

VY0M and VY0/VE3LYC

High Arctic IOTA DXpedition to Cornwallis and Melville Islands

By Cezar Trifu, VE3LYC

Cornwallis is one of the Queen Elisabeth Islands in the Canadian Arctic, which extends north of 74°N. Its first documented visit was that of Sir William Perry in 1819, after whom the southwestern part of the island group was named in 1820. Cornwallis ranks 95th among world islands with a surface of 6,995 km², and is home to Resolute, an Inuit hamlet with a population of 229, which is the second northernmost civilian community in Canada. Nearby lies the major hub of Resolute Bay, from where the Polar Continental Shelf Program (PCSP) coordinates field logistics in support of advancing scientific knowledge and management of Canada's lands and natural resources.

Visiting Resolute Bay on my way to Melville Is., I operated for approximately ten-and-a-half hours at the request of several island chasers. Since I couldn't run a radio station inside the accommodation quarters, I set up a tent about 70 m behind the building with the cooperation of PCSP. The equipment consisted in an Icom IC-7000 rig, battery powered, and a vertical multi-band wire antenna. It rained most of the time, with temperatures around 5°C and winds of up to 30 km/h. After spending an entire night on the air, I took the antenna down in the rain, dried its components and the mast, and packed everything for the trip to Melville. While foggy conditions on Melville delayed the flight for a day, the local rain intensified, and under the circumstances I decided to wait patiently for my flight rather than going back on the air.

During the short operation I logged 1209 QSOs with 1097 stations in 61 DXCC on 6 continents. In order to maximize the number of unique stations, I operated only on one band: 20 m. Since the propagation conditions were good, I preferred to stay mostly in SSB. As such, this mode accounted for 75% of all contacts, while CW for only 25%. The continental spread was similar for contacts and stations logged, i.e. EU 57%, NA 29%, AS 11%, OC and SA 1% each, while AF <1%. Top DXCCs by number of QSOs and stations were K (295/264), DL (109/97), I (108/96), UA (107/90), and JA (94/88), totaling 59 and 58% of all logged, respectively.

The southern portion of the Canadian Arctic Archipelago, called the Perry islands, is divided by Byam Martin Channel into an eastern and western group. The latter, denoted as NA-248 for the IOTA program, is the last to be activated in Canada for radio-amateurs. With a surface area of 42,149 km², Melville is not only the largest island in the group, but the fourth-largest uninhabited island in the world and the third-largest in the Canadian Arctic.

Camp Bounty is a temporary research base on Melville, 4 km inland. Run by Queen's University of Kingston, Ontario, it is used to study the effects of climate change on the land, water, and flora. The camp is located 430 km from Resolute Bay, and is reached by a twin engine charter plane. Logistics are supplied by the Polar Continental Shelf Program (PCSP), which supports Canada's science and government policies in the High Arctic. Minutes before my departure, a polar bear was spotted 650 m west of the camp, for the first time in its 12-year existence.

To carry out this IOTA operation, I was permitted by Dr. Scott Lamoureaux and Dr. Melissa Lafrenière to join their research team at Camp Bounty for about a week in early August 2015. I ran an Icom IC-7000 in their equipment storage tent, with a multi-band vertical wire antenna. Since the tent was unheated, the wind and freezing temperatures forced me to take periodic breaks to warm myself inside the main tent, intended for meals and other group activities.

Propagation conditions were good during the first couple of days, particularly at night-time, when I made about 2700 QSOs. The geomagnetic field became unsettled over the next two to three days, leading to long periods of unanswered CQs, but conditions recovered nicely during the last couple of days. I logged 4509 QSOs with 3526 stations in 84 DXCC on 7 continents. All contacts were on 20 m, except 3 on 17 m and 84 on 30 m. Overall, 54% of QSOs were in SSB and 46% in CW. The continental distribution was the same for QSOs and stations: EU 55%, NA 26%, AS 17%, and each of AF, AN, OC, and SA <1%. The top five DXCCs by number of QSOs and stations were K, JA, DL, UA, and I, accounting for 60 and 61% of each total, respectively.

I remain grateful to Scott and Melissa for allowing me to share their camp during this project. Chris McLellan, Dominic Gauthier, and the pilots at PCSP in Resolute Bay are graciously acknowledged for their logistical support. Maury (IZ1CRR) is thanked for website design, and George (VE3GHK) for his invaluable assistance with equipment and photo processing for the QSL design. A special 'thank you' to the German DX Foundation, International Radio Expedition Foundation, DX News, Icom Canada, Clipperton DX Club, and Venus IT (China) for their funding. I am indebted to Dave (W5BXX), Toshi (JM1PXX), Claudio (I2SNW), Joe (I2YDX), Alfio (IT9EJW), Al (W3AWU) and Bob (KD1CT) for their exceptional support, to the top donors – and many others who provided financial help.

Nunavut, Canada
VYØ/VE3LYC
 Cornwallis Is. NA-009, NT-004

Nunavut, Canada CQ Zone 2
VYØ/VE3LYC
 Cornwallis Is. (NA-009, NT-004); 74° 43.12 N, 94° 59.50 W

CONFIRM: QSO SWL REPORT
 TO RADIO

DATE (Day-Month-Year)	TIME (UTC)	MHz	2-WAY	RST

Tnx QSL and 73
de Cezar

Cornwallis is one of the Queen Elizabeth Islands in the Canadian Arctic. Its first documented visit was that of Sir William Perry in 1819 after whom the southwestern part of the island group was named in 1820. Cornwallis ranks 92th among world islands with a surface of 6,995 km², and is home to Resolute, an Inuit hamlet with a population of 229, which is the second northernmost civilian community in Canada. Nearby lies the major hub of Resolute Bay, from where the Polar Continental Shelf Program (PCSP) coordinates field logistics in support of advancing scientific knowledge and management of Canada's lands and natural resources.

Visiting Resolute Bay on my way to Melville Is., I operated for approximately ten-and-a-half hours at the request of several island chasers. Since I couldn't run a radio station inside the accommodation quarters, I set up a tent about 70 m behind the building with the cooperation of PCSP. The equipment consisted of an Icom IC-7000 rig, battery powered, and a vertical multi-band wire antenna. I rained most of the time, with temperatures around 5°C and winds of up to 30 km/h. After spending an entire night on the air, I took the antenna down in the rain, dried its components and the mast, and packed everything for the trip to Melville. While foggy conditions on Melville delayed the flight for a day, the local rain intensified, and under the circumstances I decided to wait patiently for my flight rather than going back on the air.

During the short operation I logged 1309 QSOs with 1097 stations in 61 DXCC on 6 continents. In order to maximize the number of unique stations, I operated only on one band: 20 m. Since the propagation conditions were good, I preferred to stay mostly in 55B. As such, this mode accounted for 75% of all contacts, while CW for only 25%. The continental spread was similar for contacts and stations logged, i.e. EU 37%, NA 29%, AS 11%, OC and SA 1% each, while AF <1%. Top DXCC by number of QSOs and stations were K (295/264), DL (109/97), I (108/96), UA (107/90), and JA (94/88), totaling 59 and 58% of all logged, respectively.

I am grateful to Dr. Scott Lamoureux and Dr. Melissa Lafreniere (Queen's University), who allowed me to join their research team on Melville, which was the reason for me travelling to Cornwallis Is. I would like to thank Chris McLeigan (PCSP) for providing me with the tent and Sphery I needed to operate, and Dominic Gauthier (PCSP) for helping me to set up and take down the camp in windy conditions. George's (VE3GKH) assistance in the preparation of materials for QSL design is graciously acknowledged. A special thank you to the German DX Foundation, International Radio Expedition Foundation, DX News, Icom Canada, Claperton DX Club, and Nerus II for their funding, to individual donors WØRL, EA3NT, K7ACZ, K8GI, G3RUV, IY9AA, VK8NSB, WB5JD, as well as to other stations who offered support.

Nunavut, Canada
VYØM
 Melville Is. NA-248, NT-027

Nunavut, Canada CQ Zone 1
VYØM
 Melville Is. (NA-248, NT-027); 74° 54.16 N, 109° 36.08 W

CONFIRM: QSO SWL REPORT
 TO RADIO

DATE (Day-Month-Year)	TIME (UTC)	MHz	2-WAY	RST

Tnx QSL and 73
de Cezar

The Canadian Arctic Archipelago, also known as Queen Elizabeth Islands, extends north of 74°N. Its southern portion, called the Baffin Islands, is divided by Baffin Martin Channel into an easterly and western group. The latter, denoted as NA-248 for the IOTA program, is the last to be activated in Canada for radio amateurs. With a surface area of 42,149 km², Melville is not only the largest island in the group, but the fourth-largest uninhabited island in the world and the third-largest in the Canadian Arctic. Camp Bounty is a temporary research base on Melville, 4 km inland, run by Queen's University of Kingston, Ontario. It is used to study the effects of climate change on the land, water, and flora. The camp is located 420 km from Resolute Bay, and is reached by a twin engine charter plane. Logistics are supplied by the Polar Continental Shelf Program (PCSP), which supports Canada's science and government policies in the High Arctic. Minutes before my departure, a polar bear was spotted 650 m west of the camp, for the first time in its 12-year existence.

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Propagation conditions were good during the first couple of days, particularly at night-time, when I made about 2700 QSOs. The geomagnetic field became unsettled over the next two to three days, leading to long periods of unusable QOs, but conditions recovered nicely during the last couple of days. I logged 4509 QSOs with 3526 stations in 84 DXCC on 7 continents. All contacts were on 20 m, except 3 on 17 m and 84 on 30 m. Overall, 54% of QSOs were in 55B and 46% in CW. The continental distribution was the same for QSOs and stations: EU 53%, NA 26%, AS 17%, and each of AF, AN, OC, and SA <1%. The top five DXCCs by number of QSOs and stations were K, JA, DL, UA, and I, accounting for 60 and 61% of each total, respectively.

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QSL cards of this operations