The Seahorse

Newsletter Published Quarterly by

The Hydrographic Society of America

U.S. Branch of The Hydrographic Society

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U.S. Society Restructuring Proposed

One of the topics of discussion at last month's Annual General Meeting (AGM) was a restructuring of the relationship between The Hydrographic Society of America (THSOA) and The Hydrographic Society (THS), whose headquarters are in England.

To put this restructuring in context, readers need to be somewhat familiar with the history of THSOA. This is well-described in the latest issue of Hydrographic International (November/December 1999), but a summary is provided here for clarification.

The U.S. Branch of THS was officially established on April 1, 1980, for very practical reasons. In the late 1970's, there were 12 individual THS members in the U.S., most of whom resided in the eastern portion of the country. In those days it was cumbersome and time-consuming to convert U.S. dollars into British pounds, plus there were bank charges for the service. One of the members began coordinating the dues collection effort, making one payment to England, thereby simplifying the process and removing a major impediment for potential new members. This action eventually led to the establishment of the U.S. Branch of THS, the first national branch.

A series of tax-related and other legal issues led to the formation of THSOA as a separate entity from the U.S. Branch of THS in 1985. Officers were elected to serve both THSOA and the U.S. Branch.

Since its inception in 1980, membership in the U.S. Branch (and THSOA after 1985) grew from 12 to 388 (including 48 corporate members) by 1992. At that time, Board members began to receive a number of comments regarding the increasing cost of dues and questions about the benefits of membership in the Society.

In trying to reach out to more "field hydrographers," it became apparent that most were more interested in domestic hydrography and were not willing to pay the fees associated with international membership. In response the Board of Trustees approved a "THSOA only" category of membership.

Membership in THSOA increased to over 450 by 1999, but U.S. Branch membership declined to 148 (including 31 corporate members). Clearly, hydrographers in the U.S. have made their preferences known and seem to be sending a message to the Board of Trustees.

While relationships with THS headquarters have been cordial for the most part, there has been increasing frustration in recent years. In 1995, a U.S. proposal to eliminate term limits for Branch elected Members of Council, thereby allowing the U.S. to retain one of its "founding fathers," was soundly defeated. Curiously, an identical proposal was approved this past year (was it just a coincidence that the affected Member of Council was from the U.K.?).

A Strategic Working Group (SWG) was formed in 1998 to plan for the future of the Society and the U.S. Branch was not invited to participate either in person or via e-mail. One of the SWG's recommendations was to create a new salaried position of Chief Executive Officer in an attempt to better manage THS. However, given the dramatic decrease in THS membership worldwide from over 2,000 members in 1992 to under 1,500 in 1999, this added expense seems ill-advised.

There have been a number of other incidents in recent years where the U.S. Branch has either not been consulted or was the sole dissenting vote in decisions of Council.

Given the declining membership in the U.S. Branch, the ever increasing cost of international dues, the perceived "lack of value returned" for

these monies, and the increasing frustration with the direction of the Society, the Board of Trustees proposes to disassociate THSOA from The Hydrographic Society and the U.S. Branch.

This is not as drastic a proposal as it first appears in that other nations have independent national hydrographic associations such as Canada, Germany and South Africa. It should be noted that should this action take place, most, if not all of the Trustees are prepared to submit resignations from their positions within the U.S. Branch of THS. Those wishing to continue the U.S. Branch are welcome to come forward and reorganize the positions of leadership.

Perhaps it is time to consider a suggestion first offered in 1991 "...to devolve the branches into a number of autonomous Hydrographic Societies ... ." This idea of an International Federation of Hydrographic Societies was resurrected in the previously mentioned Hydro International (HI) article and supported by Egon Bakker, a former Dutch Hydrographer, in his editorial.

Before the Board of Trustees takes this action, we would like to give all members of THSOA and the U.S. Branch of THS an opportunity to comment on this proposed action. We are hopeful that such an important issue will elicit response (both positive and negative) from the membership and we plan to publish some of the comments in the next issue of Seahorse.

There are two issues of primary importance to those wishing to continue memberships with THS: (1) annual dues will be higher than previous U.S. Branch dues since a portion of each member's dues were subsidized by the U.S. Branch and (2) future payments will need to be made directly to THS Headquarters in the U.K. (unless of course someone volunteers to take on the duties and responsibilities of running the U.S. Branch). The payment of dues to the U.K. are obviously much easier now with the use of credit cards.

Comments can be sent via e-mail to ***THSOA@aol.com*** or by regular mail to THSOA, P.O. Box 732, Rockville, MD, 20848-0732.

Practical Error Management Guide

Readers may be interested in a website maintained by Southampton Institute that discusses practical error management in hydrographic surveying ***http://www.solent.as.uk/hydrography***. The first chapter (Error Theory) of the guide and parts of two others (Vertical Control and Horizontal Control) are complete and can be accessed, free of charge, from the website.

The rest of the guide (the complete versions of Vertical Control and Horizontal Control plus chapters on Position Fixing and Sounding) is due for completion in early spring and will be available over the internet or on disc for a fee. The Error Theory chapter is a good summary and has largely been taken from the land surveying field. The chapter on Vertical Control begins with discussions on leveling and includes some sections on tide measurements and tidal data. Additional questions should be directed to Ian Russell of the Southampton Institute e-mail address: ***ian.russell@solent.ac.uk***. ☼

Shallow Survey '99— A Report

by Dr. Lloyd Huff
NOAA Joint Hydrographic Center, University of New Hampshire

SHALLOW SURVEY '99, held in Sydney, Australia, 18-20 October, provided a technical focus on data collection and processing techniques for two closely linked areas, shallow water hydrography and mine countermeasures operations.

The conference was organized by Dr. Roger Neill ***(roger.neill@dsto.defence.gov.au)*** of the Australia Defense Science and Technology Organization. (DSTO) and convened at, "Dockside" which is located in Sydney's Darling Harbor.

There were 120 participants at the Conference who came from Australia,

Canada, Denmark, Germany, Hong Kong, New Zealand, Norway, Singapore, The Netherlands, United Kingdom, and the United States.

SHALLOW SURVEY '99 was the first technical ocean conference to feature a pre-distributed multi-sensor Conference Data Set. This data set, distributed on CD and still available through DSTO, was acquired in Sydney Harbor with side scan sonar, multibeam echo sounder and acoustic seabed classification equipment.

The conference opened with an address by Commodore Robert Willis, Hydrographer, Royal Australian Navy. That was followed by the keynote address entitled, "Location, Location, Location" presented by Dr. Lloyd C. Huff, from NOAA, who emphasized the importance of accurate and precise geocoding when merging data acquired on different surveys and on different lines of the same survey.

These addresses were followed by three days of technical presentations. In addition to the many presentations that utilized the pre-distributed multi-sensor Conference Data Set as a basis for their technical content, there were presentations on LIDAR (LADS and SHOALS), presentations on data base issues, and presentations on tow body issues.

There are many interesting facets to the Sydney Harbor bathymetry and imagery data, including different bedform materials, shipwrecks, and various fields of debris. All of which were well represented in the many dramatic and colorful renderings.

Beyond the technical sessions, there were a number of manufacturers present, demonstrating their products and discussing their services. Conference attendees had ample time for discussions with the manufacturers and hands-on demonstrations of their data processing/presentation capabilities. The conference organizers provided a unique conference experience, not only in the excellent harbor-side venue, but also by making available for inspection, the survey vessel and some of the survey equipment used to acquire the Conference Data Set.

The Conference Data Set clearly provided a unique opportunity for data processing and display researchers. Conference participants acknowledged the Conference Data Set as being of very high quality, but with sufficient operational realism to provide post-processors with a challenging and rewarding vehicle with which to demonstrate their capabilities.

One suggestion which arose from the conference was that this data set be used to seed a larger, common domain data set in which manufacturers who did not participate in the original data collection effort have the opportunity to include Sydney Harbor-based data that has been recorded from their equipment

The efforts to acquire and distribute the Conference Data Set were managed by the Conference organizers with the participation of DSTO personnel, NOAA personnel, and equipment representatives.

Equipment utilized to collect the Conference Data Set included a Klein Model 5500 multiple beam, focused side scan sonar, an Elac Bottomchart Mk II multibeam echo sounder, a Reson Model 8101 multibeam echo sounder, a GeoAcoustics Geoswath echo sounder and a RoxAnn seabed classification system. Navigation control was accomplished through use of high-quality DGPS and, for part of the trial, KGPS equipment.

For the multibeam trials, TSS POS/MV vessel motion monitoring equipment was used. Equipment and survey support was provided by each of the equipment manufacturers, as well as their Australian representatives, including Seismic Asia Pacific Ltd, for the Klein, Elac and TSS equipment and Western Advance for the GeoAcoustics equipment. ☼

USACE Conference Set for May 23-25, 2000

The CADD/GIS Technology Center has announced the *CADD/GIS 2000 Technology Symposium and Exposition* will be held in St. Louis, Missouri, May 23-25, 2000.

Unlike the August 1997 symposium held in St. Louis, which was co-hosted with a separate surveying mapping and remote sensing event, this year's symposium will include a Surveying and Mapping track, along with other tracks in CADD, GIS, Remote Sensing, and Facility Management.

Anticipated topics in the Surveying and Mapping technical sessions:

- Multibeam Hydro Surveys for Dredge Payment
- Advances in Underwater Acoustic Systems
- Land and Hydrographic Applications of LIDAR
- 3D Terrain Visualization
- Electronic Charting for Navigation
- GPS Applications in Surveying -->

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- Photogrammetric Mapping Technology and Procedures

Workshop topics being considered:

- GPS for GIS Data Collection
- Least Squares Survey Adjustments
- Tides and Water Levels
- Digital Terrain Data Thinning
- History of the Public Land Survey System
- Geodetic Aspects of the Public Land Survey System
- Survey Computing; various software packages developed by the USACE which are freely available.

Anyone (private sector is welcome) wishing to make a 20-minute presentation in the Surveying and Mapping Track, should send a 75- to 100-word abstract to Tony Niles ***Anthony.R.Niles@tec02.usace.army.mil*** by February 25th. For complete information on registration, hotel accommodations, and exhibiting visit ***http://tsc.wes.army.mil***, and click on *CADD/GIS 2000.* ☼

Bathymetric Data From Waverunners

by Dr. Guy Gelfenbaum et al

The U.S. Geological Survey (USGS), in cooperation with the Washington Department of Ecology and the University of Florida, has recently built and tested a new system to collect bathymetric data in energetic, nearshore environments.

Based on the Coastal Profiling System developed by Oregon State University, the USGS system is comprised of a Waverunner, which we have equipped with an echo sounder, GPS receiver and antenna, and onboard computer running navigation software.

Ed. Note: The U.S. Hydro '99 Conference included a paper which described the use of a jet ski to acquire hydrographic data. We think our readers will enjoy reading about a similar application.

The Waverunner is a three-person Yamaha Wave Venture 700, which is large, powerful, stable, and provides substantial compartment space. The echo sounder is an Oceandata Bathy 500 in which we stripped off the paper recorder and mounted the acquisition and processing boards in a waterproof box and placed the box in a compartment under the rear seat.

For precise horizontal and vertical positioning we operate a Trimble GPS receiver in Real-Time-Kinematic (RTK) mode. The GPS antenna is mounted on the Waverunner directly above the echo sounder to reduce errors induced by boat motions. The GPS receiver is also enclosed in a waterproof box and stored in the compartment under the rear seat.

The GPS base station is set up on a benchmark on land to provide a land-based vertical datum. The GPS and echo sounder data are synchronized by the navigation and data acquisition software, Hypack, which is running on a Libretto laptop computer, which is also stored under the rear seat. A daylight readable flat screen monitor is housed in a waterproof box and mounted above the handlebars, along with a waterproof 17-button keypad. The entire system runs off of 24 volts at 2.5 amperes. The batteries are housed in a waterproof box and attached to a mount on the rear of the boat.

A Waverunner is the optimal boat for collecting nearshore bathymetry through the surf zone. The boats operate with a jet propulsion system, so they are safer and have a shallower draft than a propeller-driven system. The boats are extremely maneuverable and best of all they can be easily righted after they flip over (as we know from personal experience!).

The echo sounder operates at 8 Hz and the GPS at 5 Hz, so surface waves are easily resolved and accounted for in the data. Getting through the waves as they are breaking in the surf zone is another matter.

Many people helped assemble this new data collection system. Jamie MacMahan, a Ph.D. student at the University of Florida and working under a cooperative agreement with the USGS, was responsible for integrating all of the components of the new system.

Jamie worked closely with Dr. Peter Ruggiero from the Washington Department of Ecology (DOE) and Dr. Guy Gelfenbaum from the USGS's Menlo Park office to design the system.

We had a lot of advice from Dave Wegener, Phil Thompson, Mark Hansen, Keith Ludwig and Terry Kelley from the USGS's St. Petersburg field office, and Jessica Cote from the USGS's Woods Hole field office. Dave and Phil were also recruited as field operators to check the boats for safe operation.

After a 3-day comparative test in South Carolina, the Waverunners were delivered to the Washington coast for the summer field season. As part of the Southwest Washington Coastal Erosion Study, the Waverun

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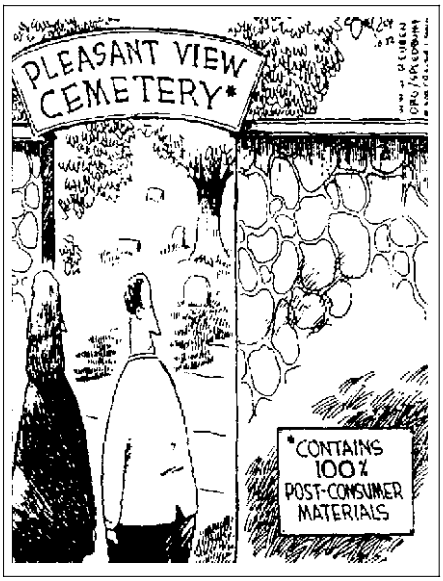

ners worked all summer collecting nearshore bathymetry across the 165-km-long Columbia River littoral cell.

Bathymetric data are being collected in cross shore profiles from mean sea level out to depths of 11 to 12 m. In selected areas within each sub-cell, profiles are spaced 200 m apart and the data are gridded to produce 3D bathymetric surface maps. Between these surface maps, profiles are collected every 1 kin. Thanks to small swell (1-2 m, 7-9 s) and light winds (< 20 knots) the field crew collected over 200 profiles.

The data are incredible! There is very little noise, and what few drop-outs we do get occur when a wave breaks on the boat and the echo sounder is surrounded by bubbles. The bathymetric profiles show several large offshore bars. The bathymetric surface maps are collected around high tide, and are merged with topographic surface maps of the sub-aerial beach collected around low tide, to provide a complete 3D map of the beach and upper shore face. These maps are helping document scales of morphological change and to understand the relationship between bar morphology and shoreline erosion.

As the nation's largest water, earth and biological science, and civilian mapping agency, the USGS works in cooperation with more than 2,000 organizations across the country to provide reliable, impartial, scientific information to resource managers, planners, and other customers. This information is gathered in every state by USGS scientists to minimize the loss of life and property from natural disasters, to contribute to the conservation and the sound economic and physical development of the nation's natural resources, and to enhance the quality of life by monitoring water, biological, energy, and mineral resources.

For more information about the USGS's Coastal and Marine Geology Program check out the web site: ***http://Coastal.er.usgs.gov/soundwaves/Sep99***.

(Guy Gelfenbaum, Peter Ruggiero, and Jamie MacMahan contributed to this article.) ☼

News from The Chapters

— Houston Chapter —

The meeting held on September 14 was attended by 28 members and guests. Brian Anderson, Vice President of Marketing for Fugro-LCT, presented an excellent talk on *"The State of the Art in Gravity and Magnetics and the Marriage with Multibeam Bathymetry."*

The speaker at the October 12th meeting was John Morse, Houston-based manager of the newly innaugurated USA office of Hydrosearch, an independent UK-based project management consultancy. John's talk was "*The Potential and Role of AUV Technology. "*

At the November 9th meeting, Cheryl Ward, Texas A&M University at Galveston, spoke about her recent fieldwork with Bob Ballard in the Black Sea.

In December the Chapter elected a new Board and held its annual Christmas Party at Sierra's. Members and guests numbered 49, where besides a fine dinner, numerous door prizes, with thanks to the Corporate sponsors, were raffled off. The new Board members are: Chairman, Peter Trabant (Trabant and Associates); Brian Morr (Technosphere); Vice Chairman, Dale Lipps (Racal NCS); Secretary and newsletter, Alastair Helme (Mercator); Treasurer, Richard Prothero (Racal NCS); Membership and Student Liaison, Tony Wood (Fugro), At Large.

Highlighting the year was THSOA's participation as Invited Society to the Offshore Technology Conference in May.

The Chapter's January speaker was Jan Van Smirren of Fugro Geos who spoke on *Metocean Considerations During Deep Water Exploration And Production Activities In The Gulf Of Mexico.* In his talk Jan showed that although the North Sea and Gulf of Mexico have some similarities in conditions, such as mean wave height, the working environment, and drilling in particular, was quite different. Currents throughout the water column, particularly eddy loop currents in the shallow to mid ranges, pose serious logistical problems. He was able to show how analysis of previous events, coupled with remote and in-water sensing (plus brief descriptions of the techniques employed) and more accurate forecasting, is able to reduce the effects of these adverse conditions.

Reminder: The Houston Chapter meets at 6:00 pm on the 2nd Tuesday of every month at the Ale House, 2425 West Alabama (one block east of Kirby). Anyone wishing to be a speaker should contact Peter Trabant at ***Trabant@pdq.net.*** -->

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— Gulf Coast Chapter —

At the meeting of May 27th 1999 at Semolina Es Restaurant in Slidell, Louisiana, Chapter President Al Rougeau of Odom Hydrographic, gave a very informative presentation on *"Correlating True Side Scan Imagery and Multibeam Bathymetry. "*

In his talk, Al showed some excellent examples of how side scan imagery from the Odom Echoscan can be draped over bathymetry to reveal bottom characteristics and features such as wrecks, that may otherwise go undetected.

Member Rebecca Smith proposed that a joint mini-conference be held with the Marine Technology Society (MTS) in the spring of 2000. This conference would be spearheaded by MTS member Laurie Jugan of PSI. No theme has been proposed yet. A similar mini-conference was held two years ago.

On August 26th a meeting was held at Doug's Place in Slidell, Louisiana. The guest speaker was Brian Greenawalt of NOAA who spoke on NOAA's Hydrographic Contracting Program.

Brian's 45-minute talk and slide presentation provided very useful information for potential contractors interested in NOAA's contracting activity. He touched on budgets, what the coming year's levels are, how they are arrived at, and the budget process from requirements to approval. Brian also explained the type of contracts NOAA uses (fixed price, indefinite delivery, indefinite quantity); the contractor selection process, qualification criteria (experience, capacity, past performance), and what NOAA looks for in Standard Forms 254 and 255. A lively and informative question and answer period followed Brian's presentation.

The final meeting of 1999 was held at Dakota's Restaurant in Covington. Louisiana, on November 18. The guest speaker was Frederick Moser, sales representative for Navigation Electronics, Inc. The subject of Mr. Moser's talk was *GPS after 2000.* Fred's talk was very informative as it forecast what we can expect in GPS technology and applications at the beginning of the new millennium.

Anyone wishing to be a speaker should contact Chapter President, Al Rougeau at ***odomsys@ix.netcom.com.***

— Northwest Chapter —

The THSOA Board has given formal approval for the formation of a Northwest Chapter to include members located in t he states of Oregon and Washington. For further information contact John Tamplin (Seafloor Systems) ***john@seafloorsystems.com*** or Joanna Hawkins (David Evans and Associates) ***jlp@deainc.com***. ☼

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

New Graduate-Level "Hydrographic Science" Program Available

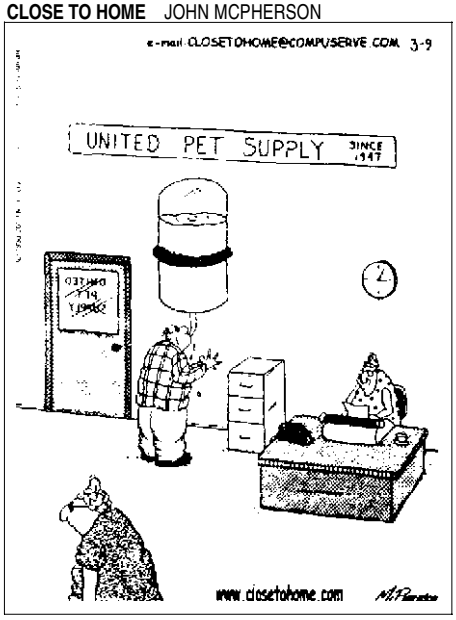
from IHB circular letter 56/1999

The Commander, Naval Meteorology and Oceanography Command (CNMOC), U.S. Navy, has announced that a new graduate-level "Hydrographic Science" program has been established at the University of Southern Mississippi (USM), Stennis Space Center, Mississippi, campus with classes beginning in the 1999-2000 academic year.

The Hydrographic Science program is an intensive, one-year course of study designed to meet the academic requirements for a Master of Science degree in Hydrographic Science. There are two options in the course of study: one designed to additionally fulfill the FIG/IHO Category A level standards of competence for hydrographic surveyors, and the second, a more theoretical course of study.

Category A status has not yet been awarded but is being sought through FIG/IHO. All course work will be taught in English only. The program is designed for a class size of ten to twelve students, and will convene annually from mid-August to the following late-July. Academic portions of the course will be taught at the John C. Stennis Space Center, Mississippi, a unique federal complex managed by the National Aeronautics and Space Administration (NASA), where ocean-environmental scientists engaged in research and development activities collaborate with operational and scientific organizations, and high-technology commercial companies. Resident agencies include: the Naval Meteorology and Oceanography Command headquarters, the Naval Oceanographic Office (with the Matthew Fontaine Maury Oceanographic Library), the Naval Research Labora-

CLOSE TO HOME JOHN MCPHERSON



tory, Navy's Major Shared Resource Center (supercomputing and visualization), the Navy's Riverine Warfare Special Boat Unit, the National Data Buoy Center and NASA's Commercial Remote Sensing Program Office.

Laboratory courses will be taught at the Stennis Space Center and along the Mississippi Gulf Coast, and field surveying exercises will be taught in the Northern Gulf of Mexico Littoral Region.

The program has been designed to meet the needs of the hydrographic community today and well into the 21st Century with special emphasis on Geographic Information System skills and capabilities. The program's proximity to the Naval Oceanographic Office, the Navy's Center of Hydrographic Expertise, affords a unique opportunity in the United States to work with a wide range of state-of-the-art equipment, and to become involved with concepts of data collection and near-real time all-source data fusion production employed by this global operation. A course syllabus is provided at Annex 1. Additional details about the curriculum are available on the web at ***http://www.marine.usm.edu/hydro***.

The program is available to qualifying civilian and military students. Applications for the program can be made through USM following the procedures given on the web site above or by writing direct to the address given below:

International Student Affairs Office
University of Southern Mississippi
Post Office Box 5151
Hattiesburg, MS 39406-5151
USA
Fax: +1 601 266 5839
Email: ***isa@usm.edu***

Information is also available on the Naval Oceanographic Office's web site at ***http://www.navo.navy.mil*** where there is also information about Navy's six-month, FIG/IHO Category B accredited International Hydrographic Management and Engineering Program.

THE UNIVERSITY
OF SOUTHERN MISSISSIPPI
DEPARTMENT OF MARINE SCIENCE

M.S. in Hydrographic Science
1999-2000 Courses

Fall Semester	*hours*
MAR 561 Physical Oceanography	3
HYD 600 Classical Geodesy	4
HYD 602 Marine Geology for Hydrographers	2
HYD 611 Remote Sensing for Hydrography	3
MAR 667 Applied Ocean Acoustics	3
Total Semester Course Load	15
Spring Semester	
MAR 667 Waves and Tides	3
HYD 604 Satellite Geodesy and Positioning	3
HYD 605 Applied Bathymetry	3
HYD 606 Nautical Cartography and GIS	3
HYD 601 Hydrographic Data Management	2
HYD 603 Law/Policy for Hydrographic Science	1
Total Semester Course Load	15
Summer Semester	
HYD 608 Practical Hydrographic Science	2
HYD 609 Nautical Science	1
HYD 610 Hydrographic Science Field Project	3
Total Semester Course Load	6
Total Degree Program Course Requirement	**36**

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FIG Bureau Handover From UK to USA

by Rear Admiral Christian Andreasen (NOAA, Ret.), NIMA

The FIG (International Federation of Surveyors) Bureau was transferred from the United Kingdom to the United States on the 8th of November 1999 during a ceremony held at the National Geographic Society in Washington, D.C. The United States is committed to manage FIG during the period 1999-2003.

FIG was founded in 1878 in Paris as the Federation International des Geometres (FIG). It is a federation of national associations and is recognized by the United Nations as a non-government organization.

Nearly 100 countries are represented in FIG by member associations (for the United States the American Congress on Surveying and Mapping and the Appraisal Institute are member organizations), affiliates (groups of surveyors under-taking professional activities but not meeting the criteria for membership) and sponsors (providers of commercial services). Recently, FIG changed its membership rules to provide for academic members.

FIG promotes the practice of a broadly defined surveying profession and encourages the development of professional standards. Commissions lead the technical work, and within FIG there are nine commissions and one ad hoc commission.

FIG Commission 4, Hydrography, is Chaired by Dennis St. Jacques of the Canadian Hydrographic Service. Commission 4 works closely with the IHO through the FIG/IHO Technical Assistance Coordination Committee (TACC) which last met in April 1999 during the U.S. Hydrographic Conference at Mobile and will meet during the Canadian Hydrographic Confer-

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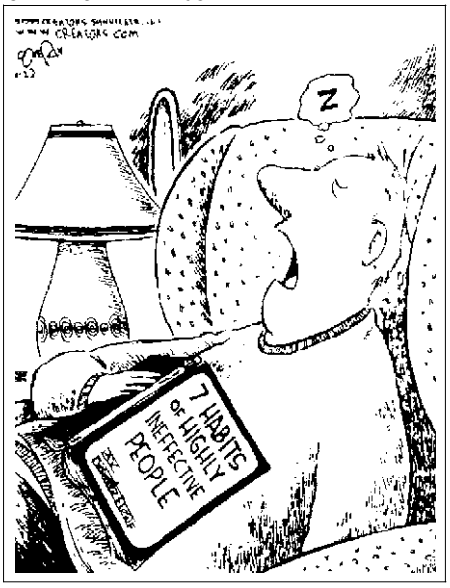

ence in 2000. Dennis St. Jacques, FIG, is also the Chairman of TACC.

Further cooperation occurs through the FIG/IHO International Advisory Board on Standards of Competence for Hydrographic Surveyors, which certifies courses of education in hydrographic surveying. The Hydrographic Society and FIG cooperate in supporting the FIG/IHO Advisory Board with professional hydrographic expertise.

Other FIG Commissions concern Professional Practice, Professional Education, Spatial Information Management, Positioning and Measurement, Engineering Surveys, Cadastre and Land Management, Spatial Planning and Development, Valuation and the Management of Real Estate (Chaired by Michael Yovino Young of the U.S.A.). The ad hoc commission concerns Construction Economics and Management.

The U.S. Bureau is led by Mr. Robert W. Foster, President of FIG. President Foster is a past President of ACSM. RADM Chris Andreasen, NOAA ret. and current Chief Hydrographer at the National Imagery and Mapping Agency (NIMA), is Secretary General of FIG. Three Vice Presidents are Dr. Tom Kennie, United Kingdom; Jerome Ives, United States; and Prof-Ing. Holger Magel, Germany. The Treasurer is Mr. Charles Challstrom, Director, National Geodetic Survey at NOAA. The Congress Director is Mary Clawson of NIMA and a well known Director of U.S. national congresses.

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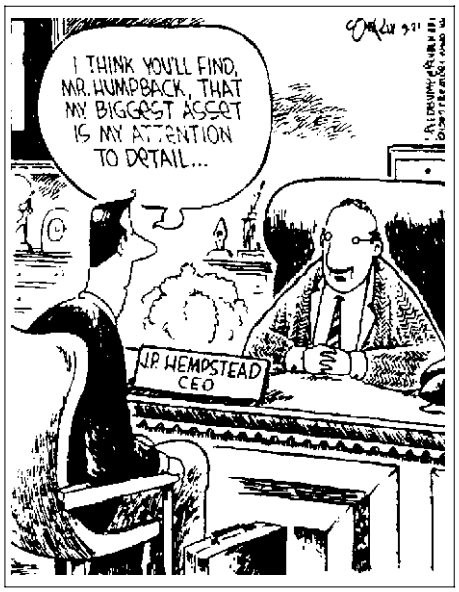

The U.S. Bureau is currently developing the FIG Work Plan to direct the management of the Federation. FIG conducts an international congress every four years; the next one will be held in the United States. During the intervening years, annual working weeks are held. In 2000 the FIG working week and XXIII General Assembly is to be held in Prague, Czech Republic during 22-26 May 2000 (***www.fig2000.cz***). A Joint Seminar of FIG Commissions 2, 4, 5, 6 and 7 will be held in Malta during 18-21 September 2000. The FIG working week and XXIV General Assembly will be held in Seoul, Korea during 6-11 May 2001.

The international XXII FIG Congress and XXV General Assembly will be held at Washington, D.C. during 21-26 April 2002. It will be at the Marriott Wardman Park Hotel close to the Washington Convention Center in Washington, D.C. This will be a major Congress for the United States in that the 2002 FIG Congress will be held in conjunction with meetings of both the American Congress on Surveying and Mapping (ACSM) and the American Society for Photogrammetry and Remote Sensing (ASPRS). Included within the FIG Congress also will be significant sessions for the Appraisal Institute. An exhibition will be held for three days during the Congress. The Congress Director, Mary Clawson, can be reached at ***Mgc1aw@aol.com.***

The FIG working week and XXVI General Assembly is to be held 19-23 May 2003 at Eilat, Israel, after which Germany will take responsibility for the FIG Bureau.

In 1999 FIG established a Permanent Office to handle its day-to-day management. The FIG Office is located at Lindevangs Alle 4, 2000 Frederiksberg, Copenhagen, Denmark and is managed by Markku Villikka, Director and Joergen Springborg, Personnal Assistant. Telephone: +45 3886 1081, Fax: +45 3886 0252, e-mail: ***FIG@ddl.org***. Home Page: ***www.ddl.org/figtree***. The Home Page gives information about the FIG meetings, the work of Commissions, membership, etc. ☼

— Humor from the Internet —

Dr. Seuss Explains Computers

If a packet hits a pocket on a socket on a port,
and the bus is interrupted as a very last resort,
and the address of the memory makes your floppy disk abort,
then the socket packet pocket has an error to report.

If your cursor finds a menu item followed by a dash,
and the double-clicking icon puts your window in the trash,
and your data is corrupted 'cause the index doesn't hash,
then your situation's hopeless and your system's gonna crash!

If the label on the cable on the table at your house,
says the network is connected to the button on your mouse,
but your packets want to tunnel on another protocol,
that's repeatedly rejected by the printer down the hall,
and your screen is all distorted by the side effects of gauss,
so your icons in the window are as wavy as a souse,
then you may as well reboot and go out with a bang,
'cause as sure as I'm a poet, the sucker's gonna hang!

When the copy of your floppy's getting sloppy on the disk,
and the macrocode instructions cause unnecessary risk,
then you have to flash your memory and you'll want to RAM your ROM.
Quickly turn off the computer and be sure to tell your mom. ☼

Letter from the President

by Pat Sanders
President THSOA

A lot has been happening since the last newsletter. At our 1999 Annual General Meeting (AGM), held last December, Chic Ransone (International Industries) and Ray Williams (USACE-Norfolk) were newly elected to the Board of Trustees, taking the seats formerly held by Jon Dasler (David Evans & Associates) and Dave Clarke (David Clarke & Associates).

My personal thanks go to Jon and Dave for their efforts over the last two years. One of the main reasons for the success of the 1999 U.S. Hydrographic Conference was due to all the hard work put in by Dave on the Exhibition . We wish Jon and Dave all the best. Short "bios" on Chic and Ray follow this column.

The lead article in this *Seahorse* comments on the current organizational structure of The Hydrographic Society (the international organization) and suggests change to a federation of national organizations. I believe that this article is a very accurate reflection of the opinions of the current Board of Trustees.

SPEED BUMP DAVE COVERLY

I would also like to use this article to extend my thanks to Dale Westbrook, who has just ended an 11 -year "tour of duty" as the Editor of the Seahorse. Anyone who has ever worked on a newsletter knows the amount of time and effort that go into each issue. THSOA has been the beneficiary of Dale's hard work and we are all greatly appreciative of his efforts and his dedication to the Society.

Future newsletters will be prepared by Tom Slater. Tom is a personal friend of Jack Wallace, our Executive Secretary. He retired from the CIA in 1986 after spending 30 years in graphic arts operations. Since his retirement he has produced newsletters for several organizations. Tom claims to be an unreconstructed DOS junkie and until now has done all his previous newsletters using WordPerfect for DOS. For a number of technical reasons, he reluctantly decided to use WordPerfect 9 for Windows in the production of this issue of the Seahorse. You will notice some differences in style and design between this and previous issues.

Regarding the THSOA web page, we are still plodding on, despite minor setbacks. I continue to feel that this is a major area where the society can benefit its members and will work with Jack Wallace and John Marinuzzi to get it off the ground in the very near future.

As a new "feature" of the web site, I would like to prepare an area where hydrographic equipment manufacturers could place their user manuals or operator manuals in PDF format. Any company wishing to participate can e-mail me the materials at ***pat@coastalo.com.***

Preparations for the 2001 U.S. Hydrographic Conference, to be held in May 2001 are proceeding. Karl Kieninger will be serving as Conference Chairman. Chic Ransone will be heading up exhibits and Ray Williams and myself will be looking after the social program.

Once we get a final handle on the available space for exhibitors and technical sessions, we will begin to sell exhibit spaces and accept registrations. I would suggest you book your exhibit space early, owing to the success of the 1999 U.S. Hydrographic Conference.

Best regards,
Pat Sanders ☼

New Trustee Ray Williams

Ray Williams is an American Congress on Surveying and Mapping certified "Inshore Hydrographer." He is presently the lead instructor for the U. S. Army Corps of Engineers' *PROSPECT* course "Hydrographic Surveying Techniques." He has served as an instructor since 1993 and as a demonstrator for the same class since 1991. He became a field supervisor/team leader on the 65-foot survey vessel team in 1987.

His vessels have functioned as demonstration platforms for numerous events including two NOAA International Hydrographic Conferences in 1990 and 1994. Additionally, Mr. Williams has been a guest lecturer at Old Dominion University for their survey class, the USACE's symposium in St. Louis (1997), and The Hydrographic Society of America's conference in Mobile (1999).

Ray is a native of Norfolk, Virginia, and has worked around the water since he was 10 years old. After high school, Ray joined the U.S. Navy Reserves and served as an Electronics Technician. He has been employed with the U. S. Army

Corps of Engineers (Norfolk District) since 1972 and is the recipient of two Achievement Medals from the Department of the Army. He presently makes his home in Virginia Beach, Virginia. ☼

New Trustee Chic Ransone

Morris A. (Chic) Ransone is President of International Industries Inc. a distributor and manufacturers representative firm in the hydrographic and oceanographic areas.

He is a graduate Marine Geologist with an MBA in marketing. He has been a research oceanographer for Columbia University and a supervisory engineer for the Oceanic Division of Westinghouse Electric Corp. developing underwater and marine systems including the first commercial side scan sonars. He has been professionally operating, developing and marketing marine equipment for over forty years.

Mr. Ransone is a past national officer of the Marine Technology Society and the American Oceanic Organization and is active in other professional groups in the marine field including the Oceanic Society of the IEEE. Mr. Ransone is a retired US Marine Corps Officer.

Morris A. Ransone, President
International Industries, Inc.
Voice 410 293 2676
Fax 410 990 0569 ☼

-Humor from the Internet-

You Might Be a High-tech Redneck If ...

Your e-mail address ends in "@over.yonder.com,"

You connect to the World Wide Web via a "Down Home Page."

If the bumper sticker on your truck says, "My other computer is a laptop."

Your laptop has a sticker that says, "Protected by Smith and Wesson."

You've ever doubled the value of your truck by installing a cellular phone.

Your computer is worth more than all your cars combined.

You wire your network with jumper cables.

Your wife said either she or the computer had to go, and you still don't miss her.

You've ever used a CD-ROM as a coaster to set your beer can on.

You ever refer to your computer as "Ole Bessy."

Three Words: Daisy Duke Screensaver

You start all your e-mails with the words, "Howdy y'all."

Your spell checker knows words like, "Y'al,' "Yonder," and "Reckon."

Your cars sit in the yard because your garage is full of dead CPUs, printers, modems and monitors.

Your belt buckle is made from a dead 3.5-inch hard drive.

You ever felt you had to move your computer desk so it didn't block the velvet picture of Elvis.

Yer mouse keeps knocking over yer spit-can.

Smith & Wesson...the original point 'N click interface.

When your friends comment on your "nice boots" and you say, "Yea, thanks. It's my spiffy, new Phoenix BIOS."

When your wife catches you again with your "Farm Animals of the Orient" CD- ROM.

When you order your new pick-up truck with a gunrack and PCMCIA sockets.

Your PC Games collection consists of nothing but Bass Fishing tournament games.

You only buy from GateWay, 'cause the cow- colored boxes are a hoot. ☼

— Humor from the Internet —

Are You a Pro?

This quiz consists of four questions that tell you whether or not you are qualified to be a professional.

There is no need to cheat. The questions are not that difficult. You just need to think like a professional.

1. How do you put a giraffe into a refrigerator? The correct answer is: Open the refrigerator, put in the giraffe and close the door. This question tests whether or not you are doing simple things in a complicated way.

2. How do you put an elephant into a refrigerator?

Incorrect answer: Open the refrigerator, put in the elephant and close the door.

Correct Answer: Open the refrigerator remove the giraffe and put in the elephant and close the door. This question tests your foresight.

3. The Lion King is hosting an animal conference. All the animals attend except one. Which animal does not attend?

Correct answer: The elephant. The elephant is in the refrigerator! This tests if you are capable of comprehensive thinking.

OK, if you did not have the last three questions correctly, this one may be your last chance to test your qualifications to be a professional.

4. There is a river filled with crocodiles. How do you cross it?

Correct answer: Simply swim through it. All the crocodiles are attending the animal meeting! This question tests your reasoning ability.

So.....

If you answered four out of four questions correctly, you are a true professional. Wealth and success await you.

If you answered three out of four, you have some catching up to do but there's hope for you.

If you answered two out of four, consider a career as a hamburger flipper in a fast food joint.

If you answered one out of four, try selling some of your organs. It's the only way you will ever make any money.

If you answered none correctly, consider a career that does not require any higher mental functions at all, such as law or politics. ☼

CLOSE TO HOME JOHN MCPHERSON

Membership Application

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

Membership in The Hydrographic Society of America (THSOA) is open to any individual or organization with an interest in surveying afloat. No formal qualifications are required. THSOA serves as the focal point for activities in the United States. Local chapters have been formed in Houston, Texas, Bay St. Louis, Mississippi, and the Pacific Northwest.

All Members receive *The Seahorse* newsletter, are eligible for membership in local chapters, receive a $25 discount on subscriptions *to Hydro* International magazine and a discount on registration at THSOA-sponsored events. Corporate Members receive a free hotlink or company description and free posting of recruitment notices on THSOA's web site (www.USAhydrosoc.org) as well as discounts on group registration and exhibit space rental at THSOA events.

Membership in THSOA is renewed on January 1 of each year. Dues are not prorated; however, members joining in the middle of the year receive all back issues of the newsletter for that year.

The U.S. Branch is comprised of those members who are also members of the international Hydrographic Society (THS) headquartered in England. Members of THS receive quarterly *The Hydrographic Journal* and a discount on registration at sponsored international events. THS Corporate Members receive two copies of *The Hydrographic Journal,* and discounts on web page and web page link advertising. THS Corporate Membership renews on January 1 and for individuals, on April 1.

NAME: Title (Mr, Ms, CAPT, Dr, etc.) First M.I. Last

ADDRESS (for mailing and correspondence)

CITY STATE ZIP

EMPLOYER

TEL: FAX:

e-mail address:

YEAR (From which membership is to be effective): 200__

☐ Check box if name may be included on mailing list provided to Corporate Members

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 _____

ANNUAL DUES

(Check appropriate box)

INDIVIDUAL (Houston Chapter add $10 for local dues)	❒ THSOA $15	❒ THSOA/THS $75
RETIRED and no longer employed in the profession of sea surveying	❒ THSOA $10	❒ THSOA/THS $40
STUDENT full-time undergraduate	❒ THSOA $5	❒ THSOA/THS $20
CORPORATE	❒ THSOA $100	❒ THSOA/THS $430

If Student, name of institution _____

Please return with payment to:

The Hydrographic Society
P.O. Box 732
Rockville, MD 20848-0732

Professional Hydrographers Needed to Participate In Skills Survey Evaluation

The Marine Advanced Technology Education (***MATE***) Center with the help of 18 professionals from the hydrographic survey field have developed draft Knowledge and Skill Guidelines for Hydrographic Survey Technicians.

In March a validation survey to test the reliability and assess the range of applicability of these guidelines will be finalized. MATE is looking for professionals from the hydrographic survey field to participate in this validation survey.

The MATE Center is a national consortium of organizations and individuals concerned with the education of people to work in the broad field of marine science and technology. The MATE Center's mission is to help prepare America's workforce for ocean-related occupations utilizing information from employers, workers, and other stakeholders to improve and develop educational programs with a focus on marine technology. The MATE Center was established in September 1997 with funding from the National Science Foundation.

The people participating in this survey should be hydrographic survey technicians or supervisors of hydrographic survey technicians who have spent time as a hydrographic survey technician. The validated Guidelines for hydrographic survey technicians will be sent to everyone participating in this survey effort. In addition, everyone who returns a survey will receive membership in MATE and a Marine Advanced Technology Education T-shirt.

Thank you in advance for your help. Your efforts will go far toward improving the education of individuals interested in marine science and technology.

To request a survey please e-mail, send, or fax your contact information to:

Deidre Sullivan
Curriculum & Industry Manager
MATE Center
980 Fremont St.
Monterey, CA 93940
Phone: (831) 646-3081
Fax (831) 646-3080
Email: ***deidres@marinetech.org;***
Website: ***www.marinetech.org.*** ☼

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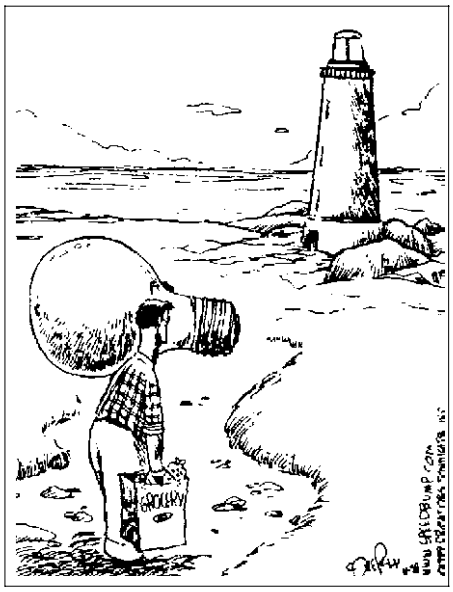

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