PHYLLIS BENTON, NP2MZ

Amateur Radio in the US Virgin Islands

From a ham standpoint these islands have split personalities. They're American, yet they're also DX!

By Harold Kramer, WJ1B

Hams dream of operating from tropical islands. Basking in the sun, working the pileup, what could be better? I recently took my vacation in the US Virgin Islands and learned a great deal about the unique challenges of island operating.

The US Virgin Islands are located in the Caribbean and consist of three principal islands. St Thomas is the tourist island with a population of about 55,000. A more private island, St John's, has a population of 4300. I stayed in the town of Christiansted on the Island of St Croix, the geographically largest of the islands, with a population of about 53,000. St Croix is known as the "wild," as in "wilderness," Island. My host was ARRL Section Manager John Ellis, NP2B, and I also visited my friends Brian, KP2HC, and Ann, KP2YL, Keegan, all of whom reside in Christiansted. Ann manages the Incoming QSL Bureau and Brian is the ARRL card checker.

On USVI there is the constant threat of storms and hurricanes. Hurricane Hugo devastated St Croix in 1989 with much of the destruction still visible. John's house was destroyed except, miraculously, for the shack. After Hugo, John and his neighbors put his towers back up, fired up the generator and went on the air handling traffic for people on the Island.

John needs a backup generator since the Island suffers from more than occasional power blackouts. Phyllis Benton, NP2MZ, the ARRL's PIO on St John, told me that she knows several hams on the island that depend on solar-fed batteries all the time and have conventional battery backups for emergency purposes. "Backup power is a must when you live in a hurricane-prone area, and where power can go off — not all that often, but sometimes several hours at a clip. Being in the middle of the ocean, far away from most stores, means you need to make do with what you have and at least know the basics about fixing things. Low tech can often work to your advantage when it comes to gear and things need to be dependable. Cans of compressed air and electrical spray for removing volcanic dust that comes from the Montserrat volcano, and for dealing with salt-air corrosion, are worth their weight in gold!"

Brian agrees. "Unless you bring it yourself, or a visiting friend brings it for you, virtually everything you need must be ordered and shipped. This makes you think twice before starting a project or a repair. The salt air can have serious effects on your equipment both indoors and out. The closer you are to the water the more serious the problem it becomes. Because electricity is expensive, few hams have A/C in their shacks to take the moisture out of the air. Regular station maintenance is the only way to prevent untimely problems from taking you off the air," he said.

Above: The photo is a homebrew 20-meter dipole at daybreak, overlooking Coral Bay, St John. Notice the PVC and blue painter's tape — another item that can be used for so much!

I asked Brian what is unique about being a ham in USVI. He said that is always a pleasure meeting visiting hams and showing them around the island. He and Ann also enjoy the camaraderie among hams on the island, including contesters who visit regularly. There are only 50 ARRL members in USVI and Brian told me that licensing new hams is a difficult challenge. The island is small and the economy does not allow most islanders to consider a hobby such as ham radio.

What bands work best? John told me that since it is summer on St Croix 12 months of the year, 40 meters is iffy and 80 meters is limited due to the constantly high noise levels. Working 160 meters is difficult because with few tall trees to support the wires, you cannot get enough antenna height. Seventeen and 20 meters are best and the Europeans come in strong on these bands. "I don't consider us to be in a DX location," John said. "We are only a 3 hour flight from the States; we use the same currency and pay Federal taxes. However, the US Virgin Islands qualifies as a separate DXCC entity and we get a steady stream of QSL cards for award credit."

Phyllis was surprised when longtime contesters and DXers from the States said they wanted her QSL card so they could add another country. "I figured everyone had already had a QSO with the US Virgin Islands. Guess not. Think about it: with a year-round population of about 4000 residents on St John,

HAROLD KRAMER, WJ1B

The home of KP2HC and KP2YL with their 40-meter dipole overlooking the hilly terrain of St Croix.

GARRY FISHER, K9WZB

Sharon Fisher, K7WZB, operating Special Event Station K2V at Radio Reef on St Croix.

a club with 12 active members may seem pretty robust. But not everyone is working HF on a regular basis and propagation can be challenging. The nice thing is that when they do hear me, most people seem eager to talk to someone on a little patch of earth in the middle of the sea. Some have visited the area before; others are planning a trip, or would like to have a DXpedition to the tropics. This is a pleasant location to DX from and it provides a different perspective for stateside hams."

Ann, KP2YL, told me that she creates an SSB pileup almost every time that she goes on the air. She attributes it to good propagation with a great shot across the Atlantic, the KP2 prefix, and being a woman! She and Brian said that while it's fun to run pileups as the DX station, there are times when you just want to chat. Most ops are considerate, but there are some who insist on sending their call several times when you've turned it over to the station that you are in QSO with. This can be very frustrating for the "DX" operator.

QSLing can be time consuming and costly for a station on USVI. Since many of the ops on the Island are not major DXpedition operators, they pay to have their own cards printed and mailed. USVI ops always appreciate a self-addressed stamped envelope with US postage to the States, or an IRC or a *green stamp* (dollar bill) for DX QSLs. The island ops emphasized that stations should look up their QSL information online and follow any special QSL instructions that are listed or given out by the on-air operator.

Antennas in Paradise

Building effective antennas on USVI can be a challenging since the terrain varies considerably. The islands were created by volcanic eruption and there are many hills and valleys. John is lucky. His 35 foot towers have a direct view of the Caribbean and straight shot to Europe since his property is at 135 feet, a high elevation for St Croix. Many operators have signal-blocking mountains behind their houses.

Grounding can also be a problem. According to John, "Much of the islands are rock. One would think that in this idyllic environment, surrounded with salt water, a good ground would be easy to come by. Wrong assumption! I have found that the only things that work for me are balanced antennas because it is difficult, if not impossible, to get a decent ground."

USVI operators confront some of the same antenna issues that we have Stateside. Brian and Ann rent their home and they are prohibited from putting up a tower. They have inconspicuous antennas including an inverted V for 20 meters and a 40 meter dipole mounted on bamboo poles that are only about 15 feet above ground. However, they are also located on top of a rise and have a straight shot to Europe. On St John's, Phyllis also uses dipoles — "one running into the woods, the other on some PVC with one end hanging from a Frangipani tree. They won't win any beauty contests, but they seem to work just fine and they can be taken down easily when storm season comes."

Antenna restrictions are generally not a problem since most ops live in rural areas with mostly dirt roads. I learned that nobody is that concerned about what their neighbors do...up to a point. Most antenna complaints arise from people buying property in view of an existing antenna that they don't like to look at! A few operators noted that neighbors usually feel differently about antennas after a hurricane takes out normal communications and Amateur Radio is the only way of getting word to the outside world.

Emergency Communications

Emergency communications, particularly using digital modes, was on the minds of the dozen folks that I met with from the US Virgin Island Amateur Radio Club on St Thomas. FEMA representatives had previously met with club members and the club is working on their emergency communications plans.

Paul Jordan, NP2JF, President of the St John club's ARES® group, told me that "Emergency communications are important to us here in the Territory. We have agreements with all the local emergency agencies to help them out if needed. We have about 15 hams on island year-round and usually 8 to 12 check into the Virgin Islands Weather Net every morning, including several from Tortola, British Virgin Islands that we consider our international ARES®D members. Tortola and St Thomas are less than a mile apart at the closest point, so we cooperate on an international level in emergencies. We also conduct a daily Virgin Islands weather and traffic net on the St John ARC repeater. Check-ins come from all three of the US Virgin and the British Virgin Islands."

Paul told me that hurricanes have taken down several of the local repeaters, but there is at least one operational 2 meter repeater on each of the three islands. "In an emergency, we use the 2 meter repeater that is still working, usually the St John ARES machine. We try that first, then the repeater output frequency on simplex, and then 146.520 MHz, the national simplex calling frequency." From his home station at 650 feet above sea level, Paul can reach 100 miles east and connect with repeaters in Puerto Rico. "After a hurricane, when everything else has blown away, St John hams can always find a piece of wire on the ground. They'll cut it to the length of a working antenna, throw it into a coconut tree, hook up their personal radio to a car battery and make contacts with FEMA and the National Hurricane Center back in the States."

I also met with 15 members of the St Croix Amateur Radio Club where we had a discussion about boating and Amateur Radio. With the lack of new hams on the Island, they also were interested in the ARRL's educational and public relations initiatives.

Operating on a tropical island has its unique challenges, but I can't wait to return!

Harold Kramer, WJ1B, is the Chief Operating Officer of the ARRL. You can contact him at **hkramer@arrl.org**.