

PAME I-2015 Agenda Item xx
AMSA Recommendation I(D)
Cruise Tourism within the U.S. Arctic

BACKGROUND

AMSA Recommendation I(D) provides that:

[T]he Arctic states should support the application of the IMO's Enhanced Contingency Planning Guidance for Passenger Ships Operating in Areas Remote from SAR Facilities, given the extreme challenges associated with rescue operations in the remote and cold Arctic region; and strongly encourage cruise ship operators to develop, implement and share their own best practices for operating in such conditions, including consideration of measures such as timing voyages so that other ships are within rescue distance in case of emergency.

PAME II-2014 adopted a record of decision (ROD) requesting member governments to submit to PAME I-2015 information on the volume, composition, size and destinations of cruise tourism within Arctic waters subject to their jurisdiction for 2011, 2012 and 2013 as well as information on the Arctic cruise tourism operators and the names of the ships they use.

USA RESPONSE

Cruise Ship Traffic in the U.S. Arctic – 2010-2014

In 2010, three vessels made trips through Arctic waters subject to U.S. jurisdiction as part of their voyages through the Northwest Passage. This included:

- the *Kapitan Khlebnikov* an icebreaker chartered by Quark Expeditions, capable of carrying a crew of 70 and up to 112 passengers, and measuring 250 by 32.2 meters;
- the private yacht *Octopus*, owned by Paul Allen,, capable of carrying a crew of 60 and up to 26 passengers, and measuring 126.2 by 21.8 meters; and
- the expedition vessel *Hanseatic* owned by Hapag-Lloyd and operated by Hapag-Lloyd Cruises, capable of carrying a crew of 125 and up to 184 passengers, and measuring 122.7 by 18 meters.

In 2011, two vessels made trips through Arctic waters subject to U.S. jurisdiction as part of their voyage through the Northwest Passage. This again included the *Kapitan Khlebnikov* and the expedition vessel *Bremen* owned by Hapag-Lloyd and operated by Hapag-Lloyd Cruises.

In 2012, the private residential cruise ship *The World* transited Arctic waters subject to U.S. jurisdiction as part of a voyage through the Northwest Passage. Owned by its residents and managed by ROW Management, it carries around 200 residents and has a crew of 250. It measures 196.4 by 29.8 meters. The private yacht *Octopus* and the expedition ship *Hanseatic* both again transited traveled through Arctic waters subject to U.S. jurisdiction as part of their voyages through the Northwest Passage.

In 2013, the cruise ship *Le Soleal*, owned and operated by Ponant, transited Arctic waters subject to U.S. jurisdiction as part of its voyage through the Northwest Passage. It carries a crew of 139, up to 264 passengers, and measures 142.1 by 20 meters. The expedition ship *Caledonian Sky*, chartered by the World Wildlife Foundation, cruised through the Bering Strait and visited several locations including Little Diomed Island and Nome, Alaska. It has a crew of 74, carries up to 114 passengers, and measures 90.6 by 15.3 meters. The expedition ships *Bremen* and *Hanseatic* both again transited Arctic waters subject to U.S. jurisdiction as part of voyages through the Northwest Passage. The private yacht *Octopus* again transited Arctic waters subject to U.S. jurisdiction as part of a voyage through the Northwest Passage.

In 2014, the expedition ship *Silver Explorer*, owned and operated by Silversea Cruises, transited Arctic waters subject to U.S. jurisdiction as part of a voyage through the Northwest Passage. It has a crew of 117, carries up to 132 passengers, and measures 198.1 by 15.8 meters. The expedition ship *Silver Discoverer*, owned and operated by Silversea Cruises, had a variety of visits to Nome and around the Bering Strait. The cruise ship *L'Austral* owned and operated by Ponant, transited Arctic waters subject to U.S. jurisdiction as part of its voyage through the Northwest Passage. It has a crew of 136, carries up to 264 passengers, and measures 142.1 by 20 meters. It has a crew of 96, carries up to 128 passengers, and measures 103 by 15.4 meters. The expedition ship *Hanseatic* had a cruise out of Nome through the Bering Strait and back.

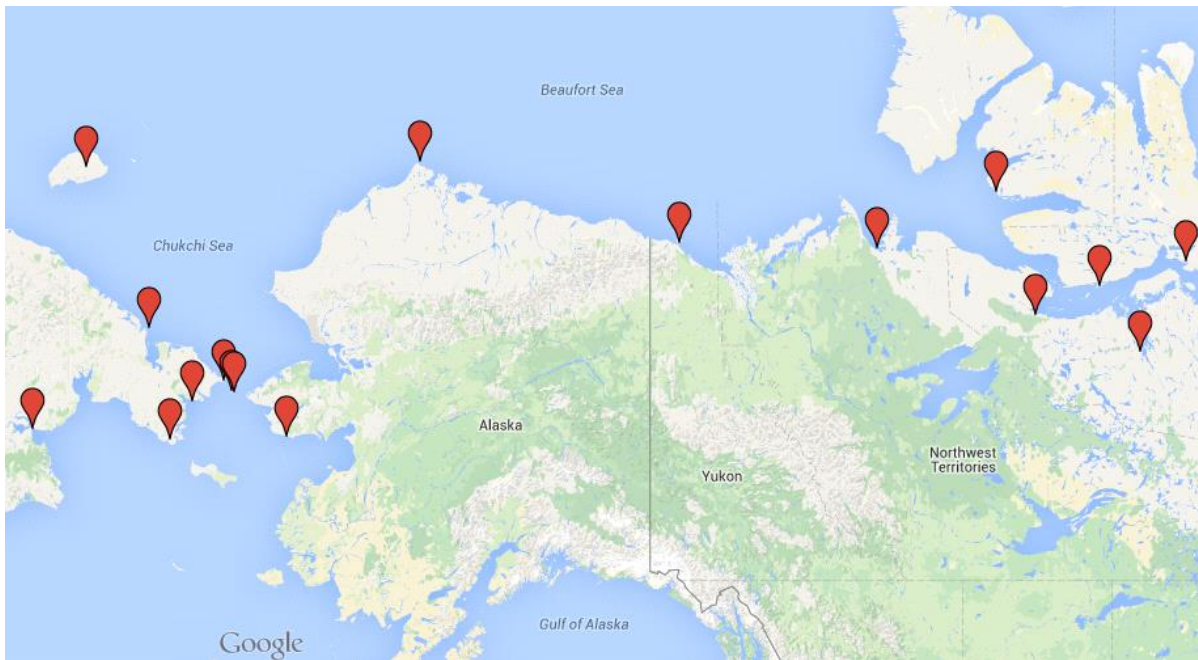
Cruise Vessels and Large Yachts Transiting the U.S. Arctic						
Year	2010	2011	2012	2013	2014	2015 (Projected)
Number of Vessels	3	2	3	5	4	5

Projected Cruise Ship Traffic in the U.S. Arctic – 2015 and Beyond

In 2015, five ships will visit Arctic waters subject to U.S. jurisdiction (north of 64°N) on eight different cruises. The combined maximum capacity for these five ships on these eight cruises is 1,579 passengers and 935 crew members. Prices per passenger range from \$8,950 to \$46,506. Currently, there is only one scheduled cruise in 2016 with a maximum capacity of 1,070 passengers and 655 crew members. Prices per passenger range from \$20,755 to \$118,955.

The three principal routes to be taken on these cruises are: (1) Northwest Passage routes ending or originating in Nome, Alaska; (2) Northeast Passage routes ending or originating in Nome, Alaska; and (3) Bering Sea routes that go through or along the Bering Strait.

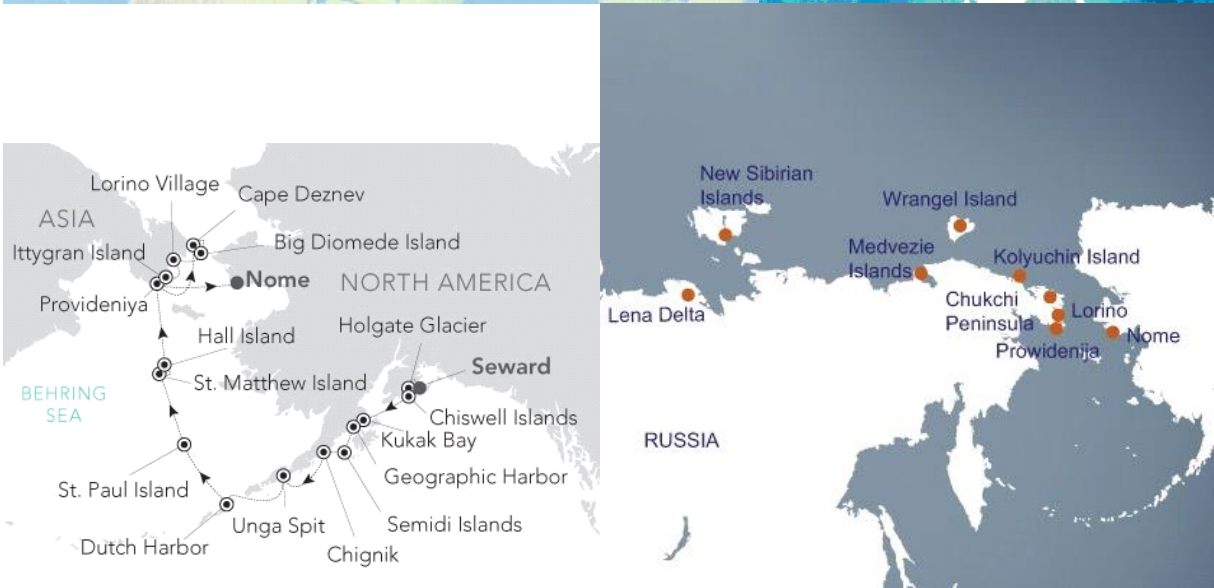
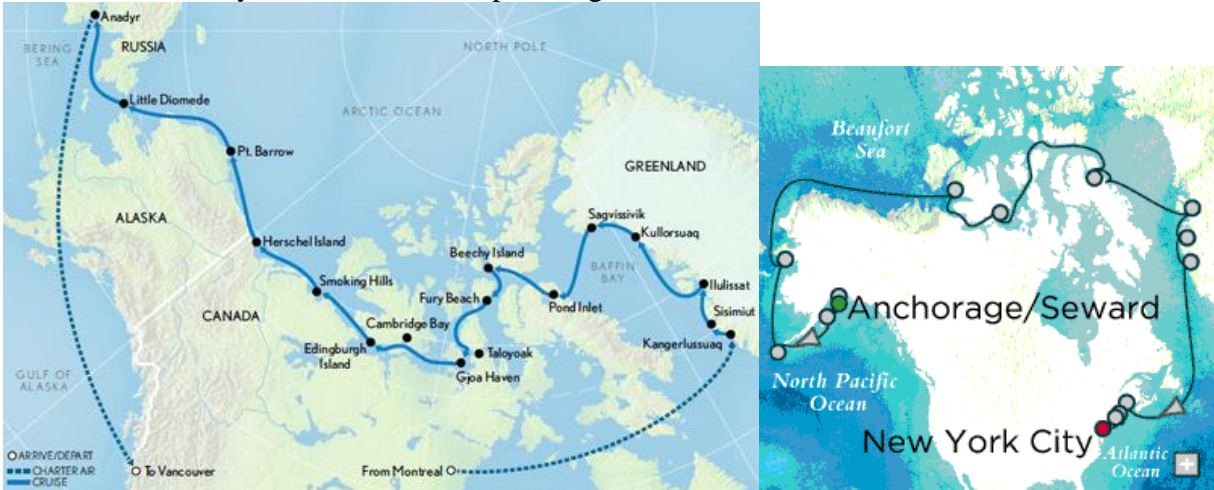
Planned Cruise Ship Destinations North of 64°N for 2015-2016



Wrangel Island, Russia; Kolyuchin Island, Russia; Anadyr, Russia; Provideniya, Russia; Lorino, Russia; Cape Deznev, Russia; Big Diomede Island, Russia; Little Diomede Island, USA; Nome, USA; Point Barrow, USA; Herschel Island, Canada; Franklin Bay, Canada; Ulukhaktok (Holman), Canada; Kugluktuk, Canada; Bathhurst Inlet, Canada; Edinburgh Island, Canada; Cambridge Bay, Canada

Most of these destinations are outside the United States as the majority of currently planned cruises with destinations above 64°N merely transit through Arctic waters subject to U.S. jurisdiction. Currently planned U.S. destinations above 64°N are Little Diomede Island, Nome, and Point Barrow, Alaska. Many ships carry zodiacs and other craft used to go ashore. Unscheduled landings at different locations, typically local villages, are possible depending on the weather and other factors.

Below are a variety of itineraries for upcoming cruises in 2015 and 2016.



Developments and Trends

The most significant area of growth in cruise ship tourism in Arctic waters subject to U.S. jurisdiction is connected to the Northwest Passage route. The Northwest Passage was a hoped for, and sought after, route that would connect the Atlantic and Pacific Oceans. It was first crossed by Norwegian explorer Roald Amundsen in 1906 over a three year period. No one was able to replicate Amundsen's achievement until 1942 and only in 1944 was the transit made in under a year. The first tourist voyage through the Northwest Passage came in 1984. Even until the mid-1990s no more than three or four ships a year made the journey. Changing weather conditions have reduced sea ice in recent years and, in 2013, eighteen vessels made the journey.

The U.S. Arctic has long been the domain of icebreakers and smaller expedition ships with reinforced hulls and high ice ratings. Icebreakers such as the *Kapitan Khlebnikov* were traditionally used to ferry passengers on expeditions through the U.S. Arctic. Starting in 1994, Hapag-Lloyd began offering cruises on its ships the *Hanseatic* and the *Bremen*. Together they have transited the Northwest Passage more than a dozen times. Both the *Hanseatic* and the *Bremen* have an E4 ice rating, the highest German rating awarded to passenger ships. Both ships are also reported to comply with IMO Maritime Safety Committee Circular 1056, which provides nonbinding guidelines for ships operating in Arctic ice covered waters. Recently, an increasing number of yachts and larger passenger ships with lower ice ratings have traversed the Northwest Passage.

In 2012, *The World* became the largest cruise ship to transit the Passage. In 2013 Ponant's *Le Soleal*, and in 2014 Ponant's *L'Austral*, made the journey. In 2015, Ponant's *Le Boreal* will enter the U.S. Arctic on two different cruises. All three of Ponant's ships can carry 264 passengers and are ice rated at 1C. In the summer of 2016, the *Crystal Serenity* carrying more than 900 passengers will surpass *The World* as the largest cruise ship to transit the Northwest Passage if its scheduled journey is successful. The *Crystal Serenity* is scheduled to depart Anchorage, Alaska and end in New York City. With an ice rating of 1C, the *Crystal Serenity* will be accompanied by a 1A ice rated support vessel that can break channels through the ice and comes equipped with a helicopter. Planning for the *Crystal Serenity*'s voyage has been in the works since 2012 and has involved consultations with Transport Canada and the Canadian Coast Guard. Additionally, Crystal Cruises has shared the vessel's emergency response plan with both the Canadian and U.S. Coast Guards.

As climate change continues and the sea ice diminishes further, there likely will be a greater number of marine tourism opportunities in Arctic waters subject to U.S. jurisdiction as it becomes more accessible to a greater variety of passenger ships. However, a recent report from the U.S. Government Accountability Office notes that an explosion in growth is unlikely with the handful of cruise ships currently operating in the U.S. Arctic "expected to remain relatively stable through the next 10 years." Representatives from a cruise association noted that there is a distinct lack of demand from the mainstream consumer base largely due to the fact that "approximately 10 days are required to sail the long distances in the U.S. Arctic, often with no variation in scenery and no points of interest for which to disembark."

For these cruise ships, the largest city they visit in the U.S. Arctic is Nome, Alaska. Many of the cruises either originate or terminate in Nome. Additionally, cruises have disembarked passengers at

both Little Diomed Island, Alaska and Barrow, Alaska. Outside of these destinations there are few, if any, places in the U.S. Arctic above 64°N that are likely to see cruise passengers. Stops have consisted of visits to Alaskan Native villages, zodiac tours and wildlife spotting.

Safety remains a concern for cruise tourism in the U.S. Arctic. In Alaska, U.S. Coast Guard resources along the Arctic coast are scarce. The closest Coast Guard station to Nome, the gateway to the U.S. Arctic, is in Kodiak, 945 nautical miles away. Although there are no permanent Coast Guard stations along Alaska’s Arctic coast, assets are deployed there during summer months, including two Coast Guard cutters in 2014. As part of its “Arctic Shield” initiative the Coast Guard has announced that it will deploy more resources in future years as traffic warrants.

While relatively rare, largely because of the limited traffic, there have been a few incidents involving vessels Arctic waters subject to U.S. jurisdiction. Severe weather conditions and a lack of accurate charting in some areas are the largest causes. For example, in 2014 a man attempting to sail a 36-foot sailboat through the Northwest passage was rescued by the U.S. Coast Guard after his boat became trapped in Arctic sea ice northeast of Barrow, Alaska.

Cruise Ships and Large Yachts with Cruises in the U.S. Arctic from 2010-2016

	2010	2011	2012	2013	2014	2015	2016
Octopus (Expedition)	✓		✓	✓			
Hanseatic (Expedition)	✓		✓	✓	✓		
Bremen (Expedition)		✓		✓		✓	
Caledonian Sky (Expedition)				✓			
Silver Explorer (Expedition)					✓		
Silver Discoverer (Expedition)					✓	✓	
Kapitan Khlebnikov (Expedition)	✓	✓					
Le Boreal (Small)						✓	
Le Soleal (Small)				✓		✓	
L'Austral (Small)					✓	✓	
The World (Small)			✓				
Crystal Serenity (Midsized)							✓

RECOMMENDATIONS

The USA recommends that:

- passenger ships, yachts and pleasure craft should operate in compliance with IMO *Guidelines for Ships Operating in Polar Waters*, *Guidelines for Voyage Planning for Passenger Ships Operating in Remote Areas* ([Resolution A.999\(25\)](#)), and *Enhanced Contingency Planning Guidance for Passenger Ships Operating in Areas Remote from SAR Facilities* ([MSC.1/Circ.1184](#));

- To the extent possible, passenger ships, pleasure craft and yachts should remain in close communications with nearby ships and shore-based facilities. Where possible, they should also operate in close proximity to other ships for added safety in the event of an incident; and
- Whenever possible, passenger ships, yachts and pleasure craft should provide advance notification to local and native communities, if they plan to anchor near or disembark passengers to such communities.

APPENDIX I

	Crystal Serenity	Kapitan Khlebnikov	L'Austral	Le Boreal	Le Soleal	Caledonian Sky
IMO Number	9243667	7824417	9502518	9502506	9641675	8802870
MMSI Number	311536000	273146110	578000700	578000500	578000200	311061100
Year Built	2003	1981	2010	2010	2013	1991
GRT	68,870	12,288	10,944	10,944	10,992	4,200
DWT	10,810	4,418	1,441	1,441	1,440	695
Length (meters)	250	129.3	142.1	142.1	142.1	90.6
Breadth (meters)	32.2	26.7	20	20	20	15.3
Crew	655	70	136	136	139	74
Passenger Capacity	1,070	112	264	264	264	114
Ice Class	1C	LL3	1C	1C	1C	
Flag	Bahamas	Russia	France	France	France	Bahamas
Operated by	Crystal Cruises (USA)	Quark Expeditions (USA)	Ponant (France)	Ponant (France)	Ponant (France)	Noble Caledonia (UK)
CLIA or AECO	CLIA	AECO	CLIA	CLIA	CLIA	AECO (Provisional)
Owned by	Nippon Yusen Kaisha (Japan)	FESCO (Russia)	Ponant (France)	Ponant (France)	Ponant (France)	Noble Caledonia (UK)
Issues	Fined 8,524 Euros for dumping ash into the Adriatic Sea in 2009. Released treated wastewater into the Monterey Bay National Marine Sanctuary in 2003 but was not fined.	Stuck in Antarctic ice for a week in 2009				
Upcoming Cruises in the U.S. Arctic	8/16-9/17 2016 (Northwest Passage)			8/20-9/11 2015 (Northwest Passage) 9/11-9/24 2015 (Nome)	8/25-9/15 2015 (Northwest Passage)	
	Bremen	Hanseatic	Octopus	Silver Discoverer	Silver Explorer	The World

PAME(I)/15/4.3/b/AMSA I(D)/Cruise Tourism within the U.S. Arctic – submission by USA

IMO Number	8907424	9000168	1007213	8800195	8806747	9219331
MMSI Number	308429000	309577000	319866000	309913000	311562000	311213000
Year Built	1990	1991	2003	1989	1989	2002
GRT	6,752	8,378	9,932	5,218	6,130	43,188
DWT	1,226	1,177	1,680	938	635	4,558
Length (meters)	111.5	122.7	126.2	103	108.1	196.4
Breadth (meters)	17.3	18	21.8	15.4	15.8	29.8
Crew	100	125	60	96	117	250
Passenger Capacity	155	184	26	128	132	200+
Ice Class	E4	E4	1A	1A	1A	
Flag	Bahamas	Bahamas	Cayman Islands	Bahamas	Bahamas	Bahamas
Operated by	Hapag-Lloyd Cruises (Germany)	Hapag-Lloyd Cruises (Germany)	Paul Allen (USA)	Silversea Cruises (Monaco)	Silversea Cruises (Monaco)	ROW Mgmt. (USA)
CLIA or AECO	CLIA	CLIA		CLIA and AECO	CLIA and AECO	
Owned by	Hapag-Lloyd (Germany)	Hapag-Lloyd (Germany)	Paul Allen (USA)	FleetPro Ocean (USA)	FleetPro Ocean (USA)	Residents
Violations and Issues				Passengers prevented from disembarking in Russia on July 30, 2014	Bridge damaged and four people injured after huge wave hit on way to Antarctica in 2013	
Upcoming Cruises in the U.S. Arctic	8/11-9/10 2015 (Northeast Passage)			7/8-7/21 2015 (Nome) 8/1-8/13 2015 (Nome) 8/13-8/31 2015 (Nome)		

APPENDIX II

Ice Class Equivalencies					
Lloyds	Det Norske Veritas	Russian	Finnish-Swedish	German	Polar Class
1AS	1A*	J1Y6	1A Super	E4	PC6
1A	1A	J1Y4	1A	E3	PC7
1B	1B	J1Y3	1B	E2	-
1C	1C	J1Y2	1C	E1	-

DNV 1A*

- Normally capable of navigating in difficult ice conditions without the assistance of icebreakers

DNV 1A

- Capable of navigating in difficult ice conditions, with the assistance of icebreakers when necessary

DNV 1B

- Capable of navigating in moderate ice conditions, with the assistance of icebreakers when necessary

DNV 1C

- Capable of navigating in light ice conditions, with the assistance of icebreakers when necessary.

		IACS	
		PC1 PC2 PC3 PC4 PC5	Year-Round Navigation in <u>Arctic</u> Waters
Winter Navigation in <u>Sub-Arctic</u> Waters	IA Super	PC6	Summer Navigation in <u>Arctic</u> Waters
	IA	PC7	
	IB		
	IC		
	FSICR		

APPENDIX III

Nome

Nome is a city of less than 4,000 that sits on the southern coast of the Seward Peninsula on Norton Sound of the Bering Sea. One of Alaska's oldest towns, Nome was established to take advantage of the gold-rich sand on the Bering Sea. Gold mining is still one of the largest industries in Nome along with government services, road construction and carpentry building. Nome hosts the only port facilities north of 64°N in Alaska. Nome's seaport is used by both freight and cruise ships as well as fishing vessels. Major improvements were completed by the Army Corps of Engineers in 2006.



Kotzebue

The nearby city of Kotzebue serves as a backup for Nome if bad weather or other issues prevent Nome's use. Kotzebue lies on gravel spit at the end of the Baldwin Peninsula in the Kotzebue Sound. While Kotzebue lacks a port or traditional docking facilities it does have a barge landing bulkhead and cement seawall.

Kotzebue barge landing bulkhead



Kotzebue seawall



Kotzebue seawall

