

Opening Remarks

By LTG Robert B. Flowers, Chief of Engineers, U.S. Army Corps of Engineers

I am delighted to be here today to welcome everyone to this year's meeting—a celebration of America's 100 years of participation in the International Navigation Association. I also take great pride in noting for you that the United States Army Corps of Engineers recently celebrated its 200th year of service to this nation since our founding by President Thomas Jefferson.

PIANC is one of the most prestigious engineering and scientific organizations in the world. It is a unique partnership between the Federal government, the international navigation community, private citizens and the organizations worldwide. And we in the U.S. Army Corps of Engineers are proud of our participation.

Since the first International Navigation Congress in 1885 in Brussels, PIANC has remained true to its founders' vision of an organization dedicated to sharing technical information on ports and waterways. America's ports and waterways have benefited greatly through PIANC's information sharing, as have governments and private sector members around the world.

The water resources challenges faced by members of PIANC and America in 1902 were great. On many levels, I believe they are greater today, but I will address that later. It's with great pride that Vicksburg hosts this year's meeting and I thank PIANC for allowing us this opportunity.

Vicksburg's association with PIANC actually predates America's formal participation in the organization. In 1892, Brevet General Cyrus Comstock, president of the Mississippi River Commission headquartered here, presented a paper at the Paris meeting. The subject was Improvements on the Mississippi.

110 years later, this nation and the Corps of Engineers are involved in another highly complex study concerning the future of navigation on the upper Mississippi River. However, let me assure you, that despite criticisms from some on the length of our studies, today's effort is not a continuation of General Comstock's 1892 paper.

PIANC's influence on the Mississippi can also be seen today in the revetment work along the river. Dr. Bunkichi Okazaki developed these concrete-block mattresses in Japan, and their low cost, durability and adaptability appealed to Mississippi River Commission engineers.

The Corps of Engineers placed its first articulated, reinforced concrete revetment in Vicksburg Harbor in 1917. The Corps later developed the mat-laying machine that continues to work on the river today.

I am also proud to share with you three distinguished U.S. Army officers who contributed to PIANC. Colonel George Goethels, who led America's completion of the Panama Canal, also led the U.S. Section of PIANC at the 12th International Navigation Congress in Philadelphia in 1912.

Lucius Clay, a delegate to the 1934 International Congress in Brussels, became the youngest general officer in the Army in 1942. In 1945, he became the military governor of Germany, eventually guiding the creation of the German Federal Republic in 1949.

Lieutenant Colonel Ray Wheeler, secretary of the section in 1938, later became the 36th Chief of Engineers from 1945 to 1949.

We are pleased to build on our great relationships of the past, and look forward to working together in the future. As we look forward, though, the challenges faced by the world are many when dealing with water resources and infrastructure. As the population increases, so too does pressure on global water resources. There is increasingly greater competition for water to provide for health and welfare, to grow crops, and to protect its quality for the environment. 70% of the earth's surface is water; but only 3 % is the freshwater on which humanity survives.

Nelson Mandela, at the release of the World Commission on Dams Report in the Fall of 2000, said, "Freedom alone is not enough without light to read at night, without time or access to water to irrigate your farm, without the ability to catch fish to feed your family."

Two-thirds of the people on this planet have inadequate sanitation. More than half have no access to clean water. Floods continue to kill more people than any other disaster, and droughts precipitate famine on an increasing scale.

With population growth, the development of maritime technologies, and a growing global market for goods and services, pressure is also increasing on the world's ports, harbors, and inland waterways. The complexity of water resource issues is often underestimated. I believe, as do many others, that water will be as important in this century as oil was in the last.

States have sovereignty over the water within their borders, yet water knows no boundaries. It flows across jurisdictions. So too must international agreements on the use of these resources to serve all who depend on the water.

If each jurisdiction or interest were to develop, preserve, or use water to maximize their interest, we would have chaos. We must have coordinated and cooperative policies that ensure the interests of all are served. This is a public responsibility that cannot be accomplished simply through regulations or markets. It requires engineering, management, and planning expertise that will find optimal ways to use these resources for the greatest good of man and the environment.

This is an area in which PIANC's long-established reputation, relationships, and expertise can continue to serve the global community. PIANC continues to be relevant to national and international debates on the use and development of global water resources. Internationally, PIANC helps to shape navigation policies, including dredging and disposal guidelines. The organization is unique though because all navigation interests are represented—deep draft commercial ports, inland waterways, recreational boat harbors, and others. No other organization provides such an effective forum for all navigation interests to come together on an equal basis to solve problems and resolve conflicts.

Within America, I hear periodic calls for “Corps Reform.” My organization has changed many times over the past 200 years, and we welcome further changes that enable us to better serve America and her people. The real issue at hand though is much greater than simply making changes to the Corps.

Within this nation, and in many others, the focus must be aimed at establishing a national policy for the management of water resources. We need to examine and debate in a public forum how best to balance the competing demands for water with a broad, holistic watershed approach. The debate must involve all stakeholders—federal, state, local, environmental, recreational, industry and shipping. It must be an open, inclusive process that gets to all the issues and lays out a course of action that sets a direction for the nation far into the future.

I offer to you today what I consider to be the five main water resource challenges facing us.

The first is effective relationships. As we advocate holistic, watershed approaches, we must seek to build collaborative, cooperative consensus within America and between nations, organizations and people.

Second is infrastructure renovation. Most of the U.S. water infrastructure is more than 50 years old and in need of repair. The nation's investment in and commitment to maintaining this infrastructure must be part of the national debate.

Policy alignment is the third issue. We must update old policies to reflect today's demographic realities, and to anticipate future requirements.

Technology support is the fourth issue. We must find ways to invest in and capture technological advances in software and hardware, GIS, and other tools to enhance water resource management.

The final issue is ecological design. A common issue around the world is how to create a balance between the needs of humanity, the environment, and the economy in the use of water.

However, make no mistake; there are no easy answers, and we know that. We welcome our partnership with PIANC as we face these issues together.

I congratulate the U.S. Section of PIANC on its 100 years of service, and thank all those who have gone before us in service to this organization. I also thank PIANC for its global commitment to water resources development, and wish you all the best for a highly successful meeting.

Essayons!

