



THE PIANC NEWSLETTER

Permanent International Association of Navigation Congresses

Fall/Winter 1995

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Ballentine Appointed Secretary, U.S. Section

Major General Stanley G. Genega, President of the U.S. Section, PIANC, recently appointed Mr. Thomas M. Ballentine as the new Secretary. Mr. Ballentine has been with the Institute for Water Resources for the last 20 years and is currently with the Policy and Special Studies Division. He officially assumed his new duties on 1 October 1995.

Mr. Ballentine is no stranger to PIANC. Many of you will remember him as the Executive Secretary of the U.S. Section, PIANC, from 1985 to 1988, when it was still a part of the Water Resources Support Center.

The new Secretary has already set up a busy schedule for the coming year and is talking of developing the U.S. Section's goals and objectives to parallel the PIANC international strategic plan. Working along with the three Regional Vice Presidents, who are now also commissioners or commissioner designees, Mr. Ballentine hopes to broaden the structure of the organization. He would like to see PIANC emerge as the organization set forth in the official rules and regulations by fully implementing the committee structure. Now that all seven of the standing committees have chairmen, he hopes to expand the technical activities and more fully support the mission.

"I know I can count on John Pisani and the committee chairmen to complete organizing the technical committees and focus on the tasks ahead," Mr. Ballentine said.

He also feels that it is important to publicize the meetings and activities of PIANC by creating a PIANC Homepage on the Internet. This would

**Annual Meeting
U.S. Section, PIANC
9-11 October 1996
Seattle, Washington**

Host: Port of Seattle

Mark your calendar and watch for additional information.

allow PIANC to share dates of meetings and other events as well as abstracts of technical working group reports with a much larger audience.



Thomas M. Ballentine

"Several representatives of Corps districts have submitted articles to our newsletter, and we would like to encourage more to do so," said Mr. Ballentine. "We have recently had an increase in the number of requests for the reports of the technical working groups. I see that as a very positive sign." Mr. Ballentine feels that if the benefits of the organization to the Corps and other agencies can be enhanced, there will be more interest in what PIANC does, and this, in turn, will increase membership. One way to do that is to better identify the issues that would be worthwhile for the Corps to pursue.

"We should explore different ways to promote and increase our membership by attracting some younger members and people from other disciplines," he continued. "One way to do that is by making PIANC membership more

affordable and accessible. Chairman Chuck Connors and the other members of the Membership Committee are exploring some options in that area. We also need to encourage and provide more opportunities for current members to participate in organizational activities."

In keeping with that, the U.S. Section, PIANC, is changing from several regional meetings a year to an annual meeting of the whole organization, which will be open to anyone who wishes to attend, member or not. The first annual meeting will take place October 9-11, 1996 in Seattle, Washington, with the Port of Seattle acting as host.

In addition, the U.S. Section, PIANC, plans to sponsor a series of one-day technical workshops executed by the technical committees and regional vice-presidents. The first workshop will address recreational boating and congestion. The next one will assess damages to port and terminal infrastructure and the navigation impacts of the 1993 Upper Mississippi River flood. The newsletter will keep you up to date on the specifics of these workshops.

"As you can see, we have many plans in the works," concluded the new Secretary. "I expect this to be a very exciting and productive year for the U.S. Section, PIANC, and I look forward to working with you to make that happen!"

Changes in International Positions

The following new PIANC International officers were announced at the General Assembly of the Permanent International Commission in New Orleans last May:

Mr. Kiyoyasu Mikanagi, Japan Section, PIANC, is the new International Vice-President, succeeding Mr. Pierre Savey of France. Mr. Mikanagi, a delegate to the Permanent International Committee since 1987, is well-

known for his outstanding performance as the head of the Organizing Committee for the 27th Congress in Osaka, Japan, in 1990. He was with Japan's Ministry of Transport, in the research and design arena, from 1958 until his retirement in 1991.

The new Secretary General is Mr. Charles Van Begin of Belgium, a construction engineer with the Brussels Bureau of Bridges for many years and more recently, administrator of the Brussels Airport Terminal Company. Mr. Van Begin was the Executive Director of PIANC for the last two years.

The new Chairman of the Permanent Technical Committee for Inland Navigation is Mr. Dik Tromp of The Netherlands, who succeeds Mr. Cees van der Burgt. Mr. Tromp acted as First Secretary of the Oslo and Paris Commissions until 1980 and is currently the Chairman of the London Convention 1972. As the Director of the North Sea Directorate of Rijkswaterstaat, Mr. Tromp is responsible for infrastructure on the Dutch part of the Continental Shelf and environmental issues relating to the sea.

Dr. Edoardo Almagia of Italy, a PIANC member since 1953, was appointed Chairman of the Finance Committee. From 1947 to 1991, Mr. Almagia managed the family company, Impresa Almagia, and then the sister company, Sider, until his retirement in 1994. The companies specialized in maritime projects and dredging, working in Morocco, Tunisia, and Libya as well as Italy.

Mr. Lyle C. McLaren, Jr., of the United States, was appointed Vice-Chairman of the Finance Committee. Mr. McLaren has been the Treasurer of the U.S. Section, PIANC, for the last seven years and held the position of Executive Secretary from 1979 to 1983. A retired, long-time member of the Corps of Engineers' Board of Rivers and Harbors, he sees PIANC as a resource not used to its full capacity and would like to do some new things like put PIANC reports on CD ROM. He thinks this would give more people access to

PIANC technical research and save money in the long run as well.

The Executive Committee gave the responsibility of chairing the Editing Committee to Prof. J. Marchal from the University of Liege in Belgium. An active member of PIANC since 1976, Prof. Marchal is the author of numerous articles on shipbuilding, shipyards and transportation systems analysis. He is a frequent presenter at PIANC Congresses and a prolific contributor to the bulletin.

Congratulations to all the new officers!

PIANC Establishes Permanent Environmental Commission

The PIANC Executive Committee formally approved the Permanent Environmental Commission (PEC) at the Seville Congress in May 1994. The PEC is responsible for general environmental issues of interest to PIANC and representing it in international organizations, such as the London Convention, that deal with these issues. It also initiates communications with non-PIANC groups involved in environmental affairs and strives to enhance PIANC membership with environmental specialists.

Since its initiation, the PEC has met twice in Brussels in conjunction with PTC I and II and the Special Commission for Sport and Pleasure Navigation.

Currently, the PEC has three working groups:

1. Management of Aquatic Disposal of Dredged Material
2. Wildlife Habitat and Port Activities (Emphasis on Birds)
3. Glossary of Environmental Terms and Terminology as Related to PIANC Activities

Dr. Robert M. Engler of the U.S. Army Engineer Waterways Experiment Station serves as the PEC Chairman.

Former AAPA President to Head North Carolina Ports

Erik Stromberg, former President and Chief Executive Officer of the American Association of Port Authorities (AAPA), will become Executive Director of the North Carolina State Ports Authority on January 1, 1996. James Scott, the current Executive Director will retire on December 31.

Since June 1987, Mr. Stromberg has headed the trade association, representing 129 port agencies throughout the Western hemisphere. His many accomplishments at AAPA include:

- Increasing effectiveness of government relations efforts through consensus development among members.
- Improving communication and coalition-building with the port, maritime and labor communities.
- Leading the association through a strategic planning process.
- Developing a public awareness campaign for greater appreciation of ports.

Mr. Stromberg is a U.S. Commissioner of PIANC.

AAPA Names Nagle President and CEO

AAPA has named its Senior Vice-President, Kurt J. Nagle, as its new President and Chief Executive Officer. Mr. Nagle succeeds Mr. Erik Stromberg, who recently resigned to head the North Carolina State Ports Authority.

Mr. Nagle joined AAPA in 1985 as the Director of Membership Services and was promoted in 1987 to Vice President of Membership Services and Administration. In 1989, he was made Senior Vice President. Mr. Nagle holds M.S. and B.S. degrees in Economics from George Mason University in Virginia.

(The following is a summary of the debate on environmental issues which took place at the Permanent International Commission in New Orleans, 26 May 1995.)

The International Debate on Environmental Issues

by Michael Thorn

It is important for PIANC, as a professional organization, to recognize and respond to society's concerns about the relationship between commercial activities and the whole environment in which we live and work. The objective of the International Debate on Environmental Issues was to paint the environmental landscape and provide a signpost for PIANC's increasing awareness and involvement in environmental issues and sustainable development of ports and navigation for the future.

The debate was chaired by Dr. Robert Engler, the Chairman of PIANC's Permanent Environmental Commission. He emphasized the emergence of a "precautionary approach" in the amendment of the London Convention, which controls disposal at sea, and the need to focus on environmental management, environmental investment, and practical advice to managers facing these issues.

Topics raised during the debate reflected the importance of public perceptions. Dr. Craig Vogt of the U.S. Environmental Protection Agency brought up the changing of the title of the London Dumping Convention to emphasize that it is not "a dumper's club" and that only about 10 percent of U.S. dredged material is contaminated. Constance Hunt of the World Wildlife Fund emphasized the need to find solutions by talking together. "In the past, developments happened in

isolation, but now project planning embraces multiple skills and a sharing of knowledge and objectives," she said.

The debaters honed in on the need to express concern for the future of navigation in some kind of common language that can bring together various scientific principles. They stressed the need for PIANC members to enter the public debate.

The direction that PIANC should take with respect to environmental issues was discussed at length throughout the debate. The establishment of the Permanent Environmental Commission will allow PIANC to introduce other scientific expertise—ecology, marine biology, chemistry—as relevant technical dimensions that we must understand and include in designs and operations. PIANC must first give guidance and help to its own members.

PIANC also needs to produce more well-argued position papers on policy-making for organizations such as the International Maritime Organization. PIANC members and sections can all be effective in informing and influencing their own national policy-makers, representatives in international organizations and non-technical public. Many of our members hold personal memberships in local conservation trusts. We need to find the compromise between the extreme positions of absolute conservation and unconstrained development. We can do this only by facing the issues, speaking the technical languages, and understanding the many dimensions.

Michael Thorn is a Director of HR Wallingford, Ltd, in Oxfordshire, England. He is a member of the PIANC British National Committee and the Permanent Environmental Commission.

Innovative Partnership Makes Dredging Project Happen

by Scott P. Miner

The Oakland Harbor deepening project, authorized in 1986, had been stalled due to nonavailability of a disposal site. An innovative partnership between federal, state and local agencies and environmental groups has cleared the "mudlock" and made this San Francisco Bay Area dredging project possible after all.

The project will increase the depth of existing channels to 42 feet to accommodate modern container ships. The total quantity to be dredged is about 5.5 million cubic yards.

The Sonoma Baylands Wetland Demonstration Project in Sonoma County, California, will restore tidal marsh on 348 acres of diked land, using dredged material.

The California State Coastal Conservancy, a government agency, and the Sonoma Land Trust, a non-government organization, conceived and planned the project. Their initial efforts were independent from the Oakland Harbor project.

Using state bond funds, the Land Trust acquired the site and completed a restoration plan in 1991. The plan identified the use of dredged material as the best means of restoring tidal salt marsh habitat.

After the plan was completed, the Coastal Conservancy, Port of Oakland, and local environmental groups began a cooperative effort to use dredged material from Oakland Harbor to construct the Baylands project. In the meantime, the environmental groups informally agreed not to litigate the interim deepening of a portion of Oakland Harbor using open water disposal in the San Francisco Bay.

The Coastal Conservancy, Port of Oakland, and environmental groups actively organized political

support for the Sonoma Baylands project among maritime industries, fishermen, and civic and labor interests. As a result of those efforts, Congress directed the Corps to construct the demonstration project in Section 1066 of the Water Resources Development Act of 1992. The Corps began design and construction in June 1993.

The Coastal Conservancy is contributing 25 percent of the estimated \$8.5 million Sonoma Baylands construction costs. This includes the additional costs of transporting 2.0 million cubic yards of Oakland Harbor dredged material to the Sonoma site instead of disposing of it in the ocean. About 1.0 million cubic yards of contaminated sediment will be taken to an upland disposal site. The remaining 2.5 million cubic yards of dredged material from Oakland Harbor will be discharged at a newly-designated deep ocean disposal site, 50 nautical miles west of the Golden Gate.

POC is Scott P. Miner, San Francisco District, Corps of Engineers, (415) 744-3276.

U.S. Proposes Plan for Seaway

The acting administrator for the U.S. St. Lawrence Seaway Development Corp. issued a three-point plan to improve the competitiveness of the St. Lawrence Seaway. He is urging Canadians to:

- Eliminate lock fees at the eight locks on the Welland Canal section of the waterway, saying the fees discriminate against smaller vessels.
- Join with the U.S. in studying the possibility of increasing the maximum allowable draft for seaway vessels by 9 inches (to 27 feet).
- Approve a vessel-incentive program that would give toll reductions to new or retrofitted ships that transit the Seaway.

Currently, the Canadian St. Lawrence Seaway Authority levies all tolls collected on the Seaway.

The Authority has been involved in discussions with a consortium of Seaway users to let the private sector manage the system with the lock and dam system remaining the property of the government. Of the 15 locks on the system, 2 are administered by the St. Lawrence Seaway Development Corp. The other locks are operated and controlled by the St. Lawrence Seaway Authority.

(Source: USDA Agricultural Marketing Service)

Birgeles Elected New Vice President for Eastern Region

Congratulations to Joseph J. Birgeles, the recently elected new Vice President for the Eastern Region of the U.S. Section, PIANC!

The U.S. Commission of PIANC has decided that the person elected as Vice President of the Eastern Region would also immediately become a Commissioner designee. As the next Commissioner position becomes available, Mr. Birgeles will automatically fill the position.

Mr. Birgeles has been with the Port Authority of New York and New Jersey since 1969. At present, he is the manager of the External Affairs Division of the Port Department of the Authority. He is responsible for overseeing port and marine resource programs and projects related to port planning and development, federal port policy, intergovernmental relations, public affairs, and vessel and terminal operations.

An active member of several professional organizations, Mr. Birgeles is Chairman of the American Association of Port Authority Harbors, Navigation and Environment Committee; Vice Chairman of the North Atlantic Ports Association Committee on Navigation Improvements; and Chairman of the U.S. Coast Guard's New York Vessel Traffic System Advisory Committee.

The new Vice President of the Eastern Region holds a Master of Science in Transportation

Management and a Bachelor's degree in Marine/Transportation/Business Administration from the State University of New York, Maritime College, Fort Schuyler.

Sweden Revives Its Shipbuilding Industry

Until the mid-80s, Uddevalla, Gothenburg, Landskrona, Malmo, Karlskrona and Stockholm were large, well-known shipbuilding centers, producing tankers, bulkers, ferries, passenger vessels and gas carriers. Today, only a few yards remain to construct military crafts, fast ferries and the smaller merchant marine vessels.

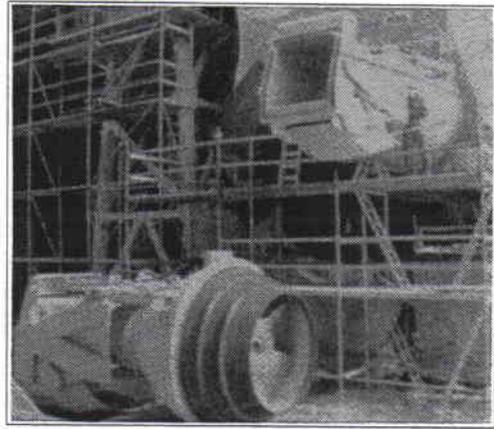
But things are changing rapidly and the shipbuilding business is making a comeback in this area. Ship repair and conversion companies are also on the rise in Sweden.



Sweden waits for the delivery of Stena's first HSS-ferry.

Much of the old skill, experience and "know how" has survived with the personnel who transferred to consulting firms, and it is being re-activated now. The old shipbuilding companies are merging or collaborating in the development of innovative projects. For example, Kockums and B&W have entered into an agreement to bid on structural steelwork for the Sound Bridge project that will connect Sjaelland with Southern Sweden.

KaMeWa of Kristinehamn, one of the world's leading suppliers of marine propulsion systems, has acquired Aquamaster-Rauma from Finnyards,



Four KaMeWa-waterjets type 160 S11 drive the HSS-ferry with a total output of 68,140 kW.

Ltd., and is taking huge orders for controllable pitch propellers for cruising vessels as well as huge waterjets for fast ferries and military crafts. It installed four waterjets with steering and a reversible unit on board the first Stena HSS (high speed service) ferry, which is under construction at Finnyards. With a total output of 68,140 kW, this job represents the largest and most powerful propulsion package ever supplied.

Det Norske Veritas (DNV) and KCS decided to join forces to provide the shipbuilding industry with integrated software applications for the design, classification and production of ships. The two companies see a significant potential for improving their services by enhancing the speed and overall efficiency of the computer tools offered to the yards.

Landskrona, on the Swedish side of the Oresund, and Gothenburg, Sweden's biggest harbor, are fast becoming bustling shipbuilding and repair centers. Swedish maritime companies are actively trying to get back into the European and international shipbuilding scene.

(Condensed from an article in Hansa, May 1995)

New Panel Heaters Keep Ice off Lock Walls

by *Donald Haynes*

On northern rivers, inland waterways, and harbors, ice accumulates on lock walls, docks and wharfs as a result of water-level changes on the cold surfaces. Each time the water level changes, a thin layer of ice freezes onto a wall or previously frozen ice. This ice buildup, or ice collar, can extend several feet out from the wall. With an ice collar frozen onto a wall, gates cannot be fully opened in lock chambers, boats cannot fit into locks with small clearances, and boats can have difficulty docking.

Ice can also build up on walls through wave action, splashing or misting.

To prevent ice growth on the walls of miter gate recesses at locks, a heater panel was designed (See fig. 1). It is made of two aluminum plates separated by aluminum spacers for a total thickness of 1/4 inch. Aluminum is lightweight, rustproof and a good conductor of heat. The heating element is a self-regulating heat cable with a capacity of 40 W/ft. The total power to the panel is 1,920 W and the power density is 60 W/sq. ft. The end of the cable and all junctions must be carefully waterproofed.

The cost of materials for one 4 ft x 8 ft panel is about \$900; however, the unit cost would decrease with multiple units.

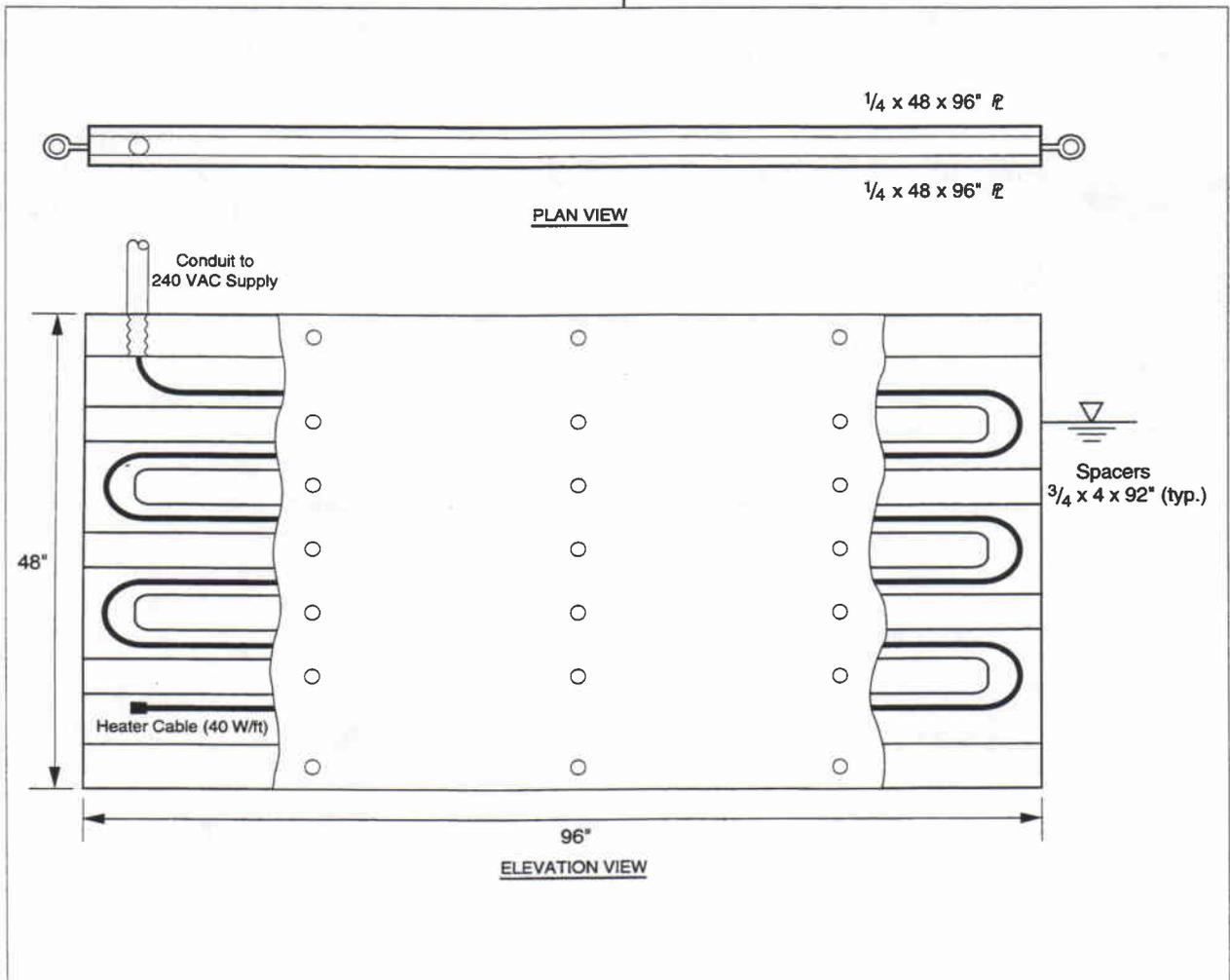


Figure 1

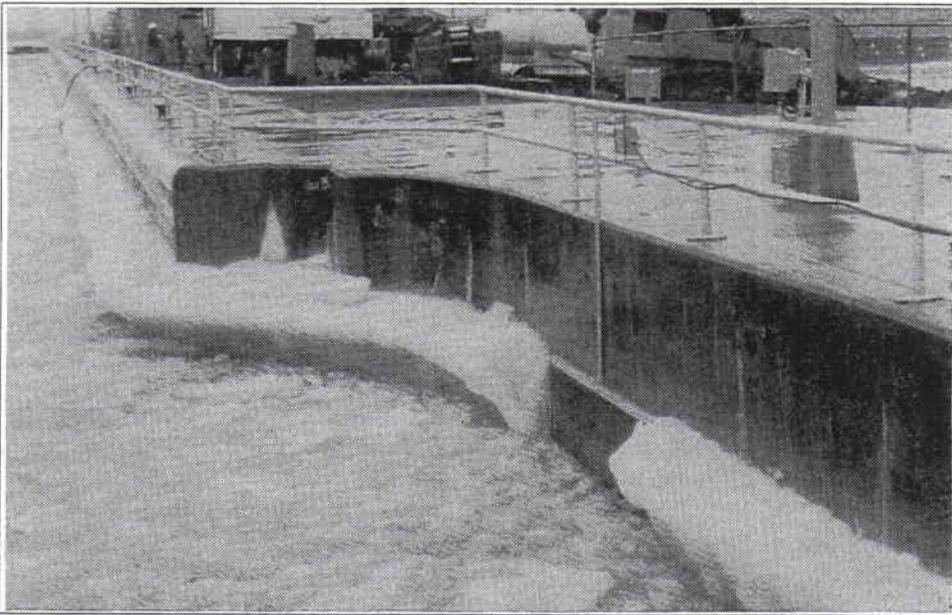


Figure 2. View showing ice collar along lock wall and gate recess wall.

A heater panel was mounted on the concrete wall of a miter gate recess at Starved Rock Lock and Dam on the Illinois River. Figure 2 shows the panel and ice conditions in January 1994. The panel was turned on for the entire winter ice season and proved very successful at keeping that portion of the wall ice-free. It even melted some ice a short distance away from the panel.

For most applications, it is not necessary to supply power to a panel continuously. The power can be regulated with a programmable controller, so that the panel only has power for 30 to 45 minutes, two or three times a day. This is sufficient to keep ice off the panel because only a very small amount of ice, about 1/16 inch thick, is melted at the interface with the panel. With this bond melted, the rest of the ice will fall off.

For example, if 16 panels were used to cover 128 feet of wall, and power was switched

every 30 minutes so that only one panel was on at a time, 1,920 W of power would keep all the panels ice-free. Each panel would be energized three times a day.

Heater panels can be made in almost any size, shape, and power density. Not only can they be used around locks and dams, but also on docks subject to tidal action or wave splash. Because of the flexibility in their design, they can also be used on navigation aids and other marine equipment.

For more information, please call Donald Haynes at (603) 646-4184.

Donald Haynes is a mechanical engineer in the Ice Engineering Research Division of the U.S. Army Cold Regions Research and Engineering Laboratory in Hanover, New Hampshire.

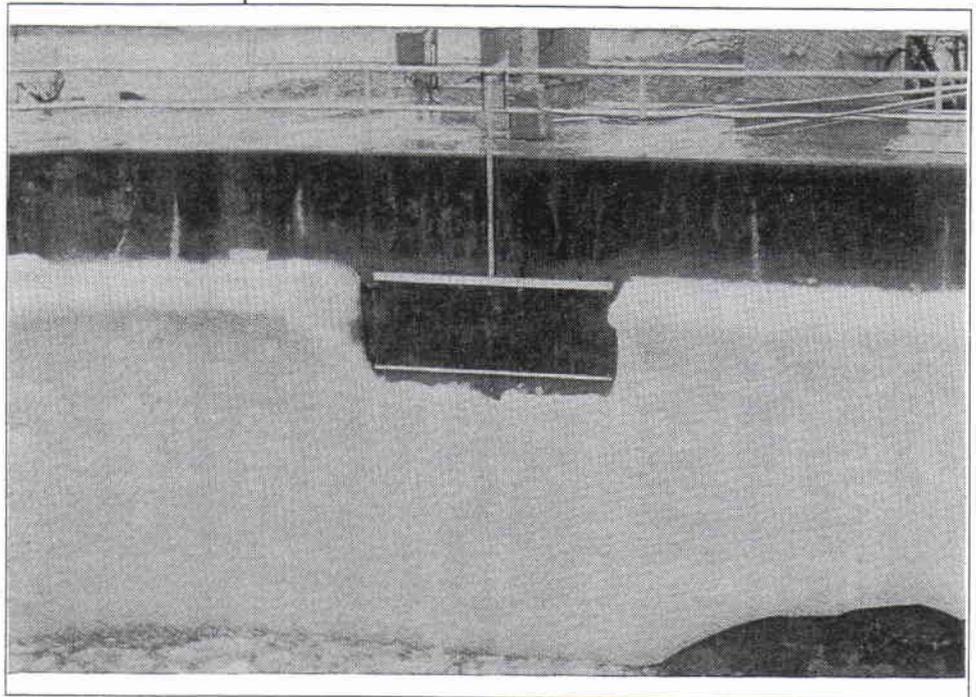


Figure 3. Note melting to the sides and below the panel heater.

Breakwater Armor Unit Ready for Licensing

The U.S. Army Corps of Engineers has developed a revolutionary new concrete breakwater armor unit. CORE-LOC provides more cost-effective and enhanced protection for coastal structures and shoreline embankments, particularly in high-wave energy applications.

CORE-LOC shows no tendency to move or break in very severe wave loadings. When placed in an interlocking matrix, it has superior stability, strength, and wave energy dissipation over conventional armor units. It also has reduced armor layer thickness and increased armor layer porosity.

When placed randomly on a rubble slope to form an armor layer matrix, CORE-LOC units interlock. Due to their unique shape, they generally do not require steel reinforcement.

Developed by the Coastal Engineering Research Center at the U.S. Army Engineer Waterways Experiment Station in Vicksburg, Mississippi, CORE-LOC is composed of three members configured in an "H" pattern. Each member is octagonal in shape and symmetrically tapered at the outer ends.

The units have also been proportioned to interlock with the dolos, an existing armor unit in widespread use, for repair projects. Model tests revealed that the repaired sections are more stable than the original dolos sections.

Several proposed Corps structures for coastal protection will use the CORE-LOC armor system in the future. The Corps has applied for worldwide patents on CORE-LOC and is currently involved in arrangements to license the CORE-LOC concept for commercial production and sales.

For more information, please contact Phillip Stuart at (601) 634-4113 or Internet at stewartp@ex1.wes.army.mil.

Herbich Named 1995 Dredger of the Year

The winner of the Western Dredging Association's 1995 Dredger of the Year award is John B. Herbich. Mr. Herbich is a well-known educator, researcher, author, lecturer and international consultant in all areas relating to dredging. His many accomplishments include founding and developing the Ocean Engineering Program and Center for Dredging Studies at Texas A&M University and publishing books on marine dredging and coastal engineering. A current member of PIANC, Mr. Herbich also served on WEDA's Board of Directors from 1987 to 1993.

Interagency Coordination Team Boosts Channel Project

Plans for widening and deepening the Houston-Galveston Navigation Channels are moving ahead--thanks to a unique approach to cooperation between industry, government and environmental agencies.

The Galveston District, U.S. Army Corps of Engineers, recently completed field-level review coordination, including the supplemental Environmental Impact Statement, for the massive \$397 million project. The project will cover 55 miles of navigation channel widening and deepening and ultimately require disposition of some 335 million cubic yards of dredged material.

The Interagency Coordination Team (ICT) achieved a consensus of the 12-member agencies and eight advisor agencies on required environmental concerns and developed appropriate studies to evaluate these concerns.

As a result, the environmental documentation produced by the study is acceptable to all.

The ICT process successfully oversaw major changes in the plan for widening and deepening the Houston and Galveston Ship Channels, changes which previously were unacceptable to environmental agencies. A subcommittee of the ICT, the Beneficial Uses Group, known as the BUG, looked specifically at developing beneficial uses from dredged material. This effort helped produce a net positive environmental impact from the project, spread over a 50-year life.

The main features of the new plan include environmental programs that call for confining the dredged material in Galveston Bay and constructing a variety of special features-- 4,250 acres of intertidal marsh; a 12-acre bird island; underwater nearshore berm for habitat variation and storm surge protection; and restoration of Goat Island and Redfish Island in Galveston Bay.

The overall performance of the ICT process was outstanding, allowing the Galveston District to continue the process by seeking authorization from Congress to construct the navigation channels in November 1996.

The agencies participating in the ICT process worked hard to identify the appropriate procedures needed to address all concerns originally identified, providing greater insight to the overall project design requirements. At the same time, the various "stakeholders" had a chance to see their ideas incorporated into the plan.

Member agencies included:

Galveston District, U.S. Army Corps of Engineers
U.S. Environmental protection Agency
U.S. National Marine Fisheries Service
U.S. Fish and Wildlife Service
U.S. National Resource Conservation Service
Galveston Bay National Estuary Program
Texas parks and Wildlife Department
Texas General Land Office

Texas Natural Resource Conservation Commission
Texas Water Development Board
Port of Houston Authority
Port of Galveston

Agencies serving as advisors included:

U.S. Coast Guard
Corps of Engineers offices, including Southwestern Division, Waterways Experiment Station, and Institute for Water Resources
Office of the Governor of Texas
Texas Historical Commission
Galveston-Texas City Pilots Association
Houston Pilots Association

For more information, please call Mr. Dalton Krueger, project manager, at (409) 766-3026 or FAX: (409) 766-3000.

Sea-Land Names Port of New Orleans Container Terminal Tops

Sea-Land Services, Inc., one of the world's largest container shipping companies, has recognized its Port of New Orleans terminal as the most productive of its terminals worldwide. Cooper/T. Smith Stevedoring and ILA Local 3000 share this honor. The annual award is presented to the port which moves Sea-Land containers faster and more efficiently than any other port.

Terrance White, port manager for Sea-Land Services, New Orleans, cites a combination of infrastructure, ambition and a unified task force as the key reasons for the award. He credits the terminal's world-class productivity to the hard work of Sea-Land's "terminal support departments as well as innovative approaches, team pride, and the drive to be No. 1 by Cooper/T. Smith Stevedoring, the International Longshoremen Association and Sea-Land."

POAC '95 Held in Murmansk, Russia

The 13th International Conference on Port and Ocean Engineering under Arctic Conditions (POAC) was held from 15-18 August 1995 in the port city of Murmansk, Russia.

The Port of Murmansk is Russia's largest arctic port, home of its fleet of nuclear icebreakers and terminus of the Northern Sea Route. The Murmansk Shipping Company was the principal sponsor and host of the conference. POAC conference sessions were held aboard the nuclear icebreakers *Sibir* and *Rossiya*.

The upsurge of interest in recent years in arctic waterborne commerce was evident from the many papers presented on related subjects at the conference. Many of the attendees were involved in the International Northern Sea Route Program, administered by the Fridtjof Nansen Institute in Lysaker, Norway, which held its first conference in Tokyo from 1 to 6 October 1995.

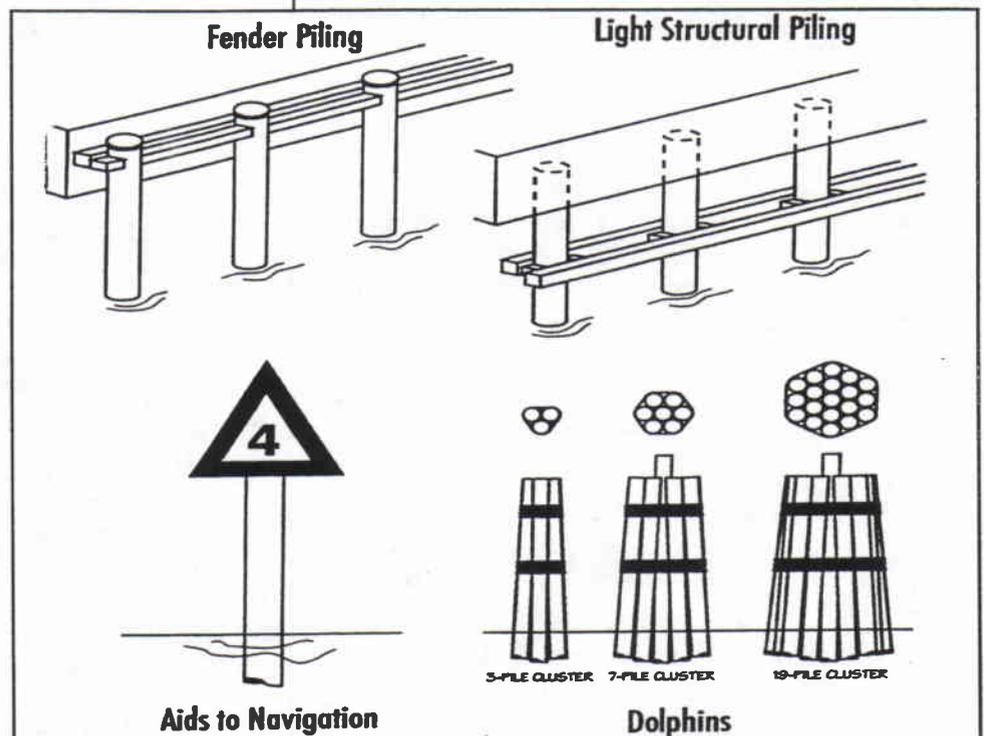
The POAC conference was attended by three Corps of Engineers specialists: Dr. Orson Smith from the Alaska District in Anchorage and Dr. Devinder Sodhi and Mr. Nathan Mulherin from the Cold Regions Research and Engineering Laboratory in Hanover, New Hampshire. The Corps representatives presented papers which summarized the findings of the Northern Sea Route Reconnaissance Study, recently published by the Alaska District. This study found a significant potential for future increases in international shipments across the Arctic Ocean.

For more information, please contact Mr. Orson Smith at (907) 753-2632 or FAX: (907) 753-2625.

New Development in Marine Fendering

For many years, chemically-treated and tropical wood products were used in marine facilities.

Creosote was the primary protective material for treating wood pilings to prevent degradation from decomposition and marine borer attack. Now a restricted substance, creosote can no longer be used to coat new piles. Many objects previously coated with creosote are now considered hazardous materials and cannot be disposed of in landfills or by other traditional means. Other alternatives such as tropical hardwoods were rejected because they also proved to be susceptible to borer attacks.



Schematic showing a range of typical applications for the SEAPILE.



SEAPILE units being used as replacements for wooden piling units on a dockside

Engineered composite plastic products have recently been introduced as alternatives to the use of these traditional materials. SEAPILE composite marine piling, a new product manufactured by Seaward International, Inc., represents a significant departure from conventional piling that overcomes the problems encountered with other types of piles.

SEAPILE offers reliable performance combined with greater vertical and lateral load capacity and the use of unlimited continuous lengths without splicing. These new

pilings also eliminate the use of chemicals harmful to the environment and do not rely on scarce wood products.

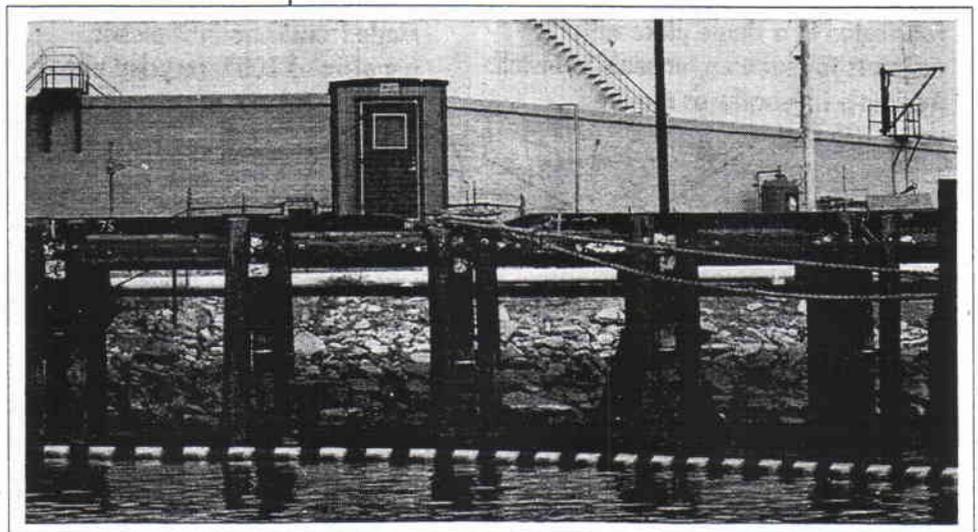
Furthermore, since SEAPILE is mostly made of plastic, it can be recycled. If a piling breaks or is damaged, it can be ground up and made into a new piling. Designed with low maintenance in mind, SEAPILE eliminates the need for frequent inspection and repairs caused by corrosion. The matrix of the piling is impervious to marine borers, which can result in significant savings in maintenance and reconstruction. The new material will not rot, chip or spall.

Some examples where SEAPILE can be used include:

- Fender piling
- Light structural piling
- Bridge pier protection
- Dolphins

For more information, please contact Robert B. Taylor at Seaward International, Inc.

(Condensed from an article in Dredging + Port Construction, March 1995.)



SEAPILES being used in conjunction with traditional wooden piling at dockside installation

Navigation Data Center Offers New Aids



The Navigation Data Center of the Water Resources Support Center is offering two new products on the Navigation Data Center Bulletin Board, Water Line (WBBS) under the Waterborne Commerce Statistics Center menu and on the Internet. The "Internal U.S. Monthly Tonnage Indicator" is based on tonnage passing through key locks on the inland waterway system. The indicator is computed as soon as the monthly lock data becomes available, which is 30 to 45 days after the close of the month. "Internal U.S. Waterways Tonnage Comparison 1993 versus 1994" contains 1994 internal tonnage estimates for the nation and for major waterways with locks.

POC is Roy Walsh, (504) 862-1424 or FAX: (504) 862-1423.

Publications

Transportation Department Offers New Reports

The following new publications are available from the U.S. Department of Transportation:

Directory of Transportation Data Sources, 1995
by Kathleen Bradley

This report identifies transportation data sources within the Department of Transportation, other Federal agencies, U.S. private transportation organizations, and Canadian and Mexican agencies.

Transportation Acronym Guide
by Pamela O'Leary

This report compiles and identifies transportation and transportation-related acronyms used by the Department of Transportation and other U.S. government agencies.

Transportation Expressions

by Pamela O'Leary and Jay Corey

This report compiles the definitions of transportation terms used in the Department of transportation and other U.S. government agencies.

For free copies of these publications, please call the Statistical Hotline at 1-800-853-1351.

Conference Proceedings

Fourth International Bridge Engineering Conference, Volumes 1, 2

The Transportation Research Board and the National Research Council have published the proceedings of the Fourth International Bridge Engineering Conference held in San Francisco, California, August 28-30 1995. The conference provided an international forum for the exchange of bridge research results and technical information on planning, design, construction, repair, rehabilitation, replacement, and maintenance of bridges. It focused on the problems and solutions of interest to bridge engineers and administrators of highway, railroad, and transit agencies.

Some of the topics covered in the two-and-half-day conference included:

Bridge Management Systems
Bridge Aesthetics
Bridge Performance
Bridge Construction
Long-Span Bridges
Bridge Loads and Dynamics
Bridge Rehabilitation
Seismic Response of Bridges
Bridge Bearings, Joints and Details
Prestressed Concrete Bridges
Bridge Structural Systems
Bridge Fatigue and Redundancy
Wood Bridges

The two-volume set has been distributed to all conference attendees and is available for purchase through the Transportation Research Board.

Education

Port Planning and Management International Training Program

The twelfth annual International Program for Port Planning and Management (IPPPM) will be held at the World Trade Center in New Orleans, Louisiana, March 18-29, 1996. The program is sponsored by the Board of Commissioners of the Port of New Orleans, the World Trade Center of New Orleans, the Louisiana State University National Ports and Waterways Institute, and the University of New Orleans.

The object of this training program is to help maritime industry executives sharpen their practical skills and strengthen their conceptual understanding of maritime planning and management fields. The curriculum covers port systems, port authority management and administration, and port planning and operations. Tuition is U.S. \$1,950. For more information, please call (504) 286-6519.

WES Offers Master's Program in Coastal Engineering

The Graduate Institute of the U.S. Waterways Experiment Station (WES) offers a one-year program designed to provide students with the academic coursework and practical training essential for solving modern-day coastal engineering problems. Program graduates will have the knowledge and tools necessary to perform coastal engineering functions within the Corps of Engineers. The program is offered jointly through the WES Graduate Institute by Texas A&M University and the Coastal Engineering Research Center. A Master of Engineering will be awarded upon successful completion of the program.

To be qualified, applicants must have a B.S. in Engineering from an accredited institution, a satisfactory scholastic record which shows ability to perform graduate level work and acceptable

scores on the Graduate Record Examination. For more information, please contact Dr. C. H. Pennington, Director, WES Graduate Institute, at (601) 634-3549.

Texas A&M Offers Dredging Engineering

Texas A&M University will offer its 25th Annual Dredging Engineering Short Course from 8-12 January 1996. POC is Dr. Robert E. Randall, Director, Center for Dredging Studies, Texas A&M University, College Station, Texas 77843-3136, (409) 845-4568.

Texas A&M Sponsors Dredging Seminar

The 29th Annual Dredging Seminar will be held on 12 June 1996 in conjunction with the Western Dredging Association's annual meeting (11-14 June 1996). Please send one-page abstracts by 27 October 1995 to Dr. Robert E. Randall, Director, Center for Dredging Studies, Texas A&M University, College Station, Texas 77843-3136, call (409) 845-4568 or FAX: (409) 862-1542.

New PIANC Members

Individuals

Thomas M. Ballentine, USACE, Institute for
Water Resources
Richard J. Clements, South Louisiana Port
Commission
James M. McCloy, Texas A&M University
Mignon C. Smith, Washington-Alabama News
Reports
Dennis W. Webb, USACE, Waterways
Experiment Station

Corporations

U.S. Army Engineer District - Chicago
U.S. Army Engineer District - Los Angeles

Students

Donald P. Ash, Hudson Engineers, Inc.

Activities

Inside PIANC

1-5 Sep 1996	PIANC Conference on Inland Maritime Navigation and Coastal Problems of East European Countries	Gdansk, Poland
9-11 Oct 1996	Annual Meeting, U.S. Section PIANC	Seattle, Washington
5-12 Jun 1998	29th PIANC Congress	Tangier, Morocco

Outside PIANC

14-17 Nov 1995	WODA XIV "Dredging Benefits" Rai Conference Centre	Amsterdam, The Netherlands
14-17 Nov 1995	14th World Dredging Conference "Dredging Benefits" Rai Exhibition Centre FAX: +31 (0)20-6464-469	Amsterdam, The Netherlands
14-18 Nov 1995	Europort '95 Rai Conference Centre	Amsterdam, The Netherlands
23-24 Nov 1995	Maritime Trade and Technology Conference, "The Way Ahead"	Melbourne, Australia
4-8 Jan 1996	Conserve '96 Conference "Responsible Water Stewardship" FAX: (212) 705-7975	Orlando, Florida
14-16 Mar 1996	International Council of Marine Industry Associations (ICOMIA) 2nd Marina Conference FAX: +39 10-5531-104	Genoa, Italy
18-20 Mar 1996	CATS III Congress "Characterization and Treatment of Cleanup Sludge from Dredging, Sewage Sludge and Comparable Industrial Process Sludge"	Ostend, Belgium
17-21 Jun 1996	11th International Harbour Congress	Antwerpen, Belgium
20-21 Jun 1996	Third European Research Round Table Conference on Short Sea Shipping "Building European Short Sea Networks" FAX: +47 55 952250	Bergen, Norway