



Arctic 2030: Projecting Challenges and Capability Gaps “Needs of the North”

*Workshop hosted by ADAC in Partnership with HQ U.S. Coast Guard DCO-X
“Evergreen” and the Homeland Security Operational Analysis Center (HSOAC)*

Overview

The Arctic Domain Awareness Center (ADAC) is a U.S. Department of Homeland Security, (DHS) Science and Technology (S&T) Directorate Office of University Programs, (OUP) Center of Excellence in Maritime Research hosted by the University of Alaska.

Headquarters (HQ) U.S. Coast Guard (USCG) Office of Emerging Policy conducts the U.S. Coast Guard “Evergreen” construct to provide the U.S. Coast Guard (USCG) strategic planning and concepts, developed in order to guide USCG planning and programming for the future force.

The HSOAC is a Federally Funded Research Development Center (FFRDC) at the RAND Corporation serving the DHS. RAND is a non-partisan policy research organization that focuses on objective analysis in a diverse range of fields, including national security, the environment, healthcare, justice, and education. RAND is headquartered in Santa Monica, CA with offices in Washington, DC; Pittsburgh, PA; Cambridge, UK; Canberra, Australia; and elsewhere.

ADAC’s current year of research (which runs 1 July 2016 to 30 June 2017) included approval to investigate a “Medium and Long Term Environment” (MaLTE) workshop oriented to research and better understand the challenges facing USCG and other maritime operators in the 2030 timeframe.

In a parallel fashion, HQ USCG Office of Emerging Policy (DCO-X) team was charged to investigate an Arctic future operations environment, oriented to 2030, under a whole of DHS construct involving participation by DHS components with current and emerging Arctic missions. The DCO-X team reached out to the HSOAC to provide analytic support in envisioning DHS Arctic missions and scenarios as well as identifying Arctic capability gaps and possible solutions.

Accordingly, ADAC (in partnership with CASP), HQ USCG DCO-X, and RAND plan to conduct a partnered workshop titled “Arctic 2030: Projecting Challenges and Capability Gaps.” 11 and 12 May 2017 during the University of Alaska Fairbanks (UAF) Week of the Arctic.

The workshop seeks to be a “Canada-U.S.” forum, to address operator mission needs for the North American Arctic. The forum is an unclassified venue. Chatham House protocols will be applied.

The UAF Week of the Arctic enables a unique opportunity to bring together scientists, government experts, industry representatives, and Arctic community members and other experts already attending the week’s activities to have a focused discussion on future Arctic trajectories and the capability gaps that may be necessary to fill in order to enable safety, security, and stewardship of the region.

Accordingly, the combined project team will conduct a workshop entitled: “Arctic 2030: Projecting challenges and capability gaps.” Purpose of the workshop is to examine possible future Arctic conditions along several dimensions, discern mission requirements, identify needed response capabilities, and uncover associated science and technology gaps and shortfalls.

Due to the current DHS and USCG responsibilities and missions, the principal focus of the workshop is to discern the challenges facing the greater North American Arctic. This focus will be informed by the reflections and perspectives from the Pan-Arctic region and influences beyond the Arctic.

Pre-workshop

Participants will be provided with the following before the event:

- Overview of the workshop and its goals (one page)
- Workshop schedule (one page)
- Summary of the workshop lexicon, key assumptions, and scope (two pages)
- Information on which breakout groups each person will be participating in
- Questionnaire, as described below

The questionnaire (which will also be sent to people who are unable to attend the workshop) will ask individuals to answer questions by rank ordering selections from lists provided no later than 5 May:

- What are important environmental, economic, political, regulatory, and other trends and decisions that will drive demand for DHS and other government entities to have specific Arctic capabilities in the 2030s?
- Which key events requiring response by DHS and other government entities in the 2030s Arctic are most plausible to occur?¹ Most stressing should they occur?
- What types of capabilities are most important for ensuring that DHS and other government entities can respond to such incidents in the 2030s?

¹ Please note: experts tend to be notoriously wrong when trying to predict the future. We ask our participants to consider plausible futures and events here and elsewhere on this agenda not as a foresight exercise, but rather to help us better understand how their inherent biases may influence some of their feedback on capabilities. Also, there tend to be two types of planners, those who focus on the most stressful situations, and those who plan toward what they think is most likely to occur (even if this is often not correct), so we would like to understand both viewpoints.

- What types of investments could DHS and other government agencies make over the next decade to achieve the capabilities they need in the 2030s?

Thursday, 11 May 2017 (Day 1)

0700 Coffee and registration begin

0750 Make announcement for everyone to take their seats

0800 Welcome participants and introduce the workshop objectives and format:²

- VADM Robert Parker: Importance of planning for operations in the region (5 minutes)
- Maj Gen Randy “Church” Kee: Welcome from the ADAC and overall vision for the workshop *Can also note that the workshop results will be summarized in an ADAC report* (5 minutes)
- CDR Eric Popiel: Welcome from the Evergreen office and objectives for the workshop *Will include remarks on what the intended products from the workshop will be and that there will be opportunities for follow-ups in the coming months. Will also mention CASP’s involvement.* (5 minutes)
- Dr. Abbie Tingstad: Welcome from RAND and workshop format/logistics *Can mention how the workshop will be used as an input to the overall HSAOC research report* (5 minutes)

0820 Plenary session: Setting the scene

Transition to briefings led by VADM Robert Parker

Briefings:

- Mr. Sean Moon: Current challenges in Arctic operations and development of the DHS Arctic Strategy
- (ADAC): Anticipated changes in the Arctic from a multi-domain perspective *Must emphasize maritime and coastal changes, and account for evolving terrestrial landscapes and air domain considerations, with acknowledgement of subsurface, space, and cyber domains*
- Dr. Alessa: Building resilient Arctic communities
- (RAND/ADAC): Impact of hydrocarbon extraction, fishing, science, and tourism on the future outlook of the Arctic
- Dr. Lawson Brigham: Global drivers for shipping in the Arctic and impact of regulatory issues on economic and security considerations
- (RAND/ADAC): Security considerations in the Arctic

Participants are invited to ask questions, guided by VADM Robert Parker

² Speakers will be signaled when they have passed their allotted time

0945 Coffee break

1000 Breakout session #1: Alternative Arctic Futures

Participants move to one of two pre-assigned sets of breakout groups, the A set and the B set. Each set of breakout groups will later be subdivided into A1, A2, etc., so that breakout groups are limited in size (preferably fewer than 10 participants with one facilitator and one person to document their findings).

Set A, in one room, will focus on alternative security and social futures. Opening remarks will be provided by Maj Gen Randy “Church” Kee for initial reflections, and by Dr. Scott Savitz to establish objectives and desired outcomes for this breakout session.

Set B, in another room, will address alternative economic and regulatory futures. Opening remarks will be provided by VADM Robert Parker for initial reflections, and by Dr. Abbie Tingstad to establish objectives and desired outcomes for this breakout session.

After the opening remarks, sets A and B will be subdivided into A1, A2, A3, B1, B2, B3, etc. Within each of these breakout groups, supported by one facilitator and one note-taker, participants are asked to verbally answer the following questions in a “go around the room”:

- What in the earlier plenary session stood out to you as key variables of change in the Arctic?
- Was there anything our experts did not mention that you would have added?

Participants will be provided with a set of alternative futures tailored to their focused areas.

Collectively, participants will be asked to:

- Discuss and attempt to build consensus about which futures are most plausible and which are most challenging, through the lens of their respective areas of focus
- Discuss how assumptions about environmental conditions impact the challenges associated with future worlds

Key themes from this session will be discussed in the evening plenary.

Participants will also have access to a comment box or table to provide insights or feedback anonymously if desired.

VADM Parker, Maj Gen Kee, and CDR Popiel will provide situational awareness to the different groups and help compile key insights from the session as a whole.

VADM Robert Parker and Maj Gen Randy “Church” Kee deliver closing remarks to their respective sets of breakout groups and dismiss them for lunch.

1200 Lunch

Evergreen, ADAC, and RAND examine results of the breakout groups and explore which futures will be most appropriate for discussion during each of the three key events that will be examined in subsequent breakout sessions (could be the same futures, could be different)

1330 Breakout Session #2: Key event to impose stress on DHS and government agencies

Participants move to one of two sets of pre-assigned breakout groups, C or D, containing breakout groups C1, C2, etc.

Roughly half of each new breakout group will have discussed security/social issues and the other half will have discussed economic/regulatory issues (this is the only shift in breakout group composition).

Set C will focus on communications and domain awareness.

Set D will address infrastructure, presence, and specialized response capabilities (e.g., medical, oil spill).

Participants will be provided with lists of example capability types to consider in their deliberations.

Deliver opening remarks:

- Dr. Abbie Tingstad (set C) and Dr. Scott Savitz (set D) establish objectives and desired outcomes for breakout session #2 and outline the futures under consideration during the session
- Maj Gen Randy “Church” Kee (set C) and VADM Robert Parker (set D) introduce the first key event

Break out into C1, C2, etc. (each with one facilitator and one note-taker), and begin deliberations:

- Individually select top priorities for capabilities to support operations assuming the key event has taken place in the 2030s decade and considering the stipulated futures
- Discuss and attempt to build consensus about which capability areas are cornerstones of response operations to the key event in the 2030s decade
- If time remains: Discuss any “low-hanging fruit” for DHS moving forward (e.g., leveraging partners, limited modifications to existing equipment)
- If time remains: Briefly discuss more ambitious investments in terms of cost and risk

Key themes from this session will be discussed in the evening plenary.

Participants will also have access to a comment box or table to provide insights or feedback anonymously if desired.

The three roaming facilitators will provide situational awareness to the different groups and help compile key insights from the session as a whole.

Rapporteurs from UAF and RAND will take notes on the discussion.

VADM Parker or Maj Gen Kee provide closing reflections.

1515 Coffee break

Groups return to the same breakout rooms.

1530 Breakout Session #3: Key event to impose stress on DHS and government agencies

Deliver opening remarks:

- Dr. Abbie Tingstad (set C) and Dr. Scott Savitz (set D) establish objectives and desired outcomes for breakout session #3 and outline the futures under consideration during the session
- Maj Gen Randy “Church” Kee (set C) and VADM Robert Parker (set D) introduce the second key event

Break out into C1, C2, etc. (each with one facilitator and one note-taker), and begin deliberations:

- Individually select top priorities for capabilities to support operations assuming the key event has taken place and considering the futures stipulated
- Discuss and attempt to build consensus about which capability areas are cornerstones of response operations to the key event
- If time remains: Discuss any “low-hanging fruit” for DHS moving forward (e.g., leveraging partners, limited modifications to existing equipment)
- If time remains: Briefly discuss more ambitious investments in terms of cost and risk

Key themes from this session will be discussed in the evening plenary.

Participants will also have access to a comment box or table to provide insights or feedback anonymously if desired.

Three roaming facilitators will provide situational awareness to the different groups and help compile key insights from the session as a whole.

Rapporteurs from UAF and RAND will take notes on the discussion.

VADM Parker or Maj Gen Kee provide closing reflections.

1715 Plenary #2: Wrap up

Closing remarks:

- Dr. Scott Savitz and Dr. Abbie Tingstad summarize key points from breakout sessions
- Maj Gen Randy “Church” Kee: Presentation of key issue for Friday’s breakout session to entice participation the next day
- CDR Eric Popiel: Closing remarks and observations from Thursday’s discussions
- VADM Robert Parker: Thank you to participants and closing remarks

Friday, 12 May 2017 (Day 2)

0830 Coffee icebreaker

0900 Plenary #3: Morning huddle

Welcome participants back and provide workshop objectives, format, and progress refresher:

- VADM Robert Parker: Opening remarks
- Maj Gen Randy “Church” Kee: Summary of Thursday results
- CDR Eric Popiel: Refresher on overall objectives and desired outcomes
- Dr. Abbie Tingstad: Introduction to morning activities and logistics reminders

0930 Breakout Session #4: Key event to impose stress on DHS and government agencies

Deliver opening remarks:

- Dr. Abbie Tingstad (set C) and Dr. Scott Savitz (set D) establish objectives and desired outcomes for breakout session #3 and outline the futures under consideration during the session
- Maj Gen Randy “Church” Kee (set D) and VADM Robert Parker (set C) introduce the second key event

Break out into C1, C2, etc. (each with one facilitator and one note-taker), and begin deliberations:

- Individually select top priorities for capabilities to support operations assuming the key event has taken place and considering the futures stipulated
- Discuss and attempt to build consensus about which capability areas are cornerstones of response operations to the key event
- Discuss any “low-hanging fruit” for DHS moving forward (e.g., leveraging partners, limited modifications to existing equipment)
- Briefly discuss more ambitious investments in terms of cost and risk

Key themes from this session will be discussed in the late morning plenary.

Participants will also have access to a comment box or table to provide insights or feedback anonymously if desired.

Three roaming facilitators will provide situational awareness to the different groups and help compile key insights from the session as a whole.

Rapporteurs from UAF and RAND will take notes on the discussion.

VADM Parker or Maj Gen Kee provide closing reflections.

1115 Plenary #2: Workshop close

Closing remarks:

- Dr. Scott Savitz and Dr. Abbie Tingstad summarize key points from morning breakout session
Will also remind participants that they may be contacted for follow up conversations in the months following, and that the workshop will be used as an input to the overall HSOAC research report
- Maj Gen Randy “Church” Kee: Summary of workshop observations
Can also mention the report the ADAC will prepare on the workshop findings
- CDR Eric Popiel: Importance of planning for Arctic operations and how workshop has helped this process
Can also mention that several of the organizers and facilitators will be staying at least through the late afternoon and are happy to continue conversations over lunch, etc.
- VADM Robert Parker: Thank you to participants and closing remarks

1145 End workshop

Point of contact for draft agenda:

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