

From the Section Manager's Shack

Greetings from Sussex County

Just under two weeks ago, Sussex County experienced yet another tornado—part of a trend that suggests our corner of the state sees more than its share of severe weather. Despite this, the region continues to fare well, all things considered. The latest event was rated an EF-1, with peak winds between 100 and 110 mph. It began in Dorchester County, Maryland, and tracked approximately 11.4 miles before ending in Bethel, stretching about 600 yards wide. Along its path, the tornado snapped and twisted trees and tore the roofs off two commercial buildings in Laurel. Thankfully, no injuries were reported.

In response, Sussex County ARES activated at least two Skywarn nets, with a strong number of check-ins and timely weather reports. Net Control Stations (NCS), with access to the National Weather Service's (NWS) restricted Slack channel, were able to relay critical reports to NWS meteorologists within seconds—providing real-time situational awareness. Through these reports and accompanying photos, Sussex Skywarn was able to confirm the occurrence of golf ball-sized hail in Millsboro, enhancing the NWS's ability to issue accurate warnings and updates to the public and media.

This kind of community-centered service is a core reason why amateur radio exists: to support our neighbors in times of need. Sussex County ARES maintains radio stations at hospitals across the county to ensure communication resilience during emergencies. There are many ways to get involved. Every county in the state has an active ARES group, and everyone is encouraged to check in during Skywarn nets when activated. While the NWS provides free Skywarn Spotter training, formal certification isn't required to make reports—Net Control will guide you.

In Sussex, we're also looking for new NCS volunteers to help when nets are activated. Whether you can spare an hour or cover the duration of an event, your help is valued. NCS must be trained Skywarn Spotters and complete a brief, 40-minute online seminar specific to Sussex County Skywarn operations.

DE QSO Party Update

Although the scores have not been compiled, I think it's safe to say the Delaware QSO Party was a success. Jerry, KB2GCG, has passed on that he has received 247 logs so far. Sadly, I was unable to participate as I was running a public service event in Sussex but heard a good number of folks on the air. If you participated and have not submitted your log there is still time. Logs must be submitted by June 10. There will be two changes to the rules for the DE QSO Party in 2026. No paper logs will be accepted. All logs must be electronic and in Cabrillo format. Also, the deadline for logs will be 14 days after the event. Visit the First State Amateur Radio Club's DE QSO Party page for more details at fsarc.org/qsoparty/qsohome.htm.

2025 ARRL Field Day – June 28-29 - Update

ARRL Field Day is just a few short weeks away. Ensure your Field Day site is registered on the ARRL Field Day Site Locator page which allows the public and other visiting radio operators to find your site. Ensure you post the hours of your site. If possible, setup in a public area and post signage to get the public to stop by. The ARRL Field Day site also has the rules, logging software suggestions, logos for your group, Public Relations documents such as the Public Relations Kit and audio public service announcements. Make sure you get your points for doing a bit of PR work.

CQ Kilo Two Echo....CQ Kilo Two Echo - The 13 Colonies Special Event; July 1-7

This event recognizes Ken Villone, KU2US, Event Founder

In just a few weeks, one of the most popular summer operating events kicks off – The 13 Colonies

Special Event. Now in its 17 years the event has grown from Special Event Stations making approximately 12,000 contacts to last year making 292, 496 contacts around the world. The Event runs from July 1 9:00 AM - July 7 Midnight Eastern (July 1 – 1300 UTC – July 8 – 0400 UTC). This year Event organizers are recognizing the 13 Colonies Special Event founder Ken Villone, KU2US, who is passing the torch on to Tony Jones, N4ATJ. For the past 16 years Villone has led the event by working with state and bonus station coordinators. Then after the event he would print out individual certificates for thousands of people who made contact with the special event stations. The Special Event consist of one station operating in each of the 13 Colonies (K2A – K2M) and three bonus stations (WM3PEN – Philadelphia, GB13COL – England, TM13COL – France) each representing their city, state, or country's role in America's Colonial period.

Ham Radio operators and SWLs can participate in the event. Complete information about the call for each colony station and the bonus stations can be found on the event website 13colonies.us and they can follow on Facebook – 13 Colonies Special Event Community. Stations need only make one contact with one of the participating stations or they can go for a Clean Sweep and work all 13 Colony stations and the 3 bonus stations. Each station offers a special QSL card for the event as well as a different certificate each year. Operators can keep an eye out for the special event stations and can keep an eye out for them by watching many of the dx spotting networks such as DXSummit.fi. I look forward to operating as K2E every year. I hope to hear you on the air.

Grid Down, Mic Up – EmComm Topics

Expanding Your Reach – A Guide to Cross Band (XB) Repeat in EmComm

In emergency communications, reliability and extended coverage are paramount. One technique that significantly enhances communication range is Cross Band Repeat—a method allowing dual-band radios to bridge gaps between different frequency bands for seamless relay.

What is Cross Band Repeat?

Cross Band Repeat utilizes a dual-band transceiver to receive signals on one band (e.g., VHF) and retransmit them on another (e.g., UHF), effectively acting as an automatic relay station/repeater. This capability is especially useful when direct line-of-sight is obstructed or when handheld operators need to extend their reach to a repeater network.

How It Works

When enabled, the radio listens for incoming transmissions on one frequency and immediately retransmits them on another. For instance, a mobile radio might receive a signal from a handheld operator on UHF (70cm) and relay it to a repeater operating on VHF (2m). This two-way relay improves communication flow in complex environments such as disaster zones, large events, or areas with challenging terrain. Many radios have XB capabilities so you probably already have the gear. These are easy to set up and run.

Why Use Cross Band Repeat?

- **Extended Coverage** – Enhances communication range without requiring users to move closer to a repeater. Very popular for public service events where the repeater is too far away to access with an HT.
- **Emergency Support** – Ensures reliable communication in areas with limited infrastructure.
- **Flexibility in Operations** – Allows mobile stations to function as temporary repeaters in critical situations.
- **Efficient Power Use** – Mobile radios with robust output can amplify signals effectively, reducing power consumption on handheld units. Can run your HT with minimal power which allows for extended run times.

Considerations for Setup

- Legal Compliance – Always follow FCC regulations regarding unattended operation and frequency use. Must ID as required. Any location running a XB rig must be attended to be able to turn off the system should an issue arise.
- Proper Frequency Coordination – Choose compatible frequencies to avoid interference. Use the TMARC Band Plan for frequency selection. www.tmarc.org
- Avoid Harmful Loops – Ensure proper squelch settings to prevent unintentional retransmission loops. Always use a PL tone to avoid unintentional access. Never XB two repeaters.
- Heat Management – Extended transmission can cause radios to overheat; cooling measures may be necessary. Think Duty Cycle for heat.
- Battery Management – Most likely you won't be operating long enough to risk your vehicle's battery but you must be aware of power consumption. Use lowest RF power setting as possible. Setting up a separate LIFEPO4 battery for the XB radio or a solar panel to your vehicle eliminates concerns.

Real-World Application

Cross Band Repeat has been successfully used in emergency drills, search and rescue missions, and large-scale public service events. By integrating this feature into operations, amateur radio operators can strengthen their role as reliable communication assets in times of need. XB can be run in your house if you need to leave the shack during a Skywarn or other net. Another tool in the toolbox.

Upcoming Events & Contests

ARRL International Digital Contest – June 7-8 - Amateurs worldwide contact and exchange QSO information with other amateurs using any digital mode (excluding RTTY) that supports the 4 digit grid square (attended operation only). Any station may work any other station. Stations may be worked only once per band, regardless of mode. 160, 80, 40, 20, 15, 10 and 6 meters.

ARRL June VHF Contest – June 14-16 - For amateurs in the US and Canada (and their possessions) to work as many amateur stations in as many different 2 degrees x 1 degree Maidenhead grid squares as possible using authorized frequencies above 50 MHz. Stations outside the US & Canada (and their possessions) may only work stations in the US (and its possessions) and Canada.

ARRL Kids Day – June 21 – Twice a year, ARRL offers an event designed to promote Amateur Radio to our youth. Share the excitement with your kids or grandkids, a Scout Troop, a church or the general public. Kids Day is designed to give on-the-air experience to young people and hopefully foster interest in getting a license of their own. It is also intended to give older hams a chance to share their station and love for the Amateur Radio Service to their children.

ARRL Field Day – June 28-29 – Field Day is ham radio's open house! Every June, more than 31,000 hams throughout North America set up temporary transmitting stations in public places to demonstrate ham radio's science, skill and service to our communities and our nation. It combines public service, emergency preparedness, community outreach, and technical skills all in a single event. Field Day has been an annual event since 1933, and remains the most popular event in ham radio. Visit www.arrl.org/field-day for up to the minute info on FD and to register your site on the ARRL Field Day Site Locator page.

13 Colonies Special Event Stations – July 1-7 – Contact as many of the 13 Colonies Special Events stations and up to three Bonus stations for a beautiful certificate. Many hams based in Delaware run the "Kilo Two Echo" station here in Delaware. Jump in on the fun. Visit 13colonies.us for details.

Visit contests.arrl.org or www.contestcalendar.com for details on these and upcoming contests.

Camaraderie; the glue that binds us together!

As we wrap up this issue, let's take a moment to appreciate one of the most enduring aspects of amateur radio: the camaraderie that binds us together. Whether we're checking into a weekly net,

lending a hand during a public service event, or standing by in times of emergency, the spirit of support and connection is what makes this community truly special. In a world where digital noise often drowns out real voices, we're reminded that the most powerful signal isn't just the one that reaches the farthest—it's the one that brings us closer. Stay safe, stay connected, and keep the spirit alive on the air.

73,
Steven Keller
Delaware Section Manager