

U.S. COMMISSION ON OCEAN POLICY



Reports of Site Visits Associated with the Alaska Regional Meeting The Hotel Captain Cook, Anchorage, Alaska August 21-22, 2002

Background/Area of Site Visits

On August 23, 2002, the U.S. Commission on Ocean Policy held simultaneous site visits in association with the Commission's Alaska Regional Public Meeting held in Anchorage. One site visit covered Juneau, and another Dutch Harbor.

Juneau, Alaska

Dutch Harbor, Alaska

Juneau Site Visit

The Juneau site visit included a tour of a Princess Cruise Lines ship, the M/V Dawn Princess, and a roundtable discussion of Alaska issues at the Department of the Interior's Regional Office.

Commissioners Participating in the Juneau Site Visit:

Vice Admiral Paul G. Gaffney II, USN

Mr. Paul Kelly

Dr. Frank Muller-Karger

Mr. Bill Ruckelshaus

Mr. Ted Beattie

Prof. Marc Hershman

Commission Staff:

Dr. Tom Kitsos, Executive Director

Mr. Peter Hill

Ms. Kate Naughten

Mr. Malcolm Williams

Also in Attendance:

Mr. Tim Keeney, Deputy Assistant Secretary of Commerce for Oceans & Atmosphere

Ms. Margaret Spring, Democratic Senior Counsel, Oceans, Atmosphere, and Fisheries Subcommittee, Senate Commerce Committee

Ms. Kassandra Brown, Knauss Marine Policy Fellow, Office of the Oceanographer of the Navy (recorder)

Visit to M/V Dawn Princess

- CAPT David Calebrese, M/V Dawn Princess
- Mr. George Wright, Director, Environmental Compliance and Security
- Mr. Thomas M. Dow, Vice President, Public Affairs
- Mr. Michael Ramsay, Chief Technical Officer, M/V Dawn Princess

The Commissioners were received onboard *M/V Dawn Princess* by Mr. Dow, CAPT Calebrese, Mr. Ramsay, and Mr. Wright. To accommodate group capacity, Commissioners and others in attendance were divided into two groups for the below-decks tour. This report details the briefing given by Mr. Dow and Mr. Ramsay of Princess to Commissioners Gaffney, Ruckelshaus, Muller-Karger, Beattie and Kelly, and Ocean Commission staff Mr. Kitsos, Mr. Hill, and Ms. Brown. Details of the briefing given by Mr. George Wright to the second group, including Commissioner Hershman and other Ocean Commission staff, are not included in this report, but the substance was similar.

General information

Princess cruises in Alaska occur from mid-May to mid-September; the ships winter in the Caribbean. The turnaround time for cruises is two weeks. The ships sail from Vancouver, British Columbia, to Seward, Alaska, and then back to Vancouver. Mr. Dow informed Commissioners that the communities in southeast Alaska have changed as a result of the cruise industry; tourism has replaced dead or dwindling traditional businesses. Some people like this change, according to Dow, but Princess is attempting to mitigate some effects of cruises on the city of Juneau, such as instituting a \$5 per passenger fee invested toward traffic guards and nuisance mitigation. There is also a joint proposal between Princess and National Oceanic and Atmospheric Association (NOAA) to collect seawater data with onboard sensors and transmit the data via satellite.

Engine Room

- Multiple Presenters

Mr. Dow and Mr. Ramsay discussed power usage aboard the Juneau-moored *M/V Dawn Princess*. Residents of Juneau and Douglas Island had submitted complaints about diesel generators emitting visible smoke from ship stacks and creating a haze. Princess initiated an agreement with a private dock owner to ameliorate some of these local concerns, allowing *M/V Dawn Princess* and four identically-equipped Princess ships to dock and plug the number 5 generator into excess shore-based hydropower. This power arrangement is unique to Juneau; it takes 10 megawatts of power, available because Juneau has four dams. During summer months, Princess uses 50% of the available asset and 75% in winter. Princess' investment for this project totaled approximately \$5 million, including \$3 million for shore-side support facilities and \$2 million for the ship-based equipment. When asked if a similar agreement could be reached at other ports, Mr. Dow replied that the proper arrangement could be reached if there was a surplus of available hydropower at a given port. If a port has coal-generated power, the benefit of a shore-based power arrangement is marginal; in these cases, Princess would use the diesel generators.

Waste Management Room

- Multiple Presenters

Mr. Dow and Mr. Ramsay showed Commissioners the onboard waste management facilities and explained the waste management process. Initially, solids such as paper and glass are sorted into separate bins in the cabins, and then brought to the Waste Management Room for a second sorting. Aluminum cans are compressed and, through an arrangement with the Boy Scouts, cans are packed onto a Seattle-bound barge for recycling (the receiving capacity in Juneau is too small for this operation). Paper, dry food waste, and light plastics are incinerated. Other garbage, including crushed glass, is refrigerated for sanitation purposes, and hazardous waste from the medical facility, x-ray film processing, and dry cleaning are stored; these items are offloaded in Vancouver when the ship turns around.

Commissioners then proceeded to the wastewater treatment facility. Princess recently invested in a three-stage Hamworthy filtration system to comply with Alaska's strict water discharge standards, aiming for quality set by the seafood processing industry. The first stage of filtration removes hair and cellulose materials, which are then dehydrated and incinerated; the second stage holds waste in a tank; and the third stage passes remaining waste through a six-filter membrane system. No chlorine is involved in this process, and through this system, gray water becomes discharge water. When asked what Princess does with the system when not moored in Alaska, Mr. Dow replied that Princess has to keep the system running constantly because samples are needed for U.S. Coast Guard certification. Mr. Dow was also asked about alternative wastewater treatment technology available. He replied that ultraviolet and ozonation technologies are available with some systems, but are used largely in land-based, eco-sensitive regions of western Canada or on Canadian ferries where the passengers are only aboard for a few hours at a time. No shelf systems are available for ships, so Princess contracted with Hamworthy for an aggressive retrofit program. When asked what to expect in the future of wastewater management aboard ships, Mr. Dow replied that environmental concerns first begin at the local level before they expand to global concerns; he expects that high standards for discharge will evolve everywhere.

Other – Medical Facility and general tour

- Multiple Presenters

Mr. Dow and Mr. Ramsay took Commissioners on a tour of the medical facility and various shipboard features, such as dining rooms and the movie theater.

Visit to the Department of Interior (DOI) Regional Office

- Ms. Drue Pearce, Special Assistant to the President for Alaskan Affairs, DOI
- Mr. John Goll, Regional Director, Alaska Region, MMS
- Mr. William Seitz, Director, Alaska Science Center & Deputy Regional Director, U.S. Geological Survey
- Dr. Bruce F. Moinia, USGS, House Oceans Caucus Legislative Fellow, Caucus Coordinator, Office of the Hon. Curt Weldon

State/Federal Relationships on the Outer Continental Shelf (OCS)

Ms. Pearce opened the informal panelist discussion by addressing the relationship between the Department of Interior (DOI) and the State of Alaska with respect to offshore leasing and development on the Federal Outer Continental Shelf (OCS). First, Ms. Pearce described partnership efforts underway between DOI and the Alaska Department of Natural Resources (DNR). Both governments have five-year leasing programs that are "somewhat coordinated" for offshore sales, and DOI has to consider the comments of the State in its plans. Second, Ms. Pearce said that DOI

communicates with the state's coastal districts and boroughs. Third, DOI communicates with the Alaska Eskimo Whaling Commission, native regional corporations established under the Native Claim Settlement Act, and partners with the Native Americans on the North Slope. Also, the DOI, through the Bureau of Indian Affairs (BIA), maintains a trust relation on a government-to-government basis with federally recognized tribes. The State of Alaska has sometimes played the role of a moderator amongst different interests, but focuses primarily on helping to develop resources. Fourth, the Minerals Management Service (MMS) administers the implementation of the Oil Pollution Act of 1990. MMS entered into a Memorandum of Understanding with Alaska Department of Environmental Conservation to plan reviews and perform oil spill response drills; enforcement efforts are also coordinated between these entities and the United States Coast Guard. Finally, Ms. Pearce said that the Joint Pipeline Office (JPO) was established as a co-management effort between seventeen Federal and State agencies to administer grants of right of way for the pipeline system. Minerals Management Service, as a member of the Joint Pipeline Caucus and a significant player in the technical review process, looks at all comments from the State before issuing a final plan.

State of Alaska Involvement in Oil and Gas Leasing

Panelists then fielded questions from Commissioners particularly relating to the State's involvement in oil and gas leasing projects. The panelists were asked how much development was in State versus Federal waters. Mr. Goll replied that most development occurs in state waters; the outward development of the OCS is slow because the infrastructure is limited primarily to nearshore areas. They also were asked about Federal and State revenue sharing. Mr. Goll replied that if the sale lies completely within state waters, the State gets 100% of the revenue. But, if the sale lies between three and six miles offshore, there is a presumption that the oil or gas reserve boundaries span both State and Federal waters, and the State gets 27% of the Federal revenue. If the site of the drilling is beyond six miles, the revenue is entirely Federal. The panel was asked whether the State had a process that parallels the National Environmental Policy Act and whether any proposed activities had been halted for environmental reasons. Mr. Goll said that the State has to perform a best interest finding involving the Fish & Game Office, and Ms. Pearce said that virtually every best interest finding of the State is the subject of litigation. Mr. Goll also said that the North Slope area is a particularly sensitive issue because of the bowhead whale migration; he believes that the proper trust-founded relationships can be developed for offshore exploration and drilling activities in time. As the economy changes, Mr. Goll believes that communities will become more accepting. Ms. Pearce agreed and said that success or failure of projects are based on need, and that sometimes it is the luck of the draw depending on what company is involved. Some companies have very good public relations and outreach. Difficulties with the consistency provisions of the Coastal Zone Management Act were also discussed; proposed changes to the process were already submitted to the Ocean Commission staff by the Minerals Management Service.

Marine Protected Areas

The panel then explored the issue of marine protected areas (MPAs), and whether or not no take zones or ecological reserves had been discussed in the Alaska context. Ms. Pearce replied that the Bush administration had decided to retain the MPA Executive Order, and the State of Alaska is particularly concerned about implementation because it is one of the last remaining areas that allows for offshore oil and gas exploration. Some believe that with over 60 million acres of wilderness,

there are enough conservation zones. DOI and the Department of Commerce are working together on the implementation of the MPA Executive Order.

The Continental Shelf

Juridical extensions of the continental shelf under the provisions of the 1982 United Nations Convention on the Law of the Sea (UNCLOS) were also discussed. Mr. Keeney stated that NOAA is looking into hydrological mapping of the U.S. continental shelf, should the United States become a party to UNCLOS and file a claim for extension of the shelf, and inquired about the involvement of the USGS. Dr. Moinia replied that the USGS provides technical advice to the State Department on submerged lands beyond the exclusive economic zone, and is waiting for direction to develop a work plan with NOAA to commence mapping. The panel was asked if there were any areas of overlap between the Russian claim for extension of the continental shelf as filed and the potential area of a future U.S. claim. Dr. Moinia responded that there is a potential area of overlap in the northwest Chukchi Sea; the Russians think that the rocks of the Lomonosov Ridge are terrestrially derived while U.S. experts say they are not. The panel then was asked about the status of methane hydrate extraction technology. Dr. Moinia replied that although the technology is not advanced enough for extraction, there is a collaborative project underway in which the U.S., Germany, Korea, South Africa and Japan are examining the environment of gas hydrates. Also, the Department of Energy has been given \$40 million to develop a gas hydrate program.

Arctic Research

Arctic research was the last topic of discussion. The panel was asked to add to the topics addressed by the Arctic Issues Panel at the public hearings. Dr. Seitz reiterated that more resources need to be allocated to the Arctic, and detailed problems of polar bear strandings and changes in marine mammal and seabird distribution. Dr. Moinia said that, of the interagency budget pooled by the Interagency Arctic Research Policy Commission, only NOAA, NASA, and NSF were allowed discretionary dollars to focus on Arctic research, and this needs to change, particularly because NSF now believes there is parity between the Arctic and the Antarctic for funding. DOI has \$25-35 million, and of that money, 95% is spent in a nondiscretionary manner. He also made a general plea to the Commission to not forget the subarctic when it makes recommendations regarding Arctic research, because most of the watersheds that drain into the Gulf of Alaska and most of the glaciers that factor into climate change are subarctic.

The panel was asked about the possibility of using research entities outside the government structure. Dr. Moinia offered the Alaska Volcanic Observatory (AVO) as an example of a partially outside-funded cooperative research program between the DOI and the University of Alaska. Ms. Pearce added another example of the trustee council established by a joint consent decree after the Exxon Valdez oil spill. The trustee council is composed of three federal trustees, including DOI (Ms. Pearce is president), MMS, the Department of Agriculture, and three state trustees. The council receives \$900 million a year to rehabilitate areas affected by the spill. The trustee council purchased easements and lands for federal/state ownership and to provide better public access, and also invested in the establishment of the Gulf of Alaska Ecosystem Research and Monitoring Program (GEM). Ms. Pearce reported that all agencies believe GEM to be a model for regional marine observations that is responsive to resource managers and the local communities; GEM decides what research is needed to make a resource decision, has the decision peer reviewed by the NRC to be consistent with national and international standards, and implements

the decision through a public invitations proposal. This kind of program represents the long-term commitment that is needed to understand the physical and biological components of the Prince William Sound ecosystem.

Finally, the panel was asked about the importance of a river gauging system as a component of an integrated, sustained coastal and ocean observation system. Mr. Seitz responded that gauges are a critical part of this concept, including the monitoring of water chemistry and nonpoint source pollution from watersheds. Asked about the high cost of gauges for the area -- estimated at \$150,000 for the North Arctic -- Mr. Seitz explained the difficulty of installation and monitoring logistics in such a large and harsh environ as the Yukon and Alaska.

Appendix I

Participants:

- CAPT David Calebrese, M/V Dawn Princess
- Mr. George Wright, Director, Environmental Compliance and Security, Princess Cruises
- Mr. Thomas M. Dow, Vice President, Public Affairs, Princess Cruises
- Mr. Michael Ramsay, Chief Technical Officer, M/V Dawn Princess
- Ms. Drue Pearce, Special Assistant to the President for Alaskan Affairs, Dept. of the Interior
- Mr. John Goll, Regional Director, Alaska Region, Minerals Management Service
- Mr. William Seitz, Director, Alaska Science Center & Deputy Regional Director, U.S. Geological Survey
- Dr. Bruce F. Moinia, U.S. Geological Survey and House Oceans Caucus Legislative Fellow, Caucus Coordinator, Office of the Hon. Curt Weldon

Dutch Harbor Site Visit

The Commissioners' stops on the Dutch Harbor site visit included a tour of the catcher/processor vessel, the F/V Arctic Storm; the National Marine Fisheries Service Observer Program Office; the Grand Aleutian Hotel, where Chairman Watkins spoke to the Unalaska City Council and other local citizens; and the UniSea Processing plant.

Commissioners Participating in the Dutch Harbor Site Visit:

Admiral James. D. Watkins, USN, (Ret.)

Dr. James Coleman

Mr. Ed Rasmuson

Dr. Andy Rosenberg

Dr. Paul Sandifer

Commission staff:

Mr. Frank Lockhart

Also in attendance:

Mr. Chris Oliver, Executive Director of the North Pacific Fishery Management Council.

Catcher/Processor Arctic Storm

- Captain Dan Hanson, F/V Arctic Fjord
- Captain Brian Styke, F/V Arctic Storm
- Mr. Van Hutton, FV Arctic Storm Factory Manager

The Commissioners boarded the C/P Arctic Storm where they were met by Captain Hanson and Captain Styke. The Arctic Storm is a 340 foot "factory trawler," so called because it can both catch and process fish on the vessel. The ship can carry 122 crew members, with most of the crew on board to process the fish. The ship fishes for and processes Bering Sea pollock and Pacific whiting (surimi and fillets), pollock roe, Pacific cod fillets, and fishmeal. Surimi is a highly refined fish mince used as a base material for a large range of consumer products primarily for the Japanese market. In the United States, surimi is used to make imitation crab meat.

The discussions centered on the capabilities of the ship and the difference in fishing before and after the passage of the American Fisheries Act. The 1999 American Fisheries Act allowed groups of onshore processors, at-sea processors, and catcher vessels to form "cooperatives" which included assigning harvest quotas to each of the cooperatives. According to the captain of the Arctic Storm, this has resulted in ending the "race for fish" in the Bering Sea pollock fishery. Before the cooperatives were in place, individual companies were extremely competitive and would not share information on the location of pollock schools with other captains. Now, captains call each other before heading out to find out where the schools are -- since everyone has a guaranteed share, there is no longer any need to be secretive. In addition, this has also meant that they no longer have to fish as often during bad weather. Finally, according to the captains, cooperatives have allowed them to stay away from areas with higher bycatch.

After their discussion on the bridge of the boat, Mr. Hutton led the Commissioners below deck to view the processing facilities. The factory runs almost continuously when the boat is fishing. Fish, primarily pollock, are lowered from the fishing deck and sent down the processing line where they are headed and gutted, filleted or turned into surimi, and frozen into blocks for shipping.

National Marine Fisheries Service Observer Program Office

- Mr. Rance Morrison, National Marine Fisheries Service
- Ms. Mary Schwenzfeier, Alaska Department of Fish and Game
- Ms. Jennifer Watson, National Marine Fisheries Service

The Commissioners were greeted by Mr. Morrison, Ms. Schwenzfeier and Ms. Watson. The North Pacific Groundfish Observer Program (NPGOP) collects and disseminates information essential for the management of sustainable fisheries in the Gulf of Alaska and eastern Bering Sea. The Gulf of Alaska and Bering Sea support one of the largest commercial fisheries in the world. The NPGOP deploys observers on a variety of vessels and processing plants to collect data used to manage the North Pacific groundfish fishery. In 2000, this involved training, placing, and overseeing approximately 441 fisheries observers on 364 vessels and at 27 processing plants.

These data are used to support in-season catch monitoring, stock assessment, and other functions of the National Marine Fisheries Service (NMFS). Observers are responsible for collecting data on total catch, species composition, length frequency and age structure from target and prohibited species. NPGOP staff review observer data to ensure that the data are consistent with programs needs. The data are stored on the Observer Program Database and distributed to other NMFS offices for monitoring and managing the groundfish fisheries.

Observers also monitor vessels for compliance with specific fishery, marine mammal, and marine pollution regulations. Observer data may be used by NMFS and other federal agencies to enforce these regulations. In accordance with the Marine Mammal Protection Act (MMPA) and Endangered Species Act, observers collect information necessary to support management of marine mammals, seabirds, and other protected species.

Unalaska City Council

- Mr. Frank V. Kelty, Natural Resource Manager for the City of Unalaska
- Ms. Shirley Marquardt, City of Unalaska Council member

The Commissioners met with the Unalaska City Council for a working lunch at the Grand Aleutian Hotel. Chairman Watkins spoke to the Council and other local citizens and then responded to questions.

UniSea Processing plant

- Mr. Don Graves, Research and Development Manager
- Mr. Rocky Caldero, UniSea Plant Manager

The Commissioners proceeded to the UniSea processing facility, where they were met by Mr. Graves and Mr. Caldero. The company's corporate headquarters are located in Redmond, Washington and the parent company, Nippon Suisan Kaisha, is headquartered in Japan. UniSea produces seafood products including pollock, pollock roe, Pacific cod, black cod, snow crab, king crab, halibut, turbot, whitefish meal, fish oil and -- to a lesser degree -- red rockfish of assorted species. The plant depends on deliveries from over 40 independent fishing vessel owners who catch and deliver to the Dutch Harbor plant to process.

It was pointed out that the City of Unalaska has changed from an industrial "boom town" during the heydays of the king crab fishery in the late 1970s and early 1980s, to a more family-oriented town. The city has a resident population of just over 4,000 people now and, subsequently, the student population has grown too. Now, Unalaska is recognized as one of the best school districts in the country. According to Mr. Graves, the city "... is much more focused on ensuring stability for the resource which in turn creates the stability for our employees, their families and the city of Unalaska."

UniSea employs up to 1200 employees at the peak of its season. Pollock is the main fish processed, and the plant is capable of processing from 900 to 1,200 metric tons of product every 24 hours. The daily production varies based on the product mix being produced. Cod processing rates average 300,000 to 400,000 pounds per day depending on the size of the fish. Crab can be processed at volumes in the 200,000 to 250,000 lbs per day range. The plant does not process all species throughout the year, but instead switches products depending on fishing seasons and availability, as shown in the below chart of the 2002 fishing seasons.

Tentative 2002 Fishing Seasons

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	Jan. 20-Mar. 30 'A' Pollock				June 20-Oct. 20 'B' Pollock						
Jan. 20-Apr. 10 Pacific Cod											
				May 1-Nov. 15 Halibut, Black Cod & Turbot							
Op*											
								Brown King			
									Red		
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

*Opilio crab (Op) - Jan. 15 - Feb. 7

***Brown King - Sept. 1 - Sept. 15

****Bristol Bay Red King Crab - Oct. 15 - Nov. 1

UniSea spends millions of dollars each year on research & development at its Unalaska facilities, with the main focus being to extract more value out of the fish through 100% utilization as well as improve the handling and quality of the final processed product. On one specific project, UniSea is working with the State of Alaska on alternative energy sources for power generation using a blend of diesel and fish oil instead of straight diesel fuel in their generators.

Appendix I

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- Mr. Frank V. Kelty, Natural Resource Manager for the City of Unalaska
- Ms. Shirley Marquardt, City of Unalaska Council member
- Captain Dan Hanson (FV Arctic Fjord)
- Captain Brian Styke (FV Arctic Storm)
- Mr. Van Hutton FV Arctic Storm Factory Manager
- Mr. Rance Morrison, National Marine Fisheries Service
- Ms. Mary Schwenzfeier, Alaska Department of Fish and Game
- Ms. Jennifer Watson, National Marine Fisheries Service
- Mr. Don Graves, UniSea Research and Development Manager
- Mr. Rocky Caldero, UniSea Plant Manager