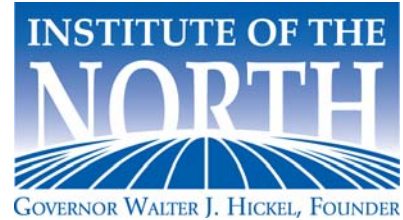


# **Bering Strait Access Workshop – Proceedings – August 2011**

**Produced during the Week of the Arctic**



## **INTRODUCTION**

The Institute of the North convened the Bering Strait Access Workshop to help inform the decision-making process relative to managing traffic in the Strait. Input gathered at this Workshop may be used by the U.S. Coast Guard to develop recommendations for the International Maritime Organization (IMO).

Primary among the questions to be considered in making these recommendations is that while the container shipping industry isn't currently a major user, how do other industries, local communities and subsistence hunters use this waterway? In considering these issues, decision-makers should examine traffic separation schemes, areas to be avoided, seasonal issues (restrictions at certain times of the year), and the development of a communications protocol and monitoring system (feasibility, legal constraints, infrastructure issues).

This final report/proceeding is broken into four inter-related topic areas that serve to inform one another and provide a comprehensive picture of the considerations involved: national/international; environmental/prevention; local community/indigenous use; and commercial traffic.

It is worth keeping in mind that the IMO may be very reluctant to adopt a mandatory routing measure (only one in existence) but that seasonal routing measures could be recommended. At the same time, there is currently no international vessel tracking system in existence.

Priority considerations that will further inform this process include:

- Technical mapping of Strait
- Input from and increased communication with stakeholders in Chukotka
- Input from and increased communication with local and indigenous users
- Development of communications/monitoring system in region

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## **GROUP DISCUSSION: ENVIRONMENT AND PREVENTION CONSIDERATIONS**

### **What is working well?**

- NO MAJOR EVENTS (thus far)
- Current regulations and other standards in place (MARPOL, collision avoidance); Section 7 consultation
- Data and data synthesis (e.g., marine exchange, marine mammal satellite tracking, etc.)
- Alternative compliance (voluntary = more flexible?)
- Current traffic may be avoiding “hotspots” (birds, marine mammals in central strait)
- Local knowledge in place to identify critical issues now; good communication with communities

- Channel Island traffic separation scheme serves as a model; not starting from scratch
- Oil spill research is increasing, with an emphasis on prevention and response; corresponding strengthening of regulations
- Still limited traffic, with time to make decisions
- Collecting data (whale migrations) and collating data (making data more available)

### **What isn't working?**

- Cooperation with Russia - different paradigm
- Few, small observing stations means lack of info (weather, fog, etc.)
- Charting is incomplete; ice forecasting needs to be improved
- Inability to protect environmentally sensitive areas (which haven't been identified)
  - No equipment in place to respond (lack of infrastructure)
- International standards (essentially there are none) for enforcement
  - There is concern that no matter what regulations are eventually agreed upon foreign vessels will not comply because there is no enforcement. One idea was to have a small Coast Guard station possibly in Gambell that could hire locals and do enforcement. It makes sense to have those that would be negatively affected by illegal activity do enforcement, but unclear how feasible this is.
- Vessel tracking; year-round shipping that is unregulated but increasing
- Few places of refuge

### **What do we need to know?**

*\*Denotes priority items*

- Ice dynamics – who?
- How to effectively collaborate internationally – who?
- Ecosystem dynamics/trends
- Finer scale mapping of marine mammals and seabird migration and foraging
  - See shore zone proposal to NOAA
- Perform spill modeling (need justification, definition of area, scope and process, funding mechanism)
- *\*Spatially define indigenous/community use (to what range?)*
  - Go to each village (WWF, Audobon, and Kawerak are working on this on US side) (ICC possibly international)
  - Must be integrated into seasonal maps across the region
  - The Bering Sea Sub Network is also working on this
- *\*Dynamically present ecosystem data*
  - Research and monitor; Identify unanswered questions; Synthesize data; Identify funding
  - Ask AOOS, NOAA, UAA, Audobon (important bird areas)
  - Is there a consortium model integrating all organizations?
- *\*Traffic and prediction of future traffic (all vessels)*
  - Tourism; Northern Sea Route usages
  - Ask Arctic Council/USCG about cumulative impacts and multiple year trends
- *\*What infrastructure is in place to respond to a pollution event? What impact does this have on subsistence? (ask industry, academia, Arctic Council (task force?))*

- Russia-US Cooperation (involve USCG, USFWS, NOAA, all US agencies, and Arctic Council)
- Role of State of Alaska (regulatory scheme; State waters/land; community interaction)
- What countries are interested in Northern Route?
  - Who has that data i.e., volume of traffic and from where?
- What is the cumulative impact and how should it be monitored?
  - Define scope of impact review; size of project reviewed; time duration of impacts; and who can enforce mitigation.
  - From a NEPA/USR process standpoint or IMO?
  - Economic impact?

### **Consideration**

- Oceanography – i.e., how to monitor and assess ice coverage
- How to prevent negative impact and respond accordingly
- Assess biological and chemical impacts of increased vessel presence – cargo, invasive species
- Species of greatest concern – bowhead, walrus, seabirds (special consideration)
- Temporal and spatial variability of species use (which is likely to evolve with alterations in the marine ecosystem due to climate change)
- Oil spill – response capability, different stakeholders and regulatory mechanisms, especially on international scale
- Not being done
  - Use of data for accurate decisions, +/- data accuracy – temporal and spatial variability, especially with biota
  - Transfer of data, availability of data → sharing not optional
  - Geography precludes data collection e.g., strandings/impacts
  - Difficulty in designing system/regulations with dynamic nature of environment— seasonality a huge issue
  - No adequate response capability in Bering Strait (Has there been a need? Explain where it did not work. What is adequate?)
- Transportation conflicts – Wildlife and Ships
- Spill response capabilities – what is acceptable risk and how do we manage international cooperation
- Subsistence use and sensitive habitats
- Non-petroleum pollutants like air emissions, wastewater (gray/black) and invasive species
- How adaptive is the process?

### **PRIORITIES**

- Collection and synthesis of data at a scale and scope appropriate for decision-making in Bering Strait
  - Legal federal trust responsibility to tribes regarding the environment
  - Talk to BSNC, Kawerak, Norton Sound, NSCOC
  - Who pays for this?
- Spill/hazardous material and ecosystem modeling

- Identify stakeholders
- What quality assurance checks and feedback correction will be continuously done? Quarterly? Annually? Who pays for modeling that must be validated in the field.
- Creation and implementation of response infrastructure
  - How do you get participation from international users?
  - Who is going to coordinate and who pays?
- Addressing spatial and temporal requirements
  - What criteria to use in establishing requirements (social, economic, communication, indigenous use)?
  - Need dynamic data system that can integrate/reflect changing data over multiple dimensions – depth of water, seasonality (time), etc. (will shift over time)
- International vessel tracking (enforcement/coordination)

## **FINAL PRESENTATION – Explanation of Map**

### **Environmental/Prevention**

- Looked at it from a strictly environmental perspective, ignored other (economic, etc.) considerations
- How to protect species and ecosystems the greatest?
- How to prepare for oil spill response?
- Looked at key environmentally sensitive areas
- Didn't really consider traffic during ice seasons, only focused on ice-free routes
- The area around the Diomedede islands should not be used
- King Island is important, Sledge, St. Lawrence has lots of use (whaling, etc.)
- Eider population areas should not be used
- Area around Russia really important for walrus in the fall
- Recommended route along eastern side of St. Lawrence Island, bifurcation on a seasonal basis depending on migratory species movements (spring - western vs. fall – eastern side) – not exclusively
- Speed restrictions in some regions (10-12 knots significantly reduces whale strikes and other marine mammals)
- How large should the speed trap be?
- Integrate GIS layers, satellite layers, what's happening in the water column with currents, changes over seasons and years, historical data, forecasts



- Day-to-day decisions rather than week-to-week
- Need a robust system available to gather all this data in the Strait
- As many as 10 million seabirds nesting in this area
- 10,000-20,000 bowhead whales in this region
- Few, if any places in the world match this level of importance to wildlife, because all these animals pass through the Strait twice a year for migration.

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**GROUP DISCUSSION: LOCAL COMMUNITY USE CONSIDERATIONS**

**What is working well?**

- USCG working hard to engage local stakeholders - USCG visits to individual communities and being introduced by local user to explain project, role and value of comments
- Few accidents to date on US side – uncertainty about Russian side?
- Local SAR networks
- AIS potential for community use
- Economic development opportunities (cruise ships, agency meetings)
- Ice/Weather websites
- Fuel/cargo deliveries
- Deadline extensions
- Co-management of boards who report issues of concern
- Wainwright’s agreement with Shell regarding communications, reporting and navigation (use as recommended model); local government and industry
- What is the hook to create agreements, such as CAA, for marine traffic through the Strait? MMPA? Industry
- Institutions exist in the Bering Strait

**What isn’t working?**

- Public/tribe not getting enough opportunities to participate in process (on BOTH sides of Strait) (In a conversation with Iver Campbell, IRA president in Gambell, AK, he has many concerns about increasing vessel traffic but says, ‘My voice is too weak for them to hear.’ There has been a lot done to include tribes in the decision-making, but we still hear these kinds of things, and it is evidence that tribes still feel left out.)
- Comprehensive understanding of needs and logistics/process involved
- \$ flow to resolve issues/gain information
- Russian protocols/communication re: SAR, traffic, infrastructure available, laws, ship cargo, discharge/pollution
- Following standard procedures
- Underestimating weather/current speed
- Mapping: seasonal and spatial shifts for subsistence users
  - How to plan for what may shift again in a few years’ time?
  - The process may exceed the use/validity of data gathered?
- No forum in which info can be shared regionally and by stakeholders and decision makers

### **What do we still need to know?**

- Russian laws/protocols and disaster mitigation/response strategy
- Local use patterns on BOTH sides of Strait
- Logistic needs for shipping – depths + infrastructure
- Better surveillance of shipping/traffic effects on environment/subsistence species/wildlife
- Cultural/social impacts of change/development
- Spill prevention & response (DNR, USCG, DEC)
  - Who to go to – Community involvement – Communication
- Where potential hubs/traffic use/needs will be on BOTH sides
- Local SAR protocols/networking in Strait
- How IMO recognizes the rights of indigenous peoples on BOTH sides of the Strait
- Basic comprehensive understanding of current, applicable laws, regulations/deregulations, PSSA (?) or SSA critical habitat
- What is a good oil spill response plan for a community?
- Are we planning for year round access or 9-month period?
- Where is there \$ available to fund people/projects/forums/info?
- What is the primary type of traffic we are planning for?
- Is an MOU the right approach?

### **Important Considerations**

- Infrastructure/development concerns and advantages/opportunities
- SAR
- Boundary issues
- Invasive species and other environmental considerations (i.e., sewage, noise, collisions)
- Russian participation (locally)
- Economies of development; increasing costs for region
- Current protocol/laws-itemized
- Oceanographic/environmental reasons for traffic to the east of St. Lawrence Island

### **Needs**

- Central command center
- Ability to disseminate info among communities
- Comment process that educates local users on the proposal AND the process
- Acknowledgement that traditional use areas shift and are not static
- How is RISK going to be managed?
- Additional funding for interactions among users, agencies, government
- Comment process that yields the best engagement by educating communities on process—domestic and IMO
  - Use native language, newsletters, radio
- Advocate for funding to facilitate formal comments among communities
  - Tell users about USCG website that posts comments received to date
- Find driver to empower communities (very important)

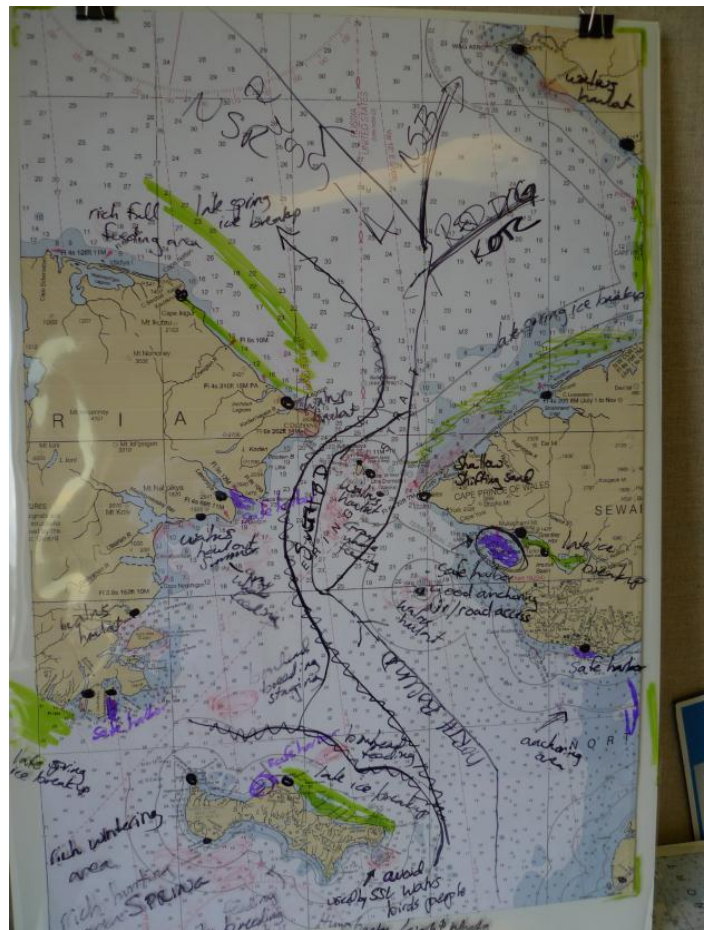
## TOP PRIORITIES

- Be flexible
- Basic comprehensive understanding of current applicable laws, regulations, logistics for developing/increasing better local understanding and participation
  - What would be the best format to condense regulation requirements?
  - Need unified regulatory framework for both state and feds
  - Need also unified regulatory reporting infrastructure for state agencies
  - What is the middle ground between impact to local community and expanding ocean use commercially?
- Communication locally across sectors, Arctic Council, IMO, local government, crossing borders, agencies, and cultures for a better understanding of socioeconomic impacts that includes subsistence issues
  - Talk to Bering Straits Native Corp, Kawerak, Norton Sound Health Corporation and Norton Sound Economic Development Group
  - This is not a socioeconomic assessment—that is what MSP (marine spatial planning) can be!
  - Communications – what’s taking place, how often and how do we improve?
- Russia/US boundary protocols re: communication/shipping/ subsistence
  - Including fostering better visa-free travel
  - What is the plan and implementation for building and maintaining open communication?
- Need for enhanced infrastructure to serve regional needs on BOTH sides of Strait re: SAR/EPPR/shipping/pollution response
  - Enhanced infrastructure must include community and environmental considerations
  - Who funds? Which would benefit BOTH sides the most?
  - Does this function like an RCAC?
- \* Additional funding for research, comments, interactions among government/communities/etc.
  - Funding from where? Local communities?
  - What about first collecting the existing data in a centralized way?
- RISK
  - Need risk assessment from users identifying risks for each use and mitigation measures
  - Take activity down to lowest acceptable risk
  - Define for shipping, OSR and SAR.
  - Weighing risk vs. economic development
- \* Mapping and adapting to shifts (*The Bering Sea Sub-Network is working on subsistence mapping on St. Lawrence Island, and in the next few years will likely be doing some modeling of subsistence use in an attempt to predict where people will go in the future based on predicted changing environmental conditions.*)
  - Whole region is dynamic/changing—not fixed or charts
  - Similar to national/international suggestion
- Modeling after Wainwright (see #2)
  - What are quality assurances and feedback loops to check accuracy? Quarterly? Annually? Local input?

- Meaningful engagement that actively involves communities
  - Engagement activity should be formalized or ad hoc
  - \* Forum or mechanism to share information and resolve/find solutions and know who (in Russian communities, government, state) to talk to about key issues and process—health, welfare, communities
  - What is the plan and implementation for communication sharing?
  - Sensitivity issues around data sharing (especially around marine mammals)
- Educating stakeholders on the process so they value it and do not get discouraged
  - Training and information sharing (safety, subsistence issues, spill response) from agencies charged with enforcement
  - Who provides funding?

**FINAL PRESENTATION and Explanation of Map**

- The predominant winds in the Bering Strait area in the winter are Northeast
- Animals have access to open water in areas in which ice breaks up
- Anadyr current is nutrient-rich, cold, clear, fast and productive, shallow, drives the whole system
- Alaska Coastal Current also comes up from the North, sediment-rich, not as rich an ocean habitat
- Both currents mix in the Bering Strait
- These areas are late to break up in the spring
- Heavy ice at Shishmaref, northeastern Chukotka peninsula
- Orange (see map) areas are rich in marine life (breeding, feeding, etc.), also birds and salmon
- Purple (see map) is safe harbor/safe anchorage areas
- Port Clarence is underestimated in this scheme (former Coast Guard station)
- No water in the map that is not accessed by subsistence users
- Funnel traffic through east side (least of all evils), avoid shallow shifting sands
- Come back to Russian side of Diomedes
- Prefer the idea of an international conflict avoidance agreement
- Black dots represent communities in the areas
- Prefer AIS for international and





- local communications (need something on both sides)
- Amazing local search and rescue network in this area
  - Don't have the financial or governmental resources as North Slope
  - Kodiak is the closest C130 (takes 4 hours to get there)
  - Real-time VHF announcement (security for passing ships)
  - Notice of current conditions might be two-way (for people coming down as well)
  - Sea-ice walrus outlook is done by a local agency
  - Tight shipping lanes are the best option, lets subsistence users know where the boundaries are
  - Cross-boundary, cross-cultural, cross-industry and community/tribal communication
  - Use biological, oceanographic, community knowledge, and weather in order to make these decisions (timing movements)
  - Some communities are fighting to become deepwater ports/ports of call to help with economic growth
  - Need for communication between traffic and subsistence users
  - Think about the future in 20 years
  - Any scheme will affect the Diomedes (including whale harvesting)
    - People have to be able to legally hunt on both sides of the border in order to continue their lifestyle (whales, seals, etc.)
    - Legal issues with this need to be resolved
  - Small boat traffic shouldn't be subject to IMO traffic patterns (this is already true)
  - Need to map out spatially where people are subsistence hunting based on the season instead of boxing the entire area out for subsistence use (BSSN currently working on this)
    - Provide little boxes instead of one enormous box - downscaling
    - Little boxes are challenging because the entire area is used, just at different times (the changing environment means that biological resources are moving and there is increased traffic and demand on resources)
  - Safety issue: if route becomes official, subsistence hunters can't impede the progress of the vessels (can only commercial fish in the buffer zone, not in the shipping lane)
  - Radio stations are one example of a communication network in the region
  - Developing the seasonal and geospatial information
    - Some of this information is already available
    - There is a Facebook group that monitors ice and hunting locations/patterns
    - Need a centralized location for all this information
  - Where does the funding come from to support this level of infrastructure?
    - What about on the Russian side?
    - Does the shipping industry pay for this?
  - To draw path: avoided migration patterns of the animals because the people follow them and that way they mostly avoid subsistence users

**GROUP DISCUSSION: MARITIME COMMERCIAL USE CONSIDERATIONS**

**What is working well?**

- Condition monitoring (AIS in critical areas) + macro data collection

- Companies are acting responsibly (good goal—what is the definition of ‘responsibly’?)
- \*Ice mapping resources and associated services
- Summer operations
- Geospatial information systems (eg GoogleEarth) and AIS/NavTec systems
- Temporary/seasonal exclusion zones (Voluntary)
- Communication centers (Shell’s system; community/industry information exchange; local subsistence advisors)
- Use of MOUs/MOAs for voluntary agreements
- VTS in other areas (Puget Sound, Straits of Juan de Fuca, Straits of Malacca, Prince William Sound)
- Potential Places of Refuge identifications, Geographic response strategies sites
- State of Alaska’s processes for compliance (leases, mitigation measures, coordination of permitting, etc)
- USCG local outreach and communications - increased USCG interest in use of state waters, location of resources, etc.
- Subsistence-use mapping—Oceana, Aleut International

#### **What isn’t working (well)?**

- Imposing unilateral seasonal restriction
- Micro data analysis and improved local communications
- \*\*Lack of Polar Code/safety code; UNCLOS ratification
- Comprehensive SAR approach or spill response strategy
- \*Inadequate charting
- Coastal Zone management
  - Coordination has been terminated for coordinated planning and implementation
- Lack of USCG infrastructure and resources (Icebreaker, SAR off shore, ice rules)
- Lack of spill response equipment, etc within the Bering Strait region
- Broad-based exclusion zones
- Free navigation restrictions
- Proceeding without local involvement
- International MOUs
- Mandatory pilots

#### **What do we still need to know?**

- Risk assessment—need to understand risks, users, increased traffic
  - Involved parties should include industry, USCG, Alaska DEC, local communities
- Who is interested in communications—what information do they want?
  - Breakdown of actual usage of the strait by USCG
- \*\*Expand AIS broadcast requirements (USCG responsibility?)
  - How do you address non-compliance with AIS?
- Expand charting data (NOAA responsibility?)
- Safe refuge identification
- Ice monitoring and forecasting (NOAA/NWS responsibility?)
- GIS Database with subsistence, seasonal info

- Communications with everyone in the area
  - Vessels, communities, stake holders, etc
- Full scope of vessel traffic in the region on a real-time basis
- Who are all of the stakeholders?
- International interests in the Arctic
- Accurate charting—NOAA
- Projected USCG presence in region (2, 5, 10 year projections)
- Present industry infrastructure
  - aviation, SAR, spill response
  - D17 information, OSRO, State of Alaska, Dept of Defense
- How to respond to oil or HNS spills under ice
- Forecasted industry infrastructure
  - USCG, OSRO, State of AK, Dept of Defense
- Current and projected uses of the region
- Learn from Greenland’s experience - How did they consider and engage indigenous?
- Weather forecasting
- What can satellite technology do for us?
  - UAF Geophysical Institute
- Build on Canadian, etc work in Arctic and integrate federal relationships into other stakeholder groups
- Comprehensive understanding of local uses of waters/region
  - Nanuq commission
  - Other indigenous commissions
- Projection international traffic in region (When, destinations, starting points)
- Local sources for logistical support

### **Important Considerations**

- Predictability + clear expectations + need for flexibility in regulations and practice
- \*\*Freedom to navigate; continue to operate through Bering Strait
- Extreme diversity of use and users
- Charted routing may be changing and affected by environment and new NAV methods
- \*Infrastructure responsibility
- Freedom of Navigation
  - Innocent passage
  - To US destination
  - Force majeure
- Recognizing seasonal restrictions, but need for overall year-round access
- Situational awareness of AIS-use compliance and security issues
- International versus national versus state waters
  - Contingency planning, etc issues
- Access for resource development support (oil and gas, tourism, etc)
- Early communication and planning to build consensus
  - Facilitate MOU/MOA/etc development
  - Safety (SAR, aids to navigation, Infrastructure support, define responsibilities)
- Ice forecasting – Mapping and Information dissemination

- Polar code implementation (ABS)
- Subsistence/habitat/environmentally sensitive areas

### **RISK REDUCTION MEASURES**

- Recommend measures for dynamic routing (1-2 options)
- Identification of risk levels for vessel types
  - Single hulled cargo
  - Oil, hazardous substance tankers
- Speed
- Seasonal needs, dynamic changes per route
- Ice impacts, forecasting, ice breakers
- Russian water management

### **ISSUES and PROPOSED SOLUTIONS**

- Identify sensitive areas—location, seasonal needs
  - 60 communities, habited islands (St Lawrence, Diomedes)
  - Subsistence activities—occur all year, or seasonal
  - Communication needs:
    - Vessels communication to local communities
    - Communities/hunters communicate with vessels
    - Tracking
    - Reporting (mandatory for winter ice months)
  - Ice dictates the current route, at times
  - Polar Code, make communications required
  - Safety of vessels, workers, communities, environmental—of highest importance
  - Adjust to Russian waterway management
- Economics factor to direct chosen vessel route
- Practicality of a ‘standardized’ or single route in winter ice conditions and local uses
- Different management in summer versus winter
- Leverage off successful industry communication systems (ie Shell Oil Co)

### **TOP PRIORITIES**

- What about the impact of helicopter fly-overs on marine resources?
- \*Freedom to navigate
  - Maybe freedom to navigate during seasons with ice only
  - Freedom to navigate should not impact other users’ freedom to use area for other purposes
  - Rules about ice-class of vessels by season
  - Need to find funding for international translators for communication centers
- \* Lack of Polar Code
  - Is this good or bad?
  - Voluntary or required?
  - Enforcement?
- Infrastructure
- Companies acting responsibly

- Ice mapping/monitoring
- Expand AIS requirements – high priority
- Risk assessment
  - Model off of other AK risk assessments
  - How do you continue to ensure all companies act responsibly?
  - Who determines appropriate level of risk in risk assessment?
  - From whom do we get this info?
  - Where does community input come into this?
- Inadequate charting
- Year-round access
  - Freedom of navigation
  - International Strait
  - Strategic Waterway
  - Year-round access to the global shipping enterprise – is this a goal?
  - Keeping routes/ATBA etc the same throughout the year or is it okay/good to have it change seasonally?
- Safety
  - SAR - Government responsibility

## **FINAL PRESENTATION**

### **Avoiding sensitive areas by using communication tools**

- Risk reduction measures
  - Dynamic routing with other options
  - Types of vessels (hazardous ones such as oil tankers)
  - Different vessels use different speeds
  - Multi use of waters and coastlines
  - Seasonal needs (2 maps – ice free shown below)
  - Need for dynamic changes with even shorter amounts of time than seasons
  - Ice impact changed the polar perspective
  - Need for forecasting
  - Behavior of icebreakers – they will become part of navigation system
  - Don't have good handle on Russian water system management



- Sensitive areas that must be considered (e.g., around the Diomedes)
- When do subsistence activities occur and where/for what?
- Communication needs
  - Vessels should communicate with the local communities and hunters to let them know when they will be there so as to not change the lifestyle or traffic pattern
  - Communities and hunters should communicate with the vessels (some companies are hiring native speakers to go on board)
  - More tracking and reporting
  - Local subsistence specialists and communication centers already located near North Slope could be the other end of communications with the ships and local communities (to avoid certain areas while the hunt is going on) – communication centers in different villages, community-focused
- Ice will dictate the current route
- Polar code might be incorporated
- Communication might be required under certain conditions
- Adjust to the way that Russian waterways are managed
- Economics is an important factor to choose vessel and route
- Practicality of proposing one single solution that won't always be beneficial all the time
- Different practices for ice vs. ice-free seasons
- Track animals (e.g., walruses) and tourists
- Learn from other companies (e.g., Shell) for behaviors and technologies to use moving forward
- Need sensitivity maps around Alaskan coast (like Canada has)
- Ice routes are much more complex; ice-free routes could probably be a lot more fixed
- Coast Guard can't mandate routes of ships coming through the area as the call-in communication system (too much like VTS)
- Might not be an exact route in the wintertime, might just be a set of guidelines from which vessels must plan their route
- Any vessel that crosses a certain line could get an email or text message notifying them
- Bering Strait area isn't as developed as the North Slope
- How to get the main actors together to sit down and negotiate this?
- What about a Conflict Avoidance Agreement?
- Villages could transmit in the blind to say in which areas hunting is occurring and tell shippers to avoid that area
  - Shippers would need to voluntarily receive this information and also transmit in the blind to announce their location

### **GROUP DISCUSSION: NATIONAL/INTERNATIONAL CONSIDERATIONS**

#### **What is working well?**

- Arctic Council
  - SAR Agreement
  - Offshore oil and gas guidelines?
  - Limitations on transfer to IMO

- USCG D17/RVS border guard
  - Law enforcement—community fisheries
- North Pacific Forum
- US-Canadian Relationship
- UMIAQ/ASRC Energy Services
  - Marine mammal observers
  - Community contact
  - Wainwright – oil spill response
- Aids to navigation
- NGO link with tribes

#### **What isn't/may not work?**

- Russian indigenous representation
- Reliance on established government channels
- DOI – tribal relations
- Interagency info sharing
- Spill response
  - (So, need to focus on prevention)
  - Lack of infrastructure—not limited to oil spill response (eg SAR)
  - Accountability
- Language barriers
- Flags of convenience
- US ratification of UNCLOS

#### **What do we still need to know and who has the info?**

- Forecast traffic for Bering Strait
  - Insurance industry
- Weather/ice observations and forecast
- Better info on use (indigenous and local marine use)
  - Get from research (industry fund?)
- What international agreements impact the Bering Strait
- Assessment of marine mammals and sea birds
  - Migratory routes
  - Feeding areas
  - Aggregation areas
  - Subsistence activities
- More info on noise (shipping and seismic – exploration)
- Receptiveness of IMO to “special status”
- US/Russian cooperation
  - Receptiveness to bilateral agreements

#### **Important Considerations**

- Hydrography and charting
- Aids to navigation
- National/International laws protecting species

- Authorities
  - Pilotage
- Emissions corridors
- Oil spill response
- US/Russia Cooperation
- Parallel processes (IMO +)
- Safe harbors
- Voluntary restrictions (speed)
- Monitoring

## **TOP PRIORITIES**

- \* Russian Federation – US cooperation
- Regional and indigenous input/interests
- Bering Strait agreement
- Bering Strait – International Strait
- Strategic waterway for US and RU
- Law of the Sea?
- Model what's working today – environmental assessment
- Marine mammals and sea birds
- Is *model* the right word? How about inventory?
- NEPA considerations: cumulative impacts, air traffic volume
- How do you utilize the info that has already been collected?
- \* Better info on local/indigenous marine use
- GIS Datasets
- How do you mitigate lack of GIS equipment and software experience among all stakeholders?
- How do you incorporate Indigenous use/importance areas into IMO/Polar Code, etc?
- Who is responsible for planning? Oversight? Implementation? Drills/practices?
- \* Oil spill prevention and response
  - Who determines level of preparedness?
  - Who's responsible for innocent passage, OSR?
  - How can US and AK compel cooperation internationally?
- Obtain IMO recognition of the special character of Bering Strait
- Migration patterns, subsistence uses, pristine sonic environment, etc
- PSSA? Marine Special area?
- Lack of accountability
- Chain command in decision-making (eg flags of convenience, insurers, etc; too much lag time between incident and abatement decisions)
- Multi-agency sectoral authority, no oversight
- Governing Body composition?

## **FINAL PRESENTATION**

- Can't lock vessels into a single shipping lane
- Created a precautionary area through which ships must take extra care



- Must alert ship ahead of time to special conditions in order for them to plan new route
  - Mandatory ship reporting (MSR) regime
- Put routes to keep vessels separated, putting them in tiny corridor increases likelihood of collisions
- Can't do this without the Russian Federation
- Who do the ships report to on the other end of the radio?
- IMO needs it to be a single reporting source (even a robot or automatic response), can't be several little villages along the coast
- MSR is infrastructure-intensive, would be extensive
  - Robot would be able to handle translation issues (e.g., Chinese)
- Can't impose a speed limit through the IMO, but you can make a mutual international agreement to recommend certain speeds due to migratory movement or hunting activities
- Can still suggest to IMO that speed limits be imposed as part of our recommendations for the area
- Lots of opportunities to create areas to be avoided (ATBA)
- November and December now have navigable water but no daylight, so there is limited visibility
  - Handled under the rules of the road, IMO doesn't have specific regulations about this (sea animals aren't lit up...)
- How do we hold people accountable for these rules?
  - Sit down and create them with the users, so that they aren't just being given the rules, but helped create them
  - What about criminals who just don't care about the rules?
  - We need to create a system of accountability
  - Can't enforce it because it's an international strait, can only make a recommendation
  - Thinks that most of the industry will comply with this, with only a handful of rogues
- What are the insurance requirements of vessels passing through this area?
  - Sometimes need an escort, reinforced hull, etc.

