

Rebuilding the West Point Cadet Amateur Radio Club – W2KGY

Even without a radio station, W2KGY strives to provide public service through Amateur Radio.

Matthew Sherburne, KF4WZB

My involvement with Venture Crew 80, W3BSA, a Boy Scouts of America program that gets boys and girls ages 14 – 20 involved with ham radio, made me want to become a ham and led me to get my Technician Plus license during my high school years. I continued my passion for providing public service through radio communications at the US Military Academy at West Point, New York. Officially organized in 1936, the Cadet Amateur Radio Club, W2KGY, is one of West Point's oldest cadet clubs.

After I joined W2KGY in 2004, Officer-in-Charge Maj. Todd Brick, KC2NPA, helped to expand the club and get us involved in public service events, such as the Scoutmasters' Council Camporee. When Lt. Col. Timothy Schmoyer, W2JIG, became Officer-in-Charge, he helped to rebuild our ham shack. In 2006, our work culminated in making a contact with the International Space Station (ISS).

Aside from being a club station to make contacts during School Club Roundup, Jamboree-on-the-Air, or Amateur Radio on the International Space Station (ARISS) events, W2KGY had to license our members. We partnered with the Orange County Amateur Radio Club (OCARC) to run VE test sessions at West Point, which is where I took my Amateur Extra exam.

Upon graduating in May 2007, I went on to serve as a Signal Officer with

the 82nd Airborne Division. In 2013, I headed to Virginia Tech to pursue an MS degree in Electrical Engineering. There I found the Virginia Tech Amateur Radio Association (VTARA), K4KDJ, and became Vice President. We planned VE test sessions, public service events, radio competitions, guest speaker presentations, and communications support events, such as the annual homecoming parade, Christmas parade, and cycling race.



Figure 1 — Cadet John Humelsine, WA4BUD, smiles from our repeater tower before he proceeds to install a new 2-meter antenna. [Matthew Sherburne, KF4WZB, photo]

Returning Home to Rebuild

Returning to West Point in the summer of 2015 as a junior rotating faculty member and the Officer-in-Charge of the Cadet Amateur Radio Club was like coming home. I was excited to lead the club through the same kinds of events that I experienced as a cadet and as a graduate student with VTARA. I found that the club had been mostly inactive for 4 years, and there was only one cadet member for me to work with in rebuilding the club. Furthermore, our entire radio station was packed away in a closet due to a multi-year renovation of the building where the station was located. My task was to rebuild the radio station and get the club back on its feet.

Re-establishing Ties

Using the past models of W2KGY and K4KDJ, the first thing I did was visit the Orange County Amateur Radio Club (OCARC) to re-establish our partnership which would allow our cadets to assist in public service events alongside seasoned hams from OCARC. In addition, I requested that any available VEs from OCARC come to West Point to assist in test administration and to help fix our repeaters, located on top of the West Point Ski Slope (see Figure 1).

Without offering test sessions at West Point, it would be next to impossible to get cadets licensed, due to restrictions on when they can leave post. Since this partnership began, OCARC



Figure 2 — Boy Scout Mike Serringer makes a contact with a ham during the 58th JOTA alongside Cadet Gustavo Maldonado and Cadet John Humelsine, WA4BUD. [Matthew Sherburne, KF4WZB, photo]

members have assisted us at two VE test sessions, which are open to the public. So far, one person from the surrounding area came to earn his Technician class license, and more than 15 cadets, staff, and faculty members have earned their Amateur Radio license through our VE test sessions since April 2016.

Community Outreach

With VE test sessions in full swing, my parallel effort in rebuilding a club without a radio station is to take part in public service and STEM outreach events so that our cadet members can practice their Amateur Radio skills and reach out to the community. In fact, our Superintendent, Lt. Gen. Robert Caslen, leads a massive community outreach initiative. Our club is able to contribute to this effort in several ways. First, W2KGY previously hosted Boy Scouts during Jamboree-on-the-Air (JOTA). I wanted to continue this effort, and so, I made contact with West Point's Troop 23 Senior Patrol Leader, Sean Flynn, KD2BFI, about setting up a station at their Scout Hut and getting the word out to surrounding troops about the 58th JOTA in October 2015 (see Figure 2). More than 25 Boy Scouts

earned their Radio Merit Badge and several Cub Scouts, as well as an American Heritage Girl, got to speak with operators across several states. Sean helped us again for the 59th JOTA in October 2016 (see Figure 3), at which over 50 Boy Scouts received their Radio Merit Badge, thanks to the assistance of four cadets and two Radio Merit Badge counselors.

W2KGY also provided public service outreach by supporting local events at the Toughman Half-Triathlon at Harri-man State Park in September 2016. Andy Weyant, KC2BSD, from OCARC, led the planning and execution of this event in which seven cadets and I participated. In the previous days before the Half-Triathlon, bombings occurred in New Jersey and New York. Our cadets, in military uniform, were there to provide radio communications, but we soon found ourselves providing more than just that. Our presence in uniform helped the racers feel safe, and they made sure to tell us that throughout the day. My cadets were paired with members of OCARC and posted at several checkpoint locations (see Figure 4). They benefited from working with experienced Amateur Radio operators and learning more about the public service and



Figure 3 — Cadet Timothy Donnellon, KE8EBS; Cadet Jonathan Morton, KE8EBT; Captain Matthew Sherburne, KF4WZB; Sean Flynn, KD2BFI; Cadet Paul Shorkey-Chacon, KC3HBB, and Cadet Gustavo Maldonado strike a pose at the conclusion of the 59th JOTA, where 50 Boy Scouts earned their Radio Merit Badge. [Deborah Flynn, KD2BFJ, photo]

technical aspects of Amateur Radio.

Future Objectives

The last great initiative for our club is rebuilding the radio station. However, money does not grow on trees, and I took a hybrid approach in the design. I wanted a station that boasted the latest in technology and also allows our members and visitors to experience the golden days of Amateur Radio. Paul Gordon, N2AAN, who works on staff at West Point, gladly took on the task of restoring our club's Collins 32S-1 and 75S-1 radios. We also have a satellite ground station and two HF operating positions. The only things we do not have right now are antennas on the roof for any of our radios. We are still in a fundraising stage in this endeavor. The club is funded by non-appropriated money and relies solely on donations.

We will be establishing a memorial library in honor of Hugh W. Morgan, W4VAB, a 1958 West Point graduate, who passed away in August 2016. He was the Vice President of W2KGY when he was a Cadet, and his family is donating his entire *QST* collection, dating back to 1958, to be showcased in our station.

We are hoping that the station will be



Figure 4 — Cadet Paul Shorkey-Chacon, KC3HBB, and Cadet Meg Goode provide radio communications support at a checkpoint along the route of the Toughman Half-Triathlon on September 18, 2016. [Matthew Sherburne, KF4WZB, photo]

Orange County Amateur Radio Club

Bruce Baccaro, K2ULZ, OCARC President

Established in 1972, the Orange County Amateur Radio Club (OCARC) is a non-profit, volunteer membership organization.

OCARC has experienced almost explosive growth in the last 10 years, going from about 60 licensed and non-licensed members to 162, of which 20 are not licensed. Much of this growth has been due to the annual Technician licensing classes we conduct every October, and publication of club activities in several local newspapers. Activities open to the general public, such as Field Day, Hamfest, "International Chalkfest" in New Paltz, New York, and other special events have also helped bring in new members.

Our relationship with the West Point Staff and Cadets goes back several years, when we provided occasional VE sessions primarily for the Cadets. Several club members helped to get the West Point repeater operational as a repeater for regular ham use and as a link to the Orange County ARES/RACES main repeater. Additionally, two club members gave a presentation on "Introduction to Digital Communications in Ham Radio" to one of Captain Sherburne's engineering classes.

Over the last 2 years, teenage club member Sean Flynn, KD2BFI, was the key individual in originating, promoting, and organizing the Boy Scout Jamboree-on-the-Air for the West Point Amateur Radio Club and the Scout's Radio Merit Badge sessions.

Many club members are also part of the county ARES/RACES team, which provided significant assistance over the last 2 years at the 3-day New York Airshow at Stewart International Airport in Newburgh. Non-ARES/RACES club members also volunteered to augment the support needed during the show, attended by approximately 40,000 people. The club is currently in the early stages of working with the Orange County 4H organization on their \$7 million project in Otisville, New York to provide ham radio classes, and hopes to donate a ham station for the 4H members.

One of the club's important goals is to find a clubhouse where we can install club-owned equipment and antennas. Currently, the club operates a C4FM (System Fusion) repeater on 2 meters and conducts both HF and VHF weekly nets.

To learn more about OCARC, visit www.ocarc-ny.org/new_contact.shtml.

fully operational in 1 – 2 years and include open visitation to the ham radio community at large. We see our collegiate station as America's station, so we want hams to be able to visit West Point and get a chance to step inside our station, see the Hugh W. Morgan memorial library, and operate on vacuum-tube radios (Collins and Heathkit), as well as software-defined radios (our long-term plan is to purchase a FLEX-6700).

Maintaining a collegiate Amateur Radio club is vital to ensuring our youth members have a place to continue to kindle their fire and passion for the hobby and service. These clubs provide a bastion of applications for the theory we teach in our engineering programs. They also provide an opportunity for college students to take part in public service and STEM outreach events.

Matthew G. Sherburne, KF4WZB, lives in West Point, New York. Matthew has a BS from the US Military Academy and an MS from Virginia Tech, both in Electrical Engineering. He is on active duty as a US Army Captain and serves as an instructor within the Department of Electrical Engineering and Computer Science at the US Military Academy. Since 2015, he has been the Officer-in-Charge and club station license trustee for the Cadet Amateur Radio Club, W2KGY. He has served in the 82nd Airborne Division as a platoon leader and infantry battalion communications officer providing reliable communications for the warfighter in both Afghanistan and Iraq.

