ARCTIC COLLABORATIVE WORKSHOP

AFTER ACTION REPORT

April 18-21, 2016, University of Alaska Fairbanks

“In the Arctic, you’ve got to be really good at sharing.”
-Lt Gen Handy, ALCOM Commander
1. The title of this document is ARCTIC COLLABORATIVE WORKSHOP After Action Report.

2. The information gathered in this After Action Report (AAR) is UNCLASSIFIED.

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EXECUTIVE SUMMARY

Overview:

The 2016 Arctic Collaborative Workshop (ACW) was conducted 18-21 April 2016 at the University of Alaska Fairbanks (UAF). The ACW is an important event designed to operationalize Arctic plans and provide a forum to develop an engagement plan to combat Arctic challenges. The ACW is a biennial venue that allows an international group of experts to examine the Arctic as an operational environment. UAF hosted the first day’s events at their International Arctic Research Center. UAF is recognized as the world’s most published and cited Arctic research institution. This day served to highlight ongoing initiatives in Arctic research, especially those that formed a baseline for the following days’ discussions.

78 people from four countries and 34 organizations attended the Workshop including participants from Norway, Denmark, Canada, and the United States. Attendees representing dozens of organizations that focus on the Arctic came together to develop an international Community of Interest approach comprised of government, industry and academia to confront Arctic challenges in the areas of defense, environmental safety, and Arctic capability advocacy. This approach facilitated cooperative efforts between Arctic nations to focus on ways to share strategies, plans, and capability development efforts. This effort improved the ability of the respective nations to meet the defense, security, safety and high impact environmental threats and challenges associated with combined operations as climate change opens the Arctic to more maritime shipping, tourism, and resource extraction activities. Participants also explored ways to improve readiness and future cooperation through exercises and information sharing.

ACW Purpose:

Strengthen our collective ability to detect, deter, defend, defeat threats, and to respond to hazards through a culture of continuous collaboration and cooperation in planning, training, and mission execution. We will advocate for required capabilities to mitigate Arctic capability gaps.

Objectives:

1. Identify processes and systems that facilitate the sharing of information, intelligence, and awareness to support mission accomplishment.

2. Strengthen U.S. and Partner Nation’s collective ability to provide appropriate, timely and effective support to civil authorities.

3. Identify key defense capabilities, both current and needed.
Scenarios: During the Workshop, attendees addressed the objectives through two scenario-driven discussions: volcanic activity requiring defense support of civil authorities (DSCA), and a foreign military escorting a research vessel conducting unauthorized activity in Arctic nations’ Economic Exclusion Zones (EEZs).

1. Environment and Response: Alaska is a place of significant geological activity. Volcanic and seismic disasters continue to challenge the requirement to protect life, property and the environment. Communities and emergency management professionals are prepared and resilient, but vast distances, weather, communications, and lack of infrastructure affect operations throughout Alaska, greatly hampering emergency response. Agencies continue to improve capabilities, however, climate change effects continuously present new challenges. This supports two major mission areas for USNORTHCOM – DSCA and Theater Security Cooperation.

2. Defense: The November 2013 Department of Defense Arctic Strategy highlighted the United States’ commitment to working with allies and partners to keep the region stable and secure. To support this role, Arctic Collaborative Workshop planners incorporated a defense scenario into discussions in order to ensure DOD is prepared to execute the other major mission assigned to USNORTHCOM: Homeland Defense.

Significant Observations:

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<th>Observation</th>
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<tr>
<td>An Arctic Engagement Plan is needed to provide a framework for long-term collaboration and engagement with partners</td>
<td>Develop a 2018-2020 Arctic Engagement Plan</td>
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<th>Observation</th>
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<td>To ensure efficient Arctic operations, stakeholders and partners should develop an Arctic Capability Baseline</td>
<td>Complete a 2018 Arctic Capability Baseline</td>
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<tr>
<td>To ensure development of mission-based plans, stakeholders and partners should develop an Arctic Process Baseline</td>
<td>Complete a 2018 Arctic Process Baseline</td>
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Way Ahead:

The Arctic Collaborative Workshop was a resounding success. This effort should continue in the future, fully linked with Arctic exercises and engagements. Every effort should be made to solicit scenario and discussion topics from the Arctic community of interest to remain relevant.
Ice coverage in the Arctic is diminishing as the climate changes, permitting increased human access in pursuit of natural resources, commercial shipping, and ecotourism. This is evidenced by an increase in maritime traffic through the Bering Strait and the Shell Oil exploratory oil drilling in the Chukchi and Beaufort Seas in the summer of 2012, and again in the summer of 2015. Additionally, the Crystal Serenity cruise ship plans to sail through the Northwest Passage in August 2016 with approximately 1,400 passengers on board, creating a potential Mass Rescue Operation hazard. Many Arctic nations are contemplating enhanced pollution prevention regulations to protect the fragile Arctic environment and the International Maritime Organization is considering development of a new Polar Code. Indigenous people are expressing increasing concern about the potential disruption to migratory patterns of species they hunt and fish. Cold War Military infrastructure built on permafrost is now sinking and becoming unstable. The frozen Arctic Ocean once provided a natural frozen obstacle and is slowly becoming a less reliable, homogenous barrier. This is considered a factor with some of Russia’s recent moves to build up militarily in the Arctic. These are just a few of the challenges regional militaries must overcome as they prepare for increasing operational responsibilities in this vast, harsh, fragile region.

Many countries have national strategies for the Arctic region. However, specific Arctic policies are needed because of the unique operating environment and complicated and overlapping political considerations. Some think that it’s easier to operate in the Arctic now because of less sea ice but this simply isn’t true. The USCG Healy completed a North Pole expedition last fall where the Commanding Officer noted that the ice is more dangerous now than it has ever been due to its unpredictability (new ice is much less stable than multi-year ice). It is not uncommon for very large ice floes to change drastically and without warning.
The U.S. Arctic territory is adjacent to the Russian and Canadian Arctic territories. The Bering Strait is a strategic choke point where the main sea lanes of communication of the Northeast Passage and the Northwest Passage converge. Because security interests follow economic interests, countries can expect to be faced with security and safety issues concurrent with the Arctic opening. Increased access in this remote and less-monitored environment provides an avenue of approach for new and existing threats to the US and our partners. New activities by unmonitored groups could also bring significant ecological harm to the pristine and fragile Arctic environment. Any attempt to introduce Weapons of Mass Destruction (WMDs) to the region through smuggling or terrorist activity could have devastating effects on the environment. In 2015, 550 Automatic Identification System (AIS) tracks were observed through the Bering Strait.

Cooperation and collaboration between all Arctic nations is essential for ensuring the safety and security of the region and approaches. Preparing for increased operations in the unique Arctic environment requires enhanced strategic partnerships among nations, which will support the U.S. Administration’s efforts to forge closer ties with Russia, which have chilled following Russian aggression in Crimea.

The first ACW occurred in March 2012 at the National Defense University in Washington, D.C. At this inaugural event, ADM Papp, USCG Commandant, and GEN Jacoby, NORAD and US Northern Command Commander, signed the historic Arctic Capability Assessment Working Group (CAWG) White Paper. Participants at this ACW conducted thorough mission analysis of initial exploratory drilling efforts by Shell Oil in the Chukchi and Beaufort Seas, in order to prepare for impending full drilling operations. Discussions focused on Shell’s operations, permit requirements, search and rescue (SAR) capabilities, contingency operations to include oil spills, and general Arctic operating challenges. Another scenario included a sinking vessel off the coast of northern Alaska and a Mass Rescue Operation. Discussions focused on SAR capabilities, medical capabilities, transport capabilities, the austere environment, and operational expectations. Shell’s VP for Arctic Operations and many dignitaries from several countries, and numerous U.S. and Canadian government agencies were in attendance. This first ACW was a resounding success and set the stage for future ACWs.

The second ACW occurred in April 2014 at the University of Alaska and was co-sponsored by UAF, JTF-AK, and U.S. Northern Command. In attendance were University of Alaska President Gamble, LGen Parent, BGen Hamel, AK Lieutenant Governor Mead Treadwell, representatives from Denmark, the Netherlands, Norway, the U.S., Canada, numerous US Government agencies, numerous mayors, and other VIPs. Thirty-seven organizations were represented. AK Lieutenant Governor Treadwell
delivered the keynote address, in which he stressed: "We need to go to the Arctic with purpose, and we need to deserve to be there." He also explained how Arctic security affects the entire country (U.S.) and why it should be a national priority. In his speech, NORAD Deputy Commander Lieutenant General Parent described the Arctic as a “unique domain.” He outlined the uncommon operational capability requirements needed there, and offered details on planned improvements. Lieutenant General Parent concluded by highlighting the role of the Arctic Council, the Northern Chiefs of Defense, USNORTHCOM, and the binational model followed by NORAD as an example for partnerships. At the local level, Northwest Arctic Borough mayor Reggie Joule, Mr. Nagruk Harcharek of UMIAQ, LLC, and Polar Services’ Ms. Marin Kuizenga offered key insights into the Alaskan native culture, communities, governance structures and industry’s capabilities.

Scenarios included a Chinese diesel submarine stuck in the sea ice near the Canada - U.S. (CANUS) boundary, maritime interception operations in the Northwest Passage, and a satellite crash near the CANUS border that created a HAZMAT disaster. The Chinese diesel submarine scenario encouraged conversations on SAR response authorities and responsibilities, required capabilities, and operating challenges in the Arctic environment. The maritime intercept operation scenario discussion focused on response organizations, their authorities and capabilities, and mitigating gaps for more efficient and timely operations. The satellite crash scenario fostered discussion about the vast distances required for logistical support, especially for specialized capabilities such as HAZMAT and unique medical support. A common theme for all three scenarios was the extremely difficult operational environment compounded by correspondingly difficult logistical support impediments. Another common theme was collaboration from the local to the federal level.

Attendees stated that this year’s Arctic Collaborative Workshop was a huge success. As Lieutenant General Handy stated, we must share in the Arctic. This was a common theme throughout the ACW and as we focused on the objectives. The civil support scenario focused on providing better timely and effective support. Attendees agreed that situational awareness, information-sharing, and relationships are the most important factors to produce a timely and effective response. The defense scenario addressed information-sharing and intelligence. This proved to be a difficult scenario to discuss at the unclassified level due to many of the Science and Technology solutions in development for improved communications, surveillance,
and detection, but participants developed a mutual understanding of the challenges, capabilities, and gaps that currently impact our ability to attain Arctic domain awareness and the international laws and agreements that may guide our presence and that of our adversaries.

As University of Alaska President Johnsen stated, it’s not a matter of if, but when, something disastrous happens in the Arctic. We need to be ready and the ACW provided great discussions toward this goal. Of note, on the final day of the Workshop, China released a 365-page manual for shipping through the Northwest Passage, complete with charts, statistics, and guidelines. This underscored many of the week’s discussions about the dynamic nature of the Arctic, its benefits, and its slow move toward becoming a geopolitical arena for commercial and geopolitical interests.

The ACW follows, and has learned from, multiple successful engagements such as Exercise ARCTIC ZEPHYR and the Arctic Domain Security Orientation (ADSO) course of instruction. ACW results and observations will continue to inform future Arctic efforts including as the U.S. Coast Guard Forum, exercises such as ARCTIC EDGE and ARCTIC ZEPHYR, the ADSO course, and Arctic nations’ strategic plans, policies, exercises, and capability advocacy.
Agenda

Pre-Event 18 April
Welcome
UAF Presentations
No Host Informal Social

Event Day One 19 April
Opening Remarks - Lt Gen Handy, Commander, Alaskan Command
Alaska Volcano Observatory Brief
Alaska Earthquake Information Center Brief
Scenario 1: Civil Support - Environment and Response
Hosted Ice Breaker Social/Reception

Day Two 20 April
Arctic Country Briefs - Strategic Interests, Defense & Security Capabilities
RAND Corporation Threat Brief
Scenario 2: Defense – China in the Arctic

Day Three 21 April
Permafrost Tunnel and Trans Alaska Pipeline System (TAPS) Tour
Out Brief
Closing Comments: BGen Drouin and University of Alaska President James Johnsen
Scenario 1 – Civil Support

Environment and Response: Alaska is a place of significant geological activity. The real threat of large-scale natural disasters continues to challenge our ability to preserve life, property and the environment. Natural disasters in Alaska often involve cascading failures that are often more significant than the initial event. For example, an earthquake may topple external heating fuel tanks, sparking fires that may be difficult to extinguish in sub-zero temperatures. Communities and emergency management professionals are well-prepared and resilient, but in Alaska, additional resources are hundreds of miles and many hours away. Agencies continue to improve their capacity to effectively respond to single emergency events and locations. However, remote locations in Alaska remain vulnerable to incidents that would otherwise require conventional, emergency-related infrastructure support. Air transportation is often the key requirement that enables effective emergency response. Communities and agencies alike should benefit from emergency preparedness, response and mitigation to decrease dependency on additional external assets. Facilitator: Cameron Carlson.

Event 1: A volcano erupts, affecting a small community, necessitating moderate emergency response. Air operations are limited and medical evacuation for at-risk civilians is required.

Event 2: Event 1 is adjusted to deny all air operations due to volcanic ash.

Event 3: As event 1 operations are under way, a significant seismic event occurs near the Northeast corner of Alaska with multiple disaster effects. Air operations are limited.

Event 4: Event 3 is escalated to deny all air operations due to volcanic ash.
**Scenario 2 – Defense**

Defense: The Sino-Russian energy cooperation in the Arctic continues to grow, Chinese oil companies have invested significantly in Russian oil infrastructure allowing them access to significant oil reserves at reduced prices. China’s requirement for rare earth minerals has resulted in the development of an ice-breaker fleet of eight ships. Consistent with China’s claim to be a near Arctic nation, in the last decade, they have routinely sent navy warships through the Bering Sea into the Arctic Ocean. This, in addition to unauthorized exploration and research, has significantly strained relations in both the US-Canadian and European Arctic regions as these nations contend that China is in violation of international law. Facilitator: Jamie Knies.

Event 1: A Chinese Surface Action Group (SAG) escorts a mineral mining vessel through the Bering Strait and toward the Northwest Passage. It is believed that the mining vessel will conduct illegal mining in another country's EEZ.

Event 2: A Chinese mineral mining vessel, escorted by a Chinese warship, is conducting illegal mining research in the Norwegian EEZ.

Event 3: The vessels from Event 1 meet up with the vessels in Event 2 in the Norwegian EEZ. The Norwegian Navy steams toward the Chinese vessels and all Chinese vessels sail to waters off of Iceland.

Event 4: The Chinese vessels regroup in Icelandic waters and are now sailing toward Norway in a known aggressive military formation.
Key Observations

• A complete discussion in a classified environment would have better captured domain awareness capabilities.
• Capitalize on proven SAR best practices as a model for other mission areas.
• There are multiple information-sharing processes in place to identify and share situational awareness between Arctic nations, all built upon personal relationships and long-term necessity.
• Russia and China have common economic interests but mutual distrust. Determining current and future intent and motive are key.
• Consider local, tribal, and State capabilities when planning a response. Inflexible Federal capabilities come with a long logistics tail and are expensive. Additionally, the local assets may be much better than a Federal response. They are much more familiar with the operating environment.
• Diplomatic efforts would be undertaken at almost all stages of a crisis, both between affected Arctic nations and with adversaries to air grievances and avoid conflict.
• There is no Maritime Operational Threat Response (MOTR)-like process to respond to maritime issues between all Arctic nations. Each nation and organization has a formal internal method for communication, awareness, decision support, and response.
• NATO has policies, procedures, and assets that would automatically be triggered during a maritime incident in the Arctic.
• There are many new communication, sensor, and information-sharing platforms in development stages that can improve Arctic domain awareness, e.g. Silvertip, Mobile User Objective System (MUOS), Alaska Satellite Facility resources, Arctic Domain Awareness Center.
• Multilateral Agreements and UNCLOS help to guide Arctic Nation response.
• Risks and vulnerabilities must be considered and mitigated when using unclassified information sharing and communication systems.
• There may be a delay in using some capabilities for response as organizations may have to disperse assets and take care of medical needs of their own people in a catastrophic event.
• There are charters in place that may be invoked in a disaster to provide satellite coverage for situational awareness.
• Involve all key players in scenario planning and discussion. Brief known processes.
• Science must inform policy; this is especially true in the Arctic – President Johnsen. The gap between science and technology can be effectively bridged with a focus on operationalizing applied science concepts.
• Ice coverage in the Arctic is diminishing as the climate warms, permitting increased human access in pursuit of natural resources, commercial shipping, and eco-tourism. Diminishing sea ice increasingly introduces uncertainty in operations as the environment undergoes changes to patterns that are often unpredictable and dangerous.
• Indigenous people are expressing increased concern that the potential for increased human activity may disrupt the migratory patterns of species upon which they depend.
• Military infrastructure built on permafrost during the Cold War is now becoming unstable.
• The frozen Arctic Ocean that provided a natural barrier to maritime approach from the north is now gradually disappearing.
• It is more dangerous to navigate Arctic waters now, even with diminished ice, due to its unpredictability. (Reinforced by USCG Cutter Healy during 2015 North Pole expedition).
• International cooperation is essential for this workshop and successful Arctic operations.
• The U.S. Arctic territory is adjacent to Russian and Canadian Arctic territories. The Bering Strait is a natural Arctic choke point where the main sea lanes of communication of the Northeast Passage and the Northwest Passage converge. Because security interests follow economic interests, Arctic stakeholder countries can expect to face security and safety issues concurrent with the Arctic opening.
• Cooperation and collaboration between all Arctic nations is essential for ensuring the safety and security of this region and approaches.
• Preparing for increased operations in the unique Arctic environment will enhance strategic partnerships among neighboring Arctic nations.
• China’s intentions in the Arctic are largely driven by resource needs and long-term considerations.
Way Ahead

This Arctic Collaborative Workshop was a resounding success building on the previous two. This effort should continue in the future and become fully integrated with other Arctic engagements and planning. Every effort should be made to solicit scenario and discussion topics from the Arctic community of interest to remain relevant.

The SAR Agreement is a successful incremental step toward providing an international framework of cooperation in the Arctic. Although the discretionary approach is appropriate in this context, there are significant gaps in cooperative operational definitions, facts, constraints, assumptions and unknowns. Nations can reasonably expect to prepare and respond to emergencies within their sectors. However, there remains significant uncertainty in how actual cooperative operations will occur. Geopolitical and operational priorities and differences may result in negative impacts to emergency response which might be clarified by focusing on exercise scenarios with actors that can discover and resolve such issues. The Arctic Collaborative Workshop series can provide the collaborative environment to solidify Arctic efforts and improve partnerships to strengthen a peaceful and cooperative Arctic.

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