

**For Discussion:
A Proposal to Establish a Committee
to Identify an
“Arctic Moonshot”**

Project Alignak

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One Person's View

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What I heard this week:



- **Relying on outdate charts (1912)**
- **Relying on modern day “lead sounding”**
- **“Knowledge is Power”**
- **“Have better data than the other guy”**
 - Do we really have better Arctic Data than Russia (ex USSR?)
 - How’s our Arctic Maritime IPOE?
- **“Cooperative Federalism” – Joint Interagency**
 - “good model to follow”
- **“Let’s get out and do this”**
- **Domain Awareness and Presence**

Project Alignak*: An Arctic “Moonshot”

- **Project Description:**

- Part A: By 202X, a collaboration USG Arctic Stakeholder Agencies with Arctic partner nations, and with the use of unmanned systems to the fullest extent, conduct a full IHO bathymetry, atmospheric full data collection in a the Arctic Ocean and reconnaissance an Arctic Passage Route, of either a) the Middle (Polar) Passage or b) the Northwest Passage, or c) other high priority areas as identified by Arctic Operators

- Part B: By 202X+Y conduct a transit of the reconnoitered passage by surface white or grey ship(s) or an under ice UUV or combination thereof.

* Project Name: Given that our last “Moonshot” was named, Apollo, (Greek God of the Sun); it’s only fitting that we counterpoint this project’s name with that of the moon. Similarly, as it’s in the Arctic, we recognize an Inuit lunar deity. Per Wikipedia, the deity “*Alignak*” is the Inuit deity of the moon, weather, water, tide, eclipses and earthquakes. Thus, respectfully, “Project *Alignak*”

This subject to correction and concurrence or by the Native Authorities.

Project Rationale



- Policy
 - Invigorate US maritime presence and interest in High Latitude and Arctic waters
 - Send strategic message to our partner nations and competitors of the will of the US to maintain maritime presence and operations in Arctic Waters
- Defense and Security
 - Continental Defense and Homeland Securities (US and CN)
 - Combined US and CN Agencies
 - Contribute to SA of and the mitigation of threats from the North
- Science
 - Furthers Basic Arctic Ocean and Atmospheric Science
 - Specially vital during the current state of the changing environmental conditions
 - Exoplanetary Science
 - NASA;s “Ice Missions”
- Humanitarian and Environmental
 - Environmental data to support contingency preps for large scale Arctic SAR or environmental disaster (e.g. oil spill)
 - Ocean Information to support commercial activity particularly passage transits during ice-free seasons
 - Safe Navigation in a “new area of popular interest”
 - Support, Protect and Respect the Native population’s norms, sensitivities and interests
- Economic
 - Provide to commercial shipping fleets reliable high fidelity bathymetry and other Arctic environmental for safe trans-Arctic passage
- Technology, Engineering and People
 - Focus Unmanned Vehicle Industry on a National Challenge
 - Accelerated advancements in UxV Technologies and Capabilities
 - Foster the next generation to gain Arctic Experience

Participants

- **Sponsoring Operational DoD Organizations**
 - NORAD/NORTHCOM, ALCOM, CNMOC, PACOM, EUCOM
 - Maritime Operational Utility identifies what and where we want to capture Maritime Arctic Environmental Data
- **Member Organizations**
 - Offering advice, SMEs, experience and execution
 - USG
 - DoD: USN, USA. USAF
 - DHS: USCG
 - Commerce: NOAA
 - DOE: Sandia
 - NASA
 - NSF
 - State
 - Academia
 - UAA ADAC etal.
 - FFRDCs and UARCs
 - Foreign Arctic Partner Nations
 - Canada: NRC, DRDC
 - ICE-PPR Nations
 - Arctic Council
 - Industry

*All Notional
But we Need
A Big
Tent*

First Step: Form A Preliminary Executive Steering Committee

- **Rationale**

- No one organization can identify all the aspects (optimal location, requirements, execution ConOps etc.) for a project of this size
- Addresses Multiple Agency Requirements
- Establishes Cross Agency alignment, communication and cooperation
- Identify LoE Required and First Order Approximation of Costs
- Seek, with one voice, Legislative support and funding

- **Representation**

- Representatives from: NORAD/NORTHCOM, EUCOM, ALCOM, INDOPACCOM, USN, NOAA, USCG, NASA, ADAC. Sandia.....

Plan of Action (1/2)



- **Near term**

- **14-17 August: Arctic Maritime Symposium**

- **Arctic Network; maintain old, establish new contacts**
 - **Record feedback**

- **Soonest: Informally socialize an Arctic Moonshot program with Operational Commands and Agencies**

- NORAD/NORTHCOM, EUCOM, ALCOM, CNMOC, NOAA, USCG, NASA etal

- **Post Symposium**

- Further the plan by Incorporating feedback from this Symposium
 - Identify and Seek Commitment from Arctic Stakeholders to form and Executive Steering Committee
 - Draft Leadership-quality point paper and supporting brief

Plan of Action (2/2)



- **Far term**
 - Convene Executive Steering Committee
 - Seek and Incorporate other CoComs' and Agencies' comments and requirements
 - Refine the identification of required resources
 - Draft final Proposal with Annexes addressing
 - Reconnaissance locations (Route Sequencing etc.)
 - Technical Data Requirements (data types, formats, fidelity)
 - Identification of ConOps
 - Data Acquisition
 - Data Reduction
 - Identification of the types and numbers of the required systems include logistical support
 - E.g. Icebreakers, Surface ship, Unmanned System, Floats etc
 - Refined Cost Estimate
 - Seek Congressional support and approval as necessary
 - Identify Funding
 - Socialize with Arctic Partner Nations

References*



- **2009 National Security Presidential Directive 66**
 - “...the United States must be prepared to safeguard its National Security Interests in the Arctic.”
- **2013 National Strategy for the Arctic Region**
 - “ ... preserve Arctic Region Freedom of the Seas and provide for future energy security.”
- **2016 DoD Arctic Strategy**
 - “...need for increased maritime surface and subsurface presence, surveillance and capabilities.”
- **FY18 Senate NDAA pertaining to the USN and the Arctic**
 - “... the Secretary of the Navy shall submit to the Congressional Defence Committees a report on the capabilities of the Navy in the Arctic region.”

What I took Away This Week



- We all recognize the near and far term importance of the Arctic
 - We all want to “do something” but don’t know what
 - Relying on Arctic presence by Military Exercises,
 - All well and good, but I suspect that many think that it’s not enough to maintain “an Arctic Presence”
- Russia: is content with the Status Quo – subject to NATO “behaving”
 - Would a NATO miscalculation upset this balance?
- China wants “Arctic In”
 - What’s our plan to rebut? Or do we?
- Risks:
 - Military Conflict is Low
 - Economic Contention is Low but probably will increase
 - Political Friction is low but probably will increase
- Now is the perfect time to formulate a plan to return to the Arctic in a “benign way” but the output of which will be useful if and when “needed”
- Remember: the Environment get a vote in the Fight

Thoughts?

- **Does this make sense?**
 - **No:**
 - **Thank you and Goodbye**
 - **Yes:**
 - **What's Missing?**
 - **Cost and Funding Deliberately Not Addressed**
 - **How best to proceed?**
 - **Should this be considered a “National Effort” or “International Effort”**
 - **Which organizations wish to or should participate to help formalize the plan?**
 - **What organization roles are necessary?**

**If it's not something like this,
What is it.....?**