

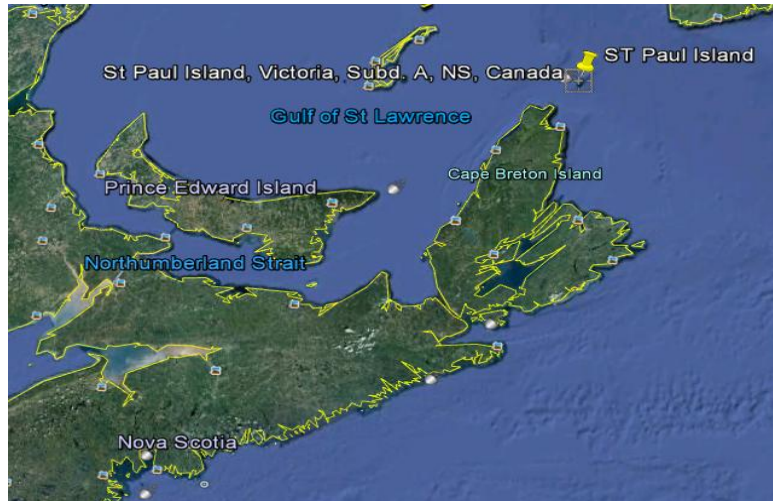
The CY9M Story

by Mike AB5EB

To truly appreciate the experience of CY9M it is important to have a good understanding of the team's destination. The history of the place alone starts to explain the islands rarity. St. Paul Island is a small uninhabited island that sits along the boundary of the Gulf of St. Lawrence and the Cabot Strait. Sitting just 24km (15 mi) north of Cape Breton, Nova Scotia, it does not seem a likely place to find a top 40 DXCC country. Why this island was so needed for being in such an easy location was a question the whole team pondered. The island and the seas would answer all these questions for us.

The island itself is made of hard granite rock and the coastline is completely circled by rugged cliffs. The island looked more like a fortress, daring anyone to come near. Where there may be a way to make a gentle climb down to the water's edge, the rocks in the surf would warn off even the most oblivious of boat captains.

Even though it would seem obvious that no ship would approach her shores under sail, more than 350 ships have been lost to the island, and more than a thousand sailors have been buried on the island. In one wreck alone, in 1834, the Sibylle lost over 300 sailors who were buried in mass graves on the island. During the shipping season when the island is ice free, it's often shrouded in fog which has led it to being known as the "The Graveyard of the Gulf."



The island was first recorded by the Italian explorer Giovanni Caboto (John Cabot) 1450-1499. However the Mi'kmaq people of Nova Scotia likely visited the island before this. So with this brief history you can start to understand why CY9 is not frequently found on the airwaves. It is not an inviting location even the locals believe it to be haunted with ghosts.



The team of CY9M consisted of (from left to right) Bill N2WB, Colin MM0NDX, Vicky SV2KBS, Steve VA3FM, Kevin VE3EN, Bjorn SM0MDG, Simon IZ7ATN, George EA2TA, (myself) Mike AB5EB and Christian EA3NT. After over a year of planning and much discussion, the team met in Sydney, Nova Scotia on July 24th, 2012. After mostly late night arrivals, it was not until the 25th that the team began making final preparations for the island. Much help had been offered by Al VE1AL (CY9DXX 1988) and Phil VE1BVD. Without these guys on the ground in Sydney, I seriously doubt this expedition would have taken place. They were able to help us store equipment in Sydney prior to our arrival. They also helped secure some of the needed camping supplies from local stores. The team departed Sydney at 3pm for the

journey north to Bay St. Lawrence in northern Nova Scotia which is about a 3 hour drive and the place where we would meet the boat captain. It took a van, two trucks, and one trailer to get all the operators and the supplies to Bay St Lawrence. The road north is through the final stretch of the Appalachian mountain range before it disappears into the north Atlantic, with St. Paul Island being its last breath of air. The road is filled with dangerous curves and moose, which I saw two of.

We arrived a little behind schedule to Bay St. Lawrence, which may have been a blessing in disguise as the wind was gusting 50 knots with seas over 10ft. This would have made an evening landing impossible, which we had initially thought might be achieved that night. It was late for us to get any sort of lodging at the local camp and in the pitch dark with our new tents we had acquired in Sydney no one felt like setting them up in the dark. The Captain showed pity and offered us to sleep in the berths of two of his crab boats. Kevin and Steve staked claim to the first boat, which would take us to St. Paul. However the stench of the second boat of fish and crab was more than any of the members wanted to try to sleep through. Half the team slept on the pier after setting up our tents without stakes and weighing them down with our bags from the wind. Col, Bill and Vicky slept in the hull of an adjacent boat. It was after midnight before we finally were all in bed. Being so close to St. Paul was exciting for the team after a long day of packing and travel. Our wakeup call was at 4am at which point we'd fill twenty 25 liter cans with fuel and then head to the island. The captain felt confident that there would be a window of good weather for landing in the morning. As we all drifted off to sleep we could only hope he was worth his word.

4am arrived and with less than four hours of sleep the adrenaline was running high - we were all eager to make the trek to St. Paul Island. However, it took little more than getting out of the harbor to realize that this would be no joy ride. The seas were an easy 6 to 7 feet and they were confused, coming from different directions. The captain, forgetting he had more than his seasoned deck hands and crab on board, plowed through the seas, much to the disliking of the crew. Two of the team became quite sick on the trip out, and before we even got to the island, spirits were starting to fall - and the reality of St. Paul was starting to begin.



As we came around the southern tip of the island we entered Atlantic Cove, or Governors Cove, according to the locals. The landing site was white with breaking water and it prompted the Captain, in his thick Cape Breton accent "Oh, didn't expect this, don't think you guys will be getting on the island today." What comfort we gain from the slightly calmer seas as we approached the island was quickly lost as the team faced the reality of possibly not getting on the island at all.

However, after ten minutes of maneuvering the captain felt that we would be able to make a landing, although it would be in less than ideal conditions. After rigging up the dingy with a 300ft rope that just reached the landing stage, Kevin VE3EN was the first operator to land on the island. I followed him and it was clear to Kevin and I that landing on the island was not going to be the biggest issue of the day. We had been told about the cliffs that guard the island but it seemed not much of a concern until we saw the 20ft granite face! There was a small crevice to the right of the face that a person could fairly easily climb, however it was not realistic to carry *any* supplies up this route. One misjudgment by any of us ascending the cliff would likely mean a quick end to the expedition.



After Kevin and I climbed the cliff-face, Simon landed on the island to help coordinate the supplies off the dingy and tied them onto a rope that Kevin and I hauled to the top. The supplies began to pile up on the landing stage and it became obvious that the task at hand was going to take hours. Col, Bjorn and Vicky helped raise the supplies until the operating tents were lifted and then they went to set up the shacks. Simon joined Kevin and I at the top while George, Steve, Christian and Bill worked on moving the supplies up the beach and tying it to the rope. The edge of the cliff was very loose, and there was a constant threat of rocks falling down on the crew below, as

many did. We were very fortunate, after six hours of lifting, we had no injuries. The final piece to lift was an 85kg generator. We had initially planned on taking much smaller generators due to the anticipated cliffs and hauling, but when the bigger generators were offered free to the group we lost our better judgment and went with the bigger generators. It took seven guys at the top of the cliff and three below to raise the beastly generator. The team had serious doubts on our ability to raise the generator after 3 failed attempts. The problem was a rock that stuck out of the cliff about 7 or 8 feet up the side. With the lighter loads we had been able to manipulate the load to get around it. However, with such a large load we could not swing it. It was not until George was able to climb an adjacent rock at the bottom and pull the generator to the left of the rock that success was at hand.

Getting the generator to the top was a big moral victory however the sun and 6 hours of heavy lifting had drained the team. The final push to the operator site was about 200 yards over flat ground, including about 30 yards of marsh with water up to our ankles. No member could escape the physical labor, and it took a serious toll on the team. The following hours seemed to drag on in an effort to get radios connected, antennas up and personal living quarters squared away. A minimal amount of gas, water and food were brought across the marsh in an effort to focus on the immediate needs of the stations. It was not until about 9pm that we made a concerted effort to get at least one station up and running. CY9M was now on air with a 20m VDA and instant pileups.





It was discouraging to the whole team that it had taken so long to get on the air. Simon had single handedly assembled 2 Hex beams, Steve and Kevin had put up the 6m station, George and Christian had worked on the computer networking and Bjorn and I started on the 160m and 80m vertical with the rest of the team all pitching in where needed. We were able to get the 17m VDA up, and after sundown, we cut a 40m $\frac{1}{4}$ vertical with one radial for CW. After all this everyone on the team was exhausted, mainly from the heavy lifting, and the

night ended early for the team. I think it is fair to say that we were disappointed by the amount of time it took for us to get on the air. However it was not for a lack of effort and we all now understood the true challenge of CY9 and the toll it had taken on the team.

The following morning was met by a sense of urgency by the team to get more stations on the air. We had gotten much needed sleep and the island was smiling on us with nice weather. The seas were more pleasant and the team was back at making antennas and putting contacts in the log. We raised the first Hexbeam for the CW station. Simon had put a second one together, and it had been placed between the SSB and CW tent with a coax long enough to reach both. We had hard boiled eggs to start each day and Vicky and Bill assumed the cooking. We only had one hot meal a day, which was usually pasta with some sort of meat and sauce. Dinner was a pot of food and we had plenty for everyone. However, depending on the task at hand or the pile up you may be eating a cold meal. The food served its purpose though - dinner was not a reward or social event - it was just for the needed energy to carry out the day's work.

We were able to get the 160m vertical up before sundown on the second day as well as the listening array. The 160m receiving antenna array was built using two opposite facing pennants remotely switched with a receive antenna coax switch from DX Engineering, who sponsored the team. As the sun went down on our second day the 80m vertical still lay on the ground and the 40m vertical had been moved to a new location where



we would later add a second vertical to build a 2-element phased array for 40m. Simon, Christian and I built a 30m $\frac{1}{4}$ wave vertical. The initial SWR was about 1.5 but at 9 MHz. So after cutting it to 9.5 MHz Christian decided we

should put 4 raised verticals instead of one on the ground. It should be noted that the antennas were less than 15m from the sea. After putting the elevated verticals we had to add the wire we had cut back, the antenna tuned at 1.5 SWR at 10.100. It is also worth noting that this antenna made over 3000 contacts on 30m CW with 500w. The 30m pile up was tremendous, and we would run that band all night. Col ran the 40m ¼ vertical with a huge pile up. The sun had set before we could complete the 2-element 40 meter phased array. The second night we ran 30m/17m and 160m out of the CW tent with the SSB tent running 20m and 40m until the bands closed.



Bjorn made several hundred contacts on 160m while Kevin ran 80m CW and Vicky ran 30m until I relieved her for some rest. The 160m vertical was top loaded with 2 raised radials. The radials were close enough to the sea to get salt spray on them and both of them worked great. The 80m vertical was a ¼ wave with only 2 raised verticals along the sea as well. The antennas were close enough that their radials overlapped a little. However using filters loaned by GM3YTS both stations could run at the same time without interference. Kevin had a nice run with the 6m station putting several hundred stations in the log along the east coast of NA. I was even able to make a few 6m contacts which were one of my goals for the trip. Unfortunately, no EU openings occurred on the Magic band.



On day three the team was starting to get rested, and into a good rhythm. The first day had been so draining physically, that it really set us back. We still had a little antenna work left. Bjorn and Steve finished a 40m 2-element phased vertical array that used a Comtek Phasing Unit. This antenna worked really well and allowed for us to limit the pile up somewhat by listening either east or west. Col and Steve used the array on 40m SSB on the third night with the ensuing pile being tremendous. We used three MW0JZE Hexbeams on HF which worked very well also. After day 3, the operating site was covered with no less than 11 antennas.

There were a total of 6 stations being built in two camps. Closest to the sea was the CW and 6 meter tent, 50 meters to the West the SSB tent which also hosted the Digi mode station. All stations were built using support from Elecraft with their K3 radios as the center piece. Two of the stations were using Acom 1011 amplifiers, one station using a HVLA700 amplifier loaned to us by RF Power and the other ALS-500 12 volt amps. The stations and antennas were hooked up together using gear from DX Engineering who also supplied the material used to build the low band RX antennas. All radios were running on 12 volt using an uninterruptable power supply built from 4 car batteries being constantly charged by a 55 amp chargers powered by the 5.5 kW generator. This way our radios were always running even during generator down time, and both camps including their amplifiers were

powered from one single generator keeping the fuel consumption to a minimum, about 2/3 of the specified fuel consumption minimizing the environmental impact on St Paul.

The 30m pile up was tremendous and would see run that band all night. Indeed 30m would turn up to be the band with more QSOs than any other with Christian focusing every morning, just after sunrise, on JA, VK and ZL stations which were coming right through the North Pole with very fluttery signals which. Combined with the pile up and a lot of patience, it was a real struggle to pull out individual Callsigns. For this reason we had to ask for QRS QRS...

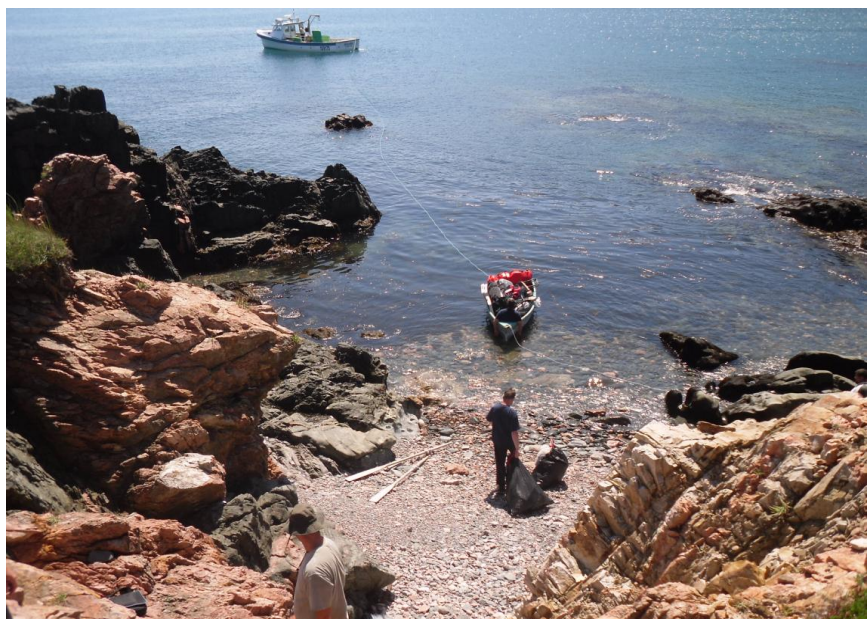
As a team we were really starting to hit our stride and there was time to enjoy a little of the island itself. Due to the thick growth it was not possible to walk very far but we were able to get about. There was a seal that would frequent the waters near our operating site. He seemed to look on in curiosity. Out of desperation Kevin had tied a few cold beers in a plastic bag and placed in the water to cool them. However the bag ripped and Kevin had to take a swim to rescue two of them. That is dedication for a cold one! The pile ups were never ending and the weather had been holding nicely. With most of the work done, it was now time to enjoy the station. We even drank some wine with our dinner and Bjorn and I enjoyed a nice cigar that evening.



Our fourth day on the island was mainly operating. Simon and Christian retrieved more water from the landing stage as our supplies dwindled. We were able to put many more contacts in the log. It was a real challenge to work the JA's, and even the west coast of NA was often weak, even with beams pointed at them. It was not usual to have EU louder off the back of the beam than some of the NA stations. The fourth night we ran 160m/80m and 30m again in the CW tent.

The conditions were not as good as the previous night, but we still put lots of stations in the log. On the low bands static crashes were sometimes over +20dB.

I was woken on day 5 by Kevin who said "We need to have a team meeting about tomorrow." I knew this didn't sound good. The weather was getting ready to change for the worse, and the Captain felt that if he did not pick us up that day, then he might not be able to get us for the next several days. With the possibility of bad weather and the concern of catching various flights home, we knew we had to leave that day. If 6ft to 7ft seas were considered decent conditions to make the trip out to the island, we had little interest in seeing what the seas would look like in "rough" conditions. We left Vicky



running the 20 CW pile as the rest of us began tearing down the antennas and camp. It all seemed to come down much easier than it went up! The seas were great for departure that day (24hrs later they would not have been) and we were able to load the boat with no real issues except the dingy sprang a leak. We had to empty the water out of it after each trip to the boat.



After loading the boat the Captain took us around the island where we were able to see the north island. There is not an inviting place to land anywhere on the north or south island. The ride back to Bay St. Lawrence was very peaceful, it even allowed us to stop and take a team photo with the island in the background. Once at the dock, we quickly unloaded the boat and sold the excess gas, batteries and one of the extension cords. We went home with a much lighter load. Vicky, Bill and I made the trip back to Sydney in a truck. Seeing two moose on the way home was a nice treat. The best part though was the hamburger and warm shower!

Everyone made it back to Sydney safely. Had we not even made one contact that would have been a good accomplishment. For a group of 10 operators, half of whom were unknown to the group, the team came together very well. We all got to know each other very well over the 10 days we were together. Most of us don't spend that much time with close family or friends in several years. It was an intense experience from not just a radio experience but from a human experience. Upon arrival back home I am already faced with ideas for the next trip for the group. If it is half the trip that CY9M was then it will be well worth it. We made just over 33,000 QSOs in 135 hours of operating.

CY9M would like to sincerely thank all sponsors and donors who made this expedition successful.

<http://www.cy9m.com/>

