The tale of an Atlantic crossing

by Antoine Rose, Special Contributor

Editor's note: Antoine Rose, Senior Advisor from the Science, Innovation and Electronic Information Division, is also a sailor in his spare time. Last summer, along with two friends, he undertook a trans-Atlantic journey aboard his sailboat. Antoine has kindly offered us some excerpts of his travel journal about the exceptional experience he and his companions lived through for several weeks. This is a story that will leave you feeling inspired. P.T.

Nova Scotia, July 3, 2008

I've been trying to get to sleep in my berth for at least two hours, without success. From time to time, my feet hit the cabin ceiling when the boat falls into the trough of a wave. This is the first gale we've had since we left. The wind is blowing at more than 30 knots, and the waves are three to four metres high. We're still over the Grand Banks of Newfoundland, and the shallow waters make for rough seas. The cacophony on the boat is deafening. Everything is making cracking sounds, and I'm having a hard time identifying half the noises we hear. Every two minutes, the boat drops heavily down the side of a wave, and it feels as if the mast is going to go through the hull and the boat is going to keep falling to the bottom of the ocean. Now I'm sitting in the main cabin and preparing to go out, fully equipped to face the sea, and I recall the words of **Molière**'s Scapin: "Mais que diable allait-il faire dans cette galère?" [what the hell was he going to do on that galley?]. Outside, we are tied to the boat, which is buffeted regularly by the sea. The waves are high, but not excessively so (we'll see bigger ones); they're mostly very choppy. As dawn returns. I'm not at all sure that I want to see the state the sea is in.

(Insert box

What the words mean

Close-hauled: A sailboat can sail up to 45 degrees against the wind. When a boat is sailing this close to the wind, it is close-hauled. But it's slower, and the boat heels (leans over) and runs against the waves. It's a very uncomfortable way of sailing. We were sailing close to the wind for about 15 of the 17 days it took to reach the Azores. In normal conditions, we would have had the wind at our backs.

Wave height: Wave height is the approximate average of the highest 30% of the waves. Above three or four metres, however, it's very difficult to estimate wave height accurately because our reference points are less valid.

Knots: A unit of sailing speed equal to one nautical mile per hour. A nautical mile is equal to the length of an arc minute on a line between the pole and the equator, which is 1,853 metres, or 1.15 ordinary miles.)

Anchors aweigh

The most difficult point in an Atlantic crossing is the moment when you have to talk yourself into casting off, because you know that from then on, you're entirely on your own. In this era of easy air travel, I'm sometimes asked what might drive someone to sail across the Atlantic on a vessel that provides less than comfortable accommodations and moves at a snail's pace (a sea snail, of course). There is a certain thirst for adventure, that's true. But the other part of the answer is precisely the desire to be fully responsible for oneself and make all one's own choices while deliberately exposing oneself to the whims of the elements. The difficulties are considerable, but the satisfaction, like the challenge, is intense.

Having booked time off with accumulated vacation leave, we departed Montréal on June 15th, after two years of intensive preparations. On board are **Captain Antoine** and two friends, **Bruno**

and **Mariette**. The crossing is divided into three legs: down the St. Lawrence River and out through the Gulf of St. Lawrence, across to the Azores, and then north to France. To begin with, the departure from Longueuil was tough, with spouses to comfort.

An unexpected problem

As the wind was unfavourable (this will be a recurring theme), we had to use the motor on the passage down to Trois-Rivières, Québec and Cap-à-l'Aigle. Four days after we left, disaster struck. The engine, one of the few things that hadn't been replaced in preparation for the crossing, gave up the ghost as we reached Cap-à-l'Aigle. Sadly, we had to ask the Coast Guard to help us into port. Only four days into our voyage, and our egos were already taking a beating.

The engine's autopsy took two days, while we oscillated between hope and disappointment. In the end, the cost of repairs was so high that it was nearly the same as the price of a brand-new engine. With the help of the people on the boat docked beside us, we quickly decided to take the engine out of the boat and return to Montréal in a borrowed vehicle to speed up the repair job. I was in Montréal for 24 hours, just long enough to have the old engine checked out by an expert, decide to buy a new one, and work out the financial details of the transaction. It was that or abandon the crossing, a difficult prospect after years of dreaming and preparing. I got back to the boat in the evening of June 23rd. Installation of the engine was completed in the morning of the 25th, and it roared to life at 2:00 p.m. The captain heaved an immense sigh of relief, and we resumed our preparations for departure. We left Cap-à-l'Aigle with the evening tide, six days behind schedule and leaving behind some new friends who helped us a lot. Our next destination was Gaspé, with no stops along the way.

The four-day trip down to Gaspé gave us a chance to settle into a routine aboard the boat. We had an autopilot that steered the boat so that we didn't have to be constantly at the helm. We divided the day into shifts so that there was always someone on watch. We reached Gaspé in the morning of June 29th, having covered the distance from Cap-à-l'Aigle in three and a half days. We stayed in Gaspé for two days, taking on supplies and making the final preparations before sailing out into the ocean.

The call of the Atlantic

We cast off on July 1st. Next stop: the Azores. This portion of the journey can be divided into four segments: sailing across the Gulf of St. Lawrence and out into the Atlantic around Cape Breton Island, heading southeast to move quickly past the Grand Banks, crossing more than half of the Atlantic toward the Azores, and actually making port in the Azores after negotiating our way around several islands.

The trip through the Gulf was calm, with light winds. An invigorating calm before the stress of the ocean. We passed north of the Magdalen Islands and officially entered the Atlantic in the morning of July 3rd, waving goodbye to the northern tip of Cape Breton Island, a majestic cliff in the form of a point. The following night, Neptune felt obliged to remind us that he's lord of the oceans. We experienced our first gale along the coast of Nova Scotia, followed by two full days of fog. We were south of Sable Island when the combined effect of the sun and the Gulf Stream burned off the fog, and we saw our first dolphins.

There's plenty of life at sea. We had frequent visits from dolphins (we spotted four different species), and birds that most landlubbers have never seen dropped by. The dolphins seemed to have a knack for showing up precisely when we needed to see them, and they instantly boosted the crew's morale. One bird species worth mentioning is the storm petrel. Almost completely black and about the size of a blue jay, they follow boats and never land on the water, flying around like bats. It was amazing. At night, the petrels fluttered around the navigation lights and seemed fascinated by our wind generator. So much so that one night, we heard a loud 'whack.' Our wind rotor had just killed a petrel that ventured too close. The ocean is alive and very rich in

plankton, which leaves a luminous green wake behind the boat at night. The dolphins we saw at night left beautiful green torpedo tracks in the water. Unfortunately, we also saw many plastic bags and objects floating on the surface.

One week after leaving Nova Scotia, the crew treated themselves to a bath. Bruno and I kept a promise we had made to ourselves: we took advantage of a calm period to dive into the waters of the 4,000-metre-deep Atlantic. The water temperature was 21 degrees Celsius. Perhaps hearing the siren call of the depths, we didn't stay in the water very long. We truly were all alone. For days, rhere were no boats, and we didn't even see any aircraft. In every direction, there was nothing but water and clouds, in many shapes and forms. Even the sea became less interesting. Luminous plankton were rare. The birds and dolphins disappeared. The only thing left was the occasional plastic bag.

Three days away from the Azores, it was time to acknowledge Neptune's power once again, as we endured our second gale. We immediately noticed how different it was from the storm off Nova Scotia. The wind was strong and the seas were high; the waves were impressive, but long and regular, not at all threatening. On the other hand, this gale lasted 36 hours, leaving the crew very tired, especially since we were still sailing into the wind. In bad weather, sleep is the first victim. It's very hard to sleep in a washing machine. As soon as the wind died down, we slept a lot, to catch up on lost sleep and to save up for the next gale.

Land ho!

After nearly 18 days at sea, we finally arrived at Horta, the main town on Faial Island, in the central group of islands in the Azores archipelago. I've never been seasick. But landsick ... that's another story. When I climbed up to the concrete quay, it was only 15 metres to the customs building, but my crew wondered anxiously if I was going to make it through the door. I would have failed the sobriety test of walking in a straight line, even if the straight line had been a metre wide.

The Azores are gorgeous islands; I could write an entire article on them alone. The archipelago, which consists of nine islands split into three groups, is one of Portugal's two semi-autonomous regions. The central group is the largest, with five islands. All the islands are volcanic in origin, as the archipelago lies on an Atlantic ridge separating the European and North American tectonic plates. Mount Pico, which dominates Pico Island, not far from Faial Island, is Portugal's highest peak, at 2,351 metres. However, if you take into account the fact that the mountains rise from the bottom of the ocean 3,000 to 4,000 metres below, we are looking at some of the biggest mountains on Earth.

Faial Island is also a volcano, with an altitude of 1,043 metres and, at its centre, a magnificent, perfectly round caldera 2 km wide and 500 metres deep. In 1957, a new volcano emerged at the western tip of the island, erupting for nearly a year. More than half of the island's people fled, many to Canada and the United States. Many of the residents we met spoke at length about Canada.

We stayed in Horta for only three days, just long enough to see a few sights, take on supplies and repair what needed fixing on the boat. Replacing the engine and sailing into the headwinds had put us behind schedule. But one very important tradition we didn't skip. For decades, the crew of every sailboat that stops at Horta has had to paint a picture on the port's walls to mark the boat's visit. The walls are covered with hundreds of pictures, some of them left by sailors who later became famous. The hard part for us was finding a blank spot on the walls to paint our work of art, which was completed a few hours before we sailed.

Next stop: the Old World

We departed in mid-afternoon with a piping-hot pizza on board, specially ordered for our dinner. Our destination was Brest, France. The sea was calm, and a wonderful sunset splashed fabulous

colours across Mount Pico, whose summit had shed its ring of clouds for the occasion. A northern bottlenose whale (a large dolphin 6 to 8 metres in length) came to bid us farewell.

The weather pattern was different on the way north to Brest. We were edging closer to Ireland and Great Britain. Each day, the weather maps showed depressions sweeping across Ireland, depressions that had a direct effect on us. We experienced three successive episodes of high winds in 10 days. We were left little time to rest between gales. The first had the strongest winds, the second brought the highest waves, and the third, just before we reached Brest, stirred up choppy, treacherous seas.

When a gale blows up, it comes in several stages. First, the sea tells us that a gale is imminent. It is churned by very long undulations or waves that warn of very high winds a few dozen miles away. Then the wind and sea gradually strengthens. That's when it's time to reduce sail. When the gale is at its height, a second wave train is superimposed on the first, and the waves become erratic, and sometimes very large when the two trains collide. This new pattern announces a change in wind direction, often preceded by a violent storm. Next, the wind remains strong for a while, but the waves gradually lengthen, until they and the wind begin to die down in tandem. The whole thing lasts about 24 hours, sometimes more, sometimes less.

During this segment, the depressions sweeping across Ireland just kept coming. As we approached Brest, we started seeing aircraft and freighters again. When the wind was strong, we made our best times of the entire crossing, covering a total of 154 nautical miles in one day, an average speed of 6,25 knots and a very respectable speed for our boat.

The French coast and shipping traffic

Getting into Brest is tricky. It means crossing the Ushant shipping lane, which is the marine traffic management zone for all cargo ships arriving from America and Africa and heading for North Sea ports, and vice versa. It's a Highway 417 for cargo ships, and we had to cross it at rush hour in four-metre seas. Despite our vigilance, we once had to change course at the last minute to avoid being run over by a huge vehicle transport ship. It was about midnight when we were finally out of the Ushant lane.

It's hard to sleep when you're approaching the coastline, especially after an ocean crossing. It was a combination of excitement and the need for precise navigation that kept us awake. We waited for the beams from the first lighthouses with bated breath. The first one was the Créac'h lighthouse, which dominates the island of Ushant and can be seen more than 25 miles out, followed by the red light of La Jument (in France, lighthouses have names: La Jument, La Vieille, La Plate). As we rode light seas, the first light of dawn revealed a coastline that was brand-new to us. We spotted the Pointe des Moulins, followed by the entrance to the Brest narrows, through which we sailed during the morning, emotions mounting, on the last of the rising tide.

Reunion with loved ones and return to terra firma

Last phone and radio calls to notify our spouses, the marina and customs of our arrival. We tied up at Brest's Moulin Blanc marina at about noon on August 1, 2008. Our spouses were waiting on the dock, and the emotion of the reunion was indescribable, after more than two months apart. Our lunch of sandwiches, pâté, cheese and champagne was exquisite. We'd done it. We even dared to sing on camera, now that we were safe from Neptune's ire.

What next? We ended our voyage with a cruise along the coast of France, with our spouses this time. We disembarked at La Rochelle, the origin of many French ancestors. Today, the boat is in storage in Charente, awaiting our return for further cruises. We'll have to bring it back some day as well. But that's another story, which will be told when the time comes.