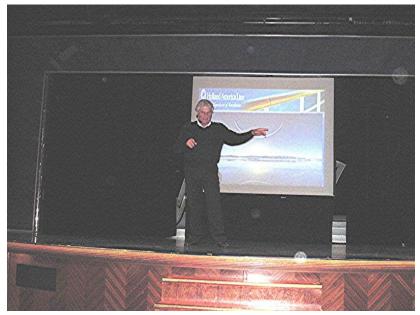
## Day 29 August 28, At Sea – Ice Pilot – Prins Christian Sund Scenic Cruising

The day started with smooth sea, cool temperature of about 50°F, and sunshine. We were cruising in the North Atlantic on our way from Iceland to Qaqortoq, Greenland.

**Ice Pilot:** At 9:30am we went to the Rembrandt Lounge and listened to a presentation by Captain Raymond Jordaine on the subject of Arctic ice and how to cope with it in ship navigation. He was giving his talk early in the morning before he had to go to the ship's bridge area to assist in navigating the scenic cruise through the Prins Christian Sund. Here, on the



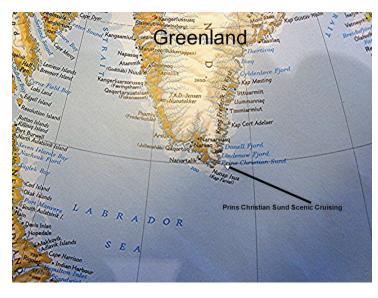
right, is a photo of him taken during his presentation.

Captain Jordaine was an excellent speaker who spoke from the experience of many years navigating through the iceberg infested waters of Greenland and the Atlantic coast of Canada. He said that because of the general warming of the climate the ice in the St Lawrence River and Gulf during the winter was becoming softer than it was 8 years ago. Cargo ships could push through the softer pack ice at a little faster speed than they could in years past.

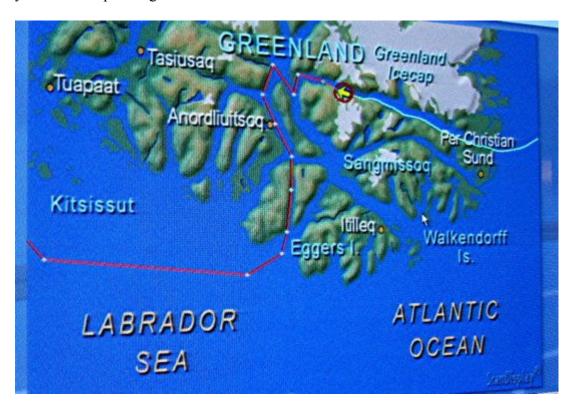
Icebergs in the North Atlantic come mainly from Greenland. Those that are large enough to cause damage to ships are reported to a Canadian Control Center by passing ships and Coast Guard Search planes. At the Control Center they plot the location of the icebergs and put out a daily map for use by all ships showing the location of the icebergs. He said it is now very rare for a ship to be sunk by collision with an iceberg. However, navigating the pack ice of frozen rivers and bays on the North Atlantic Coast requires skill and ships that are properly built to avoid damage from the ice. All foreign ships passing through the Canadian waterways subject to pack ice formation must use an Ice Pilot, such as Captain Jordaine, during pack ice season.

Prins Christian Sund - Scenic Cruising: Prins Christian Sund is a deep narrow fjord that cuts across the southern tip of Greenland, as shown in the map on the right. Earlier in the month we had passed through the fjord on our way from Nanortalic, Greenland to Iceland.

The route through Prins Christian Sund taken by the Maasdam is shown in the picture below. All the islands shown on the map are high



solid basalt rock mountains with steep cliff sides. The waterway is choked with snow and pack ice during the winter but now, in late August, all that remained of the ice was well spaced icebergs and smaller chunks of ice. We approached Prins Christian Sund from the east and proceeded along the indicated path, exiting to the south. At the time of taking the picture of the map the location of the Maasdam was shown as the circle with a yellow arrow pointing to the west.



It was exquisitely beautiful on the earlier trip through and we were looking forward to this passage. The ship entered the Prins Christian Sund about 11am. We were treated to a series of grand scenes that were unveiled as we proceeded smoothly through the fjord. It was about 55°F with a light breeze and the sun was shining brightly most of the day. It was very enjoyable to walk around the decks and take pictures as the glaciers and icebergs passed by.

The multiple glaciers we passed were photographed intensely by the Maasdam passengers, as shown in these pictures.



We alternated between viewing from the back deck of the ship and the verandah of our stateroom.

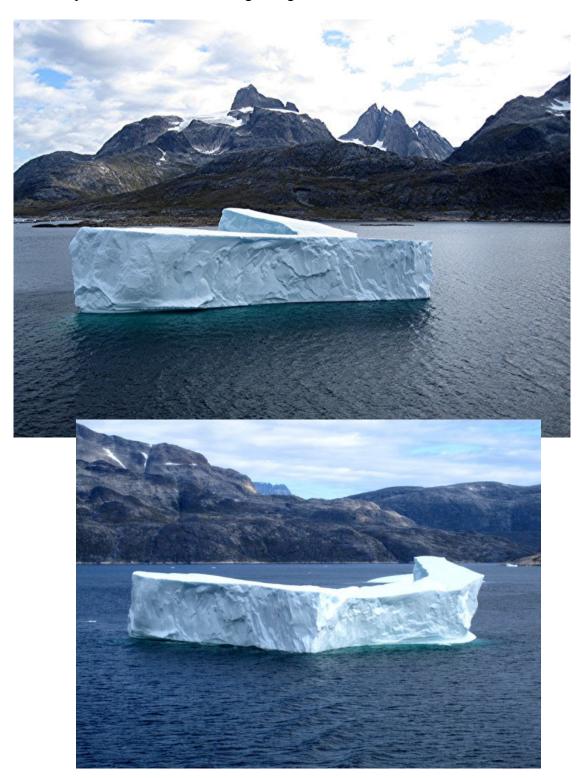


The "U" shape of the iceberg shown on the right is apparently common and was referred to as a "Dry-dock" iceberg by the Ice Pilot. It resembled the configuration of a dry-dock where ships proceed through a gate that is then closed and the water pumped out so the



ships are left high and dry for maintenance. Moisture appeared to be condensing in the air above this iceberg.

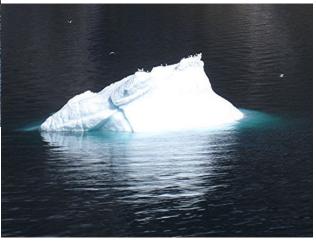
This rather flat chunk of ice, shown below in two photos, probably came from the frozen surface of the water rather than breaking off of a glacier. It protruded about 10 feet above the water surface and had an interesting texture on the fracture surface. The jagged mountains provided a constant striking background.





could see chunks of ice fall off the bigger icebergs.

We enjoyed the random shapes of the icebergs. The water temperature was  $8^{\circ}$ C ( $\sim$ 45°F) so the ice was slowly melting and occasionally we



Even without the ice, the beautiful views of the surrounding cliffs, soaring mountains and small hanging glaciers was awe inspiring.



After about four hours of this scenic banquet, the Maasdam sailed out of the narrow fjord and back into the North Atlantic waters.

We took time to check our email and Steve gave us the news that hurricane Bill was headed east, far to our south so it shouldn't bother our digestive system tomorrow. The Captain later confirmed the good news. We can put the barf bags away!

We continued on through calm sea through the evening on our way to Qaqortoq, Greenland. We should arrive there tomorrow morning about 7am.