



Navigation *eNews*

Volume 13 — May 2009

The *Navigation eNews* is changing format. The newsletter will be released every 2 months. Articles will be short, with a point of contact for folks who want more information. We aim to make this an easily perused, useful newsletter. Please send us a paragraph or two when you've something to share with the navigation community – email: dinah.n.mccomas@usace.army.mil.

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April '09 Navigation RARG Meeting Successful

The annual Navigation R&D Research Area Review Group (RARG) meeting was held 7-9 April hosted by the New York District. The purpose of the meeting was to provide the Navigation RARG with a review of the 9 Navigation Research and Development Programs: Navigation Systems; Dredging Operations and Environmental Research; Coastal Inlets Research Program; Navigation Economic Technologies; Regional Sediment Management; Coastal Zone Mapping and Imaging Lidar; Monitoring Completed Navigation Projects; Dredging Operations Technology Support; and Inland Electronic Navigational Charts. The review included FY09 progress and products, detailed plans for FY10, introduction of the new FY12 Statements of Need developed by the RARG and Field, and preliminary prioritizing of the new research statements.



Highly rated statements of need included development of innovative methods to repair post tension rods at locks, engineering design guidance and performance criteria for energy-absorbing deformable navigation structures, guidance on and mechanical properties of emerging epoxy fillers, tools to prioritize dredging on a national scale, upgrades and improvements for the Coastal Modeling System Wave model for shallow reefs and porous structures, and many more challenging navigation research topics.

New York District provided the RARG with an inspection of the New York and New Jersey On-going Operations and Channel Deepening efforts underway. RARG members saw first-hand a number of the environmental and engineering challenges these efforts encompass.

The next RARG meeting will be in April 2010 in Vicksburg, MS. For more information please contact W. Jeff Lillycrop, Navigation R&D Technical Director, Jeff.Lillycrop@usace.army.mil.

Dredged Material Assessment and Management Seminar 15-17 September 2009, Detroit, MI

Sandra Brasfield

The Dredging Operations Technical Support (DOTS) and the Dredging Operations and Environmental Research (DOER) Programs will be hosting a Dredged Material Assessment and Management Seminar in 2009. Like previous seminars, this three day meeting will offer presentations and demonstrations from the field's leading experts. Based on the overwhelming positive comments received from the most recent meeting, we have decided to continue with the format developed for the 2008 Seminar.

This new format includes updated information on the science and engineering of dredged material assessment and management. The Dredging Seminar portion of the agenda has been streamlined to fit within 1.5 days and will cover "the basics" of dredged material assessment and management. Following this portion of the agenda, one half day will be divided between a session highlighting DOER research and one highlighting dredging issues in the Great Lakes region. The third and final day of the Seminar will focus on the assessment and management of risks from dredged material resuspension. Information on registration, accommodations and other logistical matters will be posted at <http://el.erdc.usace.army.mil/dots/training/dmams.cfm>. POC Sandra Brasfield, sandra.m.brasfield@usace.army.mil.



U.S. Army Corps of Engineers Pittsburgh District and the Port of Pittsburgh Commission to host the PIANC USA Annual Meeting 2009

PIANC USA will hold its 2009 Annual Meeting and technical tour in Pittsburgh, PA, on July 15-16, 2009. The meeting will be hosted by the Port of Pittsburgh Commission and the USACE Pittsburgh District. There will be a full-day technical program on July 15, as well as a walking tour of the dewatered Emsworth Main Lock Chamber on July 16. A “Young Professionals” happy hour and a group dinner are also being planned. The meeting will be held in conjunction with a PIANC Working Group 125 (River Information Services) meeting, thus allowing for much interaction among the US and international participants. Stay tuned, more information will be coming soon! Questions? pianc@usace.army.mil.

PIANC USA was organized in 1902 with the U.S. Army Corps of Engineers serving as the Secretariat. Its goal is to advance the sustainable development of shallow and deep-draft navigation issues including dredging and dredged material disposal, navigation and port infrastructure, recreational navigation and related environmental matters. PIANC USA is chaired by the Assistant Secretary of the Army (Civil Works); the President is the Deputy Commanding General, U.S. Army Corps of Engineers.

Development of the Navigation Engineering Specialty

Bruce McCartney, William McAnally

“Navigation Engineering” involves the life-cycle planning, design, construction, operation, and maintenance of safe, secure, reliable, efficient, and environmentally sustainable navigable waterways (channels, structures, and support systems) used to move people and goods by waterborne vessels. There is no recognized engineering specialty that covers navigation channels. Navigation engineering practitioners tend to be educated in other, related fields such as transportation, hydraulics and coastal engineering, since there are only a few academic offerings specific to the navigation engineering specialty.

The Waterways Committee of the Coasts, Oceans, Ports and Rivers Institute of the ASCE has been working to lay the foundation for this specialty by developing the Manual of Practice (MOP) series (published by ASCE). The resulting ASCE manuals present not only Corps navigation design practice, design philosophy and experience, but activities of other U.S. Government agencies with navigation missions as well as foreign country practice.

Available ASCE Manuals of Practice produced by the Waterways Committee are:

- No. 116, Navigation Engineering Practice and Ethical Standards, 2009
- No. 107, Ship Channel Design and Operation, 2005 (revises and expands MOP No.80)
- No. 94, Inland Navigation: Locks, Dams and Channels, 1998
- No. 80, Report on Ship Channel Design, 1993
- No. 50, Planning and Design Guidelines for Small Craft Harbors, 1994

Currently under development is a MOP on “Major Rehabilitation of Locks and Dams.” This is a timely topic since 50 percent of the 257 navigation locks in the U.S. are over 50 years old and by 2020, eight out of ten locks will have exceeded their design life. Other Navigation Engineering MOP’s under consideration are: construction, operation, environmental sustainability and economic evaluation.

Although progress is being made to establish the body of literature to support the Navigation Engineering Specialty, more work is needed to raise the level of awareness among the engineering community and beyond. For additional information on the Navigation Engineering specialty and the efforts of the Waterways Committee, please contact Bill McAnally, Chair, Navigation Engineering Sub Committee, at McAnally@cee.msstate.edu.

Inland Waterways Users Board Meeting #61 August 10-11, 2009, Paducah, KY

The purpose of this message is to ask that you save the dates of Monday, August 10, and Tuesday, August 11, 2009, for the 61st meeting of the Inland Waterways Users Board, which will be held in Paducah, Kentucky. At present, the plan is to have a tour of the Olmsted Lock and Dam Project on the 10th, and hold the meeting of the Board on the 11th. Details as to the exact location of the meeting are currently being finalized, and a first notice of the meeting conveying information concerning the meeting will be sent out in the near future.

The Inland Waterway Users Board is an industry Federal advisory committee established by Section 302 of the Water Resources Development Act of 1986 (Public Law 99-662). The eleven-member Board represents all geographic areas on the fuel-taxed inland waterways system of the United States. The composition of the Board also reflects a balanced industry focus, including shopper and carrier members from companies of different sizes and specializing in the transport of different commodities.



The Board’s purpose is to make recommendations to the Congress and the Secretary of the Army on the priorities and spending from the Inland Waterways Trust Fund for construction and rehabilitation projects on the fuel-taxed system. Such recommendations reflect the independent judgment of the Board and are reflected in an annual report made to the Secretary of the Army and the Congress. The Board typically meets three times a year to accomplish its business, with the meetings open to the public.

The U.S. Army Corps of Engineers is the proponent for the Board. The Director of Civil Works is the Executive Director of the Board. The Corps Headquarters also provides the Executive Secretary to the Board. The Corps’ Institute for Water Resources in Alexandria, Virginia provides the Executive Assistant and other subject matter specialists that support the authorized activities of the Board.

Publications of Interest

Recently published – *ASCE Manuals and Reports on Engineering Practice No. 116 – Navigation Engineering Practice and Ethical Standards*. Check out their website, <http://pubs.asce.org>.

PIANC has a new report: Minimising Harbour Siltation, MarCom report 102, October 2008. See <http://www.pianc.org/edits/article.php?id=1001020>.

Conferences, etc.

Email Dinah.N.McComas@usace.army.mil if you know of a meeting that would be of interest to our readers.

14-17 June 2009. WEDA 29 and TAMU 40. Tempe, AZ.
<http://www.inlandwaterwaysconference.com/>

16-17 June 2009. JALBTCX Workshop and Awards. Portland, OR. POC:
jennifer.m.wozencraft@usace.army.mil.

20-24 July 2009. U.S. Army Corps of Engineers Infrastructure Systems Conference. Cleveland, OH. <http://www.usaceisconf.org/2009/>

6-9 September 2009. Smart Rivers. Vienna, Austria.
http://gulliver.trb.org/news/blurb_detail.asp?id=10031

16–18 September 2009 — Coasts, Marine Structure and Breakwaters 2009. Edinburgh, Scotland.
<http://ice-breakwaters.com>

25–28 April 2010 — Ports 2010. Jacksonville, FL.
<http://www.content.asce.org/conferences/ports2010>