As of 20 September 2019

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.

Updated Draft Agenda

University of Alaska Fairbanks
13-15 November 2019
Introduction.

In support of United States Northern Command (USNORTHCOM), Alaskan Command (ALCOM) is hosting a 3 day Arctic Symposium from 13-15 November 2019 at the University of Alaska Fairbanks. The overarching goal of this Arctic Symposium is to support USNORTHCOM’s Arctic mission, through convening a wide array of leaders and experts, very near the Arctic, during a time of year when the environment provides a solid reminder of the challenges faced in this austere and strategically vital region.

Accordingly, in support of USNORTHCOM’s Arctic missions and associated tasks and requirements established in the U.S. Presidentially approved Unified Command Plan, 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. AAS19 provides ALCOM’s senior command, USNORTHCOM, an opportunity to gain convergence in shared understanding and improved unity of effort from across policy and practices via a new and developing network of defense and security-minded professionals. Such convergence practically is gained by framing discussions from a cross agency and multi-disciplined approach to advance measures to deter, dissuade potential adversaries, while also protecting, securing and defending America’s citizens, U.S. Sovereign Territory and 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.

The following is the developing agenda for the symposium.

AAS19 Agenda

AAS19 provides an important venue for building partnerships within the defense and security communities and select international, governmental, nongovernmental, academic, industry, State, local, tribal and private sector Arctic Communities Of Interest (COIs).

12 Nov 2019

1100-1200
1300-1600 Arctic Domain Security Orientation Executive Session (ADSO-ES), led by Dr Cameron Carlson, LTC (Ret), USA

ADSO Team:

- Mr. Troy Bouffard, University of Alaska Fairbanks
- Mr. Sam Alexander, University of Alaska Fairbanks
• Dr. James Morton Jr., LTC, USAR, University of Alaska Fairbanks

**Location:** UAF Lower Campus, Building/room location, To Be Confirmed (TBC), University of Alaska Fairbanks, 1731 South Chandalar Drive, Fairbanks AK, 99775

1800-1930: Dinner, invitation only, hosted by Arctic Domain Awareness Center (ADAC). Dinner is in support of ALCOM and Alaska Native Community collaboration.

**Location:** The Pump House Restaurant, 796 Chena Pump Road, Fairbanks AK. 99709 (TBC)

**13 Nov 2019:**

0800-1700 Alaskan Command Arctic Symposium Day 1. “**Sketching the landscape, understanding the contours.**” A series of discussions to frame perspectives of the dynamic Arctic from indigenous knowledge, physical environment, political, defense and security vantages.

**Location:** UAF Lower Campus. The Great Hall, University of Alaska Fairbanks, 1731 South Chandalar Drive, Fairbanks AK, 99775

0730-0800: **Symposium check-in,** continental breakfast served.

0800-0810: **Start of Arctic Symposium.** Administrative remarks by Symposium facilitator, Maj Gen (Ret), Church Kee, USAF, Executive Director, Arctic Domain Awareness Center, University of Alaska.

0810-0825: **Opening ceremonies.** Color Guard, posting of the colors, national anthem and opening prayer by Alaska Natives/Alaskan Native veterans.

Planned prayer: **Will Mayo, Alaska Federation of Natives**

Planned Native Color Guard POC: **Mr. Benno Cleveland,** President of the Alaska Native Veteran’s Association (Invited).

0825-0850: **Official welcomes by:**

• University of Alaska Fairbanks Chancellor, **Dr. Dan White (Invited).**

• North Star Borough Mayor, **Mr. Bryce Ward (Invited).**

• Fairbanks area Elected State of Alaska Leader(s) (TBC)

*AAS 2019...Advancing Strategic Partners in Securing America’s Arctic Interests*
Commander Alaska NORAD Region, Alaskan Command and 11th Air Force, 
Lt Gen Tom Bussiere, USAF.

0850-0930: Opening Keynote speaker “The Changing Arctic...a Long View” Dr Brendan Kelly, Executive Director of the Study of Arctic Environmental Change (SEARCH), and University of Alaska Fairbanks Affiliated researcher (Confirmed).

From 4-6 Sep 2019, Dr. Kelly led the “Arctic 2050 Futures” symposium at the National Academy of Sciences in Washington D.C. This remarkable forum provided a long look at developing changes to the physical environment and associated impacts across the circumpolar North from both the views of Western Science and the community of Arctic Indigenous Knowledge.

0930-1000: The power of knowledge. A thought-provoking discussion, oriented to advance improved utilization of indigenous knowledge by Dr. Dalee Sambo Dorough, (Invited), Inuit Circumpolar Council and University of Alaska Anchorage. Dr. Dorough will be introduced by Ms. Vera Metcalf, President of Alaska’s Eskimo Walrus Commission (Invited/Pending).

Dr. Dorough’s presentation will highlight Indigenous knowledge is key in the Arctic. Her presentation will query to what extent is traditional knowledge included and used in Pan-Arctic cooperation.

1000-1015: Break.

1015-1115: Hidden in Plain Sight: The Growing Capacity of North Arctic Indigenous Peoples: A multi-disciplined panel of Alaskan Native and Canadian First Nations. 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 (Invited/Pending).

Planned panelists:

- Mr. Richard Glenn, Executive Vice President, Arctic Slope Regional Corporation (Invited).
- Ms. Gail Schubert, President/CEO, Bering Straits Regional Corporation (Invited).
- Mr. Greg Razo, Vice President, Cook Inlet Region Inc. (Invited).
- Ms. Mary David, Executive Vice President, Kawerak Inc. (Invited).
- Honorable Mervin Gruben, Mayor of Tuktoyaktuk, Northwest Territories (Invited).
• Other Canadian representative(s) TBC.

1115-1200: A conversation with the Commander of USNORTHCOM.

General Terrance O’Shaughnessy, USAF, Commander, NORAD, USNORTHCOM, Peterson AFB, Colorado. This keynote address starts with an opening set of reflections by General O’Shaughnessy, followed by a “fireside chat” moderated by either Admiral (Ret) Zukunft, USCG or by Dr. Mike Sfraga, Director of the Polar Institute, Woodrow Wilson Center. This discussion is intended to inform AAS2019 participants on the strategic insights on current and emerging trends in Arctic security and defense matters by the Commander of NORAD & USNORTHCOM.


*The Right to Be Cold* is Sheila Watt-Cloutier’s memoir of growing up in the Arctic reaches of Quebec. It is the human story of life on the front lines of climate change, told by a woman who rose from humble beginnings to become one of the most influential Indigenous environmental, cultural, and human rights advocates in the world.

1300-1315: Legislative priorities for the Arctic...assessments from Alaska’s Congressional Delegation, Part 1:

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

Planned presenter: Senator Lisa Murkowski, (R) Alaska. (In-person/remote/recorded). (Confirmed)

1315-1330: Legislative priorities for the Arctic...assessments from Alaska’s Congressional Delegation, Part 2:

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

Planned presenter: Senator Dan Sullivan, (R) Alaska. (In-person/remote/recorded). (Invited)

1330-1345: Legislative priorities for the Arctic...assessments from Alaska’s Congressional Delegation, Part 3:

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). (Invited)

1345-1500: 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. Larry Hinzman, Vice Chancellor of Research, University of Alaska Fairbanks and ADAC Research Director

Planned panelists:

- Ms. Patricia Cochran, Executive Director of the Alaska Native Science Commission (ANSC), Anchorage Alaska.
- Dr. Tim Gallaudet, RDML, USN (Ret), Assistant Secretary of Commerce, National Oceanic and Atmospheric Administration, (NOAA), Washington D.C. (Invited/Pending).
- Dr. Hajo Eicken, Director, International Arctic Research Center, University of Alaska Fairbanks (Confirmed).
- Dr. Mike Kuperberg, Director, Interagency Arctic Research Policy Committee, Washington D.C. (Pending/Invited).
- RDML John Okon, USN, Chief Oceanographer of the U.S. Navy. (Invited/Pending).
- Dr. David Scott, President and CEO, Polar Knowledge Canada. (Invited/Pending).

1500-1515: Break.

1515-1645: 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

Planned panelists:
• **RADM Matt Bell**, Commander, USCG District 17, Juneau, Alaska. *(Confirmed).*

• **Julie Roberts-Hyslop**, Tanana Chiefs Conference, Fairbanks, Alaska *(Invited).*

• **Mr. Don Moore**, Alaska National Weather Service, Anchorage, Alaska *(Invited/Pending).*

• **Hallie Bissett**, Alaska Native Village Corporation *(Invited).*

• **TBA**, Senior Leader from U.S. Army Corps of Engineers Cold Region Research and Engineering Laboratory (CRREL)

• **Brig Gen Torrence Saxe**, ANG, Commissioner, State of Alaska Department of Military and Government Affairs and Adjutant General, Alaska National Guard *(Invited).*

• **BGen Pat Carpentier**, Commander, Joint Task Force North, Yellowknife *(Confirmed).*

1645-1715: *Be a Force Multiplier: Creating Synergies between the Military and All Sectors in Alaska.*

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

1715-1720: *Concluding remarks* for Arctic Symposium Day 1.

1720: *Adjourn* for Day 1 Arctic Symposium Dinner.


Opening remarks by Arctic Symposium Host, **Lt Gen Tom Bussiere**, USAF.

Guest speaker options:
1. Admiral (Ret) Paul Zukunft, USCG, former Commandant of the U.S. Coast Guard.
2. TBA

Planned Theme: *"Rising to the challenge...exercising security and defense leadership in an increasingly complex Arctic geo-strategic environment"*

2030: Adjourn, remainder of evening at leisure.
14 Nov 2019:

0800-1700  Alaskan Command Arctic Symposium Day 2. “Succeeding at 30 below”... A series of discussions to describe the challenges and ways to succeed in conducting Arctic operations under some of the most demanding theaters on the planet.

Location:  UAF Lower Campus, The Great Hall, University of Alaska Fairbanks, 1731 South Chandalar Drive, Fairbanks AK, 99775.

0730-0800:  Symposium check-in, continental breakfast served,

0800-0810:  Start of Arctic Symposium Day 2. Administrative remarks by Symposium facilitator, Maj Gen (Ret), Church Kee, USAF, Executive Director, Arctic Domain Awareness Center, University of Alaska.


0820-0845:  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:

- Canadian reps: Ranger(s), per coordination with Dr. Lackenbauer (TBA)
- Ms. Vivian Korthuis, AVCP, Bethel (Invited)

0900-0910:  *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.

0910-0925:  *Break. Note: Track 1 will convene in the Great Hall, Track 2 will convene in the adjoining Wood Center.*

| 0925-1000 | **Track 1: Arctic Science and Innovation** | **Track 2: Arctic technologies in support of operational needs.**  
Integration of Multi-Mission Satellite Data, Weather and Ice Information for Arctic Operations. Presentation by ***Andreas Hay Kalijord***, Kongsberg Satellite Services, and ***Svein Inge***, StormGeo AS. Achieving Arctic Maritime Domain Awareness...exciting new technologies on the horizon. Presentation by CAPT ***Lee Scruggs***, USCG, Chief Technology Officer U.S. Coast Guard Intelligence (CG-26) (Invited).

0925-1000 | *Arctic Research and Operations at the Geophysical Institute.* Presentation by **Dr. Bob McCoy**, University of Alaska Fairbanks. (Confirmed).

1000-1030 | Innovating remote power solutions: the Alaska Center for Energy and Power. Presentation by **Dr. George Roe**, University of Alaska Fairbanks (Invited).

1030-1100 | National Laboratory Support to Arctic Operational Capabilities. **Dr. Holly Dockery**, Sandia National Laboratories (Confirmed). **CAPT (Ret) Mike White USCG**, Pacific NW National Laboratories (Confirmed).

1100-1115 | **Break**

1115-1145 | Next generation, Arctic capable, sensor integration research for remotely piloted aircraft. Presentation by **Dr. Cathy Cahill**, Alaska Center for Unmanned Aircraft Systems Integration (ACUASI), 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, **Patrick Baker**.
Research and innovation to for Arctic communications: The Alaska Satellite Facility. Presentation by Dr Nettie Labelle-Hamer, ASF Director, University of Alaska Fairbanks. (Confirmed).

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

1215 End of ALCOM Arctic Symposium 2019 Electives.

1215-1315: Lunch and luncheon time guest speaker. Ms. Heidi Hansen/Her replacement as, Deputy Commissioner, Alaska Department of Natural Resources Arctic Strategic Transportation and Resources project, (ASTAR) overview

1315-1330: Break and reconvene in plenary session.

1330-1445: 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 (Invited/Pending).
- VADM Scott Buschman, Commander, USCG Atlantic Command (Invited/Pending).
- Lt Gen Tom Bussiere USAF, 11th Air Force Commander. (Confirmed)
- RDML Cedric Pringle/his relief, USN, Commander, Strike Group 3. (Invited)
- RDML Michael Steffen, USN, C2F DCOM, (2nd Fleet) (Confirmed)
- BGen David Aitchison, Canadian Army, U.S. Army Alaska Deputy Commander (Invited/Pending).
- Brig Gen Pat Carpenter, Canadian Forces, Commander, Task Force North, Yellowknife NWT (Confirmed).

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

**Moderated by:** Mr. Jim Townsend, Former Deputy Assistant Secretary of Defense for Environmental Security & Senior Fellow, Environmental Change and Security Program and Polar Initiative, Woodrow Wilson Center.

**Planned Panelists:**

- **Mr. Jason Hall/Mr. Justin Gerber,** Office of Secretary Defense (Invited/Pending).
- **Ms. Iris Ferguson,** HQ USAF (Invited/Pending).
- **Mr. Shannon Jenkins,** HQ USCG (Invited).
- **Mr. Sean Moon,** HQ DHS (Invited).
- **Mr. David Kennedy,** NOAA Senior Arctic Advisor (Invited/Pending).
- **RDML Will Pennington,** Director, Global Integration and Engagement, OPNAV N-51 (Invited).

1545-1600: *Break.*

1600-1645: *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.

**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, University of Alaska Fairbanks.

**Planned panelists:**

- **Dr. John Farrell,** Executive Director, U.S. Arctic Research Commission (Invited).
- **Dr. Walter Berbrick,** U.S. Naval War College (Confirmed).
- **Ms. Cara Condit,** Center of Arctic Study and Policy, U.S. Coast Guard Academy (Invited/Pending).
• **Ms. Cara Aghajanianm**, Director, Air Force Language, Regional Expertise and Culture Program, HQ USAF A1 *(Invited)*.

• **Dr Cam Carlson**, LTC USA (Ret), University of Alaska Fairbanks School of Management *(Invited/Pending)*.

• **Sam Alexander**, University of Alaska Fairbanks School of Management.

• **RDML Cedric Pringle, USN**, Commandant, National War College, Ft McNair, Washington D.C. *(Invited/Pending)*.

1645-1700: *Review and recap* of the following day’s activities provided by symposium Host, **Lt Gen Tom Bussiere**, Commander, ALCOM, ANR and 11th AF, supported by **Church Kee**, ADAC Executive Director.

1700: Day 2 Adjourned.

1830-2100: Proposed dinner by Invitation for AAS2019 VIPs (location 1) and other AAS2019 participants (location 2). TBC: Location 1: **Lavelle’s Bistro**, 575 1st Ave, TBC Location 2: **Silver Gulch Brewery**, 2195 Old Steese Hwy N, Fairbanks AK, 99712.

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.

**Location:** **UAF Lower Campus**, The Great Hall, University of Alaska Fairbanks, 1731 South Chandalar Drive, Fairbanks AK, 99775.

0730-0800: **Symposium check-in**, continental breakfast served.

0800-0810: **Start of Arctic Symposium Day 3**. Administrative remarks by Symposium facilitator, Maj Gen (Ret), **Church Kee**, USAF, Executive Director, Arctic Domain Awareness Center, University of Alaska.

0820-0930: **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.

**Planned panelists:**
- **Mr. Jim Townsend**, Global Fellow, Wilson Center (Confirmed).
- **Ms. Heather Conley**, Senior Vice President, Center for Strategic and International Studies (CSIS) (Invited).
- **Mr. Jon Harrison**, OES Bureau, U.S. State Department Senior Advisor (Confirmed).
- **Mr. Tony Penikett**, Former Premier of Yukon Territory (Invited/Pending).
- **Mr. Mark Rosen**, Senior Vice President and General Counsel, Center for Naval Analysis (CNA) (Invited/Pending).

0930-1030: **Assessing the changing human terrain...do we have an Arctic security problem?**
A CANUS 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:** **Dr. Walter Berbrick**, Naval War College (Confirmed)

**Planned panelists:**
- Special Agent in Charge, **Jeffery E. Peterson**, Federal Bureau of Investigation, Anchorage (Invited).
- To Be Confirmed, Superintendent, Yukon District, Royal Canadian Mounted Police. Whitehorse Canada.
- **Ms. Amanda Price**, Commissioner/Mr. **Leon Morgan**, Deputy Commissioner, State of Alaska Public Safety, Anchorage Alaska.
- **Special Agent Michael Smith**, Customs & Border Protection, Anchorage AK (Invited).
- **Mr. Evan Travers**, Public Safety Canada, Ottawa (Invited/Alternate Pending).
Mr Troy Bouffard, University of Alaska Fairbanks School of Management (Invited/Pending).

1030-1045: Break.

1045-1145: **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:**

- The Honorable Fran Ulmer, Chairperson, U.S. Arctic Research Commission (Invited).
- Dr. Herb Schroeder, Director, Alaska Native Science and Engineering Program (ANSEP), University of Alaska Anchorage (Confirmed).
- Dr. Chris Fall, Director, Office of Science, Department of Energy. (Invited)
- Dr. Larry Hinzman, University of Alaska Fairbanks Vice Chancellor of Research and ADAC Research Director (Confirmed).
- Dr. Paul Hubbard, Defence Research and Development Center, Department of National Defence, Ottawa Ontario, Canada (Invited/Pending).

1145-1245: **European reflections on the challenges and opportunities of the Arctic region.** America’s Arctic-minded European 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 now Global Fellow, Wilson Center (Confirmed).

**Planned panelists:**

- COL Ólafur Ragnar Ólafsson, Deputy Chief of Mission, Minister


1245-1300: *Summary and overview of way forward*, Lt Gen Tom Bussiere, Commander, ALCOM, ANR and 11 AF, supported by ADAC Executive Director Church Kee.

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

1315-1600: *Travel to, participation in and return from field activities*, demonstrations at UAF Permafrost Tunnel, Poker Flats field station, University of Alaska Fairbanks. Note: Grab and go box lunches provided.

1600-1700: *Opportunities for self-forming seminars*, follow-on discussions, at conference facilities, University of Alaska Fairbanks. 

*Option:* ADAC hosted “horse-blanket” work session in support of exercises and activities focused in securing the approaches to the U.S. from the Bering, Chukchi and Beaufort Seas.

1700: Conclusion of ALCOM Arctic Symposium 2019.

**Conclusion**

AAS19 will improve participants’ understanding of the challenges in the complicated risk environment that describes the new circumpolar north. This will be accomplished via a series of thoughtful discussions and activities to gain insights for needed solutions to address and potentially reduce the associated defense and security risks. AAS19 will continue the momentum started with AMS18 and advanced through ASLS19, setting the stage for the next Arctic Senior Leader Summit in early 2020.