



# PIANC Bulletin

Quarterly Newsletter of the International Navigation Association U.S. Section  
Permanent International Association of Navigation Congresses (PIANC)

Fall Issue

Fourth Quarter • 2004

## President's Message by Major General Don T. Riley, President, U.S. Section, and Director of Civil Works, U.S. Army Corps of Engineers

Dear Members,

I am pleased to have the opportunity to serve the U.S. Army Corps of Engineers as Director of Civil Works and excited to become your next president. There have been other significant personnel changes as well. Of significance is the ascension of Lieutenant General Carl A. Strock, your organization's past president, to the position of the 51<sup>st</sup> Chief of Engineers.



**USACE Leadership Change of Command**

The Corps is proud to have Lieutenant General Strock as our leader, with the added benefit that he has been involved with the U.S. Section of PIANC. He and I will continue the Corps' important role in supporting navigation as a significant contributor to the health of the world's economy, and know we can count on the members of PIANC to support us in this task.

Our nation and the world will experience enormous increases in trade activity in years to come, by many projections. It is up to us now

## INSIDE...

- President's Message .....1
- Major General Don T. Riley becomes New Director of Civil Works, U.S. Army Corps of Engineers .....2
- Membership Support High at GICA Annual Convention .....3
- Do You Want That Containership Super-sized? .....4
- How Big is Big for Gulf Containership Operations? .....6
- Container Cargo Growth to and Through Louisiana .....7
- Emerging Container-on-Barge Transport in the U.S. ....9
- MARAD Hosts Conference on Inland Waterway Container Transportation .....10
- Empty Container Management for Intermodal Transportation Networks .....12
- Adverse Effects of Deferred Maintenance and Rehabilitation at USACE Navigation Structures .....12
- Western Dredging Association Meets in Orlando .....13
- Manson Construction Co. to Build Hopper Dredge at Alabama Shipyard .....14
- Status of Sea Turtle Protection during Hopper Dredging: A Success Story .....15
- Meet the Commissioners .....17
- U.S. Section PIANC Welcomes New Treasurer .....18
- Nominate a Colleague Today for a COPRI / ASCE Award! .....18
- U.S. Section Annual Meeting to Focus on Container-on-Barge .....19
- Younger Member and Student Opportunities in PIANC .....19
- Working Group 24 Report Highlights .....20
- U.S. Section Publication Responsibilities: AGA 2005 .....21
- Upcoming PIANC Events .....22
- Upcoming Related Conferences .....22
- About PIANC .....23

to plan for that future. What we do in the present will influence how we meet the challenge, and members of PIANC should play a significant part in the process. We need your expertise to reach the next level in accommodating the trade boom to come.

Meanwhile, we must pay special attention to the sustainability of our waterways – a task in which I was involved every day in my previous assignment as Commander of the Corps of Engineers' Mississippi Valley Division – managing that mighty waterway and its tributaries from Northern Minnesota to the Gulf of Mexico for a wealth of purposes. Waterways are significant features of our landscape, not only as arteries of commerce but essential for our habitation and constitute a unique ecosystem. We must wisely manage them to address and balance the multitude of water-related needs of our country.

The Corps of Engineers plays a unique role in supporting this effort. Our Environmental Operating Principles spell out our environmental stewardship responsibilities while pursuing sustainable water resources development. The concepts include:

- considering our watersheds as holistic natural systems;
- examining the economic values and environmental impacts of a variety of alternatives when making development decisions; and
- seeking consensus with those involved to guide the decision making process.

I encourage your interaction with us to sustain and improve our marine transportation system, with a view towards meeting the needs and expectations of future generations. By remaining active in the water resources development process, as well as bringing new members to the PIANC organization, you will ensure a strong future for our waterborne commerce on which the world's economy depends.

Sincerely,

Major General Don T. Riley  
President, U.S. Section, and Director of Civil Works, U.S. Army Corps of Engineers

## Major General Don T. Riley becomes New Director of Civil Works, U.S. Army Corps of Engineers *by Ron Conner*



**MG Don T. Riley**

Major General Don T. Riley assumed duties as the Director of Civil Works, Headquarters, U.S. Army Corps of Engineers on July 1, 2004. Major General Riley came to the Directorate of Civil Works following command of the Mississippi Valley

Division (MVD) in Vicksburg, Mississippi, where he also served as President-designee of the Mississippi River Commission (MRC). Prior to commanding MVD, Major General Riley served as the Deputy Chief of Staff, Engineer, Headquarters, U.S. Army Europe.

As the Director of Civil Works, Major General Riley plays a vital role in managing the Corps \$5.0 billion annual Civil Works Program focused on meeting the Nation's water resources challenges.

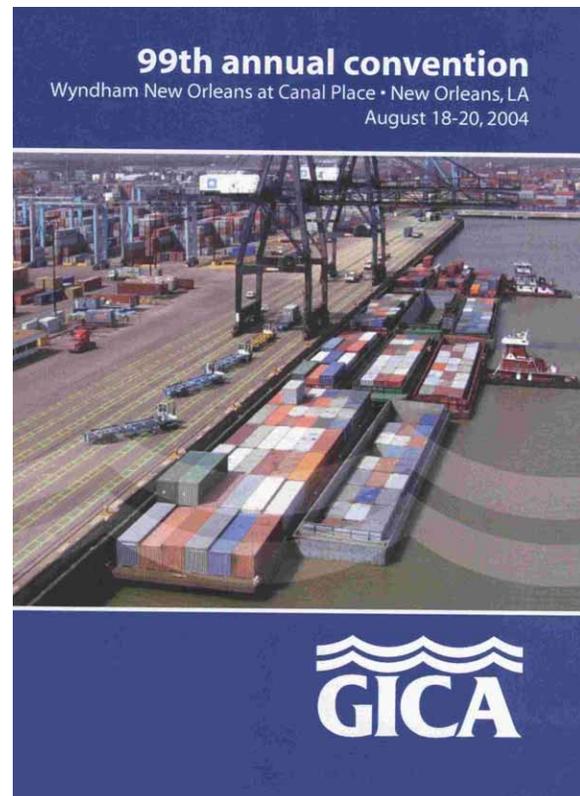
Major General Riley is a graduate of the United States Military Academy at West Point, New York, and was commissioned in the Corps of Engineers in 1973. He earned a master's degree in civil engineering from the University of California, Berkeley, and is a registered Professional Engineer in the State of California. Major General Riley is a graduate of the U.S. Army Command and General Staff College, School of Advanced Military Studies, and the United States Army War College.

Major General Riley's troop assignments include duty as platoon leader, assistant, S-3, company executive officer, and company commander, 14th Engineer Battalion, Fort Ordinance, California; Assistant Division Engineer and Chief, Plans and Exercises, G3, 3rd Armored Division; S-3, 23rd Engineer Battalion; Deputy G3, 5th Infantry Division; Commander, 7th Engineer Battalion, Fort Polk, Louisiana; Commander, 17th Engineer Battalion, Fort Hood, Texas; Chief, Plans and Exercises, G3, I Corps; Commander, 555th Engineer Group, Fort Lewis, Washington; Director, Maneuver Support Battle Lab, Fort Leonard Wood, Missouri; and Executive Officer to the Commanding General, U.S. Army Training and Doctrine Command, Fort Monroe, Virginia.

In addition, Major General Riley has served as Contract Construction Engineer for the Corps' Far East District in Korea. He also held the following positions at the United States Army Engineer Center, Fort Belvoir, Virginia: Instructor; Aide-de-Camp to the Commanding General; Chief, Captain's Training Team, Directorate of Training and Doctrine; Instructor/Team Leader, Engineer Officer Advanced Course; and Chief, NCO Training Division, Department of Military Engineering.

## Membership Support High at GICA Annual Convention *by Edmond Russo*

This year's meeting of the Gulf Intracoastal Canal Association (GICA) was held in New Orleans, Louisiana, hosted by the Port of New Orleans. Stressing the importance of the Gulf Intracoastal Waterway (GIWW), Gary LaGrange, Director of the Port of New Orleans, said in his opening remarks "Let us never forget the link that the GIWW provides to the Mississippi River and tributaries".



Honored for lifetime achievement at the event was Vernon Behrhorst, having served GICA in various positions over the last 40 years. He was credited for being instrumental in establishing waterways policies in the U.S., being an authority on inland navigation.



***Lifetime achievement honoree Vernon Behrhorst***

Larry Barbish, GICA's President, indicated that it was GICA's strong membership and support that gives them the ability to reach decision makers in Washington D.C. on ensuring the sustainability of the GIWW. GICA's Executive Director, Raymond Butler, added to this, saying that close partnership between the Corps of Engineers, U.S. Coast Guard, shippers, and port interests, creates the synergy

needed to generate strong support of the organization.

GICA believes that the GIWW has much more capacity than its current utilization, offering great potential to solve some of the nation's future demands for handling predicted increases in cargo transportation. Joe Pyne, President and CEO of Kirby Corporation, elaborated on how the inland waterway system could capitalize on this capacity for container-on-barge movements.



***GICA Executive Director Raymond Butler being recognized by Rear Admiral Bob Duncan for contributions to organization***

To achieve increased inland waterway usage, there is a need for improving port and waterway infrastructure, through increased authorization and funding of projects, said John Doyle of Jones and Walker and the Waterways Council, Inc. Linkages must be drawn in the public eye between the modes of cargo transportation and US inland waterways in support of meeting these authorization and funding needs.

The Corps Headquarters explained at the meeting how project funding will be prioritized in the future to better address needs, using performance based budgeting. They received input from channel users on how that system might be structured for best effectiveness.

## **Do You Want That Containership Super-sized?** *by Rob Harrison*

International merchandise now accounts for about one-third of the United States Gross Domestic Product (GDP), giving the nation a major role in the global marketplace. A substantial portion of the non-bulk international trade is now containerized and moves along a variety of multi-modal transportation corridors. The decreasing costs of transportation and logistics are a central part of the global trade success story and economies of scale are helping to drive down supply chain costs.

Container ports, inland ports, distribution centers, and air hubs are getting bigger and many have plans for further expansion. Intermodal trains are getting longer, airfreight will have a mega model in 2006 (the Airbus A380 with a 150 ton payload and a 10,410 km range) and containerships have been increasing in size since the late 1990s on key northern hemispheric shipping routes. But it is containerships that drive the ability of shippers to place much of the international merchandise competitively into U.S. markets. How should employees who are responsible for logistics planning in the transportation industry address the trend towards larger ships?

First, as Figure 1 indicates, the trend to larger ships is relatively recent. In 1968, some 12 years after Malcom McLean launched the containership era, United States Lines introduced the first Lancer class ship with a capacity of 1,100 twenty-foot equivalent units (TEU). Ship size increased in the 1970s but was constrained at less than 4,000 TEU by vessel design and box demand until American President Lines (APL) introduced a 4,300 TEU design in 1988. This was significant because the size prevented it from passing through the locks of the Panama Canal. Accordingly, vessels able to traverse the canal were termed "Panamax" and those that could not were termed "post-Panamax." Subsequently, the number of ships in the 4,000 to 5,000 TEU category increased until in 1996 Maersk brought a 6,000-plus TEU design into operation –

arguably, the first true mega-containership since its design was capable of expansion to around 7500 TEU. In 2001 China Shipping Group announced it would order 9,800 TEU ships for the trans-Pacific trade, and the growth of very large containerships has become a feature of maritime shipping since 2000. Figure 2 depicts a mega container ship in use, and Table 2 presents its characteristics.

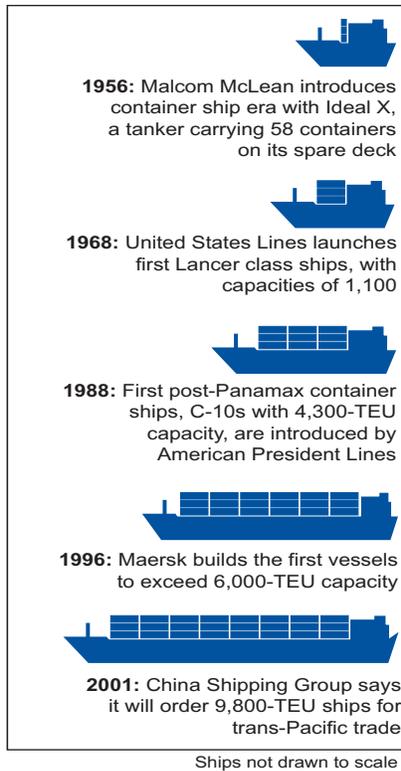


Figure 1. Trend to larger container ships

Ship Size (TEU)	5,000-5,999	6,000-6,999	7,000+
Present slots	778,495	636,461	46,150
Present ships	141	98	6
Slots on order	447,745	231,932	873,226
Ships on order	84	35	108

Source: Containerisation International Yearbook 2004. Included in the article Box Ship order book reaches all time high by Jonathan Garcia.

Table 1. Summary of World Containership Fleet in Service and on Order by Ship Size, October 2003

Recent trends confirm the use of bigger ships as the number of post-Panamax ships soared during 2003. Table 1 provides a summary of the containership fleet in service and on order by ship size. Specifically, there were 227 post-Panamax ships ordered, representing 37 percent of total orders placed (as of October 1, 2003).<sup>1</sup> Moreover, major ocean carriers are increasingly placing orders for “super” post-Panamax ships, which have a TEU capacity between 7,500 and 8,000. These mega ships, 100 of which already are on order, are expected to replace vessels with TEU capacity of 5,500 to 6,500.<sup>2</sup> And according to data from Containerisation International, ships with a capacity of at least 8,000 TEU will deliver half of the total capacity (729,400 TEU) ordered by October 2003 and scheduled for delivery in 2006.<sup>2</sup>

While the arrival of these large vessels is critical on key trading routes, it should also be noted that world trade continues to be moved by ships in the Panamax category – in 2003 such ships constituted 94 percent of the total world fleet and constituted 71 percent of the total world container slots. So it all depends on where you are in the world and the origin and destination of your containerized traffic. The growing trend of super-sized ships to transport goods is currently restricted to certain parts of the globe. For those shipping goods to and from the Far East and along the northern hemispheric routes (Western Europe – U.S. West Coast ports), bigger ships - suitably scheduled - can be efficient and profitable. But other areas do not have this luxury – at least not yet. Combinations of box demand, routes, and port facilities on the routes limit big vessel deployment.



Figure 2. Super-sized ship with expanded features

Mindful of the impact large ships would have on landside infrastructure, the Texas Department of Transportation (TxDOT) sponsored a study in 2000 to examine how the trend toward bigger ships might affect containerized trade flows in the Texas Gulf Coast region. The Center for Transportation Research (CTR) undertook this task and some of its findings are the subject of a related article in this Quarterly.

<b>Length</b>	323 meters	1,060 feet
<b>Speed</b>	25.2 knots	29 miles per hour
<b>DWT</b>	100,000 metric tons	110,231 short tons
<b>Draft</b>	14.53 meters	47.67 feet

Source: John McCray, UTSA<sup>4</sup>

## Table 2. Characteristics of Super Sized Ships

Dr. Rob Harrison is Senior Research Scientist and the Deputy Director at the CTR, The University of Texas at Austin, Email [harrison@mail.utexas.edu](mailto:harrison@mail.utexas.edu)

<sup>1</sup> Jonathan Garcia. Containersiation International Yearbook 2004. Box ship order book reaches all time high. Informa UK Ltd.

<sup>2</sup> Jane R C Boyes. Cotaineriation International Yearbook 2004. Let the good times roll, but for how long? Informa UK Ltd.

<sup>3</sup> Photograph and table were obtained from personal correspondence from John McCray, UTSA.

## How Big is Big for Gulf Containership Operations? *by Rob Harrison*

The Texas Department of Transportation (TxDOT) sponsored a project with the Center for Transportation Research (CTR) at the University of Texas at Austin in 2000 to examine the infrastructure impacts and operational requirements at Texas Gulf coast ports associated with the introduction of larger container vessels. A variety of products were developed in this work and this article is based on the findings of the impacts of

containership size, service routes, and demand on Texas Gulf ports.

The CTR study found that the degree of consolidation in the containership liner market combined with the growth of container demand will heavily influence the size of containership that is placed on any of the North Atlantic and Gulf routes. The deployment of large post-Panamax vessels is profitable when they are moving (like Boeing 747s) and not when they are in port, so a typical string or route structure is one with few ports that each have 7 day/24 hour operations, where possible, to keep the ships moving. Such ports might also be load centers, attracting containers for transshipment as well as from the markets within the region where the port is sited. On the eastern U.S. seaboard, mega-containership operations, might well take place in stages, beginning in the North Atlantic at New York-New Jersey (3.7 million Twenty foot Equivalent Units (TEU) in 2002), which will soon have a Maersk mega-service around 2006. It could then extend to the Mid-Atlantic at Charleston (1.6 million TEU) or Savannah (1.3 million TEU) as market conditions permit. CTR research staff thought that around 2.5 million TEU was about the annual port throughput that might attract such services. It is clear from the analysis that the key ports in the North and Mid-Atlantic regions are better positioned than Gulf ports to service future mega-containership services because they already have the demand, routes, geographic location, and markets to serve larger containerships.

The geographic position of the Gulf Coast, which is some distance (three day return total) from the main Atlantic trade routes, together with the limitations of the regional markets served by Gulf ports, means that Texas locations are not obvious candidates for mega-containership deployment in the immediate future. This is not simply a question of draught depth at various Gulf ports. Currently, the North Atlantic liner schedules have Gulf ports that are either last or first in the string and are therefore rarely fully loaded, meaning their draught requirements are less; it would thus be theoretically

possible to operate mega-containership liner schedules to ports with draughts under 50 feet. However, the more important constraint in the Gulf is container demand (Houston moved 1.2 million TEU in 2002) and the numbers do not appear to support the implementation of very large containerships on Gulf routes.

The continuing globalization in shipping, together with consolidation in liner shipping and the opportunities for larger vessels exhibiting economies of scale, will impact the Gulf in the next 20 years. The study reported the potential impacts in three areas.

- There is likely to be continued strong growth in container movements between the U.S. Gulf and Latin American and Caribbean markets. In some of the latter, these containers will be relayed or transhipped from other markets, which implies that the links between the Caribbean and Texas ports will be better served by feeder ships or conventional Panamax containerships than by very large containerships.
- There is likely to be moderate growth in container demand between Gulf ports and European, Mediterranean, and Middle East markets. This growth may be better served by faster regular containerships capable of maintaining 25 knots or more frequent service schedules of the smaller to Panamax vessels rather than bigger containerships.
- Currently some rather slow large liner schedules (<20 knots) at Houston could be replaced by a significantly faster vessels of similar size, perhaps using ships displaced by the mega sizes now being introduced on the northern hemispheric “pendulum” routes. This could either reduce the numbers of ships needed for each string or speed up service between the Gulf origins and foreign market destinations.

Despite the continued growth of container traffic with Texas Gulf ports, the research results

suggest that smaller Panamax sized vessels will adequately service this trade until 2010. European, Mediterranean, and Middle East groups might eventually use mega-containerships on their liner schedules, although it should be remembered that it is perfectly feasible (and economical) to offer a Gulf-based service using faster 4,000 TEU Panamax vessels and improved liner schedules to those currently available. Finally, if a Caribbean (Freeport) or Central American (Panama) load center ultimately handles the mega-sized ships, more Gulf and Mexican ports could handle container trade through the resulting hub and spoke routes. So, it would seem that super-sizing containerships is an important feature of global trading on key routes to large load centers in the northern hemisphere, particularly in the Pacific region. But for the rest of the world’s ports small to Panamax sizes should generate good business for the next decade. And they can always hub with a mega-ship load center liner service if the route distance is attractive.

## **Container Cargo Growth to and Through Louisiana** *by Ned Peak*

The Gulf of Mexico ports represent an under-served portion of the worldwide cargo container market. With rail and barge access to over one-half of the United States, the central Gulf container market is poised to grow rapidly within this decade. Access to mid-America is possible on six Class 1 freight railroads from New Orleans and scheduled container-on-barge from the state capital, Baton Rouge, already has one year of success upon which to build its increasing use of the 10,000 mile waterway system.

Created by the state legislature in 1999, the Millennium Port Authority (MPA) is a political subdivision of the state charged to identify ways to gain an increasing share of the Gulf of Mexico container market. Building on the Port of New Orleans’ Comprehensive Feasibility Study that year, the MPA’s eleven Commissioners and staff established a systematic planning process to assess

potential changes to container handling and routing for the greatest benefit to the state and nation. Twelve years of stagnant container growth in the state seemed to cry out for new ideas. With over 20 ports in Louisiana capable of handling commercial container cargo by barge, synergies in combined operations offered the greatest opportunities. MPA established Cooperative Endeavor Agreements with certain ports to work toward the desired increased market share, initially through the five deep water ports along the first 200 miles of the Mississippi River. A formal study of the potential mid-America market was completed in 2003 and validated nearly 2 million containers could be moved more economically through Louisiana than through Los Angeles/Long Beach and could be delivered to inland destinations on their existing schedules.

Phase I Millennium Port projects were defined as those requiring no costly infrastructure development: moving the Port of New Orleans container terminals from the Inner Harbor Navigation Canal to the Mississippi River was one of those projects and was completed in 2004. This move allowed larger class container ships to access new terminals on the Mississippi River, which have the latest high speed container handling equipment. The other major Phase I project is establishment of the Sea Point “port server” near the mouth of the Mississippi River near Venice, Louisiana. Sea Point is a trans-shipment facility designed to unload and sort containers from international container ships into a number of standard hopper barges for transfer to convenient inter-modal terminals. The keys to success for Sea Point are proximity to the Gulf of Mexico and immediate sorting of containers into by-destination groups for efficient inter-modal transfer. The Sea Point system has demonstrated the ability to make 110 lifts per hour unloading and, sorting containers onto the various barges.

Sea Point, scheduled for completion in 2006, holds letters of intent from two Asian carriers serving mid-America who are seeking an adjunct to the crowded terminals and costly rail runs from the U.S. West Coast ports to their interior markets.

Analysis shows the carriers can save money on an all-water service through the Panama Canal to Venice, Louisiana and can deliver their cargo via New Orleans railheads to inland destinations with no increase in current delivery schedules. In fact, new-build Panamax container ships this year attest to the strength of these regional markets throughout the world. Great potential exists as well to move low value cargoes and even empty containers downriver to the Sea Point terminal for return to Asia. Sea Point offers the greatest single opportunity to change international shipping patterns from Asia and establish major Container on Barge movements on the Mississippi River system this decade.

Increases in container traffic through Louisiana are now visible: most exciting is the new inland barge terminal in Baton Rouge handling chemicals and agricultural products. First year operations have shown an increase from 284 Twenty-foot Equivalent Units (TEUs) outbound in January, 2004, to 656 TEUs outbound in July, 2004. While these initial operations by Osprey Lines may represent the “low-hanging fruit” in this market, apparently there’s a lot of fruit out there. Increases are also visible at the new Napoleon Avenue terminal in New Orleans which opened in January 2004. Quarterly statistics show a 2.8% annual increase in total loaded TEUs handled port wide with 62,726 handled during the January through March, 2004 quarter. Macroeconomic projections show this to be the normal expected growth in the Gulf of Mexico. Lake Charles continues to handle about 13,000 containers annually but is highly dependent on US AID exports for famine relief around the world.

Additional Millennium Port projects include “due diligence” on potential container port sites in the state, Cooperative Endeavor Agreements, increased Container on Barge shipments, and planning activities related to inter-modal connections and system improvements.

Edward J. Peak, P.E., is Executive Director of the Millennium Port Authority, Email [PEAKE@portno.com](mailto:PEAKE@portno.com)



## Emerging Container-on-Barge Transport in the U.S. *by Anne Sudar*

Highway traffic forecasts indicate looming increases in freight movements that threaten to choke the U.S. interstate system with truck congestion. While the many bulk cargoes moved by water are experiencing modest or flat growth, the numbers of containers needing to be moved within U.S. is steadily and rapidly increasing.

Container-on-barge (COB) transport could add not only new cargo, but also a new *raison d'être* for some reaches of the inland and intracoastal waterways in the United States. COB could use existing jumbo barges capable of holding 72 TEU (twenty foot equivalent units) containers (stacked 3-high), thus taking at least 36 trucks off the road for each fully loaded barge.

Containers-on-barge are commonplace in Europe, where waterways are being used as relief valves for highway congestion. COB traffic on the Rhine River has skyrocketed from less than 10,000 units in 1975 to 45,000 units in 1991 and 2,300,000 units in 2003. Here in the U.S., COB is already established on the Columbia-Snake River system and has grown from 125 containers in 1975 to 50,000 in 2000.

Thus far, U.S. coastal COB ventures appear most promising, particularly with the extent to which COB can relieve both highway congestion and reduce air emissions. The ports of Houston and New York have each received Congestion Mitigation & Air Quality funds under the TEA-21 to support container-on-barge operations.

Recently, Osprey Line established COB service along the Gulf Intracoastal Waterway (GIWW) connecting Gulf Coast ports from Houston and Freeport, Texas to Pensacola, Florida. They also recently began service from Memphis, Tennessee, to Louisville, Kentucky, advancing COB up the Mississippi and Ohio Rivers through a series of locks. Kirby Corporation, a mainstream barge company, has purchased a one-third interest in Osprey Line, thus expressing confidence in COB's future.

COB service began in 2003 on the Hudson River between Port of New York and New Jersey (PANYNJ) & Albany. PANYNJ is funding an east coast network of COB ports, including Wilmington, Delaware, Camden, New Jersey, Bridgeport, Connecticut, and Providence, Rhode Island, with a pilot feeder barge service between the ports of Bridgeport and PANYNJ.

Port of Pittsburgh and Pittsburgh Barge Shippers Council are pursuing means to reduce impediments to COB, with Mexico identified as a potential market.

Obstacles to greater use of COB in U.S. still remain, including: price competition from alternative competing modes; the potential unreliability that locks & dams introduce into the logistics chain; and double handling fees at ports.

Methods should be explored for overcoming impediments to COB service, and facilitating discussions with industry stakeholders, members of the Inland Waterways Users Board and Congressional interests, including consideration of initiatives such as Corps-interagency sponsored COB demonstration projects.

For more information, contact Anne Sudar, Institute for Water Resources, U.S. Army Corps of Engineers, Alexandria, Virginia, Tel 703 428-7166, Email [R.Anne.Sudar@usace.army.mil](mailto:R.Anne.Sudar@usace.army.mil).



## MARAD Hosts Conference on Inland Waterway Container Transportation

by *Edmond Russo*

There is an anticipated increase in need for moving containerized cargo along key U.S. trade routes in the future. Existing capacity is inadequate. This is manifested by choke points occurring around the U.S. Problems mainly exist along land transit corridors.

Use of U.S. inland waterways may be strategic for adding container transportation capacity, alleviating concerns that the current system would stifle U.S. economic growth, left un-addressed.

To explore these concerns, a public-private forum was assembled on July 24, 2004 in New Orleans, Louisiana, by the United States Department of Transportation (USDOT) and the Maritime Administration (MARAD). The meeting was held to:

- bring together maritime professionals in the field, for sensing the current state of U.S. container transport;
- identify requirements for successfully launching an inland waterway container transportation system, and
- stimulate formation public-private partnerships to act on identified needs.

A risk analysis based framework on economic investments of alternatives to handle container traffic – commissioned by USDOT and MARAD – was presented at the conference. The study suggests that in the next 20 years, the current system for container transport will fall short in handling traffic increases without an addition of capacity.

Conference attendees suggested that a change in traffic patterns along U.S. container trade routes may be needed to relieve existing choke points, in support of providing additional transportation capacity. Waterborne alternatives are believed to

have potential for alleviating these capacity problems. Shallow draft vessel transport modes might include container-on-barge, as well as newly designed and built “fast vessels,” tailored to expediently handle containers on inland waterways. Waterside container handling facilities on the U.S. inland waterways network, which are connected to land transit routes, would be needed to accommodate these vessels.

Ned Peak, Executive Director of the Louisiana Millennium Port Authority (MPA), said that knowing the global container trade picture as it relates to U.S. container traffic movements, is a paramount consideration for further development of the issue. The MPA conducted a market study to identify these trade patterns, as well as conservatively assess their growth potential, as they relate to container movements through the Lower Mississippi River (LMR) and the U.S. hinterland.

A market identified in the study for the LMR is moving far-east-originating cargo through the Panama Canal and Mississippi River Navigation System (MRNS), alleviating congestion and back-up of these shipments currently going through West Coast U.S. ports and rail to the east. One report finding was that if the LMR does not react now, this business would be lost where there was once advantage to capture traffic flow during its growth. Another conclusion of the report is that a container transfer facility is needed on the LMR as close to the Gulf of Mexico as possible to transfer containers between ships and inland vessels.

USDOT and MARAD commissioned a preliminary study on the types of containerized cargo and customer base that would require the services of an expanded waterborne cargo movement on inland waterways. A number of city locations along the MRNS were identified for their potential in freight movement on land in radii away from discharge points from the water. The study suggests that the MRNS appears to have the essential elements to facilitate waterborne container traffic movements in the U.S. hinterland, with great

opportunity for increased capability, considering expectation in U.S. trade growth in the future.

While private interests are in position to capitalize on container traffic system development to meet anticipated needs, support by the federal government would be advantageous for increasing the potential for measured accomplishment. USDOT and MARAD are encouraging private interests to develop and implement a pilot program for inland waterway container movement. Strategically, they believe that this is the first step to address capacity increase requirements, if container trade is to meet the needs for U.S. economic growth.

Ned Peak indicated that a project such as Seapoint Container Transfer Facility would be a catalyst for initializing MRNS container trade. Seapoint is a high-tech facility slated for development near the mouth of the Mississippi River, where containers can be rapidly transferred between large ships and shallow draft vessels having network connectivity to the MRNS.



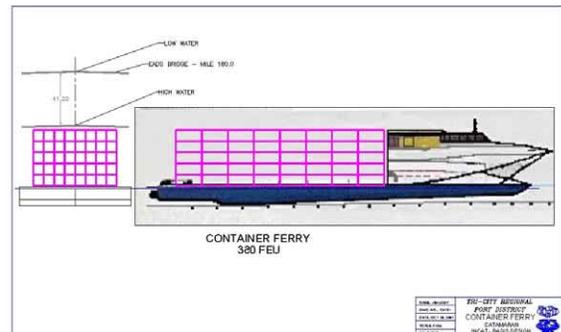
*Seapoint container transfer facility*

Jim Labit, with Tri-City Regional Port District, presented an inland waterways container transfer facility concept, which could effectively and efficiently handle containers between the waterside and land transit modes.



*Tri-City container transfer facility*

Jim Labit, sensing from users of container supply chains, said that moving high value cargo by container might have to be done with vessels moving faster than that possible by container-on-barge, to make high value inland waterway container transportation cost feasible. A container ferry concept may be able to meet this challenge, transiting under existing bridges on the MRNS with a safe margin.



*Container ferry concept*

John Carnes with MARAD suggested that the service should be rapidly responsive to companies needing shipping, with the capability to pickup and move containers within a day or so notice. Jim Amoss, with Seapoint, proposed that a transportation system for containers on inland rivers should have daily service from select ports to meet this objective.

Container handling facilities at key locations along U.S. waterways, as well as an adequate type and number of vessels to move containers on these routes, must be in place with strong service, to make inland waterways container shipping viable

for customers to use as their mode of choice. Conference attendees believed that to develop such a U.S. waterway container transport system, a user market would have to be captured along the MRNS and beyond into the U.S. hinterland. Investors are required to provide the resources needed to stand up such a system, with some already having interest in the venture.

## Empty Container Management for Intermodal Transportation

**Networks** by Michael H. Cole, Sook Tying Choong, and Erhan Kutanoglu

Empty containers can add up at shipping destination points when more product is flowing there than is leaving. Handling empty containers is a cost shippers wish to keep as low as possible, if their business is to remain strong and grow.

The authors developed an optimization model to analyze the operation of a potential container-on-barge system for the Mississippi River network. In particular, the model considers how best to manage the disposition of empty containers in order to minimize total associated logistics costs.

To a great extent, empty container movements are at the mercy of loaded container movements, since shippers pay carriers to move loaded containers. From the carrier point-of-view, though, putting shipments into containers requires an accessible inventory of empty containers.

The optimization model determines how to move empty containers through the network, from the emptying of a loaded container at the port, to transport to a container pool, to transport to a port that needs an empty container. In addition, the model can be used to investigate the effects of such factors as container pool location, mode choice for empty container shipment (barge, rail, or truck), and limitations on the fraction of barge capacity that can be devoted to hauling empty containers.

The research was funded by the Mack-Blackwell Transportation Center, and was published in *Transportation Research Part E* (2002).

Dr. Michael H. Cole is with Montana State University. Co-authors Sook Tying Choong is employed by Intel – Malaysia, and Dr. Erhan Kutanoglu works for the University of Texas. For more information, including reprints of the complete technical paper, contact Dr. Cole at [mcole@ie.montana.edu](mailto:mcole@ie.montana.edu).

## Adverse Effects of Deferred Maintenance and Rehabilitation at USACE Navigation Structures

by Julie Vignes

If trade on the nation's shallow draft waterways are to be safe and reliable for current and any future growth, the network of navigation structures must be maintained to remain operable. These structures have suffered from a long period of lack of maintenance, mainly due to competing national funding needs and limited budgets.



**Gulf Intracoastal Waterway, Inner Harbor Navigation Canal (IHNC) Lock**

The Inner Harbor Navigation Canal (IHNC) Lock is one of six locks along the Gulf Intracoastal Waterway (GIWW) in the New Orleans District. It is also a gateway from the Mississippi River eastward on the GIWW, and an example of where deferred maintenance has taken its toll.

The lock first opened to marine traffic in 1921. During calendar year 2003 16,283 vessels were locked in 11,979 lockages. The calendar year 2003 tonnage was 17,284,000.

The last major repairs and dewatering of IHNC Lock was in 1998; prior to then, the lock was dewatered and major repairs were performed in 1978. Although the Corps' New Orleans District has not experienced any costly service outages or delays to navigation at IHNC Lock as a result of deferred maintenance, the District did assume risk in operating the lock with upper hinges and lower pintles in precariously poor condition before the 1998 dewatering.



***Failing Upper Hinge Anchorage***



***Repaired Upper Hinge Anchorage***

The necessary major repairs cycle was extended to 20 years (1978 – 1998) in anticipation of the lock replacement and because of constrained funding. Major components of the \$6 million repair project included rebuilding the upper gate hinge

anchorages, repairing cracks in the concrete lock wall, and replacement of the gate pintles.



***Excessive Rust and Corrosion on Gate***



***Major Cracks in the Concrete Lock Wall***

The estimated economic impact to the navigation industry for a closure at IHNC Lock is \$670,000 per day due to the need to reroute marine traffic through a 160-mile detour.

For additional information, contact: Julie Vignes, Navigation Function, Technical Support Branch, Operations Division, USACE, New Orleans District, Email [julie.d.vignes@usace.army.mil](mailto:julie.d.vignes@usace.army.mil).

## **Western Dredging Association Meets in Orlando** *by Edmond Russo*

Long time colleagues and new friends in the dredging arena convened this July in Orlando at this year's Western Dredging Association (WEDA) meeting. Port authorities, dredging contractors, as well as governmental agencies related to navigation and dredging, came together for the event.

The three-day conference included an exhibition hall containing a wide variety of booths promoting products and services related to the dredging industry. The meeting opened with a plenary session, which was partnered by the annual Texas A&M University (TAMU) Seminar on dredging.

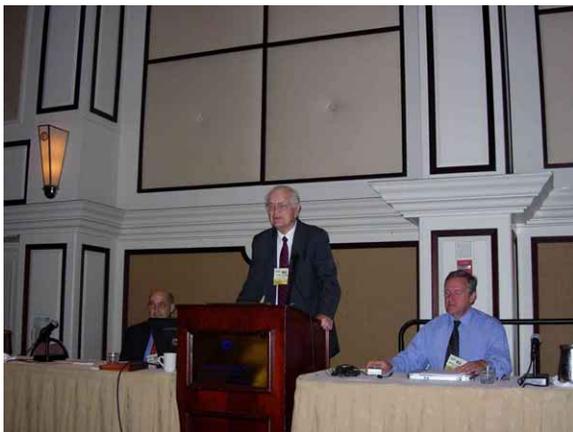
The focus of the TAMU seminar was in large dedicated to technical perspectives of dredging. We heard about topics consisting of the secret of dredging rock to that of project design considering coastal hydrodynamics.



*Dredging professionals at WEDA social*

Follow-on sessions of the conference were split among two major categories, which consisted of:

- navigation and dredging, and
- environmental considerations.



*Tom Turner explaining the secret to dredging rock*

The presentations of these concurrent sessions covered subjects ranging from new processes for dredging, handling, and placing contaminated sediments, to that of conducting a campaign for surveying and mapping the Amazon River for navigation.



*Presentation on contaminant remediation considerations during dredging*

The national WEDA conference is held annually during the summer in different cities of the U.S. There are chapter meetings held in regions around the country, typically in the fall timeframe. The next national conference is slated for New Orleans, Louisiana.

## **Manson Construction Co. to Build Hopper Dredge at Alabama Shipyard** *by Frederick Paup*

Manson Construction Co. has contracted with Alabama Shipyard to build a hopper dredge at their facility in Mobile, Alabama. The 12,000 cubic yard hopper dredge, designed by Hal Hockema & Associates of Seattle, Washington, has a length of 390-ft, breadth of 76-ft and depth of 30-ft.

See us at the U.S. Section web page:  
<http://www.iwr.usace.army.mil/PIANC/>



*Bow quarter aerial view of new Manson hopper dredge*

Engineering and Planning for the hopper dredge has already begun at Alabama Shipyard's facility on Pinto Island. Steel cutting will begin in November 2004 with delivery slated for October 2005. Financing will be provided by Bank of America.

Manson Construction Co. Chairman of the Board, Everett "Pete" Paup, said "We are very excited about our association with Alabama Shipyard and their capabilities in vessel construction. Once complete, the hopper dredge will be the largest in the United States. Since 1978, Congress has encouraged the development of a private hopper dredge industry to replace older USACE dredges. Manson again responds with the building of this, their fourth, hopper dredge as the next step in that progression."

Ron McAlear, President of Alabama Shipyard stated, "Manson is a leader in the marine construction industry and we are excited about the opportunity to work with them on this project."

Manson Construction Co., based in Seattle, Washington since 1905, is a marine contractor that performs pile driving, builds jetties, wharves, bridges and outfalls, as well as performs hopper, clamshell and pipeline dredging. Manson currently has over 500 employees.

Alabama Shipyard and its sister company, Atlantic Marine -Mobile, are divisions of Atlantic Marine, Inc. Atlantic Marine, Inc./Alabama

Shipyard specializes in the new construction of vessels for both the domestic and international maritime community.

For more information contact: Frederick Paup, of Manson's Seattle Office, Tel (206) 762-0850.

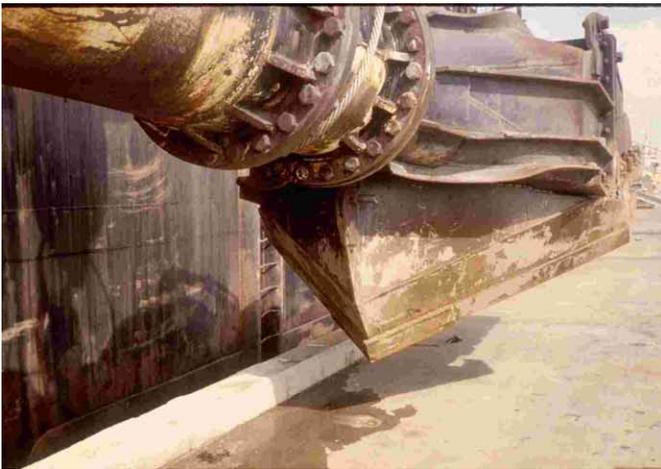
## **Status of Sea Turtle Protection during Hopper Dredging:**

### **A Success Story** by Dena Dickerson

Five species of threatened or endangered sea turtles are known to inhabit channels along the southeastern U.S. coastline and are potentially entrained during hopper dredging of these channels. A total of 508 incidental takes of sea turtles have been documented during hopper dredging from 1980 through 2003 (fiscal years) in coastal channels from the Texas-Mexico border through New York. Incidental takes of sea turtles, the issues involved with protection of these species, and compliance with the Endangered Species Act of 1973 impact one third of the USACE Districts (11 USACE Districts and 4 USACE Divisions) and all coastal hopper dredging operations along the southeastern U.S. Currently, there are more than 50 channels or projects in the southeastern U.S. that include endangered species monitoring for sea turtles during dredging projects. Of these locations, 38 have had documented incidental takes of sea turtles. As a result, large investments of time and financial resources have been devoted to reducing turtle takes by hopper dredging since 1980.

The sea turtle species primarily affected by dredging are loggerhead (*Caretta caretta*), green (*Chelonia mydas*), and Kemp's ridley (*Lepidochelys kempi*), although, hawksbill (*Eretmochelys imbricata*) and leatherback (*Dermochelys coriacea*) are also potentially vulnerable. Dramatic reductions in sea turtle entrainment have occurred over the past 24 years as a result of dredging and management alternatives implemented by the U.S. Army Corps of Engineers (USACE) and dredging industry through the USACE Sea Turtle Research Program. The success of these protection efforts is illustrated

in the reductions in incidental takes compared to the increasing number of dredged channels monitored. Between 1980 and 1981, 71 sea turtle incidental takes were recorded for Canaveral Harbor, Florida alone, whereas 35 takes were collectively recorded from all coastal hopper dredging along the southeastern U.S. during 2003.



*Hopper dredge draghead turtle deflector top view*

Due to the extreme inconsistencies in percent monitoring, screening configurations, number of projects monitored, and other methods for quantifying incidental takes throughout the history of these issues, caution should be taken when interpreting the fluctuations in the annual incidental take data reported. However, when incidental takes are quantified as sea turtle takes with respect to the number of dredging projects monitored, it is easier to identify the notable reductions in takes. Prior to 1992, the conservative figures ranged from 3 to 39 sea turtle incidents per project, whereas, starting in 1992, these numbers ranged from 0.5 to 1.8 turtle takes per project. It was in 1992 that the results and products from the Sea Turtle Research Program were starting to be implemented with turtle deflectors, relocation trawling, and dredging windows.

Visit the International Website:  
<http://www.pianc-aipcn.org/>



*Hopper dredge draghead turtle deflector bottom view*

Very little has been known about the biology and life history of sea turtles associated with coastal channels along the United States. Many management decisions concerning potential dredging impacts to sea turtles must, therefore, be made based on anecdotal or “best guess” information without defensible scientific data. Through the Sea Turtle Research Program, engineering and biological studies were conducted to develop a suite of protective tools to reduce dredging impacts on sea turtles. These investigations included sea turtle relative-abundance, behavioral, acoustic-detection and dispersal, and dredging equipment development. In addition to gaining valuable data for understanding sea turtle biology, these studies helped to develop draghead modification and draghead turtle deflectors, refine environmental windows, and establish protection protocols such as trawling to relocate sea turtles. The USACE is presently establishing an internet-based database to centralize and archive historical and future data regarding sea turtle impacts from dredging activities for long-term continuity and evaluation of these data. Efforts continue to identify additional methods to reduce sea turtle takes, better document sea turtle biology and dredging impacts in hopper-dredged channels,

and work with National Oceanic and Atmospheric Administration (NOAA) Fisheries to increase dredging options while minimizing impacts to sea turtles. Although the overall impacts to sea turtles from dredging activities is currently relatively small, the USACE and dredging industry is committed to the continued pursuit of efforts to further reduce dredging impacts on sea turtles.

Dena Dickerson is a Research Biologist with the U.S. Army Corps of Engineers, Engineering Research and Development Center, Waterways Experiment Station, Email [dickerd@wes.army.mil](mailto:dickerd@wes.army.mil).

## Meet the Commissioners *by Anne Sudar*

Each newsletter, we highlight one of our U.S. Section commissioners. This quarter, we are glad to introduce you to Ms. Doris J. Bautch.



**Doris J. Bautch**

Ms. Bautch is the Director of the Maritime Administration's (MARAD) Great Lakes Region. She reports directly to the Maritime Administrator in support of all agency programs, including supporting and conducting supplementary training for personnel in the maritime industries and participating in regional port and intermodal transportation development activities. MARAD'S Great Lakes region office is located in Chicago. The region covers the eight Great Lakes states and the eight Midwestern river basin states.

Ms. Bautch is the first woman to serve as a U.S. Section PIANC Commissioner. She is also the first woman to head any of MARAD's five regional offices.

Prior to her Great Lakes post, she served as Chief of MARAD's Division of Ports in

Washington, DC. Her responsibilities there included chairing the National Port Readiness Working Group, improving port and cargo security, conveying surplus federal property for port use, port assessments, and developing reports on the public port industry and port finance.

She also served as the U.S. delegate to the Organization of American States Inter-American Committee on Ports and chaired that organization's Technical Advisory Group on Port Security and its Port Training Subcommittee. She has directed training in security and management for over 300 port personnel in the Western Hemisphere.

In addition to serving as a Commissioner, Ms. Bautch is also the principal U.S. Representative to PIANC's, Maritime Commission Working Group 46, *Maritime Freight Transshipment* (i.e., Short Sea Shipping).

Ms. Bautch represents the U.S. Department of Transportation (DOT) on a Regional Working Group promoting collaboration of national significance for the Great Lakes. She also is active in several trade organizations and is past president of the Intermodal Club of New Orleans and the Minnesota World Trade Association.

She has consistently been recognized for her performance at MARAD including the Bronze Award, MARAD's highest award in recognition of extremely competent performance. Ms. Bautch was recognized by the Secretary of Transportation for her commitment to fulfilling DOT's mission and acknowledged as an Extraordinary Woman at DOT. Other awards include recognition for Women of Achievement in Baton Rouge and an achievement award from the Intermodal Club of New Orleans.

Prior to joining MARAD, Ms. Bautch held executive positions at the Port of Greater Baton Rouge, Port of New Orleans, Hellenic Lines, and The Pillsbury Company.

She holds a bachelor's degree from the University of Minnesota and a Master of Public

Administration degree from American University, Washington, D.C.

## U.S. Section PIANC Welcomes New Treasurer *by Anne Sudar*



The U.S. Section PIANC is pleased to introduce a new Treasurer, Joe Mantey, Principal Economist and Associate with the Greeley-Polhemus Group, Inc. Mr. Mantey brings more than 25 years of experience in both government and the private sector. His banking

### *Joe Mantey*

experience includes one year as Chairman and four years as a Member of the Board of Directors of the U.S. Engineers, L.A. Federal Credit Union.

In his consulting work, he specializes in economic and social impact studies, benefit/cost analysis, risk and uncertainty analysis, environmental impact assessment, contaminated sediment control, historic preservation, and life cycle costing.

You can meet Mr. Mantey at the upcoming Annual Meeting in Baltimore on October 20, where he will deliver his first financial report.

## Nominate a Colleague Today for a COPRI / ASCE Award! *by Kelly Barnes*

The American Society of Civil Engineers (ASCE) is now accepting nominations for the Coasts, Oceans, Ports, and Rivers Institute (COPRI)'s three awards for professional achievement. **The deadline for nominations is November 1, 2004.**

**John G. Moffatt-Frank E. Nichol Harbor and Coastal Engineering Award.** This award recognizes new ideas and concepts that can be efficiently implemented to expand the engineering or construction techniques available for harbor and coastal projects. The recipient must be a member of ASCE.

**International Coastal Engineering Award.** The award was established to provide international recognition for outstanding leadership and development in the field of coastal engineering. The recipient is to be chosen from the international community of coastal engineers without restriction as to nationality or Society membership.

**Hans Albert Einstein Award.** This award was established to honor a member of the Society who has made a significant contribution to the engineering profession in the areas of erosion control, sedimentation and/or waterway development either in teaching, research, planning, design, or management. The recipient must be a member of ASCE.

These awards are a great opportunity to honor your colleagues who have contributed to the civil and harbor, coastal, and waterways engineering profession in significant ways. Please consider nominating a deserving colleague for one of these awards.

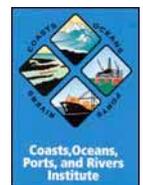
Complete details about the awards and nomination procedures are available at the COPRI Awards website:

<http://www.coprinstitute.org/inside/awards.cfm>.

Nominations packets should include:

- Nomination form (download from COPRI website)
- Two or three letters of recommendation
- Resume

For questions, email Kelly at the Coasts, Oceans, Ports, and Rivers Institute of ASCE, Email [kbarnes@asce.org](mailto:kbarnes@asce.org).



## U.S. Section PIANC Annual Meeting to Focus on Container-on-Barge

by Anne Sudar

The U.S. Section PIANC will hold its Annual Meeting October 20, 2004 at the Wyndham Hotel in Baltimore, Maryland. A morning business meeting will be followed by an afternoon seminar on Container-on-Barge Transport: Implications for Navigation Infrastructure.

Speakers are as follows:

- James R. McCarville from the Port of Pittsburgh will discuss the problems and opportunities associated with the start-up of a container-on-barge service on the Ohio River and the importance of infrastructure to support it.
- Joseph H. Pyne, President of Kirby Corporation, will address the importance of water transportation services to satisfy increasing demand for freight transport as a result of domestic and international trade growth.
- Lloyd Thompson of Moffatt & Nichol Engineers will talk about the Port Inland Distribution Network, an initiative of the Port Authority of New York and New Jersey aimed at distributing containers by barge and rail—in addition to trucks.
- Barry Holliday of the U.S. Army Corps of Engineers Headquarters office will provide the Corps perspective and the implications of container-on-barge on the Corps navigation program.
- Doris J. Bautch, Director, Great Lakes Region, Maritime Administration, will discuss the Heartland Intermodal Partnership (HIP), a regional approach to expedite safe and secure freight movement and to reduce congestion through increased use of the Heartland's intermodal transportation system, including water resources, to cope with transportation demands.

Registration is free. However, space may be limited, so pre-registration is strongly encouraged.

For more details and online registration, visit the U.S. Section PIANC website <http://www.iwr.usace.army.mil/pianc>.

## Younger Member and Student Opportunities in PIANC

by Anne Sudar and Edmond Russo

**U.S. Section Scholarship.** A U.S. Section PIANC Scholarship is available to Texas A&M University students, and may soon also be available to other universities. The award is \$1500. At present, the scholarship is awarded by the Texas A&M Scholarship Committee based on the following criteria:

- The applicant will provide a curriculum vitae or resume not to exceed one page,
- The selected applicant will be a graduate student or undergraduate student of junior or senior standing with a grade point average of at least 3.0,
- The selected applicant will be in a course of study in engineering, economic, or environmental disciplines related to planning, design, construction, operations and maintenance, and management of navigation infrastructure, coastal waterways, dredging, port and terminal facilities and water transportation planning, and
- The selected applicant will have demonstrated potential to make substantial contributions to a relevant field of engineering or associated discipline, and/or shows promise for further distinguished academic studies that are related to the mission of PIANC.

**2004 De Paepe-Willems Award Contest Results and Call for 2005 Papers.** The De Paepe-Willems Award is given for the most outstanding technical paper prepared on an aspect of waterborne transport. Categories include policy, management, design, economics, integration with other transportation modes, technology, safety, public involvement, and the environment. The

competition is open to anyone 35 years of age or under.



*Ir. Gustave Willems*    *Ir. Robert De Paepe*  
1901 - 1982

The winner receives a \$1000 U.S. Savings Bond, an expense-paid trip to the U.S. Section Annual Meeting, and an individual membership in the U.S. Section PIANC for five years. The international winner for 2005 receives a trip to the Annual General Assembly, which was held in Japan this year and Charleston, South Carolina next year.

Abstract submittal is closed for the 2005 competition, but 2006 is now on the horizon. The deadline for submitting paper abstracts for the 2006 contest is April 1, 2005, with technical paper submittals required by July 1, 2005. For more details contact Edmond Russo, Chairman, Publications Committee, at [edmond.j.russo@mvn02.usace.army.mil](mailto:edmond.j.russo@mvn02.usace.army.mil).

***Young Professionals' Implementation Group (YPIG)***. The YPIG is an international group of younger members of PIANC, which are focusing on:

- Building E-communication in the navigation community
- Representation of Young Professionals in the organization
- Promotion of PIANC to navigation interests
- Knowledge transfer of navigation-based information and technologies

There is an opening to fill the YPIG U.S. Section representative position. If you are

interested in taking up this position, please contact Ron Conner at [ronald.r.conner@usace.army.mil](mailto:ronald.r.conner@usace.army.mil).

## Working Group 24 Report Highlights *by Anthony Niles*

PIANC Working Group (WG) 24 first convened on February 5, 1999 with 13 members from various European countries, one from Russian Federation and one from the U.S. The purpose of the group and the report produced in 2002 is to provide guidelines for harmonization of information services in use or being developed in various inland waterway systems throughout the world. Such services include visual aids to navigation, voice and data radio, radar, internet, electronic chart systems, and Automatic Identification Systems (AIS). These various systems used for safety and efficiency of navigation provide information about the navigable waterway (channel depth, location, legal conditions for navigation) or information about waterway traffic.

Harmonization of the various services listed above produces River Information Systems (RIS) that enable maximum utilization of waterways and data sharing with other transportation modes (road and rail). WG 24 guidelines outline an approach to RIS design based on requirements and objectives for a particular waterway. RIS has been most successfully established on the Rhine and Danube Waterways in Europe. The areas even include RIS centers that function much like air traffic control centers, managing traffic and transmitting waterway information and piloting information.

Perhaps because U.S. inland waterways do not cross international borders there has been less momentum to establish standardized information services for navigation users. However, significant components of an RIS are already in operation in select areas. Vessel Traffic Services with mandatory AIS on certain vessels has been implemented in New Orleans and Morgan City, Louisiana. Such coverage will expand to eventually cover all U.S. inland navigable waterways. Also,

since the WG 24 report was issued, the U.S. Army Corps of Engineers has begun development of Inland Electronic Navigation Charts (IENCs) to cover all inland waterways. With IENCs and an onboard computer/GPS the vessel's real-time position can be shown with critical information concerning the waterway. These IENCs and onboard systems will then enable a significant component of an RIS; a single, harmonized display of information from various systems, including radar and AIS.

Mr. Anthony Niles, joining WG 24 during its progress, works for the U.S. Army Engineer Research and Development Center, Alexandria, Virginia, Email [anthony.r.niles@erdc.usace.army.mil](mailto:anthony.r.niles@erdc.usace.army.mil).

## U.S. Section Publication

### Responsibilities: AGA 2005 by Edmond Russo

The second Bulletin of each year is dedicated to the country hosting the PIANC Annual General Assembly (AGA). In May 2005, the AGA will be held in Charleston, South Carolina. It is the responsibility of the U.S. Section this year to solicit and obtain abstracts and articles that highlight interesting navigation achievements and developments in the USA, which prospective authors may believe of interest to a wider PIANC audience. This will be Bulletin No. 119, which will be issued June 15, 2005.

The U.S. Section accepted abstracts through September 1, 2004, which will serve as the basis of articles slated for publication in PIANC's International Bulletin No. 119. In the framework of a new publications policy, PIANC has expressed a bias towards descriptive articles instead of highly theoretical and mathematical contributions. Subjects cover the following topics, and others of interest to the navigation community:

- U.S. ports, port activity, and port development schemes
- Multi-year policy plans

- Major infrastructure and development projects
- U.S. contributions to research and development
- Dredging techniques and experiences
- Offshore development
- Articles on applied research at technical universities
- Inland navigation
- Environmental issues with regard to navigation and hydraulic engineering
- Maritime heritage
- Coastal protection and restoration
- An article on Charleston harbor, coastal and inland ports, and related regional topics, are welcomed

Consistent with the past, the U.S. Section target is to obtain about ten articles of maximum 3,000 words, with due consideration to the provision of quality pictures and figures. Authors should comply with the "Guidelines to Authors" (see <http://www.pianc-aipcn.org> under "Publications"). Text and figures/pictures must be provided as separate files. Text documents should be provided as a MS Word file, with figures and pictures in one of the following formats: jpeg, tiff, or eps. Graphics should be in full color with a minimum 300 dpi resolution. Refer to the PIANC website previous editions of the Bulletin for further aspects on article formatting. The General Secretariat can provide translations in French and German for articles by request. In addition, each author should provide:

- Personal identification data,
- Five key words,
- Picture identification, and
- Article summary.

Following past tradition, the U.S. Secretariat will develop an editorial "welcome message," as a way of welcoming PIANC members to the host country of AGA. There is an opportunity for U.S. public authorities and private companies to have their name associated with this special Bulletin, by making a reservation for advertisement. The cost for advertisement is reasonable (see <http://www.pianc-aipcn.org> under "Publications"). In prior years, countries have included a "national"

advertisement, which is an option under consideration by the U.S.

Editing, translating, type setting, and lay out of the Bulletin is very time consuming to ensure maintenance of a high standard of publishing. This takes time, so we must keep strict deadlines. The U.S. Section will provide a provisional table of contents to the publishers of the International Bulletin on October 1, 2004, covering articles received by that time. All articles, figures and pictures must be received from authors by the U.S. Section no later than **November 15, 2004**.

The following is a summary of the schedule for paper submittals:

- **Abstract Submittal:**.....**Closed**
- **Authors Notified:**.....**September 15, 2004**
- **Paper to Editor:**.....**October 15, 2004**
- **Final Papers Due:**.....**November 15, 2004**

Point of contact for abstract and article submittal is Edmond Russo, Chairman of the Publication Committee, U.S. Section PIANC.  
Tel 504-862-1496  
Fax 504-862-1902  
Email [edmond.j.russo@usace.army.mil](mailto:edmond.j.russo@usace.army.mil)

## Upcoming PIANC Events

by Edmond Russo

**U.S. Section 2004 Annual Meeting.** This event will be held in conjunction with the ASCE Annual Meeting, in Baltimore, Maryland October 20, 2004. See related article in this quarterly for more information.

**AGA 2005 in Charleston, South Carolina.** The U.S. Section is hosting the 2005 Annual General Assembly of PIANC in Charleston, South Carolina. Plans are moving ahead for the event, which is scheduled for May 9-13, 2005. The meeting will be held at the Francis Marion Hotel. The South Carolina State Port Authority has agreed to sponsor the opening reception and provide commentary during the boat tour of the harbor.

**31st World Congress.** The next International Congress will be held May 14-18, 2006 in the Portuguese resort city of Estoril.

## Upcoming Related Conferences

### 2004

- **Civil Engineering in the Oceans VI.** October 20-23. Baltimore, MD.
- **7th MTS Research and Technology Coordination Conference.** November 16-18. Washington, D.C.
- **International Conference on Coastal Infrastructure Development.** November 22-24. Hong Kong.

### 2005

- **4th International Surfing Reef Symposium.** January 12-15. Manhattan Beach, CA.
- **5th International Conference on Coastal Dynamics.** April 11-15. Barcelona, Spain.
- **Conference on Coastal Conservation and Management.** April 17-20. Algarve, Portugal.
- **Coastlines, Structures and Breakwaters.** April 19-21. London, UK
- **Solutions to Coastal Disasters.** May 8-11. Charleston, SC
- **Offshore Technology Conference.** May 8-11. Houston, TX.
- **Second International Coastal Symposium in Iceland.** June 5-8. Hornafjordur, Iceland.
- **5th International Symposium on Ocean Wave Measurement and Analysis.** (Waves '05) July 3-7. Madrid, Spain.
- **International Conference on Port-Maritime Development and Innovation.** September 5-7. World Trade Center, Rotterdam, The Netherlands.

### 2006

- **30th International Conference on Coastal Engineering.** September 3-8. San Diego, CA.

## About PIANC *by Anne Sudar*

**What is PIANC?** The International Navigation Association (PIANC) is a worldwide organization of individuals, corporations, and national governments. Founded in 1885 in Brussels, Belgium, it is concerned with maritime ports and inland waterways. The Association promotes contact and advances and disseminates information of a technical, economic, and environmental nature between people worldwide in order to efficiently manage, develop, sustain, and enhance inland, coastal and ocean waterways, ports and harbors, and their infrastructure, in a changing environment.

**Where is PIANC?** The international headquarters is located in Brussels, Belgium, at facilities provided by the Belgian Government. The headquarters of the United States Section is located in the Washington, D.C. area, within facilities provided by the U.S. Army Corps of Engineers.

**International Interaction.** The Annual General Assembly operates through a Council, which directs the working level permanent technical committees, international study commissions, and working groups.

**Working Groups.** Technical working groups are composed of participants from member countries who have interest in various subjects being studied. The groups gather, analyze, and consolidate state-of-the-art material from each country. The resulting reports are published and sent to each PIANC member. Working group reports and the International Bulletin are sent to each member from Brussels.

Every four years an International Congress, open to all members and other registrants, is held for the presentation and discussion of papers on subjects pertaining to waterways and maritime navigation.

PIANC also participates in technical activities with other organizations to study navigation

problems and joins with them to present symposia on related subjects.

**In the USA.** The United States became a member of PIANC by Act of Congress in 1902. The Chairman of the U.S. Section is the Assistant Secretary of the Army (Civil Works). The Director of Civil Works for the U.S. Army Corps of Engineers serves as President. The Section is managed by a National Commission of eleven individuals from both private industry and the Federal Government. The U.S. Section has two standing and four technical committees which promote the flow of information between members and facilitate cooperation with other national organizations. The committees are Membership, Publications, Environment, Inland Navigation, Maritime Navigation, and Ports and Recreation Navigation.

---

*A publication of the Secretariat  
U.S. Section, PIANC  
7701 Telegraph Road  
Alexandria, VA 2315-3868*

*Ronald R. Conner  
Secretary  
[ronald.r.conner@usace.army.mil](mailto:ronald.r.conner@usace.army.mil)*

*Edmond J. Russo, Jr., P.E.  
Chairman, Publications Committee, and  
Editor, U.S. Section PIANC Bulletin  
[edmond.j.russo@mvn02.usace.army.mil](mailto:edmond.j.russo@mvn02.usace.army.mil)*

