	720	18.7		RTA/RT-flex84TD	840	3150	5 - 9	2870 - 4100	61 - 76	13 - 18.5
	MG28	280	370	8 - 18	294.1 - 367.8	750	20.6 - 24.4		RTA/RT-flex96C	960	2500	6 - 14	3571.4 - 5720	92 - 102	11.6 - 18.6
	M28	280	480	6	171.5 - 220.5	390 - 450	17.8 - 19.9		ZA40S	400	560	6 - 18	750 - 750	510 - 510	25.1 - 25.1
	M30	300	530	6	196.0 - 290.0	290 - 360	17.4 - 19.1								
								* Partial portfolio Listing for Niigata							
Scania	DI 12	127	154	6	51 - 83.9	1800 - 2300	17.4 - 22.7	Volvo Penta	TAMD 71B	104.7	130	6	46.7	2600	19.2
	DI 14	127	140	8	44.5 - 68.9	1800 - 2200	14.3 - 21.2		TAMD 163 P/A	144	165	6	67.3 - 94.3	1800 - 2100	16.7 - 20.1
	DI 16M	127	154	8	46 - 73.6	1800 - 2100	15.7 - 21.5		TAMD 165 P/A/C	144	165	6	59.1 - 94.3	1800 - 2100	15.5 - 20.1
Seatek	10.3 ENDURANCE	127	135	6	116.3	3200	25.5		D12	131	150	6	75.3 - 85.8	2100 - 2300	20.6 - 22.1
	10.3 OFFSHORE	127	135	6	134.8	3350	28.2		D25	170	180	6	64.2 - 86.7	1200 - 1650	13.5 - 16.9
	6.4V 10D B1	127	135	6	95.5	3100	21.6		D30	170	220	6	64 - 116.8	1000 - 2000	13.1 - 15.4
	6.4V 10D B2	127	135	6	95.5	3100	21.6		D34	150	160	12	51.6 - 58.4	1600 - 2000	11.6 - 13.7
6-4V-10.3 TWIN TURBO RACING		127	135	6	147.1	3250	31.7		D49	170	180	12 - 16	55 - 86.7	1600 - 1650	10.1 - 15.4
	800 PLUS	127	135	6	100.5	3100	22.7		D65A MT	170	180	16	78.1 - 86.3	1600 - 1650	14.3 - 15.3
	NAVY A1	127	135	6	80.8	3100	18.3	Wartsila Corporation	200	200	240	12 - 18	175 - 200	1200 - 1500	21.2 - 23.2
	NAVY A2	127	135	6	80.8	3100	18.3		20	200	280	4 - 9	165 - 180	1000	22.5 - 24.5
SEMT Pielstick	PA4-185	185	210	6 - 18	123.3	1500	17.5		26	260	320	6 - 18	325.0	1000	23
	PA4-200	200	210	8 - 16	165.6	1500	20.1		26X	260	320	12 - 18	360 - 400	1000	25.4 - 28.2
	PA4-200VG	200	210	8 - 18	141.0	1500	17.1		32	320	400	6 - 18	460.0	750	22.9
	PA5-255	255	270	4 - 18	220.0	1000	19.1		38	380	475	6 - 18	660.0	600	24.5
	PA6	280	290	6 - 18	325	1050	20.8		38B	380	475	6 - 18	725.0	600	27
	PA6STC	280	290	12 - 16	323.3	1050	20.7		46	460	580	6 - 18	1050.0	514	25.4
	PA6B	280	330	12 - 20	405	1050	22.8	Yanmar Diesel	64	640	900	5 - 18	1940 - 2010	333 - 426	18.9 - 25
	PA6BSTC	280	330	12 - 20	405	1050	22.8		SY	127	145	6	88.3	2300	25.1
	PA6CL	280	350	6 - 18	294.0	750	21.8		K	135	160	6	64.9	2100	16.2
	PC2.6B	400	500	12 - 20	750.0	600	23.9		LA	148	165	6 - 12	51.3 - 74.6	1800 - 1900	12 - 16.6
	PC4.2B	570	660	10 - 20	1325.0	430	21.9		L	150	165	6 - 16	67.4 - 83.4	1650 - 1950	14.9 - 17.6
	PC40	570	750	5 - 10	1325.0	375	22.1		N165	165	232	6	98.0	1400	16.9
Sulzer	RTA48T	480	2000	5 - 8	820 - 1360	99 - 124	11 - 18.2		UAL	200	240	6 - 12	102.0	1000	16.2
	RTA48TB	480	2000	5 - 8	1020 - 1455	102 - 127	13.3 - 19		T220	220	280	6	135.0	900	16.9
	RTA/RT-flex50	500	2050	5 - 8	1130 - 1620	99 - 124	17 - 19.6		GL	240	290	6 - 12	147.0	750	17.9
	RTA52U	520	1800	4 - 8	860 - 1560	98 - 135	10 - 18.1		6G250L	250	290	6	162.0	750	18.2
	RTA52UB	520	1800	5 - 8	1120 - 1600	110 - 137	12.8 - 18.3		6T260L	260	330	6	184.0	750	16.8
	RTA58T	580	2416	5 - 8	1200 - 2000	82 - 103	10.9 - 18.3		N260	260	380	6	196.2 - 245.2	1750	6.7 - 8.8
	RTA/RT-flex58TB	580	2416	5 - 8	1490 - 2125	84 - 105	13.3 - 19		ZL	280	340	6 - 12	221.0	750	16.9
	RTA/RT-flex60C	600	2250	5 - 8	1031.3 - 2360	91 - 114	8.5 - 19.5		N280	280	380	6 - 8	239 - 306.5	1720	7.1 - 9.1
									N330	330	440	6 - 8	367.8 - 413.8	1620	7.2 - 8.4
									MF33	330	620	6	196.7 - 269.7	1000 - 1300	3.8 - 4.6

General Thermodynamics Corporation's

Cylinder Power Equalizer BMEP Balancer Model 300-A

for large internal combustion engines

- Saves fuel
- Maximizes power
- Extends engine life
- No electronics
- No moving parts
- No maintenance
- No calibration
- Lasts forever
- Accurate, easy to use
- Scans entire power cycle & identifies underperforming cylinder(s)
- Stainless steel construction
- Fits standard indicator valve



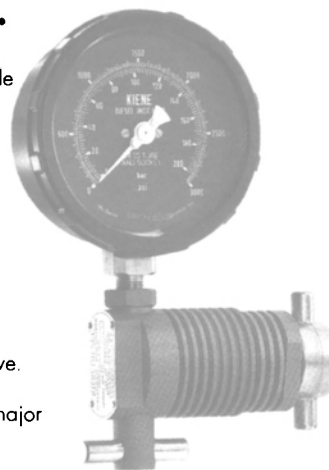
General Thermodynamics
P.O. Box 642
Hampton Falls, NH 03844
Tel: (603) 772-9800 Fax: (603) 772-7119
Visit our website: www.generalthermo.com,
or e-mail us at sales@generalthermo.com

Circle 225 on Reader Service Card

SIMPLE. RUGGED. RELIABLE.

KIENE Cylinder Pressure Indicators for measuring diesel engine firing pressures...

- Easy to use - simple and reliable
- Reduce maintenance costs.
- Improve engine availability.
- Use to balance cylinders.
- Pinpoint engine Problems.
- Optimize fuel consumption.
- Fits any standard indicator valve.
- Recommended and used by major engine builders
- Minimal investment to monitor engine condition.

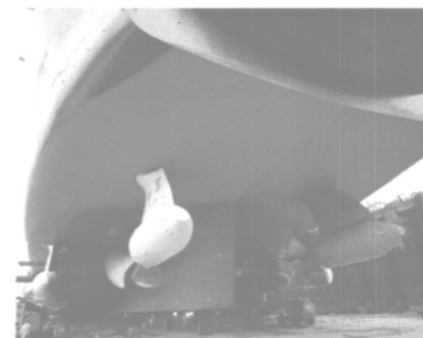


Contact us now for more information.

KIENE Phone: 1-800-264-5950
DIESEL ACCESSORIES, INC. Fax: 630-543-5953
www.kienediesel.com
E-mail: info@kienediesel.com

Circle 236 on Reader Service Card

Cunard Installs Four Rolls Royce Pods On QM2



All four pods have now been fitted to Cunard Line's \$780-million Queen Mary 2, currently in the final stages of construction at the Chantiers shipyard here. The milestone marks the first four-pod installation ever. The powerful Rolls Royce Mermaid propulsion system, which was designed for QM2, is rated at more than 85 MW. The four pods will provide a speed of nearly 30 knots, making her the fastest ocean liner in the world after its sister QE2. The new Cunard flagship is on schedule to sail her maiden voyage from Southampton, England, to Fort Lauderdale, Fla., on January 12, 2004.

Circle 178 on Reader Service Card

Contact Information

GE Diesel

General Electric

GE Transportation Systems
2901 East Lake Road, Erie, PA 16531
+1 814 875 2942/+1 814 875 6635 <http://www.ge.com/transportation>

Guascor

Guascor S.A.

Barria Oikia 44, P.O.Box 30, Zumacia20759, Gipuzkoa, Spain
+34 943 865201/+34 943 865210 guascor@guascor.com, <http://www.guascor.com>

Hanshin

Hanshin Diesel

Room 936, Eiraku Building, 4-5, Marunouchi, 1-chome Tokyo 100-0005 Chiyoda-ku Japan
+81 (0)3 3216 3601/+81 (0)3 3201 7675 <http://www.sphere.ne.jp/hanshin-d/engine> (japanese)

Hedemora Diesel

Hedemora Diesel

Sturegatan 2, Hedemora 77600 Sweden
+46 225 595800/+46 225 595801
diesel@hedemoradiesel.se <http://www.hedemoradiesel.se>

Himssen

Hyundai Heavy Ind.

Engine & Machinery Division
Ulsan, Republic of Korea
+82 52 230 7264/+82 52 230 7425
lh@hhi.co.kr <http://www.hyundai-engine.com>

Isotta Fraschini

Isotta Fraschini SpA

Vale Francesco de Blasio, Zona Industriale
Bari 70100 Italy
+39 080 534 5000/+39 080 531 1009
isotta@fdgm.com <http://www.isottafraschini.it>

Iveco

Iveco Aifo SpA

Via della Industria 13/15, Pregnana Milanese 20010 Italy +39 02 93510/+39 02 93590029
aifo@aifo.com, <http://www.aifo.com>

John Deere

Deere Power

3801 W Ridgeway Ave., P.O.Box 5100, Waterloo, 50704-5100 Iowa +1 319 292 6060/+1 319 292 5075
jdpower@johndeere.com, <http://www.deere.com/jdpower>

Mak

Caterpillar Motoren GmbH & Co KG

Falckensteiner Str. 2, Kiel 24159 Germany
+49(0)431 399501/+49 (0)431 3995 2193
ju_marketing@cat.com, <http://www.mak-global.com>

Makita

Makita Corporation

4-1-1 Asahi-machi, Takamatsu-City 760-0065 Japan
+81 (0)878 21 5501/+81 (0)878 21 5510 makita@mail.netwave.or.jp
<http://www.netwave.or.jp/~makita>

MAN B&W AG

MAN B&W Diesel AG

Postfach 10 00 80, Augsburg 86135, Germany
+49 821 322 3847/+49 821 322 3944 marineengines@manbw.de, <http://www.manbw.de>

MAN B&W Diesel LTD

MAN B&W Diesel Ltd

Paxman
Hythe Hill, Colchester, CO1 2HW UK +44 (0)1206 795151/+44 (0)1206 797869
<http://www.manbwld.com>

MAN Nutzfahrzeuge AG

MAN Nutzfahrzeuge AG,

Marine Diesel Engines
Dept., Postfach 44 0100, Nurnberg 90206, Germany +49 (0)911 4206238/+49 (0)911 4211915
brigitte-moehler@mn.man.de <http://www.man-nutzfahrzeuge.de>

Matsui Diesel

Matsui Iron Works Co.Ltd.

70 Takenohana-machi, Ise-City 516-0005 Japan, +81 (0)5963 62 222/+81 (0)5963 62 895, matsui@matsui.co.jp <http://www.matsui.co.jp> (japanese)

Mitsubishi Heavy Industries Ltd.

Mitsubishi Heavy Industries

5-1, Marunouchi 2-chome, Chiyoda-ku, Tokyo 100 Japan.
+81 (0)3 3212 9080/+81 (0)3 3212 9779
www.mhi.co.jp/index.html

MTU

MTU Friedrichshafen GmbH

Friedrichshafen 88040 Germany +49 (0)7541 90-3381/+49 (0)7541 90-3945
ebenhoch@mtu-friedrichshafen.com <http://www.mtu-friedrichshafen.com/mtu/e/index.htm>

Niigata Engineering Co.

Niigata Engineering Co.Ltd.,

Power Systems Division
10-1 Kamata Hancho 1-Chome, Ohta-ku Tokyo Japan +81 (0)3 5710 7730/+81 (0)3 5710 4752 webmstr@niigata-eng.co.jp <http://www.nigata-eng.co.jp>

Scania

Scania

Industrial & Marine Engines
Soderstalje, 15187 Sweden, +46 (0)855 381 000/+46 (0)855 382 993
webmaster@scania.com <http://www.scania.com>

Seatek

Seatek S.p.A.

Via Provinciale 71, Annone Brianza, 22040 Co, Italy +39 0341-579335/+39 0341-579317, soles@seatek-spa.com, <http://www.seatek-spa.com>

SEMT Pielstick

S.E.M.T. Pielstick S.A.

Bat Le Ronsard 22 avenue des Nations Roissy Cdg Cedex 95946 France, +33 1 48176300, +33 1 48176349, sales_marine@pielstick.com <http://www.pielstick.com>

Sulzer

Wärtsilä Corporation

Marine Marketing & Sales P.O.Box 414 Winterthur, CH-8401, Switzerland +41 (0)52 262 4941/+41 (0)52 212 0720, marinewebmaster@wartsila.com <http://www.wartsila.com>

Volvo Penta

Volvo Penta AB.

Goleborg, 40508, Sweden +46 (0)31 590000+46 (0)31 510348
<http://www.penta.volvo.se>

Wartsila Corporation

Wärtsilä Corporation

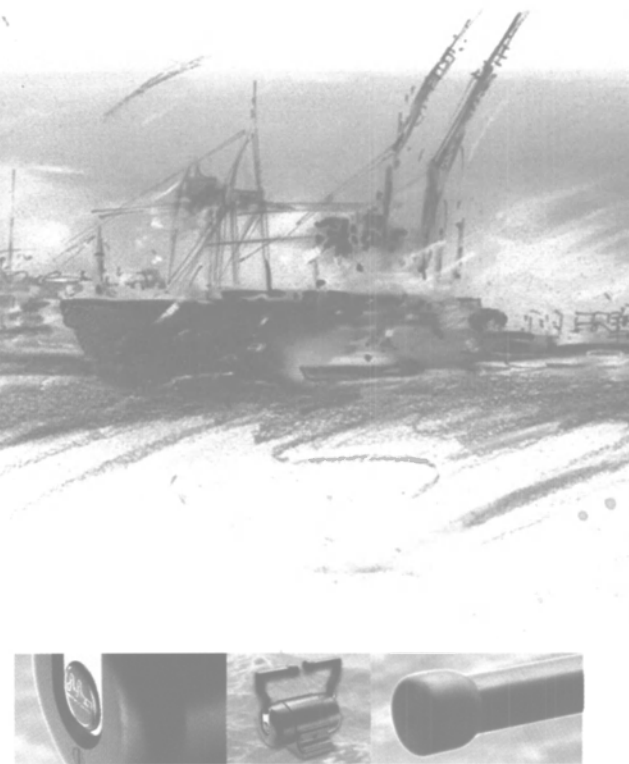
Marine Engines, P.O.Box 196, Helsinki 000531, Finland, +358 10709 0000/+358 10709 5700 marinewebmaster@wartsila.com <http://www.wartsila.com>

Yanmar Diesel

Yanmar Diesel Engine Co.Ltd.

Overseas Operations Division, 1-1, 2-chome, Yaesu, Chuo-ku, Tokyo 104, Japan
+81 3 3275 4941/+81 3 3275 4969, <http://www.yanmar.co.jp>

Power, reliability
and control



ZF offers heavy duty
products, finely
engineered to meet
these demands.

The ZF controls program offers electronic systems for multi-engine and multi-station arrangements in all types of vessels. And with the security of worldwide support from the ZF Group, peace of mind is guaranteed.

Marine Propulsion Systems

ZF Mathers LLC
Tel: +1 360 757 6265 Fax: +1 360 757 2500
Email: info.zfmathers@zf.com
www.ZF-Marine.com

Driveline and Chassis Technology



Circle 269 on Reader Service Card

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 204 on Reader Service Card

Dry Dock Structural Integrity with Computers

By Jonathan M. Ross, P.E.

Overloaded dry docks are not a pretty picture. They crack, buckle, flood, sink, damage the ships they are trying to lift - and sometimes even cause accidental deaths. Dry dock accidents are not common, but they do happen, usually resulting in dramatic photographs and disastrous physical and financial consequences. With past docking failures in mind, prudent dry dock operators strive to avoid overloading, normally through a set of manual calculations, but in certain cases through more sophisticated methods.

A case in point is the AFDL-23 ADEPT, a rigid, one-piece, welded steel, floating dry dock that was built during WWII (principal particulars of the dock are presented in Table 1).

Table 1 - ADEPT Principal Particulars

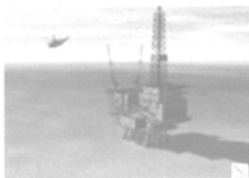
Length, (o.a.)	288 ft.
Width, (o.a.)	72 ft. (21.9 m)
Depth to top deck	34 ft. (10.3 m)
Depth of pontoon at centerline	9 ft. (2.7 m)
Pontoon deck crown	0.3 ft. (0.09 m)
Lightship	1,275 LT
Certified lifting capacity	1,777 LT
Maximum allowable keel load	10.47 LT/ft.

Throughout the last 50 years, corrosion has caused structural wastage throughout the dock with some structure being renewed with plating and stiffeners that were not in accordance with the dock's plans. Other modifications to the dock include two cranes and a hydraulic power pack mounted to the starboard wing wall (half-inch plating was added to increase deck strength). Also, the original diesel generators and their associated equipment have been removed. ADEPT is leased from the Navy by Gulf Copper Ship Repair, Inc., and is located at Aransas Pass (Ingleside), Texas.

VSTEP Allows "Walk Through" in Planning

VSTEP launched its latest virtual walk-through technology to visualize new vessels and optimize the design process. The launch followed successful pilot projects with leading shipyards and operators.

Circle 88 on Reader Service Card



AutoShip Releases Production Manager

Autoship Systems released Production Manager, a major component of Autostructure. Production Manager functions include: part subdivision; weld shrinkage compensation; plate nesting; extrusion nesting; stock definition; inventory management; remnant management; part tracking. Drawings are exported to AutoCAD via a programming interface. Both input and computational results are incorporated in the system database. If a part is nested and then changed in the design program, the nesting is flagged as invalid.

Circle 93 on Reader Service Card

DNV Software Debuts Hull Life Cycle Manager

DNV Software announced Hull Life Cycle Manager (HULC), a class independent software solution based

52

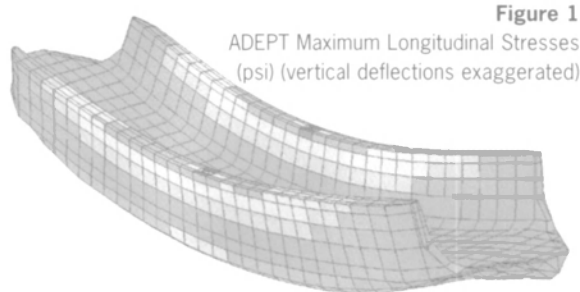


Figure 1

ADEPT Maximum Longitudinal Stresses (psi) (vertical deflections exaggerated)

"We use ADEPT to dock Navy minesweeper and mine counter measure Ships - MHCs and MCMs," says Gulf Copper Dockmaster, Jim Booker. "One of the many requirements included in our Facility Certification Report is to operate the dry dock within the allowable deflection limits, so our primary concern is always to adhere to NAVSEA operational limits." Gazing at the dock, placid at its pier-side mooring, he continues. "This dock grounded in Guam during a typhoon in the 1970s, and after the repairs, it had a permanent sag on the starboard side. Unfortunately, the dimensional uncertainties of that sag prevented us from knowing what our limiting longitudinal deflection readings should be. We were getting readings of 1.5 in., and the Navy limit was only 0.8 inches. The block loads seemed okay, and the dock wasn't breaking, but our instruments were telling us we were way out of spec. We were uncomfortable, and so was our customer. We needed answers."

To find those answers, Gulf Copper turned to Anteon Corporation's Proteus Engineering Division, and its structural design, analysis and optimization program, MAESTRO. Kevin Stone, senior principal naval architect at Proteus noted, "MAESTRO is well respected by the Navy. It's been used on lots of combatants

on new Microsoft technology for managing inspections and capturing detailed hull condition data consistently for the entire fleet. HULC is designed provide transparency and efficiency in administration of inspection routines. The program is due out 3Q 2003.

Circle 89 on Reader Service Card

Deltamarin Joins Safety at Sea, Markku Kauriala

Deltamarin has joined forces with Safety at Sea Ltd, from Glasgow and Fire Engineering Consultants Markku Kauriala Ltd, from Turku to provide a variety of services to the shipping and shipbuilding industry.

Circle 181 on Reader Service Card

HVAC Featured In ShipConstructor2004

Scheduled for a 3Q 2003 release, a major revision of the 3-D product modeling software for shipbuilding and offshore platforms from Albacore Research Ltd., ShipConstructor2004, will include a full HVAC module. HVAC is a fully integrated member of the ShipConstructor suite of Structure, Automatic and Manual Nest, NC Code generation, Outfit, Pipe, Fairing, and Lofting tools. To facilitate automatic report generation, HVAC makes full use of ShipConstructor's SQL Server product database.

Circle 180 on Reader Service Card

and dry docks for design analysis and to solve problems. It's equally at home with specialized analyses like dry docks as it is with full ship analyses of all types of ships." With quick keystrokes he brings a MAESTRO image of ADEPT onto his computer screen. "MAESTRO can automatically evaluate 25 different stress and buckling failure modes - that's unique to this program." Stone's MAESTRO model of ADEPT considered plate and stiffener corrosion of pontoon deck, bottom plate, side shell, and wing tanks. The analysis showed that the dock structure is satisfactory for MHC and MCM dockings, with longitudinal deflections (adjusted to take into account the permanent sag) of 0.039 and 0.170 inches, respectively. MAESTRO was also exercised to determine the maximum safe load for the dock. Figure 1 shows the results, which indicate a limit of longitudinal deflection (again, adjusted for the permanent sag) of 1.27 inches with a 1.7 factor of safety against stresses of 20,000 psi and a 1.25 factor of safety against buckling. Proteus recommended an operational limit of 1.25 in. for longitudinal deflection.

Both Gulf Copper and the Navy concurred with the MAESTRO results, and are now confident in the ability of ADEPT to safely dock Navy minesweepers.

About the Author

Jonathan M. Ross, P.E., is Director of Engineering at Anteon Corporation, Proteus Engineering Division, Stevensville, MD.

Reference "Analysis of the Maximum Allowable Deflection of the "Adept" (AFDL-23)." Prepared for Gulf Copper Ship Repair, Inc. by Anteon Corporation, Proteus Engineering Division, March 22, 2001.

SENER Upgrades FORAN

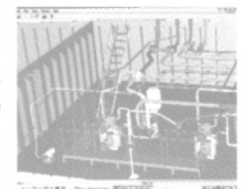
SENER has partnered with think3, Inc., a global provider of integrated product development solutions, to incorporate its technology in order to improve and upgrade its own CAD/CAM software FORAN. think3 technology will enable SENR customers to reduce the time-to-market of new products and speed up significantly the product development cycle by allowing the full integration of 2D-3D and PDM.

Circle 90 on Reader Service Card

Neilsoft Outfit Steel Module Reduces Design Time

The Neilsoft Outfit Steel Module is a new modeling tool for the Tribon M2 Shipbuilding system enabling designers to easily, quickly and accurately create and place outfit steel objects into the Tribon Product Information Model (Tribon PIM). The outfit steel objects available are Walkways, Ladders, Staircases, Equipment Foundations and Masts. This module will be marketed and sold by Tribon Solutions. In fact, last October, Tribon Solutions and Neilsoft signed a developer co-operation agreement.

Circle 60 on Reader Service Card



Products



NAPA

The Naval Architectural Package is a computer-aided engineering system for tasks such as, initial and basic design work for a ship project, comprising definition of the hull form, superstructures bulkheads and decks; naval architectural calculations such as, hydrostatics, stability levers, tank volumes, capacities, sounding and ullage tables.

Circle 101



Tribon

The new release of the Internet-based service Tribon.com contains an improved user interface making it easier for ship designers to search for and find suppliers' product information. Service Pack 3 of the Tribon M2 Shipbuilding system includes improved production information in the assembly and weld planning applications and new functions.

Circle 102



Nupas-Cadmatic

Nupas-Cadmatic is a joint venture of Cadmatic Oy and Numeriek Centrum Groningen B.V. By combining their resources the companies have created a solution that exceeds the level of traditional software offered to the market. It is a new generation of open software for hull, machinery & piping, outfitting and interior design, engineering and producing a variety of production information as well.

Circle 103



IVS

Interactive Visualization Systems (I.V.S.), provider of 3D visualization and analysis software, has released new applications and improvements to their existing software suite consisting of AvgGridder, DMagic, Fledermaus, PFMDirect and 3DEditor (area based editing).

Circle 104



ARL

Albacore Research develops ShipConstructor, an AutoCAD based product-modeling tool for ships and offshore structures of all sizes. ShipConstructor integrates functions for External Curved Plate Production, Internal Structure, Piping, HVAC, Nesting and NC Processing with a central database that can be tied to purchasing and planning.

Circle No. 105



NERA

With Nera F77, ships at sea will have at their command the communications tools associated with everyday business on land. Nera 77 terminal uses the world's first global maritime mobile Packet Data Service which gives a ship online access to a whole range of applications like the internet and e-mail.

Circle 106



CADKEY

CADKEY Workshop is a Windows-based software product that enables engineers to craft three-dimensional models and manufacturing drawings. The product allows total editing control of native and imported geometry, excellent support for complex surfacing and an easy to use approach to both two-dimensional drawing and three-dimensional modeling.

Circle 107



AeroHydro

AeroHydro, Inc. of Southwest Harbor, Maine, is a pioneer in the field of Computer Aided Design (CAD) for boats and ships, and has served the needs of the marine industry for over 25 years. More than 500 designers and builders worldwide use AeroHydro's computerized 3D and marine design software as an integral tool in their daily business.

Circle 108



Refman

REFMAN is a computer based refit/repair management system. REFMAN consists of three software modules; specification generator, cost control for recording, analyzing and reporting on the cost of jobs and shipboard defect recording for recording defects.

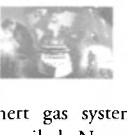
Circle No. 109



Harbormaster

Harbormaster Marine, Inc., (HMI) is a United States manufacturer of heavy-duty Marine Outboard Drive Propulsion Systems and Tunnel (Bow) Thrusters. Harbormaster developed the first heavy-duty marine outboard drives more than 50 years ago. They have propelled everything from landing craft to ferry boats to coal barges.

Circle 110



Aalborg

Aalborg Industries produces marine boilers, burners, heat exchangers and inert gas systems. They recently unveiled New MISSION™ boiler. With the oil-fired MISSION™ OB boiler ready for launch at Nor-Shipping 2003, the R&D engineering team of the Aalborg Industries' Group has applied the bottom-fired concept. Hence the type designation OB = Oil-fired and Bottom.

Circle 111



Aura Marine

Aura Marine Ltd. Designs and manufactures auxiliary systems such as oil fuel supply units, cooling water lubrication oil units as well as catalytic converter systems for power stations and marine industries. Serial production economies of scale and high quality tailored manufacturing are combined in Auramarine products.

Circle 112



Walterscheid

WALFORMplus is a positive tube fitting system that consists of just three components. The mechanically reshaped tube end is positively connected by a conventional DIN fitting body and a DIN nut, the only possible leakage path being sealed off by an elastomer ring.

Circle 113



TeleSea

TeleSea has debuted its line of high-speed offerings from Wheat Wireless Services, Inc. Their communication network provides broadband service for mariners traveling within 30 miles of the coast. TeleSea's technology can provide the maritime community with internet capabilities at sea with greater speeds and a higher overall performance.

Circle 114



Computer Dynamics

Computer Dynamics has introduced the new Survivor WildCat, which is a 15 in. sunlight-readable, corrosion-resistant computer that is designed for use in the harshest industrial environments. It is designed for unparalleled computing and features a 1GHz Intel Pentium III with up to 512M SDRAM, a 40 gigabyte hard drive, Compact Flash and ATA.

Circle 115



Boat Life

Boat Life manufactures products including, but not limited to, adhesives, sealants, epoxies, cleaners and waxes to meet the needs of our customers. Based upon a foundation of honesty and integrity, we provide profitable solutions to our customers' problems through teamwork, innovation and mutual respect.

Circle 116



Globalstar

Globalstar USA provides sales and rentals of Globalstar voice and data satellite phone equipment and services to customers throughout the United States and the Caribbean. Globalstar USA was one of the first providers to offer Globalstar satellite phone service, launching commercial service February 2000.

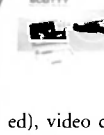
Circle 117



Marcor

Marcor Remediation, Inc. (MARCOR) is a specialty contracting firm that provides a full range of environmental contracting services, nationwide worked behind the scenes to overhaul the USS Enterprise before its deployment to Iraq. MARCOR is also working on the USS Ronald Reagan which is being built by Northrop Grumman Newport News.

Circle 118



SCOTTY

The SCOTTY Mobile is a waterproof, shock-resistant (military tested), video communication unit with a high intensity industrial display protected by an anti-mirroring metal steam-plated screen. It runs through satellitephone, VSAT, ISDN, IMUX, leased line etc. and is based on an industrial PC. The SCOTTY Mobile is truly an all-in-one unit.

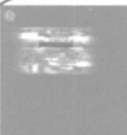
Circle 119



NLB

NLB 40201D pump unit provides up to 40,000 psi (2,800 bar) of water jetting pressure to NLB's automated Crawler, to quickly remove coatings and rust (even barnacles) from ships. Vacuum recovery included. Rugged, reliable pump has flow of just 6 gpm (23 lpm).

Circle 120



Guascor

Guascor has been working for over 30 years in the manufacturing of diesel engines for propulsion and auxiliary applications as well as generation and cogeneration systems with diesel and gas engines. They are certified by Lloyds Register Classification Society.

Circle 121



UPC

UPC's Marine Guard Floating Monopile Donut Fenders provide a fendering system to meet various docking situations. Marine Guard Fenders are constructed with the same materials as the foam-filled fenders and buoys. Marine Guard fenders skin are composed of a thick protective polyurethane elastomeric skin material.

Circle 122



Kiene

Kiene K-Series Cylinder pressure indicators provide a simple reliable way to measure diesel engine combustion pressures. This is done to improve engine performance, reliability and economy. Kiene also manufactures a complete line of indicator valves. These valves are installed in diesel engines to allow access for combustion pressure measurements.

Circle 123



General Thermodynamics

The BMEP Engine Cylinder Balancer Model 300-A allows you to improve fuel efficiency, maximize developed power, and reduce maintenance costs by balancing the load carried by each of your engine's cylinders. If you spend \$3,000 per day on fuel and reduce that amount by only 1%, you will save enough to purchase the BMEP Engine Cylinder Balancer in only 30 days!

Circle 124



Donaldson

Donaldson's DOC (Diesel Oxidation Catalyst) muffler is a new retrofit solution that reduces diesel engine emissions. The DOC muffler is a direct replacement for most Original Equipment mufflers and meets the requirements of the U.S. Environmental Agency (EPA) and California Air Resources Board (CARB).

Circle 125

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#
30	3PS Inc. 3 Point Solutions	wireless products for ships	200	25	InPlace Machining	crankshaft repair	230
6	ABB Turbosystems AG	turbochargers	201	30	Intercontinental Engineering	winches/couplers	231
14	Albacore Research	CAD/CAM	202	10	Island Boats	boat builders	232
14	American Vulkan	couplings	203	19	IZAR	shipbuilders	233
51	Anchor Marine	anchors & chains	204	37	Japan Radio	communications	234
18	Arion International	thermal imaging	205	C4	Karl Senner	marine propulsion equipment	235
15	Austal USA	aluminum shipbuilder	252	50	Kiene Diesel	diesel cylinder indicators	236
23	Ballast Technologies	ballast	206	19	Kongsberg Maritime Ship Systems	ship systems & simulators	237
46	Boll Filter	filters	272	14	LC Doane	lighting systems	238
11	Cadmatic	CAD/CAE/CAM software	207	25	Ludeca Inc.	bore alignment tools	239
13	C-Map Commercial	electronic charts	208	42	Marine Exhaust Systems of Alabama	water cooled manifolds	240
22	CMP Asia Ltd-Marintec China	exhibition	274	8	MTN	communications	241
17	Comnav Marine Ltd.	autopilot	209	49	Markisches Werk Halver	gas exchange optimizer	242
22	Creative Systems	software	210	16	McElroy/Catchot Winch Co.	deck machinery	243
35	Curacao Drydock	ship repair yard	212	12	Motor-Services Hugo Stamp	diesel engine spare parts	244
45	The Delamar Company	slade fluid sealing	261	16	Ocean Technical Systems	ship repair	245
16	Desmond Stephan	swirl off scarifiers	213	24	Omnithruster Inc.	thrusters	246
3	Detroit Diesel	diesel engines	214	16	Rasmussen Equipment	marine equipment	247
7	Deutz	diesel engines	215	41	Sanitary For All	sanitation systems	248
36	Dolphin Exhibitions	exhibition	271	2	Sea Ark Marine	boat builders	249
38	EJ Krause	exhibition	223	1	Sea Tel Inc.	communications	250
27	Electronic Marine Systems	tank level indicators	216	21	Seawave	digital communications	251
29	Electronic Marine Systems	tank level indicators	217	16	Sierra Equipment Corp	shipyard equipment	254
31	Electronic Marine Systems	tank level indicators	218	9	Sigma USA	coatings	255
33	Electronic Marine Systems	tank level indicators	219	C3	SNAME	exhibition	256
40	EMS Satcom	satellite systems	220	4	Stratos	satellite communications	257
40	Eurocom Industries A/S	satellite systems	221	28	Superior Energies	insulation manufacturers	258
18	Ferro Corporation	coatings	222	31	Technotibre Pte.Ltd.	lifeboat & davit maintenance	259
32	Flagship Marine	marine a/c	273	43	Telenor Satellite Service-Marlink	satellite communications	260
23	Foss Environmental	port security	224	39	Thrane & Thrane A/S	communications	263
50	General Thermodynamics Corp.	cylinder power equalizer	225	28	Tuthill Energy Systems	marine ventilators	264
45	GJ Wortelboer	chains	226	5	United Defense	ship repair & conversion	265
17	G.T.R. Campbell Marine	new shipbuilding	211	15	Vigilant Marine Systems	gas and level monitoring	253
C2	Guascor Inc.	diesel engines	270	17	Waterman Supply	marine equipment	266
48	Harbormaster Marine	propulsion systems	227	42	Western Machine Works	deck machinery	267
44	The Havnen Group	consulting group	262	14	Wynn Marine	windscreen & window wipers	268
34	Helkama Bica Oy	marine cables	228	51	ZF Marine Group	marine propulsion equipment	269
10	Hotel Monteleone	hotel	229				

The listings above are an editorial service provided for the convenience of our readers.



Products & Services



New England Marine Electronics

GMDSS w/Radar ABYC Electricians
FCC Vessel Safety Inspections AIS
Troubleshooting Specialists
Major Mfg. Sales, Install, Service
Mobile Shops Equipment Repair

Toll Free: 866-246-5439 Fax: 518-431-0022
www.newenglandmarineelectronics.com

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.aetnaengineering.com

e-mail: aetna@fireboy-xintex.com

LOWER OPERATING COST

Lifetime
Warranty



- More Power
- Less Smoke
- Save Fuel

CLEANS ENTIRE FUEL SYSTEM

Fuel Optimization Certified by EPA Approved Lab
Available through Major Engine Distributors
CARB# D-538

ALGAE-X 877-425-4239
Fuel Optimization www.algae-x.net

Tel: 239-463-0607 Fax: 239-463-7855 algae-x@algae-x.net

Daily updated
comprehensive
information
is just one
click away.



www.MarineLink.com

SCALE MODELS

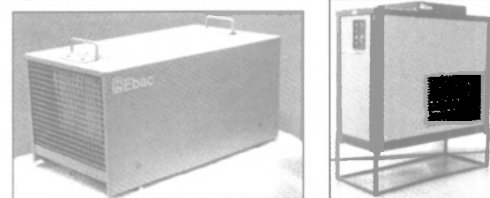


SCALE REPRODUCTIONS
WWW.2SCALE.COM

9121 PRECISION PL. 251-928-3629
FAIRHOPE, AL 36532

DEHUMIDIFIERS FOR EVERY SITUATION

- Prevent rust and corrosion
- Stop dampness from condensation
- Reduce ventilation, heating, and maintenance costs
- Prevent unpleasant environments and odors
- Maintain controlled humidity
- Eliminate mold and mildew



CAPACITY OF 6 GALLONS TO 52 GALLONS/DAY

Ebac
www.ebacusa.com

Ebac Industrial Products, Inc.
704 Middle Ground Blvd.
Newport News, VA 23606
Telephone: 800-433-9011
Fax: 757-873-3632

Peck & Hale 180 Division Avenue, West Sayville NY 11796
Tel: (631) 589-2510 Fax: (631) 589-2925
Web Site: www.peckhale.com
e-mail: sales@peckhale.com

Release-A-Matic H44 R.A.M. Hook

Features:

- Quick disconnect
- Remote release or disengagement
- Place loads where access is restricted
- Saves Manpower
- Wide range of angles of release



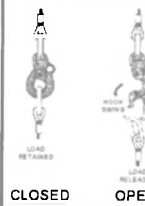
101 Applications!!

- Towing
- Maritime
- Construction
- Material Handling
- Fishing
- Boating
- Lifeboats
- Laboratory

Specifications:

Material: Heat Treated Forged Steel
Finish: Zinc or Cres.
Strength: S.W.L. M.B.S.
H44-3L 2,000 lbs. 8,000 lbs.
H44-3 4,500 lbs. 18,000 lbs.
H44-8 18,000 lbs. 71,700 lbs.

HOW IT WORKS



Peck & Hale is your Full Service Cargo Securing Systems
and Equipment Supplier!
Military • Maritime • Railroad • Aircraft Applications
Sockets • Hi-shock Chain • Wire & Web Lashing Tiedowns



SHAFT HORSEPOWER MEASUREMENT The Digital Torque Meter System

- Fiber Optic Sensors
- Accurate & Repeatable
- Simple Installation
- Easy Calibration
- HP & Engine Hours
- Competitively Priced
- Sea Trials
- Purchase or Lease

The DTMS measures shaft horsepower, torque & RPM. Calibration is accomplished by turning gear at dock or coasting the shaft down at sea while using the step by step manual. The system consists of an electronic display/enclosure, fiber optic cables, stationary sensors & interrupters, and interrupter rings that flex over the shaft. We can interface to other instrumentation and customize as required. The DTMS can be set up either as a permanent or portable system.

Instruments, Computers & Controls, Corp.
TEL 603-628-3900 / FAX 603-628-2884 Email RHICC@aol.com



WHIT CLAD 2314 Underwater Epoxy Patch



**Repair, Seal & Coat
in "wet" environments**

- Patches leaks in pipelines
- Protects against corrosion
- 100% solids epoxy system
- Adheres to aluminum, steel, fiberglass, concrete and wood

www.whitmanpolymers.com

Whitman Polymers, Inc. • Lawrence, Mass. • FAX (978) 975-2621



STOCKS IN MAJOR U.S. PORTS
ASSOCIATED COMPANIES IN MEXICO,
EUROPE AND THE FAR EAST

21 CHARLES ST., WESTPORT, CT 06880
Ph: 203-226-5200 Fx: 203-226-5246
ANKERPAINT@aol.com



WORLD-WIDE TURN-KEY TOW-DELIVERIES, TOW-
PREPARATIONS, ANY DWT, SURVEY-& INSURANCE
ASSISTANCE, DEMO-VESSEL & EQUIPMENT SALES.
http://www.nordicship.com

THE MARINE MART

The Classified
and Employment Section



Products & Services

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

Protected Franchise Areas Available!

Contact
Sea Tow Services
International

1-800-4-SEATOW

JON M. LISS ASSOCIATES, INC.

63 BOVET ROAD NO. 503 • San Mateo California 94402

NAVY STANDARD
VANEAXIAL
FANS
Delivery
From
Stock

(650) 573-9191
Fax (650) 572-8458

jon411@pacbell.net

Want the very
latest maritime
news e-mailed
to you daily?
It's one click
away at ...

MaritimeToday.com

A. R. LARSEN COMPANY INC.

The Leader in Custom Galley Equipment, Design & Fabrication

www.marinegalley.com

(425) 861-8868 • FAX: (425) 861-8668 1-800-735-7286 or (425) 861-8868 arlarsenco@yahoo.com • Redmond, WA

THE MARITIME GROUP

MARITIME REPORTER AND ENGINEERING NEWS

MarineNews

COMPLETE ADVERTISING SOLUTIONS

THE MARITIME GROUP
118 East 25th Street, New York, NY 10010
Tel: 212-477-6700, Fax: 212-254-6271, E-mail: info@marinelink.com

Vesconite Rudder & Stern Tube Bearings

- Low friction • Low lube • Long life • No swell
- ABS, Lloyds, etc approvals • For high loadings
- Largest stock • Up to 730mm Ø • Fast airfreight

Full info / stocklist www.vesconite.com
Tel +27 57 11 616 44 44 or
UK Toll free 0800 731 9745
USA Toll free 1866 635 7596

STCW

Practical and Written
www.SeaSchool.com

Coast Guard
Approved
Courses

800-237-8663

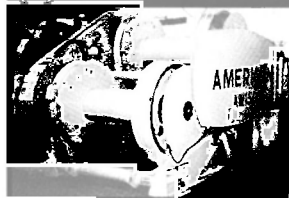
We sell cases for just about anything!

OrionCase L.L.C.
409-A Mecca Drive
Lafayette, LA 70508
Tel: (337) 291-1847 Fax: (337) 291-1850
www.orioncase.com



Vessels for Sale/Charter

(2) New Double Drum - Anchor Winches



Barge Mooring System
Model AW1500
150,000# 1st layer SLP
3,000' 1-1/2" W/R Cap / drum
6-71 GM-TD/TC
\$225,000.00 / ea.



(1) Crewboat
29' Alum, GM 6-71
Located SF, CA - USA
\$33,000.00 (or best offer)

RASMUSSEN EQUIPMENT COMPANY
(800) 227-7920 • info@rasmussenco.com • www.rasmussenco.com

**TOP DOLLAR PAID
BARGES WANTED SHIPS,
TUGS, ALUMINUM BOATS
FOR SCRAP METAL.**

BAY BRIDGE ENTERPRISES LLC

JACOBSON METAL COMPANY
IS BUYING ALL SCRAP METAL
AND REUSABLE EQUIPMENT.

PH: (757) 543- 2006

FX: (757) 543- 6632

Ask for- Mario Mazza, Tim Mullane

4300 BUELL St.
CHESAPEAKE, VA. 23324

FOR SALE / CHARTER

(1) STEEL LIQUID CARGO BARGE



Size: 120' x 33' x 10.5' • 6 compartments mid-body

Liquid Capacity: Approx. 188,416 Gallons

Deck Capacity: 578 L. Tons (piping below deck)

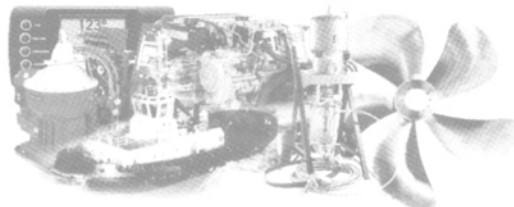
Built: 1989 • ABS LL org issued • Located Pier 96 SF, CA

Condition: Excellent Unused condition

Price and specifications available upon request

rich@rasmussenco.com - Phone: (800) 227-7920

**Selling your
vessel
or
marine
equipment
is easy!**



A classified ad in **MarineNews**
is one of the fastest and cheapest
ways to sell any marine item...
whether it's new or used equipment...
a commercial vessel...
or any kind of service.

Each month the classified section in
MarineNews is read by over **22,000**
marine industry buyers...
ship and boat owners...
shipyards... boatyards.
Its **18 times** a year frequency
means your ad gets results... **fast!**
MarineNews reaches the entire
North American marine industry.

Experience the selling power of
MarineNews classifieds!
Contact a **MarineNews**
representative today!

Florida Office
Tel: 561-732-1659

New York Office
Tel: 212-477-6700

E-mail: info@marinelink.com



Specializing In Barges



◆ Single or Double Hull, Inland or
Ocean-Going

◆ Design, Construction &
Modification

◆ Chartering, Sales & Brokerage

Ask for Bill Gobel or Jack Breshears

503-228-8891 1-800-547-9259

3121 SW Moody Avenue, Portland, Oregon 97239

**BUILDING
SOLID
SALES
LEADS
THROUGH
SUPERIOR
CIRCULATION.**

**MARITIME
REPORTER
AND
ENGINEERING NEWS**

...the only way to build sales!

Call: 212-477-6700

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

CRANE BARGE FOR SALE

BUCYRUS ERIE 88-B Crane S/N 138913 Pedestal mounted on 155' x 50' x 10' deck barge:

- Crane certified May 2003, barge drydocked February 2003
- 120' Lattice Boom in 5 sections
- Pedestal Height above deckline 22'. Deck to boom heel pin 26'3"
- Cummins KT1150C rated 405 HP @ 2000 RPM
- Main 4 part and auxiliary 2 part blocks included
- McGinnis approximately 10 CY clamshell bucket
- 4000 Gallon fuel capacity in two underdeck tanks
- Barge S/N 262267 by Nashville Bridge later modified/strengthened for crane. Equipped with one 3 drum American Hoist 70B deck winch and one Clyde model 220 two drum, both GM 454 powered. 40' Storage container on deck. Deck generator 3 phase 60 KW Detroit 471 driven.

Package also includes 203' x 45' x 11'6" Deck Barge used in conjunction with crane above as cover handling barge. Will sell as separate item.

Contact:

Stevedoring Services of America
New Orleans, Louisiana

Sid Hotard, (504) 212-4005 Fax (504) 269-3402

Baker Maritime Associates
New Orleans, Louisiana

Kingsley Bakler, (504) 393-1880

Employment/Recruitment

MARITIME INJURIES

Schechter, McElwee & Shaffer's attorneys have over 70 years of combined experience representing injured seamen, offshore workers and longshoremen in cases nationwide. Our services are on a contingent fee basis - there is no bill or fee for our services unless we recover for you.

Schechter, McElwee & Shaffer, L.L.P.

Houston & Galveston, Texas
Nationwide 24-hour help line

1-800 282-2122

(713) 524-3500

Website - www.smslegal.com

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

L & L EMPLOYMENT

Immediate Openings for AB'S & O/S.

Company paid fee for 100 TON CAPT & DDE's. Calling all EXPERIENCED TUG

CAPTAINS. OUTV's. *Paid Trans. Top*

Pay for 200 TON CAPT - 1600 TON

CAPT/MATES. CHIEF, ASST. ENG -

3RD ASST ENG . *Excellent Pay.*

QMED'S, TANKMAN, DH'S, UNI ENG

Need Immediately.

888-580-9600

SOUTH FLORIDA'S PREMIER YACHT SERVICE FACILITY IS SEEKING SKILLED, MOTIVATED, PROFESSIONALS TO FILL POSITIONS AS Marine Carpenters/Joiners, Marine Diesel Generator Mechanics, Systems Mechanics, & Marine Painters.

COMPETITIVE SALARIES AND EXCELLENT BENEFITS PLUS A GREAT LOCATION!

RYBOVICH SPENCER

4200 No. Flagler Drive, W. Palm Beach, FL 33407

(561) 840-8113 Fax: (561) 844-8393

www.rybovich.com e-mail: beths@rybovich.com



Administration - Construction
Crewing - Engineering
Finance - M & R
Operations - Sales

(Established 1969) P O Box 260 • Mercer Island, WA 98040 • 206-232-6041

Positions Available:

**Captains • Mates
Pilots • Engineers
Tankerman • AB's
QMED's • OS's**

ATT: All boat companies. When you are in need and your boat can't move, call for all crew members - trip or permanent.

We are here for you.

BUCCANEER



Buccaneer Crewing
The Offshore Employment Specialists

866-675-6300

Fax: 251-442-3696

hr@buccaneercrewing.com
www.buccaneercrewing.com

THE WORLDWIDE COMMERCIAL MARITIME INDUSTRY IS IN THE PALM OF YOUR HAND.



- Audited global circulation of over 31,000 ...
- Unparalleled pass along readership ...
- Bonus distribution at maritime conferences and expositions throughout the world ...

With **MARITIME REPORTER** thousands of international maritime companies are within your grasp.

118 East 25th Street, New York, NY 10010, Tel: 212-477-6700, Fax: 212-254-6271, E-mail: info@marinellink.com
215 NW Third Street, Boynton Beach, FL 33435, Tel: 561-732-1659, Fax: 561-732-6984, E-mail: info@marinellink.com

**MARITIME
REPORTER**
AND
ENGINEERING NEWS



Employment/Recruitment

1600 Ton + / uninspected fishing vessel needs Licensed Chief for H & G Factory Trawlers operating in the Bering Sea and Gulf of Alaska. 65 day contracts. Must pass pre-employment drug test, Pay is Based on percentage of catch or 7,500 guarantee per month – whichever is greater. Employee paid benefits available after 30days and 401k after one year. Cat or Detroit Aux., Sabroe/York Reefer systems R-22, Rapp Hydema Hydraulics. Must be able to work with multi-racial crew.

Send Resume to:
Iquique US LLC
4242 22nd Ave W Seattle WA 98199
or Fax to 206/286-1793
Attn: Human Resources

BOAT JOB LISTINGS UPDATING
DAILY
CALL 24 HOUR
MARINE JOB HOTLINE
504-889-JOBS (5627)



SALES DIRECTOR for the marine industry

Viking Life-Saving Equipment (America) has experienced growth in sales during past years and is looking to grow even further. The expected growth calls for strengthening our sales force and we are seeking a full-time Sales Director

Job Requirements: based in Miami, the position embraces responsibility for all Viking commercial and recreational (sales and service) activities in the Americas, and involvement in the global strategic development of the VIKING Group as such. Reporting to the Managing Director and supporting Sales Assistants and Regional Sales Managers, this position is responsible for representing Viking Life-Saving Equipment (America), Inc. and its marine safety products to the general public, for bringing about sales at the highest possible rate, for coordinating sales transactions from first contact to final settlement, strategic sales included, and for marketing VIKING's products while maintaining a high level of customer service. B.A. in Business (Masters Degree in Sales/Marketing) as well as having minimum 5 year of hands on management level experience from a multinational organization. The ideal candidate has a marine or offshore industry background and possesses excellent verbal and written communications skills (bilingual a plus but not necessary). In addition, strong interpersonal skills, strong communications and marketing experience, analytical skills and the ability to work with the Management Group. Some travel in the Americas and Europe is required

The Viking Group: VIKING LIFE-SAVING EQUIPMENT is an innovative and truly global group. Based on long established value Viking places our customers at the centre of our endeavors. As a family owned company the 750 member global VIKING family offers a challenging and supportive background for a newcomer to exert his/her influence and contribute with his/her experience and skills to benefit the group. Having a group turnover in excess of \$100 mill, the group is represented by its own sales and servicing companies situated in 26 locations world-wide. In addition, our operations cover a global network of 260 authorized servicing stations and own manufacturing facilities in Denmark and Thailand.

An executive package with great benefits and salary commensurate with experience and qualifications are available to the qualified applicant. Please send your cover letter and resume to Poul V. Jensen, Managing Director at pvi@viking-life.com by July 18, 2003

Visit our website to learn more about VIKING at www.viking-life.com



- Ship/Boat Operators
- Ship/Boat Building/Repair
- Offshore Drilling/Contractor
- Naval Architect/Marine Engineer
- Marine Manufacturer/Supplier
- Admiralty Law
- Marine Insurance
- Government
- Administrative
- Academy/School
- Employment Agencies
- Executive
- Administrative/Management
- Sales/Marketing
- Diving
- Stevedoring
- Every Other Maritime Job

**Employers and Job Seekers are
one click away from every area
of the Global Marine Industry
at MaritimeJobs.com.**

THE MARITIME GROUP
118 East 25th Street New York, NY 10010
Tel: 212-477-6700 Fax: 212-254-6271
215 NW Third Street Boynton Beach, FL 33435
Tel: 561-732-4368 Fax: 561-575-3217
E-mail: info@marinelink.com



Keough Associates

Since 1975, providing Professional Search and Recruitment Services in areas of Middle and Senior Management, Technical Support, Engineering, Operations, etc., to the Maritime Industry

Michael R. Keough, CPC
PH: (718) 979-8698
FAX: (718) 667-8347



DEPUTY GENERAL MANAGER

- Ferry Division -
Excellent Salary & Benefits

The Golden Gate Bridge, Highway & Transportation District's Ferry Division, located on the shores of the San Francisco Bay, currently has an excellent and rare opportunity for an experienced, hands-on professional to administer and direct all activities & functions for the Division. With six ferries and a staff of approximately 100, this Division provides excellent daily transportation services to 1.8 million customers per year.

Ideal candidates will have a BA/BS in marine transportation, business administration or related field along with 10 years of relevant management and executive level marine experience in a major transportation system, including experience in labor relations and public relations.

The District offers an energetic and rewarding work environment. Join the motivated team that keeps people moving! Qualified individuals should forward their resume to:

GGBH&TD · HR Department · Attn: D. Keyes
1011 Andersen Drive · San Rafael, CA 94901
FAX: (415) 459-6075 · Email: dkeyes@goldengate.org



Application deadline is 4:30 p.m., 07/31/03. For more information, call: (415) 257-4526, or visit our website at www.goldengate.org.
The District is proud to be an EOE, drug-free workplace.

THE MARINE MART

The Classified
and Employment Section



Professional

BAYFRONT MARINE, INC.
EXPERT WORLDWIDE VESSEL DELIVERY SERVICE
EXPERIENCED PROFESSIONALS
Licensed
Masters, Engineers and Crews
Call Mel or Diane Longo (904) 824-8970

The ultimate stop for solving marine propulsion shafting
vibration or design problems

CADEA www.cadea.hr

TRE M. PAVLINOVICA 6 • HR-21000 SMIT • CROATIA
PHONE: + 385 21 490 151 • FAX: + 385 21 490 154

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



BISSO MARINE

- OFFSHORE & INLAND
- SALVAGE & WRECK REMOVAL
- PLATFORM REMOVAL
- PLATFORM INSTALLATION
- HEAVY LIFT
- SURVEY
- DIVING

P.O. BOX 4113
NEW ORLEANS, LOUISIANA 70178
Phone: (504) 866-6341
Fax: (504) 865-8132
www.bissomarine.com
e mail info@bissomarine.com


Engineering Solutions Government Services Group

CDI Marine Company Shipbuilding Life Cycle Support
904-805-0700

The M&T Company Military Aviation Support
732-657-5600

JACKSONVILLE, FL • BREMERTON, WA
ISLANDIA, NY • PHILADELPHIA, PA
LAKEHURST, NJ • PATUXENT RIVER, MD
PASCAGOULA, MS • PORTSMOUTH, VA
SEVERNA PARK, MD • SAN DIEGO, CA
WASHINGTON, DC

Visit us at our web site at <http://www.cdi-gs.com> Email: cdi-gs@cdicorp.com



GHS
General HydroStatics
Ship Stability and Strength Software
Creative Systems, Inc.
Creators of GHS

P.O. Box 1910 Port Townsend, WA 98368 USA
phone: (360) 385-6212 fax: 385-6213
email: sales@ghsport.com
www.ghsport.com



BMT Designers and Planners
Naval Architecture
Marine Engineering
Environment & Safety
Offshore Engineering Services

2120 Washington Blvd. Phone: (703) 920-7070
Suite 200 Fax: (703) 920-7177
Arlington, VA 22204-5717 Email: dandp@dandp.com
Website: www.dandp.com

sms BMT Scientific Marine Services
Marine Instrumentation
Hull Monitoring
Trials & Testing
Ocean Engineering

9835B Whithorn Drive 101 State Place, Suite N
Houston, TX 77095 Escondido, CA 92029
Phone: (281) 858-8090 Phone: (760) 737-3505
Fax: (281) 858-8898 Fax: (760) 737-0232
Email: sms@scimar.com - Website: www.scimar.com

FL BMT Fleet Technology Limited
Concept Development
Materials and Welding Technology
Structural Integrity Assessment
Icebreakers & Arctic Engineering

311 Legget Drive Phone: (613) 592-2830
Kanata, Ontario Fax: (613) 592-4950
Canada K2K 1Z8 Email: lleel@fleetech.com
Website: www.fleetech.com

FLEETING SERVICE

Central Boat Rentals, Inc.
Morgan City, LA
20 ft. Draft
Barges - Boats - Ships
985-384-8200
www.centralboat.com

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

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



BRISTOL HARBOR MARINE DESIGN
a division of Bristol Harbor Group, Inc.

Naval Architects
Marine Engineers

103 Poppasquash Road
Bristol, RI 02809
phone 401-253-4318
fax 401-253-2329
www.bristolharbortgroup.com
design@bristolharbortgroup.com



CHILDS ENGINEERING CORPORATION
WATERFRONT ENGINEERING-DIVING INSPECTION

BOX 333 MEDFIELD, MA 02052 (508) 358 8845

C. R. CUSHING & CO., INC.
NAVAL ARCHITECTS, MARINE ENGINEERS,
TRANSPORTATION CONSULTANTS

30 VESEY STREET, 7TH FLOOR, NEW YORK, NY 10007
P: (212) 964-1180 F: (212) 285-1334 INFO@CRCCO.COM
WWW.CRCCO.COM

THE MARINE MART

The Classified
and Employment Section



Professional

Donjon Marine Co., Inc.

Marine Construction

Salvage

Dredging

Diving

Heavy-Lift

Towing

Cable-Lay Support

www.donjon.com inquiries@donjon.com
1250 Liberty Avenue, Hillside, New Jersey 07205
Phone: (908) 964-8812 Fax: (908) 964-7426

Detail Design & Drafting 3D Modeling, Lofting, Nesting



Tel: 709-834-7428
www.genoadesign.com

Genoa Design International Ltd.

SPECIALISTS IN THE DESIGN OF:
• OFFSHORE SUPPORT VESSELS
• TUGS AND TOWBOATS
• BARGES
• HIGH SPEED CRAFT
• NAVAL VESSELS
• CREWBOATS
• SPECIAL PURPOSE VESSELS
• YACHTS



DESIGN, CONSULTING, SURVEYING AND DRAFTING SERVICES



GUARINO & COX, LLC

Naval Architects, Marine Designers and Consultants
639 Lotus Drive North, Suite 3, Mandeville, LA 70471
Telephone (985) 626-1600 Fax (985) 626-0016

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

HOUSTON MARINE CONSULTANTS MARINE INSURANCE CLAIMS, SURVEYS & CONSULTANCY HULL • MACHINERY • CARGO

MUKUL H. ADVANI
PRESIDENT
4509 MAPLE ST.
BELLAIRE, TX 77401

PHONE: 713-592-9867 (24 HRS)
FAX: 713-592-0244
CELL: 713-303-5677
E-MAIL: HMCTX@EVI.NET

ICI International Consultants & Investigations, Inc.

We are trained investigators, advisors and guardians. We will protect your company and its employees throughout the world. In addition we offer VIP protection teams.

ICI operatives are trained and licensed in the following areas:

- U.S. Coast Guard license for private and commercial vessels.
- Security for marine and air travel, private and commercial
- Marine Surveyors
- Maritime investigations-3D animation reenactments of accidents and crime scenes

Phone: 212-582-3115 Toll Free: 866-977-3700
World Wide: 866-511-1110 Fax: 212-582-0028
www.ICIcompanies.com



EVERETT ENGINEERING, INC.

"INGENUITY UNLIMITED"

BEST EQUIPPED SHOP IN THE AREA
A.B.S. certified carbon & stainless steel propeller shaft weld repair
http://www.everettengineering.com
1420 W. MARINE VIEW DRIVE • EVERETT, WA 98201
FAX (425) 258-1288 • (425) 259-3117

JOHN W. GILBERT ASSOCIATES, INC. Naval Architects Marine Engineers

(781) 740-8193
FAX (781) 740-8197



75 Terry Drive, Suite 200
Hingham, MA 02043



OFFICE: (425) 787-5832
FAX: (425) 787-2522
CELLULAR: (206) 786-2354

FAB - IT - RITE, INC.

VESSEL DOCKSIDE REPAIRS & CONVERSIONS
SEAFOOD PROCESS PLANT UPGRADES

.....FULL MACHINE & FABRICATION SHOPS.....
.....MOBILE CREW WITH TOOLS.....

15332 Hwy 99 #4, Lynnwood, WA 98037
E-MAIL: RDITMER@EXCITE.COM



GLOSTEN

The Glostén Associates, Incorporated

Naval Architecture Ocean Engineering Transportation Analysis
Marine Engineering Hydrodynamics 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

Ideas Engineered Into Reality GUIDO PERLA & ASSOCIATES, INC.

Naval Architects
Marine, Mechanical & Electrical Engineers

9010 East Marginal Way South #300 Phone: 206-768-1515
Seattle, WA 98108 Fax: 206-768-9700

HEALY & BAILLIE, LLP

29 Broadway, New York, NY 10006

Providing Legal Services to the
Maritime Industry Since 1948

Contact: William N. France, Esq.
(NA & ME and PE)

tel (212) 709-9226 fax (212) 487-0326
www.healy.com

John J. McMullen Associates, Inc. An Employee Owned Company



Naval Architects
Marine Engineers
Program Support Specialists

Alexandria, VA • Washington, DC • New York, NY
Newport News, VA • Pascagoula, MS • Pittsburgh, PA
Philadelphia, PA • Bath, ME • Port Hueneme, CA
Bremerton, WA • N. Charleston, SC

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

FBM Babcock Marine

Proven design, build and support of:

- High Speed Ferries
- Para-Military Vessels
- Specialist Craft

Supported design licences available for shipyards world-wide
Delivering quality designs and completed vessels since 1899



FBM BABCOCK MARINE
5 Town Quay, Southampton, SO14 2HJ UK
tel: +44 (0)23 8021 0000
fax: +44 (0)23 8021 0001
e-mail: fbm@babcockbes.co.uk

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

CERTIFIED
ISO 9002



JMS NAVAL ARCHITECTS
SALVAGE ENGINEERS

The sea-going naval architects

860-448-4850 • jmsnet.com

THE MARINE MART

The Classified
and Employment Section



Professional

The Lightship Group, LLC

MARINE SUPPORT SERVICES

SHIPBOARD VIBRATION • INFRARED •
VOYAGE REPAIRS • INVENTORIES

PHONE: 401 294-3341

FAX: 401 294-3415

SHIPS@LIGHTSHIPGROUP.COM

WWW.LIGHTSHIPGROUP.COM

QUONSET POINT, RHODE ISLAND

NORFOLK, VIRGINIA

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

MURILLO, MALDONADO, ARREDONDO & ASOCIADOS, S.C. ATTORNEYS & CONSULTANTS

AV. COYOACAN 936, DESPACHO 402
COLONIA DEL VALLE, CODIGO POSTAL 03100
DELEGACION BENITO JUAREZ
MEXICO, DISTRITO FEDERAL

24 HOUR TELEPHONE LINE (+52 55) 5559 1718

FAX (+52 55) 5559 1619

TELEPHONE (+52 55) 5559 1620

E-MAIL: MMAasociados@aol.com

www.mma.com.mx

CRUISE SHIP SPECIALISTS



Nautical Designs Inc.

NAVAL ARCHITECTS / MARINE ENGINEERS

2101 S. ANDREWS AVE. FT. LAUDERDALE, FL. 33316 PH. (954) 463-2033

Reliable Results

In Marine Performance Evaluation

Numerical Modeling • Model Testing • Design Evaluation

OCEANIC CONSULTING CORPORATION
Marine Performance Evaluation

St. John's, Newfoundland Canada
Houston, Texas USA

www.oceaniccorp.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

MarineLinR.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

M. ROSENBLATT & SON
An AMSEC LLC Group
Naval Architects • Marine Engineers

Naval Ships from Carriers to Patrol Craft

Ship Inspection, Maintenance & Repairs

Homeland Security Engineering Design

Integrated Logistics Support

Concept-Through-Detail Design

New Construction-Conversions

Transportation Economics

Commercial Ships & Workboats

Over 20,000 design assignments successfully completed for 1,400 clients worldwide during the past half century

New York, NY • Oakland, CA • Washington, DC • Hampton, VA • Brimerton, VA
Charleston, SC • San Diego, CA • Philadelphia, PA • AMSEC LLC Corporate Headquarters, Virginia Beach, VA
www.amsec.com 757-463-6666

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: sahin@bellsouth.net

Schrider

Naval Architects

& Associates, Inc.
Marine Engineers

P.O. Box 2546

Daphne, AL 36526

E-mail: info@schrider.com

Office: (251) 621-1813

Fax: (251) 626-1814

Technical and Managerial Solutions for Shipyards & Vessel Owners

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

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
SAN DIEGO (619) 425-4211

MARINE SYSTEMS • ANALYSIS & DESIGN



A. K. Suda, Inc.

NAVAL ARCHITECTS & MARINE ENGINEERS

- Concept & Contract Design
- Construction Drawings
- Transportation Analysis
- Owner Representation

3004 19th Street • Metairie, LA 70002

Ph. (504) 835-1500 • Fax (504) 831-1925 • info@aksuda.com

SURVIVAL SYSTEMS INTERNATIONAL



931
Industry
Road
Kenner
LA, 70062

LIFEBOAT INSPECTION, REPAIRS, PARTS.

PHONE: (504) 469-4545, FAX: (504) 466-1884.

E-mail: service@ssinola.com

MCA CONSULTANTS, 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@mcaco.com

web-site: www.mcaco.com

Phone (714) 662-0500 Fax (714) 668-0300
2960 Airway Ave., A-103, Costa Mesa, CA 92626



Alan C. McCLURE ASSOCIATES, INC.

Naval Architects • Engineers

2600 South Gessner • Suite 504 • Houston, Texas 77063
Tel: (713) 789-1840 • Fax: (713) 789-1347 • E-mail: info@acma-inc.com



McELROY/CATCHOT WINCH COMPANY, INC.

DESIGNERS OF QUALITY DECK MACHINERY, WINCHES,
WINDLASSES, CAPSTANS, SHAFT AND MACHINE WORK, AND
REPAIRS

SERVING THE MARINE INDUSTRY
SINCE 1915

P.O. BOX 4632, BILOXI, MS. 39535-4632
5921 Gulf Tech Drive, Ocean Springs, MS 39564
Phone: 228-875-6327 Fax: 228-872-7880
www.mcelroycatchotwinch.com

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

WORLD MARITIME TECHNOLOGY CONFERENCE

17-20 October, 2003 • The Moscone Center
San Francisco, California • USA

WHO SHOULD ATTEND:

- Maritime Executives
- Managers/Directors of Engineering & Technology
- Naval Architects
- Marine Engineers
- Industry Regulators

FOR MORE INFORMATION:
www.worldmaritimetechnology.org

Booth Sales - Contact Rob Howard at
www.maritimeexpo.com

Circle 256 on Reader Service Card

HIGHLIGHTS:

- Over 70 technical sessions addressing the challenges the marine industry faces in the new global environment.
- Session tracks include:
 - Ship Operations
 - Design & Technology
 - Ship Production
 - The Role of Marine Technical Organizations in the New Global Environment
- Keynote presentations and panel discussions by industry leaders.
- Exposition Hall - over 150 premier vendors and service providers.
- Professional Development.
- Networking and benchmarking opportunities with peers and industry leaders.

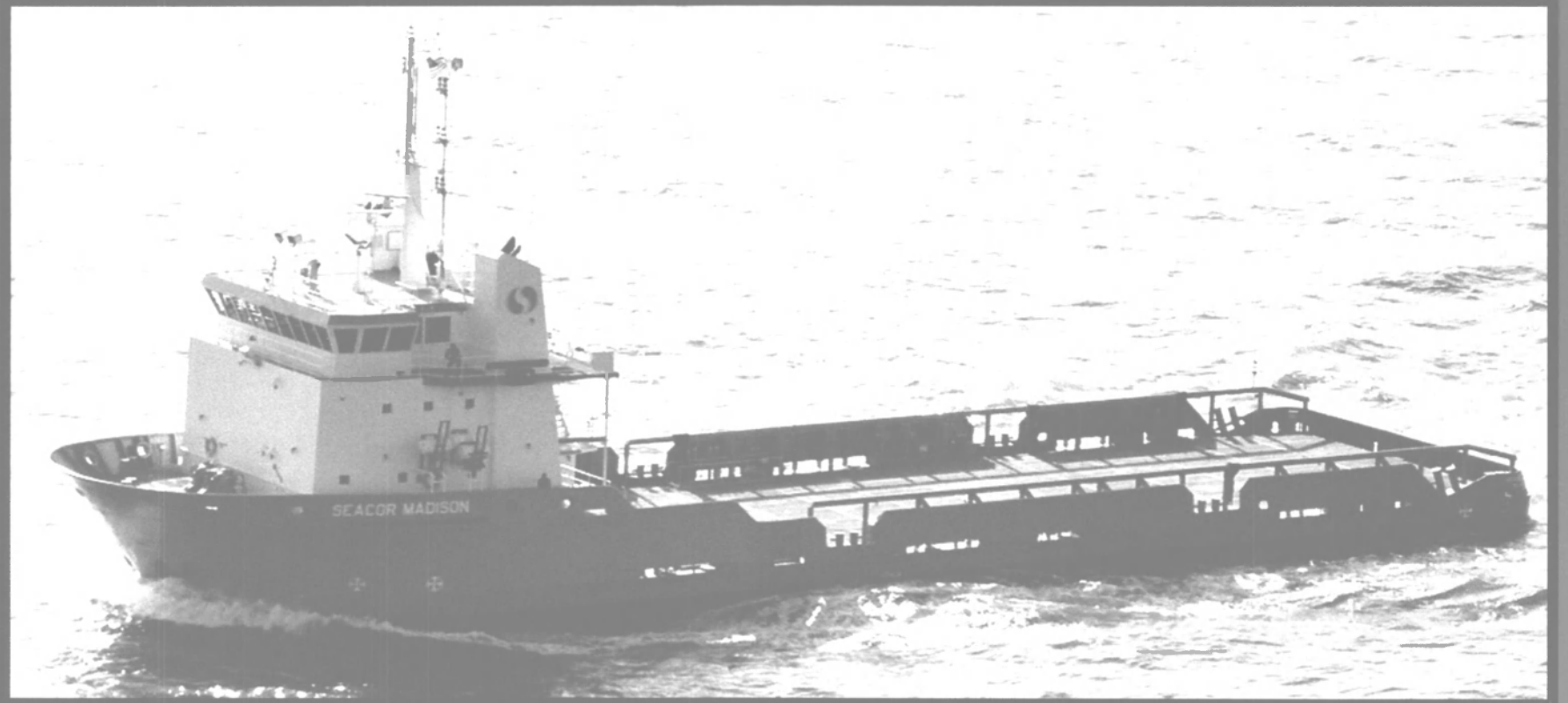
CONFERENCE ORGANIZER:

The Society of Naval Architects and Marine Engineers

PARTICIPATING ORGANIZATIONS:

- The Society of Naval Architects and Marine Engineers
- The American Society of Naval Engineers
- The Chinese Society of Naval Architects and Marine Engineers
- The Danish Society for Naval Architecture and Marine Engineering
- The Institute of Marine Engineering, Science and Technology
- The Royal Institution of Naval Architects
- The Society of Naval Architects of Japan
- The Society of Naval Architects of Korea
- Asociacion de Ingenieros Navales y Oceanicos de España
- Sociedade Brasileira de Engenharia Naval
- Schiffbautechnische Gesellschaft e.V.
- The Society of Naval Architects and Marine Engineers (Singapore)

KARL SENNER, INC ... *When Only The Best Will Do*



M/V SEACOR MADISON

KARL SENNER, INC. supplied two (2) STEERPROP SP25 AZIMUTHING PROPULSORS which are driven by CAT 3516 engines. CAT engines were supplied by Louisiana Machinery. The M/V Seacor Madison is classified as A.B.S. DP2.

OWNER: Seacor Marine
Houston, Texas

SHIPYARD: Bollinger Shipyards, Inc.
Lockport, Louisiana

REINTJES
MARINE GEARBOXES

BERG PROPULSION
CONTROLLABLE PITCH PROPELLERS
AND BOWTHRUSTERS

REXROTH
MARINE CONTROLS

 **Steerprop**
AZIMUTHING PROPULSORS

SALES, PARTS, SERVICE • 500 H.P. TO 20,000 H.P.



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>
E-mail address: service@karlsenner.com • sales@karlsenner.com • parts@karlsenner.com
Circle 235 on Reader Service Card