

The Seahorse



Newsletter published quarterly by

The Hydrographic Society
of America



U.S. Branch of
The Hydrographic Society

Vol. VIII No. 3

P.O. Box 732, Rockville, MD 20848-0732

Fall 1998

Marine Technology Society conference held

Eight hydrography papers presented

by Jerry Mills, NOAA, Coast Survey, Silver Spring, Md.

The Marine Technology Society's annual conference was held in Baltimore, Md., on November 16-19, 1998. Eight papers on hydrographic surveying were presented in two sessions on Tuesday afternoon, each with an audience of 35 to 40.

The following are some highlights from those papers. Marian Clough of NAVOCEANO discussed the proposed use of the SIMRAD EM-3000 shallow water multibeam on T-AGS 60 class survey ship HSL's (hydrographic survey launches) to detect small objects on the seafloor. Mike Harris of the Naval Research Lab (NRL) explained the improvements to the accuracy of surveys conducted with the Navy's ORCA ROV and also presented a software routine that maximized survey-line efficiency for multibeam systems. Jerry Landrum, also of NRL, discussed a map server for hydrographic data collection systems and presented a paper by Maria Kalcic (NRL) on a time-frequency analysis of acoustic imagery.

MIT's Justin Manley presented an

interesting paper on small (less than 5-feet long) inexpensive autonomous surface craft that have been used in hydrographic surveying. Gary Kozak of Klein Associates gave a very comprehensive explanation of high-speed high-resolution side scan sonars and how they are able to obtain such clear images of the seafloor. Gerd Glang and Shepard Smith of NOAA's Coast Survey concluded with a tag-team presentation on data acquisition with the Klein T5000 high-speed high-resolution side scan and the subsequent data processing and data management procedures that are under development.

Another highlight of the conference was the presence of the Navy's latest survey vessel, the USNS HENSON (T-AGS 63). Tours were permitted for MTS registrants and included explanations of the survey launch multibeam systems and other oceanographic equipment used to support the fleet. The 329-foot long HENSON was delivered in Feb. 1998, is currently undergoing sea trials and is expected to become fully operational in early 1999. NOAA's 56-foot long BAY HYDROGRAPHER and her three-person crew looked absolutely tiny next to the HENSON. But looks

can be deceiving, as the "Bay Hydro" is fully equipped with a Reson Seabat 9001 multibeam sonar and a Klein T5000 high-speed high-resolution side scan. The two vessels together represented the extremes of design necessary for hydrographic survey platforms that are necessary to support differing survey missions. ✪

A Letter From Pat

by President
Pat Sanders, THSOA



Some random thoughts:

Certification: Many hydrographers have noticed the requirement for "a registered land surveyor" in many hydrographic survey contracts. I don't mean any slight to our land-based brethren, but there is little in a land surveyor's background or knowledge which would make him an expert in hydrographic surveying. Other than basic positioning knowledge, there is very little that a land

(See **Letter**, page 2)



THSOA OFFICERS

President _____ Pat Sanders
 Secretary _____ Jerry Mills
 Treasure _____ Kart Kieninger
 Trustees
 Jim Cain
 Dave Clarke
 Jon Dasler
 Ed Hallquist
 Branch-elected Member _____ Karl Kieninger
 of IHQ Council



Executive Secretary _____ Jack Wallace
 Editor "The Seahorse" _____ Dale Westbrook
 e-mail: DWestbr@aol.com

CHAPTERS

GULF COAST

President _____ Al Rogeau
 Vice President _____ Jeff Lillycrop
 Secretary _____ Arthur Najjar
 Treasure _____ Shirley Dorsey
 At Large _____ Richard Byrd
 At Large _____ John Iwachiw

HOUSTON

Chairperson _____ Chris Echols
 Vice Chairman _____ (Vacant)
 Secretary _____ Rob Roman, Jr.
 Treasure _____ Meredith Rhodes
 Membership Sec. _____ Kim Fairweather
 Event Coord _____ Richard Seeger
 At Large _____ M. Duff Simpson

TEXAS A&M UNIV. STUDENT CHAPTER

Faculty Advisor _____ Dr. Ernie Estes

THSOA Tel: (301) 460-4768
 Fax: (301) 460-4768
 e-mail: thsoa@aol.com

DISCLAIMER

Mention in *The Seahorse* of commercial companies or products does not constitute an endorsement or recommendation by The Hydrographic Society. ✪

Letter (from page 1)

surveyor can bring to a hydrographic survey.

A few years ago, you could read hydrographic contract requirements which stated "a registered land surveyor or ACSM certified hydrographer." The "ACSM certified hydrographer" could be obtained by passing a test administered by ACSM. Although this was an improvement, it quickly disappeared as lawyers discovered there was no legal standing for the ACSM certification under existing state laws.

All states have legislation regarding the definition and requirements to become a "registered land surveyor." There is no similar provision for "hydrographer." Maybe there should be. The problem occurs when you start to develop a plan to convince 50 state legislatures and 50 state governors of the need for such a provision. This requires effort and money. It is probably beyond the scope of THSOA, given its current dues and organization. To enact such a program, we would need permanent, full-time, paid leadership, similar to other professional organizations. I don't think we are ready for that step, but would like to hear your thoughts.

Consolidation: As you see other industries go through a series of mergers and consolidations, it is my belief the hydrographic industry will not be far behind. More companies want the competitive advantage of being able to offer complete systems and the economy of scale of a larger enterprise. For end users, there will be pluses and minuses. The advantages of buying complete systems through a single vendor will be offset by fewer vendors.

1999 U.S. Hydrographic Conference: The technical program is just about finalized, the commercial train-

ing program is fixed, we have over 80 exhibitors signed up, and we will soon begin to publicize the conference. We would like to make this conference the best ever and hope everyone will help in getting out the word. USACE, NOAA and NAVOCEANO are all co-sponsors. Hopefully, this will ease any difficulties employees from those organizations may have in attending the seminar.

Best wishes for the holiday season,

Pat Sanders
 President, THSOA

HYDRO 99 coming soon

by Vic Abbott and Helen Atkinson,
 Conference Organizers

Plymouth, England, is the venue for the eleventh biennial conference of the international Hydrographic Society, namely HYDRO 99, Jan. 5-7, 1999. After the success of the last conference in Rotterdam, HYDRO 99 promises you an opportunity to meet old friends and make new ones, hear papers on the latest developments in our profession and visit an exhibition of the latest technology.

For some of you, this will be your first visit to Plymouth, a city steeped in maritime history with the famous Mayflower Steps where the Pilgrim Fathers left to sail to the New World, and Plymouth Hoe where Drake was playing bowls before defeating the Spanish Armada.

Maritime education stretches back over 130 years in Plymouth, and it is still home to the Institute of Marine Studies and the Royal Naval Hydrographic School. If you are an ex-Plymouth student, there will be an anniversary dinner after the conference which we hope you will attend.

(See **Hydro 99**, page 3)

Hydro 99 (from page 2)

The Exhibition will run alongside the conference. It is expected to attract over 40 exhibitors from the industry, spread between the Sherwell Centre and the University of Plymouth's Main Hall.

To keep you entertained, a varied social programme including a Civic Reception, an Ice Breaker Party and the Conference Dinner will be available.

We hope you find this packed programme of technical and social activities attractive and look forward to receiving your booking soon.

Any enquiries should be made to the Conference Administrator:

Susan Haley
HYDRO 99

Institute of Marine Studies
Drake Circus
Plymouth PL4 8AA UK

Tel: +44 (0) 1752 848267 or +44 (0) 1752 232424

Fax: +44 (0) 1752 848267 or +44 (0) 1752 232406

E-mail: hydro99@plymouth.ac.uk ✨

Only in America . . .
from the Internet

Only in America . . . can a pizza get to your house faster than an ambulance.

Only in America . . . are there handicap parking places in front of a skating rink.

Only in America . . . do people order a double cheeseburger, a large fries and a diet Coke.

Only in America . . . do banks leave both doors open and then chain the pens to the counters.

Only in America . . . do we leave cars

worth thousands of dollars in the driveway and leave useless things and junk in boxes in the garage.

Only in America . . . do we use answering machines to screen calls and then have call waiting so we won't miss a call from someone we didn't want to talk to in the first place.

Only in America . . . do we buy hot dogs in packages of ten and buns in packages of eight.

Only in America . . . do we use the word "politics" to describe the process so well: "poli" in Latin meaning "many" and "tics" meaning "blood-sucking creatures." ✨

THSOA 1998 AGM minutes

The 1998 Annual General Meeting (AGM) of the U.S. Branch of The Hydrographic Society (USB) and The Hydrographic Society of America (THSOA) was held on Nov. 17, 1998, at the Convention Center in Baltimore, Maryland. The AGM was held in conjunction with the Marine Technology Society Conference and followed the afternoon sessions on hydrographic surveying. It was attended by 20 members and guests and was presided over by Mr. Pat Sanders, President of USB and THSOA.

I. Call to Order—The meeting was called to order by Mr. Pat Sanders, President of USB and THSOA at 5:30 p.m.

II. Approval of the Minutes from the 1997 AGM—Copies of the minutes from the 1997 AGM were distributed to the membership for their review. After no response to a call for questions, a motion was made to accept the Minutes of the 1997 AGM and sec-

onded. The motion was unanimously approved via a voice vote.

III. Treasurer's Report—The Treasurer's Report was presented by Mr. Karl Kieninger, Treasurer of THSOA and distributed to the membership at the meeting. Highlights of the report included current cash balances, through October 23, of \$21,876 for THSOA and \$0 for USB. It was noted that the \$0 balance for the U.S. Branch is not a cause for alarm as the only expense of recent years, travel to the International Council meetings, will be eliminated as it will be covered from THS, International funds in the future. In addition, over \$5,500 has been spent for preparations for the Hydro'99 Conference in Mobile, Alabama, next fall. It is expected that this will easily be recovered from registrations and exhibit space rentals. Ideas will be sought for proposed uses of profit from the conference that will benefit the hydrographic community. After review of the report, a motion was made and seconded to accept the Treasurer's Report and approved unanimously via a voice vote.

IV. Old Business—Mr. Sanders then led a discussion of outstanding items from the 1998 year, most of which focused on the THSOA Hydrographic Conference in Mobile, Alabama, in April 1999. Co-sponsors for the conference include NOAA, U.S. Army Corps of Engineers, U.S. Naval Oceanographic Office and the Canadian Hydrographic Service. The Adams Mark Hotel has guaranteed all rooms at the U.S. Government per diem rate of \$55.00 per day for all attendees.

Dave Clarke reported that 80 of the 85 exhibit spaces have been sold and that the remainder will likely be sold by the end of the year. Virtually all of the multibeam vendors, both

(See **AGM**, page 4)

AGM (from page 3)

hardware and software, will be represented at the conference. Dave also reported that all of the social events have been finalized with the highlight being the reception on the battleship USS ALABAMA.

Karl Kieninger reported that 40 papers have been accepted and that the schedule of the presentations was being finalized. In addition, there will be about 15 commercial presentations and workshops that will run concurrently with the technical presentations.

Now that most of the logistics have been finalized, the next activity will be publicizing the conference. Jon Dasler has volunteered to lead this publicity campaign.

V. Election of Officers—Elections were held in Oct. 1998 for President, Secretary and two Trustee positions. Only one nominee for each of these positions was received resulting in the nominees being elected by consensus. Re-elected to the positions of President, Secretary and Trustee were Pat Sanders, Jerry Mills and Jim Cain respectively. Mr. Jeff Lillycrop of the U.S. Army Corps of Engineers was also elected to a Trustee position. Karl Kieninger was re-elected as Branch-Elected Member of Council. Current officers of THSOA and USB are as follows:

President	Pat Sanders	thru 2000
Treasurer	Karl Kieninger	thru 1999
Secretary	Jerry Mills	thru 2000
Trustee	Dave Clarke	thru 1999
Trustee	Jon Dasler	thru 1999
Trustee	Jim Cain	thru 2000
Trustee	Jeff Lillycrop	thru 2000

Special thanks and appreciation to our outgoing trustee, Mr. Ed Hallquist of the U.S. Army Corps of Engineers.

VI. New Business—The only item of

new business dealt with THSOA's Internet website. Since its inception, John Marinuzzi of Coastal Oceanographics has maintained our site. It has been suggested that the site should be upgraded to include more information of benefit to the hydrographic community. One proposal was to create a hydro resource library online. Papers from various publications and conferences could be scanned and made available to members only, via password protection, from our web site. Abstracts could be accessed by the general public. There would be a great deal of work conducting searches, dealing with copyright issues and obtaining author permission. It was proposed that such an undertaking would require the hiring/contracting of an individual on a part-time basis who would also take on the website maintenance responsibilities. No decision was made on this item but it will be discussed further by the THSOA Executive Board.

VII. Motion to Adjourn—There being no other new business, a motion was made to adjourn and seconded. The motion was approved unanimously via voice vote and the 1998 AGM was concluded at 5:50 p.m. ✪

SPEED BUMP DAVE COVERLY

ANOTHER EXAMPLE OF THE IMPORTANCE OF PROOFREADING...

Hydrographers—Get certified!

by Jerry Mills, NOAA, Coast Survey, Silver Spring, Md.

The Hydrographer Certification Examination sponsored by the American Congress on Surveying and Mapping (ACSM) will be given twice in early 1999—March 17 at the ACSM Conference in Portland, Oregon, and April 29 at the U.S. Hydrographic Conference (U.S. Hydro '99) in Mobile, Alabama.

This is a great opportunity to obtain professional recognition of your surveying abilities, add credibility to your contract proposals and increase your marketability. The examination lasts three hours and consists of multiple choice and short-answer questions covering a wide variety of topics suggested by the International Hydrographic Organization (IHO) and the International Federation of Surveyors (FIG).

Prospective examinees must have five years of experience in hydrographic surveying, two years of which have been in technical charge of surveys in the field. Applications, which include a short essay on the fundamentals of hydrography, must be reviewed and approved by the Hydrographer Certification Board prior to sitting for the examination.

If you are interested in taking the examination at either of the above conferences, you should contact ACSM within the next month at 5410 Grosvenor Lane, Suite 100, Bethesda, MD 20814-2144, Attn: Hydrographer Certification or via fax at 301-493-8245. For program details, see the ACSM Internet Web site at <http://www.survorg/educat45/educat01.htm>. ✪



VERY PUNNY

from the Internet (and, no doubt, a leftover from Halloween)

There's a man walking home alone at night, and suddenly there's a BUMP . . . BUMP . . . BUMP behind him. He walks faster as he looks back, barely making out an image of an upright coffin banging its way down the middle of the street towards him. BUMP . . . BUMP . . . BUMP. Frightened, the man begins to run towards his home, and the coffin bounces along after him, faster, faster, BUMP, BUMP, BUMP.



He runs up to his door, fumbles with his keys, gets the door open, falls through it, locks it . . . and the coffin crashes through the door . . . and the lid to the coffin begins to open, still bumping towards him. The man runs to the bathroom and locks himself in, heart pounding, frantic, terrified; and CRASH, the coffin breaks through the door, coming slowly toward him. The man is screaming . . . he reaches for something . . . anything . . . and he finds a box of cough drops and throws them at the coffin . . . and the coffin stops. ✨

NOTICE!

THSOA's web site, www.USAhydrosoc.org is continually being improved. Try it! ✨

U.S. Hydro '99 update

by Jerry Mills, NOAA, Coast Survey, Silver Spring, Md.

The April 26, 1999, opening of U.S. HYDRO '99 is rapidly approaching. As of mid-November, only five exhibit spaces out of 85 remain to be sold. Authors of the forty technical papers are currently being contacted with details for submission of their papers for inclusion in the conference proceedings. At press time, there are ten sessions tentatively scheduled over three days on a wide range of topics. The sessions and some topics from them are as follows:

- ◆ Hydrographic Systems—Motion Sensors, Survey Systems
- ◆ Vertical Measurements and References—Water Levels, Tidal Zoning, OTF GPS
- ◆ Offshore Hydrography—Seafloor Mapping, Acoustic Reflectivity, Ocean Bottom Cables
- ◆ Side Scan Sonar—Correlating Side Scan with Multibeam, Klein 5500 Operations
- ◆ Multibeam Sonar—Sound Speed Variability Effect on Multibeam Errors, Launch Multibeam Operations, Error Estimations in Multibeam Data
- ◆ LIDAR—Airborne Laser and Submerged Hazard Detection
- ◆ Data Presentation—Multi-fuel ECDIS, Print-on-Demand Nautical Charts

In addition, there will be approximately 15 workshops and presentations including one on Tides and Water Levels. The ACSM Hydrographer Certification Examination will also be given. See the related article elsewhere in this issue or visit the following internet address for more information:

<http://www.survmap.org/educat45/educat01.htm>.

THSOA members should be encouraged by the inexpensive registration fee (\$150 for members versus \$250 for non-members) and lodging (\$55 per night at the Adams Mark Hotel). The registration fee includes a social event on Tuesday night in the Exhibit Hall and a reception aboard the battleship USS ALABAMA which will include an ample supply of Gulf Coast seafood and southern dishes.

For more information about the conference or how to register, visit the following internet site:

<http://www.usahydrosoc.org> or contact Ms. Lourdes Ramos at Coastal Oceanographics at (860) 349-3800 (Voice) or (860) 349-1982 (fax). Hope to see you in Mobile! ✨

USS YORKTOWN found in South Pacific Ocean

by J02 Brigitte Barnes, Navy News Service, as seen in "Naval Meteorology and Oceanography Command News," C.L. Willis, Ed.

Washington (NWSA)—The wreck of the World War II aircraft carrier USS YORKTOWN was found May 19, resting at the bottom of the Pacific Ocean, 16,650 feet below the surface with the help of USNS SUMNER and an oceanographic survey crew from the Naval Oceanographic Office, based at Stennis Space Center, Miss. The announcement was made June 4 at a press conference held at the National Geographic Society in Washington, D.C.

Using new technology for deep-sea exploration developed by the U.S. Navy and a towed search system (sonar) from the University of Hawaii, the expedition was able to locate, map, explore and photograph the remains of ships lost after the Battle of Midway, which started June 4, 1942. The

(See YORKTOWN, page 6)

YORKTOWN (from page 5)

YORKTOWN sank three days later by a Japanese torpedo as it was steaming to Hawaii.

The expedition to find the YORKTOWN was sponsored by National Geographic and the Institute for Exploration. The discovery was made by Dr. Robert Ballard, best known for having found the R.M.S. TITANIC in 1985.



Launched in 1936 and commissioned in 1937, the YORKTOWN sank 56 years ago following the clash between the U.S. and Japan that proved to be the turning point for control of the Pacific Ocean in World War II.

"Our expedition to Midway represents exactly the kind of cooperation between the military, scientific and academic communities the Navy seeks to promote in the exploration of our world's oceans," said RADM Malcolm Fages, Director of Submarine Warfare. "In this case, we were able to exercise our equipment and ships in an extremely challenging deep-sea environment almost three miles below the ocean's surface. This type of hands-on training experience is absolutely invaluable as we maintain and enhance the skills of our deep submergence system operators."

Exploration of the site allowed the Navy to test its new technology for deep-sea exploration. The scientists and explorers on the expedition tested technology that can be used to rescue disabled submarines and to explore one of the last frontiers on earth—the ocean depths.

Ballard and the team used the University of Hawaii's towed search system, called the MR-1, and operated from the Navy deep submergence

support ship LANEY CHOUEST. Another Navy vehicle, the remote-operated Advanced Tethered Vehicle (ATV), was used to photograph and explore the ocean floor once the sonar from the MR-1 had located huge objects that were believed to be the YORKTOWN and other ships.

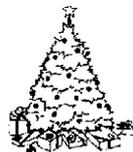
"USS YORKTOWN is in the best shape of all the ships I've ever seen on the ocean floor," Ballard said. "There is no biological growth on her hull. She is in a perfectly sterile, safe environment, with the rate of sedimentation only one centimeter per millennium. There are no plans to try to bring her up—Mother Nature is providing free storage."

When the YORKTOWN sank, she settled upright about 40 to 50 feet in the mud, Ballard said. Other than a severe starboard list, she is in perfect shape.

"This exploration would not have been possible without the Navy's help and coordination," Ballard said. "They had already conducted a bathymetric survey of the entire area before we started, and they also provided the support ship. With this expedition, we've gone deeper than ever before, and we've searched a greater area than ever before. It's a thrill to come back with images of this great American warrior."

The National Geographic Explorer series will air a television documentary about the expedition on the TBS Superstation in early 1999.

Accounts of the National Geographic Midway Expedition and of the Battle of Midway will be published in *National Geographic Magazine* in 1999. National Geographic will also dedicate a page on its website, www.nationalgeographic.com, to the expedition in early 1999. ✨



NOAA contracting update

C. Brian Greenawalt, NOAA Coast Survey, Silver Spring, Md.

NOAA has selected Ocean Surveys, Inc., to provide hydrographic surveying services to support nautical charting along the North Carolina, South Carolina, Georgia, and Florida coast, including bays and harbors. Negotiations for this \$2 million per year (estimated), two-year indefinite delivery contract will begin soon.

Work orders under this contract may consist of:

1. acquisition of shallow water multi-beam sounding data.
2. acquisition of side scan sonar data.
3. acquisition of vertical beam echosounder data.
4. determining positions and least depths on hazards to navigation.
5. installing water level gauges.
6. acquiring related supporting data (e.g. water level correctors, velocity of sound in the water column, vessel motion correctors, bottom sediment samples, etc.).
7. processing of the data including applying water level, vessel motion, and velocity of sound correctors to determine the true depths, marking and correlating sonar targets, compiling reports, final smooth sheets, and digital data.
8. delivery of the data, reports, and sheets to the Government for archiving and application to the nautical charts and associated nautical products.

All work will be performed to NOAA specifications and the data provided in NOAA-specified formats.

There are six other hydrographic surveying contracts in various stages of operation/negotiation. C&C Tech-

(See NOAA, page 7)

NOAA (from page 6)

nologies, John E. Chance and Associates and SAIC (Science Applications International Corporation) are all working on surveys in the Gulf of Mexico. Terra Surveys, LLC and Racal-Pelagos, Inc., have work orders in Cook Inlet, Alaska, and David Evans and Associates, Inc., is in negotiations for surveys in San Francisco Bay and the nearby vicinity.

For additional information, contact: C. Brian Greenawalt, NOAA, Hydrographic Surveys Division, Silver Spring, Maryland at (301) 713-2698, x114 (Voice) or (301) 713-4553 (fax) or via e-mail at:

Brian.Greenawalt@noaa.gov. ✪

CLOSE TO HOME JOHN MCPHERSON

"Let me guess — 3 a.m.,
Home Shopping Network?"

**Oceansp@ce newsletter
now available—free!**

Oceansp@ce is brought to you by the organisers of the Oceanology International series. It is a twice-weekly succinct business update on the international marine science and ocean technology scene. There is no subscription fee. Every subscriber has a professional interest or an involve-

ment in marine science and ocean technology.

Your own organization's contributions are especially welcome. Remember to e-mail us with your news and comments, and to add *Oceansp@ce* to your press list. The news and feature articles are all compiled with a targeted and well-informed international audience in mind. The editorial content—R&D news, letters and feedback, edited company press releases, news from societies and associations, discussions on topical issues and job search—is being extended with a new monthly contribution from Washington, D.C.

Special issues are published whenever the occasion merits. "Scientists in Black" featured the USA Medea declassification of ocean data project. The Director General of the World Meteorological Organisation wrote a special address which we published as an entire issue, and we covered O.I. in Brighton with five special "Show Daily" issues.

To sign up for *Oceansp@ce*, send an e-mail to:

oceanspace@dial.pipex.com with **SUBSCRIBE** written in the text.

From:

Ocean House, 50 Kingston Road,
New Malden, Surrey, KT3 3LZ,
UK

Tel: +44 (0) 181 949 9222

Fax: +44 (0) 181 942 4806

http://www.oceanspace.co.uk ✪

**New Corps of Engineers
circular issued**

by Jerry Mills, NOAA, Coast Survey,
Silver Spring, Md.

The U.S. Army Corps of Engineers has recently issued a new Engineer Circular on Hydrographic Surveying which includes technical guidance on the use and calibration of multibeam sonar systems. The new

circular, EC 1130-2-210, was approved on Oct. 1, 1998, and is posted in PDF format at the following website: **http://www.usace.army.mil/inet/usace-docs/eng-circulars/ec1130-2-210/toc.htm.**

This circular supersedes some portions of Engineer Manual EM 1110-2-1003, *Hydrographic Surveying*, which has been used for dredging measurement and payment surveys. For further information, contact Mr. Bill Bergen at: 202-761-1553, or e-mail him at: **william.a.bergen@hq02.usace.army.mil.** ✪

**Corporate Member
Press Release****EDGETECH ANNOUNCES THE
INTRODUCTION OF THE
MODEL 560D SIDE SCAN
SONAR PROCESSOR**

*The Model 560D provides the most
powerful but compact sonar system
available.*

Milford, Massachusetts, USA—EdgeTech announces the latest addition to its highly reliable side scan sonar product line. The latest technology was used for both the software and hardware of the 560D.

The Model 560D Side Scan Sonar Processor is a PC-based Pentium MMX system running in Windows 95. The processor has a high-resolution (1280 x 1024) 256-color display, rugged industrial type enclosure and towfish power and control. The software in the Model 560D allows for simultaneous display of 4 channels of sonar data, adaptability to other software processors, and image correction.

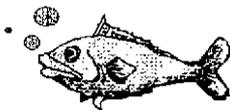
(See **Press**, page 8)

Press (from page 7)

The DF-1000 Digital Control Interface (DCI) board and DF-1000 power supply mounts internally to the Model 560D to provide power and control to the DF-1000 or Model 990D Digital Side Scan Sonar Towfish. The sonar data is digitized in the towfish and sent up a high-speed digital up-link at 12-bit resolution using a single co-axial conductor. In the DCI, the sonar data is converted into a parallel output for the Model 560D to display and store data.

Information Line

EdgeTech designs, produces and markets world-wide acoustic-based marine products and instruments such as side scan sonars, sub-bottom profilers, acoustic releases and transponder navigation systems. For a free brochure, or more information, please contact EdgeTech at (508) 478-9500. Visit the company's web site at www.edgetech.com, or e-mail: sales@edgetech.com. ✨

Salty Facts

from the Internet

In the days of Lord Nelson's navy, it was customary for married sailors to have their wives aboard the ship while in home port. And naturally the wives were usually pregnant. It was customary, when a wife was past her due date, to fire the ships guns, the thought being the concussion would hasten her into labor. A child born after such prompting was called a "son of a gun."

The area where the deck and the hull of a ship meet was called the "devil." That area had to be sealed with

caulk and hot pitch, and in nautical terms the job was known as "paying." It was a dirty, hot job in cramped, tight quarters. Hence any unpleasant task was referred to as "there will be the devil to pay."



"Freeze the balls off a brass monkey." Solid shot cannon balls were stacked and held in place by a brass stand known as a monkey. In very cold temperatures, the monkey would often shatter and the cannon balls would go careening about.

In old England, the condemned were taken to the gallows in the back of a wagon. It was customary to stop at a pub and allow the condemned one last drink. When the pub keeper would ask if he wanted another, his guards would say, "No thank you, he's on the wagon," now the term we use for someone who's stopped drinking. ✨

Press release**Senior Buyers' Programme established for O.I. 99 Pacific Rim**

Funded by the Singapore Trade Development Board, the Singapore Tourist Board and Spearhead Exhibitions, Ltd., a new Senior Buyers' Programme has been developed for Oceanology International 99 Pacific Rim. This conference returns to the World Trade Centre, Singapore, April 27-29, 1999.

Already, exhibitors from Australia, Canada, Denmark, France, Ger-

many, Netherlands, Norway, Russia, Singapore, UK and USA have announced their intention to participate. The exhibition will be held in the Harbour Pavilion immediately adjacent to the waterfront, where visiting vessels will be moored, and close to the conference halls.

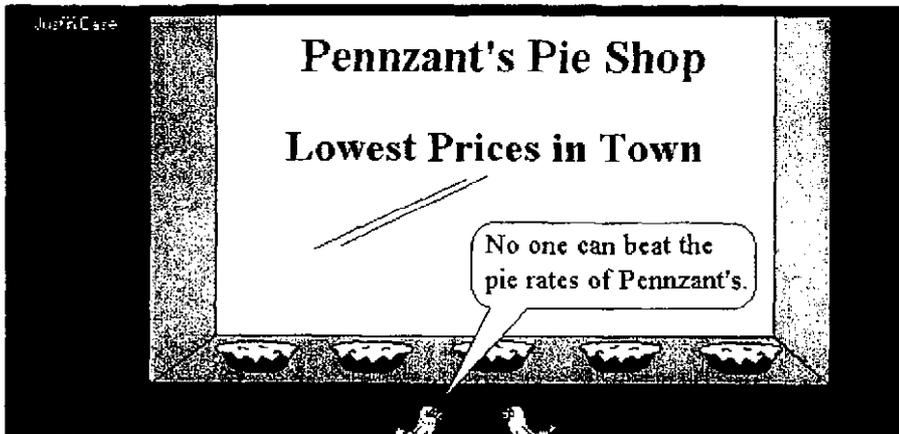
Despite the current economic difficulties, the marine and ocean science community still view the region as having enormous market potential and that the long term prospects remain strong. The marine industry has remained buoyant with many exhibitors reporting a growth in business, particularly in Taiwan, India and Australia. This sense of optimism and commitment to the region is reflected in the number of companies that have already confirmed their exhibit space for Oceanology International 99 Pacific Rim.

To attract senior visitors from the region, the organisers have announced a new Senior Buyers' Programme which is being jointly funded by the Singapore Trade Development Board, the Singapore Tourism Board and Spearhead Exhibitions, Ltd. This programme aims to identify, and to bring to Singapore, VIP visitors from the region who are interested in purchasing the oceanographic equipment, technologies and services that will be on display. The exhibitors and the organisers are working together in identifying who the potential visitors are and then following up with personal visits to all the countries in the region. With a long term view in mind, the organisers are confident that O.I. 99 Pacific Rim will be a success.

Full information on O.I. 99 Pacific Rim is available from Spearhead Exhibitions Ltd, Ocean House, 50 Kingston Road, New Malden, Surrey KT3 3LZ, UK

Tel: +44 (0)181 949 9222 Fax: +44 (0) 181 949 8186/8168

Web: <http://www.spearhead.co.uk>
E-mail: oi99@spearhead.co.uk ✨



Copyright 1997
Word Wright Int.

<http://www.experts.austin.com/justcase/>



NEWS FROM THE CHAPTERS



☆☆☆☆

No reports were received from the other chapters. ✧

HOUSTON CHAPTER

October's meeting featured a presentation on the Teal South 4C/4D project by Dave Ridyard. The presentation covered some of the advantages and disadvantages of using permanent reservoir monitoring systems and considered some of the issues associated with optimizing positioning, seismic data quality and cost for a 4C/4D survey.

The November meeting was scheduled for Nov. 10, 1998, at The Ale House. There will not be a December meeting due to the Christmas Party on Dec. 4 at Sierra West @ The Sierra Grill Restaurant.

The Houston chapter needs speakers. If you or anyone you know would like to give a presentation to The Hydrographic Society during one of the usual meetings, please call Chris Echols at (281) 398-9533. Also, if there is a particular subject you would like to hear about, let someone on the committee know, so that they can try to recruit that type of speaker.

Kurt J. Schnebele named Deputy Director of NODC from "Earth System Monitor," NOAA NESDIS, Sheri Phillips, Ed.

Kurt J. Schnebele, an oceanographer with extensive experience in field work, data processing and analysis and technical program management, has been named Deputy Director of the National Oceanographic Data Center (NODC) in Silver Spring, MD. The Center is part of the Commerce Department's National Oceanic and Atmospheric Administration (NOAA). The facility is the nation's repository and dissemination center for global oceanographic data. It manages and distributes physical, chemical, and biological oceanographic data collected by organizations in the United States and dozens of other countries around the world.

"I'm very proud to be at NODC. It's a great institution with a vital role to serve both nationally and internationally," Schnebele said.

Schnebele retired from the NOAA Corps in 1997 after serving for

26 years. He served aboard several NOAA ships, including OCEANOGRAPHER, PEIRCE, and was commanding officer of the FERREL and R/V VICKERS. On shore, he served with the National Ocean Service and NOAA's Atlantic Marine Center. He also was an assistant professor at the Naval Postgraduate School and, most recently, the executive director of NOAA's Office of Oceanic and Atmospheric Research.

Schnebele holds a B.S. and M.S. in oceanography from the University of Washington and the Naval Postgraduate School, respectively. His awards include the Navy Commendation Medal, two NOAA Commendation Medals, NOAA Special Achievement Awards, and unit citations. ✧



by Dale Westbrook

Certification

The "A Letter from Pat" article by THSOA President Pat Sanders in this issue regarding certification of hydrographers raises some interesting issues. If certification of hydrographers is not *legally* recognized, how can one who is writing survey contract requirements specify that the hydrographer must be certified? Also, how can one be sure that the winner of a hydrographic contract award is qualified to undertake the task if that winner is not certified? On the other hand, how can the ACSM get poten-

(See Editor, page 10)

Editor (from page 9)

tial hydrographers interested in becoming certified when certification is not a *legal* requirement?

As Pat says, perhaps THSOA is not large enough to initiate the struggle to get legislation passed that would require hydrographer certification. However, ACSM is large enough. It is also organized for lobbying efforts. One should take note of the success it has had in pressuring the Government to contract out survey work.

Thus, I believe that ACSM (the certifiers) and the hydrographers who are already certified should take the lead in getting a legal requirement for certification passed, *on a Federal basis*. Unlike land surveying, there probably isn't enough private hydrographic survey activity on a state-by-state basis to warrant a struggle for state-by-state legislation. A Federal law, though, would apply a consistent certification requirement for all private hydrographers. THSOA can play a positive role in support of such an effort.

I am convinced that a private hydrographer would *want* to be certified. If litigation against his company arises, perhaps due to a ship sinking with attendant loss of life, as a result of one of his surveys, how can he prove he was qualified to do the work if he is not certified?

It would be interesting to know what other countries have done in regard to a *legal* requirement for hydrographic certification. It is well known that other countries (as well as the U.S.) are contracting out a large amount of hydrographic services to private industry. Can someone out there comment on this? How about giving us your views on the subject. ✪

**SPEED BUMP** DAVE COVERLY**Coral reefs to get protection**

from "Earth System Monitor," NOAA, NESDIS, Sheri Phillips, Ed.

At the National Ocean Conference in Monterey, Calif., President Clinton and Vice President Gore launched a series of major initiatives to explore, protect and restore America's vital ocean resources. One of these efforts is dedicated to protecting coral reefs. To strengthen protection of natural coral reefs in U.S. waters, President Clinton signed an executive order directing Federal agencies to expand research, preservation and restoration activities. The President is proposing an additional \$6 million through 2002 to speed these efforts and complete restoration of 18 damaged reefs in the Atlantic, Caribbean and Pacific.

The Year of the Ocean falls on the heels of last year's International Year of the Coral Reef. This initiative builds on the efforts that began last year. For more online information on Year of the Ocean, please see: www.yoto98.noaa.gov. For more online information on the Year of the Coral Reef (97) see: www.noaa.gov/public-affairs/

coral-reef.html. For more information on this initiative, please contact Matt Stout at 202-482-6090. ✪

SMILE!!!

She smiled at a sorrowful stranger.
The smile seemed to make him feel better.

He remembered past kindnesses of a friend

And wrote him a thank you letter.

The friend was so pleased with the thank you

That he left a large tip after lunch.

The waitress, surprised by the size of the tip,

Bet the whole thing on a hunch.

The next day she picked up her winnings,

And gave part to a man on the street.

The man on the street was grateful:
For two days he'd had nothing to eat.

After he finished his dinner,

He left for his small dingy room.

He didn't know at that moment that he might be facing his doom.

On the way he picked up a shivering puppy

And took him home to get warm.

The puppy was very grateful

To be in out of the storm.

That night the house caught on fire.

The puppy barked the alarm.

He barked till he woke the whole household

And saved everybody from harm.

One of the boys that he rescued

Grew up to be President.

All this because of a simple smile
That hadn't cost a cent.

—David Hayes
IMS HEALTH Strategic
Technologies

Membership Application



**The Hydrographic Society
of America
and the
U.S. Branch of The Hydrographic
Society**

Membership in The Hydrographic Society is open to any individual or organization with an interest in surveying afloat. No formal qualifications are required.

The Hydrographic Society of America (THSOA) serves as the focal point for activities in America. Members of THSOA receive *The Seahorse* newsletter, are eligible for membership in local chapters, receive a \$15 discount on subscription to *Hydro International* magazine and receive a discount on registration at THSOA sponsored events. Local chapters have been formed in Houston, Tx. and Bay St. Louis, Miss. THSOA also provides administrative support to the U.S. Branch of The Hydrographic Society.

The Hydrographic Society (THS) was founded in London, England, in 1972. For those members interested in the international aspects of the profession, the U.S. Branch of THS provides a convenient way to pay dues in U.S. dollars. Members of THS receive quarterly copies of *The Hydrographic Journal* and a discount on registration at sponsored international events.

THSOA Corporate Members receive *The Seahorse*, a free hotlink or company description on THSOA's website (www.USAhydrosoc.org) and free posting of recruitment notices in *The Seahorse*. THS Corporate Members receive two copies of *The Hydrographic Journal* and a discount on *Journal* advertising.

The dues structure allows Individual, Retired, Student and Corporate Members to opt for THSOA alone or both THSOA and THS. There is no THSOA-only Associate Corporate rate. Individual and Retired memberships begin on entry and are renewed on April 1. Corporate memberships are renewed on January 1. Student THS memberships begin on April 1, while THSOA Student memberships are totally flexible to accommodate the school calendar. In all cases, dues are not prorated. However, members joining in the middle of the year receive all back issues of the publications for that year.

NAME: Title (Mr, Ms, CAPT, Dr, etc.)			First	M.I.	Last
CITY		STATE		ZIP	
EMPLOYER					
TEL:			FAX:		
e-mail address:					
YEAR (From which membership is to be effective):					199
<input type="checkbox"/> Check box if name may be included on mailing list provided to Corporate Members					

ANNUAL DUES

(Check appropriate box)

- | | |
|---|---|
| <p>INDIVIDUAL (Houston Chapter add \$10 for local dues)</p> <p>RETIRED and no longer employed in the profession of sea surveying</p> <p>STUDENT full-time undergraduate</p> <p>CORPORATE</p> <p>ASSOCIATE CORPORATE available to a different location or unit of a parent Corporate Member</p> | <p><input type="checkbox"/> THSOA \$15</p> <p><input type="checkbox"/> THSOA \$10</p> <p><input type="checkbox"/> THSOA \$5</p> <p><input type="checkbox"/> THSOA \$100</p> <p><input type="checkbox"/> THSOA/THS \$75</p> <p><input type="checkbox"/> THSOA/THS \$37.50</p> <p><input type="checkbox"/> THSOA/THS \$20</p> <p><input type="checkbox"/> THSOA/THS \$385</p> <p><input type="checkbox"/> THSOA/THS \$205</p> |
|---|---|

If Student, name of institution _____

If Associate Corporate, name of parent _____

STATEMENT: I wish to make application for membership in The Hydrographic Society. I agree to abide by the Articles of Association and to further its aims and objectives. I declare that the answers to the above are accurate to the best of my knowledge and belief. I agree that the decision of The Hydrographic Society Executive in regard to this application is final.

SIGNATURE _____ DATE _____

Please return with payment to:
 The Hydrographic Society
 P.O. Box 732
 Rockville, MD 20848-0732



The Hydrographic Society
of America
P.O. Box 732
Rockville, Maryland 20848-0732

Non-Profit Org.
U.S. Postage
PAID
Rockville, MD
Permit No. 5103

ADDRESS SERVICE REQUESTED