22 April 2013

Committee on the Marine Transportation System Office of the Executive Secretariat U.S. Department of Transportation 1200 New Jersey Ave SE Washington, DC 20590

Dear Committee Members:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the draft report "Arctic Marine Transportation System: Overview and Priorities for Action" and offers the following recommendations and rationale.

RECOMMENDATIONS

<u>The Marine Mammal Commission recommends</u> that the Committee on the Marine Transportation System—

- consult with the National Marine Fisheries Service and Fish and Wildlife Service to identify
 ecologically and biologically significant areas and consider the measures needed to protect
 them;
- emphasize the collection of the baseline information needed to fully appraise areas that are candidates for special protection;
- consider establishing primary shipping routes through U.S. waters to be used whenever the vagaries of sea ice allow;
- work with the International Maritime Organization and the International Whaling Commission to develop protocols to avoid collisions with marine mammals and reduce impacts of shipping noise and call for, and do all it can to expedite, the development of international agreements on all aspects of commercial shipping in the Arctic;
- establish clear objectives and milestones for the development of the management capacity needed to avoid unreasonable risk to the Arctic marine ecosystem;
- establish a framework for integrating the management of risks from shipping and the risks associated with other human activities in addition to shipping;
- incorporate within its environmental response priority the need to develop and impose appropriate emergency response standards that describe the necessary personnel and equipment and require both desktop and field exercises to test and verify joint industry-government response capabilities; and
- establish and maintain communication with the potentially affected Alaska Native communities, maintain such communication on an ongoing basis, and consult with Alaska Natives in a manner that provides them with the opportunity to influence those shipping activities that will affect their lives, cultures, and subsistence practices.

RATIONALE

The report provides a thorough and appropriate overview of this developing issue. The Commission agrees with the report's main finding that the United States needs an Arctic marine transportation system capable of meeting the safety, security, and environmental needs of present and future Arctic stakeholders and activities. The Commission also agrees with the conclusion that the "existing capacity of U.S. marine transportation infrastructure and services is inadequate both to support increased Arctic traffic and to mitigate the risks accompanying economic growth." This is especially true in the Bering Strait region and the Chukchi and Beaufort Seas, where traffic will be concentrated and where the United States has neither adequate port facilities nor the capacity for timely, effective search and rescue or oil spill response.

The Commission welcomes this effort by the Committee on the Marine Transportation System to provide an overall framework for improving the effectiveness of the U.S. Arctic Marine Transportation system. Such a framework is essential for protecting Arctic marine ecosystems, including marine mammals and the habitat upon which they depend. Ship traffic poses at least three threats to marine mammals: (1) ship strikes that can kill or seriously injure marine mammals, (2) the introduction of contaminants or new species into the marine environment (e.g., oil spills, fuel spills, exotic organisms on ship hulls and in ballast water), and (3) the introduction of noise that potentially interferes with marine mammal communication and affects foraging and other behavior and habitat use. Importantly, all of these threats could result in unintended negative effects on the harvesting of marine mammals by Alaska Natives who depend on marine mammals for subsistence.

Areas of ecological significance

Marine mammals do not use all Arctic areas equally and the Commission concurs with the prominence the Committee places on areas of ecological significance, including the Bering Strait, Chukchi Sea, and Western Beaufort Sea. The Commission strongly endorses the Committee's call for baseline research to meet the challenge of reaching "a better understanding of the ecosystem level dynamics as well as [of] habitats and species populations."

In a letter of 6 May 2011 (enclosed), the Commission commended the U.S. Coast Guard for its proactive efforts to address potential shipping hazards in the Bering Strait through its Port Access Route Study. As noted in the current report, the Bering Strait is an ecologically and biologically significant area and large numbers of marine mammals migrate seasonally through it to gain access to feeding grounds to the north in the Chukchi and Beaufort Seas and wintering grounds in the Bering Sea or further south. In essence, the effects of Arctic shipping will be concentrated in the Bering Strait region and such effects must be considered and addressed not only by the Coast Guard, but by all agencies and organizations involved in or managing shipping through the Strait.

However, the Bering Strait is just one area of special ecological significance; there are numerous others. Some of those areas will fluctuate with environmental conditions (e.g., the ice edge, which is an area of high productivity and therefore is important habitat for some marine mammals). Other areas are expected to maintain their importance despite changing conditions (e.g., the shelf areas of the Chukchi and western Beaufort Seas. The Arctic Research Policy Act defines the Arctic as extending to the southern edge of the Bering Sea, which also is rich with areas of ecological importance (e.g., the shelf break extending along the Bering Sea's so-called "greenbelt" and Unimak Pass, which is a major point of entry and exit for a variety of marine mammals as well

as ships.) To ensure that all such areas are duly recognized and suitably protected, the Marine Mammal Commission recommends that the Committee on the Marine Transportation System consult with the National Marine Fisheries Service and Fish and Wildlife Service to identify ecologically and biologically significant areas and consider the measures needed to protect them. Because the ecological and biological significance of such areas often cannot be fully described, the Commission also recommends that the Committee emphasize the collection of the baseline information needed to fully appraise areas that are candidates for special protection.

Shipping routes

As the Committee's recognition of ecologically significant areas indicates, the effects of shipping will depend, in part, on where shipping occurs. During some portion of the year, ships will not be able to adhere to fixed routes because of the presence of ice. However, the Commission believes that when safety considerations and ice conditions allow (including during open-water periods), the effects of shipping can be best mitigated and managed by constraining shipping travel to consistent routes. Doing so should facilitate both search and rescue operations and responses to oil or fuel spills, and also should provide a more consistent pattern of disturbance to the marine ecosystem, the effects of which should be easier to evaluate and may be lessened based on their predictability. U.S. agencies have emphasized the importance of ecosystem adaptation to the effects of climate disruption, and marine ecosystems may be more likely to adapt if the patterns of disruption posed by increasing human activities are relatively constrained. Therefore, with safety considerations and the need for such adaptation in mind, the Marine Mammal Commission recommends that the Committee on the Marine Transportation System consider establishing primary shipping routes through U.S. waters to be used whenever the vagaries of sea ice allow. Development of such routes will require consideration of transit distances, navigational safety (e.g., ice conditions, bathymetry, proximity to emergency response facilities), Arctic Native concerns (e.g., subsistence harvest practices), protection of sensitive environmental features (e.g., important marine mammal and seabird habitats), national security interests, areas of potential economic development (e.g., oil and gas exploitation, commercial fishing activities), and other significant concerns identified by Arctic nations.

International cooperation

The Committee's draft report highlights the importance of international cooperation and coordination for managing increased vessel traffic in the Arctic. Such cooperation and coordination are important at three levels. First, cooperation between the United States and Russia will be especially important in the Chukchi Sea and Bering Strait region. Second, cooperation and coordination also will be important with other Arctic nations to promote consistency in both research and management efforts related to shipping throughout the Arctic. Third, cooperation and coordination also will be important between Arctic nations and all those nations wishing to use Arctic shipping routes. The International Maritime Organization appears to be a critical organization for promoting such cooperation and coordination. Therefore, the Marine Mammal Commission recommends that the Committee on the Marine Transportation System work closely with the International Maritime Organization and the International Whaling Commission to develop protocols to avoid collisions with marine mammals and reduce impacts of shipping noise and call for, and do all it can to expedite, the development of international agreements on all aspects of

commercial shipping in the Arctic. The Arctic Shipping Marine Assessment provides a useful starting point for this effort. It provides a range of specific recommendations to promote better management of shipping and its potential adverse effects in this region. The world's maritime nations have developed such agreements for the Antarctic and the Commission believes a similar level of cooperation should occur in the Arctic, recognizing the considerably greater complexity that exists there in terms of the long history of human presence and ongoing occupation and use of the Arctic marine environment.

Other activities

As noted in the report, the changes occurring in the Arctic will lead not only to increased shipping, but also to increases in other industrial activities. Oil, gas, and mineral exploitation are underway already and are bound to increase, commercial fishing may expand into unfished portions of the Arctic, and tourism is likely to continue to increase as well. In addition, military activities may increase because of changing security risks, and coastal development almost certainly will expand, in part to support all those various endeavors and resulting population growth and expansion. Each activity poses environmental risks and the manner in which the United States and other Arctic nations address those risks will be critical to protect the marine ecosystem.

At present, the United States does not have the capacity to respond to a serious oil spill in the Arctic, particularly during the harsh winter months. For that reason, the Commission has recommended that the Department of the Interior adopt a slow, phased approach to oil and gas development in the Arctic region. Such a measured approach would provide opportunity not only to develop needed capacities but also to address data gaps and improve our presently poor understanding of the potential long-term and cumulative effects of oil and gas development on the Arctic marine ecosystem.

Similarly, the United States does not have a clear and demonstrable capacity to respond to other major accidents in the Arctic, including those related to shipping and transportation. In the aftermath of the Deepwater Horizon oil spill, various reviews criticized the responsible parties for allowing energy demand to set the pace of development and for taking risks that they were not capable of managing. To be clear, the federal agencies acting for the United States will be doing the same thing in the Arctic if they simply allow Arctic shipping to expand without the resources needed to manage that shipping in a way that is safe for the industry and the environment. At least for the time being, fisheries managers have recognized the need for a better understanding of the marine environment before they allow development of commercial fisheries north of the Bering Strait. Although the Committee may be limited in its ability to constrain shipping in this region, it should be able to describe the conditions that would be necessary to ensure that all reasonably likely risks associated with the increase in shipping can be managed. Therefore, the Marine Mammal Commission recommends that the Committee on the Marine Transportation System establish clear objectives and milestones for the development of the management capacity needed to avoid unreasonably likely risk to the Arctic marine ecosystem. Because those risks will be, in part, a function of other human activities in the Arctic, the Commission further recommends that the Committee establish a framework for integrating the management of risks from shipping and the risks associated with other human activities in addition to shipping. Here, again, the Arctic Marine Shipping Assessment provides a valuable basis for moving forward on this recommendation.

Testing and verification of management capacity

Despite considerable discussion about the risks of shipping and other industrial activities in the Arctic, relatively little has been done to test and verify management capacity. Shell Oil directed considerable effort into development of a spill response capacity in preparation for exploratory drilling in the Arctic and the company made a compelling argument that it could implement that capacity if and when needed. But when faced with the challenges of working in the Arctic environment (during a period when conditions were far from their worst), Shell encountered a slew of problems. Despite its good intentions and considerable efforts, Shell's experience in the past year did not meet the standards that it had hoped to meet and failed to verify its management capacity.

In many regards, the measures developed in response to the challenges facing agencies and organizations responsible for managing shipping in the Arctic also must be tested and verified. The development of plans, gathering of supplies and equipment, and training of response personnel should not be considered sufficient evidence of a response capacity if those resources have not been tested and verified by real-world exercises. To help ensure adequate response capability throughout the Arctic, but especially in U.S. Arctic waters, the Marine Mammal Commission recommends that the Committee on the Marine Transportation System incorporate within its environmental response priority the need to develop and impose appropriate emergency response standards that describe the necessary personnel and equipment and require both desktop and field exercises to test and verify joint industry-government response capabilities.

Consultation with Alaska Natives

The Commission commends the Committee for calling attention to the need for outreach to Alaska Native communities "to understand the risks to their cultures, needs and values brought on by a changing Arctic, and to draw upon their traditional knowledge of this unique environment." Overall, the report considers the concerns of Alaska Native communities and recognizes that "it is incumbent upon the Federal Government to ensure that shipping and other MTS [Marine Transportation System] activities are pursued in ways that are compatible with traditional indigenous life ways as identified through consultations with American Arctic tribal governments and Alaska Native Corporations."

Executive Order 13175 gives some guidance for the process of consultation but, to date, the practice and success of consultation with Alaska Natives have been highly variable. Alaska Natives have relatively few resources to consult actively on such matters and are just beginning the process of developing what they consider are the reasonable guidelines for such consultation. Five Alaska Native organizations have recently formed a coalition with the aim of strengthening and coordinating their consultation efforts with regard to shipping, but much more remains to be done to increase their capacity to the level needed to deal with the expected large increase in shipping plus other activities in the Arctic.

To ensure that Alaska Natives have the best possible opportunity to consult on Arctic shipping matters, which may affect them profoundly, the Marine Mammal Commission recommends that the Committee on the Marine Transportation System establish and maintain communication with the potentially affected Alaska Native communities, maintain such

communication on an ongoing basis, and consult with Alaska Natives in a manner that provides them with the opportunity to influence those shipping activities that will affect their lives, cultures, and subsistence practices. To do so will require that the Committee allow adequate time for consultations with Alaskan Native communities on the priorities for action set forth in the draft report.

Again, the Commission appreciates this effort by the Committee on the Marine Transportation System to provide an overall framework to improve the effectiveness of the U.S. Arctic Marine Transportation System and welcomes ongoing consultation with the Committee on matters related to Arctic marine mammals and marine transportation.

I hope these comments and recommendations are helpful. If you have questions, please do not hesitate to contact me.

Sincerely,

Timothy J. Ragen, Ph.D.

Twothy J. Roger

Executive Director