5th Arctic Shipping Best Practice Information Forum meeting Speakers and bios

NAME AFFILIATION

SESSION 1

Dr. Vitaly Klyuev Director, Department of the State Policy for Maritime and Inland Waterways Transport, Ministry of Transport of the Russian Federation

Educated at the Far-Eastern High Engineering Maritime College and Far-Eastern State University, Vladivostok, Russia, Vitaly Kluyev holds a doctorate degree on transport. He was a senior lecturer in radio-navigation equipment and e-navigation at the Far-Eastern State Maritime Academy, Vladivostok, Russia, in 1985.

Dr. Kluyev has also spent time at sea starting as an able seaman and deck officer on seagoing vessels, including passenger ships, a dry cargo carrier, a timber carrier, a reefer ship and a container vessel. He was also a trainer aboard a training vessel.

In 1999 Vitaly Kluyev was appointed as Head of the Asia-Pacific Maritime Information and Coordination Centre before joining the Ministry of Transport of the Russian Federation, Moscow in 2006. In his current position as Director of the Department of the State Policy for Maritime and Inland Waterways Transport Dr. Klyuev is responsible for, inter alia, development of relevant national legislation and policy in the field of maritime safety, security, bilateral and multilateral relations on maritime and inland waterways transport issues and coordination of IMO activities.

Mr. Sergey Tolmachev Forum Chair

Sergey Tolmachev obtained the bachelor and master's degrees with distinction in international relations at the Saint Petersburg State University and later the bachelor's degree in international and maritime law at the International Institute of Economics and Law in Moscow. He began his career in early 2002 at the Port Authority of Saint Petersburg, moving to Russian Maritime Register of Shipping in late 2003 where he started as expert of the survey department and by 2013 reached the position of the Head of the International Affairs Department. As from mid 2017 he has been holding the post of the counsellor in the Mission of the Russian Federation to the IMO.

Mr. Peter Oppenheimer Co-chair of PAME's Shipping Expert Group

Peter Oppenheimer, Chief of the International Section of NOAA's Office of General Counsel since 2006, oversees an office that provides legal counsel to NOAA and other federal agencies — including the Department of State, the Department of the Interior, the Environmental Protection Agency, and the Office of the U.S. Trade Representative — on international environmental and oceans law, particularly the Law of the Sea Convention. Mr. Oppenheimer has participated in the negotiation, amendment or implementation of numerous international agreements that address vessel pollution, shipwrecks, ocean dumping, seabirds, and marine scientific research, among others. He is the principal legal advisor on the U.S. delegation to the Arctic Council's Working Group on the Protection of the Arctic Marine Environment (PAME), serves as the

co-chair of PAME's Shipping Expert Group, and was previously the U.S. head of delegation to the Arctic Council's Task Force on Arctic Marine Cooperation (2015-2019). Mr. Oppenheimer graduated in 1992 with joint degrees from the Yale Law School (J.D.) and Tuft University's Fletcher School of Law and Diplomacy (M.A. in law and diplomacy). He received his B.A. summa cum laude from Yale University in 1986. Following college, he was awarded a fellowship from the Federal Republic of Germany to study at the Ludwig Maximilian University in Munich (1986-1987).

Mr. Drummond Fraser Co-chair of PAME's Shipping Expert Group

Mr. Fraser is currently a Senior Policy Advisor in the Legislative, Regulatory and International Affairs branch of Transport Canada, Marine Safety and Security. He joined Transport Canada in 2009 where he remains responsible for a variety of domestic and international Arctic shipping efforts, including Canada's implementation of the Polar Code, and co-chairing PAME's Shipping Expert Group. Mr. Fraser holds an undergraduate degree in International Relations and a Graduate degree in Marine Management. Mr. Fraser is also a graduate of the International Foundation for the Law of the Sea's Summer Academy in Hamburg, Germany.

Mr. Michael Kingston Michael Kingston Associates, Special Advisor to PAME

Originally from County Cork, Ireland, Mr. Kingston, is Managing Director of Michael Kingston Associates. He has been working with the Arctic Council's Protection of the Arctic Marine Environment Working Group (PAME) in the establishment of the Arctic Shipping Best Practices Information Forum, originally presenting the concept in Malmo Sweden in August 2015 at the World Maritime University's Arctic Conference jointly organised by the IMO and PAME. He is a London-based lawyer who represented the International Union of Marine Insurance at the IMO on the finalisation of the Polar Code. Michael also works as an IMO Consultant on Polar issues and fishing vessel safety / IUU fishing. Further information - www.michaelkingston.org

Mr. Hjalti Hreinsson PAME Secretariat

Hjalti is a project manager for the PAME Secretariat. He has a B.A. degree in media studies and an M.A. degree from the University of Akureyri in Polar Law. His background includes extensive work in journalism and media-related work. He has worked for PAME since 2014. Hjalti is 37 years old and is based in Akureyri, Iceland.

Dr. Heike Deggim Director, Maritime Safety Division, IMO

Dr. Heike Deggim, a German national, joined the International Maritime Organization (IMO), the UN specialized agency responsible for the safety and security of shipping and the prevention of marine and atmospheric pollution by ships, in 1993. She is now the Director of the Maritime Safety Division (MSD) and in that position is also acting as the Secretary of the Maritime Safety Committee, IMO's senior technical body for ship safety and security related matters. She is also the IMO representative at the Arctic Council. Prior to her career at IMO, Heike worked as R&D engineer in the German naval shipbuilding industry, followed by several years as Senior Researcher at the Shipbuilding Faculty of Rostock University, resulting in a PhD in fishing technology; and later in various positions in the German Maritime Administration dealing among other things with tonnage measurement of ships and issuing of Tonnage Certificates. Heike graduated in 1983 in Germany with a Master's degree in marine engineering from Rostock University. She is a member of the Royal Institution of Naval Architects (RINA).

Ms. Turid Stemre

Director IMO Affairs, Norwegian Maritime Authority

Ms. Turid Stemre is the director of IMO affairs in the Norwegian Maritime Authority and responsible for Norway work towards IMO on issues related to safety and security. She graduated as a naval architect in 1977 and has worked in various capacities in NMA more or less since then. She has attended IMO meetings since 1992 and is currently the Chair of the sub-committee on Ship Design and Construction. She is head of delegation for Norway to MSC and some of the sub-committees and she also attend Assembly and Council. Turid also worked towards the development of the Polar Code.

Mr. Nikolay Monko

Acting Head of the Northern Sea Route Administration, the Russian Federation

Nikolay Monko graduated from Higher Marine Engineering College (now Admiral Makarov State University of Maritime and Inland Shipping). He began his work as engineer-hydrographer in Tiksi Hydrobase (the Republic of Sakha, or Yakutia) in 1981. In 1994, Nikolay Monko started to work as chief engineer in Tiksi Hydrobase. From 1997 woks in Northern Sea Route Administration Ministry of Transport the Russian Federation. From 2004 became Head of Northern Sea Route Administration — (Department of Federal Agency of Maritime and River Transport).

From 2013 woks in Federal state Institution "The Northern Sea Route Administration" – Deputy Head, First Deputy Head, from 2016.11.29 - Acting Head of the NSR Administration.

Nikolay Monko participated in several hydrographic expedition in Arctic. Now his area of responsibility is safety of navigation, administrative regulation in the Northern Sea Route.

Mr. Neil Roberts

Head of Marine and Aviation, Lloyd's Market Association

Neil Roberts has worked in the London insurance market since 1985. He is Head of Marine and Aviation for the Lloyd's Market Association and involved the Joint Hull Committee in the development of the Polar Code. The JHC maintains a specific sub-committee which monitors ice areas.

He acts as Lloyd's market liaison with the wider maritime services community, at both commercial and government levels, on technical issues and on maritime security. In addition, he is a member of the IUMI Policy Forum and attends IMO on specific issues.

SESSION 3

Mr. Yury Malyshev

Deputy Head, Marine Rescue Coordination Center of the

Marine Rescue Service of the Russian Federation

Yury Malyshev is the Deputy Head of Main MRCC in Moscow, which is a responsibility for maritime search and rescue in Russian Federation. He graduated Archangelsk Marine College and Murmansk State Technical University with a navigation degree. His career has started in 1996 as a deck officer. He has

experience of working aboard fishing ship and merchant fleet up to Chief Mate License. From 2015 started to work in the Search and Rescue authorities. He participating in the Emergency Prevention, Preparedness and Response working group (EPPR) of the Arctic Council since 2017.

Mr. Benjamin Strong Chair of EPPR Search and Rescue Expert Group

Benjamin Strong assumed the duties as Director of the U.S. Coast Guard's Automated Mutual Assistance Vessel Rescue (AMVER) System on March 7, 2005. Mr. Strong is responsible for the overall direction, management, planning, coordination and administration of the Coast Guard's AMVER worldwide search and rescue system involving more than 20,000 commercial ships from hundreds of nations. He oversees the AMVER awards program which recognizes more than 7,000 ships annually for voluntarily making themselves available to assist in search and rescue cases. Mr. Strong is also responsible for marketing the AMVER program to the media, international government and commercial entities. Mr. Strong is a member of the U.S. delegation to the Emergency Prevention, Preparedness and Response working group of the Arctic Council.

Mr. Strong is a career civil servant with various assignments in Federal government. Mr. Strong served as the Mass Rescue Program Manager in the U.S. Coast Guard office of Search and Rescue, Washington, DC. Prior to working for the Coast Guard Mr. Strong served as a Program Specialist in the Federal Emergency Management Agency's (FEMA) Office of Urban Search and Rescue. While at FEMA he deployed to several national incidents including the World Trade Center attack on Sept. 11, 2001 and the Space Shuttle Challenger crash in 2003. Mr. Strong also served as a professional paramedic in the Prince George's County, Maryland Fire Department.

Mr. Strong is a graduate of the University of Maryland, Baltimore County where he earned both a Bachelor and Masters of Science Degree in Emergency Health Services Management. Mr. Strong is a Senior Fellow with the Excellence in Government Partnership for Public Service. Mr. Strong served in the U.S. Air Force from 1987-1991. His personal awards include the Coast Guard Arctic Service Medal, Coast Guard Presidential Unit Citation, the Federal Emergency Management Agency Director's Award, a Prince George's County Fire Department Unit Citation for assisting in the rescue of three children from a house fire and a U.S. Air Force Good Conduct Medal. Mr. Strong is also the recipient of the Medal for Commonwealth in the Name of Rescue presented by the Ministry of the Russian Federation for Civil Defense, Emergencies, and the Elimination of Consequences of Natural Disasters.

Mr. Steve Thompson

Chair, Combined Operations Working Group - Arctic Coast Guard Forum

Steve Thompson is the Superintendent, Maritime Search and Rescue for the Canadian Coast Guard, Arctic Region. Steve has ten years of experience working with the Coast Guard in both seagoing and shore-based capacities. He was most recently responsible for the development of the Coast Guard's first Arctic Search and Rescue Station, located in Rankin Inlet, NU. Prior to this, as a Senior Analyst, Strategic Business Management, he provided senior leadership with strategic advice and operational recommendations related to program delivery and improvement. Prior to joining the Coast Guard, Steve held various positions within Transport Canada, the Canada Border Services Agency, and as an independent consultant. Steve holds a Bachelor of Science from Western University, a Master of Infrastructure Protection and International Security from Carleton University and a Master of Business Administration —

Operations Management from Wilfrid Laurier University. He also holds a Professional in Critical Infrastructure Protection designation from the Critical Infrastructure Institute. Steve currently resides in Ontario with his spouse and dog.

SESSION 4

Capt. Vasily Ilyin

Deputy Director for Safety of Navigation of the Russian Federation Federal State Unitary Enterprise - 'Rosmorport', Arkhangelsk Branch

Vasily Ilin was born in 1967 and growing up in Solombala – the port area of Arkhangelsk. He graduated the navigation faculty of Admiral Makarov State Maritime Academy in 1992 and began his career as a deck officer in the Northern Shipping Company. He has experience of worldwide merchant fleet in different shipping companies including navigation in Arctic up to Master License. From 2008 started to work in Rosmorport as Marine Superintendent and from 2015 as Deputy Director, responsible for arranging and operating icebreaking in White Sea, Ice Pilotage in Russian Arctic and also has a duty of DPA for the fleet of Arkhangelsk branch (icebreakers, dredgers, tugs, pilot and special purpose vessels).

Capt. Duke Snider

CEO of Martech Polar

Captain David (Duke) Snider is the CEO and Principal Consultant of Martech Polar Consulting Ltd, a privately-owned company providing global ice navigation services and support for polar shipping, ice navigation, polar research, expedition logistics support and ice related consulting services. Martech Polar provides Ice Navigators on cargo, research, cruise and expedition ships and private yachts in ice covered waters worldwide. Martech Polar is heavily involved in assisting owners and operators to meet Polar Code requirements through completion of Operational Assessments and Polar Waters Operations Manuals. Martech Polar has been recently recognized by International Transport News Maritime and Shipping Awards 2018 as "Best Ice Pilotage & Navigation Specialists — North America" and by CV Magazine's Canadian Business Awards 2019 as "Best Polar Ice Navigation & Pilotage Specialists 2019".

Captain Snider is a Master Mariner with over 40 years at sea, operating many vessels in a broad variety of ice regimes in Arctic and Antarctic Polar Regions, the Baltic, Great Lakes and Eastern North American waters. He has served onboard Naval, Commercial and Coast Guard Vessels. He retired from Canadian Coast Guard service as Regional Director Fleet Western Region in 2013 to run his own company. He remains active at sea, holding both Polar Waters Advanced Certificate of Proficiency and The Nautical Institute Ice Navigator Level 2 Certification. As a marine consultant he has extensive experience in authoring and contributing to numerous shipping feasibility studies, as expert witness in marine insurance arbitrations and cases as well as marine industry safety and risk reviews.

As an Ice Navigator Captain Snider has been the author of and contributed to many ice regime shipping feasibility studies as well as numerous papers on ice navigation. The second edition of Captain Snider's authoritative book *Polar Ship Operations* was published by the Nautical Institute in 2018 is soon to be released in a Spanish edition. He holds a Bachelor of Maritime Studies degree granted by Memorial University of Newfoundland in 2006 and is a Fellow of the Royal Geographical Society. He was awarded

the Queen's Diamond Jubilee medal in 2011 for his many years as a member of The Nautical Institute dedicated to improving safety at sea, with particular focus on improving standards of ice navigation. His honours also include the Canadian Coast Guard Exemplary Service Medal and the United States Coast Guard Antarctic Service Medal. He was recently awarded the Maritime Museum of British Columbia Beaver Medal for outstanding achievements in polar navigation including roles in promoting internationally recognized ice navigation qualifications.

Captain Snider is the Past President of The Nautical Institute and now sits on the Institutes Executive Board. He is Chair of the Ice Navigator Working Group which is tasked with administering The Nautical Institute's global standard for Ice Navigator Training and Certification Standard. He is a member of The Nautical Institute's NGO delegation to IMO on matters of ice and polar navigation.

Capt. Mattias Pettersson Master, Icebreaker Oden

Born 1969 - Swedish citizen / resident

2005- To present, Master on Icebreaker ODEN

2000-2005: Chief Officer on Swedish Icebreaker ODEN with the exception winter 2001-2002 when Chief Officer on Swedish Icebreaker ATLE.

2000-2001: Responsible for the implementation of the ISM on the Swedish Icebreakers.

1998-2000: Employed by Nordic Oriental Shipmanagement as Chief Officer (Worked on Frontline and ICB Suezmax, VLCC tankers and Neste/Fortum product tankers.)

1996-1997: Employed by Nordic Oriental Ship Management as 2nd Officer

1995: Graduated from Master mariner program (B.Naut.Sc.) at Kalmar Merchant Marine Academy.

SESSION 5

	Deputy Director for Maritime Safety of the Russian Federation
Capt. Nikolay Zelenkov	Federal State Unitary Enterprise "Rosmorport", Murmansk
	Branch

Born in 1958 and working in Marine Industry since 1977, became deckofficer in 1981 and Master in 1998. Since 2004 started as pilot in "Rosmorport" and promoted to Head of Murmansk branch Pilot Service in 2014.

Deputy Director for Navigation Safety in Murmansk branch of "Rosmorport" Federal State Unitary Enterprise since 2017.

Dr. Jennifer L. Mercer Office of Polar Programs, National Science Foundation (USA) & Chair, Forum of Arctic Research Operators (FARO)

Dr. Jennifer Mercer is the Section Head of Arctic Sciences at the U.S. National Science Foundation. She also serves as the Chair of the International Forum of Arctic Research Operators, FARO, as well as the U.S. National Point of Contact to FARO. Dr. Mercer has a broad scientific background with extensive field experience in both the Arctic and Antarctica. She has been conducting research and leading or overseeing projects in remote field locations for over two decades with efforts on all seven continents, as well as four

ocean research vessels. Dr. Mercer holds a bachelor's degree in Environmental Physical Science from Black Hills State University in South Dakota, and a doctorate in Earth Sciences from Dartmouth College.

Dr. Åsa Lindgren

Head of Department for the Ship-Based Research Support, Swedish Polar Research Secretariat

Dr. Åsa Lindgren is head of the Ship-based Research Support at the Swedish Polar Research Secretariat and has a scientific background in biology and Arctic ecosystems. She has been involved in several expeditions both to Antarctica and many regions in the Arctic. Since 2011, Åsa is employed at the Swedish Polar Research Secretariat which is a governmental organization with the mission to promote and support Swedish polar research. As head of the Ship-based research support, the main marine platform is the Swedish Icebreaker Oden, which is one of the most capable research icebreakers in the world.

Mr. Åke Rohlen

Chairman of Arctic Marine Solutions AB, Sweden

Arctic Marine Solutions AB is a Swedish company specialising in the analysis and execution of high Arctic marine operations. Its client base consists of major oil companies, research organizations as well as ports, shipping companies and other clients. Currently Arctic Marine Solutions is planning/executing the vessel and Ice Management part of the ArcOP expedition in August/September on the Lomonosov Ridge in the Arctic.

- Åke Rohlén has been in commercial and operational positions in shipping since mid 1980's.
- Worked for the Stena Group between 1989 and 2006 in Sweden, USA, Singapore, and Russia. The last four years as Vice President & Head of Stena Bulk's office in Moscow, Russia.
- 2007-2008 he worked for Summa Group in Moscow, Russia
- Between 2008 and 2011 he worked for Rederi AB TransAtlantic with final position as V.P. Head of Icebreaking & Offshore Division that operated a fleet of icebreaking offshore vessels and the Swedish state icebreaking fleet.
- Since 2012 Chairman & Partner in Arctic Marine Solutions AB.

Apart from running Arctic Marine Solutions, Åke Rohlén has devoted a significant effort into promoting responsible operations in the Arctic region. An effort that contributed to the creation of the Arctic Shipping Best Practice Information Forum (under PAME, Arctic Council).

SESSION 6

Mr. Kyle Hurst

Director Maritime Safety and Security Services, IRIDIUM

Kyle Hurst is the Director of the Maritime Safety and Security Services for Iridium Communications Inc., the only company that offers truly global satellite communications. Mr. Hurst brings nearly 20 years of experience in the maritime satellite communication sector to Iridium. In this role, Mr. Hurst manages the operation and development of products and services used to protect the lives of seafarers and their vessels globally. He most recently secured International Maritime Organization (IMO) recognition for Iridium to provide GMDSS services, with the system commencing in December 2020. Mr. Hurst has also held several

positions at the Queensland Department of Primary Industries, the Australian Military, and is an ex-mariner who held a commercial marine license.

Dr. Geneviève Béchard Chair of the Arctic Regional Hydrographic Commission

Dr. Geneviève Béchard was appointed Hydrographer General of Canada and Director General for the Canadian Hydrographic Service (CHS) with Fisheries and Oceans Canada in 2018. She joined CHS at an exciting time at the start of a digital transformation. Dr Béchard has 33 years of service with the Canadian government, the last 18 years as an executive with the Canada Centre for Remote Sensing, the Geological Survey of Canada, the Meteorological Service of Canada and the CHS, all science and technology geospatial organizations with activities in the Arctic. Dr. Béchard has a strong international profile with experience in both bilateral collaboration and multilateral fora. She is currently Chair of the International Hydrographic Organization Council, head of delegation for Canada at the IHO Assembly, Chair of the United States — Canada Hydrographic Regional Commission and starting in November 2021, Chair of the Arctic Regional Hydrographic Commission.

Ms. Florence Fetterer

U.S. National Snow & Ice Data Center Liaison to National Oceanic and Atmospheric Administration

Florence Fetterer is with the National Snow and Ice Data Center at the University of Colorado Cooperative Institute for Research in Environmental Sciences (CIRES). With support from NOAA NESDIS NCEI she manages NOAA@NSIDC, where Russian and U.S. sea ice chart data, submarine upward looking sonar ice draft data, and satellite-data-derived ice concentration data reside. With partners in operational centers like the US National Ice Center, NOAA@NSIDC distributes data products that include information on sea ice stage of development as well as sea ice concentration. Often, these products offer researchers greater accuracy and resolution than more commonly used alternatives like satellite algorithm-derived variable maps and fields.

Mr. Jarkko Toivola

Chief Maritime Specialist, Director, Waterways, Head of Maritime Unit Finnish Transport Infrastructure Agency

Born 1959, at present Chief Maritime Specialist, Director, Waterways, and Head of Maritime unit in Finnish Transport Infrastructure Agency (FTIA), the Finnish authority responsible for arranging and operating icebreaking and winter navigation for Finnish ports. Before joining at the present position in FTIA Capt. Toivola worked as the Director/Vice President at Alfons Hakans Ltd, a Finnish Towage company with decades of ice-operations experience from Baltic Sea but also from Arctic regions icemanagement operations.

Previous of that, he held the post of Chief Maritime Specialist and Head of Winter Navigation unit in the Finnish Transport Agency. This was the previous Finish authority responsible for arranging and operating icebreaking and winter navigation for Finnish ports. Capt. Toivola he has served in leading positions in domestic and international maritime and ship-building projects. At the Agency he was in charge of building new DF (Diesel/LNG) icebreaker POLARIS for Finland. He has been also in charge of managing major oil terminals in the Northern Baltic.

Capt. Toivola has sailed on all size vessels year around in the Baltic and international trade, and sailed as a master since 1992 until 2009. He has also worked worldwide as a trials and training master for azimuth thrust vessels including Sakhalin Arctic Offshore, where he also conducted operational side of major ice-management operations.

Mr. Milton Baron

Technical Officer, Maritime Safety Division, IMO

Milton Baron is a Technical Officer in the International Maritime Organization (IMO). He works in the Maritime Training and Human Element section, Maritime Safety Division, dealing training and certification of seafarers and with STWC and STCW-F Conventions. He is currently responsible for the implementation of technical cooperation programmes related to training of seafarers and fishing vessel personnel and in particular with the implementation of the IMO's Polar Code Training Programme.

He commenced his career at IMO in 2004 as a Technical officer in the Maritime Training and Human Element section, where he co-ordinated IMO's work on all matters related to the implementation of the STCW Convention, STCW-F Convention, the human element and the ISM Code. He was responsible also for the IMO model courses.

Before joining IMO, Milton worked for the Colombian Maritime Administration with responsibility for the Colombia implementation of the STCW Convention. During his 8 years with the Agency he held various other posts including Chief Surveyor with responsibility for Navigation. His first career was at sea where he sailed as master on chemical tankers and served on container ships and cargo ships.

Along with his work experience, He has a master's degree from the World Maritime University in Malmo, Sweden, with an emphasis in Shipping Management, and one year of practical training in Ship design and shipbuilding in Yokohama, Japan. He has bachelor's degree in Marine Engineering from the Naval Cadets School in Cartagena, Colombia.

Mr. Hervé Baudu Senior Lecturer in Nautical Science, French Maritime Academy

Professor in Nautical Science, Hervé Baudu sailed for fifteen years in the French Navy, reaching the position of commanding officer. He then taught ship handling at the French Naval College before joining the Marseille center of the French National Maritime College (ENSM), where he teaches maneuvering, navigation and COLREGs. He's in charge of basic and advanced regulatory training on an ice simulator for deck officers of ships operating in polar waters. He was involved in the IMO HTW working group for the writing of the Model Training Courses for the Polar Code, effective in January 2017. He recently embarked on the French Navy's PC5 icebreaker "L'Astrolabe" to join the French scientific base Dumont D'Urville in Antarctica, and last September he reached the North Pole on the PC2 icebreaker "Le Commandant Charcot" of the French cruise company Ponant. He is an expert for polar maritime activities for the French Ministry of Foreign Affairs.

Mr. Sergey Aysinov Director of Professional Development Programmes Institute of Admiral Makarov State University of Maritime and Inland Shipping, Russian Federation

Director of Professional Development Programmes Institute of Admiral Makarov State University of Maritime ad Inland Shipping (St. Petersburg, Russia), head of Makarov Training Centre. Graduate of the radio engineering faculty of Admiral Makarov State Maritime Academy, Ph.D, MBA. Over 30 years of educating experience for specialists of the sea and river fleet, as well as oil and gas industry. Author of publications in scientific journals on the problems of simulator training for maritime industry. Participant in the development and review of the IMO Model Courses on Polar Waters. An active promoter of the use of specialized simulators and distance learning technologies to improve the skills of marine cadets and experienced sea crews. As part of the ITF delegation, participated in the development of the IMO Model Courses on the operation of ships in polar waters, as well as in the correspondence group of the IMO NCSR Subcommittee on expanding the dissemination of the requirements of the International Polar Code for non-SOLAS ships. Expert of the Maritime Safety Committee of the International Trade Union of Transport Workers (ITF) from the Russian Trade Union of Seafarers, member of ITF delegations to the IMO Facilitation Committee, IMO Subcommittee on Navigation, Communications, Search and Rescue, IMO Subcommittee on Human Factors, Training and Watchkeeping.

Mr. Jan Dusik

Sustainable Development Lead, WWF Arctic Programme

Jan Dusík is the lead specialist on sustainable development and governance in the WWF Arctic Programme. Jan has devoted his whole career to the environment, climate change and sustainability. Prior to joining WWF in 2020, he served as UNEP's principal adviser for the Arctic and representative to the Arctic Council in 2018 and 2019. He has worked for the government of the Czech Republic, the European Union and the United Nations Environment Programme (UNEP). He has always advocated for the environment to be on equal footing with economic and social considerations in decision-making. With an educational background in law and environmental change, he looks for ways to balance the need for continuity with disrupting unsustainable, business-as-usual approaches and pursuing innovative solutions.

Dr. Sian Prior Shipping Advisor, Antarctic and Southern Ocean Coalition

Dr Sian Prior is a marine science and policy specialist focused on ocean governance and ecosystem-based management in relationship to shipping and offshore industries, marine protected areas and fisheries management. She provides advice to a number of marine environmental group and coalitions including the Antarctic & Southern Ocean Coalition (ASOC) where she focuses on Antarctic shipping and the development of the Polar Code and measures for non-SOLAS vessels. Dr Prior has 30 years of experience working for the non-governmental sector — both environmental and commercial and has been seconded to government positions. She participates in a range of regional frameworks and international UN meetings, including the International Maritime Organization.

Capt. Ed Page Executive Director, Marine Exchange of Alaska

Captain Ed Page's maritime career has spanned over 50 years in the Coast Guard and marine industry, 32 of which have been in Alaska. He established the non-profit Marine Exchange of Alaska in 2001 and developed an extensive AIS network of over 130 AIS (Automatic Identification System) stations and a Vessel Compliance Monitoring and Response System for Alaska to enhance maritime safety and environmental protection. The Marine Exchange currently is operating a sea traffic management service in a region encompassing over 1.5 million square miles of Alaska waters. The vessel tracking system is used by the Coast Guard, NOAA, State of Alaska agencies and the maritime industry to aid safe and efficient maritime operations.

A 1972 graduate of the U.S. Coast Guard Academy, Captain Page sailed on Coast Guard vessels sailing Atlantic, Pacific and Alaska waters followed by assignments in marine safety, environmental protection and search and rescue. Later in his Coast Guard career he held positions as Chief of Environmental Protection during the Exxon Valdez oil spill response, as Captain of the Port for Los Angeles-Long Beach and Chief of Marine Safety and Environmental Protection for Coast Guard Pacific Area.

Ed is an avid kayaker and sailor and lives in Juneau with his wife Barbara.

Mr. Rob Hindley

Head of Machinery & Structural Design, Aker Arctic

Rob is currently Head of Machinery & Structures at Aker Arctic. His role involves coordinating machinery systems, structural, and deck outfitting disciplines as well as consultancy work supporting the practical application of Arctic technology to new, and often novel, ice-going ships. Previously Rob was Global Principal Specialist for Arctic technology at Lloyd's Register, where he held overall technical authority for ice class, winterization and implementation of the Polar Code. This included an assignment representing IACS at the IMO during the development of the Polar Code. Rob has worked in Canada, the UK, the Middle East, and in South Korea in roles involving ship surveying, classification rule development and consultancy. He is a Chartered Engineer and holds a master's degree in Naval Architecture from Newcastle University. He is currently undertaking postgraduate study on Arctic marine safety at Aalto University.

Mr. James Bond

Director, Polar Research and Ice Class Ships, American Bureau of Shipping

James Bond is the ABS Director of Polar Research & Ice Class Ships. Now based in Ottawa, James is the lead subject matter expert at ABS for Polar Shipping. He oversees the research performed at the ABS Harsh Environment Technology Centre, in St John's, where ABS works collaboratively with Memorial University of Newfoundland. James first's Arctic and "ship in ice" experience occurred in 1983 and from then on his passion for the Arctic and safe shipping in ice was ignited. He was part of the team that created the IACS Unified Requirements for Polar Class Ships in the 1990's. He and Rob Hindley represented IACS at the IMO during the crafting of the Polar Code. Having helped with bringing POLARIS to fruition, James is the ABS champion for its use and sees it as an invaluable tool for voyage planning and situational risk assessment. James was the Chair of the IACS Expert Group on Polar Code for the full duration of the group's mandate and is delivering a presentation today on behalf of IACS.