



# THE PIANC NEWSLETTER

Permanent International Association of Navigation Congresses

Spring/Summer 1995

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## PORTS '95-- A Great Success!

It appears to be the beginning of a tradition. After only two joint ventures with the American Society of Civil Engineers, PORTS '95 in Tampa, Florida, exceeded even our highest expectations! With over 700 people in attendance, twice the number at PORTS '91 in Seattle, this was the most successful PORTS conference yet.

The PORTS conference exhibit is evolving into a "trade show." This year, we had over 50 exhibits in a "sold out" conference hall. The four concurrent panel sessions quickly expanded to five concurrent sessions, as responses to the "call for papers" kept arriving. The biggest complaint was that you could only

choose one. Nearly every panel session had Standing Room Only.

We must recognize the excellent facilities of the Tampa Convention Center, located on Tampa Bay-- they were spacious and beautifully decorated, with exceptional amenities. The location was also convenient for boarding the **Lady Anderson** for the boat tour of Tampa Bay-- just a few feet from the conference meeting rooms. The tour, sponsored by the Tampa Bay Port Authority, provided a unique view of the city and its waterfront. There was also an excellent reception and tour of the then soon-to-be-opened Tampa Aquarium.

We would also like to express our gratitude to the rest of our PORTS '95 sponsors and friends for their support.

There is little point in going into the details of the conference technical presentations if you missed PORTS '95. You can, however, still get a copy of the proceedings by sending a check for \$133.00 to:

ASCE Publication Fulfillment Dept.  
345 East 47th St.  
New York, NY 10017

And, yes there will be a PORTS '98. It's planned for Long Beach, California.

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## U.S. Section, PIANC Hosts PIC '95

*by DuWayne A. Koch, Secretary  
U.S. Section, PIANC*

The U.S. Section, PIANC hosted the General Assembly of the Permanent International Commission (PIC) in New Orleans from 21-26 May 1995. Over 180 National Commissioners and their spouses responded to our invitation for PIC '95. Here are the highlights of our meeting:

On Monday, members of the Permanent Committee on Development and Cooperation (PCDC), as well as the PIANC International Executive Committee, met in the World Trade Center Building. Registration was held at the Westin Hotel. In the evening, the value and personal satisfaction of PIANC membership were clearly demonstrated as three former Chiefs of Engineers-- Lieutenant Generals Hatch, Heiberg, and Morris--hosted a Welcome Reception in the World Trade Center.

On Tuesday, delegates boarded the Motor Vessel Mississippi at the Bienville Street Wharf for a technical tour of facilities along the Mississippi River. During the trip, Mr. Pat Galway, Director of Planning and Engineering for the Port of New Orleans, talked about port facilities and sites along the river. He was assisted by Mr. Herb Haar, Special Assistant to the President of the Port of New Orleans, and a

well-known, former Commissioner of the U.S. Section, PIANC.

Technical talks presented during the day included: Mississippi River Flood of '93 by Mr. Anson Eickhorst, U.S. Army Engineer District, St. Louis; Inner Harbor Navigation Canal Lock Studies by Mr. Joe Dicharry, U.S. Army Engineer District, New Orleans; Lower Mississippi River Ship Channel by Mr. Fred Schilling, U.S. Army Engineer District, New Orleans; and New Developments in Structural Composites for Marine and Waterfront Civil Engineering by Mr. Douglas S. Barno, Composites Institute.

On Wednesday, the General Assembly announced Mr. Kiyoyasu Mikanagi, Japan Section, PIANC, as the new International Vice President, succeeding Mr. Pierre Savey, France. Mr. Dik Tromp, the Netherlands, was appointed Chairman of the Permanent Technical Committee for Inland Navigation, succeeding Mr. Cees van der Burgt, who will retire at the end of the year. Mr. Edoardo Almagia, Italy, was appointed Chairman of the Finance Committee.



*MV Mississippi*

Photo: Harry Cook

Chairman of the Finance Committee. Mr. Lyle C. McLaren, Jr., Treasurer, United States, was appointed Vice-Chairman of the Finance Committee, and Mr. Charles Van Begin, Executive Director of PIANC for two years, was appointed Secretary General.

During the afternoon session, Mr. R. Wijnstra, the Netherlands, and Mr. D.E. Reeve, United Kingdom, received the Gustave Willems Award.

On Thursday, we held an informal meeting of National Secretaries. Founded and chaired by Mr. Ian Gillespie and Mr. John Sargent, United Kingdom, this has become a valuable feature where we learn what other national sections are doing. It also gives us a chance to discuss new initiatives we would like to implement within PIANC. For example, this year, Mr. Tom Ballentine, former Executive Secretary, U.S. Section, PIANC introduced the idea of putting PIANC information on the Internet worldwide web. (Look for an article on this subject in the next newsletter.)

After touring the New Orleans Garden District and Longvue Plantation, we were greeted by Mr. R. J. Clements, Executive Director of the Port of South Louisiana, and Ms. Glenda Jeansonne, Assistant Port Director for Business Development. The port handles over 200 million tons of cargo annually, more than any port in



*PIC Meeting, Wednesday, 24 May. DuWayne Koch, Secretary, U.S. Section, MG Stanley G. Genega, President, U.S. Section, and LTG Arthur E. Williams, Chief of Engineers*



*PIC Meeting, Robert DePaepe, President, PIANC International Claire DeCraen, Administrative Officer, PIANC, International Charles Van Begin, Secy Gen, PIANC International*

Photos: Harry Cook



*International Debate Speakers (L to R)  
Dwayne Lee, Constance Hunt, Frederick Kopfler*

Photo: Harry Cook

we were treated to an evening of Cajun food and music, a first for most of our international visitors-- particularly the fried alligator.

Friday was the day of the "International Debate." The debaters were Ms. Constance Hunt, World Wildlife Fund; Mr. Dwayne Lee, Port of Los Angeles; Dr. Frederick Kopfler, Gulf of Mexico Program Office; and Dr. Craig Vogt, Environmental Protection Agency. Moderated by Dr. Robert Engler, Chairman of the PIANC Permanent Committee on the Environment, it was an exceptional opportunity for the U.S. environmental community to make its views heard before an international audience.

PIANC International hosted the Farewell Reception and Banquet on Friday evening in the Grand Ballroom of the Westin Hotel. We were served a wonderful dinner and entertained by Wanda Rowan & A Taste of New Orleans band.

All too soon, it was time to say good-bye to our many friends from around the world until May '96 when we meet in South Africa.

PIC '95 could not have been accomplished without the support of the many friends of PIANC-- especially those at the **World Trade Center of New Orleans** and the **Port of South Louisiana**. Eugene Schreiber, Managing Director of the World Trade Center, and his exceptional staff deserve a special thank you. We would also like to acknowledge Barbara Montgomery, Catering Sales Manager, and her wonderful staff at the Plimsoll Club for their outstanding food services.



*LTG Arthur E. Williams, Chief of Engineers, MG Stanley G. Genega, Director of Civil Works, Dr. John Zirschky, Acting Assistant Secretary of the Army (Civil Works)*



*MV Mississippi*



*Mr. D.E. Reeve, United Kingdom, Mr. R. Wijnstra, The Netherlands  
Winners, the Gustave Willems Award for 1995*

Photos: Harry N. Cook



*International Debate*



*Left to Right: LTG H.J. Hatch, U.S. Army (Ret.), LTG E.R. Heiberg, III  
U.S. Army (Ret.), LTG Arthur E. Williams, Chief of Engineers,  
LTG J.W. Morris, U.S. Army (Ret.)*



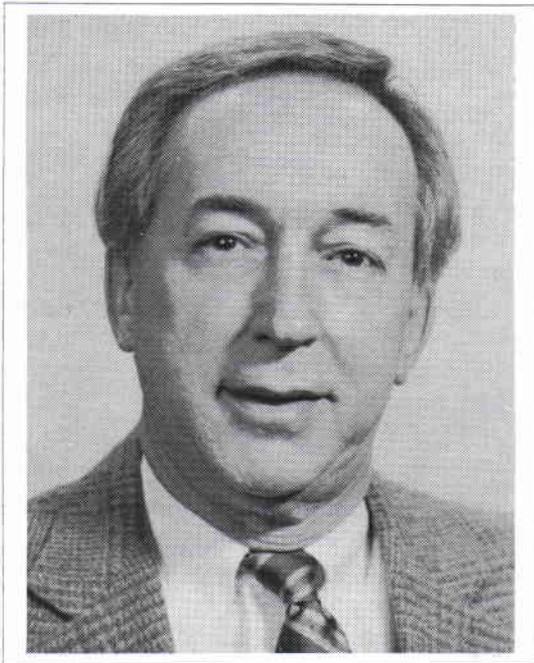
*Anson Eickhorst, U.S. Section, Speaking on MV Mississippi  
with Jean Houard, interpreter*

Photos: Harry N. Cook

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## **Waldon Elected New U.S. Section Commissioner, Central Region**

Congratulations to Mr. Donald G. Waldon, the newly elected U.S. Section Commissioner of PIANC, Central Region! Mr. Waldon will be replacing Dr. G. Edward Dickey, Acting Chief, Planning Division, Civil Works Directorate, Office of the Chief of Engineers, who served two four-year terms as a Commissioner of PIANC.



*Donald G. Waldon*  
*New Commissioner, Central Region*  
Photo provided by Tennessee-Tombigbee

Commissioner Waldon has a long history of chairing other regional and national organizations, including the Water Resources Congress. He is presently the Administrator of the Tennessee-Tombigbee Waterway Development Authority, a four-state agency which promotes the development of the waterway and its economic and trade potential for the states of Mississippi, Alabama, Florida, Kentucky and Tennessee. He has also served as the Deputy

Administrator for the Tennessee-Tombigbee Waterway Development Authority, Deputy Assistant Secretary for the U.S. Department of the Interior, and Budget Examiner in the Office of Management and Budget of the Executive Office of the President.

A graduate of Mississippi State University (1961) and the Economic Development Institute of the University of Oklahoma (1994), Commissioner Waldon attended the Massachusetts Institute of Technology and Texas A&M for graduate work. The University of Oklahoma awarded him the Robert B. Cassell Award for his thesis, titled "Solving a Developer's Dilemma: A State-Operated Wetlands Mitigation Bank."

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## **Election of Eastern Region Vice-President of PIANC**

The nomination ballots have gone out to the Eastern Region membership of PIANC for the election to be held in July. If you live in the Eastern Region of the U.S., be on the lookout for your ballot! Results will be published in our fall newsletter.

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## **PTC I Approves New Working Group**

### **Terms of Reference** Field of Study

When new inland waterway infrastructure works are constructed, or existing ones are modernized, funding has to be sought and the financial viability and profitability of the works must be demonstrated. Economic calculations must take into account the fact that river transport is only part of the transport chain, since it cannot generally deliver goods door-to-door and must therefore be complemented by rail or road transport at each end.

Economic calculations must also take into account the fact that inland waterways are not simply a form of transport infrastructure but may also have a role in the development of tourism, industry, agriculture, and urban centers by helping to improve water management and creating areas which can be used by other activities besides transport.

Inland waterways can thus be of interest to various different partners and may be based upon complex funding packages.

The economic analysis has to take into account the world economic climate and must include a comparative analysis of cost-benefit studies used by other transport modes.

The economic analysis can be divided into a number of stages, namely:

1. Initial assumptions on which the economic calculation is based (future growth in trade, interest, inflation and discounting rates).
2. Analysis of movement of goods by all transport modes where such transport could be affected by the stretch of waterway concerned, including medium- and even long-term changes which might take place.
3. Research to determine prices charged for various transport modes and selection criteria used by shipping agents.
4. Estimate of traffic likely to use the waterway and expected change with time.
5. Calculation of investment and operating costs for the waterway.
6. Assessment of the economic benefits of the waterway if used for transporting goods and other benefits generated by the waterway (tourism, agriculture, industry, water management).
7. Estimate of the economic benefits provided by the waterway (investment pay-back time, internal rate of return, etc.) And comparison between the benefits enjoyed by the various

organizations and agencies involved (regional economy in relation to the waterway, waterway owner and manager, transport companies, shipping agents).

#### Areas of Research of Working Group

The first task of the working group will be to examine the present terms of reference and suggest any changes which it feels should be made.

The group will not be expected to draw up a complete guide of inland waterway economic studies straight away, but rather to start by listing and comparing the methods used in different countries and to use this information as a basis for stages 6 and 7 described above.

The group will also be asked to make suggestions for further work following completion of the economic studies on inland waterways.

Members interested in being considered for the position of principal U.S. representative to this working group are invited to submit a curriculum vitae showing technical expertise in the subject to:

Mr. Thomas M. Ballentine  
Office of the U.S. Section, PIANC  
Casey Building,  
7701 Telegraph Road,  
Alexandria, VA 22315-3868

or

Mr. Anson Eickhorst  
Principal U.S. Representative to PTC I  
U.S. Army Engineer District, St. Louis  
1222 Spruce Street  
St. Louis, MO 63103-2833.

The deadline for nominations is August 15, 1995. The first meeting of the working group will be held in early October.

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*Journal of Waterway, Port, Coastal and Ocean Engineering*

**For more information or to order, please contact Marketing Services at ASCE, 345 East 47th Street, New York, NY 10017-2398; phone: 800/548-2723 (ASCE); fax: 202/705-8128; Internet e-mail: [marketing@ny.asce.org](mailto:marketing@ny.asce.org).**

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## Working Group on Future Congresses Prepares Report

The PIANC Working Group on Future Congresses was set up after the Seville Congress last year to study what changes, if any, should be made in the way future Congresses operate. John Sargent (UK) is the chairman of the working group, and Thorndike Saville, Jr., is the United States representative.

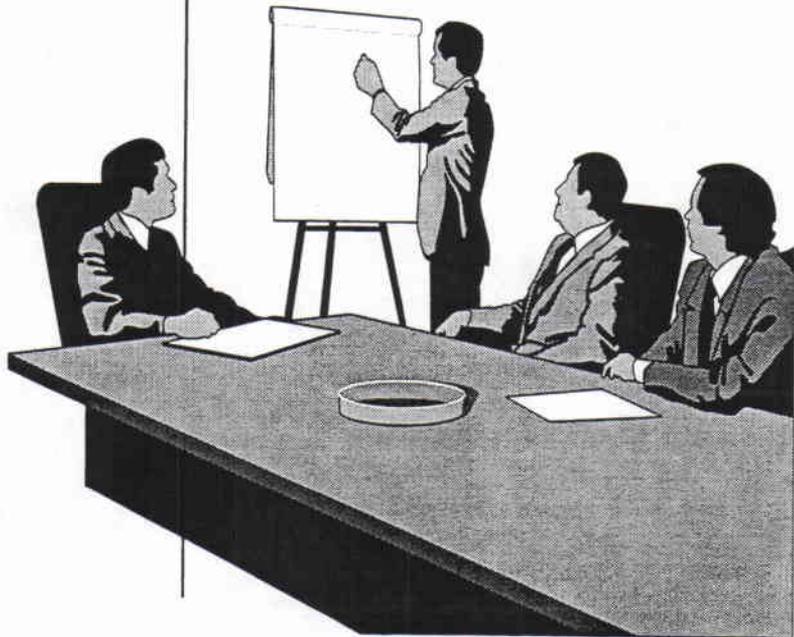
The working group's report will be presented at the October 1995 meeting of the PIANC Council. While some changes are likely, the following recommendations will probably be confirmed:

- At least one author of each national paper will be expected to attend the Congress and make a brief presentation, either to summarize the salient points of the paper or to update it.
- The Reporter-General will have a question and answer period to stimulate discussion after presentations.
- Fewer people will sit on the stage--most of the honorary positions (e.g., vice chairmen) will be eliminated.
- Sessions, days, and general times at which an author will be speaking will be confirmed in advance, with a full schedule of speakers issued at registration and updated daily.
- Conclusions formed by an editing committee chaired by the Reporter-General

will be posted on a bulletin board the morning after the session.

- Written comments will be given to the Reporter-General for consideration; final conclusions will be presented at a brief closing session.
- Individual reports (started at the Seville Congress) will continue to be presented in the regular sessions, after discussion of the main subject has been completed. Individual papers will be scheduled in advance, allowing 15 minutes for each.
- Special sessions of each of the PTCs will be encouraged, consisting of two concurrent sessions with environmental papers interwoven.
- Technical tours will continue, but long bus trips and lunches will be discouraged.

If you have any comments or suggestions, please contact John Sargent (c/o PIANC HQ, Brussels) or Thorndike Saville, Jr., (5601 Albia Road, Bethesda, Maryland 20816-3304).



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## Missouri River Water Control Equity Act

On March 6, 1995, Senator Max Baucus (D-MT) introduced the "Missouri River Water Control Equity Act" (S.525) before the Senate Committee on Environment and Public Works. The purpose of this bill is to ensure:

- ❑ "...increased recreation and maximum economic benefits from the control of the water in the Missouri River system, and for other purposes."
- ❑ "...an equitable portion of the economic benefits from the operation of the Missouri River system" for the upper basin States (Montana, North Dakota, South Dakota, and Wyoming).

These goals will be accomplished through further development of the recreation industry along the Missouri River, and a phaseout of navigation on the lower river. Increasing the upper basin reservoirs' permanent pools from 18 million to 44 million acre-feet of water should encourage more recreation development. Specifically, the permanent pool on Fort Peck Lake (Montana) will increase from 4.2 to 12 million acre-feet. Use of permanent pool water will only be permitted for emergency flood control, hydropower, or water supply.

Navigation on the lower Missouri River will be phased out over a nine-year period. Once this phaseout is completed, no program, project, or activity involving navigation on the Missouri River will be authorized. The bill also calls for the implementation of a streambank and reservoir erosion mitigation plan, with a \$20 million annual budget.

(Source: USDA Agricultural Marketing Service)

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## The Waterways of Ireland

by Pierce T. Pigott

*The following is a summary of a paper presented by Pierce T. Pigott, Director of Engineering Services, Office of Public Works, at the annual conference of the Institute of Engineers in Galway, Ireland, September 1994.*

While Ireland is well endowed with lakes and rivers, most of them are not easily navigable in their natural state. Over the centuries, various engineering solutions have been applied to improve navigation. In recent years, the value of the country's inland waterways, including canals, has been recognized as a significant tourist attraction.

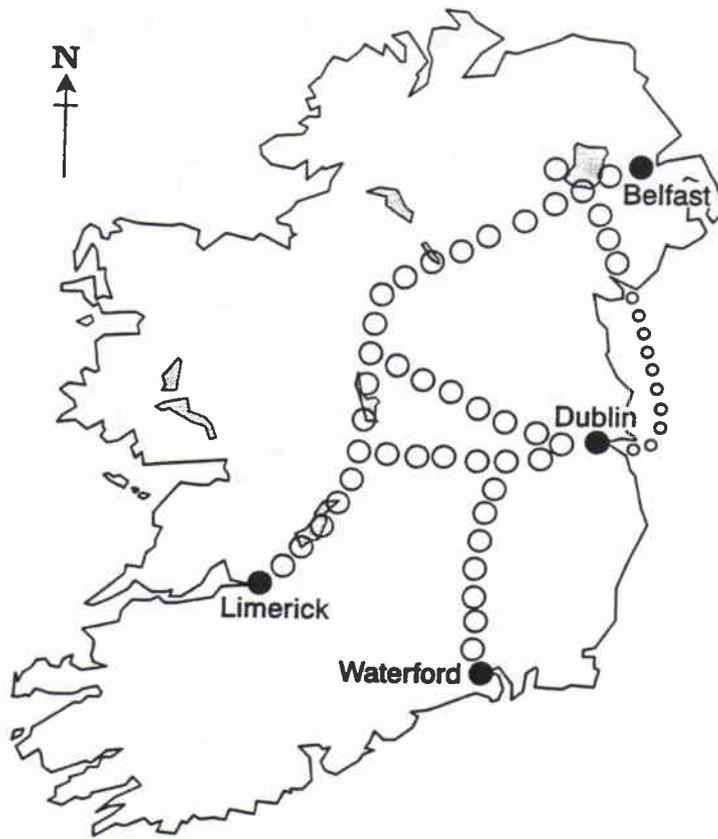
At present, the operational network in the Republic alone is about 750 kilometers, excluding estuarine waters. All of it is under the control of the Office of Public Works (Fig. 1, see next page).

The waterways:

- Are predominantly rural.
- Pass through large lakes.
- Have no commercial traffic.
- Are relatively unpolluted.
- Have few urban destinations.
- Offer alternate means of touring Ireland.
- Provide significant corridors for wildlife and nature conservation.

The popularity of the inland waterways has grown dramatically since 1970. There are now close to 2,000 vessels in the system including more than 500 hire cruisers and barges.

The growth in tourism can be gauged from the increase in lock passages through the Shannon locks. This has increased from 18,000 in 1970 to 42,000 in 1980 and nearing 70,000 in 1994.



**Original Waterways Strategic Links**

*Figure 1*

Government investments in recent years in managing and developing the waterways have increased proportionately with increased usage. The total expenditure on waterways since 1986 is more than 60 million pounds. The table below shows the pattern of expenditure in current terms since 1986:

The Shannon is the largest navigable waterway on this island. Engineering works on the Shannon involve extensive river construction and working in very poor soil conditions. In general, robust precast or in situ concrete structures founded on piles are used and particular

Year	Capital £m	Non-Capital £m	Total £m
1986	--	1.3	1.3
1987	--	2.3	2.3
1988	--	2.5	2.5
1989	2.0	3.0	5.0
1990	2.5	3.6	6.1
1991	9.4	3.3	12.7
1992	17.2	3.4	20.6
1993	7.1	3.9	11.0
1994 [E]	5.6	4.1	9.7

attention is paid to high-quality finishes. Durability is of paramount importance for the Office of Public Works in waterways construction, as is safety.

Further economic development in Ireland hinges on exploiting the indigenous resources of the country. The inland waterways are a significant resource and clearly the benefits from their restoration and development would help to increase tourism revenue. To fully exploit this resource, it is essential that local enterprises develop an aggressive approach to providing services for users of the waterways. This means providing suitable restaurants, public houses, accommodations as well as play facilities for children, as needed.

The investment in waterways has been substantial, but to realize the benefit in tourism terms, extensive marketing is also essential. Local communities and organizations can play an important role in supporting the development of the system. The Office of Public Works hopes that further cooperation with the authorities in northern Ireland, similar to that which was obtained for the restoration of the Shannon-Erne Waterway, will lead to more cross-border linkages.

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## Newsletter Survey Results

Last fall, we did a survey of PIANC Newsletter readers. We received a total of 48 responses (12 percent) from the 400 copies we mailed out. Of those who responded, 2 read 25 percent of the newsletter, 8 read 50 percent, 15 read 75 percent and 18 read 100 percent.

Here are the top ten articles in that issue by rank:

- ☛ Report on Activities of Commissions, Committees, and Technical Work Groups
- ☛ PIANC Moves

- ☛ Activities
- ☛ Differential Global Partitioning
- ☛ Wow!!! 144 Speakers/36 Panels
- ☛ Do You Believe That?
- ☛ Hammer Award
- ☛ Call for Papers-- a Special Edition
- ☛ US Dredgers Go International
- ☛ 1,320-TEU FastShip

The PIANC Newsletter staff would like to thank all the respondents who took the time to answer our survey questionnaire.

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## Canadians Plan for Changes in Grain Transportation Subsidies

The Canadian government has indicated that their Uruguay Round commitment to cut the volume of subsidized exports will result in major changes in the Western Grain Transportation Act (WGTA). The Act subsidizes the costs of shipping most export grains and oilseeds in Canada. The WGTA has existed in one form or another for over 100 years and currently pays part of the rail shipping costs for prairie farmers to ship to the ports of Vancouver (export grains only), Churchill (all grains), and Thunder Bay (all grains).

Originally, the WGTA subsidy, also known as the "crow payment," was intended to assist



in the economic development of the prairie provinces of Manitoba, Saskatchewan, and Alberta. However, the current plan for the elimination of the crow payment could have a major impact on western Canadian grain production and trade. Without the crow payment, some Canadian grain exporters may no longer have the incentive to use Canadian railroads and ports. They may find the United States a more attractive market for their crops.

According to the U.S. Embassy in Ottawa, Transportation Minister Young has made it clear that he will no longer include the WGTA in his department's budget, although Agricultural Minister Goodale has sought to avoid an abrupt termination of support to farmers. The Chretien Administration is devising a transition plan to minimize the downside effects of eliminating the crow payments.

(Source: USDA Agricultural Marketing Service)

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### **Contaminants Database Program Simplifies Calculations**

Chemical contaminants released into the environment often enter soils, sediments and surface waters. Later, they may be bioaccumulated by exposed organisms. Before dredging can take place, public law requires that we evaluate rivers and harbors for these ecological effects.

Determining whether the dredged material is suitable for open water disposal is not easy. Contaminants and accumulation databases were created to simplify this process by compiling data on contaminated sediments and empirically measured accumulation factors. They have now been combined into a single contaminants database to eliminate duplication and provide a uniform platform

for sharing many of the same modules and databases.

The contaminants database program is accessible on-line via the Contaminants Bulletin Board System (BBS) by dialing (601) 634-4380 or (601) 634-4665 using a microcomputer and modem. There is no charge to access the BBS other than the long-distance telephone call. The contaminants database program can also be installed on a microcomputer in a stand-alone mode. For more information, please consult:

Lutz, C.H., and McFarland, V.A. 1994. "The Contaminants Bulletin Board System -- A Database of Contaminated Sediment Information," **Environmental Effects of Dredging**, Vol D-94-2, US Army Waterways Experiment Station, Vicksburg, MS.

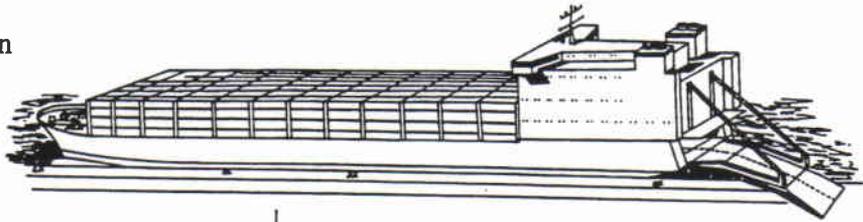
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### **Report Establishes National Dredging Policy**

On December 29, 1994, the U.S. Department of Transportation (DOT) released an interagency report establishing a national dredging policy which supports economic vitality, national security, and environmental protection concerns. The report, titled "The Dredging Process in the United States: An Action Plan for Improvement," responds to President Clinton's request that federal agencies double their efforts, without compromising environmental protection, to resolve the navigational and environmental concerns that have long stymied the dredging of the nation's ports.

According to the report, ports play an essential role in the U.S. economy, defense, and environment. In 1992, U.S. ports handled approximately 2.9 billion metric tons of cargo and supported over 15 million jobs. In addition, approximately 95 percent of all U.S. exports and imports pass through U.S.

ports. Foreign trade is an increasingly important element of the U.S. economy, currently accounting for over 20 percent of the nation's Gross Domestic Product (GDP).



Ports also play an important role in national security by handling essential cargoes for military operations. Channels to ports and berths must remain navigable and safe to ensure efficient and effective response to national and international emergencies. Also, many ports are located in or near some of the nation's most environmentally sensitive areas such as wetlands, estuaries, and associated fisheries, all of which have economic, recreational, and aesthetic value.

The report was prepared by the Interagency Working Group on the Dredging Process. The Action Plan is a commitment by all of the agencies to implement 18 recommendations for improving the existing dredging process within current resources and budget realities. The report's recommendations focus on problem areas that:

- (1) Strengthen the planning mechanisms for dredging and dredged material management
- (2) Enhance coordination and communication in the dredging project approval process
- (3) Address scientific uncertainties about dredged material; and (4) Identify consistent and efficient ways to fund dredging projects

The appendix summarizes the report's conclusions and recommendations.

The interagency working group was chaired by DOT's Maritime Administration. Besides the U.S. Army Corps of Engineers and the

U.S. Environmental Protection Agency, member agencies included:

- U.S. Department of the Interior's Fish and Wildlife Service
- U.S. Department of Commerce's National Marine Fisheries Service
- Office of Ocean and Coastal Resource Management

In addition, there were liaison representatives to the Group from the White House Office on Environmental Policy, the Office of Management and Budget, and the U.S. Navy, as well as from DOT's Office of the Secretary and the U.S. Coast Guard.

For further information, please contact Ms. Joan B. Yim (Working Group Chairwoman), Deputy Administrator (MAR-110), Maritime Administration, U.S. Department of Transportation, 400 Seventh Street, SW, Washington, DC 20590, (phone: (202) 366-1719). For copies of the report, please contact the MARAD Office of Congressional and Public Affairs at (202) 366-5807.

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### **MARAD Studies Growing Trade Within the NAFTA Region**

The U.S. Department of Transportation's Maritime Administration (MARAD) has completed the second and third phases of the program called **Maritime System of the Americas (MSA)**. The goal is to determine how water transportation can be utilized for the growing volumes of trade among North America, Central America, the Caribbean Sea, the Mississippi River and its navigable tributaries, and other rivers emptying into the

Gulf (i.e., the Alabama/Tennessee/Tombigbee waterway system), the Gulf Intracoastal Waterway, and to the north, the St. Lawrence and Great Lakes water systems.

The research was prompted by the trade potential these regions could realize as a result of the North American Free Trade Agreement (NAFTA). The Maritime Administration sponsored the research through its National Maritime Enhancement Institute research program, and Louisiana State University's National Ports and Waterways Institute conducted the analysis.

Phase I of the research program, completed in the Fall of 1993, examined the feasibility of competitive use for river/ocean vessels and river barges that could safely navigate both inland waterways and ocean waters. A comparative transportation cost estimate supported by a computer-based traffic allocation model was developed under Phase I to evaluate market segments which could be captured by these water transportation services.

Phases II and III of the research, recently completed, addressed the potential for conventional and short sea shipping as well as intermodal operations in the MSA region. While the study emphasis in Phases II and III was primarily focused on cargo movements between the United States and Mexico, the general findings can be applied to the entire NAFTA region.

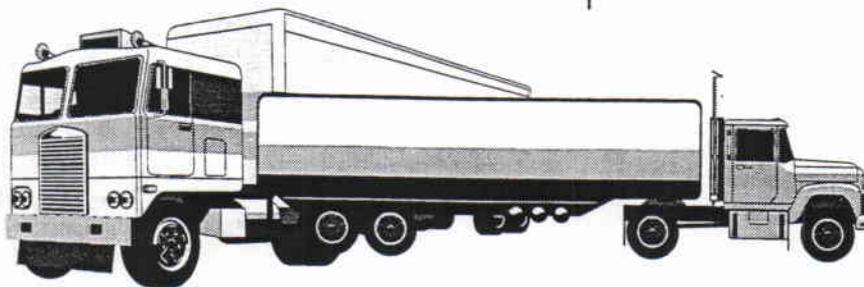
The latest findings indicate that for general cargo movements, land transportation,

especially trucking, is the dominant transportation system serving the region. During 1993, more than 1.4 million trailers and containers interchanged between the U.S. and Mexico. Water transportation was only able to capture about a three percent market share of this volume. However, trade growth within the NAFTA region presents an opportunity for increased use of the water mode in intermodal movements of general cargo using new types of services and trailer ferry operations.

Cost modeling suggests that the intermodal movement of domestic trailers has cost and logistics advantages over other transport options in serving the eastern/central regions of both the U.S. and Mexico. Assuming the introduction of new maritime services, increases in volumes for deep sea, coastal, and feeder operations should grow proportionately to overall increased rates of trade in the region.

Increased trailer ferry and coastal/short sea point-to-point services from the U.S. Gulf to Mexican Gulf ports should emerge as trade expands, providing a "waterbridge" to the national highway and railroad systems in North America. Additions of such new services might contribute to higher growth rates and an increase of water transportation's share of general cargo shipments.

For further information, please contact the U.S. Maritime Administration, Office of Intermodal Development, 400 7th St., S.W., Washington, D.C. 20590; (202) 366-4357; FAX: (202) 366-5522.



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## Port of New Orleans to Use Composite Marine Piling and Timber

The Port of New Orleans will soon sport composite marine piling and timber as part of the new, state-of-the-art shipping wharf being constructed there. The final phase of the \$90 million, multi-purpose Nashville Avenue Marine Terminal renovation will contain 190-foot lengths of composite marine piling and 1,700 linear feet of composite marine timber. This project is the centerpiece of the port's capital improvement program.

Rising timber prices and dwindling timber resources made the port turn to alternate materials. Composite marine piles and wale beams are stronger and more durable than timber. While they may cost more initially than their timber counterparts, cost-cycle analyses show that their durability and low-maintenance cost makes them more economical over the life of the facility.

Environmental benefits include:

- Elimination of disposal expense of creosoted timbers.
- Reduction in quantity of plastic disposed of in landfills.

Composite marine piling and timber will make up about one-third of a mile of the wharf at the Port of New Orleans. As additional wooden piles need replacing, more composite materials will be used.

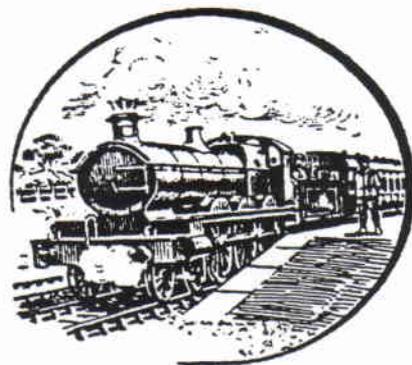
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## Chicago Short Lines Test Plastic Ties

Trains could someday run on ties made from recycled milk and water bottles. Instead of the traditional wood or concrete ties, OmniTRAX, a company which operates 11 short lines in the Chicago area, is testing ties made from recycled plastic. About 520 of these ties have been in service since December 1994.

The experimental ties cost about \$70 each or twice the price of wooden or concrete ties. However, they are easier to spike, and weigh only 85 pounds, about half the weight of conventional wooden ties. Made of high-density polyethylene, these blocks of plastic can:

- Reduce use of lumber.
- Lessen use of creosote.
- Create use for recycled plastic.
- Have a useful life of 75 years.



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## Department of Transportation Reorganizes

Last February, Secretary of Transportation Federico Pena proposed a comprehensive reorganization of the U.S. Department of Transportation (DOT) designed to streamline operations, increase efficiency, and upgrade service to customers. The reorganization would consolidate DOT's 10 agencies into 3 agencies: the Aviation Administration, the U.S. Coast Guard, and the Intermodal Transportation Administration.

The consolidation structure was chosen because it:

- Fosters intermodalism.
- Streamlines programs.
- Eliminates duplicative functions.
- Preserves customer linkages.
- Strengthens connections between safety programs, infrastructure funding and construction activities.
- Supports the flexible funding programs the department is developing.

Under this proposal, the functions currently carried out by the Federal Highway Administration, the Federal Railroad Administration, the Federal Transit Administration, the Maritime Administration, and the National Highway Traffic Safety Administration would be included in the new Intermodal Transportation Administration. The safety-related responsibilities of the Research and Special Programs Administration would also be incorporated in the Intermodal Transportation Administration.

The Aviation Administration would include the Federal Aviation Administration's safety, development, and regulatory functions as well as commercial space transportation and certain aviation functions now performed in the Office of the Secretary of Transportation.

The U.S. Coast Guard would support four main functions:

- maritime law enforcement,
- maritime safety,
- marine environmental protection, and
- national security (military).

Also proposed is the creation of a government corporation for the Air Traffic Control System, which is currently part of the Federal Aviation Administration. The St. Lawrence Seaway Corporation would be transferred out of DOT to become a free-standing, self-sustaining entity. A much smaller Office of the Secretary is also being considered.

For further information, please contact Mr. Richard Mintz, Director, Office of Public Affairs (A-1), U.S. Department of Transportation, 400 Seventh Street, SW, Washington, DC 20590, (202) 366-4570).



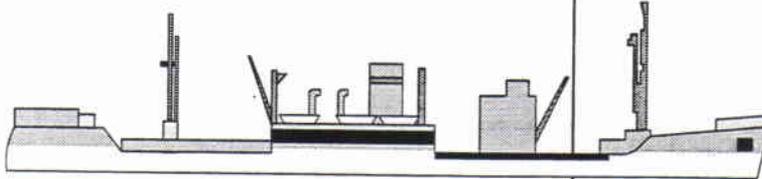
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## Mickey Kantor Named AAPA's Port Person of the Year

U.S. Trade Representative Mickey Kantor received the "Port Person of the Year" award at the American Association of Port Authorities' (AAPA) Spring Conference held at the Park Hyatt Hotel in Washington, D.C.

Congratulating Ambassador Kantor on his leadership and commitment to free and fair trade, AAPA Chairman Davis Helberg said: "The U.S. Trade Representative's work has resulted in significantly expanded global trading opportunities. The port community welcomes his determined approach toward formalizing productive global trade relationships. We also appreciate his efforts to integrate hemispheric trade policy."

Mr. Helberg continued, "In 1994, U.S. trade grew by an estimated \$130 billion, reaching a record \$1.8 trillion -- more than 27 percent of the U.S. Gross Domestic Product. With over 95 percent of U.S. overseas trade moving through U.S. ports, the successes of the U.S. Trade Representative are vital to ports, consumers, exporters and businesses."



Ambassador Kantor was sworn in as U.S. Trade Representative in January 1993. He has had a long history of public service. In the past two years, he has worked with President Clinton to conclude 71 agreements to open the world market for U.S. products and services, including:

- The North American Free Trade Agreement--largest free trade zone in the world.
- The Uruguay Round of the General Agreement on Tariffs and Trade--largest multilateral trade agreement in history.
- A major intellectual property agreement covering 80 percent of global shipbuilding.
- 12 bilateral investment treaties.
- An agreement with the nations of the Asia-Pacific region to eliminate barriers to trade.

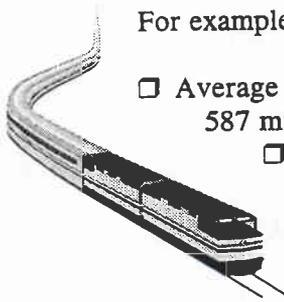
U.S. Transportation Secretary Federico Pena received the inaugural "Port Person of the Year" award last October during AAPA's Annual Convention in Philadelphia, PA.

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## U.S. Railroads Make Progress

The recently released **Railroad Facts** booklet from the Association of American Railroads contains interesting information about the Nation's Class I railroads. Although direct comparisons are not always possible because of changing criteria, we've taken a look at 1993 data relative to data from 1978.

Using a revenue threshold of \$50 million in 1978, there were 41 class I carriers compared to 12 carriers above the 1993 threshold of \$254 million. Although there was an average of one more car per train (67 versus 66), and 1.8 million more cars originated (23.4 versus 21.6 million) in 1978, tremendous advances were made in other categories.



For example:

- Average haul increased from 587 miles to 794 miles.
- Ton miles per employee hour increased from 800 to 2,280.
- Car capacity increased from 76.7 to 89.1 tons.
- Average load increased from 62.1 to 64.4 tons.

Also from 1978 to 1993, intermodal loadings increased from 3.2 million to 7.2 million.

### Grain Exports Decline in 1994

The USDA's Grain Inspection, Packers and Stockyards Administration (GIPSA) reported that 3.4 billion bushels of grain were inspected for export during 1994. This shows a decrease of 11 percent from GIPSA inspections during 1993.

Grain exports for 1994 were the lowest since 1986 and the fourth lowest in the last 20 years. The table shows grain exports by

major port areas for the years 1974 through 1994.

In 1994, Gulf of Mexico ports continued to handle a majority of grain exports, with Mississippi River ports shipping 1.9 billion bushels or 83 percent of all Gulf grain exports. Corn accounted for over half (57 percent) of all Mississippi River grain export inspections, followed by soybeans and wheat, 26 percent and 11 percent, respectively.

Texas Gulf handled almost all the remaining Gulf of Mexico grain exports, with wheat being the major grain shipped out of the Texas ports. In 1994, Pacific coast ports handled about 22 percent of all U.S. grain exports, with wheat accounting for nearly three-fourths Pacific grain exports. The Pacific Northwest ports of the Columbia River and the Puget Sound handled almost all Pacific grain exports. Other Pacific locations include the Sacramento River ports, which exported 12 million bushels of wheat in 1994.

(Based on information from the Agricultural Marketing Service)

Year	Lakes	Atlantic	Gulf	Pacific	Interior	Total
1986	193,821 (6)	168,031	1,057,791 (68)	547,777 (18)	52,328 (2)	3,017,748
1987	204,573 (5)	132,692 (3)	2,728,454 (70)	766,231 (20)	84,236 (2)	3,916,186
1988	203,528 (5)	138,885 (3)	2,913,381 (66)	1,030,162 (23)	113,364 (3)	4,399,320
1989	223,475 (5)	229,553 (5)	2,963,580 (65)	1,045,019 (23)	74,718 (2)	4,536,345
1990	255,943 (6)	164,296 (4)	2,668,598 (65)	945,499 (23)	52,779 (1)	4,087,115
1991	130,339 (3)	135,414 (4)	2,696,209 (70)	811,727 (21)	73,469 (2)	3,847,158
1992	190,995 (5)	106,002 (3)	2,898,676 (71)	779,179 (19)	106,676 (3)	4,081,528
1993	180,308 (5)	138,935 (4)	2,669,971 (69)	765,730 (2)	116,178 (3)	3,871,122
1994	214,054 (6)	60,407 (2)	2,294,238 (67)	742,150 (22)	138,541 (4)	3,449,390

( ) Represents percentage of total. Source: Grain Inspection, Packers, and Stockyards Administration

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## Publications

### ASCE Issues Metric Book to Help Engineers "Go SI"

To help practicing engineers, students and educators understand how to apply metric conversion in engineering work, the American Society of Civil Engineers has published a revised edition of **Metric Units in Engineering -- Going SI**.

The book examines how to solve standard engineering problems using the modernized metric system of units, Systeme International (SI). Authors Cornelius Wandmacher and A. Ivan Johnson also provides general guidelines for using SI and specific rules for using symbols and prefixes for the units.

A new bibliography details the most requested and currently available resources of metric reference material for specific engineering applications. Also new to the revised edition is an appendix with worked examples of metric calculations for topics such as dynamics, strength of materials, fluid mechanics, thermodynamics, electricity and magnetism. The appendix also chronicles the history and progress of metrication since the 1960 adoption of the SI in the General Conference on Weights and Measures.

**Metric Units in Engineering -- Going SI** is available from ASCE publications for \$28 (list price) and \$21 for ASCE members. To order, call ASCE Central at (800) 548-2723, FAX: (212) 705-7300, or write Marketing Services, ASCE, 345 East 47th Street, New York, New York 10017-2398. Ask for ISBN #0-7844-0070-9.

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## Members in the News

### Ravan Named Director of Alabama State Docks

Alabama Governor Bob James has selected Jack E. Ravan to be the new director of the Alabama States Docks Department in Mobile. Mr. Ravan was the director of the Alabama Department of Energy in Governor James' last administration.

Praising Mr. Ravan for his career experience, Governor James said, "Jack Ravan did a good job of serving the people during my first administration, and since that time, he has held responsible positions in the public and private sectors. He has all of the qualifications necessary by experience and by work ethic. I know he will be an asset to the State Docks and I welcome him to serve in this important role in my administration."

Mr. Ravan's past positions include:

- U.S. Commissioner for the Ohio River Basin Commission--managed and set policies for the Ohio River Basin Commission.
- Assistant Administrator for Water for the Environmental Protection Agency--managed Gulf of Mexico program.
- President and chief operating officer of Rollins Environmental, Inc.--was responsible for labor relations.
- Director of Department of Energy in Alabama--helped increase state budget and marketed Alabama coal and other resources.

He also served for four years as one of the U.S. Commissioners to the Permanent Association of Navigation Congresses. During that time, he was involved with port development, port operations and maintenance, dredging and construction.

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### **Morris Receives Golden Beaver Award**

J.W. "Jack" Morris, Chief of Engineers from 1976-1980, was presented the Golden Beaver Award in engineering by the Beavers at their 40th Annual Awards Dinner last January. The Beavers is an organization of companies and individuals who have built or are building dams and other types of heavy engineering. LTG Morris is President of J.W. Morris, Ltd., International Honorary Vice President, PIANC, and a past Chairman of the Water Resources Congress.

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### **Meeting Minutes Available**

#### **PTC 1 Meeting**

PIANC members may request a copy of the minutes of the September 28, 1994, meeting of the Permanent Technical Committee 1 on Inland Waterways and Inland Ports.

#### **Special Commission for Sport and Pleasure Navigation**

PIANC members may request a copy of the minutes of the 24th Meeting of the Commission for Sport and Pleasure Navigation September 9, 1994).

Both copies of the minutes can be obtained from:

U.S. Section, PIANC  
7701 Telegraph Road  
Alexandria, Virginia 22315-3868  
Phone: 703-355-0286  
Fax: 703-355-3171

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### **New PIANC Members**

#### Individuals

Jerry Agi, AGI International, Inc.  
Roberto A. Arrieta

John P. Basilotto, Texas A&M at Galveston  
James E. Bradshaw, Georgia Ports Authority  
Guissepe Cignarella, Maccaferri Gabions, Inc.

Phil G. Combs, US Army Engineer District - Vicksburg

Jack C. Cox, Michael Baker Corporation

David R. Curfman

Asil Gezen

Gerald E. Greener

Gordon S. Hawkins, US Army Waterways Experiment Station

Michael Horton, TAMS Consultants, Inc.

Ed McKiernan, SeaLand Technology, Inc.

Clovis L. Morrison

Dr. Michael R. Palermoo

Thomas R. Patin

Ernest O. Rabideau, Jr., Pare Engineering Corp.

John Roberge, Ocean & Coastal Consultants, Inc.

Allan M. Schrader

John G. Smith, WATERCOM

John Guerry Taylor, P.E.

Paul Woodbury, The Woodhouse Group

#### Students

Hugo E. Bermudez

Andrew W. Mauro

Keith R. Quick

Brent Taylor Sumner

Christopher M. White, Consulting Engineers, Inc.

#### Corporations

Dixie Carriers, Inc.

G.C. Eleftheroudakis S.A.

Louisiana State University and A&M College Port of Seattle

Reid Middleton, Inc.

US Army Engineer District - Savannah

US Army Engineer District - Tulsa

US Army Engineer District - St. Louis

US Army Engineer District - Vicksburg

US Army Engineer Division - Pacific Ocean

US Army Engineer Division- Ohio River

## Activities

### Inside PIANC

1-5 Sep 1996	PIANC Conference on Inland Maritime Navigation and Coastal Problems of East European Countries	Gdansk, Poland
5-12 Jun 1998	29th PIANC Congress	Tangier, Morocco

### Outside PIANC

19-21 Jul 1995	20th Annual Summer Conference Transportation Research Board (TRB) "Ports, Inland Waterways, Intermodal Distribution, and International Trade" Christina S. Casgar, (202) 334-3205	Boston, MA
4-9 Aug 1995	National Institute of Government Purchasing	Denver, CO
6-8 Sep 1995	Coastal '95	Cancun, Mexico
18-20 Sep 1995	National Conference Jointly sponsored by AWRA and ASAE "Versatility of Wetlands in the Agricultural Landscape"	Tampa, Florida
23-27 Sep 1995	Ninth Annual State Organization for Boat Access (SOBA)	Lexington, Kentucky
16-20 Oct 1995	Annual Convention, AAPA	New Orleans, Louisiana
14-17 Nov 1995	WODA XIV "Dredging Benefits" Rai Conference Centre	Amsterdam, The Netherlands
14-18 Nov 1995	Europort '95 Rai Conference Centre	Amsterdam, The Netherlands
18-20 Mar 1996	CATS III Congress "Characterization and Treatment of Cleanup Sludge from Dredging, Sewage Sludge and Comparable Industrial Process Sludge"	Ostend, Belgium
17-21 Jun 1996	11th International Harbour Congress	Antwerpen, Belgium



# Permanent International Association of Navigation Congresses

## **ATTENTION!!!**

Engineers, Researchers, Students and Other  
Professionals

1996 Competition

## **International Gustave Willems Award**

for the most Outstanding Technical Paper  
prepared on design, construction, improvement,  
maintenance, or operation of inland and  
maritime waterways (rivers, estuaries, canals,  
port approaches), inland and maritime ports  
and coastal areas.

- \$1,000 U.S. Savings Bond
- Expense-Paid Trip to U.S. Section PIANC Annual Meeting
- 5-Year Free Membership in PIANC

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**Applicants:** Must be under the age of 35

**Deadlines:** Abstract: October 15, 1995  
Technical Paper: November 15, 1995

**For Details  
Contact:** **U.S. Section, PIANC**  
7701 Telegraph Road  
Alexandria, VA 22315-3868  
Tel: 703-355-0286  
Fax: 703-355-3171

INTERNATIONAL SECRETARIAT ANNOUNCES NEW PTC II WORKING GROUPS

CALL FOR U.S. SECTION REPRESENTATIVES

WORKING GROUP 26: MARINE OIL POLLUTION

The original working group on marine oil spills has been reorganized with revised terms of reference (TOR). Dr. Ing. Tor Aamodt with the Oceanographic Company of Norway AS is serving as chairman of the group. The working group will collect and assess information on preparing contingency plans and experiences with implementing plans to combat oil spills. Information in the final report will be of interest to developers of oil spill strategies, heads and leading personnel who are involved in oil spill combatting operations, legislators, and others involved in oil spill contingency planning and implementation.

WORKING GROUP 32: PORT FACILITIES FOR HIGH-SPEED FERRIES

This working group will conduct a study of requirements for port facilities for use by high-speed (ferries with a cruising speed of 40 knots) cargo and passenger ferries and make recommendations regarding standards for terminal infrastructure and traffic management to facilitate low turn-around time in ports.

If you are interested in obtaining a copy of the terms of reference or would like to serve as the U.S. Section, PIANC representative for either Working Group 26 or 32, please get in touch with Tom Ballentine, Office of the U.S. Section, PIANC, 7701 Telegraph Road, Alexandria, Virginia 22315-3868 or Telephone: (703) 355-2072 or Fax: (703) 355-3171. If your interest is in serving as a member of the working group, please submit a brief curriculum vitae and some details about professional experience related to the subject of the working group in which you are interested.

PLEASE RESPOND BY AUGUST 21, 1995

## NOTICE

The General Secretariat of the Permanent International Association of Navigation Congresses has announced plans to hold a one-day conference on **Inland Waterways and Flood Control** in Brussels on October 23, 1995. The conference would:

“analyze the causes and consequences of flooding that has occurred in Europe and the United States in the past few years . . . taking into account economic aspects and the sustainable development of rivers and waterways.”

Any member of the U.S. Section who is interested in preparing a paper for presentation at the conference should contact Tom Ballentine, Office of the U.S. Section, PLANCO.

Please forward your response so that it will reach this office by **August 15, 1995**.

7701 Telegraph Road  
Alexandria, Virginia, 22315-3868  
Telephone: 703-355-0286  
Fax: 703-355-3171