

**ALASKA STATE LEGISLATURE**  
**SENATE SPECIAL COMMITTEE ON THE ARCTIC**

February 26, 2015

11:18 a.m.

**MEMBERS PRESENT**

Senator Cathy Giessel, Co-Chair  
Senator Lesil McGuire, Co-Chair  
Senator Lyman Hoffman  
Senator Gary Stevens  
Senator Donald Olson  
Senator Click Bishop  
Senator John Coghill

**MEMBERS ABSENT**

Senator Berta Gardner

**COMMITTEE CALENDAR**

CS FOR HOUSE BILL NO. 1(EDA) am  
"An Act declaring the Arctic policy of the state."

MOVED SCS CSHB 1(ARC) OUT OF COMMITTEE

PRESENTATION: MANAGING THE ARCTIC MARITIME DOMAIN THROUGH  
AVAILABLE TECHNOLOGY

- HEARD

**PREVIOUS COMMITTEE ACTION**

BILL: HB 1

SHORT TITLE: STATE ARCTIC POLICY

SPONSOR(s): REPRESENTATIVE(s) HERRON

01/21/15	(H)	PREFILE RELEASED 1/9/15
01/21/15	(H)	READ THE FIRST TIME - REFERRALS
01/21/15	(H)	EDA, STA
01/27/15	(H)	EDA AT 10:15 AM BARNES 124
01/27/15	(H)	Heard & Held
01/27/15	(H)	MINUTE(EDA)
02/05/15	(H)	EDA AT 11:30 AM BARNES 124
02/05/15	(H)	Moved CSHB 1(EDA) Out of Committee
02/05/15	(H)	MINUTE(EDA)
02/06/15	(H)	EDA RPT CS(EDA) 1DP 5NR

02/06/15 (H) DP: HERRON  
02/06/15 (H) NR: JOHNSON, TILTON, WOOL, ORTIZ,  
STUTES  
02/10/15 (H) STA AT 8:00 AM CAPITOL 106  
02/10/15 (H) Moved CSHB 1(EDA) Out of Committee  
02/10/15 (H) MINUTE(STA)  
02/11/15 (H) STA RPT CS(EDA) 3DP 1NR 2AM  
02/11/15 (H) DP: TALERICO, STUTES, LYNN  
02/11/15 (H) NR: KELLER  
02/11/15 (H) AM: KREISS-TOMKINS, GRUENBERG  
02/13/15 (H) TRANSMITTED TO (S)  
02/13/15 (H) VERSION: CSHB 1(EDA) AM  
02/18/15 (S) READ THE FIRST TIME - REFERRALS  
02/18/15 (S) ARC, STA  
02/19/15 (S) ARC AT 11:15 AM BUTROVICH 205  
02/19/15 (S) -- Testimony < Public and Invited > --  
02/26/15 (S) ARC AT 11:15 AM BUTROVICH 205

#### **WITNESS REGISTER**

KARA MORIARTY, President/CEO  
Alaska Oil and Gas Association (AOGA)  
Anchorage, Alaska  
**POSITION STATEMENT:** Testified in support of HB 1.

ED PAGE, Executive Director  
Marine Exchange of Alaska  
Juneau, Alaska  
**POSITION STATEMENT:** Presented information on Managing the Arctic  
Maritime Domain through Available Technology.

#### **ACTION NARRATIVE**

[11:18:51 AM](#)

**CO-CHAIR LESIL MCGUIRE** called the Senate Special Committee on  
the Arctic meeting to order at 11:18 a.m. Present at the call to  
order were Senators Hoffman, Stevens, Olson, Coghill, Bishop,  
Co-Chair Giessel, and Co-Chair McGuire.

#### **HB 1-STATE ARCTIC POLICY**

[11:19:33 AM](#)

**CO-CHAIR MCGUIRE** announced the consideration of HB 1. She noted  
that when she recessed the meeting on February 19, 2015, the  
committee had adopted version S and was considering Amendment 1.  
She had objected for discussion purposes.

SENATOR BISHOP withdrew Amendment 1 and offered Amendment 2:

Page 3, line 13:

Insert new subsection:

Section 2 AS 44.99.105(1)

(G)Continue to prepare all Alaskans for emerging economic activities, by utilizing multiple education and training opportunities and implementing state workforce plans.

CO-CHAIR MCGUIRE objected for discussion purposes.

SENATOR BISHOP read the amendment. He said he thinks it is an improvement over Amendment 1 and "gets us where we want to go."

CO-CHAIR MCGUIRE withdrew her objection. There being no further objection, Amendment 2 was adopted.

KARA MORIARTY, President/CEO, Alaska Oil and Gas Association (AOGA), testified in support of HB 1. She related that AOGA is the professional trade association whose mission is to foster the long-term viability of the oil and gas industry for the benefit of all Alaskans. She said AOGA members have been exploring, developing, producing, transporting, and refining Alaska's natural resources in the Arctic for more than 40 years. She said AOGA is proud of its partnership with the people of Alaska providing revenue to the state, economic opportunities, and infrastructure to the Arctic Region.

She thanked the 26 members of the Arctic Policy Commission for the substantial amount of work undertaken the past two years. The outcome, both the report and the implementation plan and this bill, are to be commended as a robust and comprehensive views of Alaska's Arctic. Both place the people of the Arctic at the forefront and reiterate Alaska's commitment to vibrant communities through a healthy environment and economic stability. Since statehood, the industry has fueled Alaska's economy by providing jobs and revenues to the state and local funding. Today, the oil and gas industry accounts for more than 92 percent of the state's general unrestricted funds, and 99 percent of the revenue to the North Slope Borough.

MS. MORIARTY noted that AOGA was not an official member of the commission, but was actively engaged in the process. AOGA's

comments were focused on two main tenants, access and predictability. She concluded that the industry has partnered with the state to uphold and defend multiple use of Arctic public lands for development that would lead to immense potential for supporting Arctic economies, filling the Trans-Alaska Pipeline System, and generating billions of dollars in government revenues.

She said, although access to land is itemized in the implementation plan, AOGA appreciates the commission's renewed commitment in its policies. AOGA has long fought for predictability in development. Stable tax, regulatory, and permitting processes encourage investment and drive economically vibrant communities. The oil and gas industry has been commended by the people of the Arctic for outreach efforts and integration of traditional knowledge in industry operations. Many companies have dedicated tribal liaisons who spend considerable time in the communities. She said the bottom line is AOGA members engage with Arctic communities every day and look forward to continuing to do so for years to come. She thanked the Co-chairs and Representative Herron for their leadership.

[11:24:46 AM](#)

CO-CHAIR MCGUIRE thanked Ms. Moriarty and noted the arrival of Senator Coghill.

CO-CHAIR GIESSEL thanked AOGA, the Miners Association, the Support Industry Alliance, and the Resource Development Council for their contributions to the bill and for providing awareness of where economic development and the protection of the environment come from.

CO-CHAIR MCGUIRE agreed.

CO-CHAIR GIESSEL moved to report SCS CSHB 1, version 29-LS1103\S, as amended, from committee with individual recommendations and attached zero fiscal notes. There being no objection, SCS CSHB 1(ARC) was reported from the Senate Special Committee on the Arctic.

[11:26:43 AM](#)

At ease

[11:28:28 AM](#)

CO-CHAIR MCGUIRE brought the meeting back to order and announced the arrival of Senator Stevens.

**PRESENTATION: Managing the Arctic Maritime Domain through Available Technology**

[11:28:33 AM](#)

ED PAGE, Executive Director, Marine Exchange of Alaska, presented information on Managing the Arctic Maritime Domain through Available Technology. He thanked the legislature for its support for the Marine Exchange. He provided information about his background in the Coast Guard and gave examples of where people perished on ships and of environmental tragedies. He said he became very involved in safety and prevention. He maintained that responsible development of resources must be accompanied by an obligation for industries and agencies to be pro-active regarding risk mitigation and environmental protection.

He related that the Marine Exchange was developed with funding from the state, Coast Guard, and Maritime Ministry. It leverages technology as it relates to managing the Arctic maritime domain. He noted he developed the Marine Exchange for Alaska, the most challenging maritime state.

[11:31:39 AM](#)

MR. PAGE describe the Maritime Exchange as a non-profit organization located in Juneau and established to provide the Alaska maritime community information, communications, and services to ensure safe, secure, efficient and environmentally responsible maritime operations. He said marine exchanges date back to the 1800's and used telescopes, semaphores and chalk boards. Today, radar, radio, AIS, email, the web, and satellites are used.

[11:32:36 AM](#)

SENATOR BISHOP referred to the chalk board as a means of tracking ships. He maintained that the maritime industry has impeccable written records as far back as the 1400's.

MR. PAGE he agreed. He explained that the old system whereby ships called for help no longer exists; under the new system they are tracked and contacted whenever a situation arises. He pointed out that if Captain Hazelwood [Exxon Valdez] knew he was being watched, he probably would not have left the channel. He concluded that monitoring can influence behavior. Today information is disseminated by technology, such as the internet, smart phones, and PDA's.

[11:34:08 AM](#)

SENATOR OLSON asked how the state can avoid costs related to maritime disasters.

MR. PAGE opined that if mariners knew they were being monitored there would be less risk. The Marine Exchange is currently monitoring vessels using a system that did not previously exist. He noted Canada is very interested in adopted a similar program.

SENATOR OLSON inquired how a ferry grounding could have been avoided.

MR. PAGE reiterated that if they had been monitored by the home office those events would be less likely to occur.

SENATOR OLSON asked if monitors will be installed in the wheel house.

MR. PAGE pointed out that the wheel house knows their location. With the Maritime Exchange all vessel positions are updated every couple seconds for those who are supposed to oversee the vessels.

SENATOR OLSON spoke of the financial challenges for funding new monitors.

MR. PAGE asked if he is referring to the ferry system.

SENATOR OLSON said yes.

MR. PAGE said all the monitors are in place already and the system is up and running.

11:38:00 AM

MR. PAGE showed a slide of busy Alaska vessel traffic at one point in time.

He listed the reasons for tracking vessels: safety net, risk assessments, environmental protection, validate compliance, emergency response, improve efficiency, and maritime security. The goal is for safe, secure, efficient, and environmentally sound maritime operations.

He noted the need for 100 percent success, a very high standard demanded by the agencies. He said the Marine Exchange is a commitment shared by the marine industry, Coast Guard, and the state. He listed the names of the state agencies involved: Alaska Department of Fish and Game (ADF&G), Department of

Transportation and Public Facilities (DOTPF), Department of Military & Veterans Affairs (DMVA), Department of Commerce, Community and Economic Development (DCCED), and Department of Environmental Conservation (DEC).

[11:39:41 AM](#)

MR. PAGE turned to common marine challenges Canada and Alaska share. Canada is trying to replicate a similar safety net in the northern transportation system. Both countries share concerns about: climate change and changing ice conditions, new and expanded resource development, community resupply, tourism with smaller vessels and cruise ships, increased marine traffic, limited search and rescue capacity, limited infrastructure, cost of building and maintaining infrastructure, and international interests. He showed a map of two common areas that Alaska and Canada share.

He discussed the Automatic Identification System (AIS) technology and spoke of problems encountered. About ten years ago the international maritime community required vessels to have transponders, much like aircraft. However, the Coast Guard did not have the funding to build a receiver. With the help of state money, Exxon Valdez settlement funds, Maritime Ministry funds, and Coast Guard funds, the AIS system was put in place.

[11:41:21 AM](#)

MR. PAGE showed a map of Marine Exchange marine safety site locations in 2014. Locations include Norway and Iceland.

He noted the state has been a great funding source, however, currently, the Marine Exchange is not relying on the state. The state is providing 12 percent funding now, as opposed to 60 percent in 2009.

He showed a slide of vessel tracking support and the Alaska maritime community support of the AIS Network. Support by entities such as lighthouse associations, pilot stations, harbor offices, fish hatcheries, tribal offices, and oil facilities make the Marine Exchange affordable. He showed remote self-supported AIS sites and the vehicles and methods of access.

[11:43:21 AM](#)

He turned to Southeast Alaska operations and a variety of access networks. He spoke of the rescue by a state Fish and Game vessel and the use of vessels other than the Coast Guard for rescue. He noted that the Coast Guard and the Marine Exchange see the same information. He noted that there are speed restrictions in

certain areas that are surrounded by an "automatic fence." He opined it is a great way to compel compliance.

[11:45:30 AM](#)

SENATOR OLSON asked if the Maritime Exchange has regulatory authority.

MR. PAGE said no. They simply remind the vessels of their infractions. He said Shell requested monitoring after one of their contract vessels went into the wrong area.

SENATOR OLSON spoke of the effects extreme tides and winds have on vessels.

MR. PAGE explained how they include those factors.

He shared an example of when a Canadian barge went adrift in the U.S. Arctic. The Marine Exchange found an easy way to track them using a small transponder and small sand bags.

[11:47:58 AM](#)

MR. PAGE spoke of the Arctic Safety Net Project and the use of small transponders. The sponsors are Pew, IUCN, Oak Foundation and the Arctic Council. He showed a variety of maps from the Arctic and how the data can be used. Another map showed where ships are located and their routes on a specific date and the trends by year.

SENATOR OLSON asked which side of the Diomed Islands has the majority of the traffic.

MR. PAGE said the U.S. side does. Most of the traffic goes to the Red Dog Mine and oil exploration support.

SENATOR OLSON asked why the most traffic stays on the U.S. side.

MR. PAGE said each country's vessels stay on their respective sides.

[11:50:56 AM](#)

He explained how the evaluation of maritime activity is compiled and shared with other agencies. He showed Red Dog cargo ship paths.

He shared statistics about traffic density and how passenger vessels might route. He showed pictures of a variety of vessels that use the northern water.

[11:52:35 AM](#)

MR. PAGE contrasted northern transits with those near Juneau. He stressed that the domain awareness issue is one thing to know; but whose domain it is, is another issue. In the Selendang Ayu situation there was no maritime domain awareness or management. That situation has changed and is presently there. He gave another example of an area where there is no domain awareness. He suggested moving into the area of domain management, such as with bulk cargo vessels who typically have high risk transits.

SENATOR STEVENS asked why the cargo vessel used the high risk route.

MR. PAGE did not know.

He talked about the Alaska Maritime Prevention & Response Network, made up of 25 people, of which he is president. He said he started the non-profit network to implement alternative spill response and prevention methods that most cost effectively meet the environmental protection objectives of state and federal regulations. There are tanker and non-tank vessel Alternative Planning Criteria (APC's).

He said the network was created because, even though the Coast Guard has pollution prevention regulations, they have never applied them in Alaska. The network provides an alternative to that. The network purchased over \$1 million in oil spill response equipment, but the focus is on prevention.

[11:57:24 AM](#)

SENATOR STEVENS asked about the makeup of the map near Russia.

MR. PAGE explained the map depicts the effects of the Pribilof Islands. He termed it a "donut hole" where the Marine Exchange does not track vessels. He noted the size of Alaska provides great challenges in spill response. Coast Guard regulations are only being met in Cook Inlet and in Prince William Sound.

[11:58:23 AM](#)

MR. PAGE turned to extreme weather conditions and the responsibilities and challenges in spill response. He maintained that the best response is prevention. He talked about the limited infrastructure of the network and where alternative planning criteria by the Coast Guard would be needed. He talked about prevention and response enhancements. He showed the risk mitigating routes through passes and offshore routes.

He showed the route bulk cargo vessel Red Jasmine would take after APC implementation and an example of a vessel not under command in Western Alaska waters and another not in compliance with OPA-90. He provided an example of a typical message to the Coast Guard.

MR. PAGE shared statistics from the emergency response data base. There were 450 vessels found to be non-compliant last year and the Coast Guard was notified. Currently, there is only about one a day out of compliance, a great improvement.

He shared how revenues are being allocated: to enhance spill response equipment, enhance prevention capabilities, fund spill response organization, and for administration costs. He shared the network's five-year plan and network developments in 2014. The network enrolled 2,000 vessels, enhanced vessel tracking capabilities with more AIS sites, supported cooperative research and development agreement with the Coast Guard, procured \$950,000 in oil spill response equipment, established an office in Anchorage, and initiated a ship arrestor R & D project with Glosten Engineering.

He showed graphs of non-participating vessels last year and how much improvement was made. He spoke of their role in providing environmental information by using Alaska Ocean Observing System's sponsored AIS weather project. The Marine Exchange is building 28 weather sites and developing the software.

[12:04:06 PM](#)

He discussed the cooperative research and development agreement USCG-MXAK - CRADA and the Arctic Next Generation Navigational Safety Information System. It provides virtual aids to navigation, shows the locations of whalers and whales, provides environmental data, shows vessels in distress, and notifies vessels in areas to be avoided or exceeding the speed limits. He spoke of when Simushir was adrift, which was a good example of the disparity between Alaska and Canada.

He summarized that there is a tool box which was not previously in place to manage maritime domain and communicate risks to vessels. Arctic Maritime Safety and Environmental Protection consists of maritime domain awareness and management, implementation of risk mitigation measures, monitoring and compelling compliance, response network and capabilities, and leveraging technology to enhance maritime safety.

He voiced appreciation for the support the state has provided over the years.

CO-CHAIR MCGUIRE thanked Mr. Page for his presentation.

SENATOR STEVENS asked what the current state investment is.

MR. PAGE said the Marine Exchange is not in the budget this year. He mentioned previous funding such as the cruise ship head tax which does benefit the whole maritime community. He said he is hoping to have state funding reinstated at \$500,000 as in the past.

CO-CHAIR MCGUIRE introduced Senator Gardner who is the alternate member of the committee.

12:09:25 PM

There being nothing further to come before the committee, Co-Chair McGuire adjourned the Senate Special Committee on the Arctic at 12:09 p.m.