

Commentary

Crystal Serenity – A New Chapter in Arctic Shipping or Just “Doing It Right”?

David (Duke) Snider

Perhaps one of the most newsworthy Arctic shipping related events in 2016 is the Northwest Passage voyage of Crystal Cruise’s MV Crystal Serenity. In the lead up to this momentous voyage, declarations of doom and gloom, warnings of imminent disaster and expectations of a turn for the worse in Arctic shipping seemed to gain the most attention in online blogs and chat rooms and eventually more traditional press outlets. Little was said in support of the voyage...a voyage that has been planned well in advance and executed flawlessly. The Internet misinformation game had taken hold and as each misrepresentation, misquote and error of fact was requoted and rebroadcast on various websites; many who were otherwise unknowing of the reality of the situation came to see the voyage as a threat to the environment, a threat to the cultures of the people of the north, and seemingly just a bad thing all around.

In fact, the voyage was none of those things.

Captain David (Duke) Snider is a Master Mariner with over 33 years experience at sea, most in ice covered waters and holds a bachelor degree in Maritime Studies. He is an active Ice Navigator and consultant in ice and polar navigation operations as owner of Martech Polar Consulting Ltd. Captain Snider is the author of “Polar Ship Operations - A Practical Guide” published by The Nautical Institute as well as many articles on operating ships in ice. He is a Fellow and President of The Nautical Institute as well as a Fellow of the Royal Geographical Society.

It was not poorly planned, it was not an assault on the environment, it was not a risky venture in dangerous ice-covered seas and it was not an unwanted intrusion on the communities along the route.

Crystal Cruises has set a very high standard for Arctic shipping risk assessment, planning and execution of what many had considered dangerous and risky voyages. The old images of the Arctic as an environment rife with danger is no longer valid. True, tremendous challenges still face those who venture into the Arctic, but the waters of the Arctic have become less onerous and now far from deadly, unless those who venture there do so without adequate preparation.

Not only has much changed in the Arctic in recent years, but much has also changed in how we conduct the business of ships and cargo around the world's oceans. Safety is paramount; protection of the environment, cargo, ship and personnel, whether crew or passenger, is the standard.

Planning for Crystal Serenity's voyage began several years before the voyage. From the very first, senior Crystal Cruises operational management consulted knowledgeable Arctic expedition operators and shipping experts on the concept to determine whether or not it was even feasible with the ship that was intended to complete the voyage. The ship selected was the light ice class Crystal Serenity, larger than any previous cruise ship to transit the Northwest Passage. It was determined that a voyage along what is known as the "southern" route, via Amundsen Gulf, Coronation Gulf, Queen Maud Gulf and Peel Sound to Lancaster Sound was possible. Contrary to some comment on the internet, the entire route is well surveyed to modern standards, regularly travelled, and safe for ships the size of Crystal Serenity. In fact, the route is more open, and less navigationally challenging than the Inside Passages of British Columbia and Alaska that see many larger cruise ships ply those waters every summer.

Global climate change has not only enabled this particular voyage, it has contributed to the increased safety of any ships operating in the Arctic. The window of least summer in ice has been slowly increasing in length. Regions previously ice-choked are now more commonly open. The window for Crystal Serenity's voyage was carefully selected for the period of summer when sea ice would be at its least and the route virtually ice free.

To cover all eventualities, in addition to the experienced bridge team, two highly experienced Ice Navigators were onboard the ship throughout the voyage. Crystal added another level of safety as it engaged the very capable icebreaker RSS Ernest Shackleton to accompany Crystal Serenity. The Shackleton acted as ice as a support ship and ice escort, if required. In many ways, this is a step up from the concept of the "buddy system" routinely used by cruise ships operating in Antarctic waters, ensuring support is always close at hand when two cruise ships operate together.

The Shackleton carried containers brimming with additional survival equipment and rations, helicopters for routine and emergency response, as well as oil pollution response equipment and expedition grade rigid hull inflatable boats. Like the Crystal Serenity, Shackleton also embarked two Ice Navigators. As part of the risk management planning process, the bridge teams of both ships and the specialist Ice Navigators all met well prior to the voyage to run through full mission bridge simulations of the voyage at the marine simulation training centre in St. John's, Canada. This allowed the teams to iron out any possible wrinkles in the already well-developed passage plan and ensured

the teams worked well together. Mass evacuation and search and rescue response exercises were also conducted with representative of United States Coast Guard, Canadian Coast Guard, Royal Canadian Air Force, Crystal Cruises and many other American and Canadian agencies in the spring prior to the voyage.

Throughout the two year planning process, Crystal Cruises worked closely with American, Canadian and Danish (Greenlandic) authorities, agencies and civilian organizations to ensure the voyage was feasible, within all regulations and guidelines and would result in as positive an impact on the environment and communities as possible. Local outreach to each community on the route was paramount. CBC reported during the voyage how artisans and communities along the way encouraged the ship to stop, seeing controlled visits by passengers as a boon to their community. Unlike predictions of unwanted inundations of small Arctic communities by hundreds of passengers at a time, the visit plans were worked out with each community in advance and ensured that numbers ashore were at all time less than 150 and were well controlled.



This voyage will pass in history as the first large cruise ship to navigate the Northwest Passage. But it should not be covered in negative hype. The Northwest Passage was impassable and dangerous to sailing ships in the 1800s, not to modern, well-equipped and well-crewed vessels today. Challenges certainly still do exist, but diligent planning can eliminate or mitigate any of the risks. Throughout the planning and execution, this voyage was safe. Others that follow, if

they take the same care as Crystal Cruises has done, will be as successful.

The Arctic remains a challenge to shipping, due to its remote and ill served geography, its environmental sensitivity and its challenging ice conditions. With in-depth planning, preparation and execution, Arctic voyages can be safely completed. MV Crystal Serenity has proven that.