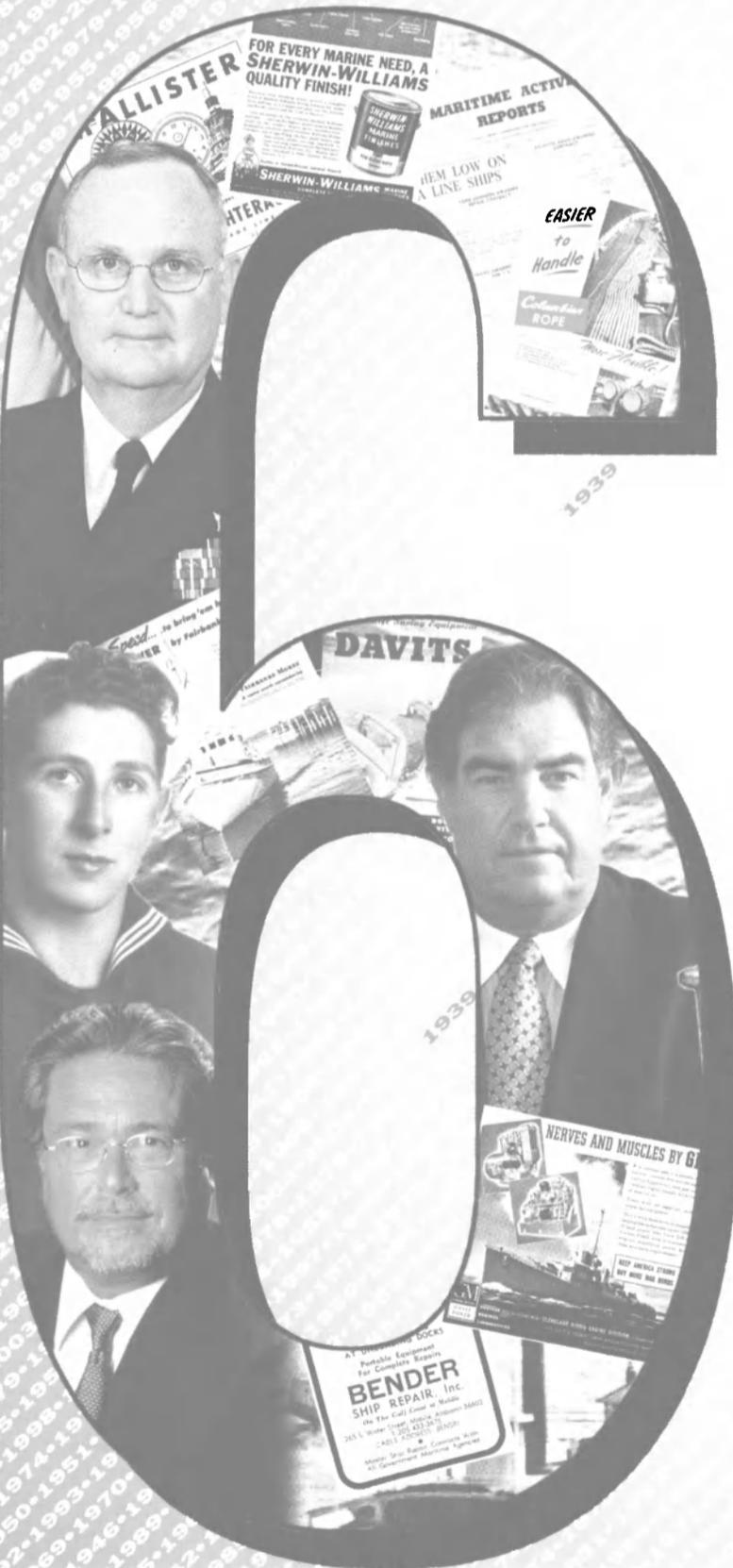


August 2004

# MARITIME REPORTER AND ENGINEERING NEWS

[www.marinelink.com](http://www.marinelink.com)



1949 STYLE

# ANNOUNCING MITAGS/PMI'S FACILITY/SHIP SECURITY TRAINING PROGRAMS



**MITAGS/PMI provide a comprehensive suite of security related programs that have been developed to assist facility/ ship operators in meeting the new training requirements outlined by the Maritime Transportation Security Act of 2002 (MTSA) and the International Ship and Port Security Code (ISPS).**

These courses can be brought to your location.

## **Security Officer for Port/Company/Ship**

**(SEC-OFF-PCS): 3 Days**

A combined twenty-one hour course that provides instruction in the duties and responsibilities for all three security officers.

Cost: \$755

Aug 30 – Sept 1	MITAGS	Baltimore
Aug 30 – Sept 1	PMI	Seattle
Oct 11 – 13	MITAGS	Baltimore
Oct 11 – 13	PMI	Seattle

## **Facility Security Officer (SEC-FSO): 2 Days**

A fourteen-hour course that focuses strictly on the duties and responsibilities of the FSO.

Cost: \$525

Aug 17 – 18	MITAGS	Baltimore
Sept 28 – 29	MITAGS	Baltimore
Nov 9 – 10	MITAGS	Baltimore

## **Maritime Security Professional Train the Trainer**

**(SEC-MAR-PRO-TTT): 5 Days**

A thirty-five hour course that assists security professionals in developing competency in the maritime security arena and to instruct other professionals in this subject. Meets MTSA requirements.

Cost: \$1,145

Oct 18 – 22	MITAGS	Baltimore
-------------	--------	-----------

## **Maritime Tactical Response - Levels 1 to 4**

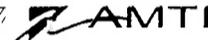
**(SEC-MTR1 to SEC-MTR4): 5 Days**

A thirty-five hour high-risk training course developed for Law Enforcement Officers with tactical training (SWAT) experience.

Cost: Call for Quote

Offered by Request

*Maritime Tactical Response taught in partnership with AMTI*



## **Facility/Ship Awareness Seminars:**

Two-hour seminars designed for personnel without specific security related duties, but must receive training under MTSA requirements. Seminars can be brought to your location or can be combined with other training programs offered at MITAGS/PMI

Cost: Call for Quote

## **Facility/Ship Security Awareness Workbooks:**

These self-study booklets include information necessary for security awareness, testing, and recordkeeping requirements. Booklets may be customized to specifically fit your organization's requirements.

Cost: \$4.25 per Booklet or \$1,500 for unlimited use. For custom booklets, please call for a quote.

## **Companion Courses Available:**

- 1-day Contingency Planning (CONT-PLNG)
- 1-day Media Response Workshop (MEDIA-RSP-WKSH)
- 2-day Damage Control (MSC-DC)
- 1-Day Chemical/Biological/Radiological Defense Training
- 1 or 5 Day Hazardous Materials Response



**Maritime Institute of Technology & Graduate Studies (MITAGS)**

**Pacific Maritime Institute (PMI)**

*The Leaders in Maritime Training*



MITAGS is internationally certified as a Maritime Simulation & Training Center by Det Norske Veritas

**MITAGS:** for custom course information, please call Tom Johnson toll free: (866) 656-5569. For course scheduling, please call admissions toll free at: (866) 656-5568 or via e-mail at [admissions@mitags.org](mailto:admissions@mitags.org).

You may also visit our website at [www.mitags.org](http://www.mitags.org).

# MARINE ENGINEERING TRAINING

The United States Merchant Marine Academy (USMMA) at Kings Point, New York is one of the five federal service academies and America's premier maritime institution. Along with the undergraduate program, USMMA offers the most extensive maritime and transportation professional development program in the United States.

USMMA GMATS teaches over 35 marine engineering courses and over 140 other courses in Nautical Science, Maritime Business, International Transportation and Maritime Security. Our instructor staff includes outstanding USMMA faculty, guest lecturers, and industry experts. The majority of our classes are hands on training using the Academy's 22 magnificent engineering laboratories and waterfront vessels. In addition to our regularly scheduled classes, almost anything can be customized to meet your company's needs.



**Diesel Crossover Course**  
(USCG & STCW Approved)

**Medium Speed Diesels**

**Slow Speed Diesels**

**Basic & Advanced Welding**

**Basic & Advanced  
Machine Shop**

**Refrigeration**  
(Universal Certification)

**QMED FOWT Course**  
(USCG & STCW Approved)

**AutoCadd**

**Pumps**

**Auxiliary Systems**

**Fundamentals of Diesels**

**Ship Activation of the RRF**

**Programmable Logic  
Controllers**

**For More Information, Please Contact:**

**USMMA Global Maritime and Transportation School**  
300 Steamboat Rd, Samuels Hall  
Kings Point, NY 11024-1699

**PH: 516-773-5149**

**FX: 516-773-5353**

**[www.usmma.edu/gmats](http://www.usmma.edu/gmats)**

**email: [frangoss@usmma.edu](mailto:frangoss@usmma.edu)**

## **United States Merchant Marine Academy Global Maritime & Transportation School**

## Contents

### Government Update

#### 14 Declaration of Security

Paperwork trails such as the Declaration of Security are new and important means to combat terror. — by **Dennis L. Bryant**

### Satellite Communications

#### 18 Maritime Takes to the Air

Innovations in satellite communication technology are allowing marine operators to run fleets more efficiently.

### 65th Anniversary Edition

**24 Training & Education** Glen Paine discusses the evolution of technology and its role in maritime training and education.

**28 Security** While 9/11 has magnified it, port security has been a top U.S. Coast Guard priority since 1917. — by **Joe Direnzo III** and **Chris Doane**

**30 The Inland Waterways** AWO, a leader on U.S. waters for six decades, shares perspective on the issues that shaped today's industry.

**34 Computerization** Vessel design via computer is arguably the most significant advance for the marine industry ... ever. — by **Chris Barry**

**38 First Voyage of S.S. Michael Moran** Captain Bill Carroll shares his experience aboard a WWII cargo ship.



## 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](mailto:mren@marinelink.com) • Web: [www.marinelink.com](http://www.marinelink.com)

**FLORIDA** • 215 NW 3rd St., Boynton Beach, FL 33435  
Tel: (561) 732-1659; Fax: (561) 732-6984

### Associate Publisher

Gregory R. Trauthwein • [trauthwein@marinelink.com](mailto:trauthwein@marinelink.com)

Associate Editor • Jennifer Rabulan • [rabulan@marinelink.com](mailto: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](mailto:lowe@marinelink.com)

Asst. Production Manager Irina Tobakina • [tobakina@marinelink.com](mailto:tobakina@marinelink.com)

### CIRCULATION

Kristen O'Malley • [omalley@marinelink.com](mailto:omalley@marinelink.com)

### ADVERTISING SALES

Vice President of Sales

Lucia M. Annunziata • [annunziata@marinelink.com](mailto:annunziata@marinelink.com)

National Sales Manager

Rob Howard • [howard@marinelink.com](mailto:howard@marinelink.com)

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

North American Sales Manager

Brett W. Keil • [bkeil@marinelink.com](mailto:bkeil@marinelink.com)

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

Regional Sales Manager

Leonardo Maldonado • [maldonado@marinelink.com](mailto:maldonado@marinelink.com)

Tel: (561) 732-9670; Fax: (561) 732-8414

### Classified Ad Sales

Dale L. Barnett • [barnett@marinelink.com](mailto:barnett@marinelink.com)

### Marketing Manager

Richard Grable • [grable@marinelink.com](mailto:grable@marinelink.com)

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

### Manager, Information Services

Tina Veselov • [veselov@marinelink.com](mailto:veselov@marinelink.com)

### Manager, Accounting Services

Esther Rothenberger • [rothenberger@marinelink.com](mailto:rothenberger@marinelink.com)

### Manager, Public Relations

Mark O'Malley • [omalley@marinelink.com](mailto:omalley@marinelink.com)

### Sales Assistant

Nicole Sullivan • [sullivan@marinelink.com](mailto:sullivan@marinelink.com)

Classified Sales • Tel: (212) 477-6700

### Manager, Information Technology Services

Vladimir Bibik • [bibik@marinelink.com](mailto:bibik@marinelink.com)

### PUBLISHERS

John E. O'Malley

John C. O'Malley • [jomalley@marinelink.com](mailto:jomalley@marinelink.com)

## International Sales Operations

### Managing Director, International Sales

#### TONY STEIN

12, Braehead, Business, West Lathion EH51 0BZ, Scotland, U.K.  
Tel: +44 (0) 1506 822240; Fax: +44 (0) 1506 828085

### Germany/Switzerland

TONY STEIN • [stein@marinelink.com](mailto:stein@marinelink.com)

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 • [biscom@unitel.co.kr](mailto:biscom@unitel.co.kr)

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 • [leon@stephan-orn.se](mailto:leon@stephan-orn.se)

AB Stephen R.G. Orn, Box 184, S-271 24 Ystad, Sweden  
Tel: +46 411-184 00; Fax: +46 411 105 31

### Spain

JOSE LUIS SEVA • [jseva@viaexclusivas.com](mailto:jseva@viaexclusivas.com)

Via Exclusivas S.L., C/ Viriato, 69 SC, 28010, Madrid, Spain  
Tel: +34 91 448 9136; Fax: +34 91 446 0214

### 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](mailto:ckeil@marinelink.com)

# ShipConstructor

powering AutoCAD

3D Product Modeling inside AutoCAD

One Project - Many Users - Thousands of Parts - One Database

Database Management

Fairing

Lofting

Structure

Pipe

HVAC

Equipment

Penetrations

Plate Nesting

Profile Nesting

NC-Processing

Production Reports

Production Drawings



ShipConstructor2005 released!  
Compatible with AutoCAD 2005 & 2004  
New: Hull Module inside AutoCAD

3D cut-away product model, 210' offshore supply vessel  
Courtesy Bender Shipbuilding and Repair Co., USA and  
Guido Perla & Associates Inc., USA

E-mail: [Info@ShipConstructor.com](mailto:Info@ShipConstructor.com) Web: [www.ShipConstructor.com](http://www.ShipConstructor.com)

ARL  
Albacore Research Ltd.

Circle 203 on Reader Service Card



WHY PRE-TEST, ALPHA-TEST, BETA-TEST AND  
FINAL-TEST OUR NEW DIGITAL CELLULAR  
**NETWORK**  
UNTIL IT'S ROCK SOLID?

**BECAUSE FAILURE IS NOT AN OPTION.**

Pardon us if we're a little fixated right now, relentlessly testing, analyzing and validating our new GSM/GPRS/EDGE digital cellular network around the clock.

But we're not going to stop until we're absolutely sure it delivers all the advanced communications and data capabilities you expect on land, in the Gulf.

PetroCom has a reputation for uncompromising communications reliability. That's why we're currently working closely with some of

our more demanding customers to measure our new digital network's ability to help them achieve specific operational goals.

One company needs to share immense volumes of offshore production data in real time, without failure.

Another seeks to put more eyeballs on drilling situations by sending video from remote offshore facilities to diagnostic specialists worldwide, without failure.

Yet another wants to offer its employees

working in the Gulf image transfer, high-bandwidth Internet access and e-mail services, without failure.

PetroCom is determined to deliver all this and more. Without failure. So, if you operate in the Gulf and have a daunting communication or data requirement, bring it to us at **1-800-PETROCOM** or **www.petrocom.com**.

The reason we're busy testing is so we're ready for any challenge.



VOICE • HIGH-SPEED DATA • FIXED WIRELESS • INTERNET ACCESS • E-MAIL • SHORT MESSAGE SERVICE • PRIVATE NETWORKING

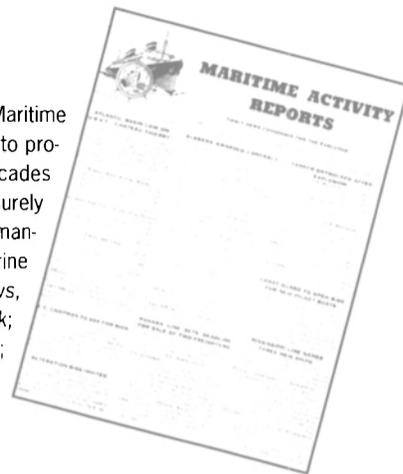
Circle 25 on Reader Service Card

## The Index

Alaska Marine Highway System	21	Marlink	18
Albacore Research	35	Marlow Ropes	57
American Waterways Operators	30	Mediterranea di Navigazione	13
Amot	57	MITAGS	24
Anchor Lamina	57	Mitsubishi	13
Aquabond	57	Moore McCormack Lines	38
AT&T Wireless	18	MTN	18
Autoship	57	Munson Manufacturing	35
Bender Shipbuilding	10	NASSCO	9
BP Oil Shipping Co.	9	National Shipbuilding Research Program	50
Caprock	22	NTSB	30
Caterpillar	12	OSHA	31
Celik Tekne	13	Pacific Maritime Institute	24
Centa	57	Peck & Hale	57
Ciserve	57	PetroCom	21
Cole Hersee	57	Post-Kogelco	16
Connexion by Boeing	20	Renk	57
Coolboxx	16	Rigdon Marine	10
Cummins	10	Rolls-Royce	12
Daewoo Shipbuilding and Marine Engineering	9	Schat Harding	57
Damen	12	Seawave	21
Derecktor Shipyard	21	Siemens	21
Effer	12	Simrad	57
Ericsson	21	SNAME	47
France Telecom	20	SNAME	49
France Telecom	22	Source of Supply	57
Frontline Ltd	9	Stratos	18
Furuno	12	Stuyvesant Dredging Co.	10
GE	57	Sumitomo Heavy Industries	9
Geest North Sea Line	16	Tanker Pacific	9
General Maritime Corp	9	Teamtalk Satellite	22
Griptek	57	Teekay Shipping	9
Hansard Security	57	Teekay Shipping	20
Heinzmann	57	Telenor	22
Hempe	13	The Coast Guard Yard	35
Holland & Knight	14	Thrustmaster	57
IHI Marine United	9	Tribon	36
IHI Marine United	9	US Coast Guard	13
Industrial Power Systems	13	US Coast Guard	28
Intergraph	36	US Court of Appeals	10
Intertanko	33	US Dept. of Homeland Security	31
IPS	57	USACE	10
Izar	13	USACE	31
Kraaijeveld	12	Viking	57
KVH	21	Visbeen Transport	16
Liton	12	Walz & Krenzer	47
Lloyd's Register	13	Wartsila	57
Mampay	12	Warwick Mills	57
Marflex	57	Wireless Maritime Services	18
Marine Propulsion Research	57	Xantic	21

## In Good Company

*Maritime Reporter & Engineering News* was founded (originally as *Maritime Activity Reports*) by **John J. O'Malley** in 1939, with the mandate to provide "Timely news condensed for the executive." More than six decades have passed, and while times have surely changed, some things surely have not. The O'Malley name still heads the masthead, and the mandate to provide timely information has expanded to a family of marine information products, lead by *Maritime Reporter & Engineering News*, but now including: *MarineNews*; *Maritime Security Sourcebook*; [www.marinelink.com](http://www.marinelink.com); *MaritimeToday* @ [www.maritimetoday.com](http://www.maritimetoday.com); and the annual *Global Maritime Directory* on CD ROM. In examining our history, the editorial team ran across some other notable events from 1939.

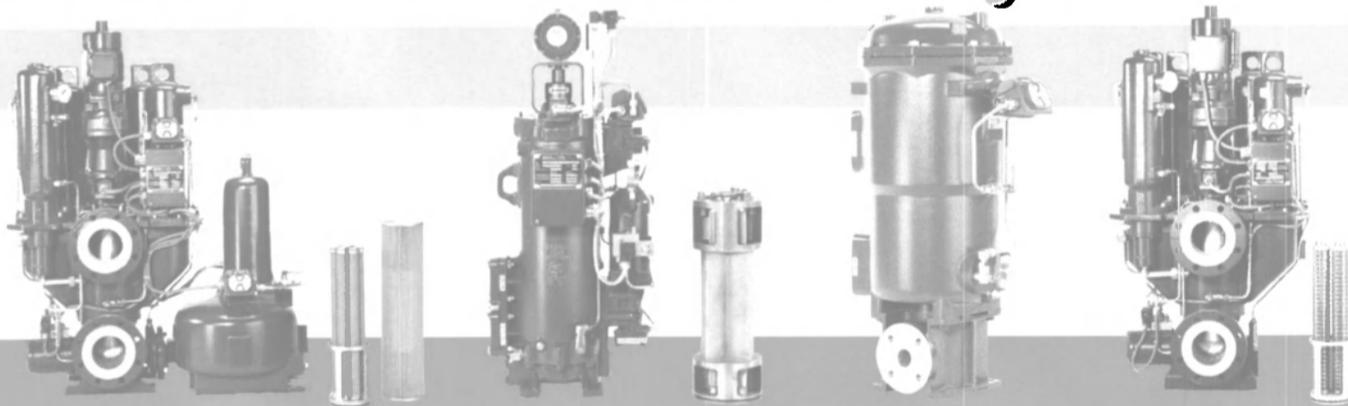


January 16, 1939	Comic strip " <b>Superman</b> " debuts
January 22, 1939	<b>Uranium</b> atom 1st split, Columbia University
February 15, 1939	German battleship <b>Bismarck</b> was launched
March 7, 1939	<b>Glamour</b> magazine begins publishing
March 7, 1939	Guy Lombardo & Royal Canadians 1st record " <b>Auld Lang Syne</b> "
April 14, 1939	John Steinbeck novel " <b>The Grapes of Wrath</b> " published
April 20, 1939	<b>Ted Williams'</b> 1st hit (off of Yankee Red Ruffing) a double
May 2, 1939	<b>Lou Gehrig</b> ends 2,130 consecutive game streak, Yanks beat Tigers 22-2
May 20, 1939	Pan Am begins <b>transatlantic</b> passenger & air mail service
June 20, 1939	Test flight of <b>1st rocket plane</b> using liquid propellants
August 17, 1939	" <b>Wizard of Oz</b> " opens at Loew's Capitol Theater in NY
September 3, 1939	<b>German U-boat</b> sinks British passenger ship <i>Athenia</i>
September 3, 1939	<b>Britain declares war</b> on Germany. France follows 6 hours later quickly joined by Australia, NZ, South Africa & Canada
September 13, 1939	Igor Stravinsky invents <b>1st helicopter</b>
<b>November 11, 1939</b>	Kate Smith 1st sings Irving Berlin's " <b>God Bless America</b> "

# PROTECT YOUR INVESTMENT



## BOLLFILTER Protection Systems



**Motor-Services Hugo Stamp (MSHS)** is an authorized distributor and service center for BollFilter Protection Systems. We offer quality products, experienced service and authorized training to make sure your engines run longer and more efficiently.

**MSHS** also provides turnkey solutions for diesel engines, turbochargers and separator systems. To learn more about all of our services, call toll free **1-800-622-6747** or visit [www.mshs.com](http://www.mshs.com)



## MOTOR-SERVICES HUGO STAMP, INC.

AUTHORIZED DISTRIBUTORS & SERVICE CENTER

MAN B&W • S.E.M.T. PIELSTICK • SULZER • NAPIER • KBB • ABB • LASER ALIGNMENT • BOLL FILTRATION • DEUTZ ENGINE SALES AND SERVICE

Circle 246 on Reader Service Card

# We'd like to float a few quality ideas by you.



**Trinity Marine barges** are built to last. And last. And last. That's because we've built more barges than anyone else on the river. We've learned to install quality, one detail at a time.

Take a closer look for yourself.

❶ NABRICO deck fittings have been specially crafted to perform under even the most strenuous operating conditions.

❷ Most seams on Trinity barges are butt welded. That's why there's no if's, and's or but's about their performance.

❸ All new Trinity barges are constructed to meet or exceed the latest USCG quality and environmental protection requirements.

❹ Quality means conforming to your specifications. That's why our processes assure modifications that meet your needs.

❺ It isn't quality unless it's delivered on time. Trinity deliveries are always scheduled to keep your business flowing.

❻ Quality is as quality looks. And Trinity barges look as good as they perform.

## TRINITY MARINE PRODUCTS

*We Build Trust*

[www.trinitymarineproducts.com](http://www.trinitymarineproducts.com)

© Copyright 2004 Trinity Marine Products, Inc.  
All rights reserved

Circle 267 on Reader Service Card

## Editor's Note

**W**ithout a doubt, the historical richness of the maritime industry and the presentation of such in these pages is the aspect of this job I enjoy most. The maritime industry's hallmark is a diverse, "colorful" past that has no equal, and in speaking with the individuals that have made and continue to make the indelible marks, I find common ties that help to bind all.

This edition is the 65th Anniversary edition of *Maritime Reporter & Engineering News*, a testament to the perseverance of one company and its quest to service the industry with information as envisioned by John J. O'Malley in 1939.

The company, much as the industry and the world, have undergone radical changes since the first edition of "*Maritime Activity Reports*" was published 65 years ago. While the look, the name and the masthead have changed many times, the steadfast goal of providing good, timely information for maritime executives has been a granite foundation upon which *Maritime Reporter* and its family of printed and electronic products has been built. Today *Maritime Reporter* stands with publications *MarineNews* and *Maritime Security Sourcebook*, as well as a diversity of electronic and on-line products including: *The Shipbuilding Report* ([www.shipbuilding.com](http://www.shipbuilding.com)); *MaritimeToday* ([www.maritimetoday.com](http://www.maritimetoday.com)); [www.marinelink.com](http://www.marinelink.com); [www.maritimejobs.com](http://www.maritimejobs.com); [www.maritimeequipment.com](http://www.maritimeequipment.com); and The Annual Maritime Directory on CD in an effort to fulfill that original vision.

This edition was designed to deliver insights as to the evolution of the market over the last six-plus decades. While it is by no means a comprehensive account, you will find a diversity of topics, with discussions of how significant events shaped everything from Port Security to Training & Education to the Inland Industry.

While I am loath to pick a favorite, I must admit I have two ... starting on page 38 and 48 respectively.

To me these article represent our industry's heart and soul.

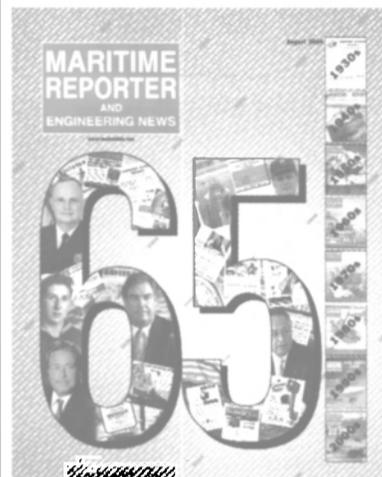


[www.marinelink.com](http://www.marinelink.com)

[trauthwein@marinelink.com](mailto:trauthwein@marinelink.com)



## On the Cover



Maritime Reporter celebrates 65 years of fulfilling the information needs of an industry. See special commemorative editorial section starting on page 24.

(Cover Graphic: Richard Grable)

- 4 Editorial Index
- 49 SNAME Preview
- 53 Buyer's Directory
- 56 Ad Index
- 57 Ship's Store
- 58 Classifieds

**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](mailto:barnett@marinelink.com)

# MARITIME REPORTER

AND  
ENGINEERING NEWS

[www.marinelink.com](http://www.marinelink.com)

ISSN-0025-3448  
USPS-016-750

No. 8

Vol. 66

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.

Publications Mail Agreement No: 40024966  
Return Undeliverable Canadian Addresses to  
Circulation Dept. of DPGM  
4960-2 Walker Road  
Windsor, ON N9A 6J3

Publishers are not responsible for the safekeeping or return of editorial material. ©2004 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.

## Coming in *Maritime Reporter & Engineering News*

### September 2004

The "Big 3" Show Edition 1. SMM • 2. SNAME •  
3. U.S. Maritime Security Expo  
Plus: Marine Propulsion Annual • U.S. Ferry Market • Software Solutions

### October 2004

MEGAYACHTS • Marine Communications • U.S. Navy Quarterly • RIB Report  
Insulations, Pipes, Pumps and Valves • Finland

### November 2004

The Workboat Show Edition • The Electric Ship • Training & Education • Ship  
Repair & Conversion Technologies • Coatings & Corrosion Control • China

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

**ABB**

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

Circle 201 on Reader Service Card

**All Dressed Up ...**

A penguin joins the crew of the Coast Guard icebreaker Eastwind during Operation Deep Freeze I. The annual voyages to Antarctica were named "Operation Deep Freeze" for obvious reasons. According to one of the Eastwind's crew, who shall remain

anonymous: "this one penguin kept hanging out with various Eastwind crewmembers while they were ashore. They originally painted a bow tie around his neck and button on his chest in grease (the penguin happily complied). The penguin then wiped the bow tie away by turning his head (hence the smudge in the picture). They then

painted USCG on its stomach. He apparently loved it, and held a higher place in the penguin flock because of it."

The U.S. Coast Guard has a rich and successful history in securing U.S. Ports. The history of Port Security in the U.S. is the topic of one of this month's "Anniversary Edition" reports, starting on page 24)



**Correction**

In the Story "Flood Attracted to Water" (pg. 30, June 2004 edition), the e-mail address for Mr. Flood was incorrect. You can reach Mr. Flood at [jamesaflood@jamesaflood.com](mailto:jamesaflood@jamesaflood.com), or view his collection at [www.jamesaflood.com](http://www.jamesaflood.com). Pictured below is Queen Mary 2 in the Solent.



Displayed in QM2's Onboard Gallery Queen Mary 2 is portrayed working up speed as she departs the Solent on a very clear but brisk day early in her career. A hearty crew of yachtsmen, made from the brave sort of sailor that only Britain breeds, take in the spectacle of this new ship. Fine on her starboard quarter a tanker has not yet made the turn into the channel leading to open sea. Astern of this great new Cunarder steams the beloved Queen Elizabeth 2. These two ships are the proud upholders of a tradition that dates back to the middle of the nineteenth century. It includes such proud liners as *Mauretania*, *Aquitania*, *Berengaria*, *Carmania*, and many others. Queen Mary 2 measures 1,131 feet, 3 inches long, making this colossal liner the longest in the world. She has a beam of 131 feet, a draught of 32 feet, 6 inches, and her height from keel to funnel is 236 feet, 2 inches. Designed to carry up to 2,620 passengers with a crew of approximately 1,250, she is capable of exceeding a speed of 30 knots.

**On time. Every time.**

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

[www.northropgrumman.com](http://www.northropgrumman.com)  
© 2004 Northrop Grumman Corporation

**NORTHROP GRUMMAN** DEFINING THE FUTURE™  
*Newport News*

## Leading Off

### Maritime Meanings

#### Peepers

Sailor's slang for eyes; the expression was in common use in ships at the beginning of the 1800s. The word has long since passed into common use, and is enshrined in at least one 1938 song of music-hall fame, the

first line of which runs: "Jeepers Creepers, where'd you get those peepers."

Source: *An Ocean of Words: A Dictionary of Nautical Words and Phrases*, by Peter D. Jeans; Birch Lane Press, 1998

### ... We All Live in a Yellow Submarine ...

Hamburg-based Rickmers-Linie a "Yellow Submarine" to its list of extraordinary cargoes carried. A yellow tourist submarine, to be used for underwater excursions on the coast of Cheju Island, Korea's biggest island, was lifted onboard



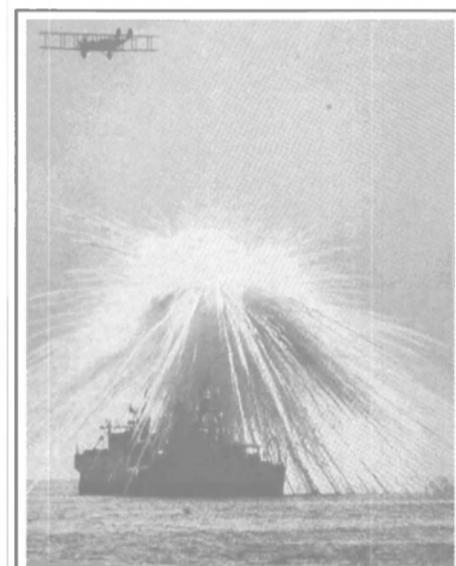
Memories of the Beatles' song Yellow Submarine were revived recently when Rickmers-Linie shipped a yellow tourist submarine from Hawaii to South Korea

the 17,850 tons deadweight charter vessel Oasis in Honolulu, Hawaii. Weighing 100 tons, the 22.3 m long submarine was lifted aboard Oasis using the ship's own 125-ton derrick. Together with the submarine, a tender and spare parts were also loaded in Hawaii. The shipment was managed by AP Shipping, Gardena, California and operations were supervised by the Houston office of Rickmers-Linie.

## Advanced, Reliable Systems Recognized Worldwide

**Why is JRC a name recognized worldwide  
in the field of marine electronics?  
Because of our state-of-the-art technologies and  
knowhow developed over many years.**

We offer a host of advanced and reliable systems and equipment: ARPA/radar that will ensure your safe navigation, ECDIS to make your bridge operations more convenient, satellite communications to enable seamless offices, and radio equipment to assist your oceangoing life.



July 20, 1921 - A spectacular air blast during an NBS-1 bombing test on a captured German battleship (Ostfriesland) off the Virginia Capes. (Attention! The German battleship (Ostfriesland) is not a Lockheed Martin product)

(Photo Courtesy Lockheed Martin)



**JMA-900 Series  
Chart RADAR**

Unique ARPA/radar with chart functions;  
23-inch color LCD



**JAN-901 / 701 Series  
ECDIS**

Ergonomically designed,  
multi-functional display;  
23/18-inch color LCD



**JHS-182  
Automatic Identification System**

Large 6-inch screen;  
transponder integrated with GPS/VHF;  
expandable interfacing for radar/ECDIS



**JUE-410F  
Inmarsat Fleet F77  
Mobile Earth Station**

Multi-interfacing: mobile packet and  
high-speed data service capability;  
antenna of unique, robust design

\* JRC supported Remote Diagnostic System (option)  
\* All JRC products are of in-house design.

**JRC Japan Radio Co., Ltd.**

Visit [www.jrc.co.jp](http://www.jrc.co.jp)

Circle 233 on Reader Service Card



## Daewoo Wins \$515M Contract

Daewoo Shipbuilding and Marine Engineering reportedly has won a \$515.8 million order from Teekay Shipping of Canada to build three LNG (liquefied natural gas) ships, with delivery due in April 2007.

## Two Killed in Shipyard Accident

According to wire reports, two workers were killed and two others injured after falling about 65 ft. to the ground when a 246-ton steel block fell over on a ship under construction in Kure, Hiroshima Prefecture. The four were working on the construction of a 90,000-ton containership for a German client at a shipbuilding dock of IHI Marine United Inc., launched in 2002 via the partial merger of Ishikawajima-Harima Heavy Industries Co. and Sumitomo Heavy Industries Ltd.

## Shipyard Responsible For Poor Construction

The U.S. District Court for the Southern District of New York ruled that a shipyard is responsible under products liability for poor construction. In the

instant case, the shipyard contracted to enlarge a container ship by fabricating and inserting a new mid-body. Thirteen years later, the ship broke in two during a storm at sea. The break occurred at the point where the new mid-body was joined to the original after-body. Evidence indicated that many of the welds connecting the two portions were bad and that the shipyard knew of the bad welds when the ship was redeliv-

ered to the owner.

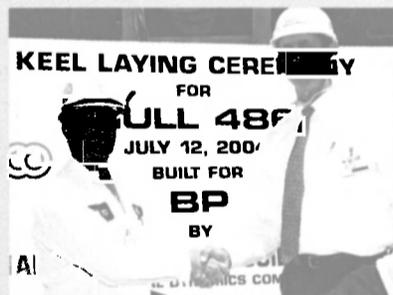
The court held that insertion of a new mid-body was a sale, rather than a repair. The court also held that privity was not required in a products liability case brought in admiralty (the ship having been sold between the time of redelivery and the time of the casualty). In the Matter of the Complaint of Rationis Enterprises, Inc., 97 Civ. 9052 (HK Law).

## General Maritime Sells Four Ships

General Maritime Corporation sold four single-hull vessels: Harriet (1989/Suezmax) is being sold to Tanker Pacific; while Transporter (1989/Suezmax), Centaur (1990/Suezmax) and Traveller (1990/Suezmax) are being sold en bloc to Frontline Ltd. The company expects to realize a net gain of approximately



## Keel-Laying Ceremony for BP Tanker



Stan Taylor (l) of the BP ship construction site team is congratulated by Richard Vortmann after welding his initials into the keel of Hull 486, signifying the start of construction on the vessel.

National Steel and Shipbuilding Company (NASSCO) held a keel-laying ceremony for Hull 486, the third of four Alaska Class, double-hull oil tankers being constructed for BP Oil Shipping Company, USA. BP's Site Team Member Stan Taylor welded his initials into the keel to signify the start of construction. The first ship, the Alaskan Frontier, is being prepared for sea trials and will be delivered later this year. The second ship is undergoing construction and is scheduled to be delivered in 2005, with the third and fourth ships to be delivered in 2005 and 2006. The four ships are being constructed sequentially in NASSCO's 1,000-ft. graving dock.

Circle 24 on Reader Service Card

VESSEL NAME / TYPE	HORSE POWER	SIZE	KORT NOZZLES	BOW THRUSTERS	SHARK JAWS
CLASS	L X B X D				
Offshore Towing Vessels					
N. Joseph Guidry	9000	115" X 32' X 15'	YES	N/A	N/A
Harvey Commander	9000	115" X 32' X 14'	YES	N/A	N/A
Harvey Gladiator	9000	115" X 32' X 14'	YES	N/A	N/A
Harvey Invader	9000	115" X 32' X 14'	YES	N/A	N/A
Harvey Viking	10000	115" X 32' X 17'	YES	N/A	N/A
Harvey Warrior	10000	115" X 32' X 17'	YES	N/A	N/A
Harvey Trojan	10500	126" X 37' X 17'	YES	4TH QTR 04	200 TONS
Harvey Titan	10500	135" X 36' X 16'	YES	4TH QTR 04	200 TONS
Harvey Intruder	13500	135" X 36' X 16'	YES	YES	200 TONS
Harvey Thunder	13500	135" X 36' X 16'	YES	YES	200 TONS
Harvey War Horse	16500	150" X 45' X 18'	YES	YES	350 TONS
Offshore Supply Vessels	CLEAR DECK	SIZE	LIQUID MUD	DRY BULK	METHANOL
Harvey Provider - DP 2 Cert.	175' X 50'	240 X56 X15'	7000 BBLs	9600 CU. FT.	1100 BBLs
Harvey Explorer - DP 2 Cert.	175' X 50'	240'X56'X15'	7000 BBLs	9600 CU. FT.	1100 BBLs

\*All Towing Vessels ABS Bollard Pull Certified under new guidelines in 2003.

With our ultra-large towing vessels, we provide offshore rig moving services of jack-up and semisubmersible drilling rigs for every major Drilling Contractor and Oil Company, as well as rendering tug and barge transportation services for cargo movements, platform rig installations and ocean towing services.

## HARVEY GULF INTERNATIONAL MARINE, INC.

3817 SPENCER STREET

HARVEY, LOUISIANA 70058

PHONE: 504-348-2466

FAX: 504-348-8060

E-MAIL: [info@harveygulf.com](mailto:info@harveygulf.com)

WEB SITE: [www.harveygulf.com](http://www.harveygulf.com)



Circle 229 on Reader Service Card

## News

\$8.5m in the third quarter of 2004 from the sale. It also expects depreciation expense to fall by approximately \$3.3m per quarter through 2005 and \$2.5m per quarter thereafter. **Peter C. Georgiopoulos**, Chairman, CEO and President, said, "These sales are part of

General Maritime's program to modernize its fleet. With the sale of these four vessels, we have increased the percentage of double-hull or double-sided vessels in our fleet to 89% while improving the fleet's age profile from 10.3 years to 9.8 years as of July 1, 2004."

## Dredge Vessel Exception Interpreted

The U.S. Court of Appeals for the Federal Circuit ruled that a U.S.-documented non-hopper dredge vessel chartered by a company in which Stuyvesant

Dredging Company (SDC) has an interest may be used to perform work under a dredging contract with the U.S. Army Corps of Engineers. In the instant case, a rival dredge company filed a bid protest after the contract was awarded to a company in which SDC has an ownership interest. The protestor asserted that the SDC statutory exception only applied with regard to non-hopper dredges in existence on the date the statutory exception was enacted and may only be utilized in support of hopper dredges. The court held that the applicable statutory exception contained only three restrictions, all of which were met in this case: (1) the non-hopper dredge must be documented as a vessel of the United States; (2) the non-hopper dredge must be chartered to SDC or to an entity in which it has an ownership interest; and (3) the non-hopper dredge must be chartered to fulfill dredging obligations under a specific contract. The appellate court remanded the case with instructions to enter summary judgment in favor of the SDC interests. *Norfolk Dredging Co., Inc. v. United States*, No. 04-5040 (Fed. Cir.) (HK Law)



Orkot® Marine Bearings are offered as custom-engineered components (to Ø 2.2m) and as semifinished tubes and plates with stocks worldwide.

Available in two material grades to perfectly match application requirements.

Classification society approvals. 24 hour service (United States)

## Orkot® Marine Bearings

A unique synthetic composition and the incorporation of solid lubricants, ensures Orkot® Marine Bearings operate with an exceptionally low co-efficient of friction in seawater, grease, oil and even in dry-running conditions.

- High load tolerance - for applications including crane mast bearings and cylinder rod-end bearings.
- Water lubricated - for rudder and propeller shaft bearings.
- Low friction - suited to hatch cover pads and stabilizer bearings.



Visit our website at

[www.orkotmarine.us](http://www.orkotmarine.us)

Busak Shamban

North/South America Tel: +1(541) 688-5529 Fax: +1(541) 688-2079  
Europe/Middle & Far East Tel: +44(0)1709 376044 Fax: +44(0)1709 374819

24 hr service (United States): 1-800-546-7568

TLM MARINE  
TXM MARINE  
Trelleborg Orkot Composites

Circle 249 on Reader Service Card

## 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@seark.com](mailto:sales@seark.com) — [www.seark.com](http://www.seark.com)

Circle 255 on Reader Service Card

## Rigdon Christens M/V Bourbon



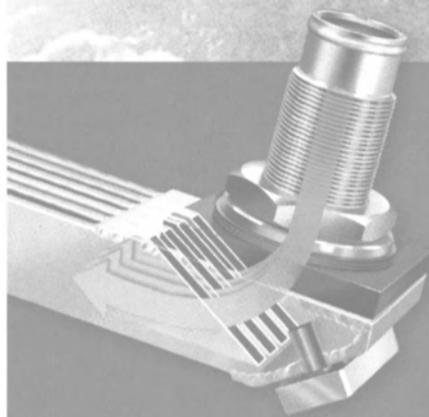
M/V Bourbon, the second in a series of 10 innovative Platform Supply Vessels (PSV) being built for Rigdon Marine by Bender Shipbuilding, was recently christened. The 210 x 54 x 19-ft. diesel-electric PSV immediately deployed to a major oil company for work in the Gulf of Mexico. Like its sister vessel M/V Orleans, Bourbon is outfitted with a dynamic positioning class 2 (DP-2) certification and a modern, streamlined hull designed for fuel efficiency with top speeds of 13 knots fully loaded and 15 knots in light conditions. The cargo capacity of these vessels has also been increased due to the space saving diesel electric engine room which hosts two 1,825kw (2,500 hp) generators driven by Cummins QSK 60 engines and a third 910kw (1,200 hp) generator driven by a Cummins KTA 38 engine. Furthermore, the fuel burn of this system has been rated at 230 gallons-per-hour (gph) at 13 knots when fully loaded, and only 88 gph at 10 knots. The diesel electric system provides a significant fuel savings often exceeding 10 percent versus conventional direct-drive, diesel propelled vessels.

Circle 26 on Reader Service Card

Maritime Reporter & Engineering News

# Duramax Marine® Heat Exchange Solutions.

## What Could be Cooler?

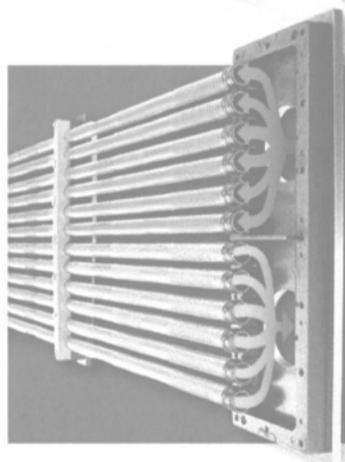
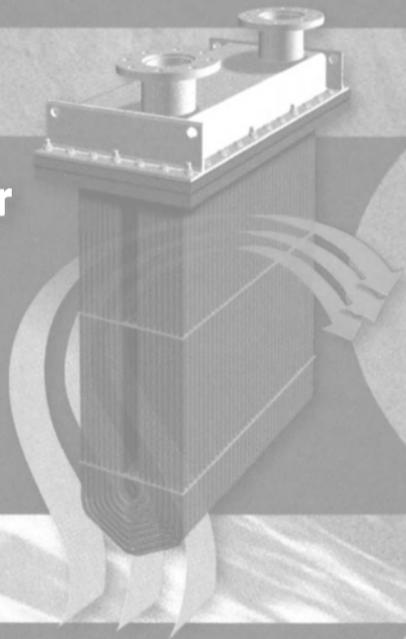


### Duracooler®

- ▶ Streamlined head for improved internal/external flow
- ▶ Lower pressure drop across keel cooler
- ▶ Compact footprint with increased cooling surface area

### Duramax® Box Cooler

- ▶ Alternative to plate and shell & tube heat exchangers
- ▶ Protected within the ship's hull against damage
- ▶ Leakage can be stopped without dry docking



### Johnson® Demountable Keel Cooler

- ▶ No through hull fittings
- ▶ Individual replaceable parts
- ▶ Cool multiple circuits with one cooler

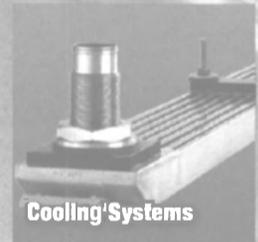
For over 30 years, Duramax Marine® has developed engineered cooling solutions to meet the demands of today's vessels. Diverse operating conditions, engines and equipment challenge us to test the waters and find new ways to solve tomorrow's cooling needs.

Through decades of research and extensive testing, Duramax Marine® understands the differences that will help you select the right cooling solution for your application.

**Innovation. Experience. Results.**  
All from one source -  
Duramax Marine. Now that's cool.



Johnson Cutless Bearings



Cooling Systems



Shaft Seal Systems



Fendering Systems

Contact Duramax Marine – your leader in total marine solutions – for all your heat exchange needs.

# DURAMAX MARINE® LLC

17990 GREAT LAKES PARKWAY • HIRAM, OHIO 44234 USA • PHONE 440.834.5400 • FAX 440.834.4950

[www.DuramaxMarine.com](http://www.DuramaxMarine.com)

Circle 216 on Reader Service Card

# Damen Delivers Three ASD Tugs to Kenya

Damen recently delivered three of its ASD Tugs 3110 - Simba III, Kiboko II AND Nyangumi II - to be used in the port of Mombasa. The Damen ASD Tug 3110 hallmark is a round bilge hull with a transom stern and a tapered bow. The transom corners are well rounded and the forecastle gives sufficient bow height for severe working conditions. To date more than 100 Damen ASD Tugs are built based on this design. The hull is designed to be strong, with side and bottom plating of 12 mm and decks of 8 mm, and is divided into five watertight compartments.

Two Caterpillar 3516 TA HD engines power each vessel. The main engines have a total output of 3,450 kW (4626 hp) at 1,600 rpm. Using this power with 2,400 mm diameter Rolls Royce US 205 rudder propellers, each vessel achieves a

bollard pull of 58 tons.

The tugs are fitted with comprehensive deck equipment, consisting of a Mampaey disc-type towing hook with a Safe Working Load of 65 tons; a Kraaijeveld capstan of 5 ton at 15 m/min and a stern roller on the aft deck; a combined hydraulic Kraaijeveld anchor winch and two-speed towing winch on the foredeck, with a pull of 18 ton at 11m/min is fitted, with a holding power of 130 ton.

Nyangumi II alone is fitted with a hydraulic knuckle boom type deck crane. This Effer crane (type 440002S) has a capacity of 5.75 ton at 7.6 m.

On Nyangumi II a standard 20 ft container is fitted with a decompression chamber, also diving compressors and diving equipment are fitted.

Circle 23 on Reader Service Card



Main Particulars		1x Caterpillar 3304NA, 63 kVA	
Length	101.1 ft. (30.8 m)	Caterpillar 3306B TA fire fighting engine with a fire fighting pump of 600 m <sup>3</sup> /hr	
Breadth	33.5 ft. (10.2 m)	Speed	13 knots
Depth	15.7 ft. (4.8 m)	Bollard pull ahead	58 ton
Gross tonnage	307	Bollard pull astern	54 ton
Classification	Lloyd's Register	VHF Radio	Sailor
Main engines	(2) Caterpillar 3516 TA HD	SSB Radio	Furuno
Total power	3,450 kW at 1,600 rpm	Echo Sounder, Navtex	Furuno
Propulsion	2x Rolls Royce US 205 rudder propellers, propeller diameter 2400 mm	Autopilot	Litton
Auxiliaries	2x Caterpillar 3304T sets, 106 kVA each	GPS, Radar	Furuno

**FALK MARINE DRIVES**  
 The "Best Value" for new vessels or re-powers!  
 type MRHW with continuous slip control  
**WORKING THE WATER**  
 Contact us for details!  
 Phone: 1-800-545-5215  
 E-mail: falkinfo@falkcorp.com  
 Web: www.falkcorp.com/marineads

Circle 224 on Reader Service Card

**www.marinesigns.com**  
**Marine & Offshore Signage Experts**  
 We have the technology and capabilities to supply ALL your signage needs, including complete shipboard conversion projects and sign upgrading services.  
 What can we do for you?  
**VISIT OUR NEW WEBSITE** featuring our new product lines!  
 Order online or contact us for your FREE CD Product Guide  
**Maritime Associates**  
 P.O. Box 1788 • Crystal Bay, NV 89402 USA  
 775-832-2422 • Fax: 775-832-2424  
 E-mail: maritimeas@charter.net

Circle 243 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 204 on Reader Service Card

*We also supply . . .*  
**Wire Rope • Lashing Gear**  
**Barges • Fairleads**  
**Synthetic Rope**  
**Rental / Sales**  
**Anchor/Spud Winches**  
**Complete Mooring Systems**  
**Used Skagit, Clyde, American, Manitowoc**  
**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 252 on Reader Service Card

**MARINE EXHAUST SYSTEMS OF ALABAMA INC**  
 P.O. Box 698  
 757 Nichols Ave  
 Fairhope, AL 36533  
 1-251-928-1234  
 Phone/Fax  
 Water Cooled Manifolds, Silicon Hose, Elbows, Bellows, Heat Exchangers, Wet Ells, Mufflers, Silencers, Turbos, Flex, and much, much more.  
 Marinization, Repair or Duplication of Obsolete Parts also available upon request.  
 Please contact us for all of your exhaust needs.  
 Mesamarine@Earthlink.net http://www.mesamarine.com

Circle 241 on Reader Service Card

**COASTAL MARINE EQUIPMENT, INC.**  
 Offering a complete line of deck machinery as well as general fabrication, machining services, installation, maintenance and repair services.  
**Stennis Space Center, MS 39529-7099**  
**Phone (228) 813-1700 Fax (228) 813-1709**  
**E-Mail: sales@coastalmarineequipment.com**  
**www.coastalmarineequipment.com**

Circle 211 on Reader Service Card

## IZAR Manises Tests, Delivers Mitsubishi Engine

Manises Propulsion and Energy, IZAR's two stroke diesel engines factory has tested and delivered a Mitsubishi engine of 8,670 kW at 127 rpm, that will be assembled in the 25,000 tons chemical ship, that is being built in the Turkish shipyard Celik Tekne for the Italian shipowner Mediterranea di Navigazione.

This commissioning is an important milestone for Izar-Manises Propulsion and Energy, because it is the only licensee of Mitsubishi in Europe and because this engine is the first Mitsubishi engine delivered in Europe. The Commercial Manager of Mitsubishi in Europe, **Hideo Kihara**, the President of Mediterranea di Navigazione, **Giorgio Cagnoni**, and the Executive Officer of Celik Tekne, R.C. Behar, among others, have attended the event. Besides the normal tests, in which the correct general functioning of the engine at different power and its consumption is verified, special tests for emissions of nitrogen oxide, hydrocarbon, and carbon monoxide and dioxide are being done, in order to verify that this engine fulfills the



present international regulations and is environmentally friendly. Izar Manises Propulsion and Energy and the Japanese engines manufacturer, Mitsubishi, signed on October 2000 an agreement of licence that has opened excellent expectations for Izar in Europe and North and South America. After this agreement was signed, the factory of Izar Manises did a hard job to adapt their processes to Mitsubishi's, that on July 11, 2003 ended with the contract of the engine delivered today. It is a Mitsubishi propulsion engine, type 6UEC50LSII, of 8,670 kW at 127 rpm and six cylinders of 50 cm diameter. Its dimensions are: 4,702 mm long, 3,100 mm wide and 8,900 mm tall.

## Vadm. Hull Retires After 39 Years

Vice Adm. **Vivien S. Crea**, assumed responsibilities from Vice Adm. **James D. Hull** as the Coast Guard Atlantic Area commander last month. Hull, the Atlantic Area commander for the past two years, retired after 39 years of service. He was commissioned an Ensign at the Coast Guard Academy, New London, Conn., in 1969. Between 1969 and 1971, Hull was aboard the Coast Guard Cutter Rush in Vietnam. During combat, crewmembers from the Rush sank two enemy trawlers and prevented a U.S. Army unit from being over-run. In 1999, Hull became Commander, Ninth Coast Guard District and in 2002, was promoted to Commander, Atlantic Area.

## LR Gets USCG Nod for OSVs

Lloyd's Register has been authorized by the U.S. Coast Guard (USCG) to extend its Alternate Compliance Program (ACP) capabilities to offshore supply vessels (OSVs), in addition to cargo and tank vessels. The new authorization was issued on July 9, 2004.

## Hempel to Raise Prices 5 to 15%

Citing sharp increases in raw material costs, Hempel announced that it is forced to raise prices on its marine coatings products from 5 to 15 percent. The majority of raw materials used in the paint industry are oil related. Paint raw materials such as epoxy resins have, over the past months, increased markedly, some even as much as 30 percent. Due to the general positive trend in the world economy, the price of metal is also under pressure, in particular Zinc and Copper. These metals constitute a major part of the cost of many protective and marine coatings.

## IPS Delivers for Reinauer

The Marine Division of Industrial Power Systems has completed ABS inspections, functional testing, and delivery of the Main and Emergency Switchboards for the Reinauer Transportation ATB Tug, Meredith C. Reinauer. The Meredith C is the latest of three new tug and barge combinations built by Alabama Shipyard and Atlantic Marine. IPS Marine has provided the switchboards for all three projects.

# YOUR POWERFUL ALLY

SEARCH & RESCUE    MARITIME PATROL    SURVEILLANCE    RECONNAISSANCE



MilCAM Recon™



MilCAM Recon™



ThermoVision®  
RANGER™ II



MilCAM Recon™



SEE WHAT YOU'RE MISSING.  
Turn night into day with infrared imagers from the world's #1 supplier, FLIR Systems. Superior thermal sensitivity and long-range optical performance provide situational awareness and precise target identification. Choose from mission-specific multi-sensor payloads.  
FIND WHAT YOU'RE LOOKING FOR!

**FLIR**  
SYSTEMS

USA: 1.800.727.FLIR  
INTERNATIONAL: +44 (0) 1732 22 0011  
[www.flir.com/mr0604](http://www.flir.com/mr0604)

Circle 225 on Reader Service Card

# Declaration of Security

Like most other tasks involving two or more parties, maritime security becomes less difficult if each party understands what the others are going to be doing. The method for achieving this understanding in the marine sector, under both the International Ship and Port Facility Security (ISPS) Code and the U.S. Maritime Transportation Security Act (MTSA), is by means of

the Declaration of Security.

Declaration of Security (DoS) is defined by the Safety of Life at Sea (SOLAS) Convention as "an agreement reached between a ship and either a port facility or another ship with which it interfaces, specifying the security measures each will implement". Maritime security regulations promulgated by the U.S.

Coast Guard are more specific and provide that Declaration of Security (DoS) means:

An agreement executed between the responsible Vessel and Facility Security Officer, or between Vessel Security Officers in the case of a vessel-to-vessel activity, that provides a means for ensuring that all shared security concerns are properly addressed and security will remain in place throughout the time a vessel is moored to the facility or for the duration of the vessel-to-vessel activity, respectively.

#### DoS form

Review of the form recommended in the ISPS Code for documenting the DoS between a ship and a port facility reveals that, after identifying the ship and port facility involved, it provides for: (1) the period of validity of the DoS; (2) the activities covered by the DoS (i.e., mooring, loading or discharging cargo, bunkering, etc.); (3) the security levels of the ship and port facility; and (4) the affixing of the initials of the ship security officer and the port facility security officer for a variety of specific activities indicating that each agrees that the relevant activity will be done in accordance with its security plan. Among the specific activities addressed on the DoS form are monitoring restricted areas to ensure that only authorized personnel have access; handling of cargo; delivery of ship's stores; handling of unaccompanied baggage; controlling the embarkation of persons and their effects; and ensuring that security communication is readily available between the ship and the port facility. U.S. Coast Guard maritime security regulations provide that the DoS for U.S. ships and port facilities must include at least the information provided for in the ISPS Code recommended form.

#### Utilization of the DoS

Use of the DoS may either be mandated by a Contracting Government or requested by a ship. Reasons why a ship may request completion of a DoS include: (a) the ship is operating at a higher security level than the port facility or another ship with which it is interfacing; (b) there has been a security threat or a security incident involving the ship or the port facility; or (c) the ship is at a port facility that is not required to have and implement an approved port facility security plan. A change in security levels by either the ship or the port facility or both may necessitate completion of a new or revised DoS. Retention periods for completed DoS forms are to be specified for port facilities by their Contracting Governments and for ships by their Administrations.

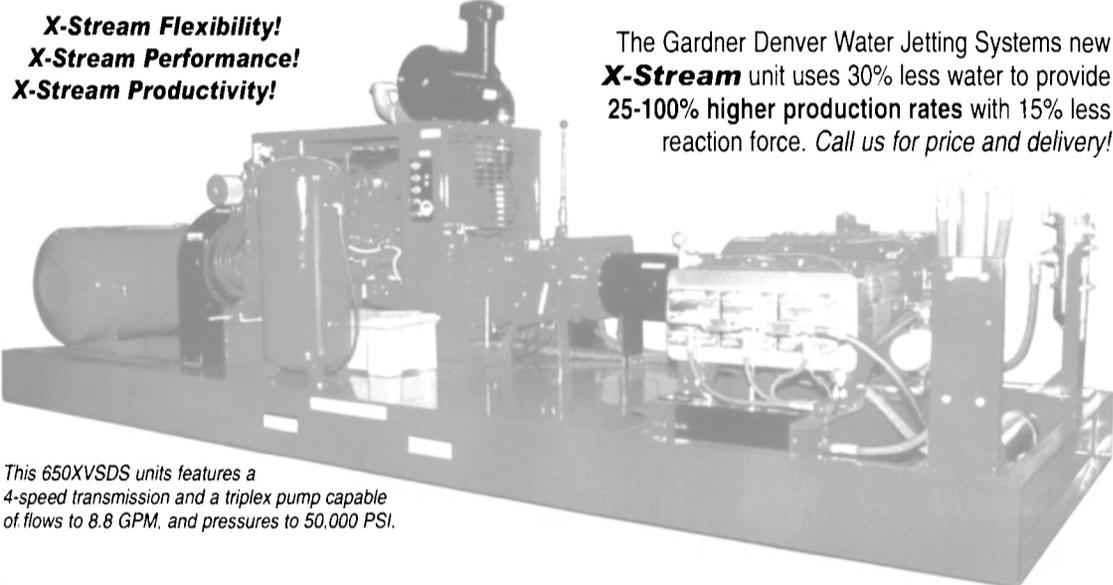
There is one potentially significant gap with regard to use of the recommended DoS form. While the DoS is intended to be used when a ship calls at a port facility that is not required to have and implement an approved port facility security plan and (presumably) when the ship calls at a port facility that does not have an approved port facility security plan even though it is required to under the ISPS Code, there is no obvious place on the DoS form to indicate this situation. In this turn of events, the port facility probably has no security officer and no one at the port facility is likely to be



## X-STREAM 50K DOES IT BETTER!

**X-Stream Flexibility!  
X-Stream Performance!  
X-Stream Productivity!**

The Gardner Denver Water Jetting Systems new **X-Stream** unit uses 30% less water to provide 25-100% higher production rates with 15% less reaction force. *Call us for price and delivery!*

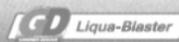


This 650XVSDS unit features a 4-speed transmission and a triplex pump capable of flows to 8.8 GPM, and pressures to 50,000 PSI.

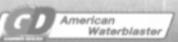
1-800-231-3628

12300 North Houston-Rosslyn Road  
Houston, Texas 77086  
281-448-5800 • FAX 281-448-7500  
www.waterjetting.com • mktg.wjs@gardnerdenver.com

Your SINGLE SOURCE Water Jetting Solution.





Circle 226 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

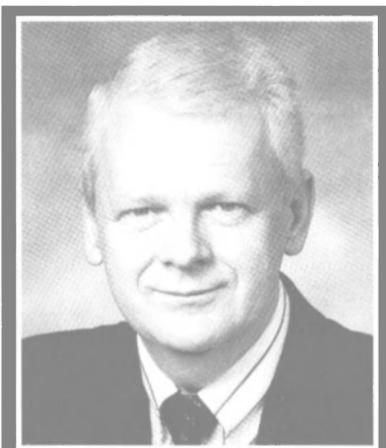
P.O. BOX 58645  
HOUSTON, TX 77258

sales@anchormarinehouston.com  
www.anchormarinehouston.com

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



Circle 206 on Reader Service Card



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

willing to sign or initial the DoS form. There is enough blank space on the form, though, for the ship security officer to fully document the situation, including the additional security measures implemented by the ship to inoculate itself from the lack of documented security at the port facility. It is strongly recommended that the ship security officer clearly document on the DoS form and in the ship's log the additional security measures implemented by the ship during the call at the non-compliant port facility.

#### Requirements Unique to the United States

In the United States, the Coast Guard requires that each vessel and port facility owner or operator ensure procedures are established for requesting a DoS and for handling DoS requests from the interfacing entity. A DoS must be completed with regard to any interface involving a cruise ship or a manned vessel carrying Certain Dangerous Cargoes in bulk. For interfaces involving a cruise ship or a manned vessel carrying Certain Dangerous Cargoes in bulk, the security needs and procedures are to be coordinated and agreed prior to arrival and the DoS is to be signed by both the ship and the port facility or another vessel prior to commencement of passenger embarkation/disembarkation or cargo operations. At Maritime Security (MARSEC) levels 2 or 3, the security needs and procedures are to be coordinated and agreed prior to arrival and the DoS is to be signed by both the ship and the port facility or another vessel for all interfaces involving a manned vessel and either a port facility or another vessel. The port facility owner or operator must ensure that, in the event of a change in the MARSEC level, any ships moored at the facility and any ships scheduled to arrive within 96 hours are

[www.helm-chair.com](http://www.helm-chair.com)



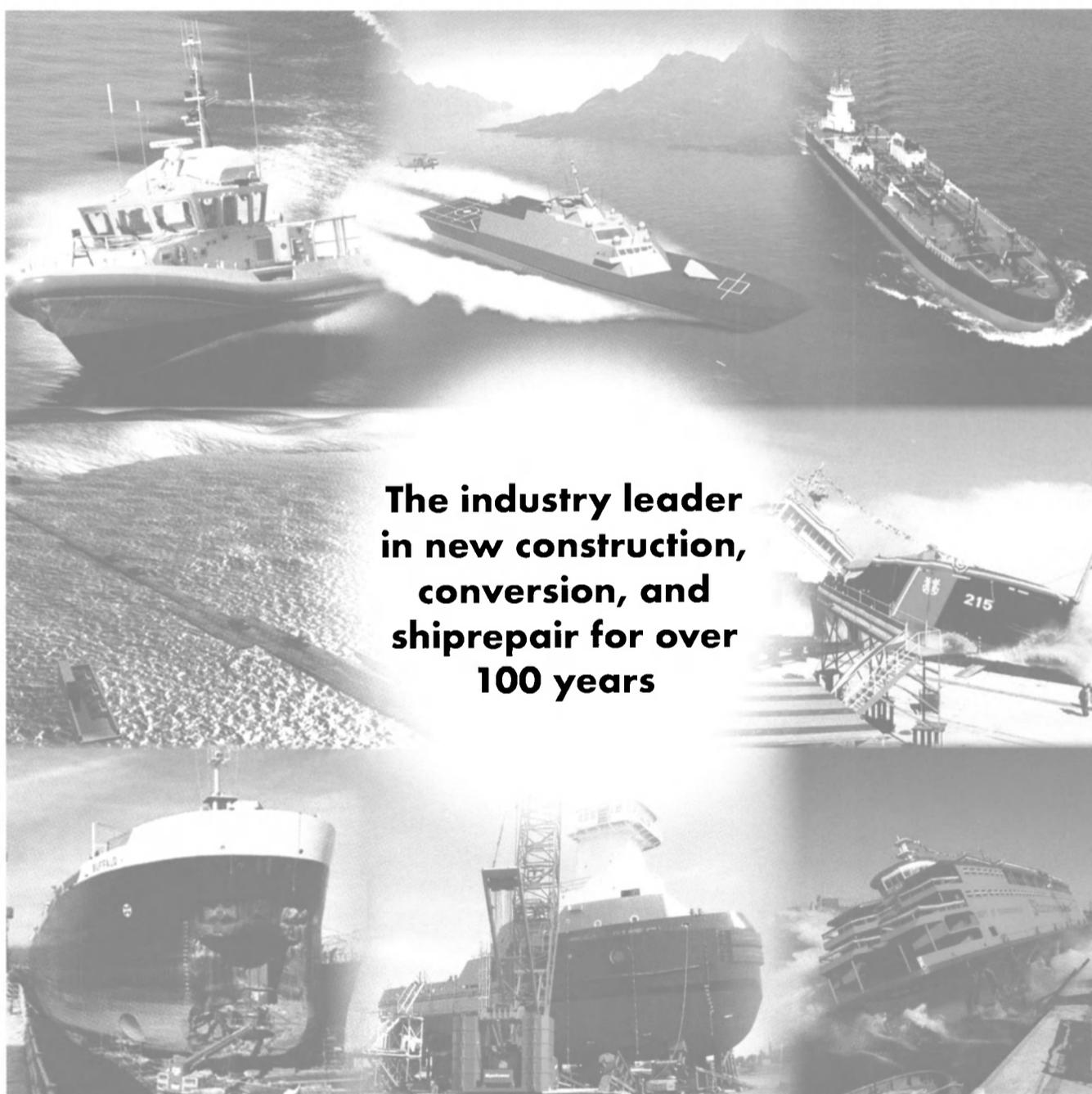
Helm Chairs starting at \$395



**1-800-284-5771**

Circle 236 on Reader Service Card

**Manitowoc**  
Marine Group



**The industry leader  
in new construction,  
conversion, and  
shiprepair for over  
100 years**

**We deliver to your specifications,  
competitively and on schedule**

- ✓ Quality unmatched in the marine industry
- ✓ Capacity to handle your multi-vessel projects
- ✓ Highly specialized in automation technology

**Manitowoc Marine Group**

1600 Ely Street, Marinette, WI 54143  
715-735-9341 Ext. 528 Fax: 715-735-3516

Circle 240 on Reader Service Card

A **Manitowoc** Company

## Government Update

promptly notified of the change and that the DoSs are revised as necessary.

### Control Measures

Failure of the ship to complete a DoS when it has interfaced with a port facility or other ship subject to, but in viola-

tion of, the ISPS Code or Chapter XI-2 of the SOLAS Convention constitutes clear grounds for a port state control official of a Contracting Government to exercising control measures with regard to the ship. Control measures utilized must be proportionate, but may involve:

(1) inspection of the ship; (2) delaying the ship; (3) detention of the ship; (4) restriction of operations, including movement within the port; or (5) expulsion of the ship from port. For ships intending to enter a port of a Contracting Government, where there are clear

grounds for believing that the ship is in violation of the ISPS Code or Chapter XI-2 of the SOLAS Convention, the port state control officials may: (a) require rectification of the non-compliance prior to entry; (b) require that the ship proceed to a specified location in the territorial sea or internal waters of the nation; (c) inspect the ship in the territorial sea of the nation; or (d) deny entry into the port. If control measures are exercised, the port state control officials must forthwith inform in writing the flag Administration of the control measures imposed and the reasons thereof. The port state control officials must also inform the recognized security organization (RSO), if any, and the International Maritime Organization (IMO) when control measures have been imposed. Denial of entry into port or expulsion from port may only be imposed where the port state control officials have clear grounds to believe that the ship poses an immediate threat to the security or safety of persons, or of ships or other property and there are no other appropriate means for removing that threat.

### Summary

Proper use of the DoS is important, not only as a means of coordinating security arrangements between ships and port facilities, but also as a method of documenting appropriate implementation of the ISPS Code and related maritime security requirements. This becomes crucial when a ship calls at a port facility that is not in full compliance with the ISPS Code and does not have an approved security plan. A ship calling at such a port facility must not only institute additional security measures (as provided for in the ISPS Code and its ship security plan), but it must also be able to demonstrate to port state control officials at subsequent port calls that it took the appropriate steps. The way to demonstrate this full compliance with the ISPS Code is to complete and retain on board a DoS fully documenting the ship's security measures while at this non-compliant port facility.

Welcome to the new world of security through paperwork.

### Coolboxx Formed

Three Dutch companies: Visbeen Transport Groep, Post-Kogeko, and Geest North Sea Line joined forces to launch Coolboxx, a new pan-European initiative that is designed to provide shippers of temperature-controlled commodities with a range of intermodal alternatives to road transport. Coolboxx will be fully operational last quarter of 2004.

Maritime Reporter & Engineering News

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!



**SEI**

ISO 9001 CERTIFIED

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 263 on Reader Service Card



**monitoring and measurement solutions**

Imes Systems provides a range of turnkey systems and off the shelf products to support oil and gas operations in both local and international markets.



System expertise includes:

- anchor chain load monitoring
- stack monitoring during underbalanced drilling
- subsea umbilical electrical fault finding
- riser inhaul logging and monitoring

[www.imes-systems.com](http://www.imes-systems.com)

Circle 230 on Reader Service Card

## Need a Lift?

If you're suffering from those load-towing blues, we have just what you need.

Allied Systems Company now manufactures **LANTEC**

**Winches**. With three winch models and four drive models to choose from, chances are, you'll find the machine suited to your application. Fast, safe, reliable—**LANTEC Winches** are leaders in their field.



To find out more, write, call or email:

**Allied Systems**  
COMPANY  
2300 Oregon St.  
Sherwood, OR 97140, USA  
Phone: 503.625.2560  
Fax: 503.625.7269  
Email: [marketing@alliedsystems.com](mailto:marketing@alliedsystems.com)  
Website: <http://www.alliedsystems.com>

Manufactured under license from LANTEC, a division of IMAC Design Group Ltd.

Circle 205 on Reader Service Card

**The fish can't believe their eyes**

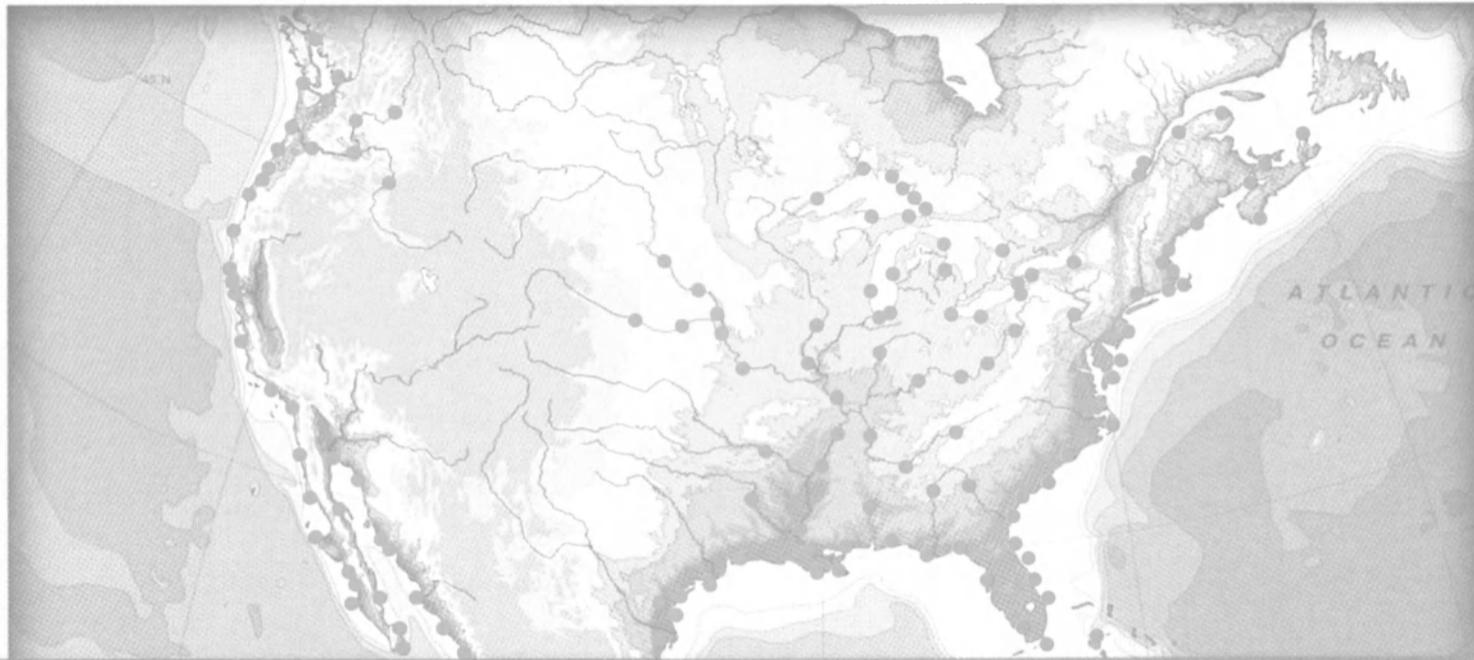
Now it's your turn...  
**Insist upon  
Barkemeyer  
manoeuvring  
equipment**



MARINE SYSTEMS  
**VAN DER VELDEN**

Barkemeyer Schiffstechnik GmbH & Co. KG., Birkenweg 11, D-214465 Reinbek  
Tel.: +49(0)40 7118020, Fax:+49(0)40 7110086  
E-Mail: [info@vdvelden.com](mailto:info@vdvelden.com), Internet: [www.vdvelden.com](http://www.vdvelden.com)

Circle 200 on Reader Service Card

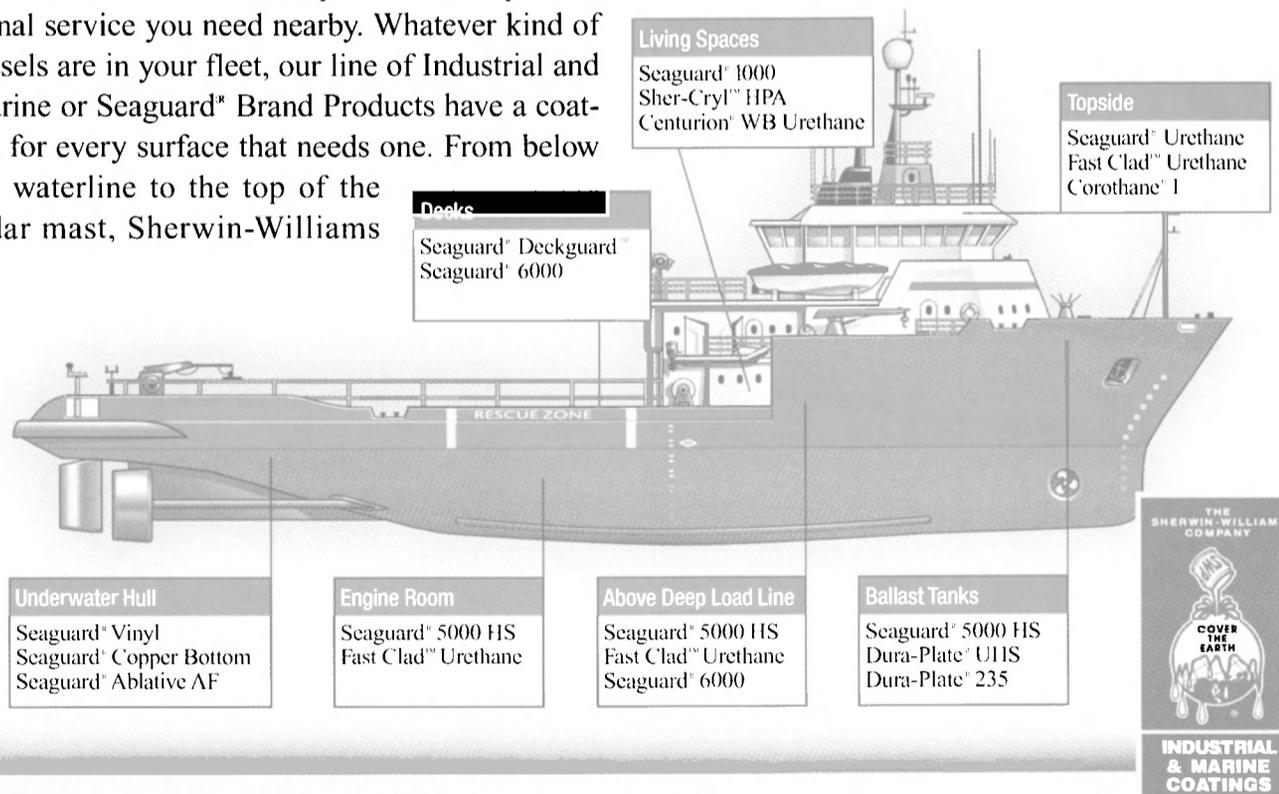


## WE COVER EVERY INCH OF YOUR BOAT FROM COAST TO COAST.

Tugs in San Francisco Bay. Rig tenders in the Gulf. Towing ships off the East Coast. Ferries and barges from the Great Lakes to the mighty Mississippi. What do all these vessels have in common? Sherwin-Williams.

No matter which port you call home, Sherwin-Williams has the products and professional service you need nearby. Whatever kind of vessels are in your fleet, our line of Industrial and Marine or Seaguard® Brand Products have a coating for every surface that needs one. From below the waterline to the top of the radar mast, Sherwin-Williams

has you covered. To learn more about our Industrial and Marine or Seaguard Brand Coatings and to see case histories and tests results, contact your Sherwin-Williams representative or call 800-524-5979 to have a representative contact you.



[www.sherwin-williams.com](http://www.sherwin-williams.com)

Circle 25E on Reader Service Card

# We're not the biggest yard on the Gulf...

But when our customers turn over a project to us, they know it will be completed with the utmost consideration to safety, quality workmanship and time requirements. No matter what kind of marine construction project you have, you can rest assured with United Marine. Contact us for a competitive price on your next repair job, upgrade, conversion or new construction.



**UNITED  
MARINE  
SHIPYARD**

Texaco Island, Port Arthur, Texas  
**800-824-SHIP**

Corporate Office:  
P.O. Box 22077 Beaumont, Texas 77720  
409-833-7070 Fax 409-833-0744  
[www.unitedmarineshipyard.com](http://www.unitedmarineshipyard.com)  
[mail@unitedmarineshipyard.com](mailto:mail@unitedmarineshipyard.com)

Circle 27 on Reader Service Card

## SatCom

**Albert Einstein, when asked to describe radio, replied:**

**"You see, wire telegraph is a kind of a very, very long cat. You pull his tail in New York and his head is meowing in Los Angeles. Do you understand this? And radio operates exactly the same way: you send signals here, they receive them there. The only difference is that there is no cat."**

**— Albert Einstein**

*As technologically advanced as communications have become, the bottom line, particularly for business applications, remains basically the same: the need for clear, reliable and cost-effective means to communicate.*

*Trends in the transmission of data, voice and e-mail from ship-to-shore are much like that of land-based operations. The need for more speed and increased reliability are never ending, and the companies that excel are the ones that not only continually innovate, but those that consistently stay on the front of the curve to deliver real-world technologies that deliver benefits in the unique maritime operational environment. In parallel, price pressures are ubiquitous, as shipowners are keen to exploit every outlet to cut costs and generate revenue. Following are updates of systems, products and service from some of the industry's leaders.*

### Marlink Debuts Online Tools to Control Costs

Marlink introduced a cost-saving enhancement to its account management tool, MarlinkOnline. MarlinkOnline, available exclusively to Marlink customers, is a secure Web-based tool designed to allow both maritime and land-based customers to more directly manage their Marlink communication accounts by permitting authorized users

to review and analyze monthly invoices and daily account usage, as well as print call records and invoice details. Maritime customers can select and view

invoices or call data for individual vessels or for their entire fleet with information updated every 24 hours. Both ship and shore-based customers now have the ability to manage their communications costs in greater detail enabling them to improve their overall operational efficiencies. Another enhancement is the WebDial feature, a feature that enables users to initiate voice calls online via the Web. Marlink's WebDial permits the user to direct calls to any terrestrial or cellular phone and to determine the account to be billed for the call.

Circle 4 on Reader Service Card

### Cell Phone Service Sets Sail

AT&T Wireless and Maritime Telecommunications Network (MTN) are working to provide cruise ship passengers with the convenience of using

their wireless phones at sea. Earlier this year the companies formed a joint venture, Wireless Maritime Services, to develop and launch an innovative and affordable communications offering that will rely on a combination of satellite and wireless services to provide the cruise line industry and its passengers with on-board wireless service. Recently it was announced that Island Cruises would offer passengers the service via their personal wireless phones anywhere their cruise ship takes them in international waters. Island Cruises' Island Escape incorporated a new communications offering developed by Wireless Maritime Services. The offering combines satellite and wireless services to provide the cruise line industry and its passengers with on-board wireless service. Wireless service is now available on the Island Escape for many passengers with GSM phones operating on the 900 MHz frequency, which is common throughout Europe.

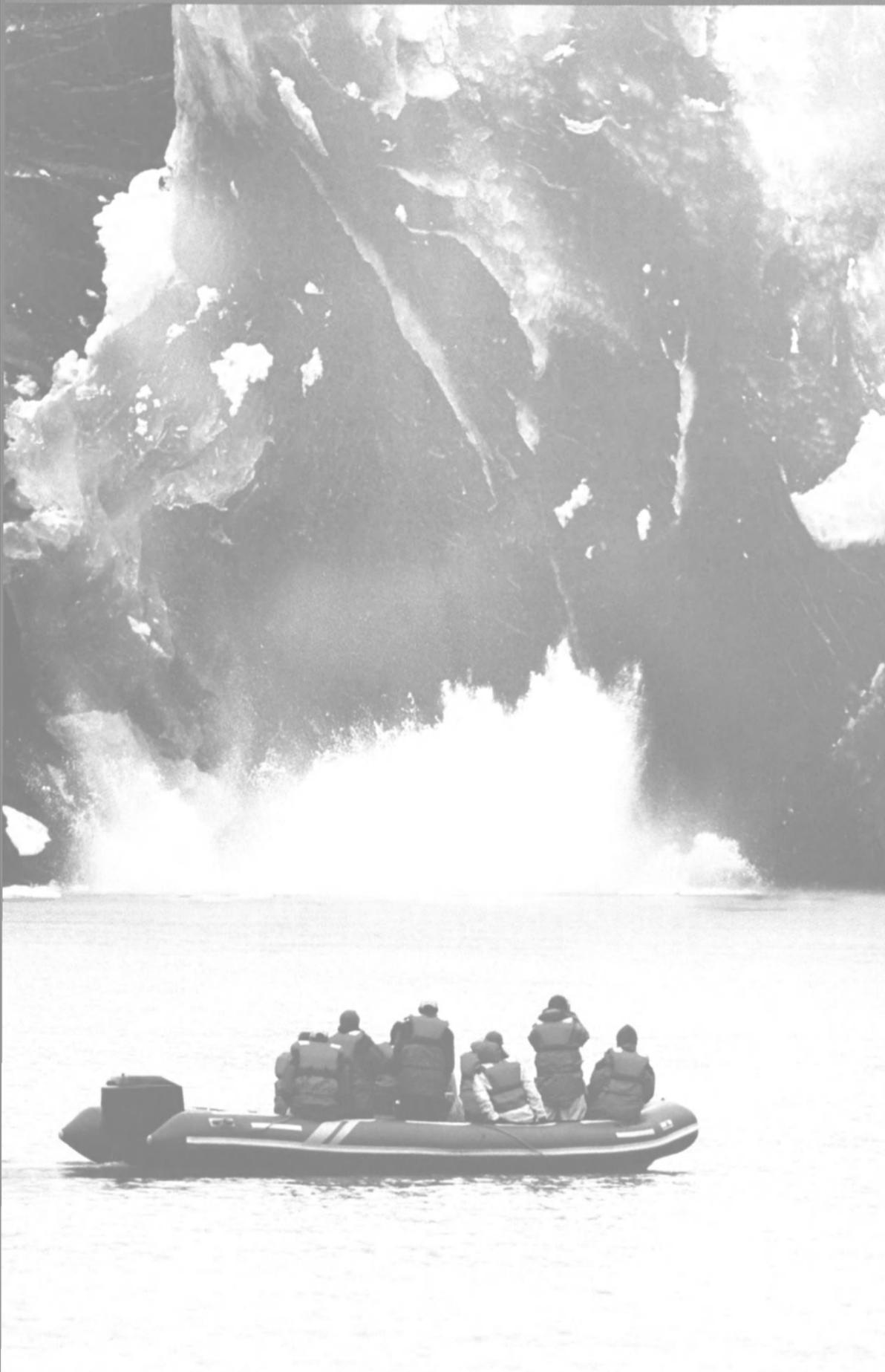
Circle 26 on Reader Service Card

### Stratos Offers F33 MPDS

Stratos Global has available Mobile Packet Data Service (MPDS) for Inmarsat Fleet F33, bringing always-on connectivity and data-transmission-based billing to smaller maritime vessels. MPDS for Fleet F33 features persistent connectivity at speeds up to 64 kbps incoming from the satellite and up to 28 kbps outgoing from the terminal. MPDS connectivity is available within Inmarsat's spot beam coverage area and users pay only for the amount of data sent and received, rather than the amount

Maritime Reporter & Engineering News

# A little ice isn't going to stop us.



## UNCOMPROMISING COMMUNICATIONS FOR THE WORLD'S HARSHEST LOCATIONS

What is ice anyway? Certainly not a big enough obstacle to keep us from delivering reliable communications. Actually, there's no place on earth that's too remote or too harsh for our reliability. A relentless pursuit of excellence — that's what it takes to be a premier global service provider. That's what it takes to offer premium service. And that's what ensures uncompromising quality for our customers around the world.

Without question, CapRock is the satellite communications provider you can count on day-in and day-out. No ifs, ands, buts or ice.



Circle 210 on Reader Service Card

RELIABILITY TO THE EXTREME

[www.CapRock.com](http://www.CapRock.com)

# Flying High Again

France Telecom is pushing hard to advance its position as a single source communications and IT services provider.

Corporate consolidation and technological evolution in the maritime satcom domain continue to subdue pricing, helping to level the playing field among service providers. France Telecom, in an effort to tilt the competitive balance in its favor, is embarked on an aggressive campaign to differentiate itself from the competition by positioning itself as a one-stop communication and an IT solution provider, an effort backed by an impressive R&D effort geared to delivering simple-to-use, customer driven solutions.

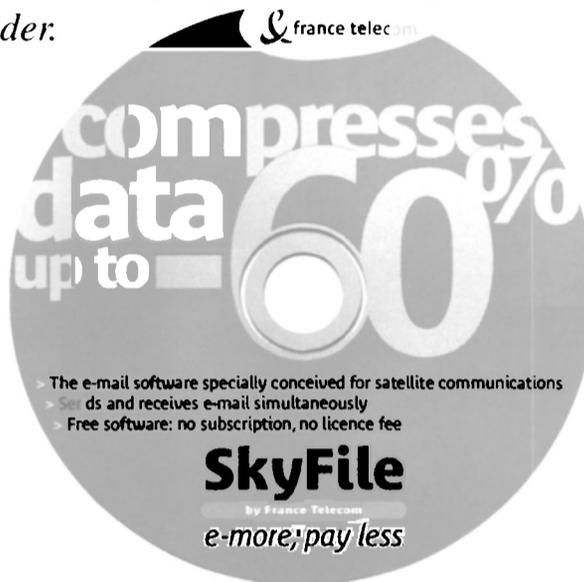
"The challenge is to have our range of value added services, to have them known, understood and used," said **Ghani Gehloul**, Marketing Director, Maritime. "The big job is the education of the shipowners, to ensure that they realize the benefit."

That broad service offering has been significantly expanded already in 2004, with France Telecom Mobile Satellite Communications adding the following since January 1:

- Version 2 of its Traffic Information System as well as the VPN connection via Fleet;
- Skyfile C and an extended low tariff time slot for the pre-paid Scratch & Phone Card;
- The ability to compress messages by up to 40 Kbit on Fleet 33 (enabling more fluid use of Internet and an increase of 27 percent in e-mail transmission speed) as well as the MPDS on-line management tool with the Fleet range to optimize control of MPDS usage on fleets of ships;
- SSAS on Inmarsat C and Mini-C services, enabling ships to comply with IMO's ISPS regulation for the sending of ship-to-shore alarm signals in case of a security alert or attack.
- MPDS with Fleet 33, and the successful testing of call waiting with the MPDS fleet range.

## A burgeoning marketplace

The proliferation of communication choices available onboard ships has mushroomed much in the same manner, albeit a bit slower, as found in traditional land applications. For business purposes, voice communication is increasingly giving way to data transmission



and e-mail. Gehloul said that the voice/data traffic split is about 70 to 30 percent, but conceded that business data usage is growing rapidly while business voice usage is declining. Much as in any office application, speed and reliability concerns are great, as slow communications - whether it voice, data or e-mail — means decreased efficiency and increased airtime usage. While satcom usage becomes more common, shipowners and managers - notoriously fanatical to control costs — are determined to monitor and control costs closely. Thus each of the major service providers have continued to roll out more and increasingly sophisticated value-added software solutions, more often than not offered for free, that are geared toward monitoring and managing satcom services, as well as consolidating information for more rapid transmission. "A big fear of shipowners is the use of MPDS," said Gehloul. Thus, the onus is squarely on service providers to deliver increasingly sophisticated but simple-to-use platforms to make communication services and costs reliable. "Our strategy is to extend product and value added services, while we always try to give value added services for free," said Gehloul. "All product developments come from our customers." One such free service was the recently updated Skyfile C, a file compression tool which Gehloul stressed is extremely easy to use.



Ghani Gehloul, France Telecom, Marketing Director, Maritime

## France Telecom makes a move

In just five years France Telecom has risen from being the seventh largest provider of communication services to number four, according to Gehloul.

France Telecom Mobile Satellite Communications, with sales of E179 million and more than 100,000 subscribers worldwide, plans to leverage the efforts of its 4,000-strong R&D team to continually develop and deliver communication and IT solutions based on its customer's demands. In the increasingly congested maritime communications market, France Telecom is hardly a stranger, but it is perhaps only the last six years that the company has aggressively sought to raise its level of services and profile. A founding member of the original Inmarsat consortium, France Telecom has been involved in maritime communications since World War II when it began operating a network of radio communications. The company is counting on its customer-driven, 4,000-strong R&D team to deliver to market the comprehensive, easy-to-use software solutions, but the continuing corporate trend of outsourcing vital IT services instead of maintaining large in-house, expensive to maintain teams.

"Many of our shipping customers have huge IT teams (that are expensive to maintain)," said Gehloul. "They should be looking to outsource IT solutions, and we are a communication and IT partner that can solve virtually any problem." Top priority in the R&D lab today is work on video compression technology. While he admits that, currently, the maritime market does not exhibit an overwhelming need for this technology, Gehloul said France Telecom is in talks with the French Navy regarding video conferencing capabilities.

For more information from France Telecom  
Circle 12 on Reader Service Card



## Connexion, Teekay Agree to High-Speed, High Seas Internet Test

Connexion by Boeing and Teekay Shipping will this month launch a maritime trial of the Connexion by Boeing service over the North Atlantic. "Affordable broadband on our ships will allow us to explore business solutions and services that have previously not been feasible," said **Graham Westgarth**, president of Teekay Marine Services. The Connexion by Boeing maritime solution — 2.5 Mbps to the vessel and 256 kbps from the vessel — is touted as much faster than options currently on the market today. As ships at sea increasingly utilize communication tools to facilitate the efficient operation of ships, this capability will allow users to access the Internet and firewall-protected corporate intranets, send outgoing e-mails or open large attachments from incoming e-mails and get the news, weather or destination information. "This service brings new choices to the maritime market, offering previously unavailable productivity strategies for owners to manage their fleets," said **Sean Schwinn**, Connexion by Boeing vice president of Strategy and Business Development. "The maritime solution leverages the existing satellite and ground-based network Connexion by Boeing has established and will bring the same capabilities for robust, high-speed connectivity to the maritime industry." **Circle 2 on Reader Service Card**

## SatCom

of time they are connected. Fleet F33 from Stratos features a small, lightweight antenna and reduced-size on-deck equipment

**Circle 5 on Reader Service Card**

### PetroCom Helps Turn the Tide in Offshore Communication

PetroCom completed phase one of base station installations in the Gulf of Mexico — the first digital cellular network in the Gulf — with final testing scheduled to have begun in early July. Working with Siemens and Ericsson, PetroCom is introducing GSM technology to provide enhanced, secure and high-speed communications for companies in the offshore industry.

"The first digital cellular network in the Gulf is on schedule and moving swiftly to deployment," said PetroCom President and CEO Brad Parro. "The first operational digital cellular sites signify PetroCom's solid commitment and delivery on its promise to bring



the dominant and most strategic communications network to our customers in the Gulf of Mexico."

In addition, PetroCom is fully optimizing the existing analog network at the same time. The analog system is being reengineered and upgraded for better, more powerful performance.

When complete, PetroCom's digital cellular network will deliver approximately 100,000 sq. miles of coverage in the Gulf of Mexico. The company will also provide additional coverage to support deepwater exploration projects and specialized market demands. PetroCom's network harnesses the strength of the Global System for Mobile Communications (GSM) standard. The network will also be one of the first system-wide deployments of EDGE (Enhanced Data rates for GSM Evolution) technology in the U.S.

**Circle 3 on Reader Service Card**

### SeaWave Helps Steer Ferry Home

SeaWave, LLC installed the SeaWave Integrator 3.0 aboard the Alaska Marine Highway System's (AMHS) high speed ferry Fairweather, as it embarked earlier this year on its one-month trip for delivery from Bridgeport, Conn., to Juneau, Alaska. Derecktor Shipyards wanted a communications system on board for email and weather tracking for its delivery voyage. The SeaWave Integrator provided voice and email communications to the Derecktor delivery captain and 10 crew members during transit of the first commercial ferry to be built to the international High Speed Craft

(HSC) code in the United States. SeaWave provides tracking services using their SeaWave STAR vessel tracking software, freely available to SeaWave users from their Web portal mySeaWave.

**Circle 28 on Reader Service Card\**

### KVH Tracphone F77 for High Speed Internet

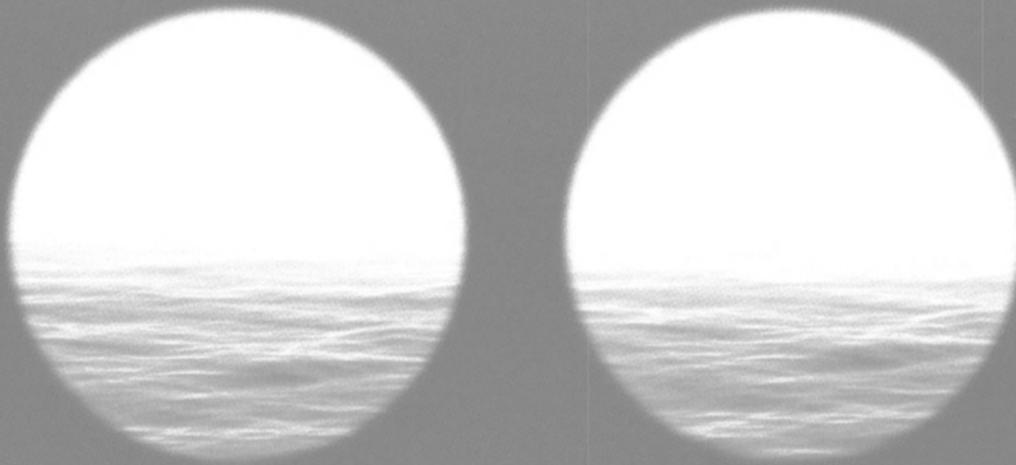
The Tracphone F77 by KVH Industries is designed to be a compact, high-powered marine satellite communications system. Using the Inmarsat Fleet F77 service, the Tracphone F77 offers vessels high quality voice connection worldwide and high-speed data and internet connections in more than 90 percent of the maritime cruising routes and regions around the world. Tracphone F77 can meet a variety of needs via its ability to switch between Mobile Packet Data Service (MPDS) and mobile Integrated Services Digital Network (ISDN) channels.

**Circle 16 on Reader Service Card**

### Xantic Appointed BGAN Launch Partner

Xantic was selected by Inmarsat to become a prospective launch Distribution Partner for the new BGAN services which will become available to the market in 2005. The BGAN is designed as a complete, easy-to-use mobile satellite solution. With bandwidth up to 432kbit/s and improved portability via a broad

## How is the visibility of your satcom traffic?



**Circle 274 on Reader Service Card**

## SatCom

selection of terminals. BGAN will extend offerings to traditional mobile satcom users.

Circle 7 on Reader Service Card

### Scratch & Phone

France Telecom Mobile Satellite Communications pre-paid phone card service, dubbed "Scratch & Phone," is designed to help control crew communication costs and boost morale. Recently, the system was significantly enhanced with reduced rates and extended "Happy Hour" times. When calling within the new Happy Hour time slot, Opti-time card users pay less than \$1/minute, whatever the ocean region or call destination. On April 1, 2004, the "Happy Hour" time slot was extended to 7 p.m. to 7 a.m. UTC/GMT during the week and all day on the weekends.

### Telenor Launches Sealink Global Access

Telenor launched Sealink Global Access, the company's latest broadband communications package designed to deliver high-speed global access for the maritime industry. This new very small aperture terminal (VSAT) service provides ships with connections of up to 256 kpbs at a fixed monthly fee.

The off-the-shelf package includes on-board telephone/fax lines; internet and public switched telephone network access; installation and maintenance of the on-board antenna and equipment; and 24-hour customer support.

"Sealink Global Access incorporates all the communications functionality of our well-proven Sealink broadband solution using smaller, commercially available equipment that provides the maritime shipping and transportation markets a very cost-effective and fully managed communications package for global and regional operations."

Circle 17 on Reader Service Card

### Teamtalk Satellite Launches E-mail Software

Teamtalk Satellite launched SuperHub Pro2004, an upgrade to its existing e-mail software portfolio. The new package includes all of the standard benefits of satellite communication packages, such as compression, batching, breakpoint restart, duplex transfer, encryption and security. In addition, it uses SMTP/POP3 client software, allowing it to be used with popular programs such as MS Outlook, MS Outlook Express, Lotus, Eudora and CCMail.

Circle 14 on Reader Service Card

### Subsea7: Staying Connected with CapRock

Subsea7 travels to some of the world's most remote marine locations to provide construction, diving, pipelay and remotely operated vehicle (ROV)/survey services. Because it operates vessels throughout the world, it is essential for Subsea7 to provide a reliable means for customers and vessel crews to transmit and receive voice and data. But providing communications is outside of Subsea7's core competency and the company had been using the same VSAT systems for several years. In 2002, Subsea7 recognized that its limited VSAT communications systems were due for replacement, and the company saw an opportunity to upgrade to systems. Reliability topped the list of the qualities Subsea7 was looking for in a provider. "Working from a ship for any length of time is considerably more efficient with reliable broadband communications to the outside world," said Subsea7 Global IT Manager Anders From. "We chose CapRock Communications based on their track record of reliability and their ability to demonstrate significant savings. They gave us a system with unparalleled quality, creating value for our customers and employees who can easily work from any vessel in the Subsea7 fleet with communications tailored to their project needs." CapRock is the single source provider of both dedicated and Bandwidth-on-Demand connectivity to enable flexible ship-to-ship and ship-to-shore communications for customers and crew aboard Subsea7 ships around the world. CapRock's flexible network allows voice and high-speed data connections to be provisioned on an as-needed basis from CapRock's network operating center (NOC) in Scotland. "Ensuring that the products and services were of a high standard was extremely important," said Subsea7 Project Manager John Morrison. "But, beyond that, we were interested in contracting with a company with whom we could establish a strong relationship."

Circle 1 on Reader Service Card

# STEARNS®



Industrial flotation products for all your security needs.  
From the hottest weather to the coldest; we've got you covered...



Inflatable Vests

Flotation Vests

Flotation Jackets

Flotation Coveralls

**Stearns® ...for ALL seasons.**



Stearns® Inc.  
P.O. Box 1498 • St. Cloud, MN 56302 • (800) 697-5801 • Fax (320) 252-4425 • E-mail: safety@stearnsnet.com • www.stearnsinc.com

Circle 279 on Reader Service Card

# Stolt Offshore Completes Platform Salvage

Stolt Offshore reported it has successfully completed the Eugene Island 275A platform salvage project for Total E&P USA, INC., in what is described as the first platform salvage using only mechanical cutting devices. The platform was located on OCS-G-0988, some 70 miles off the Louisiana coast in 180 ft. of water.

"Because of environmental and safety objectives, Total E&P USA asked Stolt to conduct the salvage operation without an arc being struck under water, using remotely operated tools as much as possible," said Allan Palmer, Stolt's region-

al manager of regional projects and operations in Houston. "At the request of Total E&P USA, and assisted by LoneStar Deepwater Consulting, we conducted an extensive testing program to qualify the tools for this job."

Stolt Offshore located heavy duty cutting tools that could be modified or redesigned to be used remotely underwater. Before taking the tools offshore, the company tested them at its Port of Iberia location at New

Iberia, La.. The remotely operated tools had to be able to sever 42 x 0.5-in. jacket legs with 39 x 0.75-in. grouted

piles down to 8-in. diameter jacket members. Stolt also tested tools for stripping and cutting casings to get vertical access to the wells for further plugging. These modified and redesigned cutting tools allowed Stolt Offshore to perform the first platform removal project done using only remote cutting devices. The Stolt Offshore tool kit included

- heavy-duty shears;
- high pressure, abrasive cutters;
- diamond wire cutters;
- guillotine-type saws; and
- a variety of remotely operated

mechanical cutters.

One of the hydraulic shears used for the job produces 750,000 psi of cutting force. It had originally been designed to cut concrete piles and was modified for this big underwater project, Palmer said. The abandonment project began in August 2002, with original plans calling for the removal of the deck for disposal onshore and the transportation of the jacket to a nearby artificial reef site. In parallel, Stolt Offshore had commenced abandonment procedures of pipelines leading from the platform.

(Continued on page 52)

The Materials Barge



The A6 Conductor



Innovative Cutter



Crane Cab



MARITIME SERVICES BY FRANCE TELECOM MOBILE SATELLITE COMMUNICATIONS  
The leading solutions for cost-conscious companies



With Traffic Information System, follow your satcom usage any time you want.



Group	Duration	Volume
Maria Ship Fleet ISDN	89	
Maria Ship Fleet LS	6164	
Maria Ship Fleet MPDS		85453
Maria Ship Inmarsat A	1276	
Maria Ship Inmarsat B		

Only by France Telecom Mobile Satellite Communications:

- A management tool for tracking your satcom usage and anticipating future bills.
- Direct on-line access 24/7 via a dedicated password and a secured connection (SSL).
- Free all-inclusive service, complete with tools for multi-criteria analyses.

Take your company beyond its limits with France Telecom Mobile Satellite Communications, **The Ultimate Link**.

mobilesat@francetelecom.com • +33 5 56 22 32 31 • www.francetelecom-mobilesat.com

france telecom  
mobile satellite communications

**The Ultimate Link**

Circle 275 on Reader Service Card

# Training and Education in the Maritime Industry

By Glen Paine, Executive Director,  
MITAGS & PMI

Over the past six decades, there have been rapid developments in technology and marine operations. These have brought about significant changes in

maritime education and training.

Six decades ago, maritime education and training was a relatively straightforward process. Upon entry into the merchant marine, an individual served mandatory periods of minimum sea service between progressive grades of license examinations that were conducted by the appropriate licensing authority. Sea service provided the bulk of required practical experience and formed the basis for further instruction ashore. Long sea voyages, long turn-around times, large crews, and extensive apprenticeship and cadet programs all contributed to individuals learning the required practical skills while at sea.

Following a period of sea service, a candidate would enroll in an upgrading course. These courses followed mandatory syllabi designed primarily for professional advancement. A strong element of preparation for the examination was included, but subject knowledge was the focus. External examiners from the licensing authority set and conducted the examinations. Questions were regularly updated and required essay type answers supplemented by sketches and diagrams. In the thorough one-on-one oral examination that followed, a candidate was "grilled" extensively and required to demonstrate proficiency for a variety of skills ranging from wire splicing to adjusting a standard magnetic compass.

Coupled with sea experience, these courses covered all of the material required for a particular level of license. Although there were different types of vessels (dry cargo, passenger, tanker, etc.), their navigation and propulsion technologies were similar. Accordingly, the one-course training system addressed a "generic" ship and the sea time provided on-the-job training for

## SSAS

### SHIP SECURITY ALERT SYSTEM

Two solutions from SAILOR – your choice!

- Meet the IMO requirements for SSAS
- Additional communication services
- Only standard subscription cost - no additional fees for SSAS functionality

SAILOR Iridium SSAS. Based on the Iridium Satellite Network.



Visit [www.sailor.dk](http://www.sailor.dk)

- SSAS information and brochures
- World-wide Distribution and Service Network

SAILOR H3000M SSA Mini-C. Based on the Inmarsat Satellite Network.





PIRATES BEWARE



When safety counts

Circle 223 on Reader Service Card

## WE'VE GOT NEW EQUIPMENT FOR YOU TO TRY.

4th Ocean  
Technology Workshop

October 19-21, 2004  
Hyatt Regency Hotel  
Newport, RI

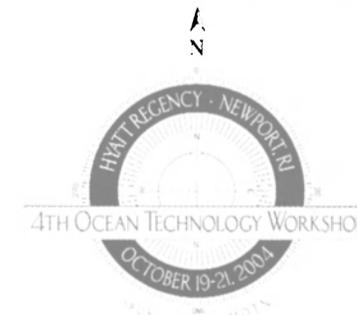
Training & Boat Demos  
by Industry Leaders



Register at [www.motn.org](http://www.motn.org)  
or call 781.740.1456





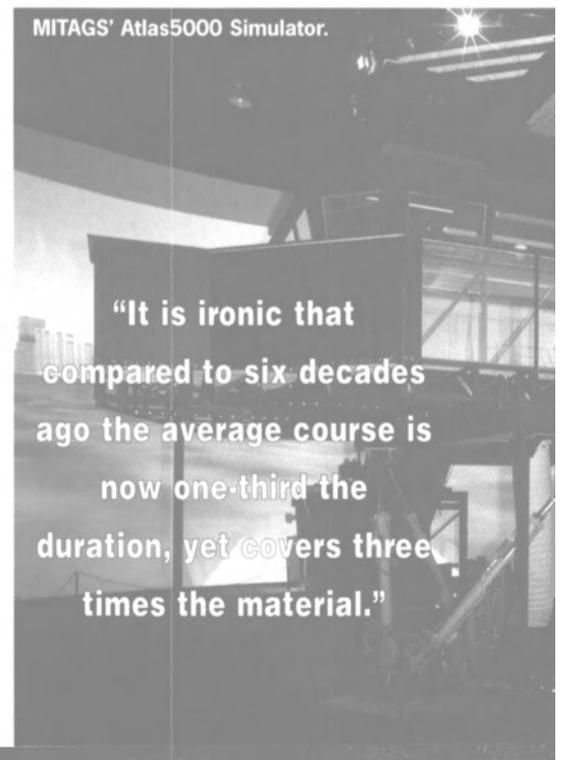


Technologies for Port and Harbor Security

M O T N   E X P A N D S   M E M B E R S H I P   G L O B A L L Y

Circle 280 on Reader Service Card

MITAGS' Atlas5000 Simulator.



"It is ironic that compared to six decades ago the average course is now one-third the duration, yet covers three times the material."

## 65<sup>th</sup> Anniversary Edition

each particular type of ship and the cargo carried.

Paid study leave was a common feature in the industry, so affordable course fees were not a problem. Apart from a First Aid course, there were no "short" courses. The first mandatory short course, a two-week Radar Observer course, didn't appear until 1956.

Although minimum teaching qualifications were required in other professions, the maritime education system considered it unnecessary. Instructors were only required to have the highest-level license in their particular department. Largely, teaching was a process of providing information. At that time, the instructor would write notes and laboriously draw diagrams on the chalkboard that the students copied into their workbooks for subsequent reference.

Handouts were virtually unknown. Reprographic equipment was limited to a typewriter and mechanical spirit duplicator. However, use was made of actual equipment (such as rigging gear, safety equipment, etc.), supplemented by detailed scale models of buoys, flags, and other items. Despite the weaknesses that existed in the system, a generation of seafarers owed much to the dedicated efforts of these instructors.

Now leap forward to present day. Rapid advances in technology have led to vessels that are larger, stronger, deeper, faster, and more powerful. Globalization of the economy has created "just in time" inventory systems that require ships to have quick turn around schedules and smaller crews. The plethora of new technology acronyms (ARPA, GPS, ECDIS, AIS, DP, Azipod, GMDSS, and IBS) reflects the fact that today's bridge is much closer to an aircraft cockpit than the ships of yesteryear. Sophisticated propulsion systems (Azipod, tractor, joystick controls, etc.) add to this complexity.

The same rapid advances have also

occurred throughout shipboard operations. Equipment and procedures for the carriage and transfer of dangerous liquids, hazardous materials, and exotic cargoes all require specialized training. To these add the diversity of human factors and management topics; such as fatigue, stress, sexual harassment, dis-

crimination, crowd control, and public relations. It is apparent that maritime education and training is no longer a straightforward process.

The government's response to the changes in the business environment, and growing public awareness of pollution, has led to the passing of numerous

international conventions. These conventions have generally been in response to maritime casualties. Most mandate training and include stiff penalties for failing to comply. The major ones include: SOLAS; MARPOL; ISM; STCW-95; ISPS; and MTSA.

## Benefit - from being in control

[www.marlinkonline.com](http://www.marlinkonline.com)



Imagine being able to analyze your daily call data or invoices, have an overview of your satellite communication costs, shop for prepaid airtime or even initiate voice calls - all via the Internet.

All these services and more are now available via [www.marlinkonline.com](http://www.marlinkonline.com), Marlink's Web-based tool designed to streamline the daily management of your satellite communications and improve your operational efficiencies.

Communications you can rely on

# MARLINK

[www.marlinkonline.com](http://www.marlinkonline.com)  
[www.marlink.com](http://www.marlink.com)



Circle 264 on Reader Service Card



180 Division Ave  
West Sayville, NY 11796, USA  
Tel.: 631-589-2510 or 800-488-7325  
Fax: 631-589-2925  
www.peckhale.com  
sales@peckhale.com

**YOUR WORLDWIDE SOURCE FOR QUALITY  
CARGO SECURING AND SPECIALIZED  
MATERIAL HANDLING PRODUCTS AND SYSTEMS**

**DEFENSE**

- Aircraft Carriers
- MSC & MARAD Ships
- Ammo/Cargo Vessels
- Amphibious Crafts

**MARITIME**

- Container Ships
- Ro-Ro Vessels
- Multi-Purpose Ships
- Specialty Vessels

**PRODUCTS**

- Container Lashing
- Web & Wire Tiedowns
- Hi-Shock Chain Tiedowns
- Vehicle Aircraft Tiedowns
- Sling & Nets
- Camlocks
- Corner Castings
- Quick Release Hooks

**A FULL SERVICE MANUFACTURER**

- Complete Product Line
- Engineering & Design
- Worldwide Network
- Technical Services
- Over 50 Years Experience

Circle 250 on Reader Service Card



**MEET WASHINGTON, D.C.,  
AT LOEWS L'ENFANT PLAZA HOTEL**

It's where you meet with Washington, D.C., not just in it. Come gather in rooms where views of the Washington Monument thrill with their majesty. Then smile as the attendees return triumphant from a tour that took them through the city's treasures without taking them far from the hotel. This is truly a capital Loews Meeting City.

- 21,000 square feet of meeting space, including 10 flexible function rooms and a glass-enclosed solarium
- 5,355-square-foot Grand Ballroom
- 370 spacious guestrooms and suites with breathtaking views
- Most convenient downtown hotel to Reagan National Airport
- Directly above the Metrorail station
- Footsteps from the Smithsonian and most national monuments

Call 202-484-1000 • Get more details at [www.loewshotels.com](http://www.loewshotels.com)

Circle 238 on Reader Service Card

**The SHIP SECURITY ALERT SYSTEM from EMS Satcom is all you need.**

You need an SSAS on board to comply with regulations and to protect your vessels from piracy, terrorism and other perils at sea. You need EMS Satcom. Our easy-to-install SSAS meets all the demands of the SOLAS, Chapter XI-2, Regulation 6 requirements. Blending covertly into your ship's surroundings to avoid detection by intruders, it delivers high reliability and true security – simply and economically.

Dedicated 'fit & forget' terminal

Hideaway Switches

Simple, easy-to-install antenna

1 800 600-9759 (North America) +44 1684 290 020 (Europe) 1 613 727-1034 (Worldwide) [info@emssatcom.com](mailto:info@emssatcom.com) [www.emssatcom.com](http://www.emssatcom.com)

Circle 22 on Reader Service Card

## 65<sup>th</sup> Anniversary Edition

The bigger ships, smaller crews, and shorter turn-around time, leave little time for on-board instruction. This makes it extremely difficult for new mariners to obtain the same practical training at sea. Gone are the days when one can "learn it all" on the job.

The mariner wishing to progress through the license structure is now faced with what must seem a bewildering, complicated process. Even the most conscientious mariner would find it nearly impossible to keep abreast of these changes.

For a mariner that is unsupported by a union or employer, the cost of attending several blocks of short courses could run to several thousand dollars. Training now requires more than "chalk-and-talk." Through mandatory train-the-trainer courses, instructors are more aware of factors that improve the learning process.

Six decades ago, it would have been unimaginable to conceive the plethora of teaching aids now available to instructors and students (copiers, scanners, computers, presentation software, projectors, videos, the Internet, etc.). To these, add state-of-the art full-mission and part task simulators and one can truly appreciate that training tools, as well as the high cost of training, have changed considerably.

These changes have brought about new challenges to maritime education and training providers. By far the greatest of these are compromises made between course length and cost. It is ironic that compared to six decades ago the average course is now one-third the duration, yet covers three times the material.

Constraints of time often lead to teaching the bottom line answers only. Additionally, the random order in which mariners can attend the block courses do not provide for logical continuity. Of all the recent legislation, the Standards of Training, Certification, and Watchstanding Code (STCW-95) is the only convention that offers a structure to turn this mass of new regulations into a logical methodology for the orderly transfer of knowledge and skills. The code's framework builds on the skill sets identified at each level (Rating Part of a Navigation/Engineer Watch, Officer in Charge of the Watch, and Management level) and how the task of one level fits into the big picture.

It also requires that skill sets be properly assessed before moving on to the next subject (not just cramming for a written examination). This structure is also applicable to the schools and instructors that are providing the train-

ing. The complete integration of domestic requirements into the STCW Code structure would go a long way towards reducing today's confusing and sometimes conflicting standards. It would also ensure that mariners obtain skills they can actually use in real life.

In addition, it will establish a clear

career path for mariners and provide transferable skills. In the long run, it will help reduce the amount of re-training that is required, which will help keep mariners in the industry.

The maritime community, with the help of training institutions, needs to take advantage of this opportunity to

harmonize our training system. If all sides work toward the "big picture," we can provide meaningful, quality training that truly prepares mariners for the challenges of the global maritime industry in the 21st century. I have no doubt that the industry and maritime training community are up to the task.

# ■ Capsat<sup>®</sup> Fleet77 – always online



**Global solution with great services**  
Capsat<sup>®</sup> Fleet77 offers you a global solution for maritime satellite communication and presents the owners with the following services:

- Continuously on-line with MPDS
- 64 kbps ISDN
- 3.1 KHz Audio
- Speech
- mini-M voice
- Fax
- Global Voice Distress

**Great experiences with already installed Capsat<sup>®</sup> Fleet77 systems**  
More than 800 Capsat<sup>®</sup> Fleet77 systems have been shipped – making Thrane & Thrane the absolute leader in the market. The installations count a wide range of vessels within merchant, fishery, and the navy as well as super yachts.

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

[www.tt.dk/marine](http://www.tt.dk/marine)

**Thrane & Thrane**  
We bring satellite communication down to earth

Thrane & Thrane A/S  
Denmark  
[www.tt.dk](http://www.tt.dk)  
[info@tt.dk](mailto:info@tt.dk)  
+45 35 55 55 00

Thrane & Thrane, Inc.  
10000 Lakeside Drive  
Suite 100  
Virginia Beach, VA 23462

Circle 265 on Reader Service Card

The History of Port Security

# A U.S. Coast Guard Mission Since 1917

By Chris Doane and Joe DiRenzo III

The horrific attacks on 9-11, and the subsequent increase in maritime security required to protect against asymmetric maritime attacks, has dramatically changed the U. S. Coast Guard. They have changed the service's emphasis on port security as well as its ethos in the eyes of the nation it serves. Previously, the Coast Guard received national media attention mostly when it was involved in a dramatic at-sea rescue leaving a public perception of the service as lifesavers. Since 9-11, because of its port security efforts and its overall role in Homeland Security, the Coast Guard has received more national level public, political and media attention than at any other time in its long history and its public image is rapidly shifting from lifesaver to protector. Consider the following examples. The President has made several nationally televised addresses on Homeland Security from Coast Guard bases, a recognition and experience new to all who currently serve in the Coast Guard. During the recent Fleet Week activities in New York City CNN's Headline News replayed images of Coast Guard small boats operating within the harbor providing a visible presence in one of America's busiest ports. National and local media everywhere have continuously filmed and reported on the Coast Guard's increased presence in the ports and waterways of the U.S.

All of this attention has left some, including some within the Coast Guard, with the impression that port security is a new role for the Coast Guard; it is not. The Coast Guard has been responsible for the security of America's ports and waterways for nearly 87 years. Port security is a Coast Guard legacy mission that has been continuously performed to varying degrees, but always moves to the forefront of the service's activities whenever the homeland is being threatened. As we face this newest threat to our internal security, it is useful to examine the history of the Coast Guard



**CAPT Godfrey L. Carden, USCG.** During World War I, CAPT Godfrey L. Carden, commander of the Coast Guard's New York Division, was named COTP in that harbor. The majority of the nation's munitions shipments abroad left through New York. For a period of 1.5 years, more than 1,600 vessels, carrying more than 345 million tons of explosives, sailed from this port. In 1918, Carden's command was the largest single command in the Coast Guard. It was made up of 1,400 officers and men, four Corps of Engineer's tugs and five harbor cutters. His pioneering work defined the Coast Guard's port security mission for the next 60 years. (Original caption unknown, photo number/date/photographer unknown. Possibly 1918. Courtesy U.S. Coast Guard)

in port security to better understand the service's roles, responsibilities and authorities for protecting the U.S. Maritime Transportation System.

The origins of the Coast Guard's role in port security date back to 1917 and the enactment of the Espionage Act following the highly destructive sabotage of a munitions terminal at Black Tom Island, NJ. Since that time, a progression of laws, including the Magnuson Act of 1950, the Ports and Waterways Safety Act (PWSA) of 1972 and most recently the Maritime Transportation Act (MTSA) of 2002 have assigned and refined the Coast Guard's roles and responsibilities for the safety and security of our ports and waterways. Each new law was implemented in response to very real threats posed to U.S. ports during both World Wars, the Korean War, the Cold War, and now the global war on terrorism. The goal of these laws was to give the Coast Guard the authorities it needed to ensure our maritime security, essential to ensuring our economic survival. <sup>1</sup>

(Continued on page 42)



**Left:** The terrorist attacks of September 11, 2001 have directly resulted in the most sweeping maritime security measures in history.

**Below:** The Coast Guard has a long history of maritime and border security. Pictured are dogs and their beach patrol handlers leaping into action from a surfboat during a landing exercise along the coast of South Carolina, circa 1943. During WWII the Coast Guard created a cavalry of mounted beach patrol units and trained dogs to patrol the shoreline. (Photographer unknown. Courtesy of U.S. Coast Guard)



The Timeline

Pharaoh **Snefru** brings 40 ships from Byblus to Phoenicia

Polynesians begin their migration throughout the South Pacific.

1st written shipwreck record. Egyptian mariner is only survivor of a crew of 120.

Queen **Hatshepsut** sends ships into the Red Sea on trading voyages

Chinese invent first compass.

**Ptolemy** of Egypt, a mathematician and astronomer, builds the foundations of cartography.

**“From technical expertise to budget and schedule consciousness, Crowley met or exceeded our expectations.”**

~ Fred H. Van Etten • Project Manager • Chevron Overseas Petroleum



To install five massive energy platforms at Lake Maracaibo, Venezuela, Crowley put its knowledge of complex marine engineering strategies to work. As lead logistics provider for Chevron, we professionally handled all aspects of transportation and installation, adapted new lift technologies and conducted engineering, safety, environmental and budget analyses to meet Chevron's goals.

People who know Crowley know many industries value our logistical know-how. Whether we're solving major installation challenges for energy suppliers, helping to manage supply chains for automotive manufacturers or swiftly moving goods for apparel companies between countries, Crowley has the same goal for every project: exceed customer expectations. For more information, call 1-800-CROWLEY or visit us on the Web at [www.crowley.com](http://www.crowley.com).

- **Liner Shipping**
- **Worldwide Logistics**
- **Energy Support**
- **Project Management**
- **Ocean Towing & Transportation**
- **Petroleum & Chemical Transportation**
- **Alaska Fuel Sales & Distribution**
- **Ship Assist & Escort**
- **Salvage & Emergency Response**



**CROWLEY**<sup>®</sup>  
People Who Know<sup>™</sup>

Circle 213 on Reader Service Card

© Crowley Maritime Corporation, 2004 CROWLEY is a registered trademark of Crowley Maritime Corporation



Inland Waterways Evolution

# The Tugboat, Towboat and Barge Industry



The development and adoption of the AWO Responsible Carrier Program (RCP) was a ground-breaking effort to enhance safety in the tug and barge industry. When a tragic accident in 1993 involving a barge that hit and displaced an Amtrak train trestle resulted in the loss of 47 lives, the industry responded with the RCP, a safety and environmental protection code of practice. The Program encompasses every aspect of fleet operations, including company management and administration, vessel equipment and inspection, and personnel training. In 1999, AWO members voted to make compliance with the RCP a condition of membership in AWO. On January 1, 2000, 13 companies were forced to leave the organization when they failed to certify compliance by the deadline. Since then, some of those companies have been reinstated. Today, all AWO member companies must certify compliance with the RCP through an independent, third-party audit conducted every three years. AWO was the first transportation trade association to require compliance with a safety management system as a condition of membership. The RCP is a dynamic program that continues to evolve to meet the safety needs of AWO members.

**McALLISTER**  
ANY POINT - ANY TIME  
Extensive floating equipment, when and where you need it, for all types of  
**TOWING - LIGHTERAGE**  
McALLISTER LIGHTERING LINE, INC.  
17 STATE STREET NEW YORK CITY

This year, The American Waterways Operators (AWO), the national trade association for the tugboat, towboat and barge industry, celebrates its 60th anniversary. AWO members, representing the inland, coastal and harbor sectors of the industry, recently marked this milestone at its Spring Convention, recalling the reasons for the association's founding and recognizing the remarkable evolution of the industry over the past six decades. AWO was formed in 1944 in the midst of emerging regulations, priorities and demands for transportation during World War II. Today, AWO members account for 80 percent of the towing industry's active fleet. The industry has met, and continues to meet, many challenges, notably in the areas of safety, security, Jones Act integrity, infrastructure modernization, oil spill prevention, and state vs. federal regulatory jurisdiction.

the past 60 years, and enormous changes have been instituted to enable it to boast of a strong safety record today. In fact, in the context of the amount of cargo carried, waterways transportation is remarkably safe, with a low incidence of both crew fatalities and vessel casualties, defined as incidents involving allisions, breakaways, equipment failure, collisions, fire, loss of electrical power, groundings, etc. That said, safety is an ongoing challenge, and one that consumes both time and resources within AWO as a major focus. In this regard, AWO members have initiated some historic changes to raise the bar of safety for the entire industry.

For example, the establishment of the U.S. Coast Guard-AWO Safety Partnership in 1995 was a first-of-its-kind public-private partnership in the U.S. maritime industry. The Partnership has launched over 30 Quality Action Teams to address the most pressing safety issues in the industry and to improve safety and training throughout the tug and barge industry's operations.

**Safety — Taking it to the Next Level**

A new industry safety initiative is now taking shape as the result of a recognition by AWO that it was time to take the RCP to another level to further enhance safety. This new program has also evolved over the past few years as a result of both external events and internal debate in AWO.

In September 2000, as part of the m/v Anne Holly accident investigation, the National Transportation Safety Board (NTSB) recommended that the Coast Guard seek authority to require domestic towing companies to develop and implement a safety management system. In September 2001, a towing vessel on the Gulf Intracoastal Waterway struck



The Man from Moran

**Safety - The Biggest Challenge**

Safety has without a doubt been the biggest challenge in the industry over

**The Timeline**

1798 Invention of sawmill spurs shipbuilding.

1812 England begins construction of double-deck warships.

1519 Magellan begins his journey to circumnavigate the world with five ships and 270 men.

1769 James Watt invents first practical steam engine, incorporating several of his own innovations and improvements.

1794 Joshua Humphreys appointed master builder to build Navy ships at an annual salary of \$2,000.

1807 First steamboat to offer regular passenger service American entrepreneur and inventor Robert Fulton's Clermont began regularly carrying passengers for profit on the Hudson River.

1815 Captain Jan Lawrence, r wounded, u famous "Tel fire faster! [ the ship!"

## 65<sup>th</sup> Anniversary Edition

the Queen Isabella Causeway Bridge in Port Isabel, Texas, resulting in the deaths of eight people. When the U.S. Supreme Court issued its January 2002 decision in the *Chao v. Mallard Bay* case, it ruled that the Occupational and Safety Health Administration (OSHA) regulations could apply to uninspected vessels, namely, tugboats and towboats. Then, in May 2002, another tragic bridge allision involving the Interstate-40 bridge in Webbers Falls, Oklahoma, resulted in 14 fatalities. Under the auspices of the Coast Guard-AWO Safety Partnership, a task force was formed to examine the causes of barge/bridge allisions and to make recommendations to avert them and reduce the severity of those that do occur. The Coast Guard-AWO Bridge Allision Work Group report was issued in May 2003.

In the context of these events over the past few years, the Coast Guard determined that a new safety and security regime for the towing industry could improve safety, particularly one requiring that towing vessels be subject to inspection and that all towing companies employ a safety management system. The Secretary of Homeland Security recently submitted just such a proposal to the Congress. AWO supports this proposal, a historic change to its long-time position, because it believes the new inspection regime will enhance industry safety and security.

### Security — A New World

Speaking of security, the towing industry, like all transportation modes, has had to retool its approach to safety in a post-9/11 world to incorporate security concerns. For the past 60 years, the industry has viewed operational issues and vulnerabilities through the safety prism. Today, of course, that has all changed. The industry has had to consider the possibility that a vessel could be used as a weapon. In this regard, AWO worked closely with the Coast Guard, the U.S. Army Corps of Engineers, and the U.S. Departments of Transportation and Homeland Security to assess vulnerabilities, and to develop a model vessel security plan for members. With a few modifications, it later became the AWO Alternative Security Program, one of only a handful of alternative industry plans that received Coast

Guard approval to meet the requirements of the new maritime security regulations put in place on July 1, 2004.

### The Jones Act — Foundation of the U.S. Domestic Maritime Industry

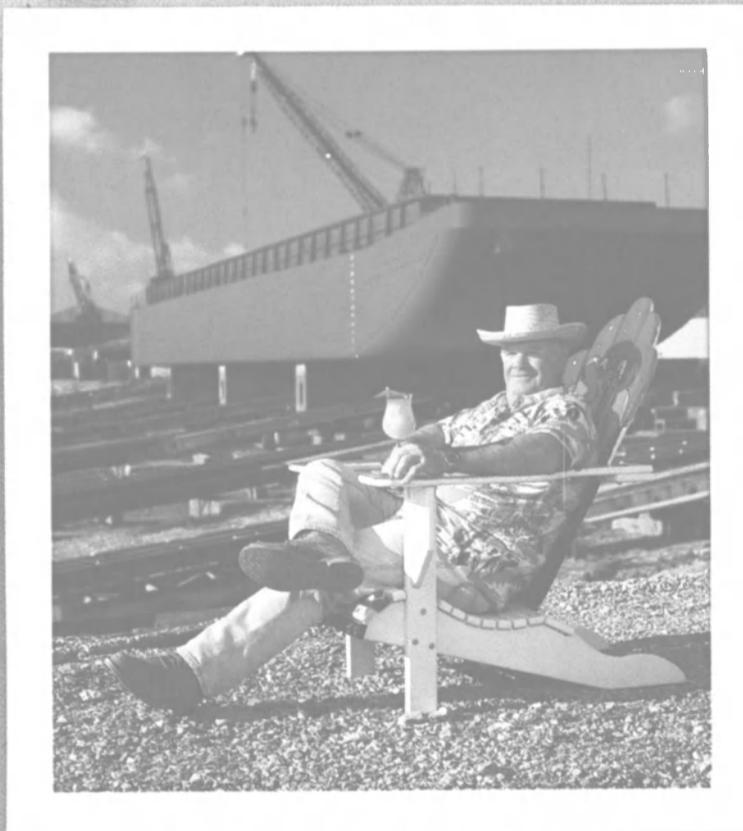
The Jones Act is the foundation of the U.S. domestic maritime industry, of which the towing industry is the largest

component. Dating back to the 1700s, cabotage laws like the Jones Act ensured national control over critical domestic transportation infrastructures. The Jones Act of 1920 required that any vessel engaging in trade between U.S. ports must be American-owned, American-built and American-documented. Further, it stipulated that such vessels be

operated by U.S.-citizen controlled companies and crewed by U.S. citizens. Because of the Jones Act, all providers of domestic transportation services operate on a level playing field - that is, they must all comply with the same laws and regulations pertaining to safety, security taxation and the environment. For generations, the Jones Act has pro-

**'When I started building barges in 1964, I had long hair and drove a '51 Chevy. Hair's gone. Car's gone. Heck, I'm gone. But a lot of the barges I built are still around.'**

**Garrold Wyne, Retired Yard Manager**



Even though Garrold has been retired for three years now, many of the barges he worked on are still going strong. That's not unusual for Jeffboat barges. Because we build them to last, with state-of-the-art engineering, seasoned production personnel, quality control follow-up, and constant attention to customer satisfaction.

So, if you want to have the same confidence in your barges, give us a call at 812-288-0200. Choose from our standard designs, or let us custom-build one to your specifications. Either way, we'll build you a barge that would make Garrold proud.

**JEFFBOAT**

America's largest inland shipyard.

ly  
he  
nen to  
give up

Installation of the first electric lighting on a US Navy Ship completed on USS Trenton.

USS Holland, first practical submarine, launched

1893

1898

August 2004

Circle 234 on Reader Service Card

31

## 65<sup>th</sup> Anniversary Edition

vided the basis upon which enormous investments have been made by U.S. domestic maritime industry owners and operators. For all these reasons, no issue is more important to the American maritime industry than assuring that the integrity of the Jones Act remains intact.

The Jones Act has withstood several challenges in the past few years. In 1995, the Jones Act Reform Coalition (JARC) was established to promote the elimination of the Jones Act. In response, the Maritime Cabotage Task Force (MCTF) was formed to bring

together vessel operators, shipyards, and labor unions in an effort to defend U.S. cabotage laws. Despite an aggressive public relations campaign, the JARC failed to achieve a weakening of the Jones Act and the JARC is now disbanded. A new threat emerged in the form of

a challenge to the U.S.-citizen ownership requirements of the Jones Act when foreign vessel owners tried to exploit a 1996 statutory change to the lease financing provisions of the Jones Act. The MCTF, of which AWO is a Board member, has worked vigorously to close the loophole by which foreign vessel owners were trying to gain access to the Jones Act trade. Other challenges to the Jones Act continue to exist in international trade negotiations. In a post-9/11 world, the Jones Act seems even more relevant, and with the bipartisan support it has enjoyed from U.S. Presidents and Members of Congress, it is hoped that it will continue to be recognized for its vital importance to U.S. homeland security, economic and environmental interests.

**Attention Naval Architects**

Version 9.0 is now available. If you have not yet upgraded, please consider:

1. Every new release is friendlier and includes dozens of improvements.
2. Configuring onboard systems for your customers is much easier than before.
3. The things you like about GHS never change; they just get better.



# GHS

## General HydroStatics

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/home

Making software that naval architects love since 1972

Circle 276 on Reader Service Card

*Exceeded expectations*



Designed by C. Raymond Hunt Associates Photo: Capt. Ben Schi

***"Gladding-Hearn Shipbuilding worked with the Association throughout the planning and building phases to design and construct a pilot boat which exceeded the expectations of the Maryland Pilots."***

Capt. Roger Hall, Marine Superintendent  
Association of Maryland Pilots

The bottom line is this: like any quality investment our pilot boats pay quality dividends in performance, safety, structural integrity and enduring value. Consider this, Gladding-Hearn builds more pilot boats than any yard in North America. If you're looking to build a world-class pilot boat, call Peter Duclos at 508 676-8596. He'll be happy to provide you with all the awesome details. Gladding-Hearn Shipbuilding, PO Box 300, Somerset, MA 02726. www.gladding-hearn.com

**GLADDING-HEARN**  
SHIPBUILDING  
Duclos Corporation

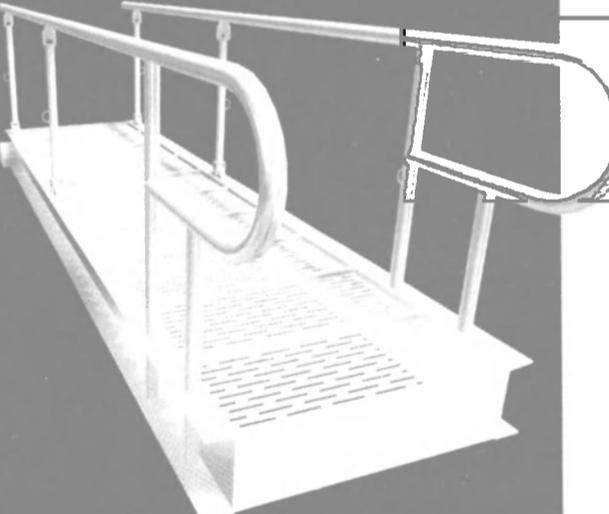
Celebrating 50 years of  
uncompromising quality

Circle 228 on Reader Service Card

WACO Products, Inc.

Your Complete Marine Product Supplier For:

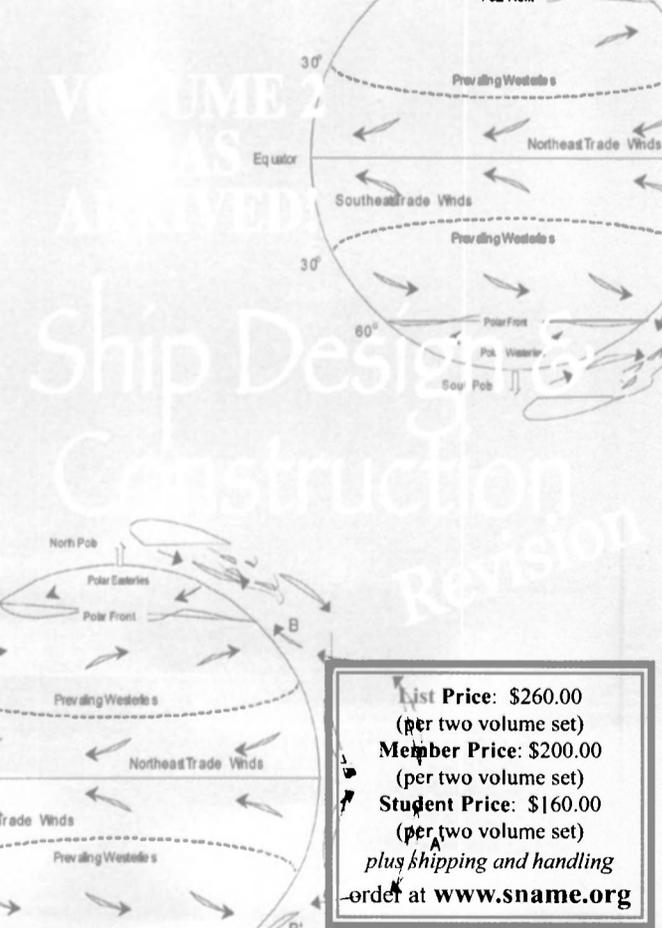
Gangways, Accommodation Ladders, Inclined, Vertical and Side Ladders, Treads, Grating, Battens, Replacement Parts and More.





**WACO Products, Inc.**  
1330 Knecht Avenue - Baltimore, MD 21229  
Phone: 410-242-1000 - Fax: 410-247-4890  
Email: sales@wacoproducts.com - www.wacoproducts.com

Circle 270 on Reader Service Card



List Price: \$260.00  
(per two volume set)  
Member Price: \$200.00  
(per two volume set)  
Student Price: \$160.00  
(per two volume set)  
plus shipping and handling  
order at [www.sname.org](http://www.sname.org)

Circle 259 on Reader Service Card

### Infrastructure — Maintenance and Modernization

Proper maintenance and modernization of U.S. ports and waterways infrastructure is a critical issue for the towing industry and vital to America's economy, environment, and quality of life. Locks and dams that were built in the 1930s have outlived their useful lives and are in many cases crumbling, causing costly delays for the industry and negatively impacting the economy. Since barges carry over 50 percent of America's export grain, inefficiencies caused by poor infrastructure affect America's position as breadbasket to the world and erode American farmers' ability to get their products to market in the most affordable way. The system is aging while demands on it are growing. The U.S. Department of Transportation has projected that demand for waterways transportation will double by 2020, making a world-class ports and waterways infrastructure more important than ever. At the same time, the maintenance and modernization of the system is under attack from well-funded, vocal opponents who oppose these projects - from modernizing the 60-year old locks and dams on the Upper Mississippi River to dredging in coastal ports and harbors, to maintenance of the dams on the Columbia/Snake river system in the Northwest -- and misunderstand the projects' fundamental value to the nation.

Inland towing vessel operators pay more than \$100 million a year into the Inland Waterways Trust Fund (IWTF) to pay for 50 percent of all capital construction and major rehabilitation on the inland waterways system. The IWTF currently has a \$400 million surplus. Support for a modern, well-maintained waterways infrastructure is a priority for AWO, which coordinates with other

Maritime Reporter & Engineering News

## 65<sup>th</sup> Anniversary Edition

waterways organizations to ensure adequate funding for priority projects identified by the Congressionally-authorized Inland Waterways Users Board.

### OPA '90 and Double Hulls

The transportation of petroleum and petroleum products is a key segment of the towing business: tank barges move 20 percent of the oil that fuels the economy and keeps cars running and homes warm. Powerful, state-of-the-art tugboats also provide tanker escort services to enable the safe movement of petroleum cargoes in busy ports. In the wake of the Exxon Valdez disaster, Congress enacted the Oil Pollution Act of 1990 (OPA '90), which mandated that all vessels calling at U.S. ports be double-hulled by 2015. Today, fully 73 percent of the U.S. tank barge fleet is double-hulled, years in advance of the OPA '90-mandated phase-out schedule. This has been accomplished through an enormous investment of more than a billion dollars in new double-hulled vessels to serve the U.S. energy transportation market and a commitment by companies in the oil transportation business to embrace safety management systems like the AWO Responsible Carrier Program to reduce operational risks throughout their operations.

Since OPA '90 was passed, oil spills from U.S. tank barges have declined to historic lows. Between 1990 and 2003, barges spilled 93.9 percent less oil - not a perfect record, but a powerful trend in the right direction. The industry's goal is zero spills and a 100 percent double-hulled fleet. AWO members are firmly committed to achieving those goals.

### State vs. Federal Regulatory Jurisdiction

The Exxon Valdez disaster also prompted a number of states to pass laws on oil pollution response and prevention. Just such a law passed by Washington State in 1994 led to a landmark Supreme Court decision with huge ramifications for industry operations.

The potential proliferation of individual state laws is of concern to towing industry operators because of the burden it places on companies to comply with different requirements in different states - an obvious problem for an industry that consistently crosses state borders as it operates throughout the nation. When Washington State enacted its oil spill prevention law intended to prevent oil spills from tanker accidents in state waters, the International Association of Independent Tanker Owners (INTERTANKO) filed suit challenging the constitutionality of the law. When the U.S.

District Court ruled in favor of Washington State in 1996, INTERTANKO appealed the District Court's ruling to the Supreme Court. AWO filed an amicus brief with the Supreme Court in support of INTERTANKO's appeal.

On March 5, 2000, the Supreme Court

held that federal statutes and regulation preempted Washington State's regulations. Subsequently, the state of Washington repealed the tank barge regulations and suspended its regulations for tank ships.

AWO is committed to containing state

efforts to extend over vessel operations laws and regulations that duplicate or conflict with federal requirements. AWO will continue to press for repeal of regulations that overstep state authority as outlined in the INTERTANKO v. Locke decision.



# BLOUNT BOATS INC.

ESTABLISHED 1949



### NEW CONSTRUCTION AND REPAIR

500-Ton Lift Dock (Launch up to 200')  
 Railway-Launch up to 220'      15-Ton Crane  
 28-Ton Crane                      Aerial Lift

*Over 500 combined years shipbuilding experience  
 with more than 300 vessels launched.*

• Engineering	• Machining
• Electrical	• Welding
• Carpentry	• Painting/Sandblasting
• Pipefitting	• Aluminum
• Fabricating	• Steel

[www.blountboats.com](http://www.blountboats.com)

461 WATER STREET • WARREN, RHODE ISLAND 02885  
 PHONE (401) 245-8300 • FAX (401) 245-8303

Circle 208 on Reader Service Card

*Worldwide  
 Excellence in  
 Service and  
 Technology.*

## Lifeboat & Davit Maintenance



*Immediate & responsive maintenance services for:*

- Davit launched liferafts
- Lifeboats & Tenders
- Fast rescue boats
- On-site surveys
- Winch & davit systems
- Release gear overload testing



Call (360) 293-3994

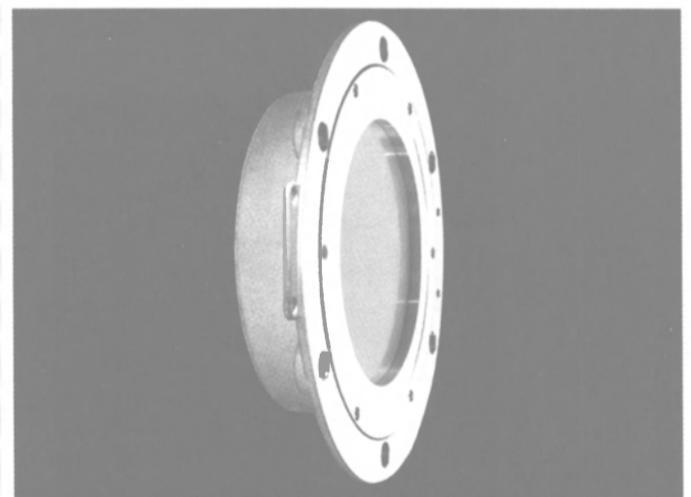
## TechnoFIBRE

Americas Inc.  
[www.technofibreamericas.com](http://www.technofibreamericas.com)

Circle 209 on Reader Service Card

**“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!

# EMS

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

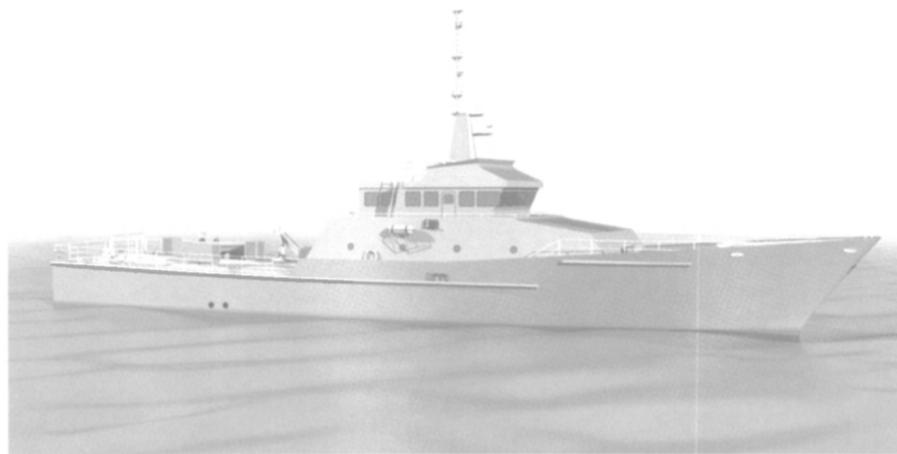
732.382.4344  
 732.388.5111 fax  
[emsmarcon@aol.com](mailto:emsmarcon@aol.com) e-mail  
<http://www.emsmarcon.com>

Circle 217 on Reader Service Card

Evolution of Computerization

# From 2D CAD to the Integrated Product Model

One of the most important improvements in ship production has been the introduction of CAD/CAM. The initial use of computers for drafting, lofting and automation of steel cutting has been extended from the design office and the mold loft throughout the shipyard and beyond by integrating the Internet, sophisticated database applications and enterprise management software to radically improve the entire shipbuilding process. However, the result of this, the Integrated Ship Product Model, is poised to revolutionize ship management and maintenance throughout its lifecycle.



Advances in computerization allow boats and ships to be designed, built and sent on sea-trials before the first piece of steel is even ordered.

The Problem With Ships

Boats and ships differ from most other objects because they are formed of arbitrary curved surfaces instead of well-defined assemblies of geometric shapes. Manufacturing and hydrodynamics also requires that these shapes be "fair", smooth and free from any sudden changes in curvature. Traditionally, ships were designed using orthographic drafting and wooden splines and weights. Surface contours drawn in var-

ious views were laboriously resolved to develop a consistent surface. Then structure, machinery and other components were designed, and flotation, weight, structural and hydrodynamic calculations were done.

However, due to the large change in scale, the design drawings were not accurate enough to actually make parts that fit, so "laying down and picking up" was required. The hull surface was

redrawn, refaired and laboriously resolved view to view at full scale, usually on a whitewashed floor in a loft, hence the term "lofting". Loftsmen developed patterns for piece parts and rolled and curved plates and made full size templates to hand cut and form parts. All of this represented a great deal of labor and schedule time.

Ships are also very complicated objects. They contain miles of pipe and

wire, ductwork, furnishings, large specialized machinery and perhaps even weapons systems. Virtually all engineering disciplines are involved in ship design. Even a small tug has piping for fuel oil, lube oil, seawater cooling, bilge water, oil contaminated bilge water, engine exhaust, fresh water, sewage, compressed air, hydraulics, and carbon dioxide and seawater for fire fighting. It also has ventilation ducting, AC and DC electrical systems, two locomotives worth of engines, gears and shafting and a small apartment/office/shop complex for the crew. A naval combatant is probably the most complex product ever manufactured: The drawings for a nuclear submarine weigh more than the vessel itself. Coordinating all of these parts so that a ship can be outfitted on schedule in very tight, oddly shaped spaces is a major challenge.

The computer first revolutionized the surface design lofting, and cutting processes. In 1962 the first computer programs were under development to automate this costly effort. By the late 70's several mainframe based large systems, notably STEERBEAR, were

Our Supporters ... Then and Now

## Skilled hands



McAllister Brothers Inc. Towing and Transportation 17 Battery Place New York, N.Y. 10004 (212) 269-3700 Serving the ports of New York, Norfolk, Philadelphia and San Juan



*"The Safety Factor Plus"*  
WHEN YOU USE  
**WK**  
WATERTITE DOORS  
*Precision Built To Fit Your Needs and Requirements*

A wealth of experience plus top Marine Engineers and materials have resulted in producing the finest all steel Watertite Doors that are designed, manufactured and sold, all at the Walz Krenzer plant.

Approved by the U.S. Coast Guard, A.B.S. and Lloyds WK Doors, manufactured to your specifications and dimensions, guarantee the extra margin of safety at sea that is so essential. Hand or power operated, WK Doors are always on guard for a new measure of security upon which you can always depend.

WK Electro Hydraulic Steering Gears for Dependability  
Distributors for Collar Hoists, Door Operators and Controls

**WK WALZ & KRENZER, INC.**  
FACTORY: 250 Mount Hope Ave. Rochester 7 N.Y.  
MARINE DIVISION: 150 Nassau St. - WOrkh 4-1282 New York City

Need A  
**FERRY BOAT**  
This Season?

**Blount Can Deliver**  
IN TIME FOR THE  
1955 TOURIST SEASON

Pictured above is the 64'-6" x 200' Passenger steel Ferry VIKING, a typical example of Blount's ability to engineer and build a steel vessel to meet your particular problem at the lowest possible cost. Prices start at \$34,000 for the U.S.C.G. inspected open side 200 passenger sight-seeing model. Contracts for larger vessels, including the 750 passenger MISS LIBERTY type being accepted for somewhat later delivery.

**BLOUNT MARINE CORPORATION**  
Warren, Rhode Island  
Telephone: Warren 1-2170

The Timeline

1901 First report of Ship Model Basin at Washington Navy Yard issued by Naval Constructor David W. Taylor who designed the basin.

1904 More than 1,000 people die when the steamship General Slocum burst into flames while moving up the East River in New York

1912 White Star Line's "unsinkable" Titanic strikes an iceberg on its maiden voyage and sinks, killing 1,513.

1912 Navy establishes North Atlantic Ice Patrol following RMS Titanic disaster

1931 Keel laying at Newport News, VA of USS Ranger (CV-4), first ship designed and constructed as an aircraft carrier.

1938 Prototype shipboard radar, designed and built by the Naval Research Laboratory, is installed on USS New York (BB-34).

## 65<sup>th</sup> Anniversary Edition

available that developed information for surface definition, piece part design and development of code to automatically drive Computer Numerically Controlled (CNC) torches that cut steel. Some of this software also included features to do various analyses, especially stability. The larger shipyards rapidly adopted these integrated systems throughout the 70s.

The late 80s saw the emergence of several hull surface definition programs for PCs, as small computers with graphic capability became readily available. Small shipyards adopted PC-DOS based processes, which interfaced specialized surface definition programs, off-the-shelf Computer Aided Drafting software, mainly AutoCAD, and stand alone CNC code generators.

One typical such interfaced process was used at Munson Manufacturing of Edmonds, Wash., a builder of small aluminum workboats. In 1991, Munson used Baseline, for preliminary hull surface definition. The files were then transferred to ShipCAM, for detailed fairing, definition of developable surfaces, plate expansions and other lofting functions. This data was then transferred to AutoCAD for part detailing in 2D and to GHS for stability and flotation analysis. Structural, weight and mechanical analyses were performed with spreadsheets. Files of the parts nested together on a "burn sheet" were transferred by modem to Farwest Steel, for cutting. Shortly after, a truck with the CNC plasma cut parts arrived, ready to be erected. As a result, delivery times and labor costs were reduced.

The next challenge was to change shipyard practices to best take advantage of the new tools. The Coast Guard Yard, in Curtis Bay, Md., was a typical example of reengineering shipbuilding processes to take advantage of CAD/CAM. The Yard also used Albacore Research, Ltd.'s ShipCAM. It had been some years since their last new construction project, when they were awarded a run of 27 49BUSLs (small buoy tenders). The Yard was also the first federal organization to be ISO 9001 certified. Thus, when the Yard implemented a production CAD/CAM system it was systematically integrated into the production process, through the use of

Total Quality Management techniques, looking for changes and streamlining processes. This proved to be another important advance, though one enabled by technology, rather than an advance in technology itself.

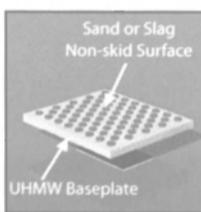
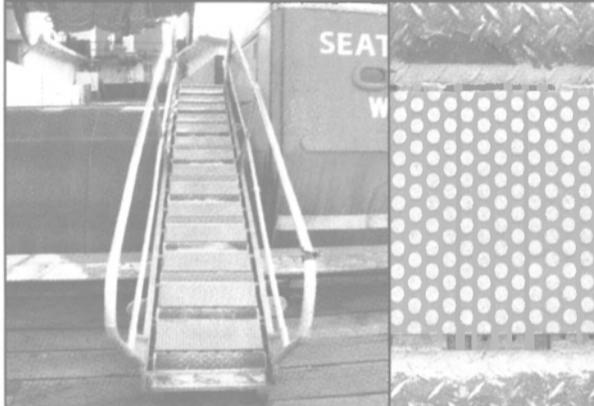
The lesson from this is that

CAD/CAM in particular and computers in general afford significant opportunities for improvement, and the wider one looks for improvements, the more opportunities. The precision offered by CAD/CAM has been especially important in modular construction, because if

the parts are exactly defined and guaranteed to fit, they can be made anywhere and outfitted ahead of time. Other opportunities include concurrent engineering, palletization and group technology, improved techniques for controlling and scheduling work and better

### B R A X X<sup>®</sup>

#### PERMANENT NON-SKID SHEET



- ◆ Aggressive UHMW Non-Skid
- ◆ High Visibility UV Colors
- ◆ Tactile Warning Surface
- ◆ .3" x 4' x 10' Sheet Size
- ◆ Product Display Available

800.872.8469

253.272.1457 (fax)

**ULTRAPOLY**

Web <http://www.ultrapoly.com>  
E-mail [sales@ultrapoly.com](mailto:sales@ultrapoly.com)

Circle 268 on Reader Service Card

### DO YOU HAVE A COWBOY ON BOARD?



Cowboys are renowned for their accurate roping abilities. If every vessel had a cowboy on board, mooring would be simple.

For those of you who are not cowboys, we have the Restech PLT Mooring 75. This durable, easy to use pneumatic line thrower makes accurate mooring simple. Even in heavy side winds, the aim of the Restech PLT Mooring 75 is extremely accurate up to 90 meters. The Restech PLT uses a compressed air propellant, so there are no flames or sparks, making this the perfect mooring device for tankers and cruise ships. Contact us today for more information.

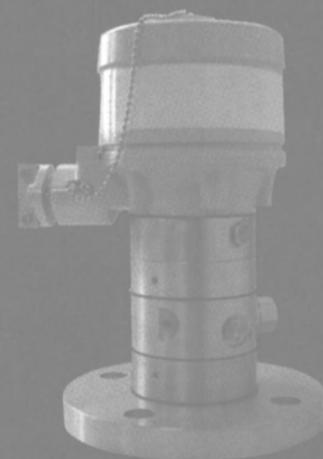
Visit [www.restech.no](http://www.restech.no) for a complete line of rescue and mooring line throwers

#### RESTECH NORWAY AS

Mail Address: P.O. Box 624 NO-8001 Bode Norway	Office Address: Jordbruksveien 41 NO-8007 Bode Norway	Tel: (+47) 75 54 24 40 Fax: (+47) 75 54 24 41 <a href="mailto:restech@restech.no">restech@restech.no</a> <a href="http://www.restech.no">www.restech.no</a>
---	--	--

Circle 253 on Reader Service Card

## THE BUBBLER



### Smart Pneumatic Level Sensor with Generic 4-20mA Output

The Bubbler is an electro-pneumatic level transmitter that allows remote level measurement using a 4-20mA analog output. The lack of air pressure poses no operational problems, due to an automatic one-way valve which closes as soon as the pressure drops below 1 bar, this prevents back flow in the bubbling line towards the transmitter. Over pressure is also protected against by an automatic one-way valve.

- It's the size of a grapefruit
- Explosion proof housing
- Accuracy .3% full scale
- Automatic over-pressure valve
- Automatic stop valve for air failure
- Automatic cleaning of bubbling line
- Connection for pressurized tanks
- 2 pair 24 VDC and 4-20mA cable
- Top or side mount

#### Many Options

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](mailto:emsmarcon@aol.com) e-mail  
<http://www.emsmarcon.com>

Circle 218 on Reader Service Card

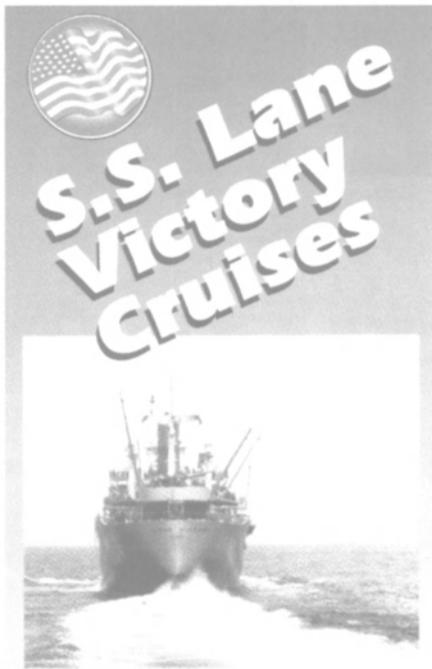
Maritime Activity  
Reports makes its  
debut as the mar-  
itime industry's  
information  
source.



August 2004

WWII Memories

# The First Voyage of the S.S. Michael Moran



**The most spectacular, exciting and unique event in Southern California**

Cruise aboard the Lane Victory, a fully restored WWII cargo ship. Enjoy the sights of Los Angeles harbor enroute to the blue Pacific and beautiful Catalina Island. Relive the excitement of a wartime convoy

[www.lanevictoryship.com](http://www.lanevictoryship.com)

By Captain Bill Carroll

I first went aboard the S.S. Michael Moran in the middle of August, 1944, while she was still in the shipyard in Portland, Me. where she was built. She was operated by Moore McCormack Lines, a company with whom I had sailed before. I signed on as Third Mate; this would be my fourth Liberty Ship.

From Portland we sailed down to Boston where we loaded military cargo for a destination unknown.

Most of the crew were down-easters. Capt. George Blanthorn was Master, a real gentleman with a good sense of humor. The First Mate was a Mr. Marshall, an older man who had flown with the French Escadrill in WWI. The Second Mate was Mr. Pease.

I can still picture some of the rest of the crew; the Radio Operator and some of the engineers; but, I have long since forgotten their names. I remember that the Third Engineer came from Kleinseltersville, Pa. Its claim to fame being that that was the longest name on a post office in the U.S. His claim, not mine. (It's funny what one remembers after 60 years.)



Left is Bill Carroll circa 1944; Right is Capt. Bill Carroll today.

For the purpose of camouflage, all ships were painted battleship grey; company colors stowed for the duration. However, we were not long out of Boston when our good Captain, an old Moore McCormack company man, had the Mate paint the three inch band

around the stack dark green and on either side the Mormac logo, a circular, white background with a red "M" in the center. He also had the Mate stencil the name "Little Mike" on the bow of each of our four lifeboats. I never sailed with another skipper who was that audacious.

We were in a pretty good size convoy as we headed out across the Atlantic; 50 to 70 ships or more. By this time, the submarine threat had diminished to some extent and I don't recall any incidents other than some depth charges being dropped on the other side of the convoy. There was a Midget Carrier in the column next to us. They carried a couple of Bi-planes which would take off every morning to reconnaissance the area for submarines and raiders.

Our first landfall was Land's End, England and we were the first convoy to take this route through the English Channel since the beginning of the war. We proceeded up the channel to Southend, located at the mouth of the Thames River which leads to London. There we dropped anchor, awaiting orders.



## The Society of Naval Architects and Marine Engineers

*congratulates*

### Maritime Reporter and Engineering News

on 65 years of service to the maritime industry, and on two years of a successful partnership with us on the SNAME Maritime Technology Expo.

601 Pavonia Ave., Suite 400  
Jersey City, New Jersey 07306  
(201) 798-4800  
[www.sname.org](http://www.sname.org)



**The Timeline**

<p>A "computer bug" is first identified and named by LT Grace Murray Hopper while she was on Navy active duty in 1945.</p>	<p>USS Nautilus (SSN-571), the first nuclear-powered submarine, casts off lines and sends message "underway on nuclear power"</p>
--	---



## 65<sup>th</sup> Anniversary Edition

We were there several days before we received orders to proceed, in convoy, to Methil, Scotland, which is near Edinburgh. There we dropped anchor and again waited for orders.

It was several days before we were told to join another convoy that was heading south to Southend. This was the period when the Allies were about to take Antwerp and the powers weren't sure where our cargo was most needed. We made this trip up and down the coast several (maybe four) times, before we were finally ordered to Cherbourg, France.

We were in Cherbourg about a week while the ship was being discharged. The city had sustained a lot of damage from the Nazi bombers and we were discouraged from going ashore during the day. After dark, when there was total blackout, no one was allowed to go ashore. (The Third Assistant from Kliensfeltersville and I snuck ashore one night and almost got into a heap of trouble. But, that's another story!)

From Cherbourg, we were sent across the Channel to

Fowey (pronounced "Foy"), on the southeast coast of England, where we loaded a full cargo of china clay. Fowey is an ancient seaport village with cobblestone streets and stone buildings. It has a very small harbor and our ship took up most of it. To get us to the loading dock, they used a couple of small tugs to turn us around in the harbor and then they towed us, stern first, up the river to the loading dock.

From Fowey, we headed south towards Land's End where we were to meet up with a convoy. And this is where the fun begins.

### Formation in the Fog

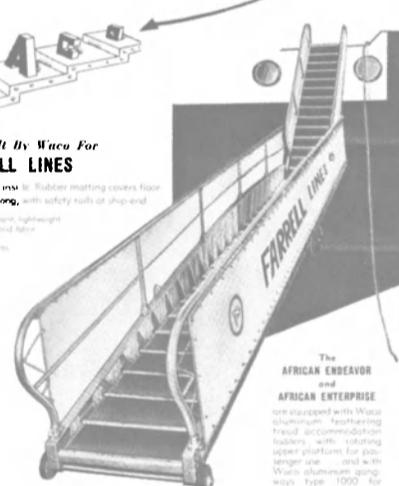
As we approached Land's End, the fog started to settle. Patches at first, growing thicker as the day went on. The convoy was about the same size as the one coming over so we had all those ships trying to form up into rows and columns.

Convoy formation was always a dicey operation, with ships going in all directions trying to

get into position. Remember, this was before radar, so the Captain's world was what he could see from the wing of the bridge, one side at a time, and there were many near misses and lots of whistle blowing. Different size ships; different kinds of engines; differ-

## Our Supporters ... Then and Now

*Preference Points to*



**Custom Built By Waco For FARRELL LINES**

Aluminum Pier Gangway, 40'-4" wide by 100'-0" long, with safety rails on ship-end and end-to-berth, walk time and back.

Spaced deck aluminum structure, 6" center, flat top.

Thorough attention given to customer requests.

The **AFRICAN ENDEAVOR** and **AFRICAN ENTERPRISE** are equipped with Waco aluminum ladders, featuring fixed accommodation ladders with rotating upper platform for passenger use and with 30-watt aluminum gangways, type 1000 for crew.

All Waco Products may be built to your exact requirements.

**WASHINGTON ALUMINUM CO.**  
designers • fabricators • d.i.s.  
KNECHT AVE. & PENNA. R.R. BALTIMORE 29, MD.

**IMMEDIATE DELIVERY**



**45' 6" Heavy Duty Stock Tug**  
Tug Illustrated: DUKE



**36-ft. Fishing Dragger**



**64' 6" Passenger Ferry\***  
\*Certified 200 Passengers



**46-ft. Research Boat**



**24-ft. Dredge Tender**

We invite your inquiries on the above Diesel-Powered, Steel Hull, Listings.

**Cladding - Hearn** Shipbuilding Corporation  
BROKERAGE DIVISION  
Somerset, Mass. Tel. Osborne 6-8596

Stockholm rammed her specially reinforced ice-breaker prow into the side of the Italian luxury liner Andrea Doria, which sank.

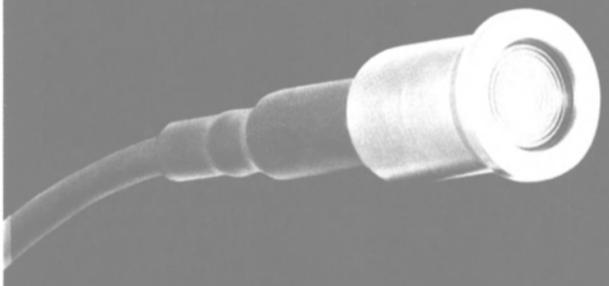
First nuclear powered aircraft carrier, USS Enterprise (CVAN-65), launched at Newport News, VA

Valdez Oil Spill results in OPA 90, rules which, among other measures, call for the double-hulling of tankers

Queen Mary 2 ... the world's largest and most expensive cruise ship ever ... sets sail on its maiden voyage.

August 2004

"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!**

**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 220 on Reader Service Card

## 65<sup>th</sup> Anniversary Edition

ent flags speaking different languages all contributed to a challenging experience in good weather; a chaotic experience in the fog or rain.

We had fog the entire journey, and basically, the practice in convoy was to follow the ship ahead while keeping a check on the compass course of the convoy. At night, all ships were completely blacked out, with the exception of a small blue light on the stern that could only be seen from directly behind the ship. This was what the helmsman tried to steer by.

During the day, each ship towed a fog buoy about five hundred feet astern. This was a very simple device consisting of two pieces of wood bolted together

in the shape of a cross. About a two inch hole was drilled down the center from which a length of pipe extended. On the underside, a small piece of sheet metal was attached to form a scoop. As this was towed through the water, it ejected a plume of water that was clearly visible and this was the guide for the ship astern.

A lookout was stationed on the bow; it was his job to keep that buoy in sight. Very often it could not be seen from the bridge. If he saw the ship was lagging behind, or getting too close, he would call the bridge on the sound powered telephone. However, there was one minor drawback to the fog buoy: it looked very similar to a periscope cutting through

the water. There were tales of fog buoys being blown out of the water ... by their own ships. The voyage proceeded without incident to Philadelphia where I signed off the ship on December 12, 1944. End of Voyage One.

We know from "Liberty Ships, The Ugly Ducklings of World War II", by John Gorley Bunker, that the Michael Moran went on to make four more voyages, one of which she ventured around the world, before she was laid up at New Orleans in 1946. In 1958, she was towed into the Atlantic where she was used as a target for testing new Navy missiles. Her remains now create a fish haven resting on the bottom of the sea. A good ending for a good ship.

*The preceding was written by Captain Bill Carroll. Captain Carroll was kind enough to write to us in response to the February 2004 "Leading Off" piece about the Michael Moran. He was the Third Mate on the ship when it came out of the yard in Portland, Maine in 1944. Today, Captain Carroll is Master of the S.S. Lane Victory, one of the last operating Victory Ships from WWII and now a National Historical Monument, berthed in San Pedro, Ca. <http://www.lanevictory.org>*

### SPURS<sup>®</sup> PROTECTS YOUR FLEET

From net and line entanglements and resulting oil seal damage

Awesome Cutting Action!



The Cutting Edge Propeller Entanglement Solution

Spurs Cutter Systems are the world's most efficient and cost effective method of eliminating propeller entanglement and are trusted by U.S. Navy and commercial fleets worldwide. Spurs instantly cut lines and nets and prevent unscheduled dry-docking due to aft seal damage.



"Oil Leak"

"Damaged Seal"

Environmental Challenge

Don't take a chance!  
Avoid **expensive** fines and downtime from resulting oil leakage due to line and net intrusion into aft oil seals. (as shown here)





All size Spurs cutters are in stock ready for immediate shipment and installation at your next dry docking.



Environmentally Correct

SPURS<sup>®</sup>

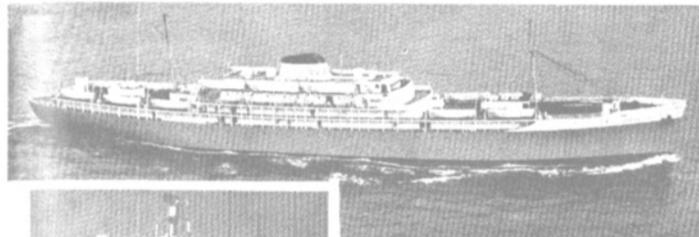
LINE & NET CUTTER

Protecting the Shipping Industry

For more information, or to request a free cd-rom, visit us at: [www.spursmarine.com](http://www.spursmarine.com)  
email: [spurs@spursmarine.com](mailto:spurs@spursmarine.com) Phone (954) 463-2707 Fax (954) 525-0239  
Spurs Marine 201 SW 33rd Street Ft. Lauderdale, FL 33315  
SEE DEMO @ SMM - HALL 7 USA PAVILION STAND 70058

### Our Supporters ... Then and Now

#### NEWPORT NEWS CONVERSION ...



## 1949 STYLE

The CORRIENTES, a former U.S. type ocean liner, was converted at Newport News for emigrant passenger service between Italy and Argentina. Her modern appointments include a colorful lounge, completely equipped hospital, laundry, and a dining saloon seating 675 persons. The family size staterooms for four and six persons, all with running water, will accommodate a total of 1550 passengers.

The conversion of the CORRIENTES and her sister ship the SALTA add two more names to the long list of Newport News conversions that in recent years have included vessels for more than a dozen specialized uses.

#### NEWPORT NEWS SHIPBUILDING AND DRY DOCK CO.

NEWPORT NEWS, VIRGINIA

### United Marine: Offshoot From Bethlehem Steel



Where did everybody go? That must have been what they said at Bethlehem Steel Corp. when many of their workers left to join a new company called United Marine. Began in 1991 by A.B. Bernard, a former plant manager for Bethlehem, United Marine began using their experience in drill rig construction to form a niche in the rig repair sector. Soon after acquiring a waterfront base on Tezaco Island in Port Arthur, Texas they began repairing ships for the U.S. Maritime Administration, Navy and Coast Guard.



UNITED MARINE SHIPYARD

Tezaco Island, Port Arthur, Texas  
(800) 824-SHIP

Circle 26 on Reader Service Card

# MORE TONNAGE

A large cargo ship is shown sailing past the US Capitol building and the Washington Monument. The ship is the central focus, with its white hull and dark lower section. The background features a cityscape with classical architecture, including the dome of the US Capitol and the Washington Monument. The sky is filled with clouds.

## Blank Rome Knows Homeland Security

You are carrying more than ever. Not only are you responsible for 90% of imports, you are now charged with 100% of ship and port security as well. From MTSA to ISPS to DOS and ISSC, we are ready to help you understand and comply with the new security requirements.

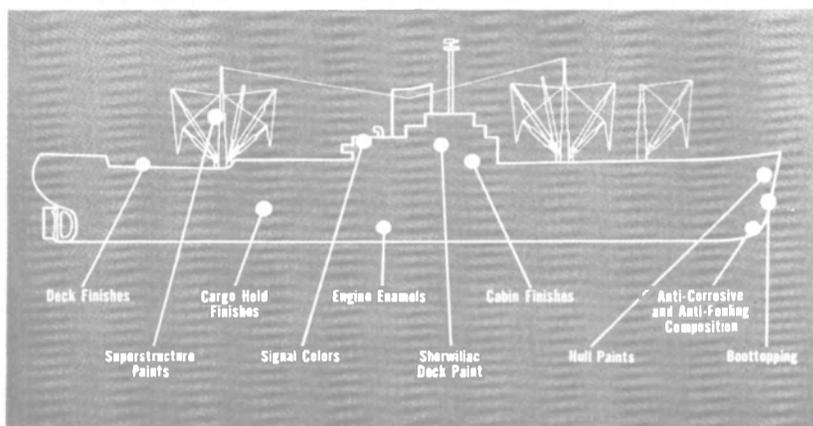
For more information about our Maritime Practice, contact Jon Waldron at 202-772-5964.

[www.BlankRome.com](http://www.BlankRome.com)

BLANK

ROME LLP  
COUNSELORS AT LAW

## Our Supporters ... Then and Now



## FOR EVERY MARINE NEED, A SHERWIN-WILLIAMS QUALITY FINISH!

Whatever your finishing needs, there's a complete stock of Sherwin-Williams Marine Finishes for immediate delivery at 15 important ports on the Atlantic and Pacific coasts and the Gulf of Mexico!

Take advantage of this extensive Sherwin-Williams network . . . and use the highest quality marine finishes made by the world's largest paint manufacturer. Remember, when you specify Sherwin-Williams Marine Finishes, you're specifying the *best paint money can buy*—made under exacting standards to meet exacting conditions on the high seas! The Sherwin-Williams Co., Marine Division, Cleveland 1, Ohio. (Export Division, Newark, N. J.)



Products of SHERWIN-WILLIAMS Industrial Research

### SHERWIN-WILLIAMS MARINE FINISHES

COMPLETE STOCK AT:

Boston • New York • Newark • Baltimore • Newport News • Norfolk • New Orleans • Galveston • Houston  
Corpus Christi • Brownsville • Los Angeles • Oakland • Seattle • Portland, Ore.

(Continued from page 28)

The Espionage Act was the result of one of the first foreign terrorist attacks ever conducted inside the territorial United States. This spotlight event, which ignited public interest in port security, occurred on July 29th of 1916 on Black Tom Island near Jersey City, NJ at a site now occupied by Liberty Island. Black Tom Island was used to store military ammunition and various explosives. The United States, although providing aid to England, was not at war and the facility had little in the way of physical security and few guards. The German government knew the facility was exposed and exploited the lax security to prevent the munitions from reaching its enemies. The result was one of the most spectacular explosions ever within a U.S. port. Fortunately, the number of people killed by this incident was minimal, but there was loss of life and significant physical destruction creating a public outcry. The media picked up the cry and Congress responded by passing the Espionage Act. The Espionage Act of 1917 resulted in the Coast Guard being granted the authority to regulate the anchorage and movement of any vessel in U.S. territorial waters including the placement of guards on or taking full possession of such vessels. The Coast Guard, with this new authority, designated selected officers as Captains of the Port or COTPs, with direct tasking to ensure the requirements from the new law were prop-

erly enforced. This COTP designation has been a primary foundation from which the modern port security mission has evolved. Although the rigid enforcement of this act waned following the conclusion of the First World War, the authorities and the emphasis on port security ramped up exponentially as the United States entered World War II. Again, the media captured the country's interest with pictures of the damage inflicted by German submarines operating off of the Atlantic Coast sinking ships in plain view of residents along the New York shore. During World War II the Coast Guard was deeply involved in port security missions that supported the on-load of supply ships headed for both theaters of operation. These operations were most recently duplicated as the Coast Guard supported Military On-load Operations in strategic ports supporting Operations Enduring and Iraqi Freedom. Where, just as in World War II, Coast Guard units conducted waterside security, worked with Army personnel loading the vessel and ensured security along the supply routes.

It was during World War II that Congress specifically reinforced the role of the COTP as the lead for enforcement activities within their specific ports. This occurred in 1941 while the Coast Guard was being transferred to the War Department specifically under the Navy. Even while operating under the Navy, the Coast Guard was the leading agency for

## HOW TO PREVENT A

# Part Attack

A single part malfunction can halt your entire operation in an instant. Part attacks like these occur when you least expect them and come at considerable expense to your business.

ILS, the world's largest e-marketplace for the marine industry, can help prevent costly part attacks. ILS offers global access to spares, equipment and information, customer contacts, advanced e-commerce and data management tools, plus all the specialized support you need. You'll find the parts and services you need—in an instant!

Don't let part attacks disable your business. ILS can help.

To see a demonstration, go to [www.ILSmart.com](http://www.ILSmart.com) and click on Demo under Marine Marketplace.

**ILSmart.com**  
It's About Results

1-800-233-3414 (North America) • 1-901-794-5000 (Worldwide)  
ebusiness@ILSmart.com • [www.ILSmart.com](http://www.ILSmart.com)

- Rescue Towing
- Lightering
- Fendering
- Salvage
- Firefighting

**Marine Response**  
**ALLIANCE**

*The real deal - experience and equipment  
throughout the U.S. and worldwide*



CROWLEY MARINE POLLUTION CONTROL TITAN MARINE HAZARD RESPONSE

For more information, call us at: 206-332-8076  
or visit: [www.marineresponsealliance.com](http://www.marineresponsealliance.com)

Circle 231 on Reader Service Card

Circle 242 on Reader Service Card



# Verint Video Solutions

*What can actionable intelligence do for your security initiatives?*

Verint Video Solutions deliver actionable intelligence to address security threats before they escalate.

Visit us at **ASIS Booth #2823**  
or on the Internet at  
[www.verint.com/videosolutions](http://www.verint.com/videosolutions)

## VERINT

**Verint Networked Video Solutions** transform video images into *actionable intelligence* – the just-in-time information your organization needs to protect people, property, and assets.

Interfacing with your access control, RFID tags, cargo handling technologies and other business systems, **Verint Video Solutions** deliver timely alerts about significant events – wherever events occur and wherever the information is needed.

No wonder they call it **Actionable Intelligence For A Safer World.**

**Verint. Powering Actionable Intelligence.**

Visit us on the Internet at [www.verint.com](http://www.verint.com).

Copyright Verint, Inc, 2004. All rights reserved.

## 65th Anniversary Edition

port security. Who can forget the pictures of Coast Guard patrols, complete with handler and dog, walking the beaches on both coasts? The number of Coast Guard personnel on active duty, during World War II, grew to 241,093 with 22% or 53,040 (Note 3) specifically assigned to port security duties a sig-

nificant difference from the 39,000 active duty men and women currently serving in the Coast Guard worldwide.

Following the end of World War II and the reduction in force, the Coast Guard again returned to the traditional mission mix. At the same time that this was occurring the political landscape of the

world was continuing to change with the rise in power of communism in several locations. With the United States entry into the Korean conflict, Congress again looked at the ports as being a potential critical vulnerability and responded by reinforcing the authorities under the Espionage Act by enacting the

Magnuson Act. The act expanded the Coast Guard's authorities beyond the limited scope of the Espionage Act to include protection of vessels, harbors, ports and waterfront facilities in the U.S. From this law spawned the COTP's authority to establish and enforce security zones. After the Korean War ended and throughout the Cold War emphasis on port security remained, but not as a top priority within the Coast Guard, as new missions were added with little growth in personnel or funds. Instead, port safety became increasingly important to COTPs as they sought to ensure the safe operation of commercial vessels and facilities. Still, port security operations continued, primarily as a mission for the Coast Guard Reserve in support of military out loads.

Following 9-11, the Coast Guard responded immediately deploying its fleet of small boats and cutters to protect the nation's ports and waterways from acts of terrorism; once again port security became a top priority for the service. Congress also acted quickly in support of the Coast Guard, passing the Maritime Transportation Security Act of 2002 (MTSA). This massive 592-page bill expanded and reinforced the Coast Guard's authority, responsibility and leadership role for port security. It may be viewed as the final maturation of the Coast Guard's port security authorities into one comprehensive and overarching mosaic. The MTSA also solidified the responsibility that waterfront facility and vessel owners and operators have for their own security.

The act, which comes into full effect on July 1st 2004, gives the COTP clear authority to enforce requirements for vessels and waterfront facilities that have the potential for a "transportation security incident" (i.e., a significant loss of life, economic loss of environmental impact) to develop and implement security plans. The act further designates the COTP as the Federal Maritime Security Coordinator or FMSC responsible for forming a committee of port security stakeholders (Federal, state, local and industry) to develop, implement and exercise maritime security plans for their respective zones.

The result of MTSA has been a partnership that has created a formidable layered defense within the 47 COTP zones in the United States. The first layer is the internal security mandated by law and implemented by facilities and vessels. Local law enforcement and the Coast Guard provide the next layer conducting water and shore side patrols in the ports and waterways. The layers then expand outward as the Coast Guard, Navy and other Federal agencies



## Main Sponsor Schlumberger

September 13  
Golf Tournament & Tutorials  
September 14-16  
Conference & Exhibition  
Marriott Westchase Hotel  
& Convention Center  
Houston, Texas

One Day of Tutorials  
3 Days of Technical Papers  
3 Days of Exhibits

For Conference information:  
Toll-free in the USA—(877) 270 7102  
Tel (772) 221 7720, Fax (772) 221 7715  
Email: techsystems@sprintmail.com

Register On-Line [www.offshorecoms.com](http://www.offshorecoms.com)

Corporate Sponsors:

**SES AMERICOM**  
An SES GLOBAL Company

**CapRock**  
COMMUNICATIONS  
RELIABILITY TO THE EXTREME

Supporting Sponsors:

**HARRIS**

**Fiber**

**PETROCOM**

**G**

**INTEC**

**SatCom Systems**

**OMTN**

**VERSO**

Media Sponsors:

**Via Satellite**

**BUSINESS**

**TECH BEEFINGS**

**OIL-GAS**

**MARITIME REPORTER**

**SCN**

**OCS**

**Submarine Telecom**  
[www.subtelforum.com](http://www.subtelforum.com)

**Maritime Security**

**WORKBOAT**

**MarineNews**

**UPSTREAM**

Organized by:

**Technology Systems Corporation**  
PO Box 1096  
Palm City, FL 34991

Circle 248 on Reader Service Card

Sasakura developed new generation of  
Plate Type Fresh Water Generator.

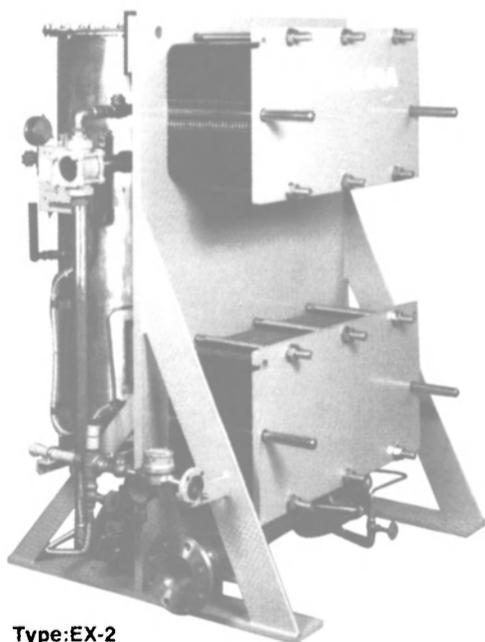
# AQUARIO

Capacity range: 3-40t/day

**No Front Cover!!**

The deletion of front cover provides:-

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



Type:EX-2

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

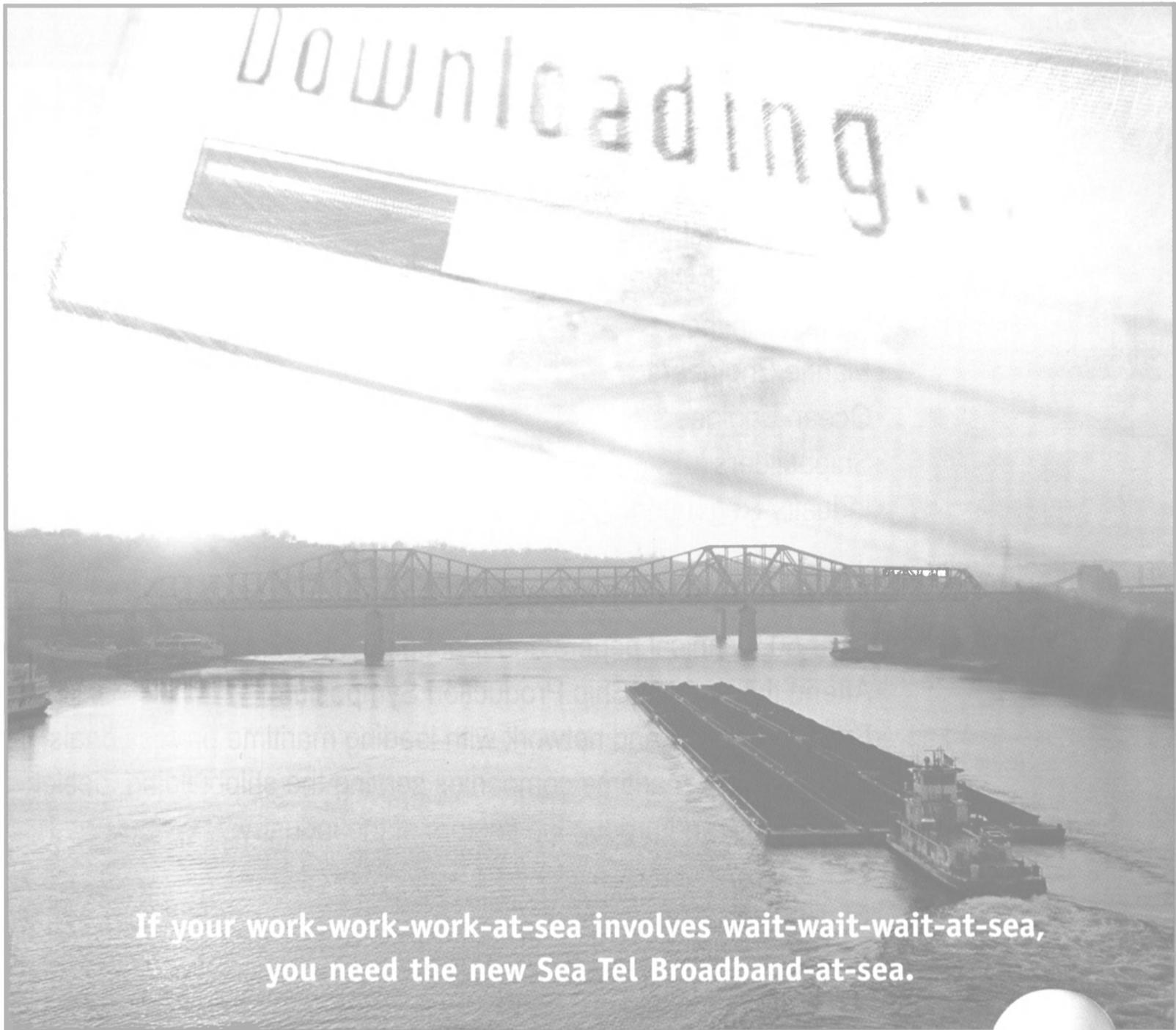
**SASAKURA**  
ENGINEERING CO., LTD.

7-32, Takejima 4-chome, Nishiyodogawa-ku, Osaka 555-0011, Japan Tel:+81-6-6473-2134 Fax:+81-6-6473-5540

E-mail : [webmaster@sasakura.co.jp](mailto:webmaster@sasakura.co.jp) website : <http://www.sasakura.co.jp>

HONG KONG : Sasakura International (H.K.) Co., Ltd. Tel:+852-2850-6139 Fax:+852-2850-5259

Circle 254 on Reader Service Card



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 <sup>1</sup>	B <sup>2</sup>
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 MFPS	*18.60 (*9.00/min)
Cost/GB	*1,000	*16,640 ISDN *36,000 MFPS	*18,720

4.15.03 <sup>1</sup>Source: KVH website <sup>2</sup>Source: 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.

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

Circle 256 on Reader Service Card

65<sup>th</sup> Anniversary Edition

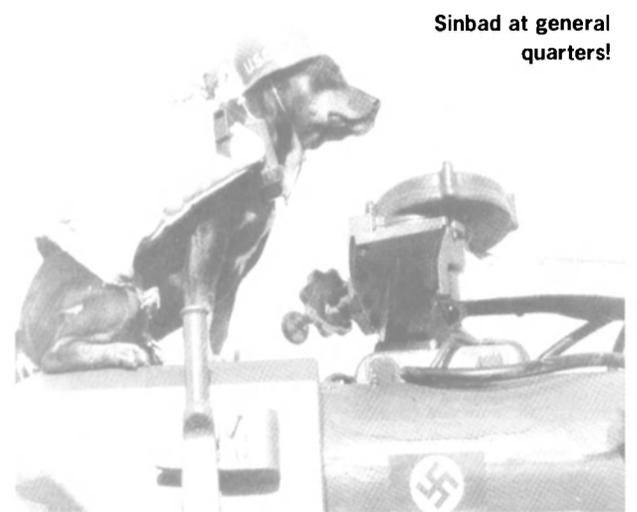
# U.S. Coast Guard: Dogged by a Unique Past

The crew of the Coast Guard cutter Campbell adopted a mixed-breed puppy in 1938. Little did they know that their canine companion would become a world famous Coast Guard veteran. He was, literally, a member of the crew, complete with all the necessary enlistment forms and other official paperwork, uniforms, and his own bunk. He sailed on board the combat-tested cutter through World War II and saw much action, both at sea and in port. As Life Magazine reported: "An Old Sea Dog Has Favorite Bars and Plenty of Girls in Every Port." Until recently he had the honor and distinction of being the only Coast Guardsman to be the subject of a biography! It was Sinbad of the Coast Guard, written by Chief Specialist George R. Foley, USCGR and published by Dodd, Mead and Company of New York during the war. The book made him an international celebrity. Although he served honorably, he did run into a bit of trouble on occasion, as any sailor might during a long career at sea. He caused an international incident in Greenland, another in Casablanca, and was busted in rank a few times for minor

cer ordered all but essential personnel off the ship. They transferred to a nearby destroyer but a tough and hardy few stayed on board the Campbell while the cutter was towed to safety, patching her hull and insuring that she stayed afloat during the voyage. Among that few was Sinbad.

He served faithfully on board Campbell for 11 years, garnering more sea time than most of his contemporaries, before finally retiring to the Barnegat Light Station. He passed away December 30, 1951 and was laid to rest beneath the station's flagstaff.

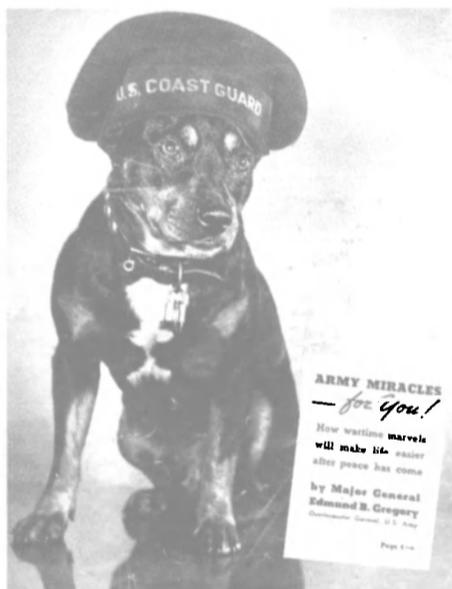
(Preceding text and photos courtesy of the U.S. Coast Guard — <http://www.uscg.mil/hq/g-cp/history>)



Sinbad at general quarters!

## Our Supporters ... Then and Now

### This used to be the engine room.



Sinbad in an advertisement from from a war-time magazine.

infractions. As another author noted:

"Sinbad is a salty sailor but he's not a good sailor. He'll never rate gold hashmarks nor Good Conduct Medals. He's been on report several times and he's raised hell in a number of ports. On a few occasions, he has embarrassed the United States Government by creating disturbances in foreign zones. Perhaps that's why Coast Guardsmen love Sinbad, he's as bad as the worst and as good as the best of us." Regardless of the fact that he like to blow off a little steam when he was on liberty, he was a brave and capable sailor when he was on duty. He earned the respect and affection of his shipmates during one famous battle when the Campbell fought it out with the Nazi submarine U-606. The cutter was severely damaged during the fight and the commanding offi-



Now this space is pure profit. Even better, thanks to GE's compact LM2500 gas turbine engine propulsion, there are 69 more spaces just like it aboard. That's how many additional passenger cabins LM2500 propulsion yields over diesel engines in the typical 1900-passenger cruise ship.

Since the overall operating cost of either system is virtually the same, with LM2500, your bottom-line gets more of what you operate a cruise line for. Plus, your passengers get a smoother, cleaner, quieter voyage. And the Captain, the most trouble-free ship of his career.

Sounds like a sea story? Ask the U.S. Navy. Or the navies of 16 other nations. For more than a decade, LM2500 propulsion has provided them more shipboard space, exceptional reliability, lower maintenance costs, and availability for sea duty that's consistently over 99%.

To find out how GE's LM2500 propulsion can help you cruise into the future profitably, contact Manager of Cruise Line Marketing, Mail Drop N-158, GE Marine & Industrial Engines, 1 Neumann Way, Cincinnati, Ohio, USA 45215, Or call 513-552-5378.



**GE Marine  
& Industrial Engines**  
*Keeping the Promise*

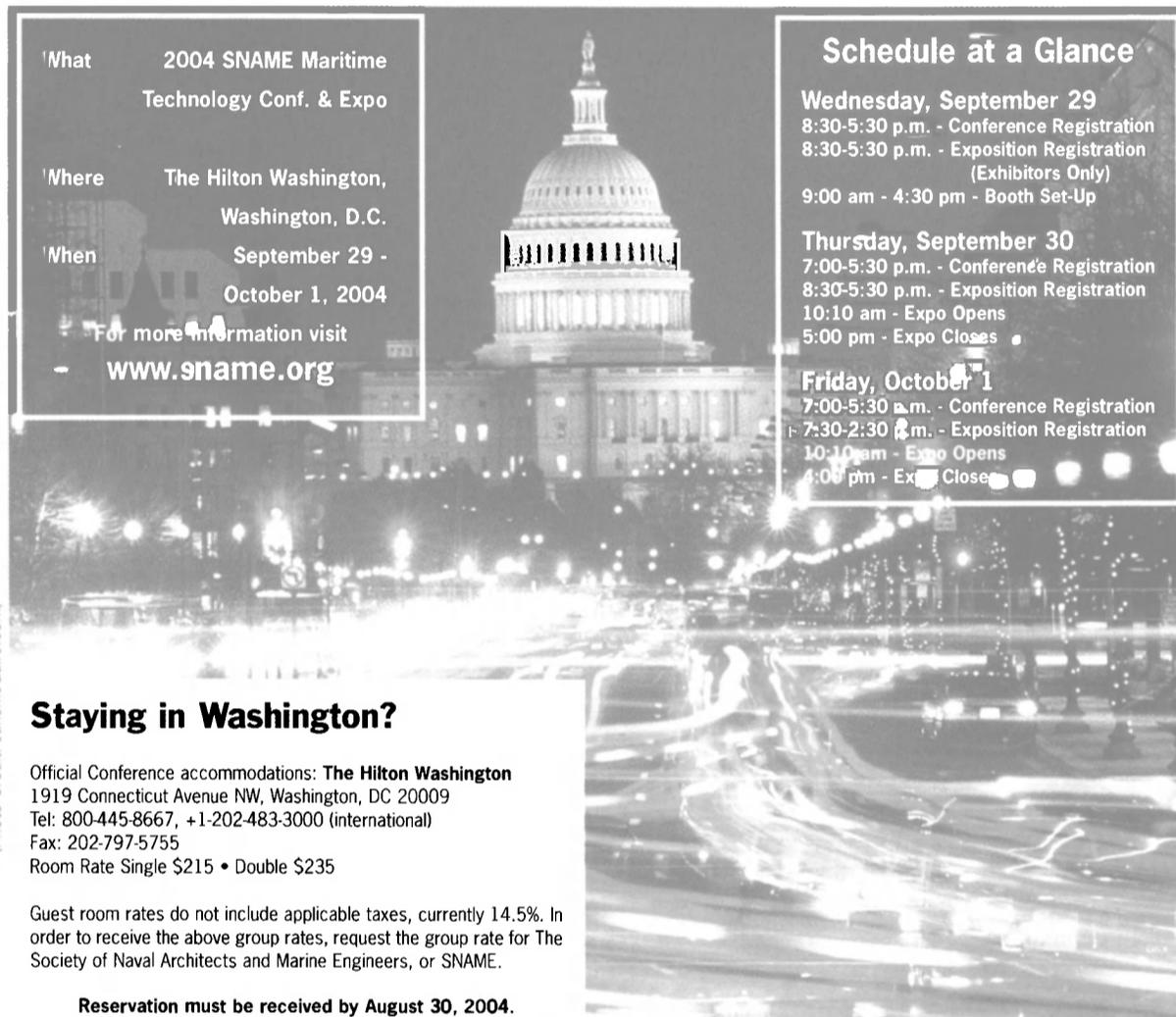
# 2004 SNAME Set for Washington, D.C.

One of the maritime industry's premiere annual events, the 2004 SNAME Maritime Technology Conference & Exposition, is scheduled to grace scenic Washington, D.C., scheduled from September 29 to October 1, 2004. Washington, D.C., the center of U.S. political power, is an appropriate host for the event, as the Society of Naval Architects and Marine Engineers (SNAME) annual meeting and exhibition are well-

renowned for bringing together an enviable gathering of the maritime industry's elite minds. This year's edition promises not to disappoint, as the conference once again is filled with a wide diversity of papers on topics geared to spark discussion and debate on some of the industry's more timely and challenging topics (see full paper listing on page 51).

The technical program consists of two SNAME

tracks and two Ship Production Symposium tracks, with a first time ever one-hour time slot on Thursday dedicating all four tracks to student presentations. Presentations on advances in ship production, design, operations, and innovations in product and system technologies will provide opportunities for professional development. This program promises to be one of the most timely, content-rich programs available with-



**What** 2004 SNAME Maritime Technology Conf. & Expo

**Where** The Hilton Washington, Washington, D.C.

**When** September 29 - October 1, 2004

For more information visit [www.sname.org](http://www.sname.org)

**Schedule at a Glance**

**Wednesday, September 29**  
 8:30-5:30 p.m. - Conference Registration  
 8:30-5:30 p.m. - Exposition Registration (Exhibitors Only)  
 9:00 am - 4:30 pm - Booth Set-Up

**Thursday, September 30**  
 7:00-5:30 p.m. - Conference Registration  
 8:30-5:30 p.m. - Exposition Registration  
 10:10 am - Expo Opens  
 5:00 pm - Expo Closes

**Friday, October 1**  
 7:00-5:30 p.m. - Conference Registration  
 7:30-2:30 p.m. - Exposition Registration  
 10:10 am - Expo Opens  
 4:00 pm - Expo Closes

**Staying in Washington?**

Official Conference accommodations: **The Hilton Washington**  
 1919 Connecticut Avenue NW, Washington, DC 20009  
 Tel: 800-445-8667, +1-202-483-3000 (international)  
 Fax: 202-797-5755  
 Room Rate Single \$215 • Double \$235

Guest room rates do not include applicable taxes, currently 14.5%. In order to receive the above group rates, request the group rate for The Society of Naval Architects and Marine Engineers, or SNAME.

**Reservation must be received by August 30, 2004.**

Photo Credit: JakeMcGuire.com

## SUNDIAL

MARINE CONSTRUCTION & REPAIR

*COLUMBIA RIVER'S LARGEST  
FULL SERVICE SHIPYARD*

New Construction, Repairs, Drydocking  
*"Quality workmanship at a fair price"*

PORTLAND, OREGON

tel (503) 667-1974 fax (503) 666-7872  
 Email: [sundial@sundial-marine.com](mailto:sundial@sundial-marine.com)  
[www.sundial-marine.com](http://www.sundial-marine.com)

Circle 262 on Reader Service Card



*When you've worked there...  
You know how to design for it.*

Engineering & Design For:

- New Build
- Repairs
- Modifications
- Shipyards Support



NAVAL ARCHITECTS  
SALVAGE ENGINEERS  
*the sea going naval architects*

860-448-4850  
[jmsnet.com](http://jmsnet.com)

Circle 235 on Reader Service Card

## Good-looking boat?



Don Sutherland  
Photographer of boats  
and maritime activities.  
Anywhere.

In New York: 718-447-3908 : [ssuthe7880@aol.com](mailto:ssuthe7880@aol.com)

**NEW! Online photo gallery. Check-out the boats:**  
[www.don-sutherland.com](http://www.don-sutherland.com)  
 (don't forget to type the dash, for that dashing digital boat photog.)

Circle 278 on Reader Service Card

in the maritime industry. See page 51 for Paper Topic Listings

### Ship Production Symposium

This symposium is a well-known annual event where results of research supported by sources including the National Shipbuilding Research Program Advanced Shipbuilding

Enterprise (NSRP ASE) are presented. This symposium is dedicated to the support and progress of U.S. shipyards, both commercial and naval, in keeping with NSRP's mission to assist the U.S. shipbuilding and repair industry in reducing the cost of Navy ships while achieving and maintaining global competitiveness with respect to quality.

time, cost and customer satisfaction. Authors will be presenting papers that reflect the interests of the SNAME Ship Production Committee and the NSRP Strategic Investment Plan.

### Exhibitor List as of July 15, 2004

3PS INC	326
ABB Marine	304
ABS Americas	105 107
ACL Industries	401

Advanced Structures Corporation	622
AGM Container Controls Inc	428
Archime Manufacturing Co. Ltd	211
Alexander / Ryan Marine & Safety Co	302
Aifa Laval Inc.	408
Allied Systems Company	213
Anteon Corporation-Proteus Engineering	222
Appleton Marine INC	319
Applied Thermal Sciences, Inc.	640
ARL Albacore Research Ltd	220
Azonic-Dynalco	529
Ballast Technologies	227
Binsfeld Engineering	325
BMT Salvage Ltd	731
BMT Scientific Marine Services INC	202
CAE USA	738
Calhoun Meba Engineering School	627
Carderock Division NSWC	109
Caterpillar Marine Division	201
CD adapco Group	517
Coppus Portable Ventilators	327
Cummins Marine	413
Dassault Systemes Services - Americas	734
Deansteele Mfg. Co.	512
Delta T Systems, Inc.	533
Det Norske Veritas	433 532
Detroit Diesel Corp	110
Deutz	303
Diesel & Gas Turbine Worldwide	204
Duramax Marine LLC	116
EBAC Industrial Products, Inc	639
ElectroWave, Hyde Marine, TMS	332 333
EVAC	515
Fairbanks Morse	502 504
Faro Technologies	726
Fast Systems-Smith & Loveless	203
FINCANTIERI S.p.A	407
Fire Protection Services, Inc.	642
Fleetway Inc	221
Flow Science Inc.	508
Fluent Inc	306
Formation Design Systems	323
Frank Mohn Houston	313
Garibaldi Glass Industries, INC	419
GE Marine	623 625
General Dynamics	308 310 312
Genoa Design International	123
George G. Sharp Inc	513
Germanischer Lloyd (Cyber Cate)	733 735
Great Lakes Chemical	628
Griffin Americas	405
GS Hydro	422
GTA Marine	206
Hagglunds Drives Inc.	424
Hempel	624
Hiller Companies	505
Horizons Metalphoto	425
HydroComp Inc	218
Imes Systems / Water Weights	503
Integrated Systems Analysts, Thermal Spray Mach	723
Intelligent Engineering Ltd	633
Intergraph Solutions Group	124
International Metalizing & Coatings, Inc.	643
International Paint Inc	223
Inventory Locator Service, LLC	638
ITW American Safety Technologies	114
ITW Philadelphia Resins	112
Jastram Engineering	507
Jesse Engineering	421
JGB Enterprises, Inc	626
Kahlenberg Bros. Co	329
Knowledge Based Systems, Inc	740
Kobelco Eagle Marine, Inc	518
Kranendonk Production systems BV	728
Kvaerner Masa Marine Inc	722
Lehman & Michels Inc (LEMAG)	427
Leitritz Corporation	207
Lloyds Register Americas INC	104 106
Mac Gregor Group AB	311
Maersk Line Limited	729
MAN B&W Diesel, Inc.	205
Marn	410 412
Marine Electric Systems	122
Marine Log	318
Marintek Inc	420
MMC International Corp	212
Motor-Services Hugo Stamp	520
/Governor Control Systems	629
National Surface Treatment Center	230
Nautican Research Development	324
NIIP SPARS	224
North American CLS	328
Northern Lights	113
Northrop Grumman Newport News	111
Northrop Grumman Ship Systems	208 210
NSRP	209
Ocean Power & Equipment Co Inc	125
Oceanic Consulting Corp	637
Peck & Hale LLC	736
Phoenix Products	641
Poly Hi Soldur	320
Potts Welding	322
Prime Mover Controls Inc.	429
R.W. Fernstrum&Co	120
Retif Testing Laboratories	301
RFD Beaufort Inc	635
Rochern	509 511
Rolls Royce	732
Saab Rosemount	225
Schenker Inc	426
SDT International	307
Sea-Image	423
Seaworthy Systems Inc	403
Sherwin Williams	724
Ship Structure Committee	725
Siemens	523
Sigma Coatings	321
SKF Couplings	644 646
SNAME	402
Sohre Turbo Machinery	110
The Maritime Group	418
Thordon Bearings INC	506
Thrustmaster of Texas	632
Total Marine Solutions	634
Tribon Solutions	510
Tube-Mac Industries	636
Twin Disc, Incorporated	411
Tyco Valves & Controls-Marine	309
UE Systems Inc.	305
Ultrajet	727
Ultrapoly Inc	226
Umoe Schat-Harding	300
US Filter Electrolytic	219
Viking Life Saving Equipment	525 527
Visions East	742
Wagner Steering / Summer Equipment Ltd.	524 526
Walz & Krenzer, Inc.	404 406
Wartsila N.A. Inc	528
Welin Lambie	121
Westfalia Separator Inc	409
Workboat Show/ Workboat Magazine	522
Zero Surge Inc.	400
ZFI Marine	

## AGMarine

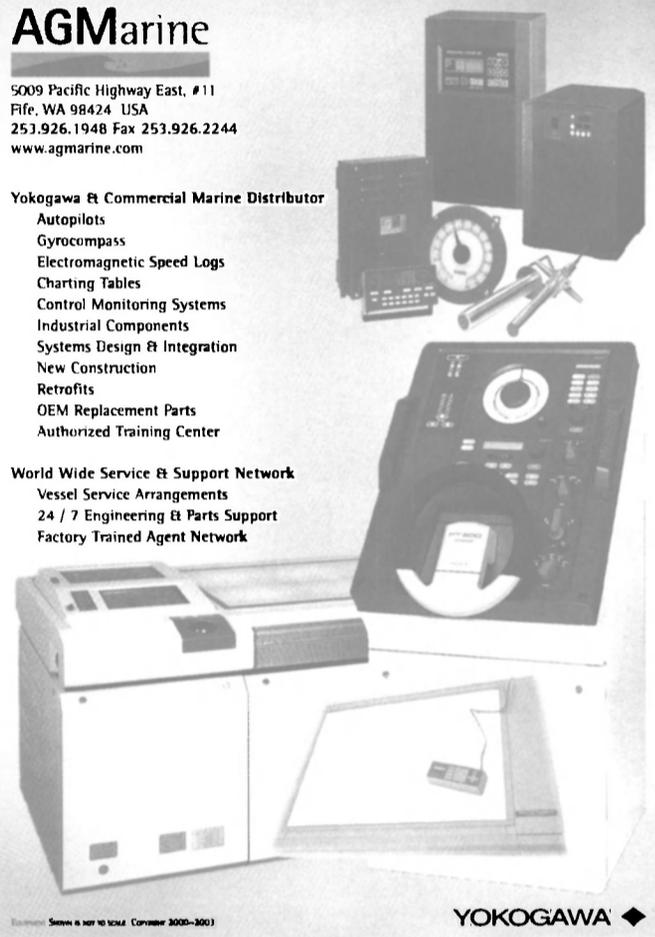
5009 Pacific Highway East, #11  
Fife, WA 98424 USA  
253.926.1948 Fax 253.926.2244  
www.agmarine.com

### Yokogawa & Commercial Marine Distributor

- Autopilots
- Gyrocompass
- Electromagnetic Speed Logs
- Charting Tables
- Control Monitoring Systems
- Industrial Components
- Systems Design & Integration
- New Construction
- Retrofits
- OEM Replacement Parts
- Authorized Training Center

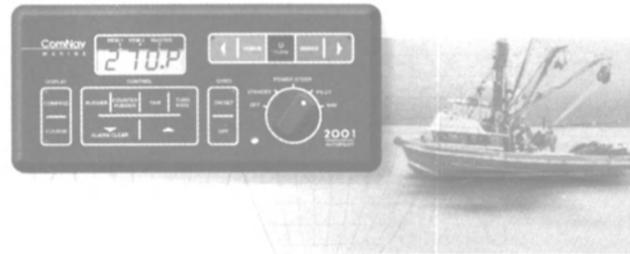
### World Wide Service & Support Network

- Vessel Service Arrangements
- 24 / 7 Engineering & Parts Support
- Factory Trained Agent Network



Circle 202 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 Warranty

## ComNav

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

Circle 212 on Reader Service Card

## Cable Transit Problems...



### Rapid Transit® Sealing System

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

For a full catalog, software and informational video contact:

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

Circle 214 on Reader Service Card



## Donjon Marine Co., Inc.

Phone: (908) 964-8812 Fax: (908) 964-7426

Web Site: www.donjon.com

E-Mail: inquiries@donjon.com

1250 Liberty Avenue, Hillside, New Jersey 07205 USA

Circle 215 on Reader Service Card

## 2004 SNAME Technical Program

(All information is current as of July 30, 2004. For updates or to register, visit: [http://www.sname.org/AM2004/technical\\_program.cgi](http://www.sname.org/AM2004/technical_program.cgi))

Topical Area - Date - Time - (Paper Number) - Title/Author Location

Ship Operations - Thursday, 09/30/2004 - 10:30 AM

A1(D16) - **Shipboard Routing Assistance – Decision Making Support for the Operation of Container Ships in Heavy Seas** by Hans G. Payer, Helge Rathje

Ship Operations - Thursday, 09/30/2004 - 10:30 AM

B1(D40) - **Development and Investigation of the Ballast-Free Ship Concept**, by Miltiadis Kotinis, Michael G. Parsons, Thomas Lamb, Ana Sirviente

Ship Operations - Thursday, 09/30/2004 - 11:30 AM

A2(D26) - **Criteria for Parametric Roll of Large Containerships in Longitudinal Seas** by Y.S. Shin, V.L. Belenky, J.R. Paulling, K.M. Weems, W.M. Lin

Ship Operations - Thursday, 09/30/2004 - 11:30 AM

B2(D39) - **Computational Fluid Dynamics Study of the Effectiveness of Flow-Through Ballast Exchange** by Christopher P. Kent, Michael G. Parsons

Ship Design - Thursday, 09/30/2004 - 2 PM

B3(D13) - **Compressed Natural Gas Carrier Development – The Knutsen PNG Concept** by Sverre Valsgård, Kim J. Mørk, Per Lothe, Nils Kristian Strøm

Ship Operations - Thursday, 09/30/2004 - 2 PM

A3(D14) - **A study on the manoeuvring capabilities of the twin screw POLAR ENDEAVOUR Class Tankers**, by Peter Tragårdh, Robert A Levine

Ship Operations - Thursday, 09/30/2004 - 4:30 PM

A5(D42) - **U.S. Coast Guard Cutter Maneuverability** by R. Sheinberg, P. Minnick, J. Daidola

Ship Structure - Thursday, 09/30/2004 4:30 PM

B5(D03) - **Design Principles and Criteria for Ship Structures under Dynamic Pressure Loads Arising from Sloshing, Slamming and Green Seas** by Jeom Kee Paik, Jae Myung Lee, Yung Sup Shin, Ge Wang

Hydrodynamics - Friday, 10/01/2004 - 9 AM

C6(D19) - **Automated Hydrodynamic Shape Optimization Using Neural Networks** - by A. Schmitz, E. Besnard, H. Hefazi

Ship Propulsion - Friday, 10/01/2004 - 9 AM

A6(D09) - **Correlation of Cavitation: Comparison of Full-Scale Data with Results of Model Tests and Computations** by J.T. Ligtelijn, H.C.J. van Wijngaarden, J.C. Moulijn, J.B. Verkuyl

Offshore Industry - Friday, 10/01/2004 - 9 AM

B6(D21) - **Reliability-Based Service Life Assessment of FPSO Structures** by Torgeir Moan, Efen Ayala-Uraga, Xiaozhi Wang

Ship Operations - Friday, 10/01/2004 - 10 AM

C7(D25) - **Using Simulation Programs to Design and Analyze Marine Transportation Systems** by Melissa L. Hertel, Kevin J. Kinports

Ship Propulsion - Friday, 10/01/2004 - 10 AM

A7(D36) - **Design and Experimental Study on a New Concept of Preswirl Stator as an Efficient Energy-Saving Device for Slow Speed Full Body Ship**, by M. C. Kim, H. H. Chun, Y. D. Kang

Ship Structure - Friday, 10/01/2004 10 AM

B7(D22) - **Analytical Prediction of Limit Loads of Ship Grillages Subjected to Lateral Loads** by Leonid M. Belenkiy, Yury N. Raskin

Ship Structure - Friday, 10/01/2004 11 AM

B8(D32) - **General Requirements for Limit State Assessment of Ship Structures** by Paul A. Frieze, Jeom Kee Paik

Ship Propulsion - Friday, 10/01/2004 11 AM

A8(D43) - **The Development and Application of High Efficiency Nozzles and Rudders** by Josip Gruzling

Ship Design - Friday, 10/01/2004 - 11 AM

C8(D08) - **Evolution of U.S. Naval Surface Combatant Design and Acquisition Policies** by John C. Hootman, Barry F. Tibbitts

Hydrodynamics - Friday, 10/01/2004 - 1:30 PM

A9(D41) - **Interference-Resistance Prediction and Its Applications to Optimal Multi-Hull Configuration Design** by Ronald W. Yeung, Gregoire Poupard, Jean O. Toilliez

Ship Operations - Friday, 10/01/2004 - 1:30 PM

B9(D01) - **The Loss of the Beth Dee Bob** by William H. Garzke, Jr. and Captain Steve Gatto

Ship Operations - Friday, 10/01/2004 - 2:30 PM

B10(D29) - **Evaluation of IMO and Naval Type Bilge Cocktails** by Hal Alper

Ship Operations - Friday, 10/01/2004 - 2:30 PM

A10(D30) - **Double Hull Tankers and Corrosion Protection** by Dragos Rauta, Tim Gunner, Johnny Eliasson

Ship Production - Friday, 10/01/2004 - 3:30 PM

B11(D04) - **The Advanced Outfitting Dilemma** by Thomas Lamb

Small Craft - Friday, 10/01/2004 3:30 PM

A11(D17) - **Escort Tug Design Alternatives and a Comparison of their Hydrodynamic Performance** by Robert G. Allan, David Molyneux

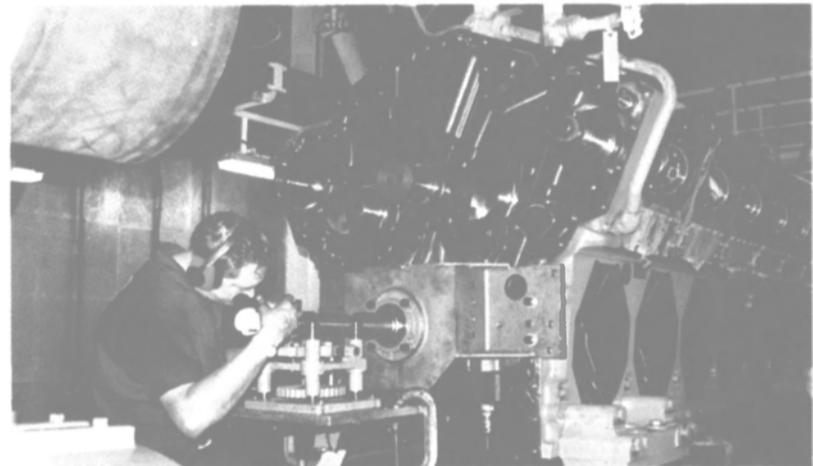
T&R Session Friday, 10/01/2004 1:30 PM C9 - SNAME T&R Session Room C

T&R Session Friday, 10/01/2004 2:30 PM C10 - SNAME T&R Session Room C

T&R Session Friday, 10/01/2004 3:30 PM C11 - SNAME T&R Session Room C

# CRANKSHAFT GRINDING

While Installed in Engine



- **CRANKPIN AND MAIN JOURNAL REFURBISHING**  
While crankshaft is in engine

- **LINE 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<sup>®</sup>**  
Only Lloyd's approved USA company for repair of cracked or broken cast iron engine blocks

## IN-PLACE MACHINING COMPANY

USA: 800-833-3575 International: 414-562-2000 FAX: 414-562-2932  
24 HOUR EMERGENCY SERVICE...day or night, 365 days a year  
email: [help@inplace.com](mailto:help@inplace.com) Website: [www.inplace.com](http://www.inplace.com)

Circle 231 on Reader Service Card



### T&T Marine Salvage, Inc.

### T&T Offshore, Inc.

### Tug Josephine, Inc.

24-HOUR EMERGENCY RESPONSE SINCE 1957




- Salvage & Wreck Removal
- Heavy Lift
- Spill Response
- Firefighting
- Diving
- Towing
- Lightering
- Fender Systems
- Offshore Crew/Supply Vessels

Salvage of barge loaded with Sulfuric Acid

Member:	9723 Teichman Road	3110 East Pasadena Frwy.
American Salvage Association	Galveston, Texas 77554	Pasadena, Texas
American Waterways Operators	409-744-1222 • 281-488-5757	713-534-0500
Association of Diving Contractors	<a href="http://www.tandtmarine.com">www.tandtmarine.com</a>	

Circle 237 on Reader Service Card

(Continued from page 23)

Stolt Offshore was managing the company's 210-ft. saturation diving support vessel, American Constitution, at the platform site when Hurricane Lili approached the Gulf packing more than 120 mph winds.

As the hurricane moved into the Gulf, Total E&P USA, Inc. as well as Stolt Offshore evacuated all

personnel. By the time Lili reached the vicinity of Eugene Island 275A in late September, it had grown into a Category 4 hurricane, carrying 140 mph winds

By October 4, 2002, when Total E&P USA, Inc. returned to the area after the storm had passed, the platform had vanished. No pollution occurred, thanks to the decommissioning and abandonment already performed. The platform jacket had buckled 125 ft. below sea level and had toppled to the west. The deck had

broken free of the jacket and rested upright on bottom. Total E&P USA, Inc. asked LoneStar Deepwater, Stolt Offshore, and Noble Denton Consultants, Inc. to provide a feasibility study.

For environmental as well as safety reasons, Total E&P USA, Inc. requested Stolt Offshore not to use

Explosives, as many types of marine life, such as sea turtles, and various kinds of fish, populate that area of the Gulf.

After reviewing the options, TOTAL E&P USA, INC. elected to apply for a Special Artificial Reef Site (SARS) to leave part of the platform on location and then follow a multi-staged solution which included removing enough of the jacket structure to ensure a minimum clearance of 85 ft. from the surface of the water for safe navigation purposes; removing equipment still possibly containing fuel or other hydrocarbons; flooding the remaining empty vessels on the deck to make them stable and to prevent them from making an uncontrolled ascent to the surface; and completing the plugging and abandonment operations of the remaining four wells.

The final step, just completed, was for Stolt Offshore to conduct a survey to ensure all procedures were correctly implemented and all regulatory requirements satisfied.

### Multiraship Completes Danish Salvage

Multiraship Salvage completed another salvage of a vessel grounded in the shallows of the Danish Great Belt. The Bulgarian-flag 38,511 dwt bulker Petimata OT RMS grounded in Danish waters on July 9, while carrying fertilizer from Ventspils to Santos. Multiraship has now completed the discharge of enough of the vessel's cargo and bunkers, and after refloating moved the vessel to the Danish port of Kalundborg where it has been inspected and reloaded. The operation follows the recent salvage in the same area of the 38,391 dwt Egyptian-flag Domiat, which grounded near Copenhagen on June 7. "It seems fertilizer exports from Baltic ports will keep salvors busy," said Multiraship managing director Leendert Muller. "These two jobs have justified our decision to expand our salvage operations and to react to incidents right across Europe. We undertook this job on LOF2000, and were able to use our Multiratug 7 plus two other tugs, a bunker lighter and a chartered Spliethof bulker, the Apollogracht, to clear the ship of bunkers and take off enough cargo to move the ship to safety."



Organized By:



**IN ASSOCIATION WITH:**

The US Merchant Marine Academy  
US Maritime Administration

**SPONSORED BY:**

The John Jay College of Criminal Justice  
National Biometric Security Project  
ComCARE Alliance  
The Emergency Interoperability Consortium (EIC)

**SUPPORTED BY:**

International Association of Ports & Harbors (IAPH)

**OFFICIAL PUBLICATION:**

Journal of Commerce  
Cargo Security International

**OFFICIAL MEDIA CO-PARTNER:**

The Maritime Group

**OFFICIAL DATA PARTNER:**

Lloyd's Register - Fairplay Ltd

**MEDIA PARTNERS:**

American Shipper  
Border and Transportation Security  
Faircount LLC  
GSN: Government Security News  
HSToday Magazine  
Marine Log  
Maritime Executive  
Sea Power Magazine  
Seaports of the Americas  
Security Technology & Design  
McGraw Hill's - Aviation Week  
Business Intelligence Services  
TransSec Magazine

**CORPORATE SPONSORS:**

Lockheed Martin  
Unisys Corporation  
The Boeing Company  
Oracle Corporation  
Rapiscan Security Products, Inc.  
Primedia Workplace Learning

**Maritime Security Expo 2004**  
**3<sup>rd</sup> Annual Expo & Conference**  
**(Ship - Port - Rail - Truck)**

**September 14-15, 2004**  
**Jacob Javits Convention Center • New York City**

*The 3<sup>rd</sup> Annual Presentation of America's Largest and Most Successful International Exhibition and Conference on Protecting Ports, Harbors, Bridges, Cargo, Containers, Power Plants, Oil Rigs, Railroads, Trucks, Cargo & Passenger Ships.*

**Over 3000 Attendees from 50 Countries Expected REGISTER TODAY!**

*For more information on exhibiting or attending, please call George DeBakay or Lindsey Field at 301-493-5500.*

[www.maritimesecurityexpo.com](http://www.maritimesecurityexpo.com)

Circle 272 on Reader Service Card

Norwegian Maritime Equipment AS, BOX 244, NO-5480 HUSNES, Norway  
Stearns Mfg. Co., PO Box 1498, St. Cloud, GA 56302-1498  
Thordon Bearings Inc., 3225 Mainway, Burlington, Ontario L7M 1A6, Canada  
Viking Life Saving Equipment, 1625 N. Miami Ave., Miami, FL 33136  
Walport USA, 39-5A Dover Rd South, Toms River, NJ 08757  
Warwick Mills, 301 Turnpike Rd, New Ipswich, NH 03071

#### **SALT REMOVING PRODUCTS**

Salt Away, P.O. Box 8797, Newport Beach, CA 92658

#### **SALVAGE**

Donjon Marine, 1250 Liberty Avenue, Hillside, NJ 07205  
Titan Maritime Industries Inc., P.O. Box 350485, Ft. Lauderdale, FL 33004

#### **SANITATION DEVICE- POLLUTION CONTROL**

Envirovac Inc, 1260 Turret Dr., Rockford, IL 61111  
EVAC Environmental Solutions, 1260 Turret Dr., Rockford, IL 61111

**FAST@Systems, 8229 Brentwood Industrial Drive, Brentwood, MO 63144, 314-645-6540, 314-645-6131, solutions@marinefast.com. Contact: Alan Fleischer, www.marinefast.com**

Headhunter Inc., 3380 SW 11th Ave., Ft. Lauderdale, FL 33315  
Hydroxi Systems, 9800 McDonald Park Rd, Sidney, BC V8L 3S8, Canada

Microphor, 452 E. Hill Rd., Willis, CA 95490  
**Research Products-INCINOLET, 2639 Andjon Drive, Dallas, TX 75220, 800-527-5551, 214-350-7919, sales@incinole.com**

#### **SATELLITE COMMUNICATIONS**

EMS Satcom, Green Lane, Tewkesbury, Gloucestershire GL20 8HD, UK  
Eurocom Industries AB, Box 7071, DK-9200 Aalborg SV, Denmark  
**France Telecom Mobile Satellite Communications, 16.bvd du Mont d'Est-BP 14-93161, Noisy le Grand, France, +33556223231, mobilesat@francetelecom-mobilesat.com. Contact: unknown, www.francetelecom-mobilesat.com**

Furuno USA Inc., 4400 NW Pacific Rim Blvd. Camas, WA 98607  
KVH Industries Inc., 50 Enterprise Center, Middletown, RI 02842  
Land Sea Systems, 509 Viking Drive, Suites K,L,M, Virginia Beach, VA 23452

Nera Satcom AS, Box 91, NO-1375 Billingstad, Norway  
**Petrocom, 5300 West Sam Houston Parkway North, Houston, TX 77041, 1-800-PETROCOM, 713-580-4150, sales@petrocom.com**  
Stralos, 1501 Metcalfe St. Ste 1900, Ottawa, Ontario K2P 1P1, Canada  
Telenor Satellite Services-Marlink, NO-1331, Fornebu, Norway  
Thrane & Thrane A/S, Lundtoftegadesvej 93D, DK-2800 Lyngby, Denmark

#### **SCARIFIERS**

Desmond-Stephan, P.O. Box 30, Urbana, OH 43078

#### **SEALS**

Duramax Marine LLC, 17990 Great Lakes Parkway, Hiram, OH 44234  
**Kobelco Eagle Marine, Inc., 366 Fifth Avenue, Suite 312, NY, NY 10017, 212-967-5575, 212-967-6966, hawkins@kobelco-eagle.com**  
Orkot Composites, 2535 Prairie Rd, Unit D., Eugene, OR 97402

#### **SEATING**

H.O. Bostrom, 818 Progress Ave., Waukesha, WI 53186

#### **SECURITY**

Control Screening, 2 Gardiner Rd, Fairfield, NJ 07004  
GE Ion Track, 205 Lowell Street, Wilmington, MA 01887  
Lorinox Video Solutions, 1120 W. 122nd Ave. Suite 200, Denver, CO 80234  
Smiths Detection, 30 Hook Mountain Road PO Box 410, Pine Brook, NJ 07058, 973 830-2131, 973-830-2200, susan.cooper@smithsdetection.com, Contact: Susan Cooper, www.smithsdetection.com  
Vingcard Marine, Bryan Oaks Business Park 1500 N.W. 1st Street, Dania, FL 33004

#### **SECURITY BARRIERS**

Seacor Environmental Products, P.O. Box 3535, Seattle, WA 98124  
Trelleborg Engineered Products, P.O. Box 98, Clearbrook, VA 22624

#### **SECURITY CONSULTANTS**

Solutions Group, 9663 Santa Monica Blvd. Ste 175, Beverly Hills, CA 90210

#### **SENSORS**

3 Point Solutions, 810A Tradesmans Park Loop, Hutto, TX 78634  
Electronic Marine Systems, 800 Ferndale Pl., Rahway, NJ 07065

#### **SHAFT SEALS**

Duramax Marine LLC, 17990 Great Lakes Parkway, Hiram, OH 44234

#### **SHAFTS**

Centra Corp., 815 Black Hawk Drive, Westmont, IL 60559  
Geislinger Corporation, 200 Geislinger Drive, Battle Creek, MI 49015

#### **SHIP DISPLAYS**

Data Modul, 1767-46 Vets Memorial Highway, Islandia, NY 11749

#### **SHIP MANAGEMENT**

Crowley Maritime, 9487 Regency Sq Blvd, Jacksonville, FL 32225  
Eurasia Group, 22A Floor Chinachem Exchange Sq., 1 Hoi Wan St., Quarry Bay, Hong Kong  
OCEAN TECHNICAL SERVICES, MILITARY OCEAN TERMINAL BAYONNE UNIT #8-FOOT OF 32ND STREET, BAYONNE, NJ 07002

#### **SHIP REPAIR**

Dubai Drydocks, P.O. Box 8988, Dubai, United Arab Emirates  
HALIFAX SHIPYARD, 3099 BARRINGTON ST, HALIFAX, NS, Canada  
Manitowoc Marine Group, 1600 Ely St., Marinette, WI 54143-2434

NORSHIPCO, PO BOX 2100, Norfolk, VA 23501-2100  
Tndent Technologies, 4011 C Highway 377 S., Fort Worth, TX 76109  
United Marine Enterprises Inc., P.O. Box 22077, Beaumont, TX 77720

#### **SHIP SIMULATORS**

Kongsberg Maritime AS, PO Box 1009, 3194 Horten, Norway

#### **SHIPBUILDING-REPAIRS, MAINTENANCE, DRYDOCKING**

American Ship Repair, 1011 38th St, Brooklyn, NY 11219  
Atlantic Marine, Inc., P.O. Box 3202, mobile, AL 36652  
Austal USA, 100 Dunlap Dr., Mobile, AL 36633  
Blount Marine, 461 Water St., Warren, RI 02885  
Bollinger Lockport & Larose, P.O. Box 250, Lockport, LA 70374  
Curacao Drydock Co., Box 3012, Willemstad, Curacao, Netherlands Antilles  
Damen Shipyards, P.O. Box 1 Gorinchem, 4200AA Holland, Netherlands  
Enavi Reparos Navais Ltda, 169 Barreto., Niteroi, RJ 24110-200, Brazil  
Fincantieri Cantieri Navali Italiani Spa, Merchant Shipbuilding Div., 34123 Trieste, Italy  
Gladding Hearn, 1 Riverside Ave., Somerset, MA 02725  
Grand Bahama Shipyard, PO BOX F-42498-411, Freeport, Bahamas  
GTR Campbell Marine, 24 Lambton Street, Ormstown, Quebec J0S 1A0, Canada  
In-Place Machining, 1929 N. Buffum St, Milwaukee, WI 53212  
Leevac Industries, LLC, P.O. Box 1190, Jennings, LA 70546  
Motor-Services AB, Box 2115, Ronninge S-144 04, Sweden  
NASSCO, 2798 E HARBOR DR, SAN DIEGO, CA 92113  
Newport News Shipbuilding, 4101 Washington Ave., Newport News, VA 23607  
Signal International LLC, 1011 S.Hwy 6, Ste 108, Houston, TX 77077  
United Defense, 1525 Wilson Blvd., Ste 700, Arlington, VA 22209-2444  
United Marine Enterprises Inc., P.O. Box 22077, Beaumont, TX 77720  
VT Halter, PO Box 3029, Gullport, MS 39505  
Washburn Doughty, P.O. Box 296, E. Boothbay, ME 04544  
Willard Marine Inc., 1250 N. Grove St., Anaheim, CA 92806

#### **SHIPYARDS**

Alabama Shipyard, P.O. Box 3202, Mobile, AL 36652  
Atlantic Marine, Inc., P.O. Box 3202, mobile, AL 36652  
**Bollinger Shipyards, 8365 Hwy 308 South, Lockport, LA 70374, 985 532-2554, 985 532-7225, Roberts@bollingershipyards.com, Contact: Robert A. Socha, www.bollingershipyards.com**  
Bradford Marine, 3051 State Rd 84, Fort Lauderdale, FL 33312  
Derektor Shipyard, 311 E. Boston Post Rd., Mamaroneck, NY 10543  
Jeffboat, 1030 E.MARKET STREET, JEFFERSONVILLE, IN 47130  
Kvaerner Masa-Yards Oy, BOX 132, FI-00151, Helsinki, Finland  
Leevac Industries, LLC, P.O. Box 1190, Jennings, LA 70546  
Offshore Inland, 3521 Brookdale Dr. S., Mobile, AL 36618  
United Defense, 1525 Wilson Blvd., Ste 700, Arlington, VA 22209-2444

#### **SILENCERS**

**EM Products, 5380 Cottonwood Lane, Prior Lake, MN 55372, (952) 440-9200, (952) 440-3400, sales@zerostart.com**  
Silex Inc., 6659 Ordan Dr., Mississauga, ON L5T 1K6, Canada

#### **SIMULATION TRAINING**

Marine Safety International, Marine Terminal, Laguardia Airport, NY 11371  
Maritime Institute of Technology, 5700 Hammonds Ferry Rd., Linthicum Heights, MD 21090  
Poseidon Simulation AS, Box 89, NO-8370 Leknes, Norway  
Transas Marine Overseas Ltd., 12 Obukhovskoy, Oboron, St. Petersburg 193019, Russian Federation

#### **SKILLED LABORERS**

MK Production Resources Inc., 1610 Reynolds Street, Brunswick, GA 31520

#### **SLIDING DOORS**

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

#### **SOFTWARE**

Autoshop Systems Corp., 611 Alexander Street, Suite 312, Vancouver, BC V6A 1E1, Canada, 604-254-4171, 604-254-5171, sales@autoshop.com, Contact: Samantha Lucas, www.autoshop.com  
Creative Systems Inc., P.O. Box 1910, Port Townsend WA 98368  
Loadmaster International, St. Varsvargen 11B SE, 211 19 Malme, Sweden  
Resurgence Software Inc., 2021 Lakeshore Dr., Ste 21D, New Orleans, LA 70122

#### **STEERING GEARS/ STEERING SYSTEMS**

A. Van der Velden B.V., Dorpsstraat 67a, PO Box 2061, 2930 AB Krimpen a/d Lek, Netherlands  
CS Controls Inc, 101 Dickon Road, Houma, LA 70363, 985-876-6040, 985-876-0751, info@cscontrols.com, Contact: Paul Srigley, www.cscontrols.com  
Jastram Engineering, 467 Mountain Hwy, North Vancouver, BC V7J 2L3, Canada  
Kobelt Manufacturing Co., Ltd., 8238-129 Street, Surrey, BC V3W0A6, Canada  
Offshore Inland, 3521 Brookdale Dr. S., Mobile, AL 36618

#### **STERN TUBE BEARINGS/ BUSHES**

Duramax Marine LLC, 17990 Great Lakes Parkway, Hiram, OH 44234, 440-834-5400, 440-834-4950, Contact: Richard Spangler  
Orkot Composites, 2535 Prairie Rd, Unit D., Eugene, OR 97402  
Thordon Bearings Inc., 3225 Mainway, Burlington, Ontario L7M 1A6, Canada

#### **STERN TUBE SEALS**

Superbolt, PO Box 683, Carnegie, PA 15106

#### **STRAINERS**

Hellan Strainer, 3249 East 80th St., Cleveland, OH 44104

#### **SUN PROTECTION SYSTEMS**

Solar Solve Marine, 7 St. Hilda Industrial Estate, South Shields NE33 1RA, UK, +44 191 454 8595, +44 191 454 8692, info@solasolv.com, Contact: Paul Hopkins, www.solasolv.com

#### **SURFACE PREP TOOLS**

Aurand Mfg., 1210 Ellis St., Cincinnati, OH 45223  
Dalseide Shipping Services, NO-5397, BEKKJARVIK, Norway  
Flow International Corp., 23500 64th Ave., South Kent, WA 98059  
NLB Corp., 29830 Beck Road, Wixom, MI 48383, 248-624-5555, 248-624-0908, nlbmtg@nlbusa.com, Contact: Jenna Eads, www.nlbcorp.com  
UltraStrip Systems Inc., 3515 SE Lionel Terrace, Stuart, FL 34997, 772-287-4846, 772-781-4778, sales@ultrastrip.com, Contact: John Odwazny, www.ultrastrip.com

#### **SURVIVAL EQUIPMENT**

Brookdale International, 1-8755 Ash St., Vancouver, BC V6P 6T3, Canada

#### **SWITCHBOARDS**

Industrial Power Systems, 3010 Powers Avenue Unit 16, Jacksonville, FL 32207, 904 731-8844, 904 731-0188, marine@ipsjax.com, Contact: Glenn Beaupre, www.ipswitchgear.com

#### **TANK LEVELING INDICATORS**

Ian Conrad Bergan, 3119 North Davis Highway, Pensacola, FL 32503, 850-434-1286, 850-434-1246, sales@icbergan.com, Contact: Ron Monell, www.icbergan.com  
King Engineering Co, PO Box 1228, Ann Arbor, MI 48106  
Kockum Sonics LLC, 933 Industry Road Suite 105, Kenner, LA 70062

Saab Marine Electronics, Box 13045, 402 5Goteborg, Sweden  
Technical Marine Services, 6040 North Cuthier Circle, Portland, OR 97217

#### **TEAK DECK SEALANT**

Boatlife Industries, 2081 Bridgeview Drive, N. Charleston, SC 29415, 800-382-9706, 843-566-1275, Contact: Louise Schmidt

#### **TESTING SERVICES**

Wyle Laboratories, 7800 Govern's Dr. S.W., Huntsville, AL 35807

#### **THICKNESS GAUGES**

StressTel Ultrasonic Testing, 2790 West College Avenue, State College, PA 16801-260

#### **THRUSTER SYSTEMS**

Omnithruster, 30555 Solon Industrial Parkway, Cleveland, OH 44139, 440 542-9260, 440 542-9265, widmer@omnithruster.com, Contact: Kurt Widmer, www.omnithruster.com

Thrustmaster of Texas, Inc., 12227 FM-529, Houston TX 77041, 713 937-6295, 713 937-7962, info@thrustmastertexas.com, Contact: Bert Ault, www.thrustmastertexas.com

#### **TRAINING**

International Maritime Training, 910 SE 17th St., Ste 200, Fort Lauderdale, FL 33316  
SUNY Maritime College, 6 Pennyfield Ave, Bronx, NY 10465-4198  
USMMA- Global Maritime and Transportation School, 300 Steamboat Rd., Kings Point, NY 11024

#### **TRAINING VIDEOS**

Coastal Training Technologies Corp., 500 Studio Drive, Virginia Beach, VA 23452  
Moxie Media, PO Box 10203, New Orleans, LA 70181

#### **TRANSMISSIONS**

Karl Senner Inc., 25 W Third, Kenner, LA 70062

#### **TRAVEL SERVICES**

ManneTravel Services, 200 Golden Oak Court, Suite 120, Virginia Beach, VA 23452

#### **TURBOCHARGERS**

ABB Turbo Systems AG, CH 5401, Baden, Switzerland

#### **TURBOCHARGERS- REPAIRS**

Motor-Services Hugo Stamp, 3101 S.W. 3rd Ave., Ft. Lauderdale, FL 33315  
Napier Turbochargers, P.O. Box 1, Waterside, South Lincoln LN5 7FD, UK

#### **ULTRA HIGH MOLECULAR WEIGHT MARINE FENDERING**

Ultra Poly, Inc., 2926 So.Steele Street, Tacoma, WA 98409

#### **ULTRASONIC TESTING**

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

#### **ULTRATHIN (UHMW) NON-SKID DECKING**

Ultra Poly, Inc., 2926 So.Steele Street, Tacoma, WA 98409

#### **UNDERWATER SURVEILLANCE SONAR**

C-Tech LTD, P.O.Box 1960, Cornwall Ontario K6H6N7, Canada

#### **VACUUM EQUIPMENT**

Industrial Vacuum Equipment Corporation, N8091 Maple Street, Ixonia, WI 53036, 800-331-4832, 920-261-7117, randy@industrialvacuum.com

#### **VACUUM TOILET SYSTEM**

Envirovac Inc, 1260 Turret Dr., Rockford, IL 61111  
Jets Vacuum Sewage System, P.O. Box 14, N-6060 Hareid, Norway

#### **VALVES & FITTINGS**

Leslie Controls, 12501 Telecom Dr., Tampa, FL 33637  
William E. Williams, 38-52 Review Ave, Long Island City, NY 11101

#### **VENTILATION SYSTEMS / PRODUCTS**

Delta T Systems, 858 West 13th Court, Riviera Beach, FL 33404  
Dry Air Technology, 313 North Oak St., Burlington, VA 88233  
Jon M. Liss Associates, PO Box 5005-73, Rancho Santa Fe, CA 92067

#### **VIBRATION ANALYSIS**

Ludeca, Inc., 1425 NW 88th Ave, Miami, FL 33172  
Maritech, LLC, 100 Powermill Rd., Acton, MA 01725

#### **VISCOMETERS**

Cambridge Applied System, 196 Boston Ave., Medford, MA 02155

#### **VOYAGE DATA RECORDERS**

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

#### **WASTE WATER TREATMENT**

**FAST@Systems, 8229 Brentwood Industrial Drive, Brentwood, MO 63144, 314-645-6540, 314-645-6131, solutions@marinefast.com. Contact: Alan Fleischer, www.marinefast.com**  
Marine Environmental Partners, 3874 Fiscal Ct, Suite 200, West Palm Beach, FL 33404  
RWO, Leerkampe 3, D- 28259 Bremen, Germany

#### **WATER JET CLEANING**

Flow International Corp., 23500 64th Ave., South Kent, WA 98059  
Gardner Denver Water Jetting Systems, 12300 N. Houston Rosslyn Road, Houston, TX 77086  
NLB Corp., 29830 Beck Road, Wixom, MI 48383

#### **WATER PURIFIERS**

Alfa-Laval Separation, Inc., 955 Meams Rd., Warminster, PA 18974

Everpure, 502 Indiana Avenue, Sheboygan, WI 53081, 866-873-7506, 866-203-7361, customerservice@plymouthwater.com, Contact: Jerry Letcher, www.everpure.com

Gardner Denver Water Jetting Systems, 12300 N. Houston Rosslyn Road, Houston, TX 77086

#### **WATERTIGHT CLOSURES**

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

#### **WELDING PRODUCTS & POWER EQUIPMENT**

ESAB Welding and Cutting Products, 411 S. Ebenezer Rd, PO Box 100545, Florence, SC 29501, 843-664-4411, 843-664-4258, dterry@esab.com, Contact: Donna Terry, www.esabna.com

#### **WINCHES & FAIRLEADS**

Coastal Marine Equipment, Bldg 9114 MISAAP Ind. Complex, Stennis Space Center, MS 39529  
Coastal Marine Equipment Inc., BLDG. 9114 MISAAP Industrial Complex, Stennis Space CTR., MS 39529, 228-813-1700, 228-813-1709, sales@coastalmarineequipment.com, Contact: Ralph Waguespack, www.coastalmarineequipment.com

CS Controls Inc, 101 Dickon Road, Houma, LA 70363, 985-876-6040, 985-876-0751, info@cscontrols.com, Contact: Paul Srigley, www.cscontrols.com  
Intercontinental Engineering, PO Box 9055, Kansas City, MO 64168  
Jeamar Winches, 1051 Clinton St., Buffalo, NY 14206  
Markey Machinery, P.O. Box 24788, Seattle, WA 98124  
McElroy/Catchot Winch Company, Inc., P.O. Box 4632, Biloxi, MS 39535-4632, 228-875-6327, 228-872-7880, hcatchot@bellsouth.net, Contact: Harold Catchot, www.mcelroycatchotwinch.com

MMC International, 60 Inip Dr, Inwood, NY 11096  
Nabrico Manne Products, 1050 Trinity Road, Ashland City, TN 37016  
Skookum, P.O. Box 280, Hubbard, OR 97032  
Smith Berger Marine, 7915 10th Ave. S., Seattle, WA 98108  
Superior Lidgerwood Mundy, 1101 John Ave., Superior, WI 54880  
Timberland Equipment Ltd & Almon Johnson, 459 Industrial Ave., Woodstock, ON N4S 7Z2, Canada

#### **WINDLASSES (ANCHORS)**

Coastal Marine Equipment, Bldg 9114 MISAAP Ind. Complex, Stennis Space Center, MS 39529  
Coastal Marine Equipment Inc., BLDG. 9114 MISAAP Industrial Complex, Stennis Space CTR., MS 39529, 228-813-1700, 228-813-1709, sales@coastalmarineequipment.com, Contact: Ralph Waguespack, www.coastalmarineequipment.com

CS Controls Inc, 101 Dickon Road, Houma, LA 70363, 985-876-6040, 985-876-0751, info@cscontrols.com, Contact: Paul Srigley, www.cscontrols.com  
McElroy/Catchot Winch Company, Inc., P.O. Box 4632, Biloxi, MS 39535-4632, 228-875-6327, 228-872-7880, hcatchot@bellsouth.net, Contact: Harold Catchot, www.mcelroycatchotwinch.com

#### **WINDOWS**

Deansteel Mfg., 111 Merchant St., San Antonio, TX 78204

#### **WINDSCREEN & WINDOW WIPERS**

Bae Systems, 550 South Fulton St., Mt. Vernon, NJ 10550  
Hepworth Marine International, Hepworth House, Brook St., Redditch, Worcestershire B98 8NF, UK  
Wynn Marine, Ltd., Wynn House, Lansdown Estate, Cheltenham, Gloucestershire, UK

# INFORMATION

**S H O W C A S E**

## Get Free Information Fast

Circle the appropriate Reader Service Number  
on the opposite page or visit  
[www.maritimeequipment.com](http://www.maritimeequipment.com)



**GET FREE INFORMATION ONLINE at: [www.maritimeequipment.com](http://www.maritimeequipment.com)**

Page	Advertiser	Product	R/S#	Page	Advertiser	Product	R/S#
24	4th Ocean Technology Workshop	technology workshop	280	26	Loews L'Enfant Plaza	hotel	238
16	A. Van der Velden BV	manoeuvring equipment	200	43	Loronix Video Solutions	security products	239
6	ABB Turbocharger System	turbochargers	201	15	Manitowoc	shipyard	240
50	AG Marine	autopilots/navigation wholesale	202	12	Marine Exhaust Systems of Alabama	water cooled manifolds	241
2	Albacore Research Ltd.	CAD/CAM	203	42	Marine Response Alliance	hazard response	242
16	Allied Systems	deck machinery	205	12	Maritime Associates	marine & offshore signage	243
14	Anchor Marine	anchors and chains	206	36	McAllister Towing	shipdocking	244
41	Blank Rome LLP	counselors at law	207	C2	MITAGS	training and education	245
33	Blount Boats	boatbuilders	208	4	Motor-Services Hugo Stamp	diesel engine spare parts	246
19	Caprock Communications	satellite communications	210	7	Northrop Grumman Newport News	shipbuilding	247
12	Coastal Marine Equipment	deck machinery	211	44	Offshore Communications 2004	conference & exhibition	248
50	Comnav Marine Ltd.	autopilot	212	10	Orkot Marine	bearings	249
32	Creative Systems	software	276	26	Peck & Hale	cargo securing systems	250
29	Crowley Maritime	marine logistics/transportation	213	3	Petrocom	communications service	251
50	CSD North America	pipe/cable sealing systems	214	12	Rasmussen Equipment Co.	deck machinery	252
49	Don Sutherland Photography	photography	278	35	Restech Norway A/S	pneumatic line throwers	253
50	Donjon Marine Co. Inc.	salvage	215	44	Sasakura Engineering	fresh water generators	254
11	Duramax	heat exchangers	216	10	Sea Ark Marine	boatbuilder	255
52	E.J. Krause	exposition/conference	272	45	Sea Tel Inc.	communications	256
33	Electronic Marine Systems	tank level indicators	217	C4	Seawave	communication services	257
35	Electronic Marine Systems	tank level indicators	218	17	Sherwin Williams	coatings	258
37	Electronic Marine Systems	tank level indicators	219	32	SNAME	ship design publications	259
39	Electronic Marine Systems	tank level indicators	220	38	SNAME	naval architects/marine engineers	260
26	EMS Technologies Canada Ltd.	satellite communications	221	46	SNAME	exhibition	277
C3	ESAB Cutting Systems	cutting & welding equipment	222	40	Spurs Marine	propeller cutters	261
24	EuroCom Industries A/S	satellite communications	223	22	Stearns Manufacturing Co.	safety products	279
12	Falk Corporation	propulsion gear drives	224	49	Sundial Marine	shipyard	262
13	Flir Systems	thermal imaging	225	16	Superior Energies	insulation manufacturers	263
21	France Telecom	mobile satellite systems	274	51	T & T Marine Salvage Inc.	marine salvage	237
23	France Telecom	mobile satellite systems	275	33	Technofibre	lifeboat & davit maintenance	209
14	Gardner Denver Water Jetting	waterjetting system	226	25	Telenor Satellite Services-Marlink	satellite communications	264
47	GE Marine Engines	engines	227	27	Thrane & Thrane	communications	265
32	Gladding Hearn	shipbuilding	228	37	Trident Technologies	magnetic hull patch	266
9	Harvey Gulf Marine	marine transportation	229	5	Trinity Marine Products	shipyard	267
16	Imes Inc.	lifeboat testing	230	35	Ultra Poly Inc.	UHMW non skid braxx sheet	268
51	InPlace Machining	crankshaft repair	231	18	United Marine Shipyard	shipyard	273
42	Inventory Locator Service	parts locator service	232	1	USMMA	maritime & transportation training	269
8	Japan Radio	communications	233	32	WACO Products	gangways	270
31	Jeffboat	shipyard	234	36	Walz & Krenzer	hi pressure doors	271
49	JMS Naval Architects & Salvage	naval architects	235	12	Western Machine Works	deck machinery	204
15	Llebroc Industries	chairs	236				

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

## Products



### Aquabond

Aquabond offers a new marine repair compound. The new Marine Repair Compound is a two-part sandable and paintable epoxy that can be used on any vessel's surface, including boats and campers. Whether above or below water, Aquabond's Marine Repair Compound will repair anything from fiberglass and plastic to aluminum and wood.

**Circle 101**



### Amot

AMOT's new global capability offers a range of high quality PLC's, switches, sensors and detectors for monitoring and protection of rotating equipment. AMOT's marine diesel engine products are designed to monitor and provide fuel savings, and our quality temperature control valves provide emissions control and protection solutions for our customers.

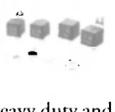
**Circle 102**



### Ciserv

Ciserv CGL is a leader in developing and implementing cost-effective techniques to recondition two and four stroke diesel engine component to the latest OEM specifications and modifications. Recondition is an ideal way to achieve maximum service life of components, while minimizing costs.

**Circle 103**



### Cole Hersee

Cole Hersee Company introduced its new heavy duty and high power relays for marine applications. The relays are ideal for lighting control, starting, horn, heating and cooling applications, and motors controlling the fuel pump, windshield wipers, or windlasses. The heavy duty relays are normally open 40A at 12V DC and closed at 30A, or for 24V DC: open at 20A and closed at 15A.

**Circle 104**



### Autoship Systems

Autoload 6.0 is the latest 3D-based onboard stability and simulation monitor software from Autoship. Autoload is very user-friendly and reliable, yet is the most advanced system available. BP bought Autoload 6.0 for Thunderhorse. Why not you?

**Circle No. 105**



### Warwick Mills

The TurtleSkin material technology is now being used in their line of WaterArmor protective suits for high pressure water jet operators. The TurtleSkin WaterArmor provides protection against accidental swipes of up to 40,000 psi. The patented technology used in the WaterArmor was first developed for the crash bags used in the Mars landings.

**Circle 106**



### Anchor Lamina

Versatile hydraulic drill system is portable like electric drills, but lasts longer (typically 10 to 20 years) with little maintenance. It drills or taps up, down and sideways, even underwater. Six interchangeable heads, with a variety of quick-change tools and simple, convenient controls. Meets NEMA, CE and other global standards.

**Circle 107**



### Heinzmann

At the heart of Heinzmann's digital governor beats a 32-bit microprocessor capable of performing up to 8 million commands per second. They feature governor dynamics under a number of circumstances. Millions of times per second, the processor adapts the governor's dynamics to external factors, such as load, temperature and engine speed.

**Circle 108**



### Hansard Security

Hansard Security's team can help companies develop security and crisis management procedures to comply with these new regulations. They can offer strategic assessment and advice by assisting with port and facility threat assessment and crisis management planning and response. Their maritime security surveys and implementation involves port and terminal.

**Circle 109**



### Marlow Ropes

Marlow Ropes is a technology led manufacturing company servicing worldwide the harbor and escort towage markets with a diverse range of high performance synthetic fiber ropes. Steelite Xtra UHMPE or Superline circular braid and 12 strand SQ12 combination polyester fiber ropes are "The Preferred Connection" for many major tug and ship operators.

**Circle 110**



### Grip-Tek

Grip-Tek has released its new catalog featuring a wide variety of Foam Grips, Plastic Grips, Foam Tubing, and Vinyl Caps available. Grip-Tek offers a full line of EPDM Foam and Plastic Grips. Grip-Tek, located in Buena Park, Ca., combined with Trim-Lok can now provide over forty years of experience in Sales, Service, Design Engineering, Prototyping, Tooling and Custom Color Capabilities

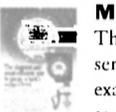
**Circle 111**



### Schat-Harding

Schat-Harding evolved from a merger of the three most respected companies in the survival craft and davit business- Watercraft International, Harding Safety and Schat Davit Company- each of which served the requirements of the offshore industry for decades. Each had different ranges of equipment for the offshore sector, comprising conventional survival craft, freefall survival craft and launching arrangements.

**Circle 112**



### MMC

The MMC Oxygen-sensor tells you the exact depth of the sensor and percent of oxygen in the inert gas in each tank. There's no mess or guesswork. The unit is battery operated, completely portably, with a built-in self-calibrating feature and is approved by BASEEFA as intrinsically safe. Just lock it on an MMC vapor control valve and lower the sensor to the correct ullage level.

**Circle 113**



### Viking

Viking Fender custom measures and manufactures these bow fenders to fit properly, realizing that lines must work over them without fouling. All of their fenders have their particular advantages. To ensure the best selection to meet your specific need, please feel free to consult with us before placing your order.

**Circle 114**



### Marine Propulsion Research

Marine Propulsion Research Inc. in Bradenton, FL, patented a sea chest that provides an abundant supply of water for engines, generators and air conditioning at speed. There is no cavitation or drag. This design makes it possible for easier and reduced plumbing throughout the craft.

**Circle 115**



### Centa

Whether you have small, medium, or large horsepower; rigid or resilient mountings; remote or close-coupled gearing; Centa can meet requirements with state-of-the-art torsional coupling solutions. Their products are used on diesel, natural gas and gasoline engines, main drives or for electrical power generation. Centa offers torsional vibration analysis as well as total global product support.

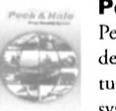
**Circle 116**



### Wartsila

Wartsila is the world's leading supplier of marine engines and propulsion systems for all types of vessels and offshore applications. As The Ship Power Supplier Wartsila is committed to serving the marine market with reliable, cost effective and environmentally sound marine power systems.

**Circle 117**



### Peck & Hale

Peck & Hale is a designer and manufacturer of cargo securing systems for the Defense and Transportation industries. Peck & Hale focus on continued product development that services the needs of their customers by offering a comprehensive service for the design, supply, refurbishment and replacement of equipment for all types of cargo securing systems.

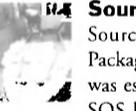
**Circle 118**



### IPS

Industrial Power Systems offers a full line of marine switchboards for any application. All are custom built to your design and in conformance with any required regulatory body rules. American quality and craftsmanship since 1981.

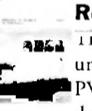
**Circle 119**



### Source of Supply

Source of Supply Packaging Systems, Inc. was established in 1992. SOS has offices in New York, Florida, Texas, and California. They manufacture and distribute polyurethane and epoxy equipment and chemical systems throughout the U.S. Typical applications include marine flotation, insulation and packaging. The above photo illustrates a boat hull being filled according to coast guard specifications.

**Circle 120**



### Renk

The marine planetary gear units of series PLS and PWS have been specially designed for use in fast vessels, such as patrol boats and yachts. With a capacity range from 1,500 to 10,000 kW and reduction ratios from 1.5 to 7.1, they cover all requirements. The Renk planetary gears for fast vessels are available as a disconnectable reduction gear unit and as a reversing gear unit.

**Circle 121**



### Simrad

Simrad's new CF Series marine monitors will be offered in 15, 17, 19 and 23 in. versions, to accommodate bridge layouts and helm stations of various sizes. With its TFT MVA Premium technology, this series is designed to provide clarity, realistic colors and superior definition whether displaying sonar, echosounder, radar, chart plotting or other fishfinding or navigation data.

**Circle 122**



### Thrustmaster

Thrustmaster of Texas, Inc. is a privately-owned corporation based in Houston, Texas. Thrustmaster manufactures marine propulsion equipment, including deck-mounted propulsion units, thru-hull azimuthing thrusters, retractable thrusters, tunnel thrusters, and portable DP systems.

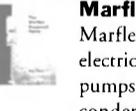
**Circle 123**



### GE

GE Transportation Systems Marine & Stationary Power supplies GE Diesel and EMD\* compatible (GE Competitive) engines and products for the Marine, Power and Industrial markets. The GE Diesel family of medium speed engines includes 8, 12 and 16 cylinder V configurations ranging between 1600 - 4500 hp.

**Circle 124**



### Marflex

Marflex manufactures electric driven Deepwell pumps for cargo, slop, condensate and ballast water discharge on board of inland barges, Product- & Chemical tankers, FSO's & FPSO's. Capacities from 50 cu. m./hr up to 2000 cu. m./hr for 1,000 DWT up to 300,000 DWT vessels Marflex was founded in 1980 and has experience on board of barges, tankers and FSO/FPSOs.

**Circle 125**

# THE MARINE MART

The Classified  
and Employment Section



## Products & Services

**CAMAR International Corp.**  
120 Davis Steet, Douglas, MA 01516

**FMS REPAIR PARTS**  
For Ex-USN Ships in Foreign Navies



The most complete stock of MILSPEC replacement parts and components for:

- Blowers & Compressors
- Steam Turbines
- Pumps
- Steam Valves
- Steam Boilers

Rotating Equipment Specialists

For Sales, Service and Support Call  
(800) 352-7629  
or fax to (508) 752-5687

**Muldoon Marine Services**  
COMMERCIAL DIVING - NONDESTRUCTIVE TESTING

**UWILD Surveys**  
Approved By All Major Class Societies

**Nondestructive Testing**  
Topside and Underwater

**Ship Maintenance**  
Propeller Polishing, Hull Cleaning, Etc.

24-Hour: (562) 432 5670  
Long Beach, CA  
www.muldoonmarine.com



**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

**SEASCHOOL**

STCW Medical Care Provider & Maritime Security Training Programs.

Call Today: 1-800-237-8663  
www.seaschool.com



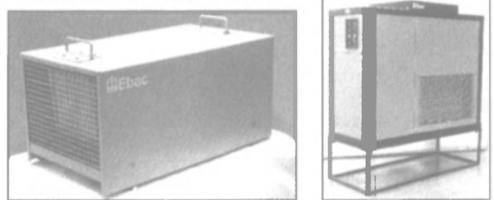

**DURABAK - SKID - RESISTANT COATING**

- DURABAK has superior NON-SKID properties and is more skid-resistant when wet than when dry (ASTM D-1894-93).
- DURABAK uses recycled rubber crumbs in suspension, giving a totally flexible, impact resistant, resilient-like surface which will not crack, chip or peel.
- DURABAK is a one part polyurethane product which bonds to fiberglass, wood, rubber, primed metals, concrete and more.
- DURABAK is not affected by fresh or saltwater and is resistant to oil, gasoline, diesel, dilute acids (i.e.: battery acid) and tolerates heat to 250 F+
- DURABAK can be easily brushed, rolled or sprayed and is available in a variety of colors, including the "safety colors".
- DURABAK works very well on all types of equipment: trucks, trailers, planking, scaffolding, storeroom floors, loading docks, ramps, walkways, or anyplace slip and fall hazards exist.

For information contact:  
**APPLIED SURFACES INC.**  
Telephone: 800-272-3312  
Fax (561) 391-0045  
e-mail: info@appliedsurfaces.com  
web site: www.durabak.com

**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

**JOINER SYSTEMS™**  
ENGINEERING • DESIGN • MANUFACTURING

- Bulkhead Systems - Isolamin Panels in stock
- Ceiling Systems • Floating Floors
- Doors: A-60, B-30 Fire Rated Weathertight, Watertight
- Hatches, Scuttles & Manholes
- Toilet Modules

Tel: (514) 636-5555 Fax: (514) 636-5410  
e-mail: info@joinersystems.com  
Web Site: http://www.joinersystems.com

**The Wooster Way... Performance Under Pressure**



Wooster Hydrostatics, an independent remanufacturer of hydrostatic pumps and motors, uses only genuine OEM replacement parts. We are dedicated to providing our customers superior service and a quality product that meets or exceeds OEM standards.

**WOOSTER HYDROSTATICS**  
Performance Under Pressure

Wooster, Ohio Service Center  
330-263-6555 • 800-800-6971  
Fax 330-263-4463 • www.woosterhydrostatics.com

**DAVIT SALES INC.**  
&  
**DAVIT ENGINEERING**  
Naval Architects & Marine Engineers

**WWW.DAVITSALESINC.COM**

MARINE CRANES ♦ OIL SPILL BARRIERS  
MARINE ENGINEERS

**CRANSTON, RI \* JEFFERSON VALLEY, NY**  
PHONE: 914 962 4544 FAX: 914 962 5418 E-MAIL: DAVIT1@AOL.COM




# THE MARINE MART

The Classified  
and Employment Section



## Products & Services

**SCALE MODELS**



**SCALE REPRODUCTIONS**  
[WWW.2SCALE.COM](http://WWW.2SCALE.COM)  
9121 PRECISION PL. 251-928-3829  
FAIRHOPE, AL 36532

**MARINE INCINERATORS**

Burn shipboard waste and sludge in rugged and efficient THERM-TEC Marine incinerators. The first and only US built, IMO, USCG, ABS approved equipment. We also supply leased containerized incineration plants for open deck use.

**THERM-TEC Inc.** [www.thermtecmarine.com](http://www.thermtecmarine.com)  
e-mail: [carolina@teleport.com](mailto:carolina@teleport.com) Phone: 503-978-0863

**FOR SALE MODELS**



ORDERS are now being accepted. Please visit our WEBSITE. phone: 1(305)386-1958 fax: 1(305)380-9056 [replicas@maritimereplicas.com](mailto:replicas@maritimereplicas.com)  
[WWW.MARITIMEREPLICAS.COM](http://WWW.MARITIMEREPLICAS.COM)

QUEEN MARY 2  
THE Authorized model

**BIGTOP FABRIC STRUCTURES**

shelter shown: 36 W x 150'L x 34'H

- Modular
- Multi purpose
- Relocatable
- Affordable
- Fast delivery
- Turnkey
- Large Doors
- HVAC

paint/prep sheds  blast containment  any width, length, or height

**GREAT SHELTERS -- FACTORY DIRECT!**

[www.bigtopshelters.com](http://www.bigtopshelters.com)  
sales@bigtopshelters.com • PH 800-277-8677

**McELROY/CATCHOT WINCH COMPANY, INC.**

DESIGNERS OF QUALITY DECK MACHINERY, WINCHES, WINDLASSES, CAPSTANS, SHAFT AND MACHINE WORK, AND REPAIRS

SEVING 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](http://www.mcelroycatchotwinch.com)

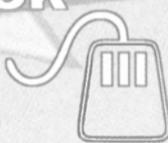
**U.S.C.G. LICENSE ABOUT TO BE Revoked or Suspended**

Put a fighter in your corner  
Protect your ticket  
Call Today (727) 580-4576  
ADMINISTRATIVE LAW HEARING REPRESENTATION

**ANKER MARINE PAINTS**

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](mailto:ANKERPAINT@aol.com)

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

**MaritimeToday.com**

**A. R. LARSEN COMPANY INC.**

Custom Marine Interiors,  
Galley Equipment & Fabrication

[www.marinegalley.com](http://www.marinegalley.com)  
TOLL-FREE 800-735-7286 • (425) 861-8868

**AETNA ENGINEERING**  
A DIVISION OF FIREBOY-XINTEX



**Direction Indicating Shaft Tachometer**

- ✓ Guaranteed accurate to 1 RPM
- ✓ Display shows F (Forward) or R (Reverse)
- ✓ Simple four wire installation
- ✓ No separate "Black Box" required
- ✓ Rugged - 2-Year Limited Warranty

Contact one of our engine specialists to assist you with your tachometer needs

0-379 Lake Michigan Dr. NW, Grand Rapids, MI 49544 USA  
Toll Free: 1-800-776-7962 Fax: (231) 223-9467  
Email: [aetnaengineering@fireboy-xintex.com](mailto:aetnaengineering@fireboy-xintex.com)  
Web: [www.fireboy-xintex.com](http://www.fireboy-xintex.com)

**LOWER OPERATING COST**

*Life-time Warranty*

- More Power
- Less Smoke
- Save Fuel

**CLEANS ENTIRE FUEL SYSTEM**

Fuel Optimization Certified by EPA Approved Lab  
Available through Major Engine Distributors

**ALGAE-X** 877-425-4239  
[www.algae-x.net](http://www.algae-x.net)  
Fuel Optimization

Tel: 239-463-0607 Fax: 239-463-7855 [algae-x@algae-x.net](mailto:algae-x@algae-x.net)

**JON M. LISS ASSOCIATES, INC.**  
POST OFFICE BOX 5005-73 RANCHO SANTA FE CA 92067



**NAVY STANDARD VANEAXIAL & CENTRIFUGAL FANS**

Delivery From Stock

Phone 858 793 9100 Fax 858 793 9113  
Email [jon411@pacbell.net](mailto:jon411@pacbell.net)



## Products & Services

### Rope Problems? Web-Tec Line Protection Systems



**WEB-TEC Line Protection Systems**  
a division of Shaw Belting Company  
265 Pennsylvania Ave. Hillside, NJ 07205  
PH: 800-435-0033 Fax: 908-355-5544  
PH: 908-355-1101

- **Protects** synthetic lines used in tough Ship Assist, Pushing and Mooring applications

- **Heavy Duty** Velcro closure system permits WEB-TEC to be installed in seconds

- **Proven** in Z-Drive ship assist applications

[www.webtecchafeguard.com](http://www.webtecchafeguard.com)

Hunting  
for a new job?  
Set your sights on the  
extensive listings on



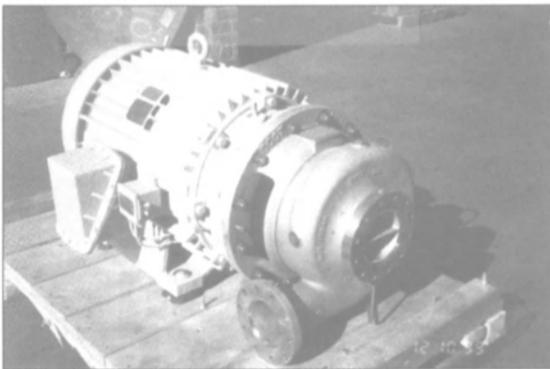
The ideal environment  
to bag your next job.

THE MARITIME GROUP  
118 East 25th Street, New York, NY 10010  
Tel: 212.477.6700, Fax: 212.254.6271, E-mail: [info@marinelink.com](mailto:info@marinelink.com)

## Vessels for Sale/Charter - New/Used Equipment

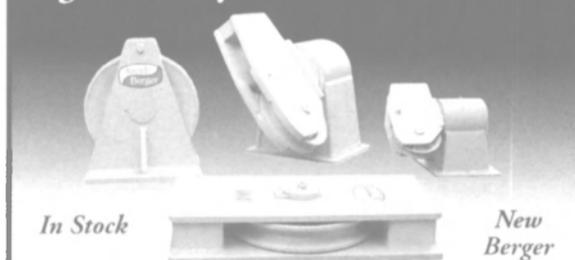
### NEW FIRE PUMPS

1,000 G.P.M. at 125 P.S.I. - 6" IN x 5" OUT  
Driven by a Low Noise 150 H.P. 440 Volts Elect. Motor  
Titanium casing, totally enclosed motors.  
Ideal for MARINE or INDUSTRIAL USES  
COMPLETE MANUAL and CURVES AVAILABLE



**WATERMAN SUPPLY CO. INC.**  
910 MAHAR AVE · WILMINGTON, CA. 90748  
Phone : (310) 522-9698 Fax: (310) 522-1043  
e-mail: [waterman@bigplanet.com](mailto:waterman@bigplanet.com)

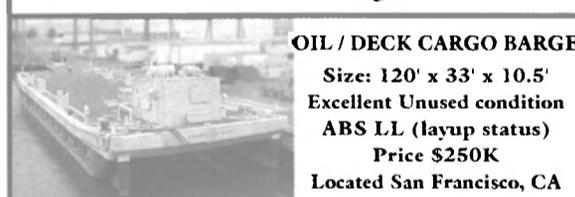
### Large Inventory of Fairleads & Deckleads



**RASMUSSEN EQUIPMENT COMPANY**  
(800) 227-7920 • [info@rasmussenco.com](mailto:info@rasmussenco.com) • [www.rasmussenco.com](http://www.rasmussenco.com)

### New 225' Deck Barge

For Sale / Charter - P.O.R  
225' x 54' x 14' Deck Barge - ABS LL



**RASMUSSEN EQUIPMENT COMPANY**  
(800) 227-7920 • [info@rasmussenco.com](mailto:info@rasmussenco.com) • [www.rasmussenco.com](http://www.rasmussenco.com)

Daily updated  
comprehensive  
information  
is just one  
click away.



[www.MarineLink.com](http://www.MarineLink.com)

**Looking for a vessel?**

Find it in the  
"Vessels for Sale"  
Section in  
**MarineNews.**



### Specializing In Barges



**ZIDELL**  
MARINE  
CORPORATION

- ◆ Single or Double Hull, Inland or Ocean-Going
- ◆ Design, Construction & Modification
- ◆ Chartering, Sales & Brokerage

Ask for Bill Gobel

503-228-8691 1-800-547-9259

3121 SW Moody Avenue, Portland, Oregon 97239



## 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](http://www.smslegal.com)

### VESSEL INSPECTOR

The Washington State Dept. of Ecology is seeking a Vessel Inspector to work from our field office in Portland, Oregon.

**Requirements:** A Bachelor's degree and have served as USCG licensed second assistant engineer (or higher) and have 3 years of sailing experience on merchant vessels or 4 years of sailing experience serving as a commissioned engineering watch officer in the armed services with one year of experience on a noncombatant surface vessel.

**Salary:** \$49,380-\$63,192 / year plus competitive benefit package. For job announcement or information, contact us at:

(503) 229-6103 or via e-mail at  
[dstr461@ecv.wa.gov](mailto:dstr461@ecv.wa.gov).

Closing Due is Aug, 31, 2004

<http://www.ecv.wa.gov/programs/spills/spills.html>

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



CREWING

**Buccaneer Crewing**

The Offshore Employment Specialists

**866-675-6300**

**Fax: 251-442-3696**

[hr@buccaneercrewing.com](mailto:hr@buccaneercrewing.com)

[www.buccaneercrewing.com](http://www.buccaneercrewing.com)

*Power. On land,  
at sea, in the air.*

And people at the center of it all. Excellence, it's the very essence of our employees and the world-class technology they bring to the civil and defense aerospace, marine, and energy markets. At Rolls-Royce, we believe our achievements are only as exceptional as the talent behind them. Join us and realize your most ambitious goals while discovering the power within.

#### Senior Sales Manager Houston, TX

This individual's primary objective is to maintain and develop the market for sales of all Rolls-Royce Commercial Marine's (RRCM) products in the GOM area, including marketing, sales, quotations with technical and commercial terms and follow-up. Responsible for leading and supervising the sales team in the GOM area.

A minimum of 8 years' marine sales experience with 4 of the years in a leading position is required. The ability to work on a team within the organization and to contribute to overall business in North America is a must. Knowledge, experience and understanding for propeller, thruster and propulsion applications is required. Candidates must have good organizational and computer skills. A college degree is highly preferred.

In addition to competitive pay and bonus programs, Rolls-Royce offers comprehensive benefits, including medical, dental, vision, 401k, and tuition reimbursement, among many others.

To learn more about Rolls-Royce and to apply to this or other positions, please visit our website at [www.rolls-royce.com/careers](http://www.rolls-royce.com/careers)

Rolls-Royce is an equal opportunity employer who recognizes the power of diversity and the strength it brings to the workplace.

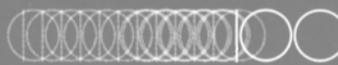
Trusted to deliver excellence

No agency inquiries, please.

People. The Power Within.



Rolls-Royce



**AB'S, CAPTAINS, ENGINEER'S,  
MATES, QMED'S, TANKERMAN**

ARE YOU LOOKING FOR A BETTER JOB?

MORE MONEY? WE ARE DISCREET..

EMPLOYERS LOOKING FOR A CREW?

LET US MAKE THE CONNECTION FOR YOU!!

PROGRESSIVE MARINE PERSONNEL SERVICE

TEXAS (281) 689-7400 FAX (281) 689-7711

WASHINGTON (206) 524-6366 FAX (206) 524-4544



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

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



### 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

## Maritime Jobs

[www.maritimejobs.com](http://www.maritimejobs.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](mailto:info@marinelink.com)

# THE MARINE MART

The Classified  
and Employment Section

TO ADVERTISE,  
Call Today at:  
212-477-6700

## Professional

### American Heavy Industries Marine & Shipboard Elevators



3411 Amherst Street  
Norfolk, VA 23513  
(757) 858-2000 (Office)  
(757) 858-2100 (Fax)  
[www.americanheavy.org](http://www.americanheavy.org)



### BRISTOL HARBOR MARINE DESIGN

Naval Architects / Marine Engineers  
a division of  
BRISTOL HARBOR GROUP, INC.  
103 POPPASQUASH RD  
BRISTOL, RI 02809  
TEL 401.253.4318  
FAX 401.253.2329

[www.bristolharbortgroup.com](http://www.bristolharbortgroup.com)



### CHILDS ENGINEERING CORPORATION

WATERFRONT ENGINEERING • DIVING INSPECTION  
BOX 333 MEDFIELD, MA 02052 (508) 359-8945

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

### CADEA

[www.cadea.hr](http://www.cadea.hr)

TROJMI PAVELONICA 6 • HR-21000 ŠIBIC • 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](http://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](http://www.bissomarine.com)  
e mail [info@bissomarine.com](mailto:info@bissomarine.com)



Engineering  
Solutions

Government Services Group

### CDI Marine Company

Shipbuilding Life  
Cycle Support

904-805-0700

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>

### The M&T Company

Military Aviation Support

732-657-5600

Email: [cdi-gs@cdicorp.com](mailto:cdi-gs@cdicorp.com)

There's only one thing with a stronger  
international presence than  
**MARITIME REPORTER.**  
Empower your ad with  
superior circulation.

Call 212-477-6700



MARITIME  
REPORTER

THE MARITIME GROUP

118 East 25th Street, New York, NY 10010  
Tel: 212-477-6700, Fax: 212-254-6271, E-mail: [info@marinelink.com](mailto:info@marinelink.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](mailto:dandp@dandp.com)  
Website: [www.dandp.com](http://www.dandp.com)

**sms**

### BMT Scientific Marine Services

Marine Instrumentation  
Hull Monitoring  
Trials & Testing  
Ocean Engineering

9835B Whithorn Drive Phone: (281) 858-8090  
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](mailto:sms@scimar.com) - Website: [www.scimar.com](http://www.scimar.com)



### 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: [lleet@fleetech.com](mailto:lleet@fleetech.com)  
Website: [www.fleetech.com](http://www.fleetech.com)

# 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](mailto:Info@marinelink.com)

# THE MARINE MART

The Classified  
and Employment Section



## Professional



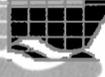
# GHS

## 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/ghs



# DOWNEY

engineering corporation

naval architecture • structural engineering

990 N. Corporate Drive, Suite 220  
Harahan, Louisiana 70123-3387  
Phone (504) 818-0377 Fax (504) 818-0447  
www.downeyengineering.com

## JOHN W. GILBERT ASSOCIATES, INC.

Naval Architects  Marine Engineers

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

 75 Terry Drive, Suite 200  
Hingham, MA 02043

## 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



## EVERETT ENGINEERING INC.

"INGENUITY UNLIMITED"

**NEW!** Main propulsion ABS certified shaft, sleeve and bushing weld repair & fabrication services up to 15" diameter and 50 feet in length

- Stainless & carbon steel cladding/weld repair
- Straightening and score/gouge filling

<http://www.everettengineering.com>

1420 W. Marine View Drive  
Everett, WA 98201  
Tel: (425) 259-3117 Fax: (425) 258-1288



## GLOSTTEN

The Glostten Associates, Incorporated

Naval Architecture Marine Engineering Ocean Engineering Hydrodynamics Transportation Analysis Contract Administration

605 First Avenue, No. 600  
Seattle, WA 98104-2224

Phone: (206) 624-7850  
Fax: (206) 682-9117

CONSULTING ENGINEERS SERVING THE MARINE COMMUNITY

## CUNNINGHAM MARINE HYDRAULICS CO., INC.

Service Parts Repair Consulting

Authorized Sperry - Decca - C. Plath Dealer

## CMH HELE-SHAW, INC.



201 Harrison Street  
Hoboken, N.J. 07030  
(201) 792-0500 #(800) 322-2641  
FAX # (201) 792-7716

E-Mail Address:  
cmh@cmhusa.com

## Naval Architects and Marine Engineers

Proven design, build and support of:

- High Speed Ferries
- Military Patrol Vessels
- Specialist Craft

Supported design licenses available for shipyards world-wide

[www.fbmuk.com](http://www.fbmuk.com)



**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@babcock.co.uk

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

*Ideas Engineered Into Reality*

## GUIDO PERLA & ASSOCIATES, INC.

Naval Architects  
Marine, Mechanical & Electrical Engineers

9010 East Marginal Way South #300  
Seattle, WA 98108

Phone: 206-768-1515  
Fax: 206-768-9700

## 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

## 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](http://www.hegerdrydock.com)

## 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



## GIBBS & COX INC.

NAVAL ARCHITECTS & MARINE ENGINEERS

[www.gibbscox.com](http://www.gibbscox.com)

Email: info@gibbscox.com Phone: 703-416-3620

## HOUSTON MARINE CONSULTANTS

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

MUKUL H. ADVANI  
PRESIDENT  
4509 MAPLE ST.  
BELLAIRE, TX 77401 E-MAIL: HMCTX@EV1.NET

PHONE: 713-592-9867 (24 HRS)  
FAX: 713-592-0244  
CELL: 713-858-5516

# THE MARINE MART

The Classified  
and Employment Section



## Professional



**Dan Parker**  
President  
P.O. Box 7427  
Louisville, KY 40257-0427  
Phone : 1-502-267-0101  
Toll Free: 1-800-255-6073  
Fax: 1-502-267-0191  
Pager: 1-502-344-7956  
Mobile: 1-502-445-0901  
www.ciagent.com  
www.onsitewastemgmt.com  
dan@ciagent.com

Corporate Office  
11760 Commonwealth Dr.  
Louisville, KY 40299  
**Immediate Response Spill Technologies, LLC**

**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

Naval Architects  Marine Engineers

**M. ROSENBLATT & SON**

Serving the Maritime Industry and the  
United States Navy in 36 Worldwide Locations

www.amsec.com 757-463-6666

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



Since 1957-  
Commercial and Naval Ship Design, Detail Design and Construction  
Program Support, Marine Consulting, Pollution Prevention Programs

**Naval Architects  
Marine Engineers  
Program Support Specialists**

Alexandria, VA • Washington, DC • New York, NY  
Newport News, VA • Pascagoula, MS • Pittsburgh, PA  
Philadelphia, PA • Port Hueneme, CA • Bath, ME  
New Orleans, LA • Jacksonville, FL • Groton, CT

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

www.ecmo-inc.com



**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

**Schrider** & Associates, Inc.  
Naval Architects Marine Engineers

P.O. Box 2546 Office: (251) 621-1813  
Daphne, AL 36526 Fax: (251) 626-1814  
E-mail: info@schrider.com

Technical and Managerial Solutions for Shipyards & Vessel Owners

**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., 29 Broadway, New York, N.Y. 10006. Tel (212) 962-1590 Fax (212) 385-0920. E-mail: Rmellusi@rdt.net

*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

Specializing in Marine & Industrial  
Supplies, Provisions & Bonded

*Liberty Marine  
Services, Inc.*

606-6 N. Lane Ave.  
Jacksonville, FL 32254

Tel 904-695-2577  
Fax 904-695-2484

**MSC MARINE SYSTEMS CORPORATION**  
MARINE ENGINEERS / NAVAL ARCHITECTS

<b>HM&amp;E Design Inspection</b>	<b>Drawings Vibration</b>	<b>Logistic Support Testing Programs</b>
---------------------------------------	-------------------------------	--

68 FARGO STREET, BOSTON, MA 02210 INFO @ MSCORP.NET  
TEL (617) 542-3345 FAX (617) 542-2461 WWW.MSCORP.NET

**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  
BREMERTON (360) 476-8896  
SAN DIEGO (619) 425-4211

MARINE SYSTEMS • ANALYSIS & DESIGN

**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

 *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

**M.A.C.E.**

FT. LAUDERDALE - USA - WORLDWIDE  
PHONE: (954) 493-8913 • FAX: (954) 493-9559

- N.D.T. Services
- Vibration - noise - structural/modal analysis
- Field balancing. Laser Alignment
- Torque - torsional vibration analysis
- IR - Thermography inspection
- Emmission tests, Engine Performance tests

**Ocean Marine**

Brokerage Services  
**Commercial Vessel Brokers**  
FISHING VESSELS & OILFIELD VESSELS  
E-MAIL: comboats@oceanmarine.com  
Web: www.oceanmarine.com  
CALL 985-448-0409 Fax: 985-448-1070

**SURVIVAL SYSTEMS INTERNATIONAL**

LIFEBOAT INSPECTION, REPAIRS, PARTS.

PHONE: (504) 469-4545, FAX: (504) 466-1884  
E-mail: service@ssinola.com

931 Industry Road  
Kenner  
LA, 70062



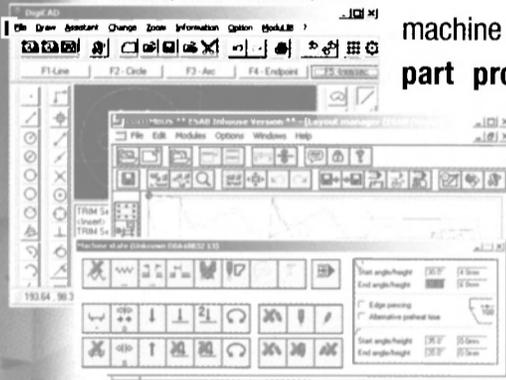
# Explore ESAB's World Columbus™ of Nesting Software

**NEW!**

## The First Cutting Software Package Developed and Maintained by a Cutting Machine Manufacturer

ESAB brings new levels of part programming flexibility and control to cutting machine applications in North and South America. Designed by ESAB and proven in thousands of installations throughout the world over the past 15 years, this Windows-

based programming software package offers simple set-up and full process control for every cutting

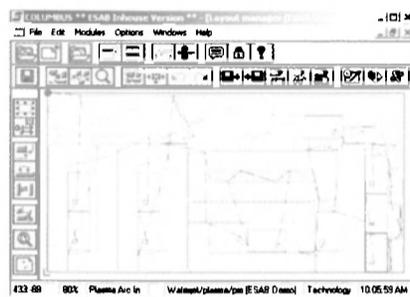
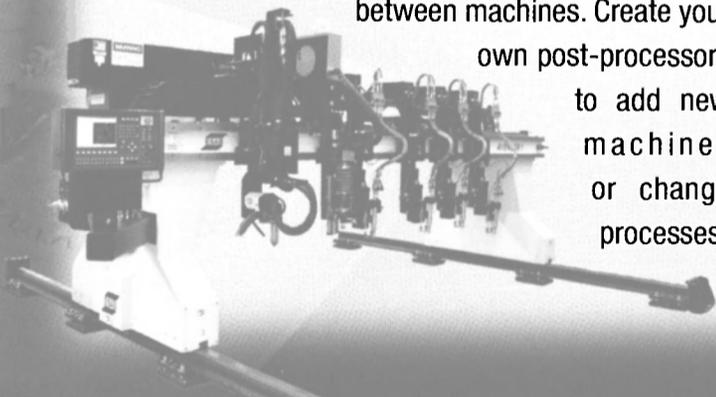


machine in your shop...**plus part programming, true shape nesting, common line cutting, bridge cutting, plate and inventory management, parts management, and even machine-specific estimating...all in a single integrated package.**

**Control Every Cutting Machine In Your Shop With the Click of an Icon** – Switch easily back and forth

between machines. Create your own post-processors

to add new machines or change processes.



### **Supports All Processes** –

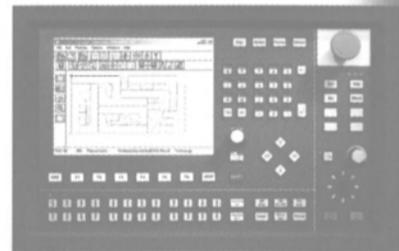
Supports straight or bevel cutting with oxyfuel, plasma, waterjet and laser, plus all current marking devices, in numerous combinations.

### **Multiple Process Programming**

– Change a plasma cut to a laser or waterjet cut with a click of the mouse. Cut interior geometries with waterjet, precision plasma or laser and cut the exterior with standard plasma to reduce your running costs.

### **Complements ESAB Programmable Cutting Parameters (SDP files)** –

Select the cutting parameters for your ESAB machine in the Columbus Software. Eliminate the guesswork of calculating cutting speeds, pierce times, and gas flows. Improve the consistency on your cut parts from shift to shift and operator to operator.



**Simplifies Bevel Cutting** – Program your bevel parts and post them in seconds for any process.

**Enhances Flexibility** – Columbus Software runs on your ESAB CNC or desktop PC. Post programs and transfer DXF drawings right on your control!

**Discover the freedom and control of this adaptable and flexible tool...available only from ESAB!**

**ESAB**

**ESAB - Your Partner  
in Welding and Cutting**

#### **In U.S.A.:**

411 S. Ebenezer Road  
P.O. Box 100545  
Florence, SC 29501-0545  
Telephone: (843) 664-4394  
Telefax: (843) 664-4403

#### **In Canada:**

6010 Tomken Road  
Mississauga, Ontario L5T 1X9  
Telephone: (905) 670-0220  
Telefax: (905) 670-4879

#### **In Mexico:**

Ave. Diego Diaz de Berlanga No. 130  
Col. Nogalar  
San Nicolas de los Garza, N.L. 66480  
Monterrey, Mexico  
Telephone: 52-83-05-3700  
Telefax: 52-83-50-5920



[www.esabcutting.com](http://www.esabcutting.com) [www.esabna.com](http://www.esabna.com) [www.plasmaonline.com](http://www.plasmaonline.com) [www.oxyfuelcutting.com](http://www.oxyfuelcutting.com) [www.waterjetonline.com](http://www.waterjetonline.com) [www.onlinewaterjet.com](http://www.onlinewaterjet.com)

REGISTERED TO  
**ISO 9001**

Circle 221 on Reader Service Card

simplify crew access

# reduce costs

increase control

*Cost effective marine communications for your fleet starts before the first call is placed or the first e-mail is sent. The SeaWave Solution lowers the cost of communications by removing administration, simplifying crew access and providing state-of-the-art throughput technology and automatic least cost routing over multiple satellite systems and cellular GSM.*

*With SeaWave you benefit from a family of value added services designed to curb costs, enhance performance and increase shore based control.*



## ENHANCED PERFORMANCE

SeaWave's proprietary Throughput Technology Software (TTS) accelerates the transmission of every e-mail and file attachment. This same TTS application also makes accessing the Web a more cost effective and land-like experience.

## LEAST COST ROUTING ... VOICE AND DATA

Money is wasted when the wrong communication device is utilized at the wrong time. When is it most cost effective to choose Inmarsat A, B, Mini M, Fleet, Iridium or Cellular? Are they available – did your message go through? SeaWave's proprietary Least Cost Routing (LCR) automatically solves these problems by choosing the best service available based on data speeds, air time rates, file size, geographic variances, signal quality and more. SeaWave LCR assures economical voice and data communications.

## INCREDIBLE VALUE

SeaWave saves you money and provides additional service through these value added applications:

**SeaWave STAR** – Economically track one vessel or an entire fleet from your office

**mySeaWave** – Free onshore access to e-mail, billing and account management

**SeaWave Weather** – Schedule automatic color and text NOAA weather forecasts

**SeaWave Billing** – One bill for all communications summarized by user, vessel, fleet or by communications device

**Crew Billing** – Take the administration out of permitting crew access

**Report Optimization** – Streamline shore-based reporting

SeaWave Integrator 3.0t:  
Comes complete with a built in Iridium modem, GSM modem and GPS. Inmarsat A, B, Mini M, Fleet 33/55/77 compatible. Network and PBX ready. Easy-to-use & easy-to-install.



# SeaWave

Throughput Technology Software

**STAR**  
ship tracking and reporting

Circle 257 on Reader Service Card

Contact a SeaWave specialist today to reduce your communications costs right away!

(800) 746-6251 • sales@seawave.com • www.seawave.com