

# **U.S. Coast Guard Oversight of Recognized Organizations**

## **Committee**

### **Mary R. Brooks**

#### **Chair**

Mary R. Brooks, Chair, is Professor Emerita at Dalhousie University's Rowe School of Business, where she has been on the faculty for more than 35 years. Her research focuses on competition policy in liner shipping, port strategic management, and short sea shipping. She has authored more than 25 books and technical reports, more than 25 book chapters, and more than 80 articles in peer-reviewed scholarly journals. She is a founding editor of *Research in Transportation Business & Management*. In 2018, she was recognized for her lifetime contribution to the maritime field with the Onassis Prize in Shipping. From 2015-2017, she chaired the Council of Canadian Academies' assessment of *The Value of Commercial Marine Shipping to Canada*. From 2016-2018, she served as Chair of the Transportation Research Board's Marine Board, and in February 2020 was appointed as a National Associate of the National Academies of Sciences, Engineering, and Medicine. She received her bachelor's degree from McGill University, an M.B.A. in international business from Dalhousie University, and a Ph.D. in Maritime Studies from the University of Wales.

### **Hendrik Bruhns**

#### **Member**

Hendrik Bruhns is the Senior Vice President of Herbert Engineering Corporation. Herbert Engineering Corporation is a full-service owner's design agent that provides support through all phases of vessel acquisition, construction, and operation for both new buildings and conversions. He started his professional career at MEC Marine Equipment & Consulting, working on container cell guides and lashing equipment. Later he joined the Stability Department of Germanischer Lloyd—heading the stability department from 2002-2008—where he was in-charge of plan approval, planning, coordinating and implementing all kinds of projects related to ship safety and environmental protection, particularly intact and damage stability, ballast water management, fuel tank protection and collision strength. He was President of Herbert-ABS Software Solutions LLC from 2009 to 2020. Herbert-ABS Software Solutions LLC is an independent company that provides leading-edge stability, load management and emergency response software solutions for the marine and offshore industries. He has been a member of the German delegation for numerous committees at International Maritime Organization (IMO) and has chaired IMO working groups and coordinated correspondence groups. He was a member of the IMO Working Group on Subdivision and Damage Stability since 2002 and was the Chairman of the IMO/SLF Working Group on Subdivision and Damage Stability until 2012. He holds an M.S. in Naval Architecture from University of Hamburg.

## **James C. Card, USCG, Ret.**

### **Member**

VADM James C. Card is a former Vice Commandant for the U.S. Coast Guard, before retiring in 2000. Since 2006, he has worked as a maritime consultant. From 2000 to 2006, he was Senior Vice President and Chief Technology Officer at the American Bureau of Shipping, where he was responsible for overall management of global technology, research, and rule development for ships and offshore facilities. He served for 36 years in the U.S. Coast Guard in a career that included the positions as Vice Commandant, Commander of the Pacific Area, and Assistant Commandant for Marine Safety, Security and Environmental Protection, and where he led many United States Delegations to the International Maritime Organization. He is currently on the Independent Appeal Board for the International Association of Classification Societies and the Board of Directors of AET (formerly American Eagle Tankers). He was a member of the National Academies Resilient America Roundtable, past Chair and member of the Marine Board, and National Associate of the National Academies of Sciences, Engineering, and Medicine. He has authored many papers on marine safety, environmental protection, and concepts for tankers and human factors in marine operations. His awards include The Rear Admiral Halert C. Shepherd Award from the Chamber of Shipping of America for achievement in merchant marine safety, the Vice Admiral Jerry Land Medal from SNAME for outstanding accomplishment in the marine field, and the Roy Wilkins service award from the NAACP. His military awards include the Department of Transportation Distinguished Service Medal and the Coast Guard Distinguished Service Medal. He earned a bachelor's degree in marine engineering and mechanical engineering from the U.S. Coast Guard Academy and a master's degree in naval architecture and mechanical engineering from the Massachusetts Institute of Technology. He is also a 1986 graduate of the Industrial College of the Armed Forces.

## **Victoria Dlugokecki**

### **Member**

Victoria Dlugokecki, P.E. is an independent engineering and management consultant with more than 30 years of ship design and construction experience, providing design, analysis, and management support services to commercial clients and government agencies in the maritime field. Her specialties are pre-contract, post-contract, and life-cycle engineering and management services in the following areas: vessel arrangements, hull form design and analysis, stability and weights, structural analysis and design, feasibility studies, classification and regulatory body liaison, ship specification development and compliance, technical drawing review, test program support, build strategy development, program and project management, quality management systems and process improvement, and proposal development. Prior to becoming a consultant in 2003, she was a senior supervisor at NASSCO in the Initial Design and Naval Architecture Department, and an engineer at ABS, working on rule development and quality assurance. She started her career at C. R. Cushing and Co., Inc., where she was able to participate in all aspects of engineering design for various types of commercial and military vessels. She has participated in several successful National Shipbuilding Research Program projects focusing on Design for Producibility, Design for Maintainability, Welding and Distortion, Modular Design and Knowledge Management. She holds a B.S. degree in naval architecture and marine engineering from the Webb Institute of Naval Architecture, and an M.S. from the Ocean Systems Management Program at the Massachusetts Institute of Technology.

# Donald Liu

## Member

Donald Liu, NAE, retired as the Executive Vice President and Chief Technology Officer for the American Bureau of Shipping (ABS) after a 38-year career. His research and interests have focused on finite element structural applications, ship structural dynamics, hull loading, structural stability, and probabilistic methods of structural analysis. He has been an active participant in key national and international organizations that are concerned with ship structures research, development and design. He served as the ABS representative on the interagency Ship Structures Committee, and member of the Standing Committees of the International Ship and Offshore Structures Congress and the Symposia on Practical Design of Ships and Mobile Units. He served as a member of the NRC Committee on the Oil Pollution Act of 1990 Implementation Review, a member of the TRB Committee on Naval Engineering in The 21st Century, a member of the NAE/NRC Committee on Best Available and Safest Technologies for Offshore Oil and Gas Operations: Options for Implementation, and a member of the TRB Committee to Revise and Update U. S. Coast Guard Ship Stability Regulations. He has served as a member of TRB's Marine Board. He has received numerous awards including the Sea Trade "Safety at Sea" award in recognition of his role in developing the ABS SafeHull system; the Rear Admiral Halert C. Shephard Award from the Chamber of Shipping of America in recognition of his achievements in promoting merchant marine safety; and the United States Coast Guard Meritorious Public Service Award in recognition of his contributions to marine safety. He was elected to the U.S. National Academy of Engineering in 2011, and is a Fellow of the Society of Naval Architects and Marine Engineers. He co-authored the Society of Naval Architects and Marine Engineers book Strength of Ships and Ocean Structures. He was also the recipient of the David W. Taylor Medal from the Society of Naval Architects and Marine Engineers and the Gibbs Brother Medal from the National Academy of Sciences for outstanding contributions in the fields of naval architecture and marine engineering. He received a B.S. degree from the U.S. Merchant Marine Academy, B.S. and M.S. degrees in naval architecture and marine engineering from MIT, and a Ph.D in mechanical engineering from the University of Arizona.

## **Kyle McAvoy**

### **Member**

CAPT Kyle McAvoy, U.S. Coast Guard (retired) is a marine safety expert at Robson Forensic, Inc., a company that offers consulting services and technical expertise across multiple engineering sectors. He has more than 26 years of experience in all aspects of ship inspections and marine incident investigations. He has expertise in forensic investigations that involve the commercial and recreational use of our inland, coastal, and international waterways and shorelines. With the U.S. Coast Guard's Marine Safety and Prevention programs, his experience included inspections of all types of commercial ships, the investigation of both major and minor maritime accidents, the review and approval of engineering proposals involving ship construction or modifications, and the development of national policies and procedures. He has been honored with several distinguished Coast Guard awards, including a Legion of Merit, two Meritorious Service Medals, and a Department of Homeland Security Secretary's Gold Medal. He has been published in Coast Guard periodicals and presented in various forums on Coast Guard regulatory compliance issues. He is a member of the Society of Naval Architects and Marine Engineers. He earned master's degrees in naval architecture and marine engineering and in manufacturing engineering from the University of Michigan.

## **R. Keith Michel**

### **Member**

R. Keith Michel, NAE, is president of Webb Institute. Prior to this appointment in 2013, he worked for the naval architecture firm Herbert Engineering Company (HEC) for 38 years, serving as President and Chairman of the Board. At HEC he worked on the design, specification development, and contract negotiations for containerships, bulk carriers, and tankers. He has served on numerous industry advisory groups developing guidelines for alternative tanker designs, including groups advising the International Maritime Organization (IMO) and the U.S. Coast Guard, and served as chair of the IMO's BLG committee tasked with developing regulations concerning the subdivision of tankers, including criteria for the acceptance of alternative designs to double-hull tankers. His work has included development of methodology, vessel models, and oil outflow analysis. He was a project engineer for the U.S. Coast Guard report on oil outflow analysis for double-hull and hybrid tanker arrangements, which was part of the U.S. Department of Transportation's technical report on the Oil Pollution Act of 1990 to Congress. He has also worked on the development of salvage software used by the U.S. and Canadian Coast Guards, the U.S. Navy, the National Transportation Safety Board, the Maritime Administration, the American Bureau of Shipping, Lloyd's, and numerous oil and shipping companies. He was Chair of TRB's Marine Board from 2002 through 2004 and has served on several NRC committees. In 2011, he was awarded the W. Selkirk Owen Award for distinguished service by the Alumni Association of the Webb Institute. He is a past-president of the Society of Naval Architects and Marine Engineers (SNAME). In 2002, he was the recipient of SNAME's highest award, the David W. Taylor Medal. He is a Fellow and Honorary Member of SNAME, a National Associate of NASEM, and past Chair of the Webb Institute Board of Trustees. In 2014, he was elected to the National Academy of Engineering. He holds a B.S. degree in naval architecture and marine engineering from the Webb Institute of Naval Architecture.

## **William H. Moore**

### **Member**

William H. Moore is Senior Vice President and Global Loss Prevention Director at the Shipowners Claims Bureau, Inc., Managers of the American Club, which is a protection and indemnity insurance company that provides coverage to ship owners and charterers against most third-party liabilities associated with vessels in commercial operations. In his 17 years at American Club, he has developed an expertise in the creation and implementation of loss prevention initiatives to assist ship owners in the reduction of maritime risks and incidents. Prior to joining the firm in 2003, he worked for four years at Gard Services A/S in Norway as a Manager of Loss Prevention & Risk Control. From 1994 to 1999, he worked at the American Bureau of Shipping as a Senior Consultant, in Research and Development. He is former Chairman of the IMO's Joint Maritime Safety Committee & Marine Environmental Protection Committee's Working Group on the Human Element. He holds a Dr.Eng. in naval architecture and offshore engineering from the University of California, Berkeley, an M.S. in ocean systems management from the Massachusetts Institute of Technology, and a B.A. in statistics from the University of California, Berkeley.

## **Kirsi K. Tikka**

### **Member**

Kirsi Tikka, NAE, is a Maritime Advisor and an Independent Non-Executive Director at Pacific Basin Shipping Limited and Ardmore Shipping Corporation. Pacific Basin Shipping Limited is a maritime transport company engaged in international dry bulk shipping, and Ardmore Shipping Corporation is an independent product and chemical tanker company that provides shipping services. From September 2001 until July 2019, she worked at the American Bureau of Shipping where she held the position of Executive Vice President and Senior Maritime Advisor. From 1996 to 2001, she was professor of Naval Architecture at the Webb Institute of Naval Architecture. Previously, she worked as a naval architect, operations planner, and analyst for Chevron. Her expertise and interests span many aspects of shipping and offshore oil and gas, including reducing and monitoring oil discharge from tankers and ships, regulatory processes, and decarbonization. She is a Fellow of both the Society of Naval Architects and Marine Engineers (SNAME) and the Royal Institution of Naval Architects. In 2012, she was awarded SNAME's David W. Taylor Medal. She was awarded an honorary doctorate of science by the Webb Institute in 2018. She is a member of the National Academy of Engineering, and a member of the U.K. Women in Maritime Task Force. She chaired the Committee for Evaluating Double Hull Tanker Design Alternatives (2001) and served as a member of the Committee on Oil Pollution Act of 1990 Implementation Review (1998) and as a member of the Special Nominating Committee on International Member Diversity (2019). She holds a Ph.D. in naval architecture and offshore engineering and a master's degree in naval architecture and offshore engineering from the University of California, Berkeley. She also holds a master's degree in mechanical engineering, solid mechanics, and naval architecture from the University of Technology, Helsinki.

**Mark Hutchins**

**Staff Officer**