

# NEWSLETTER

Ocean Engineering Program • Zachry Department of Civil Engineering • Texas A&M University • College Station, Texas 77843-3136

Telephone: 979/845-4516

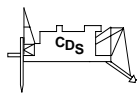
Vol. 39 August 2006

Fax: 979/862-8162

## 35<sup>th</sup> Dredging Short Course



The 35<sup>th</sup> Dredging Engineering Short Course was held January 9-13, 2006 at Texas A&M University in College Station, Texas. A total of 42 participants attended the 4 ½ day short course. All participants were given one year memberships to the Western Dredging Association. The 36<sup>th</sup> Dredging Engineering Short Course is scheduled for January 8-12, 2007 on the campus of Texas A&M University in College Station, Texas. The course fee is \$1310 and a brochure and application may be obtained by contacting Dr. R. E. Randall ([r-randall@tamu.edu](mailto:r-randall@tamu.edu), 979-845-4568) or from <http://oceaneng.civil.tamu.edu>.



&



38<sup>th</sup> TAMU

## Dredging Seminar & XXVI WEDA Technical Conference

Approximately 350 participants and 47 exhibitors attended the 38<sup>th</sup> Texas A&M Dredging Seminar and WEDA XXVI Technical Conference and Exhibition held in San Diego, California June 25-27, 2006. Sixteen technical papers were presented during the Texas A&M Dredging Seminar and eighteen papers were given in the WEDA Technical Conference. Panel discussions were organized and conducted by the WEDA Environmental Commission and Safety Commission. The paper entitled "Numerical Modeling Studies Supporting Nearshore Placement of Dredged Material from the Savannah River Entrance Channel by Joe Gailani and Jarrell Smith won the Dredging Contractors of America (DCA) Best Paper Award. The conference CD proceedings are available through Larry Patella ([weda@comcast.net](mailto:weda@comcast.net)) or view the WEDA web site ([www.westerndredging.com](http://www.westerndredging.com)).

## World Dredging Congress (WODCON)

The 18<sup>th</sup> World Dredging Congress (WODCON) is being organized by the Western Dredging Association (WEDA) and the TAMU Center for Dredging Studies. The technical conference and exhibition will be held Sunday May 27<sup>th</sup> – June 1, 2007 at the Buena Vista Palace Luxury Resort & Spa in Disney World, Orlando, Florida. The call for papers has been distributed ([www.westerndredging.com](http://www.westerndredging.com)) and interested authors should email one page abstracts by October 15, 2006 to Dr. Robert E. Randall ([r-randall@tamu.edu](mailto:r-randall@tamu.edu)).



## WEDA Awards

The 2006 WEDA Lifetime Achievement Award was given to Dr. John B. Herbich, Professor Emeritus of Ocean and Civil Engineering and Director Emeritus of the Center for Dredging Studies at Texas A&M University. The award was accepted by daughter Patricia Herbich O'Connor from John Adams, WEDA President. John Herbich's many dredging contributions include founding the Center of Dredging Studies in 1968, initiating the TAMU Annual Dredging Seminar series, publishing the Handbook of Dredging Engineering (2000), organizing the annual Dredging Engineering Short Course beginning in 1971, and publishing many dredging research papers in dredging conferences and journals. John and his wife, Polly, currently reside in Wailuku, Maui, Hawaii.



WEDA President, John Adams presented the WEDA Dredger of the Year to Robert E. Randall, Director of the Center for Dredging Studies and Professor of Ocean and Civil Engineering at Texas A&M University. Bob was recognized for his efforts on behalf of WEDA, editing of the annual conference proceedings since 1994, serving on WEDA and WODCON technical paper committees, and contributions to dredging education and research.

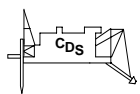


## Panama Chapter 1<sup>st</sup> Annual Dredging Conference

Panama Chapter's First Annual Dredging Conference was held at the Gamboa Rain Forest Resort in the Republic of Panama, February 14-17, 2006. The conference was dedicated to Charles



W. Hummer who is one of the founding fathers and president emeritus of the Panama Canal Museum. The first day of the conference was devoted to presentations from the Panama Canal Authority, the christening of the drill boat "Baru", and a tour of Gaillard Cut and Panama Canal dipper dredging operations. Additional technical presentations were given over the next day and a half. Peter Marotta's presentation "History of Dredging at the Panama Canal" won the best paper award. The end of the conference was highlighted with the election of officers for the WEDA Panama Chapter with Mr. Peter Marotta elected as President. The conference CD proceedings are available through Larry Patella ([weda@comcast.net](mailto:weda@comcast.net)).



DIGITAL  
AUTOMATION  
CONTROL  
SYSTEMS

DACS

Cutter Suction

## Dredge Simulator Short Course

The January 16-18, 2006 Cutter Suction Dredge Simulator short course



attracted eight participants from dredging companies (USACE, Great Lakes Dredge and Dock, Pine Bluff Sand & Gravel, Manson, Weeks Marine, and Marinex Construction). The course demonstrates the fundamentals of hydraulic dredging using a cutter suction dredge that include cavitation, deposition of sediment in the pipeline, pipeline length limitations, pump power limitations, and swing winch limitations. Different sediment conditions and channel currents are also simulated. Three simulators interface actual controls for a cutter suction dredge to a personal computer are used for the course. The next Cutter Suction Dredge Simulator short course is scheduled for January 15-17, 2007 on the campus of Texas A&M University in College Station, Texas. The course fee is \$1500 and a brochure and application may be obtained by contacting Dr. R.E. Randall ([r-randall@tamu.edu](mailto:r-randall@tamu.edu), 979-845-4568) or from the web site, <http://oceaneng.civil.tamu.edu>. The course instructors are Mr. Peter deJong, President of Digital Automation and Control Systems and Dr. R. E. Randall, Director of the Center for Dredging Studies at Texas A&M University.



## Projects Underway

### Dredge Carriage Operational in Reta & Bill Haynes '46 Coastal Engineering Laboratory

The DACS designed and OEM, Inc built dredge carriage for the tow/dredge tank (12 ft wide, 10 ft deep with a 5-ft deep sediment pit, 150 ft long) has a GIW, Inc. dredge pump (4 in suction & 3 in discharge), ladder, and a Dredging Supply Co. 13 inch cutter. A 130 gpm throughput dewatering system has been purchased from TriFlo Inc. and four optical backscatter instruments have been purchased through funds provided by the Hindes Foundation. Ohmart Inc. is donating a nuclear density meter and Steel Processors has agreed to donate a 14 cubic yard floating hopper barge. Instrumentation is available for measuring cutter torque, cutter forces, flowrate, pump discharge and suction pressure, cutter rpm, pump rpm, slurry density, and ladder angle and position. The data acquisition and control system was developed by Digital Automation and Control Systems (DACs).



The dredge/tow carriage was used to test loadings on underwater strakes for Shell Inc. in April and May 2006. Over 600 towing tests were conducted at towing speeds of 1 to 4 knots. The dredge carriage performance was very reliable and resulted in a very successful test program. The dredge carriage is currently being used by Dr. Chang for measuring scour profiles around bridge structures using the sediment pit and the current generation system capable of a 35,000 gpm throughput.



## Scholarship Awards

John Henriksen received the Barrett G. Hindes Merit Scholarship endowed by the Hindes Foundation and the Murden Scholarship sponsored by the Western Dredging Association for the 2006-07 academic year. John is a 3<sup>rd</sup> year doctoral student conducting dredging research related to resuspension of dredged sediments using the dredge carriage and model cutter suction dredge in the Haynes Coastal Engineering Laboratory.



## New Publications

- Adair, R. F. and Randall, R. E. "Method for Estimating Clamshell Dredge Production and Project Cost," *Journal of Dredging Engineering*, Western Dredging Association (WEDA), Vol. 7, No. 1, June 2006.
- Randall, R. E. *Proceedings of the Western Dredging Association Twenty-sixth Technical Conference and Thirty-eighth Annual Texas A&M Dredging Seminar*, Editor, San Diego, California, Texas A&M University, Center for Dredging Studies, Ocean Engineering Program, Civil Engineering Department, College Station, TX, CDS Report No. 508, 468 pp., June 25-28, 2006.
- Randall, R., deJong, P., Sonye, S., Krippner, N., and Henriksen, J. "Laboratory Dredge Carriage for Modeling Dredge Operations," *Proceedings of the Western Dredging Association Twenty-fifth Technical Conference and Thirty-seventh Texas A&M Dredging Seminar*, New Orleans, Louisiana, Texas A&M University, Center for Dredging Studies, Ocean Engineering Program, Civil Engineering Department, College Station, TX, CDS Report No. 507, pp.17-30, June 19-22, 2005.