



THE NEWSLETTER OF THE U.S. SECTION, PIANC

Permanent International Association of Navigation Congresses

Summer 1997

Inside this issue:

Solution for Contaminated Sediments	4
Recognition of Corporate Members	4
29th International Navigation Congress	5
Regeneration of Commercial Harbors	12
Tenn-Tom Locks Renamed	13

In each issue:

New Members	14
Activities	15

NOTES FROM THE SECRETARY

We have completed the plans for the 1997 conference, which will be held October 28-30, 1997, in Wilmington, North Carolina. The host for the conference will be **Erik Stromberg**, Executive Director of the North Carolina State Ports Authority. Copies of the combined program and registration brochure have been mailed to members of the U.S. Section and non-members who are on our mailing list. If you would like a brochure sent to a firm or an individual who is not a member of the U.S. Section of PIANC, please send me the name and address. If you would like additional copies of the program to distribute, please contact the Office of the U.S. Section, PIANC at (703) 428-6286.

The **Honorable H. Martin Lancaster**, Assistant Secretary of the Army for Civil Works (ASA(CW)) and Chairman of the U.S. Section of PIANC, resigned in July to accept the position of President of the North Carolina Community College System in Raleigh, North Carolina. Mr. Lancaster, who served as ASA(CW) from January 1996 to July 1997, provided strong support to the association. Best wishes to Mr. Lancaster for success in his academic career.

The Assistant Secretary of the Army has designated two new U.S. Commissioners to replace retiring Commissioners **Erik Stromberg** and **Charles F. Connors**. Both Mr. Connors and Mr. Stromberg contributed eight years of their time and talents to further the objectives of the association. I am pleased to announce that **Kurt J. Nagle**, President of the American Association of Port Authorities, and **Robert D. Nichol**, President of Moffatt and Nichol Engineers, have been appointed to serve four-year terms as members of the U.S. National Commission.

The U.S. Section will again sponsor a breakfast and technical program at the forthcoming National Waterways Conference meeting in Houston, Texas. The PIANC breakfast will begin at 7:00 a.m. on Thursday, September 18, 1997. Mr. **Anson Eickhorst**, Executive Assistant, U.S. Army Corps of

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Engineers, St. Louis, will discuss *Lock Automation in the St. Louis District*. Assisted by electrical engineers from the district office, he will demonstrate opening a lock on the Mississippi River from the hotel meeting room in Houston.

The U.S. Section of PIANC participated in the Summer Meeting of the **Transportation Research Board**, which was held in Gulfport, Mississippi, July 16-18, 1997. The PIANC panel, which led off the meeting, focused on inland and coastal navigation research and development. The speakers' presentations highlighted the Civil Works activities of the Corps of Engineers' Directorate of Research and Development, the U.S. Army Engineer Institute for Water Resources, the Division of Ports of the Maritime Administration, and PIANC International Working Group Number 19, Problems of Collisions Due to the Presence of Bridges.

The Wildlife Habitat and Port Management Working Group of the Permanent Environmental Commission recently held a meeting in the United States. The U.S. representative, **Dr. Mary C. Landin**, was host of the meeting, which was held in Baltimore, Maryland, in conjunction with the International Workshop on Beneficial Uses of Dredged Material.

The annual meeting of the General Assembly of the Permanent International Commission met in Mestre, Italy, in May. Following are some items of business that may be of interest: ■ There are 24 active working groups. One new working group, **Technical and Economic Problems of Channel Icing**, was approved under PTC I. Two new working groups under PTC II were approved. Both subjects were proposed by members of the U.S. Section. Working Group Number 37, **Ice Navigation**, was proposed by **Dr. Orson Smith**, who now works with the U.S. Army

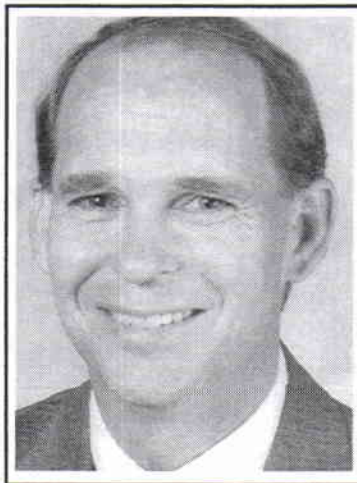
Cold Regions Research Laboratory. Working Group Number 38, **Advances in Maritime Intermodal Freight Transportation**, will be chaired by **H. John Vickerman**, a principal in Vickerman, Zachary, Miller TransSystems Corp., who drafted the terms of reference. ■ New International Vice-Presidents appointed at the meeting include **Mr. Arne Fuglum** (Norway) and **Mr. Andrea Ferrante** (Italy). ■ Chapters 1-4 of the *Technical Dictionary* have been translated into German, French, Dutch and English. The Spanish and Italian Sections are assisting with translations into those two languages. The goal is to publish the technical dictionary on a CD-ROM before the 29th Congress. ■ The names of the Chairman and Reporters-General for the 29th Navigation Congress were approved. Two members of the U.S. Section will serve as chairmen: **Mr. Charles Lehman** will chair Session I-3, Inland Navigation, a Safe Transport Mode, and **Dr. Robert Engler** will chair Session II-5, Evaluation of Port Environmental Management. **Mr. John Nichol** will be the Reporter-General of Session II-1, conflicts Between Commercial and Recreational Navigation. ■ **Mr. Pierre Savey** (French Section) reported on the one-day international conference on the use of geotextiles and geomembranes in river and maritime works that will be held on Tuesday, 7 October 1997, in Rheims, France. Speakers from 10 countries will present recent examples and experiences using new materials. The presentations will supplement the three PIANC working group reports that have been published. **Hollis Allen**, who is with the U.S. Army Engineer Waterways Experiment Station, will present a paper on bioengineering with geotextiles. ■ **LTG Henry J. Hatch, USA (Ret.)** was named an Honorary Vice-President in recognition of his service as an International Vice-President from 1993 to 1996. ■ A representative of the British Section suggested that PIANC seek a

commercial partnership with an international publisher to promote the sale of working group reports. ■ A new international membership directory for 1997-1998 will be published. ■ An international jury has been organized to select individual papers to be presented at the 29th Congress. A draft summary should reach the Secretariat by 1 January 1998. Those papers selected for presentation will be printed after the Congress.

Recently we have received two new newsletters which might interest you. ■ The National Shipyard Association has published the first issue of its newsletter, entitled **Newsline**. The organization, whose office is located in Arlington, Virginia, represents the commercial shipyards industry in the United States. For additional information, please contact Allen Walker at (703) 351-6734. ■ The first issue of the **Texas Ports & Waterways News** has been issued by the Texas A&M Center for Ports and Waterways at Galveston. For additional information contact John Basilotto at (409) 740-4883.

Thomas Ballentine, Secretary, U.S. Section, PIANC

**KURT J. NAGLE, PRESIDENT,
AMERICAN ASSOCIATION OF
PORT AUTHORITIES**



On July 1, 1997, Mr. Nagle was appointed to a four-year term as a member of the U. S. National Commission of the Permanent International Association of Navigation Congresses (PIANC). Mr. Nagle joined the AAPA in

1985 as Director of Membership Services, served as Vice President of Membership Services and Administration and Senior Vice President prior to being named President in September 1995. Earlier in his career he was Director of International Trade for the National Coal Association and worked in the Office of International Economic Research at the U. S. Department of Commerce. He holds M.S. and B.S. degrees in Economics from George Mason University in Virginia.

**ROBERT D. NICHOL,
PRESIDENT, MOFFATT AND
NICHOL ENGINEERS**



On July 1, 1997, Mr. Nichol was appointed to a four-year term as a member of the U. S. National Commission of P I A N C . Since 1975, Mr. Nichol has been President of

Moffatt and Nichol Engineers and been responsible for the projects and operations of the company. The 200 person firm, which has numerous offices around the United States, has provided consulting services throughout the country and overseas for the U.S. Navy, U. S. Army, U. S. Maritime Administration, and the Department of State, as well as for many local governmental agencies and private clients. Mr. Nichol contributes his engineering experience and management skills to many waterfront, industrial, commercial, military and public works projects in the U. S. and abroad. The home office of the firm is located in Long Beach, California.

U.S. SECTION, PIANC RECOGNIZES ITS CORPORATE MEMBERS

The U.S. Section of PIANC sincerely appreciates the annual membership subscriptions received from our Corporate Members who generously support the important work of developing and exchanging technical information on navigation and port infrastructure and related safety, economic and environmental matters.

Beginning with this issue of the newsletter of the U.S. Section of PIANC, a list of Corporate Members will be published once a year. In each of the other issues of the newsletter, a short profile highlighting one or two private sector corporate members will be published. The articles shall not exceed 250 words in length and may include a corporate logo.

Corporate Members that are not agencies of the U.S. government that are interested in having a profile of their firm published may submit an article to the Office of the U.S. Section of PIANC. Articles, which will be logged in by the date they are received, will be printed in chronological order of their receipt. Please include the name and telephone number of a point of contact at the firm.

Corporate Members

American Association of Port Authorities
American Commercial Barge Line Co.
Black & Veatch
CH2M Hill
Diversified Expositions
Dredging Contractors of America
Foster Wheeler Environmental Corp.
Great Lakes Dredge & Dock Co.
Hartman Consulting Corporation
INCA Engineers, Inc.

Kirby Marine Transportation Corp.
Louisiana State University & A&M College
Maryland Environmental Service
Memphis State University
Moffatt & Nichol Engineers
National Waterways Conference, Inc.
Naval Facilities Engineering Service Center
Ocean University
Office of Coast Survey
Panama Canal Commission
Port Authority of NY & NJ
Port of Corpus Christi
Port of Houston Authority
Port of Long Beach
Port of Oakland
Port of Redwood City
Port of Seattle
Purdue University Library
Reid Middleton, Inc.
Society of the Plastics Industry
Texas Engr Extension Service
Trellex Morse
UPC/Biblioteca Rector
Texas A&M University
US Army Corps of Engineers
WATERCOM

BUFFALO DISTRICT USES INNOVATIVE APPROACH TO CONTAMINATED SEDIMENTS PROBLEM

Contaminated sediments in the Great Lakes are a long-standing problem with major impacts on dredging and water commerce. Many rivers and harbors in the region are not dredged for long periods of time due to the lack of disposal areas to contain contaminated sediments. In conjunction with the USEPA, OEPA and the local citizens, the Buffalo District of the Corps of Engineers is working toward a solution to this problem for the Ashtabula River in Ohio.

As part of this effort, Buffalo District has conducted sampling to more clearly define the location and extent of contamination in the river sediments. Critical to the project is the definition of areas of the river where polychlorinated biphenyl (PCB) levels in the sediment exceed 50 mg/kg. Sediments with this level of contamination are subject to regulation under the Toxic Substances Control Act (TSCA), which mandates specific requirements for handling and disposal of the dredged material. The requirements add significant costs to the project and can reduce the economic viability of removing and disposing of the sediments.

TSCA, as compared with previous estimates, and will result in significant cost savings.

In these days of complex environmental problems and limited resources, innovative ideas are necessary to complete dredging projects. Buffalo District's new approach, in coordination with partners in Ashtabula, will help to ensure that the recommended dredging plan is protective of the environment and cost effective.

P.O.C. Dave Conboy, USACED, Buffalo, 716-879-4439



Buffalo District Corps of Engineers and USEPA Personnel Conducting Sediment Sampling on the Ashtabula River in July, 1995."

To more accurately determine the location and volume of sediments exceeding the TSCA threshold, Buffalo District, in coordination with the Corps of Engineers Waterways Experiment Station, used the Department of Defense's groundwater modeling system to model the contamination in the river sediments based on our sampling results. This innovative approach resulted in an almost 50 percent reduction in the volume of sediments considered regulated under

NATIONAL PAPERS FOR THE 29TH INTERNATIONAL NAVIGATION CONGRESS

Following a long tradition, the Secretariat of the Permanent International Association of Navigation Congresses (PIANC) and a host member nation sponsor a major congress every four years. The **29th International Navigation Congress** will be held in The

Hague, The Netherlands, on September 6-11, 1998.

The United States Section and its members will present eight national papers at the 29th Congress. Dr. Anatoly B. Hochstein, Director of the LSU Ports and Waterways Institute and a Commissioner of the U.S. Section, is in charge of organizing the U.S. presentations. The papers are grouped into two categories: Section I - Inland Waterways and Ports for Commercial and Pleasure Navigation and Section II - Maritime Ports and Seaways for Commercial, Fishery and Pleasure Navigation.

Following are the titles, authors and reviewers of the papers submitted by the U.S. Section.

Section I - Inland Waterways and Ports

Subject 1 - The Role of Public and Private Operators in Developing Inland Waterways

No National Paper submitted.

Subject 2 - Reducing Terminal Costs in Inland Navigation Ports

Efficiency and Terminal Costs in Inland Public River Terminals

Dr. Larry G. Bray, Robert L. Cockrel and Donald C. McCrory

Reviewed By: James R. McCarville and Ron Coles

Subject 3 - Inland Navigation, a Safe Transportation Mode

Inland Navigation, A Safe Transportation Mode

Dr. Larry L. Daggett

Reviewed By: Charles F. Lehman and Margie Hegy

Subject 4 - Water Supply of Navigation Canals

No National Paper submitted.

Subject 5 - Inland Transportation and Sustainable Development - Environmentally Sustainable Navigation, Focusing on Habitat Creation, Protection and Restoration

Inland Navigation and Sustainable Development

Major General Robert B. Flowers, Claude N. Strauser and David Busse

Reviewed By: Carl H. Gaum and Dr. Mary Landin

Section II - Maritime Ports and Seaways

Subject 1 - Risk Assessment in Port Planning and Operation Including Port Approaches

Waterway Risk Assessment Using System Simulation and Expert Judgement

Dr. John R. Harrald, Dr. Thomas A. Mazzuchi, Rene Van Dorp, Jason Merrick, John Spahn And Dr. Martha R. Grabowski

Reviewed By: Dr. Henry S. Marcus and Stan Norman

Subject 2 - Prevention of Conflicts Between Commercial and Recreational Traffic, Both Inland Waterways and at Sea

Resolving Conflicts Between Commercial and Recreational Vessels on U. S. Waterways

Michael A Kraman, Commander John J. Davin, Jr., Captain Manfred H. D. Asclemeier, William Elder and Paul Donheffner

Reviewed By: Richard B. Dornhelm and Nicholas Pansic

Subject 3 - The Design and Maintenance of Marine Works with Particular Reference to the Problem of the Degradation of Concrete Structures

Durability and Maintenance of Concrete Port Structures - American Experience

Dr. Valery M. Buslov

Reviewed By: John F. Aidoo and Robert Wallace

Subject 4 - New Trends in Port Planning and Development

Planning for Intermodal Transportation As An Integral Part of Future Port Planning

Robert T. Beard, Thomas A Ward and Dr. Asaf Ashar

Reviewed By: Leonard Sugin, Patrick Gallwey and Paul W. Chilcote

Subject 5 - Economic Evaluation of Port Environmental Management

Beneficial Uses of Dredged Material - Agonies and Ecstasies of Implementation

Frank L. Hamons

Reviewed By: Dr. Jack Fowler and Gerald E. Greener

The U.S. Section appreciates the contributions made by the authors and reviewers of the papers and sincerely thanks Dr. Hochstein for his work in organizing the project. Special thanks go to Ms. Sylvia J. Binkowski, Office Manager at the Louisiana State University National Ports and Waterways Institute, for the assistance she provided in skillfully managing the project. As a result of the combined efforts of everyone involved, the U.S. national papers were sent to the Secretariat well ahead of the deadline.

INDIVIDUAL PAPERS FOR THE 29TH INTERNATIONAL NAVIGATION CONGRESS

It's not too late to submit an individual paper for the 29th International Navigation Congress to be held in The Netherlands on 6-11 September 1998. Send a summary of your paper directly to the Secretariat in Brussels by January 1, 1998. Authors whose papers are selected will be notified by the International Editing Committee. Papers will not be printed prior to the Congress. To date, only one individual paper, entitled *Port of Oakland Inner Waterway Design Considerations*, has been submitted by R. Andrews, C. Holland and V. Shepsis.

ENGLER NOMINATED FOR GESAMP

Dr. Robert M. Engler was recently nominated for membership to the Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) by Dr. Manfred K. Nauke, International Maritime Organization (IMO), Director, Office of the London Convention, 1972, and Technical Secretary of GESAMP. A multidisciplinary body of independent experts, the GESAMP provides advice to sponsoring organizations on pollution and other problems that face marine and coastal environments. The group has direct influence on the development of international law and policy concerning marine pollution issues. Dr. Engler, who is with the U.S. Army Corps of Engineers' Waterways Experiment Station, was selected for his technical expertise as a sediment chemist and his international reputation in dealing with marine systems. The GESAMP holds annual meetings with most of the work conducted during the intercessional period by Working Groups. Sponsoring organizations of the

continued on page 12

ACTIVITIES OF THE U.S. SECTION, PIANC



PANEL SPONSORED BY U.S. SECTION OF PIANC AT ANNUAL MEETING OF THE INLAND RIVERS, PORTS & TERMINALS, INC. April 10, 1997. The PIANC panel, which was organized by Donald G. Waldon, U.S. Section National Commissioner for the Central Region, addressed the subject of Emerging Issues Facing Inland Ports. From left: Mr. Glen Cheatthem, President of IRPT; Dr. Eric Kalivoda, a member of the Southern Governors' Association Task Force on Transportation; Doris J. Bautch, Chief, Division of Ports, U.S. Maritime Administration; and Mr. Waldon. Other member of the PIANC panel not shown was Dr. Martin Lipinski.



PIC '97. Major General Russell L. Fuhrman thanking retiring U.S. National Commissioner, Charles F. Connors, along with his wife, Evelyn, for eight years of service to the association.