# **FINAL PROGRAM**



# PORTS® 122

Honolulu, Hawaii | September 18-21, 2022







# **SHIBATAFENDERTEAM**



on the safe side



#### **Contents**

Schedule-at-a-Glance	3
Welcome & Committee	4
Special Events/Special Sessions	5–7
Technical Program	8-15
Exhibit Hall	17
Exhibitors	18-21
Hotel Floor Plan	22
General Information	23
Sponsors	24



# Schedule-at-a-Glance (Subject to Change)

# Sunday, September 18

6:00 — 11:30 a.m.	Registration Open, Coral Lounge
7:00 — 11:30 a.m.	Optimization of Port Operations Using Simulation
	Modeling Short Course, South Pacific 4
7:00 — 11:30 a.m.	Design and Construction of Large Floating Structures
	Short Course, Sea Pearl 1/2
7:00 — 11:30 a.m.	Seismic Design of Piers and Wharves Short Course,
	Sea Pearl 3/4
7:00 a.m.— 5:00 p.m.	Vessel Mooring and Berthing Short Course, South
	Pacific 1
7:00 a.m.— 5:00 p.m.	Inspection, Testing, and Rehabilitation of Waterfront
	Structures Short Course, South Pacific 2
7:00 a.m.— 5:00 p.m.	Modeling and Resilient Design Against Tsunami
	Hazards Short Course, South Pacific 3
12:30 — 5:00 p.m.	Planning, Design, and Implementation of Automated
	Terminals Short Course, South Pacific 4
12:30 — 5:00 p.m.	Theory and Design of Floating Wave Attenuators Short
	Course, Sea Pearl 1/2
12:30 — 5:00 p.m.	Dredging 201 Short Course, Sea Pearl 3/4
11:30 a.m.— 12:30 p.m.	Registration Closed for Lunch Coral Lounge
12:30 — 6:30 p.m.	Exhibitor Move-in, Coral Ballroom 1-3 & Lounge
12:30 — 7:00 p.m.	Registration Open, Coral Lounge
3:30 — 5:30 p.m.	Speaker Check-in, Hibiscus
5:30 — 6:30 p.m.	Student & Young Professionals Reception, Nautilus
6:30 — 8:00 p.m.	Exhibits Open, Coral Ballroom 1-3 & Lounge

# & Lounge Monday, September 19

6:30 - 8:00 p.m.

6:00 a.m.— 12:00	Registration Open, Coral Lounge
p.m. 6:30 — 8:30 a.m.	On an in an Plan arm of Court Builton and 4/5
	Opening Plenary, Coral Ballroom 4/5
6:30 a.m.— 5:00 p.m.	Exhibits Open, Coral Ballroom 1-3 & Lounge
8:30 — 10:00 a.m.	Concurrent Technical & Special Sessions, see page 8
8:30 — 10:00 a.m.	PIANC - Maritime Perspectives Across the Pacific, Nautilus
10:00 - 10:30 a.m.	Exhibit Hall Networking Break, Coral Ballroom 1-3 &
	Lounge
10:30 a.m.— 12:00 p.m.	Concurrent Technical & Special Sessions, see page 9
10:30 a.m.— 12:00 p.m.	Panel Discussion – Freedom of Navigation, Nautilus
12:00 — 1:00 p.m.	Registration Closed for Lunch, Coral Lounge
12:00 — 1:00 p.m.	Exhibit Hall Lunch, Coral Ballroom 1-3 & Lounge
12:00 — 2:30 p.m.	Young Professional Networking Event, Coral Ballroom 4
1:00 — 5:00 p.m.	Registration Open, Coral Lounge
1:00 — 2:30 p.m.	Concurrent Technical & Special Sessions, see page 10
3:00 — 4:30 p.m.	ACOPNE Induction, Rainbow Suite 1/2
	·

Ice Breaker Welcome Reception, Coral Ballroom 1-3,

3:00 — 5:00 p.m.	Young Professional Team Building Event, Dukes Beach Hilton Hawaiian Village
4:30 — 5:30 p.m.	Speaker Check-in, Hibiscus
6:00 — 7:00 p.m.	Young Professional Happy Hour, Maui Brewing Co-
	Waikiki

Registration Open, Coral Lounge

# **Tuesday, September 20** 6:00 a.m.— 12:00

p.m.	
6:30 — 8:00 a.m.	Concurrent Technical & Special Sessions, see page 11
6:30 a.m.— 5:00 p.m.	Exhibits Open, Coral Ballroom 1-3 & Lounge
8:00 - 8:30  a.m.	Exhibit Hall Networking Break, Coral Ballroom 1-3 &
	Lounge
8:30 — 10:00 a.m.	Concurrent Technical & Special Sessions, see page 12
8:30 — 10:00 a.m.	MarCom Working Group 208, Planning of Automated
	Container Terminals, Nautilus
10:00 — 10:30 a.m.	Exhibit Hall Networking Break, Coral Ballroom 1-3 &
	Lounge
10:30 a.m.— 12:00 p.m.	Concurrent Technical & Special Sessions, see page 12
10:30 a.m.— 12:00 p.m.	ASCE 61Special Session, Sea Pearl 1/2
12:00 — 1:00 p.m.	Exhibit Hall Lunch, Coral Lounge & Coral Ballroom I-III
12:00 — 1:00 p.m.	Registration Closed for Lunch, Coral Lounge
1:00 — 2:30 p.m.	Concurrent Technical & Special Sessions, see page 13
1:00 — 5:00 p.m.	Registration Open, Coral Lounge
2:30 — 3:30 p.m.	Speaker Check-in, Hibiscus

Gala Social Event, Bishop Museum, Buses depart the hotel

from 5:45 to 6:00 p.m. and return between 9:30 and 10:00 p.m.

6:30 - 9:30 p.m.

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6:00 — 11:00 a.m.	Registration Open, Coral Lounge
6:30 — 8:00 a.m.	Concurrent Technical & Special Sessions, see page 14
6:30 — 1:00 p.m.	Exhibits Open, Coral Ballroom 1-3 & Lounge
8:00 — 8:30 a.m.	Exhibit Hall Networking Break, Coral Ballroom 1-3 &
	Lounge
8:30 — 10:00 a.m.	Concurrent Technical & Special Sessions, see page 15
10:00 - 10:30 a.m.	Exhibit Hall Networking Break, Coral Ballroom 1-3 &
	Lounge
10:30  a.m. - 12:00  p.m.	Concurrent Technical & Special Sessions, see page 15
10:30 a.m.— 12:00 p.m.	Sustainability and Resilience in Port Engineering
	Practice, Nautilus
1:00 — 5:00 p.m.	Exhibitor Move-out, Coral Ballroom 1-3 & Lounge
3:00 — 5:00 p.m.	Pearl Harbor Tour, Offsite, Buses depart the hotel from 2:00 to
	2:15 p.m. and load between 5:00 – 5:15 p.m. to return

# Thursday, September 22

6:30 — 11:30 a.m. Ports & Harbors Committee Meeting, South Pacific 1-4

# Welcome to PORTS® '22

# Welcome from the Conference Chair

Welcome to Honolulu, Hawai'i, and **PORTS '22**, the premier port engineering conference series in North America. As the sixteenth triennial PORTS conference, we strive to grow our community, honor our technical traditions and build future success by providing an exceptional learning and networking environment for all participants. Aligned with our theme, **Knowledge Sharing for a Better Tomorrow**, PORTS '22 participants will be exposed to the latest developments in the port industry and benefit from direct interaction with professionals representing the broad range of specialties serving the greater port industry. We encourage everyone to take a look at all the conference has to offer:

- An expanded and technically diverse program with nearly 200 presentations with presenters from 15 countries representing 85 organizations
- Our Sunday Short Course Series of 9 technical classes taught by industry experts designed to further your professional knowledge
- 8 panel/round-table discussions devoted to timely topics such as climate change, asset management, port infrastructure funding, and navigational freedom in the Pacific among others
- 3 ASCE design standards sessions sharing new developments and standards committee recommendations regarding the design for piers, wharves, and bulkheads
- 2 PIANC Working Group sessions presenting new design guidelines regarding planning for container terminal automation and fender design principles
- 2 Special Presentation sessions dedicated to port industry topics of local interest to Hawaiian practitioners
- Our Exhibit Hall with 70 vendors catering to our industry with ample opportunities to view the exhibits and become more aware of the breadth of services and goods available to the port industry

In addition to the traditional program, PORTS '22 also provides numerous options for participants to connect with each other to maintain industry contacts, cultivate new relationships, and increase recruiting potential. Specific social events include:

- Sunday night's Ice Breaker Welcome Reception
- Tuesday night's Gala at the Bishop Museum
- Wednesday afternoon's Navy-hosted Pearl Harbor Boat Tour

PORTS '22 also has an expanded student and younger professional program that provides specific educational and networking opportunities for the next generation of talented, energetic specialists in the port industry. Notable events developed specifically for younger professionals includes:

- Sunday night's Young Professionals Welcome Reception
- A two-part networking opportunity Monday afternoon with a Team-Building Outrigger Canoe Race and a post-race Younger Professional Social
- The PORTS 101 series is a concurrent technical track where unique, port industry experience and knowledge is shared by expert practitioners in easily digestible 20-minute presentations

The professional interaction, exchange of ideas, and cultivation of new professional contacts and opportunities remain a hallmark of the PORTS '22 Conference series. I encourage everyone to experience new ideas and grow your knowledge while basking in the beauty of Hawai'i.



William M. Bruin, P.E., D.P.E., M.ASCE Simpson Gumpertz & Heger PORTS® '22 Organizing Chair

### **PORTS® '22 Organizing Committee Chairs**

Organizing Chair: William M. Bruin, P.E., D.P.E., M. ASCE, Simpson Gumpertz & Heger

Technical Program Co-Chairs: Philip Erbland, P.E., M.ASCE, S&ME, Inc.; Byan Jones, P.E., D.P.E., D.CE, M.ASCE, HDR Short Course & PORTS 101 Chair: Danielle Goudreau, P.E., M.ASCE, Collins Engineers, Inc.

Keynote and Plenary Chair: Amanda Schindhelm, P.E., D.PE, M.ASCE, Marine Solutions, Inc.

Gala/Social Chair: Shannon Kinsella, P.E., M.ASCE, Reid Middleton

**Student/YP Co-Chairs:** Jon Benvenuto, LCDR, P.E., United States Coast Guard; **Allison Digregorio**, A.M.ASCE, Simpson Gumpertz & Heger

Sponsorship and Exhibitor Chair: Bradley Syler, P.E., S.E., M.ASCE, Marine Solutions, Inc.

#### **Conference Staff**

Tom Chase, Director, COPRI

Sean Herpolsheimer, Coordinator, COPRI

**Lucy King, CMP,** Senior Manager, Geo-Institute & COPRI Conferences

Sean Scully, Senior Manager, ASCE Sponsorship and Exhibit Sales

# Using the PORTS® '22 App

1. Download the "ASCE Events" mobile app

Scan this QR Code or go to the Apple App Store or Google Play and search for ASCE Events.



INSTALL and OPEN the ASCE Events mobile app, then look for the PORTS '22 Conference event icon in the bottom row to open the app

CLICK the icon to launch the event app.

2. Log in to the PORTS '22 Conference app

To start using the app, click on the login button, You will be redirected to the login page to enter your ASCE Credentials to log you into the app.

Don't have an account? Use the Create Account option on the login page to set up an ASCE account.

3. Use the app and engage with the event!

Locate the schedule, add sessions to your personal schedule and search for your favorite session. Learn about our speakers, network and message other attendees (be sure to agree to "share" your information when you log in).

Our Expo Hall will be easy to navigate with the mobile app. Search for exhibitor's names, or booth listing, then use the "Find Booth" button to locate the booth on the interactive Floor Plan. You can also take notes and save them right in the exhibitor's profile listing in the app!

Sponsored by COLLINS ENGINEERS

# **Special Events/Special Sessions**

# **Special Events**

Sunday, September 18

6:30 - 8:00 p.m., Exhibit Hall, Coral Ballroom 1-3 & Lounge

# **Ice Breaker Welcome Reception**

Included with full registration - Cash Bar

Kick off PORTS '22 with friends, colleagues, young professionals, and distinguished award winners in the Exhibit Hall. Visit and talk with our exhibitors and sponsors as we begin another successful PORTS conference. Don't miss this special opportunity to catch up with old friends and colleagues or make new contacts with similar interests.

# Monday, September 19

3:00 – 4:30 p.m., Rainbow Suite 1/2



Included with full registration

Get acquainted with your ACOPNE and COPRI colleagues and toast the newest Diplomates. Hawaiian Aloha business attire requested.

The Academy of Coastal, Ocean, Port & Navigation Engineers (ACOPNE) was launched in 2009 by the American Society of Civil Engineers (ASCE) to advance the practice in coastal, ocean, port, and navigation engineering by recognizing and certifying professional engineers in the profession. The ACOPNE is ASCE's third elite professional academy, comprised of nearly 250 professional engineers, who have accumulated extensive training, project experience, leadership, and high-level expertise to become eligible for Board Certification as ACOPNE Diplomates.

# Tuesday, September 20

# Social Gala at the Bishop Museum

6:30 - 9:30 p.m.

Included with full registration

Discover Hawai'i's history and living culture, learn about Polynesian wayfinding, and experience the thrill



Buses will depart from the Hilton Hawaiian Village bus depot between 5:45 – 6:00 p.m. Buses will arrive at the museum between 6:30 – 6:45 p.m. Upon arrival you may visit the Hawaiian Hall exhibit in the museum or grab a drink and network with your friends and colleagues on the Great Lawn. Dinner service will follow during which Hawaiian musicians and dancers will take to the stage and entertain attendees. Buses will depart for the hotel between 9:30 – 10:00 p.m.



# **Pearl Harbor Tour**

3:00 - 5:00 p.m.

#### Additional registration required

U.S. Navy staff will host a tour around Pearl Harbor and Ford Island. The tour is for attendees who have

preregistered for the technical tour. Tour registrations are currently at capacity and any new registrants will be added to a wait list. Attendees should wear sleeved shirts, long pants, and closed-toe shoes.



2:00 – 2:15 p.m. Buses load and depart from the Hilton

Hawaiian Village bus depot

3:00 – 3:15 p.m. Boat loads and departs

3:15 - 5:00 p.m. Tour (pre-registration required)

5:00 – 5:15 p.m. Buses load for return to Hilton Hawaiian

/illage

6:00 p.m. Buses return to Hilton Hawaiian Village

# **Special Sessions**

PORTS '22 features technical tracks consisting of special discussion sessions and round tables with industry leaders.

# Monday, September 19

# PIANC – Maritime Perspectives Across the Pacific

8:30 - 10:00 a.m., Nautilus

Moderator: Joe D. Manous, Jr., Jr, Ph.D., P.E., D.WRE, F.EWRI, Dist.M.ASCE, Secretary United States Section of PIANC – Director US-ACE Institute for Water Resources

The session format will be six panelists providing 10 minutes of remarks and then engaging in a discussion and Q&A of current and emerging port and maritime issues within the Pacific region.

#### **Confirmed Panelists:**

Bumgou Kang, President of the Korean Section of PIANC – President & CEO of Korea Logistics Network Corporation

Mitsuhiko Okada, P.E., Chair of the Japanese Section of PIANC – Managing Director, Airport Facilities Co., Ltd.

**Helen Jenkins**, Vice-President of the Canadian Section of PIANC – Senior Engineer WSP Golder

Nick Pansic, P.E., D.NE, M.ASCE, Vice-President of United States Section of PIANC – Vice President, Stantec Consulting Services Inc.

**Greg Britton,** Senior Board Member PIANC ANZ – Technical Director, Water & Maritime, Haskoning Australia

Francisco Esteban Lefler, President of PIANC



# Special Sessions (continued)

# Panel Discussion – Freedom of Navigation

10:30 a.m. - 12:00 p.m., Nautilus

**Moderator: Brian Norris,** Senior Vice President, Stantec How the maritime engineering and construction community partners with the DOD to assure freedom of navigation globally, safeguarding commerce, health and prosperity.

#### **Confirmed Panelists:**

US Navy – RDML Jeff Kilian, NAVFAC Pacific Commander
US Army – Jose Sanchez, USACE Pacific Ocean Division
Engineering & Construction – Elizabeth Collins, President, Collins Engineers, Inc.
Shipping/Logistics – Kam Chun, Facilities Manager, Matson

Tuesday, September 20

# MarCom Working Group 208, Planning of Automated Container Terminals

8:30 - 10:00 a.m., Nautilus

#### **Moderators:**

Tom Ward, P.E., S.E., D.P.E., M.ASCE, WSP

Ashebir Jacob, P.E., M.ASCE, Moffatt & Nichol Join this special technical session to become familiarized with this new report presenting the state-of-the-art and best practices when planning for automation in container terminals. Digitisation and decarbonisation are disrupting the supply chain, and consequently transport infrastructure. Technological developments are, at the same time, creating attractive but non-standardised opportunities for automation. The report provides advice and guidance for port stakeholders in the planning process and the specific considerations with regards to automation. This technical session is intended to familiarize the wider engineering community with the document as a key design resource, providing a broader strategic overview of the planning and design process. This session will focus on the following four broad topics paralleling the major sections of the WG 208 report:

- The State of Automation
- The Automation Business Case
- The Terminal Planning Process
- Systems Integration

# **ASCE 61 Special Session**

10:30 a.m. - 12:00 p.m., Sea Pearl 1/2

This session will include brief presentations and a panel discussion of significant changes to the next edition of ASCE 61, the Standard for Seismic Design of Piers and Wharves. Topics include revisions to the performance criteria and return periods, geotechnical provisions, structural analysis and design provisions, seismic detailing, topsides structures, and the new provisions on bulkheads.

Speakers include the following:

Gayle Johnson, P.E., M.ASCE – SGH (Committee Chair)

Joe Galloway, P.E., M.ASCE – WSP (Committee Vice-Chair)

Steve Dickenson, Ph.D., P.E., D.P.E., M.ASCE – New Albion Geotechnical

Julie Galbraith, P.E., M.ASCE – SGH

Rod Iwashita, P.E., D.P.E., F.ASCE – Port of San Francisco Brett King, P.E., M.ASCE – WSP Carlos Ospina, P.E., M.ASCE – SGH Marc Percher, P.E., M.ASCE – COWI Paul Smith – Seattle University Jose Ugalde – Fugro

# Sustainability and Resilience in Practice Special Session Series

Join the ASCE Sustainability Technical Committee and COPRI Ports and Harbors Committee for a series of moderated group discussions around three distinct themes of sustainability and resilience: Adaptation, Mitigation, and Management. Each 90-minute session will explore the following questions: How are port engineers and planners using sustainability and resilience in practice? What gaps exist in sustainable and resilient port engineering practices? And, what information and data is missing for creating sustainable and resilient port designs? Please attend and help influence future activities of the sponsoring committees.

# Tuesday, September 20

# Sustainability and Resilience in Practice – Adaptation

6:30 - 8:00 am

#### **Moderators:**

Rod K. Iwashita, P.E., D.PE, F.ASCE, Deputy Director & Chief Harbor Engineer, Port of San Francisco

**Dan Walker, Ph.D., M.ASCE**, Associate Director for Multidisciplinary Studies, Center for Technology and Systems Management, University of Maryland

# Sustainability and Resilience in Practice - Management

10:30 am - 12:00 p.m.

**Moderator: Daniel Elroi,** Asset Management Program Manager, NorthSouth GIS, LLC

# Wednesday, September 21

# Sustainability and Resilience in Practice – Mitigation

10:30 am - 12:00 p.m.

#### Moderators:

**Lee Barco**, **P.E.**, **D.PE**, **F.ASCE**, Vice-President, COPRI Governing Board; Director, Director, Global - Infrastructure Engineering, APM Terminals

Joel Farrier, P.E., MBA, M.ASCE, Chair, ASCE Sustainability Technical Committee; West US Strategic Growth Leader | Regional Environment Manager, Burns & McDonnell

# **Student & Young Professionals Program**

PORTS '22 will feature an expanded Student and Young Professionals program including the return of our PORTS 101 track, especially focused for early-career port engineers, but equally applicable to mid-career engineers transitioning into the port industry, or senior-level managers who have port engineering oversight duties.

# Sunday, September 18

# Young Professionals Reception – Sunday Evening

5:30 - 6:30 p.m., Nautilus Suite

Cost: FREE

All young professionals are invited to this first Young Professionals event via a casual meet and greet! What better way to network amongst your peers from different parts of the world over great food and drinks!

# Monday, September 19

# Young Professionals Networking Event – Monday Lunch

12:00 – 1:25 p.m. | Lunch and Facilitated Networking, *Coral 4* 1:25 – 2:30 p.m. Extended Informal Networking, *Coral 4* 

Cost: FREE

Are you a young professional (35 years old and under) looking to gain invaluable insight from other seasoned engineers and your peers? If you answered YES, join us at the Younger Member Networking Event! This event connects emerging, diverse young professionals with seasoned professionals that are passionate about giving back during the PORTS '22 Conference through facilitating a networking/mentorship event.

Lunch and fun are free and provided for all attendees! Be sure to download the conference app once it is available to receive updates and venue location. We look forward to seeing you there!

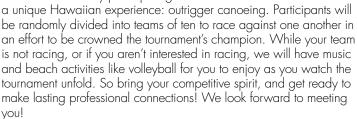


# Young Professionals Team Building Event

3:00 - 5:00 pm, The Beach

Cost: \$50

Join us for an afternoon of team building and professional networking while simultaneously participating in



The first 100 registrants under 35 will receive a custom PORTS '22 Hawaiian shirt, designed by the COPRI Ports & Harbors Student & Young Professionals Task Committee. \*Registrants must enter their age during registration to be eligible for the giveaway.

# **Young Professionals Happy Hour**

6:00 - 7:30 p.m., Maui Brewing Co. - Waikiki

Cost: FREE (limited seating)

All young professionals are invited to this casual Happy Hour! What better way to network amongst your own peers from different parts of the world over great food and drinks!

# Monday, September 19-Wednesday, September 21

### **PORTS 101**

Technical program concurrent track, Sea Pearl 3/4

Cost: FREE

The PORTS 101 series is a concurrent technical track where unique, port industry experience and knowledge is shared by expert practitioners in easily digestible 20-minute presentations. You can learn more about the PORTS 101 track on our interactive program.

Tuesday, September 20

# **Student Paper Competition**

1:00 - 2:30 p.m., Nautilus Suite

Join the PORTS'22 Student Paper Competition finalists when they present their research during this special session. Topics include tsunamis, vessel berthing, geotechnics, and coastal processes.



# Technical Program (subject to change)

# Monday, September 19

6:00 a.m. - 5:00 p.m. Registration (closed for lunch 12:00 - 1:00 p.m.), Coral Lounge

6:30 a.m. – 5:00 p.m. **Exhibit Hall Open,** Coral Ballroom 1-3 & Lounge

6:30 – 8:30 a.m. Opening Plenary, Coral IV/V

8:30 – 10:00 a.m. Technical Sessions

8:30 - 10:00 a.m.	Technical Sessions					
<b>Track A  </b> South Pacific 1	<b>Track B</b>   South Pacific 2	<b>Track C</b>   South Pacific 3	<b>Track D</b>   South Pacific 4	<b>Track E</b>   Sea Pearl 1/2	Track F   Sea Pearl 3/4	Track G   Nautilus
1A Environmental	1B Port Engineering	1C Port Engineering	1D Equipment & Systems	1E Terminal Planning & Design	Ports 101 – Port Structures	PIANC - Different Perspectives from Across the Pacific
Regulations of Port Cities, Peter Brennan, P.E., P.Eng., M.ASCE; Kaitlyn Frega CFM,	Moderator: Daniel O'Connor, P.E., M.ASCE  Developing Load Factors for Berthing Loads  Based on Monte Carlo Modeling and Statistical Analysis, Rune Iversen, P.E., M.ASCE; Dolunay Oniz EIT, A.M.ASCE; Elizabeth Washburn S.M.ASCE; Brian Phan, P.E.; Allison DiGregorio M ASCE  Initial Investigation of Steel Pipe Pile Strain Limits for Performance-based Seismic Design, Theresa Richards, P.E., S.M.ASCE; Omar Jaradat, Ph.D., P.E., D.P.E, M.ASCE; Sergio Suarez, P.E.; Jose Restrepo Ph.D.; Machel Morrison, Ph.D.  New ASCE/COPRI Design Standards for Piers and Wharves, Omar Jaradat, Ph.D., P.E., D.P.E, MASCE; Julian Cajiao; David Pryor, P.E.; Daryl English, P.E., M.ASCE; Handony Farmer, P.E., M.ASCE; Bill Paparis, P.E., D.P.E, M.ASCE; Bill Paparis, P.E., D.P.E, M.ASCE; Dies Galbraith, P.E.; Rune Iversen, P.E., M.ASCE; Julian Galia, P.E., S.E., M.ASCE; Julian Cajiao; David Pryor, P.E.; Daryl English, P.E., M.ASCE; Handony Farmer, P.E., M.ASCE; Bill Paparis, P.E., D.P.E, M.ASCE Proposed Framework for Seismic Assessment and Rehabilitation of Pile-supported Piers and Wharves, Carlos Ospina, Ph.D., P.E.; William Bruin, P.E., D.P.E., M. ASCE; Gayle Johnson, P.E.	Moderator: Bryan Jones, P.E., D.P.E., M.ASCE  Optimization of Seawall Design at Alameda Marina, Samuel Yao M.ASCE; Ali Naeem M ASCE; Joshua Core M ASCE; Alison DiGregorio M ASCE Advancements in Galvanic Protection for Marine Structures, Rick Ellingson, P.E., NACE (P2; Jason Chodachek NACE (P2)  Offshore Technology Utilized to Accelerate Nearshore Barge Terminal Construction, Daniel E Leonard P.Eng.; Vignesh Ramadhas P.Eng.; Hong Liang P.Eng. Seismic Performance Requirements in the Urban Waterfront: Case Study – Repurposed 1940's Navy Wharf, Justin Reynolds, P.E., M.ASCE; Gayle Johnson, P.E.; Stephen Dickenson Ph.D., P.E., D.P.E., M.ASCE; Samuel Cortes, P.E.	Moderator: Kevin Matakis, P.E., M.ASCE  Balance Crane — a New Type of STS Crane in Development, Kenton Lee , P.E., S.E., Anna Dix , P.E., S.E., M.ASCE; Simo Hoite , P.E.; Lu Yan , P.E.  STS Crane Stowage Design: Key Considerations and Case Study, Anna Dix , P.E., S.E., M.ASCE; Erik Soderberg, P.E., S.E., D.P.E., M.ASCE; Tois Shiratsubaki, P.E.  Berthing Eccentricity Coefficient: Derivation, Application, and Use in PIANC, MOTEMS, and BS6349, Julian Cajiao; Jon Phelan P.Eng Design and Implementation of the World's First Fixed Track Mobile Shore Power Outlet System, Jennifer Lim, R.E.; Nothan Tang, P.E.; Edwin Draper, P.E.; Tracy Fidell, P.E.; Sean McCaskili; Matthew Trowbridge, P.E., S.E., P.Eng	Moderator: Thomas Spencer, P.E., S.E., D.P.E., M.ASCE Applying Lessons Learned for a New Battery Exchange Building at the Automated Middle Harbor Terminal, Kent Sayler, P.E.; John Litzinger, P.E. Completing the South Texas Gateway Terminal Permitting, Design, and Construction in 18 Months, Ted Trenkwalder 2677142; Michael O'Sullivan, P.E., S.E., M.ASCE; Chris Mills, P.E.; Vince Kolbuck, P.E.; Warren Stewart, P.E., S.E. D., P.E. Historic Pier Restoration and Repurposing: Iconic City Pier Transformed to World Class Luxury Hotel, Jared Freeman, P.E., M.C.E., M.ASCE Design-build Delivery of Cement Imports Dock Configured for Future Liquid Exports, Viswanath Kumar P.E., S.E.; Eileen Elizondo, P.E.; Natsch Fudge, P.E.; Jyotirmoy Sircar, P.E.	Moderator: Danielle Goudreau, P.E., M.ASCE Port Structures, Danielle J. Goudreau, P.E., M.ASCE Waterfront Design Considerations, Justin J. Pyun, P.E., S.E., M.ASCE Floating Structures, Shannon Kinsella, P.E., PMP, LEED AP, M.ASCE Inland Ports, Stephen C. Owen, P.E., MS, M.ASCE	Moderator: Joe D. Manous, Jr., Ph.D., P.E., D.WRE, F.EWRI, Dist.M.ASCE Panelists: Greg Britton, Board Member, PIANC Australia and New Zealand Francisco Esteban Lefler, President, PIANC Helen Jenkins, P.Eng, Vice President, PIANC Canada Bumgou Kang, President, PIANC Korea Mitsuhiko Okada, Chair, PIANC-Japan Nick Pansic, P.E., D.NE, M.ASCE, Vice President for the Americas, PIANC USA
10:00 - 10:30 a.m.	Refreshment Break, E	khibit Hall				

# Opening Plenary

6:30 - 8:30 a.m., Coral Ballroom 4/5



#### **KEYNOTE SPEAKER**

R. David Curfman, P.E., Chief Engineer and Assistant Commander for Design and Construction Naval Facilities Engineering Systems Command

In June 2019, David Curfman assumed duties as the Naval Facilities Engineering Systems Command's (NAVFAC) Chief Engineer and Assistant Commander (Director) for Design and Construction. He is the senior technical advisor and technical authority for Navy shore and ocean facilities and leads over

4000 engineering professionals delivering over \$7B per year in military design and construction services for the Navy, Marine Corps and other DoD agencies around the world. He is currently leading over \$3 billion in earthquake recovery projects at Naval Station China Lake, over \$2.5 billion in hurricane Florence recovery at MCB Camp Lejeune, numerous piers, wharves, moorings, dredging, and coastal projects, and over \$8 billion in shipyard modernization and climate adaptation projects at the four Naval Shipyards.



10:30 a.m. – 12:00 p.m.  Track A   South Pacific 1  2A Environmental	Track B   South Pacific 2	<b>Track C</b>   South Pacific 3	Track D   South	Track E   Sea	T   F   C	
Pacific 1	Pacific 2	Track C   South Pacific 3	Track D   South	Track E Soc		
24 Environmental	OD D . F		Pacific 4	Pearl 1/2	<b>Track F</b>   Sea Pearl 3/4	Track G   Nautilus
ZA Environmental	2B Port Engineering	2C Port Engineering	2D Port Planning & Operations	2E Terminal Planning & Design	PORTS 101 – Inspection and Design	Panel Discussion On Freedom of Navigation
P.E., MS, M.ASCE  Beneficial Reuse of Dredged Contaminated Sediments for Redevelopment of an Upland Cleanup Site, Jessi Massingale, P.E., M.ASCE; Corey Wilson, P.E.; Chris Hartman, P.E.  Evaluating the Effects of Increased Dredge Depths on Existing Structures, Timothy Weeks, P.E.; Andrew Leedom, P.E.; Jeff Fisher, P.E.  Bulkhead Barrier Wall Design and Construction Considerations: The Gowanus Canal, Kayla Newton, P.E.; Matthew Page, P.E. Completing the Installation of 10 Megawatts of Photovoltaic Solar Power at the Port of Los Angeles, Carlos Baldenegro, P.E., L.S.I.T, M.ASCE	Innovative Waterfront Applications of Concrete and Steel Bulkheads for Marine Terminals, Alfredo Rivera, P.E.; Carlos Ospina, Ph.D., P.E.; Ludovic Gros; Robert Rocha Dynamic Mooring Analysis for Portmiami North Bulkhead Cruise	P.E., G.E., M.ASCE  Sheet Pile Combi-Wall Reinforcement Plates, Charles Rosner P.Eng.; Scott Melvin P.Eng.  Design Considerations for a New Marine Oil Terminal at Port of Los Angeles, Berths B238-	Moderator: Justin J. Pyun, P.E., S.E., M.ASCE Port of Los Angeles Public Access Investment Plan and Implementation for the Los Angeles Waterfront, Christine Honeybone, P.E.; Sue Lai, P.E.; Dina Aryan-Zahlan, P.E., PMP Ports — A Key Resiliency Hub — Before, During, and After the Storm, Paul Ischirky, Ph.D., P.E.ng, DCE, MASCE; Steve Kral	Moderator: Jim Girouard, P.E., M.ASCE First Major U.S. Offshore Wind Staging Terminal: Planning, Engineering, and Construction, Elie Hasso, P.E.; Carsten Agerbæk; Joshua Singer, P.E.; Mathhew Trowbridge, P.E., S.E., PEng Geotechnical and Structural Adaptations for Seismic Design of New Ferry Terminal in Washington State, Madan Karkee, Ph.D., P.E., PEng, M.ASCE; Andrew Gastineau, Ph.D., P.E.; Michael Chamberlain, P.E., M.ASCE; Andy Bennett, P.E.; LEG, M.ASCE; Andy Bennett, P.E.; Jodd Mooney, Ph.D., P.E. Large Scale Dry Bulk Terminal Expansion in the Heart of Vancouver, British Columbia, Kevin Wong, PEng.; Jurgen Franke P.Eng., CEM; Steve Yee P.Eng., M.A.SC.; Keith Arnstead P.Eng. New Ferry Terminal Provides a Resilient Solution for a Needed Commuter Route, Craig Lewis, S.E.; James Connolly, P.E., DPE; Chad Mason	Moderator: Jim Girouard, P.E., M.ASCE Geotechnical Investigation and Testing, Benjamin Serna, P.E., G.E., M.ASCE Underwater Inspections, Daniel Robbins, P.E. (NH) Pile Design, Timothy W. Smith, P.E. Seismic Considerations, Brian L. Phan, P.E., M.ASCE	Moderator: Brian Norris Panelists: Jeffrey J. Kilian, Commander, Naval Facilities Engineering Command Pacific/ Director Jose E. Sanchez, P.E., Director of Regional Business, U.S. Army Corps of Engineers Elizabeth M. Collins, P.E., D.PE, F.ASCE, Executive Vice President Collins Engineers, Inc. Kam Chun, Facilities Manager, Matson
12:00 – 1:00 p.m.	Exhibit Hall Lunch					

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1:00 – 2:30 p.m.	Technical Sessions					
Track A   South Pacific 1	Track B   South Pacific 2	Track C   South Pacific 3	Track D   South Pacific 4	Track E   Sea Pearl 1/2	Track F   Sea Pearl 3/4	Track G   Nautilus
3A Environmental	3B Port Engineering	3C Port Engineering	3D Landside Connections	3E Terminal Planning & Design		
Moderator: Ali Naeem, P.E., M.ASCE	Moderator: Gayle Johnson, P.E., M.ASCE	Moderator: Julie Galbraith, P.E., M.ASCE	Moderator: Shane Phillips, P.E., D.CE, D.PE, M.ASCE	Moderator: Alex Mora, P.E., D.PE, M.ASCE		
Coupled Modeling Approach to Quantify Shoreline Erosion and Beach Morphology Due to Passing Vessels, Scott Fenical, P.E., D.CE, D.P.E., Francis Salcedo, P.E., M.ASCE; Abhishek Sharma Ph.D. Designing Ports for Rising Seas: Portmiami's Approach to Staying Afloat, Erica Harris ENV SP, WEDG; Justin Vandever, P.E.; Philip Hadfield, P.E., M.ASCE; Helga Sommer, P.E. Development of New PIANC Guidance for the Beneficial Use of Dredged Material, Burton Suedel; Victor Magar; Luca Sittoni Fast-track Integrated Environmental Cleanup & Maritime Terminal Redevelopment of Former Mill Site, Nathan Watson, P.E., M.ASCE; Dylan Frazer LG; Jeff Becker, P.E.; Erik Gerking	Area, Craig Lewis, S.E.; Camille Gozum EIT; Robert Sherwood, P.E.; Paul DePrey; Andrew Rocheleau Physical Modeling of Hard Structure Effects on Tsunami Force Reduction in Urban Coastal Environment, Sungwon Shin, Ph.D., A.M.ASCE; Hyoungsu Park Ph.D.; Hai Van Dang; Dayeon Lee; Daniel Cox Ph.D. Recommendations for Durable Anchor Pile Design in Floating Structures, Christine Smith,	Case History of a Rehabilitated Port Facility After the 2016 Ecuador Earthquake, Pedro Rojas, Ph.D., Ing., M.ASCE; José Barros M.Sc.; Dioselina Rosero ENG.; Leandro García, ENG.; Eduardo Miranda Ph.D.; Wilmer Márquez, ENG.  Design Challenges — Seward Marine Center, Arctic Research Vessel Berth in Seward, Alaska, M.R. Hasan, P.E., PMP, M.ASCE; Jim Van Ness, P.E., M.ASCE Overcoming Operative, Construction & Design Challenges Widening the Dock Entrance at Boston Port, UK, Mary Schafer CEng MICE; Sergio Solera C.Eng, FICE; Peter Mallin MIE Aust; Myles Bethell C.Eng, MICE; Stephon Van Eeden C.Eng, MICE; Charlie Bell C.Eng, MICE; Lorenzo Allievi C.Eng, M.ASCE, MICE Designing for Inland Waterway Operational Continuity Throughout High and Low Water Levels, Danielle Goudreau, P.E., M.ASCE; Ryan McCoy, P.E.; Elizabeth M. Collins, P.E., D.PE, F.ASCE	Bigger Isn't Better – Managing Uncertainty to Phase the Pier B On-dock Rail Support Facility, Nathan deSousa, P.E., M.ASCE; Ron Richardson, P.E., CA; Try Khou, P.E. Ground Improvements for Georgia Ports Mason Mega Rail Project, Guoming Lin, Ph.D., P.E., D.GE, F.ASCE; Christoper Novack, P.E.; Oliver Himbert, P.E.; Brad Woodall, P.E.; Daniel Peavy; Honor Hutton, P.E. Rail System Strategic Planning and Lessons Learned Through Major Events, Michael Leue, P.E.; Kerry Cartwright, P.E.; Shashank Patil MS; Carlo Luzzi The Mega Rail Project: Increasing Intermodal Capacity, While Maintaining Intermodal Operations, Daniel Peavy	New Graving Dock Design Considerations and Challenges, Ajaya Malla MS, R.E., M.ASCE Planning and Simulation of Large-scale Container Terminal Consolidation for Smart Port Initiatives, Alan Zhang San Francisco Floating Fire Station 35: Overview and Lessons Learned, Erik Soderberg, P.E., S.E., D.P.E., M.ASCE; Leah Olson, P.E.; Di Liu, P.E. Tsunami Design Approaches for Resilient Ferry Terminals, Chris Steams, P.E., S.E., M.ASCE		
3:00 – 4:30 p.m.	ACOPNE Induction, Ra	inbow Suite 1/2				
3:00 – 5:00 p.m.	YP Team Building, Duk	es Beach				
4:30 – 5:30 p.m.	Speaker Check-in, Hib	iscus 1/2				
6:00 – 7:00 p.m.	YP Happy Hour, Maui	Brewing Co. – Waikiki				



# **PIANC USA**

Visit us at booth #134 to learn how you can get involved.



# Tuesday, September 20

6:00 a.m. – 5:00 p.m. Registration (closed for lunch 12:00 – 1:00 p.m.), Coral Lounge

6:30 a.m. – 5:00 p.m. Exhibit Hall Open, Coral Ballroom 1-3 & Lounge

6:30 - 8:00 a.m. **Technical Sessions** 

Track A   South Pacific 1	Track B   South Pacific 2	Track C   South Pacific 3	Track D   South Pacific 4	Track E   Sea Pearl 1/2	Track E   Sea Pearl 1/2	Track E   Sea Pearl 1/2
4A Environmental	4B Port Engineering	4C Port Engineering	4D Navigation & Waterways	4E Hugh K. Leatherman Terminal	Ports 101 - Sustainability and Resiliency	Sustainability & Resilience Discussion – Adaptation
Moderator: Scott Fenical, P.E., D.CE, D.PE Innovative Approaches for Port-led Advance Mitigation and Mitigation Banking, Dan Berlin PWS Holistic Design of Resilient and Adaptive Waterfronts and Application in San Francisco, Luce Bassetti Ph.D., ENV SP, WEDG, GISP; Darren Milsom CEng, MICE; Brad Benson Innovative Collection & Reporting for Marine Mammal Monitoring, Portsmouth Naval Shipyard Dry Dock 1, Alexander Pries, MS; Douglas Stewart; Ian Trefry; Kari Moore Stabilization of Dredged Sediments: Enabling Beneficial Re-use Solutions in a Contaminated Port, Tom Gillespie CPEng	Moderator: Scott Kuebler, P.E., S.E., M.ASCE Case Study — Lateral Pile Testing for Seismic Design in Unexpected Soil Conditions, Benjamin Pesicka, P.E., S.E.; Lyle Stone, P.E., GE, M.ASCE; Timothy O'Neill Joint Probability Extremal Analysis of Combined Storm Surge and Precipitation, Craig Harter, P.E., A.M.ASCE; Darrier Price; Josh Carter, P.E., D.C.E, M.ASCE; Luis Maristany, P.E. Palmer Station Antarctica Pier Replacement - Logistics and Design for Remote Construction, TJ Schilling; John Daley, P.E., S.E. Toe Wall Design and Construction for Busy Container Berth Deepening, Jyotirmoy Sircar, P.E.; Alfredo Rivera, P.E.; Leon Carillo	Moderator: Cheryl Coviello, P.E., D.PE, M.ASCE Berths 226-236 Terminal Redevelopment Construction Lessons Learned at the Port of Los Angeles, Brian Correa Aff.M.ASCE; Rosario Lauro EIT; Marco Sanchez, P.E., M.ASCE; Omar Jaradat, Ph.D., P.E., D.PE, M.ASCE; Arul Arulmoli, Ph.D., P.E., G.E., FASCE Fender System Construction Using Cluster Drilling: Case Study of the New Goethals Bridge, Mina Mikaeel, P.E.; Ioannis Sokratis Drakatos Ph.D.; John Waldorf; Suheil Lahdo-Abdi; Abdolrasool Attar Hawaii's New Container Terminal for the 21st Century Honolulu Harbor, Oahu, Hawaii, Dean Kokubun Water Injection Dredging, a Costeffective Force of Nature, Robert Wagner, P.E., DNE, BCEE, MASCE	Moderator: Jonathan Armbruster, R.E., M.S., M.ASCE Modeling Structural Alternatives to Reduce Navigation Channel Shoaling in Waukegan Harbor, Illinois, Lihwa Lin; Zeki Demibilek Real-time Vessel Navigation Simulations in Design of Naval Station Channel Reconfiguration, Gwen Lawrence SMART Planning and Deep Draft Navigation: Houston Ship Channel Expansion Channel Improvement Project, Ashley Judith, P.E., M.S., M.ASCE; Lori Brownell, P.E., D.N.F. M.ASCE; Uori Brownell, P.E., D.N.F. M.ASCE; When a Breakwater Does Not Look Like a Breakwater by Emulating Nature, Jack Cox, P.E., D.CE, D.NE, D.PE, M.ASCE	Moderator: Edward Stehmeyer, R.E., M. ASCE Hugh K. Leatherman Terminal – Transforming a Former Naval Facility into a Modern Container Terminal, Edward Stehmeyer, P.E., M. ASCE; Edward (Butch) Weber, P.E., M. ASCE; Mark Messersmith CEM Hugh K. Leatherman Terminal – Site Preparation, Surcharge Program, Utilities and Foundation Design, Edward (Butch) Weber, R.E., M. ASCE; Lucy Terza, P.E., M. ASCE; Hugh K. Leatherman Terminal – A Mega Project Success Nearly 20 Years in the Making, Edward (Butch) Weber, R.E., M. ASCE; Lucy Terza, P.E., M. ASCE; Hugh K. Leatherman Terminal – A Mega Project Success Nearly 20 Years in the Making, Edward (Butch) Weber, R.E., M. ASCE; Hugh K. Leatherman Terminal – Wharf Extension Design Considering Phase 1 Lessons Learned, Craig McGillawee, P.E., M.ASCE; Lucy Terza, P.E., M. ASCE; Lucy	Moderator: Andrew Cairns, P.E., D.P.E., PMP, M.ASCE Coastal Modeling 101, Matthew Shultz, P.E., D.C.E., M.ASCE Offshore Wind Readiness, Joshua Singer, P.E. Offshore Wind Development: A Geodata Approach, Jack Koban, Ph.D., P.E., P.G., M.ASCE Structural Impacts to Seawalls from Ocean Hazards, Oceana Francis, Ph.D., P.E., M.ASCE	Moderators: Rod K. Iwashita, P.E., D.PE, F.ASCE; Dan Walker, Ph.D., M.ASCE



# **Tuesday, September 20** (continued)

8:30 - 10:00 a.m.	Technical Sessions					
Track A   South Pacific 1	Track B   South Pacific 2	Track C   South Pacific 3	Track D   South Pacific 4	Track E   Sea Pearl 1/2	Track F   Sea Pearl 3/4	Track G   Nautilus
5A Environmental	5B Port Engineering	5C Port Engineering	5D Port Planning & Operations	5E Seismic Design of Bulkheads	PORTS 101 – Vessel Loading and Considerations	5G PIANC Working Group 208: Planning of Automated Container Terminals
Moderator: Robert Snover, P.E., D.DE, D.PE, MASCE Machine Learning Based Seagrass Growth Prediction for Mitigation and Habitat Assessment, Patrick McLaughlin, P.E., MASCE; Josh Carter, P.E., D.CE, D.PE Maryland Port Administration, Dundalk Marine Terminal, Resiliency for an Active RO/RO Terminal, John Schirmer, P.E.; Steven Johnson, P.E. Military Installation Coastal Resiliency Planning and Adaption Alternative Communications, Alex Viana PMP; John Quellette Keeping the Vision: A Small Port's Journey to Comprehensive Remediation of a Wood Treating Site, Joshua Elliott, P.E.; Laurie Olin	Boling, P.E.; David Gibson, P.E. Pier Design Using Coupled Orthogonal Lateral Systems for Liquefaction and Seismic	in Action at the Port	Moderator: Noah Elwood, P.E., D.OE, D.PE, M.ASCE 21st Century Opportunities, Hazards, Roles, and Responsibilities Facing the Nation's Water Resources, Joe Manous, Ph.D., P.E., D.WRE, F.EWRI, Dist.M.ASCE; Elizabeth M. Collins, P.E., D.PE, F.ASCE Coastal Practice for Flood Resiliency Projects, Xiao (Steven) Li, P.E., Ph.D.; Abbas Sarmad, P.E. How U.S. West Coast & Hawaii Ports Can Prepare for the Unique Requirements of Floating Offshore Wind, Carly Willmott, P.E., M.ASCE Traffic Management While Building New Gerald Desmond Bridge and Middle Harbor Container Terminal, Rajeev Seetharam, P.E., T.E., (P.P.; Peter Kim, P.E., T.E.; Thereso Dau-Ngo AICP	Moderator: Pooja Jain, P.E., P.Eng, S.E., M.ASCE	Moderator: Carlos Peña, P.E., M.ASCE  Vessel Particulars, Maximo Argo, P.E., M.ASCE  Dredging 101, Scott J.  Stainer, P.E.  Berthing & Mooring in Demanding Environments 1, Nick Labrosse; Mick Langford Berthing & Mooring in Demanding Environments 2, Nick Labrosse; Mick Langford	Moderator: Thomas Ward, P.E., S.E., D.P.E., M.ASCE Panelist(s) Ashebir Jacob, P.E., M.ASCE, Vice President Moffatt & Nichol Thomas Ward, P.E., S.E., D.PE, M.ASCE, Maritime Planning Guru WSP USA Dimitrios Pachakis, Ph.D., P.E., MICE, Technical Director, Maritime, Moffatt & Nichol Sylvia Wong, M.PIANC, Principal, Smart Ports / Terminals, Hatch

10:00 - 10:30 a.m.

Exhibit Hall Networking Break, Coral Ballroom 1-3 & Lounge

10:30 a.m. - 12:00 p.m. **Technical Sessions** 

Track A   South Pacific 1	Track B   South Pacific 2	Track C   South Pacific 3	Track D   South Pacific 4	Track E   Sea Pearl 1/2	Track F   Sea Pearl 3/4	Track G   Nautilus
6A Environmental	6B Port Engineering	6C Port Engineering	6D Port Infrastructure	6E ASCE 61	PORTS 101 – Technology, Planning, and Management	Sustainability & Resilience Discussion – Management
Moderator: Donald Oates, P.E., P.Eng., D.P.E., DBIA, M.ASCE PIANC WG 175-Practical Guide to Environmental Risk Management for Navigation Infrastructure Projects, John Lally, P.E., M.ASCE; Mirran Vanwonterghem; Amy Parry; Todd Bridges Ph.D.; Rebecca Gardner, P.E.; Burton Suede; Kevin Kane Ph.D.; Kevin Allen Port Houston: The Business Case for Emissions Reduction Strategies, Vijaykumar Agrawal, P.E., M.ASCE; Adithya Dahagama Port of Los Angeles Resiliency in Capital Improvement Projects, Adrienne Newbold, P.E., M.ASCE	Moderator: Michael Wray, P.E., M.ASCE, LEED AP  Equinor South Riding Point Sea-island Berth 2 Repairs, Grand Bahamas, Charles Rosner P.Eng.; Marcel Deveau P.Eng.; Jay Vadodaria M.Sc.; Mike Martell P.Eng. Innovative Deepening of Maher Container Terminal Berths 64/66, Christopher Lawrence; Songtao Yang, P.E. Ph.D.; Arundhati Bhosle, P.E.; Louis Allora C.P.E Toe Wall Analysis, Design, Installation and Trouble Shooting at the Port of Hueneme, Adam Bergman, P.E., M.ASCE; Sean Story, P.E.; Christina Birdsey 4883677; Todd Graham, D.P.E, M.ASCE Towards Performance- based Seismic Design of Shiploaders, Maged Ghali M.Eng., P.Eng.; Sherief Sakla MASc, Ph.D., P.E., P.Eng.	Moderator: Sean Chapman, P.E., A.M.ASCE  A Sea Level Rise Resilient Design for the Royal Hawaiian Groin, Scott Sullivan, MS; David Smith Ph.D., P.E., M.ASCE Development of Major Ferry Homeport in Dense Urban Waterfront, David Jones, P.E.; Simon Betsale!; Stephen Famularo, P.E., D.PE From 2D to 3D: modeling to Refine Design of a New Kingpile Bulkhead, Cheryl Coviello, P.E., D.PE, M.ASCE; Yixing Yuan, P.E.; Dino Fiscaletti, P.E. Humboldt Bay Offshore Wind Port Assessment, Aaron Porter, P.E., M.ASCE; Shane Phillips; Michelle Gostic MS	Moderator: Anne Porter, P.E., MBA, LEED AP, CSBA, M.ASCE Bulkhead Wall Reconstruction Under Active Transit Shed with Ongoing Cargo Operations, Nick Pestello, R.E.; Marthew Trowbridge, R.E., S.E., P.Eng; Elie Hasso, P.E.; Michael Hasen, P.E.; Adrian Pearson Corrosion Mitigation and Prevention of Port Infrastructure, Brian Pailes, Ph.D., R.E., NACE CPS Experiences Gained from Construction of Middle Harbor Automated Terminal at the Port of Long Beach, Cesar Larios, P.E., CCM Keeping Old Running as New at Portsmouth Naval Shipyard, Lukian Harris, R.E.; Banielle Somma, P.E., Tor Harris, P.E.; Kirk Riden, P.E.	Moderator: Gayle Johnson, P.E., M.ASCE Joe Galloway, P.E., M.ASCE Steve Dickenson, Ph.D., P.E., D.PE, M.ASCE Julie Galbraith, P.E., M.ASCE Rod Iwashita, P.E., D.PE, F.ASCE Brett King, P.E., M.ASCE Carlos Ospina, P.E., M.ASCE Marc Percher, P.E., M.ASCE Paul Smith Jose Ugalde, Fugro	Moderator: Barritt Lovelace, P.E.  Digital Twins for Dummies, Bibhuti Aryal Green Port Policy Now & Tomorrow, John Chun, P.E. Project Management and Financials, Charlie William Marshall Roberts, P.E., D.P.E., M.ASCE Cost Estimating, Ryan M. McCoy, P.E.	Moderator: Daniel Elroi
12:00 – 1:00 p.m.	Exhibit Hall Lunch, Co	ral Ballroom 1-3 & Lounge				

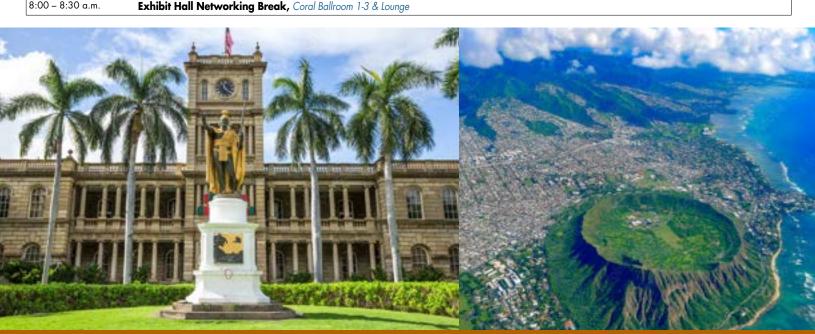
1:00 - 2:30 p.m.	Technical Sessions					
Track A   South Pacific 1	Track B   South Pacific 2	Track C   South Pacific 3	Track D   South Pacific 4	Track E   Sea Pearl 1/2	Track F   Sea Pearl 3/4	Track G   Nautilus
7A Environmental	7B Port Engineering	7C Port Engineering	7D Port Infrastructure	New ASCE/COPRI Design Standards for Piers and Wharves Committee Interaction and Owners Perspective		7G Student Paper Competition
MDOT MPA's Innovative Reuse and Beneficial Use of Dredged Material Program, Walter Dinicola, R.E. Salmon Habitat Restoration Design and Permitting at Vigor Shipyards, Seattle, Erin Murray, Johnathan Cook, R.E., Scott Stainer, R.E., Kate Snider, R.E. Conley Terminal Soil Reclamation and Reuse Program: A Story of Successful Contaminated Material Management, lleen Gladstone, R.E., LSP; Nhuy Hoang; Chester Myers	Stephen Owen, P.E., M.S. M.ASCE; William Young, P.E., S.E., M.ASCE; John Jones, P.E.  Wharf Upgrades for an Active Cruise Terminal to Accommodate Larger Vessels, Desiderio Maldonado M.S., P.E.; Scott Fenical, P.E., D.CE, D.P.E; David Conrad, P.E., M. ASCE; Ashwin Paramboth, P.E., M. ASCE;	Moderator: Mustafa Samad Ph.D., P.Eng, M.ASCE  Dolomite Drivability and Combination Wall Systems for Terminal Rehabilitation, Eric Fleet, P.E., LEED Green Associate; William Bruin, P.E., D.P.E., M.ASCE; Rose McClure, S.E., P.E., LEED AP BD+C  New Shiploader Foundations Within Existing Post-tensioned Wharf in Region of High Seismicity, Christopher Meisl MASC, P.Eng.; Andre Dratwa PEng, MEng, Eric Liu MASC, LEED Green Associate, P.Eng; Andrew Quinn PEng.  Port of Los Angeles Berth 83 Town Square Project – Design, Construction, and Impact of the Pandemic, John Posadas, P.E., M.ASCE; Briella Matsumoto, P.E.  What Is a Safe Safe Working Load for Your Bollard? Erik Broos MSc.; Jan Dlugosch; Jörg Pollmann; Wim Hoebee MSc.; Nils Tammen; Adrian Kahl Dipl. Ing.	Moderator: Elizabeth M. Collins, P.E., D.P.E, F.ASCE  Structural Rehabilitation to an Active Container Facility: A Collaborative Approach, Alan Pepin, P.E., M.ASCE; Nhuy Hoang, Chester Myers  The Entrance Structure, Matthew Teeden, P.E., S.E., D.OE, D.P.E, M.ASCE; Eric Levesque, P.E.; David Marcotte, P.E.; Diana Mccullough, P.E.; Linn Lebel, P.E. Waterfront Inspections Using Light and Sound, John Loftus, P.E., M.ASCE; Mike Russalesi; Russel Batman Remote and Robust — Reinforcing a Marine Berth to Withstand the Bering Sea at Eareckson Air Station, Lukian Harris, P.E.; Noah Elwood, P.E., M.ASCE	Moderator: Omar Jaradat, Ph.D., P.E., D.PE, M.ASCE Panelists: Rune Iversen, P.E., M.ASCE Bill Paparis, P.E., D.PE, M.ASCE Anthony Farmer, P.E., M.ASCE Rod Iwashita, P.E., D.PE, F.ASCE Angel Lim, P.E., S.E., M.ASCE Joseph Ackroyd, P.E. Daryl English, P.E., M.ASCE Joel Aguilar, P.E., S.E., M. ASCE Julian Cajiao		Moderator: Jon Benvenuto, P.E., PMP Probabilistic Fragility Analysis of Reinforced Concrete Structures under Tsunami Hydrodynamic Loads of the ASCE 7 Standard, Mostafa Hassan Fathi Abdelhafeez A Simulation Study on Risk Associated with Berthing Loads for Load Factor Development, Elizabeth A. Washburn, A.M.ASCE, EIT Evaluation of a Proposed Magnetic Jar Separation Test to Determine Glauconite Content ,Christopher J. Sylvia, S.M.ASCE 4D Nearshore Wavefield by a Low Cost Stereo Video System, Matheus Vieira, MS
2:30 – 3:30 p.m.	Speaker Check-in, Hib	iscus				
6:30 – 9:30 p.m.	Gala, Bishop Museum					



# Wednesday, September 21

6:00 - 11:00 a.m. Registration, Coral Lounge 6:30 a.m. – 1:00 p.m. Exhbit Hall Networking Break, Coral Ballroom 1-3 & Lounge

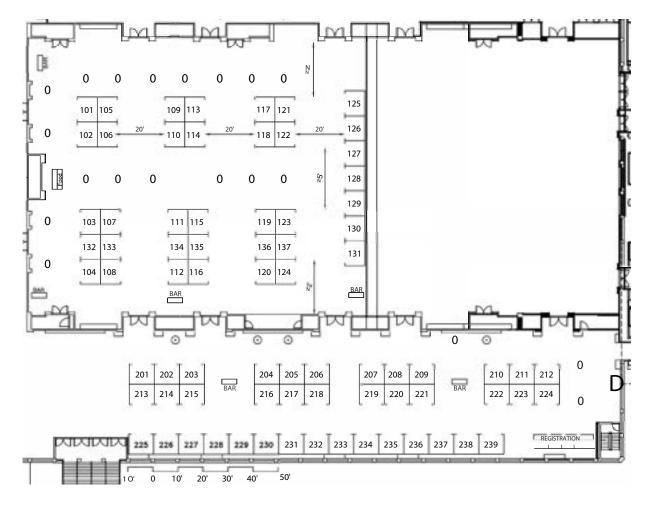
Track A   South Pacific 1	Track B   South Pacific 2	Track C   South Pacific 3	Track D   South Pacific 4	Track E   Sea Pearl 1/2	Track F   Sea	Track G   Nautilus
	OD D . F			I call I/ Z	Pearl 3/4	
8A Environmental	8B Port Engineering	8C Port Engineering	8D Port Planning & Operations	What Does It Take to Deliver a Mega Program? Examining Change and success:terminal 5 Rehabilitation	PORTS 101 – Material Solutions	8G Ports Infrastructure Development and Funding: Defining Needs and Exploring Opportunities
RE., M.ASCE Terminal Wide Industrial Stormwater Treatment on a 200-acre Container Terminal, Ellis Beckwith, P.E.; Emily Jones, P.E. Urban Waterfront Redevelopment Incorporating Sea-level Rise Considerations, Edmonds, Washington, Blaine McRae CET, CDT; Paul Crocker, P.E., S.E.; Shannon Kinsella, P.E., PMP, LEED AP Washington State Ferries Sea Level Rise Study, Abigail Gertz, P.E., M.ASCE; Aaron Porter, P.E., M.ASCE Whatcom Waterway Multiphase Remediation Project: Phase 2 Predesign and Design Planning, Matt Wolfman, P.E., P.E.ing	Large Seismic Induced Displacements at a Port Facility, Daniel Chadwick PEng; Ann-Marie Giesbrecht PEng; Hamidreza Baktash Ph.D., PEng;, Steve Yee P.Eng., M.A.S.c; Greg Andrew P.Eng. Over a Decade of Intensive Dredged Material Management — A Case Study of Maximizing Storage Capacity of a Confined Disposal Facility, Ramil Mijares Ph.D., P.E., M.ASCE; Kwasi Badu-Tweneboah Ph.D., P.E., D.GE, F.ASCE; Jeffrey Green, P.E.; Kenneth Cargill, P.E. Maritime Enhancements to the Bahamas' Largest Seaport for Cruise Vessels, David Street, P.E., M.ASCE; Manfred Zinserling, P.E., S.E., MASCE;	Moderator: Bradley Syler, P.E., S.E., M.ASCE PIANC WG211 — Reliability Based Design of Marine Fenders — No More Abnormal Berthing Factor, Rune Iversen, P.E., M.ASCE, Alfred Roubos Dr. MSC.; Prasanthi Mirihagalla BSC, MEng., CEng., MICE Bollard Load Testing an Industry Update, Charlie Roberts, P.E., D.PE, M.ASCE Evaluation and Repair of a Damaged Sheet Pile Barge Dock, Tommy Howard, P.E., M.ASCE; Greg Buccola, P.E., S.E. Quantifying and Understanding Structural Loading from Wave-driven Debris Fields, Dakota Mascarenas; Abbey Serrone; Pedro Arduino Ph.D.; Marc Eberhard, Ph.D.; Michael Motley, Ph.D., P.E.	Moderator: William Young, P.E., S.E., M.ASCE A Resilient Path for the Marine Transportation System: Hurricane Response & Recovery Recommendations, Katherine Chambers MS; Jossamin Straub MS; Emily Russ; Joshua Murphy Advanced Modeling Techniques Make the First and Last Miles the Best Miles at the Port of Long Beach, Mark Erickson, P.E.; Beth Kulick BS, MS; Rick Degman NAVFAC Contingency Engineering Lessons Learned from Ports and Piers in the Pacific AOR, Stephen Jones Ph.D. Green Ports — Sustainable Port Development, Patrick McCallum BE	Moderator: Emma Del Vento AICP Panelists: Steven Gray, P.E., P.Eng., Senior Manager/ Supervisory Engineer, Moffatt & Nichol Joanna Hingle, P.E., S.E., M.ASCE, Assistant Director of Engineering - Design, Port of Seattle Thais Howard, P.E., Director of Engineering, Northwest Seaport Alliance Jonathan Ohta, P.E., Senior Construction Manager, Port of Seattle Anne Porter, P.E., MBA, LEED AP, CSBA, Envision, Director Waterfront Project Management, Port of Seattle Jon Sloan, LEED AP, Senior Manager Maritime Environmental and Sustainability, Port of Seattle	Moderator: Jon Benvenuto, P.E., PMP Corrosion Causes Doug Leng, A.M.ASCE Corrosion Mitigation / Repair Techniques Doug Leng, A.M.ASCE Steel Sheet Pile Specification and Selection Maria Idrovo Ground Improvements: Performance vs Material Specification Steve Williams, P.E.	Moderator: Omar A. Jaradat, Ph.D., P.E., D.PE, M.ASCE Panelists: Eric Letvin, FEMA Mitigation Director Robert Bouchard, Director, MARAD Office of Port Infrastructure Development Rod Iwashita, Port of San Francisco Daley Dunham, Port of San Francisco Grant Specialist Lisa Scola, S&A Inc., Port Grant Specialist Mohammed Ettouney, Ph.D., 1WAI BCA Expert This panel discussion will provide attendess with a practical understanding and overview of federal and state infrastructure grants, the transla in funding, and the capital improvement needs of port authorities.



8:30 - 10:00 a.m.	Technical Sessions					
Track A   South Pacific 1	Track B   South Pacific 2	Track C   South Pacific 3	Track D   South Pacific 4	Track E   Sea Pearl 1/2	Track F   Sea Pearl 3/4	Track G   Nautilus
9A Navigation & Waterways	9B Port Engineering	9C Port Engineering	9D Port Planning & Operations	9E Local Session 1	PORTS 101 – Waterfront Construction	9G Updates from PIANC WG211 - Design of Fender Systems
Moderator: Shane Phillips, P.E., D.CE, D.PE, M.ASCE  Analysis of the U.S. Port Network Using AIS Data: Metrics for the Caribbean, David Young, Ph.D., P.E.; Marin Kress Ph.D.; Katherine Chambers MS; Brandan Scully Ph.D., P.E. Charleston Harbor Post 45 Deepening: A Success Story Through Collaboration, Edward Stehmeyer, P.E., M.ASCE; Jeremy Johnson, P.E., PMP Designing a Yacht and Super Yacht Marina for the Pacific Coast of Peru, Daniel Natchez CMP; Jock Cox, P.E., D.CE, D.NE, D.PE, M.ASCE Jacksonville Harbor Dredged Material Management Long Term Assessment, Jonathan Armbruster, P.E., MS	Moderator: Max Argo, P.E., MASCE Berth 11 Bulkhead, Paul Harrington, P.E.; Nathan Libby; David Melo, P.E.; Victor Govoni Kinematic Demands on Pile-supported Wharves due to Liquefaction- induced Lateral Ground Deformations, Thomas Torkelson, P.E.; Milod Souri Ph.D.; Nason McCullough Ph.D., P.E., G.E., M. ASCE; Arash Khosravifar Ph.D., P.E. Settlement and Bearing Capacity Mitigation of Organic Marrine Deposits for Offshore Wind Staging Port, Mangtoo (Monty) Du, P.E.; Porang Deljoui, Ph.D., P.E., P.Eng, D.P.E., MASCE; Theodore von Rosenvinge, P.E., D.G.; John Henshaw M.A.L.D. Soil, Structure, and Motion Factors Impacting Kinematic and Inertial Loading of Pile Foundations, Milad Souri Ph.D.; Stephen Dickenson Ph.D., P.E., D.P.E., M.ASCE; Arash Khosravifar Ph.D., P.E.; Scott Schlechter, P.E., G.E., M. ASCE; Nason McCullough Ph.D., P.E., G.E., M. ASCE		Moderator: Shannon Kinsello, P.E., P.M.P., LEED AP, M.ASCE  Evaluation of Accelerated Rail Corrosion at Bulk Terminal, Port of Long Beach Pier G Berths  212-214 Terminal, Todd Graham D.P.E., M.ASCE; Julia wu Stephan, P.E., ENV-SP; Scott Wyatt, P.E., S.E.; Richard Lewis, P.E.; Ramanjit Brar, P.E.  Inspection and Maintenance of Ferry Terminals – Risk Reduction and Cost Efficiency, Robert Seitz P.Eng; Toylor Carr ASCT; Carol Turner P.Eng; Tony Bleasdale  Loading Capacity Planning and Management for the Washington State Ferries Multimodal Terminal, Isaac Ansingh; John Mansfield A.M.ASCE  Maritime Planning at Smaller Scales, Thomas Word, P.E., S.E., D.P.E, M.ASCE; Hardik Gajjar ENV SP	Moderator: Morgan Stephenson, EIT, A.M.ASCE Lahaina Ferry Pier at Lahaina Small Boat Harbor Chris H Ball, A.M.ASCE; Emily Luke, A.M.ASCE American Samoa Climate Change Vulnerability Assessment for Transportation Infrastructure Jessica Podoski, P.E., MS Iroquois Point Beach Nourishment and Long- Term Monitoring Scott P. Sullivan, MS	Moderator: Allison DiGregorio, M ASCE Designing for Constructability, Matthew McCarty, P.E., S.E., M.ASCE Precast, Prestressed Concrete Waterfront Structures, James Parkins, P.E., M.ASCE Construction Documentation, Matthew Martinez, P.E., S.E., D.PE, M.ASCE Service Life Estimation and Determination, Zachary D. Jenkins, P.E., S.E.	Moderator: Rune Iversen, P.E., M.ASCE An Introduction to the New PIANC Guidelines for the Design of Fender Systems 2022 by WG211, Alfred Roubos, Dr. MSc. PIANC Standardized Design Vessels, Rune Iversen, P.E., M.ASCE Recommendations for Berthing Velocity in PIANC WG 211, Alfred Roubos, Dr. MSc. Recommendations for Fender Testing in PIANC WG 211, Harvinder Singh, RPEQ, CPEng, FIEAust
10:00 - 10:30 a.m.	Exhibit Hall Networki	ng Break, Coral Ballroom	1-3 & Lounge			
10:30 a.m. – 12:00 p.m.	Technical Sessions					
Track A   South Pacific 1	Track B   South Pacific 2	Track C   South Pacific 3	Track D   South Pacific 4	Track E   Sea Pearl 1/2	Track F   Sea Pearl 3/4	Track G   Nautilus
10A Project Delivery	10B Port Engineering	10C Port Planning & Operations	10D Equipment and Systems	10E Local Session 2	PORTS 101 – Port Management and Operations	Sustainability & Resilience Discussion – Mitigation
Moderator: Motthew Teeden, R.E., S.E., D.OE, D.PE, M.ASCE Cost Estimating and Cost Management for Marine Construction, Zachary Jenkins, R.E., S.E.; Michael Deiters, P.E., CCP Port of Long Beach Middle Harbor Terminal: A Collaborative Approach to Port Project Delivery, Monique Lebrun, R.E., M.ASCE; Ashebir Jacob, R.E., M.ASCE; Reza Alamir, P.E., M.ASCE; Cesar Larios, P.E., CCM Recapitalization of a 40 Year Old Dry Dock: Project Insights, Risk Management, and Team Building, John McCoy, R.E., M.ASCE; Michael Brengel, R.E.; Amy Hoffer, R.E.; Daniel Cloutier, P.E. Strategic Waterfront Infrastructure Investment Plan for Joint Base Pearl Harbor-Hickam, Daniel O'Connor, P.E., M.ASCE; Daniel	P.E., P.G., M.ASCE  Proposed Revisions to Design and Detailing of Piles and Pile-to-Deck Connections in ASCE/ COPRI 61-22, Carlos Ospina, Ph.D., P.E.; John Smith, Ph.D., P.E., S.E., M.ASCE; Edyson Rojas, P.E. Soil Liquefaction and Kinematic Loads Evaluation for Seismic	Moderator: Matthew Martinez, P.E., S.E., D.PE, M.ASCE Pier Design vs. Operations (A Navy Perspective), Anthony Farmer, P.E., M.ASCE Planning Waterfront Emergency Response Facilities with the Future in Mind, Craig Lewis, S.E.; Satish Chilka, P.E.; Magdalena Ryor, Ph.D., LEED AP, BD+C, CCM, PMP Small Ports in Transition - Port of Woodland, Washington, Scott Keillor AICP; Jennifer Wray-Keene; Brian Carrico AICP; Sam Roberts AICP Systematic Approach to Predicting Remaining Service Life of U.S. Navy Piers, James Connolly, P.E., DPE; Anne-Marie Langlois P.Eng., P.E.; Henrik Dahl, P.E.; Alberto Sanchez, P.E.; Monica Martinez-Maruri	Moderator: John Chapman Digital Twins for Safe and Efficient Port Infrastructure Management, Barritt Lovelace, P.E.; Bibhuti Aryal Maintaining the Historic Alaska Marine Highway System, Jordan Furlan, P.E.; Robert Davies, P.E.; Bradley Syler, P.E., S.E., M.ASCE Port of Long Beach: Transforming Terminal Infrastructure and the Push to Zero Emissions, Fred Patricio; Not Applicable; Morgan Caswell MPH The Gò Công International Port and Landside Development, Reece Shaw, P.E.; Khang Dang BS	Moderator: Morgan Stephenson, EIT, A.M.ASCE Ocean Hazards on Coastal Infrastructure in Hawaii Oceana, Francis, Ph.D., P.E., M.ASCE Pearl Harbor SIOP, Sean Hanser, Ph.D.	Moderator: Norisa Abelgas, P.E., M.ASCE Owners and Engineers Common Ground, Todd Mitchell, CP, M.ASCE Public Port Perspective Rod K. Iwashita, P.E., D.PE, F.ASCE Container Terminal Operations, Thomas A. Ward, P.E., S.E., D.PE, M.ASCE Port Economics, Alfred Roubos, Dr. MSc.	Moderator: Lee Barco, P.E., D.PE, F.ASCE; Joel Farrier, P.E., MBA, M.ASCE



# **Exhibit Hall** Floor Plan



#### 120 ACO, INC

#### www.acousa.com

ACO provides systems for professional surface water drainage, efficient cleaning, and the controlled discharge or reuse of water.

#### 237

# **Advisian - Worley**

#### www.advisian.com

Advisian is a leading provider of professional services to the resources and energy sectors and complex process industries.

#### 228 **AECOM**

#### www.aecom.com

With over 90,000 employees — including architects, engineers, designers, planners, scientists and management and construction services professionals — serving clients in more than 150 countries around the world, AECOM is the premier, fully integrated infrastructure and support services firm worldwide.

#### 202 **American Marine Corp** American Marine Corp

American Marine Corporation offers Marine Construction, Commercial Diving, Transportation, Crew Boat Services, Marine Vessel Inspection &

Repair, Vessel Support, Vessel Salvage, Towing Services, Emergency Repair, Logistics, Waterfront Services, and Environmental Remediation.

# 127

# **Anchor QEA, LLC**

#### www.anchorgea.com

Anchor QEA is a nationally recognized environmental science and engineering consulting firm that specializes in waterfront redevelopment, contaminated sediment remediation, and water resource management.

# 230

#### Aquaveo www.aquaveo.com

Our software solutions provide engineers tools for modeling groundwater and surface-water in the areas of hydrology and hydraulics to help complete demanding water resources projects.

#### 116 **ASCE Future World Vision**

#### www.futureworldvision.org

Reimagine the world and shape the future. Innovation does not happen in a vacuum. The Future World Vision initiative grounds critical conversation in a shared vision from which civil engineers will be able to visualize, design, and create the future of infrastructure. Join us in taking this first step towards the future of infrastructure with a gift in support of this bold and comprehensive project.

#### 112

#### **Atlantic Track - Crane Runway Division** www.atlantictrack.com

Atlantic Track is recognized as a highly reliable source for quality and cost effective engineered crane runway system solutions by Port Operators and their Consultants

#### 121

#### **Bellingham Marine Industries** www.bellingham-marine.com

Bellingham Marine (BMI) is the world leader in the design, manufacture, and construction of marinas and related products and services.

# Exhibitors (continued)

# **Exhibit Hall** Hours

# Sunday, September 18

12:30 - 6:30 p.m. Exhibitor Move-in 6:30 - 8:00 p.m. Exhibits Open 6:30 - 8:00 p.m. Ice Breaker Welcome Reception

# Monday, September 19

6:30 a.m. - 5:00 p.m. Exhibits Open

10:00 – 10:30 a.m. Exhibit Hall Networking Break

12:00 - 1:00 p.m. Exhibit Hall Lunch

# Tuesday, September 20

6:30 a.m. - 5:00 p.m. Exhibits Open

8:00 - 8:30 a.m. Exhibit Hall Networking Break 10:00 - 10:30 a.m. Exhibit Hall Networking Break

12:00 - 1:00 p.m. Exhibit Hall Lunch

# Wednesday, September 21

6:30 a.m. - 1:00 p.m. Exhibits Open

8:00 - 8:30 a.m. Exhibit Hall Networking Break 10:00 - 10:30 a.m. Exhibit Hall Networking Break

1:00 - 5:00 p.m. Exhibitor Move-out

#### 118 **Birdzoff**

#### www.birdzoff.com

Birdzoff recognizes that birds of prey and other pest birds are not only a nuisance but also a hazard for your industrial facilities. Our bird control products work effectively-saving you time and money and improving worker safety. That's why for 30 years industry leaders have trusted us to create state-of-the-art solutions for the toughest of industrial bird control problems.

# **BollardScan**

# bollardscan.com

The BollardScanTM is a unique way to establish the integrity of the bollard and its foundation. And whether it still meets the design requirements of the structure. The methodology that was developed in-house is based on the transmission of vibration and sound through the structure allowing us to pinpoint any errors.

#### 213

### **Burns & McDonnell Engineering** Company, Inc.

#### www.burnsmcd.com

We design and build the tangible and intangible, everything you see (and don't see) that helps our cities thrive. We've worked relentlessly to make our clients and our communities successful since 1898, because we know safe, essential infrastructure is the foundation of a flourishing society.

# **Carmel Corrosion Systems, Inc.**

#### www.carmel-corrosion.com

CCS produces protection pile wraps, customer designed against corrosive marine environments. Easy installation on piles, risers, dolphins, used inland, off-shore and deep sea.

#### 238

#### **Commercial Metals Company -**ChromX

#### cmc.com

ChromX is a high strength, corrosion resistant rebar produced by Commercial Metals Company as part of the specialty products division. ChromX provides superior corrosion resistance of more than 100 years of service left before the first repair in our CS product while simultaneously providing 100 - 120 KSI strength.

#### 136 **COPRI**

#### asce.org/copri

Created in 2000, the Coasts, Oceans, Ports, and Rivers Institute (COPRI) is a semi-autonomous institute of the American Society of Civil Engineers (ASCE), the country's oldest national engineering society. COPRI's services are designed to complement ASCE's traditional civil engineering base and to attract non-engineering allied professionals who seek to enhance their professional and technical development.

#### 210 COWI

#### www.cowi.com

Port and harbor engineering services, including underwater investigation, structural and geotechnical design, berthing analysis, dredging design, permitting, construction support, resident engineering, and coastal engineering services.

#### **Creative Composites Group** www.creativecompositesgroup.com

The Creative Composites Group delivers innovative, engineered solutions so that our customers take advantage of the benefits of Fiber Reinforced Polymer (FRP) composites. This means our customers have products that are lightweight, high strength, corrosion-resistant, and long-lasting! The Creative Composites Group combines the expertise of many companies to offer the best in composite design and advanced manufacturing processes.

#### 209

### **Denso North America**

#### www.densona.com

Denso is a leader in marine corrosion protection. Our SeaShield Marine System provides full line of steel, concrete and timber pile protection and rehabilitation.

#### 124

# EJ USA, INC.

#### www.ejco.com

Infrastructure access solutions for seaport applications - from EJ - leaders in design, manufacture and distribution for water, sewer, drainage, telecommunications and utility networks worldwide.

# 137

# **Epoxy Interest Group of CRSI**

#### www.epoxyinterestgroup.org

The Epoxy Interest Group (EIG) of CRSI (Concrete Reinforcing Steel Institute), is a not-for-profit trade association providing an authoritative resource for information related to use of epoxy-coated steel (epoxy rebar) in reinforced concrete. Epoxycoated reinforcing steel is also known as ECR, epoxy-coated rebar, fusion bonded epoxy coated rebar or FBECR.

#### 110 **ForSHORE**

#### www.forshore-ports.com

ForSHORE operates as a General Contractor to deliver all four stages in the development of port infrastructure projects: financing, design, build, and maintenance. For SHORE provides the best risk management related to the ground-infrastructure interaction to build resilient, lasting ports. ForSHORE offers a full range of port infrastructure capabilities: Jetties, quays, dry docks, locks, breakwaters, dolphins, foundations for platforms, storage tanks and buildings, sea outfall/intake. ForSHORE capitalises on Soletanche Bachy's global reach and local presence and on the Group's geotechnical expertise and solutions.

#### 125 **FYFE**

#### www.cs-nri.com/brands/fyfe-frp

Fyfe FRP - Advanced Composites for Structural Strengthening Over time, the stresses of daily wear take their toll on pipelines, bridges, tanks, buildings, and other structures. Fyfe® develops and designs materials that strengthen, repair, and restore these deteriorating structures—sometimes to better-than-new condition.

#### 104 Gantrex Inc.

# www.gantrex.com

Gantrex is the leading provider of runway components for STS and Overhead Cranes. Our solutions include crane rail, pad, clips and concrete-supported rail products.

#### 211

#### **GEI Consultants, Inc.**

#### www.geiconsultants.com

Driven by a culture of collaboration and entrepreneurial spirit, GEI engineers and scientists partner with clients to improve communities, infrastructure, and the environment. We leverage the best talent in the industry to move you forward.

### 232 **Haley & Aldrich**

# www.halevaldrich.com

Haley & Aldrich, Inc. is committed to delivering the value our clients need from their capital, operations, and environmental projects. Our one-team approach allows us to draw from our 800 engineers, scientists, and constructors in 33 offices for creative collaboration and expert perspectives. Since our founding in 1957, we have one goal in all we do: deliver long-term value efficiently, no matter how straightforward or complex the challenge. In 2020, Haley & Aldrich acquired Hart Crowser, an engineering and environmental consultancy with extensive expertise in the Pacific Northwest and recognized for its cutting-edge performance-based seismic design methods. Visit www.haleyaldrich.com.

#### **Headed Reinforcement Corp. (HRC)** www.hrc-usa.com

High Performance Reinforcement Products for Structural Integrity and Constructability

#### 225

#### **HUESKER + Proserve Ltd.**

#### www.huesker.us

HUESKER is the world's leading manufacturer of geosynthetics, agricultural, and industrial textiles. Providing solutions for Earthworks and Foundations, Roads and Pavements, Environmental Engineering, Hydraulic Engineering, Industry and Agriculture.

#### 113 Igus

#### www.igus.com

Over 30 million parts and 4 million feet of cable stocked in the USA - shipped as early as today. Long-lasting, self-lubricating plastics.

#### **IRM Offshore and Marine Engineers Pvt Ltd**

#### www.irmome.com

IRM Offshore and Marine Engineers Private Limited is a global leader, offering more than 2,000 speciality rubber engineering products and various services for the shipbuilding industry, maritime infrastructure, offshore oil drilling platforms, Offshore wind energy & naval establishments.

### 208

#### **Kongsberg Maritime**

### www.kongsberg.com/maritime

Kongsberg Maritime is a world leader in marine technology. With an extensive portfolio of innovative and integrated products and solutions, Kongsberg Maritime delivers efficiency, reliability, flexibility, and environmental sustainability to enhance the business of its customers. Our approach to product design maximize performance by providing THE FULL PICTURE.

#### **Manson Construction**

#### www.mansonconstruction.com

Manson Construction Co. is a leading heavy civil marine contractor with a fleet of heavy marine equipment that includes 60 specialized vessels and over 50 barges. Our services include dredging, waterfront construction, bride building, heavy lifts, and off

#### 204

#### Marine Solutions, Inc.

#### www.msimarinesolutions.com

Marine Solutions is a small, woman-owned, DBE specialized construction and engineering firm focused on building and maintaining waterfront, hydraulic, navigation, and bridge structures.

#### 132

#### **Marubeni America Corporation**

#### www.marubeniamerica.com

Marubeni America Corporation, which we also refer to as "MAC", is a general trading company, engaged as an intermediary, importer/exporter, facilitator or broker in various types of trade between and among business enterprises and countries.

#### 224

### **McCarthy Builders**

#### www.mccarthy.com

Established in 1864, McCarthy Building Companies, Inc. has a long history of building facilities that drive greater value. From exceptional levels of quality and safety — to ease of maintenance over time, we are firmly committed to helping our clients and partners achieve the short- and long-term strategic goals of every project we do.

#### 231

### **McLaren Engineering Group**

#### www.mgmclaren.com

McLaren Engineering Group's marine department provides underwater inspection, design, permitting, and construction services in support of structural, geotechnical, rehabilitation, dredging, and coastal engineering projects worldwide.

#### **Menard USA**

#### www.menardusa.com

Menard USA is one of the leading specialized ground improvement contractors in the U.S., with over 30 years of experience. We are the U.S. affiliate of Menard, a global leader among ground improvement contractors with offices in over 30 countries. Menard USA was formed as a merger between DGI (Drainage & Ground Improvement, Inc.), a leading Vertical Wick Drain installer in the US, and Menard.

# **Michels Corporation**

#### www.michel.us

A diversified global leader in energy and infrastructure construction, Michels offers proven combination of services and a distinctive culture unique to the industry. As a family-owned and operated business, we support our customers' infrastructure needs with decades of experience; the ability to make swift, strategic decisions, and an uncompromising commitment to our safety-first mindset.

# Exhibitors (continued)

#### 214

#### **Mid-America Engine**

#### www.midamericaengine.com

We are an industry leader for new, used and surplus power generation equipment. Our inventory is extensive - from 13kW to 15MW. It includes high quality diesel generator sets, power modules and gas turbines. We are truly able to respond, and quickly deliver, all of your power generation needs.

#### 217

### **Mitsubishi Chemical Group**

#### www.mitsubishichem-hd.co.jp/english

With 80 years of experience and 30 branch offices, we are the global leader for researching, developing, and manufacturing high-performance, engineered polymer materials.

#### 201

#### **Moffatt & Nichol**

#### www.moffattnichol.com

Moffatt & Nichol is a leading U.S.-based global infrastructure advisor specializing in the planning and design of facilities that shape our coastlines, harbors and rivers as well as an innovator in the transportation complexities associated with the movem

#### 220

#### **Mott McDonald**

#### www.mottmac.com

Mott MacDonald is a vibrant infrastructure development and engineering company with 180 offices worldwide and over 60 offices in the United States and Canada.

#### 223

#### NorthSouth GIS (NSGIS)

### www.nsgis.com

NorthSouth GIS LLC (NSGIS) is one of the most respected geospatial systems implementation and integration consulting firms in the United States. We are passionate about: Ports globally; Water and Wastewater Utilities nationally; Local Government in Southern California.

#### 205

#### **Nucor Skyline**

#### www.nucorskyline.com

The Vulcraft/Verco Group, a part of Nucor Corporation, is the nation's largest manufacturer of steel joists, joist girders and steel deck

#### 234

# **Pacific Pile & Marine**

#### www.pacificpile.com

Pacific Pile & Marine (PPM) is a heavy civil and marine contractor specializing in complex construction, especially in remote locations. Our team has experience in alternate delivery and is sufficiently resourced to deliver a wide range of construction services.

#### 134 **PIANC**

#### www.pianc.org

PIANC is the World Association for Waterborne Transport Infrastructure. It is an international association composed of governments, private sector companies, academics, and individual professionals that works to advance the sustainable development of maritime and inland navigation.

#### 236

### PileMedic by QuakeWrap

#### www.pilemedic.com

PipeMedic® by QuakeWrap is the industry leader in the development of innovative, sustainable FRP pipes and pipe repair systems for new construction and repair of existing pipelines.

#### 215

#### **Precast/Prestressed Concrete Institute** (PCI)

#### www.pci.org

The Precast/Prestressed Concrete Institute (PCI) is the technical institute and trade association for the precast concrete structures industry.

#### 108 **Riteks**

#### www.riteks.com/protective-coatings

RITEKS provides the highest performing, US Navy approved, Splash Zone and Protective Coatings for the harshest environments: Ports, Marine Assets and Waterfront Structures.

#### 216

### **Roller Compacted Concrete Pavement** Council

#### www.agpeltz.com

The Roller Compacted Concrete (RCC) Council is an organization committed to the promotion and research of RCC Pavements. RCC has been used at several port facilities for container stacking and heavy industrial storage. This includes Bayport (Houston,

# 218

#### Roxtec

#### www.roxtec.com

We provide complete sealing solutions for a wide range of applications in many industries. Roxtec safety seals are found on land, at sea and underground. Our co-operation with customers creates excellent conditions for continuous development. The teamwork enables us to tailor new solutions – and stimulates us to keep on exploring new markets.

### S.T. Hudson Engineers, Inc.

#### www.sthe.com

Our experienced team comprised of engineers, environmental specialists, hydrographers, commercial hard hat divers, estimators, construction managers, and inspectors are readily available to assist our clients on all aspects of a project from the docks to the tanks and everything in between.

#### 333

## **SEA Engineering**

#### www.seaengineering.com

Sea Engineering, Inc. was founded in 1973 by University of Hawaii graduate students to provide marine-related engineering, construction and diving services. Today, our company has three office locations in Hawaii and California and over 90 employees. Our core services include coastal engineering, geophysical surveys, oceanographic and environmental studies, as well as marine waterfront construction and industrial diving.

#### ShibataFenderTeam Inc

#### www.shibata-fender.team

One of the leading fender manufacturers, 50+ years of group experience, extensive global network, focused on in-house manufacturing, offering the full range of fender products.

#### Simpson Gumpertz & Heger (SGH) www.sgh.com

SGH is a national engineering firm with more than 25 years' experience in condition assessment, structural evaluation, failure risk analysis, failure investigation, and repair of pipelines.

#### 219

#### Site Scout 360

#### www.synergy360.co

Synergy 360 specializes in rapidly collecting accurate on-site measurement data to produce 360 video walkthroughs, floor plans, and models for indoor and outdoor space management projects. From simple to complex sites, we capture the data and information you need to complete your projects faster, more efficiently, and at lower cost, increasing your project bottom line.

#### 203

#### Stantec

#### Stantec

We're designers, engineers, scientists, and project managers, innovating together at the intersection of community, creativity, and client relationships. Balancing these priorities results in projects that advance the quality of life in communities across the globe.

#### 123

#### Straatman BV

#### www.mfstraatman.com

With over 50 years of experience in the design and manufacture of mooring equipment, Straatman is your go-to partner in order to guarantee safe and efficient mooring operations at LNG, oil, and container terminals. We are an established supplier of Quick Release Mooring Hooks, Berthing Aid Systems and sophisticated ATEX / IECEx certified solar systems for the maritime market.

#### 115

#### **Structural Group**

#### www.structuraltechnologies.com

Structural Technologies, a Structural Group company, develops and integrates specialized products with engineering services to improve, protect and enhance water and wastewater pipelines. Its unique product systems provide structural strengthening for the restoration or renewal of concrete, metallic, and polymerbased large diameter pipelines. Its repair options include state-of-the-art materials, which provide engineered value through short construction windows with little to no disruption to traffic patterns or operations.

# **Synthetex**

#### www.synthetex.com

Synthetex is the leading manufacturer and principal supplier of HYDROTEX® highly engineered fabric formed concrete erosion control and scour protection systems.

# **Tangent Materials**

#### tangentmaterials.com

Strength. Durability. Aesthetics. For those who need a combination of strength, durability and aesthetics outdoors, Tangent delivers unrivaled performance in alternative materials that are made to live on.

### **Taylor Engineering, Inc**

# www.taylorengineering.com

Taylor Engineering, a Federal Small Business, specializes in water-related engineering, planning, and environmental challenges with particular emphasis on coastal regions.

#### 212 Tensar

#### www.tensarcorp.com

At Tensar, we love solving earthwork problems with innovative, resilient solutions and sharing that passion with others. We're here to support you with proven technology, proven project successes, and greater total value that delivers proven savings

#### 126

### **Tokyo Rope Company** www.tokyorope.co.jp

Manufacturing and sales of wire rope, steel cord, Carbon Fiber Composite Cable (CFCC): design and construction of road safety devices such as rock fall prevention net, environment protection products such as sound insulation walls, and bridges and cable-suspended bridges: manufacturing and sales of various industrial machinery and metal fiber

#### 107

# **Tough Leaf**

#### www.toughleaf.com

To facilitate a diverse and thriving environment where contractors can seamlessly meet and exceed their D/M/WBE goals on projects.

# **Traylor Bros.**

#### www.traylor.com

Our Mission is to excel at constructing complex infrastructure safer, better, and faster by engaging the entrepreneurial and innovative spirit of our team members and providing limitless opportunity for personal and professional growth in a close knit and collaborative organization.

#### **Trelleborg Marine & Infrastructure** www.trelleborg.com/en/marine-andinfrastructure

With a smarter approach to port and terminal efficiency, Trelleborg Marine Systems offers a broad range of solutions spanning marine fenders, oil and gas transfer, ship performance, docking and mooring and piloting and navigational aids.

#### 111 **Trimble**

#### www.tekla.com/us

Tekla software by Trimble enables engineers to design and analyze buildings, produce professional construction documentation and calculations as well as provide full detailing services.

#### 130

#### **Vector Corrosion Technologies**

#### www.vector-corrosion.com

Vector Corrosion Technologies has innovative solutions for concrete corrosion repair and protection in reinforced concrete structures including: embedded galvanic anodes, galvanic jackets, activated arc-spray zinc metallizing, corrosion detection and evaluation, repair and mitigation services for post-tension corrosion.

### Whitney Bailey Cox & Magnani (WBCM)

#### wbcm.com

Founded in 1977, WBCM's Marine Engineering Division specializes in the planning, inspection, rehabilitation, repair, renovation, and design of marine structures and landside support facilities.

#### 239

### **Williams Form Engineering**

#### www.williamsform.com

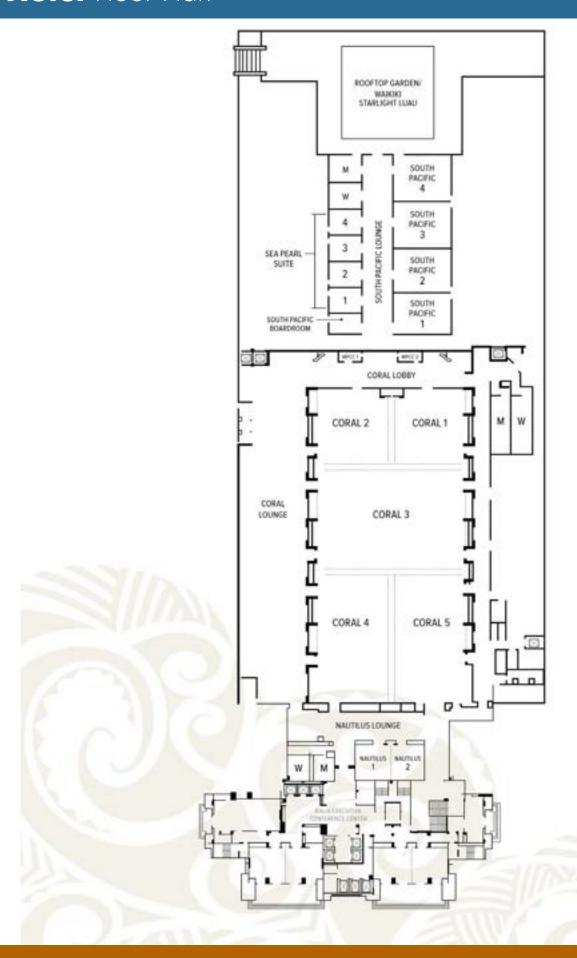
Williams Form Engineering Corporation has been offering Ground Anchors, Concrete Anchors, Post Tensioning Systems, and Concrete Forming Hardware to the construction industry for over 95 years.

#### 206 **WSP**

#### www.wsp.com

Since the development of the original Panama Canal, WSP—including former BergerABAM and Louis Berger — has worked with port authorities and terminal operators worldwide to plan, design and manage the construction of maritime infrastructure including cargo, passenger, recreation and military facilities. Our maritime specialists are committed to using the latest technology to deliver Future Ready<sup>TM</sup> solutions.

# Hotel Floor Plan



# **General** Information

# **Assumption of Risk**

All ASCE/COPRI events and activities are purely voluntary activities, and attendees are fully responsible for their own conduct and well-being, including, and without limitation, determining their level of fitness to take part in any such event or activity. In participating in any event or activity, attendees shall be deemed to understand and accept all risk of possible physical injury that might occur as a result of such participation. Children under the age of 18 are not allowed in the exhibit hall.

#### **Attire**

The dress code for the conference is Hawaiian "Aloha" Casual. Meeting room temperatures will vary, so be sure to dress with your personal comfort in mind.

# **Badge Policy and Ribbons**

Your name badge is your admission to the educational sessions. Please wear your badge at all times while in the hotel. ASCE/COPRI recommends you remove your badge when leaving the hotel. Tickets are required for meal events. Where tickets are required, please be sure to bring your tickets with you to each event as you will not be admitted without a ticket. Ribbons will be available at the Registration Desk.

# **Diversity and Inclusion**

The ASCE/COPRI policy of Diversity and Inclusion fosters a culture that encourages the free expression and exchange of engineering ideas by all members, regardless of gender, race, ethnic origin, religion, age, marital status, sexual orientation, disabilities, or any other reason not related to scientific or technical merit.

# Medical Emergencies

The Hilton Hawaiian Village and ASCE/COPRI hopes that your visit to PORTS® '22 will be free from illness or injury, but in case you or a family member needs medical attention during your time at the event, contact the front desk or consider visiting the nearby urgent care facility.

Queen's Island Urgent Care - Kapahulu 449 Kapahulu Ave., Suite 104, Honolulu, HI 96815 (808) 735-0007

# **Meeting Room Overcrowding**

ASCE/COPRI will make every effort to schedule popular events in rooms large enough to accommodate anticipated attendance. Since many events are extremely popular, it is wise to select alternative events as you plan your conference schedule. ASCE and the Hilton Hawaiian Village are REQUIRED to follow local fire regulations and may ask participants in rooms filled to capacity to choose another event.

# **Professional Development Hours (PDHs)**

You may earn PDHs, which are nationally recognized units of record, by attending pre-conference workshops and conference concurrent sessions. Please note there are differences from state to state in continuing education requirements for professional engineering licensure. Each state licensing board has the final authority to approve course, credits, PDHs, and other methods of earning credits in that state. ASCE strongly recommends that individuals regularly check with their state licensing boards for specific continuing education requirements in their jurisdictions that affect professional engineering licensure and the ability to renew

### **Program and Session Cancellation**

ASCE/COPRI reserves the right to cancel programs and/or sessions. In the unlikely event of a cancellation, all registrants will be notified. Programs and sessions are subject to change, and ASCE reserves the right to substitute a program, session, and/or speaker of equal caliber to fulfill the educational

### Photographs and Video

Photographs and Video of the event may be taken by ASCE, its agents, contractors, or representatives, and such photographs and video may be used for any purpose at ASCE discretion.

# **Registration Hours**

\*Registration Hours

\*Closed for lunch 11:30 a.m. – 12:30 p.m. Sunday, and 12:00 – 1:00 p.m. Monday and Tuesday

Sunday, 9/18 6;00 a.m. - 7:00 p.m. 6:00 a.m. - 5;00 p.m. Monday, 9/19 Tuesday, 9/20 6:00 a.m. - 5:00 p.m. Wednesday, 9/21 6:00 - 11:00 a.m.

The registration desk is located in the Coral Lounge.



Visit us at booth #136 to learn how you can get involved. asce.org/copri





# Thank You to Our Sponsors!

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