People come to Victoria, British Columbia, to avoid winter. But Capt. David (Duke) Snider regularly seeks opportunities to leave his Vancouver Island home to sail where the water is crusty, and often solid.

Duke Snider (nicknamed for a yesteryear baseball star) is an ice pilot/navigator with 28 years of experience at sea – 10 of those in the ice. Since 1995, through his company Martech Polar, he has plied his ice expertise across the Northern Hemisphere. Between frosty assignments he works on ice research, and writes about ice navigation.

“I don’t know what else I’d want to do but go to sea and work the ice – it’s what I live for,” Capt. Snider said.

Ice pilots advise ship captains on the unique requirements of operating in ice. Regulations require an ice pilot to be on board vessels in ice-covered waters. To enable a ship to safely proceed where ice is an impediment, the pilot considers weather, preferred routing, ship characteristics and abilities, and available icebreaker support. In many cases, the ice pilot actually takes conduct of the vessel - resulting in long hours on the bridge. It is estimated there are three dozen ice pilots in Canada, and 60 worldwide.
Capt. David (Duke) Snider, ice pilot

‘The Iceman’ plies expertise across Northern Hemisphere

Each hour and each ship is different, according to Capt. Snider. “We operate ‘in the moment’ where strategic routing and tactical ship-handling decisions must be made frequently in extreme conditions,” he said. “Patience is the most valuable trait because situations and conditions change. Adaptability and rapid decision making are vital. The ice pilot must be aware of many more factors that affect safe transit than is the case in open water.”

Capt. Snider didn’t intend on having an icy career, but a mentor was the catalyst. “Capt. Fred Wedgewood suggested that one of the best things I could do career-wise was take a turn on the Mackenzie River and in the Arctic,” Capt. Snider recalled. “He said it was seat-of-the-pants operating up there, and you had to rely on your own skills more than anywhere else. He was right.

“That self-reliance is an incredible feeling. It’s a terrific accomplishment to depart a vessel with a smiling, appreciative master.”

Since then, Capt. Snider has toiled in the Arctic, Gulf of St. Lawrence, Atlantic Ocean and Baltic Sea. He has combatted dense water aboard numerous ships, some of which had no special reinforcement for ice. Further skills were honed on board MV Arctic — then the world’s highest ice-class cargo ship — which operated in the ice before and after the seasonal presence of icebreakers.

“Ice-classed ships, rather than ice-strengthened, are the most fun,” Capt. Snider said. “You can push the ship’s limits in more rigorous ice regimes, breaking ice, opposed to avoiding it. With an ice-strengthened vessel, avoidance is the key, whereas icebreaking vessels can meet the ice head on, and work it. It’s challenging to avoid positions from which you can’t recover. Rapid temperature drops and sea ice freezing can trap and damage a ship in mere hours.”

Capt. Snider had no nautical experience, other than growing up in runabouts at the family cottage, before going directly from high school into the Canadian navy in 1977. Since joining the Canadian Coast Guard in 1980, he has served as master of numerous ships and held executive shoreside posts. Stints with Canarctic Shipping Company Ltd. on board MV Arctic were followed by a return to the coast guard in the late 1990s.

Capt. Snider has been an ice pilot/navigator since obtaining his Master Mariner Certificate in 1998. He currently serves as the coast guard’s superintendent of the regional operations centre, Pacific. In 2004, he was honoured as the runner-up for the annual Lloyd’s List Shipmaster of the Year Award, with global recognition for his service in the coast guard and as an ice pilot. He came second to Commodore Ronald Warwick, master of the Queen Mary 2.

Capt. Snider, 48, was born in Nova Scotia. He has been married since 1979 to Karen, who hails from Ontario. The same-aged couple has two dogs, no children, and until recently pursued cold maritime careers. Karen, now a land-based nurse practitioner, previously saw civilian medical service on the Mediterranean, Red and China seas, and the Indian Ocean, in addition to many seasons with the Canadian Coast Guard in the Arctic.

One of Capt. Snider’s memorable frozen moments occurred in 2002 aboard RV Mirai (the world’s largest research ship), when it exceeded latitude 72-north in the Chukchi Sea. “We believed it was a record, reaching the farthest north position of a non-icebreaking research ship,” he said. Scientists wanted to go even farther to collect water samples, but the temperature plummeted and ice re-formed as fast as Mirai spun around to create an opening.

“Mirai’s master asked, ‘What do you think, pilot-san?’ and I had to make the call,” Capt. Snider said. “Mirai is only lightly ice-strengthened. We couldn’t risk becoming ice-bound. We ran 25 miles south in rapidly forming new ice, where there had been open water just hours before.”

Two years later, Capt. Snider took Mirai even farther, past latitude 76-north.
The outlook for ice pilots is globally warming, according to Capt. Snider. “Despite a hiatus in the Canadian Arctic due to mine closures, the tourist/cruise market is growing,” he said. “A deepwater port is being considered for Bathurst Inlet. Shipping direct between Murmansk and Churchill is contemplated. East Coast winter shipping appears unabated. Petroleum resources, refinery and port facilities are developing in ice-infested areas. There seems to be a global resurgence in Arctic exploitation.

“But, before there is much expansion in ice-related business in Canada, we’ll have to change the way we think about activities like resource extraction and sovereignty - we might have to do some things that we don’t like.”

Vessel traffic into Hudson Bay and Churchill is increasing, and there is a modest but steady flow of small cruise ships and other vessels being repositioned via the Northwest Passage instead of the Panama Canal.

And what of the commercial prospects for the fabled Northwest Passage? “The consensus is that it isn’t likely to become the Panama Canal of the north,” Capt. Snider said. “Going straight over the top in clear, open water is more likely. The route on the Canadian side has many islands and potential choke points.”

An expansive shoreline bereft of dry docks and boatyards presents Arctic mariners with additional challenges, and some amount of worry for others, Capt. Snider said. “A real concern is the growing number of adventurers - especially the poorly prepared ones. We’re seeing 30-foot sail and power boats, some of which need rescuing. Apparently, the message isn’t getting out that it’s a dangerous place,” he said.

Increased demand for ice pilots means increased demands on the pilots. Ships are bigger, faster, operate with fewer people, carry more expensive cargoes, and work under greater time constraints. “Education is more important than ever, as the profession becomes focused on technology,” Capt. Snider said. “Modern ships are highly computerized and electronically sophisticated. Ice pilots must be computer literate, IT capable and technically competent. A mariner can no longer simply get by with a good ship and a star to steer by.”

In 2004, Capt. David Snider was honoured as the runner-up for the annual Lloyd’s List Shipmaster of the Year Award. He came second to Commodore Ronald Warwick, master of the Queen Mary 2.

In 2004, Capt. David Snider was honoured as the runner-up for the annual Lloyd’s List Shipmaster of the Year Award. He came second to Commodore Ronald Warwick, master of the Queen Mary 2.