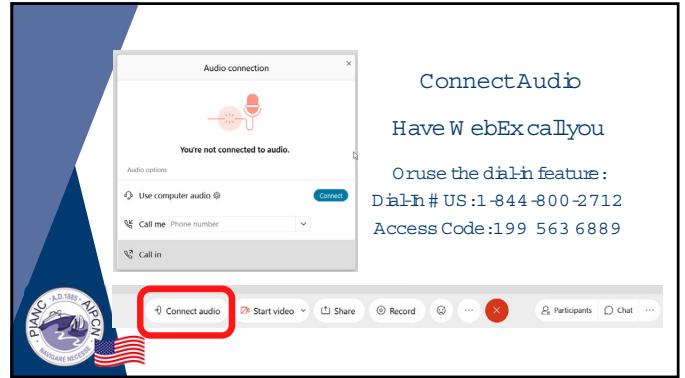
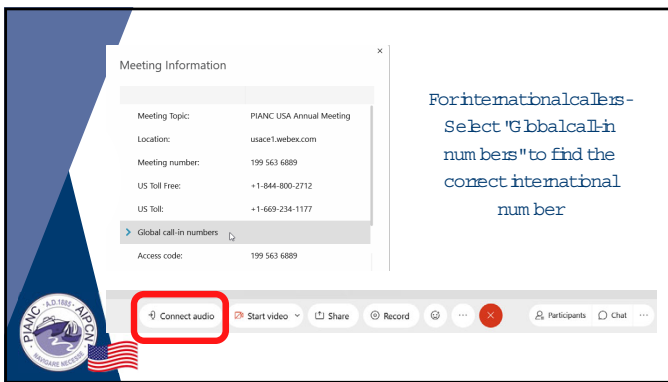


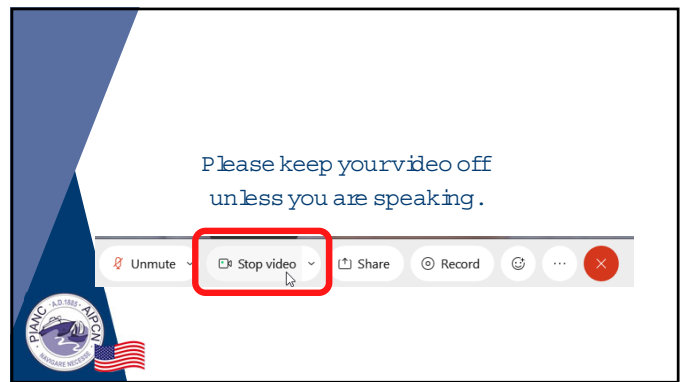
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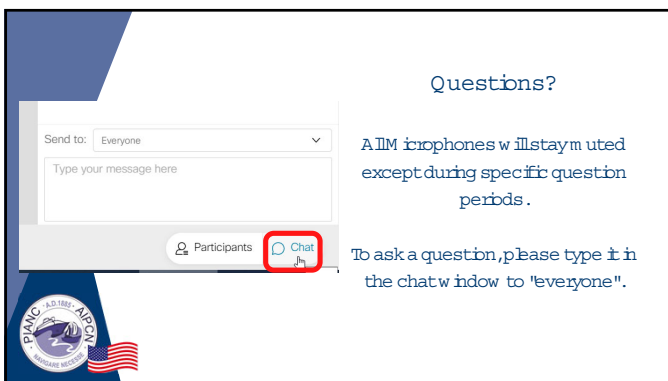
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6

Join PIANC USA

Learn about membership and join PIANC USA by visiting our website at pianc.us/membership/join-pienc-usa/



Learn more about PIANC USA: www.pianc.us

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7

We will begin soon.


Join PIANC by visiting pianc.us/membership



8

PIANC USA
Annual Meeting

April 22, 2021



9

Dr Joe D Manous Jr


SECRETARY, PIANC USA
DIRECTOR, INSTITUTE FOR WATER RESOURCES



10

Mr Vance F. Stewart, III

Acting PRINCIPAL DEPUTY ASSISTANT SECRETARY
OF THE ARMY (Civil Works)



11

Mr Francisco Esteban Lefler

PIANC PRESIDENT



12

Presenting

PIANC – A Direction forward

The World Association for Waterborne Transport Infrastructure



PIANC USA

The US Section of the World Association for Waterborne Transport Infrastructure



Presentation by
Francisco Esteban Lefler
PIANC President

at the occasion of
PIANC USA Annual Meeting 2021

13

Table of contents

- General overview of PIANC
- A direction forward: inside PIANC
 - Effect of the pandemics
 - Challenges and opportunities: the future
- A direction forward: challenges regarding WTI and RNI
- Some questions after the grounding at Suez
- An anniversary in 2022



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14

What PIANC Stands For

The global organisation providing guidance for sustainable waterborne transport infrastructure for ports and waterways

- PIANC is the forum where professionals from around the world join forces to provide expert advice on cost-effective, reliable and sustainable infrastructure to facilitate the growth of waterborne transport.
- Established in 1885, PIANC is the longest-standing organisation in its field, and continues to be the leading partner for governments and private sector in the design, development and maintenance of ports, waterways and coastal areas.

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15

Our Mission

To remain the leading international source of waterborne transport-related information in the 21st century

To provide expert guidance and technical advice

- Bringing together the best international experts, both public and private, on technical, economic and environmental issues pertaining to waterborne transport infrastructure
- High-quality Technical Reports
- International Commissions and Working Groups

To keep the international waterborne transport community connected

- Four-yearly PIANC World Congresses
- Four-yearly PIANC-COPEDEC International Conferences on Coastal and Port Engineering in Developing Countries
- Two-yearly Smart Rivers Conferences bringing experts together on inland waterway infrastructure.

To support Young Professionals and Countries in Transition

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16

Our Membership

43 Qualifying Members (QM) of which 27 have a National Section (NS)
(i.e. governmental and non-governmental organisations representing a country)



more than 1,800 Individual Members
(Students included)

About 500 Corporate Members
(port authorities, chambers of commerce, universities, other public- and private-sector organisations)

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17

Our Membership



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18

Our Membership

10 Platinum Partners



DEME
Dredging, Environmental
& Marine Engineering



Jan De Nul
GROUP



Van Oord
Marine ingenuity



Port of Rotterdam



TRELLEBORG



五洋建設
PENYANG CONSTRUCTION



BEKAERT
Better together



Hiro
INDUSTRIES



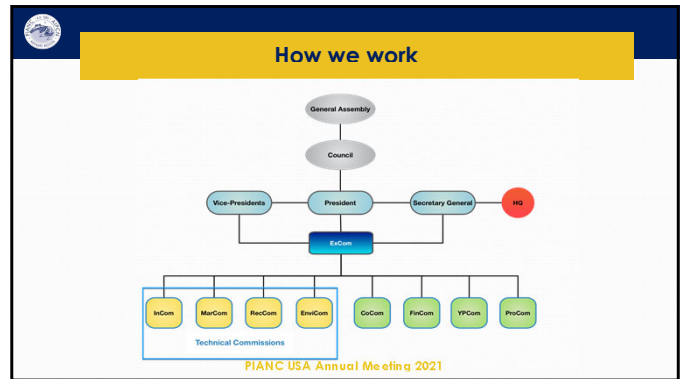
SHIBATAFENDERTEAM
on the safe side



Boskalis
Dredging & Marine Experts

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19



20

How we work

Forthcoming events

- **ANNUAL GENERAL ASSEMBLY (AGA): 1 meeting per year (May)**
 - 2021: Virtual (UK)
 - 2022: TBD
 - 2023: Oslo (Norway)
 - 2024: Cape Town (South Africa-March)
- **WORLD CONGRESS: 2024 Cape Town, South Africa**
- **COPEDEC: 2022 (?) Manila, The Philippines**
- **SMART RIVERS: 2022 (?) Nanjing, China**


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21

How we work

Special focus on Young Professionals

- Specific commission (YP-Com) created in 2006 to better serve their needs and develop their involvement in PIANC's activities.
- Our objective: create an international network of Young Professionals, to share knowledge and facilitate contacts with the world's leading specialists across all working fields.
- Very active in many National Sections (31 delegates and 24 observers) and well represented (more than 100 YPs) in ongoing and former Working Groups.
- Year-round E-Networking
 - > More than 1,250 joined PIANC Young Professionals on
 - > Upcoming events & questions are posted regularly





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22

How we work

AWARDS

- **PIANC DE PAEPE-WILLEMS AWARD (DPWA):**
 - > special prize established as a recognition of outstanding technical research on waterborne transport infrastructure by young engineers (< age of 40).
 - > 3 prizes: 4,000.00; 2,000.00 and 1,000.00 EUR
- **MEDA AWARD (RecCom)** 
- **WORKING WITH NATURE AWARD (EnvCom)** 

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23


Working with Nature

Standard approach

- Definition of the navigation problem
- Design
 - Technical solutions
- Environmental impact studies
 - Environmental impact assessment
 - EIS
 - Mitigation measures
- Environmental permits
- Construction

Working With Nature

- Analysis of navigation problem and knowledge of the environmental factors
- Stakeholder involvement
- Development of win-win solutions
 - Design
 - Environmental management
- Permits
- Construction



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24

Our Technical Reports

The Core Business of PIANC

- Provide *state-of-the-art* guidance on waterborne transport-related topics for professionals
- Drafted by *International Working Groups* supervised by a Commission
- An average of 15 to 20 Working Groups active at any time!

Available FOR FREE
for all PIANC members
on the Members Only pages!

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25

Our Yearbook

1 issue per year (MOY)

- Full-colour publication **(full version on Website)**
- Technical articles dedicated to the host country of the AGA
- An overview of the activities of the National Sections & Qualifying Members
- The main points of interest of the commission on which they focused in the previous year, highlights of WG-reports, technical visits, etc.
- An overview of the activities of our Platinum Partners
- Article De Paeppe-Willems Award winner
- ...

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26

Our E-Newsletter 'Sailing Ahead'

JUNE 2020

With the possible forecast to mitigate the Covid-19 crisis, we get more creative in staying connected with colleagues from all over the world in order to keep striving to create the best guidelines for waterborne transport infrastructure!

Despite the fact that our colleagues from PIANC UK had meticulously been preparing for another edition of PIANC's Annual General Assembly (AGA) in Bristol, Covid-19 unfortunately prevented us from meeting face-to-face in Bristol. The E-News and AGA meetings had to be turned into virtual meetings and the future of our international society is still under discussion, given the circumstances. We will keep you informed about these events as soon as we can!

In the meantime, enjoy reading 'Sailing Ahead!' Stay safe and stay connected, many of our Working Group and Commission members have proven that yes, we can!

NEWS FROM EXCOM

Virtual ExCom Meeting 2020 on 18 May 2020

Currently 6 issues per year

CONTENTS

- Reports on activities at the international and national levels
- News from the National Sections
- News from the Commissions

OBJECTIVES

- To provide members and non-members with an overview of latest PIANC activities
- To become the means of communication between management and membership

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27

Social Media

Follow us on

- Facebook
- LinkedIn
- Twitter
- YouTube

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28

Sister Associations

- PIANC co-operates regularly with many other national and international organisations, including the International Maritime Organisation (IMO), the United Nations Environmental Programme (UNEP) and international dredging organisations (IADC, CEDA, WODA).
- PIANC has also signed Memorandums of Understanding with fifteen *Sister Associations*:

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29

7 reasons to join PIANC

- 1 Get connected to expert guidance and technical advice
- 2 Gain open access to advanced technological information
- 3 Address climate change
- 4 Team up with decision makers
- 5 Be active in Working Groups, Commissions and National Sections
- 6 Come aboard the Young Professional Community
- 7 Become part of our international network

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30

A direction forward: Inside PIANC

Effects of the Pandemics:

- First impact on PIANC: confinements and travel limitations
 - Suspension of face-to-face events: impact on networking
- Adaptation of management processes:
 - Online meetings: more meetings but shorter (5 ExCom meetings in 2020)
 - Statutory and regulatory issues 2020:
 - AGA by e-mail for urgent approval matters in first half 2020
 - Council + EOGA by videoconference in October
 - Cautious and thoughtful management of finances: Good results!

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31

A direction forward: Inside PIANC

Effects of the Pandemics (cont.)

- Remarkable efforts in HQ, Commissions and Working Groups: Thanks!
- Webinars and remote meetings
- Larger number of successful regional events
- Different evolution of the effects of pandemics and restrictions:
 - Hybrid events: PIANC APAC 2020 at Fremantle (Australia)

Conclusion: PIANC has adapted to the challenges of COVID-19 with resilience
Strategies of the future are adapted to the new situation but the objectives remain the same

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32

Opportunities for PIANC: the future

COVID-19: not only brings challenges, also opportunities for the future

- PIANC means NETWORKING: face-to-face events will stay
- More virtual events:
 - Reach more members and increase membership
 - Participate in events and Working Groups
 - Increase diffusion of regional events
 - Store webinars on line
- Move some conferences to virtual/hybrid



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33

Opportunities for PIANC: the future

Working lines

- Development of tools to support PIANC online events without the need of attention from HQ
- ProCom SG Membership
- Membership software
- Development of webinars by the Commissions as a communication tool
- Joint activities of different National Sections: successful experiences
- Re-design of some PIANC events



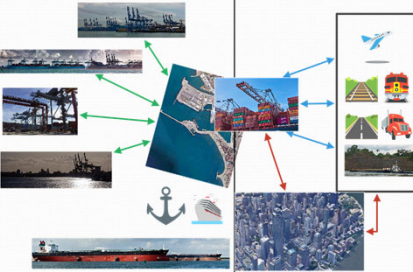
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34

A direction forward: challenges related to WTI and RNI

COVID 19

- High impact low probability event
- Impact on port operations: sudden changes
- Impact on all elements of the supply chain
- Stress on storage capabilities (container yards, warehouses...)
- Complex evolution in space and time scales: multiple interaction




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35

A direction forward: challenges related to WTI and RNI

Infrastructure

- Long term for obtention (planning, design, permitting, contracting, building, commissioning...)
- Need for LCA:
 - Changes in operation and governance
 - Changing climate adaptation: incremental funding
 - Sustainability requirements
 - Uncertainties in demand
 - Uncertainty in logistic connections: holistic view



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36

A direction forward: challenges related to WTI and RNI

HAZARDS
Design of Marine Infrastructure

- Natural Hazards**
 - Storms
 - Floods
 - Hurricanes and typhoons
 - Volcanic eruptions
 - Earthquakes
 - Tsunamis
 - Landslides
- Accidental Hazards**
 - Fire
 - Spills
 - Crane failure
 - Toxic leaks
 - Radioactive leaks
 - Accidental explosions
- Provoked Hazards**
 - Terrorist attack with conventional weapons
 - Chemical or biological attacks
 - Nuclear terrorism
 - Star
 - Piracy
- Climate Change related Hazards**
 - Changes in water levels
 - Changes in storm frequency and intensity
 - Changes in rainfall
 - Changes in river flow regimes
 - Changes in freeze and melt cycles
- Human failures**
 - Failures in economic and social frameworks
 - Governance failures
- Paradoxes**




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37

A direction forward: challenges related to WTI and RNI

Infrastructure planning and obtention

- Natural disasters and extreme events:**
 - Non stationary extreme value distributions
 - Planning recovery
 - Adaptability to changes in operation and governance
- Change of design concept:**
 - Old concept: set design loads and safety level
 - Today: **resilience** – What does it happen beyond design conditions?
 - Social demand of reliability(?): $p(F)=0 \rightarrow \text{Cost}=\infty$
- Resilience assessment and retrofitting of existing infrastructure**



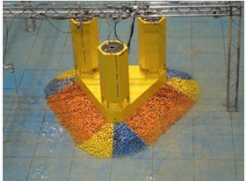
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38

A direction forward: challenges related to WTI and RNI

Infrastructure planning and obtention

- Innovation:**
 - Durable materials, large precast elements, artificial islands, floating elements...
- Risk analysis: management of uncertainty**
- Design tools:**
 - Probabilistic methods, data connection and analysis
 - Numerical and physical modelling tools
 - Forecasting tools
 - Better understanding of sea-structure-soil interaction



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39

A direction forward: challenges related to WTI and RNI

Digitalisation and contribution to Smart Ports and Waterways

- Instrumentation of infrastructural elements:**
 - Measure of physical magnitudes: movements, velocities, forces, strains...
- Design/adapt terminals for automation**
- Provide physical support for digital equipment: sensors, cables, data storage and processing equipment**
- Integrate digital navigation services:**
 - RIS
 - ATON
 - Communication
- Facilitate single window operations**
- Connectivity: Port Community, intermodal links**
- Cybersecurity**

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40

A direction forward: challenges related to WTI and RNI

Environmental opportunities: contribution to Green Ports

- Energy transition: renewables, generation, distribution, supply...**
 - Onshore Power Supply
 - Land availability for energy related facilities
- Raising Green Funding**
- Ecosystem Services**
- Nature based solutions: WWN, EWN, minimise impact on natural environment**
- Decarbonisation**
- New fuels (LNG, Hydrogen...)**
 - Handling
 - Storage
 - Bunkering


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41

A direction forward: challenges related to WTI and RNI

Logistics and hinterland

- Intermodal operations: rail and road connections**
- Reliability of Port Logistics**
- Hinterland: connections and impacts**
 - Bottlenecks
 - Contamination
- Port city operations: improvement of urban quality of life**
- Potential medium and long term impact of the pandemics on the logistic chains:**
 - Reconsideration of just-in time logistics?
 - Relocation and shortening of supply chains?



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42

Questions: grounding at Suez Canal

- **Some voices against growth of ULCS:**
 - Should limitations other than economy, navigation channel and port capacity and environmental requirements be imposed?
 - Will ships continue demanding waterway/port adaptation to larger ships?
 - Twenty years ago we were hearing that container ship size had reached its limit...
- **Is society aware that full safety and reliability does not exist?**
- **How safe is enough for society?**
- **Can society withstand these low probability impacts on logistics from time to time?**
- **Same in other terms: how much extra money is society willing to pay for increasing reliability?**
- **How can we explain this to society?**

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43


A 50th Anniversary in 2022

- In 1972 MG Morris, Director of Civil Works of USACE proposed, on behalf of the US Section, that PIANC assume leadership in recognizing the effects on the environment of dredging and disposal of dredged material.
- Approved same year by the Expanded Executive Committee of PIANC, the Commission was formed.
- The final Report of the International Commission for the Study of Environmental effects of Dredging and Disposal of Dredged Material was published in 1977.
- The international context was driven by:
 - Oslo Convention, 1972
 - London Convention, 1972
 - Paris Convention, 1974
 - Helsinki (Baltic) Convention 1974
 - Barcelona (Mediterranean) Convention 1976


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44

But we are not alone



We are in PIANC



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45

THANK YOU FOR YOUR ATTENTION



Francisco Esteban Llerer
President
president@pianc.org

PIANC
General Secretariat
Bvd. du Roi Albert II, 20-83
1000 Brussels (Belgium)
Tel.: +32 2 553 71 61
E-mail: info@pianc.org





PIANC USA

The US Section of the World Association
for Waterborne Transport Infrastructure



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46

Mr Ron Heffron

PRINCIPAL REPRESENTATIVE TO MARCOM
SENIOR VP, ENERGY & MARINE, COWI




47

MarCom USA Team

- > RON HEFFRON MEMBER
COWI

- > Richard Styles Alternate
USACE

- > Chris Thomas YP
COWI

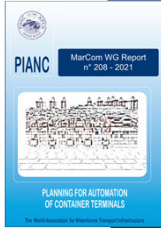

- > Ed Backlund YP Observer
Hatch




48

New ly Published Reports

- > MarCom Report No. 208-2021: Planning for Automation of Container Terminals

49

Other Recently Published Reports



- > MarCom Report No. 145-2020: Berthing Velocity Analysis of Seagoing Vessels Over 30,000 DWT
- > MarCom Report No. 185-2019: Ports on Greenfield Sites - Guidelines for Site Selection and Masterplanning
- > MarCom Report No. 159-2019: Renewables and Energy Efficiency for Maritime Ports
- > MarCom Report No. 184-2019: Design Principles for Dry Bulk Marine Terminals




50

Active Working Groups



| WG | Title |
|-------|---|
| WG164 | Upgrade of Port Terminals by increasing dredged depth |
| WG167 | Design of terminals for RoRo and RoPax vessels |
| WG171 | Ship handling Simulation Dedicated to Channel and Harbour Design |
| WG180 | Guidelines for protecting berthing structures from scour caused by ships |
| WG185 | Site Selection and Planning For New Ports and Specialist Marine Terminals on Greenfield Sites |
| WG186 | Mooring of Large Ships at Quay Walls |
| WG187 | Protection of undersea pipelines and cables in navigable areas |
| WG194 | A Framework for Early Contractor Involvement in Infrastructure Projects |

51

Active Working Groups



| WG | Title |
|-------|--|
| WG199 | Health Monitoring for Port and Waterway Structures |
| WG200 | Recommendations for the Design and Assessment of Marine Single Point Mooring (SPM) or Multi-Point Mooring (MPM) Facilities |
| WG205 | Design and construction of breakwaters in soft seabeds |
| WG211 | Guidelines for the design of fender systems |
| WG212 | Criteria for acceptable movement of ships at berths |
| WG213 | Design guidelines for marine multi-purpose terminals |
| WG224 | Planning of Fishing Ports |
| WG225 | Seismic Design Guidelines for Port Structures |

52

Active Working Groups



| WG | Title |
|--------|--|
| WG231 | Mooring Bollards and Hooks - Selection, maintenance and testing |
| WG232 | Mitoccean related risk during the construction of Marine works |
| WG233 | Inspection, Maintenance and Repair of Waterfront Facilities |
| WG235 | Ship Dimensions for Planning & Designing Marine Infrastructure |
| WG1538 | Recommendations for the Design and Assessment of Marine Oil, Gas & Petrochemical Terminals |

53

New ly Form ing Working Groups

| WG | Title |
|-------|---|
| WG238 | Guidelines for use of BIM in infrastructure for ports and waterways |
| WG239 | Mitigation of tsunami disasters in ports |
| WG240 | Guidance for ports in small island countries |

54

Summary


- MarCom is VERY active, and very productive!
- More participation from USA on Working Groups is always welcome
 - There are opportunities, even on active groups
- Suggested topics for new WGs are always welcome
 - What needs in our industry are not currently being met?



55

Mr Jonathan Ambruster

PRINCIPAL REPRESENTATIVE TO RECCOM
VICE PRESIDENT
TAYLOR ENGINEERING, INC.



56

RecCom USA Team


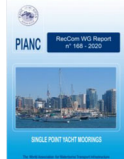

- RecCom Chairman: Esteban Biondi (Argentina)
- Jonathan Ambruster
USA Principal Representative
Taylor Engineering
- Mark Pineilo
USA Alternate Representative
Moffatt & Nichol
- Young Professional Representative - Vacant



57

Recently Published Reports


- RecCom Report No. 168-2020: Single Point Yacht Moorings (RecCom WG 168)
- RecCom Report No. 147-2020: Guidelines for Managing the Relationship Between Recreational Navigation and Commercial Ports (RecCom WG 147)

58

Active Working Groups


| WG | Working Group Name and Status |
|-----|---|
| 148 | Sustainable Recreational Navigation Infrastructure <ul style="list-style-type: none"> • Chair working to compile and develop final draft in the next few months with expectation to publish this year. |
| 149 | PIANC Guidelines for Marina Design <ul style="list-style-type: none"> • Working to finalize last volume • Made a call for new members to assist |
| 169 | Fire system detection and controls in marinas <ul style="list-style-type: none"> • Trying to re-engage • Develop draft by end of this year |
| 182 | Underwater Acoustic Imaging of Waterborne Transport Infrastructure <ul style="list-style-type: none"> • Draft in development |



59

Active Working Groups


| WG | Working Group Name and Status |
|-----|---|
| 202 | Influence of Recreational Navigation Infrastructure on waterfront projects <ul style="list-style-type: none"> • PIANC RecCom – ICOMIA (IMG) joint WG • Working to Re-engage |
| 203 | InCom Sustainable Island Waterways – A Guide for Waterways Managers on Social and Environmental Impacts <ul style="list-style-type: none"> • RecCom provides representative for crossover topic |
| 209 | Recommendations for Use of AIS Data for Recreational Navigation Infrastructure <ul style="list-style-type: none"> • Drafting a Position Paper (nearly complete) rather than typical Technical Report |
| 217 | Alternative Propulsion Systems for Recreational Boats and Impacts on Marina Design (Decarbonization) <ul style="list-style-type: none"> • Kickoff Meeting held; off to a good start |



60

Active Working Groups

| WG | Working Group Name and Status |
|-----|--|
| 219 | Guidelines for Inland Waterways Infrastructure to Facilitate Tourism (InCom/EnvCom/RecCom) <ul style="list-style-type: none"> New Kickoff meeting with new Chair |
| 220 | Planning, Design, and Operational Guidelines for Pump-Out Systems in Recreational Facilities <ul style="list-style-type: none"> Progress stalled |
| 221 | Design Guidelines for Recreational Boating Slipways <ul style="list-style-type: none"> Seeking Chairman |
| 222 | Design Guidelines for Floating Breakwaters in Marinas <ul style="list-style-type: none"> Making strong progress on a draft |
| 223 | Meaningful Inclusion of Fishing Communities in Recreational Marinas - Guidelines for Planning <ul style="list-style-type: none"> Seeking additional members Planning for kickoff meeting |




61

Working Groups – Coming Soon

Terms of Reference in Development for:

- Carbon Management for Marina and Boat Harbors
- Climate Change Adaptation Planning for Marina and Boat Harbors
- Floating Houses in Marinas



62

Awards

<https://www.pianc.org/awards/pianc-marina-excellence-design-jack-nichol-award>



Marina Excellence Design Jack Nichol Award

CALL FOR APPLICATIONS

PIANC-RecCom and ICOMIA-IMG invite owners, operators and designers to submit marina projects for consideration. The award evaluation criteria:

- Functionality
- Aesthetics
- Environmental Sustainability

The PIANC Marina Excellence Design "Jack Nichol" Award is the most prestigious international award that recognizes excellence in the design of marinas and recreational navigation infrastructure, and is administered by PIANC's Recreational Navigation Commission (RecCom).

Eligible marinas should have been constructed (or reconstructed) within the last 15 years and have been operational for at least 2 years.




63

Summary

More participation from USA on Working Groups is needed, particularly as topics become more specialized

The pandemic has impacted participation and productivity in the WGs, but the Chair is working to re-energize activity


Any potential candidates for the MEDA award, please consider applying



64

Dr Burton Suedel


PRINCIPAL REPRESENTATIVE TO ENVICom
RESEARCH B D LOGIST
U.S. ARMY CORPS OF ENGINEERS



65

EnviCom USA Team


- Todd Bridges - Chair
USACE
- Burton Suedel- Principal Representative
USACE
- Victor Magar - Alternate Representative
Ramboll
- Vacant - YP Representative




66

Recently Completed Working Groups

| WG | Title |
|-----|---|
| 175 | A Practical Guide to Environmental Risk Management for Navigation Infrastructure Projects |
| 176 | Guide for Applying Working With Nature to Navigation Infrastructure |
| 178 | Climate Change Adaptation for Maritime and Inland Port and Navigation |
| 188 | Carbon Management for Ports |
| 193 | Resilience of the Maritime and Inland Waterborne Transport System |
| 195 | An Introduction to applying Ecosystem Services for Waterborne Transport Infrastructure Projects |



WG 175



67

Active Working Groups

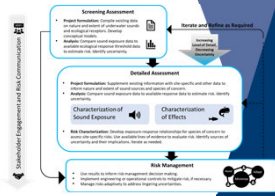
| WG | Title |
|-----|---|
| 157 | Environmental Aspects of Dredging and Port and Waterway Construction Around Coastal Plant Habitats |
| 170 | Best Practices of how to deal with Sea Turtles and Mammals in Marine Waterway and Port Construction |
| 174 | Sustainability Reporting for Ports |
| 214 | Beneficial Sediment Use |
| 218 | The implications of Invasive Alien Species for Waterborne Transport Infrastructure |
| 226 | A Guide for Assessing and Managing Effects of Underwater Sounds from Navigation Infrastructure |




68

Newly Forming Working Groups

| WG | Title |
|-----|---|
| 227 | A Guide for Assessing and Managing Environmental Restrictions on Dredging and Disposal Operations |
| 230 | How to Attract Green Funding for Nature Based Navigation Infrastructure |
| ToR | Environmental Use of Navigation Structures |
| ToR | Overarching Environmental Guidance that Would Be Used by other WGs |




WG 226




69

Joint Working Groups

| WG | Title |
|-------------|--|
| (InCom) 203 | Sustainable Inland Waterways: A Guide for Inland Waterway managers on Social and Environmental Impacts |
| (InCom) 228 | Management and Operation of Low Use Waterways |



WG 203



70

Summary

- > EnvInCom is active, although COVID-19 has delayed progress on some WGs
- > Pursuing joint WG opportunities with other PIANC commissions and organizations
- > Opportunities to participate in ongoing and upcoming WGs
- > Seeking creative ways to leverage WGs



WG 176



71

Mr Jose Sanchez

PRINCIPAL REPRESENTATIVE TO INCOM
DEPUTY DIRECTOR OF RESEARCH & DEVELOPMENT
U.S. ARMY CORPS OF ENGINEERS



72

InCom USA Team

»JOSE SANCHEZ MEMBER
USACE

»BRAN TRETAVLT ALTERNATE
USACE

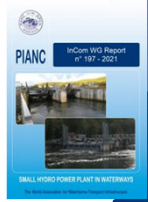

»JEREMY GODVANDO YP OBSERVER
USACE



73

New ly Published Reports

»InCom Report No.197-2021:
SM ALLHYDRO POW ER PLANT N WATERWAYS

74






Other Recently Published Reports

»InCom Report No.201-2020:Framework for an
Inland Waterway Classification in South America

»InCom Report No.179-2020:Standardisation of
Inland Waterways - Proposal for the Revision of the
ECM T 1992 Classification

»InCom Report No.191-2020:Com posites for
Hydraulic Structures


»InCom Report No.189-2020:Fatigue of Hydraulic
Steel Structures

75

Active Working Groups


| WG | Title |
|-------|--|
| WG125 | RIS Guidelines |
| WG128 | Alternative Bank Protection Techniques |
| WG190 | Corrosion Mitigation of Hydr Steel Structures |
| WG198 | Salt Water Intrusion Mitigations and Technologies |
| WG199 | Health Monitoring for Port and Waterway Structures |
| WG203 | Sustainable Inland Waterways - A Guide for Waterways Manager on Social and Environmental Impacts |
| WG206 | Update the Final Report (1986) of the International Commission for the Study of Locks |



76

Active Working Groups


| WG | Title |
|-------|--|
| WG207 | Innovations in Ship/IIFT Navigation Concepts |
| WG210 | Smart Shipping on IW |
| WG215 | Accidental Impacts from Ships on Fixed Structures |
| WG216 | Best Practices in Planning IW Multimodal Platforms |
| WG219 | Guidelines for IW Infrastructure to Facilitate Tourism |
| WG228 | Extended Values of 'Low-Use' Inland Waterways |
| WG229 | Guidelines for Sustainable Performance Indicators for Inland Waterways |
| TG234 | Infrastructure for the Decarbonisation of IWT |



77

New ly Form ing Working Groups


| WG | Title |
|-------|---|
| WG236 | Sustainable Management of the Navigability of Free Flow River |
| WG237 | Bottlenecks and Best Practices of Transport of Containers on Inland Waterways |
| WG241 | Handling Accidents and Calamities in Navigation Hydraulic Structures |



78

Summary


- > YCom is highly productive
- > More participation from USA on Working Groups is needed
- > The Pandemic has impacted participation and productivity in the WGs



79

Matt McCarty



PRINCIPAL REPRESENTATIVE TO YPCOM
LEAD TECHNICAL SPECIALIST
MCLAREN ENGINEERING



80

YPCOM USA Team

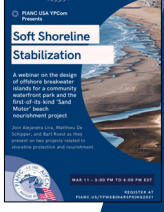

- Matt McCarty Chair
McLaren Engineering
- Nicole Pauly Co-Chair
Moffatt Nichol
- Nick Stefani Co-Chair
Edgewater Resources
- Kayla Waltemire
USACE, MR Alexandria

81

Recent Accomplishments

- > Added board members representing USA SouthEast and Great Lakes Regions
- > Monthly planning meetings
- > Webinar Series
 - Dec 20 - Deep Water Channels: Tsunami Resilience of Pile-Supported Wharves & Monopile Dolphin New Design Considerations
 - March 21 - Offshore Breakwater Design & Sand Motor Mega Beach Nourishment

82

Current Initiatives

- > Webinars with technical and YP issue focus
- > Successor to Past-Chair Andrea Viteri
- > Kickoff scholarship program for upcoming conferences
- > Start preparations for a 2023 USA BTW
- > Improve YP participation in WGs
- > Resume in-person, local events when appropriate.





83

How can YOU get involved?

- > YP Co-Chair position
- > Working group YP position
- > Volunteer to help lead or assist with YP initiative


- Matt McCarty: mmccarty@mclaren.com
- Nicole Pauly: npauly@moffattnichol.com
- Nick Stefani: nstefani@edgewaterresources.com
- Kayla Waltemire: pianc@usace.army.mil



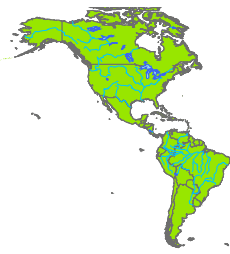
84

Dr Calvin Creech

PIANC USA LIAISON TO PIANC AMERICAS
INTERDISCIPLINARY ENGINEER
U.S. ARMY CORPS OF ENGINEERS



85



PIANC USA
The US Section of the World Association
for Waterborne Transport Infrastructure

CoCom Updates


PIANC America Initiative

- Calvin Creech, PhD, PE
- Lead Interdisciplinary Engineer, Latin America Programs
- USACE, Mobile District, South Atlantic Division
- Duty Station: Brasilia, Brazil

86

CoCom USA Team

| | |
|--|---|
| <p>PIANC HQ</p> <ul style="list-style-type: none"> • Abbas Sarmad – Co-Chair AECOM • Edward Schmeltz – Former Chair AECOM, Retired • Nick Pansic – ExCom Vice President Stantec Consulting Services Inc. | <p>PIANC USA</p> <ul style="list-style-type: none"> • Calvin Creech – Principal Rep. USACE • Lillian Almodovar – USA Commissioner USACE, Retired • Jim Walker – USA Commissioner AAPA |
|--|---|



87

CoCom Mission

- International Cooperation
- Promoting PIANC in Countries without National Sections or QM
- Create effective tools and methods to disseminate information
- Organizing / Assist in COPEDEC
- Organizing regional seminars and workshops



FRAMEWORK FOR AN INLAND WATERWAY CLASSIFICATION IN SOUTH AMERICA



88

PIANC AMERICA INITIATIVE


- The PIANC International Co-Operation Commission identified a need for coordination in the Americas
- Builds on Previous Events
 - ✓ SMART Rivers, Buenos Aires (2015)
 - ✓ PIANC-COPEDEC, Rio de Janeiro (2016)
 - ✓ SMART Rivers, Pittsburg (2017)
 - ✓ PIANC World Congress, Panama (2018)
- Latin America Group meetings and conference calls
- In 2020, the PIANC America Initiative was formed
- Steering Committee from representatives throughout the Americas
- Quarterly meetings since June 2020 (virtual)




89

COUNTRY STATUS

- Promote and Support development of National Sections and Qualifying Members


| | |
|--|--|
| <p><u>National Sections</u></p> <ul style="list-style-type: none"> ✓ Argentina ✓ Canada (new status) ✓ Colombia ✓ United States <p><u>Qualifying Members</u></p> <ul style="list-style-type: none"> ✓ Ecuador ✓ Panama ✓ Brazil |  <p>Legend</p> <p>PIANC Membership</p> <ul style="list-style-type: none"> ■ National Section ■ Qualifying Member □ No Membership |
|--|--|



90

PIANC AMERICA INITIATIVE

- Goals:
 1. Provide Opportunities to Enhance Professional Development of Members within the Region
 2. Strengthen America's Leadership within PIANC
 3. Disseminate Best Practices and Guidelines on Port Infrastructure and Waterway Development throughout the Americas
 4. Increase recognition of the importance of waterborne transport as a key water use component within the context of Integrated Water Resources Management across the global water community



91

TRAINING AND WEBINARS

- National Section events with broader application advertised throughout the Americas
 - ✓ PIANC USA Quarterly webinars
 - ✓ PIANC Argentina webinars
- Organize Training Events in the Americas
 - ✓ Leverage Curriculum and Training Material developed for Brazil Capacity Building Program
 - ✓ Training brought to countries in the Americas
- Courses Developed include:
 - ✓ Deep Draft Navigation Design
 - ✓ Shallow Draft Navigation (Engineering)
 - ✓ Economics of Shallow Draft Navigation
 - ✓ Dredging Fundamentals and Cost Estimating
 - ✓ River Training Structure Design
 - ✓ Navigation Planning Essentials
 - ✓ Navigation Lock Planning and Design
 - ✓ Hydraulic Modeling (HEC-RAS)



92

PIANC AMERICA CONFERENCE


- Regional Conference for the Americas tailored to address the needs and challenges of the waterborne transport in the Americas.
- Held every two years, with host nation rotating
- Current Proposal:
 - ✓ PIANC USA proposal to Host first PIANC America Conference
 - ✓ Proposed for early 2023
 - ✓ Location proposed for Southern Florida
- Next Steps

Confirm Dates/Location

Establish Committees:
 1. Planning
 2. Technical
 3. Executive

Define Conference Theme

Coordination of
 Agenda
 Marketing and Sponsors
 Schedule



93

SUMMARY


- CoCom mission on international cooperation
- Established a forum for the Americas to discuss PIANC activities
- Training continues to be a major area of collaboration and growth within the CoCom
- The PIANC America Conference is a major focus of PIANC USA




94

Thank you

Calvin Crech
Calvin.Crech@usace.army.mil
 Ph: +1.251.581.6378



PIANC USA
The US Section of the World Association for Waterborne Transport Infrastructure



95

Panel Discussion

MODERATOR: JESSICA MCINTYRE


PLEASE CHAT IN QUESTIONS FOR THE PANELISTS

Send to: Everyone

Type your message here

Participants Chat

- **RON HEFFRON**
 Senior VP, Energy & Marine, COWI
- **NICK PANSE**
 Vice President, Stantec
- **JOSE SANCHEZ**
 Deputy Director of R&D, US Army Corps of Engineers
- **JIM WALKER**
 Director of Government Relations, American Association of Port Authorities



96

Working Group Certificates

Presented to PANC USA members who participated in working groups since 2016.

67 Certificates were awarded.



97

**WORKING GROUP CERTIFICATE
RECIPIENTS 2016**

11 Awarded

| | |
|------------------|-------------------|
| Bob Beasley | Don Oates |
| Jack Cox | Mark Peicher |
| David Grier | Thomas Spencer |
| Ron Heffion | Gregory A. Saders |
| Gayle S. Johnson | Majid Yavary |
| Jeffrey Meby | |




98

**WORKING GROUP CERTIFICATE
RECIPIENTS 2017**

11 Awarded

| | |
|------------------|-------------------|
| Tenence Browne | Brenden McKinley |
| John D. Clarkson | Wally Mosher |
| Thomas Hood | Timothy M. Paulis |
| Frederick Jones | Mark Pine lb |
| Eric Johnson | Brian Tetreault |
| Richard Lockwood | |



99

**WORKING GROUP CERTIFICATE
RECIPIENTS 2018**

15 Awarded

| | |
|-------------------|------------------|
| Lillian Almodovar | Ron Heffion |
| Helen Bihl | Ellen Johnck |
| Anne Cann | Kevin Knight |
| Ronald Coles | Mike Leone |
| Kelly Burks-Copes | James McCarville |
| George Detweiler | Victor Magar |
| Laura Dunkh | Nick Pansic |
| | Craig Philip |



100

**WORKING GROUP CERTIFICATE
RECIPIENTS 2019**

17 Awarded

| | |
|-------------------------|-----------------|
| Ed Backlund | John Lally |
| Albert Barnes | Rich Lockwood |
| Ron Coles | Brian Molby |
| Doug Daugherty | David Moore |
| Catherine Fox-Lent | Tim Paulis |
| Fernando Gonzalez Chana | Burton Suedel |
| Kathy Griffin | Brian Tetreault |
| Margaret Kuth | Charles Wiggins |
| | Stanley White |



101

**WORKING GROUP CERTIFICATE
RECIPIENTS 2020**

13 Awarded

| | |
|-------------------------|--------------------|
| Travis Adams | Cate Fox-Lent |
| Brian Alberto | Maurice Kerr |
| Jonathan Benvenuto | Matt Lunemann |
| Sandra Brasfield Newell | Julie Rosati |
| Katherine Chambers | Jonathan Thovillon |
| John Clarkson | William Veatch |
| Calvin Creech | |



102




SPECIAL RECOGNITIONS

ANDREA VITERI
 PANC USA YCom Co-Chair
 Marine Project Engineer
 Moffatt & Nichol

BRIAN LEE
 Former Deputy Secretary, PANC USA
 U.S. Army Corps of Engineers

RACHEL GRANDPRE
 Former Secretary, PANC USA
 U.S. Army Corps of Engineers

103




SPECIAL RECOGNITIONS
 Commissioners

EDWARD SCHMELTZ
 Retired Senior Vice President
 AECOM

MICHAEL LEONE
 Retired Director of MassPort

NICHOLAS PANSE
 Vice President, Stantec
 Consulting Services, Inc.

104



M G William (Butch) Graham
 PRESIDENT, PANC USA
 DEPUTY COMMANDING GENERAL FOR CIVIL AND EMERGENCY
 OPERATIONS
 HEADQUARTERS, U.S. ARMY CORPS OF ENGINEERS

105