



PIANC Bulletin

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President's Message by Major General Carl A. Strock, President, U.S. Section, and Director of Civil Works, U.S. Army Corps of Engineers

Dear Members,

More than ever before, world trade drives America's economy. Ports and navigable waterways are paramount in sustaining America's economic growth and prosperity. They are also essential for national defense, and have a major effect on other water resources missions, such as flood control, water supply, hydropower, environmental protection and restoration, and recreation.

America's trade with the world means that our Marine Transportation System (MTS) must be prepared for bigger ships and higher volumes of inland barge traffic. Our MTS's efficiency in doing so equates to transportation



Major General Carl A. Strock

cost savings. For instance, rivers carry about 15 percent of U.S. freight, at one-half the cost of rail and one-tenth that of trucks. River transportation also can reduce potentially dangerous truck traffic on our Nation's already clogged highways. Transportation cost savings lower the costs of

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goods, the ultimate result being savings to consumers. As a side benefit, channel dredging results in immediate job growth and increased tax revenues for States and local municipalities. The construction, operation, and maintenance of our Nation's navigation projects also results in cleaner water and air due to reduced emissions and improved navigational safety.

The Nation spends about \$1.7 billion a year on improving, operating, and maintaining its navigation system – about 40% of the U.S. Army Corps of Engineers Civil Works budget. The navigation industry has been an outstanding partner with the Corps of Engineers in recognizing MTS program and project priorities, as well as in making the case for navigation to Congress and Administrations over the years. Yet today, our navigation system is showing signs of age. More than one-half of our locks are past their 50-year design life, and we have experienced major problems where locks had to be closed for emergency repairs. Without a major investment in the overhaul, and in some cases, replacement of our aging infrastructure, this problem will only get worse. Many channel maintenance projects have been deferred or reduced in scope. This backlog of work erodes the efficiency of waterborne commerce, a great challenge made even greater as navigation projects must compete in the wide spectrum of national priorities for funding.

Funding for the Civil Works program is tight for Fiscal Year (FY) 2004, and the President's FY 2005 budget request of \$4.22 billion is a \$350 million reduction from the FY 04 appropriation. The focus in the FY 2005 budget is on completing construction on projects where work is currently underway; projects not under construction by the end of FY 2004 would not be funded in FY 2005. Proposed funding to plan or design new projects would likewise be limited; only five new studies are budgeted in FY 2005.

To help protect our vital infrastructure and in light of national security requirements, the budget

includes \$84 million to continue anti-terrorist protection at key projects. Under the budget, our Headquarters would also retain a \$35 million emergency maintenance reserve to address unforeseen, urgent maintenance and repairs. The budget is frugal, but reflects the priorities of a Nation at war.

To address critical navigation program needs in a limited resource environment for FY 2006, Mr. John Paul Woodley, Jr., Assistant Secretary of the Army for Civil Works, directed that the Civil Works program be managed based on objective performance measures. This will require that we develop objective measures to rank projects. Projects providing the highest values to taxpayers should receive priority for funding, while those that demonstrate lesser value face cuts or elimination. The idea of performance based budgeting has been around since the Government Performance & Results Act of 1993, but implementation will begin in earnest with the FY 2006 budget. Corps programs in navigation, flood damage reduction and other business lines perform well in this area on the national scene; the Corps of Engineers is one of the very few Federal agencies required to show at least one dollar in benefits for every dollar spent. This does not mean, though, that we can't improve performance measures to better capture and communicate outcomes of our projects and activities. Navigation design and construction work is formulated to maximize economic benefits, and ranked for budgeting by benefit-cost ratio, generally with the highest performing projects being recommended for funding. Our operation and maintenance work, meanwhile, is ranked based on site conditions, utilization and benefits to the Nation.

The Corps will need close participation and support of our navigation partners to ensure near-term success in meeting project performance challenges within the budget. We also must maintain wide and frequent communication of future needs in meeting the Nation's world trade objectives. A significant opportunity for us all to

interact will be in Charleston, South Carolina next May, at the 2005 PIANC Annual General Assembly (AGA 05). This venue will provide a chance to network with national and international navigation associates, as well as to exchange information by participating in conference sessions. Please consider attending, as well as making a presentation on navigation initiatives important to our community.

Read on for more on AGA 2005 and other significant events in the navigation arena!

Sincerely,

Major General Carl A. Strock
 President, U.S. Section, and Director of Civil Works, U.S. Army Corps of Engineers

2004 AGA of PIANC Held in Fukuoka and Hakata, Japan *by Keita Furukawa*

The Annual General Assembly (AGA) of the International Navigation Association – PIANC, was successfully held in Fukuoka from May 10th through 13th, 2004.

The AGA started by having a welcome reception at the Sea Hawk Hotel & Resort on May 10th, followed by the main general meeting on May 11th. The retirement of S. Ghosh (India), the senior vice president, was announced. Dr. S. Noda (Japan) becomes the new senior vice president.



Hakata Island City

Mr. David Gordon of the U.S. Army Corps of Engineers, St. Louis District, gave his presentation titled “Chronic Dredging on the Upper Mississippi River Remedied with Innovative River Training Structures” as De Paepe-Willems Award winner in the U.S. Section this year. His paper can be found at the U.S. Section PIANC website: <http://www.iwr.usace.army.mil/PIANC/>.

On May 12th, there were two technical visits to the waterfront Development Project in Hakata Bay and the birthplace of Japanese porcelain that has linked Kyushu, Japan to Europe through the “Ceramic Road on the Sea.” The Hakata Bay Dinner Cruise was also held with 210 participants from more than 14 countries on this evening.



Daifu Tenmangu Shrine

On May 13th, there was the International Technical Seminar and panel exhibition at Fukuoka International Congress Center, as reported in the next article.



Panel exhibition

**AGA 2004
 Technical Seminar
 Program**

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

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International Seminar at PIANC AGA 2004 by Keita Furukawa

The International Seminar was one of the official activities for AGA 2004. The seminar featured a special lecture on the history of maritime cultural interaction between Kyushu, the host for the AGA, and Europe, where PIANC was established. Mr. Sakaida Kakiemon XIV, holder of the important intangible cultural property (Living National Treasure of Japan) presented “Historical route of the potteries, which linked Kyushu and Europe.”

There was also an Asian Session for “Technical Issues of Large-Scale Port Development Projects in Asia” and a Technical Session for “Technical Issues on Dredging” followed by a panel discussion among technical session presenters. Dr. Robert Engler of the Environmental Laboratory at the U.S. Army Corps of Engineers’ Engineer Research and Development Center (ERDC), presented “Dredging and Beneficial Uses of Dredged Material in the USA”.



Dr. Engler at his presentation

The seminar was open to the public. More than 300 participants joined the seminar from national and regional governments, academia, private contractors, as well as consultants of Japan (75%) and other countries (25%).

On the panel, the important aspects of international legislation, economic feasibility, innovative techniques, and public involvement, were stressed on beneficial use of dredged materials. Furthermore, establishment of a new working group for the beneficial use of dredged material of PIANC was announced.



Panel discussions held during the seminar

For more related information, please visit <http://www.pianc2004fukuoka.jp/>.

Dr. Sandra Knight becomes Chairperson of the Inland Commission of PIANC by Ron Conner

A historic event occurred at the 2004 AGA in Fukuoka, Japan. For the first time in the 120-year history of International Navigation Association, a woman is a member of the Executive Commission and the Chairperson of the Inland Navigation Commission (InCom). Dr. Sandra K. Knight, formerly Principal U.S. Representative to InCom, was confirmed during the conference as the new InCom Chairperson.

Dr. Knight has served as Principal U.S. Representative to InCom since 1998. In this capacity, Dr. Knight has strived to maintain the technical excellence of InCom working group

reports, facilitated the contributions of U.S. working group members, and insured the flow of technical information to U.S. Section members and the navigation community.



Sandra Knight in Japan

A graduate of Overton High School in Memphis, Tennessee, Dr. Knight has received a B.S.C.E. from Memphis State University, a M.S. in Civil Engineering from Mississippi State University and a Ph.D. in Civil Engineering from University of Memphis. Dr. Knight has worked for the Corps of Engineers since 1980, beginning her career in the Vicksburg District before transferring to ERDC in 1985. Dr. Knight currently serves as Navigation Technical Director for the Coastal and Hydraulics Laboratory at ERDC.

Acting President, U.S. Section PIANC Signs Agreement to Host 2005 AGA in Charleston, South Carolina *by Ron Conner*

Brigadier General Don T. Riley, while Acting President of the U.S. Section PIANC, signed an agreement to host the 2005 AGA at this year’s AGA in Fukuoka, Japan. The 2005 AGA will be held May 9th through 12th in the beautiful and historic city of Charleston, South Carolina. The theme of this year’s AGA and accompanying

Technical Workshop is “Port Development in the Americas”.



AGA handshake

Approximately 125 AGA delegates and their accompanying persons will stay at the gracious and elegant Francis Marion Hotel on historic Marion Square. The Francis Marion was opened in 1924 as the largest and grandest hotel in the Carolinas. Rising 12 stories above the historic district, many of the guest rooms and suites offer spectacular views of Charleston’s church steeples, antebellum mansions and the harbor. The hotel’s grand ballroom will be used for the general assembly as well as the closing dinner.



AGA agreement signing

Guests will be transported to Monday's opening reception at the South Carolina Aquarium in horse-drawn carriages. The Aquarium, located on Charleston Harbor, houses over 60 exhibits that focus on five major regions of the Appalachian Watershed: the Mountains, the Piedmont, the Coastal Plain, the Coast and the Ocean. During the AGA, accompanying persons will visit Middleton Place, a carefully preserved 18th century plantation, as well as Drayton Hall, the oldest surviving example of Georgia-Palladian architecture in the American South.



2004 Jack Nichol Award presentation

Wednesday's boat tour will explore Charleston Harbor, and visit Fort Sumter, where the U.S. Civil War began in 1861. The boat tour will also pass the U.S.S. Yorktown, a World War II aircraft carrier and national historic monument. We also hope



Ron Conner in Japan

to arrange a visit to the Hunley, a Confederate submersible raised in 2000. The Hunley was the first submarine to engage and sink a warship.

On Thursday, a technical workshop on "Port Development in The Americas" will be held at the Francis Marion Hotel. The workshop will explore historic port development in the Americas, as well as ongoing development of ports in South and Central America, and the Caribbean. Wednesday's boat tour and Thursday's technical workshop will be open to all members of the U.S. Section of PIANC and the general public for a nominal registration fee.

USACE Signs Memorandum of Agreement with Rijkswaterstaat by Dr. Linda Mathies

In a May 25, 2004 ceremony in the Hague, the Assistant Secretary of the Army for Civil Works, Mr. John Paul Woodley, Jr., and Mr. Bert Keijts, Director General of the Ministry of Transport, Public Works and Water Management of the Netherlands (Rijkswaterstaat), signed a memorandum of agreement to promote a long-term relationship between their two agencies for collaborative efforts of mutual benefit to the United States and the Netherlands.

Goals of the partnership include mutual cooperation and information exchange in the fields of flood control, inland navigation, dredging, and water resources management coastal development; promoting and enhancing public safety and community welfare by fostering research, development and improvement of integrated water management; and sharing best practices, lessons learned, and technical expertise in water resources management.

In attendance at the signing ceremony was the first Technical Exchange Delegation from the USACE. The delegation was lead by Mr. David Sanford and Michael Taylor, USACE Headquarters. Other members of the team were Ms. Susan Sylvester, Mr. Dan Haubner, and Mr. Tim Murphy, Jacksonville District; Dr. Linda Mathies, Mr. Bruce Baird, and Mr. Angel Mislan, New Orleans District; and Mr. Andy Petallides, North Atlantic Division.

The team spent a week visiting numerous water resources projects throughout the Netherlands in the company of Mr. Dick de Bruin and other technical experts working with the Rijkswaterstaat.



Agency Heads signing agreement. Seated left: Assistant Secretary of the Army, Mr. John Paul Woodley, Jr. and Mr. Bert Keijts, Director General for Water at the Ministry of Transport, Public Works and Water Management Rijkswaterstaat. Standing left to right, Mr. Fred Caver, HQUSACE; Mr. Clifford M. Sobel, U.S. Ambassador to the Netherlands; Ms. Melanie van Haegen, State Secretary of the Ministry of Transport, Public Works and Water Management rijkswaterstaat; and Mr. Dick de Bruin, Ministry of Transport, Public Works and Water Managment Rijkswaterstaat

Dr. Linda Mathies is an Environmental Specialist in the New Orleans District of the U.S. Army Corps of Engineers, Email linda.g.mathies@usace.army.mil.

PORTS 2004 Conference Held in Houston by Anne Sudar

Navigation experts gathered in Houston, Texas from May 23rd through 26th, 2004, at the PORTS 2004 Triennial Conference. PIANC was a co-sponsor of the meeting, along with ASCE's Coasts, Oceans, Ports, and Rivers Institute (COPRI). The theme was Port Development in the Changing

World, and attendance exceeded the organizers' expectations.

The kick-off address was given by RADM Kevin Eldridge, the 11th District Commander of the Coast Guard. His message was that safety and security must be factored into port design, and that in order to protect our maritime system from harm we need to utilize new forms of technology.

MG Carl A. Strock, Director of Civil Works, USACE, and President of the U.S. Section of PIANC, delivered the keynote address. He discussed the trends facing ports and inland waterways: increased global trade and vessel capacity; increased reliance on just-in-time delivery; increased emphasis on sustainable development, including environmental and social aspects as well as economics; and declining budgets. The major implications of these trends are: greater throughput will be necessary; increased intermodal activity; increased maintenance will be required to keep aging infrastructure operational; navigation development will be coupled with large scale ecosystem restoration; and there will be a need for greater collaboration between federal, state, local agencies and the private sector. In response to these forces, the Corps of Engineers has developed several initiatives: the Civil Works Strategic Plan, the planning improvements program, regulatory process improvements, environmental operating principles, regional sediment management, innovative construction methods, and performance measures.

The luncheon speaker was Alberto Aleman Zubieta, Administrator of the Panama Canal Authority, who talked about changes in world trade and resulting impacts on marine infrastructure. He also presented plans for possible expansion of the Panama Canal and related issues.

There were also dozens of technical sessions on every aspect of navigation and port development, and lots of productive networking among conference attendees. The next PORTS Conference

will be held in San Diego, California during March 25th through 28th, 2007.

Transition of Authority to the Iraq Port Authority *by Tom Wakeman*

Ambassador L. Paul Bremer III, the Administrator for the Coalition Provisional Authority, presided over the transition of authority to the Ministry of Transport in Baghdad on Thursday, May 25th, 2004. The Ambassador emphasized that the Minister of Transportation, working closely with Captain Manson Brown and his predecessors, had accomplished remarkable things and specifically mentioned the progress at the ports:

- “Many of the wrecked ships have been cleared from the Umm Qasr port and the key channels have been dredged.”
- “Regularly scheduled ferry services now operate between Dubai and Iraq.”

Ambassador Bremer closed his comments by stating that the Ministry will have to focus on the need to improve the intermodal connections so that cargo can move seamlessly from ship to rail to truck and from there to every point in Iraq. This desire can only be met if each portion of the transportation system is full functional and authorized to perform its responsibilities.

In keeping with the Ambassador’s actions in Baghdad, on Saturday, May 29th, 2004, at Umm Qasr, the Coalition Provisional Authority (CPA) celebrated the passing of authority for managing and operating Umm Qasr Port from the CPA and its contractor SSA Marine to the Iraq Port Authority (IPA). The festivities were well attended. From the IPA were representatives from the highest levels of the organization including senior officials from the Basrah office (Director General Mahmood Salih, Deputy DG Captain Hamid, and several others) and from Umm Qasr Port (Captain Adel, Port Manager, Mr. Sadiq, Deputy Port Manager, Mr. Basil, Technical Director, Captain Salah, Chief Security, Captain Samir, Manager of Survey Department and

many others). The CPA was represented by the Principal Maritime Advisor and his deputies from Umm Qasr (Thomas Wakeman, Jethro Schaper, and Bob Friedenwald) and representatives from CPA-South (Peter Bingham and Mario Portillo). Several representatives from SSA Marine (Peter McGivern, Harbor Master, Dean Faina, Security Manager, Alex Parkman, Yard Manager and Jim Brunton, Warehouse Manager), U.S. Army (Captains Mecina, Canale, and Hannon) and British Military (Captain Henry Burton) rounded out the crowd of about 25 people.

Each of the American and British attendees were given an opportunity to congratulate the IPA on this new undertaking as the CPA and its sister organizations step back and turn activities over to the IPA. These activities, which that had been handled by SSA Marine since May, 2003, including port management and operations activities are now transferred to the IPA. This transition of authority gives the IPA the responsibility to organize operations and to collect port fees henceforth. At the conclusion of the brief speeches, the Principal Maritime Advisor presented the Director General and the Port Manger with several gifts including a card signed by all CPA, SSA Marine staff and other attendees, copies of the original 1955 British consulting engineers’ drawings for the design for Umm Qasr Port (obtained from the University of Westminster, London) and a copy of the Phase 1, Transportation Master Plan being prepared by the Italian government for the Ministry of Transportation. During the presentation, it was mentioned that the 1995 design documents signified the port’s past and the Master Plan its future, including recommendations for intermodal connections. Thereafter the Director General expressed his appreciation to the CPA and SSA Marine for their assistance over the last year. He stated that the IPA will work to continue to improve the port.

No party is complete without refreshments, and this party was no exception with food and drink for all. SSA Marine provided pizza and a cake that

expressed their wishes for “Good Luck” to the IPA. The Umm Qasr IPA participants also brought several different types of cakes, and the CPA provided canned soda. Following the exchange of remarks, the celebration shifted to informal socializing with the many cakes being cut and served by the Director General and staff. The participants mingled for more than another hour with their colleagues discussing the past and the future of the Umm Qasr Port.

Tom Wakeman is on a temporary assignment with the Department of Defense, on leave from his permanent position at the Port of New York and New Jersey.

Port Improvements in Iraq by Tom Wakeman

There is measured improvement for the ports of Iraq as a result of reconstruction efforts. Areas addressed include: vessel traffic, smuggling vessels, scrap, and humanitarian aid.



Tom Wakeman in Iraq

There are nine vessels working in the port: *Merdif 2*, ro-ro; *Sima Tara*, containers; *Vishnakarma*, bagged rice; *Nanking*, bagged sugar; *Thor Triumph*, bagged rice; *Team Spirit*, bulk wheat; *Flecha*, bulk wheat; *Silver Star*, bagged rice; and *Thor Lotus*, bagged rice.

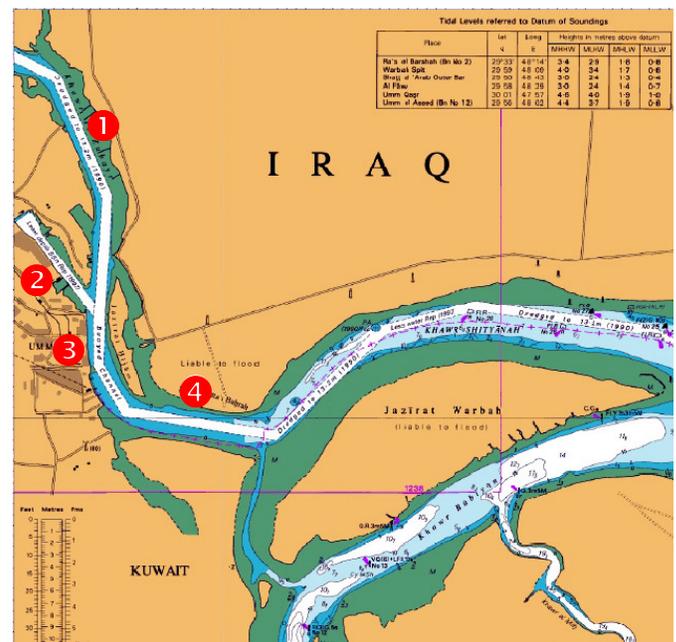
In addition, the *Saif Saad* is dredging in berths 1 and 2.

The United Nations is performing over \$30 million) worth of waterways clean-up in Umm Qasr and in the area below to the Arabian Gulf. Since last year, they have removed about 30 wrecks from

around the North Port and expect to remove perhaps six more towards the Gulf.

A UNDP maritime scrap contract began on May 20th of this year with 15 laborers and a foreman working on the cutting up of scrap on Iraqi docks (including a couple of tug boats). The contractor will pay the UNDP \$100/ton, which the UN plans to pass-on to the IPA.

Another area of port progress is the removal of seized smuggling vessels. The Iraqi Riverine Patrol (IRP), stationed near the ro-ro berth in North Port, conducts operations along the Khawr Az Zubayr (KAZ) to counter illegal smuggling activities. Only oil and livestock smuggling have been encountered thus far but intelligence suggests that these activities extend to weapon and illegal immigrant smuggling. Getting rid of these vessels and animals is tough. The IRP and Iraqi Customs take the alleged criminals away but leave the ships in the Smug Box (see map below) and sheep in the port’s care. Sheep remain here for weeks, and vessels can be here for months.



- ① Khwar Az Zubayr Channel to Al Zubayr Port;
- ② Umm Qasr North Port;
- ③ Umm Qasr South Port;
- ④ Smug Box

The *Navstar*, a large vessel (~160 meters in length), was causing congestion problems in the channel below Umm Qasr. The vessel was seized for smuggling last Fall and held in the port for six months. This already has limited berth space because of our “classic fleet” of old IPA ships. Thereafter, the *Navstar* was moved to the Smug Box awaiting the court's ruling. Following the court's decision, the vessel was sold to a new owner and has left the Smug Box for the open sea.

Movement of humanitarian cargos (wheat, rice, sugar and tea) is the highest priority cargo for all Iraqi ports. Oil is the highest for the smugglers along the Shatt-al-Arab. Iraq needs something like 300,000 metric tons (mt)/month or 10,000 mt/day of wheat to feed its 26 million people. Approximately 45% of the population is totally reliant on this food source, and 80% of the people are semi-dependent. Domestic sources provide about 120,000 mt/month or 4000 mt/day, and the domestic supply ends in June. Currently imported sources add another 180,000 mt/month or 6000 mt/day. Approximately 2000 mt/day comes from Aqaba, Jordan, another 2000 mt/day from Syria and 2000 to 3000/day comes from Umm Qasr. At the end of June, 2004, the wheat coming from Syria will stop because the contract terminates. It will not be renewed. The country needs an additional 6000 mt/day to make-up for the loss from the end of domestic wheat and the closing of the Syria contract.

Until recently, Umm Qasr had only its grain silo to move bulk wheat. With improvements the grain silo could discharge approximately 4000 to 5000 mt/day. Ministry of Trade is undertaking these facility rehabilitations. In addition, Trade has leased six grain Vigan Vacuators and they are ready to go to work at Berth 12. Each pair/set of Vigans is capable of discharging and filling at the rate of 3 trucks per hour. This equates to a set filling 36 trucks per day. As there are 3 Vigan sets, 36 trucks are multiplied by 3 to reach an overall daily figure of 108 trucks. Since each truck can carry an average of 40 mt/truck, the Vigans can add about 4,000 mt/day to our output.

It seems that with the improved silo operations and the 6 Vigans, cargo handling has become satisfactory. But there is a for need trucks to move the cargo from the port to the cities in the north and west. There are many improvements being made at the port, with a challenge to provide adequate land connections to the north.

Meet the Commissioners *by Amy Switzer*

Each newsletter, we will highlight one of our U.S. Section commissioners. This quarter, we are glad to introduce you to Charles Calhoun, Jr., P.E.

Charles Calhoun has provided many contributions to the U.S. Section PIANC throughout his involvement. Prior to his election in 1999 as Vice President for the Central Region and a National Commissioner of



Charles C. Calhoun, Jr., P.E.

U.S. Section PIANC, the office in which he currently serves, he was the chairman of the U.S. Section's Publication Committee.

Mr. Calhoun is now a private engineering consultant and also conducts leadership development seminars throughout the country. He completed his career at the Corps of Engineers Waterway Experiment Station (WES) when he retired in 1999 as the Deputy Director of the Coastal and Hydraulics laboratory. Prior to that assignment he led the Corps dredging research in the WES Environmental Laboratory.

Through his involvement with engineering, Mr. Calhoun has earned much recognition for his contributions to the community. He was a recipient of the ASCE Moffat & Nichol Harbor and Coastal

Engineering Award and was also inducted into the Waterways Experiment Station Gallery of Distinguished Employees.

Currently, Mr. Calhoun serves as the 2004 President of the Coasts, Oceans, Ports and Rivers Institute (COPRI) of the American Society of Civil Engineers (ASCE). He was also a founding member of COPRI. He is a Fellow in ASCE and has chaired two ASCE dredging specialty conferences.

Mr. Calhoun earned a B.S. degree in civil engineering from Mississippi State University in 1963 and a M.S. in civil engineering from Oklahoma State University in 1972.

Dr. Robert Engler Chairs the New COPRI Dredging Operations Subcommittee *by Anne Sudar*

Charles Calhoun, President of the American Society of Civil Engineers (ASCE) Coasts, Oceans, Ports and River Institute (COPRI) announced that PIANC member Dr. Robert M. Engler will chair the new Dredging Operations subcommittee of the COPRI Waterways Committee. The new organization was approved by the COPRI Board of Governors at their May meeting along with their Mission Statement:

“to study and disseminate information on all aspects of dredging operations and its potential impacts, establish and maintain contact with other organizations interested in the dredging process, and seek opportunities for joint efforts.”

Calhoun noted that the Waterways Committee has historically been the home of dredging within ASCE even though the word “Dredging” appears nowhere in the organizational structure. “That oversight has now been corrected”.

Dr. Engler is Chairman of the PIANC Environmental Committee, a member of the PIANC Executive Committee, and is the U.S. State Department Delegate to the London Convention (the treaty on ocean dumping). He is the Army's Senior Scientist (Environmental) at the U.S. Army Engineer Research and Development Center in Vicksburg, Mississippi.

Calhoun, U.S. Section Vice President and Commissioner, went on to say, “We are pleased to have Bob agree to chair this committee since we believe he is ideally suited for and committed to making it a success. He is known and respected world-wide in the dredging community and is in leadership positions in PIANC and the Western Dredging Association. These three organizations working together, while maintaining their niches, can accomplish great things for the overall benefit of the profession. Successfully working together is nothing new for PIANC and ASCE/COPRI as shown by the jointly sponsored Ports and Dredging Conferences. We look for even greater success with this new effort”. If you are interested in serving on the committee, please contact Bob at robert.m.engler@erdc.usace.army.mil

Younger Member and Student Opportunities to Excel 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 will 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
- 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 receives a trip to the Annual General Assembly, which will be held in Japan this year and Charleston, South Carolina next year.

The deadline for submitting paper abstracts for 2005 has been extended to August 1, 2004, with technical paper submittals required by September 30, 2004. For more details contact Edmond Russo, Chairman, Publications Committee, 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.

Clean Marina Program – A Positive Influence *by James L. Frye*

During the last decade, the United States has taken significant strides towards understanding the balance between recreational boating and environmental conservation and management. The last ten years have created a breadth of experience about mitigating the impacts of development and the need for appropriate trade-offs between profitable operations and practical science resulting in sound regulation.

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



Clean marina programs were created to address many of the common challenges at state and local levels and to test the viability of public and private partnerships. These efforts have re-shaped the relationship between regulators and industry and have provided a platform to continually improve practices that ensure recreational boating is compatible with environmental goals.

One example – representative industry groups like the Marina Operators Association of America (MOAA) conducted a two-day national workshop, held in Mystic, Connecticut in September, 2002 that addressed the need for implementing the Environmental Protection Agency's (EPA's) national management measures to control non-point source pollution from marinas and recreational boating. The workshop brought together the National Park Service, Corps of Engineers, Tennessee Valley Authority, Fish and Wildlife Service, Coast Guard, Bureau of Reclamation, state agencies, the marina industry and the majority of Clean Marina programs in the country.

This first-time event brought over 100 local, state and federal officials responsible for the development and delivery of clean marina programs as well as national and regional marine trade group representatives to systematically use the experience of existing clean marina programs and to shape a set of common principles, approaches, tools and techniques for future clean marina programs.

Although many lessons were drawn from the workshop, a key outcome was the definition of Clean Marina Principles that were mutually agreed

upon by the country's leading practitioners. Guiding principles are those actions that every clean marina program, regardless of the unique qualities of each place and site, should employ. The group concluded that for a Clean Marina Program to be successful, it must:

- Provide adequate and innovative incentives to encourage participation of target groups. Incentives include demonstrating economic value, access to grant money, and marketing and branding.
- Develop and support partnerships that serve as a foundation for consensus building.
- Identify funding sources that can be used to initiate and sustain programs early in the design process. Funding sources must reach beyond traditional mechanisms and explore alternative opportunities such as enhanced cost sharing, fund leveraging and user fees.
- Encourage consumer demand for clean marinas.
- Include strong educational, awareness and outreach components that encourage the participation of a broad audience.
- Apply today's best technology and encourage the development of new and innovative approaches to pollution control.
- Seek a balance between voluntary and regulatory approaches that ensure facilities' compliance with existing regulation and help them implement practices that go beyond what is required.
- Collect and share lessons about technology and process in a regular and systematic way.
- Publicly identify, designate and promote those facilities that meet clean marina standards.
- Recognize that clean marina programs are cyclical, moving thru a series of steps from initial design delivery to assessment and back to design. As such, programs must be adaptive and evolutionary in their approach.
- Set meaningful and measurable criteria to document success at both output and outcome levels.

As we move into the next century, we must continue to highlight clean marina successes and learn to share these experiences more effectively. We must develop mechanisms to spread key innovations across the country more quickly. Clean marina programs must gain national recognition and receive more national attention. We need to institutionalize clean marina programs nationwide through the voluntary process of education. These needs can— in part – be met by systematizing approaches and techniques to common problems that draw from clean marina’s collective experience.

Clean Marina programs are a course to clean boating practices and experiences. They are providing a foundation for a cleaner recreational environment and a higher quality recreational experience.

Jim Frye can be reached for more on the Clean Marina Program jfrye@nmma.org.

Marine and Facilities Safety in the Navigation Program *by Karl Anderson*

Safety of USACE employees, our contractors, facility users, the public and other stakeholders is always of the highest concern to our organization. The prevention of injuries, deaths and loss of property is a high priority for us. Not only are the various safety and health professionals needed in this endeavor, but each person involved has a part to play, from the vessel master to the lock tender to the maintenance mechanic. Assistant Secretary of the Army for Civil Works, Mr. John Paul Woodley Jr., (the current Chairman of the US Section of PIANC) strongly supports the safety programs in USACE civil works operations. During a recent briefing to him of the USACE Civil Works-related safety programs, he made it clear that safeguarding lives and property is a high priority of his. Similarly, the current USACE Director for Civil Works and President of PIANC, MG Carl A. Strock has had years of field and command experience that have given him insightful knowledge of accident

prevention and have made him a vigorous proponent of Safety.

With such strong support, one might think the USACE Safety Office wouldn’t need any assistance in getting their job done. USACE does have an enviably good safety record, but it is only possible through a combined effort within all disciplines of USACE and with our partners. Successful safety and health programs have always relied on partnering between safety offices and the other stakeholders because in order to succeed, a program needs safety expertise combined with operational insights. Recent changes to the USACE organizational structure and business process reflect just that cooperative combination of skills.

The USACE 2012 organizational structure has created Communities of Practice (CoPs) – interdisciplinary teams focused on specific mission areas. Basically, everyone involved in that mission area is by default a member of the Community; since safety is everyone’s concern, the Safety CoP is naturally large. In order to concentrate efforts on specific program areas, several Sub-Communities of Practice have been developed, and some of these are even broken down further into functional teams for specific types of missions. The teams most affecting navigational issues are part of the Operations Safety Sub-CoP and include the Marine Safety functional team, and the Operating Projects (Facilities) Safety functional team. Each of these teams will have co-leaders from the USACE Safety and Operations organizations and “core members” selected from USACE, other agencies, and professional trade organizations. The core members will perform a variety of vital functions such as developing regulation guidelines, researching best practices, preparing safety notices/lessons learned, and generally acting as a clearing house for safety information on the mission area. “Participant members of these teams will benefit from the information shared and will serve as a resource of information in the core group’s actions.

This may all sound very dull, but considering the numerous safety challenges faced daily in USACE operations, participation in these teams can bring each member a tremendous amount of information. Much of the work the teams perform will be accomplished virtually through web pages, email forums, and teleconferencing. In order to start the Safety CoP, Sub-CoPs and teams off with unified goals, better cohesion, and an initial assessment of issues needing work, the USACE Safety and Occupational Health Office is holding a Safety and Health Community of Practice Workshop during August 17th through 20th, 2004, in Seattle, Washington. The week promises to be very beneficial, with team introductions, forums of the teams, and general working group actions to get things started. We are identifying members for the various teams and groups both within USACE and outside – if you have a strong interest in participating on one of these marine-related teams, please call me at (202) 761-7112 and we can decide how best to fit you into the community.

We applaud the efforts of all our team members, associates and partners in maintaining a safe and healthful environment. Even with effective programs and processes in place, we will continue to experience accidents, and for that reason we need to continually share information and evaluate our operations so we can improve. The formation of the Safety and Health CoP, Sub-CoPs and teams will go a long way towards unifying our efforts and crafting our work methods into the best possible practices.

We look forward to working with many of you in the future: We are all in this together, and the best way for us to succeed is to share our strengths.

Mr. Anderson is Program Manager for Construction, Operations and Training, HQUSACE Safety and Occupational Health. Email: anderson.a.karl@hq02.usace.army.mil.

Working Group 7 Report Highlights

by Dr. Russell Theriot

Wetlands are among the most important and productive ecosystems on earth. Although wetlands



comprise only about 4 to 6 percent of the world's land surface, they contribute a much greater proportion of the world's overall biological productivity and water resource functions. Since wetlands reside at the interface where land meets water, they are very often the setting where navigation infrastructure development occurs. Recognizing wetland significance, scarcity, and relationship to navigation, PIANC tasked Working Group 7 (WG 7) in January, 2000 with producing a guidebook for managers, scientists, and engineers to use for sustainable planning, design, construction, operation, and maintenance of navigation projects in wetland environments.

There is greater awareness of society on the significance of wetlands and associated impacts stemming from navigation infrastructure development. The guidebook characterizes wetland functions and how to engage the public in addressing development needs while maintaining vital wetland functions. Plan formulation, project design, and alternative evaluation are described in the report. Important aspects of project construction, operation, and maintenance are also discussed, with coverage of principles of adaptive management that should be applied during project implementation. Several case studies are provided to describe lessons learned and best practices for working sustainably with wetland ecosystems.

An international group of PIANC members formed WG 7. Representatives were from the USA, United Kingdom, The Netherlands, Switzerland,

Japan, Spain, France, Italy, and the UN Office of the RAMSAR Convention on Wetlands. Members convened over a two year period at locations around the world to develop the report. They exchanged experiences, as well as management and technical knowledge in the environmental and navigation arenas, which served as the basis of the report's contents. The group was Chaired by Dr. Russell Theriot, who is with the Environmental Laboratory at the U.S. Army Corps of Engineer's Engineer Research and Development Center in Vicksburg, Mississippi, USA. The report is available from the PIANC International web site at <http://www.pianc-aipcn.org/>.

U.S. Section Publication Responsibilities for 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 is accepting abstracts through **August 15, 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 may include presentations on the following topics, or 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:

- **Abstracts Due:**August 15, 2004
- **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.

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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. More details to come.

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

- **Conference on Hydraulics in Water Engineering.** July 13-16. Queensland, Australia.
- **Technologies for Deep Water and Remote Offshore Developments.** August 23-25. Lisbon, Portugal.
- **Conference on Coastal and Estuarine Habitat Restoration.** September 12-15. Seattle, Washington.
- **ASBPA Fall Conference.** September 13-15. New Orleans, LA.
- **Challenger Conference for Marine Science.** September 13-17. Liverpool, UK.
- **29th International Conference on Coastal Engineering.** September 19-24. Lisbon, Portugal.
- **Littoral 2004: Delivering Sustainable Coasts: Connecting Science and Policy.** September 20-22. Aberdeen, Scotland
- **Panamerican Congress on Ocean and Coastal Engineering.** September 22-24. Mexico City, Mexico.
- **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.

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