**U.S. IOOS Advisory Committee Members**

**https://ioos.noaa.gov/community/u-s-ioos-advisory-committee/u-s-ioos-advisory-committee-members/**

**2015-2018 Membership - Committee Members:**

1. Conrad C. Lautenbacher, GeoOptics, Inc., Chair
2. Tom Gulbransen, Battelle Memorial Institute, Vice Chair
3. Val Klump,  University of Wisconsin-Milwaukee
4. Justin Manley, Just Innovation LLC
5. LaVerne Ragster, University of the Virgin Islands
6. Tony MacDonald, Monmouth University
7. Chris Ostrander, University of Hawaii at Manoa
8. Doug Vandemark, University of New Hampshire
9. Thomas B. Curtin, University of Washington
10. Casey Moore, Sea-Bird Scientific
11. Jennifer Hagen, Quileute Indian Tribe

Ex-Officio Members:

David Legler, National Oceanic Atmospheric Administration (NOAA)
Linda Lillycrop, Army Corps of Engineers (USACE)
Brian Melzian, U.S. Environmental Protection Agency (EPA)

DFO: Jessica Snowden, U.S. IOOS Program

**Committee Member Bios**

**Conrad C. Lautenbacher, Jr., Ph.D., GeoOptics, Inc., Chair**

Retired Navy Vice Admiral Conrad C. Lautenbacher, Ph.D., serves as Chief Executive Officer and Director for GeoOptics, Inc., a startup company with the goal of launching and operating the first commercial Radio Occultation (RO) satellite constellation designed to collect and offer weather data and associated services as a commercial enterprise. Most recently, as Vice President, Science Programs, Applied Technology Group (ATG) of CSC Corporation he was engaged in business development activities to expand opportunities in science and technical support operations. He previously served as Under Secretary of Commerce for Oceans & Atmosphere and Administrator of the National Oceanic and Atmospheric Administration (NOAA) for seven years. Prior to that, he was President and CEO of the Consortium for Oceanographic Research and Education (CORE), now known as the Consortium for Ocean Leadership. Notable navy assignments included Commander US Third Fleet, Deputy Chief of Naval Operations (Resources, Warfare Requirements and Assessments), Director of J-8 (Resources) on the Joint Staff., Commander Naval Station Norfolk, the Navys largest naval station, Commanding Officer of USS HEWITT (DD-966), Commander Cruiser Destroyer Group Five, and Commander, Naval Forces, Riyadh during Operation Desert Storm. He holds Master of Science and Ph.D. degrees from Harvard University in Applied Mathematics and is a graduate of the US Naval Academy (Class of 1964).

**Thomas Gulbransen, Battelle Memorial Institute, Vice Chair**

Mr. Gulbransen serves as Senior Scientist for Battelle Memorial Institute’s Infrastructure & Environment business. His 33 years of experience include fieldwork, ecosystem restoration and remediation services to federal, state, local, industrial and international clientele. His primary responsibilities are as Chief Scientist, Technical Director or Project Manager for water quality investigations and Environmental Informatics projects. These roles are guided by translating clients’ needs into data quality objectives that guide fieldwork, systems development plans or defensible mining of legacy information systems. His experience leading large scale projects, such as managing construction of Cyberinfrastructure and Data Services for NSF’s continental-scale National Ecological Observatory Network (NEON), built through collaboration with academia, federal agencies, NGOs and commercial vendors, offers the IOOS AC an industry perspective relevant to promoting IOOS partnerships. He has served in various municipal capacities in elected office, on boards dedicated to environmental stewardship, and as an officer in a volunteer Fire/EMS Department. Mr. Gulbransen holds a Master of Science in Marine Environmental Science from State University of New York, and a Certificate of Special Studies in Management and Administration from Harvard University.

**J. Val Klump, Ph.D., University of Wisconsin-Milwaukee**

Dr. Klump is currently the Senior Director, Professor and Associate Dean of Research for the School of Freshwater Science at the Great Lakes WATER Institute, University of Wisconsin-Milwaukee. He is an active participant in the Great Lakes Observing System, whose research focuses on implementation of Great Lakes Observing System Real time Buoy and Vessel of Opportunity Underway Observing Systems. Dr. Klump has experience on numerous professional societies and committees, including serving on the Science and Technology Advisory Committee of the Green Bay Remedial Action Plan (Vice Chair) and as a member of the U.S. Canadian International Joint Commission, Science Advisory Board. He also is a board member of Discovery World at Pier Wisconsin, member of the NOAA Cooperative Institute for Limnology and Ecosystem Research (CILER) Management Council, sits on the NOAA Great Lakes Observing System (GLOS) planning group, and was a past member of the Great Lakes Observing System Enterprise Architecture Expert Advisory Panel. Dr. Klump holds a Juris Doctor from Georgetown University Law Center and a doctorate in Chemical Oceanography from the University of North Carolina.

**Justin Manley, Just Innovation Inc.**

Justin Manley is an innovative technologist and executive with experience in startup, international corporation, academic, and public sectors. He is a recognized leader in unmanned systems development and operations. He was a principal in the development of unmanned marine vehicles at the Massachusetts Institute of Technology from 1993 to 2002. Between 2002 and 2009 Mr. Manley provided marine technology consulting services, primarily to the National Oceanic and Atmospheric Administration (NOAA) where he was the founding Chair of the NOAA-wide AUV Working Group. In 2009 Mr. Manley transitioned to the private sector, joining Liquid Robotics during its startup phase. There he was responsible for developing new commercial and scientific programs based on the Wave Glider. In 2011 Mr. Manley joined Teledyne Benthos as Senior Director of Business Development where he managed a diverse product portfolio and led the development of a networked systems strategy across Teledyne Marine Systems (Benthos, Webb Research, Gavia, and SeaBotix).

Drawn back to entrepreneurial endeavors Mr. Manley founded Just Innovation Inc. in mid-2015. He supports clients from startups to multi-national corporations with core technical specializations in unmanned vehicles, robotics, sensors, and undersea systems. Mr. Manley offers clients support with strategy and innovation, business and product development, evangelism, and marketing. Just Innovation Inc. is also active in unmanned systems technology development and is commercializing concepts for secure unmanned aircraft “drone” communications and operations.

Mr. Manley is extensively involved in the marine and robotics communities through a variety of leadership roles. He is a Senior Member of IEEE, Life Member of the Marine Technology Society, Director of AUVSI New England, and a member of the U.S. Integrated Ocean Observing System (IOOS) Advisory Committee. He is also dedicated to innovation, serving as an advisor to startup companies and a judge for the Wendy Schmidt Ocean Health XPRIZE.

**LaVerne E. Ragster, Ph.D., University of the Virgin Islands**

Dr. LaVerne Ragster is a retired Professor of Marine Biology and President Emerita of the University of the Virgin Islands. She has conducted research and training in the areas of algal physiology and natural resource management, presented and published in the areas of plant physiology, natural resource management and training, and obtained training and practical experience in institutional and leadership development over a 34 year span. Her service experience includes participation on the Congressional Black Caucus Brain Trust on Environmental Justice, the National Marine Fisheries Advisory Committee and National Ocean Observing Systems Advisory Committee. Projects in the Eastern Caribbean involved the United Nations Environmental Program and the Organization of Eastern Caribbean States. Service on boards includes the Island Resources Foundation, VI Waste Management Authority and the Caribbean Natural Resources Institute (2010-2015). Current scholarly work at the UVI Caribbean Exploratory (NIMHD) Research Center addresses climate change adaptation and linkages to public health in the Caribbean.

**Tony MacDonald, Monmouth University**

Mr. MacDonald is currently Director of the Urban Coast Institute at Monmouth University. The Institute is a University-based think tank that serves as a forum for addressing key coastal and ocean policy challenges at the state, regional and national level; supporting interdisciplinary science and research that supports coastal and ocean decision-making and a better informed public; and, builds on the University’s emerging strengths in environmental, and watershed management and socio-economic studies related to coasts and oceans. Previously, he was the Executive Director of the Coastal States Organization, where he influenced Congressional consideration of and funding for important coastal and marine legislation and regulations, as well as influenced national policy through coordination of state comments on the report of the U.S. Commission on Ocean Policy and the President’s U.S. Ocean Action Plan. Mr. Macdonald also represented state interests on the Department of Transportation’s Interagency Task Force on the Future of the Marine Transportation System, and worked to develop a policy framework for offshore marine aquaculture. Mr. Macdonald also worked as Special Counsel and Director of Environmental Affairs for the American Association of Port Authorities. Mr. Macdonald holds a Juris Doctor from Fordham University School of Law.

**Chris Ostrander, University of Hawaii at Manoa**

Mr. Ostrander serves as Assistant Dean at the University of Hawaii at Manoa’s School of Ocean and Earth Science and Technology (SOEST) where he leads school-wide initiatives focused on international development, philanthropy, public relations, communications, government engagement, and science applications.

He studied cultural geography and armed conflict at the United States Military Academy at West Point, political theory at the Johns Hopkins University, and physical oceanography at the University of Hawaii.   He has spent the past decade in the Pacific, conducting environmental research, developing and leading applied science and research programs, and building collaborative enterprises to better understand the environment and its impact on the safety, economy, and health of coastal populations.

Mr. Ostrander currently serves on the Boards of the IOOS Association, the Pacific Islands Ocean Observing System (PacIOOS), and the Pacific Islands Global Ocean Observing System.  He has served as an advisor to numerous academic, federal, state, and community organizations, including the Hawaii Office of Planning, the Hawaiian Islands Humpback Whale National Marine Sanctuary, the Papahanaumokuakea National Marine Monument, the NOAA Coastal Storms Program, the University of Guam Sea Grant Program, and the Western Pacific Regional Fishery Management Council.

**Doug Vandemark, Ph.D., University of New Hampshire**

Dr. Vandemark currently serves the University of New Hampshire as Research Professor in Earth Sciences and Director of the Ocean Process Analysis Laboratory within the Institute for the Study of Earth. His research activities lie in the study of ocean and atmosphere boundary layer interactions and how to remotely measure near-surface ocean properties including wind, waves, salinity, and mass flux using satellite radar and radiometer systems. He is active in research using numerous NASA, NOAA, and ESA ocean observing satellite sensors and serves as a Principal Investigator on NASA’s Ocean Surface Topography and Ocean Vector Wind Science Teams. He has been involved in coastal ocean observing activities in the Gulf of Maine since 2002, including work with ocean wave and carbon dioxide measurements. He is a senior member of the IEEE, and serves or has served on NASA Physical Oceanography Data Archive advisory group, the strategic planning team for the Northeast Regional Association of Coastal and Ocean Observing Systems (NERACOOS), the Executive Committee for UNH/EOS, and research grant review panels for many agencies. Dr. Vandemark holds a B.Sc. in Physics from Hope College, an M.Sc. in Electrical Engineering from the University of Massachusetts, and a Doctorate in Oceanography from the University of New Hampshire.

**Thomas B. Curtin, Ph.D., University of Washington**

Thomas Curtin is currently a Senior Principal Research Scientist at the Applied Physics Laboratory/UW, a Senior Fellow at the Institute for Adaptive Systems and CEO of Agrowbot Farms. He has served as Chief Scientist at the NATO Undersea Research Centre in La Spezia Italy (2008-11) as Chief Knowledge Officer at the Association for Unmanned Vehicle Systems International (2007-08), as Program Manager at the US Office of Naval Research (ONR) (1984-2007), as Assistant Professor at North Carolina State University (1979-84), and as an oceanographer at the Fisheries Research Institute in Penang, Malaysia (1969-71). At ONR, he managed programs in Physical Oceanography, Arctic Sciences, Ocean Modeling and Prediction and Undersea Autonomous Operations.

Thomas Curtin received the B.S. degree in Physics from Boston College, the M.S. and Ph.D. degrees in Physical Oceanography from Oregon State University and the University of Miami, respectively, and the M.B.A. degree from Massachusetts Institute of Technology. He has been editor of IEEE and AGU special issue journals and an Ocean Engineering Handbook (Springer), has authored 35 peer-reviewed papers, 21 technical reports and 2 patents. He has been Chief Scientist on 25 oceanographic cruises in mid-latitude and equatorial Atlantic and Pacific Oceans, the Arctic Ocean, the Ross Sea in Antarctica, and the South China Sea. He has been awarded the U.S. Navy Meritorious Civilian Service Medal, the U.S. Navy Superior Civilian Service Medal, the U.S. Navy Unit Commendation and the U.S. Coast Guard Arctic Service Medal.

**Casey Moore, Sea-Bird Scientific**

Casey Moore is president of Sea-Bird Scientific, a company which develops tools for monitoring physical and biogeochemical variability in the ocean and Great Lakes. He holds several patents. His career has focused on creating cutting-edge technology to improve ocean observing in both the coastal and global ocean environments. He brings valuable expertise in starting and growing a successful marine technology company.

**Jennifer Hagen, Quileute Indian Tribe**

Jennifer Hagen’s experience includes more than 25 years of working with Washington Coastal Tribes in marine resource management topics. Since 2009, she has worked as a marine biologist for the Department of Natural Resources with the Quileute Tribe in La Push, Washington. She is actively engaged in federal, tribal, state and regional marine resource forums which address technical, policy and legal issues regarding the marine environment. Her experience includes extensive experience managing observing assets collecting biological variables, including conducting research and monitoring activities of off shore and near shore marine resources. She participates on state and federal working groups in support of marine protected areas and local west coast resources management.

**Ex-Officio Member Bios**

**David Legler, NOAA**

Dr. David M. Legler currently serves as a Chief of NOAA’s Climate Observations Division. The Division is leading NOAA’s efforts to develop and sustain a global observing system for climate. Before coming to NOAA, Dr Legler directed the US Climate Variability and Predictability (CLIVAR a program of the World Climate Research Program) Office in Washington, DC for over 10 years where he coordinated scientific and programmatic activities addressing a wide range of topics including the Atlantic Meridional Overturning Circulation (AMOC). Formerly a research associate and Deputy Director of the Center for Ocean-Atmospheric Prediction Studies (COAPS) at Florida State University, he has published on topics such as ocean remote sensing, air-sea interaction, and the impacts of ENSO on North American climate and subsequent effects on US agriculture and water resources. Dr. Legler has served on a number of international committees for CLIVAR, WOCE, Oceanobs09, and GODAE addressing issues of climate, ocean observations and data management, and data assimilation.

**Linda Lillycrop, Army Corps of Engineers (USACE)**

**Brian Melzian, U.S. Environmental Protection Agency (EPA)**