



ARCTIC DOMAIN
AWARENESS CENTER
A DEPARTMENT OF HOMELAND SECURITY CENTER OF EXCELLENCE

As of 15 March 2021

ADAC's Arctic Challenges, Innovations, & Commerce Expo (Arctic C-ICE): *Expanded Agenda & Event Details*



16-17 March 2021, via Zoom

Introduction and Background

The world's urban centers are well known to be focal points of innovation, entrepreneurship, and technological advancement. They attract creative, diverse, and skilled minds, serving as pools for competition, productivity, and increased economic diversification. In many ways, cities comprise of the fuel for national economies, as their residents are often those that develop and apply the innovative technologies that our economies depend on. However, where does this leave those living in rural and remote locations, such as the Arctic?

The Arctic is 15% of the world's landmass, yet it is home to only 0.05% of the global population. As the United States' door to the Arctic, Alaska reflects this with the lowest population density in the nation. With a land mass of roughly 663,000 square miles (approximately one fifth the size of the entirety of the contiguous United States), Alaska exhibits a population size of only 732,000. These numbers equate to approximately 1.3 Alaskan residents per square mile. Additionally, 80% of Alaska's communities are not located on the road system and are only accessible via marine or aviation transportation. As such, when compared to the vast interconnectedness of the nation's cities, the Arctic region exhibits numerous complexities when it comes to innovation, entrepreneurship, and the development of new technologies. Most notably, Alaska's remoteness, and its absence of economies of scale, produce significant challenges when it comes to entrance into the business and commercial sectors.

At the community level, due to the reliance on marine and air transportation in many of Alaska's communities, the cost of importing goods and services can be extraordinarily high. Correspondingly, it is exceedingly costly to export hard goods as well, minimizing the prospects of growth and profitability within the private business and industry realms. Compounding matters is the extremely high cost of living in Alaska's rural communities, making it difficult to not only establish business in these regions, but to also attract qualified personnel from other locations. These challenges are exacerbated by a lack of economies of scale, particularly at the community level in Alaska. More specifically, Alaska's remote communities do not have access to national infrastructure, and the corresponding improvements, in the same ways that

many of the nation's "Lower 48" states do. As a result, many communities must expend enormous amounts of human and financial capital in order to establish and maintain much of their own foundational community infrastructure, such as sanitation facilities, ports, energy resources, education, and healthcare.

Government services face the same challenges in the Arctic region, particularly in delivering services that improve safety and security, like the United States Coast Guard (USCG). With a tidal shoreline that measures more than 46,6000 miles (longer than the shorelines of all "lower 48" states combined), and an environment characterized by extreme weather, sparse population densities, and increasing environmental change, the resources required for the USCG to fulfill its immense and perilous mission in the Arctic's maritime domain are increasingly spread thin. As such, while a critical line of effort for the USCG is to "innovate and adapt to promote resilience and prosperity," the time and bandwidth to do so are limited in the Arctic domain.

Despite these challenges, the Arctic region is increasingly recognized as a domain of opportunity for both international business and local entrepreneurs. In particular, as sea ice decline increasingly allows more access to the region's vast energy, mineral, and fishery resources, global interests in these assets are simultaneously intensifying. The Arctic is estimated to hold 13% of the world's remaining undiscovered conventional oil and 30% of the remaining natural gas deposits. On the periphery of the Arctic lies some of the most productive fisheries in the world. Alaskan fishermen in the Bering Sea, for example, produced a combined catch of 1.1 Billion pounds in 2018. Furthermore, international interests in the expanding Arctic sea routes is increasing. As global and local interests intersect, and sometimes, conflict, Arctic nation-states face the challenge of implementing policy aimed at ensuring that economic development is balanced between commercial opportunities and traditional subsistence activities in local communities.

As we look to the future of Alaska's economy, many ask, what's next for Alaska, particularly beyond the extraction model? As the region continues to grapple with the effects of climate change, recognition for the Arctic's immense "blue economy" resources is correspondingly increasing, especially amongst industries seeking environmentally sustainable options to economic development, such as tourism, biotechnology, renewables, shipping, and mariculture. As a result, the Arctic region is ever more characterized as a domain of economic opportunity, competition, and correspondingly, risk. As such, while increased economic development and diversification can translate into increased prosperity of the region, it is important that these opportunities are cultivated in a manner that also fuels the safety, security, and resilience of the Arctic domain and its residents. From a private sector perspective, achieving this mission may include methods that promote local employment opportunities and self-sufficiency, while reducing the amount of economic leakage that is experienced within many Arctic communities. From the vantage point of the public sector, opportunities may lie within the realm of public/private partnerships, in which private entities could utilize innovative means to translate key mission areas into private opportunities, while allowing public entities increased bandwidth to ensure the safety and security of the Arctic domain.

As the Arctic changes, a current gap lies in the connections between commercial and industry interests, innovative and entrepreneurial minds, and existing opportunities in the region. As a result, existing opportunities often fail to be recognized, or are too difficult to find. In response to this gap, the Arctic Domain Awareness Center's (ADAC) Arctic Challenges, Innovations, and Commerce Expo (Arctic CICE) seeks to explore the networks, resources, and infrastructure needed to enable the commercial entrance of Arctic-related products and technologies into the Arctic domain. Drawing from ADAC's vast experience in federally funded operational research and design (R&D), this expo will use an interdisciplinary and collaborative approach to foster conversations around Arctic-centered business pressure points, state-of-the-Arctic-focused R&D, gap analysis of investment and innovation, and the future of business in the region. Participants will be exposed to the latest hardware, software, and people-ware emerging to advance domain awareness, risk mitigation, exploration, Arctic operations, and overall, Arctic security.

Conference Summary

ADAC's Arctic C-ICE will take place virtually over a two-day timeframe, March 16-17, 2021. Day one of the conference will consist of both live and prerecorded panel presentations that will be accessible via online streaming services, as well as interactive platforms. The topics of the first day will provide participants with a foundational understanding of the existing challenges associated with commercializing innovative technologies in the Arctic region, while also highlighting the emerging technologies being developed to tackle such challenges. In particular, the first day of the conference will focus on the topics of scientific exploration, risk mitigation, domain awareness, and the current known barriers to business in the Arctic region. Lastly, the first day of the conference will conclude with a "Solutions Showcase," in which a variety of existing Arctic technologies (both in development and already finalized) will be displayed in a virtual booth format.

Day two of the Arctic C-ICE will delve deeper into the challenges discussed on the first day of conference by exploring the ways in which such challenges can be transformed into opportunities. The second day will begin with plenary discussions regarding the ways in which R&D and entrepreneurship play a role in tackling the challenges of the harsh Arctic domain. These discussions will follow with a group tabletop exercise in which all workshop participants will have the opportunity to participate in a "Strategic Doing" exercise, which teaches people how to form collaborations quickly, direct them towards measurable outcomes, and to make adjustments along the way. Following the "Strategic Doing" exercise, the conference will conclude with a final keynote presentation regarding the future of business in the Arctic and closing remarks.

Online Connecting and Coordinating Instructions

The two-day virtual event will be hosted using Zoom Meetings. The Zoom links and connection instructions will be provided to registered participants via email, and are located on the event's webpage here: https://arcticdomainawarenesscenter.org/EventHub_C-ICE.

Agenda & Details

March 16, Day 1 (All times are listed in Alaska Time...Eastern time zone minus 4 hours)*

0730-0810: Welcome & Introduction to the Event

Presented by the ADAC Leadership Team

0810-0850: Keynote #1- Arctic Innovation and Technology

Presented by Mead Treadwell - *Co-Chair*, The Wilson Center Polar Institute, *Lieutenant Governor* of Alaska (2010-14), *Chair*, US Arctic Research Commission (2006-2010), *Chair/CEO* Qilak LNG, *Vice Chair*, Alaska, A2A Rail, *Chair*, Iridium Polar Advisory Board

For centuries, businesses considered the Arctic inaccessible. Faced with expansive sea ice, frigid temperatures, and unknown threats, business analysts saw more risk than reward. However, today, as a result of immense innovation and creativity, particularly in the realms of science and technology, much of what was once perceived as challenges in the Arctic domain, have been transformed into opportunities. The "Arctic Innovation and Technology" keynote will challenge your past perceptions of the region, highlight the forthcoming business opportunities, and introduce you to the technology that will drive your admission into the Arctic.

0900-0930: Track #1 - Exploration

History is filled with mythology about the Arctic. The Vikings believed the aurora borealis were incantations of their gods, the Nepalese told tales of the infamous Yeti, and even the ancient Greeks had their story of Hyperborea, which described the Arctic as a tropical paradise. The reality is that the aurora, while beautiful, can interrupt radio and radar signals, making Arctic communication difficult. Instead of Yeti, Polar Bears are skilled hunters who typically inhabit the ice and will attack humans, requiring training and caution by personnel. And the lore of a tropical paradise is quickly wiped away as temperatures with a wind chill can reach -70°F.

With these challenges, what then can you or your organization do to seek out opportunities in the Arctic? This track includes presentations on Arctic-capable technology, how information about the Arctic is collected, tools and resources for identifying the path ahead, and a live plenary discussion of the challenges and emerging support systems for those who are ready to explore.

Track & Session Title	Track 1 Session 1: <i>Who's out there?</i>	Track 1 Session 2: <i>Who's out there?</i>	Track 1 Plenary 1: <i>What lies beneath?</i>	Track 1 Plenary 2 : <i>Challenges and Emerging Solutions to Arctic Communications</i>	Track 1 Plenary 3: <i>Marine specific Arctic challenges</i>
Session Type	Prerecorded Video	Prerecorded Video	Live Streaming	Live Streaming	Live Streaming
Topic(s)	An overview presentation of ADAC's Geofencing Project, which is focused on designing, developing, and implementing a web-based geospatial tool in an ArcGIS Online Format to extend Arctic vessel monitoring and alertness.	An overview presentation of ADAC's All Hazards GIS project, which is working with stakeholders to design, develop, and implement a web-based geospatial tool in an ArcGIS Online format.	A presentation on the patented 3D sonar technology developed by Farsounder to reliably detect in-water obstacles and shallows.	A presentation regarding SDR assisted assessment of Arctic RF activity for use in present and future radio management operations.	A presentation on the marine insurance challenges associated with Arctic exposures.
Presenter(s)	Dr. Shawn Butler , Project Principal Investigator, Professor of Computer Sciences at the University of Alaska Anchorage	Dr. Marcus Boyd , Project Principal Investigator at the University of Maryland	Matthew Zimmerman , Executive Vice President of Engineering at FarSounder	The ASRC Federal Team, Bruce Heinrich , Program Director, Maritime Warfare Systems Mike Berenato , Solution Architect, Maritime Warfare Systems, Orest Ukrainsky , Director of Innovation Engineering, Steve Kacenjjar , Senior Scientist, Innovation Engineering, and Steve Specht , Chief	Captain Andrew Kinsey , Senior Marine Risk Consultant at Allianz Risk Consulting LLC

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0930-1000: Track #2 – Risks, Challenges, and Innovative Solutions

Life and work in the Arctic is challenged by the harsh and unforgiving nature of the environment. As such, how do you ensure your employees and business interests are suitably prepared for the environmental challenges they’ll face? This track explores technological solutions (hardware/software) to mitigate the risks associated with traversing the Arctic, presents cutting edge research to address ongoing challenges, and offers a live discussion with commercial marine insurers on their perspective of Arctic shipping risks and benefits.

Track & Session Title	Track 2 Session 1: <i>Reducing risk on the water</i>	Track 2 Session 2: <i>When the worst happens</i>	Track 2 Session 3: <i>Predicting the unpredictable</i>	Track 2 Plenary 1: <i>Insuring business in the Arctic</i>	Track 2 Plenary 2: <i>Sustainable approaches to Arctic challenges</i>
Session Type	Prerecorded Video	Prerecorded Video	Prerecorded Video	Live Streaming	Live Streaming
Topic(s)	A presentation on ADAC’s Arctic Ice Conditions Index (ARCTICE) Project – a project developing an easy-to-understand numeral to communicate ice conditions that are relevant to the capabilities of an individual vessel.	A presentation on cutting edge research emerging in the field of maritime safety as it relates to Arctic maritime spill modeling.	A presentation on ADAC’S HIOMAS Project, an innovative technology developed to simulate and forecast Arctic currents, sea ice, and change.	The risks and benefits of Arctic shipping from the perspectives of commercial marine insurers.	A presentation on Borrum Energy Solutions (BES) Inc., a sustainable engineering firm designing wind solutions for rural areas in Canada.
Presenter(s)	Ms. Kelsey Frazier , ARCTICE Project Supporting Investigator and ADAC Research Associate	Dr. Nancy Kinner , ADAC’s Arctic Maritime Spill Modeling (AMSM), Project Principal Investigator, and Megan Verfaillie , UNH Graduate Student.	Dr. Jinlun Zhang , Principal Investigator of ADAC’s HIOMAS Project from the Polar Science Center at the University of Washington	Isaak Hurst , Founder & Principal Attorney of The International Maritime Group	Odilon Lemieux , President of Borrum Energy Solutions Inc.

1010-1040: Track #3 - Domain (i.e., communications, awareness, risk, etc.)

Many Arctic residents already capitalize on the ocean’s resources for both subsistence and livelihood activities. However, executing these activities has become increasing complicated as climate change induces dynamic regional changes in the form of sea ice depletion, increased ocean acidification, and

shifting food-web dynamics. These changes have the potential to negatively impact the health, wellbeing, and economic stability of the Arctic’s residents. With those impacts in mind, this discussion track brings together a collection of innovative technological solutions to assist businesses in monitoring the extent of their impact on the natural environment, the current state of environmental research and environmental baselines, and highlight the emerging communications technology to ensure you can stay in touch with your team whether on land or at sea.

Track & Session Title	Track 3 Session 1: <i>Innovative marine technologies.</i>	Track 3 Session 2A: <i>The importance of biological baselines</i>	Track 3 Session 2B: <i>The importance of biological baselines</i>	Track 3 Plenary 3: <i>Commercial solutions to the Arctic communication challenge</i>
Session Type	Prerecorded Video	Prerecorded Video	Prerecorded Video	Live Streaming
Topic(s)	A presentation on marine induced polarization methods for the detection of oil in an Arctic marine oil spill, including investigation of oil within and under broken ice fields.	A presentation on the intersection between biological baselines, dispersants, and the food web through the eyes of ADAC’s Arctic Copepods Project team.	A presentation on the intersection between biological baselines, dispersants, and the food web through the eyes of ADAC’s Arctic Mussels Project team.	A highlight of emerging polar communication technologies to ensure reliable contact amongst teams on both land and sea, presented by Iridium Communications Inc.
Presenter(s)	Kari Walker , Supporting Investigator for ADAC’s Marine Induced Polarization Project Team	Dr. Chris Aepli and Dr. David Fields , Co-Principal Investigators for ADAC’s Arctic Copepods Project at Bigelow Laboratories for Ocean Sciences	Dr. Patrick Tomco , Principal Investigator for ADAC’s Arctic Mussels Project, and Professor of Chemistry at the University of Alaska Anchorage	Ken Flowers , VP, Government Relations at Iridium Communications, and/or Charlie Lever , Director, Government Relations, Iridium Communications

1045-1145: Keynote #2 – Building Responsible Partnerships with Rural Alaska

Moderated by Kaare Sikuaq Erickson – Outreach & Engagement Manager for Ukpeaġvik Inupiat Corporation (UIC) in Utqiagvik, Alaska, and a member of the Board of Directors for the Arctic Research Consortium of the United States

Presented by Twyla Aanauraq Thurmond, Native Village of Shishmaref, and Nagruk Harcharek, Ukpeaġvik Inupiat Corporation.

From an outside perspective, business development in Alaska may look very different to those unfamiliar with the dynamics of the State’s business and industry enterprises, particularly when it comes to conducting business in or with Alaska Native Villages. This keynote discussion will delve into the topic of responsible business operation in the Arctic, with a particular emphasis on the importance of engaging and forming collaborative partnerships with Alaska’s rural and Indigenous communities.

Mr. Erickson will lead a panel discussion between Twyla Aanauraq Thurmond, Native Village of Shishmaref, who will present on “Approaching Rural and Indigenous Entities in Alaska: Realistic Aspects of

Ethical Engagement,” and Nagruk Harcharek, who will present on: “What Happens Next? A Discussion on Post-Pandemic Arctic Business.”

1200-1210: Solutions Showcase Technology Overview

1210-1330: Virtual Booths – Solutions Showcase

The Solutions Showcase portion of the conference is designed to increase the visibility of a variety of Arctic technologies, to include ADAC research endeavors and projects. The goal of the showcase is to strengthen connections, collaboration, and partnerships between a diverse range of Arctic innovators, and to explore and/or initiate commercial transition pathways for participating Arctic technologies and research. The event will take a virtual “tradeshow” format, allowing attendees to speak one-on-one with the showcased project teams and organizations through designated Zoom breakout rooms.

Solutions Showcase Virtual Booths	
Booth 1	<p>ADAC’s Arctic Vessel Monitoring, Geofencing & Alert Awareness Project – Hosted by Dr. Shawn Butler *(the Geofencing booth will only be open from 12PM-1PM AKST)</p> <p>The project team is working with stakeholders to design, develop, and implement a web-based geospatial tool in an ArcGIS Online format. Through regular interaction with stakeholders, the project team is identifying critical needs and develop a tool that meets the demand caused by the increased activity in the Arctic domain and provide a tool for comprehensive domain awareness for Arctic operators.</p> <p>More information can be found on the project’s webpage: https://arcticdomainawarenesscenter.org/P16_Geofencing.</p>
Booth 2	<p>ADAC’s Remote Unmanned Aircraft System (UAS) Inspection and Response Team Development in the Bering Strait Region Project – Hosted by Dr. Jessica Garron</p> <p>In an effort to increase the efficiency of USCG infrastructure inspection missions, while supporting the expansion of community Science, Technology, Engineering and Math (STEM) capacity, investigators designed a program to train a set of UAS pilots, (equipped with U.S. manufactured UAS platforms) in the Bering Strait hub community of Unalakleet, Alaska, to conduct infrastructure inspections, specifically oil-containing infrastructure, and emergency response (ER) actions in support of local and/or regional crisis.</p> <p>More information can be found on the project’s webpage: https://arcticdomainawarenesscenter.org/P29_UAS.</p>
Booth 3	<p>ADAC’s Arctic Maritime Spills Modeling Project – Hosted by Dr. Nancy Kinner</p> <p>The objective of this project is to identify the current state-of-the-art Arctic maritime oil spill response modeling, potential integration of these models, and specifics needs to be addressed to obtain models that will be functional and effective in the response time scale to advance the Federal On-Scene Coordinator’s decision making during an incident. This will be accomplished through an Arctic Maritime Spill Response Modeling workshop focused on goals to provide pathways towards a useful oil spill response model that will inform decision-makers during spills.</p> <p>More information can be found on the project’s webpage: https://arcticdomainawarenesscenter.org/P25_AMSM.</p>
Booth 4	<p>ADAC’s Ice Conditions Index for the Arctic – Hosted by Ms. Kelsey Frazier</p>

In collaboration with USCG and other government agencies, the ADAC team is developing Arctic Ice Condition Index (ARCTICE). In this project, the team is focused on the ice laden waters of the Bering, Chukchi and Beaufort Seas (corresponding to the U.S. Arctic Extended Economic Zone (EEZ)). The project produces an easy-to-understand numeral to communicate ice conditions that are relevant to the capabilities of an individual vessel. This index will be available for current and future ice conditions, providing forecasts from 72 hours up to 1 month in advance.

More information can be found on the project's webpage:
https://arcticdomainawarenesscenter.org/P27_ARCTICE.

Solutions Showcase Virtual Booths

Booth 5

ADAC's Marine Induced Polarization Project – Hosted by Ms. Kari Walker

The objective of this project is to identify the current state-of-the-art Arctic maritime oil spill response modeling, potential integration of these models, and specific needs to be addressed to obtain models that will be functional and effective in the response time scale to advance the Federal On-Scene Coordinator's decision making during an incident. This will be accomplished through an Arctic Maritime Spill Response Modeling workshop focused on goals to provide pathways towards a useful oil spill response model that will inform decision-makers during spills.

More information can be found on the project's webpage:
https://arcticdomainawarenesscenter.org/P26_MIPM.

Booth 6

FarSounder – Hosted by Matthew Zimmerman, Executive Vice President of Engineering

Since 2001, FarSounder has been dedicated to tackling new ideas and developing 3D Forward Looking Sonar technology (3D FLS). Their unique patented technology paints a clear picture of what lies ahead underwater and along the bottom, reducing the likelihood of collisions, which in turn prevents costly damage to property, the environment, and marine and human lives alike.

More information can be found on the FarSounder webpage: <http://www.farsounder.com/about>.

Booth 7

ADAC's Long Range Autonomous Underwater Vehicle (LRAUV) Project – Hosted by Amy Kukulya

The objective of this research is to develop an Autonomous Underwater Vehicle (AUV) based capability to observe and sample dynamic processes in the ocean to characterize oil spills and other environmental hazards under ice. Creating a baseline of data for Arctic Ocean communities can systematically be carried out with the Long Range AUV, Tethys.

More information can be found on the project webpage:
https://arcticdomainawarenesscenter.org/P10_LRAUV.

An overview presentation of the LRAUV can also be found here:
<https://spark.adobe.com/page/Zt7gSxJlpFq/>.

Booth 8

Borrum Energy Solutions Inc. – Hosted by Odilon Lemeux

Borrum Energy Solutions Inc. is a premier product engineering firm. They design and offer sustainable wind solutions for cottages, rural dwellings, tiny homes, and other remote locations nationwide. Their products are offered in Northern Canada, territories and regions through their value-added resellers, and they serve the rest of Canada through online direct sales.

More information can be found on their webpage: <https://borrumenergysolutions.ca/pages/about-us>.

March 17, Day 2 (All times listed in Alaska Time...Eastern time zone minus 4 hours)*

0830-0835: Welcome back and daily reminders

Presented by the ADAC Leadership Team

0835-0915: Fireside Chat - Transforming Challenges into Opportunities and Entrepreneurship

Presented and hosted by Nolan Klouda, Executive Director of the University of Alaska Center for Economic Development

The first keynote discussion of Day 2 will discuss the theoretical transformation of a challenge to an opportunity, using examples of success from Alaska. The discussion will further explore the current barriers to business in the Arctic, catalyzing upon the substantial presence of the military in Alaska in terms of creating opportunities, and the various pipelines to success when it comes to entering business in the Arctic region. The keynote will further expand upon the role of R&D in the entrepreneurial pipeline, particularly when it comes to the stage of market testing in the Arctic region.

0920-1000: Track #4 – The Blue Economy

The UN Global Ocean Treaty of 2020 outlines policy on the commercial use of, and economic development of the world’s oceans. Nations who ratify this treaty will agree to find ways to combat illegal, unregulated, and unreported (IUU) fishing, reducing vessel noise pollution near protected habitats, reducing marine plastic litter, improving regional management of the waterways and addressing Indigenous populations’ rights to the ocean as a source of food. Even if nations decline to ratify the treaty international mariners traveling through the exclusive economic zones of foreign nations could be subject to additional rules and regulations. All these items will place additional demands on commercial enterprises who harvest from the ocean or use the ocean to transport goods in terms of tracking and reporting.

To meet these emerging demands on the commercial sector, organizations will need state-of-the-art technology and research to inform and improve their processes. This track highlights some of those solutions, whether developed specifically for the US Coast Guard, or adjacent to federal interests, but all help better inform, educate, and support users in the emerging Arctic economy. A live discussion panel will explore how developing infrastructure will change the shape of commerce in the Arctic, and what still needs to be done.

Track & Session Title	Track 4 Session 1A: <i>Remote Sensing Technologies</i>	Track 4 Session 1B: <i>Remote Sensing Technologies</i>	Track 4 Plenary 4: <i>Fueling Arctic Innovation</i>
Session Type	Prerecorded Video	Prerecorded Video	Live Streaming
Topic(s)	A presentation on the use of unmanned aircraft system for inspection and response team development in Bering Strait Region of Alaska.	A presentation on ADAC’s propeller driven long range autonomous underwater vehicle (LRAUV) project, and its applications in the Arctic.	What infrastructure is needed to inspire and foster innovation in the Arctic? What have we seen, what is emerging, and how will it drive new opportunities?

Presenter(s)	Dr. Jessica Garron , Principal Investigator for ADAC's Unmanned Aerial Systems (UAS) Project Team	Amy Kukulya , Principal Investigator for ADAC's Long Range Autonomous Underwater Vehicle (LRAUV) Project Team	Moderated by Taylor Holshouser , Director of Business at the Alaska Ocean Cluster. Mr. Holshouser will moderate a discussion between Leslie Canavera , Chief Executive Officer of PolArctic, and Peter Macy , Chief Business Officer of Blue Ocean Gear
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1000-1010: Break

1010-1145: Strategic Doing Tabletop Exercise

An exercise led by Margo Fliss – Manager of Strategic Engagement at the University of Alaska Center for Economic Development.

Strategic Doing is a participatory activity that teaches people how to form collaborations quickly, direct them towards measurable outcomes, and to make adjustments along the way. In today's Arctic environment, collaboration is essential to meeting the complex challenges we face, and for capitalizing upon opportunities.

During the activity, all participants will have the opportunity to self-select into one of four different breakout groups, each of which will discuss a different theme related to the major topics covered during the Expo. The four themes for each breakout room include:

1. Balancing Environmental Risks & Possibilities in the Arctic
2. Advancing the Arctic Economy
3. Ensuring Human Security in the Arctic
4. Arctic-related Technological Gaps and Opportunities

1145-1200: Break

1200 -1245: Keynote #4 - The Future of Business in the Arctic: Innovation with Impact

Presented by Hezekiah "Ky" Holland – Founding Partner of Alyeska Venture Management LLC, Owner of Holland Consulting, Creator and Manager of the Alaska Accelerator Fund, and instructor for numerous entrepreneurship courses at the University of Alaska Anchorage.

Exploring the challenges of the arctic and developing the opportunities that are emerging offer a choice of futures for Alaska and America's door to the arctic. Alaska's rich history of subsistence and extraction economies brings us to this moment of profound arctic and global transitions and the question, What is Next, Alaska? Imagine if Alaska protected and developed the best opportunities we are exploring today and created a new economy for the generations who follow? What would that look like for Alaska's people, communities, economy, and contribution to the world? The answers will be found in what we do to build strategic networks, capture agreement on shared outcomes, and invest in strategies that increase the impact of innovation in Alaska and for the country. These agile development strategies will leverage the work already being done and link research and exploration of challenges, curation of opportunities, development of solutions, and the creation of investable new ventures.

1245-1300: Closing Remarks provided by ADAC Leadership

