As of 8 November 2019

Panel Instructions

AAS19 is supported by moderators from the following organizations:

In support USNORTHERN Command’s Arctic Security and Defense Mission

Alaskan Command hosts

Arctic Symposium 2019 (AAS19)

Advancing Strategic Partners in Securing America’s Arctic Interests

University of Alaska Fairbanks
13-15 November 2019
Introduction.

ALCOM’s Arctic Symposium 2019 (AAS19) is planned as a composite and complex event. AAS2109 includes multiple plenary sessions, breakout group electives and follow-on field activities, principally focused to advance greater understanding, improved networks and more effective approaches in discerning and developing solutions to address current and emerging concerns to U.S. national interests in the Arctic region.

The principal outcome sought in AAS19 is to improve understanding of the challenges in the complicated risk environment that describes the new circumpolar north. Symposium planners seek AAS19 will create thoughtful discussions to gain needed solutions to address and potentially reduce the associated defense and security risks. Overall, based in advancing Arctic security and defense baselines well established via Arctic Maritime Symposium 2018 and Arctic Senior Leader Summit 2019, the AAS19 Panels are intended to provide expert insights and understandings, based on each panelists’ unique and deep knowledge, aligned to the panel in which they are participating.

Overall guidance:

Generally, following brief introductions by panel moderators, (who are asked to refrain from reading biographies/biography summaries...as these are published for symposium participants) all panels are arranged for opening views and discussions planned and prepared by the panelists. Accordingly, AAS19 planners respectfully request speakers to consider the following:

- **Very minimum slides/viewgraphs.** For Plenary panels, AAS19 planners relay a preference for little to no slides. For Keynote speakers and plenary panels, AAS19 Planners will provide a chart of the Arctic presented as a backdrop for presenters who wish to not use slides. For multiple member plenary panels, if slides are used, planners request 1-3 viewgraphs be the target range, and request no more than 5 slides per panel presenter. For AAS19 Day two electives, presenters are welcome to use the slides necessary to present within their allotted time.

- **Style of presentation...Informative and conversational.** Planners wish to encourage discussion and dialogue...and provide the opportunity for questions from participants.

- **Desired content of presentation...fact laden and practically focused:** AAS19 planners wish you to relay what you know and what you think. Each presenter at AAS19 is exceptionally knowledgeable...and each presenter has unique and valuable insights. Planners wish participants listen and learn from what each presenter knows and thinks about the panel topic.
  - AAS19 planners do not wish the panel title be too much a constraint...but serve as a guide of what we wish for panelists to consider in reflecting their understandings and insights.
Planners are requested to focus less on aspirations...of what we wish the Arctic to become and focus more on the contours of the Arctic which is presenting itself in the near and mid-term time horizon.

Please consider the overall changing geostrategic trends of the Arctic. While noting these changes, we also challenge presenters to think about fine scale aspects and avoid too much generalization, which can possibly lead to mischaracterization.

Presenters should focus less on what would be considered partisan or political...the symposium is about practical measures which protect citizens, identifying and recognizing gaps and shortfalls in responding day to day and in crisis...and learning more from Alaska and Canadian Indigenous Leaders.

Presenters are requested to relay real experiences and provide practical assessments.

Presenters are requested to focus more as well in securing respective national interests, while considering the changes now underway in and across the Arctic.

Finally, for plenary presenters are requested to speak more about what they know and think...and less about what their organization does. This guidance does not apply to the Day 2 electives.

- **Panelists are asked to consider using a “Ted (style) Talk” approach.** Here’s a site to consider in preparing for the panels: [https://whatis.techtarget.com/definition/TED-talk](https://whatis.techtarget.com/definition/TED-talk)

- **Supporting Power point Presentations:** Please email any powerpoint presentations to uaa.adac@alaska.edu with cc copy to rakee@alaska.edu and ematthews@alaska.edu no later than close of business, 7 November 2019.

**Specific guidance considerations for respective presentations:**

0900-0940: Opening Keynote speaker **“The Changing Arctic...a Long View”** Dr. Brendan Kelly, Executive Director of the Study of Arctic Environmental Change (SEARCH), and Professor of Marine Biology, International Arctic Research Center, University of Alaska Fairbanks (Confirmed).

**Presentation aspects to consider:** AAS19 planners respectfully ask Dr. Kelly to provide reflections that put the changing Arctic into perspective over centuries from a geophysical aspect, similar to what he presented at a prior Arctic Encounter Symposium. AAS19 planners request approximately 10 minutes be reserved for Questions and Answers (Q&A).
0940-1010: Reflections on the power of Alaska’s Indigenous Peoples to advance Arctic and Northern regional security. **Dr. Rosita Worl**, President of the Sealaska Heritage Institute of the Sealaska Corporation, Juneau Alaska (Confirmed).

**Presentation aspects to consider:** AAS19 planners respectfully ask Dr. Worl consider and present on the rise of Alaska Natives in advancing Arctic governance, traditional, economic and environmental security and associated welfare across the High North. While Alaska’s Native communities have considerably greater influence in security and defense, what aspects are lagging and need revised/revitalized policy and government emphasis? AAS19 planners request approximately 5-7 minutes be reserved for Q&A.

1025-1125: **Hidden in Plain Sight: The Growing Capacity of North Arctic Indigenous Peoples:** A multi-disciplined panel of Alaskan Native Leaders. This panel will describe alignment of vision, goals and actions necessary to accelerate a dynamic partnership between Indigenous people and the military to address the rapidly changing security environment.

**Planned moderator:** **Dr. Whitney Lackenbauer**, Trent University, Peterborough Ontario, Canada (Confirmed).

**Planned panelists:**

- **Ms. Sarah Obed** Vice President, External Affairs, Doyon Corporation, Fairbanks, Alaska (Confirmed)
- **Mr. Greg Razo**, Vice President, Cook Inlet Region Inc. Anchorage, Alaska (Confirmed).
- **Ms. Mary David**, Executive Vice President, Kawerak Inc. Nome, Alaska (Confirmed).
- **Mr. Nagruk Harcharek**, Director of Barrow Operations, Ukpeagvik Inupiat Corporation, Utqiagvik, Alaska. (Confirmed).

**Presentation aspects to consider:** AAS19 planners respectfully ask the moderator to guide these 4 panelists for the reflections of approximately 12 minutes each on their respective insights and experiences as leaders within their communities and/or organizations in connecting between Alaska Natives and Canadian First nations to the respective defense and security organizations within Canada and Alaska/U.S. What are current shortfalls (and associated areas of misunderstanding and what are some practical measures that can be taken to improve communication and trust? AAS19 planners request a reserve of approximately 15-20 minutes of Q&A.
Suggested questions for panelists to consider:

1. What particular experiences have been helpful in building bridges between communities and defense & security teams?
2. What set of experiences have inhibited relations and strengthening partnerships?
3. What measures should be considered to advance the partnership between these communities?


Presentation aspects to consider: AAS19 planners respectfully request DASD Maurer provide an overall Strategic overview and associated assessment of emerging defense and security contours of the circumpolar Arctic while outlining U.S. defense challenges and opportunities across the Arctic region. AAS19 planners request a reserve of approximately 5 minutes for Q&A.


1305-1315: Legislative priorities for the Arctic...assessments from Congressman Don Young (R-AK).

Description: A Congressional update on legislative matters oriented to the Arctic from a member of the Alaskan Congressional Delegation.

Planned presenter: Representative Don Young, (R) Alaska. (In person/remote/recorded). (Confirmed...Recorded Message).

1315-1335: Legislative priorities for the Arctic...assessments from Alaska’s Senator Sullivan (R-AK)

Description: A Congressional update on legislative matters oriented to the Arctic from a member of the Alaskan Congressional Delegation

Presentation aspects to consider: AAS19 planners respectfully request Senator Sullivan provide his assessment of legislative measures and associated policy actions which target aspects of security and defense, (principally focusing on defense strategy needs) to better address [understood] rising competition between Great Power Nations to defend and protect U.S., Interests and support Allied and Partner security in and across the Arctic. AAS19 planners request a reserve of approximately 3-5 minutes for Q&A.

1345-1450: The rapidly changing Arctic environment...what’s going on here? A panel of Arctic science experts describe recent and projected Arctic environmental changes, to include the warmest summer in recorded history for the Alaskan Arctic region.

Planned moderator: Dr. Michael Sfaga, Director Global Risk and Resilience Program and Director Polar Institute, Woodrow Wilson Center, Washington D.C. (Confirmed).

Planned panelists:

- Mr. Don Moore, Alaska National Weather Service, Anchorage, Alaska (Confirmed).
- Dr. Hajo Eicken, Director, International Arctic Research Center, UAF, Fairbanks, Alaska (Confirmed).
- CAPT Chris Gabriel, USN, Commanding Officer, USN Fleet Weather Center, Norfolk, Virginia (Confirmed).
- Mr. Nagruk Harcharek, Director of Barrow Operations, Ukpeagvik Inupiat Corporation (UIC), representing UIC-Science, Utqiagvik, Alaska. (Confirmed).
- Dr. Julie Morris, Associate Director for the U.S. Global Change Research Program (USGCRP), Washington D.C. (Confirmed).
- Mr. Craig Fleener, Executive Director, Alaska Ocean Cluster, Anchorage, Alaska (Confirmed).

Presentation aspects to consider: AAS19 planners respectfully request the moderator to guide these 7 panelists for the reflections of approximately 10 minutes each on their respective insights and understandings of what how and why the physical environment of the Arctic is changing. Planners request fine scale understandings of the science of a changing Arctic and related regional and localized implications of these changes over the near to mid-term horizons.
(aiming for impacts oriented to 5-15 years distant). In sum, how does the changing Arctic affect residents, and impact regional security and defense activities? AAS19 planners request a reserve of approximately 10 minutes of Q&A.

**Suggested questions for panelists to consider:**

1. What changes now underway in the physical Arctic environment is viewed as perhaps the principal catalyst for additional series of changes?

2. How significant a concern to local and regional ecosystems is thawing permafrost in/across the North American Arctic? Consider categorizations such as “significant,” “manageable,” “catastrophic”...etc.

3. If Arctic sea ice largely melts seasonally, what are the anticipated impacts to coastal regions across the North American Arctic (in context of geography, infrastructure, subsistence lifestyles, economic aspects, etc.?)

**1505-1655:** **Achieving Improved Unity of Effort in Order to Better Succeed at 30 Below.** An interactive panel discussion highlighting practical measures that can improve cooperation between defense/security forces and regional officials with local rural communities.

**Panel description:** A cross-cutting panel of experts who have different vantages, but mutual interests to advance cooperation and collaboration in order to improve Arctic security.

**Moderated by:** Dr. Whitney Lackenbauer, Trent University, Peterborough, Ontario, Canada.

**Planned panelists:**

- **RADM Matt Bell,** USCG, Commander, USCG District 17, Juneau, Alaska. (Confirmed).


- **Ms. Hallie Bissett,** Alaska Native Village Corporation (Confirmed).

- **Mr. Kevin Bjella,** U.S. Army Corps of Engineers Cold Region Research and Engineering Laboratory (CRREL), Ft Wainwright, Alaska. (Confirmed)

- **BG Joseph Streff,** ANG, Director of Staff, Alaska National Guard, JBER Alaska (Confirmed).

- **BGen Pat Carpentier,** Commander, Joint Task Force North, Yellowknife, NWT, Canada (Confirmed).

- **LCol Tim Halfkenny** Commanding Officer 1st Canadian Ranger Patrol Group
Presentation aspects to consider: AAS19 planners respectfully request the moderator to guide these 8 panelists in their respective reflections of approximately 7-8 minutes each to engage and work between local communities and government service (whether defense, security and/or service support) to better support and protect citizens, secure and defend the sovereignty of the nation, characterize a changing environment, address infrastructure challenges and cope with the distances and challenges of the austere North American Arctic. AAS19 planners request a reserve of approximately 10 minutes of Q&A.

Suggested questions for panelists to consider:
1. What practical measures are useful to consider can improve cooperation between government officials, their team’s local leaders?
2. What experiences can operational leaders/operational support leaders relate that were helpful to improve communication and cooperation with local officials?
3. What suggestions can operational/operational support leaders relate that would be helpful to better orient local and regional response with local officials?

1655-1730: *Leadership Lessons from Working Together (with a focus on cyber security).*

Joint Presentation by Ms. Julie Kitka, President, Alaska Federation of Natives and Ms. Darlene Gates, President of Exxon Alaska (and Honorary Col of the Royal Canadian Air Force) with Introduction by Ms. Amanda Andraschko, Native Affairs Liaison, Alaska Command (Confirmed).

Additional participants include Special Agent William “Bill” Walton, FBI Anchorage, (Confirmed) and Col Tim Maxwell, ALCOM J6 JBER, Alaska (Confirmed).

Presentation aspects to consider: AAS19 planners respectfully thanks this panel for their reflections and provides no additional guidance, other than request a reserve of approximately 5 minutes of Q&A.

1900-2130: Reception Icebreaker followed by Dinner, Pikes Landing Restaurant, 4438 Airport Way, Fairbanks AK, 99709 (Confirmed).
Guest speaker:  **Vice Admiral Linda Fagan**, USCG, Commander, Pacific Region, U.S. Coast Guard, Alameda, California (Confirmed).

Planned Theme: “**Rising to the challenge...exercising leadership in an increasingly complex Arctic geo-strategic environment**”

*Presentation aspects to consider:* AAS19 planners respectfully thanks Admiral Fagan for her reflections and requests consideration of the challenges, opportunities and successes USCG Pac Area faces in accomplishing USCG assigned missions in and near the U.S. Arctic regions of the North Pacific, Bering, Chukchi and Beaufort Seas. AAS 19 planners request approximately 20-25 minute presentation and request a reserve of approximately 5-7 minutes of Q&A.

**14 Nov 2019:**

**0800-1720**  *Alaskan Command Arctic Symposium Day 2.  “Succeeding at 30 below”*... A series of discussions to describe the challenges and ways to succeed across an array of multidiscipline endeavors under some of the most demanding theaters on the planet.

**0815-0850:**  *Rising to the Challenge: Addressing Public Safety, Rural Law Enforcement and Security Concerns in the North American Arctic.* A bilateral exchange on the Canadian Rangers model and application to address security concerns in Arctic Alaska.

*Panel Description:* A CANUS panel that compares and contrasts the Canadian approach to protect and serve citizens in remote Arctic regions with the approach utilized in Arctic Alaska.

*Planned moderator:*  **Dr. Whitney Lackenbauer**, Trent University, Peterborough Ontario, Canada.

*Planned panelists:*

- **LCol Tim Halfkenny** Commanding Officer 1st Canadian Ranger Patrol Group Canadian Armed Forces, Yellowknife NWT, Canada (Confirmed).
- **Ms. Vivian Korthuis**, AVCP, Bethel, Alaska (Confirmed)
- **Julie Kitka**, President, Alaska Federation of Natives, Anchorage, Alaska (Confirmed).
- **Nicole Borromeo**, Executive Vice President and General Counsel, Alaska
Presentation aspects to consider:  AAS19 planners respectfully request the moderator to guide these 4 panelists in their respective reflections approximately 7-9 minutes each that address rural Arctic region public safety...are their lessons in Canada that should be considered for transcribing to Alaska’s remote regions? AAS19 planners request a reserve of approximately 10 minutes of Q&A

Suggested questions for panelists to consider:

1. What measures should be considered which could reduce rural public safety concerns in/across Rural Alaska?
2. What measures have been taken or being considered across rural Arctic Canada to reduce public safety concerns?


Presentation aspects to consider: AAS19 planners respectfully thanks Mayor Brower for his reflections and provides no additional guidance, other than to request a reserve of approximately 5 minutes for Q&A.

0910-0915: Overview in Electives to advance Arctic Innovation and Technology aligned to support advancing research and knowledge to “Succeed at 30 below.”

Track 1: Arctic Science and Innovation.
Track 2: Arctic technologies in support of operational needs.

0915-0930: Break. Note: Track 1 will convene in the Great Hall, Track 2 will convene in the adjoining Wood Center.

Track 1: Arctic Science and Innovation, A series of presentations moderated by Dr Doug Causey, ADAC Principal Investigator, University of Alaska, Anchorage Alaska.

Location: Great Hall

Track 2: Arctic technologies in support of operational needs. A series of presentations moderated by Dr Michael Sfraga, Director, Polar Institute, Wilson Center, Washington D.C.

Location: Davis Concert Hall
0930-1000  *Arctic Research and Operations at the Geophysical Institute.* Presentation by director **Dr. Bob McCoy**, University of Alaska Fairbanks, Fairbanks Alaska. (Confirmed)

NOAA satellite service support to advance Arctic Domain Awareness for operational decision makers. **Dr. Lihang Zhou**, NOAA JPSS (Confirmed).


Alaska Department of Natural Resources Arctic Strategic Transportation and Resources project, (ASTAR) overview. Presentation by **Mr. Trent Hubbard** from DNR, Division of Geological and Geophysical Survey (DGGS) and **Ms. Tasha Jackson**. RDI (ASTAR contractor) (Confirmed).

1030-1100  *Emerging mapping capabilities for the Arctic region: The Geographic Information Network for Alaska (GINA).* Presentation by GINA Director, **Mr. John Pace**, UAF, Fairbanks, Alaska (Confirmed).

Commercial Satellite data provides Maritime Situational Awareness. Presentation by **Sigmund Dehli**, Kongsberg Satellite Services, Norway (Confirmed).

1100-1110  Break

1110-1140  *Next generation, Arctic capable, sensor integration research for remotely piloted aircraft.* Presentation by **Dr. Cathy Cahill**, Alaska Center for Unmanned Aircraft Systems Integration (ACUASI), UAF, Fairbanks, Alaska (Confirmed).

Sabre St Paul SPXTR Arctic Plan: Putting Alaska Technology forefront of Search & Rescue, Disaster Relief, Emergency Response, Hazmat Response and Interdiction. Presented by Executive Director, **Mr. Patrick Baker** and President, **Mr. Amos Philemonoff**, Aleut Community of St Paul Island, plus **Mr. Ed De Reyes**, CEO Sabrewing Aircraft Company, St. Paul, Alaska. (Confirmed).


Support to Northern space operations: The Alaska Aerospace Corporation (AAC). Presentation by President and CEO, **Mr. Mark Lester**, Anchorage, Alaska. (Confirmed).

**Presentation aspects to consider:** AAS19 planners have planned these 30 minute blocks to allow research, innovation, science and technology providers to provide information briefings to elective attendees. Unlike overall guidance, these sessions are welcomed to use viewgraphs/power point slides as needed to describe their associated activities. AAS19 planners request each presenter to consider providing a minimum of 5-7 minutes for Q&A.
1210  End of ALCOM Arctic Symposium 2019 Electives.

1210-1215: Reconvence in Great Hall for Lunch.

1215-1330: Lunch and luncheon guest speakers...the Woodrow Wilson Polar Institute: “The Unfolding geopolitical trends Across the Circumpolar North.” A luncheon discussion with the Woodrow Wilson Center’s Polar Institute, led by Dr. Michael Sfraga, Director Global Risk and Resilience Program and Director Polar Institute, Woodrow Wilson Center, Washington D.C.

Accompanied by: Mr. Jim Townsend, Former DASD, and Global Fellow Polar Institute Woodrow Wilson Center; and Mr. Abe Denmark, Director of the Asia Program at the for Scholars, and a Senior Fellow Kissinger Institute on China and the United States, Woodrow Wilson Center, Washington D.C.

Presentation aspects to consider: AAS19 planners respectfully thank Wilson Center’s Polar Institute for their reflections on the emerging geopolitical trends of the Arctic region in preparation for the afternoon panel on Arctic challenges from the senior operational commanders, while requesting planned remarks be scoped to 25 minutes and to reserve approximately 5 minutes of Q&A.

1315-1330: Legislative priorities for the Arctic (continued from previous day).

Moderated by Ms. Rachel Kallander, Founder and Executive Director, Arctic Encounter, Anchorage Alaska (Confirmed).

Legislative priorities for the Arctic...assessments from Alaska’s Senator Murkowski (R-AK).

Description: A Congressional update on legislative matters oriented to the Arctic from a member of the Alaskan Congressional Delegation.


1340-1510: Arctic 2020...becoming the Great Game of the New Millennium? A CANUS “Keynote” panel of operational defense leaders, vested with defending the respective national interests in the Arctic from more sophisticated and nuanced threat envelope associated with potential great power competition in the Arctic.

Panel Description: A panel of experts who lead defense or security forces prepared and equipped to protect and defend Canada and/or U.S. national interests in the Arctic region.
Moderated by: Maj Gen, Randy “Church” Kee, USAF (Ret), ADAC Executive Director, University of Alaska.

Planned Panelists:

- VADM Linda Fagan, Commander, USCG Pacific Command, Alameda, California (Confirmed).
- MG Peter Andrysiak, USA, U.S. Army Alaska Commander, JBER, Alaska, (Confirmed).
- BG Patrick Carpentier, Commander, Joint Task Force (North), Yellowknife, NT, Canada (Confirmed).
- RADM Andrew Betton, Royal Navy, Deputy Commander, NATO Joint Force Command Norfolk (Confirmed).

**Presentation aspects to consider:** AAS19 planners respectfully request these 6 panelists to reflect approximately 12 minutes per speaker, reflecting of concerns of operational defense leaders, vested with defending the sovereign territories from external threats within the Arctic from ever more sophisticated and nuanced threat envelope associated with potential great power competition in the Arctic. In sum...what are keeping these operational leaders up at night when considering threats which are more diffuse, more sophisticated and more capable? AAS 19 planners request approximately request a reserve of approximately 15-20 minutes of Q&A.

**Suggested questions for panelists to consider:**

1. What developments in state-sponsored activities in and across the Arctic do panelists feel is challenging the nation’s security interests (from an unclassified view)?
2. How concerned (with supporting reflections) are panelists towards China’s Arctic declarations and activities?
3. How concerned (with supporting reflections) are panelists towards Russian Federation Arctic declarations and activities (such as the refurbishment of old Soviet era facilities and construction of new infrastructure in the Russian Arctic)?
4. Any views towards combined Chinese and Russian efforts in the Arctic, to include their combined economic development activities (such as the combined Russian/Chinese joint venture at the Yamal Liquefied Natural Gas facility?)
5. What is the current (releasable) set of insights regarding “NORAD-Next”? How does the future of NORAD conform to the emerging geo-strategic challenges of the Arctic?


Panel Description: A panel oriented to discuss security-oriented Arctic strategies between the strategy points of contact within DHS and DoD.

Moderated by: Dr. Michael Sfraga, Director Global Risk and Resilience Program and Director Polar Institute, Woodrow Wilson Center, Washington D.C.

Planned Panelists:

- Mr. Justin Gerber, Office of Secretary Defense, Pentagon, Washington D.C. (Confirmed).
- Ms. Iris Ferguson, Deputy Chief of Staff, Operations, HQ USAF Pentagon, Washington D.C. (Confirmed).
- Mr. Shannon Jenkins, Commandant’s Senior Arctic Advisor (SAPA), HQ USCG, Washington D.C. (Confirmed).
- Mr. Jeff Barker, Deputy Branch Head, Policy and Posture OPNAV N5I5B, HQ U.S. Navy, Pentagon, Washington D.C (Confirmed).

Presentation aspects to consider: AAS19 planners respectfully request the 5 panelists to reflect approximately 5 minutes each on their current department’s Arctic Strategy/Strategic Outlook development and associated implementation plans. AAS 19 planners request approximately request a reserve of approximately 5 minutes of Q&A.

Suggested questions for panelists to consider:

1. Have the time and investment placed into developing Arctic Strategy/Strategic Outlooks resulted in substantive gains in department/organizational focus towards the Arctic region?

2. Have these Strategy/Strategic Outlooks positively influenced measures towards implementation activities?

3. Has cross department/organization collaboration in developing Arctic Strategy/Strategic Outlooks been useful? In what ways has such collaboration been most useful?
1600-1710: Preparing the next generation. Educating and training Arctic-minded leaders in security and defense and science to better secure, defend, serve and learn in an increasingly unpredictable Arctic.

An opening address by: University of Alaska President, Dr. Jim Johnsen, followed by an interactive panel to explore educational convergence.

Follow-on panel description: A cross-cutting panel of experts who may be able to help those vested with better preparing and equipping defense and security personnel to establish a baseline of knowledge towards understanding the Arctic region.

Moderated by: Dr Larry Hinzman, Vice Chancellor for Research, ADAC Research Director, UAF, Fairbanks, Alaska.

Planned panelists:
- Dr. Mary Thompson-Jones, Naval War College, Newport, Rhode Island (Confirmed)
- Ms. Cara Condit, Center of Arctic Study and Policy, U.S. Coast Guard Academy, New London, Connecticut (Confirmed).
- Ms. Cara Aghajanian, Director, Air Force Language, Regional Expertise and Culture Program, HQ USAF A1, Maxwell AFB, Alabama (Confirmed).
- Dr. Cam Carlson, LTC USA (Ret), SOM, UAF, Fairbanks, Alaska (Confirmed).
- Mr. Sam Alexander, SOM, UAF, Fairbanks, Alaska (Confirmed).
- Mr. Dave Auerswald, National Defense University, Ft McNair, Washington D.C. (Confirmed).

Presentation aspects for UA President Johnsen to consider. AAS19 planners respectfully request President Johnsen provide an approximate 10 minute overview of current efforts across the University system to provide superb education, service and research in support of Arctic endeavors while coping with a difficult fiscal environment. AAS 19 planners request approximately request a reserve of approximately 5 minutes of Q&A.

Presentation aspects to consider panelist: AAS19 planners respectfully request the 7 panelists to reflect approximately 5-7 minutes each on their current department’s Arctic Strategy/Strategic Outlook development and associated implementation plans. AAS 19 planners request approximately request a reserve of approximately 5-10 minutes of Q&A.
Suggested questions for panelists to consider:

1. What current/established approaches in education and training towards increasing Arctic awareness and understanding more/most useful to emphasize and leverage?

2. What new approaches in education and training are needed to create a workforce better informed and understanding of the multiple facets facing the Arctic?

3. What elements of Arctic knowledge (at least as relates to Safety, Security, and Defense) would be useful to include in any DoD and/or U.S. Coast Guard education and training that would lead to Arctic Service skills identifier and/or Certificate Program? What about a graduate level multidiscipline Arctic Security program?

1720: Day 2 Adjourned.

15 Nov 2019:

0800-1500 Alaskan Command Arctic Symposium Day 3. “Arctic horizons...the way forward, followed by Opportunities to orient”...a series of field activities.

0815-0950: Arctic policy in support of improved security and defense of the Northern Flank of U.S and Canadian homeland? What is missing and what is needed? A strategically oriented panel from senior policy and government experts in assessing gaps and shortfalls in policy and means to implement measures to better secure U.S. National Interests in the Arctic region.

Panel description. A panel of experts to critically examine current strategy, policy, and associated capabilities on the Arctic, offering ideas to address shortfalls and gaps.

Moderated by: Maj Gen (Ret), Church Kee, USAF, Executive Director, Arctic Domain Awareness Center, University of Alaska Anchorage, Alaska.

Planned panelists:


- Dr. Mike Sfraga, Director, Polar Institute Woodrow Wilson Center, Washington D.C. (Confirmed).

- Ms. Eugénie Panitchesk. First Secretary (Arctic Affairs) / Première secrétaire (affaires arctiques), Canadian Embassy to the United States, Washington D.C. (Confirmed).
• **Mr. Tony Peniket**, Former Premier of Yukon Territory, Vancouver, British Columbia, Canada *(Confirmed)*.


• **Ms. Gail Schubert**, President and CEO Bering Straits Native Corporation, Nome Alaska *(Confirmed)*.

*Presentation aspects to consider panelist:* AAS19 planners respectfully request the 6 panelists to reflect approximately 12 minutes each on their views of current U.S. and Canadian (depending on the speaker’s country of citizenship) policy and governance approaches that addresses security and defense challenges and opportunities... oriented to the North American Arctic. What elements of the existing framework that supports North American Arctic Security and Defense is working well, what elements of the current security and defense mechanisms between Canada and the U.S. stand improvement? Accordingly, what new policy initiatives should be considered within Washington D.C. and Ottawa (and jointly between capitals) that would better posture both nations to address the changing geo-political landscape of the Arctic Region? AAS 19 planners request approximately request a reserve of approximately 10-15 minutes of Q&A.

*Suggested questions for panelists to consider:*

1. Is the CANUS Permanent Joint Board on Defense (PJBD) which comprises U.S. Department of Defense, Department of Homeland Security, Canada’s Department of National Security and Department of Public Safety, serving as a useful cooperation and coordination mechanism for safety, security and defense of the North American Arctic?

2. Should North American Arctic Safety, Security and Defense, more purposely/intentionally include Greenland? If/as so, how should the weight of the relationship be oriented...specifically, between Danish government in Copenhagen and Greenlandic officials in Nuuk?

3. What elements of CANUS safety, security and defense coordination between Washington and Ottawa further include state/provincial governments in Juneau, Whitehorse, Yellowknife and Iqaluit? Please consider providing examples as suitable.

1000-1030: *Assessing the changing human terrain...do we have an Arctic security problem?*  
A panel of security experts relay their assessment of current and emerging law enforcement challenges facing the North American Arctic.
Panel Description: This panel will seek to comprehensively address internally sourced challenges as well as security concerns that arise from external regions.

Planned moderator: Nicole Borromeo, Executive Vice President and General Counsel, Alaska Federation of Natives, Anchorage, Alaska (Invited).

Planned panelists:

- Supervisory Special Agent, Jeffery Peterson, Federal Bureau of Investigation, Anchorage Alaska (Confirmed).
- Dr. Mary Thompson-Jones, Naval War College, Newport, Rhode Island (Confirmed)
- Special Agent Michael Smith, Customs & Border Protection, Anchorage, Alaska (Confirmed).
- Mr. Troy Bouffard, School of Management, UAF, Fairbanks, Alaska (Confirmed).

Presentation aspects to consider panelist: AAS19 planners respectfully request the 4 panelists to reflect approximately 8 minutes each on their views of current U.S. and Canadian law enforcement challenges (depending on the speaker’s country of citizenship). Panelists are asked to consider the challenges facing the law enforcement and security challenges based in rising traffic into the and across the Arctic. Included in these challenges are the rise in illicit narcotics, human trafficking, illegal fishing and mining and other criminal activities. How acute is the gap from security challenges and law enforcement capability to respond? AAS 19 planners request a reserve of approximately 5-10 minutes of Q&A.

Suggested questions for panelists to consider:

1. What are the more acute areas of concern in law enforcement challenges in and across the Arctic? For example, are there more significant challenges in addressing illicit narcotics than human trafficking? In sum, what are the priority concerns?

2. The U.S. Attorney General is sponsoring resources in support of improving safety and security in rural Alaska. What mechanisms of cooperation and collaboration are needed from Federal and State law enforcement to support new personnel tasked to improve safety and security in these small communities to be better trained, equipped and prepared?

3. The rise in Arctic Shipping and Tourism is increasing the volume of traffic in Canada and U.S. maritime regions, which affords illicit actors greater opportunity to blend in with legal vessel movements. What kinds of sensors are needed to better distinguish legal from illicit movements?
1045-1100: **Achieving Arctic Domain Awareness, Canada’s developing approach.** Dr. Paul Comeau, S&T Safety and Security DRDC’s Centre for Security Science Defence Research and Development Canada / Government of Canada, Ottawa, Canada.

**Presentation aspects to consider:** AAS19 planners respectfully thanks Dr. Comeau for his reflections and request his presentation be focused on Canada’s efforts in All Domain Situational Awareness, and request a reserve of approximately 3-5 minutes for Q&A.

1100-1145: **No Do Overs in the Arctic: Applied Research and Its Contributions to a Rapidly Changing Era.** An expert panel that seeks to illustrate the vital role applied research provides to security and defense of U.S. and Allied National Interests in the Arctic Region.

**Panel Description:** As described by a multi-disciplined panel of experts, as the Arctic remains perhaps was what could be described as an “economy of resource theater,” leveraging investments made by the U.S. and international research community could prove critical in protecting and preserving U.S. and Allied national interests.

**Moderated by:** Dr. Douglas Causey, ADAC Principal Investigator.

**Planned Panelists:**

- **Dr. John Farrell.** Executive Director, U.S. Arctic Research Commission. Washington D.C. *(Confirmed).*
- **Professor Matt Calhoun,** Alaska Native Science and Engineering Program (ANSEP), University of Alaska Anchorage *(Confirmed).*
- **Dr. Holly Dockery,** Sandia National Laboratories, Albuquerque, New Mexico *(Confirmed).*
- **CAPT (Ret) Mike White** USCG, Pacific NW National Laboratories, Walla Walla Washington *(Confirmed).*

**Presentation aspects to consider panelist:** AAS19 planners respectfully request the 3-4 planned panelists to provide approximately 10-12 minutes of their experiences in research and research support activities which contribute to improved knowledge and understandings on the changing Arctic, and support safety security and defense of U.S. and Allied National Interests in the Arctic Region. AAS 19 planners request a reserve of approximately 10 minutes of Q&A.

**Suggested questions for panelists to consider:**

1. What new investments in Arctic research (such as the National Science
Foundation’s “Navigating the New Arctic” may contribute to safety, security and defense measures? Any examples?

2. What initiatives from the National Laboratories are useful to advance research the addresses knowledge critical to support safety, security and defense for the Arctic? Any examples?

3. What advances in connecting emerging scientists and engineers from the Alaska Native community with new Arctic focused research are either underway or envisioned in the near term? Any examples?

4. What are some opportunities that connect research from university, national laboratories, U.S. Federal departments and agencies and State of Alaska departments to support Arctic Safety, Security and/or Defense? Any examples?

1145-1245: Allied and Partner Reflections on the challenges and opportunities of the Arctic region. America’s Arctic-minded allies and partners offer their reflections in assessing challenges and opportunities in gaining improved synergy in practical measures to improve overall security in the circumpolar North.

Panel description: A panel comprised of members from America’s Arctic Allies and partners, principally sourced from their respective Embassy to the U.S., reflecting on their concerns and suggestions to practically advance security and reduce risks to respective national interests across the Arctic region.

Moderated by: Jim Townsend, Former DASD Europe, Office of Secretary of Defense and Global Fellow, Polar Institute Wilson Center (Confirmed).

Planned panelists:

- **COL Ólafur Ragnar Ólafsson**, National Liaison Representative for Iceland, North Atlantic Treaty Organization/Headquarters Supreme Allied Commander Transformation (NATO/HQ SACT), Norfolk VA (Confirmed).
- **Senior Commander Tue Lippert**, Danish Joint Arctic Command (Confirmed).
Presentation aspects to consider panelist: AAS19 planners respectfully request 4-5 planned panelists to provide approximately 8-10 minutes of remarks from their unique vantages (noting that most panelists are associated with their respective embassies in Washington D.C.) of concerns and opportunities to advance the peaceful opening of the Arctic from a political-military vantage. Included in these reflections, panelists are asked to consider offering practical measures that improve communication, collaboration and cooperation among NATO Allied and Partner security and defense forces in and across the Arctic region. AAS 19 planners request a reserve of approximately 10 minutes of Q&A.

Suggested questions for panelists to consider:
1. What are panelist views of the rising interest of competing nations towards the opening Arctic?
2. What measures of escalation management should be considered to better ensure the Arctic can remain a region principally oriented to collaboration and cooperation?
3. What are panelist concerns about Russian military activities, which do occur near border regions near the Nordic nations?
4. What recommendations can panelists provide which support practical advances in understanding and interoperability between NATO Allies and partners in an Arctic context? Any examples?

1300-1315: 
**Break**, followed by loading of buses for field activities at the UAF Poker Flats Research Range (PFRR).

1315-1745: 
**Travel to, participation in and return from field activities/demonstrations** at U.S. Army Corps of Engineers Cold Regions Research and Engineering Laboratory (CRREL) Permafrost Tunnel, followed by UAF Poker Flats Rocket Range (PFRR), plus UAF’s Alaska Center for Unmanned Aerial Systems Integration (ACUASI) demonstrations.

1745: 
**Conclusion** of ALCOM Arctic Symposium 2019.

Conclusion

The above guidance is respectfully suggested and recommended to support the speakers and panelists for AAS19. ADAC remains at the ready to assist any and all speakers in preparing and conducting their presentations.