Exercise plan, agenda, & logistics
Arctic Maritime Horizons 2021

A Headquarters U.S. Coast Guard Sponsored Exercise

Focused on Improved Solutions in Maritime Transportation Systems...
Oriented to the Bering, Chukchi and Beaufort Sea Regions

An ADAC planned and conducted Table-Top Exercise, resourced by HQ U.S. Coast Guard Senior Arctic Policy Advisor and organized in accordance with ADAC’s Arctic Related Medium-and-Long Term Environment (Arctic MaLTE) processes.

Note: While this is a recorded session, the recording is only for aiding the report. Chatham House protocols are used. Any attribution will be coordinated in advance with the particular member requested to provide such attribution.

A “hybrid” event
In-person at: Anchorage, Alaska
Virtually: via Zoom Conferencing

5-6 May 2021

Introduction

ADAC is a U.S. Department of Homeland Security, Science and Technology (S&T) Directorate’s University Programs, (OUP) Center of Excellence in Maritime Research hosted by the University of Alaska, focused on the U.S. Coast Guard mission in the Arctic Region. In accordance with ADAC’s Medium-and-Long-Term Exercise (MaLTE) processes, the Center, in partnership with HQ USCG Director of Maritime Transportation Systems and USCG Senior Arctic Policy Advisor, are creating a table top exercise planned as an in-person and virtual event for 5-6 May 2021 (in-person at the University of Alaska Anchorage and virtually via Zoom) focused organized to address policy, plans and initiatives to support HQ USCG and the Coast Guard Enterprise in addressing the 2019 USCG

1 Note: Reception/meal and planning event for in-person activities on 4 May 2021
Arctic Maritime Horizons Exercise will provide an orienting and deliberative plenary forum to prepare participants followed by a 3-move exercise to challenge assumptions, gain insights and organize follow-on items of consideration to guide USCG Arctic and Maritime Commerce Strategic Outlook implementation tasks.

Note, due to COVID19, this event is planned as a “Hybrid” event...in person for those who are able to so participate in person, at University of Alaska Anchorage and virtually, via Zoom for those who are not able to so participate.

Note, due to on-going COVID19 social distancing restrictions by the Municipality of Anchorage, (MoA) in person participation numbers are limited. ADAC will try to accommodate as many in-person participants as allowed by the MoA.

Note: University of Alaska Anchorage Safety and Leadership have approved the exercise to be conducted on campus for in-person participation. However, the use of masks and social distancing policies remain in effect for the duration of on-campus activities.

Overview

The Arctic continues to advance as a region of increased focus and attention to multinational organizations, nations, industry, and illicit actors. While changes to the physical environment of the region continue to outpace corresponding factors from lower latitudes the Arctic also is experiencing a sharply rising level of human interest and activity. Collectively, these changes are catalyzing the need to deconflict the waterways uses and frequently reassess the risks to the marine environment, commercial shipping, subsistent activities, and any other existing or emerging maritime activity. The changes in the maritime environment also necessitates that the U.S. Coast Guard (USCG), in coordination with other governance organizations vested with safety and security mandates, reassess current plans and activities to advance better policies, plans, and activities in support of the peaceful opening of the Arctic. This includes advancing and modernizing the Maritime Transportation System (MTS) in the Arctic.

Per the U.S. Coast Guard’s (USCG) 2018 Maritime Commerce Strategic Outlook (MCSO) and the 2019 Arctic Strategic Outlook (ArcSO), the MTS is the lifeblood of the Nation’s economy. The USCG’s ability to maintain a safe, secure, and efficient national MTS facilitates more than $5.4 trillion per year in economic activity, supporting more than 30.8 million jobs. Increased maritime activity in the Arctic will create increased demand for the full spectrum of USCG authorities, services and capabilities to manage risk and de-conflict activities in the Arctic MTS. As geostrategic and economic conditions have the potential to make key routes through the Straits of Malacca and the Suez and Panama Canals less predictable or affordable, sea lanes in the Arctic are poised to provide valuable alternatives between North America, Europe, and Asia. This has powerful implications for both
commerce and military mobility and makes an efficient MTS in the Arctic important to the Nation’s security, resiliency, and prosperity.

Replicating the MTS that exists in the contiguous United States is not a viable option in the Arctic. Therefore, the USCG must complement its existing MTS management tools with innovative policies and technologies, developed in partnership with both the public and private sectors. As a principal instrument to provide safety and security of America’s waterways, the USCG will lead the comprehensive integration of the Arctic into the Nation’s critically important MTS. This will enable growth in commerce and contribute directly to the strength, resilience, and prosperity of the Nation.

In order to begin this process, the U.S. Coast Guard’s Marine Transportation Systems Directorate (CG-5PW) requires support in 1) understanding the near-term and future risks and requirements of an Arctic MTS that enables responsible maritime activity and growth; 2) identifying changing conditions of the human terrain and associated impacts to the effective rule of law; 3) understanding options, opportunities, and courses of action for progressing the Arctic MTS; and 4) identifying methodologies for evaluating and quantifying advancements in the MTS.

In order to advance understanding these objectives and identifying needed policies, authorities, and technologies, HQ USCG CG-5PW requires support to conduct a focused and inclusive exercise with multi-national, U.S. Departments and Agencies, Arctic leaders in governance, industry, and academia. In support of CG-5PW, the Arctic Domain Awareness Center (ADAC), is planning and conducting “Arctic Maritime Horizons,” a HQ USCG Sponsored Exercise, focused on Improved Solutions in Maritime Transportation Systems for the Arctic Domain, from 5-6 May at the University of Alaska Anchorage and via Zoom for virtual participation.

Arctic Maritime Horizons is planned as a hybrid In-person and virtual activity and is principally oriented as a table-top exercise that conducts a series of realistic exercise scenarios. Each scenario is purposely designed to elicit participation from a multidiscipline array of participants to frame and cross examine the elements of the problem in order to propose options, which suitably address the challenges and opportunities emanating from the scenario.

**What is key about the tabletop exercise...is not the scenario...it is the discussions associated on the changes/impacts on the developing U.S. Arctic MTS that the scenario will hopefully trigger.**

The desired outcome of the tabletop exercise is to create and deliver a comprehensive knowledge product that supports the HQ USCG implementation planning for the ArcSO and MCSO, specifically oriented to the developing and increasingly complex MTS environment in the Bering, Chukchi and Beaufort Sea regions.

This exercise seeks to advance items of relevance to future horizons through convening leaders and experts to quickly surmise current baselines of organizational strategies, plans, policies, and implementation activities in order to identify shortfalls, gaps, new synergies and convergence opportunities in shared MTS endeavors in the Arctic.
Exercise Customer

Arctic Maritime Horizons is oriented to specifically address the needs and responsibilities of Headquarters U.S. Coast Guard Director, U.S. Coast Guard Marine Transportation Systems (USCG-5PW) and to support the public good in accordance with the DHS S&T OUP – University of Alaska Anchorage ADAC Cooperative Agreement.

Exercise Hypothesis

People generate incredibly useful and innovative solutions when provided realistic and tangible scenarios. Accordingly, exercise planners will foster a series of smartly designed scenarios, using proven methodologies that quickly generate ideas/brainstorm via dynamic and focused group collaboration oriented via a tabletop exercise.

Note: In order to gain best and unfiltered exercise participation, planners are using “Chatham House” rules (no-direct attribution of any particular remark) made by any exercise participant. Any direct quotes deemed essential to relay will be done so via full coordination and approval between planners and the participant selected for the essential quote.

Planned participants

U.S. and State of Alaska public officials, invited guests from Canada, select Arctic thought and research leaders from Alaska Native, academic, and associated industry communities.

Planned exercise outcome

Comprehensive Rapporteur’s report, with analysis and recommendations, speaker summaries, exercise move, tables of notes, Delphi analysis. Option for drafting an article suitable to publishing to USCG Forum (in particular, USCG Proceedings) following delivery of Rapporteur’s report.

The final report will include a brief Executive Summary, Recommendations, and Conclusions suitable for Executive level review and consideration.

Virtual Connecting Links:

Arctic Maritime Horizons Day 1:

Join Zoom Meeting
ID: 89549395834
Passcode: 614594
(US) +1 312-626-6799
Arctic Maritime Horizons Day 2:

Join Zoom Meeting
ID: 82753167238
Passcode: 608863
(US) +1 312-626-6799
Passcode: 608863
82753167238@zoomcrc.com
Passcode: 608863

Planned Agenda
Note: Agenda times are listed in both Alaska and Eastern Time Zones in recognition of the hybrid nature of the exercise
AKDT = Alaska Daylight Time
EDT = Eastern Daylight Time

Tuesday, 4 May 2021

Note: All in person activities will be conducted in accordance with Municipality of Anchorage and/or University of Alaska Anchorage Social Distance requirements to protect exercise participants from effects of COVID-19

10:00-11:00 AM AKDT
2:00-3:00 PM EDT: Communications check for virtual presenters (as desired)
Use “Day 1” Zoom Link:
   Join Zoom Meeting
   ID: 89549395834
   Passcode: 614594
   (US) +1 312-626-6799
   Passcode: 614594
   89549395834@zoomcrc.com
   Passcode: 614594

2:00-3:00 PM AKDT
6:00-7:00 PM EDT: Virtual and in-person facilitation Meeting. Lucy Cuddy Hall/Gorsuch Commons, University of Alaska Anchorage (UAA).

3:00-4:00 PM AKDT: Recorders Coordinators Meeting. Lucy Cuddy Hall/Gorsuch Commons, University of Alaska Anchorage (UAA).
(In-person only)
6:00-8:00 PM AKDT: Welcome and working dinner to provide exercise overview and coordinating instructions.
(In-person only)
Location: Sullivan’s Steakhouse
Website: sullivanssteakhouse.com
Address: 320 W 5th Ave, Anchorage, AK 99501
Phone: (907) 258-2882

Wednesday 5 May 2021

Plenary Session
7:00-7:30 AM AKDT
11:00-11:30 AM EDT: Registration & continental breakfast (for in-person participants). Lucy Cuddy Hall/Gorsuch Commons, University of Alaska Anchorage (UAA).

7:30-7:45 AM AKDT
11:30-11:45 AM EDT: Welcome and introductory overview/orientation by UAA and ADAC leadership, to include overview exercise groups assignments.

Workshop hosts will note that some plenary speakers may be in-person while the remainder are participating via Zoom conferencing.

7:45-8:10 AM AKDT
11:45 AM-12:10 PM EDT: Reflections from the Exercise Customer: Opening address and discussion of desired outcomes of the event. Planned speakers: SES Mike Emerson, CAPT, USCG (Ret), HQ USCG Director of the Maritime Transportation System and Mr. Shannon Jenkins, HQ USCG Senior Arctic Policy Advisor.

8:10-8:30 AM AKDT
12:10-12:30 PM EDT: USCG MTS Operational Leader Remarks from the Commander, U.S. Coast Guard District 17/designated representative in providing an assessment of the current challenges in providing safety and suitable waterways management of the U.S. Arctic MTS. Planned speaker: RADM Nathan Moore, Commander, USCG District 17, Juneau Alaska.

8:30-8:35 AM AKDT
12:30-12:35 PM: Set up for Panel #1.

8:35-9:50 AM AKDT
12:35-1:50 PM EDT: Panel #1: Public Officials Reflections on the challenges and opportunities of the future U.S. Arctic MTS.
Description: A diverse panel of national and regional government officials who are associated with some element of the U.S. Arctic Maritime Transportation System from policy, prevention, response, safety or associated environmental characterization.

Desired outcomes: Increased exercise participant understandings of current and developing policies and regulations, new capacity developments, new or developing safety/risk mitigations, and/or environment characterizations affecting the Arctic MTS from Washington, D.C., Ottawa Canada and/or regional vantage points in Alaska.

Planned speakers:
- Ms. Helen Brohl, US Committee on Marine Transportation Executive Director, Washington D.C. (Confirmed) (Virtual)
- Dr. Alyson Azzara, International Trade Specialist, Department of Transportation Maritime Administration, Washington, D.C. (Confirmed) (Virtual)
- Mr. Steve Thompson, Superintendent, Maritime Search and Rescue Canadian Coast Guard | Arctic Region. (Confirmed) (Virtual)
- Ms. Joy Baker, Director, Port of Nome, Nome Alaska. (Confirmed) (Virtual)
- Dr. Dennis Thurston, Arctic Specialist/Physical Scientist, Alaska Region, Bureau of Ocean Energy Management (BOEM), U.S. Department of the Interior, Anchorage, Alaska. (Confirmed) (Virtual)
- Dr. Scott Lindsey, Director, Alaska Region, National Weather Service, Anchorage, Alaska. (Confirmed) (Virtual)

9:50-10:00 AM AKDT
1:50-2:00 PM EDT: Break

10:00-11:20 AM AKDT
2:00-3:20 EDT: Panel #2: Remarks from Alaska Indigenous Leadership. Investing insights and perspectives on the future U.S. Arctic MTS from Alaska Native leaders (or their designated representatives).

Description: A panel of serving Alaskan Native Leaders in regional government, organizations representing Alaskan Native Tribes/tribal concerns or Governance and Policy advocacy organizations support of Traditional Arctic based lifestyles (such as Subsistence Hunting & Fishing).

Desired Outcomes: Increased exercise participant understandings towards current baselines, challenges and opportunities towards the development of the Arctic MTS. These distinguished leaders can provide insights important
to gain in striking the right balance in developing policies that support new safe & sustainable economic developments on the Arctic MTS, while also minimizing impacts to traditional Arctic lifestyles. Further, these leaders may possibly provide invaluable insights in how best to partner with local authorities in developmental endeavors.

**Planned speakers:**
- The Honorable Harry Brower Jr., Mayor North Slope Borough Alaska, Utqiagvik, Alaska. (Confirmed) (In-person)
- Mr. John Hopson, Jr., Chairman of the Alaska Eskimo Whaling Commission, Utqiagvik, Alaska. (Confirmed) (Virtual)
- Mr. Eugene “Gene” Peltola, Jr Regional Director, Bureau of Indian Affairs, Alaska Region, U.S. Department of Interior. (Confirmed) (In-person)
- Ms. Mary David, Executive Vice President Kawerak Inc., Nome, Alaska. (Confirmed) (Virtual)
- The Honorable Lucy Nelson, Mayor and Mr. Nathan Hadley Jr., Assembly President Northwest Arctic Borough, Kotzebue, Alaska. (Confirmed) (In-person)
- Patrick Baker, Executive Director, Tribal Government of Saint Paul Island, Alaska. (Confirmed) (In-person)

11:20 AM - 12:40 PM AKDT
3:20-4:40 EDT:  **Panel #3: Remarks from Industry** regarding the developing U.S. Arctic MTS from commercial interest vantages.

**Description:** A panel of Arctic Industry Leaders that utilize the Arctic MTS as an integral part of their business ventures, such as shipping, fishing, resource extraction, tourism and more.

**Desired outcomes:** Increased exercise participant understanding in current and future plans of Arctic industry activities that utilize or affect the Arctic MTS. This includes industry plans to adapt to new fishing locations, new mineral extraction plans, new initiatives in shipping/transport and tourism.

**Planned speakers:**
- Ms. Elizabeth “Liz” Cravalho, NANA Corporation Vice President of Lands, Kotzebue, Alaska. (Confirmed) (Virtual)
- Ms. Gail Schubert, President and CEO, Bering Straits Native Corporation, Nome, Alaska. (Confirmed) (Virtual)
- Mr. David Clarke, President, Qilak, LNG, LLC, Anchorage, Alaska. (Confirmed) (In-person)
• Mr. Nagruk Harcharek, Director, Barrow Operations, Ukpeagvik Inupiat Corporation, Utqiaġvik, Alaska. (Confirmed) (In person)
• Ms. Stephanie Madsen, Executive Director, At Sea Processors, Juneau, Alaska. (Confirmed) (Virtual)
• Mr. Crawford Patkotak, Commissioner, U.S. Arctic Research Commission, Chairman, Arctic Slope Regional Corporation and Vice Chairman, Eskimo Whaling Commission, Utqiaġvik, Alaska. (Confirmed) (Virtual)

12:40-1:40 PM AKDT 4:40-5:40 PM EDT: Working lunch. Lunchtime speaker: Understanding the current trajectories of Arctic maritime Shipping. What is industry planning and how should USCG and other responders better prepare?

• Mr. Mead Treadwell, CEO, Qilak LNG, LLC., Anchorage AK (Confirmed) (In person)

1:40-2:20 PM AKDT 5:40-6:20 PM EDT: Panel #4: Remarks from Arctic MTS Operators and Analysts. Current experts in industry and analysts provide their insights to developing U.S. Arctic MTS.

Description: A panel of Arctic MTS experienced leaders that provide safety technology, domain awareness & management as well as providing analysis and policy insights that are relevant to the developing U.S. Arctic MTS.

Desired outcomes: Increased exercise participant understanding in current and future aspects of the U.S. Arctic MTS in terms of safety, domain management, commercial trajectories, limitations and policy matters in association with the International Maritime Organization.

Planned speakers:
• Dr. Lawson Brigham, CAPT, USCG (Ret), Fellow, U.S. Coast Guard Center of Arctic Study and Policy, Global Fellow, Polar Institute Woodrow Wilson Center and Advisor, U.S. Arctic Research Commission, Eagle River, Alaska. (Confirmed) (In person)
• CAPT Ed Page, USCG (Ret), Executive Director, Marine Exchange of Alaska, Juneau Alaska. (Confirmed) (In person)
• CAPT Buddy Custard, USCG (Ret), President and Chief Executive Officer of the Alaska Chardux’ Network, Juneau Alaska. (Confirmed) (In person)

Exercise session: “interactive roundtable” a facilitated set of discussions in a plenary setting, oriented to the critical facets of the developing Arctic MTS.
Understanding the current trajectories and associated effects from anticipated changes in Bering Sea fishing and Arctic maritime shipping. A facilitated “just the highlights” discussion with Exercise participants to sketch the outlines of the current state of industry planning towards Arctic shipping and how should USCG and other responders better prepare?

- Moderated by ADAC Executive Director (Church Kee) and ADAC Associate Director and Senior Research Professional (Olaf Roe) (Confirmed) (In Person)

This discussion will include a Zoom poll (manual option provided for in-person participants that do not have a laptop) for exercise participants oriented to the following questions:

1. What are some needed/definitive steps, useful for improving Bering, Chukchi and Beaufort Seas Waterways Management? (In light of rising traffic and increasingly difficult to predict meteorological conditions as well as surges in both technology innovation and emergent commercial pursuits in the region).

2. Improving understanding on the current trajectory of Arctic maritime activity, specifically commercial activity. In sum, what is industry planning and how should USCG and other responders better prepare? What are the impacts if the USCG does the same, more, or less with respect to planned safety measures in association for the Arctic MTS?

3. Compare and contrast Northern Sea Route, Northwest Passage activity, and projected activity for these two routes as well as the Transpolar shipping route as relates to U.S. Arctic MTS...what are the issues of concern in waterways management in the U.S. EEZ as relates to vessels accessing these Arctic waterways?

Blue economy and the Arctic. What are the indicators and potentials to advance ocean-related industry into the Arctic and what are the implications as relates to safety and environmental security in the maritime and coastal regions? A facilitated “just the highlights” discussion with Exercise participants to sketch the outlines of the future potentials for developing a “Blue Economy” on the Arctic.

- Moderated by Taylor Holshauser, Alaska Ocean Cluster, Anchorage Alaska. (Confirmed) (in person)
3:10-3:30 PM AKDT
7:10-7:30 PM EDT: **Essential elements of Great Power implications towards Arctic MTS.**
Speakers will address the basic contours of the rising competition between nations of significant economic and/or military power across the Arctic region, and relate this competition to the U.S. Arctic MTS. A facilitated “just the highlights” discussion with Exercise participants to sketch the outlines of the future potentials for crisis and conflict in the Arctic.

*Moderated by Church Kee, Arctic Domain Awareness Center (Confirmed) (In person).*

3:30-4:15 PM AKDT
7:30-8:15 PM EDT: **“Participant Reflection” Open session.** Informed by panels and presentations throughout the day, participants address the following topics in terms of needed *policy, plans, guidance, authorities, and/or technologies.*

Note: Following the open discussion, participants (in person and virtual) will leverage Zoom polling to accomplish this activity. For in-person participants without laptop, poll will be conducted manually.

1. What are some needed/definitive steps, useful for improving Bering, Chukchi and Beaufort Seas Waterways Management? (In light of rising traffic and increasingly difficult to predict meteorological conditions as well as surges in both technology innovation and emergent commercial pursuits in the region).

2. Aspects to consider for Arctic Maritime Studies. In sum, what new baseline studies are needed to understand Industry and Maritime Service needs in the medium and longer term for analysis associated with U.S. Arctic MTS?

3. Improving understanding on the current trajectory of Arctic maritime activity, specifically commercial activity. In sum, what is industry planning and how should USCG and other responders better prepare? What are the impacts if the USCG does the same, more, or less with respect to planned safety measures in association for the Arctic MTS?

4. Blue economy and the Arctic. What are the indicators and potentials to advance ocean-related industry into the Arctic and what are the implications as this relates to safety and environmental security in the maritime and coastal regions?

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*Note: Due to lateness in the day and the hybrid format, exercise team has transitioned this activity from breakout to open roundtable discussion*
5. Suggested solutions to advance collaboration within the prevention and response community in association with the U.S. Arctic MTS. How can industry and coastal communities’ better partner with USCG and other government agencies to advance improved safety and security for the Arctic MTS?

4:15-4:30 PM AKDT
8:15-8:30 PM EDT:  **Participant voting.** Each participant will exercise the Zoom poll option as discussed above.

4:30-4:35 PM AKDT
8:30-8:35 PM EDT:  Brief review for evening working dinner (previous session will be discussed at dinner).

4:35 PM AKDT
8:35 PM EDT:  **Close of Exercise Day 1**

6:15-8:30 PM AKDT:  Working dinner, *The Residence of the Former Lt Governor, Mead Treadwell, Anchorage*. Address to be provided to in-person participant
Review and summary analysis of answers to questions and prioritized voting aggregated by self-identified functional alignment.

**Thursday, 6 May 2021, Exercise Day 2**

7:00-7:45 AM AKDT:  Registration & continental breakfast. Lucy Cuddy Hall/Gorsuch Commons, University of Alaska Anchorage (UAA).

7:45-8:00 AM AKDT
11:45 AM-12 Noon EDT:  **Welcome back overview/orientation of Day 2**

8:00-8:15 AM AKDT
12:00-12:15 PM EDT:  **Warmup address:** “Framework and essential elements of a successful future Arctic MTS... areas of focus to pursue and areas of concern to avoid.”

8:15-8:25 AM AKDT
12:15-12:25 PM EDT:  **Tabletop Exercise Instructions**

8:30-8:45 AM AKDT
12:30-12:45 EDT:  **Exercise Move #1 Overview Scene Setting (Video #1)**

*Note: Each move video is conducted in two steps...an initial scenario, followed by a follow-up scenario. After each video clip, moderator will guide “around the room, and around the net” for exercise inject/commentary.*
8:45-10:30 AM AKDT
12:45-2:30 PM EDT: Exercise Move #1: **Disabled oil tanker Bering Straits blown onto known obstacles.**
   1. Around the room
   2. Around the net

10:30-10:45 AM AKDT
2:30-2:45 PM EDT: Break

10:45-11:00 AM AKDT
2:45-3:00 PM EDT: Exercise Move #2 Overview Scene Setting (Video #2)

11:00 AM -12:30 PM AKDT
3:00-4:30 PM EDT: Exercise Move #2: **Congested waterways impact subsistence hunting.**
   1. Around the room
   2. Around the net

12:30-1:30 PM AKDT
4:40-5:30 PM EDT: **In-place lunch. Lunchtime presentation,** Understanding the developing Alaskan and U.S. Arctic economic outlook...what possibly can the maritime prevention and response community anticipate in terms of economic growth?
   • Mr. Bill Popp, Executive Director, Anchorage Economic Development Corporation, Anchorage AK (Confirmed) (In-person)

1:30-1:35 PM AKDT
5:30-5:35 PM EDT: Break/reconvene.

1:35-1:50 PM AKDT:
5:35-5:50 PM EDT: Review and “hot wash” key aspects of Move #1 & 2.

1:50-2:05 PM AKDT
5:50-6:05 PM EDT: Exercise Move #3 (Video #3)

2:05-3:50 PM AKDT
6:05-7:50 PM EDT: Exercise Move #3: **Chukchi Sea & Bering Straits Economic Boom and associated Security Concerns in U.S. and Russia.**
   1. Around the room
   2. Around the net
Methodology.

Overall, Arctic Maritime Horizons will be accomplished via Panels, Roundtables and Tabletop Exercise moves. The exercise moves will be accomplished via ADAC “scene setter” scenarios through several step videos, presented to the exercise participants, provide exercise controllers an alternative to more costly and timely simulations. Such informercials to scene set are adaptable to as many sequences/steps as desired by the exercise control group.

The effectiveness of a central “event hub” ...accessible via ADAC’s website. The Event Hub is the standard in which the center conducts virtual events...and contained videos, documents and other resources useful to inform participants comprehensively as possible. Accordingly, ADAC will shortly establish an “Arctic Maritime Horizons” Event Hub to place all associated materials, organized to the same construct of time sequence as a guide for exercise participants. The Event Hub will be located at https://arcticdomainawarenesscenter.org/Events.

Background.

ADAC has developed a method to identify significant research opportunities relevant to Department of Homeland Security components in accordance with the component mission. The process starts with surveying the principal customer, of what are the chief concerns of operational significance. It is based on the fundamental concern of the operational commander/director: “what keeps you up at night?” (as the commander/director is concerned of his/her ability to respond to a particular crisis scenario. ADAC has labeled this method/approach the Center’s “Arctic-related Incidents of National Significance” (Arctic IoNS).

For the opening of the Arctic Maritime Horizons exercise, this approach is oriented to the following question:

“In assessing the current and developing operational, economic, and environmental conditions of the U.S. Extended Economic Zone (EEZ) of the Arctic region, what are the most pressing concerns that seek solutions (whether this is doctrine, policy, training, capabilities
or research) and what are emerging opportunities that should be considered in advancing U.S. Coast Guard internal actions or advancing U.S. Coast Guard efforts collaborating approaches with partnering entities (Federal Departments & Agencies, State of Alaska, Tribal & Local governance, industry, communities and internationally).”

Key individuals to help frame such a discussion in order to establish an exercise “scene setter” are HQ USCG Director of Maritime Transportation Systems, Commander, U.S. Coast Guard District 17, Commander, USCG District 17 Sector Anchorage, State of Alaska Commissioner of Commerce, Community and Economic Development, key representatives from Bering Sea fishing industry, Alaska native leadership from subsistence organizations (in particular, Alaska Eskimo Whaling Commission) as well as leadership from Alaska Federation of Natives and Tribal Governments in Western and North Slope Alaska.

**Objective**

The purpose of the event is to gather Arctic minded experts from government, operators, academics, and industry from across the United States as well as from the international community (in particular Canada) to conduct a series of “speed discussions” to address important parameters associated with safety and security of the MTS in the Arctic, followed by a table top exercise that address 5 planned scenarios oriented to understand and comprehensively analyze medium and long term challenges affecting the safety and security of the U.S. Arctic MTS. This analysis is important to collaboratively address needed objectives for advancing and modernizing the MTS in the Arctic.

A key outcome to this exercise is to build on associated baseline discussions and assessments (much of which is contained in a preparatory Literature Review), in order to provide a summary and draft a series of “solutions” oriented as White Papers on the associated topics of discussions and provide to participants so that policy and decision makers can leverage.

Foundational documents which guide exercise orientation are the USCG’s 2018 MCSO and 2019 ArcSO. Important inputs to the literature reviews include Arctic oriented or applicable Committee Maritime Transportation System documents as well as associated Aleutians, Bering Sea, Chukchi and Beaufort Sea Port Access Route Studies (PARS), along with navigation and waterways management policies and regulatory guidance developed and maintained by HQ USCG. Such information provides a baseline of current understandings and knowledge in order to more rapidly advance the exercise to focus on solutions and future opportunities.

Strategically, the exercise will be framed to address the possible futures related to the MTS in the Arctic region. Based on the range of possible futures, planners, seek to establish the corresponding needs of the U.S. Arctic region MTS, then distilling the needs to elements which are common to all likely/probable futures, and then seek to establish associated priorities, to include timeframes for recommendations.
Prioritization of recommendations will be made through aggregating results to identified groups such as USCG, Industry, International, Alaska Native Groups, etc. Planners will focus recommended solutions which include improve presence and cooperative activities that if/as implemented, should advance improved safety and security for the U.S. Arctic and set an example for the pan-Arctic.

While this exercise is focused on needed policies and authorities, subsequent efforts are likely useful to establish science and technology and operational capabilities useful to address implementation of the strategic outlook of the MTS for the Arctic region. Accordingly, planners will work with HQ USCG and DHS to develop subsequent workshops and exercises to address these important follow-on aspects.

**Setting the stage for the tabletop exercise...” Interactive” roundtable discussions.**

As a catalyst for investing participants into the planned tabletop activities, the following Seven Topic Areas are planned as a preliminary plenary roundtable, prior to proceeding to the planned and sequential tabletop exercise in order to spark important and needed discussions among exercise participants.

The below topics will be addressed in a guided discussion in a compressed (approximately 25 minutes per topic) facilitated discussion. Each topic will face the same parameters to challenge participants: “What is working, what is not, what can help and what is missing that nobody has yet to mention?”

1. What are some needed/definitive steps, useful for improving Bering, Chukchi and Beaufort Seas Waterways Management? (In light of rising traffic and increasingly difficult to predict meteorological conditions as well as surges in both technology innovation and emergent commercial pursuits in the region).

2. Improving understanding on the current trajectory of Arctic maritime activity, specifically commercial activity. In sum, what is industry planning and how should USCG and other responders better prepare? What are the impacts if the USCG does the same, more, or less with respect to planned safety measures in association for the Arctic MTS?

3. Blue economy and the Arctic. What are the indicators and potentials to advance ocean-related industry into the Arctic and what are the implications as this relates to safety and environmental security in the maritime and coastal regions?

4. Compare and contrast Northern Sea Route, Northwest Passage activity, and projected activity for these two routes as well as the Transpolar shipping route as relates to U.S. Arctic MTS implications? Included in this discussion is an examination of insights that can be obtained from Russia (as research can discover) and Canada (via soliciting Canadian exercise participants)...particularly Transport Canada and Canadian Coast Guard.

*Arctic Maritime Horizons...advancing understanding the future Arctic MTS*
Planned tabletop exercise moves.
The following are the summary outlines of the four exercise scenarios. Note, each scenario is fictitious and generated to create challenges for exercise participants to understand the specific response dynamics, create solutions and identify shortfalls in policy and capability. Each scenario has some facet of action that may result to impacts for subsistence activities.

**Move One: disabled oil tanker Bering Straits blown onto known obstacles.** Making a transit during the Bering Straits during a rough and difficult fall storm, a fuel oil tanker with petroleum products needed for heating homes in remote villages along the Beaufort Sea coast is disabled southeast of Little Diomede Island in the Bering Strait, and is quickly driven from the sea lanes to Fairway rocks blocking movement of maritime commerce in the U.S. Arctic MTS and creating a significant response challenge. The storm results in the vessel to be driven hard on the rocks and causing a rupture of the tank necessitate the need for closing shipping lanes, in order to affect spill response and potentially impacting subsistence activities (based on safety & hazard concerns). Regrettably, the grounding occurs just as annual fall subsistence harvests commence. Complicating response is the remote and austereness of location and an unusually persistent season of low clouds, winds, and precipitation that complicates the response.

![Figure 1 Fairway Rocks in the Bering Straits](image1.jpg)

**Move two: Congested waterways impact subsistence hunting.** Due to unpredictable weather patterns, which resulted in a number of significant fall and early weather storms across the Bering and Chukchi Sea regions, shipments from a new, very large and economically significant mine on the Alaska’s Northwest coast (modelled on the Graphite Creek mine near Teller Alaska) are well behind in delivering ore shipments as Spring arrives, and shareholders are insistent that every effort should be made to expedite movement of ore. Unfortunately, as shipping traffic gets underway in relieving the backlog, subsistence hunters, relying on the Spring subsistence marine mammal harvest find the congested traffic as critically disruptive to the hunt and are seeking redress to prioritize their subsistence activities over the movement of ore barges through the region. Complicating factors are an early warming spell coupled with heavy rains resulted in spoiled food stored root cellars due to unexpected thawing conditions and rain that caused heavy snow melt. Accordingly, regional resident food resilience is greatly compromised.

![Figure 2 Graphite Creek Mine near Teller AK](image2.jpg)
Move three: Chukchi Sea & Bering Straits Economic Boom and associated Security Concerns in U.S. and Russia. MTS activity in the Bering and Chukchi rapidly rises as a result renewed pressure for Petroleum due to the of a decision by the Organization of the Petroleum Exporting Countries (OPEC) to curtail global production in order to drive higher prices per barrel. Demand for oil rises rapidly, resulting in oil sector to quickly assess and initiate drilling activities in the Chukchi Sea. Meanwhile, rising temperatures across the Arctic reach the threshold in which maritime transit of the Northern Sea Route, Northwest Passage and even limited seasons of Transpolar routes are feasible. Sensing economic advantage, Lloyd’s of London and other insurance companies approve bulk carriers and container vessels for Arctic transit through the Bering Straits. Complicating matters, a new discovery of on and near shore gold deposits (similar to the gold sands found near Nome in the 1900-1901 strikes) is made on St Lawrence Island Alaska that creates a new rush for wealth in the Bering Straits region. A number of hastily arranged mining enterprises arrive with little notice to Gambell village on St Lawrence Island eager to strike out and make their mining claims. Some of these enterprises are marginally legal and create a web of concerns to law enforcement, which was totally ill prepared to cope with the economic opportunists, who seem impervious to Tribal and local government concerns. Air and marine traffic rise dramatically, all in a haphazard fashion, which concerns and causes the Russian Federation to commence a series of reactionary/protective measures to include military exercises that restrict transit through Russian waters, forcing yet more traffic into the U.S. EEZ.

Exercise Logistics

- **Recommended attire:**  *Evening and duty hour meetings:* Business Casual. *Outdoor activities:* Alaska Spring Casual: Warm clothing, Hats, Gloves and layers.

- **Transportation:**
  - Ground: Rental cars (via Ted Stevens airport), Taxi and now Uber (although limited). Note, due to COVID-19 safety protocols, UAA is unable to provide ground transport/shuttle service.

- **Lodging:** ADAC has arranged a limited room block for the UAA Springhill Suites (part of Marriott.com). Details are below. For out-of-town guests that wish to stay at downtown Anchorage, there are a number of hotels to consider, such as the Hotel Captain Cook. ADAC does not have a room block for the downtown hotels. Below is a Marriott.com reservation link that you can send out to people book their reservations. This link is open and available to book through Friday, April 16th.
ADAC Workshop
Start Date: 2021 May 2, Sun
End Date: 2021 May 7, Fri
Last Day to Book: 2021 Apr 16, Fri

Hotel(s) offering your special group rate:

SpringHill Suites Anchorage University Lake for $112.00 USD per night

Book your group rate for ADAC Workshop  (Note:  Click to book)

- **Weather and sunrise/sunset data.** May is generally a truly a delightful month in Anchorage. Weather is generally sunny and clear with Temperatures averaging from 40 F to 51 F. Sunrise is approximately 5:30 AM and Sunset is approximately 10:15 PM. Note: 2021 has been much colder than average for South Central Alaska. Early April temperatures have been as low as Minus 5 F, with some snow in the Anchorage area. Accordingly, May could prove colder as well, continuing the overall weather trend for 2021.

**Exercise Conclusion**

ADAC believes **Arctic Maritime Horizons** will successfully address a myriad of topics important to the USCG’s Arctic mission set in a very constrained timeframe. The Center will gain needed Arctic minded experts from government, operators, academics, and industry from the international community and the U.S. to conduct a series of short essential information briefs followed by “speed discussions” in breakout groups, following in rapid succession in a busy, nearly whirlwind pace. This is a new format and approach, but the center will ensure skillful presenters and moderators and recorders guide and secure what is sure to be a large volume of critical insights from participants. ADAC will diligently record and publish discussions and insights for USCG in a timely and responsible manner.

**Annex (Additional background)**

ADAC’s Arctic IoNS workshop method is an expert researcher, operator and government official structured seminar, tabletop exercise, breakout group discussion that accompanies advanced discussion with Alaska Native leaders (and other rural residents located in Arctic Alaska, oriented to provide key insights that can inform follow-on research to address capability shortfalls. To date, ADAC has conducted three Arctic IoNS workshops, with a fourth one planned for 1-2 April 2020, but now rescheduled to Spring 2021. Prior events conducted focused investigation into addressing
fictitious scenarios for a disabled cruise ship in Arctic waters (June 2016) and a shipborne oil spill in U.S. Federal waters in the Beaufort Sea (October 2017) and a two-part large region storm related crisis response (April and May 2019).

Each prior ADAC Arctic IoNS workshop has resulted in funded awards to conduct research addressing workshop identified shortfalls in applicable science and technology.

Arctic IoNS 2019 employed “wargaming construct” to generate multi-faceted department and agency response (based on practical expertise gained by ADAC’s Executive Director, a retired USAF Major General) during time in uniform in Pentagon and Unified Command service. As a former United States Transportation Command Exercise Director, ADAC’s Executive Director has organized and conducted several multi-command wargames as well as participated in numerous more at the U.S. Joint Staff and as the United States European Command Director of Plans, Policies, Strategies and Capabilities (ECJ5/8).

Based on insights and inputs from the ADAC Executive Director, the Center has oriented Arctic IoNS (with associated wargaming) development to begin with the Arctic operators specifying priority areas of concern to investigate. This is followed by comprehensive literature review regarding the current state of capability corresponding to the concerns; a structured and purpose-built wargame, guided by an array of operators, government officials and experts to validate and expand understanding of the baseline and required capabilities; followed by a Rapporteurs report and funded solicitation to support the research and development needed to address those shortfalls discovered and discussed at the exercise.

Each of the Arctic IoNS events has averaged approximately 85 select participants from across U.S. and Canadian federal governments, State of Alaska, plus Canada and U.S. local and tribal leadership.

To date, ADAC has accomplished 3 Arctic-focused Incidents of National Significance (Arctic IoNS) in June 2016, October 2017 and April & May (a two part/two location event) 2019. ADAC’s Arctic IoNS workshops are acknowledged and appreciated by DHS, National Oceanic & Atmospheric Administration, U.S. Arctic Research Commission, Canadian Joint Operations Command and many others, as uniquely important to advancing Arctic research The Arctic IoNS process has created useful knowledge products and developed a pathway in sponsoring more than $3M in new research.

Additionally, ADAC has conducted a number of significant Arctic-related Medium and Long-term Environment (Arctic MaLTE) workshops with one in 2017, two in 2018 and two in 2019 at locations in Fairbanks, Anchorage, Nome, and Utqiagvik Alaska. In the current Program Year (1 July 2020-30 June 2021) ADAC has recently accomplished four significant workshops/exercises via virtual means, (using Zoom, MS Teams, and WebEx) totaling more than 500 registered participants.