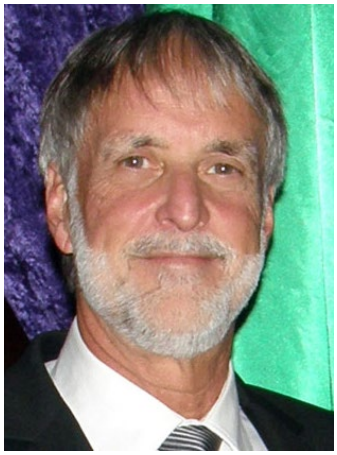
Speaker Biographies
HSRP Virtual Public Meeting, March 9-10, 2022

Table of Contents (Updated Mar 2, 2022) PAGE

Captain Paul Amos

Pilot, Columbia River Pilots



Captain Paul Amos has been employed continuously in the tug and barge industry for more than 16 years and also a pilot for 29 years. From 1980 to 1990 he worked as captain on towing vessels on the Columbia/ Willamette/ Snake River system. He has a wide range of experience on various types of towing vessels but the majority of those years were spent on grain barge tows between Portland, OR and Lewiston, ID. For the last 29 years Paul has been a Columbia River pilot. As a member of the Columbia River Pilots (COLRIP) he served two years as treasurer and was vice president in 1999. He was re-elected as vice president in 2006. Shortly afterward he became president and served in that position through 2014. He was deeply involved in developing COLRIP's AIS-based navigation system and continues to work on improvements to that system. He is currently the chairman of the American Pilots' Association Navigation Technology Committee, is a past chairman of the Lower Columbia Region Harbor Safety Committee and past president of the Pacific Northwest Waterways Association. Paul is married to a sailor, Della, one of the first women to graduate from Kings Point Merchant Marine Academy and lives in Vancouver, WA.

Captain (NOAA, ret.) Andrew A. Armstrong III

Co-Director, NOAA-University of New Hampshire Joint Hydrographic Center

Captain (NOAA, ret.) Andrew Armstrong is Co-Director of the NOAA/University of New Hampshire Joint Hydrographic Center where he leads NOAA's role in the research, mapping and educational programs of the Center. He is the Bathymetric Data Acquisition team leader for the U.S. Interagency Extended Continental Shelf Task Project where he has been responsible for mapping nearly 875,000 square nautical miles of the seafloor in the Arctic Ocean, the U.S. Pacific Islands, and along the U.S. Atlantic and Pacific margins. Andy joined the NOAA Commissioned Officer Corps in 1974, following 4 years of commissioned service in the U.S. Navy. He retired from the NOAA Corps in 2001, continuing with NOAA as Co-Director of the Joint Hydrographic Center in a civil service capacity. Throughout his NOAA career, he has specialized in hydrographic surveying and seafloor mapping. He has served on several NOAA hydrographic ships and field parties, conducting hydrographic and bathymetric surveys in Alaska and Hawaii, along the Pacific, Atlantic, Gulf of Mexico coasts, and in the Great Lakes. He served as commanding officer of *NOAA Ship Peirce* and *NOAA Ship Whiting*, and as chief of NOAA's Hydrographic Surveys Division. He has a B.S. in geology from Tulane University and an M.S. in technical management from The Johns Hopkins University.

Ms. Juliana P. Blackwell

Director, National Geodetic Survey, NOS, NOAA

Ms. Juliana P. Blackwell is the Director of NOAA's National Geodetic Survey (NGS). As Director, she is responsible for the financial, administrative and programmatic performance of NGS, the lead federal agency for positioning activities in the Nation. She oversees the management and delivery of the National Spatial Reference System (NSRS), the nation's consistent coordinate system for latitude, longitude, height, shoreline, gravity measurements and shoreline information throughout the United States. NSRS supports a wide range of important activities including mapping and charting, navigation, flood risk determination, transportation, land use and ecosystem management. Ms. Blackwell serves as Chair of the Federal Geodetic Control Subcommittee of the Federal Geographic Data Committee, exercising government-wide leadership in the development and improvement of geodetic surveying specifications, methods, instrumentation, and data transfers. She represents NOAA on the interagency Alaska Mapping Executive Committee and the 3D Elevation Program Executive Forum. A graduate of Tufts University, Ms. Blackwell earned a B.S. in mathematics. She received a MBA from the University of Maryland's Robert H. Smith School of Business.

Dr. Brian Calder

Research Professor and Associate Director, University of New Hampshire, Center for Coastal and Ocean Mapping

Brian Calder graduated M.Eng (Merit) and Ph.D. in Electrical and Electronic Engineering from Heriot-Watt University, Edinburgh in 1994 and 1997 respectively, completed a post-doctoral period at HWU until the end of 1999, and then joined the Center for Coastal and Ocean Mapping & NOAA-UNH Joint Hydrographic Center at the University of New Hampshire as a plank-owner. He is currently a Research Professor at CCOM/JHC, and Associate Director of CCOM. His research at the Center has focused primarily on statistical methods applied to rapid and principled processing of bathymetric data, including the estimation, use, and propagation of its uncertainty.

Mr. Chris DiVeglio

Maritime Services Program Manager, CO-OPS, NOS, NOAA

Chris DiVeglio works for NOS' Center for Operational Oceanographic Products and Services (CO-OPS) as the Maritime Services Program Manager – serving in this role since 2019. Chris oversees the NOAA Physical Oceanographic Real-Time System (PORTS®) program as well as engagement and outreach tied to CO-OPS current surveys and hydrodynamic models. Chris regularly engages with various groups of maritime stakeholders and partners in seaports around the U.S. which are served by a PORTS®, in order to meet operational needs and enhancements for these valuable systems. He works closely with the operational teams and leadership within CO-OPS, coordinating projects and associated programmatic tasks related to the Maritime Services Portfolio. He serves as a CO-OPS liaison for meteorological data with the National Data Buoy Center (NDBC) and local National Weather Service (NWS) forecast offices. Chris' previous experience at CO-OPS includes time on both the Data Monitoring and Data Processing teams in the Oceanographic Division. Before joining NOS in 2013, Chris worked as an operational meteorologist for a private weather company in the NYC area. Chris earned his Bachelor's degree in Meteorology from Plymouth State University in New Hampshire.

Mr. Sean M. Duffy, Sr.

Executive Director, Big River Coalition

Mr. Duffy directs the Big River Coalition which is committed to protecting maritime commerce across the Mississippi River and Tributaries (MRT). He leads the Coalition which focuses on maximizing transportation efficiencies on the Mississippi River Ship Channel (Baton Rouge to the Gulf of Mexico) with a dedicated focus on channel maintenance. The Big River Coalition is at the forefront of efforts to deepen the Mississippi River Ship Channel to 50 feet. He spearheads the visions of the future deep-draft navigation on the MRT to ensure that systematic approaches protect maritime commerce by maintaining fully authorized channel dimensions while also updating and maintaining navigation infrastructure, specifically the locks and dams along the MRT. The Big River Coalition missions include a dedicated focus to secure increased federal investments for channel maintenance of the Mississippi River Ship Channel. The project to deepen the Ship Channel to 50 feet and to increase the beneficial use of dredge material or "sediment recycling" were projects first promoted by the navigation industry through the Big River Coalition. Mr. Duffy also serves as an Executive Vice President / Maritime Advocate for the parent company the New Orleans Steamship Association and another d.b.a. the Louisiana Maritime Association. Mr. Duffy is a proponent for local industry specializing in advocating on Capitol Hill to

secure supplemental funds for maintenance dredging and waterway maintenance. Previous employment experiences include various management positions, Boarding Agent, Deckhand, Stevedore General Superintendent and Marine Surveyor. Mr. Duffy is familiar with obstacles faced by the maritime industry, both nationally and those specific to Louisiana, and has been recognized for his efforts on coastal restoration through maintenance dredging. He became the HSRP co-chair in March 2021.

Mr. Richard Edwing

Director, Center for Operational Oceanographic Products and Services, NOS, NOAA

Richard Edwing is the director of **NOAA's Center for Operational Oceanographic Products and Services** (CO-OPS), the nation's authoritative source for accurate, reliable and timely water-level and current measurements. In his role, he oversees and continues to improve this 24-hour a day operation to provide mariners, coastal managers, and many other users with real-time data on ocean conditions along America's 95,000-mile coastline. His career with NOAA spans three decades with much of that time spent advancing NOAA's navigation services mission to provide the nation with up-to-date ocean, weather, mapping and positioning data and tools for safe transits to and from U.S. ports. He started in 1976 in the Marine Boundary Program, a partnership between NOAA and coastal states to establish tidal data such as base elevations in sensitive wetland areas vulnerable to urban growth. He was the division chief of NOS's policy, planning and analysis division, where he shaped NOAA's priorities for ocean issues, as well as identified budget needs to advance and modernize ocean science. He graduated from George Washington University (1976) with a B.S. in oceanography, and completed graduate level work in civil engineering at the University of Maryland. For two hundred years, CO-OPS and its predecessor agencies have provided the critical oceanographic data needed to protect life, property, and the marine environment. The Center manages NOAA's Physical Oceanographic Real-Time System, the National Water Level Program, and National Current Observation Program - major national systems critical to keeping America's oceans, coasts, and Great Lakes safe, healthy and productive.

Rear Admiral Benjamin Evans

Director, Designated Federal Officer, HSRP; and Director, Office of Coast Survey, NOS, NOAA

Rear Admiral (lower half) Benjamin K. Evans is the Director of the Office of Coast Survey and U.S. National Hydrographer responsible for overseeing NOAA's hydrographic services, including the mapping and charting of all U.S. coastal waters, as well as representing the U.S. on interagency and in international hydrographic efforts. He leads NOAA's ocean mapping and nautical charting program, continuing the transformation of the agency's navigation services to meet the needs of twenty first

century mariners and apply Coast Survey's technical expertise to meet a broad range of requirements

for authoritative ocean mapping data. He is an experienced hydrographer with over twenty-one years of service in the NOAA Commissioned Corps, most of which has been in the NOAA mapping and charting community afloat and ashore. He has served in a wide range of leadership, technical, and policy roles, including command of NOAA Ships *Ferdinand R. Hassler* and *Rainier*, management positions in Coast Survey and the Office of Marine and Aviation Operations, and on the staff of the NOAA Administrator and the acting chief of staff of the NOS Assistant Administrator. Rear Admiral Evans holds degrees in Physics from Williams College, and Ocean Engineering from the MIT/WHOI Joint Program where his research focused on uncrewed systems. He is an American Conference on Surveying and Mapping / Hydrographic Society of America Certified Hydrographer.

Mr. Lindsay Gee

Mapping and Science Coordinator, Ocean Exploration Trust

Mr. Lindsay Gee coordinates the science and mapping activities conducted on the *E/V Nautilus*. He has

four decades of broad experience working in the international hydrographic surveying and ocean mapping industry. This experience ranged from working at a national hydrographic service, then consulting in the broader offshore industry, and leading a small innovative company providing software and services to the international hydrographic industry. His roles included conducting and managing operational hydrographic surveys for nautical charting, client representation for geodetic and geo-hazard surveys in the oil and gas industry, through to leading a team in development of software applications to support hydrographic surveying and ocean mapping. During the latter 15 years he built a deep understanding and expertise in guiding the transfer of technology from research at partner ocean mapping research institutions, and leading the development of an agile company to successfully interpret industry requirements and trends. His most recent consulting was focused on the technology used in the ocean mapping industry, and the strategic planning and business development required to identify and transition innovative technology to products, services and solutions for general operational use. Mr. Gee is affiliated with the Hydrographic Society of America, Surveying and Spatial Sciences Institute, Australasian Hydrographic Society, Marine Technology Society and American Geophysical Union.

Mr. Derek Hanson

Derek Hanson, Attorney-Advisor, Weather, Satellites, & Research Section, NOAA Office of General Counsel

Derek Hanson is an attorney-advisor at the National Oceanic and Atmospheric Administration (NOAA). Derek provides legal counsel to NOAA's environmental satellite, weather, and research divisions, as well the Chief Information Officer and Chief Data Officer. In that role, he advises on the implementation of the NOAA Data Strategy, as well as open data policies and data licensing more generally.

Ms. Deane Hargrave

Geoscience Manager, Atlantic Shores Offshore Wind LLC

Ms. Hargrave is planning, executing and delivering technically complex and logistically challenging offshore geophysical projects for Atlantic Shores Offshore Wind LLC and recently worked for Shell for six years. Over the past 20 years, she has conducted numerous shallow hazard surveys, geotechnical investigations, seep surveys, and navigational positioning projects at worldwide locations. Deanne strives to anticipate industry technical requirements, interpret regulatory trends, and adopt innovative technologies. She began her career in 1998 as a geotechnical engineer conducting onshore investigations with GeoEngineers. Beginning in 2004, she was project manager and party chief for offshore geophysical and geotechnical investigations throughout Alaska and was instrumental in creating Geo LLC, a company specializing in shallow hazard surveys for the oil and gas industry. In 2011, after acquisition of Geo LLC by Fugro, she was promoted to Operations Manager for Fugro Geo Services - Alaska, supervising technical personnel, implementing quality, health, safety and environmental management systems, and managing operations/logistics for large offshore projects in Alaska, Caribbean, Brazil, and New Zealand. In 2014, she joined Shell in Alaska to deliver seabed clearance/ geotechnical investigations and environmental baseline surveys. Deanne was responsible for implementing Shell's multi-year Marine Mammal Monitoring and Mitigation Program, including an industry-leading underwater sound source verification program, and improved logistics and operational efficiency by managing project risks and collaborating with stakeholders. She successfully identified two innovative methods for completing subsea construction activities necessary in Arctic waters. She completed a B.S. in Civil Engineering at Gonzaga University, continuing education in Arctic Engineering and Project Management at the University of Alaska Anchorage, and is a Professional Engineer licensed in Alaska and Texas.

CDR Briana Welton Hillstrom

Chief, Hydrographic Services Division, OCS, NOS, NOAA

CDR Briana Welton Hillstrom has been a NOAA Commissioned Corps Officer for 17 years, with nearly nine years in sea assignments on all four of NOAA's hydrographic ships – *Rainier, Fairweather, Ferdinand R. Hassler,* and *Thomas Jefferson* – mapping on both coasts of the United States, Gulf of Mexico, Caribbean, and Arctic. CDR Hillstrom is the new Chief, Hydrographic Surveys Division in OCS and served throughout the Office of Coast Survey (OCS), from the mobile units of *Bay Hydrographer* and Navigation Response Team 7; Mid-Atlantic Navigation Manager; and Chief of the Atlantic Hydrographic Branch. She was the former Commanding Officer of NOAA Ship *Thomas Jefferson,* NOAA's 2020 Ship of the Year, homeported in Norfolk, Virginia, where she leads a crew of 36 professional mariners mapping the seafloor for nautical chart update and hurricane response. CDR Hillstrom has a bachelor's degree in mathematics from Smith College in Northampton, Massachusetts, and a Master's of Science in Ocean Engineering Ocean Mapping from the University of New Hampshire. Her received a Commerce Gold Medal for her work in taking a new Navigation Response Team to Vieques Island, Puerto Rico, to survey unexploded ordinance for the U.S. Navy; a NOAA Corps Commendation Medal for leading *Fairweather* in its most productive field season just after receiving and integrating four brand new survey launches and the ship's first Arctic project in 2010; and the Association of Commissioned Officers Science and Engineering Award for work on in situ field acoustic calibration methods of hydrographic multibeam sonars. CDR Hillstrom is a member of The Hydrographic Society of America (THSOA); and is a CAT A hydrographer.

Mr. Jeff Jalbrzikowski

Regional Geodetic Advisor, NGS, NOS, NOAA, NOAA

Jeff Jalbrzikowski (pronounced jobs-uh-kah-ski) is the Appalachian Regional Advisor for NOAA's National Geodetic Survey (NGS). He has a varied background with field and office experience in boundary, geodetic, and hydrographic surveying, and has been involved in GIS projects ranging from parcel digitization to aerial LiDAR data processing. Jeff is a licensed Professional Surveyor in multiple states, a certified GIS Professional, and a Certified Floodplain Surveyor. Prior to NGS, his Federal career includes work as a cadastral surveyor with the Bureau of Land Management (BLM), and nine years with the U.S. Army Corps of Engineers (USACE) which included responsibility for the Inland ENC (IENC) of the Allegheny, Monongahela, and Upper Ohio Rivers. His role as Regional Geodetic Advisor is to assist the public in understanding and utilizing the National Spatial Reference System (NSRS), and any other products and services that NGS provides.

Mr. Sam Knight

Director, Product Management, Blue Marble Geographics

Sam Knight has been at Blue Marble since 2004. In that time, he worked in Tech Support, Training, and QA, eventually transitioning to Product Manager, and then Director of Product Management. Responsible for developing and leading Blue Marble's successful applied geodesy training program, he has lead hundreds of GIS and Geodetics courses and is a frequent speaker at industry conferences, trying to make tricky geodetics concepts accessible at a practical level. Sam's other role at Blue Marble is being a commercially certified drone pilot to support the company's work in drone-based 3d modeling. In his off-hours, he is a mentor for the high school robotics team that Blue Marble sponsors and an elementary school LEGO robotics team, and is always tinkering on a project of some sort.

Mr. Tony LaVoi

Chief Data Officer, NOAA

Tony LaVoi serves as the National Oceanic and Atmospheric Administration (NOAA) Chief Data Officer (CDO). As the NOAA CDO, he is responsible for NOAA's new Data Strategy and all aspects of its implementation across the organization. Tony serves as NOAA's Open Government Senior Lead and the U.S. Department of Commerce's Senior Agency Official for Geospatial Information. He and the CDO Team are also responsible for a suite of NOAA enterprise government information services, including Freedom of Information Act (FOIA), Paperwork Reduction Act (PRA), Information Quality Act (IQA), and Privacy compliance and reporting. Prior roles in NOAA include serving as the NOAA Geospatial Information Officer (GIO), as well as a National Ocean Service Information Services Director. Tony is a member of the Federal Geographic Data Committee (FGDC), National Geospatial Advisory Committee (NGAC), Interagency Council for Advancing Meteorological Services (ICAMS), Federal CDO Council, Cooperative Institute for Satellite Earth System Studies (CISESS) Executive Council, and the United Nations Global Geospatial Information Management Working Group. Tony holds a BS in Civil and Environmental Engineering from the University of Wisconsin.

Ms. Nicole R. LeBoeuf

Assistant Administrator, National Ocean Service, NOAA

Nicole R. LeBoeuf is the Assistant Administrator for the National Oceanic and Atmospheric Administration's National Ocean Service, an organization of 1,800 staff in more than 50 locations around the country. Ms. LeBoeuf oversees all strategic and operational aspects of America's premiere

coastal and ocean agency, which provides science-based solutions through collaborative partnerships to address evolving economic, environmental, and social pressures on our ocean, coasts, and coastal communities. She worked on a wide range of issues from protected species conservation and oil spill response to international treaty negotiation. Prior to joining NOS, Ms. LeBoeuf served as Acting Deputy Director of the Office of Protected Resources in NOAA Fisheries, where she maintained oversight of a diverse protected species conservation and management portfolio. Before that, she spent four years as the Chief of the Marine Mammal and Sea Turtle Conservation Division in the Office of Protected Resources. Her work included, among numerous duties, application of scientific information to implement the Marine Mammal Protection Act and the Endangered Species Act and is a subject matter expert in the implementation of this legislation. Ms. LeBoeuf served in the NOAA Budget Office as NOAA's finance lead during the Deepwater Horizon oil spill. Her international expertise includes overseeing NOAA's Antarctic Treaty System responsibilities, coordinating protected species bycatch reduction efforts in multiple tuna treaties, and representing NOAA at the U.N. General Assembly regarding the protection of deep sea corals. Ms. LeBoeuf holds a B.S. in Marine Biology from Texas A&M University and a M.S. in Sustainable Development and Conservation Biology from the University of Maryland.

Dr. Larry Mayer

Director, Center for Coastal and Ocean Mapping, and Co-Director, Joint Hydrographic Center, University of New Hampshire

Larry Mayer is a Professor and Director of The Center for Coastal and Ocean Mapping at the University of New Hampshire. He received a Ph.D. from the Scripps Institution of Oceanography in Marine Geophysics (1979). After being selected as an astronaut candidate finalist for NASA's first class of mission specialists, Larry went on to a Post-Doc at the School of Oceanography at the University of Rhode Island where he worked on the early development of the Chirp Sonar and problems of deep-sea sediment transport and paleoceanography. In 2000 Larry became the founding director of the Center for Coastal and Ocean Mapping at the University of New Hampshire. Larry has participated in more than 95 cruises (over 75 months at sea!) during the last 38 years including 13 mapping expeditions in the ice-covered regions of the high Arctic. He is the recipient of the Keen Medal for Marine Geology and an Honorary Doctorate from the University of Stockholm. He was a member of the President's Panel on Ocean Exploration and chaired National Academy of Science studies on national needs for coastal mapping and charting and the impact of the Deepwater Horizon Spill on ecosystem services in the Gulf of Mexico. He was the co-chair of the NOAA's Ocean Exploration Advisory Working Group, the Vice-Chair of the Consortium of Ocean Leadership's Board of Trustees, and is currently the Chair of the National Academies of Science's Oceans Studies Board and the U.S.

Committee for the Decade of Ocean Science, a member of the State Dept.'s Extended Continental Shelf Task Force, the Navy's SCICEX Advisory Committee, and Vice Chair of the Board of the Ocean Exploration Trust. In 2016 Larry was appointed by President Obama to the Arctic Research Commission, in 2017 he was elected to the Hydrographic Society of America Hall of Fame. In 2018 he was elected to the National Academy of Engineering and in 2019 he was elected as a foreign member of the Royal Swedish Academy of Sciences. In 2020 Larry became the first recipient of the Walter Munk Medal from The Oceanography Society and was elected a Fellow of the American Geophysical Union. Larry's current research deals with sonar imaging and remote characterization of the seafloor as well as advanced applications of 3-D visualization to ocean mapping problems and applications of mapping to Law of the Sea issues, particularly in the Arctic.

Mr. Guy Noll

Associate Director, Esri Mapping Systems

Guy is a retired NOAA Corps officer (1987-2011) who came to Esri to assist with the "Ocean Initiative" after a career of technology improvement in the Coast Survey missions. He joined at roughly the same time as Chief Scientist Dawn Wright. He works as an executive consultant in the maritime market as well as managing a portfolio of products that are primarily focused on production mapping – Aeronautical, Nautical, and Defense, plus tools to normalize workflows for data quality and cartographic representation (Data Reviewer, Workflow Manager, and ArcGIS Maps for Adobe Creative Cloud development teams).

Dr. John Nyberg

Deputy Hydrographer, OCS NOS, NOAA

John Nyberg's previous positions at NOAA include chief and deputy chief of the Marine Chart Division between 2010 and 2020 where he helped direct Coast Survey's chart modernization to digital products, changing the operational focus from paper-based chart compilation to electronic navigational charts. Prior to his work in the Marine Chart Division, Nyberg spent 12 years in Coast Survey's Navigation Services Division moving from Coast Pilot cartographer to deputy division chief where he helped manage the procurement of the research vessel Bay Hydrographer II and initiated the modernization of the United States Coast Pilot's production system. Nyberg currently serves as co-chair of the United Nations GGIM Working Group on Marine Geospatial Information, chair of the IHO WEND-WG, and vice-chair of the IHO IRCC. John has a bachelor's degree from the University of Florida, with a major in geography, a master's in international management from the University of Maryland, and a Ph.D. in geographic science from George Mason University.

Ms. Julia Powell

Chief, Navigation Services Division, OCS, NOS, NOAA

Julia Powell is the Chief of the Office of Coast Survey Navigation Services Division. NSD provides a focal point for customer requests on charting issues, short-term (fast response) hydrographic surveys, and Nautical Publications, such as Coast Pilot. The division coordinates and represents OCS at constituent events such as harbor safety meetings, waterways management meetings, cooperative workshops, conferences, and trade shows, as well as standing up NOAA's Precision Marine Navigation Program. Julia graduated with a degree in Geological Sciences from Cornell University and has a Masters in Information Systems from the University of Maryland. She is chair of the IHO's S-100 working group that is working on the framework standard that underpins the next generation navigation products, such as underkeel clearance management, high-resolution bathymetry and other integrated products.

Mr. Ed Saade

Mr. Edward J. Saade, Group Director Americas, President USA, Fugro Inc.

Edward J. Saade has 40+ years of Hydrographic, Coastal Zone Management, Geospatial Survey and Ocean Engineering experience. Since 2014, Mr. Saade has been serving as Americas Regional Director for the Fugro Marine Division and in June of 2015 was promoted to the President of Fugro (USA) Inc., serving Fugro in both capacities. His responsibilities include the management of the largest of Fugro's Regional Divisions, overseeing a staff of 1200, operating from eleven primary offices located from Alaska and Canada to Brazil, with multiple offices in the USA, Mexico, Colombia and Trinidad and Tobago; operating in virtually every country in the Region. He has overseen the expansion of Fugro's capabilities to become the world leader in hydrographic LiDAR, multi-beam and backscatter data acquisition and mapping techniques for charting, Coastal Zone and Essential Fish Habitat analysis. These techniques have been directly applied to the offshore oil and gas and construction industries and a wide variety of national hydrographic offices including NOAA, CHS (Canada), GCS (Kingdom of Saudi Arabia, RAN (Australia) and SHOM (France). He has been actively involved in high resolution geophysical survey data acquisition and interpretation programs, both domestically and overseas. He holds a B.S. in geology from the University of California, Santa Barbara, and completed Ph.D. courses and research in marine geophysics at the Hawaii Institute of Geophysics. Mr. Saade is a California Professional Geophysicist, and has authored/coauthored over 70 reports and studies related to seafloor geology and sub-bottom conditions. He served as the HSRP chair for 3 years.

Dr. Kurt Schwehr

Software Engineer, Google and Affiliate Research Professor, University of New Hampshire Center for Coastal and Ocean Mapping

Kurt Schwehr is a software engineer at Google working on Earth Engine and is an Affiliate Associate Research Professor at the University of New Hampshire. He earned a B.S. in Geology from Stanford and his PhD in Marine Geology/Geophysics from Scripps Institution of Oceanography. He works on open source software including GDAL, PROJ, MB-System, PySTAC, and libais and is on the board for GDAL and PROJ. He is a co-founder of Global Fishing Watch, WhaleAlert, and NOAA's Environmental Response Management Application (ERMA).

Galen Scott

Constituent Resources Manager, Geodetic Services Division, National Geodetic Survey

Galen Scott has served in a number of roles since he started at National Geodetic Survey in 2003. He currently serves as the NGS Constituent Resource Manager, responsible for engaging the broad array of NGS stakeholders, soliciting feedback on NGS products and services, and helping NGS incorporate that feedback into the product development life cycle and strategic planning for modernizing the National Spatial Reference System. Galen was the project manager for GEOID18 and currently leads the GPS on Bench Marks program to crowd-source data for the 2022 Transformation Tool. He holds Master's Degrees in Environmental Science and Policy from Johns Hopkins University and Environmental Science and Management from the University of Rhode Island.

Randy TeBeest

Deputy Assistant Administrator (DAA) for Programs and Administration, NOAA Office of Marine Aviation Operations

He is responsible for resource management, strategic planning, organizational performance management, platform acquisition and corporate human capital management. A 23-year NOAA Corps veteran and OMAO senior officer, Mr. TeBeest has served on three NOAA ships and earned flight qualifications on six NOAA aircraft, including the agency's WP-3D Orion "hurricane hunter" aircraft. He retired in 2013 after serving as Commanding Officer of the NOAA Aircraft Operations Center, with nearly 4,000 flight hours and 155 hurricane eyewall penetrations.

At NOAA, he held senior staff positions with OMAO, National Weather Service and NOAA Budget Office, and served in multiple leadership positions on the Deepwater Horizon oil spill response

efforts. Following his active duty service, he gained executive administration and policy experience in the public safety, aerospace and environmental industries as Assistant County Administrator of Public Safety for Pasco County, Florida, where he oversaw fire and rescue, 9-1-1 communications, emergency management and misdemeanor/ probation operations. He served as Aerospace Program Manager for Maryland Department of Commerce, developing the space, aviation and unmanned aircraft industries. Most recently, he was Vice President of Environmental Programs for a science and engineering consulting firm supporting NOAA, NASA and the U.S. Army Corps of Engineers. Mr. TeBeest holds a degree in mechanical engineering from the College of New Jersey and a Juris Doctor from Taft Law School.

Ms. Julie Thomas

Ms. Julie Thomas, Senior Advisor, Southern California Coastal Observing System (SCCOOS) and Coastal Data Information Program (CDIP), Scripps Institution of Oceanography (retired)

Since 1976, Julie Thomas worked at the Scripps Institution of Oceanography, and during the last several years, served as the Program Manager and Principal Investigator for the Coastal Data Information Program (CDIP). She served as the Executive Director for the Southern California Coastal Ocean Observing System (SCCOOS) from 2009 to 2018. She is now serving in an Advisory capacity for both of the above mentioned programs. She worked with a breadth of projects. She has been an advocate for sustained funding for real-time monitoring and model validation, working closely with many federal agencies, in particular the U.S. Army Corps of Engineers (USACE) and NOAA. She has worked closely with many of the coastal USACE whose projects are dependent upon high quality, long-term wave data, realizing that this long term history is critical in infrastructure design and repair. Through the State of California, she has obtained sustained project funding, working closely with the recreational and commercial maritime community, including the Coast Guard and state Oil Spill Prevention and Response agencies. At the local and regional level, she is engaged with coastal issues, particularly those that are affected by energetic wave action, providing data for infrastructure design, shoreline change and sea level rise. Ms. Thomas has extensive outreach experience. She has focused on listening to comments from the maritime users/operators, spent many hours walking the fishing docks with nautical chart in hand, discussing the best location for a buoy deployment, and attending the maritime industry meetings to help resolve their concerns. Her priority is to maintain standards for collecting and disseminating high quality data, assure the data are curated and archived at the NOAA National Centers for Environmental Information (NCEI), and advocate for the integration and communication of information that helps ensure safety, economic and environmental resilience, and the

sustainable use of coastal oceans. She is the outgoing co-chair of HSRP and will become the chair on March 5, 2021.

Dr. Neil Weston

Chief Scientist, OCS, NOS, NOAA and Affiliate Research Professor, University of New Hampshire, Center for Coast and Ocean Mapping, UNH-NOAA Joint Hydrographic Center

Neil Weston serves as the OCS Chief Scientist and has a research appointment to strengthen the academic and research ties between UNH/CCOM/JHC and the Office of Coast Survey, NOAA.
He collaborates on research activities related to GNSS/GPS positioning, geophysical phenomena affecting land/ocean interfaces, data visualization, digital signal processing, and modeling. Dr. Weston is also interested in advising/mentoring graduate students, giving invited talks/seminars, promoting OCS, NOS and NOAA scientific and technological endeavors, and strengthening high-level collaborations between the academic community and NOAA. Dr. Weston received his doctorate from Catholic University of America in 2007 in biomedical engineering and physics, and has master's degrees from Johns Hopkins University in physics (sensor systems) and the University of South Florida in physics (laser optics and quantum electronics). He also holds positions as a Science/Technical Advisor with the U.S. State Department and as a Technical Advisor for the United Nations.

Mr. Matt Wilson

Physical Scientist, OCS, NOS, NOAA

Matt Wilson is a Physical Scientist for the NOAA Office of Coast Survey. He holds an MS in Ocean Mapping from the University of New Hampshire Center for Coastal and Ocean Mapping & Joint Hydrographic Center and an MBA from Pennsylvania State University. Previously, he worked as Sales and Marketing Manager for QPS, Inc., and he began his career serving as a U.S. Naval Officer, completing tours in Stennis, Mississippi, and Yokosuka, Japan. With NOAA, he is focused on the faster and more efficient throughput of hydrographic data towards products and services.